City of Dixon
Community Development Department

Dixon Innovation Center Project

Initial Study/Addendum to the Northeast Quadrant Specific Plan Environmental Impact Report (SCH# 92113073)

November 2024

Prepared by

RANEY PLANNING & MANAGEMENT, INC. | 25 years
1501 Sports Drive, Suite A, Sacramento, CA 95834

TABLE OF CONTENTS

A. BACKGROUND 1
B. INTRODUCTION 2
C. PROJECT DESCRIPTION 4
D. BASELINE FOR THE ANALYSIS 10
E. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED 10
F. SOURCES 11
G. DETERMINATION 13
H. ENVIRONMENTAL CHECKLIST 14

I. AESTHETICS. 15
II. AGRICULTURE AND FORESTRY RESOURCES. 18
III. AIR QUALITY. 20
IV. BIOLOGICAL RESOURCES. 29
V. CULTURAL RESOURCES. 39
VI. ENERGY 44
VII. GEOLOGY AND SOILS. 47
VIII. GREENHOUSE GAS EMISSIONS. 52
IX. HAZARDS AND HAZARDOUS MATERIALS. 54
X. HYDROLOGY AND WATER QUALITY. 60
XI. LAND USE AND PLANNING. 66
XII. MINERAL RESOURCES. 68
XIII. NOISE 69
XIV. POPULATION AND HOUSING. 72
XV. PUBLIC SERVICES. 74
XVI. RECREATION. 77
XVII. TRANSPORTATION. 78
XVIII. TRIBAL CULTURAL RESOURCES. 81
XIX. UTILITIES AND SERVICE SYSTEMS. 84
XX. WILDFIRE 89
XXI. MANDATORY FINDINGS OF SIGNIFICANCE. 91

APPENDICES:

Appendix A: CalEEMod Results
Appendix B: Biological Resources Assessment
Appendix C: Geotechnical Exploration
Appendix D: Phase I Environmental Site Assessment
Appendix E: Drainage Study
Appendix F: VMT Assessment
Appendix G: Supplemental Water Capacity Analysis
Appendix H: Supplemental Sewer Capacity Analysis

INITIAL STUDY / ADDENDUM
NOVEMBER 2024

A. BACKGROUND

1. Project Title: Dixon Innovation Center Project

2. Lead Agency Name and Address: City of Dixon Community Development Department
600 East A Street
Dixon, CA 95620

3. Contact Person and Phone Number: Raffi Boloyan
Community Development Director
(707) 678-7000

4. Project Location: Southwest of the Pedrick Road/
Interstate 80 (I-80) Intersection
Dixon, CA 95620
Assessor's Parcel Number: 0111-010-080

5. Project Sponsor's Name and Address: Buzz Oates Construction, Inc.
555 Capitol Mall, Suite 900
Sacramento, CA 95814

6. Existing General Plan Designation: Industrial

7. Existing Zoning Designation: General Industrial (IG-NESP)

8. Existing Northeast Quadrant Specific Plan Designation: Highway Commercial

9. Proposed Northeast Quadrant Specific Plan Designation: General Industrial

10. Surrounding Land Uses and Setting:

The approximately 37.57-acre project site, identified by Assessor's Parcel Number (APN) 0111-010-080, is located southwest of the intersection of Pedrick Road and Interstate 80 (I-80) in the City of Dixon, and is located within the City of Dixon Northeast Quadrant Specific Plan (NQSP). The project site was previously used for agricultural purposes but is currently undeveloped and consists of disked grasses. Surrounding land uses include a truck and trailer dealership to the north; undeveloped land and industrial uses to the east, across Pedrick Road; undeveloped land to the south, across from future Professional Drive, which is the subject site for the proposed The Campus Project (also was known as Dixon 257 Project); and agricultural land to the west, across I-80. The City of Dixon General Plan designates the project site as Industrial and the site is zoned General Industrial (IG). The NQSP designates the site as Highway Commercial.

11. Project Description Summary:

The Dixon Innovation Center Project (proposed project) consists of program-level land use entitlements that are intended to bring the NQSP land use designation for the project site into conformity with the site's existing (recently updated) General Plan and zoning designations. More specifically, the proposed project includes a request to amend the NQSP to create a new General Industrial land use designation and to redesignate the site's NQSP land use designation from Highway Commercial to General Industrial. The industrial development potential identified for the project site is approximately 563,826 square feet (sf). This environmental analysis will also consider the potential environmental effects associated with off-site backbone sewer and water infrastructure improvements required to serve future industrial development on the project site, in the event that such infrastructure is not constructed by The Campus (Dixon 257) Project.

B. INTRODUCTION

This Initial Study/Addendum identifies and analyzes the potential environmental impacts of the proposed project. The information and analysis presented in this document is organized in accordance with the order of the California Environmental Quality Act (CEQA) checklist in Appendix G of the CEQA Guidelines.

Project Background

The project site is within the NQSP, which consists of approximately 643 acres located in the northeast portion of the City of Dixon. The NQSP and associated Environmental Impact Report (EIR) were adopted and certified in August 1994. The NQSP EIR was prepared as a program-level EIR, pursuant to Section 15168 of the CEQA Guidelines. The NQSP designates the project site as Highway Commercial.

The City of Dixon adopted the General Plan Update and certified the General Plan Environmental Impact Report (General Plan EIR) on May 18, 2021. The General Plan EIR was prepared as a program-level EIR, pursuant to Section 15168 of the CEQA Guidelines. As part of the General Plan Update, the City redesignated the project site from Highway Commercial to Industrial.

Rationale for the Preparation of an Addendum

In the case of a project proposal requiring discretionary approval by the City for which the City has adopted an EIR for the overall project, the City must determine whether a subsequent EIR is required. The CEQA Guidelines provide guidance in this process by requiring an examination of whether, since the certification of the EIR, changes in the approved project or circumstances under which the approved project would be undertaken have occurred to such an extent that the proposal may result in a new significant impact (not previously identified in the certified EIR) or substantial increase in the severity of a previously identified significant impact. If so, the City would be required to prepare a subsequent EIR. The examination of impacts is the first step taken by the City in reviewing the CEQA treatment of the project. The following review proceeds with the requirements of CEQA Guidelines Section 15162 as discussed in detail below.

For the purposes of this Initial Study/Addendum, the checklist to document evaluation of the proposed industrial project will be based, generally, on the Appendix G format. Modifications will be made to the checklist sections, generally consisting of additional questions related to CEQA Guidelines Section 15162. Per CEQA Guidelines Section 15064, an addendum to an adopted EIR may be prepared if only minor technical changes or additions are required, and none of the conditions identified in CEQA Guidelines Section 15162 are present. The following identifies the standards set forth in Section 15162(a):

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 [or negative declaration];*

    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 following discussion confirms that the project has been evaluated for significant impacts pursuant to CEQA. The determination in this document is that the project's impacts have been considered in a previous CEQA document (i.e., the NQSP EIR) that was certified by the City of Dixon and deemed a sufficient and adequate analysis of the environmental impacts of the Dixon Innovation Center Project. The discussion concludes that the conditions set forth in Section 15162 are not triggered by the modified project. As such, an addendum is the appropriate environmental document for the proposed project, pursuant to CEQA Guidelines Section 15164.

Use of a Prior Environmental Document

In *Friends of College of San Mateo Gardens v. San Mateo County Community College District* (2016) 1 Cal.5th 937, 951, the California Supreme Court held that a lead agency, in considering a proposed change to a previously-approved project, has the responsibility for deciding whether the environmental document for the original project retains "some relevance" to the decision-making process for the proposed change. "[W]hether an initial environmental document remains relevant despite changed plans or circumstances—like the question whether an initial environmental document requires major revisions due to changed plans or circumstances—is a predominantly factual question. It is thus a question for the agency to answer in the first instance, drawing on its particular expertise." (*Id.* at p. 952.) On this factual issue, lead agencies are entitled to considerable deference from reviewing courts: "'a court should tread with extraordinary care' before reversing an agency's determination, whether implicit or explicit, that its initial environmental document retains some relevance to the decision-making process." (*Id.* at p. 953.)

Here, considering the quality of the certified Final EIR, the nature of the underlying program level project approved in 1994, and the programmatic nature of the proposed changes to that approved project, the City of Dixon has determined that the EIR certified for the Northeast Quadrant Specific Plan remains relevant to the proposal at hand, which does not alter the approved project footprint.

Based on the analysis set forth below, moreover, the City has also concluded that the proposed project change will not trigger the need for either a subsequent EIR or a supplement to the previously-certified 1994 Final EIR. For these reasons, the City has prepared this addendum to the 1994 EIR in order to evaluate the proposed project. The proposed modifications to the site's NQSP land use designation would result in impacts similar to those identified in the 1994 EIR.

C. PROJECT DESCRIPTION

The following provides a description of the project site's current location and setting, as well as the proposed project components.

Project Location and Setting

The approximately 37.57-acre project site, identified by APN 0111-010-080, is located southwest of the intersection of Pedrick Road and I-80 in the City of Dixon, and is located within the City of Dixon NQSP (see Figure 1). The project site was previously used for agricultural purposes but is currently undeveloped and consists of disked grasses. Surrounding land uses include a truck and trailer dealership to the north; undeveloped land and industrial uses to the east, across Pedrick Road; undeveloped land to the south, across from future Professional Drive, which is site of the proposed The Campus (Dixon 257) Project; and agricultural land to the west, across I-80 (see Figure 2). The City of Dixon General Plan designates the project site as Industrial and the site is zoned IG. The NQSP designates the site as Highway Commercial.

Project Components

The scope of this project is to align the land use designation for the project site in the NQSP to match the recently updated General Plan and Zoning Ordinance, which changed the land use and zoning for this site from Highway Commercial to Industrial. The proposed project includes a SPA to create the General Industrial land use designation and to modify the site's existing NQSP land use designation from Highway Commercial to General Industrial. The proposed General Industrial NQSP land use designation would allow for the development of a variety of large and small scale industrial, warehouse, and distribution uses, and would be generally consistent with the IG zoning designation as defined in Chapter 18.06, Industrial Districts, of the City of Dixon Municipal Code. As such, development within the proposed General Industrial NQSP land use designation would allow for development with a maximum floor area ratio (FAR) of 0.6, minimum lot size of 40,000 sf, and maximum height of 10 feet within 200 feet of a residential district, or 75 feet otherwise. Following approval of the proposed SPA, the project site's NQSP land use designation would be consistent with the site's City of Dixon General Plan land use and zoning designations. Additionally, the project includes the addition of a new Section 7 for Industrial development, addressing development standards, site planning, building design and related aspects for industrial development. No specific development is proposed as part of this project.

Figure 1
Regional Project Location

Figure 2
Project Site Boundaries Map

Project site boundaries are approximate.

Future buildout of the project site would include the development of industrial uses, consistent with the permitted uses and standards established by the existing General Plan and zoning designations, as well as the proposed NQSP land use designation. Although a site plan has not been prepared at this time, consistent with the Traffic Impact Analysis prepared for the proposed project,[1] this environmental analysis considers a future development potential for the project site of approximately 563,826 sf of industrial uses. In addition, future buildout of the project site would include the widening of the northern half of the future right-of-way (ROW) of Professional Drive along the site's southerly boundary (i.e., Pedrick Road to the southwestern corner of the project site).

As discussed above, the proposed The Campus (Dixon 257) Project is located immediately south of the project site. The Campus (Dixon 257) Project proposes multiple utilities improvements, including the development of water supply and sewer infrastructure extensions from the existing lines in Vaughn Road, the development of a stormwater retention basin, and the construction of a 1,500 gallons per minute (gpm) municipal well. Should The Campus (Dixon 257) Project be approved prior to approval of the currently proposed project, such utilities improvements would be developed as part of The Campus (Dixon 257) Project. However, if The Campus (Dixon 257) Project is not approved, or if construction of The Campus (Dixon 257) Project does not commence such that the off-site water, sewer, and drainage utilities would be built in time for the proposed project to rely on them, the Dixon Innovation Center project applicant could elect to proceed with building the necessary off-site utilities infrastructure improvements described above. As a result, the environmental analysis included for said off-site utilities in The Campus (Dixon 257) EIR is incorporated by reference in this document.

With respect to water supply infrastructure, if The Campus (Dixon 257) Project is not approved, or said project is approved but its associated water infrastructure will not be installed in sufficient time for the proposed project to proceed, the Dixon Innovation Center applicant would construct a 1,500-gpm municipal well south of the project site. In addition, a 12-inch water main would be extended south from the project site to connect to the existing 10-inch water main within Vaughn Road (see Figure 3).

With respect to sanitary sewer infrastructure, the proposed project would include the development of a sanitary sewer lift station in the southwest corner of the project site. In addition, if The Campus (Dixon 257) Project is not approved, or said project is approved but its associated sewer infrastructure will not be installed in sufficient time for the proposed project to proceed, the Dixon Innovation Center applicant would construct an off-site sewer line extension south to the existing sanitary sewer main within Vaughn Road (see Figure 4).

The proposed sewer infrastructure would serve the project site as well as the surrounding parcels to the north, west, and south of the project site. As such, the required sewer infrastructure improvements would include the installation of an eight-inch sewer line originating north of the project site, north of I-80, and would extend south within Pedrick Road before branching west into a 10-inch sewer line within the future Professional Drive, which would run along the site's southern boundary, before discharging into the aforementioned on-site lift station. From the lift station, the sewer line would vary in size and extend south to the existing 18-inch sewer line within Vaughn Road.

[1] Flecker Associates. *Traffic Impact Analysis for Dixon Innovation Center*. November 27, 2023.

Figure 3
Potential Water Infrastructure

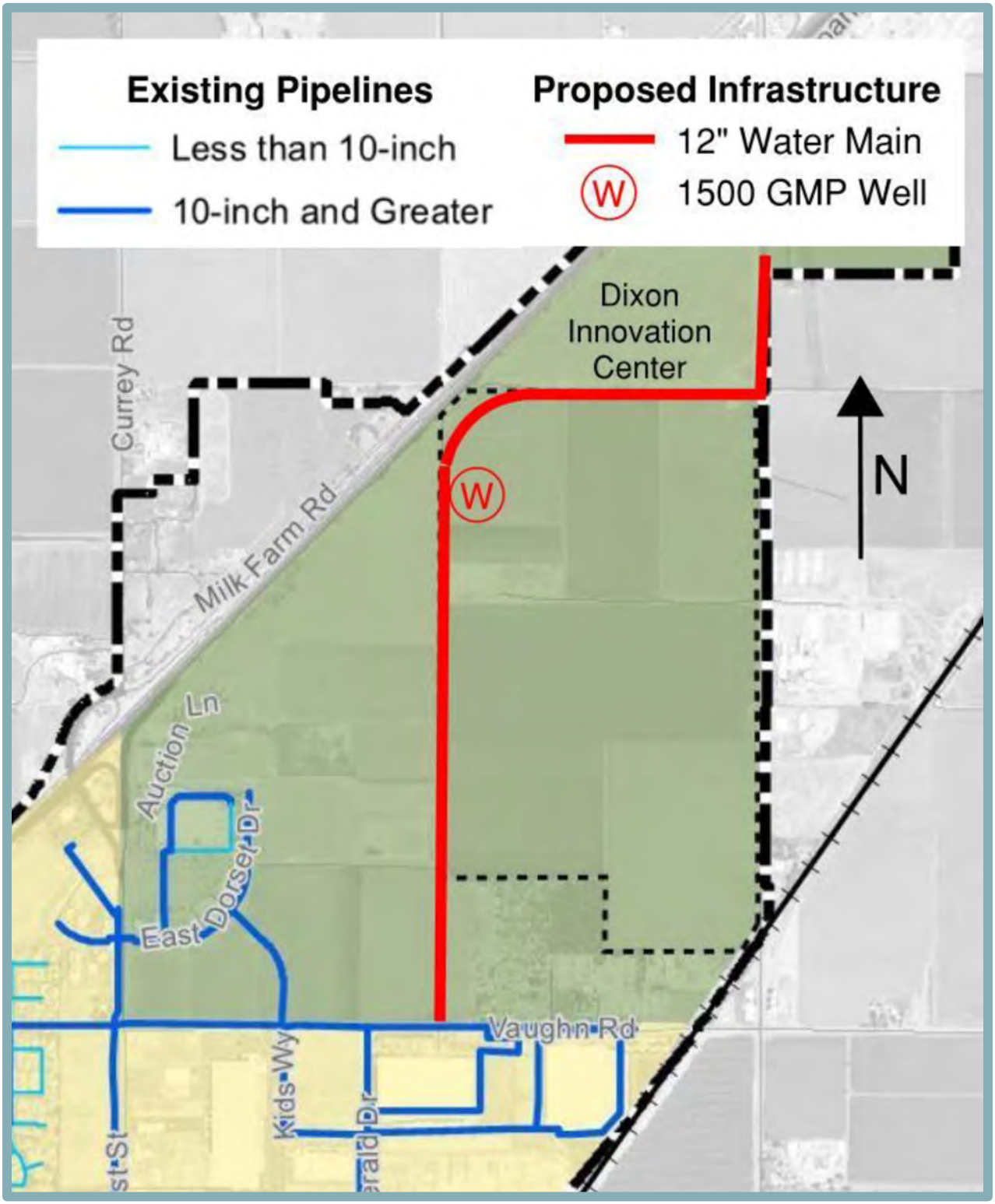
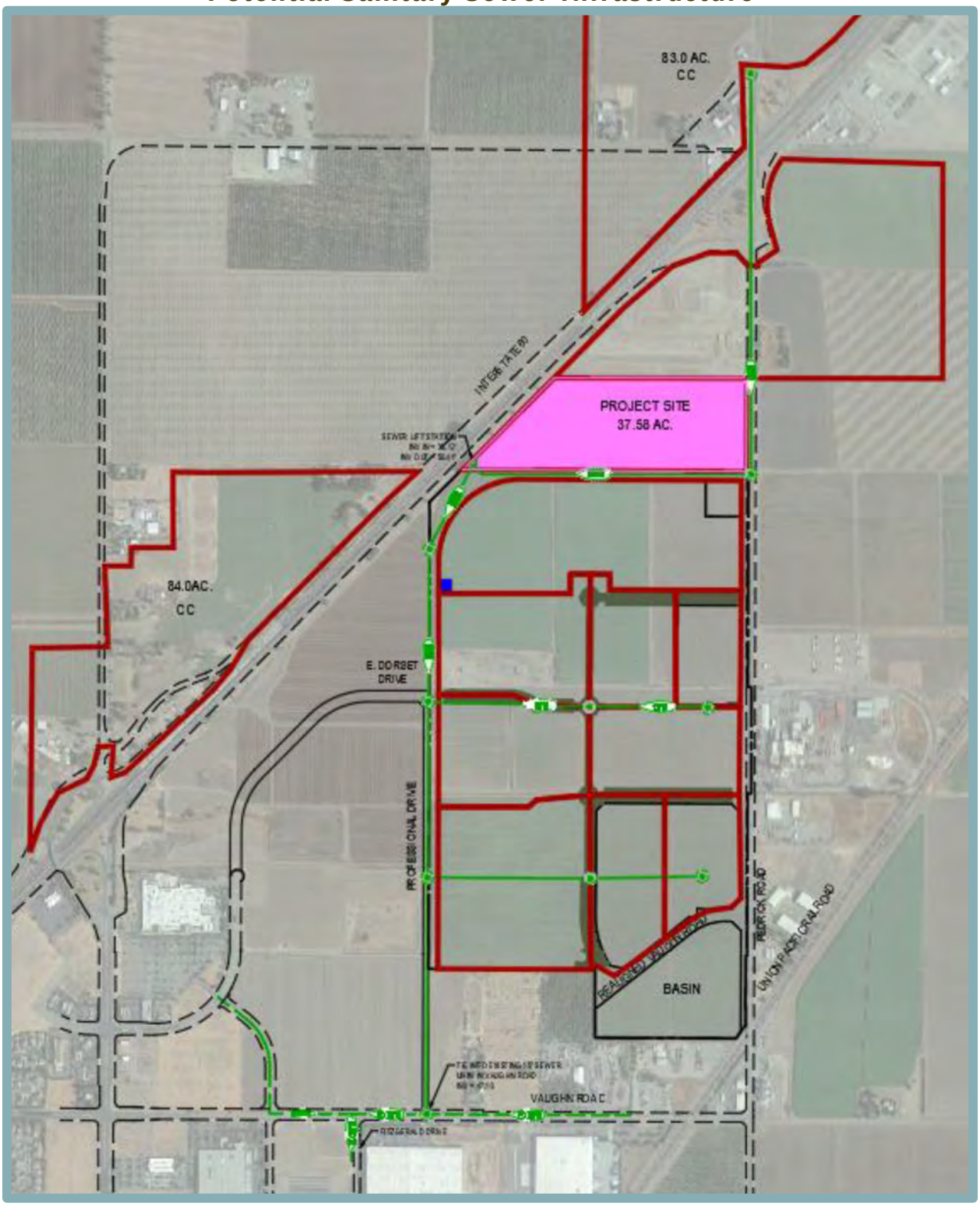


Figure 4
Potential Sanitary Sewer Infrastructure



With respect to storm water drainage, if The Campus (Dixon 257) Project is approved prior to approval of the proposed project, and its storm water infrastructure is in place when the project applicant is ready to proceed with development, then the proposed project's on-site storm drain infrastructure would connect to the off-site retention basin constructed as part of The Campus (Dixon 257) Project. However, if The Campus (Dixon 257) Project is not approved or said project is approved but its associated storm water infrastructure will not be installed in sufficient time for the proposed project to proceed, future buildout of the currently proposed project would include the construction of an on-site retention basin located in the western portion of the project site. The retention basin would provide a minimum of 44.3 acre-feet of storage with a percolation rate of two inches per day.

Requested Entitlements

The proposed project would require approval of the proposed SPA to create the General Industrial land use designation and to redesignate the site's existing NQSP land use designation from Highway Commercial to General Industrial.

D. BASELINE FOR THE ANALYSIS

In cases where an approved project has already undergone environmental review, and the environmental document has been certified by the lead agency, the lead agency can restrict its review to the incremental effects of the modified project, rather than having to reconsider the overall impacts of the project as if it were proposed for the first time. In other words, if the project under review constitutes a modification of a previously approved project previously subjected to environmental review, then the "baseline" for purposes of CEQA is adjusted such that the originally approved project is assumed to exist.[2] Thus, the environmental baseline for this analysis consists of the maximum buildout potential of the project site under the site's existing Highway Commercial NQSP land use designation. Under the Highway Commercial NQSP land use designation, which allows for a maximum FAR of 0.25, the project site would be developed with a maximum of 376,685 sf of commercial uses.[3]

E. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

On the basis of the following Initial Study/Addendum, the City has determined that the proposed park project is consistent with the NQSP EIR. All project impacts have been determined to be less than significant, or can be mitigated to a less-than-significant level given required compliance with mitigation measures specified by the NQSP EIR. Therefore, none of the environmental factors below are affected.

☐ **Aesthetics**	☐ **Agriculture and Forest Resources**	☐ **Air Quality**
☐ **Biological Resources**	☐ **Cultural Resources**	☐ **Energy**
☐ **Geology and Soils**	☐ **Greenhouse Gas Emissions**	☐ **Hazards and Hazardous Materials**
☐ **Hydrology and Water Quality**	☐ **Land Use and Planning**	☐ **Mineral Resources**

[2] See Michael H. Remy et al. *Guide to CEQA, 11th Edition*. Point Arena: Solano Press Books (2007), p. 207; Stephen L. Kostka and Michael H. Zischke. *Practice Under the Environmental Quality Act, Second Edition* (Vol. 1). Oakland: Continuing Education of the Bar (2018), p. 12-32; *Benton v. Board of Supervisors* (1st Dist. 1991) 226 Cal. App. 3d 1467.

[3] 34.59 * 43,560 sf *0.25 = 376,685 sf. Note that the site acreage used here to calculate the development potential of the site pursuant to the existing NQSP land use designation of Highway Commercial is based on an earlier version of the applicant's SPA exhibit. This former exhibit originally proposed to redesignate 34,59 acres as General Industrial and the remaining acreage for utilities. Rather, the entire 37.57 acres would be redesignated to General Industrial. By using the smaller acreage of 34,59, the development potential serving as the baseline for this analysis (376,685 sf) is less than it otherwise could be (409,137 sf). Thus, the analysis in this Addendum is conservative.

☐ **Aesthetics**	☐ **Agriculture and Forest Resources**	☐ **Air Quality**
☐ **Noise**	☐ **Population and Housing**	☐ **Public Services**
☐ **Recreation**	☐ **Transportation**	☐ **Tribal Cultural Resources**
☐ **Utilities and Service Systems**	☐ **Wildfire**	☐ **Mandatory Findings of Significance**

F. SOURCES

The following documents are referenced information sources used for the purpose of this Initial Study/Addendum:

1. Brusca Associates, Inc. *Pedrick Road at I80 Property Phase I ESA*. March 17, 2022.
2. Brusca Associates, Inc. *Pedrick Road Property Phase I ESA*. September 30, 2020.
3. California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/dlrp/ciff/. Accessed October 2024.
4. California Department of Forestry and Fire Protection. *Solano County: Fire Hazard Severity Zones In SRA*. Available at: https://cdnverify.osfm.fire.ca.gov/media/5wwjs5hp/fhsz_county_sra_11x17_2022_solano_ada.pdf. Accessed October 2024.
5. California Department of Transportation. *California State Scenic Highway System Map*. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed June 2022.
6. California State Water Resources Control Board. *Phase II Small Municipal Separate Storm Sewer System (MS4) Program*. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.html. Accessed October 2024.
7. Dixon Unified School District Board of Education. *Developer Fee Justification Study, 2022*. June 2022.
8. DKS Associates. *Dixon Innovation Center VMT Assessment Draft R.2*. October 22, 2024.
9. ENGEO Incorporated. *Pedrick Road Warehouse, Dixon, California Geotechnical Exploration*. June 21, 2022.
10. Federal Emergency Management Agency. *Flood Insurance Rate Map 06095C0200F, Effective August 2, 2012.* Available at: https://msc.fema.gov/portal/search?AddressQuery=Dixon%2C%20CA. Accessed October 2024.
11. HELIX Environmental Planning, Inc. *Dixon 257 Development Project Cultural Resources Assessment*. April 2023.
12. HELIX Environmental Planning, Inc. *Dixon 257 Project Biological Resources Assessment*. April 2023.
13. Madrone Ecological Consulting. *Biological Resources Assessment: Dixon Innovation Center (Pedrick Road)*. November 2023.
14. Morton & Pitalo, Inc. *Supplemental Sewer Capacity Analysis*. February 2024.
15. Morton & Pitalo, Inc. *Supplemental Water Capacity Analysis*. February 2024.
16. Morton & Pitalo. *Dixon Innovation Center Drainage Study*. February 28, 2024.
17. Placer County Air Pollution Control District. *2017 CEQA Handbook: Chapter 4, Analyzing Operations Criteria Pollutant Emissions*. 2017.
18. Sacramento Metropolitan Air Quality Management District. *CEQA Guide: Chapter 4, Operational Criteria Air Pollutant Emissions*. October 2020.
19. Solano Subbasin Groundwater Sustainability Agency. *Solano Subbasin Groundwater Sustainability Plan*. November 30, 2021.

20. Tom Origer and Associates. *Cultural Resources Study for the Dixon Innovation Center Project, Dixon, Solano County, California*. September 13, 2023.
21. Weather Spark. *Climate and Average Weather Year Round in Dixon, California*. Available at: https://weatherspark.com/y/1121/Average-Weather-in-Dixon-California-United-States-Year-Round. Accessed November 2024.
22. Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.

G. DETERMINATION

On the basis of this Initial Study/Addendum:

☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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

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

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

☒ As demonstrated in this Initial Study Checklist, the City has determined that the proposed modified project does not present a legal or evidentiary basis for the preparation of a Supplemental or Subsequent EIR pursuant to State CEQA Guidelines Section 15162 and that an Addendum to the 1994 EIR, pursuant to State CEQA Guidelines Section 15164, is the appropriate environmental document for the proposed project.

_____	_____
Signature	Date
Raffi Boloyan, Community Development Director	City of Dixon
Printed Name	For

H. ENVIRONMENTAL CHECKLIST

The purpose of the comparison is to evaluate the categories in terms of any "**changes**" or "**new information**" that may result in a changed environmental impact evaluation. A "no" answer does not necessarily mean that potential impacts do not exist relative to the environmental category, but that a relevant change would not occur in the condition or status of the impact due to its insignificance or its treatment in a previous environmental document. The following impact evaluation categories will be used to evaluate the proposed park project as compared to the NQSP EIR:

Where Impact Was Analyzed in the Previous CEQA Documents: This column provides a reference to the page(s) of the NQSP EIR where information and analysis may be found relative to the environmental issue listed under each topic.

Do Proposed Changes Involve New or More Severe Impacts? Pursuant to Section 15162(a)(1) of the CEQA Guidelines, this column indicates whether the changes represented by the current project will result in new significant impacts that have not already been considered and mitigated by a previous EIR or that substantially increase the severity of a previously identified significant impact. If a "yes" answer is given and more severe significant impacts are specified, additional mitigations will be specified in the discussion section including a statement of impact status after mitigation.

Any New Circumstances Involving New or More Severe Impacts? Pursuant to Section 15162(a)(2) of the CEQA Guidelines, this column indicates whether there have been changes to the project site or the vicinity (environmental setting) that have occurred subsequent to the certification of an EIR, which would result in the current project having significant impacts that were not considered or mitigated by that EIR or which substantially increase the severity of a previously identified significant impact.

Any New Information Requiring New Analysis or Verification? Pursuant to Section 15162(a)(3)(A-D) of the CEQA Guidelines, this column indicates whether 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 environmental documents were certified as complete is available, requiring an update to the analysis of the previous environmental documents to verify that the environmental conclusions and mitigation measures remain valid. If the new information shows that: (A) the project will have one or more significant effects not discussed in the prior environmental documents; or (B) that significant effects previously examined will be substantially more severe than shown in the prior environmental documents; or (C) that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects or the project, but the project proponents decline to adopt the mitigation measure or alternative; or (D) that mitigation measures or alternatives which are considerably different from those analyzed in the prior environmental documents would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative, the question would be answered 'Yes' requiring the preparation of a subsequent EIR or supplement to the EIR. However, if the additional analysis completed as part of this Environmental Checklist Review finds that the conclusions of the prior environmental documents remain the same and no new significant impacts are identified, or identified significant environmental impacts are not found to be substantially more severe, the question would be answered 'No' and no additional EIR documentation (supplement to the EIR or subsequent EIR) would be required.

I. AESTHETICS. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Have a substantial adverse effect on a scenic vista?	Pgs. 4-135 to 4-136 of NQSP EIR	No	No	No
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	N/A	No	No	No
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Pg. 4-136 of NQSP EIR	No	No	No
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Pgs. 4-136 to 4-137 of NQSP EIR	No	No	No

Discussion

a. Although the NQSP EIR does not specifically identify any scenic vistas or address potential impacts to such resources, the NQSP EIR concluded that although buildout of the NQSP would result in the elimination of existing views of agricultural uses, because the NQSP area is surrounded by agricultural uses, the loss of such views would not be considered significant.

The proposed project would not alter the assessment made in the NQSP EIR because although the proposed SPA would change the site's NQSP land use designation from CH to IG, both the anticipated and proposed uses are urban in nature. As such, the proposed project would not result in the development of any lands that were not previously analyzed for urban uses. Therefore, the proposed project would not result in substantial modifications such that the proposed project would have a substantial adverse effect on a scenic vista.

Based on the above information, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts related to scenic vistas than were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

b. The NQSP EIR did not address potential impacts related to substantially damaging scenic resources, including, but not limited to rock outcroppings, and historic buildings within a State scenic highway. However, according to the California Department of

Transportation's (Caltrans) Scenic Highway System Lists,[4] the nearest officially designated State scenic highway to the project site is State Route (SR) 160, the nearest point of which is located approximately 16 miles to the east. In addition, while SR 128 is considered to be eligible for designation as a State scenic highway, SR 128 is located approximately eight miles west of the project site. As such, the currently proposed project would not substantially damage scenic resources, including, but not limited to rock outcroppings, and historic buildings within a State scenic highway. Thus, the proposed project would not result in new significant impacts or substantially more severe significant impacts than were previously analyzed in the NQSP EIR.

c. The NQSP EIR determined that compliance with the siting and design requirements and review procedures established in the NQSP to ensure visual compatibility and aesthetic appropriateness of development within the NQSP area would ensure that impacts related to substantially degrading the existing visual character or quality of the site and its surroundings would be less than significant. While the proposed project would change the types of uses proposed, and such changes could lead to changes in visual character that might ultimately be different, the resulting impacts would be not more severe than what was previously anticipated. In addition, the NQSP includes recommended design element features along the I-80 Corridor to soften the visual image of projects, with recommended setbacks varying from 35 to 200 feet. No specific design-level plans are being processed at this time for the project; thus, the City will review future development applications to ensure consistency with the I-80 Corridor recommendations in the NQSP. Should the project include construction of a retention basin on-site, rather than tying into the off-site basin within The Campus (Dixon 257) project, the basin would be located along the western property edge, adjacent to I-80. This retention basin could serve as part of the recommended buffer, as the NQSP clearly anticipates a variety of features that could achieve the recommended setback, including but not limited to, earth mounding, berms, retaining walls, screen structures, and parking areas. Therefore, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Thus, the proposed project is consistent with the conclusions of the NQSP EIR.

d. The NQSP EIR analyzed the potential of buildout of the NQSP to create new sources of substantial light or glare which would adversely affect day or nighttime views in the area. The EIR concluded that while the NQSP includes a set of lighting guidelines intended to provide safety and security as well as mitigate nighttime glare, implementation of Mitigation Measures VR-A through VR-D would be required to reduce the impact to a less-than-significant level.

The currently proposed project would involve the introduction of new sources of light and glare associated with interior light spilling through windows, exterior lighting on the proposed structures, outdoor lighting on the internal drive aisles and within parking areas, and light reflected off windows. However, since the NQSP EIR was certified, lighting technology has improved considerably including LED components, lower spillover, and programmable levels. As such, the proposed lighting is anticipated to have a lesser impact than what was previously anticipated in the NQSP EIR. In addition, the proposed project would be subject to the 2022 Building Energy Efficiency Standards (Title 24, Part 6 California Code of Regulations [CCR]), which regulates outdoor lighting characteristics of

[4] California Department of Transportation. *California State Scenic Highway System Map*. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed June 2022.

new development such as maximum power and brightness, shielding, and controls to turn lighting on and off.

In addition, Mitigation Measures VR-A through VR-D would still be applicable to the proposed project. Mitigation Measure VR-A would require that bare metallic surfaces such as pipes, vents, and gutters be painted or concealed from view, and that all flashing and sheet metal be treated to match adjacent materials; similarly, Mitigation Measure VR-B would require that primary roofing materials be non-reflective. In addition, Mitigation Measure VR-C would disallow monolithic glass structures, and Mitigation Measure VR-D would require building mass colors to be of varied hues that minimize glare.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project is consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

The following mitigation measure(s) from the NQSP EIR would continue to apply to the proposed project:

- **Mitigation Measure VR-A:** Bare metallic surfaces such as pipes, vents, gutters, and flashings shall be painted or concealed from view in a manner harmonious to the structure. All flashing and sheet metal must be treated to match the adjacent materials.
- **Mitigation Measure VR-B:** Primary roofing materials shall be non-reflective.
- **Mitigation Measure VR-C:** Monolithic glass structures shall not be allowed unless used as a portion of a building to highlight an entry.
- **Mitigation Measure VR-D:** Building mass colors shall be of varied hues that minimize glare with bright colors limited to use around doors, trims, awnings, and other pedestrian-oriented features.

New Mitigation Measures

None Required.

II. AGRICULTURE AND FORESTRY RESOURCES. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping Program of the California Resources Agency, to non-agricultural use?	Pg. 4-13	No	No	No
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Pg. 4-18	No	No	No
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))?	N/A	No	No	No
d. Result in the loss of forest land or conversion of forest land to non-forest use?	N/A	No	No	No
e. Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use?	Pg. 4-14	No	No	No

Discussion

a,b,e. The NQSP EIR determined that although development of the NQSP area with commercial and industrial uses would be consistent with the Dixon General Plan, such development would result in the conversion of approximately 623 acres of Farmland, including approximately 60 acres under a Williamson Act contract. The NQSP EIR concluded that mitigation to reduce the significance of such impacts would be infeasible, and would remain significant and unavoidable.

With respect to the currently proposed project, according to the California Department of Conservation's California Important Farmland Finder tool, the project site is solely comprised of Grazing Land.[5] In addition, the project site is not subject to a Williamson Act contract. Therefore, the proposed project would have no impact related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, to a non-agricultural use and further review is not required for this topic.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously

[5] California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/dlrp/ciff/. Accessed October 2024.

analyzed in the NQSP EIR. Thus, the proposed project is consistent with the conclusions of the NQSP EIR.

c,d. Impacts to forest land, timberland, or land zoned Timberland Production were not addressed in the NQSP EIR. Nonetheless, the project site consists of disked grasses. The City of Dixon General Plan designates the project site as Industrial and the site is zoned IG-NESP. The NQSP designates the site as CH. The project site is not considered forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), and is not zoned Timberland Production (as defined by Government Code Section 51104[g]). Therefore, the proposed project would have no impact with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning.

Prior Mitigation Measures

None Required.

New Mitigation Measures

None Required.

III. AIR QUALITY. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Conflict with or obstruct implementation of the applicable air quality plan?	Pgs. 4-45 to 4-47	No	No	No
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?	Pgs. 4-47 to 4-50	No	No	No
c. Expose sensitive receptors to substantial pollutant concentrations?	Pg. 4-50	No	No	No
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	N/A	No	No	No

Discussion

a,b. The NQSP EIR determined that construction of the NQSP area could result in emissions that could conflict with or obstruct implementation of the applicable air quality plan. However, with implementation of mitigation, such impacts would be reduced to a less-than-significant level. However, the NQSP EIR determined that a significant and unavoidable impact would occur resulting from increased long-term regional emissions of criteria pollutants, primarily associated with mobile sources, that would exceed the Yolo-Solano Air Quality Management District's (YSAQMD) significance thresholds of 10 tons per year (TPY) for reactive organic gas (ROG), 10 TPY for nitrogen oxides (NO_X), and 80 pounds per day for particulate matter 10 microns in diameter (PM_{10}). The NQSP EIR also concluded that even with implementation of mitigation, the generation of local mobile-source carbon monoxide (CO) concentrations would result in a significant and unavoidable impact.

For this Addendum, air quality impacts were assessed to determine if the proposed project could involve more severe air quality impacts than those that were analyzed in the previous CEQA document for the planned Highway Commercial uses.

Regulatory Setting

Areas not meeting federal and State AAQS are designated as nonattainment areas, which are required to have an air quality plan containing strategies and control measures to attain the AAQS. The NQSP area, including the project site, is located within the Sacramento Valley Air Basin (SVAB) and is within the jurisdictional boundaries of the YSAQMD. The SVAB is designated nonattainment for the federal particulate matter 2.5 microns in diameter ($PM_{2.5}$) and PM_{10} standards, as well as for both the federal and State ozone standards.

Due to the nonattainment designations of the area, YSAQMD has developed plans to attain the State and federal standards for ozone and particulate matter. The plans include the 2013 Ozone Attainment Plan, the $PM_{2.5}$ Implementation/Maintenance Plan, and the 2012 Triennial Assessment and Plan Update. Adopted YSAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. Thus,

by exceeding the YSAQMD's mass emission thresholds for operational or construction emissions of ROG, NO_X, or PM_{10}, a project would be considered to conflict with or obstruct implementation of the YSAQMD's air quality planning efforts. The YSAQMD mass emission thresholds for operational and construction emissions are shown in Table 1 below.

Table 1
YSAQMD Thresholds of Significance

Pollutant	Construction Thresholds	Operational Thresholds
ROG	10 tons/yr	10 tons/yr
NO_X	10 tons/yr	10 tons/yr
PM_{10}	80 lbs/day	80 lbs/day

Source: YSAQMD. Handbook for Assessing and Mitigating Air Quality Impacts. July 11, 2007.

Method of Analysis

To analyze emissions from construction and operations of the proposed uses, emissions were quantified using the California Emissions Estimator Model (CalEEMod) software version 2022.1.1.28 – a Statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, vehicle mix, trip length, average speed, etc. Where project-specific information is available, such information should be applied in the model. It should be noted that the modeling for both the approved and proposed land uses included the potential off-site utilities infrastructure improvements, as they would be needed to serve the site under either scenario. All CalEEMod results are included as Appendix A.

Pursuant to the site's existing NQSP land use designation, buildout of the project site was originally anticipated to include Highway Commercial uses. For the purpose of the CalEEMod modeling, the approved land use for the 37.57-acre site was assumed to result in the development of 376,685 sf of Highway Commercial uses. The modeling prepared for the approved conditions scenario assumed the foregoing land uses, as well as the following:

- Construction was assumed to start in June 2025;
- Construction would occur over a four-year period; and
- Trip rates were adjusted based on the trip generation rates that were provided for the proposed project by DKS Associates.[6]

For the proposed project, it was assumed that buildout of the project site could result in approximately 563,826 sf of General Industrial uses. The emissions modeling included the following assumptions:

- Construction was assumed to start in June 2025;
- Construction would occur over a four-year period; and
- Trip rates were adjusted based on the trip generation rates that were provided for

[6] DKS Associates. *Dixon Innovation Center VMT Assessment Draft R.2.* October 22, 2024.

the proposed project by DKS Associates.[7]

The estimated emissions associated with construction and operations of the proposed project as compared to the approved conditions are presented and discussed in further detail below.

Construction Emissions

According to the CalEEMod results, the approved conditions and the proposed project would result in maximum criteria air pollutant emissions during construction as shown in Table 2.

Table 2
Incremental Change in Construction Emissions

	ROG (tons/yr)	NO_X (tons/yr)	PM_{10} (lbs/day)
Approved Conditions	0.63	1.81	21.7
Proposed Project	0.74	0.49	20.2
Difference	0.11	-1.32	-1.5
Threshold of Significance	10	10	80
Exceeds Threshold?	**NO**	**NO**	**NO**

Source: CalEEMod, October 2024 (see Appendix A).

As shown in Table 2, the proposed project could result in slightly reduced emissions as compared to the approved conditions, with the exception of ROG emissions; however, construction emissions associated with the proposed project would be well below the applicable thresholds of significance for all criteria pollutants. Most importantly, the net increase in criteria pollutant emissions associated with the proposed project as compared to the existing conditions would be well below all applicable thresholds of significance. As a result, the proposed project would result in a less-than-significant impact related to construction emissions of criteria pollutants.

Operational Emissions

According to the CalEEMod results, the approved conditions and the proposed project would result in maximum criteria air pollutant emissions during operations as shown in Table 3.

As shown in the table, operational emissions associated with the proposed project would be above the applicable threshold of significance for PM_{10}. However, emissions of ROG and NO_x associated with the proposed project would be below the thresholds of significance. However, as previously discussed, under subsequent CEQA review, the analysis appropriately considers the approved conditions as the environmental baseline for determining impact significance. Although newly calculated proposed project PM_{10} emissions would exceed the 82 lbs/day YSAQMD threshold of significance, emissions of PM_{10} would occur at a level below what could be anticipated for the approved conditions in the 1994 EIR. Because the proposed project's emission of PM_{10} would be less than that of the 1994 EIR, new mitigation measures are not required beyond those identified in the 1994 EIR, which would result in PM_{10} emissions below the 82 lbs/day YSAQMD threshold of significance.

[7] DKS Associates. *Dixon Innovation Center VMT Assessment Draft R.2.* October 22, 2024.

Table 3 Incremental Change in Operational Emissions			
	ROG (tons/yr)	**NO_X (tons/yr)**	**PM_{10} (lbs/day)**
Approved Conditions	10.5	9.56	99.2
Proposed Project	8.48	8.66	85.9
Difference	-2.02	-0.9	-13.3
Threshold of Significance	10	10	80
Exceeds Threshold?	**NO**	**NO**	**NO**
Source: CalEEMod, October 2024 (see Appendix A).			

Conclusion

Given all of the above, the proposed project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact related to air quality. Although the proposed project would result in emissions of PM_{10} that exceed the YSAQMD threshold, emissions of PM_{10} would be below what was anticipated for the previously approved uses.

Considering the anticipated level of PM_{10} emissions, mitigation sufficient to reduce PM_{10} emissions below the YSAQMD's threshold of significance is currently available. Overall, the proposed project would not result in new significant impacts or substantially more severe significant impacts related to conflicting with or obstruct implementation of the applicable air quality plan.

c. The NQSP EIR found that even with implementation of Mitigation Measures AQ-M through AQ-V, buildout of the NQSP area would result in a significant and unavoidable impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by preexisting health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptors to the project site are the single-family residences located approximately 1,000 feet west of the project site, across I-80.

The major pollutant concentrations of concern are localized CO emissions and Toxic Air Contaminant (TAC) emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. The YSAQMD recommends the use of screening thresholds to assess a project's potential to create an impact through the creation of CO hotspots. A violation of the CO standard could

occur if either of the following criteria is true of any street or intersection affected by the mitigated project:[8]

- The project would reduce peak-hour level of service (LOS) on one or more streets or at one or more intersections to an unacceptable LOS (typically LOS E or F); or
- The project would increase a traffic delay by 10 or more seconds on one or more streets or at one or more intersections in the project vicinity where a peak hour LOS of F currently exists.

If either or both of the above criteria are met by the mitigated project, YSAQMD recommends performing a full CO Protocol Analysis. However, following approval of Senate Bill (SB) 743, CEQA documents can no longer rely on LOS for determining significance conclusions. Because the YSAQMD's current guidance for determining localized CO impacts relies only on LOS, and LOS cannot be used for determining significance conclusions, this analysis relies on the guidance of nearby air districts.

Pursuant to the Sacramento Metropolitan Air Quality Management District's (SMAQMD's) CEQA Guidelines, emissions of CO are generally of less concern than other criteria pollutants, as operational activities are not likely to generate substantial quantities of CO, and the SVAB has been in attainment for CO for multiple years.[9] Additionally, the Placer County Air Pollution Control District (PCAPCD), which has authority over a portion of the SVAB and is located within proximity to the YSAQMD, has a screening level for localized CO impacts. According to the PCAPCD screening levels, a project could result in a significant impact if the project would result in CO emissions from vehicle operations in excess of 550 lbs/day.[10] Per CalEEMod estimates calculated for the proposed project, operations of the proposed project would result in maximum CO emissions of 375 lbs/day, which is well under the PCAPCD screening level.

Therefore, based on the guidance of the SMAQMD and PCAPCD, the proposed project would not expose sensitive receptors to substantial concentrations of localized CO and impacts related to localized CO emissions would be less than significant.

TAC Emissions

Another category of environmental concern is TACs. The California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Such TACs include, but are not limited to, benzene, ethyl benzene, toluene, and xylene. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the

---

8 Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.

9 Sacramento Metropolitan Air Quality Management District. *CEQA Guide: Chapter 4, Operational Criteria Air Pollutant Emissions*. October 2020.

10 Placer County Air Pollution Control District. *2017 CEQA Handbook: Chapter 4, Analyzing Operations Criteria Pollutant Emissions*. 2017.

higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk.

The proposed project would involve components that would result in emissions of TACs. In particular, implementation of the proposed project would result in emissions related to project construction, and the use of heavy-duty diesel trucks to transport goods to and from the site. Each source of TACs is discussed in further depth below.

Construction Emissions

Construction-related activities have the potential to generate concentrations of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction would be temporary and would occur over a relatively short duration in comparison to the operational lifetime of the proposed project. Only portions of the site would be disturbed at a time throughout the construction period, with operation of construction equipment occurring intermittently throughout the course of a day rather than continuously at any one location on the project site. Operation of construction equipment within portions of the overall development area would allow for the dispersal of emissions, and would ensure that construction activity is not continuously occurring in the portions of the project site closest to existing receptors.

Pursuant to the City's Noise Ordinance, construction activities would be limited to the hours of 7:00 AM and 6:00 PM Monday through Saturday and 9:00 AM through 6:00 PM Sunday. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation includes emissions reducing requirements such as limitations on vehicle idling, disclosure, reporting, and labeling requirements for existing vehicles, as well as standards relating to fleet average emissions and the use of Best Available Control Technologies. Furthermore, the prevailing wind direction in the City of Dixon is primarily from the west and, thus, construction-related DPM would be directed away from the nearest residential areas and associated sensitive receptors.[11]

Due to the temporary nature of construction and substantial distance to the closest sensitive receptors, the project would not result in any one nearby sensitive receptor being exposed to high concentration of DPM associated with construction for an extended period of time.

Operational Emissions

The CARB Handbook considers industrial uses involving heavy-duty diesel truck traffic as a source of substantial TAC emissions. The proposed project could consist of the future development of approximately 563,826 sf of industrial uses, which would involve the use of heavy-duty diesel trucks during project operations. However, the nearest sensitive receptor to the project site is a single-family residence located approximately 1,000 feet west of the project site. DPM is a highly dispersive gas, and concentrations of DPM decline rapidly with distance. Based on the CARB's Handbook, an 80 percent drop-off in pollutant concentrations occurs at approximately 1,000 feet from a distribution center. In addition, the prevailing wind direction in the project area is from the west; therefore, any emissions of TACs produced by the proposed project would not typically

[11] Weather Spark. *Climate and Average Weather Year Round in Dixon, California*. Available at: https://weatherspark.com/y/1121/Average-Weather-in-Dixon-California-United-States-Year-Round. Accessed November 2024.

be blown toward the nearest sensitive receptors, which are located to the west of the project site.[12] Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations during operations.

Conclusion

Based on the above, the proposed project would not result in new significant impacts or substantially more severe significant impacts related to exposure to substantial pollutant concentrations than what were analyzed in the NQSP EIR. Therefore, the proposed project remains consistent with the conclusions of the NQSP EIR.

d. The NQSP EIR did not analyze the potential for buildout of the NQSP area to create objectionable odors affecting a substantial number of people. Pollutants of principal concern include emissions leading to odors, emissions of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in sections "a" through "c" above. Therefore, the following discussion focuses on emissions of odors and dust.

Odors

According to the YSAQMD, common types of facilities that are known to produce odors include, but are not limited to, wastewater treatment facilities, chemical or fiberglass manufacturing, landfills, auto body shops, composting facilities, food processing facilities, refineries, dairies, and asphalt or rendering plants.[13] While offensive odors rarely inflict physical harm, the YSAQMD notes that odors can still generate considerable distress among the public because of their unpleasant nature, which in turn, potentially leads to citizen complaints to local governments and the YSAQMD. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The presence of an odor impact is dependent on a number of variables, including: the nature of the odor source; the frequency of odor generation; the insensitivity of odor; the distance of odor source to sensitive receptors; wind direction; and sensitivity of the receptor.

Diesel fumes from construction equipment are often found to be objectionable; however, construction is temporary and construction equipment would operate intermittently throughout the course of a day, would be restricted to daytime hours, and would only occur over portions of the improvement area at a time. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. Project construction would also be required to comply with all applicable YSAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions as well as any associated odors related to operation of construction equipment. Considering the short-term nature of construction activities, as well as the regulated and intermittent nature of the operation of construction equipment, construction of the proposed project would not be expected to create objectionable odors affecting a substantial number of people.

The YSAQMD regulates objectionable odors through Rule 2.5 (Nuisance), which prohibits any person or source from emitting air contaminants or other material that result in any of

---

12 *Ibid.*

13 Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.

the following: cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; endanger the comfort, repose, health, or safety of any such persons or the public; or have a natural tendency to cause injury or damage to business or property. Rule 2.5 is enforced based on complaints. If complaints are received, the YSAQMD is required to investigate the complaint, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications. Thus, although not anticipated, if odor complaints are made during construction or operation of the project, the YSAQMD would ensure that such odors are satisfactorily addressed. Furthermore, the approved Highway Commercial uses could result in greater potential to generate odors than the proposed General Industrial uses. Highway Commercial uses such as fast-food restaurants generate food odors from cooking, oil and grease waste, and refuse that could reasonably be expected to exceed any odors that could be generated from the proposed uses.

Dust

All projects within the YSAQMD are required to implement construction mitigation measures, such as a dust control program. The dust control program would ensure that water or dust palliatives would be applied to exposed surfaces, grading operations would not take place during periods of high winds, and construction-related trucks would be covered at the end of the day. In addition, the project would be required to comply with YSAQMD Rule 2.11, Particulate Matter Concentration, and Rule 2.19, Particulate Matter Process Emission Rate, as well as the best management practices (BMPs) noted in Policy NE-5.3 of the City's General Plan, which serve to reduce air pollutant emissions associated with the construction and operation of development projects.

Implementation of all applicable YSAQMD rules would ensure that construction of the proposed project would not result in substantial emissions of dust. Following project construction, vehicles operating within the project site would be limited to paved areas of the site. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

Conclusion

Based on the above, the proposed project would not result in new significant impacts or substantially more severe significant impacts related to exposure to substantial pollutant concentrations than what were analyzed in the NQSP EIR. Therefore, the proposed project remains consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

The following mitigation measures from the NQSP are still applicable to the proposed project to address the exceedance of the YSAQMD PM_{10} threshold.

- **Mitigation Measure AQ-M**: Convenient access, such as shuttle services, to public transit systems shall be provided to encourage shoppers, employees and visitors to use mass transit, thereby reducing vehicle emissions.
- **Mitigation Measure AQ-N:** Information shall be provided at various locations within the project site about carpool, vanpool, or transit use facilities. Incentives, such as parking stalls for carpool and vanpool vehicles shall also be exercised.
- **Mitigation Measure AQ-O**: Employee trip reduction and other applicable transportation control measures shall be developed. An annual report shall be prepared to document and demonstrate employee trip reduction.

- **Mitigation Measure AQ-R**: Parking lots, drive-through facilities, and egress/ingress areas shall be designed to reduce vehicle idling. Slow-moving or idling vehicles produce more emissions.
- **Mitigation Measure AQ-S**: Secure, convenient indoor or outdoor bike storage racks shall be provided at commercial centers, office buildings, and other places of employment.

New Mitigation Measures

None Required.

IV. BIOLOGICAL RESOURCES. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
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?	Pgs. 4-58 to 4-61	No	No	No
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	N/A	No	No	No
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?	Pgs. 4-58 to 4-59	No	No	No
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	N/A	No	No	No
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	N/A	No	No	No
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	N/A	No	No	No

Discussion

a. The NQSP EIR analyzed the potential for buildout of the NQSP area to substantially impact a candidate, sensitive, or special-status plant or wildlife species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). According to the NQSP EIR, special-status plant species were determined to be absent from the NQSP area and to not have the potential to occur within the NQSP. Therefore, the NQSP EIR did not further address potential impacts to special-status plant species. According to the Biological Resources Assessment (BRA) prepared for the project site by Madrone Ecological Consulting (Madrone) (see Appendix B),[14] the agricultural lands within the project site lack the

[14] Madrone Ecological Consulting. *Biological Resources Assessment: Dixon Innovation Center (Pedrick Road)*. November 2023.

necessary habitat constituents to provide potential habitat for special-status plant species. Therefore, consistent with the NQSP EIR, future development of the project site would not result in any adverse impacts to special-status plant species.

Should The Campus (Dixon 257) Project not be approved, or said project is approved but its associated water and sewer infrastructure will not be installed in sufficient time for the proposed project to proceed, the proposed project be required to complete off-site water and sewer infrastructure improvements. However, according to BRA prepared for The Campus (Dixon 257) Project (Dixon 257 BRA),[15] special-status plant species do not have the potential to occur within the development footprint of such utilities infrastructure improvements, and special-status plant species were not observed. Therefore, the potential off-site utilities improvements that could be associated with the proposed project would not result in any adverse impacts to special-status plant species.

With respect to special-status wildlife species, the NQSP EIR identified three special-status wildlife species with the potential to occur within the NQSP area: California tiger salamander, Swainson's hawk, and burrowing owl. The NQSP EIR concluded that although buildout of the NQSP area could result in potential impacts to the foregoing special-status wildlife species, implementation of mitigation would ensure that such impacts would be reduced to a less-than-significant level.

The BRA determined that future development of the project site would not have the potential to impact aquatic species such as California tiger salamander. Similarly, The Campus (Dixon 257) BRA concluded that California tiger salamander does not have the potential to occur within the development footprint of the potential off-site utilities improvements. As such, the proposed project would not have the potential to result in adverse impacts to the California tiger salamander.

Similar to the determination of the NQSP EIR, the BRA prepared for the project site found that the only special-status wildlife species with the potential to occur within the project site are Swainson's hawk and burrowing owl, as well as other nesting raptors (e.g., white-tailed kite) and songbirds. Although development of the project site is not currently proposed, future development of the site could result in the destruction of habitat or individuals of the foregoing species. The potential off-site utilities improvements could result in similar impacts.

Impacts to nesting migratory birds would be addressed through the project's required compliance with Policy NE-1.13 of the Dixon General Plan, as follows:

- In new development, avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non-nesting season (typically September 1- February 15) or by conducting a pre-construction survey by a qualified biologist to confirm nests are absent or to define appropriate buffers until any young have successfully fledged the nest.

While General Plan policies provide guidance for protection of special-status species and migratory birds, additional performance standards should be provided to ensure clarity of mitigation requirements. New mitigation measures are provided below for this purpose, based on the recommendations in the BRA for the proposed project. In addition, while the

[15] HELIX Environmental Planning, Inc. *Dixon 257 Project Biological Resources Assessment*. April 2023.

NQSP includes broad mitigation requirements for protected wildlife, the City, as lead agency, recognizes the need to improve upon the measure language to provide additional clarity and greater ease of tracking successful implementation. Modified mitigation measures are provided below for this purpose.

Based on the above, given implementation of the modified and new mitigation measures defined below, the proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would remain consistent with the conclusions of the NQSP EIR.

b. Riparian habitat, as well as other sensitive natural communities, have not been identified within the NQSP area. As such, the NQSP EIR did not address potential impacts related to potentially substantial adverse effects on any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFW or USFWS. The BRA prepared for the proposed project confirmed that riparian habitat and/or other sensitive natural communities do not occur within the project site, and The Campus (Dixon 257) BRA also confirmed that such resources do not occur within the footprint of the potential off-site utilities improvements.

Based on the above, the proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would remain consistent with the conclusions of the NQSP EIR.

c. As shown in Figure 4.5.1, Biological Resources, of the NQSP EIR, the only aquatic resource identified within the NQSP area by the NQSP EIR is the approximately 5.3-acre seasonal freshwater marsh located in the western portion of the NQSP area (not on the project site). The NQSP EIR determined that implementation of Mitigation Measures B-A, B-B, and B-C, which generally require avoidance of the seasonal freshwater marsh and replacement mitigation at a 1:1 ratio of any of the wetland that is destroyed during construction, would reduce the impact to a less-than-significant level. The seasonal freshwater marsh is located southwest of the project site and west of the development footprint of the potential off-site utilities infrastructure improvements. Therefore, the proposed project would not result in any impacts to the seasonal freshwater marsh, and Mitigation Measures B-A, B-B, and B-C do not apply to the proposed project.

According to the protocol-level aquatic resources delineation conducted in 2022 as part of the BRA, the project site does not contain any aquatic resources. However, according to The Campus (Dixon 257) BRA, and the Draft Environmental Impact Report for The Campus Project (see Impact 3.4-7, pg. 3.4-40), a total of 1.17 acres of ditches were identified in The Campus (Dixon 257) Project site, a portion of which could be impacted by the potential off-site utilities improvements associated with the proposed project. Although the aquatic features have not been formally verified by the U.S. Army Corps of Engineers (USACE), they are likely to be classified as a water of the U.S. and/or water of the State. A preliminary jurisdictional determination (SPK-2021-00634) was issued May 11, 2023 by the USACE that states the 1.17 acres of ditches are considered potential jurisdictional aquatic resources (“waters of the United States”) regulated under Section 404 of the Clean Water Act. Therefore, if The Campus (Dixon 257) Project is not approved, or said project is approved but its associated water and sewer infrastructure will not be installed in sufficient time for the proposed project to proceed, the proposed project would

be required to complete off-site utilities infrastructure improvements that could have a substantial adverse affect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. However, implementation of Mitigation Measure IV-4, as defined below, incorporated by reference from The Campus Project EIR (i.e., Mitigation Measure 3.4-7), would reduce the potential impact to a less-than-significant level.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. As such, the proposed project would remain consistent with the conclusions of the NQSP EIR.

d. Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. This fragmentation of habitat can also occur when a portion of one or more habitats is converted into another habitat; for instance, when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or construction activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The NQSP EIR did not include any discussion of potential impacts related to interference with the movement of wildlife species or with established wildlife corridors. Furthermore, project site is located within an agricultural area that is surrounded by agricultural fields, industrial areas, and roadways. As such, although wildlife may disperse through the project site on a local level, neither the project-specific BRA nor The Campus (Dixon 257) BRA identified potential wildlife migration corridors within the project site or within the development footprint of the potential off-site utilities infrastructure improvements. Therefore, the proposed project would result in a less-than-significant impact to wildlife movement within the project area.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. As such, the proposed project would remain consistent with the conclusions of the NQSP EIR.

e. The NQSP EIR did not include any discussion of potential impacts related to conflicting with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Neither the project site nor the development footprint of the potential off-site utilities infrastructure improvements contain any trees, and, thus, would not require any tree removal. As such, no impact would occur.

f. As discussed above, since certification of the NQSP EIR, the City of Dixon has participated in the Solano HCP which establishes a framework for complying with State and federal endangered species regulations while accommodating future urban growth, development of infrastructure, and ongoing operations and maintenance activities associated with flood control, irrigation facilities, and other public infrastructure undertaken by or under the permitting authority/control of the Plan Participants within Solano County over the next 30

years. As the HCP was being prepared when the NQSP was being considered, the EIR includes Mitigation Measure B-E, which requires the proposed project to participate in the HCP. Participation in the Solano HCP would include pre- construction surveys, and adherence to the requirements of the HCP. The HCP is still in draft form and not yet adopted, as the Environmental Impact Statement has not been completed. Compliance with Mitigation Measure B-E would ensure that the proposed project would not result in conflicts with an adopted HCP or other approved local, regional, or State habitat conservation plan.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. As such, the proposed project would remain consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

The following mitigation measure(s) from the NQSP EIR would apply to the proposed project, but only if the Solano Countywide Multispecies Habitat Conservation Plan (HCP) is adopted prior to issuance of grading permits for the proposed project:

- **Mitigation Measure B-E:** Future development shall participate in a County-wide Habitat Management Plan.

Modified Mitigation Measures

The following mitigation measure(s) from the NQSP EIR have been modified to apply to the proposed project:

- **Mitigation Measure B-D:** A breeding survey shall be conducted ~~between April and July~~ in accordance with guidelines set by the *Swainson's Hawk Technical Advisory Committee (SHTAC 2000)* in order to:
    - Determine if the species nest on the project site; and
    - To ~~develop appropriate mitigation~~ comply with the following generally accepted mitigation replacement ratio~~, which may include a 1:1 replacement ratio of~~ for impacted foraging habitat based on CDFW *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk* (2014)~~. This replacement habitat should include alfalfa and row crops such as tomatoes, oats, wheat, barley, and sugar beets.~~:

      Pursuant to California Department of Fish and Wildlife (CDFW) guidelines, the applicant shall preserve an equal acreage of Swainson's hawk foraging habitat as is proposed for development (approximately 37.57 acres) (i.e., a 1:1 ratio). The preserved habitat shall be at a location approved by the CDFW. Preservation may occur through either:

        - Payment of a mitigation fee to an established mitigation bank, or similar habitat development and management company, or the City of Dixon through a negotiated agreement (subject to approval by CDFW) between the City and the applicant. The monies shall be held in a trust fund, and used to purchase mitigation credits to offset the loss of suitable foraging habitat for Swainson's hawk. The credits would become incorporated into the mitigation bank, owned and operated by the habitat development and

management company, and protected in perpetuity (consistent with CDFW guidelines); or

- Purchase of conservation easements or fee title of lands with suitable Swainson's hawk foraging habitat (consistent with CDFW guidelines).

If mitigation lands or a conservation easement have not been acquired prior to issuance of the building permit or grading permits, whichever occurs first, the City shall hold the applicant's contribution in a separate, interest-bearing account until the appropriate lands are identified (through consultation with CDFW and the City) and acquired by the City or preserved through other methods acceptable to the CDFW. The foregoing funds shall be used to compensate for the loss of Swainson's hawk foraging habitat.

New Mitigation Measures

The following mitigation measure(s) would be required to reduce impacts to biological resources to a less-than-significant level:

- **Mitigation Measure IV-1**: If construction occurs during the breeding season (February 1 through August 31), a pre-construction nesting bird survey shall be conducted by a qualified biologist (Project Biologist) throughout the portion of the project site proposed for construction and all accessible areas within a 500-foot radius of proposed construction areas, no more than seven days prior to the initiation of construction. If there is a break in construction activity of more than seven days, then subsequent surveys shall be conducted.
    - If an active raptor nest is found, no construction activities shall take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot no disturbance buffer will be established until the young have fledged. These no-disturbance buffers may be reduced if a smaller, sufficiently protective buffer is proposed by the Project Biologist and approved by the City after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, and nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest). The Project Biologist can visit the nest as needed to determine when the young have fledged the nest and are independent of the site or the nest can be left undisturbed until the end of the nesting season.
    - Survey Report. A report summarizing the survey(s) shall be provided to the City within 30 days of the completed survey and is valid for one construction season. If no nests are found, no further mitigation is required.
    - Increases to Buffers and Completion of Nesting
        - If construction activities will continue within the no-disturbance buffer, then the Project Biologist will be required to monitor the nest. That monitoring will include observations about the bird's behaviors relative to the construction activities. Should construction activities cause a nesting bird to do any of the following in a way that would be considered a result of construction activities: vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop this agitated behavior. The revised no-disturbance buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with the City.

- Construction activities without monitoring may only resume within the no-disturbance buffer after a follow-up survey by the Project Biologist has been conducted and a report has been prepared indicating that the nest (or nests) are no longer active, and that no new nests have been identified.

- **Mitigation Measure IV-2:** A targeted burrowing owl nest survey shall be conducted of all accessible areas within 500 feet of the proposed construction area within 15 days prior to construction activities utilizing 60-foot transects as outlined in the Staff Report on Burrowing Owl Mitigation (CDFG 2012) (Staff Report). If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl, and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest burrow until the Project Biologist determines that the young have fledged or it is determined that the nesting attempt has failed. If the applicant desires to work within 250 feet of the nest burrow, the applicant shall consult with CDFW and the City to determine if the nest buffer can be reduced.
    - If construction begins during the non-nesting season, (September 1 through the 14 February), the applicant shall conduct a survey for burrows or debris that represent suitable nesting habitat for burrowing owls within areas of proposed ground disturbance. If overwintering owls are located and cannot be avoided, the applicant may exclude any burrowing owls observed and collapse any burrows or remove the debris in accordance with the methodology outlined in the Staff Report. In accordance with the Staff Report, prior to burrow exclusion and/or closure, a Burrowing Owl Exclusion Plan must be developed and approved by CDFW. As outlined in the Staff Report, components of this plan shall include but not be limited to:
        - Confirm by site surveillance that the burrow(s) is empty of burrowing owls and other species preceding burrow scoping;
        - Type of scope and appropriate timing of scoping to avoid impacts;
        - Occupancy factors to look for and what will guide determination of vacancy and excavation timing (one-way doors should be left in place 48 hours to ensure burrowing owls have left the burrow before excavation, visited twice daily and monitored for evidence that owls are inside and can't escape i.e., look for sign immediately inside the door).
        - How the burrow(s) will be excavated. Excavation using hand tools with refilling to prevent reoccupation is preferable whenever possible (may include using piping to stabilize the burrow to prevent collapsing until the entire burrow has been excavated and it can be determined that no owls reside inside the burrow);
        - Removal of other potential owl burrow surrogates or refugia on site;
        - Photographing the excavation and closure of the burrow to demonstrate success and sufficiency;
        - Monitoring of the site to evaluate success and, if needed, to implement remedial measures to prevent subsequent owl use to avoid take; and
        - How the impacted site will continually be made inhospitable to burrowing owls and fossorial mammals (e.g., by allowing vegetation to grow tall, heavy disking, or immediate and continuous grading) until development is complete.
    - If any nesting burrowing owls are found during the breeding season pre-construction survey, mitigation for the permanent loss of burrowing owl foraging habitat (defined as all areas of suitable habitat within 250 feet of an active nest burrow) shall be accomplished at a 1:1 ratio. The mitigation provided shall be

consistent with recommendations in the CDFW 2012 Staff Report and may be accomplished within the Swainson's Hawk Foraging Habitat mitigation area if burrowing owls have been documented utilizing that area, or if the Project Biologist and the City determine that the area is suitable. The Staff Report recommendations for mitigation land for burrowing owls are as follows:

- Where habitat will be temporarily disturbed, restore the disturbed area to pre-project condition including decompacting soil and revegetating. Permanent habitat protection may be warranted if there is the potential that the temporary impacts may render a nesting site (nesting burrow and satellite burrows) unsustainable or unavailable depending on the time frame, resulting in reduced survival or abandonment. For the latter potential impact, see the permanent impact measures below.
- Mitigate for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced based on the information provided in Appendix A. Note: A minimum habitat replacement recommendation is not provided here as it has been shown to serve as a default, replacing any site-specific analysis and discounting the wide variation in natal area, home range, foraging area, and other factors influencing burrowing owls and burrowing owl population persistence in a particular area.
- Mitigate for permanent impacts to nesting, occupied and satellite burrows and burrowing owl habitat with (a) permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. If the mitigation lands are located adjacent to the impacted burrow site, ensure the nearest neighbor artificial or natural burrow clusters are at least within 210 meters (Fisher et al. 2007).
- Permanently protect mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission, for the purpose of conserving burrowing owl habitat and prohibiting activities incompatible with burrowing owl use. If the project is located within the service area of a Department approved burrowing owl conservation bank, the project proponent may purchase available burrowing owl conservation bank credits.
- Develop and implement a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls (see Management Plan and Artificial Burrow sections below, if applicable).
- Fund the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.
- Habitat should not be altered or destroyed, and burrowing owls should not be excluded from burrows, until mitigation lands have been legally secured, are managed for the benefit of burrowing owls according to Department-approved management, monitoring and reporting plans, and the

endowment or other long-term funding mechanism is in place or security is provided until these measures are completed.

- Mitigation lands should be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support burrowing owls present. Where there is insufficient habitat on, adjacent to, or near project sites where burrowing owls will be excluded, acquire mitigation lands with burrowing owl habitat away from the project site. The selection of mitigation lands should then focus on consolidating and enlarging conservation areas located outside of urban and planned growth areas, within foraging distance of other conserved lands. If mitigation lands are not available adjacent to other conserved lands, increase the mitigation land acreage requirement to ensure a selected site is of sufficient size. Offsite mitigation may not adequately offset the biological and habitat values impacted on a one to one basis. Consult with the Department when determining offsite mitigation acreages.
- Evaluate and select suitable mitigation lands based on a comparison of the habitat attributes of the impacted and conserved lands, including but not limited to: type and structure of habitat being impacted or conserved; density of burrowing owls in impacted and conserved habitat; and significance of impacted or conserved habitat to the species range-wide. Mitigate for the highest quality burrowing owl habitat impacted first and foremost when identifying mitigation lands, even if a mitigation site is located outside of a lead agency's jurisdictional boundary, particularly if the lead agency is a city or special district.
- Select mitigation lands taking into account the potential human and wildlife conflicts or incompatibility, including but not limited to, human foot and vehicle traffic, and predation by cats, loose dogs and urban-adapted wildlife, and incompatible species management (i.e., snowy plover).
- Where a burrowing owl population appears to be highly adapted to heavily altered habitats such as golf courses, airports, athletic fields, and business complexes, permanently protecting the land, augmenting the site with artificial burrows, and enhancing and maintaining those areas may enhance sustainability of the burrowing owl population onsite. Maintenance includes keeping lands grazed or mowed with weedeaters or push mowers, free from trees and shrubs, and preventing excessive human and human-related disturbance (e.g., walking, jogging, off-road activity, dog-walking) and loose and feral pets (chasing and, presumably, preying upon owls) that make the environment uninhabitable for burrowing owls.
- If there are no other feasible mitigation options available and a lead agency is willing to establish and oversee a Burrowing Owl Mitigation and Conservation Fund that funds on a competitive basis acquisition and permanent habitat conservation, the project proponent may participate in the lead agency's program.

- **Mitigation Measure IV-4 (Mitigation Measure 3.4-7 from The Campus Project DEIR):** The project proponent shall implement the following measure to avoid or minimize impacts on potentially jurisdictional waters <u>only if the project constructs the off-site water and sewer infrastructure improvements in lieu of these improvements being completed by other parties</u>:
    - Before any activities that would result in discharge, fill, removal, or hydrologic interruption of any of the water features occur within the project site, the project

proponent shall obtain an approved jurisdictional delineation (AJD) from the USACE.

- For any impacts on jurisdictional features, the project proponent shall obtain the appropriate CWA Section 404 and or 401 permits. All permit conditions including required avoidance, minimization, and mitigation measures included as conditions of the permit shall be followed.
- Section 404 authorization from the USACE and a Section 401 Water Quality Certification from the RWQCB shall be required prior to the start of construction that would impact any waters of the U.S. Any waters of the U.S. or jurisdictional wetlands that would be lost or disturbed shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with the USACE mitigation guidelines and City of Dixon requirements. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to the agencies.

  If a 404 permit is required for the proposed project, then water quality concerns during construction shall be addressed in the Section 401 water quality certification from the Regional Water Quality Control Board. A Storm Water Pollution Prevention Plan (SWPPP) shall also be required during construction activities. SWPPPs are required in issuance of a National Pollutant Discharge Elimination System (NPDES) construction discharge permit by the U.S. Environmental Protection Agency. Implementation of Best Management Practices (BMPs) during construction is standard in most SWPPPs and water quality certifications. Examples of BMPs include stockpiling of debris away from regulated wetlands and waterways; immediate removal of debris piles from the site during the rainy season; use of silt fencing and construction fencing around regulated waterways; and use of drip pans under work vehicles and containment of fuel waste throughout the site during construction.

  If the ditches are determined to not be subject to federal jurisdiction, then these features may still be subject to waste discharge requirements under the Porter-Cologne Water Quality Control Act. Section 13260(a) of the Porter-Cologne Water Quality Control Act (contained in the California Water Code) requires any person discharging waste or proposing to discharge waste, other than to a community sewer system, within any region that could affect the quality of the waters of the State (all surface and subsurface waters) to file a report of waste discharge. The discharge of dredged or fill material into the ditches may constitute a discharge of waste that could affect the quality of waters of the State. A report of waste discharge shall be filed for impacts to non-federal waters, if required.

V. CULTURAL RESOURCES. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	Pg.4-66	No	No	No
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	Pgs.4-65 to 4-66	No	No	No
c. Disturb any human remains, including those interred outside of dedicated cemeteries.	N/A	No	No	No

Discussion

a. The NQSP EIR assessed the potential for buildout of the NQSP area to cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines and determined that two structures, the Dudley House and the Vaughn House, are eligible for listing in the California Register of Historical Resources (CRHR). Although buildout of the NQSP area has the potential to significantly impact the foregoing resources, the NQSP EIR concluded that implementation of Mitigation Measures C-B and C-C would be adequate to reduce potential impacts to a less-than-significant level. Neither the Dudley House nor the Vaughn House are located within the project site or the footprint of the potential off-site utilities infrastructure improvements, and, thus, Mitigation Measures C-B and C-C would not apply to the proposed project.

A Cultural Resources Study (CRS) was prepared for the currently proposed project by Tom Origer and Associates (Origer).[16] As part of the CRS, the Northwest Information Center (NWIC) conducted a records search of the California Historical Resources Information System (CHRIS) on August 24, 2023 to determine if additional historical resources have been found on-site since the NQSP EIR was certified. In addition, an intensive field survey of the project site was completed on September 7, 2023; additional historical resources were not identified. Overall, the CRS concluded that the project site does not contain known historical resources and is unlikely to contain previously unrecorded historical resources.

As discussed previously, should The Campus (Dixon 257) Project not be approved, or said project is approved but its associated water and sewer infrastructure will not be installed in sufficient time for the proposed project to proceed, the proposed project would be required to complete off-site utilities infrastructure improvements. The potential for the development footprint of the potential off-site utilities infrastructure improvements to contain known and/or unrecorded historical resources was assessed in a Cultural Resources Assessment (Dixon 257 CRA) prepared by HELIX Environmental Planning, Inc (HELIX).[17] According to The Campus (Dixon 257) CRA, there is a moderate to high potential for The Campus (Dixon 257) project site to contain previously unrecorded historic era cultural resources. The moderate to high cultural potential is associated with the graveled-over area in the western central portion of the project site, which could overlap

[16] Tom Origer and Associates. *Cultural Resources Study for the Dixon Innovation Center Project, Dixon, Solano County, California*. September 13, 2023.

[17] HELIX Environmental Planning, Inc. *Dixon 257 Development Project Cultural Resources Assessment*. April 2023.

with the alignment and construction work area for the off-site water and sewer utilities. The moderate to high potential is suggested by: (1) the identification of indicators of a historic structure or structures in the vicinity within early 20th-century maps analyzed in the Cultural Resources Assessment and within mid- to late-20th-century historic aerial photographs analyzed in the Cultural Resources Assessment, and (2) by the identification of "Dixon 257 Structural Remain" which consists of historical structural remnants within the graveled-over area, in the form of a three-sided wall feature, likely a subterranean feature associated with a structure, which possessed an inscription of "3-25-1969 R. J." presumably dating the remnants to the mid-20th century. While no other traces of historic-era materials were found in the graveled-over area during the pedestrian survey, and while the presence of these remnants alone likely does not constitute a cultural resource worthy of consideration for the CRHR or NRHP, the presence of the remnants of a structure over 50 years in age, along with cartographic and aerial photographic evidence suggesting that an above ground structure once stood in this area during the latter half of the 20th century, suggests that there is a moderate to high potential to find additional historic era features and/or artifacts within the vicinity of the gravel-covered area.

Mitigation Measures V-1 and V-2 (incorporated by reference from The Campus Project EIR (i.e., Mitigation Measures 3.5-1(a) and (b)), would reduce the potential impact to a less-than-significant level, consistent with the conclusion of The Campus Project EIR (pg. 3.5-17).

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. As such, the proposed project would remain consistent with the conclusions of the NQSP EIR.

b. The NQSP EIR assessed the potential for buildout of the NQSP area to cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines and determined that although surface-level archaeological resources were not identified, likely due to the long history of agriculture in the area, construction activities could potentially disturb or destroy significant buried archaeological resources. Therefore, the NQSP EIR concluded that implementation of Mitigation Measure C-A, which requires consultation with a qualified archaeologist if buried archaeological resources are discovered during construction, would be required to reduce potential impacts to a less-than-significant level.

The project-specific CRS did not identify known archaeological resources within the project site based on a records search by the California Historical Resources Information Center, and an intensive pedestrian field survey.

According to The Campus Project EIR (Impact 3.5-2), the findings of the Cultural Resources Assessment concluded that the project site possesses a moderate to high potential to contain previously unrecorded precontact cultural resources. Areas of particular concern include the locations of two (now filled in) historic drainages, which run from west to east across the entire span of the project site, and the gravel-covered area located within the western central portion of the project site. The two drainages are highlighted as having a moderate to high potential to contain precontact resources through both the noted presence of significant precontact resources located along drainages found elsewhere in the Dixon area and project vicinity as well as the presence of two isolated finds (Dixon 257 Isolate 1 and 2) encountered within the western portion of the project site's southern historic drainage during the pedestrian survey. The presence of these

resources at the ground surface within the historic drainage points towards the possibility for additional precontact resources to be located beneath the ground surface.

Given that the historic drainages span the entire Dixon 257 project site, the westernmost portion of the historic drainages overlaps the water and sewer infrastructure alignments. As discussed previously, should The Campus (Dixon 257) Project not be approved, or said project is approved but its associated water and sewer infrastructure will not be installed in sufficient time for the proposed project to proceed, the proposed project would be required to complete off-site utilities infrastructure improvements. Therefore, Mitigation Measure 3.5-2 of The Campus Project EIR is hereby incorporate by reference to satisfactorily address this potential impact; Mitigation Measure 3.5-2 requires implementation of Mitigation Measures 3.5-1(a) and (b), which are already incorporated as new Mitigation Measures V-1 and V-2 below.

In addition, for the proposed project, while known archaeological resources have not been identified on-site, the potential for discovery of previously unrecorded archaeological resources cannot be dismissed, the significance of which could be adversely affected by project buildout. However, implementation of Modified Mitigation Measure C-A from the NQSP EIR, as defined below, would ensure the potential impact would be less-than-significant consistent with the conclusions of the NQSP EIR.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. As such, the proposed project would remain consistent with the conclusions of the NQSP EIR.

c. The NQSP EIR did not specifically address the potential for the disturbance of human remains within the NQSP area. However, the CRS did not identify known human remains or cemeteries within the project site, and The Campus (Dixon 257) CRA did not identify such remains within the development footprint of the potential off-site utilities infrastructure improvements. Nonetheless, implementation of Mitigation Measure V-3, incorporated by reference from The Campus Project EIR, would be required to ensure that impacts related to the proposed project's potential to disturb human remains, including those interred outside of dedicated cemeteries, is reduced to a less-than-significant level.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. As such, the proposed project would remain consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

None required.

Modified Mitigation Measures

The following modified mitigation measure(s) from the NQSP EIR would apply to the proposed project:

- **Mitigation Measure C-A:** if archaeological remains are uncovered during construction, work within 100 feet of the discovery shall be halted immediately and the project contractor shall notify the applicant, who shall ~~C~~consult~~ant~~ with a qualified archaeologist~~ if buried archaeological deposits are discovered during construction~~. The City shall require that the

applicant include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate California Department of Parks and Recreation forms and evaluated for significance in terms of California Environmental Quality Act criteria by a qualified archaeologist. Potentially significant archaeological resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA, the City and a qualified archaeologist shall determine whether preservation in place is feasible. Such preservation in place is the preferred mitigation. If such preservation is infeasible, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan for the resource. The archaeologist shall also conduct appropriate technical analyses, prepare a comprehensive written report and file it with the appropriate information center (California Historical Resources Information System), and provide for the permanent curation of the recovered materials.

New Mitigation Measures

The following mitigation measure(s) from The Campus Project DEIR would be required to reduce impacts to cultural resources to a less-than-significant level:

- **Mitigation Measure V-1 (Mitigation Measure 3.5-1(a) from The Campus Project DEIR):** The project proponent shall implement the following measure to avoid or minimize impacts on potential historic resources only if the project constructs the off-site water and sewer infrastructure improvements in lieu of these improvements being completed by other parties:

  The project proponent shall develop and implement an Archaeological Monitoring Program, whereby the project proponents shall retain the services of an experienced archaeologist who will be present on-site to observe ground-disturbing activities requiring grubbing, grading, trenching, or excavation within the development footprint of the potential off-site utilities infrastructure improvements. The Archaeological Monitor will be given access to inspect all ground surface and subsurface modifications, excavations, installations, equipment parking, and any other construction-related activities in the vicinity of the development footprint of the potential off-site utilities infrastructure improvements.

  The archaeological monitoring will consist of on-the-ground and close observation by an experienced archaeologist for any kind of archaeological or cultural remains that might be exposed during ground- disturbing construction activities. Construction activities will be monitored by following the construction equipment as it removes or modifies soils and vegetation, and may involve walking cuts or excavations after the machinery has passed, or standing to the side and observing the soil removal activity. The archaeologist on-site will be given “stop work authority” so that in the event that they observe a change in soil conditions and/or artifacts or structural remains, they shall bring all construction activities within a 164 ft radius of the area to a stop so that they may further assess the find. Further ground disturbances in the vicinity of the find will remain stopped while an assessment is underway and until the archaeologist on-site can provide recommendations for treatment of the discovery. If a potentially significant find cannot be avoided by the project, the retained archaeologist, who meets the Secretary of the Interior’s Professional Qualifications Standards, will develop an evaluation plan in consultation with the City that contains a research design to guide assessments of the resource’s significance and scientific potential.

- **Mitigation Measure V-2 (Mitigation Measure 3.5-1(b) from The Campus Project DEIR):** The project proponent shall implement the following measure to avoid or minimize impacts on potential historic resources only if the project constructs the off-site water and sewer infrastructure improvements in lieu of these improvements being completed by other parties:

  The project proponent shall develop and implement a Worker Awareness Training Program, where all construction personnel involved in ground-disturbing activities shall be trained in the recognition of possible cultural resources and the protection of such resources. The training program will inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials, including Native American artifacts. Construction personnel will be instructed that cultural resources must be avoided and that all travel and construction activity must be confined to designated roads and areas. The training will include a review of the local, state, and federal laws and regulations related to cultural resources, as well as instructions on the procedures to be implemented should unanticipated resources be encountered during construction, including stopping work in the vicinity of the find and contacting the appropriate environmental compliance specialist.

- **Mitigation Measure V-3 (Mitigation Measure 3.5-3 from The Campus Project DEIR):** If an inadvertent discovery of human remains is made at any time during project-related construction activities or project planning, the following performance standards shall be met before implementing or continuing actions such as construction that may result in damage to or destruction of human remains. In accordance with the California Health and Safety Code (HSC), if human remains are encountered during ground-disturbing activities, the City shall immediately halt potentially damaging excavation in the area of the remains and notify the Solano County Coroner and a qualified archaeologist (meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology) to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (HSC Section 7050.5[b]).

  If the human remains are of historic age and are determined by the Solano County Coroner to be not of Native American origin, the City will follow the provisions of HSC Section 7000 et seq. regarding the disinterment and removal of non–Native American human remains.

  If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (HSC Section 7050[c]). After the coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant, in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains. The responsibilities of the City for acting upon notification of a discovery of Native American human remains are identified in Public Resources Code Section 5097.9 et seq.

VI. ENERGY. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	N/A	No	No	Yes
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	N/A	No	No	Yes

Discussion

a,b. Because Appendix G of the CEQA Guidelines did not previously include a specific section on energy, the NQSP EIR did not include a specific analysis of the potential energy-related impacts of buildout of the NQSP area; however, as efficient use of energy was included in Appendix F of the CEQA Guidelines, increased energy demand associated with buildout of the NQSP area was evaluated within Section 4.9.7, Electricity and Natural Gas, of the NQSP EIR.

Through existing infrastructure, electrical services are provided by the Pacific Gas & Electric Company (PG&E). During construction, the proposed project would be subject to regulations required by the CARB. During operations, the proposed project would be subject to the 2022 Building Energy Efficiency Standards and the 2022 CALGreen standards, as applicable.

Construction Energy Use

Future development of the project site, as well as the potential off-site utilities infrastructure improvements, would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met via a hookup to the existing electricity grid. However, all construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. In addition, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. The In-Use Off-Road Diesel Vehicle Regulation would therefore help to improve fuel efficiency for equipment used in construction of the proposed project. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to further reduce demand on oil and limit emissions associated with construction.

Based on the above, the temporary increase in energy use occurring during future development of the project site, as well as the potential off-site utilities infrastructure improvements, would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, future

development would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand. Furthermore, regulations pertaining to energy use, including, but not limited to, State and federal vehicle standards, are much more stringent than the regulations in place at the time the NQSP EIR was prepared. Therefore, construction energy usage related to the proposed project would be less than what was anticipated in the NQSP EIR for Highway Commercial uses.

Operational Energy Use

Energy use associated with operation of the proposed project would be typical of industrial uses, requiring electricity for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, appliances, security systems, and more. Operational energy use associated with the future proposed general industrial uses would not be anticipated to differ substantially than operational energy demand from the planned Highway Commercial uses for the site. Maintenance activities during operations, such as landscape maintenance, could involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with employee vehicle trips generated by the proposed project.

All on-site structures would be subject to all relevant provisions of the most recent update of the California Building Standards Code (CBSC), including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as door and window interlocks and high efficiency outdoor lighting. In addition, since the NQSP EIR was developed, lighting technology including LED components and programmable lighting, has improved considerably. As such, the proposed lighting is anticipated to consume less energy than what was previously anticipated in the NQSP EIR. In addition, electricity supplied to the project by PG&E would comply with the State's RPS, which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 60 percent of total procurement by 2030. Thus, a portion of the energy consumed during project operations would originate from renewable sources.

With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. Furthermore, regulations pertaining to energy usage, such as State and federal vehicle standards, are much more stringent than the regulations that were in place at the time the NQSP EIR was prepared. Therefore, operational energy usage from future buildout of the project site would be less than what was anticipated in the NQSP EIR.

Conclusion

Based on the above information, the currently proposed project would involve energy use associated with construction activities and operations; however, the proposed project would comply with all applicable State energy standards, which would ensure that construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Furthermore, as discussed above, regulations pertaining to energy usage are much more stringent than the regulations that were in place at the time the NQSP EIR was prepared. Therefore, energy usage from

buildout of the proposed project would be less than what was anticipated in the NQSP EIR, and impacts related to energy use would be less than significant.

Prior Mitigation Measures

None Required.

New Mitigation Measures

None Required.

VII. GEOLOGY AND SOILS. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
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 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?	Pgs. 4.26 and 4.27	No	No	No
b. Result in substantial soil erosion or the loss of topsoil?	Pg. 4-25	No	No	No
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?	N/A	No	No	No
d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Pg. 4-26	No	No	No
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	N/A	No	No	No
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	N/A	No	No	No

Discussion

ai.-aiv. The NQSP EIR analyzed the potential of buildout of the NQSP area to expose people or structures to groundshaking and liquefaction due to a possible seismic event along active faults in the area, but did not specifically address impacts related to potential substantial adverse effects, including the risk of loss, injury, or death involving the 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, or landslides. Nonetheless, the NQSP EIR concluded that with incorporation of Mitigation Measures G-E through G-G, and applicable regulatory requirements, all impacts would be reduced to a less-than-significant level.

According to the Geotechnical Exploration prepared for the project site by ENGEO Incorporated (ENGEO) (see Appendix C),[18] the project site is not located within an earthquake fault zone as currently designated by the Alquist-Priolo Earthquake Fault Zone Act. However, the NQSP EIR concluded that because the area could be subject to significant ground shaking associated with the San Andreas Fault system, located approximately 60 miles west of the NQSP area, Mitigation Measures G-E through G-G would be required to mitigate the effects of potential hazards associated with seismic ground shaking; the proposed project would be required to comply with the foregoing mitigation measures. Compliance with such would ensure that potential impacts related to seismic hazards associated with future buildout of the project site, as well as the potential off-site utilities infrastructure improvements, would be less than significant.

Liquefaction, which occurs when saturated, loose materials (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure, more often occurs in areas underlain by young alluvium where the groundwater table is higher than 50 feet below ground surface (bgs). According to the Geotechnical Exploration, based on the groundwater being over 50 feet bgs, the potential for liquefaction at the site is low during seismic shaking. Similarly, both the project site and the development footprint of the potential off-site utilities infrastructure improvements are flat and do not contain slopes and, thus, are unlikely to be subject to seismically induced landslides.

Based on the above information, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

b. The NQSP EIR analyzed the potential for buildout of the NQSP area to result in substantial soil erosion or the loss of topsoil, and concluded that with incorporation of Mitigation Measures G-A and G-B, impacts would be reduced to a less-than-significant level. Future development of the project site, as well as the potential off-site utilities infrastructure improvements, would be subject to the foregoing measures, which require the preparation of an erosion control plan and that disturbed areas not be left exposed during the winter rainy season. Furthermore, future site-specific development would be evaluated for conformance with the CBSC, Dixon General Plan, Municipal Code, and other regulations that address construction activities and soil erosion. Each phase of project construction disturbing one acre or more of soil would be required to obtain coverage under the Construction General Permit prior to issuance of a grading permit. The Construction General Permit requires development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and monitoring plan, which must include erosion-control and sediment- control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. Future construction associated with the proposed project would also be required to implement construction site control BMPs in compliance with the City's National Pollutant Discharge Elimination System (NPDES) Permit (MS4). Project construction activities would also be subject to the City's grading control ordinance, which controls land disturbances, landfill, soil storage, pollution, and erosion and sedimentation resulting from new development and redevelopment, and establishes procedures for the issuance, administration and enforcement of permits for such activities; and storm water control ordinance, which addresses City requirements for stormwater

[18] ENGEO Incorporated. *Pedrick Road Warehouse, Dixon, California Geotechnical Exploration*. June 21, 2022.

management and discharge control, including controlling erosion, sedimentation, and other pollutant runoff. Given compliance with the foregoing requirements, as well as Mitigation Measures G-A and G-B, potential impacts associated with erosion and loss of topsoil would be less than significant.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

c. The NQSP EIR does not specifically address potential impacts related to being located on a geologic unit or soil that is unstable. However, as discussed above, neither the project site nor the disturbance footprint of the potential off-site utilities infrastructure improvements are located on or near a slope and, thus, would not be subject to landslide or lateral spreading. In addition, according to the Geotechnical Exploration, the risk of liquefaction, subsidence, and collapse at the project site is negligible. Furthermore, while the disturbance footprint of the potential off-site utilities infrastructure improvements may be underlain by alluvium that could be susceptible to collapse if the soils were exposed to excessive moisture, as discussed above, future improvements would be evaluated for conformance with the CBSC, Dixon General Plan, Municipal Code, and other regulations related to geologic conditions, compliance with which would ensure that impacts related to such would be less than significant.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

d. Expansive soils are soils which undergo significant volume change with changes in moisture content. Specifically, such soils shrink and harden when dried and expand and soften when wetted, potentially resulting in damage to building foundations. Placement of buildings on unstable soils can result in structural failure. The NQSP EIR determined that the NQSP area has a moderate to high potential for shrink/swell behavior and, thus, development could result in risks to life or property. However, the NQSP EIR concluded that implementation of Mitigation Measures G-C and G-D, which require a geotechnical investigation of on-site soils for shrink/swell behavior and avoidance of such hazards, would reduce potential impacts to a less-than-significant level.

Consistent with the requirements of Mitigation Measure G-C, a Geotechnical Exploration has been conducted for the project site; as such, Mitigation Measure G-C would not be required for the proposed project. The Geotechnical Exploration concluded that expansive clay with medium to high shrink/swell potential underlies the majority of the project site. As such, future development of the project site could be subject to risks to life or property related to expansive soils.

However, the proposed project would be required to comply with all applicable CBSC standards to ensure the structural integrity of the proposed structures. In addition, the Geotechnical Exploration includes recommendations to address potential impacts related to expansive soils and settlements, including measures pertaining to foundations, pavements, fill compaction, acceptable fill, slope gradients, and the completion of a design-level geotechnical report that would involve additional subsurface exploration based on the development layout. Implementation of Mitigation Measure G-D, as modified

below, would ensure that the site-specific recommendations of the Geotechnical Exploration are implemented, and that impacts related to expansive soils are reduced to a less-than-significant level.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

e. Because development within the NQSP area would obtain wastewater treatment and sewer services from connections to the existing sewer infrastructure in the vicinity, and septic systems would not be developed as part of future development, impacts related to septic systems were not evaluated in the NQSP EIR.

The currently proposed project would either connect to the sewer infrastructure constructed as part of The Campus (Dixon 257) Project or, if The Campus (Dixon 257) Project is not approved, or said project is approved but its associated sewer infrastructure will not be installed in sufficient time for the proposed project to proceed, the currently proposed project would include off-site sewer infrastructure connections to the existing sewer main in Vaughn Road to the south. The proposed project would not include installation of septic tanks or construction of alternative wastewater systems. Therefore, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. As such, the proposed project would remain consistent with the conclusions of the NQSP EIR.

f. The NQSP EIR did not explicitly assess the potential for buildout of the NQSP area to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Future buildout of the project site, as well as the potential off-site utilities infrastructure improvements, would involve construction activities such as grading, excavation, and other ground-disturbing activities with the potential to result in the accidental destruction or disturbance of paleontological resources. As discussed in the Dixon General Plan EIR, numerous paleontological resources have been discovered throughout the Sacramento Valley and Solano County regions, including Vacaville and Putah Creek, and while paleontological resources have not been discovered within the City, there is potential that resources could be found in the future.

The project site, as well as the development footprint of the potential off-site utilities infrastructure improvements, is currently vacant/undeveloped, consisting primarily of farmland, and has undergone extensive previous grading. While the project is not anticipated to directly or indirectly impact previously undiscovered paleontological resources, there is the potential for project excavation activities to encounter paleontological resources. However, the General Plan includes Mitigation Measure GEO-1, with which the project would be required to comply. Mitigation Measure GEO-1 requires halting work if paleontological resources are discovered during construction, and proper treatment of said resources.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

The following mitigation measure(s) from the NQSP EIR would apply to the proposed park project:

- **Mitigation Measure G-A**: An erosion control plan shall be prepared prior to construction. This plan shall include standards for permanent erosion control design, requirements for full establishment of vegetation, and emphasize drought-tolerant and climate-adapted vegetation.
- **Mitigation Measure G-B**: Disturbed areas of the project site that are not actively under construction during the winter rainy season shall not be left exposed for more than one month.
- **Mitigation Measure G-E:** All structures and new building constructed within the project area shall conform to the lates seismic structural standards of the Uniform Building Code (UBC) as a minimum standard.
- **Mitigation Measure G-F:** Plans for individual buildings subject to public occupancy shall be accompanied by an investigative report prepared for a geologist specialized in engineering. This report shall identify underlying geology including depth of water table depth to bedrock, and presence and characteristics of sand lenses. Necessary structural measures to adequately respond to the degree of probable risk attributable to these underlying formations shall be recommended.
- **Mitigation Measure G-G:** No public or private electrical, water, wastewater or gas lines shall be permitted to cross identified potential ground failure areas without sufficient precautionary emergency provisions for: rapid shut-off, minimum disruption of service, and any adverse impact on adjoining and surrounding uses in the event of seismic-induced ground failure.

Modified Mitigation Measures

The following mitigation measure(s) from the NQSP EIR have been modified to apply to the proposed project:

- **Mitigation Measure G-D:** In conjunction with the submittal of improvement plans, the project applicant shall submit a Design-Level Geotechnical Report for the proposed project, prepared by a licensed geotechnical engineer. Hazards associated with shrink/swell soils shall be avoided through proper construction methods which include site drainage, and responsive grading, excavation and foundation design. Potential adverse effects due to soils with high shrink/swell are avoidable if these soils are identified prior to the design and construction, and appropriate design and construction methods are applied. The findings and recommendations contained in the Design-Level Geotechnical Report shall be incorporated into the project plans. Proof of compliance with all recommendations specified in the Design-Level Geotechnical Report shall be subject to review and approval by the City Engineer.

New Mitigation Measures

None required.

VIII. GREENHOUSE GAS EMISSIONS. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	N/A	No	No	No
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	N/A	No	No	No

Discussion

a,b. Greenhouse gas (GHG) emissions were not addressed in the 1994 EIR. However, potential impacts related to GHG emissions do not constitute "new information of substantial importance" as defined by CEQA Guidelines section 15162, as GHG emissions were known as potential environmental issues before 2002, when the original Granite Lakes Estates EIR was certified.[19] In *Citizens for Responsible Equitable Environmental Development (CREED) v. City of San Diego* (2011) 196 Cal.App.4th 515, the Court of Appeal, Fourth Appellate District, concluded that the issue of GHG emissions and climate change could have been raised at the time that the original EIR was prepared (in 1994). For this reason, the lead agency was not required to prepare a Supplemental or Subsequent EIR. In the CREED case, the court noted that scientists and the government have been aware that GHG emissions could trigger climatic changes as early as the 1970's, or before. Specifically, the Court of Appeal noted that in *Massachusetts v. E.P.A.* (2007) 549 U.S. 497, 507, the United States Supreme Court stated the following:

> *"In the late 1970's, the Federal Government began devoting serious attention to the possibility that carbon dioxide emissions associated with human activity could provoke climate change. In 1978, Congress enacted the National Climate Program Act, 92 Stat. 601, which required the President to establish a program to 'assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications[.]' [citation] President Carter, in turn, asked the National Research Council, the working arm of the National Academy of Sciences, to investigate the subject. The Council's response was unequivocal: 'If carbon dioxide continues to increase, the study group finds no reason to doubt that climate changes will result and no reason to believe that these changes will be negligible. A wait-and-see policy may mean waiting until it is too late.'"*

The Court of Appeal concluded by stating that "[t]he effect of GHG emissions on climate could have been raised in 1994 when the City considered the FEIR." In *Concerned Dublin Citizens v. City of Dublin* (2013) 214 Cal.App.4th 1301, the Court of Appeal for the Fourth Appellate District adopted this reasoning as its own, reaching exactly the same conclusion on similar facts.

[19] As explained in a series of cases, most recently in *Concerned Dublin Citizens v. City of Dublin (2013) 214 Cal. App. 4th 1301*. Also see, *Citizens of Responsible Equitable Development v. City of San Diego (2011) 196 Cal.App.4th 515*.

Again, in *Citizens Against Airport Pollution v. City of San Jose* (2014) 227 Cal.App.4th 788, the Court of Appeal, Sixth Appellate District, considered whether the lack of GHG and climate change analysis in a 1997 EIR and 2003 SEIR precluded adoption of an addendum. The court relied on previous case law to conclude that the potential environmental impact of GHG emissions was known or could have been known at the time of certification of the 1997 EIR and 2003 SEIR. The court thus upheld the eighth addendum that the City of San Jose had prepared after having completed the 1997 and 2003 EIRs.

The conclusions that were made in the *CREED*, *Dublin Citizens*, and *Citizens Against Airport Pollution* cases can also be made regarding the 1994 NQSP EIR. Under the law, as set forth in these cases, the City may not undertake the preparation of a Supplemental or Subsequent EIR based solely on issues relating to climate change. Thus, the overall creation of GHG emissions from future development within the project site cannot under the law constitute a new significant impact or new information of substantial importance.

Furthermore, in addition to the City's General Plan Update, a number of regulations have been enacted since the 1994 EIR was certified for the purpose of, or with an underlying goal for, reducing GHG emissions, such as the California Green Building Standards Code (CALGreen Code) and the California Building Energy Efficiency Standards Code. The 2022 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy efficiency measures from the 2019 Building Energy Efficiency Standards. Such regulations have become increasingly stringent since the 1994 EIR was certified. The proposed project would be required to comply with all applicable regulations associated with GHG emissions, including the CALGreen Code and California Building Energy Efficiency Standards Code.

In summary, based on the above, no new analysis is required to be completed for the modified project. Pursuant to CEQA Guidelines Section 15164, subdivision (a), the City finds that "none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred."

Prior Mitigation Measures

None Required.

New Mitigation Measures

None Required.

IX. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Pgs. 4-143 to 4-144	No	No	No
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	Pgs. 4-142 to 4-143	No	No	No
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	N/A	No	No	No
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?	N/A	No	No	No
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?	N/A	No	No	No
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	N/A	No	No	No
g. Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?	N/A	No	No	No

Discussion

a. The NQSP EIR analyzed the potential for future uses within the NQSP area to use and store hazardous materials and determined that with implementation of Mitigation Measure PH-E, which requires the preparation of a hazardous waste reduction program for all businesses handling hazardous waste, would reduce the impact to a less-than-significant level.

Although the project site is intended for future development of industrial uses, specific tenants have not been identified at this time, nor is a specific development proposal under consideration as part of the project. Operations associated with the proposed project would be typical of other industrial uses in the City, and would be governed by the uses permitted for the site's Industrial land use and zoning designations. Given that the proposed project includes a SPA, following implementation of the proposed

project, the project site's NQSP land use designation would be General Industrial, which would allow for the development of a variety of large and small scale industrial, warehouse, and distribution uses, and would be generally consistent with the IG zoning designation as defined in Chapter 18.06, Industrial Districts, of the City of Dixon Municipal Code.

The potential use and storage of hazardous materials associated with future buildout of the project site, as well as the potential off-site utilities infrastructure improvements, would be subject to the provisions of the California Health and Safety Code, as well as regulations by the County's Hazardous Materials Program (HMP), which is a part of the Solano County Department of Resource Management's Environmental Health Services Division. The HMP is the Certified Unified Program Agency (CUPA) for all cities and unincorporate areas within the County. The Unified Program is a statewide program overseen by the California EPA (CalEPA) that delegates the responsibility of applying regulatory standards established by State agencies to local agencies through inspections, permitting, and enforcement activities. The Unified Program encompasses regulatory standards from the Governor's Office of Emergency Services (OES), Department of Toxic Substances Control (DTSC), Office of the State Fire Marshal (OSFM), the State Water Resources Control Board, and CalEPA. The HMP regulates all of the program elements in the County by issuing permits, inspecting facilities, investigating complaints, and performing enforcement as necessary.

Pursuant to the requirements established by the HMP, any future tenants of the project site that would use or store hazardous materials would be required to prepare a Hazardous Materials Business Plan (HMBP) to ensure impacts related to such operations would not occur. The HMBP is required for businesses with hazardous materials on-site and must detail the quantity of such materials stored on the premises, spill prevention and control measures, and an emergency response plan to address potential incidents related to such materials such as a release, fire, and/or disaster. In addition, pursuant to Section 6.03.040 of the City of Dixon Municipal Code, any future tenant of the project site who uses or handles a hazardous material would be required to submit a completed disclosure form prepared by the City's Fire Department.

Overall, the proposed project would be required to comply with all applicable provisions of the California Health and Safety Code, as well as all applicable provisions set forth by the County's HMP, including the preparation of a HMBP. Compliance with such would ensure that impacts related to the routine transport, use, or disposal of hazardous materials would be less-than-significant. As such, Mitigation Measure PH-E would not be applicable to the proposed project.

Based on the above information, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

b. The NQSP EIR analyzed the potential for buildout of the NQSP area to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, specifically related to the presence of underground storage tanks (USTs) within the area as well as the use and disposal of pesticides and herbicides. The NQSP EIR concluded that implementation of Mitigation Measures PH-A, PH-B, and PH-C would reduce potential impacts related to such to a less-than-significant level.

A Phase I Environmental Site Assessment (ESA) was prepared for the proposed project by Brusca Associates, Inc. (Brusca) for the purpose of identifying potential recognized environmental conditions (RECs) associated with the project site (see Appendix D).[20] The Phase I ESA was prepared in conformance with the general scope and limitations of the American Society for Testing and Materials' ASTM Standard Practice E1527-13. Past and current uses of the project site and surrounding properties were evaluated by reviewing available historical map coverage, aerial photographs, and chain of title documents, as well as conducting personal interviews and site reconnaissance. According to the Phase I ESA, the project site has been used for agricultural uses since at least the 1930s, but has remained otherwise undeveloped. The Phase I ESA (pg. 9) notes that previous agricultural chemical applications to farmland typically do not seriously impair the soil chemistry. Pesticide contamination is most commonly attributable to the rinsing of equipment after field application, when rinsing occurs in one place over a period of time. Such rinsing activities are usually performed at a farming headquarters or at an airport supporting crop dusting aircraft; research has revealed no evidence of any previous crop dusting or farm headquarters facilities on the subject property. Furthermore, organochlorine soil contamination is typically a concern for residential development because occupants could be continually exposed to harmful effects. Any future on-site development would be industrial in nature and no residential development would be allowed on-site.[21]

As such, the Phase I ESA did not identify any existing, controlled or historical RECs in connection with the project site, and Mitigation Measures PH-A, PH-B, and PH-C would not apply to the currently proposed project.

It is noted that a Phase I ESA prepared for The Campus (Dixon 257) Project identified potential RECs within The Campus (Dixon 257) Project, specifically an abandoned landfill and a former 10,000-gallon diesel aboveground storage tank (AST).[22] The abandoned landfill was fully excavated and all refuse was removed, and the AST was removed; the Central Valley Regional Water Quality Control Board (CVRWQCB) prepared a letter dated September 23, 2020 indicating that further environmental work related to the AST is not necessary. As such, neither of the foregoing factors are considered to be an REC. In addition, the disturbance footprint of the potential off-site utilities infrastructure improvements would not overlap with either the abandoned landfill or the AST. Therefore, neither future development of the project site nor development of the potential off-site utilities infrastructure improvements would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.

---

20 Brusca Associates, Inc. *Pedrick Road at I80 Property Phase I ESA*. March 17, 2022.

21 Moreover, in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (*CBIA*), the California Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future users. In those specific instances, it is the impact of the project on the environment – and not the impact of the environment on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions." (*Id.* at pp. 377-378.). Potential pesticide-related effects would be considered the environment's effect on the proposed project.

22 Brusca Associates, Inc. *Pedrick Road Property Phase I ESA*. September 30, 2020.

Future construction activities associated with the proposed project would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. However, as noted above, the project contractor would be required to comply with all local City and County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Compliance with such regulations would ensure that the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment during construction activities, particularly associated with construction equipment.

Based on the above information, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

c. The NQSP EIR did not address potential impacts related to emitting hazardous emissions or handling hazardous materials within 0.25-mile of an existing or proposed school. However, schools were not located within 0.25-mile of the NQSP area at the time the NQSP EIR was certified; nor have additional schools been constructed within 0.25-mile of the project site since the NQSP EIR was certified. Thus, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

d. The NQSP EIR did not address potential impacts related to being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, according to the Phase I ESA, the project site is not included on the DTSC Cortese list. Other components of the Cortese List include the list of leaking underground storage tank sites from the California State Water Resources Control Board's (SWRCB's) GeoTracker database, the list of solid waste disposal sites identified by the SWRCB, and the list of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO) from the SWRCB. According to the Phase I ESA, the project site is not located on the Cortese List. In addition, according to the Phase I ESA prepared for The Campus (Dixon 257) Project, the disturbance footprint of the potential off-site utilities infrastructure improvements would not overlap with any site listed on the Cortese List. Therefore, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR, and the proposed project is consistent with the conclusions of the NQSP EIR.

e. The NQSP EIR did not address potential impacts related to being located within an airport land use plan or being located within two miles of an airport. However, an airport was not located within two miles of the NQSP area at the time the NQSP EIR was certified; a new airport has not been constructed within two miles of the project site since the NQSP EIR was drafted. Thus, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

f. The NQSP EIR did not address potential impacts related to impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan. Future development of the project site would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. Fire and emergency services at the project site are provided by the Dixon Fire Department. Development of the project would be required to comply with applicable City codes and regulations pertaining to emergency response and evacuation plans. Future project-related development would also include improvements to the half sections of Pedrick Road and Professional Drive along its frontage, which could improve emergency access through the area. Prior to construction of future development, proposed site plans would be required to undergo review by the Dixon Fire Department to ensure that adequate emergency access would be maintained within the area. The proposed project would also be required to comply with all applicable codes and ordinances for emergency access, including resolving any deficiencies in access that could preclude emergency evacuation or emergency response identified by the fire department. During project operation, the City and/or County Emergency Operations Plan (EOP) would be implemented and emergency response and evacuation would occur dependent upon the emergency situation, consistent with the respective EOPs. Therefore, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; impacts would be less than significant.

Based on the above information, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

g. Issues related to wildfire hazards are further discussed in Section XX, Wildfire, of this Initial Study/Addendum. The NQSP EIR did not address potential impacts related to wildfire. However, according to the California Department of Forestry and Fire Protection's (CAL FIRE) Fire and Resource Assessment Program, the project site is located within a Local Responsibility Area (LRA) – Incorporated.[23] CAL FIRE has determined that the County does not contain Very High Fire Hazard (VHFH) Severity Zones in LRAs. Furthermore, future development within the project site would be required by law to incorporate California Building Code and California Fire Code requirements into all development phases. Fire reduction measures include fire sprinklers, fire resistant coatings, construction and maintenance of fuel breaks, management of fire-prone vegetation along streets, maintenance of clearances around structures, providing minimum street widths and turning radii, limiting the lengths of cul-de-sacs and dead-end streets, limiting excessive street grades, and requiring at least two access roads in and out of developed areas. Compliance with California Building Code regulations, California Fire Code requirements, and other state and local fire safety requirements would minimize wildland fire risks at the project site, and a less-than-significant impact would occur.

Based on the above information, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

---

[23] California Department of Forestry and Fire Protection. *Solano County: Fire Hazard Severity Zones In SRA*. Available at: https://cdnverify.osfm.fire.ca.gov/media/5wwjs5hp/fhsz_county_sra_11x17_2022_solano_ada.pdf. Accessed October 2024.

Prior Mitigation Measures

None Required.

New Mitigation Measures

None Required.

X. HYDROLOGY AND WATER QUALITY. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Pgs. 4-34 to 4-35	No	No	No
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	N/A	No	No	No
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?	Pg. 4-34	No	No	No
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	N/A	No	No	No
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	N/A	No	No	No

Discussion

a. The NQSP EIR analyzed the potential for buildout of the NQSP area to result in changes to the quality of runoff and determined that various pollutants generated by human activity, such as fertilizers and fine sediments, could accumulate on impervious surfaces and be subsequently washed off and transported into surface water courses during a storm event, which would result in a potentially significant impact. However, the NQSP EIR concluded that implementation of Mitigation Measure WQ-C, which requires the development of a surface water quality control plan prior to commencement of on-site grading, would adequately reduce the potential impact to a less-than-significant level.

Future development associated with the proposed project would be subject to compliance with multiple regulations that have been instituted subsequent to the certification of the NQSP EIR. Water quality degradation is regulated by the federal NPDES Program, established by the Clean Water Act (CWA), which controls and reduces pollutants to water bodies from point and non-point discharges. In California, the NPDES permitting program

is administered by the SWRCB through nine RWQCBs. As discussed in Section VII, Geology and Soils, of this Initial Study/Addendum, Section 16.04.040 of the City's Municipal Code requires new development within the City that disturbs one or more acres of land to comply with the NPDES General Construction Permit. Compliance with the Construction General Permit would include the preparation of a SWPPP, which would incorporate BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. Additionally, Section 16.04.040 of the Municipal Code necessitates that projects subject to the NPDES Construction General Permit prepare an Erosion and Sediment Control (ESC) plan incorporating BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. Although development of the project site is not currently proposed, future development of the site could include industrial uses well in excess of one acre. Therefore, future development of the project site would be subject to the State NPDES General Permit conditions. Furthermore, because the potential off-site utilities infrastructure improvements would result in the disturbance of over one acre, such development would also be subject to the State NPDES General Permit conditions.

Following future development of the project site, impervious surfaces on the project site could contribute incrementally to the degradation of downstream water quality during storm events. During the dry season, vehicles and other urban activities may release contaminants onto the impervious surfaces, where they would accumulate until the first storm event. During the initial storm event, or first flush, the concentrated pollutants would be transported via stormwater runoff from the site to the stormwater drainage system and eventually a downstream waterway. Typical urban pollutants that would likely be associated with the proposed project include sediment, herbicides and pesticides, oil and grease, nutrients, metals, bacteria, and trash. In addition, stormwater runoff could cause soil erosion if not properly addressed and provide a more lucrative means of transport for pollutants to enter the waterways.

The City of Dixon is listed by the RWQCB as a NPDES Phase II program municipality. As such, permanent stormwater management measures for development in the City must be designed in accordance with the State's Phase II Small MS4 General Permit, the development standards of which have been adopted by reference in Section 16.06.120 of the City's Municipal Code. The Phase II Small MS4 General Permit requires that permanent stormwater control measures be incorporated into the proposed project to ensure that new development does not result in the discharge of polluted water or the increase in sources of polluted runoff. Regulated projects under the Phase II Small MS4 General Permit are required to divide the project area into drainage management areas (DMAs) and implement and direct water to appropriately-sized temporary control measures (TCMs), consistent with the sizing standards in Section E.12.e.(ii)(c) of the Provisions for all Small MS4 Permittees.[24] TCMs are designed after the inclusion of Site Design Measures (SDMs) consistent with the standards of Section E.12.b. and E.12.e.(ii)(d). Baseline Hydromodification Measures are implemented consistent with the prescriptive standards of Section E.12.e.(ii)(f). Regulated projects must additionally include source control BMPs where possible. Future development of the project site associated with the proposed project would be required to comply with the applicable standards set forth in Section 16.06.120 of the City's Municipal Code.

[24] California State Water Resources Control Board. *Phase II Small Municipal Separate Storm Sewer System (MS4) Program*. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.html. Accessed October 2024.

In addition, all future development of the project site would operate in accordance with the post-construction provisions contained in Section 16.04.040 of the Municipal Code, which requires a Post-Construction ESC plan. The Post-Construction ESC plan must include sufficient engineering analysis to show that the proposed post-construction stormwater management measures are capable of controlling runoff from the project site in compliance with the CWA, all applicable standards and regulations set forth by Chapter 16.04 of the Municipal Code, and such standards and specifications as may be adopted by the City pursuant to Chapter 16.04. The Post-Construction ESC plan must include a statement of the proposed BMPs that would be used to secure the project following completion of construction; provisions for maintenance of all permanent stormwater management facilities; and a landscaping plan for management of vegetation at the site after construction is completed. Additionally, the project would be required to file a Stormwater BMP Operations and Maintenance Agreement with the City, prior to the approval of a grading permit.

As previously discussed, if The Campus (Dixon 257) Project is approved prior to approval of the proposed project, and its storm water infrastructure is in place when the project applicant is ready to proceed with development, then the proposed project's on-site storm drain infrastructure would connect to the off-site retention basin constructed as part of The Campus (Dixon 257) Project. However, if The Campus (Dixon 257) Project is not approved or said project is approved but its associated storm water infrastructure will not be installed in sufficient time for the proposed project to proceed, future buildout of the currently proposed project would include the construction of an on-site retention basin located in the western portion of the project site. The retention basin would address peak flow runoff from the site, as further discussed below, and provide water quality treatment for storm water runoff.

Based on the above, through required compliance with federal, State, and local regulations, and NQSP Mitigation Measure WQ-C, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction and operations. Therefore, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR. Thus, the proposed project is consistent with the conclusions of the NQSP EIR.

b,e. The NQSP EIR did not specifically address the potential for buildout of the NQSP area to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that development would impede sustainable groundwater management of the basin. Nonetheless, it is noted that the City of Dixon is entirely dependent on groundwater drawn from the Solano Groundwater Subbasin. The groundwater levels of the Solano Groundwater Subbasin have been stable in each year since the 1980s, with low levels in the dry season and high levels in the wet season; however, the State has designated the subbasin as a medium-priority groundwater basin. As such, the subbasin is subject to the Sustainable Groundwater Management Act (SGMA), which requires the formation of local groundwater sustainability agencies that must assess conditions in local water basins and adopt locally based groundwater sustainability plans for at least 10 years for basins that cannot demonstrate sustainable yields. As a result, subsequent to the certification of the NQSP EIR, the City became a participant in the Solano Subbasin Groundwater Sustainability Agency (SSGSA), operating under a Joint Powers Authority (JPA) governance structure. The SSGSA is required to complete and maintain a plan for long-term sustainability of the subbasin. The Solano Subbasin Groundwater Sustainability

Plan was approved by the California Department of Water Resources (DWR) on January 18, 2024.[25] Compliance with SGMA legislation, which requires regularly demonstrating that the subbasin is not over-drafted, would ensure that groundwater draws from the Solano Groundwater Subbasin are carefully managed and sustainably used. As a result, buildout of the NQSP area, including future development of the project site, would not substantially deplete groundwater supplies from increased demand.

Furthermore, overall infiltration into the aquifer would remain robust through compliance with existing regulations, such as the incorporation of BMPs and low-impact development (LID) techniques in projects. LID refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration, or use of stormwater in order to protect water quality and associated aquatic habitat. LIDs include biofiltration to capture and infiltrate stormwater runoff consistent with the City's required compliance with NPDES permitting. Through compliance with existing federal, State, and local programs and regulations, buildout of the NQSP area would result in a less-than-significant impact related to substantial depletion of groundwater supplies or substantial interference with groundwater recharge such that a net deficit in aquifer volume or a lowering of the local groundwater table level would occur.

Although a site plan for the project site is not currently available, future development of the proposed project would be subject to all such regulations. In addition, as discussed previously, if The Campus (Dixon 257) Project is approved prior to approval of the proposed project, on-site storm drain infrastructure would connect to a retention basin constructed as part of The Campus (Dixon 257) Project. However, if The Campus (Dixon 257) Project is not approved or said project is approved but its associated storm water infrastructure will not be installed in sufficient time for the proposed project to proceed, future buildout of the currently proposed project would include the development of an on-site storm drain system that would collect and convey flows to an on-site retention basin located in the western portion of the project site. The retention basin would provide a minimum of 44.3 acre-feet of storage with a percolation rate of two inches per day. As such, the proposed project would include LID techniques that would allow for groundwater recharge.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

c.i-iii. The NQSP EIR determined that because the conversion of predominantly agricultural land to urban uses would have the potential to result in increases in the quantity of surface water runoff, and because of limited downstream flow capabilities at the time the NQSP EIR was certified, buildout of the NQSP was concluded to be dependent on improvements to the City-wide drainage system or on-site drainage facilities. The NQSP EIR concluded that implementation of Mitigation Measure WQ-A, which would require the preparation of a hydraulic analysis to confirm that future development would not result in flooding, as well as Mitigation Measure WQ-B, which requires stormwater drainage infrastructure to adequately accommodate runoff from 10-year and 100-year storm events, impacts related to altering the existing drainage pattern of the NQSP area would be less than significant.

[25] Solano Subbasin Groundwater Sustainability Agency. *Solano Subbasin Groundwater Sustainability Plan*. November 30, 2021.

The project site consists of undeveloped land. Future development of the proposed project would include impervious surfaces, which would alter the existing drainage pattern of the site. As discussed above, future development of the project site would be required to comply with Section 16.04.040 of the Municipal Code and the City's Engineering Design Standards, which would ensure BMPs are incorporated in the Post-Construction ESC and that on-site stormwater runoff is diverted to DMAs for on-site retention and treatment prior to discharge to the City's stormwater system. It is noted that the City's stormwater system has undergone significant improvements since the certification of the NQSP EIR. As required by the City's Engineering Design Standards pertaining to drainage design, the proposed stormwater system would be designed not to affect the existing drainage patterns on adjacent properties.

A Drainage Study has been prepared for the proposed project by Morton & Pitalo (see Appendix E).[26] According to the Drainage Study, based on the assumption that 85 percent of the project site would be developed with impervious surfaces, the proposed on-site retention basin would be adequately sized to accommodate stormwater flows during the 100-year storm event, and increases in peak flow and water surface elevations would not occur upstream or downstream of the project site. The Dixon Innovation Center storm drainpipe system would be tied into the storm drain system constructed with The Campus (Dixon 257) project when available.

Therefore, the proposed project is not anticipated to substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion, siltation, or flooding on- or off-site, 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. This will be confirmed through implementation of NQSP EIR Mitigation Measures WQ-A and WQ-B at such time that future site-specific development proposals are submitted to the City for the project site.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

c.iv,d. According to the NQSP EIR, because the NQSP is not located within a 100-year floodplain, further discussion was not provided in the EIR regarding risk of flooding, including flooding risk from rising sea levels associated with climate change, or of risk of inundation by mudflow, seiche, or tsunami.

The currently proposed project would be constructed within the footprint of the previously analyzed NQSP area. Based on current FEMA mapping, the project site is located within Zone X, defined as an area of minimal flood hazard.[27] Therefore, the proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. As such, the proposed project would be consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

The following mitigation measure(s) from the NQSP EIR would apply to the proposed project:

---

[26] Morton & Pitalo. *Dixon Innovation Center Drainage Study*. October 25, 2022.

[27] Federal Emergency Management Agency. *Flood Insurance Rate Map 06095C0200F, Effective August 2, 2012.* Available at: https://msc.fema.gov/portal/search?AddressQuery=Dixon%2C%20CA. Accessed October 2024.

- **Mitigation Measure WQ-A**: Prior to commencement of on-site grading, the project shall demonstrate, via a detailed hydraulic analysis of post development topographic and drainage conditions, that the final project design would not substantially cause flooding to adjacent or downstream parcels or conveyance facilities. The project proponent shall participate in city-wide drainage improvements in order to increase downstream flow capacities to accommodate this project.

- **Mitigation Measure WQ-B**: Final detention basin(s) design, conveyance facilities, and management of the proposed facilities on-site shall, as demonstrated by the hydraulic analysis of the project proponent and approved by the City of Dixon, adequately accommodate runoff from a 10-year and 100-year storm event. Ultimate development of the entire site must be considered, although drainage infrastructure construction could be phased as needed.

- **Mitigation Measure WQ-C**: Prior to commencement of on-site grading, the project sponsor shall develop a surface storm water quality control plan, to be implemented and approved by the City of Dixon. The plan shall include, but not necessarily be limited to reducing runoff contaminant concentrations by:
    - Installing sediment and grease traps at all catch basins or within storm drain lines;
    - Properly maintaining sediment and grease traps, with responsibility for maintenance assigned to site operations to be established by the project sponsors prior to completion of construction of the first phase of development;
    - Incorporating infiltration facilities (porous pavement or grass swales) within the project to reduce peak flow of runoff;
    - Reducing source pollution causes through practices such as minimal use of fertilizer, pesticides and herbicides, proper application of water for landscape irrigation, keeping roadway sand parking lots free of litter and sediments, proper methods and locations for disposal of automobile hazardous wastes; and
    - Maximizing distances between inlets and outlets perhaps using elongated basin shapes.

New Mitigation Measures

None Required.

XI. LAND USE AND PLANNING. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Physically divide an established community?	N/A	No	No	No
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?	Pgs. 4-14 to 4-18	No	No	No

Discussion

a. The NQSP EIR did not specifically address potential impacts related to physically dividing an established community. However, the project site is surrounded by agricultural and industrial uses, and is not located near an existing residential development. Therefore, future buildout of the project site would not physically divide an established community, and no impact would occur.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

b. The NQSP EIR assessed the potential for the NQSP to 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 specifically related to the NQSP's consistency with Solano County Local Agency Formation Commission (LAFCo) Guidelines for Annexation. According to the NQSP EIR, within implementation of Mitigation Measure LU-B, which required the NQSP to be reviewed and approved by the Solano County LAFCo prior to annexation to the City of Dixon, impacts related to conflicts with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect would be less than significant. The NQSP was approved in 1995, and the Plan area annexed into the City; therefore, Mitigation Measure LU-B would not be applicable to the proposed project.

The proposed project would require approval of the proposed SPA to create the General Industrial land use designation and to modify the site's existing NQSP land use designation from Highway Commercial to General Industrial. The new General Industrial NQSP land use designation would allow for the development of a variety of large and small scale industrial, warehouse, and distribution uses, and would be generally consistent with the IG zoning designation as defined in Chapter 18.06, Industrial Districts, of the City of Dixon Municipal Code. Furthermore, this project would bring the NQSP into conformance with the Dixon General Plan 2040 and Zoning Ordinance, as it is currently not in conformance. As such, development within the proposed General Industrial NQSP land use designation would allow for development with a maximum floor area ratio (FAR) of 0.6, minimum lot size of 40,000 sf, and maximum height of 10 feet within 200 feet of a residential district, or 75 feet otherwise. Future development of the project site would be consistent with the requirements of the site's land use and zoning designations. Therefore, the proposed park project would not 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.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

None Required.

New Mitigation Measures

None Required.

XII. MINERAL RESOURCES. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
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?	N/A	No	No	No
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?	N/A	No	No	No

Discussion

a,b. The NQSP EIR did not include a specific analysis of future buildout of the NQSP area's potential impacts to mineral resources. However, according to the City of Dixon General Plan EIR, other than a few existing idle oil wells, mineral resources have not been identified in the General Plan Planning Area. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State or in the loss of availability of a locally important mineral resource recovery site.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

None Required.

New Mitigation Measures

None Required.

XIII. NOISE. *Would the project result in:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
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?	Pgs. 4-107 to 4-109	No	No	No
b. Generation of excessive groundborne vibration or groundborne noise levels?	N/A	No	No	No
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?	N/A	No	No	No

Discussion

a. The NQSP EIR analyzed the potential for buildout of the NQSP area to generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established by the City of Dixon, and concluded that implementation of Mitigation Measures N-A and N-B would be required to ensure impacts related to temporary short-term exposure to construction generated noise would be less-than-significant, and Mitigation Measure N-C would be required to reduce impacts related to long-term increases in traffic, area, and stationary source noise levels at nearby sensitive receptors to less than significant. The following provides a discussion of noise associated with construction and operation of the proposed project.

Construction Noise

The NQSP EIR's analysis of potential noise impacts associated with buildout of the NQSP area accounted for noise generated during construction activities. Implementation of the proposed project would generate noise during construction by the use of construction equipment. Table 4.8.2 in the NQSP EIR provides the typical construction operations that would be required to develop the NQSP area, and the estimated sound generated by such equipment from a distance of 50 feet. According to the NQSP EIR, noise levels for the construction operations in Table 4.8.2 would range from 78 to 89 decibels (dBA) at 50 feet. Based on the noise levels presented in the NQSP EIR, the NQSP EIR concluded that sensitive receptors are not located close enough to the NQSP area to be adversely impacted by short-term construction noise.

Nonetheless, the NQSP EIR included Mitigation Measure N-A, which requires all contractors to comply with local, State, and federal noise regulations, including fitting all equipment with mufflers, as well Mitigation Measure N-B, which requires construction activities to not take place between 7:00 PM and 7:00 AM on weekdays and Saturday or Sunday or holidays, to reduce impacts related to construction noise to a less-than-significant level. Though the project site similarly lack nearby sensitive receptors, the proposed project would be required to comply with Mitigation Measures N-A and N-B.

The proposed project would not cause any additional construction noise that would exceed what was already evaluated in the NQSP EIR. Therefore, additional noise control mitigation measures would not be required for construction noise, beyond those already outlined in the NQSP EIR, and proposed project would not result in any changes, new circumstances, or new information that would involve new significant impacts or substantially more severe significant impacts from what has been anticipated in the NQSP EIR.

Project Operational Noise

According to the NQSP EIR, operation of future development within the NQSP area would result in a potentially significant increase in traffic noise on local roadways. Implementation of Mitigation Measure N-C, which requires future development to comply with the City of Dixon's noise standards or provide site-specific mitigation measures to ensure that noise thresholds are not exceeded, would reduce impacts related to operational noise to a less-than-significant level.

As discussed in Section XVII, Transportation, of this Initial Study/Addendum, according to the VMT Assessment prepared for the proposed project by DKS Associates (see Appendix F),[28] the proposed project is estimated to generate 7,014 total daily trips. Buildout of the project site under currently approved conditions is estimated to generate 12,308 total daily trips. Because the proposed project would result in a reduction of approximately 5,294 total daily trips, operational traffic noise associated with the proposed project would significantly decrease as compared to what was anticipated for the site in the NQSP EIR. Nonetheless, the proposed project would still be subject to compliance with Mitigation Measure N-C.

With respect to operational stationary noise sources, the NQSP EIR does not specifically analyze this issue, presumably given the lack of sensitive receptors surrounding the Plan area. In terms of the current project site, there is a similar lack of sensitive receptors in the immediate vicinity. Thus, stationary noise sources associated with future on-site industrial development (e.g., loading docks, on-site truck circulation, parking lot noise) would not expose sensitive receptors to noise levels in excess of the City of Dixon's noise standards.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

b. The NQSP EIR did not analyze the potential for buildout of the NQSP area to result in the generation of excessive groundborne vibration or groundborne noise levels. The currently proposed project would be constructed within the footprint of the previously analyzed highway commercial component of the NQSP. As such, operation of the future industrial uses within the project site would not cause any additional vibration impacts beyond what was already evaluated in the NQSP EIR. Therefore, additional vibration control mitigation measures would not be required, and the proposed project would not result in any changes, new circumstances, or new information that would involve new significant impacts or substantially more severe significant impacts from what has been anticipated for buildout of the NQSP in the NQSP EIR.

[28] DKS Associates. *Dixon Innovation Center VMT Assessment Draft R.2.* October 22, 2024.

Based on the above information, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

c. The NQSP EIR did not address potential impacts related to being located within an airport land use plan or being located within two miles of an airport. However, an airport was not located within two miles of the NQSP area at the time the NQSP EIR was certified; a new airport has not been constructed within two miles of the project site since the NQSP EIR was drafted. Thus, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

The following mitigation measure(s) from the NQSP EIR would apply to the proposed project:

- **Mitigation Measure N-A:** All contractors shall comply with local, state and federal noise regulations, including fitting all equipment with mufflers according to the manufacturer's specifications.
- **Mitigation Measure N-B:** Construction activities shall not take place between 7:00 p.m. and 7:00 a.m. on weekdays and Saturday, and shall not be permitted on Sunday or on federal holidays.
- **Mitigation Measure N-C:** Future development shall comply with the City of Dixon. Development criteria in the NQSP shall be required to demonstrate conformance with the City's noise standard or site specific mitigation measures to ensure that noise thresholds are not exceeded.

New Mitigation Measures

None Required.

XIV. POPULATION AND HOUSING. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	N/A	No	No	No
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Pg. 4-14	No	No	No

Discussion

a. Because residential development is not proposed in the NQSP area, the NQSP EIR did not specifically address impacts related to inducing substantial population growth in an area, either directly or indirectly. The proposed project would include a SPA to change the NQSP land use designation of the project site from Highway Commercial to General Industrial, and would not include any residential or commercial development. As such, although future development would be altered from what was anticipated for the site in the NQSP EIR, the potential population increase associated with new employment opportunities would be generally consistent with what was anticipated in the NQSP EIR. In addition, although the proposed project may include the development of off-site utilities infrastructure improvements, such utilities would be required to serve the commercial and industrial development anticipated in the NQSP EIR both on-site and in the project site vicinity. As such, the potential off-site utilities infrastructure improvements would not be considered to indirectly induce unplanned population growth. Therefore, the project would not directly or indirectly induce population growth.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR. Thus, the proposed project is consistent with the conclusions of the NQSP EIR.

b. According to the NQSP EIR, approval of the NQSP would result in the conversion of 11 residential parcels to a commercial or light industrial use. Because existing residences within the NQSP area are associated with existing agricultural uses and are not the predominant land use, and because relatively few people would be displaced by approval of the NQSP, the NQSP EIR concluded that impacts related to such would be less than significant.

The project site is currently undeveloped and does not include existing housing or other habitable structures. As such, the proposed project would not displace a substantial number of existing housing or people and would not necessitate the construction of replacement housing elsewhere. Therefore, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR. Thus, the proposed project is consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

None Required.

New Mitigation Measures

None Required.

XV. PUBLIC SERVICES.

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:	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Fire protection?	Pgs. 4-121	No	No	No
b. Police protection?	to 4-125	No	No	No
c. Schools?	and 4-126	No	No	No
d. Parks?	to 4-127	No	No	No
e. Other Public Facilities?		No	No	No

Discussion

a,b. The NQSP EIR analyzed the potential for buildout of the NQSP area to result in an increased need for fire protection and police protection services and determined that due to the increased number of employees that would occur following buildout of the area, a potentially significant impact could occur. With respect to fire protection services, the NQSP EIR concluded that implementation of Mitigation Measures PS-I, PS-J, and PS-K, which require the payment for new fire protection facilities, the submission of a plan showing all fire hydrant locations, and the preparation of an emergency response plan, impacts related to fire protection would be reduced to a less-than-significant level. Similarly, the NQSP EIR concluded that implementation of Mitigation Measures PS-L and PS-M, which require project applicants to pay fair share fees for the provision of additional police protection facilities, and for project applicants to provide on-site private security staff to serve future projects, impacts related to the provision of police protection services would be less than significant.

The Dixon Fire Department (DFD) provides emergency fire, rescue, and medical services to the City and the Dixon Fire Protection District, a 320-square-mile area. The fire station is located at 205 Ford Way, approximately two miles south of the project site, and is manned by 21 career and 10 volunteer/reserve personnel. A new fire station, Fire Station 82, is planned to be constructed at the corner of Pitt School Road and Lavender Lane, which would respond to service calls in the southern and western portions of the city. The addition of Station 82 to the City Fire Department would then allow trucks and personnel from the existing fire station to respond more rapidly to service calls in the northern and eastern portions of the City, including the NEQSP area.

The General Plan EIR concluded that the City's fire protection infrastructure maintains acceptable service ratios, response times, and other performative objectives related to fire protection. Based on the relatively short distance between the fire station and project site, the DFD would be able to respond to service calls from the project site within an acceptable time frame. Furthermore, individual development projects, including the proposed project, would be subject to Fire Department review and approval and would be required to pay the City's standard public safety impact fees (Policies PSF.1-5 and PSF.1-6). Revenues generated through impact fees on new development would pay for any new

fire facilities deemed necessary by the City, all of which would be required to undergo analysis of all potential environmental impacts under CEQA. As such, Mitigation Measures PS-I, PS-J, and PS-K would not be applicable to the proposed project.

The Dixon Police Department (DPD) provides law enforcement service within the City limits and is based at 201 West A Street, approximately three miles south of the project site. The DPD is manned by 28 sworn police officers, two administrative staff, and three community service officers, and maintains 21 police vehicles, one K9 unit, two police motorcycles, an off-road utility vehicle and two distinctively marked police vehicles for community service officers. The DPD strives to have a response time of less than five minutes to Priority 1 calls, which typically relate to incidents involving an immediate threat to life, danger of serious physical injury, or danger of major property damage. Given the short distance from the police station to the project site, the DPD would be able to respond to service calls from the project site within the five-minute response time. In addition, Section 4.07.060 of the Municipal Code establishes police facilities impact fees for development within the City, which must be paid as part of the issuance of a building permit. The proposed project would be subject to all applicable impact fees. Revenues generated through impact fees on new development would pay for any new police facilities deemed necessary by the City, all of which would be required to undergo analysis of all potential environmental impacts under CEQA. As such, Mitigation Measures PS-L and PS-M would not apply to the proposed project.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR related to the need for new or physically altered fire protection facilities or police protection facilities, the construction of which could cause significant environmental impacts. Therefore, the proposed project is consistent with the conclusions of the NQSP EIR.

c-e. According to the NQSP EIR, although development of the NQSP area would not include residential uses and, thus, would not directly increase student enrollment at any existing educational facilities, the anticipated commercial and industrial uses would indirectly impact the capacity of educational facilities and should contribute to its fair share to fund such facilities. As such, the NQSP EIR concluded that implementation of Mitigation Measure MS-N, which requires payment of developer fees, would reduce impacts related to school facilities to a less-than-significant level. The NQSP EIR concluded that construction of the anticipated commercial and industrial uses would not significantly increase the need for additional public parks and recreational facilities, and impacts related to such would be less than significant.

Future development of the project site would be industrial in nature, and, therefore, would not include any development that would result in direct population growth such that demand for schools, parks, or other public facilities would increase. The nearest park to the project site is Conejo Park, located approximately two miles southwest of the project site. The proposed project would not bring school-age children to the area; thus, an impact to schools would not occur with implementation of the proposed project. Nonetheless, the project would be subject to payment of School Impact Mitigation Development Fees to fund local school services. Pursuant to the Dixon Unified School District (DUSD) Developer Fee Justification Study, the proposed project would be required to pay $0.78 per square foot for new industrial construction.[29] Proposition 1A/SB 50 prohibits local

[29] Dixon Unified School District Board of Education. *Developer Fee Justification Study, 2022*. June 2022.

agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act…involving …the planning, use, or development of real property" (Government Code 65996(b)). Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation." Therefore, Mitigation Measure MS-N would not apply to the currently proposed project.

Furthermore, the project would be subject to payment of the City's park facility fee in accordance with Section 4.07.040 of the City's Municipal Code. Therefore, the proposed project would have a less-than-significant impact related to the need for new or physically altered schools, parks, or other public facilities, the construction of which could cause significant environmental impacts.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR related to the need for new or physically altered fire protection facilities or police protection facilities, the construction of which could cause significant environmental impacts. Therefore, the proposed project is consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

None Required.

New Mitigation Measures

None Required.

XVI. RECREATION. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
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?	Pgs. 4-126 to 4-127	No	No	No
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?	Pgs. 4-126 to 4-127	No	No	No

Discussion

a,b. The NQSP EIR concluded that construction of the anticipated commercial and industrial uses would not significantly increase the need for additional public parks and recreational facilities, and impacts related to such would be less than significant.

As discussed previously, future development of the project site would be industrial in nature, and, therefore, would not include any development that would result in an increase in the use of existing parks. The nearest park to the project site is Conejo Park, located approximately two miles southwest of the project site. Furthermore, the project would be subject to payment of the City's park facility fee in accordance with Section 4.07.040 of the City's Municipal Code. Therefore, the proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR. Thus, the proposed project is consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

None Required.

New Mitigation Measures

None Required.

XVII. TRANSPORTATION. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Pgs. 4-85 and 4-94 to 4-95	No	No	No
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	N/A	No	No	Yes
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	N/A	No	No	No
d. Result in inadequate emergency access?	N/A	No	No	No

Discussion

a. The Draft EIR for Northeast Quadrant Specific Plan was released prior to 2020 when the CEQA Guidelines were updated to shift the analysis for transportation impacts from Level of Service (LOS) to Vehicle Miles Traveled (VMT). Prior case law in California has uniformly concluded that projects subject to supplemental review under CEQA did not need to address new subject matter, even though the prior EIR being updated did not address the new subject matter (greenhouse gases for these cases). (Reference *Citizens for Responsible Equitable Environmental Development v. City of San Diego* (2011) 196 Cal.App.4th 525, 530-532*; Citizens Against Airport Pollution v. City of San Jose* (2014) 227 Cal.App4th 788, 806-808; see also CEQA Guidelines Section 15007(b)(c).) This case law can apply to VMT analysis as the CEQA Guidelines expressly states that it (VMT analysis) "shall apply prospectively as described in Section 15007." If a document meets the requirements in effect at the time of public review, the document does not need to conform to any new content. Therefore, there is no requirement to conduct VMT analysis for the modified project as the Final EIR was released well before VMT was adopted as a metric for analysis requirements.

Please refer to Question 'b' for further discussion of VMT.

Transit, Bicycle, and Pedestrian Facilities

The NQSP EIR concluded that because the area was not served by transit facilities at the time the EIR was published, no impact would occur related to such. Similarly, the NQSP EIR concluded that with implementation of Mitigation Measure T-I, which requires roadway improvements to be designed to ensure safe and efficient movement of bicyclists and pedestrians, as well as Mitigation Measure T-J, which requires buildout of the NQSP area to include a bikeway and pedestrian trail system for public use, potential impacts related to such would be less than significant.

Consistent with the analysis in the NQSP EIR, the project site is not currently served by public transit, and bicycle and pedestrian facilities do not exist in the project site vicinity. Due to the industrial nature of future development associated with the proposed project, as well as the potential off-site utilities infrastructure improvements, the proposed project

is unlikely to generate new pedestrian and bicycle trips to the project site. In fact, the proposed project would generate fewer pedestrian and bicycle trips than the commercial uses anticipated for the site in the NQSP EIR; it is reasonably anticipated that the proposed industrial uses would only generate employee trips, rather than potential customer trips. Nonetheless, the proposed project would still be subject to compliance with Mitigation Measures T-I and T-J from the NQSP EIR.

Conclusion

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR. Thus, the proposed project is consistent with the conclusions of the NQSP EIR.

b. As noted above, there is no requirement to conduct VMT analysis for the modified project as the Final EIR was released well before VMT was adopted as a metric for analysis requirements. Nevertheless, for informational purposes, DKS Associates prepared a VMT Assessment for the proposed project (see Appendix F).[30] The VMT Assessment was prepared consistent with the City of Dixon's Transportation Impact Analysis Guidelines (TIA Guidelines) and utilized the City of Dixon traffic model.

The analysis compares two scenarios given that the proposed project is being reviewed pursuant to CEQA's subsequent revisions provisions: the "Approved Conditions" would consist of buildout of the project site with 377,000 sf of Highway Commercial uses, consistent with the site's existing NQSP land use designation. The Approved Conditions is estimated to generate 600 retail jobs. The "Proposed Project" would consist of the proposed General Industrial uses, and would generate an estimated 2,080 office-service jobs. The Proposed Project scenario also assumes full buildout of the project site with the proposed industrial uses by 2025, as well as the widening of southbound Pedrick Road to two lanes and the construction of Professional Drive along the project site frontage.

In addition, while The Campus (Dixon 257) Project is still being reviewed by the City of Dixon, the VMT Assessment considered its effects on VMT in the area for informational purposes.

Table 4 below presents the total daily VMT for each of the aforementioned scenarios.

Table 4
VMT Comparison

Scenario	Total Daily VMT
Approved Conditions (Without The Campus/Dixon 257 Project)	139,003
Approved Conditions (With The Campus/Dixon 257 Project)	125,415
Proposed Project (Without The Campus/Dixon 257 Project)	119,962
Proposed Project (With The Campus/Dixon 257 Project)	108,161

Source: DKS Associates, October 2024 (see Appendix F).

[30] DKS Associates. *Dixon Innovation Center VMT Assessment Draft R.2*. October 22, 2024.

As shown in Table 4, , the Proposed Project scenario would result in less total daily VMT than the Approved Conditions scenario, both with and without consideration of The Campus (Dixon 257) Project. VMT does not constitute a new significant impact or significant new information under CEQA, for reasons stated above, but for informational purposes, as shown in Table 4, the modified project is expected to result in lower overall VMT upon buildout.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR.

c,d. The NQSP EIR does not explicitly address potential impacts related to the potential to substantially increase hazards due to a design feature or incompatible use or to result in inadequate emergency access.

Although site plans are not currently available for the proposed project, as stated above, the project would include the widening of southbound Pedrick Road to two lanes and the construction of Professional Drive along the project site frontage. The proposed roadway improvements, as well as all development related to site entrances and exits, would be required to conform with applicable design standards and requirements contained in the Municipal Code and the City's Engineering Design Standards. Compliance with such would ensure that the proposed project would not substantially increase hazards due to design features or incompatible uses, and emergency access to the site would be adequate.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR. Thus, the proposed project is consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

The following mitigation measure(s) from the NQSP EIR would apply to the proposed project:

- **Mitigation Measure T-I:** Ensure Safety in the Design of Road Improvements. Design and implementation of roadway improvements shall ensure safe and efficient movement of bicyclists and pedestrians, including sidewalk paths, bicycle lanes and signalized crosswalks at major intersections, in accordance with City standards.
- **Mitigation Measure T-J:** Implementation of the project includes a bikeway and pedestrian trail system for public use.

New Mitigation Measures

None Required.

XVIII. TRIBAL CULTURAL RESOURCES.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
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).	N/A	No	No	No
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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	N/A	No	No	No

Discussion

a,b. Because Appendix G of the CEQA Guidelines did not previously include a specific section on tribal cultural resources, the NQSP EIR did not include a specific analysis of potential tribal cultural resource related impacts. However, as discussed in Section V, Cultural Resources, of this Initial Study/Addendum, the NQSP EIR addressed the potential for buildout of the NQSP area to result in impacts to known and unknown cultural resources. As discussed therein, with implementation of Mitigation Measure C-A from the NQSP EIR, as well as Mitigation Measures V-1 through V-3, the currently proposed project would not result in significant impacts related to cultural resources.

Assembly Bill (AB) 52, passed in 2014, requires environmental review documents to disclose and analyze potential significant impacts to tribal cultural resources, including sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. Lead agencies are also required to begin consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed park project if the tribes request to the lead agency, in writing, to be informed by the lead agency of proposed park projects in that geographic area and the tribes request consultation, prior to determining whether a negative declaration, mitigated negative declaration, or EIR is required for a project. AB 52 specifically applies to projects that have a Notice of Preparation or a Notice of Intent to adopt a negative declaration or mitigated negative declaration filed on or after July 1, 2015.

The NQSP EIR was certified prior to implementation of AB 52. Therefore, AB 52 is not applicable to the proposed project.

As discussed previously, should The Campus (Dixon 257) Project not be approved, or said project is approved but its associated off-site infrastructure will not be installed in sufficient time for the proposed project to proceed, the proposed project be required to complete off-site utilities infrastructure improvements. As part of The Campus (Dixon 257) CRA, HELIX notified the Cachil Dehe Band of Wintun Indians of the Colusa Indian Community, Confederated Villages of Lisjan, and Cortina Rancheria-Kletsel Dehe Band of Wintun Indians of the proposed Dixon 257 Project, with which the potential off-site utilities infrastructure improvements would overlap. The Yocha Dehe Wintun Nation responded on August 3, 2023, recommending that the City include cultural monitors during development and ground disturbance, cultural sensitivity training for any pre-project personnel, and to incorporate Yocha Dehe Wintun Nation's Treatment Protocol into the mitigation measures for The Campus (Dixon 257) Project.

The tribal cultural resources section of The Campus Project EIR requires implementation of Mitigation Measures 3.5-1(a), 3.5-1(b), 3.5-2, 3.5-3, and 3.5-4(b) to reduce potential impacts to tribal cultural resources to a less-than-significant level. With the exception of Mitigation Measure 3.5-4(b), the previously stated measures are already required in Section V of the Initial Study/Addendum. Therefore, Mitigation Measure 3.5-4(b) of The Campus Project EIR has been incorporated herein as new Mitigation Measure XVIII-1.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. As a result, the proposed project would remain consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

None Required.

New Mitigation Measures

The following mitigation measure(s) from The Campus Project DEIR would be required to reduce impacts to tribal cultural resources to a less-than-significant level:

- **Mitigation Measure XVIII-1 (Mitigation Measure 3.5-4(b) from The Campus Project DEIR):** The project proponent shall implement the following measure to avoid or minimize impacts on potential tribal cultural resources only if the project constructs the off-site infrastructure improvements in lieu of these improvements being completed by other parties:

  A tribal cultural resources awareness brochure and training program for all personnel involved in ground-disturbing activities (site grading, utility infrastructure installation, construction, etc.) associated with the potential off-site utilities infrastructure improvements shall be developed in coordination with interested Native American Tribes. The brochure shall be distributed and the training will be conducted by Native American representatives, or tribal monitors from culturally affiliated Native American Tribes, before any stages of project implementation and construction activities begin. The training may be done in coordination with the project archaeologist. The program will include relevant information regarding sensitive tribal cultural resources, applicable regulations and

protocols for avoidance, and consequences of violating state laws and regulations. The program will describe appropriate avoidance and minimization measures for resources that have the potential to be located on the disturbance footprint of the potential off-site utilities infrastructure improvements and will outline what to do and whom to contact if any potential tribal cultural resources or archaeological resources are encountered. The program will underscore the requirement for confidentiality and culturally appropriate treatment of any find with cultural significance to Native Americans' tribal values. All operators of ground-disturbing equipment shall receive the training and sign a form that acknowledges receipt of the training.

XIX. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
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?	Pgs. 4-112, 4-115, 4-125, and 4-126	No	No	No
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Pgs. 4-112 to 4-114	No	No	No
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?	Pgs. 4-115 to 4-118	No	No	No
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?	Pg. 4-120	No	No	No
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Pg. 4-120	No	No	No

Discussion

a-c. The NQSP EIR assessed the potential for buildout of the NQSP area to 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, and concluded that, with implementation of mitigation, impacts would be less than significant.

Brief discussions of the water, wastewater, stormwater drainage, electrical, natural gas, and telecommunications facilities that would serve the proposed project are included below.

Water

The NQSP EIR anticipated that buildout of the NQSP area would require new water utilities infrastructure and would result in an increase in water demand. The NQSP EIR concluded that implementation of Mitigation Measure PS-B, which required project proponents to obtain evidence that a water supply is available to meet minimum demand, would reduce the impact to a less-than-significant level.

As discussed previously, if The Campus (Dixon 257) Project is not approved, or said project is approved but its associated off-site water infrastructure will not be installed in sufficient time for the proposed project to proceed, a 1,500-gpm municipal well would be constructed south of the project site as part of the proposed project. In addition, a 12-inch water main would be extended south from the project site to connect to the existing 10-

inch water main within Vaughn Road. If The Campus (Dixon 257) Project is approved prior to the approval of the proposed project, the foregoing utilities improvements would be developed as part of The Campus (Dixon 257) Project, and the currently proposed project would only require connections to the new off-site utilities connections.

A Supplemental Water Capacity Analysis was prepared for the proposed project by Morton & Pitalo, Inc. (M&P) (see Appendix G)[31] to assess if adequate water supply is available to serve the project. According to the Water Analysis, the average annual water demand for the project would be 57 acre-feet per year; maximum day demand and peak hour demand were estimated to be 0.112 and 0.168 million gallons per day, respectively. The 1,500-gpm municipal well proposed for development south of the project site would not only adequately meet the demand of the proposed project, but would be capable of serving other future development in the NQSP area, including The Campus (Dixon 257) Project. In addition, the City of Dixon General Plan EIR determined that even in dry and multiple dry years, the Solano Groundwater Subbasin levels have been relatively stable. Since the construction of the Solano Project and the Monticello Dam in the 1950s, groundwater levels have remained consistent throughout the County, with major land subsidence not detected, and well levels dropping and rising seasonally, even during the multi-year drought from 2011 to 2017. According to the General Plan EIR, the relative stability of the subbasin levels indicates that even in dry and multiple dry years, the City is likely to have adequate water supply. As such, Mitigation Measure PS-B would not be required for the proposed project.

Wastewater

The NQSP EIR determined that although buildout of the NQSP area would increase demand for and require the development of additional wastewater infrastructure, implementation of Mitigation Measures PS-C, PS-D, and PS-E would reduce impacts related to such to a less-than-significant level. Mitigation Measure PS-C requires project proponents to present evidence that the City's wastewater treatment plant has capacity to serve the project, and Mitigation Measure PS-E requires the project applicant to pay hook-up fees to offset costs of necessary sewage treatment facility expansions; Mitigation Measure PS-D requires annexation of 60 acres into the City's sewer service area, which has already occurred.

The proposed project would include the development of a sanitary sewer lift station in the southwest corner of the project site. If The Campus (Dixon 257) Project is not approved, or said project is approved but its associated off-site sewer infrastructure will not be installed in sufficient time for the proposed project to proceed, the proposed project would also require extension of an off-site sanitary sewer pipe to the south to connection to the existing sanitary sewer main within Vaughn Road. The proposed sewer infrastructure would serve the project site as well as the surrounding parcels to the north, west, and south of the project site. As such, the required sewer infrastructure improvements would include the installation of an eight-inch sewer line originating from north of the project site, north of I-80, and would extend south within Pedrick Road before branching west into a 10-inch sewer line within the future Professional Drive, which would run along the site's southern boundary, before discharging into the aforementioned lift station. From the lift station, the sewer line would vary in size and gravity to the existing 18-inch sewer line within Vaughn Road. According to the Supplemental Sewer Capacity Analysis prepared

[31] Morton & Pitalo, Inc. *Supplemental Water Capacity Analysis*. February 2024.

for the proposed project by M&P (see Appendix H),[32] the proposed sewer utilities infrastructure improvements would be adequately sized to serve the project site and the surrounding area.

The 18-inch sewer line within Vaughn Road leads to the City-owned and operated sewer system and wastewater treatment facility (WWTF). In 2016, Dixon completed an upgrade to its wastewater treatment facility (WWTF), replacing 130-acre treatment ponds with an oxidation ditch design. The upgrade implemented an activated sludge treatment process that required much less land than the original aerated pond process. Phase 1 of the WWTF upgrade increased the Average Annual Flow (AAF) capacity of the WWTF to 1.9 million gallons per day (MGD) and was constructed on four acres in a 14-acre site at the north edge of the original WWTF, which covered 430 acres. The Phase 1 upgrade/expansion was designed so that the WWTF can be further expanded to an AAF capacity of 2.5 MGD. As of 2014, the flows to the WWTF were approximately 1.2 MGD (City of Dixon, 2014).

The City collects wastewater rates and impact fees to fund the operation, maintenance, and expansion of the collection system and WWTF, ensuring the financial capacity to make any necessary improvements in full compliance with any applicable regulations. Section 4.07.100 of the City's Municipal Code established such fees. As such, Mitigation Measure PS-E would not be required for the proposed project. However, Mitigation Measure PS-C would still be required for the proposed project to ensure that the WWTF has capacity to serve the proposed project.

Stormwater

The NQSP EIR did not specifically address potential impacts related to the development of stormwater infrastructure. Issues related to stormwater infrastructure are discussed in Section X, Hydrology and Water Quality, of this Initial Study/Addendum. As noted therein, according to the Drainage Study prepared for the proposed project, if The Campus (Dixon 257) project is not approved, or said project is approved but The Campus (Dixon 257) stormwater basin is not constructed in sufficient time such that the proposed project can proceed, the proposed project would construct an on-site retention basin that would be adequately sized to accommodate stormwater flows during the 100-year storm event, and increases in peak flow and water surface elevations would not occur upstream or downstream of the project site.

Electricity, Natural Gas, and Telecommunications

The NQSP EIR determined that future development would be able to connect to existing PG&E infrastructure in the vicinity for electricity and natural gas, and that telecommunications facilities would be provided by Pacific Bell. Therefore, the NQSP EIR concluded that a less than significant impact would occur. Consistent with the conclusions of the NQSP EIR, electricity and natural gas would be provided by PG&E by way of existing electrical and natural gas infrastructure in the project vicinity. Internet and telephone services would be provided by AT&T or a similar service provider operating within the City. The project would not require major upgrades to, or extension of, existing infrastructure. Thus, impacts to electricity, natural gas, and telecommunications infrastructure would be less than significant.

[32] Morton & Pitalo, Inc. *Supplemental Sewer Capacity Analysis*. February 2024.

Conclusion

As discussed above, if The Campus (Dixon 257) Project is approved prior to the approval of the proposed project, the relocation or construction of new or expanded utilities infrastructure would not occur, as the proposed project would only connect to the new utilities infrastructure developed as part of The Campus (Dixon 257) Project. Nevertheless, the potential environmental impacts of the aforementioned off-site utilities infrastructure improvements that would be required are addressed throughout this Initial Study/Addendum by incorporating by reference the analysis and applicable mitigation measures from The Campus Project DEIR. As such, additional environmental impacts would not occur beyond what has been anticipated in this Initial Study/Addendum. In addition, sufficient water supplies would be available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years, and, with implementation of NQSP EIR mitigation, adequate capacity to serve the project's projected wastewater services demand in addition to the City's existing commitments.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR. Thus, the proposed project is consistent with the conclusions of the NQSP EIR.

d,e. Although the NQSP EIR did not analyze compliance with federal, State, and local statutes and regulations related to solid waste, the NQSP EIR concluded that with implementation of Mitigation Measures PS-F, PS-G and PS-H, impacts related to having adequate landfill capacity to serve buildout of the NQSP area would be less than significant. The aforementioned mitigation measures generally require the NQSP to include waste management plans, to include an on-site recycling center, and for organic waste to be made available for composting or recycling.

Solid waste disposal services are provided in the City of Dixon by Recology Dixon, a private company under contract with the City. Recology Dixon provides weekly curbside collection of garbage, recycling, and yard waste, and operates the Dixon Recycle Center, located in the City. Household hazardous waste disposal services are provided by Recology Dixon at the Household Hazardous Waste Facility in the City of Vacaville. Solid waste collected in the Planning Area is transported to the Hay Road Landfill located eight miles south of the City, operated by Recology. The landfill has a permitted capacity of 2,400 tons per day, with an estimated total permitted capacity of 34,697,000 cubic yards. The total estimated capacity used, as of April 2013, was 6,559,000 cubic yards (18.9 percent of total permitted capacity). The estimated closure date of the currently permitted facility is 2068. In 2018, Recology released a Notice of Preparation stating an intent to expand the Hay Road Landfill by 8,800,000 cubic yards and extend the estimated life of the landfill by approximately nine years. As such, adequate capacity would be available at the Hay Road Landfill to accept solid waste generated by the proposed project.

The proposed project would be required to comply with all applicable policies and regulations regarding solid waste. The City of Dixon General Plan contains numerous policies aimed at reduction and diversion from landfills of solid waste including by providing recycling receptacles throughout Dixon, requiring development of a construction waste diversion ordinance, increasing public education around waste reduction and diversion, and facilitating citywide goods donation and garage sale events. All new development must also comply with the CALGreen Code, which requires diversion of at least 65 percent of construction waste from landfills. Because the requirements of the

CALGreen Code have become more stringent since the NQSP EIR was certified, development of the proposed project would result in the generation of less waste than was anticipated in the NQSP EIR.

Based on the above, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts beyond what were analyzed in the NQSP EIR, and the proposed project is consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

The following mitigation measure(s) from the NQSP EIR would apply to the proposed project:

- **Mitigation Measure PS-C:** Prior to the issuance of a building permit, evidence that the city's wastewater treatment plant has capacity to accommodate the proposed project shall be submitted to the City of Dixon.

New Mitigation Measures

None Required.

XX. WILDFIRE. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	N/A	No	No	No
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?	N/A	No	No	No
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?	N/A	No	No	No
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?	N/A	No	No	No

Discussion

a-d. Wildfire is an environmental issue area included in CEQA Guidelines Appendix G, subsequent to the approval of the NQSP EIR. As such, the NQSP EIR did not include an analysis specifically dedicated to wildfire. According to the CAL FIRE Fire and Resource Assessment Program, the project site is located within a LRA – Incorporated.[33] CAL FIRE has determined that the County does not contain VHFH Severity Zones in LRAs. Furthermore, future development within the project site would be required by law to incorporate California Building Code and California Fire Code requirements into all development phases. Fire reduction measures include fire sprinklers, fire resistant coatings, construction and maintenance of fuel breaks, management of fire-prone vegetation along streets, maintenance of clearances around structures, providing minimum street widths and turning radii, limiting the lengths of cul-de-sacs and dead-end streets, limiting excessive street grades, and requiring at least two access roads in and out of developed areas. The project site is not located on a substantial slope, and the project area does not include any existing features that would substantially increase fire risk. As discussed in Section VII, Geology and Soils, and Section X, Hydrology and Water Quality, of this Initial Study/Addendum, development of the proposed project would not expose people or structures to significant risks related to flooding or landslides.

Compliance with California Building Code regulations, California Fire Code requirements, and other state and local fire safety requirements would minimize wildland fire risks at the project site, and a less-than-significant impact would occur.

[33] California Department of Forestry and Fire Protection. *Solano County: Fire Hazard Severity Zones In SRA*. Available at: https://cdnverify.osfm.fire.ca.gov/media/5wwjs5hp/fhsz_county_sra_11x17_2022_solano_ada.pdf. Accessed October 2024.

Based on the above information, the currently proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR. Therefore, the proposed project would be consistent with the conclusions of the NQSP EIR.

Prior Mitigation Measures

None Required.

New Mitigation Measures

None Required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.	Where Impact Was Analyzed in Previous CEQA Document(s)?	Do Proposed Changes Involve New or More Severe Impacts?	Any New Circumstances Involving New or More Severe Impacts?	Any New Information Requiring New Analysis or Verification?
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	N/A	No	No	No
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)?	N/A	No	No	No
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	N/A	No	No	No

Discussion

a. As discussed in Section IV, Biological Resources, of this Initial Study/Addendum, the agricultural lands within the project site lack the necessary habitat constituents for special-status plant species and, thus, the proposed project would not result in impacts to such. Through preconstruction and protocol-level surveys and any additional protective measures specified by Mitigation Measures B-D and IV-1 through IV-3, all potential adverse effects to special-status wildlife species would be minimized. Additionally, because the project site could contain unidentified historic or prehistoric resources beneath the ground surface, the proposed project would be implemented in accordance with Mitigation Measures C-A and V-1 through V-3, and impacts related to unidentified historic or precontact resources within the project site would be minimized during construction activities, consistent with the requirements of CEQA.

Considering the above, the proposed project would not: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory. Impacts associated with such resources have been adequately addressed and would not change from what was identified in the NQSP EIR, and the criteria for requiring further CEQA review are not met.

b. The NQSP EIR concluded that cumulative impacts to land use and air quality would be significant and unavoidable. For those impacts determined to be significant in an EIR, CEQA Section 15162 allows for future environmental documents to limit examination of environmental effects to substantial changes in a proposed project that would require major revisions of the previous EIR to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Although not specifically anticipated in the NQSP EIR, as analyzed throughout this Initial Study/Addendum, the proposed project would not result in new significant impacts or substantially more severe significant impacts than what were previously analyzed in the NQSP EIR, and further analysis is not required in this Initial Study/Addendum.

c. As described in this Initial Study/Addendum, the proposed project would not cause substantial effects to human beings, including effects related to exposure to air pollutants, geologic hazards, hazardous materials, and excessive noise, beyond those effects previously analyzed as part of the NQSP EIR. Therefore, further analysis is not required.

APPENDIX A

CALEEMOD RESULTS

Dixon Innovation Center - Approved Conditions Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

3.3. Grading (2025) - Unmitigated

3.5. Building Construction (2026) - Unmitigated

3.7. Building Construction (2027) - Unmitigated

3.9. Building Construction (2028) - Unmitigated

3.11. Paving (2025) - Unmitigated

3.13. Paving (2026) - Unmitigated

3.15. Architectural Coating (2026) - Unmitigated

3.17. Architectural Coating (2027) - Unmitigated

3.19. Architectural Coating (2028) - Unmitigated

3.21. Linear, Grubbing & Land Clearing (2025) - Unmitigated

3.23. Linear, Grading & Excavation (2025) - Unmitigated

3.25. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

3.27. Linear, Paving (2025) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Dixon Innovation Center - Approved Conditions
Construction Start Date	6/2/2025
Operational Year	2029
Lead Agency	City of Dixon
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	33.8
Location	38.48321457893605, -121.80876392996089
County	Solano-Sacramento
City	Dixon
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	830
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Strip Mall	377	1000sqft	26.3	376,685	245,482	—	—	—

Other Asphalt Surfaces	3.15	Acre	3.15	0.00	0.00	—	—	—
User Defined Linear	2.44	Mile	0.89	0.00	0.00	—	—	—
Parking Lot	1,256	Space	11.3	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.37	4.99	40.5	43.1	0.07	1.69	20.2	21.7	1.56	10.2	11.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.22	4.91	29.7	29.0	0.06	1.23	9.37	10.6	1.14	3.69	4.83
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.67	3.45	9.89	13.8	0.03	0.42	3.58	4.00	0.38	1.60	1.98
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.67	0.63	1.81	2.52	< 0.005	0.08	0.65	0.73	0.07	0.29	0.36

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	5.37	4.52	40.5	43.1	0.07	1.69	20.2	21.7	1.56	10.2	11.7
2026	5.26	4.99	13.0	20.8	0.04	0.42	1.63	2.06	0.39	0.40	0.79
2027	5.18	4.87	12.4	20.3	0.04	0.38	1.63	2.01	0.35	0.40	0.75
2028	5.09	4.81	11.8	19.9	0.04	0.34	1.63	1.97	0.31	0.40	0.71
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	3.88	3.27	29.7	29.0	0.06	1.23	9.37	10.6	1.14	3.69	4.83
2026	5.22	4.91	13.3	19.9	0.04	0.42	1.63	2.06	0.39	0.40	0.79
2027	5.13	4.83	12.6	19.4	0.04	0.38	1.63	2.01	0.35	0.40	0.75
2028	5.06	4.77	12.0	19.1	0.04	0.34	1.63	1.97	0.31	0.40	0.71
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2025	1.38	1.18	9.89	10.1	0.02	0.42	3.58	4.00	0.38	1.60	1.98
2026	3.55	3.33	9.22	13.8	0.03	0.30	1.10	1.40	0.28	0.27	0.55
2027	3.67	3.45	8.95	13.8	0.03	0.27	1.14	1.41	0.25	0.28	0.53
2028	3.21	3.03	7.37	11.8	0.02	0.21	0.99	1.20	0.19	0.24	0.44
Annual	—	—	—	—	—	—	—	—	—	—	—
2025	0.25	0.21	1.81	1.84	< 0.005	0.08	0.65	0.73	0.07	0.29	0.36
2026	0.65	0.61	1.68	2.52	< 0.005	0.05	0.20	0.26	0.05	0.05	0.10
2027	0.67	0.63	1.63	2.52	< 0.005	0.05	0.21	0.26	0.05	0.05	0.10
2028	0.59	0.55	1.35	2.14	< 0.005	0.04	0.18	0.22	0.04	0.04	0.08

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Unmit.	66.9	62.6	47.7	428	1.11	0.98	98.2	99.2	0.92	24.9	25.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	60.3	56.1	55.8	376	1.03	0.95	98.2	99.2	0.90	24.9	25.8
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	61.5	57.3	52.4	371	1.04	0.97	96.1	97.1	0.91	24.4	25.3
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.2	10.5	9.56	67.7	0.19	0.18	17.5	17.7	0.17	4.45	4.61

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	55.1	51.1	46.7	411	1.10	0.89	98.2	99.1	0.83	24.9	25.7
Area	11.7	11.4	0.14	16.4	< 0.005	0.03	—	0.03	0.02	—	0.02
Energy	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—	—
Total	66.9	62.6	47.7	428	1.11	0.98	98.2	99.2	0.92	24.9	25.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	51.5	47.3	55.0	375	1.02	0.89	98.2	99.1	0.84	24.9	25.7
Area	8.76	8.76	—	—	—	—	—	—	—	—	—
Energy	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—

Refrig.	—	—	—	—	—	—	—	—	—	—	—
Total	60.3	56.1	55.8	376	1.03	0.95	98.2	99.2	0.90	24.9	25.8
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	51.2	47.2	51.4	362	1.04	0.89	96.1	97.0	0.83	24.4	25.2
Area	10.2	10.1	0.07	8.08	< 0.005	0.01	—	0.01	0.01	—	0.01
Energy	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—	—
Total	61.5	57.3	52.4	371	1.04	0.97	96.1	97.1	0.91	24.4	25.3
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.34	8.61	9.38	66.1	0.19	0.16	17.5	17.7	0.15	4.45	4.60
Area	1.86	1.84	0.01	1.47	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Energy	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—	—
Total	11.2	10.5	9.56	67.7	0.19	0.18	17.5	17.7	0.17	4.45	4.61

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26

Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.60	2.48	< 0.005	0.11	—	0.11	0.10	—	0.10
Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.83	0.83
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.47	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.15	0.15
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.74	0.00	0.00	0.14	0.14	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.66	6.10	5.82	0.01	0.25	—	0.25	0.23	—	0.23
Dust From Material Movement	—	—	—	—	—	—	1.89	1.89	—	0.75	0.75
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.11	1.06	< 0.005	0.05	—	0.05	0.04	—	0.04
Dust From Material Movement	—	—	—	—	—	—	0.35	0.35	—	0.14	0.14
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.85	0.00	0.00	0.17	0.17	0.00	0.04	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.71	0.00	0.00	0.17	0.17	0.00	0.04	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	0.74	6.83	8.98	0.02	0.26	—	0.26	0.24	—	0.24
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.25	1.64	< 0.005	0.05	—	0.05	0.04	—	0.04
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.45	0.26	4.77	0.00	0.00	1.00	1.00	0.00	0.23	0.23
Vendor	0.10	0.08	1.95	0.95	0.01	0.02	0.44	0.46	0.02	0.12	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.38	0.38	3.99	0.00	0.00	1.00	1.00	0.00	0.23	0.23
Vendor	0.09	0.07	2.10	0.98	0.01	0.02	0.44	0.46	0.02	0.12	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Worker	0.29	0.26	0.23	2.69	0.00	0.00	0.68	0.68	0.00	0.16	0.16
Vendor	0.07	0.05	1.42	0.67	0.01	0.02	0.30	0.31	0.02	0.08	0.10
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03
Vendor	0.01	0.01	0.26	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.40	0.26	4.46	0.00	0.00	1.00	1.00	0.00	0.23	0.23
Vendor	0.10	0.07	1.87	0.89	0.01	0.02	0.44	0.46	0.02	0.12	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.37	0.34	3.71	0.00	0.00	1.00	1.00	0.00	0.23	0.23
Vendor	0.08	0.06	2.01	0.92	0.01	0.02	0.44	0.46	0.02	0.12	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.21	2.59	0.00	0.00	0.70	0.70	0.00	0.16	0.16
Vendor	0.07	0.04	1.40	0.64	0.01	0.02	0.31	0.32	0.02	0.08	0.10
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.47	0.00	0.00	0.13	0.13	0.00	0.03	0.03
Vendor	0.01	0.01	0.25	0.12	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	5.50	7.97	0.01	0.19	—	0.19	0.17	—	0.17
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.00	1.46	< 0.005	0.03	—	0.03	0.03	—	0.03
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.38	0.23	4.20	0.00	0.00	1.00	1.00	0.00	0.23	0.23
Vendor	0.09	0.06	1.78	0.84	0.01	0.02	0.44	0.46	0.02	0.12	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.31	3.51	0.00	0.00	1.00	1.00	0.00	0.23	0.23
Vendor	0.08	0.06	1.92	0.87	0.01	0.02	0.44	0.46	0.02	0.12	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.22	0.16	2.10	0.00	0.00	0.60	0.60	0.00	0.14	0.14
Vendor	0.05	0.04	1.16	0.52	0.01	0.01	0.26	0.28	0.01	0.07	0.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.11	0.11	0.00	0.03	0.03
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32
Paving	0.73	0.73	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.96	1.29	< 0.005	0.05	—	0.05	0.04	—	0.04
Paving	0.09	0.09	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29
Paving	0.73	0.73	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.50	0.00	0.00	0.12	0.12	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.19	3.19	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.19	3.19	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.57	0.75	< 0.005	0.02	—	0.02	0.01	—	0.01
Architectural Coatings	2.12	2.12	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	0.39	0.39	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.05	0.95	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	0.80	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.52	0.00	0.00	0.13	0.13	0.00	0.03	0.03

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.19	3.19	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	3.19	3.19	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.59	0.80	< 0.005	0.01	—	0.01	0.01	—	0.01
Architectural Coatings	2.28	2.28	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	0.42	0.42	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.89	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.74	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.52	0.00	0.00	0.14	0.14	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01
Architectural Coatings	3.19	3.19	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01
Architectural Coatings	3.19	3.19	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.52	0.72	< 0.005	0.01	—	0.01	0.01	—	0.01
Architectural Coatings	2.05	2.05	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.09	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	0.37	0.37	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.84	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.70	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.44	0.00	0.00	0.13	0.13	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Linear, Grading & Excavation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	0.03	1.76	0.42	0.01	0.03	0.40	0.43	0.03	0.11	0.14
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.25. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.26	1.05	8.77	11.1	0.02	0.33	—	0.33	0.30	—	0.30
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.06	0.00	0.00	0.21	0.21	0.00	0.05	0.05

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Linear, Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	55.1	51.1	46.7	411	1.10	0.89	98.2	99.1	0.83	24.9	25.7
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	55.1	51.1	46.7	411	1.10	0.89	98.2	99.1	0.83	24.9	25.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Strip Mall	51.5	47.3	55.0	375	1.02	0.89	98.2	99.1	0.84	24.9	25.7
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	51.5	47.3	55.0	375	1.02	0.89	98.2	99.1	0.84	24.9	25.7
Annual	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	9.34	8.61	9.38	66.1	0.19	0.16	17.5	17.7	0.15	4.45	4.60
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	9.34	8.61	9.38	66.1	0.19	0.16	17.5	17.7	0.15	4.45	4.60

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07
Annual	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.11	8.11	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.65	0.65	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.92	2.69	0.14	16.4	< 0.005	0.03	—	0.03	0.02	—	0.02
Total	11.7	11.4	0.14	16.4	< 0.005	0.03	—	0.03	0.02	—	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.11	8.11	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.65	0.65	—	—	—	—	—	—	—	—	—
Total	8.76	8.76	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.48	1.48	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.12	0.12	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.26	0.24	0.01	1.47	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Total	1.86	1.84	0.01	1.47	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	7/11/2025	5.00	30.0	—
Grading	Grading	7/14/2025	10/24/2025	5.00	75.0	—
Building Construction	Building Construction	1/12/2026	11/10/2028	5.00	740	—
Paving	Paving	10/27/2025	1/9/2026	5.00	55.0	—
Architectural Coating	Architectural Coating	1/26/2026	11/24/2028	5.00	740	—

Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/4/2025	5.00	2.00	—
Linear, Grading & Excavation	Linear, Grading & Excavation	6/5/2025	6/16/2025	5.00	8.00	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/17/2025	6/26/2025	5.00	7.00	—
Linear, Paving	Linear, Paving	6/27/2025	7/1/2025	5.00	3.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—

Building Construction	Worker	121	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	61.7	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	24.1	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	0.00	11.7	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.40	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	0.00	11.7	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.40	HHDT,MHDT
Linear, Grading & Excavation	Hauling	21.8	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	11.7	LDA,LDT1,LDT2

Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.40	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	0.00	11.7	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.40	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	565,028	188,343	37,777

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	45.0	0.00	—
Grading	—	—	225	0.00	—
Paving	0.00	0.00	0.00	0.00	15.3

Linear, Grubbing & Land Clearing	—	—	0.89	0.00	—
Linear, Grading & Excavation	—	1,386	0.89	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	—	0.89	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Strip Mall	0.00	0%
Other Asphalt Surfaces	3.15	100%
User Defined Linear	0.89	100%
Parking Lot	11.3	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Strip Mall	12,306	12,306	12,306	4,491,799	139,003	139,003	139,003	50,736,095

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	565,028	188,343	37,777

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Strip Mall	3,281,708	204	0.0330	0.0040	3,249,134
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
Parking Lot	431,344	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	27,902,008	3,200,109
Other Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	396	—
Other Asphalt Surfaces	0.00	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Lot acreage adjusted to represent overall acreage of the project site. Building square feet adjusted to represent the provided building square footage of the project.
Construction: Construction Phases	Based on typical construction practices, architectural coating assumed to start two weeks after the start of building construction and last for the same number of days.
Construction: On-Road Fugitive Dust	All roads in project vicinity are paved.
Operations: Road Dust	All operations take place on 100% paved roads.
Operations: Vehicle Data	Trip rates and VMT updated to be consistent with traffic data provided by DKS.

Dixon Innovation Center - Proposed Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

3.3. Grading (2025) - Unmitigated

3.5. Building Construction (2026) - Unmitigated

3.7. Building Construction (2027) - Unmitigated

3.9. Building Construction (2028) - Unmitigated

3.11. Paving (2025) - Unmitigated

3.13. Paving (2026) - Unmitigated

3.15. Architectural Coating (2026) - Unmitigated

3.17. Architectural Coating (2027) - Unmitigated

3.19. Architectural Coating (2028) - Unmitigated

3.21. Linear, Grubbing & Land Clearing (2025) - Unmitigated

3.23. Linear, Grading & Excavation (2025) - Unmitigated

3.25. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

3.27. Linear, Paving (2025) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Dixon Innovation Center - Proposed
Construction Start Date	6/2/2025
Operational Year	2029
Lead Agency	City of Dixon
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	33.8
Location	38.48321457893605, -121.80876392996089
County	Solano-Sacramento
City	Dixon
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	830
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Asphalt Surfaces	3.15	Acre	3.15	0.00	0.00	—	—	—

User Defined Linear	2.44	Mile	0.89	0.00	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	564	1000sqft	20.7	563,828	245,482	—	—	—
Parking Lot	1,879	Space	16.9	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.97	5.92	3.53	12.7	0.02	0.03	20.2	20.2	0.03	10.2	10.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.89	5.76	4.03	10.9	0.02	0.03	9.37	9.37	0.03	3.69	3.69
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.17	4.07	2.67	7.30	0.01	0.02	3.58	3.58	0.02	1.60	1.60
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.76	0.74	0.49	1.33	< 0.005	< 0.005	0.65	0.65	< 0.005	0.29	0.29

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	0.17	0.17	1.80	1.80	0.01	0.03	20.2	20.2	0.03	10.2	10.3
2026	5.97	5.92	3.53	12.7	0.02	0.03	3.00	3.03	0.03	0.73	0.76
2027	5.92	5.78	3.41	11.9	0.02	0.03	3.00	3.03	0.03	0.73	0.76
2028	5.87	5.74	3.20	11.2	0.02	0.03	3.00	3.03	0.03	0.73	0.76
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	1.05	1.05	0.07	0.71	0.00	0.00	9.37	9.37	0.00	3.69	3.69
2026	5.89	5.76	4.03	10.9	0.02	0.03	3.00	3.03	0.03	0.73	0.76
2027	5.83	5.70	3.82	10.1	0.02	0.03	3.00	3.03	0.03	0.73	0.76
2028	5.80	5.67	3.60	9.58	0.02	0.03	3.00	3.03	0.03	0.73	0.76
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2025	0.16	0.16	0.06	0.28	< 0.005	< 0.005	3.58	3.58	< 0.005	1.60	1.60
2026	3.96	3.87	2.67	7.30	0.01	0.02	2.03	2.05	0.02	0.49	0.52
2027	4.17	4.07	2.59	7.06	0.01	0.02	2.10	2.12	0.02	0.51	0.54
2028	3.70	3.62	2.12	5.77	0.01	0.02	1.82	1.84	0.02	0.44	0.46
Annual	—	—	—	—	—	—	—	—	—	—	—
2025	0.03	0.03	0.01	0.05	< 0.005	< 0.005	0.65	0.65	< 0.005	0.29	0.29
2026	0.72	0.71	0.49	1.33	< 0.005	< 0.005	0.37	0.37	< 0.005	0.09	0.09
2027	0.76	0.74	0.47	1.29	< 0.005	< 0.005	0.38	0.39	< 0.005	0.09	0.10
2028	0.68	0.66	0.39	1.05	< 0.005	< 0.005	0.33	0.34	< 0.005	0.08	0.08

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Unmit.	54.7	50.9	45.7	375	0.97	1.12	84.8	85.9	1.05	21.5	22.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	48.3	44.8	52.1	309	0.90	1.08	84.8	85.8	1.02	21.5	22.5
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	50.0	46.5	47.5	312	0.91	1.03	82.9	84.0	0.97	21.0	22.0
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.13	8.48	8.66	56.9	0.17	0.19	15.1	15.3	0.18	3.84	4.02

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	36.2	33.0	37.2	336	0.94	0.75	84.8	85.5	0.71	21.5	22.2
Area	17.5	17.1	0.21	24.5	< 0.005	0.04	—	0.04	0.03	—	0.03
Energy	0.09	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Off-Road	0.94	0.79	7.37	13.4	0.02	0.26	—	0.26	0.24	—	0.24
Stationary	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005
Total	54.7	50.9	45.7	375	0.97	1.12	84.8	85.9	1.05	21.5	22.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	34.2	30.9	43.9	295	0.88	0.75	84.8	85.5	0.71	21.5	22.2
Area	13.1	13.1	—	—	—	—	—	—	—	—	—
Energy	0.09	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06
Water	—	—	—	—	—	—	—	—	—	—	—

Waste	—	—	—	—	—	—	—	—	—	—	—
Off-Road	0.94	0.79	7.37	13.4	0.02	0.26	—	0.26	0.24	—	0.24
Stationary	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005
Total	48.3	44.8	52.1	309	0.90	1.08	84.8	85.8	1.02	21.5	22.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	34.0	30.7	41.1	289	0.89	0.75	82.9	83.7	0.71	21.0	21.7
Area	15.2	15.1	0.10	12.1	< 0.005	0.02	—	0.02	0.02	—	0.02
Energy	0.09	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Off-Road	0.67	0.56	5.25	9.58	0.01	0.19	—	0.19	0.17	—	0.17
Stationary	0.07	0.07	0.19	0.24	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01
Total	50.0	46.5	47.5	312	0.91	1.03	82.9	84.0	0.97	21.0	22.0
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.20	5.60	7.50	52.8	0.16	0.14	15.1	15.3	0.13	3.84	3.97
Area	2.78	2.75	0.02	2.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Energy	0.02	0.01	0.15	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Off-Road	0.12	0.10	0.96	1.75	< 0.005	0.03	—	0.03	0.03	—	0.03
Stationary	0.01	0.01	0.03	0.04	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005
Total	9.13	8.48	8.66	56.9	0.17	0.19	15.1	15.3	0.18	3.84	4.02

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.83	0.83
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.15	0.15
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.74	0.00	0.00	0.14	0.14	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	1.89	1.89	—	0.75	0.75
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.35	0.35	—	0.14	0.14
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.85	0.00	0.00	0.17	0.17	0.00	0.04	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.71	0.00	0.00	0.17	0.17	0.00	0.04	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.88	0.52	9.36	0.00	0.00	1.96	1.96	0.00	0.46	0.46
Vendor	0.15	0.12	2.91	1.43	0.02	0.03	0.65	0.69	0.03	0.18	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.84	0.76	0.74	7.83	0.00	0.00	1.96	1.96	0.00	0.46	0.46
Vendor	0.14	0.11	3.14	1.46	0.02	0.03	0.65	0.69	0.03	0.18	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.52	0.45	5.28	0.00	0.00	1.33	1.33	0.00	0.31	0.31
Vendor	0.10	0.08	2.13	1.00	0.01	0.02	0.44	0.47	0.02	0.12	0.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.96	0.00	0.00	0.24	0.24	0.00	0.06	0.06
Vendor	0.02	0.01	0.39	0.18	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.86	0.78	0.51	8.77	0.00	0.00	1.96	1.96	0.00	0.46	0.46
Vendor	0.15	0.10	2.80	1.33	0.02	0.03	0.65	0.69	0.03	0.18	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.72	0.67	7.30	0.00	0.00	1.96	1.96	0.00	0.46	0.46
Vendor	0.12	0.09	3.01	1.38	0.02	0.03	0.65	0.69	0.03	0.18	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.51	0.42	5.09	0.00	0.00	1.37	1.37	0.00	0.32	0.32
Vendor	0.10	0.07	2.09	0.96	0.01	0.02	0.46	0.48	0.02	0.13	0.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.93	0.00	0.00	0.25	0.25	0.00	0.06	0.06
Vendor	0.02	0.01	0.38	0.17	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.75	0.45	8.25	0.00	0.00	1.96	1.96	0.00	0.46	0.46
Vendor	0.13	0.10	2.66	1.25	0.02	0.03	0.65	0.69	0.03	0.18	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.70	0.60	6.90	0.00	0.00	1.96	1.96	0.00	0.46	0.46
Vendor	0.12	0.09	2.88	1.30	0.02	0.03	0.65	0.69	0.03	0.18	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.42	0.32	4.13	0.00	0.00	1.18	1.18	0.00	0.28	0.28
Vendor	0.08	0.06	1.73	0.78	0.01	0.02	0.39	0.42	0.02	0.11	0.13
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.75	0.00	0.00	0.22	0.22	0.00	0.05	0.05
Vendor	0.01	0.01	0.32	0.14	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Paving	1.00	1.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Paving	1.00	1.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.50	0.00	0.00	0.12	0.12	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.74	4.74	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.74	4.74	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	3.16	3.16	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.58	0.58	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.18	0.10	1.87	0.00	0.00	0.39	0.39	0.00	0.09	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.15	1.57	0.00	0.00	0.39	0.39	0.00	0.09	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.09	1.01	0.00	0.00	0.25	0.25	0.00	0.06	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.19	0.00	0.00	0.05	0.05	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.74	4.74	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.74	4.74	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.39	3.39	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.62	0.62	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.10	1.75	0.00	0.00	0.39	0.39	0.00	0.09	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.13	1.46	0.00	0.00	0.39	0.39	0.00	0.09	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.08	1.02	0.00	0.00	0.27	0.27	0.00	0.06	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.19	0.00	0.00	0.05	0.05	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.74	4.74	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.74	4.74	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.05	3.05	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.56	0.56	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.09	1.65	0.00	0.00	0.39	0.39	0.00	0.09	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.12	1.38	0.00	0.00	0.39	0.39	0.00	0.09	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.07	0.86	0.00	0.00	0.25	0.25	0.00	0.06	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.05	0.05	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Linear, Grading & Excavation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	0.03	1.76	0.42	0.01	0.03	0.40	0.43	0.03	0.11	0.14
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.25. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.06	0.00	0.00	0.21	0.21	0.00	0.05	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Linear, Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unrefrigerated Warehouse-No Rail	36.2	33.0	37.2	336	0.94	0.75	84.8	85.5	0.71	21.5	22.2

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	36.2	33.0	37.2	336	0.94	0.75	84.8	85.5	0.71	21.5	22.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unrefrigerated Warehouse-No Rail	34.2	30.9	43.9	295	0.88	0.75	84.8	85.5	0.71	21.5	22.2
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	34.2	30.9	43.9	295	0.88	0.75	84.8	85.5	0.71	21.5	22.2
Annual	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unrefrigerated Warehouse-No Rail	6.20	5.60	7.50	52.8	0.16	0.14	15.1	15.3	0.13	3.84	3.97
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.20	5.60	7.50	52.8	0.16	0.14	15.1	15.3	0.13	3.84	3.97

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.09	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.09	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.09	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.09	0.05	0.84	0.71	0.01	0.06	—	0.06	0.06	—	0.06
Annual	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Unrefrigerated Warehouse-No Rail	0.02	0.01	0.15	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.02	0.01	0.15	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	12.1	12.1	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.96	0.96	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.37	4.03	0.21	24.5	< 0.005	0.04	—	0.04	0.03	—	0.03
Total	17.5	17.1	0.21	24.5	< 0.005	0.04	—	0.04	0.03	—	0.03

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	12.1	12.1	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.96	0.96	—	—	—	—	—	—	—	—	—
Total	13.1	13.1	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.21	2.21	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.18	0.18	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.39	0.36	0.02	2.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Total	2.78	2.75	0.02	2.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.94	0.79	7.37	13.4	0.02	0.26	—	0.26	0.24	—	0.24
Total	0.94	0.79	7.37	13.4	0.02	0.26	—	0.26	0.24	—	0.24
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.94	0.79	7.37	13.4	0.02	0.26	—	0.26	0.24	—	0.24
Total	0.94	0.79	7.37	13.4	0.02	0.26	—	0.26	0.24	—	0.24
Annual	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.12	0.10	0.96	1.75	< 0.005	0.03	—	0.03	0.03	—	0.03
Total	0.12	0.10	0.96	1.75	< 0.005	0.03	—	0.03	0.03	—	0.03

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005

Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.01	0.01	0.03	0.04	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005
Total	0.01	0.01	0.03	0.04	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	7/11/2025	5.00	30.0	—
Grading	Grading	7/14/2025	10/24/2025	5.00	75.0	—
Building Construction	Building Construction	1/12/2026	11/10/2028	5.00	740	—
Paving	Paving	10/27/2025	1/9/2026	5.00	55.0	—
Architectural Coating	Architectural Coating	1/26/2026	11/24/2028	5.00	740	—
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/4/2025	5.00	2.00	—

Linear, Grading & Excavation	Linear, Grading & Excavation	6/5/2025	6/16/2025	5.00	8.00	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/17/2025	6/26/2025	5.00	7.00	—
Linear, Paving	Linear, Paving	6/27/2025	7/1/2025	5.00	3.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	237	11.7	LDA,LDT1,LDT2

Building Construction	Vendor	92.4	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	47.4	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	0.00	11.7	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.40	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	0.00	11.7	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.40	HHDT,MHDT
Linear, Grading & Excavation	Hauling	21.8	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	11.7	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.40	HHDT,MHDT

Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	0.00	11.7	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.40	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	845,742	281,914	52,431

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	45.0	0.00	—
Grading	—	—	225	0.00	—
Paving	0.00	0.00	0.00	0.00	20.9
Linear, Grubbing & Land Clearing	—	—	0.89	0.00	—
Linear, Grading & Excavation	—	1,386	0.89	0.00	—

Linear, Drainage, Utilities, & Sub-Grade	—	—	0.89	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	3.15	100%
User Defined Linear	0.89	100%
Unrefrigerated Warehouse-No Rail	0.00	0%
Parking Lot	16.9	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unrefrigerated Warehouse-No Rail	7,014	7,014	7,014	2,560,117	119,962	119,962	119,962	43,786,130

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	845,742	281,914	52,431

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	5,883,365	204	0.0330	0.0040	3,131,971
Parking Lot	645,299	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Other Asphalt Surfaces	0.00	0.00
Unrefrigerated Warehouse-No Rail	130,385,225	3,200,109
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Other Asphalt Surfaces	0.00	—
Unrefrigerated Warehouse-No Rail	530	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Diesel	Average	12.0	8.00	89.0	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	0.01	100	150	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Lot acreage adjusted to represent overall acreage of the project site. Building square feet adjusted to represent the provided building square footage of the project.
Construction: Off-Road Equipment	Additional equipment
Operations: Road Dust	All roadways and operations take place on 100% paved roads.
Construction: Construction Phases	Based on typical construction practices, architectural coating assumed to start two weeks after the start of building construction and last for the same number of days.
Operations: Vehicle Data	Trip rates and VMT updated to be consistent with traffic data provided by DKS.
Construction: On-Road Fugitive Dust	All roads in project vicinity are paved.
Operations: Off-Road Equipment	Used minimum rate as no info was provided by the applicant and the tenants of the buildings are unknown. Consistent with approach for previous projects (Ophir & Bridgehead) and rate similar to other rate used in the past (0.018) for other projects (SMPs, Duckhorn Logistics Center, Waterman Brinkman, etc.). Left Defaults for other information: 8 hours/day, 260 days/yr, 89 HP, Diesel.

APPENDIX B

BIOLOGICAL RESOURCES ASSESSMENT

Biological Resources Assessment

Dixon Innovation Center (Pedrick Road)

Solano County
February 2024

MADRONE ECOLOGICAL CONSULTING

Prepared for:

Bret Hogge
Buzz Oates Construction, Inc.
555 Capitol Mall, Suite 900
Sacramento, CA 95814

Recommended Citation:

Madrone Ecological Consulting, LLC (Madrone). 2023. *Biological Resources Assessment for the Dixon Innovation Center*. Prepared for Buzz Oates Construction, Inc. Published on 26 February 2024.

CONTENTS | **Biological Resources Assessment**
Dixon Innovation Center

1.0 INTRODUCTION ____ **1**
1.1 Project Description ____ **1**

2.0 REGULATORY SETTING ____ **1**
2.1 Federal Regulations ____ **1**
2.1.1 Federal Endangered Species Act ____ 1
2.1.2 Clean Water Act, Section 404 ____ 1
2.1.3 Migratory Bird Treaty Act ____ 2
2.1.4 Bald and Golden Eagle Protection Act ____ 2
2.2 State Regulations ____ **3**
2.2.1 California Environmental Quality Act ____ 3
2.2.2 State Endangered Species Act ____ 3
2.2.3 California Fully Protected Species ____ 3
2.2.4 California Species of Special Concern ____ 4
2.2.5 Native Plant Protection Act ____ 4
2.2.6 Clean Water Act, Section 401 ____ 4
2.2.7 California Water Code, Porter-Cologne Act ____ 5
2.2.8 California Fish and Game Code, Section 1600 – Streambed and Lake Alteration ____ 5
2.2.9 California Fish and Game Code, Section 3503.5 - Raptor Nests ____ 5
2.3 Local Regulations ____ **6**
2.3.1 Dixon General Plan 2040 ____ 6
2.3.2 Northeast Quadrant Specific Plan ____ 7
2.3.3 Solano Habitat Conservation Plan ____ 11

3.0 METHODOLOGY ____ **12**
3.1 Literature Review ____ **12**
3.2 Field Surveys ____ **12**

4.0 EXISTING CONDITIONS ____ **13**
4.1 Terrestrial Vegetation Communities ____ **13**
4.1.1 Agricultural ____ 13
4.2 Aquatic Resources ____ **14**
4.3 Soils ____ **14**

5.0 RESULTS ____ **14**
5.1 Species Considered and Excluded ____ **15**
5.2 Birds ____ **15**
5.2.1 Tricolored Blackbird ____ 15
5.2.2 Burrowing Owl ____ 20
5.2.3 Swainson's Hawk ____ 20
5.2.4 White-Tailed Kite ____ 20

6.0 IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES ____ **21**

6.1 Nesting Raptors and Songbirds 21
6.2 Tricolored Blackbird 21
6.3 Burrowing Owl 21
7.0 MITIGATION FOR IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES 22
7.1 Nesting Raptors and Other Birds 22
7.2 Burrowing Owls 23
7.3 Swainson's Hawk 26
8.0 REFERENCES 28

Tables:

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area 16

Figures:

Figure 1. Site and Vicinity
Figure 2. California Natural Diversity Database Occurrences of Plant Species
Figure 3. California Natural Diversity Database Occurrences of Wildlife Species
Figure 4. Vegetation Communities
Figure 5. Natural Resources Conservation Service Soils

Attachments:

Attachment A. Site Plan
Attachment B. IPaC Trust Resource Report for the Study Area
Attachment C. CNPS Inventory of Rare and Endangered Plants Query for the "Dixon Heights, California" USGS Quadrangle and Eight Surrounding Quadrangles
Attachment D. Wildlife Species Observed within the Study Area
Attachment E. Wetland Delineation Report and USACE Verification for the Pedrick Road Property

1.0 INTRODUCTION

This report presents the results of a Biological Resources Assessment (BRA) conducted for the Dixon Innovation Center, also known as the Pedrick Road Property (Study Area) (**Figure 1**). The approximately 38-acre Study Area is located south of Highway 80 and west of Pedrick Road in the City of Dixon (City), Solano County, California, corresponding to Solano County Assessor's Parcel Number 011-010-080. The Study Area is located in a portion of Section 1, Township 7 North, Range 5 East (MDB&M) of the "Dixon California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2021) at a Latitude 38.482844°, Longitude -121.807263 (**Figure 1**).

1.1 Project Description

The Proposed Project is an industrial/business park with a mix of uses including industry clusters, research & development, light industrial, and advanced manufacturing. The current site plan is included as **Attachment A**. For the purposes of this document, impacts have been analyzed based on the assumption that the entire Study Area will be disturbed and permanently converted to an industrial/business park.

2.0 REGULATORY SETTING

This section describes federal, state and local laws and policies that are relevant to this assessment of biological resources.

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 protects species that are federally listed as endangered or threatened with extinction. FESA prohibits the unauthorized "take" of listed wildlife species. Take includes harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such activities. Harm includes significant modifications or degradations of habitats that may cause death or injury to protected species by impairing their behavioral patterns. Harassment includes disruption of normal behavior patterns that may result in injury to or mortality of protected species. Civil or criminal penalties can be levied against persons convicted of unauthorized "take." In addition, FESA prohibits malicious damage or destruction of listed plant species on federal lands or in association with federal actions, and the removal, cutting, digging up, damage, or destruction of listed plant species in violation of state law. FESA does not afford any protections to federally listed plant species that are not also included on a state endangered species list on private lands with no associated federal action.

2.1.2 Clean Water Act, Section 404

Section 404 of the Federal Clean Water Act requires that a Department of the Army permit be issued prior to the discharge of dredged or fill material into waters of the United States, including some wetlands. The

U.S. Army Corps of Engineers (USACE) administers this program, with oversight from the U. S. Environmental Protection Agency. As of the date of this document, waters of the United States (waters of the U.S.) are defined as follows (40 CFR 120.2):

1. Waters which are:
   i. Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
   ii. The territorial seas; or
   iii. Interstate waters;
2. Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under item (5) below;
3. Tributaries of waters identified in items (1) or (2) above that are relatively permanent, standing or continuously flowing bodies of water;
4. Wetlands adjacent to the following waters:
   i. Waters identified in item (1) of this section; or
   ii. Relatively permanent, standing or continuously flowing bodies of water identified in items (2) or (3) above and with a continuous surface connection to those waters;
5. Intrastate lakes and ponds not identified in paragraphs (1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in items (1) or (3) above.

Under the current definition of waters of the U.S., "adjacent" means *having a continuous surface connection*.

Waters subject to regulation under Section 404 are referred to as "jurisdictional waters".

2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, any native migratory bird, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11.). Likewise, Section 3513 of the California Fish & Game Code prohibits the "take or possession" of any migratory non-game bird identified under the MBTA. Therefore, activities that may result in the injury or mortality of native migratory birds, including eggs and nestlings, would be prohibited under the MBTA.

2.1.4 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act of 1940 (as amended) provides for the protection of bald eagle and golden eagle by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit [16 USC 668(a); 50 CFR 22]. The USFWS may authorize take of bald eagles and golden eagles for activities where the take is associated with, but not the purpose of, the activity and cannot practicably be avoided (50 CFR 22.26).

2.2 State Regulations

2.2.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires evaluations of project effects on biological resources. Determining the significance of those effects is guided by Appendix G of the CEQA guidelines. These evaluations must consider direct effects on a biological resource within the project site itself, indirect effects on adjacent resources, and cumulative effects within a larger area or region. Effects can be locally important but not significant according to CEQA if they would not substantially affect the regional population of the biological resource. Significant adverse impacts on biological resources would include the following:

- Substantial adverse effects on any species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife (CDFW) or the U.S. Fish and Wildlife Service (USFWS) (these effects could be either direct or via habitat modification);
- Substantial adverse impacts to species designated by the California Department of Fish and Game (2009) as Species of Special Concern;
- Substantial adverse effects on riparian habitat or other sensitive habitat identified in local or regional plans, policies, or regulations or by CDFW and USFWS;
- Substantial adverse effects on federally protected wetlands defined under Section 404 of the Clean Water Act (these effects include direct removal, filling, or hydrologic interruption of marshes, vernal pools, coastal wetlands, or other wetland types);
- Substantial interference with movements of native resident or migratory fish or wildlife species population, or with use of native wildlife nursery sites;
- Conflicts with local policies or ordinances protecting biological resources (e.g. tree preservation policies); and
- Conflict with provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

2.2.2 State Endangered Species Act

With limited exceptions, the California Endangered Species Act (CESA) of 1984 protects state-designated endangered and threatened species in a way similar to FESA. For projects on private property (i.e. that for which a state agency is not a lead agency), CESA enables CDFW to authorize take of a listed species that is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code Section 2081).

2.2.3 California Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds,

and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code, § 4700 for mammals, § 3511 for birds, § 5050 for reptiles and amphibians, and § 5515 for fish) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species. CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit.

2.2.4 California Species of Special Concern

The Species of Special Concern (SSC) are defined by CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under the federal or California ESAs or the California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role.
- The species is listed as federally (but not state) threatened or endangered or meets the state definition of threatened or endangered but has not formally been listed.
- The species has or is experiencing serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status.
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for state threatened or endangered status.

SSC are typically associated with habitats that are threatened. Project-related impacts to SSC, state-threatened or endangered species are considered "significant" under CEQA.

2.2.5 Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

2.2.6 Clean Water Act, Section 401

Section 401 of the Clean Water Act requires any applicant for a 404 permit in support of activities that may result in any discharge into waters of the United States to obtain a water quality certification with the Regional Water Quality Control Board (RWQCB). This program is meant to protect these waters and

wetlands by ensuring that waste discharged into them meets state water quality standards. Because the water quality certification program is triggered by the need for a Section 404 permit (and both programs are a part of the Clean Water Act), the definition of waters of the United States under Section 401 is the same as that used by the USACE under Section 404.

2.2.7 California Water Code, Porter-Cologne Act

Waters that are not considered waters of the U.S. may be considered waters of the State of California (waters of the State) under the Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne, from Division 7 of the California Water Code, requires any person discharging waste or proposing to discharge waste that could affect the quality of waters of the state to file a report of waste discharge (RWD) with the RWQCB. The RWQCB can waive the filing of a report, but once a report is filed, the RWQCB must either waive or adopt water discharge requirements (WDRs). Waters of the State are defined as any surface water or groundwater, including saline waters, within the boundaries of the state of California.

2.2.8 California Fish and Game Code, Section 1600 – Streambed and Lake Alteration

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the Fish and Game Code, Section 1602, requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

For the purposes of Section 1602, rivers, streams and lakes must flow at least intermittently through a bed or channel. If notification is required and CDFW believes the proposed activity is likely to result in adverse harm to the natural environment, it will require that the parties enter into a Lake or Streambed Alteration Agreement (LSAA).

2.2.9 California Fish and Game Code, Section 3503.5 - Raptor Nests

Section 3503.5 of the Fish and Game Code makes it unlawful to take, possess, or destroy hawks or owls, unless permitted to do so, or to destroy the nest or eggs of any hawk or owl.

2.3 Local Regulations

2.3.1 Dixon General Plan 2040

The Study Area is subject to the Dixon General Plan 2040 (General Plan), which includes goals, objectives, and policies regarding biological resources within the City limits. The General Plan addresses biological resources in the Natural Environment section as included in the following policies:

NE-1.1 Preserve the natural open space and agricultural lands that surround Dixon through continued leadership in cross-jurisdictional conservation initiatives such as the Vacaville-Dixon Greenbelt and the Davis-Dixon greenbelt.
NE-1.2 Support regional efforts to place additional land under permanent conservation easements and continue to use the Agricultural Land Mitigation Fund to collect development impact fees for the purpose of funding greenbelt expansion.
NE-1.3 Encourage open space preservation through easements, open space designation, or dedication of lands for the purpose of connecting conservation areas, protecting biodiversity, accommodating wildlife movement, and sustaining ecosystems.
NE-1.4 Prior to annexing land into the city or expanding the SOI, continue to require agricultural mitigation consistent with the Solano County Local Agency Formation Commission's Standards and Procedures when agricultural lands would be converted to nonagricultural purposes.
NE-1.5 Continue to allow agriculture as an interim use on land within the City that is designated for future urban use.
NE-1.6 Recognize the Sacramento Valley - Solano Groundwater Subbasin as a critical resource for Dixon and proactively promote sustainable groundwater management practices.
NE-1.7 Continue to work with the Solano Subbasin Groundwater Sustainability Agency Collaborative to develop and implement strategies for the long-term health and viability of the Solano Groundwater Subbasin.
NE-1.8 Facilitate groundwater recharge in Dixon by encouraging development projects to use Low Impact Development (LID) practices such as bioretention, porous paving, and green roofs, and by encouraging private property owners to design or retrofit landscaped or impervious areas to better capture storm water runoff.
NE-1.9 Ensure that drainage ditches which discharge directly to or are located within open space lands are regularly repaired and maintained.
NE-1.10 Support regional habitat conservation efforts, including implementation of the Solano Countywide Multispecies Habitat Conservation Plan.
NE-1.11 Ensure that adverse impacts on sensitive biological resources, including special-status species, sensitive natural communities, sensitive habitat, and wetlands are avoided or mitigated to the greatest extent feasible as development takes place.
NE-1.12 In areas where development (including trails or other improvements) has the potential for adverse effects on special-status species, require project proponents to submit a study conducted by a qualified professional that identifies the presence or absence of special-status species at the proposed development

site. If special-status species are determined by the City to be present, require incorporation of appropriate mitigation measures as part of the proposed development prior to final approval.
NE-1.13 Protect the nests of raptors and other birds when in active use, as required by State and federal regulations. In new development, avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non-nesting season or by conducting a pre-construction survey by a qualified biologist to confirm nests are absent or to define appropriate buffers until any young have successfully fledged the nest.
NE-1.14 Recognize the importance of the urban forest to the natural environment in Dixon and expand the tree canopy on public and private property throughout the community.
NE-1.15 Enhance tree health and the appearance of streets and other public spaces through regular maintenance as well as tree and landscape planting and care of the existing canopy.
NE-1.16 Minimize removal of, and damage to, trees due to construction-related activities and continue to require replacement of trees, including street trees lost to new development.
NE-1.17 Require new development to provide and maintain street trees suitable to local climatic conditions.

As many of the policies are resource based and some projects may lack these resources, policies are applied as necessary to meet the General Plan's goal and objectives based on the resources within an area.

2.3.2 Northeast Quadrant Specific Plan

The Project is within the Dixon Northeast Quadrant Specific Plan (NQSP). The NQSP establishes a land use and circulation plan, policies, and guidelines for the development of 643 acres in the northeast portion of the City of Dixon. The specific plan defines the land use and development concepts to be applied in the plan area and is intended to implement the objectives and policies of the City of Dixon General Plan. Applicable resource management policies of the NQSP are included below.

Wetlands

- Any wetlands determined to be subject to state or federal regulation will be subject to review by the appropriate agencies. Requirements of any permit issued by state and federal agencies will be fully implemented.
- Any enhancement/compensation program required pursuant to state or federal permits will be the responsibility of the property owners. Where excavation is utilized to create or enhance wetlands, excavated soils should be reshaped to form gentle contours and then planted with appropriate native species.
- If removal or total destruction of the wetland area is unavoidable as a result of the project, after examination of all feasibility alternatives, it may be required that the impacted wetland should be mitigated at a 1:1 ratio so that no net loss of wetland habitat occurs. Onsite mitigation is preferable, although offsite mitigation may be allowed. The Community Director in consultation with CDFW shall define a set of conditions applicable to wetland mitigation for approval on any affected development within the plan area.

- Implementation of both a short-term and long-term monitoring program to ensure the success of the required appropriate permits and EIR mitigation measures is required. The property owners will be responsible for required monitoring.
- If publicly accessible, wetland areas should be limited to passive recreation activities compatible with the primary purpose of wetland habitat restoration. In general access should be controlled or restricted.
- Prior to construction approval of improvement plans, or the issuance of any permits for adjacent property a chain link fence, or acceptable alternative, shall be installed along the wetland area. The fencing should not be removed until the completion of construction activity. A written release from the Community Development Department must be received prior to the removal of any fencing.
- Proposed detention/retention facilities located within or adjacent to wetland preserve areas should be in compliance with appropriate permit requirements.

Sensitive Species

- Proponents of development applications within the specific plan area shall consult with CDFW regarding the take of an endangered species or its habitat pursuant to the CESA and CDFW codes.
- A (bird) breeding survey should be conducted between April and July, prior to construction, to determine if the species nests on-site, if further impacts are a possibility, and to develop appropriate mitigation strategies.
- The Dixon Community Development Director in consultation with CDFW shall define a set of conditions for approval on any development within the plan area consistent with the Count Habitat Conservation Plan, if such a plan is in effect at that time. Such conditions shall be applied by the Planning Commission and City Council, in the City review and entitlement process. Such conditions shall be enforced by the Community Development Department and the Engineering Department, during the review and approval of any land use or improvement plans pursuant to the land use entitlement.

Trees and Orchards

- Development plans shall identify the location, species, size, and general condition of all existing trees on site, except trees within an orchard. Existing trees should be incorporated in the development plan where feasible.
- Signs, ropes, cables, or other similar appendages should not be attached to trees designated for preservation unless specifically required by a certified arborist.
- No tree identified for preservation in approved plans may be removed or significantly altered without approval by the Dixon Community Development Department.
- Tree preservation and site development policies set forth herein should be incorporated into Covenants, Conditions and Restrictions (CC&Rs) for all projects within the plan area to ensure that subsequent property owners are aware of their obligation to protect any trees designated for preservation.
- All development projects should be designed to avoid:

- o compaction of the tree root zone,
- o discharge of concentrated run-off to the root zone of trees,
- o placement of parking or walkways across the root zone, and
- o heat damage or scorching of trees from highly reflective building materials or paving.

Soil Protection and Grading

- All development plans submitted for City review and approval shall provide an erosion and sediment control plan in compliance with the City's grading control ordinance. Required measures will include seeding of graded areas and watering during grading activities to reduce wind erosion.
- If created, slopes should be rounded at top and bottom. Steep slopes (greater than 3: I) and large retaining walls (higher than five feet) should be avoided.
- Soil exposed during grading which will be left exposed and will not be under active construction during the rainy season (assumed to occur between October 15 and April 15) should be promptly replanted with native compatible, drought-resistant vegetation.
- Prior to the development of any individual project area, a master conceptual grading plan should be submitted which identifies the overall grading concept for the project area.
- Drainage problems resulting from poor soil permeability should be reduced through development of gravel subdrains and the creation of swales and channels to convey runoff.

Water Quality

- Paved parking areas should be designed to provide the minimum amount of paving area necessary to meet required parking standards. Permeable paving materials may be considered where feasible.
- Best management practices (BMPs) such as sediment traps, evaporation basins, flow reduction devices, and other methods to treat pollutants draining from parking areas and streets shall be installed in the storm drain system for individual projects within the plan area in accordance with City standards.
- Plan proposed detention ponds shall incorporate similar BMP devices and methods in accordance with City standards.
- Design of storm detention facilities should be consistent with the City's retention/detention system design standards. In general, allowable storage capacity shall be determined by the city engineer. Low growing ground cover is recommended around the periphery of the pond. Other aesthetic enhancements may be allowed with approval from the city engineer.

The NQSP identified potential biological impacts to vegetation, seasonal freshwater marsh, wildlife resources, Swainson's hawk, Tiger Salamander, and cumulative impacts. These impacts were reduced to a less-than-significant level by implementing the following mitigation measures included in the *Final Environmental Impact Report for the Northeast Quadrant Specific Plan Mitigation Monitoring Program Finding of Fact and Statement of Overriding Considerations* (MMRP) (City of Dixon 1995). These measures apply to development within the NQSP.

- Mitigation Measure B-A: Prior to issuance of improvements or development approval by the City, a detailed wetland delineation should be conducted to precisely define seasonal wetland boundaries and acreages. Habitat values should also be qualified by type and condition of vegetation.
- Mitigation Measures B-B: Prior to issuance of improvement or development approvals by the City, a chain link fence, or acceptable alternative, shall be installed around the seasonal wetland area. The fencing should not be removed until completion of construction activities. Written release from the City Planning Department must be received prior to removal of any fencing.
- Mitigation Measure B-C: Where practicable, the wetlands area should be avoided through land use planning.
- Mitigation Measure B-D: Preserved wetlands area should be protected from development by a 50-foot buffer or easement, so that the seasonal wetland continues to function in a natural state. Buffer widths would vary depending upon final configuration of adjected proposed land uses. The wetlands area and buffer shall be dedicated as an open-space easement which prohibits structures, grading, and filling activities.

  In general, the following standards shall apply to the buffer and preserved wetlands area:
    - All sprinkler systems shall be designed so that no direct irrigation water reaches any portion of the preserve. Grass-lined swales shall be constructed at the margins of all turfed and irrigated areas that slope toward the buffer in order to intercept and prevent irrigation water from flowing into the wetland area.
    - No mowing shall be allowed to occur in a wetland easement.
    - Surface water runoff from paved surface shall be directed away from any intermittent tributary or swale which carries water to a wetland.
- Mitigation Measure B-E: If the removal or total destruction of the marshland area is unavoidable as a result of the project, after examination of all feasible avoidance alternatives, it may be required that the impacted wetlands be mitigated at a 1:1 ration so that no net loss of wetland habitat occurs. On-site mitigation is preferable, although off-site mitigation may be allowed.
- Swainson's Hawk Mitigation Measure B-F: The following mitigation measure shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented. The project will not substantially affect a special-status animal species or species' habitat. To ensure this a breeding survey shall be conducted between April and July in order to:
    - Determine if the species nest on the project site;
    - To develop appropriate mitigation measures, which may include 1:1 replacement ratio of impacted foraging habitat. This replacement habitat should include alfalfa and row crops such as tomatoes, oats, wheat, barley, and sugar beets.
- Swainson's Hawk Mitigation Measure B-G: Project proponents shall participate in a County-wide Habitat Management Plan as appropriate. The Dixon General Plan EIR's mitigation measure for wildlife impact requires developers to participate in a Habitat Mitigation Plan.
- California tiger salamander Mitigation Measure B-H: No tiger salamander were observed to occupy the wetland area of the project site during the field surveys. However, the following

mitigation measures shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented.

- The project will not substantially affect a special-status animal species or species' habitat. To ensure this, a field survey shall be conducted during the spring months in order to:
    - Determine if the species occurs on the project site;
    - To develop appropriate mitigation measures
- Disturbance to habitat for northern harrier, black shouldered kite (white-tailed kite) and tricolored blackbird Mitigation Measure B-I: The following mitigation measures shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented. The project will not substantially affect a special-status animal species or species' habitat. To ensure this, project proponents shall participate in a County Wide Habitat Management Plan addressing the loss of potential foraging habitat.

2.3.3 Solano Habitat Conservation Plan

The General Plan contains a policy to support regional habitat conservation efforts, including implementation of the Solano Countywide Multispecies Habitat Conservation Plan (HCP) (Policy NE-1.10). Additionally, the NQSP requires that the Dixon Community Development Director set conditions of approval consistent with the HCP if approved at the time of entitlement. The HCP, which is being led by the Solano County Water Agency, establishes a framework for complying with federal and state regulations for endangered species while accommodating development of infrastructure, and ongoing operations and maintenance activities associated with flood control, irrigation facilities, and other public infrastructure undertaken by or under the permitting authority/control of the HCP participants within the plan area. The City is a voluntary participant in the HCP if/when the HCP is adopted.

The Study Area is within the City of Dixon Urban Growth Boundary and indicated as irrigated agriculture within a General Plan designated planned development. The Study Area is mapped in the HCP covered activity Zone 1-Urban Zone. The HCP notes that projects in this zone that are "…surrounded by urban development on at least three sides are not considered to be important for conservation and are generally exempt from in-depth habitat surveys and mitigation requirements. However, even small in-fill projects will be required to comply with wetland protection, compensation and permitting requirements, and with protection measures for the nests of burrowing owl, Swainson's hawk, and other Covered and Special Management Species." The Study Area is currently surrounded only surrounded by development to the north.

The HCP has not been adopted to date and likely will not be adopted prior to the project going to construction, but measures to address impacts identified within the Study Area would not conflict with the October 2012 administrative draft version of the HCP (SCWA 2012) as directed by General Plan and the MMRP.

3.0 METHODOLOGY

3.1 Literature Review

A list of special-status species with potential to occur within the Study Area was developed by conducting a query of the following databases:

- California Natural Diversity Database (CNDDB) (CNDDB 2023) query of the Study Area and all areas within 5 miles of the Study Area (**Figures 2 and 3**);
- USFWS Information for Planning and Conservation (IPaC) (USFWS 2023a) query for the Study Area (**Attachment B**);
- California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (CNPS 2023) query of the "Dixon, California" USGS topo quadrangle, and the eight surrounding quadrangles (**Attachment C**); and
- Western Bat Working Group (WBWG) Species Matrix (WBWG 2023).

In addition, any special-status species that are known to occur in the region, but that were not identified in any of the above database searches were also analyzed for their potential to occur within the Project area. The Aquatic Resources Delineation Report for Pedrick Road (Madrone 2023) was reviewed and incorporated into this document.

For the purposes of this Biological Resources Assessment, special-status species is defined as those species that are:

- listed as threatened or endangered, or proposed or candidates for listing by the USFWS or National Marine Fisheries Service;
- listed as threatened or endangered and candidates for listing by CDFW;
- identified as Fully Protected species or species of special concern by CDFW;
- identified as Medium or High priority species by the WBWG (WBWG 2023); and
- plant species considered to be rare, threatened, or endangered in California by the CNPS and CDFW [California Rare Plant Rank (CRPR) 1, 2, and 3]:
  - CRPR 1A: Plants presumed extinct.
  - CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere.
  - CRPR 2A: Plants extirpated in California, but common elsewhere.
  - CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
  - CRPR 3: Plants about which the CNPS needs more information – a review list.

3.2 Field Surveys

Madrone senior biologist Bonnie Peterson conducted field surveys of the Study Area on 15 April and 2 September 2022 to assess the suitability of habitats on-site to support special-status species and to conduct a delineation of aquatic resources. Meandering pedestrian surveys were performed on foot throughout the Study Area. Vegetation communities were classified in accordance with *Vegetation Alliances and Associations of the Great Valley Ecoregion* (CNPS 2012) and plant taxonomy was based on the nomenclature

in the Jepson eFlora (Jepson Flora Project 2023). A list of all wildlife species observed during field surveys is included as **Attachment D**.

The results of the aquatic resources delineation conducted by Madrone (Madrone 2023) are also incorporated into this report:

4.0 EXISTING CONDITIONS

The Study Area is comprised of leveled agricultural land at an elevation of approximately 65-ft above mean sea level. The Study Area is bound by Interstate 80 to the northwest, a stormwater basin and industrial site to the north, Pedrick Road to the east, and agricultural land to the south. The surrounding lands are generally agricultural.

A shallow, upland roadside ditch is located north of the Study Area and is directed through a culvert pipe into a box inlet structure in the northeastern corner of the Study Area. This box culvert drains to an off-site stormwater basin directly north of the Study Area. A similarly shallow roadside feature is observable along the Pedrick Road. The Study Area is dry land farmed and has been utilized as a hay field for a number of years and terrestrial plant communities in the Study Area are limited to agricultural lands and with ruderal fringes. During the April 2022 site visit the Study Area had been closely mowed, and by September it had been disked and was minimally vegetated. Scattered walnut trees (*Juglans sp*.) are located outside the western boundary of the Study Area, along the Interstate 80 frontage.

4.1 Terrestrial Vegetation Communities

The Study Area does not contain any natural communities as classified by the *Vegetation Alliances and Associations of the Great Valley Ecoregion*. Vegetation communities in the Study Area consists of Agricultural lands.

4.1.1 Agricultural

Agricultural lands are classified by CNPS as unvegetated or urbanized areas with ground cover dominated by annual or perennial agriculture. Dry farmed areas within the Study Area are regularly mowed and disked and are currently comprised of non-native annual grasses and weedy forbs. The primary crop appears to have been cultivated wheat (*Triticum aestivum*). In addition to the disked wheat, this vegetation community is dominated by tumbleweed (*Amaranthus albus*), Russian thistle (*Salsola tragus*), Johnsongrass (*Sorghum halepense*), common purslane (*Portulaca oleracea*), silver sheath knotweed (*Polygonum argyrocoleon*), alkali mallow (*Malvella leprosa*), filaree (*Erodium botrys*), Bermuda grass (*Cynodon dactylon*), prickly lettuce (*Lactuca serriola*), and winter vetch (*Vicia villosa*). In less disturbed areas along Pedrick Road and Highway 80 frontages other species that commonly occur include perennial ryegrass (*Festuca perennis*), filaree, winter vetch, yellow starthistle (*Centaurea solstitialis*), slender wild oat (*Avena barbata*), and cleavers (*Galium aparine*).

4.2 Aquatic Resources

No aquatic resources were delineated within the Study Area during a protocol-level aquatic resources delineation conducted in 2022. This delineation was submitted to the USACE and verified on 12 January 2024 (**Attachment E**).

In addition the National Wetlands Inventory (NWI) was reviewed. The (NWI) produces and distributes maps and other geospatial data to the public on American wetland and deepwater habitats, as well as monitor changes in these habitats through time as directed by the Emergency Wetlands Resources Act of 1986 (Public Law 99-645). The NWI is primarily compiled through the use of trained image analysts to identify and classify wetlands and deepwater habitats from aerial imagery and is not a substitute for a full field analysis. The NWI has also not mapped any wetlands or other aquatic resources within the Study Area (USFWS 2023).

4.3 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2023a), three soil mapping units occur within the Study Area (**Figure 5**):

- (BrA) Brentwood clay loam, 0 to 2 percent slopes,
- (Ca) Capay silty clay loam, 0 percent slopes, MLRA 17,
- and (Yo) 0 to 4 percent slopes, MLRA 17.

None of the mapped soil map units are listed in the "**Hydric Soils of the United States**" (NRCS 2023b) or contain recognized hydric inclusions. The vast majority of the Study Area is Capay silty clay loam.

Soils within the Study Area are prime farmland and general alluvium derived from igneous, metamorphic and sedimentary rock. Soils are non-saline with the exception of the Brentwood clay inclusion in the southwest corner which is non-saline to very slightly saline. No serpentine soils are know to occur within the Study Area.

5.0 RESULTS

Table 1 provides a list of special-status species that were evaluated, including their listing status, habitat associations, and their potential to occur in the Study Area. The following set of criteria was used to determine each species' potential for occurrence on the site:

- Present: Species occurs on the site based on CNDDB records, and/or was observed on the site during field surveys.
- High: The site is within the known range of the species and suitable habitat exists.
- Moderate: The site is within the known range of the species and very limited suitable habitat exists.

- Low: The site is within the known range of the species and there is marginally suitable habitat or the species was not observed during protocol-level surveys conducted on-site.
- Absent/No Habitat Present: The site does not contain suitable habitat for the species, the species was not observed during protocol-level floristic surveys conducted on-site, or the site is outside the known range of the species.

Figures 2 and 3 are exhibits displaying CNDDB occurrences within five miles of the Study Area. Below is a discussion of all special-status plant and animal species with potential to occur on the site.

5.1 Species Considered and Excluded

As analyzed in **Table 1.** agricultural lands within the Study Area lack the necessary habitat constituents to provide potential habitat for federally, state, or CRPR listed plant species. No special-status plant species have been observed within the Study Area. The Study Area also lacks high quality habitat for invertebrate species. The lack of necessary habitat consistent (wetlands, elderberry shrubs) and current land use preclude special-status invertebrate species known to occur in the greater vicinity. Additionally, the Study Area lacks suitable aquatic habitat to support special-status reptiles and amphibians identified in the record search, and lacks roosting sites for special-status bat species. As such special-status plants, invertebrates, reptiles, amphibians, and mammals are not discussed further in this report.

5.2 Birds

The Study Area provides potential nesting or foraging habitat for a number of bird species as discussed below.

5.2.1 Tricolored Blackbird

Tricolored blackbirds (*Agelaius tricolor*) are not federally listed, but are state listed as threatened. In addition, tricolored blackbird is listed by CDFW as a species of special concern. They are colonial nesters preferring to nest in dense stands of cattails, bulrush, or blackberry thickets associated with perennial water (Shuford and Gardali 2008).

The Study Area does not provide suitable nesting habitat for this species and the off-site stormwater pond directly north of the Study Area does not contain the typically perennial hydrology or dense vegetation favored for nesting habitat. Agricultural fields, particularly if planted in seasonal grains or silage, represent suitable seasonal foraging habitat for tricolored blackbird. The nearest documented occurrence of tricolored blackbird is CNDDB Occurrence #328, which is located approximately 3.75 miles northwest of the Study Area (CNDDB 2023).

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Plants				
Astragalus tener var. ferrisiae Ferris' milk-vetch	--	CRPR 1B.1	Occurs in meadows, foothill and valley grasslands. Usually found in dry adobe soils. Elevations between 5-245'.	**No Habitat Present.** No suitable grasslands present.
Astragalus tener var. tener Alkali milk-vetch	--	CRPR 1B.2	Include elevation range. Playas, Valley and foothill grassland (adobe clay), Vernal pools	**No Habitat Present.** The Study Area does not support wetlands or grassland habitats and is regularly disturbed.
Atriplex cordulata var. cordulata Heartscale	--	CRPR 1B.2	Grows in grasslands with sandy alkaline or saline soils. Occurs in elevations between sea level and 1835'.	**No Habitat Present.** The Study Area does not support suitable sandy soils.
Atriplex depressa Brittlescale	--	CRPR 1B.2	Prefers meadows or grasslands, vernal pools, in alkaline or saline clay soils. (5-1050')	**No Habitat Present.** The Study Area does not support typically meadow, grassland or mesic habitats.
Atriplex persistens Vernal pool smallscale	--	CRPR 1B.2	Alkaline vernal pools (35' - 375')	**No Habitat Present.** The Study Area does not support vernal pools or other wetlands.
Centromadia parryi ssp. *parryi* Pappose tarplant	--	CRPR 1B.2	Found on alkaline soils in coastal prairie, meadows, seeps, coastal salt marshes, and valley/foothill grasslands. Found at sea level to 1380 ft.	**No Habitat Present.** The Study Area does not support alkaline soils or typically grassland habitats.
Chloropyron molle ssp. *hispidum* Hispid bird's-beak	--	CRPR 1B.1	Prefers seasonally flooded, saline-alkali soils at elevations between 5 and 510 feet. Occurs in valley and foothill grasslands.	**No Habitat Present.** No alkaline soils or grassland are present on-site.

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Cicuta maculata var. bolanderi Bolander's water-hemlock	--	CRPR 2B.1	Coastal, fresh, or brackish marshes and swamps (0' – 656').	**No Habitat Present.** No coastal marshes or swamps present.
Delphinium recurvatum Recurved larkspur	--	CRPR 1B.2	Alkaline soils within chenopod scrub, cismontane woodland, and valley and foothill grasslands (10' – 2,592').	**No Habitat Present.** Alkaline soils do not occur within the Study Area.
Downingia pusilla Dwarf downingia	--	CRPR 2B.2	Mesic areas in valley and foothill grassland, and vernal pools (3' – 1,460').	**No Habitat Present.** The Study Area does not support vernal pools or other wetlands.
Eryngium jepsonii Jepson's coyote-thistle	--	CRPR 1B.2	Occurs in vernal pools, valley and foothill grasslands. Found at elevations between 10-985 feet.	**No Habitat Present.** The Study Area does not support wetlands or other grassland habitats.
Extriplex joaquinana San Joaquin spearscale	--	CRPR 1B.2	Found in seasonal alkali wetlands or alkali sink scrub. Found between 5 and 2740 feet.	**No Habitat Present.** The Study Area does not support wetlands or other scrub habitat.
Fritillaria liliacea Fragrant fritillary	--	CRPR 1B.2	Elevations between 10 feet and 1,350 feet. Found in cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grasslands, often on serpentine soils.	**No Habitat Present**. Although this species is typically found on serpentine soils, it has been found on clay soils. However, current land management as active agriculture precludes the establishment of suitable habitat.
Fritillaria pluriflora Adobe-lily	--	CRPR 1B.2	Grows in chaparral, cismontane woodland, or foothill grasslands with clay or serpentine soils. (195-2315')	**No Habitat Present**. Although this species is typically found on serpentine soils, it has been found on clay soils. However, current land management as active agriculture

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
				precludes the establishment of suitable grassland habitat.
Gratiola heterosepala Boggs Lake hedge-hyssop	--	CE, CRPR 1B.2	Vernal pools and margins of lakes/ponds on clay soils (35' - 7,790').	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Hibiscus lasiocarpos var. occidentalis Woolly rose-mallow	--	CRPR 1B.2	Occurs in freshwater wetlands/marshes including edges. Often in riprap on sides of levees. Found in elevations between sea level to 395 feet.	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Isocoma arguta Carquinez goldenbush	--	CRPR 1B.1	Alkaline soils in valley and foothill grasslands (3' – 66').	**No Habitat Present.** The Study Area does not contain suitable alkaline soils or grassland habitats.
Lasthenia chrysantha Alkali-sink goldfields	--	CRPR 1B.1	Alkaline vernal pools (0' - 655').	**No Habitat Present.** Alkaline soils do not occur within the Study Area and the Study Area does not support wetlands or other mesic areas.
Lasthenia conjugens Contra Costa goldfields	FE	CRPR 1B.1	Found in mesic areas in cismontane woodland and annual grassland and in alkaline playas and vernal pools. Occurs in areas between 0-1540 ft.	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	--	CRPR 1B.1	Usually found on alkaline soils in sinks, playas, vernal pools, grasslands, and coastal salt marshes between 5-4005 ft	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas and lacks alkaline soils.

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Lathyrus jepsonii var. jepsonii Delta tule pea	None	CRPR 1B.2	Prefers tidally influenced channels, brackish marshes and swamps below 15 feet.	**No Habitat Present.** The Study Area does not support wetlands, swamps, or mashes.
Legenere limosa Legenere	--	CRPR 1B.1	Occurs in vernal pools between 5 and 2885 feet.	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Lepidium latipes var. heckardii Heckard's pepper-grass	--	CRPR 1B.2	This annual prefers valley and foothill grasslands with alkaline soils.	**No Habitat Present.** The Study Area does not contain alkaline soils and does not support grassland habitats.
Lilaeopsis masonii Mason's lilaeopsis	--	Rare, CRPR 1B.1	This species prefers brackish or freshwater swamps, intertidal marshes, and riparian scrub at or below 35 feet.	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Navarretia leucocephala ssp. *bakeri* Baker's navarretia	--	CRPR 1B.1	Favors vernal pools, cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grasslands between 15 and 5710 feet.	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Neostapfia colusana Colusa grass	FT, CH	CE, CRPR 1B.1	Large vernal pools with clay soils (16' – 656').	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Orcuttia inaequalis San Joaquin Valley Orcutt grass	FT, CH	CE, CRPR 1B.1	Vernal pools on acidic soils (35' - 2,475').	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Plagiobothrys hystriculus Bearded popcornflower	--	CRPR 1B.1	Often in vernal swales, and in mesic areas of valley and foothill grassland and vernal pool margins (0' – 899').	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Puccinellia simplex California alkali grass	--	CRPR 1B.2	Alkaline, vernally mesic areas in sinks, flats and lake margins in chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools (7' – 3,051').	**No Habitat Present.** Alkaline soils do not occur within the Study Area.
Sagittaria sanfordii Sanford's arrowhead	--	CRPR 1B.2	Occurs in emergent marsh habitat, typically associated with drainages, canals, or irrigation ditches (0' - 2,135').	**No Habitat Present.** The Study Area lacks suitable marsh or aquatic habitat.
Sidalcea keckii Keck's checkerbloom	FE	CRPR 1B.1	Serpentinite clay soils in cismontane woodland and valley and foothill grasslands (245' - 2,135').	**No Habitat Present.** Serpentinite soils do not occur within the Study Area and the Study Area lacks suitable woodland or grassland habitats.
Symphyotrichum lentum Suisun Marsh aster	--	CRPR 1B.2	Occurs in fresh and salt water marshes, often associated with blackberries, cattails, and bulrush between sea level and 10 feet.	**No Habitat Present.** No marshes occur within the Study Area.
Trifolium amoenum Two-forked clover	FE	CRPR 1B.	Considered extinct until 1993. Only known from two occurrences, one in Sonoma County and one in Marin. Occurs in coastal bluff scrub, valley and foothill grassland between 15 and 1360 feet elevation.	**No Habitat Present.** Outside of the documented range of the species. The Study Area lacks suitable scrub or grassland habitat.
Trifolium hydrophilum Saline clover	--	CRPR 1B.2	Grows in marshes, swamps, and vernal pools with alkaline soils between sea level and 985 feet elevation.	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
Tuctoria mucronate Crampton's tuctoria	FE	CE, CRPR 1B.1	Vernal pools and mesic areas in valley and foothill grasslands. Blooms April-August (elevation 15'–35')	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Invertebrates				
Bombus crotchii Crotch bumble bee	--	CC	Occurs in open grasslands and scrub habitats. This species occurs primarily in California including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California (William et al 2014). This species was historically common in the Central Valley of California, but now appears to be absent from most of it, especially in the center of its historic range (Williams et al. 2014; Richardson et al 2014).	**Low.** This species is poorly documented. The Study Area does not support typical grassland or scrub habitats and agricultural disturbance reduces the suitability of overwintering.
Bombus occidentalis Western bumble bee	--	CC	Meadows and grasslands with the blended floral resources are the appropriate habitat for this sub-species. While the Western bumble bee was historically known throughout the mountains and northern coast of California, it is now largely confined to high elevation sites and a small handful of records on the northern	**Low.** This species is poorly documented. The Study Area does not support typical grassland or scrub habitats and agricultural disturbance reduces the suitability of overwintering.

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
			California coast (Cameron et al. 2011a; Xerces Society 2012: Williams et al. 2014; Xerces Society et al. 2017).	
Branchinecta conservatio Conservancy fairy shrimp	FE	--	Occurs in very large, turbid vernal pools.	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Branchinecta lynchi Vernal pool fairy shrimp	FT	--	Occurs in vernal pools.	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Branchinecta mesovallensis Midvalley fairy shrimp	--	--	Occurs in vernal pools.	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Danaus plexippus Monarch butterfly	FC	--	Migratory species; most prevalent in the Central Valley in summer and early fall. Dependent upon milkweed (*Asclepias* species) plants as their exclusive larval host.	**No Habitat Present.** The Study Area does not support milkweed or nectar plants, which are a necessary habitat consistent for this species.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT	--	Dependent upon elderberry (*Sambucus* species) plant as primary host species.	**No Habitat Present.** The Study Area does not support elderberry shrubs, which are a necessary habitat consistent for this species.
Lepidurus packardi Vernal pool tadpole shrimp	FE	--	Occurs in vernal pools.	**No Habitat Present.** The Study Area does not support wetlands or other mesic areas.
Amphibians				
Ambystoma californiense California tiger salamander	FT	CT, CSC	Breeds in ponds or other deeply ponded wetlands and uses gopher	**No Habitat Present.** The Study Area does not support suitable

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
			holes and ground squirrel burrows in adjacent grasslands for upland refugia/foraging.	aquatic habitat for this species and is not adjacent to suitable breeding ponds. Regular land disturbance from agricultural activities reduces suitability of upland dispersal.
Reptiles				
Actinemys marmorata Northwestern pond turtle	FC	CSC	Occurs in ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	**No Habitat Present.** The Study Area does not support suitable aquatic habitat for this species. An offsite stormwater pond does not contain suitable hydrology or forage for this species.
Thamnophis gigas Giant garter snake	FT	CT	Occurs in rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow moving water and heavy emergent vegetation.	**No Habitat Present.** The Study Area does not contain suitably aquatic habitat for this species.
Birds				
Agelaius tricolor Tricolored blackbird	--	CE, CSC	Colonial nester in cattails (*Typha* species), bulrush (*Schoenoplectus* species), or blackberry (*Rubus* species) associated with marsh habitats.	**Moderate. No Breeding Habitat Present.** The Study Area lacks suitable breeding habitat for this Species. An adjacent stormwater pond lacks established vegetation typical of breeding habitat, however, colonies may utilize the Study Area for seasonal foraging.

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
Aquila chrysaetos Golden eagle	--	CFP	Forages in open areas including grasslands, savannahs, deserts, and early successional stages of shrub and forest communities. Nests in large trees and cliffs.	**No Habitat Present.** Breeding habitat is not present on-site, no typical foraging habitat present.
Athene cunicularia Burrowing owl	--	CSC	Nests in abandoned ground squirrel (*Otospermophilus beecheyi*) burrows associated with open grassland habitats.	**Moderate.** Agricultural areas are regularly disturbed and suitable burrows were not observed for this species. This species may utilize ruderal roadside areas and on or off-site culverts.
Buteo swainsoni Swainson's hawk	--	CT	Nests in large trees, preferably in riparian areas. Forages in fields, cropland, irrigated pasture, and grassland near large riparian corridors.	**Present.** The trees along Highway 80 are suitable nesting habitat, and the agricultural areas are suitable foraging habitat. A Swainson's hawk has been observed foraging in the Study Area and perching in adjacent trees.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FT	CE	Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, adjacent to slow-moving waterways, backwaters, or seeps.	**No Habitat Present.** The Study Area does not support riparian woodland habitats.
Elanus leucurus White-tailed kite	--	CFP	Open grasslands, fields, and meadows are used for foraging. Isolated trees in close proximity to foraging habitat are used for perching and nesting.	**Low.** The trees adjacent to the Project Site are low quality nesting habitat and not typically of the riparian trees that this species

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area

Scientific Name (Common Name)	Federal Status[1]	State Status[1]	Habitat Requirements	Potential for Occurrence
				favors. Agricultural areas provide suitable foraging habitat for this species.
Haliaeetus leucocephalus Bald eagle	--	CE	Nest in large trees within 1 mile of lakes, rivers, or larger streams.	**No Habitat Present.** Suitable breeding habitat and foraging habitat are absent. No large lakes, rivers or streams in the vicinity.
Mammals				
Antrozous pallidus Pallid bat	--	CSC, WBWG H	Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods [*Sequoia sempervirens]* and giant sequoia [*Sequoiadendron giganteum]*, bole cavities of oaks [*Quercus* species], exfoliating Ponderosa pine [*Pinus ponderosa]* and valley oak [*Quercus lobata]* bark, deciduous trees in riparian areas, and fruit trees in orchards), and various human structures such as bridges (especially wooden and concrete girder designs), barns, porches, bat boxes, and human-occupied as well as vacant buildings (WBWG 2022).	**No Habitat Present.** The Study Area does not include suitable roosting habitat for this species.
Lasionycteris noctivagans Silver-haired bat	--	WBWG M	Roosts in abandoned woodpecker holes, under bark, and occasionally in	**No Habitat Present.** The Study Area does not include suitable roosting habitat for this species.

Table 1. Special-Status Species with Potential to Occur within the Dixon Innovation Center Project Area

Scientific Name **(Common Name)**	**Federal Status[1]**	**State Status[1]**	**Habitat Requirements**	**Potential for Occurrence**
			rock crevices. It forages in open wooded areas near water features.	
Lasiurus cinereus Hoary bat	--	WBWG M	Roosts primarily in foliage of both coniferous and deciduous trees at the edges of clearings (WBWG 2022).	**No Habitat Present.** The Study Area does not include suitable roosting habitat for this species.
Taxidea taxus American badger	--	CSC	This species prefers dry open fields, grasslands, and pastures.	**Low.** Agricultural land in the Study Area provides poor quality foraging and denning habitat. No recent occurrences of this species in the Study Area vicinity (CNDDB 2023).

[1]*Status Codes:*

CC - CDFW Candidate for Listing *CE - CDFW Endangered* *CFP - CDFW Fully Protected* *CRPR - California Rare Plant Rank* *CR - California Rare*
CSC - CDFW Species of Concern *CT - CDFW Threatened* *FE - Federally Endangered* *FT - Federally Threatened* *FC - Federal Candidate for Listing*
WBWG H - Western Bat Working Group High Threat Rank *WBWG M - Western Bat Working Group Medium Threat Rank*

5.2.2 Burrowing Owl

Burrowing owl (*Athene cunicularia*) is not listed pursuant to either the California or federal Endangered Species Acts; however, it is designated as a species of special concern by the CDFW. They typically inhabit dry open rolling hills, grasslands, desert floors, and open bare ground with gullies and arroyos. This species typically uses burrows created by fossorial mammals, most notably the California ground squirrel, but may also use man-made structures such as culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement (CDFG 1995). The breeding season extends from February 1 through August 31 (CBOC 1993, CDFG 1995).

Very little potential nesting habitat is present within the Study Area. No ground squirrel burrows were observed and the Study Area lacks debris piles, irrigation piping, or other artificial structures favored by this species. However, the drop inlet in the northeastern corner of the Study Area could provide artificial habitat and cover for burrowing owl. Agricultural lands provide suitable foraging habitat for this species. The nearest known occurrence of burrowing owl is approximately 0.25 miles northeast of the Study Area, along Highway 80 (CNDDB Occ 238).

5.2.3 Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is a raptor species that is not federally listed, but is listed as threatened by CDFW. Breeding pairs typically nest in tall trees associated with riparian corridors, and forage in grassland, irrigated pasture, and cropland with a high density of rodents (Shuford and Gardali 2008). The Central Valley populations breed and nest in the late spring through early summer before migrating to Central and South America for the winter (Shuford and Gardali 2008).

Agricultural fields throughout the Study Area represent high quality foraging habitat for Swainson's hawk, trees directly adjacent to the Study Area provide suitable nesting habitat, and Swainson’s hawk was observed on-site during the 2022 site visits. The nearest documented Swainson’s hawk nest that is considered extant is CNDDB Occurrence #2243, in a walnut tree on the western boundary of the Study Area (CNDDB 2006), however there are multiple confirmed Swainson’s hawk occurrences within 5-miles of the Study Area.

5.2.4 White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is not federally or state listed, but is a CDFW fully protected species. This species is a yearlong resident in the Central Valley and is primarily found in or near foraging areas such as open grasslands, meadows, farmlands, savannahs, and emergent wetlands (Shuford and Gardali 2008). White-tailed kites typically nest from March through June in trees within riparian, oak woodland, and savannah habitats of the Central Valley and Coast Range (Shuford and Gardali 2008).

Agricultural fields throughout the Study Area represent suitable foraging habitat for white-tailed kite. While trees along Highway 80 adjacent to the Study Area provide nesting potential, white-tailed kite tends to

favor riparian habitats for nesting and it unlikely to nest adjacent to the Study Area. The nearest documented occurrence of white-tailed kite in the CNDDB is Occurrence #55, which is located over 4 miles north of the Study Area.

6.0 IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

This section details potential impacts to the biological resources discussed above associated with construction of the Project, as discussed in **Section 1.1** and shown in **Attachment A**.

6.1 Nesting Raptors and Songbirds

Swainson's hawk, white-tailed kite, and tricolored blackbird have the potential to nest adjacent to and forage within the Project area. Common bird species protected by the MBTA may also nest and forage within the Project Area. Birds nesting in avoided areas adjacent to construction could be disturbed by construction, which could result in nest abandonment. If they were nesting on-site, removal of the nests would impact these species.

The conversion of agricultural lands to development represents the loss of foraging habitat for Swainson's hawk, white-tailed kite, and tricolored blackbird.

6.2 Tricolored Blackbird

The agricultural lands within the Study Area provide marginally suitable foraging habitat for tricolored blackbird colonies. No direct impact to individuals is anticipated due to the lack of suitable nesting habitat. The Proposed Project may result in the loss of up to 38.4 acres of foraging habitat for tricolored blackbird. The loss of foraging habitat is not expected to have a substantial adverse effect on regional foraging opportunities for tricolored blackbird.

6.3 Burrowing Owl

The agricultural lands within the Study Area provide marginally suitable foraging habitat for burrowing owls, but regular site disturbance and the lack of ground squirrel complexes or artificial structure fails to provide suitable nesting cover. While unlikely, burrowing owl may use the storm drain inlets in the northeast corner of the Study Area as artificial cover.

The Proposed Project may result in the loss of up to 38.4 acres of burrowing owl foraging habitat. Additionally, if burrowing owls were present in the Project Area at the time of construction, individuals of this species could be killed and/or nests could be abandoned. However, application pre-construction burrowing owl surveys and other burrowing owl avoidance measures would minimize the potential for direct impacts to individuals that may be using the site at the time of construction. The loss of foraging habitat is not expected to have a substantial adverse effect on regional foraging opportunities for burrowing owl.

7.0 MITIGATION FOR IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

Impacts to Biological Resources are consistent with those anticipated in the NQSP. The Project Area does not contain any wetlands or other waters as verified by the USACE on 12 January 2024. The following are mitigation measures that are included in the General Plan and Specific Plan MMRP, or are often required by CEQA lead agencies for impacts to sensitive biological resources that may be associated with construction of the Project.

7.1 Nesting Raptors and Other Birds

Per the General Plan (NE-1.13) the following requirements apply to protect the nests of raptors and other birds when in active use.

- In new development, avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non-nesting season (typically September 1-February 15) or by conducting a pre-construction survey by a qualified biologist to confirm nests are absent or to define appropriate buffers until any young have successfully fledged the nest.

Additionally, the Project must be conducted in compliance with the NQSP. The following biological mitigation measures are included in the MMRP and are applicable to resources that occur in the Study Area.

- Disturbance to habitat for white-tailed kite and tricolored blackbird Mitigation Measure B-I: The following mitigation measures shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented. The project will not substantially affect a special-status animal species or species' habitat. To ensure this, project proponents shall participate in a Countywide Habitat Management Plan addressing the loss of potential foraging habitat.

The following site-specific mitigation measure shall be implemented to meet the requirements of the NQSP and General Plan and reduce the risk of take under the MBTA:

  - A pre-construction nesting bird survey shall be conducted by a qualified biologist (Project Biologist) throughout the portion of the Project Parcel proposed for construction and all accessible areas within a 500-foot radius of proposed construction areas, no more than seven days prior to the initiation of construction. If there is a break in construction activity of more than seven days, then subsequent surveys shall be conducted.
  - If an active raptor nest is found, no construction activities shall take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot no disturbance buffer will be established until the young have fledged. These no-disturbance buffers may be reduced if a smaller, sufficiently protective buffer is proposed by the Project Biologist and approved by the City after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, the nest occupants' habituation to

existing or ongoing activity, and nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest). The Project Biologist can visit the nest as needed to determine when the young have fledged the nest and are independent of the site or the nest can be left undisturbed until the end of the nesting season.

- Survey Report. A report summarizing the survey(s) shall be provided to the City within 30 days of the completed survey and is valid for one construction season. If no nests are found, no further mitigation is required.
- Increases to Buffers and Completion of Nesting
    - If construction activities will continue within the no-disturbance buffer, then the Project Biologist will be required to monitor the nest. That monitoring will include observations about the bird's behaviors relative to the construction activities. Should construction activities cause a nesting bird to do any of the following in a way that would be considered a result of construction activities: vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop this agitated behavior. The revised no-disturbance buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with the City.
    - Construction activities without monitoring may only resume within the no-disturbance buffer after a follow-up survey by the Project Biologist has been conducted and a report has been prepared indicating that the nest (or nests) are no longer active, and that no new nests have been identified.

7.2 Burrowing Owls

The Project is subject to General Plan Policy NE-1.13 which will avoid nest disturbance and loss of bird nests, including borrowing owl, as outlined below:

- NE-1.13 Protect the nests of raptors and other birds when in active use, as required by State and federal regulations. In new development, avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non-nesting season or by conducting a pre-construction survey by a qualified biologist to confirm nests are absent or to define appropriate buffers until any young have successfully fledged the nest.

To minimize impacts to burrowing owl the following measures shall be implemented:

- A targeted burrowing owl nest survey shall be conducted of all accessible areas within 500 feet of the proposed construction area within 15 days prior to construction activities utilizing 60 foot transects as outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) (Staff Report). If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl, and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest burrow until the Project Biologist determines that the young have fledged or it is determined that the nesting attempt has failed. If the applicant desires to work within 250 feet

of the nest burrow, the applicant shall consult with CDFW and the City to determine if the nest buffer can be reduced.

- If construction begins during the non-nesting season, (September 1 through the 14 February), the applicant shall conduct a survey for burrows or debris that represent suitable nesting habitat for burrowing owls within areas of proposed ground disturbance. If overwintering owls are located and cannot be avoided, the applicant may exclude any burrowing owls observed and collapse any burrows or remove the debris in accordance with the methodology outlined in the Staff Report. In accordance with the Staff Report, prior to burrow exclusion and/or closure, a Burrowing Owl Exclusion Plan must be developed and approved by CDFW. As outlined in the Staff Report, components of this plan shall include but not be limited to:
    - Confirm by site surveillance that the burrow(s) is empty of burrowing owls and other species preceding burrow scoping;
    - Type of scope and appropriate timing of scoping to avoid impacts;
    - Occupancy factors to look for and what will guide determination of vacancy and excavation timing (one-way doors should be left in place 48 hours to ensure burrowing owls have left the burrow before excavation, visited twice daily and monitored for evidence that owls are inside and can't escape i.e., look for sign immediately inside the door).
    - How the burrow(s) will be excavated. Excavation using hand tools with refilling to prevent reoccupation is preferable whenever possible (may include using piping to stabilize the burrow to prevent collapsing until the entire burrow has been excavated and it can be determined that no owls reside inside the burrow);
    - Removal of other potential owl burrow surrogates or refugia on site;
    - Photographing the excavation and closure of the burrow to demonstrate success and sufficiency;
    - Monitoring of the site to evaluate success and, if needed, to implement remedial measures to prevent subsequent owl use to avoid take; and
    - How the impacted site will continually be made inhospitable to burrowing owls and fossorial mammals (e.g., by allowing vegetation to grow tall, heavy disking, or immediate and continuous grading) until development is complete.

- If any nesting burrowing owls are found during the breeding season pre-construction survey, mitigation for the permanent loss of burrowing owl foraging habitat (defined as all areas of suitable habitat within 250 feet of an active nest burrow) shall be accomplished at a 1:1 ratio. The mitigation provided shall be consistent with recommendations in the CDFW 2012 Staff Report and may be accomplished within the Swainson's Hawk Foraging Habitat mitigation area if burrowing owls have been documented utilizing that area, or if the Project Biologist and the City determine that the area is suitable. The Staff Report recommendations for mitigation land for burrowing owls are as follows:
    - Where habitat will be temporarily disturbed, restore the disturbed area to pre-project condition including decompacting soil and revegetating. Permanent habitat protection may be warranted if there is the potential that the temporary impacts may render a nesting site (nesting burrow and satellite burrows) unsustainable or unavailable depending on the time frame, resulting in reduced survival or abandonment. For the latter potential impact, see the permanent impact measures below.
    - Mitigate for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced based on the information provided in Appendix A. Note: A minimum habitat replacement recommendation is not provided here as it has been shown

to serve as a default, replacing any site-specific analysis and discounting the wide variation in natal area, home range, foraging area, and other factors influencing burrowing owls and burrowing owl population persistence in a particular area.

- Mitigate for permanent impacts to nesting, occupied and satellite burrows and burrowing owl habitat with (a) permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. If the mitigation lands are located adjacent to the impacted burrow site, ensure the nearest neighbor artificial or natural burrow clusters are at least within 210 meters (Fisher et al. 2007).
- Permanently protect mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission, for the purpose of conserving burrowing owl habitat and prohibiting activities incompatible with burrowing owl use. If the project is located within the service area of a Department approved burrowing owl conservation bank, the project proponent may purchase available burrowing owl conservation bank credits.
- Develop and implement a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls (see Management Plan and Artificial Burrow sections below, if applicable).
- Fund the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.
- Habitat should not be altered or destroyed, and burrowing owls should not be excluded from burrows, until mitigation lands have been legally secured, are managed for the benefit of burrowing owls according to Department-approved management, monitoring and reporting plans, and the endowment or other long-term funding mechanism is in place or security is provided until these measures are completed.
- Mitigation lands should be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support burrowing owls present. Where there is insufficient habitat on, adjacent to, or near project sites where burrowing owls will be excluded, acquire mitigation lands with burrowing owl habitat away from the project site. The selection of mitigation lands should then focus on consolidating and enlarging conservation areas located outside of urban and planned growth areas, within foraging distance of other conserved lands. If mitigation lands are not available adjacent to other conserved lands, increase the mitigation land acreage requirement to ensure a selected site is of sufficient size. Offsite mitigation may not adequately offset the biological and habitat values impacted on a one to one basis. Consult with the Department when determining offsite mitigation acreages.
- Evaluate and select suitable mitigation lands based on a comparison of the habitat attributes of the impacted and conserved lands, including but not limited to: type and structure of habitat being impacted or conserved; density of burrowing owls in impacted and conserved habitat; and significance of impacted or conserved habitat to the species range-wide. Mitigate for the highest quality burrowing owl habitat impacted first and foremost when identifying mitigation lands, even if a mitigation site is located outside of a lead agency's jurisdictional boundary, particularly if the lead agency is a city or special district.

- Select mitigation lands taking into account the potential human and wildlife conflicts or incompatibility, including but not limited to, human foot and vehicle traffic, and predation by cats, loose dogs and urban-adapted wildlife, and incompatible species management (i.e., snowy plover).
- Where a burrowing owl population appears to be highly adapted to heavily altered habitats such as golf courses, airports, athletic fields, and business complexes, permanently protecting the land, augmenting the site with artificial burrows, and enhancing and maintaining those areas may enhance sustainability of the burrowing owl population onsite. Maintenance includes keeping lands grazed or mowed with weedeaters or push mowers, free from trees and shrubs, and preventing excessive human and human-related disturbance (e.g., walking, jogging, off-road activity, dog-walking) and loose and feral pets (chasing and, presumably, preying upon owls) that make the environment uninhabitable for burrowing owls.
- If there are no other feasible mitigation options available and a lead agency is willing to establish and oversee a Burrowing Owl Mitigation and Conservation Fund that funds on a competitive basis acquisition and permanent habitat conservation, the project proponent may participate in the lead agency's program.

The Project Area is not expected to contain any nesting burrowing owl as due to the lack of burrowing habitat. However, if any nesting burrowing owls are found during the pre-construction survey, mitigation for the permanent loss of burrowing owl foraging habitat (typically defined as all areas of suitable habitat within 250 feet of the active burrow) can typically be accomplished concurrent with within the Swainson's Hawk Foraging Habitat mitigation (as detailed in **Section 7.3** below).

7.3 Swainson's Hawk

The Proposed Project will result in the loss of 38.4 acre of Swainson's hawk foraging habitat and may impact Swainson's hawk nesting in trees just outside the Project Area.

The Project must be conducted in compliance with the NQSP. The following biological mitigation measures are included in the MMRP and are applicable to resources that occur in the Study Area.

- Swainson's Hawk Mitigation Measure B-F: The following mitigation measure shall be required as part of a subsequent "construction-level" analysis, required before any construction can be implemented. The project will not substantially affect a special-status animal species or species' habitat. To ensure this a breeding survey shall be conducted between April and July in order to:
  - Determine if the species nest on the project site;
  - To develop appropriate mitigation measures, which may include 1:1 replacement ratio of impacted foraging habitat. This replacement habitat should include alfalfa and row crops such as tomatoes, oats, wheat, barley, and sugar beets.

As the HCP has not yet been approved a generally accepted mitigation replacement ratio for foraging habitat is included in the CDFW *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk* (CDFW 2014). These measures allow projects to mitigate for loss of Swainson's hawk foraging habitat to a less than

significant level through the implementation of either site-specific measures reviewed by CDFW or of the following mitigation measure:

- Pursuant to California Department of Fish and Wildlife (CDFW) guidelines, the applicant shall preserve an equal acreage of Swainson's hawk foraging habitat as is proposed for development (approximately 38.4 acres) (i.e., a 1:1 ratio). The preserved habitat shall be at a location approved by the CDFW. Preservation may occur through either:
    - Payment of a mitigation fee to an established mitigation bank, or similar habitat development and management company, or the City of Dixon through a negotiated agreement (subject to approval by CDFW) between the City and the applicant. The monies shall be held in a trust fund, and used to purchase mitigation credits to offset the loss of suitable foraging habitat for Swainson's hawk. The credits would become incorporated into the mitigation bank, owned and operated by the habitat development and management company, and protected in perpetuity (consistent with CDFW guidelines); or
    - Purchase of conservation easements or fee title of lands with suitable Swainson's hawk foraging habitat (consistent with CDFW guidelines).

If mitigation lands or a conservation easement have not been acquired prior to issuance of the building permit or grading permits, whichever occurs first, the City shall hold the applicant's contribution in a separate, interest-bearing account until the appropriate lands are identified (through consultation with CDFW and the City) and acquired by the City or preserved through other methods acceptable to the CDFW. The foregoing funds shall be used to compensate for the loss of Swainson's hawk foraging habitat.

Implementation of this measure would also provide compensation for the loss of foraging habitat for burrowing owl and other special-status raptors that rely on annual grassland foraging habitat.

Additionally, as Swainson’s hawk is a state listed endangered species, the Project should be designed to avoid incidental take of the species. In compliance the following General Plan Measure applies:

- NE-1.12 In areas where development (including trails or other improvements) has the potential for adverse effects on special-status species, require project proponents to submit a study conducted by a qualified professional that identifies the presence or absence of special-status species at the proposed development site. If special-status species are determined by the City to be present, require incorporation of appropriate mitigation measures as part of the proposed development prior to final approval.

8.0 REFERENCES

California Burrowing Owl Consortium (CBOC). 1993. *Burrowing Owl Survey Protocol and Mitigation Guidelines*. Dated April 1993.

California Department of Fish and Game (CDFG). 1995. *Staff Report on Burrowing Owl Mitigation*. Dated 25 September 1995.

CDFG. 2012. *Staff Report on Burrowing Owl Mitigation*. Dated 7 March 2012.

CDFG 1994. *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California.* Dated November 1, 1994.

California Native Plant Society (CNPS). 2023. *Inventory of Rare and Endangered Plants* (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website http://www.rareplants.cnps.org [accessed May 2022 through October 2023].

CNPS. 2012. *Vegetation Alliances and Associations of the Great Valley Ecoregion, California.* CNPS Vegetation Program April 2012

California Natural Diversity Database (CNDDB). 2023. RareFind 5. California Department of Fish and Wildlife. Dated 3 October 2023.

City of Dixon. 2021. Final Compiled Dixon General Plan 2040. Available online at: https://www.cityofdixon.us/GeneralPlan.

City of Dixon 2009. Northeast Quadrant Specific Plan, Adopted May 9 1995, as Correct 9 June 2009 Available online at: https://www.cityofdixon.us/media/SpecificPlans/NortheastQuadrantSpecificPlan(PDF).pdf

City of Dixon. 1992. Final Environmental Impact Report for the Northeast Quadrant Specific Plan Mitigation Monitoring Program Finding of Fact and Statement of Overriding Considerations, State Clearinghouse Number 92113073, Adopted by the City of Dixon 1 May 1995

Jepson Flora Project (eds.). 2023. *Jepson eFlora*, http://ucjeps.berkeley.edu/eflora/ [accessed in May 2022 through October 2023]

Madrone Ecological Consulting, LLC (Madrone). 2023. *Aquatic Resources Delineation Report for Pedrick Road*. Prepared for Buzz Oates Construction, Inc. Published on 11 October 2023

Shuford, W. D., and Gardali, T., editors. 2008. *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in*

California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture (NRCS). 2023a. *Web Soil Survey*. Available online at http://websoilsurvey.nrcs.usda.gov/.

NRCS. 2023b. *Soil Data Access (SDA) Hydric Soils* List Available online at https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html. Accessed October 2023.

Solano County Water Agency (SCWA). 2012. Solano Habitat Conservation Plan. Final administrative draft. October.

U.S. Department of the Interior, Fish and Wildlife Service (USFWS). 2023. *IPaC Trust Resource Report for the Study Area*. Generated from http://ecos.fws.gov/ipac/ on 24 October 2023.

U.S. Geological Survey (USGS). 2013. *"Dixon, California"* 7.5-Minute Series Topographic Quadrangle Map. U.S. Geological Survey. Denver, Colorado.

Western Bat Working Group (WBWG). 2023. *Species Matrix and Species Accounts*. Accessed on-line at http://wbwg.org/ in October and November 2023.

Figures

Figure 1. Site and Vicinity

Figure 2. California Natural Diversity Database Occurrences of Plant Species

Figure 3. California Natural Diversity Database Occurrences of Wildlife Species and Critical Habitat

Figure 4. Vegetation Communties

Figure 5. Natural Resources Conservation Service Soils

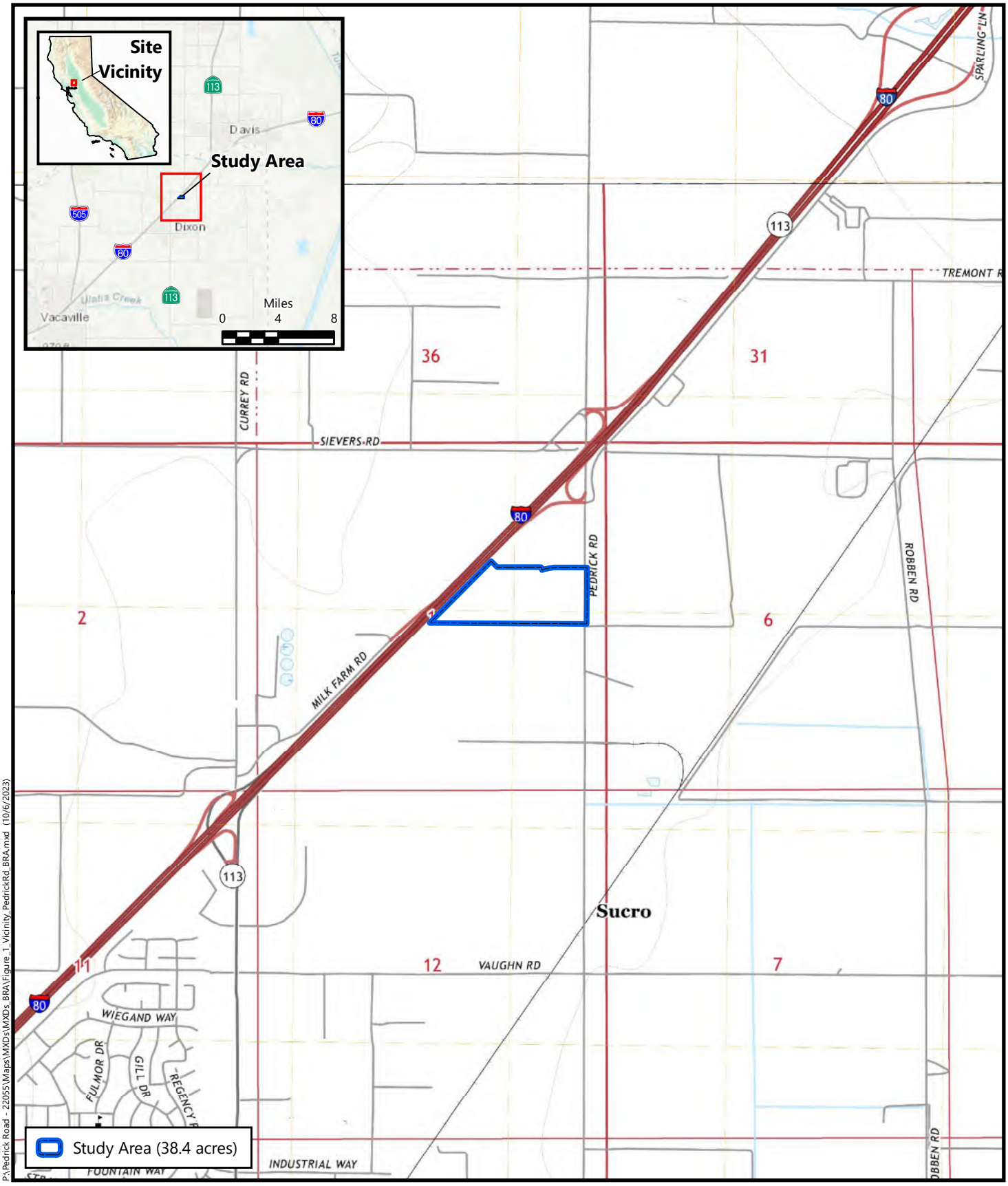
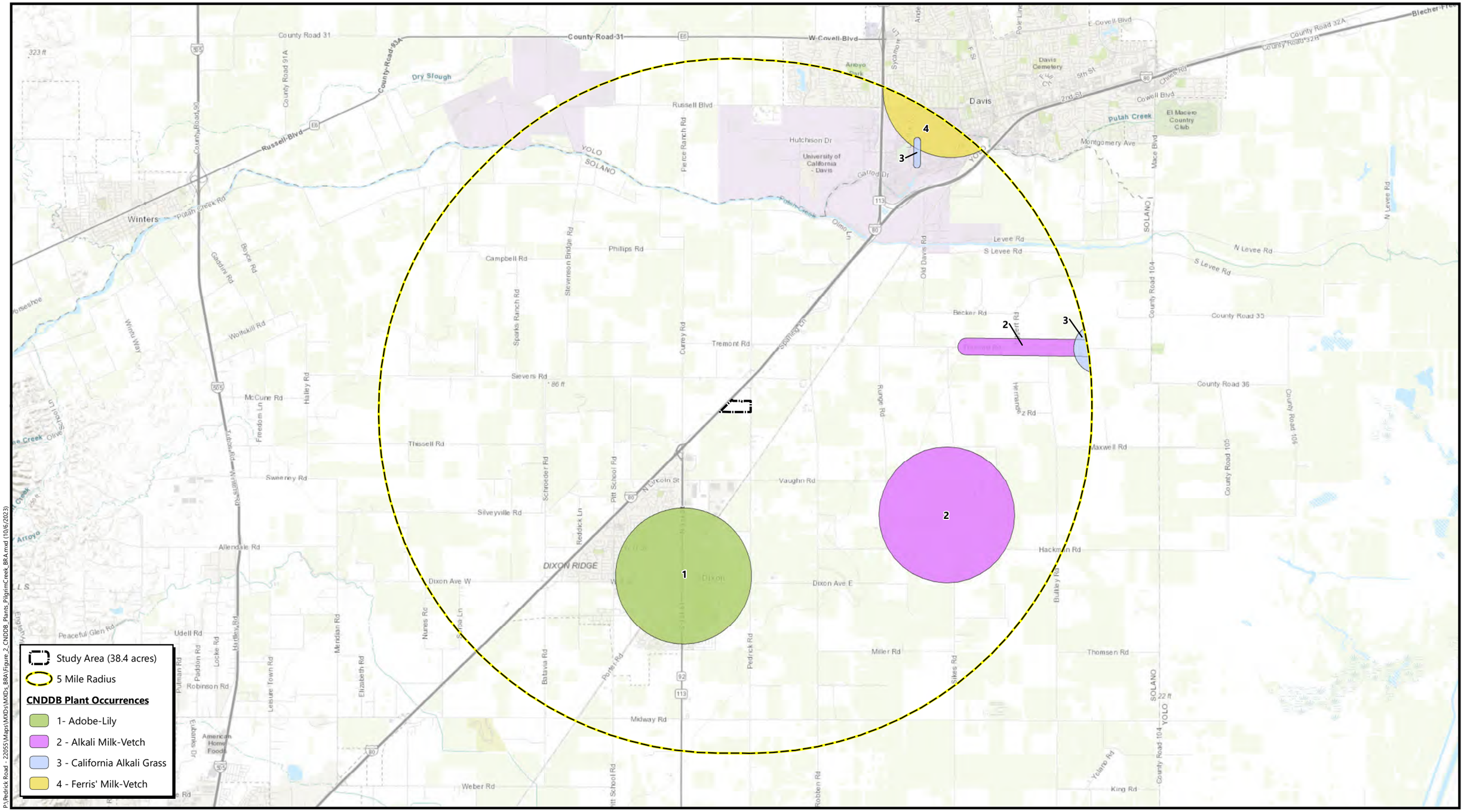


Figure 1
Site and Vicinity

Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING

Source: United States Geologic Survey, 2021
"Dixon, California" 7.5-Minute Topographic Quadrangle
Section 1, Township 7 North, Range 1 East, MDBM
Latitude (NAD83): 38.482844°, Longitude (NAD83): -121.807263°



P:\Pedrick Road - 22055\Maps\MXDs\MXDs_BRA\Figure 2_CNDDB_Plants_PilgrimCreek_BRA.mxd (10/6/2023)

Source: *California Department of Fish and Wildlife*, October 2023
Basemap Source: ESRI World Topography

Figure 2
California Natural Diversity Database Occurrences of Plant Species

Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING

Study Area (38.4 acres)

5 Mile Radius

CNDDB Wildlife Occurrences

Invertebrates

- 1 - Crotch Bumble Bee
- 2 - Valley Elderberry Longhorn Beetle
- 3 - Vernal Pool Fairy Shrimp
- 4 - Vernal Pool Tadpole Shrimp
- 5 - Western Bumble Bee

Amphibians/Reptiles

- 6 - California Tiger Salamander - Central California DPS
- 7 - Giant Garter Snake
- 8 - Western Pond Turtle

Birds

- 9 - Burrowing Owl
- 10 - Swainson's Hawk
- 11 - Tricolored Blackbird
- 12 - Western Yellow-Billed Cuckoo
- 13 - White-Tailed Kite

Mammals

- 14 - American Badger
- 15 - Hoary Bat
- 16 - Pallid Bat
- 17 - Silver-Haired Bat

P:\Pedrick Road - 22055\Maps\MXDs\MXDs_BRA\Figure_3_CNDDB_Wildlife_PilgrimCreek_BRA.mxd (10/6/2023)

N

0 Miles 1.5

Source: *California Department of Fish and Wildlife*, October 2023
Basemap Source: ESRI World Topography

Figure 3
California Natural Diversity Database Occurrences of Wildlife Species

Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING

P:\Pedrick Road - 22055\Maps\MXDs\MXDs_BRA\Figure_4_Vegetation_PedrickRd_BRA.mxd (10/6/2023)

Figure 4
Vegetation Communities

Boundary Source: Morton and Pitalo
Aerial Source: Maxar, 27 September 2022

Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING

Soil Survey Source: *USDA, Soil Conservation Service. Soil Survey Geographic (SSURGO) database for Solano County, California*
Boundary Source: Morton and Pitalo
Aerial Source: Maxar, 27 September 2022

Figure 5
Natural Resources Conservation Service Soils

Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING

Attachments

Attachment A. Site Plan

Attachment B. IPaC Trust Resource Report for the Study Area

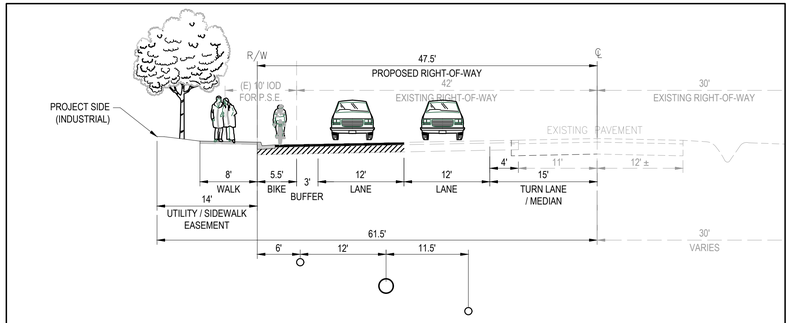
Attachment C. CNPS Inventory of Rare and Endangered Plants Query for the "Dixon, California" USGS Quadrangle and Eight Surrounding Quadrangles

Attachment D. Wildlife Species Observed within the Study Area

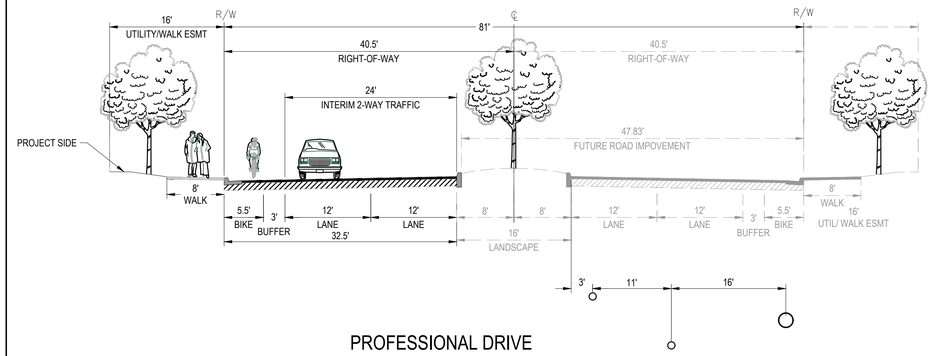
Attachment E. Wetland Delineation Report and USACE Verification for the Pedrick Road Property

Attachment A

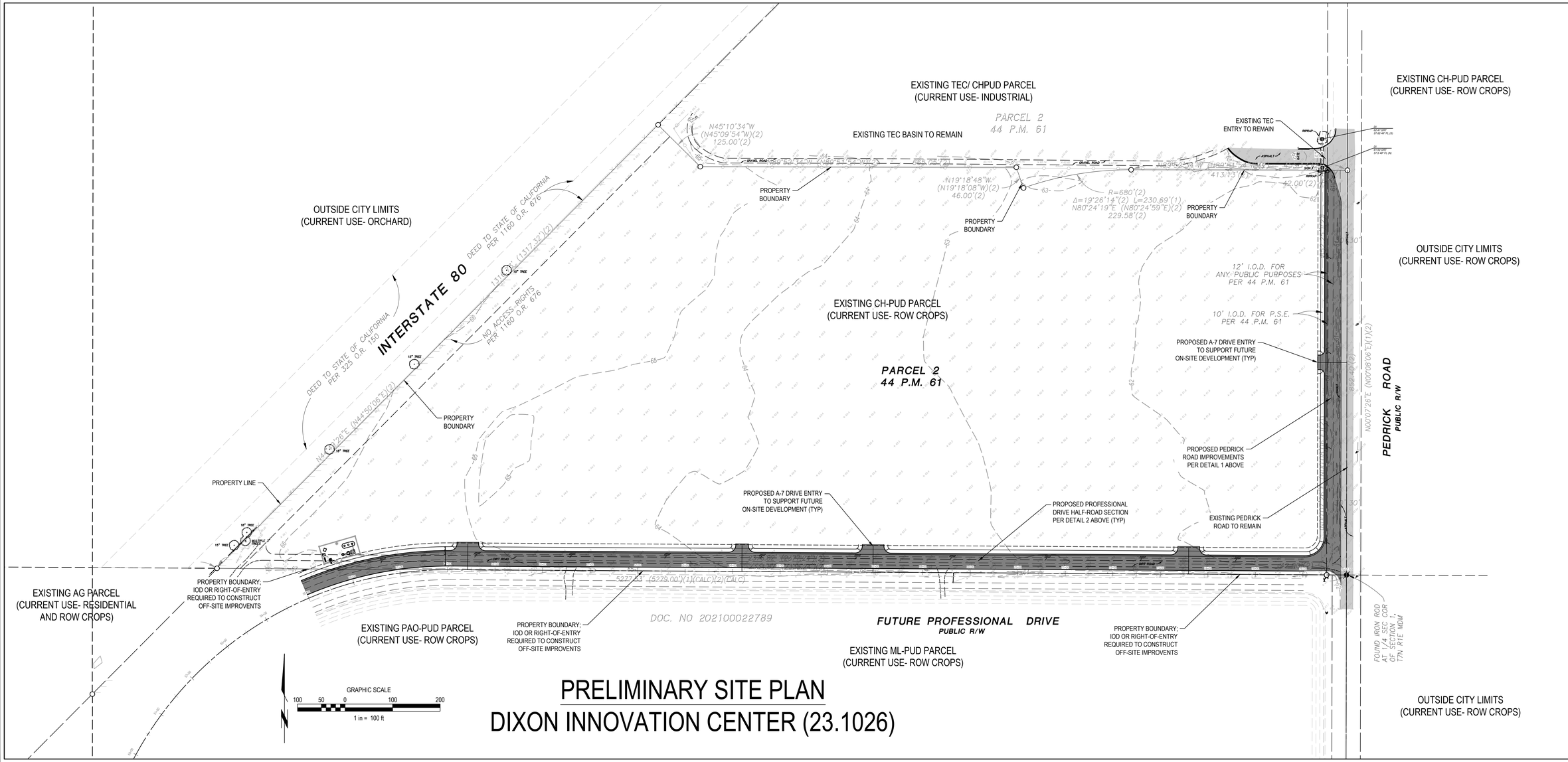
Site Plan



1 PEDRICK ROAD
MODIFIED ARTERIAL TO EXISTING
NTS



2 PROFESSIONAL DRIVE
4-LANE ARTERIAL
NTS



PRELIMINARY SITE PLAN
DIXON INNOVATION CENTER (23.1026)

Dwg: X:\2022\22-0022-00 (PEDRICK ROAD)\DWG\PLAN\22022-P01-PB07.DWG | Saved: 10-30-23 05:39pm SPEDERSEN

JOB NO. 22-0022-00

Attachment B

IPaC Trust Resource Report for the Study Area

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

IPaC resource list

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

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

Location

Solano County, California

Local office

Sacramento Fish And Wildlife Office

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

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

NOT FOR CONSULTATION

Endangered species

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

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

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

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

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

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

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

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

Reptiles

NAME	STATUS
Giant Garter Snake *Thamnophis gigas* Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Tiger Salamander *Ambystoma californiense* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

NOT FOR CONSULTATION

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp Branchinecta conservatio Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

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

There are no critical habitats at this location.

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

Bald & Golden Eagles

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

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

Additional information can be found using the following links:

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

There are bald and/or golden eagles in your project area.

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

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

NOT FOR CONSULTATION

Probability of Presence Summary

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

Probability of Presence (■)

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

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

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

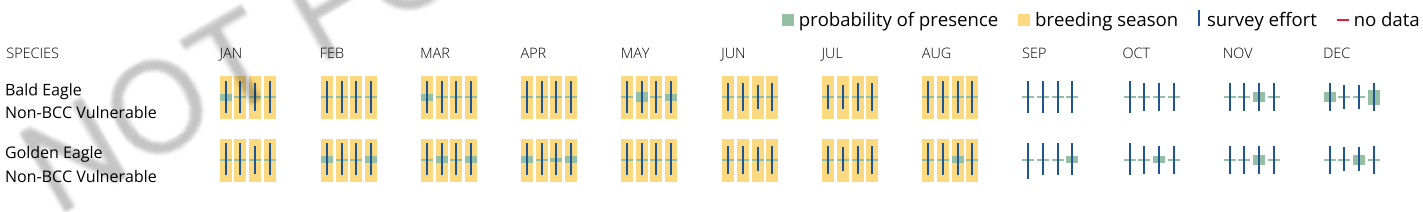
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

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

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

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

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



NOT FOR CONSULTATION

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

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

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

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

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

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

What if I have eagles on my list?

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

Migratory birds

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

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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

Additional information can be found using the following links:

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

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

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

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Cassin's Finch Carpodacus cassinii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15

NOT FOR CONSULTATION

Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lawrence's Goldfinch Carduelis lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher Contopus cooperi This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie Pica nuttalli This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

NOT FOR CONSULTATION

Probability of Presence Summary

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

Probability of Presence (■)

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

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

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

Breeding Season (■)

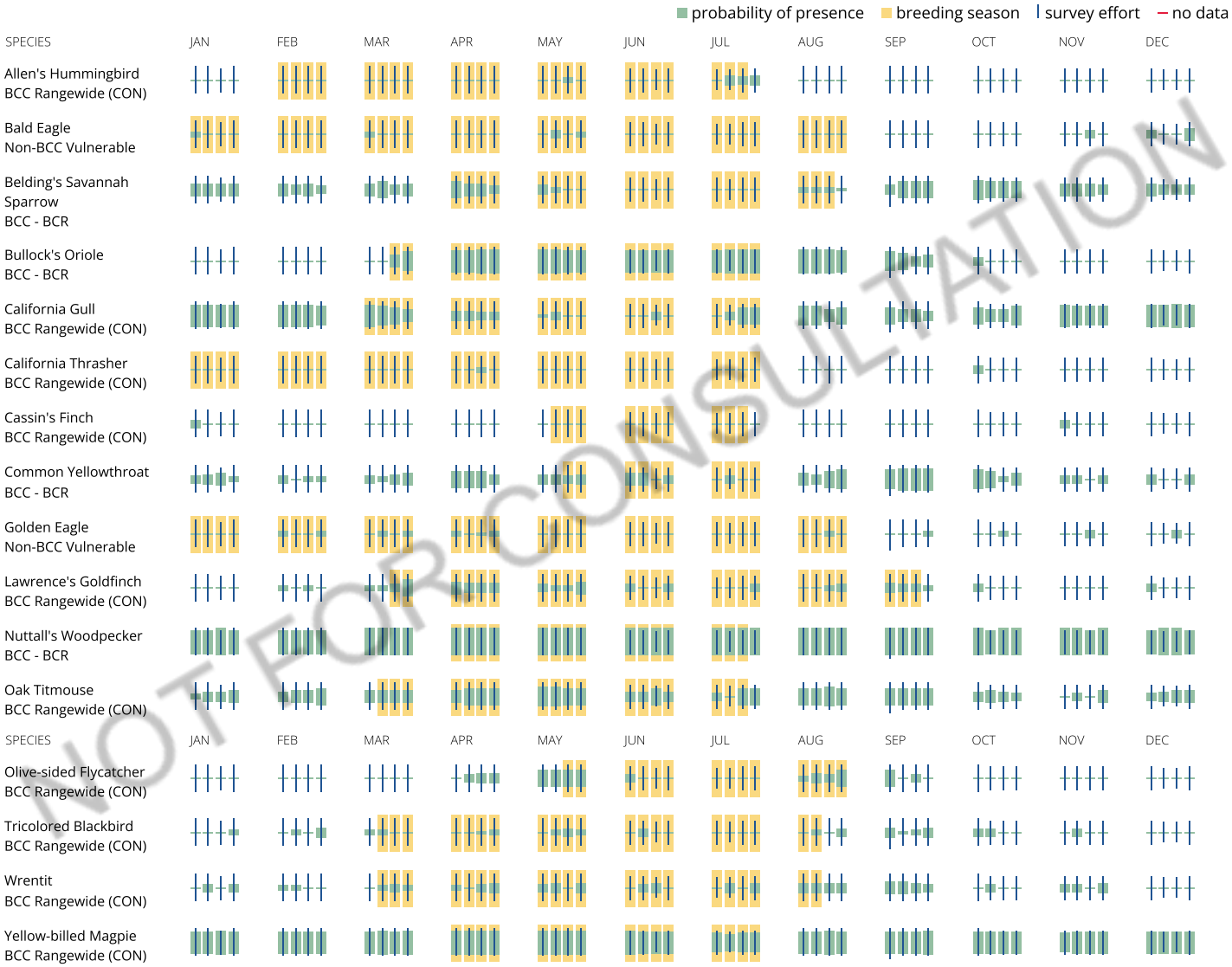
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

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

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

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

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



NOT FOR CONSULTATION

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

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

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

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

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

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

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

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

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

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

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

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

NOT FOR CONSULTATION

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

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

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

This location did not intersect any wetlands mapped by NWI.

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

Data limitations

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

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

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

Data exclusions

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

Data precautions

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

NOT FOR CONSULTATION

Attachment C

CNPS Inventory of Rare and Endangered Plants Query for the "Dixon, California" USGS Quadrangle and Eight Surrounding Quadrangles Area

CNPR 9-Quadrange Search including [3812136:3812147:3812158:3812157:3812156:3812146:3812137:3812138

Scientific Name	Common Name	CRPR	CESA	FESA
Astragalus tener var. ferrisiae	Ferris' milk-vetch	1B.1	None	None
Astragalus tener var. tener	alkali milk-vetch	1B.2	None	None
Atriplex cordulata var. cordulata	heartscale	1B.2	None	None
Atriplex depressa	brittlescale	1B.2	None	None
Atriplex persistens	vernal pool smallscale	1B.2	None	None
Centromadia parryi ssp. parryi	pappose tarplant	1B.2	None	None
Centromadia parryi ssp. rudis	Parry's rough tarplant	4.2	None	None
Chloropyron molle ssp. hispidum	hispid salty bird's-beak	1B.1	None	None
Cicuta maculata var. bolanderi	Bolander's water-hemlock	2B.1	None	None
Delphinium recurvatum	recurved larkspur	1B.2	None	None
Downingia pusilla	dwarf downingia	2B.2	None	None
Eryngium jepsonii	Jepson's coyote-thistle	1B.2	None	None
Extriplex joaquinana	San Joaquin spearscale	1B.2	None	None
Fritillaria agrestis	stinkbells	4.2	None	None
Fritillaria liliacea	fragrant fritillary	1B.2	None	None
Fritillaria pluriflora	adobe-lily	1B.2	None	None
Gratiola heterosepala	Boggs Lake hedge-hyssop	1B.2	CE	None
Hesperevax caulescens	hogwallow starfish	4.2	None	None
Hibiscus lasiocarpos var. occidentalis	woolly rose-mallow	1B.2	None	None
Isocoma arguta	Carquinez goldenbush	1B.1	None	None
Lasthenia chrysantha	alkali-sink goldfields	1B.1	None	None
Lasthenia conjugens	Contra Costa goldfields	1B.1	None	FE
Lasthenia ferrisiae	Ferris' goldfields	4.2	None	None
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	1B.1	None	None
Lathyrus jepsonii var. jepsonii	Delta tule pea	1B.2	None	None
Legenere limosa	legenere	1B.1	None	None
Lepidium latipes var. heckardii	Heckard's pepper-grass	1B.2	None	None
Lilaeopsis masonii	Mason's lilaeopsis	1B.1	CR	None
Limosella australis	Delta mudwort	2B.1	None	None
Malacothamnus helleri	Heller's bush-mallow	3.3	None	None
Myosurus minimus ssp. apus	little mousetail	3.1	None	None
Navarretia leucocephala ssp. bakeri	Baker's navarretia	1B.1	None	None
Neostapfia colusana	Colusa grass	1B.1	CE	FT
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	1B.1	CE	FT
Perideridia gairdneri ssp. gairdneri	Gairdner's yampah	4.2	None	None
Plagiobothrys hystriculus	bearded popcornflower	1B.1	None	None
Puccinellia simplex	California alkali grass	1B.2	None	None
Sagittaria sanfordii	Sanford's arrowhead	1B.2	None	None
Sidalcea keckii	Keck's checkerbloom	1B.1	None	FE
Symphyotrichum lentum	Suisun Marsh aster	1B.2	None	None
Trifolium amoenum	two-fork clover	1B.1	None	FE
Trifolium hydrophilum	saline clover	1B.2	None	None
Tuctoria mucronata	Crampton's tuctoria or Solano g	1B.1	CE	FE

Attachment D

Wildlife Species Observed within the Study Area

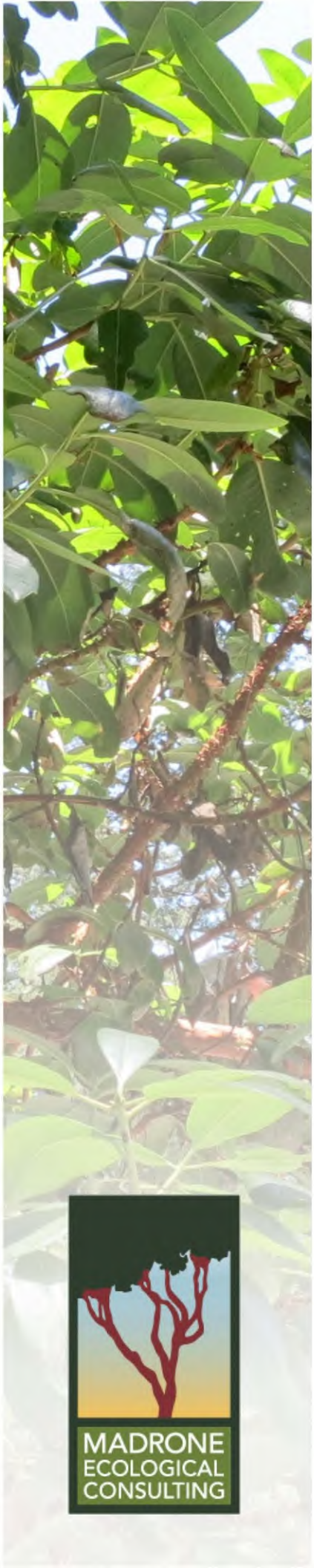
Wildlife Species Observed within The Study Area

Survey Dates: 15 April 2021 and 2 September 2022

Species Name	Common name
Birds	
Branta canadensis	Canada goose
Buteo swainsoni	Swainson's hawk
Circus hudsonius	Northern harrier
Falco sparverius	American kestrel
Passerculus sandwichensis	Savannah sparrow
Tyrannus verticalis	Western kingbird
Zenaida macroura	Mourning dove

Attachment E

Wetland Delineation Report and USACE Verification for the Pedrick Road Property



Aquatic Resources Delineation Report

Pedrick Road

Solano County
October 2023

MADRONE ECOLOGICAL CONSULTING

Prepared for:

Bret Hogge
Buzz Oates Construction, Inc.
555 Capitol Mall, Suite 900
Sacramento, CA 95814

Recommended Citation:

Madrone Ecological Consulting, LLC (Madrone). 2023. *Aquatic Resources Delineation Report for Pedrick Road*. Prepared for Buzz Oates Construction, Inc. Published on 11 October 2023.

CONTENTS

Aquatic Resources Delineation Report
Pedrick Road

1.0 INTRODUCTION ____ **1**
1.1 Contact Information ____ **1**
2.0 METHODOLOGY ____ **1**
3.0 EXISTING CONDITIONS ____ **2**
3.1 Terrestrial Plant Communities ____ **2**
3.1.1 Agricultural ____ 2
3.2 Hydrology ____ **2**
3.3 National Wetlands Inventory ____ **3**
3.4 Soils ____ **3**
3.5 Driving Directions ____ **3**
4.0 RESULTS ____ **3**
5.0 CONCLUSION ____ **4**
6.0 REFERENCES ____ **4**

Figures:

Figure 1. Vicinity Map
Figure 2. Natural Resources Conservation Service Soils
Figure 3. Aquatic Resources

Attachments:

Attachment A. Arid West Wetland Determination Data Forms
Attachment B. Aquatic Resources Delineation
Attachment C. Plant Species Observed within the Study Area
Attachment D. Representative Site Photographs
Attachment E. Request for Aquatic Resource Verification or Jurisdictional Determination Form

1.0 INTRODUCTION

This report presents the results of a delineation of aquatic resources within the Pedrick Road Property (Study Area) conducted by Madrone Ecological Consulting, LLC (Madrone). The approximately 37-acre Study Area is located south of Highway 80 and east of Pedrick Road in the Town of Dixon, Solano County, California, corresponding to Solano County Assessor's Parcel Number 011-010-080. The Study Area is located in a portion of Section 1, Township 7 North, Range 5 East (MDB&M) of the "Dixon California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2021) at a Latitude 38.482844°, Longitude -121.807263 (**Figure 1**).

1.1 Contact Information

Property Owner

Bret Hogge
Development Project Manager, Buzz Oats Construction, LLC
555 Capitol Mall, Suite 900.
Sacramento, CA 95814
brethogge@buzzoates.com
916-379-3854

Agent

Sarah VonderOhe
Madrone Ecological Consulting, LLC
8421 Auburn Blvd., Suite #248
Citrus Heights, CA 95610
SVonderOhe@madroneeco.com
916-822-3225

2.0 METHODOLOGY

Madrone senior biologist Bonnie Peterson conducted a delineation of aquatic resources within the Study Area on 15 April and 2 September 2022. Data points were mapped in the field with a GPS unit capable of sub-meter accuracy (Arrow 100). Three-parameter data (vegetation, soils, and hydrology) were collected at each data point, documenting wetland/waters or upland status, as appropriate. The delineation map was prepared in accordance with the *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (USACE 2016a). The GPS data was overlayed on an ortho-rectified aerial photograph (Maxar 2022).

The delineation was performed in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (USACE 2016b). U.S. Army Corps of Engineers (USACE) regulations (33 CFR 328) were used to determine the presence of Waters of the United States other than wetlands. The most recent *National Wetland Plant List* (USACE 2023) was used to determine the wetland indicator status of plants observed in the Study Area. The *Jepson eFlora* (Jepson Flora Project 2023) was used for plant nomenclature, except where it conflicted with the nomenclature in the *National Wetland Plant List*, which was given priority on the data sheets.

3.0 EXISTING CONDITIONS

The Study Area is comprised of a leveled agricultural land at an elevation of approximately 65-ft above mean sea level. The Study Area is bound by Interstate 80 to the northwest, a stormwater basin and industrial site to the north, Pedrick Road to the east, and agricultural land to the south. The surrounding lands in general represent agricultural lands.

A shallow roadside ditch is located north of the Study Area and is directed through a culvert pipe into a box inlet structure in the northeastern corner of the Study Area. This box culvert drains to an off-site stormwater basin. A similarly shallow roadside feature is observable along Pedrick Road. The Study Area is dry land farmed and has been utilized as a hay field for a number of years and terrestrial plant communities in the Study Area are limited to agricultural lands and with ruderal fringes. During the April 2022 site visit the Study Area had been closely mowed, and by September it had been disked and was minimally vegetated. Scattered walnut trees (*Juglans sp*.) are located along the fringes of the Study Area along the Interstate 80 frontage.

3.1 Terrestrial Plant Communities

3.1.1 Agricultural

Dry farmed areas within the Study Area are regularly mowed and disked and are currently comprised of non-native annual grasses and weedy forbs. The primary crop appears to have been cultivated wheat (*Triticum aestivum*). In addition to the disked wheat, this vegetation community is dominated by tumbleweed (*Amaranthus albus*), Russian thistle (*Salsola tragus*), Johnsongrass (*Sorghum halepense*), common purslane (*Portulaca oleracea*), silver sheath knotweed (*Polygonum argyrocoleon*), alkali mallow (*Malvella leprosa*), filaree (*Erodium botrys*), Bermuda grass (*Cynodon dactylon*), prickly lettuce (*Lactuca serriola*), and winter vetch (*Vicia villosa*). Undisturbed areas along Pedrick Road and Highway 80 frontages include perennial ryegrass (*Festuca perennis*), filaree, wintervetch, yellow starthistle (*Centaurea solstitialis*), slender wild oat (*Avena barbata*), and (*Galium aparine*).

3.2 Hydrology

Surface water in the Study Area is driven by natural stormwater runoff and seasonal irrigation. The Study Area is flat without evidence of concentrated flows. A partially blocked roadside ditch along Pedrick Road connects to a drop inlet that drains to a detention basin associated with the industrial property north of the Study Area. The Study Area is located in the Lower American River Watershed (HUC 1802011) (USGS 1978).

3.3 National Wetlands Inventory

The National Wetlands Inventory (NWI) produces and distributes maps and other geospatial data to the public on American wetland and deepwater habitats, as well as monitor changes in these habitats through time as directed by the Emergency Wetlands Resources Act of 1986 (Public Law 99-645). The NWI is primarily compiled through the use of trained image analysts to identify and classify wetlands and deepwater habitats from aerial imagery and is not a substitute for a full field analysis. The NWI has not mapped any wetlands or other aquatic resources within the Study Area (USFWS 2023).

3.4 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2023a), three soil mapping units occur within the Study Area (**Figure 2**): (BrA) Brentwood clay loam, 0 to 2 percent slopes, (Ca) Capay silty clay loam, 0 percent slopes, MLRA 17, and (Yo) 0 to 4 percent slopes, MLRA 17. None of the mapped soil map units are listed in the "Hydric Soils of the United States" (NRCS 2023b) or contain recognized hydric inclusions.

3.5 Driving Directions

To access the Study Area from Sacramento, drive west on Interstate 80 to the Pedrick Road exit. Drive south on Pedrick Road over the freeway and the Study Area is located on the west side of the road.

4.0 RESULTS

No aquatic resources were delineated within the Study Area. Three data points were collected in a shallow roadside ditch along Pedrick Road. This ditch was designed to convey runoff from Pedrick Road into a storm drain inlet in the northeast corner of the Study Area. The ditch was partially blocked to the south and does not appear to convey regular flow as the surrounding land is relatively flat. This concrete drain inlet in the northeast corner of the Study Area receives runoff from a more substantial off-site ditch segment north of the Study Area, and directs these flows into a storm water detention basin. Date points DP-1, DP-2, and DP-3 were collected in the on-site portion of this roadside ditch. The on-site ditch has no OHWM, but is dominated by perennial ryegrass, a non-native annual grass that is classified as a facultative wetland plant species. Therefore, it does meet the wetland dominance test and is classified as containing hydrophytic vegetation. However, the loamy clay soils lacked hydric soil indicators, and are not included on the hydric soils list. The ditch does not meet the tree parameters for wetland status. With the exception of biotic crust at data point DP-1 the ditch lacks hydrology indicators. No evidence of ponding or saturation within the ditch was observed in a review of aerial imagery (Google Earth 2023).

An additional data point (DP-4) was collected in the fallow field based off saturation visible on the July 2021 aerial image (Google Earth 2023). This data point was dominated by weedy upland forbs and lacked hydric soils or wetland hydrology. The saturation visible on the aerial imagery appears to have been irrigation

overflow from the field to the south and not consistent enough support the development of a wetland in this location.

Data sheets are included in **Attachment A,** maps of the Study Area are included as **Figure 3** and **Attachment B,** and a list of the plant species observed in the Study Area with their wetland indicator status is included in **Attachment C**. Representative site photographs are available in **Attachment D**.

5.0 CONCLUSION

No wetlands or other waters were mapped within the Study Area. The shallow roadside ditch does not meet the hydrophytic vegetation, hydric soil, and wetland hydrology criteria outlined by the USACE.

The applicant is requesting an Approved Jurisdictional Determination for the site due to the lack of aquatic resources within the Study Area. The *Request for Aquatic Resource Verification or Jurisdictional Determination Form* is included in **Attachment E**.

6.0 REFERENCES

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual.* Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station. Vicksburg, Miss.

Google Earth. 2023. Google earth pro V 7.3.4.8642. (May 12, 2023). Latitude 38.482844°, Longitude -121.807263. SIO, NOAA, U.S. Navy, NGA, GEBCO. http://www.earth.google.com [accessed October 2023].

HistoricAerials.com. 2023. Viewer available at: https://www.historicaerials.com/viewer.

Jepson Flora Project (eds.) 2023. *Jepson eFlora*. Available on-line at: http://ucjeps.berkeley.edu/eflora/. [accessed October 2023].

Maxar 2022. *Aerial Photograph of the Study Area.* Imagery © 2022 Maxar, Dated 27 September 2022.

Soil Survey Staff, Natural Resources Conservation Service (NRCS), 2023a United States Department of Agriculture (NRCS). 2023a. *Web Soil Survey*. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed October 2023.

NRCS. 2023b. *Soil Data Access (SDA) Hydric Soils* List Available online at https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html. Accessed October 2023.

U.S. Army Corps of Engineers (USACE). 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers (USACE). 2008b. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. A Delineation Manual*. Prepared by R. W. Lichvar and S. M. McColley. ERDC/CRREL TR-08-12. Cold Regions Research and Engineering Laboratory.

U.S. Army Corps of Engineers (USACE). 2016. *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports*. U.S. Army Corps of Engineers, Sacramento District. Dated January 2016. Available online at: http://www.spk.usace.army.mil/Portals/12/documents/regulatory/jd/minimum-standards/Minimum_Standards_for_Delineation_with_Template-final.pdf

U.S. Army Corps of Engineers (USACE). 2016a. *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program*. Dated February 10, 2016. Available online at: http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/651327/updated-map-and-drawing-standards/.

U.S. Army Corps of Engineers 2023. National Wetland Plant List, version 3.4, http://wetlandplants.usace.army.mil/, U.S. Army Corps of Engineers Engineer Research and Development Center Cold Regions Research and Engineering Laboratory, Hanover, NH

U.S. Department of the Interior, Geological Survey (USGS). 1978. *Hydrologic Unit Map, State of California*. Geological Survey. Reston, Virginia.

U.S. Department of the Interior, Geological Survey (USGS). 2021. *Dixon, California* 7.5-minute Quadrangle. Geological Survey. Denver, Colorado.

U.S. Fish and Wildlife Service. October 2023, National Wetland Inventory (NWI) wetlands mapper, https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper, accessed October 2023. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

Figures

Figure 1. Vicinity Map

Figure 2. Natural Resources Conservation Service Soils

Figure 3. Aquatic Resources

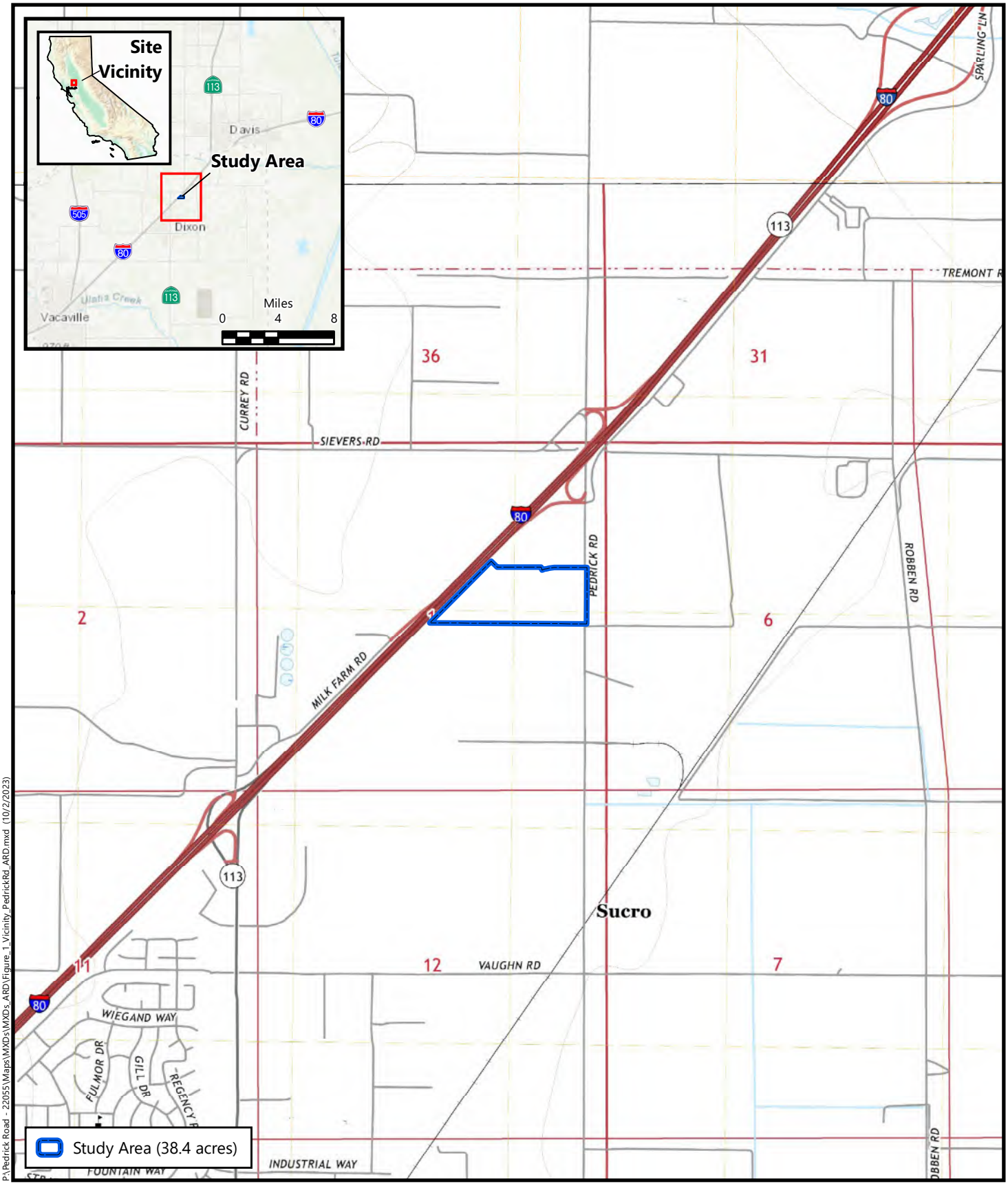


Figure 1
Site and Vicinity

Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING

Source: United States Geologic Survey, 2021
"Dixon, California" 7.5-Minute Topographic Quadrangle
Section 1, Township 7 North, Range 1 East, MDBM
Latitude (NAD83): 38.482844°, Longitude (NAD83): -121.807263°

P:\Pedrick Road - 22055\Maps\MXDs\MXDs_ARD\Figure_2_NRCS_PedrickRd_ARD.mxd (10/2/2023)

Soil Survey Source: *USDA, Soil Conservation Service. Soil Survey Geographic (SSURGO) database for Solano County, California*
Boundary Source: Morton and Pitalo
Aerial Source: Maxar, 27 September 2022

Figure 2
Natural Resources Conservation Service Soils

Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING

P:\Pedrick Road - 22055\Maps\MXDs\MXDs_ARD\Figure_3_AquaticResources_PedrickRd_ARD.mxd (10/11/2023)

N

Feet
0 200 400

Boundary Source: Morton and Pitalo
Aerial Source: Maxar, 27 September 2022

Figure 3
Aquatic Resources

Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING

Attachments

Attachment A. Arid West Wetland Determination Data Forms

Attachment B. Aquatic Resources Delineation

Attachment C. Plant Species Observed within the Study Area

Attachment D. Representative Site Photographs

Attachment E. Request for Aquatic Resource Verification or Jurisdictional Determination Form

Attachment A

Arid West Wetland Determination Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pedrick Road City/County: Dixon, Solano County Sampling Date: 9/2/2022
Applicant/Owner: Buzz Oats Construction State: Sampling Point: DP-1
Investigator(s): Bonnie Peterson Section, Township, Range: Section 10, Township 11 North, Range 6 East.
Landform (hillside, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRR C Lat: Long: Datum: NAD 83
Soil Map Unit Name: Yolo loam, 0 to 4 percent slopes, MLRA 17 NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No
Hydric Soil Present? Yes No X
Wetland Hydrology Present? Yes X No

Is the Sampled Area within a Wetland? **Yes** **No** X

Remarks:
Point selected in a roadside ditch adjacent to a rip rap drop inlet.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 1 meter sq.)			
1. *Epilobium brachycarpum*	5	No	FAC
2. *Lactuca serriola*	5	No	FACU
3. *Solanum vulgaris*	10	No	UPL
4. *Festuca perennis/ Lolium perenne*	70	Yes	FAC
5.			
6.			
7.			
8.			
	90 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 10

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	75	x 3 =	225
FACU species	5	x 4 =	20
UPL species	10	x 5 =	50
Column Totals:	90 (A)		295 (B)
Prevalence Index = B/A =			3.28

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
Prevalence Index is ≤3.0[1]
Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No**

Remarks:

SOIL

Sampling Point: DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4								Rock
4-18	2.5y 3/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ? Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- X Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pedrick Road City/County: Dixon, Solano County Sampling Date: 9/2/2022
Applicant/Owner: Buzz Oats Construction State: Sampling Point: DP-2
Investigator(s): Bonnie Peterson Section, Township, Range: Section 10, Township 11 North, Range 6 East.
Landform (hillside, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRR C Lat: Long: Datum: NAD 83
Soil Map Unit Name: Capay silty clay loam, 0 percent slopes, MLRA 17 NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No
Hydric Soil Present? Yes No X
Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? **Yes** **No** X

Remarks:
Point selected in a roadside ditch.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 1 meter sq.)			
1. *Brassica nigra*	5	No	UPL
2. *Lactuca serriola*	5	No	FACU
3. *Centaurea solstitialis*	10	No	UPL
4. *Festuca perennis/ Lolium perenne*	50	Yes	FAC
5. *Convolvulus arvensis*	2	No	UPL
6.			
7.			
8.			
	72 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	5	x 4 =	20
UPL species	17	x 5 =	85
Column Totals:	72 (A)		255 (B)
Prevalence Index = B/A =			3.54

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
Prevalence Index is ≤3.0[1]
Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No**

Remarks:

SOIL

Sampling Point: DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	2.5y 3/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pedrick Road City/County: Dixon, Solano County Sampling Date: 9/2/2022
Applicant/Owner: Buzz Oats Construction State: Sampling Point: DP-3
Investigator(s): Bonnie Peterson Section, Township, Range: Section 10, Township 11 North, Range 6 East.
Landform (hillside, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRR C Lat: Long: Datum: NAD 83
Soil Map Unit Name: Capay silty clay loam, 0 percent slopes, MLRA 17 NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No
Hydric Soil Present? Yes No X
Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? **Yes** **No** X

Remarks:
Point selected in a roadside ditch.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 1 meter sq.)			
1. *Festuca perennis/ Lolium perenne*	100	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	100 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	100	x 3 =	300
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		300 (B)
Prevalence Index = B/A =			3.00

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
Prevalence Index is ≤3.0[1]
Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No**

Remarks:

SOIL

Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5y 3/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pedrick Road City/County: Dixon, Solano County Sampling Date: 9/2/2022
Applicant/Owner: Buzz Oats Construction State: Sampling Point: DP-4
Investigator(s): Bonnie Peterson Section, Township, Range: Section 10, Township 11 North, Range 6 East.
Landform (hillside, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): 1
Subregion (LRR): LRR C Lat: Long: Datum: NAD 83
Soil Map Unit Name: Capay silty clay loam, 0 percent slopes, MLRA 17 NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes No X
Hydric Soil Present? Yes No X
Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? **Yes** **No** X

Remarks:
Point selected in a signature on ariel imagery.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 1 meter sq.)			
1. *Amaranthus albus*	40	Yes	FACU
2. *Portulaca oleracea*	5	No	FAC
3. *Malvela leprosa*	5	No	FACU
4. *Sorghum halepense*	35	Yes	FACU
5. *Convolvulus arvensis*	10	No	UPL
6.			
7.			
8.			
	95 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	80	x 4 =	320
UPL species	10	x 5 =	50
Column Totals:	95 (A)		385 (B)
Prevalence Index = B/A =			4.05

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** **No** X

Remarks:

SOIL

Sampling Point: DP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10yr 3/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Soils are regularly disked.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Irrigation water present on ariel imagery

Attachment B

Aquatic Resources Delineation

P:\Pedrick Road - 220503\Maps\MXDs\MXDs_ARD\USACE_ARD_PedrickRd.mxd, jswager, 10/11/2023, 14:01

N

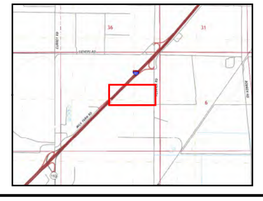
Feet
0 50 100 200

Map Scale: 1 inch = 100 feet (at 26"x14")
Coordinate System
NAD 1983 StatePlane California II FIPS 0402 Feet
Sources
Aerial : Maxar, 27 September 2022
Boundary : Morton and Pitalo

Delineation Performed by: B. Peterson
Map Prepared by: J.Swager
Date Map Prepared: 10/11/2023

Made in accordance with the *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program,* as amended on February 10, 2016

Prepared For:
Buzz Oates Construction, Inc.
555 Capitol Mall Suite 900
Sacramento, CA 95814



Study Area (38.4 acres)
Reference Coordinate (NAD83)
Data Point

Aquatic Resources (0.000 acre)
No Aquatic Resources in Study Area

Aquatic Resources Delineation
Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING
8421 Auburn Boulevard, Suite 248
Citrus Heights, California 95610
(916) 822.3230 | www.madroneeco.com

Attachment C

Plant Species Observed within the Study Area

Plant Species Observed within the Study Area
15 April and 2 September 2022

Species Name	Common Name	Wetland Indicator Status
Carduus pycnocephalus subsp. pycnocephalus	Italian thistle	UPL
Lactuca serriola	Prickly lettuce	FACU
Pseudognaphalium luteoalbum	Pearly everlasting	-
Senecio vulgaris	Common groundsel	FACU
Amsinckia intermedia	Common fiddleneck	-
Brassica nigra	Black mustard	UPL
Acmispon americanus var. americanus	Spanish lotus	UPL
Lupinus bicolor	Miniature lupine	UPL
Trifolium hirtum	Rose clover	UPL
Vicia villosa	Hairy vetch, winter vetch	-
Erodium botrys	Filaree	FACU
Geranium dissectum	Cut leaf geranium	UPL
Juncus bufonius var. bufonius	Toad rush	-
Avena barbata	Slender wild oat	UPL
Avena sativa	Cultivated oat	-
Bromus hordeaceus	Soft chess	FACU
Elymus caput-medusae	Medusa head	UPL
Festuca microstachys	Pacific fescue	-
Festuca perennis	Rye grass	FAC
Hordeum marinum subsp. gussoneanum	Mediterranean barley	FAC
Hordeum murinum subsp. glaucum	Smooth barley	-
Poa annua	Annual blue grass	FAC
Galium aparine	Goose grass	FACU
Amaranthus albus	Tumbleweed	FACU
Centaurea solstitialis	Yellow star-thistle	UPL
Centromadia fitchii	Fitch's spikeweed	-
Raphanus raphanistrum	Jointed charlock	-
Convolvulus arvensis	Bindweed	UPL
Juglans regia	English walnut	UPL
Malvella leprosa	Alkali-mallow	FACU
Epilobium brachycarpum	Panicled willow-herb	UPL
Cynodon dactylon	Bermuda grass	FACU
Sorghum halepense	Johnson grass	FACU
Triticum aestivum	Cultivated wheat	-
Polygonum argyrocoleon	Persian knotweed	-
Polygonum aviculare	Knotweed, knotgrass	-
Rumex crispus	Curly dock	FAC
Portulaca oleracea	Purslane	FAC
Carduus pycnocephalus subsp. pycnocephalus	Italian thistle	UPL

Species Name	Common Name	Wetland Indicator Status
Lactuca serriola	Prickly lettuce	FACU
Pseudognaphalium luteoalbum	Pearly everlasting	-
Senecio vulgaris	Common groundsel	FACU
Amsinckia intermedia	Common fiddleneck	-
Brassica nigra	Black mustard	UPL
Acmispon americanus var. americanus	Spanish lotus	UPL
Lupinus bicolor	Miniature lupine	UPL
Trifolium hirtum	Rose clover	UPL
Vicia villosa	Hairy vetch, winter vetch	-
Erodium botrys	Filaree	FACU
Geranium dissectum	Cut leaf geranium	UPL
Juncus bufonius var. bufonius	Toad rush	-

Attachment D

Representative Site Photographs

Photo DP-1 – Photo taken 2 September 2022.

Photo DP-2 – Photo taken 2 September 2022.

Photo DP-3 – Photo taken 2 September 2022.

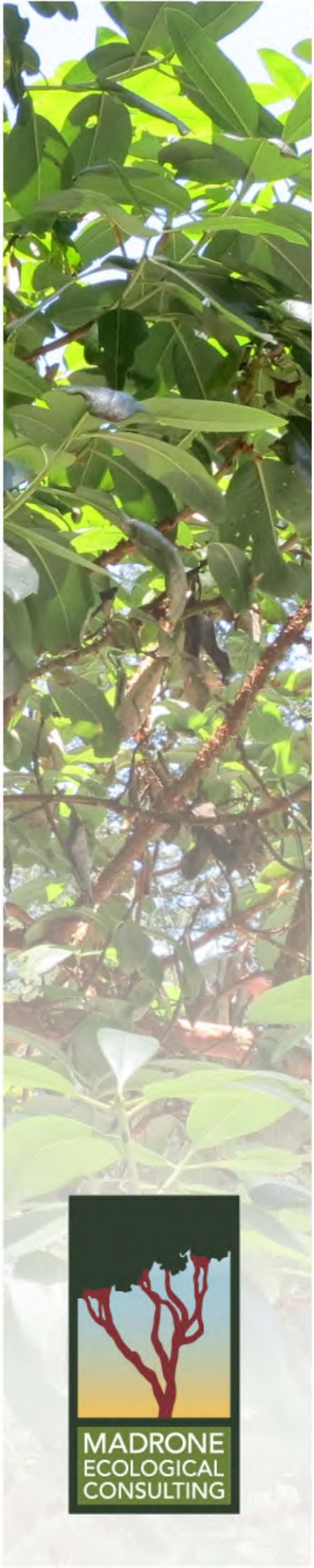
Photo DP-4 – Photo taken 2 September 2022.

Pedrick Road frontage including shallow roadside ditch– Photo taken 2 September 2022.

Typical upland agricultural field– Photo taken 2 September 2022.

Attachment E

Request for Aquatic Resource Verification or Jurisdictional Determination Form



Aquatic Resources Delineation Report

Pedrick Road

Solano County
October 2023

MADRONE ECOLOGICAL CONSULTING

Prepared for:

Bret Hogge
Buzz Oates Construction, Inc.
555 Capitol Mall, Suite 900
Sacramento, CA 95814

Recommended Citation:

Madrone Ecological Consulting, LLC (Madrone). 2023. *Aquatic Resources Delineation Report for Pedrick Road*. Prepared for Buzz Oates Construction, Inc. Published on 11 October 2023.

CONTENTS

Aquatic Resources Delineation Report
Pedrick Road

1.0 INTRODUCTION ____ **1**
1.1 Contact Information ____ **1**
2.0 METHODOLOGY ____ **1**
3.0 EXISTING CONDITIONS ____ **2**
3.1 Terrestrial Plant Communities ____ **2**
3.1.1 Agricultural ____ 2
3.2 Hydrology ____ **2**
3.3 National Wetlands Inventory ____ **3**
3.4 Soils ____ **3**
3.5 Driving Directions ____ **3**
4.0 RESULTS ____ **3**
5.0 CONCLUSION ____ **4**
6.0 REFERENCES ____ **4**

Figures:

Figure 1. Vicinity Map
Figure 2. Natural Resources Conservation Service Soils
Figure 3. Aquatic Resources

Attachments:

Attachment A. Arid West Wetland Determination Data Forms
Attachment B. Aquatic Resources Delineation
Attachment C. Plant Species Observed within the Study Area
Attachment D. Representative Site Photographs
Attachment E. Request for Aquatic Resource Verification or Jurisdictional Determination Form

1.0 INTRODUCTION

This report presents the results of a delineation of aquatic resources within the Pedrick Road Property (Study Area) conducted by Madrone Ecological Consulting, LLC (Madrone). The approximately 37-acre Study Area is located south of Highway 80 and east of Pedrick Road in the Town of Dixon, Solano County, California, corresponding to Solano County Assessor's Parcel Number 011-010-080. The Study Area is located in a portion of Section 1, Township 7 North, Range 5 East (MDB&M) of the "Dixon California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2021) at a Latitude 38.482844°, Longitude -121.807263 (**Figure 1**).

1.1 Contact Information

Property Owner

Bret Hogge
Development Project Manager, Buzz Oats Construction, LLC
555 Capitol Mall, Suite 900.
Sacramento, CA 95814
brethogge@buzzoates.com
916-379-3854

Agent

Sarah VonderOhe
Madrone Ecological Consulting, LLC
8421 Auburn Blvd., Suite #248
Citrus Heights, CA 95610
SVonderOhe@madroneeco.com
916-822-3225

2.0 METHODOLOGY

Madrone senior biologist Bonnie Peterson conducted a delineation of aquatic resources within the Study Area on 15 April and 2 September 2022. Data points were mapped in the field with a GPS unit capable of sub-meter accuracy (Arrow 100). Three-parameter data (vegetation, soils, and hydrology) were collected at each data point, documenting wetland/waters or upland status, as appropriate. The delineation map was prepared in accordance with the *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (USACE 2016a). The GPS data was overlayed on an ortho-rectified aerial photograph (Maxar 2022).

The delineation was performed in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (USACE 2016b). U.S. Army Corps of Engineers (USACE) regulations (33 CFR 328) were used to determine the presence of Waters of the United States other than wetlands. The most recent *National Wetland Plant List* (USACE 2023) was used to determine the wetland indicator status of plants observed in the Study Area. The *Jepson eFlora* (Jepson Flora Project 2023) was used for plant nomenclature, except where it conflicted with the nomenclature in the *National Wetland Plant List*, which was given priority on the data sheets.

3.0 EXISTING CONDITIONS

The Study Area is comprised of a leveled agricultural land at an elevation of approximately 65-ft above mean sea level. The Study Area is bound by Interstate 80 to the northwest, a stormwater basin and industrial site to the north, Pedrick Road to the east, and agricultural land to the south. The surrounding lands in general represent agricultural lands.

A shallow roadside ditch is located north of the Study Area and is directed through a culvert pipe into a box inlet structure in the northeastern corner of the Study Area. This box culvert drains to an off-site stormwater basin. A similarly shallow roadside feature is observable along Pedrick Road. The Study Area is dry land farmed and has been utilized as a hay field for a number of years and terrestrial plant communities in the Study Area are limited to agricultural lands and with ruderal fringes. During the April 2022 site visit the Study Area had been closely mowed, and by September it had been disked and was minimally vegetated. Scattered walnut trees (*Juglans sp*.) are located along the fringes of the Study Area along the Interstate 80 frontage.

3.1 Terrestrial Plant Communities

3.1.1 Agricultural

Dry farmed areas within the Study Area are regularly mowed and disked and are currently comprised of non-native annual grasses and weedy forbs. The primary crop appears to have been cultivated wheat (*Triticum aestivum*). In addition to the disked wheat, this vegetation community is dominated by tumbleweed (*Amaranthus albus*), Russian thistle (*Salsola tragus*), Johnsongrass (*Sorghum halepense*), common purslane (*Portulaca oleracea*), silver sheath knotweed (*Polygonum argyrocoleon*), alkali mallow (*Malvella leprosa*), filaree (*Erodium botrys*), Bermuda grass (*Cynodon dactylon*), prickly lettuce (*Lactuca serriola*), and winter vetch (*Vicia villosa*). Undisturbed areas along Pedrick Road and Highway 80 frontages include perennial ryegrass (*Festuca perennis*), filaree, wintervetch, yellow starthistle (*Centaurea solstitialis*), slender wild oat (*Avena barbata*), and (*Galium aparine*).

3.2 Hydrology

Surface water in the Study Area is driven by natural stormwater runoff and seasonal irrigation. The Study Area is flat without evidence of concentrated flows. A partially blocked roadside ditch along Pedrick Road connects to a drop inlet that drains to a detention basin associated with the industrial property north of the Study Area. The Study Area is located in the Lower American River Watershed (HUC 1802011) (USGS 1978).

3.3 National Wetlands Inventory

The National Wetlands Inventory (NWI) produces and distributes maps and other geospatial data to the public on American wetland and deepwater habitats, as well as monitor changes in these habitats through time as directed by the Emergency Wetlands Resources Act of 1986 (Public Law 99-645). The NWI is primarily compiled through the use of trained image analysts to identify and classify wetlands and deepwater habitats from aerial imagery and is not a substitute for a full field analysis. The NWI has not mapped any wetlands or other aquatic resources within the Study Area (USFWS 2023).

3.4 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2023a), three soil mapping units occur within the Study Area (**Figure 2**): (BrA) Brentwood clay loam, 0 to 2 percent slopes, (Ca) Capay silty clay loam, 0 percent slopes, MLRA 17, and (Yo) 0 to 4 percent slopes, MLRA 17. None of the mapped soil map units are listed in the "Hydric Soils of the United States" (NRCS 2023b) or contain recognized hydric inclusions.

3.5 Driving Directions

To access the Study Area from Sacramento, drive west on Interstate 80 to the Pedrick Road exit. Drive south on Pedrick Road over the freeway and the Study Area is located on the west side of the road.

4.0 RESULTS

No aquatic resources were delineated within the Study Area. Three data points were collected in a shallow roadside ditch along Pedrick Road. This ditch was designed to convey runoff from Pedrick Road into a storm drain inlet in the northeast corner of the Study Area. The ditch was partially blocked to the south and does not appear to convey regular flow as the surrounding land is relatively flat. This concrete drain inlet in the northeast corner of the Study Area receives runoff from a more substantial off-site ditch segment north of the Study Area, and directs these flows into a storm water detention basin. Date points DP-1, DP-2, and DP-3 were collected in the on-site portion of this roadside ditch. The on-site ditch has no OHWM, but is dominated by perennial ryegrass, a non-native annual grass that is classified as a facultative wetland plant species. Therefore, it does meet the wetland dominance test and is classified as containing hydrophytic vegetation. However, the loamy clay soils lacked hydric soil indicators, and are not included on the hydric soils list. The ditch does not meet the tree parameters for wetland status. With the exception of biotic crust at data point DP-1 the ditch lacks hydrology indicators. No evidence of ponding or saturation within the ditch was observed in a review of aerial imagery (Google Earth 2023).

An additional data point (DP-4) was collected in the fallow field based off saturation visible on the July 2021 aerial image (Google Earth 2023). This data point was dominated by weedy upland forbs and lacked hydric soils or wetland hydrology. The saturation visible on the aerial imagery appears to have been irrigation

overflow from the field to the south and not consistent enough support the development of a wetland in this location.

Data sheets are included in **Attachment A,** maps of the Study Area are included as **Figure 3** and **Attachment B,** and a list of the plant species observed in the Study Area with their wetland indicator status is included in **Attachment C**. Representative site photographs are available in **Attachment D**.

5.0 CONCLUSION

No wetlands or other waters were mapped within the Study Area. The shallow roadside ditch does not meet the hydrophytic vegetation, hydric soil, and wetland hydrology criteria outlined by the USACE.

The applicant is requesting an Approved Jurisdictional Determination for the site due to the lack of aquatic resources within the Study Area. The *Request for Aquatic Resource Verification or Jurisdictional Determination Form* is included in **Attachment E**.

6.0 REFERENCES

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual.* Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station. Vicksburg, Miss.

Google Earth. 2023. Google earth pro V 7.3.4.8642. (May 12, 2023). Latitude 38.482844°, Longitude -121.807263. SIO, NOAA, U.S. Navy, NGA, GEBCO. http://www.earth.google.com [accessed October 2023].

HistoricAerials.com. 2023. Viewer available at: https://www.historicaerials.com/viewer.

Jepson Flora Project (eds.) 2023. *Jepson eFlora*. Available on-line at: http://ucjeps.berkeley.edu/eflora/. [accessed October 2023].

Maxar 2022. *Aerial Photograph of the Study Area.* Imagery © 2022 Maxar, Dated 27 September 2022.

Soil Survey Staff, Natural Resources Conservation Service (NRCS), 2023a United States Department of Agriculture (NRCS). 2023a. *Web Soil Survey*. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed October 2023.

NRCS. 2023b. *Soil Data Access (SDA) Hydric Soils* List Available online at https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html. Accessed October 2023.

U.S. Army Corps of Engineers (USACE). 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers (USACE). 2008b. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. A Delineation Manual*. Prepared by R. W. Lichvar and S. M. McColley. ERDC/CRREL TR-08-12. Cold Regions Research and Engineering Laboratory.

U.S. Army Corps of Engineers (USACE). 2016. *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports*. U.S. Army Corps of Engineers, Sacramento District. Dated January 2016. Available online at: http://www.spk.usace.army.mil/Portals/12/documents/regulatory/jd/minimum-standards/Minimum_Standards_for_Delineation_with_Template-final.pdf

U.S. Army Corps of Engineers (USACE). 2016a. *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program*. Dated February 10, 2016. Available online at: http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/651327/updated-map-and-drawing-standards/.

U.S. Army Corps of Engineers 2023. National Wetland Plant List, version 3.4, http://wetlandplants.usace.army.mil/, U.S. Army Corps of Engineers Engineer Research and Development Center Cold Regions Research and Engineering Laboratory, Hanover, NH

U.S. Department of the Interior, Geological Survey (USGS). 1978. *Hydrologic Unit Map, State of California*. Geological Survey. Reston, Virginia.

U.S. Department of the Interior, Geological Survey (USGS). 2021. *Dixon, California* 7.5-minute Quadrangle. Geological Survey. Denver, Colorado.

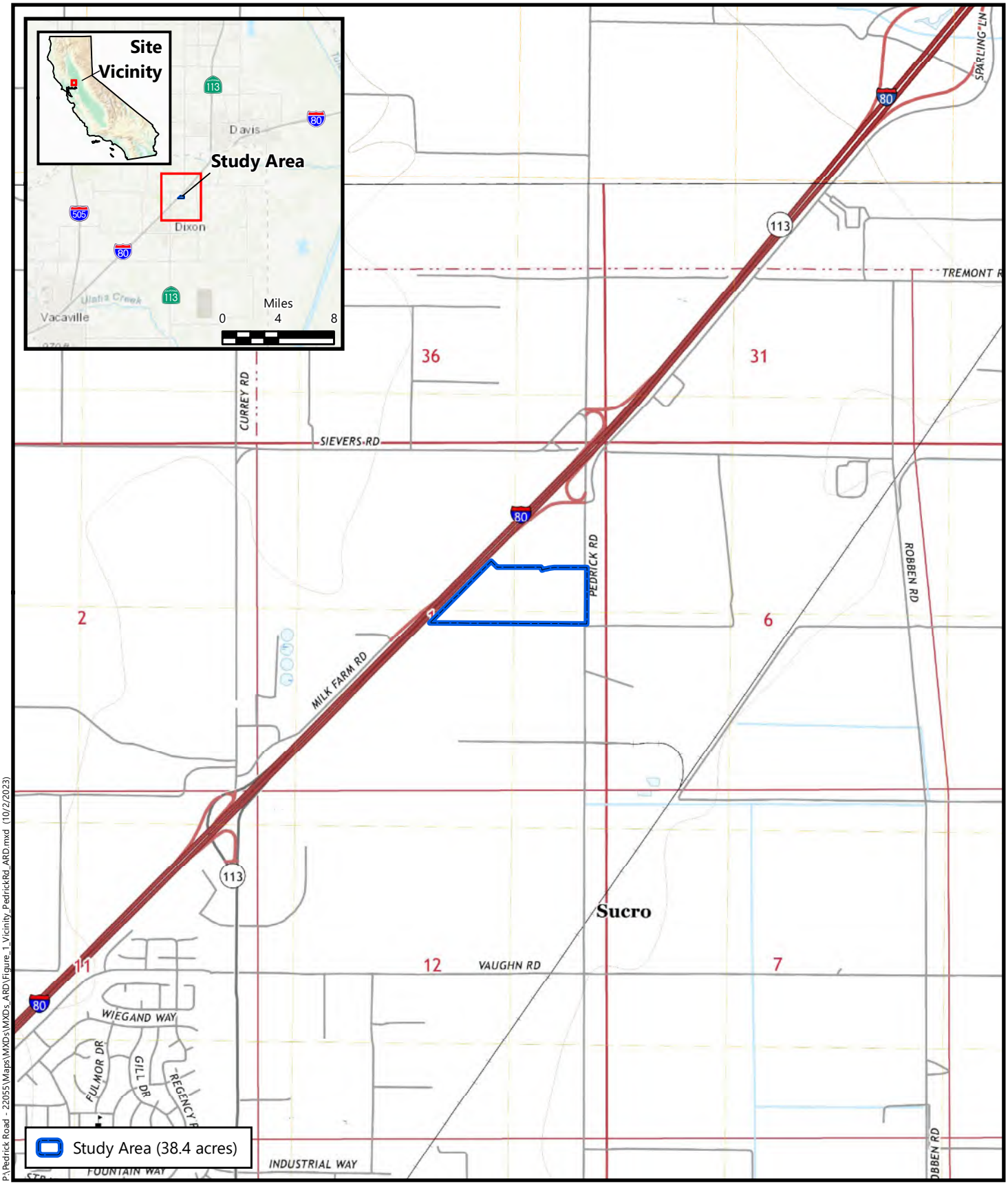
U.S. Fish and Wildlife Service. October 2023, National Wetland Inventory (NWI) wetlands mapper, https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper, accessed October 2023. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

Figures

Figure 1. Vicinity Map

Figure 2. Natural Resources Conservation Service Soils

Figure 3. Aquatic Resources



P:\Pedrick Road - 22055\Maps\MXDs\MXDs_ARD\Figure_1_Vicinity_PedrickRd_ARD.mxd (10/2/2023)

Source: United States Geologic Survey, 2021
"Dixon, California" 7.5-Minute Topographic Quadrangle
Section 1, Township 7 North, Range 1 East, MDBM
Latitude (NAD83): 38.482844°, Longitude (NAD83): -121.807263°

Figure 1
Site and Vicinity

Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING

P:\Pedrick Road - 22055\Maps\MXDs\MXDs_ARD\Figure_2_NRCS_PedrickRd_ARD.mxd (10/2/2023)

Soil Survey Source: *USDA, Soil Conservation Service. Soil Survey Geographic (SSURGO) database for Solano County, California*
Boundary Source: Morton and Pitalo
Aerial Source: Maxar, 27 September 2022

Figure 2
Natural Resources Conservation Service Soils

Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING

P:\Pedrick Road - 22055\Maps\MXDs\MXDs_ARD\Figure_3_AquaticResources_PedrickRd_ARD.mxd (10/11/2023)

N

Feet
0 200 400

Boundary Source: Morton and Pitalo
Aerial Source: Maxar, 27 September 2022

Figure 3
Aquatic Resources

Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING

Attachments

Attachment A. Arid West Wetland Determination Data Forms

Attachment B. Aquatic Resources Delineation

Attachment C. Plant Species Observed within the Study Area

Attachment D. Representative Site Photographs

Attachment E. Request for Aquatic Resource Verification or Jurisdictional Determination Form

Attachment A

Arid West Wetland Determination Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pedrick Road City/County: Dixon, Solano County Sampling Date: 9/2/2022
Applicant/Owner: Buzz Oats Construction State: Sampling Point: DP-1
Investigator(s): Bonnie Peterson Section, Township, Range: Section 10, Township 11 North, Range 6 East.
Landform (hillside, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRR C Lat: Long: Datum: NAD 83
Soil Map Unit Name: Yolo loam, 0 to 4 percent slopes, MLRA 17 NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No
Hydric Soil Present? Yes No X
Wetland Hydrology Present? Yes X No

Is the Sampled Area within a Wetland? **Yes** **No** X

Remarks:
Point selected in a roadside ditch adjacent to a rip rap drop inlet.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 1 meter sq.)			
1. *Epilobium brachycarpum*	5	No	FAC
2. *Lactuca serriola*	5	No	FACU
3. *Solanum vulgaris*	10	No	UPL
4. *Festuca perennis/ Lolium perenne*	70	Yes	FAC
5.			
6.			
7.			
8.			
	90 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 10

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	75	x 3 =	225
FACU species	5	x 4 =	20
UPL species	10	x 5 =	50
Column Totals:	90 (A)		295 (B)
Prevalence Index = B/A =			3.28

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
Prevalence Index is ≤3.0[1]
Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No**

Remarks:

SOIL

Sampling Point: DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4								Rock
4-18	2.5y 3/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ? Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- X Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pedrick Road City/County: Dixon, Solano County Sampling Date: 9/2/2022
Applicant/Owner: Buzz Oats Construction State: Sampling Point: DP-2
Investigator(s): Bonnie Peterson Section, Township, Range: Section 10, Township 11 North, Range 6 East.
Landform (hillside, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRR C Lat: Long: Datum: NAD 83
Soil Map Unit Name: Capay silty clay loam, 0 percent slopes, MLRA 17 NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No
Hydric Soil Present? Yes No X
Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? **Yes** **No** X

Remarks:
Point selected in a roadside ditch.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 1 meter sq.)			
1. *Brassica nigra*	5	No	UPL
2. *Lactuca serriola*	5	No	FACU
3. *Centaurea solstitialis*	10	No	UPL
4. *Festuca perennis/ Lolium perenne*	50	Yes	FAC
5. *Convolvulus arvensis*	2	No	UPL
6.			
7.			
8.			
	72 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	5	x 4 =	20
UPL species	17	x 5 =	85
Column Totals:	72 (A)		255 (B)
Prevalence Index = B/A =			3.54

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
Prevalence Index is ≤3.0[1]
Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No**

Remarks:

SOIL

Sampling Point: DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	2.5y 3/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pedrick Road City/County: Dixon, Solano County Sampling Date: 9/2/2022
Applicant/Owner: Buzz Oats Construction State: Sampling Point: DP-3
Investigator(s): Bonnie Peterson Section, Township, Range: Section 10, Township 11 North, Range 6 East.
Landform (hillside, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRR C Lat: Long: Datum: NAD 83
Soil Map Unit Name: Capay silty clay loam, 0 percent slopes, MLRA 17 NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No
Hydric Soil Present? Yes No X
Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? **Yes** **No** X

Remarks:
Point selected in a roadside ditch.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 1 meter sq.)			
1. *Festuca perennis/ Lolium perenne*	100	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	100 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	100	x 3 =	300
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		300 (B)
Prevalence Index = B/A =			3.00

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
Prevalence Index is ≤3.0[1]
Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No**

Remarks:

SOIL

Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5y 3/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pedrick Road City/County: Dixon, Solano County Sampling Date: 9/2/2022
Applicant/Owner: Buzz Oats Construction State: Sampling Point: DP-4
Investigator(s): Bonnie Peterson Section, Township, Range: Section 10, Township 11 North, Range 6 East.
Landform (hillside, terrace, etc.): Valley floor Local relief (concave, convex, none): Concave Slope (%): 1
Subregion (LRR): LRR C Lat: Long: Datum: NAD 83
Soil Map Unit Name: Capay silty clay loam, 0 percent slopes, MLRA 17 NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes No X
Hydric Soil Present? Yes No X
Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? **Yes** **No** X

Remarks:
Point selected in a signature on ariel imagery.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 1 meter sq.)			
1. *Amaranthus albus*	40	Yes	FACU
2. *Portulaca oleracea*	5	No	FAC
3. *Malvela leprosa*	5	No	FACU
4. *Sorghum halepense*	35	Yes	FACU
5. *Convolvulus arvensis*	10	No	UPL
6.			
7.			
8.			
	95 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	80	x 4 =	320
UPL species	10	x 5 =	50
Column Totals:	95 (A)		385 (B)
Prevalence Index = B/A =			4.05

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** **No** X

Remarks:

SOIL

Sampling Point: DP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10yr 3/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Soils are regularly disked.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Irrigation water present on ariel imagery

Attachment B

Aquatic Resources Delineation

P:\Pedrick Road - 220553\Maps\MXDs\MXDs_ARD\USACE_ARD_PedrickRd.mxd, jswager, 10/11/2023, 14:01

N

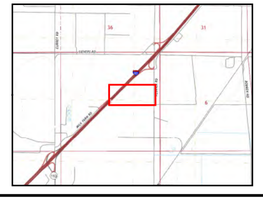
Feet
0 50 100 200

Map Scale: 1 inch = 100 feet (at 26"x14")
Coordinate System
NAD 1983 StatePlane California II FIPS 0402 Feet
Sources
Aerial : Maxar, 27 September 2022
Boundary : Morton and Pitalo

Delineation Performed by: B. Peterson
Map Prepared by: J.Swager
Date Map Prepared: 10/11/2023

Made in accordance with the *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program,* as amended on February 10, 2016

Prepared For:
Buzz Oates Construction, Inc.
555 Capitol Mall Suite 900
Sacramento, CA 95814



Study Area (38.4 acres)
Reference Coordinate (NAD83)
Data Point

Aquatic Resources (0.000 acre)
No Aquatic Resources in Study Area

Aquatic Resources Delineation
Pedrick Road
Dixon, Solano County, California

MADRONE ECOLOGICAL CONSULTING
8421 Auburn Boulevard, Suite 248
Citrus Heights, California 95610
(916) 822.3230 | www.madroneeco.com

Attachment C

Plant Species Observed within the Study Area

Plant Species Observed within the Study Area
15 April and 2 September 2022

Species Name	Common Name	Wetland Indicator Status
Carduus pycnocephalus subsp. pycnocephalus	Italian thistle	UPL
Lactuca serriola	Prickly lettuce	FACU
Pseudognaphalium luteoalbum	Pearly everlasting	-
Senecio vulgaris	Common groundsel	FACU
Amsinckia intermedia	Common fiddleneck	-
Brassica nigra	Black mustard	UPL
Acmispon americanus var. americanus	Spanish lotus	UPL
Lupinus bicolor	Miniature lupine	UPL
Trifolium hirtum	Rose clover	UPL
Vicia villosa	Hairy vetch, winter vetch	-
Erodium botrys	Filaree	FACU
Geranium dissectum	Cut leaf geranium	UPL
Juncus bufonius var. bufonius	Toad rush	-
Avena barbata	Slender wild oat	UPL
Avena sativa	Cultivated oat	-
Bromus hordeaceus	Soft chess	FACU
Elymus caput-medusae	Medusa head	UPL
Festuca microstachys	Pacific fescue	-
Festuca perennis	Rye grass	FAC
Hordeum marinum subsp. gussoneanum	Mediterranean barley	FAC
Hordeum murinum subsp. glaucum	Smooth barley	-
Poa annua	Annual blue grass	FAC
Galium aparine	Goose grass	FACU
Amaranthus albus	Tumbleweed	FACU
Centaurea solstitialis	Yellow star-thistle	UPL
Centromadia fitchii	Fitch's spikeweed	-
Raphanus raphanistrum	Jointed charlock	-
Convolvulus arvensis	Bindweed	UPL
Juglans regia	English walnut	UPL
Malvella leprosa	Alkali-mallow	FACU
Epilobium brachycarpum	Panicled willow-herb	UPL
Cynodon dactylon	Bermuda grass	FACU
Sorghum halepense	Johnson grass	FACU
Triticum aestivum	Cultivated wheat	-
Polygonum argyrocoleon	Persian knotweed	-
Polygonum aviculare	Knotweed, knotgrass	-
Rumex crispus	Curly dock	FAC
Portulaca oleracea	Purslane	FAC
Carduus pycnocephalus subsp. pycnocephalus	Italian thistle	UPL

Species Name	Common Name	Wetland Indicator Status
Lactuca serriola	Prickly lettuce	FACU
Pseudognaphalium luteoalbum	Pearly everlasting	-
Senecio vulgaris	Common groundsel	FACU
Amsinckia intermedia	Common fiddleneck	-
Brassica nigra	Black mustard	UPL
Acmispon americanus var. americanus	Spanish lotus	UPL
Lupinus bicolor	Miniature lupine	UPL
Trifolium hirtum	Rose clover	UPL
Vicia villosa	Hairy vetch, winter vetch	-
Erodium botrys	Filaree	FACU
Geranium dissectum	Cut leaf geranium	UPL
Juncus bufonius var. bufonius	Toad rush	-

Attachment D

Representative Site Photographs

Photo DP-1 – Photo taken 2 September 2022.

Photo DP-2 – Photo taken 2 September 2022.

Photo DP-3 – Photo taken 2 September 2022.

Photo DP-4 – Photo taken 2 September 2022.

Pedrick Road frontage including shallow roadside ditch– Photo taken 2 September 2022.

Typical upland agricultural field– Photo taken 2 September 2022.

Attachment E

Request for Aquatic Resource Verification or Jurisdictional Determination Form

REQUEST FOR AQUATIC RESOURCES DELINEATION VERIFICATION

OR JURISDICTIONAL DETERMINATION

A separate jurisdictional determination (JD) is not necessary to process a permit. An Approved Jurisdictional Determination (AJD) is required to definitively determine the extent of waters of the U.S. and is generally used to disclaim jurisdiction over aquatic resources that are not waters of the U.S., in cases where the review area contains no aquatic resources, and in cases when the recipient wishes to challenge the water of the U.S. determination on appeal. Either an Aquatic Resources Delineation Verification or a Preliminary Jurisdictional Determination (PJD) may be used when the recipient wishes to assume that aquatic resources are waters of the U.S. for the purposes of permitting. In some circumstances an AJD may require more information, a greater level of effort, and more time to produce. If you are unsure which product to request, please speak with your project manager or call the Sacramento District's general information line at (916) 557-5250.

I am requesting the product indicated below from the U.S. Army Corps of Engineers, Sacramento District, for the review area located at:

Street Address: Pedrick Road City: Dixon County: Solano
State: CA Zip: 95620 Section: 1 Township: 7 North Range: 5 East
Latitude (decimal degrees): 38.482844 Longitude (decimal degrees): -121.807263
The approximate size of the review area for the JD is 37 acres. **(Please attach location map)**

Choose one:
- (•) I own the review area
- ( ) I hold an easement or development rights over the review area
- ( ) I lease the review area
- ( ) I plan to purchase the review area
- ( ) I am an agent/consultant acting on behalf of the requestor
- ( ) Other: _____

Choose one product:
- (•) I am requesting an Aquatic Resources Delineation Verification
- ( ) I am requesting an Approved JD
- ( ) I am requesting a Preliminary JD
- ( ) I am requesting additional information to inform my decision about which product to request

Reason for request: (check all that apply)
- [ ] I need information concerning aquatic resources within the review area for planning purposes.
- [ ] I intend to construct/develop a project or perform activities in this review area which would be designed to avoid all aquatic resources.
- [ ] I intend to construct/develop a project or perform activities in this review area which would be designed to avoid those aquatic resources determined to be waters of the U.S.
- [ ] I intend to construct/develop a project or perform activities in this review area which may require authorization from the Corps; this request is accompanied by my permit application.
- [ ] I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district's list of navigable waters under Section 10 of the Rivers and Harbors Act of 1899 and/or is subject to the ebb and flow of the tide.
- [ ] My lender, insurer, investors, local unit of government, etc. has indicated that an aquatic resources delineation verification is inadequate and is requiring a jurisdictional determination.
- [ ] I intend to contest jurisdiction over particular aquatic resources and request the Corps confirm that these aquatic resources are or are not waters of the U.S.
- [x] I believe that the review area may be comprised entirely of dry land.
- [ ] Other: _____

Attached Information:
- [x] Maps depicting the general location and aquatic resources within the review area consistent with Map and Drawing Standards for the South Pacific Division Regulatory Program (Public Notice February 2016, http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/651327/updated-map-and-drawing-standards/)
- [x] Aquatic Resources Delineation Report, if available, consistent with the Sacramento District's Minimum Standards for Acceptance (Public Notice January 2016, http://1.usa.gov/1V68IYa)

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the review area. Your signature shall be an affirmation that you possess the requisite property rights for this request on the subject property.

*Signature: Bret Hogge Date: 10/12/2023
Name: Bret Hogge Company name: Buzz Oates Construction, LLC
Address: 555 Capitol Mall, Suite 900. Sacramento, CA 95814
Telephone: 916-379-3854 Email: brethogge@buzzoates.com

***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.
Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.
Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.
Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

January 12, 2024

Regulatory Division (SPK-2023-00812)

Buzz Oates Construction, LLC
Attn: Mr. Bret Hogge
555 Capitol Mall
Sacramento, California 95814
brethogge@buzzoates.com

Dear Mr. Hogge:

We are responding to your October 12, 2023, request for an approved jurisdictional determination for the *Pedrick Road Property* site. The approximately 37-acre project site is located near property address 8555 Pedrick Road, Latitude 38.48287°, Longitude -121.80736°, City of Dixon, California.

Based on available information, we concur with your aquatic resources delineation for the site, as depicted on the enclosed October 11, 2023, *Aquatic Resources Delineation Pedrick Road* drawing prepared by Madrone Ecological Consulting *(Enclosure).* No aquatic resources are present within the survey area. This letter verifies that the location and boundaries of wetlands were delineated consistent with the wetland definition at 33 CFR §328.3(c)(16), the 1987 *Corps of Engineers Wetlands Delineation Manual* (Wetlands Research Program Technical Report Y-87-1) and the applicable regional supplements; the location and boundaries of tidal waters conform with the high tide line defined at 33 CFR §328.3(c)(4); and the location and boundaries of non-tidal waters conform with the ordinary high water mark definition at 33 CFR §328.3(c)(7), Regulatory Guidance Letter 05-05, and any applicable regional guide.

This approved jurisdictional determination is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 Code of Federal Regulations (CFR) Part 331. A *Notification of Appeal Process (NAP) and Request for Appeal (RFA) Form* is attached below. If you request to appeal this determination, you must submit a completed RFA form to the South Pacific Division Office at the following address: Administrative Appeal Review Officer, Army Corps of Engineers, South Pacific Division, CESPD-PDO, 1455 Market Street, 2052B, San Francisco, California 94103-1399, Telephone: 415-503-6574, FAX: 415-503-6646.

In order for an RFA to be accepted by the Corps, we must determine that the form is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that the form was received by the Division Office **within 60 days** of the date of the NAP. It is not necessary to submit an RFA form to the Division Office unless you object to the determination in this letter.

We recommend that you provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

We appreciate feedback, especially about interaction with our staff and our processes.

Please refer to identification number SPK-2023-00812 in any correspondence concerning this project. If you have any questions, please contact Jeffrey Wang by email at *Jeffrey.H.Wang@usace.army.mil*, or telephone at (916) 557-5269. For program information or to complete our Customer Survey, visit our website at *www.spk.usace.army.mil/Missions/Regulatory.aspx*.

Sincerely,

Michael S. Jewell
Chief,
Regulatory Division

Enclosure
cc:
Ms. Bonnie Peterson, Madrone Ecological Consulting, *bpeterson@madroneeco.com*

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Buzz Oates Construction, LLC, Attn: Mr. Bret Hogge	File No.: SPK-2023-00812	Date: January 12, 2024

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
→	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I – The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at *http://www.usace.army.mil/cecw/pages/reg_materials.aspx* or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II – REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

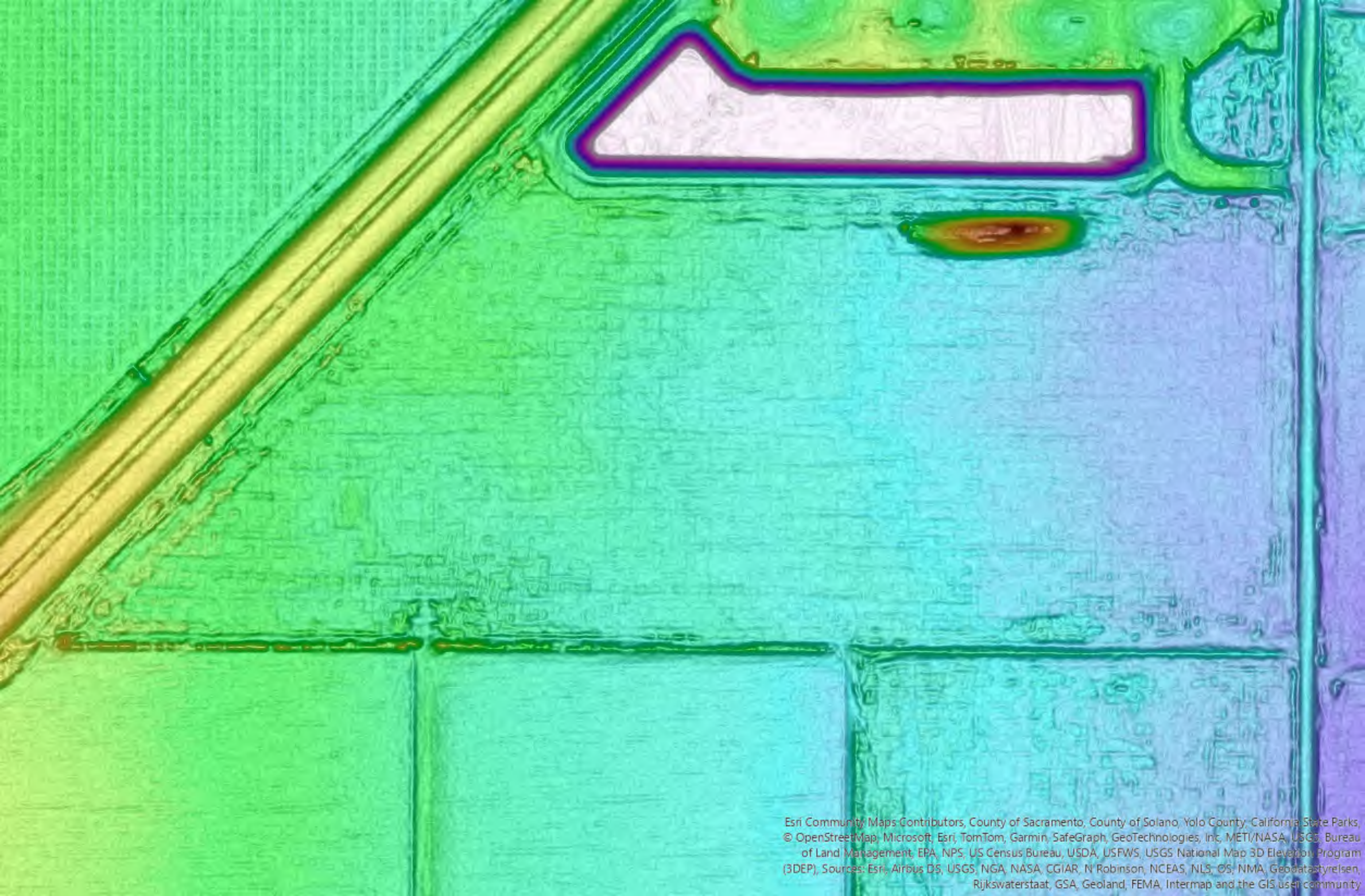
Jeffrey Wang
Regulatory Project Manager
CA Delta Section
U.S. Army Corps of Engineers
1325 J Street, Room 1827
Sacramento, CA 95814
Phone: (916) 557-5269, FAX 916-557-7803
Email: Jeffrey.H.Wang@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Travis Morse
Administrative Appeal Review Officer
U.S. Army Corps of Engineers
South Pacific Division
Phillip Burton Federal Building, Post Office Box 36023
450 Golden Gate Avenue
San Francisco, California 94102
Phone: 970-243-1199x1014, FAX: 971-241-2358
Email: W.Travis.Morse@usace.army.mil

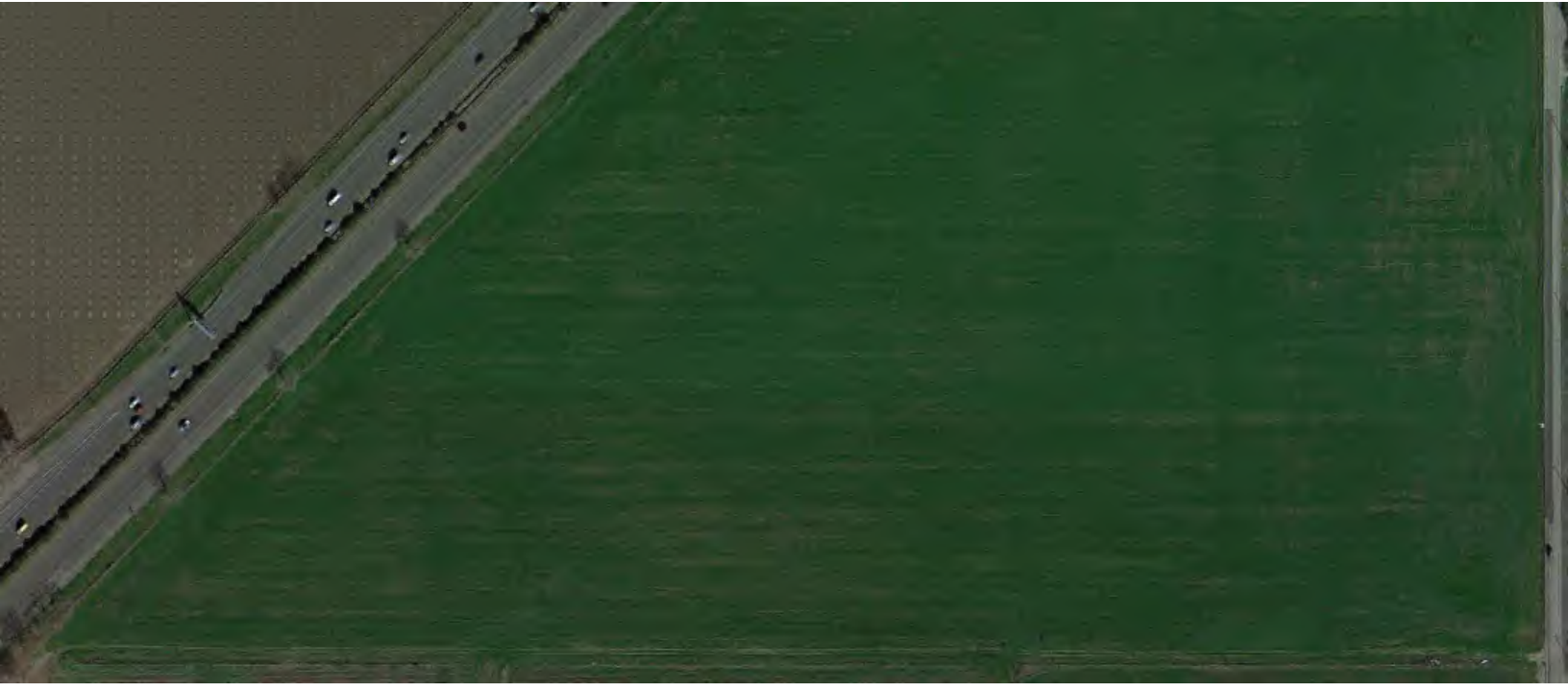
RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		


Esri Community Maps Contributors, County of Sacramento, County of Solano, Yolo County, California State Parks, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, USGS National Map 3D Elevation Program (3DEP), Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

01/21/2023
Source: Digital Globe

09/05/2023
Source: Digital Globe



February 2018
Source: Google Earth Pro

February, 2020
Source: Google Earth Pro

February 2022
Source: Google Earth Pro

APPENDIX C

GEOTECHNICAL EXPLORATION

PEDRICK ROAD WAREHOUSE
DIXON, CALIFORNIA

GEOTECHNICAL EXPLORATION

SUBMITTED TO
Mr. Joe Livaich
Buzz Oates
555 Capitol Mall, Suite 900
Sacramento, CA 95814

PREPARED BY
ENGEO Incorporated

June 21, 2022

PROJECT NO.
20357.000.001

Copyright © 2022 by ENGEO Incorporated. This document may not be reproduced in whole or in part by any means whatsoever, nor may it be quoted or excerpted without the express written consent of ENGEO Incorporated.

ENGEO
Expect Excellence

Project No.
20357.000.001

June 21, 2022

Mr. Joe Livaich
Buzz Oates
555 Capitol Mall, Suite 900
Sacramento, CA 95814

Subject: Pedrick Road Warehouse
Dixon, California

GEOTECHNICAL EXPLORATION

Dear Mr. Livaich:

ENGEO prepared this geotechnical report for Buzz Oates as outlined in our agreement dated May 5, 2022. We characterized the subsurface conditions at the site to provide the enclosed geotechnical recommendations for design.

From a geotechnical engineering viewpoint, in our opinion, the site is suitable for the proposed development, provided the geotechnical recommendations in this report are properly incorporated into the design plans and specifications. The primary geotechnical concern that could affect development on the site is expansive soil.

Our experience and that of our profession clearly indicate that the risk of costly design, construction, and maintenance problems can be significantly lowered by retaining the design geotechnical engineering firm to review the project plans and specifications and provide geotechnical observation and testing services during construction. Please let us know when working drawings are nearing completion and we will be glad to discuss these additional services with you.

If you have any questions or comments regarding this report, please call and we will be glad to discuss them with you.

Sincerely,

ENGEO Incorporated

Abram Magel, GE

Mark Gilbert, GE

am/mmg/ca

TABLE OF CONTENTS

LETTER OF TRANSMITTAL

1.0 INTRODUCTION 1
1.1 PURPOSE AND SCOPE 1
1.2 PROJECT LOCATION 1
1.3 PROJECT DESCRIPTION 1

2.0 FINDINGS 2
2.1 FIELD EXPLORATION 2
2.1.1 Borings 2
2.1.2 Percolation Tests 2
2.1.3 Cone Penetration Tests 3
2.2 GEOLOGY 3
2.3 SEISMICITY 4
2.4 SURFACE CONDITIONS 4
2.5 SUBSURFACE CONDITIONS 5
2.6 GROUNDWATER CONDITIONS 6
2.7 LABORATORY TESTING 6

3.0 CONCLUSIONS 6
3.1 EXPANSIVE SOIL 6
3.2 STORMWATER INFILTRATION 7
3.3 SEISMIC HAZARDS 7
3.3.1 Ground Rupture 7
3.3.2 Ground Shaking 7
3.3.3 Liquefaction 8
3.3.4 Ground Lurching 8
3.4 2019 CBC SEISMIC DESIGN PARAMETERS 8
3.5 SOIL CORROSION POTENTIAL 9

4.0 CONSTRUCTION MONITORING 10

5.0 EARTHWORK RECOMMENDATIONS 11
5.1 EXPANSIVE SOIL MITIGATION 11
5.2 GENERAL SITE CLEARING 11
5.3 OVER-OPTIMUM SOIL MOISTURE CONDITIONS 12
5.4 ACCEPTABLE FILL 12
5.5 FILL COMPACTION 12
5.5.1 Grading in Structural Areas 12
5.5.2 Underground Utility Backfill 13
5.5.3 Landscape Fill 13
5.6 LIME TREATMENT 13
5.7 SLOPE GRADIENTS 14
5.8 SURFACE DRAINAGE 14
5.9 STORMWATER BIORETENTION AREAS 14
5.10 LANDSCAPING CONSIDERATION 15

TABLE OF CONTENTS (Continued)

6.0 FOUNDATION RECOMMENDATIONS 15

6.1 FOOTING DIMENSIONS AND ALLOWABLE BEARING CAPACITY 16
6.2 WATERSTOP 16
6.3 REINFORCEMENT 16
6.4 LATERAL RESISTANCE 16
6.5 SETTLEMENT 17

7.0 SLABS-ON-GRADE 17

7.1 INTERIOR CONCRETE FLOOR SLABS 17

7.1.1 Minimum Design Section 17
7.1.2 Slab Moisture Vapor Reduction 17
7.1.3 Subgrade Modulus for Structural Slab Design 18

7.2 EXTERIOR FLATWORK 18
7.3 TRENCH BACKFILL 18

8.0 RETAINING WALLS 18

8.1 LATERAL SOIL PRESSURES 18
8.2 RETAINING WALL DRAINAGE 19
8.3 BACKFILL 19
8.4 FOUNDATIONS 19

9.0 PAVEMENT DESIGN 19

9.1 FLEXIBLE PAVEMENTS 19
9.2 RIGID PAVEMENTS 20
9.3 SUBGRADE AND AGGREGATE BASE COMPACTION 21
9.4 CUTOFF CURBS 21

10.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS 21

SELECTED REFERENCES

FIGURES

APPENDIX A – Boring Logs

APPENDIX B – Laboratory Test Data

APPENDIX C – CPT Data

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

We prepared this geotechnical report for design of Pedrick Road Warehouse in Dixon, California. As outlined in our agreement dated May 5, 2022, you authorized us to conduct the following scope of services.

- Service plan development
- Subsurface field exploration
- Percolation testing
- Soil laboratory testing
- Data analysis and conclusions
- Report preparation

For our use, we received the following:

- Preliminary Site Plan (Option D), prepared by RMW, dated April 8, 2022.
- Preliminary building loads, provided by Mathewson & Associates, Inc. via email on June 13, 2022.
- A.L.T.A./N.S.P.S. Land Title Survey prepared by Morton & Pitalo, Inc., dated March 2022.
- Preliminary Landscape Plan for TEC Equipment Dixon Truck Sales and Service Facility, prepared by James Ferguson Clabaugh, dated January 18, 2017.

This report was prepared for the exclusive use of our client and their consultants for design of this project. If any changes are made in the character, design, or layout of the development, we must be contacted to review the conclusions and recommendations contained in this report to evaluate whether modifications are recommended. This document may not be reproduced in whole or in part by any means whatsoever, nor may it be quoted or excerpted without our express written consent.

1.2 PROJECT LOCATION

Figure 1 displays a Site Vicinity Map. The site is located on the west side of Pedrick Road on the southeastern side of Interstate 80 (I-80).

Figure 2 shows site boundaries, proposed building and pavement areas, and our exploratory locations. Pedrick Road borders the site to the east, a commercial property borders the site to the north, I-80 borders the site to the west, and agricultural fields border the site to the south.

1.3 PROJECT DESCRIPTION

Based on our review of the Preliminary Site Plan, we understand that the project will include 4 one-story warehouse buildings, a stormwater detention basin, and paved parking and drive lanes. The large central warehouse is about 400,000 square feet and the smaller surrounding warehouses are about 50,000 square feet each. The warehouses will have concrete slab-on-grade floors, depressed trailer dock positions with retaining walls, and a 26-foot clear interior height. Preliminary structural loads indicate maximum perimeter loads (dead-plus-live) of

about 4,100 to 4,600 pounds per linear foot and maximum interior loads of about 43 to 86 kips. Grading plans are yet to be developed; however, we assume that only minor grading will be required. Based on discussion with Morton & Pitalo, we understand that the proposed detention basin will be approximately 10 feet deep and that there is consideration to enlarging the detention basins on the neighboring property to the north.

2.0 FINDINGS

2.1 FIELD EXPLORATION

Our field exploration included drilling ten borings and advancing four cone penetration tests (CPTs) at various locations on the site. Six of the borings, designated as P1 through P6 were converted into percolation test holes. The remaining four borings and four CPTs, 1-B1 through 1-B4 and 1-CPT1 through 1-CPT4, were performed within or near the footprint of the proposed warehouse buildings. We performed our field exploration between May 23 and May 27, 2022.

The locations of our explorations are shown on Figure 2. They were estimated by using Google Earth and a GPS-enabled cell phone; they should be considered accurate only to the degree implied by the method used.

2.1.1 Borings

We observed the drilling of 10 borings at the locations shown on the Site Plan, Figure 2. An ENGEO representative observed the drilling and logged the subsurface conditions at each location. We retained a truck-mounted B24 drill rig and crew to advance the borings. Borings 1-B1 through 1-B4 were advanced using a 4-inch-diameter solid-flight auger and Borings P1 through P4 were advanced using a 6-inch-diameter solid-flight auger. The borings were advanced to depths ranging from 5 to 26½ feet below existing grade.

We obtained bulk soil samples from drill cuttings and retrieved disturbed samples at various intervals in the borings using both standard penetration test (SPT) (2-inch-outside-diameter) and modified California (3-inch-outside-diameter) split-spoon samplers. The blow counts were obtained by dropping a 140-pound hammer through a 30-inch free fall. The sampler was driven 18 inches and the number of blows was recorded for each 6 inches of penetration. Unless otherwise indicated, the blows per foot recorded on the boring log represent the accumulated number of blows to drive the last 1 foot of penetration; the blow counts have not been converted using any correction factors. When sampler driving was difficult, penetration was recorded as the number of blows divided by inches penetrated.

The boring logs are included in Appendix A and depict the subsurface conditions at the exploration locations and during the time of exploration; however, subsurface conditions may vary with time.

2.1.2 Percolation Tests

We performed six percolation tests in the boreholes designated as P1 through P6. Tests P1 through P3 were located in the proposed basin on the west side of the site and P4 through P6 were located off site in the existing basin on the neighboring property to the north. Percolation testing was performed in general accordance with the EPA *Design Manual for Onsite Wastewater Treatment and Disposal Systems* (U.S. EPA, 1980). After drilling and logging the borings, we placed an approximately 2-inch-thick layer of open-graded gravel at the bottom of the borehole

and then a 3-inch-diameter perforated plastic pipe that extended to just above the ground surface. We presoaked the hole with water overnight prior to performing the percolation tests.

After presoaking, we filled the holes with water to approximately 12 inches above the top of the gravel. The water level was then measured until the percolation rate generally stabilized. At the end of each interval, additional water was added, as needed, to reset the water level to approximately 12 inches above the gravel. Based on the time interval between test readings and the difference in water level measurements, we calculated the field percolation rates for each test hole. We corrected the field percolation rates to vertical infiltration rates using the Porchet Method (Orange County, 2013). The infiltration data is summarized in Table 2.1.2-1 below; the values presented do not include a factor of safety.

TABLE 2.1.2-1: Infiltration Rates from Percolations Tests

TEST LOCATION	DEPTH OF TEST (FEET)	SOIL TYPE AT TEST DEPTH	INFILTRATION RATE (INCH/HOUR)
P1	10	Fat Clay (CH)	0.44
P2	10	Lean Clay (CL)	0.46
P3	10	Fat Clay (CH)	0.34
P4	5	Fat Clay (CH)	0.14
P5	5	Fat Clay (CH)	0.02
P6	5	Fat Clay (CH)	0.14

2.1.3 Cone Penetration Tests

We retained a track-mounted CPT rig to push the cone penetrometer at three locations to a maximum depth of about 52 feet. The CPT has a 20-ton compression-type cone with a 15-square-centimeter (cm^2) base area, an apex angle of 60 degrees, and a friction sleeve with a surface area of 225 cm^2. The cone, connected with a series of rods, was pushed into the ground at a near constant rate. Cone readings were taken at approximately 5-cm intervals with a penetration rate of 2 cm per second in accordance with ASTM D5778. Measurements include the tip resistance to penetration of the cone (Qc), the resistance of the surface sleeve (Fs), and pore pressure (U) (Robertson and Campanella, 1988). We also performed shear-wave velocity measurements in 1-CPT3. The CPT data are presented in Appendix C.

2.2 GEOLOGY

The site is located in the Great Valley geomorphic province. The Great Valley is an elongate, northwest-trending structural trough bound by the Coast Range on the west and the Sierra Nevada on the east. The northern portion of the Great Valley is commonly referred to as the Sacramento Valley. The Sacramento Valley has been and is presently being filled with alluvium transported by powerful river systems originating in the surrounding mountains. These sediments of various ages underlie the site and are estimated to be several thousand feet thick at the site (Helley and Harwood, 1982). The origin and character of these deposits is related to the paleo-climactic conditions and the nature of the ancient depositional environment.

Surface deposits at the site are mapped as Holocene alluvial fan deposits (Dawson, 2009), as shown in Figure 3. Holocene alluvial fan deposits are described as *sand, gravel, silt, and clay that are moderately to poorly sorted and moderately to poorly bedded.* Typical of the alluvial sequence in Sacramento Valley, underlying the Holocene deposits are older Pleistocene deposits.

Pleistocene alluvial fan deposits (11,700 to 42,000 years old) are mapped to the west of the site and are likely below the Holocene deposits. These Pleistocene alluvial formations consist of gravel, sand, silt, and clay that generally show evidence of aging such as increased density, weathering, and cementation (Helley and Harwood, 1985).

2.3 SEISMICITY

The northern California area contains numerous active earthquake faults. Nearby active faults include the Great Valley and Hunting Creek faults. An active fault is defined by the California Geologic Survey as one that has had surface displacement within Holocene time (about the last 11,700 years) (CGS, 2018). The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone and no known surface expression of active faults is believed to exist within the site. Fault rupture through the site; therefore, is not anticipated.

Although fault rupture is not anticipated, an earthquake in the region could generate ground shaking at the site. Numerous small earthquakes occur every year in the Northern California region and larger earthquakes have been recorded and can be expected to occur in the future. Figure 4 shows the approximate locations of faults and significant historical earthquake epicenters recorded in the region. The Uniform California Earthquake Rupture Forecast (UCERF3) estimates the 30-year probability for a magnitude 6.7 or greater earthquake in Northern California Region at approximately 95 percent (Field et al., 2015).

The table below summarizes the distance to the fault rupture surface (R_{rup}) and the associated moment magnitude for nearby seismic sources used for the National Seismic Hazard Maps, which are incorporated into the California Building Code (CBC). We obtained the data using the USGS Unified Hazard Tool (Dynamic Conterminous U.S. 2014 (update) (v4.2.0)) and deaggregated the hazard at the peak ground acceleration (PGA) for 2,475-year return period, and Site Class D. These results represent fault sources contributing at least one percent to the seismic hazard at the site; gridded or areal sources are not presented.

TABLE 2.3-1: Nearby Seismic Sources
(Latitude: 38.4828 Longitude: -121.8070)

SOURCE	R_{RUP}		MOMENT MAGNITUDE M_W
	(KM)	(MILES)	
Great Valley 06 (Midland) alt1 [0]	7	4	6.75
Great Valley 04a Trout Creek [2]	21	13	7.07
Hunting Creek – Berryessa [0]	37	23	7.20
Great Valley 03a Dunnigan Hills [0]	17	11	6.18
Great Valley 04b Gordon Valley [2]	23	14	6.34
Great Valley 04b Gordon Valley [1]	23	14	6.62

Source: USGS Unified Hazard Tool (USGS, n.d.)

2.4 SURFACE CONDITIONS

According to the Land Title Survey by Morton & Pitalo, the site slopes gently downward towards the southeast with surface grades ranging from approximately Elevation 61½ to 66 feet (NAVD88).

We observed the following site features during our field exploration.

- The site was an agricultural field that was recently disced. The disced ground surface was rough with desiccated clods of soil and dried grass/weeds.
- Overhead utility lines were located along the southern boundary of the site.
- The detention basin located on the neighboring property to the north was about 5 to 10 feet lower in elevation than the site and contained no water.

The photograph below shows the typical surface conditions at the time of performing our field exploration.

PHOTO 2.4-1: Typical Surface Conditions

2.5 SUBSURFACE CONDITIONS

All of our borings encountered clay at the ground surface that extended to a depth of at least about 4 feet. The near-surface clay was stiff to hard and ranged from low to high plasticity. Laboratory testing of the near-surface clay indicates that this soil exhibits medium to high expansion potential. In most of the borings, the clay extended to about 20 feet deep. Boring 1-B1 encountered a loose to medium dense sand layer from about 4 to 14 feet deep. The CPTs encountered similar subsurface conditions in the depth range explored by the borings. The deepest CPT, 1-CPT3, encountered fine-grained soil (predominantly clay) from about 3 to 52 feet deep.

Shear-wave velocity measurements were performed at 1-CPT3. We extrapolated the data to a depth of 100 feet and calculated an average shear-wave velocity of 863 feet per second using the formula provided in Section 20.4.1 of ASCE/SEI 7-16.

Consult the Site Plan and exploration logs for specific subsurface conditions at each location. We include our boring logs in Appendix A and CPT data in Appendix C. The boring logs contain the soil type, color, consistency, and visual classification in general accordance with the Unified Soil Classification System. The boring logs and CPT data graphically depict the subsurface conditions encountered at the time of the exploration.

2.6 GROUNDWATER CONDITIONS

We did not observe static or perched groundwater in any of our subsurface explorations, which extended to a maximum depth of about 52 feet. Fluctuations in the level of groundwater may occur due to variations in rainfall, irrigation practice, and other factors not evident at the time measurements were made.

2.7 LABORATORY TESTING

We performed laboratory tests on selected soil samples to evaluate their engineering properties. For this project, we performed moisture content, sieve, dry density, plasticity index, resistance value (R-value), and soil corrosion potential testing. Moisture content, plasticity index, fines content, and dry density results are recorded on the boring logs in Appendix A. Individual laboratory test reports are included in Appendix B.

3.0 CONCLUSIONS

From a geotechnical engineering viewpoint, in our opinion, the site is suitable for the proposed development, provided the geotechnical recommendations in this report are properly incorporated into the design plans and specifications. The primary geotechnical concern that could affect development on the site is expansive soil. We summarize our conclusions below.

3.1 EXPANSIVE SOIL

We observed potentially expansive clay near the surface of the site in all of our borings. Our laboratory testing indicates that this soil exhibits medium to high shrink/swell potential with variations in moisture content.

Expansive soil changes in volume with changes in moisture. They can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. To reduce the potential for damage to the planned buildings, we recommend that the upper 18 inches of the building pad extending at least 5 feet laterally beyond building areas be underlain by low expansive fill. Due to the relatively flat nature of the site, selective grading to mitigate expansive soil may not be practical and imported fill may be recommended. In lieu of importing low expansive fill, it may be cost effective to lime treat the upper 18 inches of the building pad to reduce the expansion potential of the on-site soil.

Expansive soil generally provides poor subgrade support for pavement, as indicated by the low R-value laboratory test results included in Appendix B. A low R-value results in thicker pavement structural sections than a higher R-value. If desired to reduce the pavement section thickness, the subgrade can be lime-treated to increase the R-value for design. We provide lime treatment recommendations in Section 5.6 and provide pavement design options in Section 9.

We have also provided specific grading recommendations for compaction of clay soil at the site. The purpose of these recommendations is to reduce the swell potential of the clay by compacting the soil at a higher moisture content and controlling the amount of compaction. Expansive soil mitigation recommendations are presented in Section 5.1 of this report.

3.2 STORMWATER INFILTRATION

As described in Section 2.1.2, we performed percolation tests to determine infiltration rates for use in designing stormwater detention basins. The infiltration rates varied from 0.02 to 0.46 inch/hour, with slightly higher infiltration rates measured at locations P1 through P3 compared to P4 through P6. We recommend that a conservative factor of safety (reduction factor) be applied to the actual rates for determination of the design infiltration rate. Infiltration in detention basins is known to decrease over time, largely due to sedimentary particles accumulating at the infiltration surface. In addition, the variability in test procedures and soil deposits need to be considered in the overall performance of the infiltration system. The civil engineer should select a factor of safety commensurate with the risk of potential flooding or discharge.

3.3 SEISMIC HAZARDS

Potential seismic hazards resulting from a nearby moderate to major earthquake can generally be classified as primary and secondary. The primary effect is ground rupture, also called surface faulting. Common secondary seismic hazards include ground shaking, liquefaction, and ground lurching. The following sections present a discussion of these hazards as they apply to the site. Based on topographic and lithologic data, the risk of regional subsidence or uplift, lateral spreading, landslides, tsunamis, flooding, or seiches is considered low to negligible at the site.

3.3.1 Ground Rupture

Since there are no known active faults crossing the property and the site is not located within an Earthquake Fault Special Study Zone, it is our opinion that ground rupture is unlikely at the subject property.

3.3.2 Ground Shaking

An earthquake of moderate to high magnitude generated within the region could cause considerable ground shaking at the site, similar to that which has occurred in the past. To mitigate the shaking effects, structures should be designed using sound engineering judgment and the 2019 California Building Code (CBC) requirements, as a minimum. Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead and live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures should be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage. Conformance to the current building code recommendations does not constitute any kind of guarantee that significant structural damage would not occur in the event of a maximum magnitude earthquake; however, it is reasonable to expect that a well-designed and well-constructed structure will not collapse or cause loss of life in a major earthquake (SEAOC, 1999).

3.3.3 Liquefaction

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soil most susceptible to liquefaction is clean, loose, saturated, uniformly graded, fine-grained sand. Based on the depth to groundwater being over 50 feet deep, we judge the potential for liquefaction at the site is low during seismic shaking.

3.3.4 Ground Lurching

Ground lurching is a result of the rolling motion imparted to the ground surface during energy released by an earthquake. Such rolling motion can cause ground cracks to form in weaker soil. The potential for the formation of these cracks is considered greater at contacts between deep alluvium and bedrock. Such an occurrence is possible at the site as in other locations in the region, but based on the site location, it is our opinion that the offset is expected to be minor. We provide recommendations for foundation and pavement design in this report that are intended to reduce the potential for adverse impacts from lurch cracking.

3.4 2019 CBC SEISMIC DESIGN PARAMETERS

The 2019 CBC utilizes seismic design criteria established in the ASCE/SEI Standard *Minimum Design Loads and Associated Criteria for Buildings and Other Structures* (ASCE 7-16). Based on the subsurface conditions encountered and shear-wave velocity measurements, we characterized the site as Site Class D.

ASCE 7-16 requires a site-specific ground-motion hazard analysis for Site Class D sites with a mapped S_1 value greater than or equal to 0.2. However, Section 11.4.8 of ASCE 7-16 and Supplement 3 provide an exception to this requirement. A site-specific ground-motion hazard analysis is not required where the value of the parameter S_{M1} determined by Equation 11.4-2 of ASCE 7-16 and shown in Table 3.4-1 below is increased by 50 percent for developing the mapped Risk-Targeted Maximum Considered Earthquake (MCE_R) spectral response, calculating S_{D1}, and evaluating C_s in accordance with Chapter 12 of ASCE 7-16.

In Table 3.4-1 below, we provide the CBC seismic parameters based on the United States Geological Survey's (USGS) Seismic Design Maps for your use. When using this table, consideration should be given to exceptions in Section 11.4.8 of ASCE 7-16, as described above.

TABLE 3.4-1: 2019 CBC Seismic Design Parameters
Latitude: 38.4828 Longitude: -121.8070

PARAMETER	VALUE
Site Class	D
Mapped MCE_R Spectral Response Acceleration at Short Periods, S_S (g)	0.943
Mapped MCE_R Spectral Response Acceleration at 1-second Period, S_1 (g)	0.355
Site Coefficient, F_a	1.123
Site Coefficient, F_v	*1.945**
MCE_R Spectral Response Acceleration at Short Periods, S_{MS} (g)	1.059
MCE_R Spectral Response Acceleration at 1-second Period, S_{M1} (g)	*0.69**
Design Spectral Response Acceleration at Short Periods, S_{DS} (g)	0.706

PARAMETER	VALUE
Design Spectral Response Acceleration at 1-second Period, S_{D1} (g)	*0.46**
Mapped MCE Geometric Mean (MCE_G) Peak Ground Acceleration, PGA (g)	0.395
Site Coefficient, F_{PGA}	1.205
MCE_G Peak Ground Acceleration adjusted for Site Class effects, PGA_M (g)	0.476
Long period transition-period, T_L (sec)	8

*The parameters above should only be used for calculation of T_s, determination of Seismic Design Category, and, when taking the exceptions under Items 1 and 2 of ASCE 7-16 Section 11.4.8 (Supplement 3 https://ascelibrary.org/doi/epdf/10.1061/9780784414248.sup3).

We recommend that we collaborate with the structural engineer of record to further evaluate the effects of taking the exception on the structural design and identify the need for performing a site-specific ground-motion hazard analysis. We can prepare a proposal for a site-specific ground-motion hazard analysis, if requested.

3.5 SOIL CORROSION POTENTIAL

As part of this study, we obtained representative soil samples and submitted them to an analytical lab for determination of pH, minimum resistivity, sulfate content, and chloride content. The results are included in Appendix B and summarized in the table below.

TABLE 3.5-1: Corrosivity Test Results

SAMPLE LOCATION	DEPTH (FEET)	pH[1]	MINIMUM RESISTIVITY[1] (OHMS-CM)	CHLORIDE[2] (PPM)	SULFATE[3] (PPM)
1-B2	3	7.40	1,530	1.1	18.8
1-B3	3½	7.35	1,340	1.4	13.8

[1] CA DOT Test 643; [2] CA DOT Test 422; [3] CA DOT Test 417

The 2019 CBC references the 2014 American Concrete Institute Manual, ACI 318-14, Section 19.3.1 for concrete durability requirements. ACI Table 19.3.1.1 provides the following exposure categories and classes, and ACI Table 19.3.2.1 provides requirements for concrete in contact with soil based upon the exposure class.

The 2019 CBC references the 2014 American Concrete Institute Manual, ACI 318-14, Section 19.3.1 for concrete durability requirements. ACI Table 19.3.1.1 provides the following exposure categories and classes, and Table 19.3.2.1 provides requirements for concrete in contact with soil based upon the exposure class.

TABLE 3.5-2: ACI Table 19.3.1.1: Exposure Categories and Classes

CATEGORY	SEVERITY	CLASS	CONDITION
F Freezing and thawing	Not Applicable	F0	Concrete not exposed to freezing-and-thawing cycles
	Moderate	F1	Concrete exposed to freezing-and-thawing cycles and occasional exposure to moisture
	Severe	F2	Concrete exposed to freezing-and-thawing cycles and in continuous contact with moisture

CATEGORY	SEVERITY	CLASS	CONDITION	
	Very Severe	F3	Concrete exposed to freezing-and-thawing cycles and in continuous contact with moisture and exposed to deicing chemicals	
			WATER- SOLUBLE SULFATE IN SOIL % BY WEIGHT	**DISSOLVED SULFATE IN WATER MG/KG (PPM)**
S Sulfate	Not applicable	S0	$SO_4 < 0.10$	$SO_4 < 150$
	Moderate	S1	$0.10 \leq SO_4 < 0.20$	$150 \leq SO_4 \leq 1,500$ seawater
	Severe	S2	$0.20 \leq SO_4 \leq 2.00$	$1,500 \leq SO_4 \leq 10,000$
	Very severe	S3	$SO_4 > 2.00$	$SO_4 > 10,000$
			CONDITION	
P Requiring low permeability	Not applicable	P0	In contact with water where low permeability is not required.	
	Required	P1	In contact with water where low permeability is required.	
C Corrosion protection of reinforcement	Not applicable	C0	Concrete dry or protected from moisture	
	Moderate	C1	Concrete exposed to moisture but not to external sources of chlorides	
	Severe	C2	Concrete exposed to moisture and an external source of chlorides from deicing chemicals, salt, brackish water, seawater, or spray from these sources	

In accordance with the criteria presented in the table above, the soil is categorized as F0 freeze-thaw class, S0 sulfate exposure class, P0 exposure class, and C1 corrosion class. Cement type, water-cement ratio, and concrete strength are not specified for these ranges.

Considering a 'Not Applicable' sulfate exposure, there is no requirement for cement type or water-cement ratio; however, a minimum concrete compressive strength of 2,500 psi is specified by the building code. For this sulfate range, we recommend Type II cement and a concrete mix design for foundations and building slabs-on-grade that incorporates a maximum water-cement ratio of 0.50. It should be noted; however, that the structural engineering design requirements for concrete may result in more stringent concrete specifications.

The resistivity measurements indicate the soil is considered severely to very severely corrosive, according to the National Association of Corrosion Engineers' interpretation of resistivity (Roberge, 2006).

If desired to investigate this further, we recommend a corrosion consultant be retained to evaluate if specific corrosion recommendations are advised for the project.

4.0 CONSTRUCTION MONITORING

Our experience and that of our profession clearly indicate that the risk of costly design, construction, and maintenance problems can be significantly lowered by retaining the design geotechnical engineering firm to:

1. Review the final grading and foundation plans and specifications prior to construction to evaluate whether our recommendations have been implemented, and to provide additional or modified recommendations, as needed. This also allows us to check if any changes have

occurred in the nature, design or location of the proposed improvements and provides the opportunity to prepare a written response with updated recommendations.

2. Perform construction monitoring to check the validity of the assumptions we made to prepare this report. Earthwork operations should be performed under the observation of our representative to check that the site is properly prepared, the selected fill materials are satisfactory, and that placement and compaction of the fill has been performed in accordance with our recommendations and the project specifications. Sufficient notification to us prior to earthwork is important.

If we are not retained to perform the services described above, then we are not responsible for any party's interpretation of our report (and subsequent addenda, letters, and verbal discussions).

5.0 EARTHWORK RECOMMENDATIONS

As used in this report, relative compaction refers to the in-place dry unit weight of soil expressed as a percentage of the maximum dry unit weight of the same soil, as determined by the ASTM D1557 laboratory compaction test procedure, latest edition. Compacted soil is not acceptable if it is unstable; it should exhibit only minimal flexing or pumping, as observed by an ENGEO representative. The term "moisture condition" refers to adjusting the moisture content of the soil by either drying if too wet or adding water if too dry.

We define "structural areas" as any area sensitive to settlement of compacted soil. These areas include, but are not limited to building pads, sidewalks, pavement areas, loading docks, and retaining walls.

We define "expansive" soil as fine-grained soil with a plasticity index of 12 or greater and "low expansive" soil as soil with a plasticity index less than 12.

5.1 EXPANSIVE SOIL MITIGATION

We recommend that structural elements, such as foundations, slabs-on-grade, and pavements be designed for highly expansive soil conditions.

We recommend constructing the upper 18 inches of building pads with low expansive fill. As an alternative to importing low expansive fill for grading building pads, it may be cost effective to lime treat the upper 18 inches of the finished building pad and to 5 feet laterally beyond. See Section 5.6 for specific lime treatment recommendations.

To reduce expansion potential of compacted fill, we recommend that clay on site be compacted at a slightly lower relative compaction at a moisture content well over optimum, as detailed in Section 5.5.

Our foundations recommendations in Section 6, slab-on-grade recommendations in Section 7, and pavement recommendations in Section 9 account for the expansive soil conditions.

5.2 GENERAL SITE CLEARING

Areas to be developed should be cleared of surface and subsurface deleterious materials, including existing building foundations, slabs, buried utility and irrigation lines, pavements, debris, and designated trees, shrubs, and associated roots. Clean and backfill excavations extending

below the planned finished site grades with suitable material compacted to the recommendations presented in Section 5.5. ENGEO should be retained to observe and test backfilling.

Following clearing, the site should be stripped to remove surface organic materials. Strip organics from the ground surface to a depth of at least 2 to 3 inches below the surface. Remove stripping from the site or, if considered suitable by the landscape architect and owner, use them in landscape fill.

It may also be feasible to mulch organics in place, depending on the amount and type of vegetation present at the time of grading as well as the proposed mulching method. If desired, ENGEO can evaluate site vegetation at the time of grading to assess the feasibility of mulching organics in place. In general, we recommend that the organics content be reduced to no more than 3 percent by weight.

5.3 OVER-OPTIMUM SOIL MOISTURE CONDITIONS

The contractor should anticipate encountering excessively over-optimum (wet) soil moisture conditions during winter or spring grading, or during or following periods of rain. Wet soil can make proper compaction difficult or impossible. Wet soil conditions can be mitigated by:

- Frequent spreading and mixing during warm dry weather,
- Mixing with drier materials,
- Mixing with a lime, lime-flyash, or cement product, or
- Stabilizing with aggregate or geotextile stabilization fabric, or both.

Options 3 and 4 should be evaluated by ENGEO prior to implementation.

5.4 ACCEPTABLE FILL

On-site soil material is suitable as fill material provided it is processed to remove concentrations of organic material, debris, and particles greater than 8 inches in maximum dimension.

Imported fill materials should meet the above requirements and have a plasticity index less than 12 and at least 20 percent passing the No. 200 sieve. Allow ENGEO to sample and test proposed imported fill materials at least 5 days prior to delivery to the site.

5.5 FILL COMPACTION

5.5.1 Grading in Structural Areas

Areas to receive fill should be scarified to a depth of 8 inches, moisture conditioned, and recompacted to provide adequate bonding with the initial lift of fill. Fill should be placed with a loose lift thickness no greater than 8 inches. The following compaction recommendations should be used for the placement and compaction of fill.

TABLE 5.5.1-1: Compaction and Moisture Content Requirements

DESCRIPTION	SOIL	RECOMMENDED RELATIVE COMPACTION (%)	MINIMUM MOISTURE CONTENT (PERCENTAGE POINTS ABOVE OPTIMUM)
Grading in Structural Areas	Expansive	87 to 92	4
	Low Expansive	90 or greater	1
Upper 6 inches of Pavement Subgrade	Expansive	90 or greater	4
	Low Expansive	95 or greater	1
Pavement Aggregate Base and Slab Subbase	Caltrans Class 2 AB	95 or greater	0

Optimum moisture is the moisture content corresponding to the maximum dry density. We recommend that the expansive soil be compacted at higher than optimum moisture contents as shown above to reduce potential swell.

5.5.2 Underground Utility Backfill

The contractor is responsible for conducting trenching and shoring in accordance with CALOSHA requirements. Project consultants involved in utility design should specify pipe bedding materials.

Place and compact trench backfill in structural areas as follows.

- Trench backfill should have a maximum particle size of 6 inches.
- Moisture condition fill outside the trench to the moisture content specified in Table 5.5.1-1.
- Place fill in loose lifts not exceeding 12 inches.
- Compact fill to the relative compaction specified in Table 5.5.1-1.

Where utility trenches cross underneath buildings, we recommend that a plug be placed within the trench backfill to help prevent the normally granular bedding materials from acting as a conduit for water to enter beneath the building. The plug should be constructed using a sand cement slurry (minimum 28-day compressive strength of 500 psi) or relatively impermeable native soil for pipe bedding and backfill. We recommend that the plug extend for a distance of at least 3 feet in each direction from the point where the utility enters the building perimeter.

Jetting of backfill is not an acceptable means of compaction. We may allow thicker loose lift thicknesses based on acceptable density test results, where increased effort is applied to rocky fill, or for the first lift of fill over pipe bedding.

5.5.3 Landscape Fill

Process, place, and compact fill in accordance with Sections 5.5.1, except compact to at least 85 percent relative compaction (ASTM D1557).

5.6 LIME TREATMENT

Where lime treatment of the soil is used to enhance slab-on-grade and pavement subgrade support, we recommend uniformly mixing the subgrade soil with at least 4 percent high calcium lime by dry weight. The soil should be moisture conditioned to at least 3 percentage points above

the optimum moisture content before mixing. The mixing should be performed in accordance with the current version of Caltrans Standard Specifications with the following exceptions.

- Following mixing, the treated soil should be allowed to fully hydrate prior to compaction.
- Following hydration, the treated soil should be compacted to not less than 95 percent relative compaction at a moisture content at least 2 percentage points above the optimum to a non-yielding surface.

5.7 SLOPE GRADIENTS

Construct final slope gradients to 2:1 (horizontal:vertical) or flatter. The contractor is responsible to construct temporary construction slopes in accordance with CALOSHA requirements.

5.8 SURFACE DRAINAGE

The project civil engineer is responsible for designing surface drainage improvements. With regard to geotechnical engineering issues, we recommend that finish grades be sloped away from buildings and pavements to the maximum extent practical to reduce the potentially damaging effects of expansive soil. The latest California Building Code Section 1804.4 specifies that pervious surfaces have a minimum slope of 5 percent away from foundations. As a minimum, we recommend the following:

- Discharge roof downspouts into closed conduits and direct away from foundations to appropriate drainage devices.
- Do not allow water to pond near foundations, pavements, or exterior flatwork.

5.9 STORMWATER BIORETENTION AREAS

If bioretention areas are implemented, we recommend that, when practical, they be planned a minimum of 5 feet away from structural site improvements, such as buildings, streets, retaining walls, and sidewalks/driveways. When this is not practical, bioretention areas located within 5 feet of structural site improvements can either:

- Be constructed with structural side walls capable of withstanding the loads from the adjacent improvements, or
- Incorporate filter material compacted to between 85 and 90 percent relative compaction and a waterproofing system designed to reduce the potential for moisture transmission into the subgrade soil beneath the adjacent improvement.

The retaining wall structures adjacent to the bioretention basins should be a cast-in-place or CMU wall system that would not allow water to freely pass through the wall.

We recommend that each of the bioretention basins and swales incorporate a waterproofing system lining the excavation and a subdrain, or other storm drain system, to collect and convey water to an approved outlet. The waterproofing system should cover the bioretention area excavation in such a manner as to reduce the potential for moisture transmission beneath the adjacent improvements.

Site improvements located adjacent to bioretention areas that are underlain by base rock, sand, or other imported granular materials, should be designed with a deepened edge that extends to the bottom of the imported material underlying the improvement.

Bioretention system internal slopes should follow the slope guidelines described in Section 5.7 of this report.

Given the nature of bioretention systems and possible proximity to improvements, we recommend we be retained to review design plans and provide testing and observation services during the installation of linings, compaction of the filter material, and connection of designed drains.

It should be noted that the contractor is responsible for conducting all excavation and shoring in a manner that does not cause damage to adjacent improvements during construction and future maintenance of the bioretention areas. As with any excavation adjacent to improvements, the contractor should reduce the exposure time such that the improvements are not detrimentally impacted.

5.10 LANDSCAPING CONSIDERATION

As the near-surface soil is moderately to highly expansive, we recommend greatly restricting the amount of surface water infiltration near structures, pavements, flatwork, and slabs-on-grade. This may be accomplished by:

- Selecting landscaping that requires little or no watering, especially within 3 feet of structures, slabs-on-grade, or pavements.
- Using low precipitation sprinkler heads.
- Regulating the amount of water distributed to lawn or planter areas by installing timers on the sprinkler system.
- Providing surface grades to drain rainfall or landscape watering to appropriate collection systems and away from structures, slabs-on-grade, or pavements.
- Preventing water from draining toward or ponding near building foundations, slabs-on-grade, or pavements.
- Avoiding open planting areas within 3 feet of the building perimeter.

We recommend that these items be incorporated into the landscaping plans.

6.0 FOUNDATION RECOMMENDATIONS

Provided the upper 18 inches of building pads consist of low expansive fill or lime treated soil, then the proposed warehouse buildings can be supported on continuous and/or isolated spread footings with a concrete slab-on-grade floor.

6.1 FOOTING DIMENSIONS AND ALLOWABLE BEARING CAPACITY

We recommend the minimum footing dimensions in Table 6.1-1 below.

TABLE 6.1-1: Minimum Footing Dimensions

FOOTING TYPE	MINIMUM DEPTH* (INCHES)	MINIMUM WIDTH (INCHES)
Continuous	24	12
Isolated	24	18

* below lowest adjacent pad grade

Minimum footing depths shown above are taken from lowest adjacent pad grade. The cold joint between the exterior footing and slab-on-grade should be located at least 4 inches above adjacent exterior grade.

Design foundations recommended above for a maximum allowable bearing pressure of 4,000 pounds per square foot (psf) for dead-plus-live loads. Increase this bearing capacity by one-third for the short-term effects of wind or seismic loading.

The maximum allowable bearing pressure is a net value; the weight of the footing may be neglected for design purposes. Footings located adjacent to utility trenches should have their bearing surfaces below an imaginary 1:1 (horizontal:vertical) plane projected upward from the bottom edge of the trench to the footing.

6.2 WATERSTOP

If a two-pour system is used for footings and slab, the cold joint between the exterior footing and slab-on-grade should be located at least 4 inches above adjacent finish exterior grade. If this is not done, then we recommend the addition of a waterstop between the two pours to reduce moisture penetration through the cold joint and migration under the slab. Use of a monolithic pour would eliminate the need for the waterstop.

6.3 REINFORCEMENT

The structural engineer should design footing reinforcement to support the intended structural loads without excessive settlement. Reinforce continuous footings with top and bottom steel to provide structural continuity and to permit spanning of local irregularities. At a minimum, design continuous footings to structurally span a clear distance of 5 feet.

To help resist expansive soil movement, reinforce continuous footings with at least four No. 4 steel reinforcement bars, two top and two bottom.

6.4 LATERAL RESISTANCE

Lateral loads may be resisted by friction along the base and by passive pressure along the sides of foundations. The passive pressure is based on an equivalent fluid pressure in pounds per cubic foot (pcf). We recommend the following allowable values for design:

- Passive Lateral Pressure: 300 pcf
- Coefficient of Friction: 0.25

The above allowable values include a factor of safety of 1.5. Increase the above values by one-third for the short-term effects of wind or seismic loading.

Passive lateral pressure should not be used for footings on or above slopes.

6.5 SETTLEMENT

Provided our report recommendations are followed and given the proposed construction (Section 1.3), we estimate total and differential foundation settlements to be less than approximately 1 and ½ inch, respectively.

7.0 SLABS-ON-GRADE

7.1 INTERIOR CONCRETE FLOOR SLABS

7.1.1 Minimum Design Section

We anticipate that the operation of the warehouse facilities will include the use of heavy equipment and storage systems on the interior of the buildings. We recommend that a structural engineer design interior concrete slabs-on-grade as structural slabs for the anticipated interior floor loads. At a minimum, we recommend the following.

- Provide a minimum section of 6 inches of Portland Cement concrete over 6 inches of aggregate base (such as Caltrans Class 2 Aggregate Base) compacted to at least 95 percent relative compaction.
- Place minimum steel reinforcing of No. 3 rebar on 18-inch centers each way within the middle third of the slab to help control the width of shrinkage cracking that inherently occurs as concrete cures.

The structural engineer should provide the final design thickness, joint spacing, and reinforcement for any structural loads, including traffic, forklift, and/or rack loads.

7.1.2 Slab Moisture Vapor Reduction

When buildings are constructed with concrete slab-on-grade, water vapor from beneath the slab will migrate through the slab and into the building. This water vapor can be reduced but not stopped. Vapor transmission can negatively affect floor coverings and lead to increased moisture within a building. When water vapor migrating through the slab would be undesirable, such as at office areas or where floor coverings may be applied, we recommend the following.

- Install a vapor retarder membrane directly beneath the slab-on-grade sealed at all seams and pipe penetrations and connected to all footings. Vapor retarders shall conform to Class A vapor retarder in accordance with ASTM E1745, latest edition, *Standard Specification for Plastic Water Vapor Retarders used in Contact with Soil or Granular Fill under Concrete Slabs*. The vapor retarder should be underlain by at least 6 inches of aggregate base, as recommended in Section 7.1.1
- Use a concrete water-cement ratio for slabs-on-grade of no more than 0.50.
- Provide inspection and testing during concrete placement to check that the proper concrete and water cement ratio are used.

- Moist cure slabs for a minimum of 3 days or use other equivalent curing specified by the structural engineer.

The structural engineer should be consulted as to the use of a layer of clean sand or pea gravel (less than 5 percent passing the U.S. Standard No. 200 Sieve) placed on top of the vapor retarder membrane to assist in concrete curing.

7.1.3 Subgrade Modulus for Structural Slab Design

Provided the site earthwork is conducted in accordance with the recommendations of this report, a subgrade modulus of 200 psi/in can be used for structural slab design.

7.2 EXTERIOR FLATWORK

Exterior flatwork includes items such as concrete sidewalks, steps, and outdoor courtyards exposed to foot traffic only. Provide a minimum section of 4 inches of concrete over 4 inches of aggregate base. Compact the aggregate base to at least 95 percent relative compaction (ASTM D1557). Thicken flatwork edges to at least 8 inches to help control moisture variations in the subgrade and place wire mesh or rebar within the middle third of the slab to help control the width and offset of cracks. Construct control and construction joints in accordance with current Portland Cement Association Guidelines.

7.3 TRENCH BACKFILL

Backfill and compact all trenches below building slabs-on-grade and to 5 feet laterally beyond any edge in accordance with Section 5.5.2.

8.0 RETAINING WALLS

8.1 LATERAL SOIL PRESSURES

Design proposed retaining walls to resist lateral earth pressures from adjoining natural materials and/or backfill and from any surcharge loads. Provided that adequate drainage is included as recommended below, design walls restrained from movement at the top to resist an equivalent fluid pressure of 60 pounds per cubic foot (pcf). In addition, design restrained walls to resist an additional uniform pressure equivalent to one half of any surcharge loads applied at the surface.

Design unrestrained retaining walls with adequate drainage to resist an equivalent fluid pressure of 45 pcf plus one third of any surcharge loads.

The above lateral earth pressures assume level backfill conditions and sufficient drainage behind the walls to prevent any build-up of hydrostatic pressures from surface water infiltration and/or a rise in the groundwater level. If adequate drainage is not provided, we recommend that an additional equivalent fluid pressure of 40 pcf be added to the values recommended above for both restrained and unrestrained walls. Damp-proofing of the walls should be included in areas where wall moisture would be problematic.

Construct a drainage system, as recommended below, to reduce hydrostatic forces behind the retaining wall.

8.2 RETAINING WALL DRAINAGE

Construct either graded rock drains or geosynthetic drainage composites behind the retaining walls to reduce hydrostatic lateral forces. For rock drain construction, we recommend two types of rock drain alternatives.

- A minimum 12-inch-thick layer of Class 2 Permeable Filter Material (Caltrans Specification 68-2.02F) placed directly behind the wall.
- A minimum 12-inch-thick layer of washed, crushed rock with 100 percent passing the ¾-inch sieve and less than 5 percent passing the No. 4 sieve. Envelop rock in a minimum 6-ounce, nonwoven geotextile filter fabric.

For both types of rock drains:

- Place the rock drain directly behind the walls of the structure.
- Extend rock drains from the wall base to within 12 inches of the top of the wall.
- Place a minimum of 4-inch-diameter perforated pipe (glued joints and end caps) at the base of the wall, inside the rock drain and fabric, with perforations placed down.
- Place pipe at a gradient at least 1 percent to direct water away from the wall by gravity to a drainage facility.

ENGEO should review and approve geosynthetic composite drainage systems prior to use.

8.3 BACKFILL

Backfill behind retaining walls should be placed and compacted in accordance with Section 5.5. Use light compaction equipment within 5 feet of the wall face. If heavy compaction equipment is used, the walls should be temporarily braced to avoid excessive wall movement.

8.4 FOUNDATIONS

Retaining walls may be supported on continuous footings designed in accordance with recommendations presented in Section 6.1 and 6.4, except that the minimum footing width should be increased to 18 inches.

9.0 PAVEMENT DESIGN

9.1 FLEXIBLE PAVEMENTS

We obtained two representative bulk samples of the near-surface soil and performed R-value tests to provide data for pavement design. The results of the tests are included in Appendix B and indicate R-values of 6 and 7. Based on these test results and considering the predominance of expansive clay at the site, it is our opinion that an R-value of 5 is applicable for design. Using estimated traffic indexes for various pavement loading requirements, we developed the following recommended flexible pavement sections using Topic 633 of the Caltrans Highway Design Manual (including the asphalt factor of safety), presented in the table below. The table includes recommended pavement sections for native soil subgrade and lime-treated subgrade.

TABLE 9.1-1: Recommended Asphalt Concrete Pavement Sections

TRAFFIC INDEX	NATIVE SOIL SUBGRADE		LIME-TREATED SUBGRADE*	
	ASPHALT CONCRETE (INCHES)	CLASS 2 AGGREGATE BASE (INCHES)	ASPHALT CONCRETE (INCHES)	CLASS 2 AGGREGATE BASE (INCHES)
5	3	10	3	4
6	3½	13	3½	4
7	4	15½	4	4½
8	5	17½	5	5
9	5½	20½	5½	6½

* Assumed R-value of 50 for lime-treated subgrade

The civil engineer should determine the appropriate traffic indexes based on the estimated traffic loads and frequencies.

9.2 RIGID PAVEMENTS

We recommend that rigid pavement be used in heavily loaded exterior traffic areas of the warehouse facility such as truck parking, loading, and travel lanes. Using various daily truck traffic, we developed the following recommended rigid pavement sections using the ACI *Guide for the Design and Construction of Concrete Site Paving for Industrial and Trucking Facilities* (ACI, 2017), presented in the tables below. Table 9.2-1 includes recommended rigid pavement sections for pavement on native soil subgrade and Table 9.2-2 includes recommended rigid pavement sections for pavement on 12 inches of lime-treated subgrade.

TABLE 9.2-1: Recommended Rigid Pavement Sections on Native Subgrade

NO. OF TRUCKS PER DAY	CONCRETE (INCHES)	CLASS 2 AGGREGATE BASE (INCHES)	MAX. JOINT SPACING (FEET)
50	6½	8	13
100	7	8	14
200	7	8	14
500	7½	8	15
1000	8	8	15

TABLE 9.2-2: Recommended Rigid Pavement Sections on 12 inches of Lime-Treated Subgrade

NO. OF TRUCKS PER DAY	CONCRETE (INCHES)	CLASS 2 AGGREGATE BASE (INCHES)	MAX. JOINT SPACING (FEET)
50	6	4	12
100	6½	4	13
200	6½	4	14
500	7	4	15
1000	7½	4	15

The recommendations above assume jointed plain concrete pavement with no dowels and a minimum compressive strength of 3,000 psi. We recommend that control joints be spaced and constructed in accordance with ACI guidelines.

9.3 SUBGRADE AND AGGREGATE BASE COMPACTION

Compact finish subgrade and aggregate base in accordance with Section 5.5.1. Aggregate Base should meet the requirements for ¾-inch maximum Class 2 AB in accordance with Section 26-1.02B of the latest Caltrans Standard Specifications.

9.4 CUTOFF CURBS

Saturated pavement subgrade or aggregate base can cause premature failure or increased maintenance of pavements. This condition often occurs where landscape areas directly abut and drain toward pavements. If desired to install pavement cutoff barriers, they should be considered where pavement areas lie downslope of any landscape areas that are to be sprinklered or irrigated and should extend to a depth of at least 4 inches below the base rock layer. Cutoff barriers may consist of deepened concrete curbs or deep-root moisture barriers.

If reduced pavement life and greater than normal pavement maintenance is acceptable to the owner, then the cutoff barrier may be eliminated.

10.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

This report presents geotechnical recommendations for design of the improvements discussed in Section 1.3 for the Pedrick Road Warehouse project. If changes occur in the nature or design of the project, we should be allowed to review this report and provide additional recommendations, if any. It is the responsibility of the owner to transmit the information and recommendations of this report to the appropriate organizations or people involved in design of the project, including but not limited to developers, owners, buyers, architects, engineers, and designers. The conclusions and recommendations contained in this report are solely professional opinions and are valid for a period of no more than 2 years from the date of report issuance.

We strived to perform our professional services in accordance with generally accepted principles and practices currently employed in the area; there is no warranty, express or implied. There are risks of earth movement and property damages inherent in building on or with earth materials. We are unable to eliminate all risks; therefore, we are unable to guarantee or warrant the results of our services.

This report is based upon field and other conditions discovered at the time of report preparation. We developed this report with limited subsurface exploration data. We assumed that our subsurface exploration data are representative of the actual subsurface conditions across the site. Considering possible underground variability of soil and groundwater, additional costs may be required to complete the project. We recommend that the owner establish a contingency fund to cover such costs. If unexpected conditions are encountered, ENGEO must be notified immediately to review these conditions and provide additional and/or modified recommendations, as necessary.

Our services did not include excavation sloping or shoring, soil volume change factors, flood potential, or a geohazard exploration. In addition, our geotechnical exploration did not include work to determine the existence of possible hazardous materials. If any hazardous materials are encountered during construction, the proper regulatory officials must be notified immediately.

This document must not be subject to unauthorized reuse; that is, reusing without written authorization of ENGEO. Such authorization is essential because it requires ENGEO to evaluate the document's applicability given new circumstances, not the least of which is passage of time.

Actual field or other conditions will necessitate clarifications, adjustments, modifications or other changes to ENGEO's documents. Therefore, ENGEO must be engaged to prepare the necessary clarifications, adjustments, modifications or other changes before construction activities commence or further activity proceeds. If ENGEO's scope of services does not include on-site construction observation, or if other persons or entities are retained to provide such services, ENGEO cannot be held responsible for any or all claims arising from or resulting from the performance of such services by other persons or entities, and from any or all claims arising from or resulting from clarifications, adjustments, modifications, discrepancies or other changes necessary to reflect changed field or other conditions.

We determined the lines designating the interface between layers on the exploration logs using visual observations. The transition between the materials may be abrupt or gradual. The exploration logs contain information concerning samples recovered, indications of the presence of various materials such as clay, sand, silt, rock, existing fill, etc., and observations of groundwater encountered. The field logs also contain our interpretation of the subsurface conditions between sample locations. Therefore, the logs contain both factual and interpretative information. Our recommendations are based on the contents of the final logs, which represent our interpretation of the field logs.

SELECTED REFERENCES

American Concrete Institute (ACI). (2014). Building Code Requirements for Structural Concrete (ACI 318-14). ACI Committee 318 Structural Building Code.

American Concrete Institute (ACI). (2017). Guide for the Design and Construction of Concrete Site Paving for Industrial and Trucking Facilities (ACI 330.2R-17). May 2017.

American Society of Civil Engineers (ASCE). (2017). Minimum Design Loads for Buildings and Other Structures, ASCE Standard, ASCE/SEI 7-16.

American Society of Testing and Materials (ASTM). Annual Book of Standards.

California Building Standards Commission. (2019). California Building Code 2019, Volumes 1 and 2. Sacramento, California.

California Department of Transportation (Caltrans). (2014). Highway Design Manual. Sacramento, California.

California Department of Transportation (Caltrans). (2018). Standard Specification. Sacramento, California.

California Geologic Survey (CGS). (2018). Special Publication 42, Earthquake Fault Zones, A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California.

Dawson, T.E. (2009). Preliminary Geologic Map of the Lodi 30' x 60' Quadrangle, California. California Geological Survey. Scale 1:100,000. Revised September 28, 2009.

Field et al. (2015). Long-Term Time-Dependent Probabilities for the Third Uniform California Earthquake Rupture Forecast (UCERF3). Bulletin of the Seismological Society of America, Vol 105, No. 2A, pp. 511-543.

Harwood, D.S. and Helley, E.J. (1982). Preliminary structure contour map of the Sacramento Valley, California showing major Late Cenozoic structural features and depth to basement. Map Scale 1:250,000. Open-File Report 82-737.

Helley, E.J., and Harwood, D.S. (1985). Geologic map of the late Cenozoic deposits of the Sacramento Valley and Northern Sierran Foothills, California [map]. Map Scale 1:62,500. U.S. Geological Survey, Miscellaneous Field Studies Map MF-1790.

Orange County. (2013). Technical Guidance Document for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans. December 20, 2013.

Roberge, P. (2006). Corrosion Basics: An Introduction, 2nd Edition. National Association of Corrosion Engineers.

Structural Engineers Association of California (SEAOC). (1999). Recommended Lateral Force Requirements and Commentary (Blue Book).

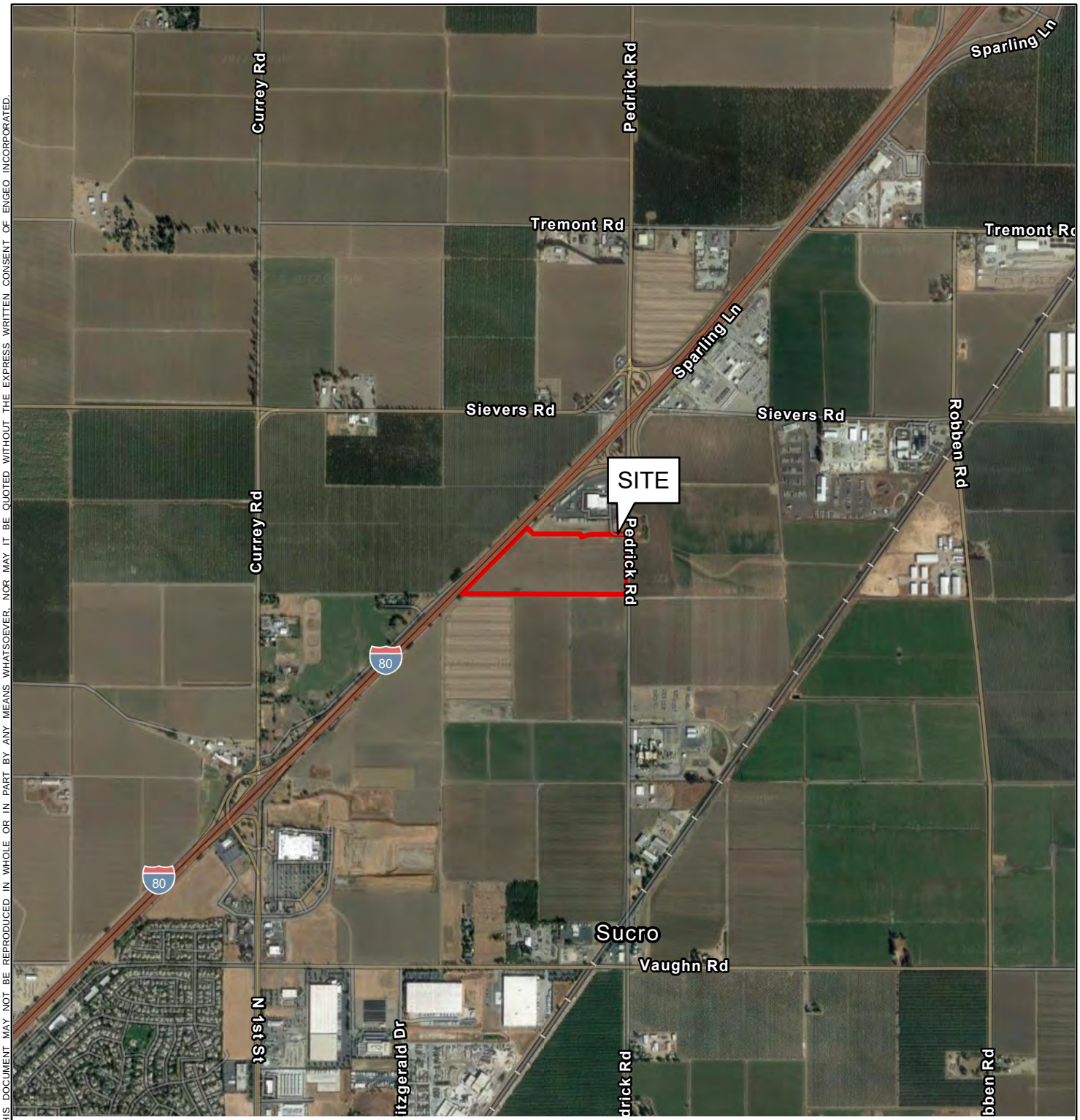
SELECTED REFERENCES (Continued)

U.S. Environmental Protection Agency (U.S. EPA). (1980). Design Manual for Onsite Wastewater Treatment and Disposal Systems.

U.S. Geologic Survey (USGS). (n.d.). Unified Hazard Tool. Accessed June 7, 2022 from https://earthquake.usgs.gov/hazards/interactive/index.php.

FIGURES

FIGURE 1: Vicinity Map
FIGURE 2: Site Plan
FIGURE 3: Regional Geologic Map
FIGURE 4: Regional Faulting and Seismicity



0 1,000 2,000
FEET

N

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 6/3/2021

COPYRIGHT @ 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

ENGEO
Expect Excellence

VICINITY MAP

PEDRICK ROAD WAREHOUSE

DIXON, CALIFORNIA

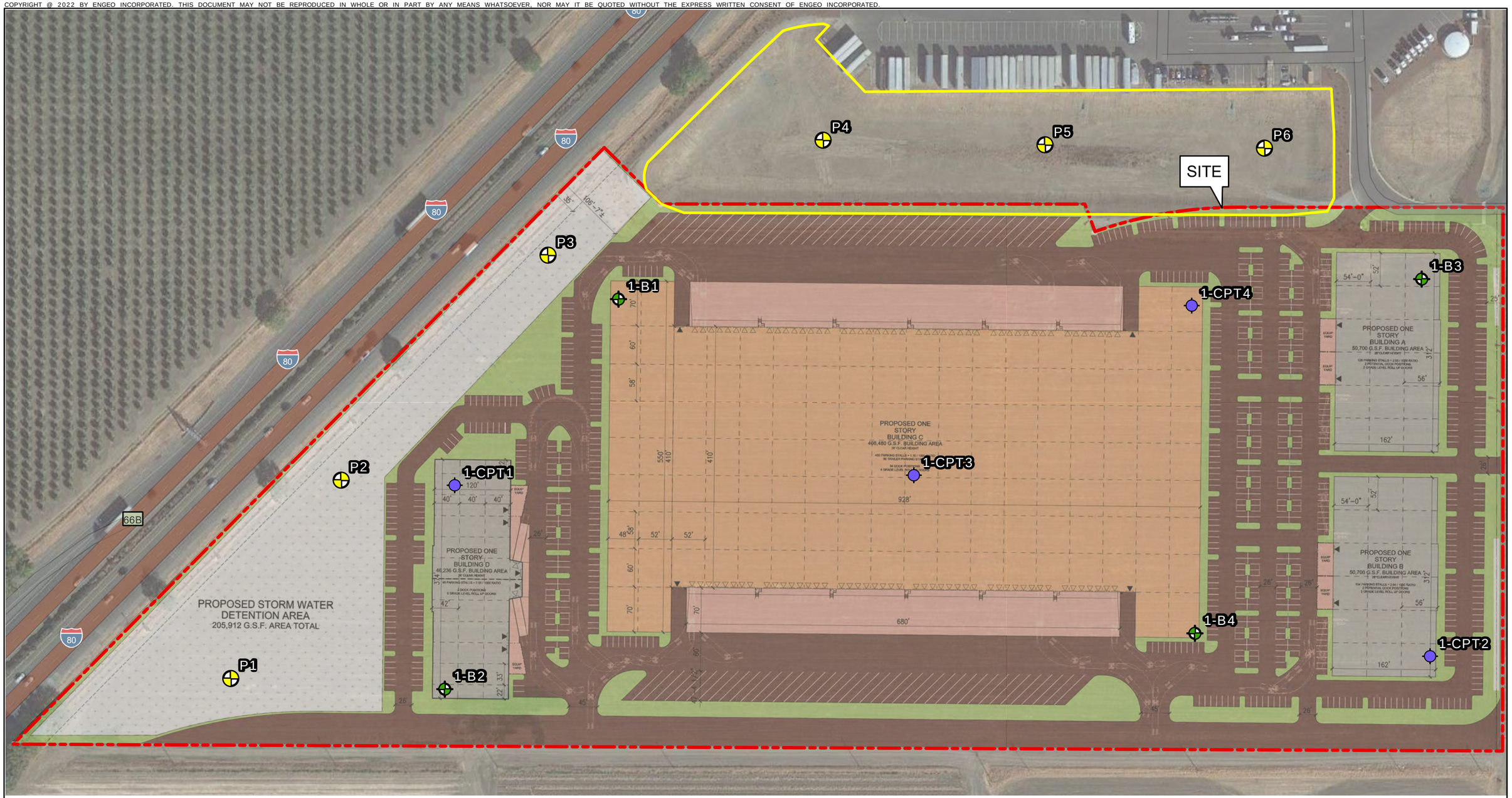
PROJECT NO. :	20357.000.001
SCALE:	AS SHOWN
DRAWN BY: JV	CHECKED BY: MMG

FIGURE NO. 1

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20357\20357000001\GEOTECH\GEX\20357000001_GEX.APRX
LAYOUT: VICINITY USER: JVERGARA

ORIGINAL FIGURE PRINTED IN COLOR

COPYRIGHT @ 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- BORING (ENGEO, 2022)
- CONE PENETRATION TEST (ENGEO, 2022)
- BORING AND PERCOLATION TEST (ENGEO, 2022)
- OFFSITE DETENTION BASIN

N

0 75 150

FEET

BASE MAP SOURCE: GOOGLE EARTH MAPPING SERVICE 10/21/2020 AND RMW 2022

ENGEO Expect Excellence

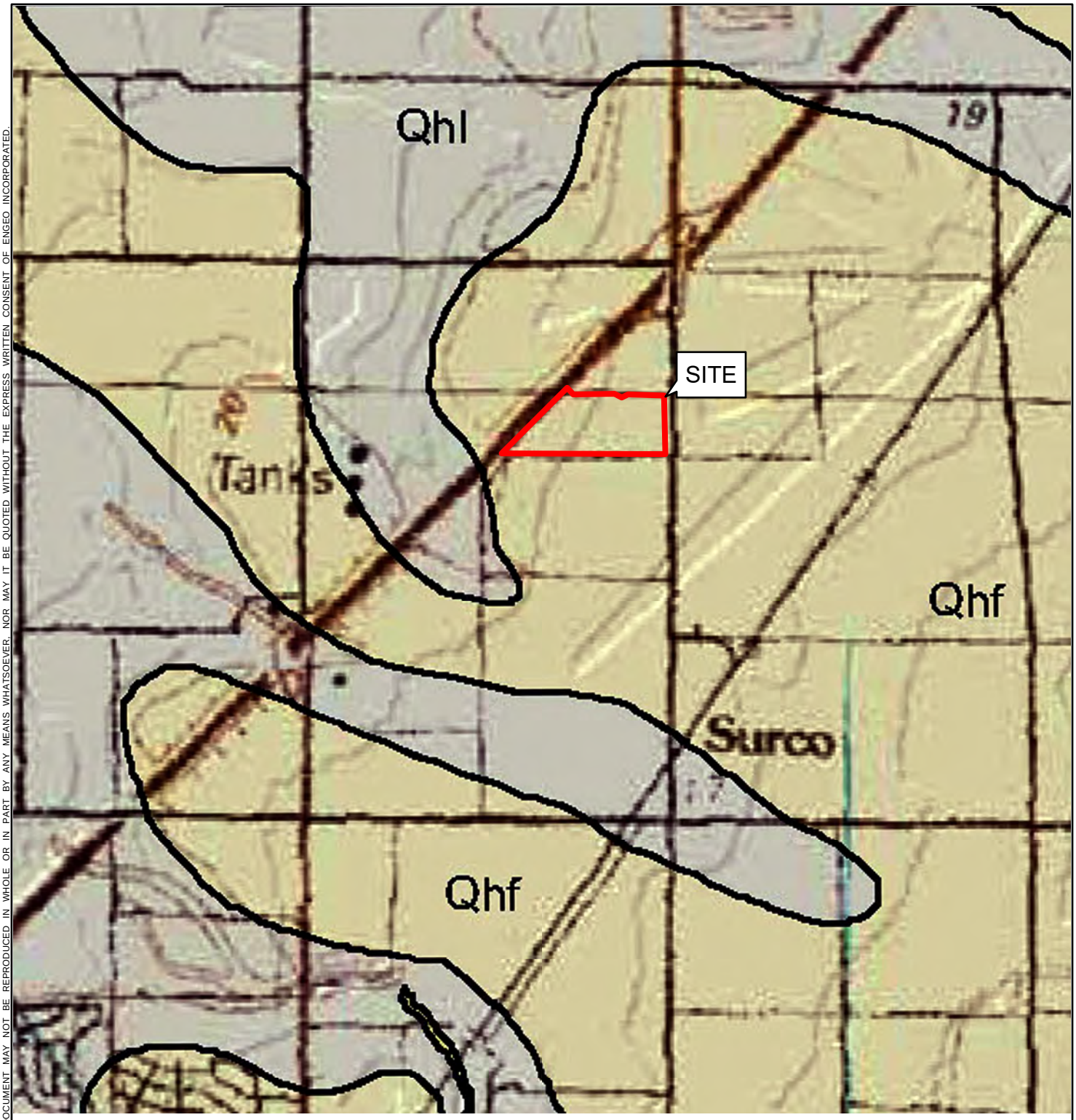
SITE PLAN
PEDRICK ROAD WAREHOUSE
DIXON, CALIFORNIA

PROJECT NO. : 20357.000.001		FIGURE NO. 2
SCALE: AS SHOWN		
DRAWN BY: JV	CHECKED BY: MMG	

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20357\20357000001\GEOTECH\GEX\20357000001_GEX.APRX
LAYOUT: B - SIZE LANDSCAPE USER: JVERGARA

ORIGINAL FIGURE PRINTED IN COLOR

COPYRIGHT @ 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER. NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- Qhl — HOLOCENE FAN LEVEE DEPOSITS
- Qhf — HOLOCENE ALLUVIAL FAN DEPOSITS

N

0 1,000 2,000

FEET

BASEMAP SOURCE: DAWSON, 2009

ENGEO Expect Excellence

REGIONAL GEOLOGIC MAP

PEDRICK ROAD WAREHOUSE

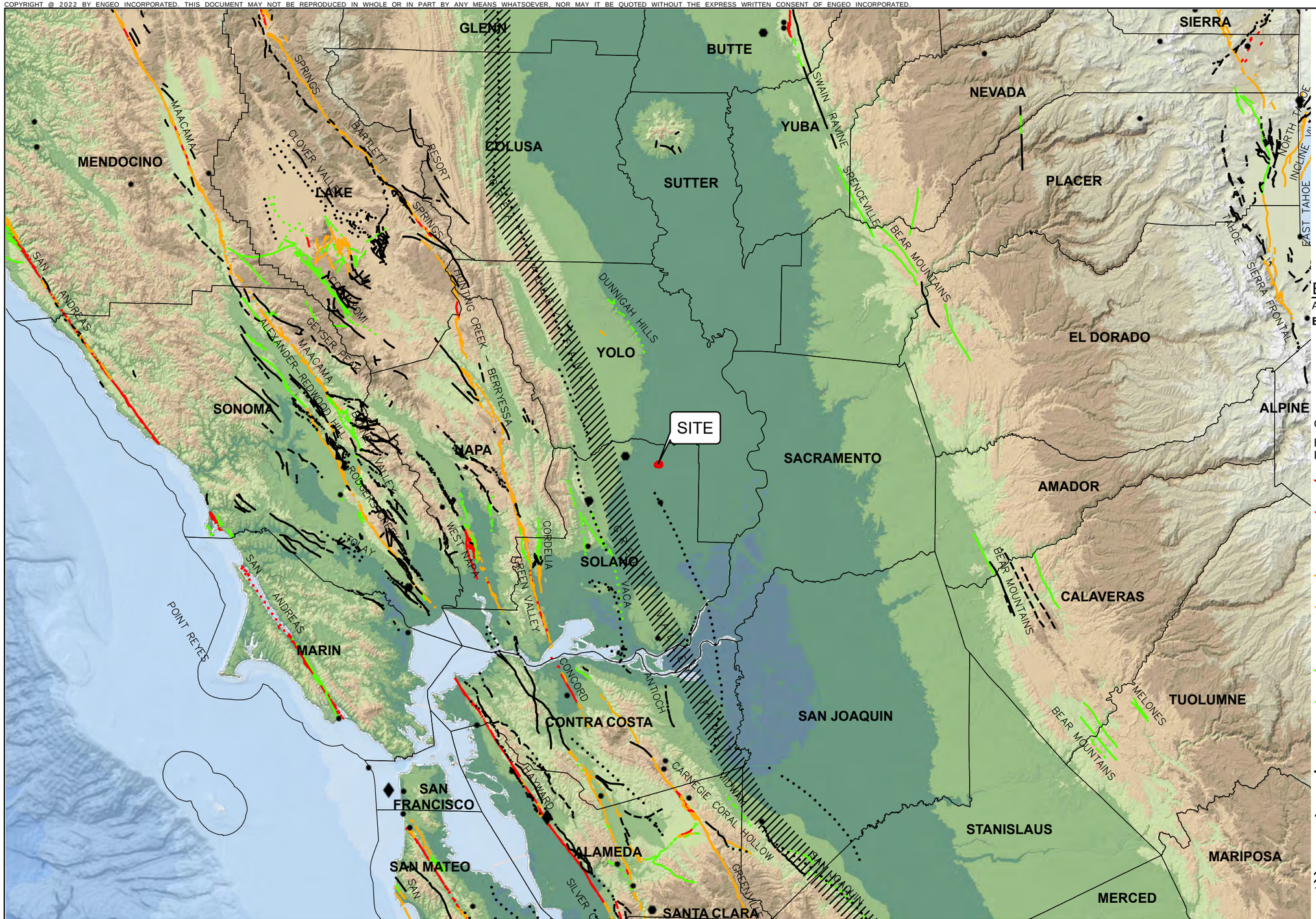
DIXON, CALIFORNIA

PROJECT NO. : 20357.000.001	FIGURE NO. 3
SCALE: AS SHOWN	
DRAWN BY: JV	CHECKED BY: MMG

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20357\20357000001\GEOTECH\GEX\20357000001_GEX.APRX
LAYOUT: GEOLOGIC USER: JVERGARA

ORIGINAL FIGURE PRINTED IN COLOR

COPYRIGHT @ 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



N

0 7.5 15

Miles

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

EARTHQUAKE

- MAGNITUDE 7+
- MAGNITUDE 6-7
- MAGNITUDE 5-6

QUATERNARY FAULTS

BASED ON TIME OF MOST RECENT SURFACE DEFORMATION

- HISTORICAL (<150 YEARS), WELL CONSTRAINED LOCATION
- HISTORICAL (<150 YEARS), MODERATELY CONSTRAINED LOCATION
- HISTORICAL (<150 YEARS), INFERRED LOCATION
- LATEST QUATERNARY (<15,000 YEARS), WELL CONSTRAINED LOCATION
- LATEST QUATERNARY (<15,000 YEARS), MODERATELY CONSTRAINED LOCATION
- LATEST QUATERNARY (<15,000 YEARS), INFERRED LOCATION
- LATE QUATERNARY (<130,000 YEARS), WELL CONSTRAINED LOCATION
- LATE QUATERNARY (<130,000 YEARS), MODERATELY CONSTRAINED LOCATION
- LATE QUATERNARY (<130,000 YEARS), INFERRED LOCATION
- UNDIFFERENTIATED QUATERNARY(<1.6 MILLION YEARS), WELL CONSTRAINED LOCATION
- UNDIFFERENTIATED QUATERNARY(<1.6 MILLION YEARS), MODERATELY CONSTRAINED LOCATION
- UNDIFFERENTIATED QUATERNARY(<1.6 MILLION YEARS), INFERRED LOCATION
- GREAT VALLEY FAULT ZONE

BASE MAP SOURCE
ESRI, GEBCO, DELORME, NATURALVUE
COLOR HILLSHADE IMAGE BASED ON THE NATIONAL ELEVATION DATA SET (NED) AT 30 METER RESOLUTION
U.S.G.S. QUATERNARY FAULT DATABASE, 2020
U.S.G.S. HISTORIC EARTHQUAKE DATABASE (1800-PRESENT)
U.S.G.S OPEN-FILE REPORT 96-705

ENGEO Expect Excellence

REGIONAL FAULTING AND SEISMICITY

PEDRICK ROAD WAREHOUSE

DIXON, CALIFORNIA

PROJECT NO. : 20357.000.001	FIGURE NO. 4
SCALE: AS SHOWN	
DRAWN BY: JV	CHECKED BY:MMG

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20357\20357000001\GEOTECH\GEX\20357000001_GEX.APRX
LAYOUT: FAULT&SEISMICITY USER: JVERGARA

ORIGINAL FIGURE PRINTED IN COLOR

APPENDIX A

BORING LOG KEY
BORING LOGS

KEY TO BORING LOGS

MAJOR TYPES			DESCRIPTION
COARSE-GRAINED SOILS MORE THAN HALF OF MAT'L LARGER THAN #200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE	CLEAN GRAVELS WITH LESS THAN 5% FINES	GW - Well graded gravels or gravel-sand mixtures GP - Poorly graded gravels or gravel-sand mixtures
		GRAVELS WITH OVER 12 % FINES	GM - Silty gravels, gravel-sand and silt mixtures GC - Clayey gravels, gravel-sand and clay mixtures
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 5% FINES	SW - Well graded sands, or gravelly sand mixtures SP - Poorly graded sands or gravelly sand mixtures
		SANDS WITH OVER 12 % FINES	SM - Silty sand, sand-silt mixtures SC - Clayey sand, sand-clay mixtures
FINE-GRAINED SOILS MORE THAN HALF OF MAT'L SMALLER THAN #200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50 % OR LESS		ML - Inorganic silt with low to medium plasticity CL - Inorganic clay with low to medium plasticity OL - Low plasticity organic silts and clays
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50 %		MH - Elastic silt with high plasticity CH - Fat clay with high plasticity OH - Highly plastic organic silts and clays
	HIGHLY ORGANIC SOILS		PT - Peat and other highly organic soils

For fine-grained soils with 15 to 29% retained on the #200 sieve, the words "with sand" or "with gravel" (whichever is predominant) are added to the group name.

For fine-grained soil with >30% retained on the #200 sieve, the words "sandy" or "gravelly" (whichever is predominant) are added to the group name.

GRAIN SIZES

U.S. STANDARD SERIES SIEVE SIZE					CLEAR SQUARE SIEVE OPENINGS			
200	40	10	4	3/4 "	3"	12"		
SILTS AND CLAYS	SAND			GRAVEL			COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE			

RELATIVE DENSITY

SANDS AND GRAVELS	BLOWS/FOOT (S.P.T.)
VERY LOOSE	0-4
LOOSE	4-10
MEDIUM DENSE	10-30
DENSE	30-50
VERY DENSE	OVER 50

CONSISTENCY

SILTS AND CLAYS	STRENGTH*
VERY SOFT	0-1/4
SOFT	1/4-1/2
MEDIUM STIFF	1/2-1
STIFF	1-2
VERY STIFF	2-4
HARD	OVER 4

SAMPLER SYMBOLS

- Modified California (3" O.D.) sampler
- California (2.5" O.D.) sampler
- S.P.T. - Split spoon sampler
- Shelby Tube
- Dames and Moore Piston
- Continuous Core
- Bag Samples
- Grab Samples
- NR No Recovery

MOISTURE CONDITION

DRY	Dusty, dry to touch
MOIST	Damp but no visible water
WET	Visible freewater

LINE TYPES

- ———— Solid - Layer Break
- – – – – – Dashed - Gradational or approximate layer break

GROUNDWATER SYMBOLS

- Groundwater level during drilling
- Stabilized groundwater level

(S.P.T.) Number of blows of 140 lb. hammer falling 30" to drive a 2-inch O.D. (1-3/8 inch I.D.) sampler

* Unconfined compressive strength in tons/sq. ft., asterisk on log means determined by pocket penetrometer

ENGEO
Expect Excellence

LOG OF BORING 1-B1

ENGEO Expect Excellence

LATITUDE: 38.483757 LONGITUDE: -121808819

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 25½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (NAVD88): 65.5 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
0	65		SANDY LEAN CLAY (CL), brown, very stiff, moist, low plasticity, approximately 30% fine-grained sand			16					7.9	93.4	2*
						10							
5	60		POORLY GRADED SAND WITH CLAY (SP-SC), brown, loose, moist, fine- to medium-grained sand, approximately 7% fines			9				7	5.5		
			grades to medium dense, fine- to coarse-grained sand			18							
10	55		grades to approixmately 15% fine gravel			14							
15	50		SANDY LEAN CLAY (CL), brown, hard, moist, medium plasticity, approximately 40% fine-to coarse-grained sand			9					13.5		4*
20			FAT CLAY (CH), yellowish brown, hard, moist, high plasticity, trace calcium carbonate										

LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

LOG OF BORING 1-B1

LATITUDE: 38.483757 LONGITUDE: -121808819

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 25½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (NAVD88): 65.5 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
	45		FAT CLAY (CH), yellowish brown, hard, moist, high plasticity, trace calcium carbonate			50/6							>4.5*
25			grades to some iron oxide staining			50/6							>4.5*
	40		Boring terminated at approximately 25½ feet. No groundwater encountered										

LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

LOG OF BORING 1-B2

ENGEO Expect Excellence

LATITUDE: 38.482068 LONGITUDE: -121.809782

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 26½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (NAVD88): 65 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
0	65		LEAN CLAY (CL), brown, hard, slightly moist, medium plasticity			33	48	19	29	95	15.8		>4.5*
5	60		FAT CLAY (CH), brown, hard, moist, high plasticity			40					19.5	106.5	>4.5*
						43							4*
10	55					46					23.2		4.5*
			LEAN CLAY (CL), yellowish brown, stiff, moist, medium plasticity										
15	50					16							1*
20	45												

LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

LOG OF BORING 1-B2

LATITUDE: 38.482068 LONGITUDE: -121.809782

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 26½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (NAVD88): 65 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
			LEAN CLAY (CL), yellowish brown, stiff, moist, medium plasticity			24					12.3		>4.5*
			SANDY SILT (ML), brown, hard, moist, low plasticity, approximately 40% fine-grained sand										
25	40		grades to very stiff, approximately 45% sand, iron oxide staining			14							2.25*
			Boring terminated at approximately 26½ feet. No groundwater encountered.										

LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

LOG OF BORING 1-B3

LATITUDE: 38.483836 LONGITUDE: -121.80439

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 26½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (NAVD88): 62 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
0	62		LEAN CLAY (CL), brown, hard, slightly moist, medium plasticity			35	43	17	26	89	14		>4.5*
	60		FAT CLAY (CH), brown, hard, slightly moist, high plasticity			52					16.8	108.4	>4.5*
5			grades to some calcium carbonate filaments			48							>4.5*
	55												
10			grades to occasional fine calcium carbonate nodules			58					17.4	108.5	4.5*
	50												
15			LEAN CLAY (CL), brown, hard, moist, low plasticity, slightly silty			58							>4.5*
	45												
			LEAN CLAY WITH SAND (CL), brown mottled with greenish gray, hard, low plasticity, approixmately 25% coarse-grained sand										
20													

LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

LOG OF BORING 1-B3

LATITUDE: 38.483836 LONGITUDE: -121.80439

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 26½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (NAVD88): 62 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
			LEAN CLAY WITH SAND (CL), brown mottled with greenish gray, hard, low plasticity, approixmately 25% coarse-grained sand			38							4.5*
	40		SANDY SILT (ML), brown, hard, moist, low plasticity, approximately 30% fine-grained sand										
25			POORLY GRADED SAND WITH CLAY (SP-SC), brown, medium dense, moist, fine-grained sand, approximately 5% fines, rare subrounded fine gravel			22							
			Boring terminated at approximately 26½ feet. No groundwater encountered										

LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

ENGEO
Expect Excellence

LOG OF BORING 1-B4

LATITUDE: 38.482303 LONGITUDE: -121.805645

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 26½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (NAVD88): 62.5 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
			LEAN CLAY WITH SAND (CL), dark brown, hard, slightly moist, medium plasticity, 29% fine-grained sand			24	43	23	20	71	14.1		>4.5*
	60					31							>4.5*
5													
			grades to very stiff, brown, some translocated clays			42					20.1		3.75*
	55												
			SANDY FAT CLAY WITH GRAVEL (CH), reddish brown, hard, moist, high plasticity, approximately 30% fine- to coarse-grained sand, approximately 20% rounded fine to coarse gravel										
10						48							>4.5*
	50												
			SANDY LEAN CLAY WITH GRAVEL (CL), reddish brown, very stiff, moist, low plasticity, approximately 30% fine- to coarse-grained sand, approximately 20% subrounded fine gravel										
15						18					11.4		
	45												
			POORLY GRADED SAND WITH CLAY (SP-SC), brown, medium dense, moist, fine- to coarse-grained sand, <10% fines										
20													

LOG OF BORING 1-B4

LATITUDE: 38.482303 LONGITUDE: -121.805645

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 26½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (NAVD88): 62.5 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
			POORLY GRADED SAND WITH CLAY (SP-SC), brown, medium dense, moist, fine- to coarse-grained sand, <10% fines			38				6	10.8		
	40												
			POORLY GRADED SAND WITH GRAVEL (SP), brown, very dense, moist, fine- to coarse-grained sand, approximately 30% rounded to subangular fine to coarse gravel										
25						85/11							
			Boring terminated at approximately 26½ feet. No groundwater encountered										

LOG OF BORING P-1

LATITUDE: 38.482116 LONGITUDE: -121.810962

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 10 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (NAVD88): 65.5 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
	65		FAT CLAY (CH), dark brown, hard, slightly moist, high plasticity			38							>4.5*
			LEAN CLAY (CL), brown, hard, moist, medium plasticity			22							>4.5*
5	60		FAT CLAY (CH), brown, hard, moist, high plasticity			40							>4.5*
			grades to dark brown			48				95	19.6		>4.5*
10			Boring terminated at approximately 10 feet. No groundwater encountered										

LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

LOG OF BORING P-2

LATITUDE: 38.482975 LONGITUDE: -121.810351

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 10 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (NAVD88): 66 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
	65		FAT CLAY (CH), dark brown, hard, moist, high plasticity			30							>4.5*
			LEAN CLAY (CL), brown, hard, moist, medium plasticity			19							>4.5*
5	60		LEAN CLAY (CL), brown, very stiff, moist, medium plasticity, weak greenish gray mottling			28							3.25*
			grades to stiff			27	45	24	21	88	21		1.75*
10			Boring terminated at approximately 10 feet. No groundwater encountered										

LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

LOG OF BORING P-3

ENGEO Expect Excellence

LATITUDE: 38.483948 LONGITUDE: -121.809207

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 10 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (NAVD88): 65.5 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
	65		FAT CLAY (CH), dark brown, hard, moist, high plasticity			25							>4.5*
			SILT (ML), yellowish brown, very stiff, moist, low plasticity, <10% fine-grained sand										
5	60		FAT CLAY (CH), brown, very stiff, moist, high plasticity			20							3.5*
			grades to hard			49				96	20.4		4.5*
10			Boring terminated at approximately 10 feet. No groundwater encountered										

LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

LOG OF BORING P-4

LATITUDE: 38.48444 LONGITUDE: -121.807689

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 5 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (NAVD88): 56 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
	55		FAT CLAY (CH), brown, hard, moist, high plasticity, occasional calcium carbonate nodules			40							>4.5*
			grades to very stiff			46				94	22.1		4*
5			Boring terminated at approximately 5 feet. No groundwater encountered										

LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

LOG OF BORING P-5

LATITUDE: 38.48442 LONGITUDE: -121.806466

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 5 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (NAVD88): 56 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
	55		FAT CLAY (CH), brown, hard, moist, high plasticity, some fine calcium carbonate nodules			32							>4.5*
						46				94	19.2		>4.5*
5			Boring terminated at approixmately 5 feet. No groundwater encountered										

LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

LOG OF BORING P-6

LATITUDE: 38.484406 LONGITUDE: -121.80525

Geotechnical Exploration
Pedrick Road Warehouse
Dixon, CA
20357.000.001

DATE DRILLED: 5/23/2022
HOLE DEPTH: Approx. 5 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (NAVD88): 56 ft.

LOGGED / REVIEWED BY: R. Rud / MMG
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Unconfined Strength (tsf) *field approx
	55		FAT CA (CH), brown, hard, moist, high plasticity, some fine calcium carbonate nodules			33							4*
						48	50	15	35	91	20.3		4.25*
5			Boring terminated at approximately 5 feet. No groundwater encountered										

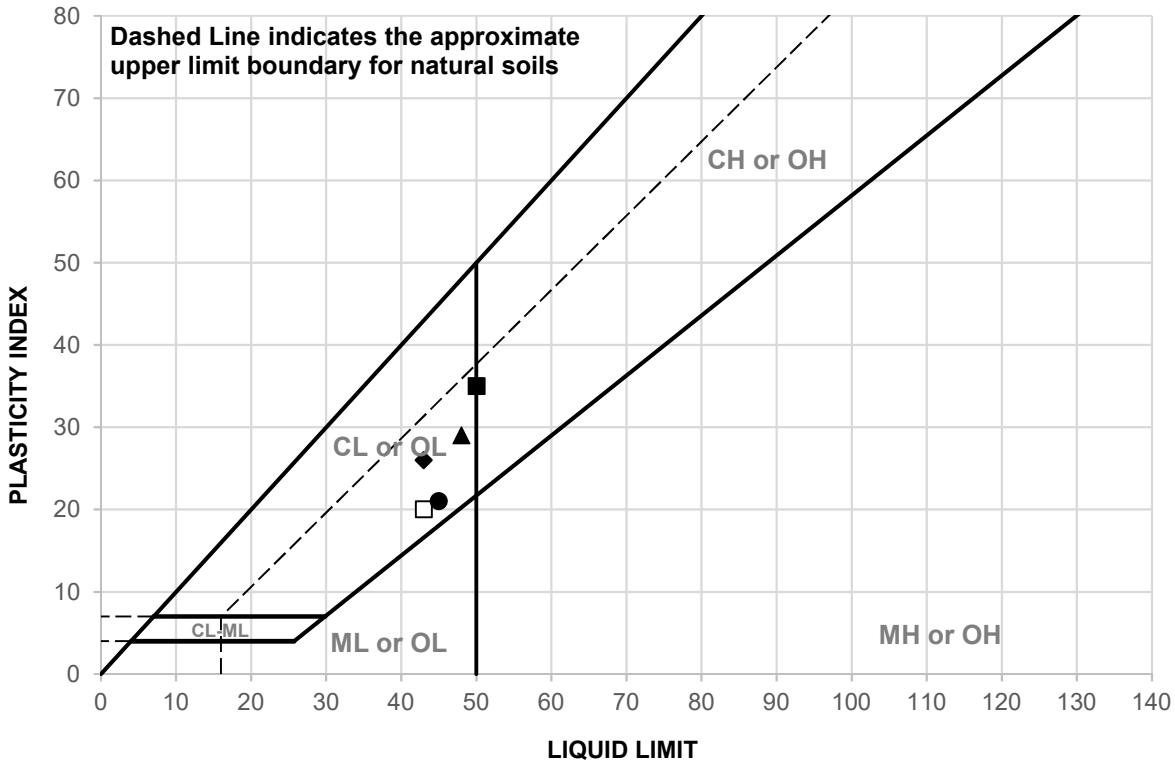
LOG - GEOTECHNICAL W/ELEV. 20357000001 PEDRICK ROAD WAREHOUSE BORING LOGS.GPJ ENGEO INC.GDT 6/20/22

APPENDIX B

LABORATORY TEST DATA

Liquid and Plastic Limits Test Report
Particle Size Distribution Reports
Moisture Content Report
Moisture-Density Determination Report
R-Value Test Reports
Analytical Results of Soil Corrosion

LIQUID AND PLASTIC LIMITS TEST REPORT
ASTM D4318



	SAMPLE ID	DEPTH (ft)	MATERIAL DESCRIPTION	LL	PL	PI
▲	1-B2@2.5	2.5	See exploration logs	48	19	29
◆	1-B3@1	1	See exploration logs	43	17	26
□	1-B4@1.5	1.5	See exploration logs	43	23	20
●	P2@9.5	9.5	See exploration logs	45	24	21
■	P6@4.5	4.5	See exploration logs	50	15	35

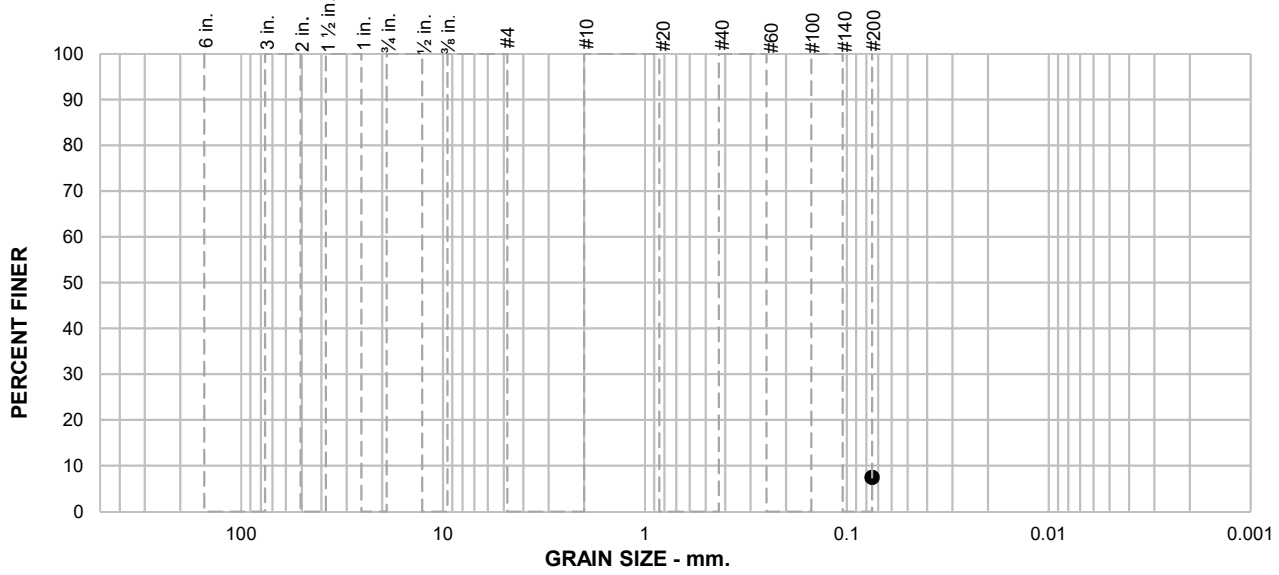
	SAMPLE ID	TEST METHOD	REMARKS
▲	1-B2@2.5	PI: ASTM D4318, Wet Method	
◆	1-B3@1	PI: ASTM D4318, Wet Method	
□	1-B4@1.5	PI: ASTM D4318, Wet Method	
●	P2@9.5	PI: ASTM D4318, Wet Method	
■	P6@4.5	PI: ASTM D4318, Wet Method	

ENGEO
Expect Excellence

CLIENT: Buzz Oates
PROJECT NAME: Pedrick Road Warehouse
PROJECT NO: 20357.000.001 PH001
PROJECT LOCATION: Dixon, CA
REPORT DATE: 6/6/2022
TESTED BY: L. Schmitz
REVIEWED BY: M. Gilbert

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: 1-B1@5

DEPTH (ft): 5

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	7		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = LL = PI =

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS =

REMARKS

Soak time = 180 min
Dry sample weight = 569.9 g
Largest particle size ≥ No. 4 Sieve

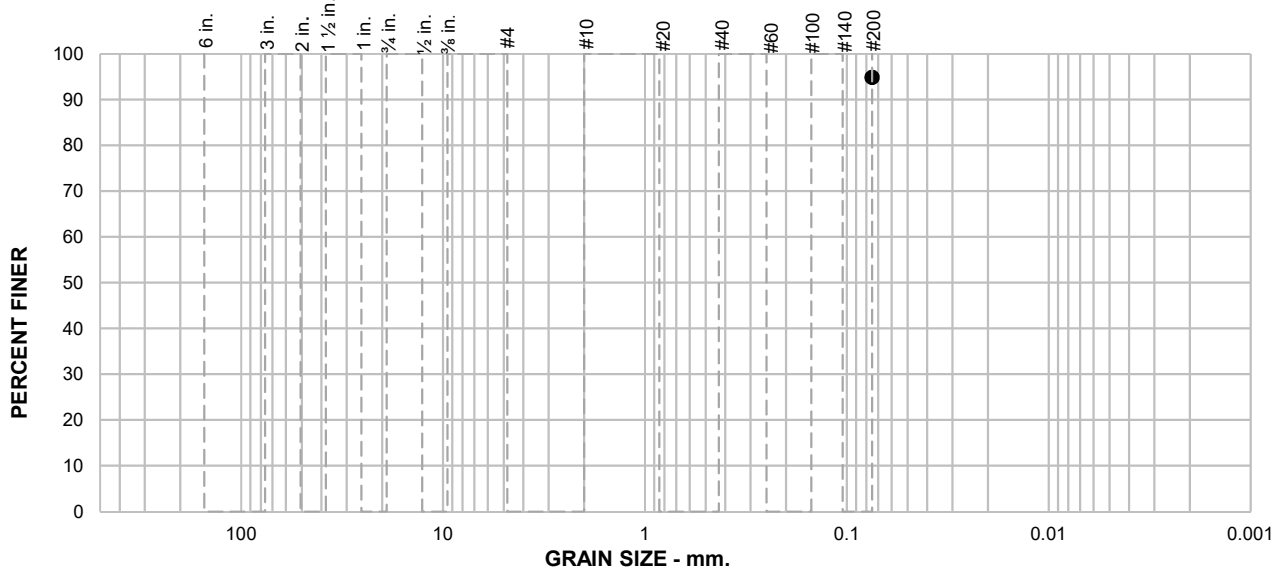
* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Buzz Oates
PROJECT NAME: Pedrick Road Warehouse
PROJECT NO: 20357.000.001 PH001
PROJECT LOCATION: Dixon, CA
REPORT DATE: 6/3/2022
TESTED BY: L. Schmitz
REVIEWED BY: M. Gilbert

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: 1-B2@2.5

DEPTH (ft): 2.5

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						94.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	94.9		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = 19 LL = 48 PI = 29

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS = CL

REMARKS

PI: ASTM D4318, Wet Method

Soak time = 180 min
Dry sample weight = 371.2 g
Largest particle size < No. 4 Sieve

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Buzz Oates

PROJECT NAME: Pedrick Road Warehouse

PROJECT NO: 20357.000.001 PH001

PROJECT LOCATION: Dixon, CA

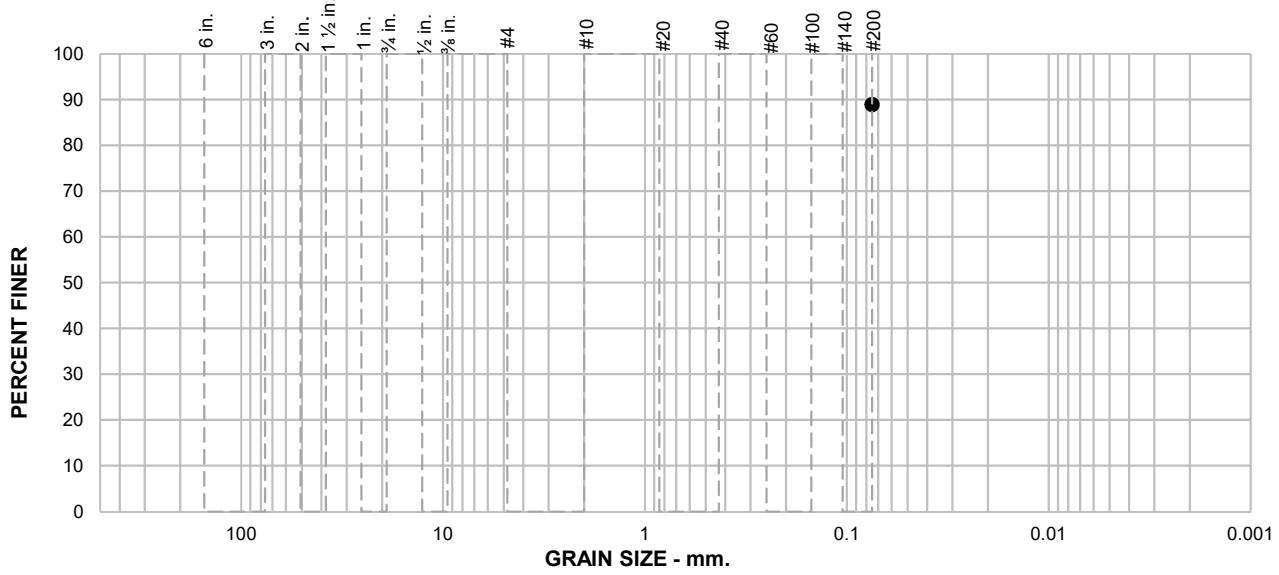
REPORT DATE: 6/6/2022

TESTED BY: L. Schmitz

REVIEWED BY: M. Gilbert

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: 1-B3@1

DEPTH (ft): 1

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						88.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	88.9		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = 17 LL = 43 PI = 26

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS = CL

REMARKS

PI: ASTM D4318, Wet Method

Soak time = 180 min
Dry sample weight = 362 g
Largest particle size < No. 4 Sieve

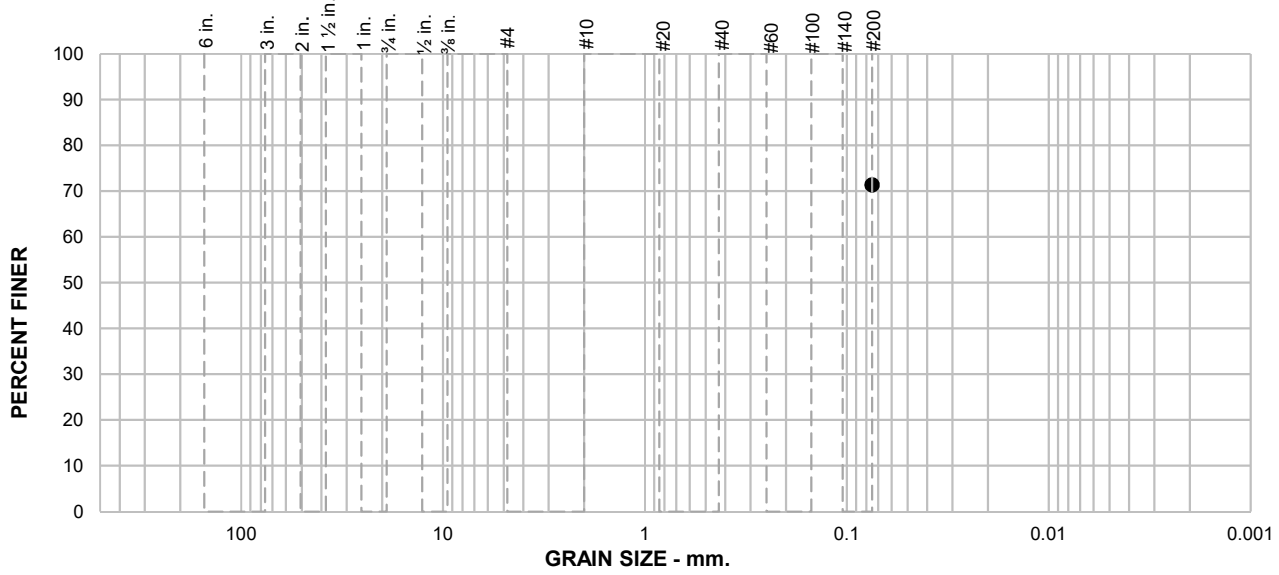
* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Buzz Oates
PROJECT NAME: Pedrick Road Warehouse
PROJECT NO: 20357.000.001 PH001
PROJECT LOCATION: Dixon, CA
REPORT DATE: 6/6/2022
TESTED BY: L. Schmitz
REVIEWED BY: M. Gilbert

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: 1-B4@1.5

DEPTH (ft): 1.5

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						71.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	71.3		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = 23 LL = 43 PI = 20

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS = CL

REMARKS

PI: ASTM D4318, Wet Method

Soak time = 180 min
Dry sample weight = 393.1 g
Largest particle size < No. 4 Sieve

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Buzz Oates

PROJECT NAME: Pedrick Road Warehouse

PROJECT NO: 20357.000.001 PH001

PROJECT LOCATION: Dixon, CA

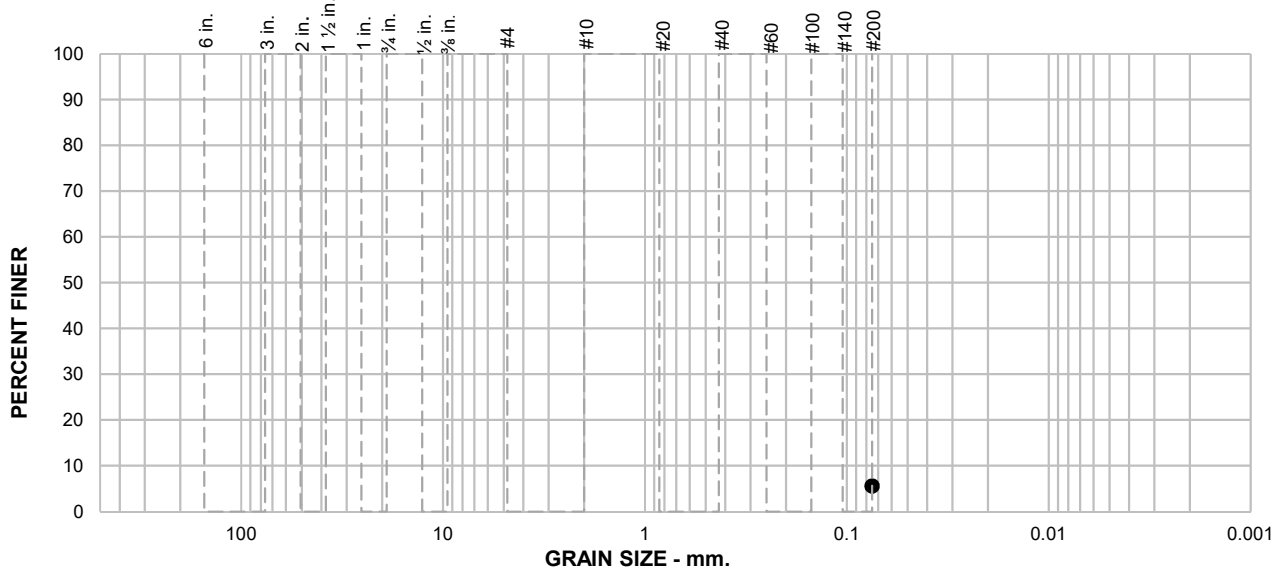
REPORT DATE: 6/6/2022

TESTED BY: L. Schmitz

REVIEWED BY: M. Gilbert

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: 1-B4@21

DEPTH (ft): 21

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	6		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = LL = PI =

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS =

REMARKS

Soak time = 180 min
Dry sample weight = 747.7 g
Largest particle size ≥ No. 4 Sieve

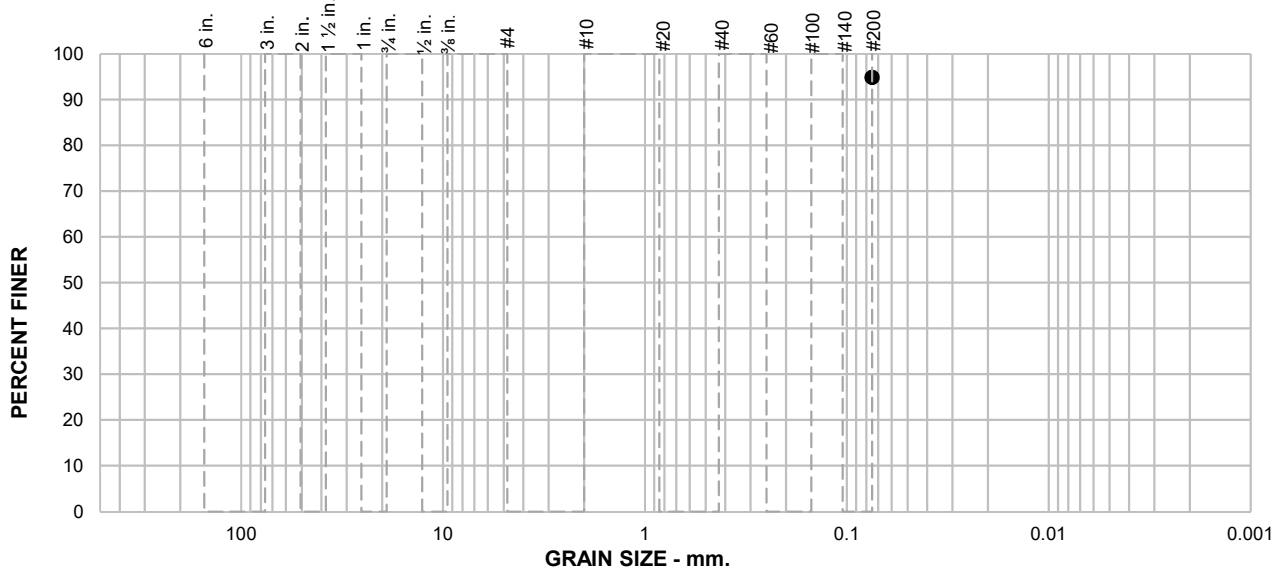
* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Buzz Oates
PROJECT NAME: Pedrick Road Warehouse
PROJECT NO: 20357.000.001 PH001
PROJECT LOCATION: Dixon, CA
REPORT DATE: 6/3/2022
TESTED BY: L. Schmitz
REVIEWED BY: M. Gilbert

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: P1@8

DEPTH (ft): 8

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						95	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	95		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = LL = PI =

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS =

REMARKS

Soak time = 180 min
Dry sample weight = 756.1 g
Largest particle size ≥ No. 4 Sieve

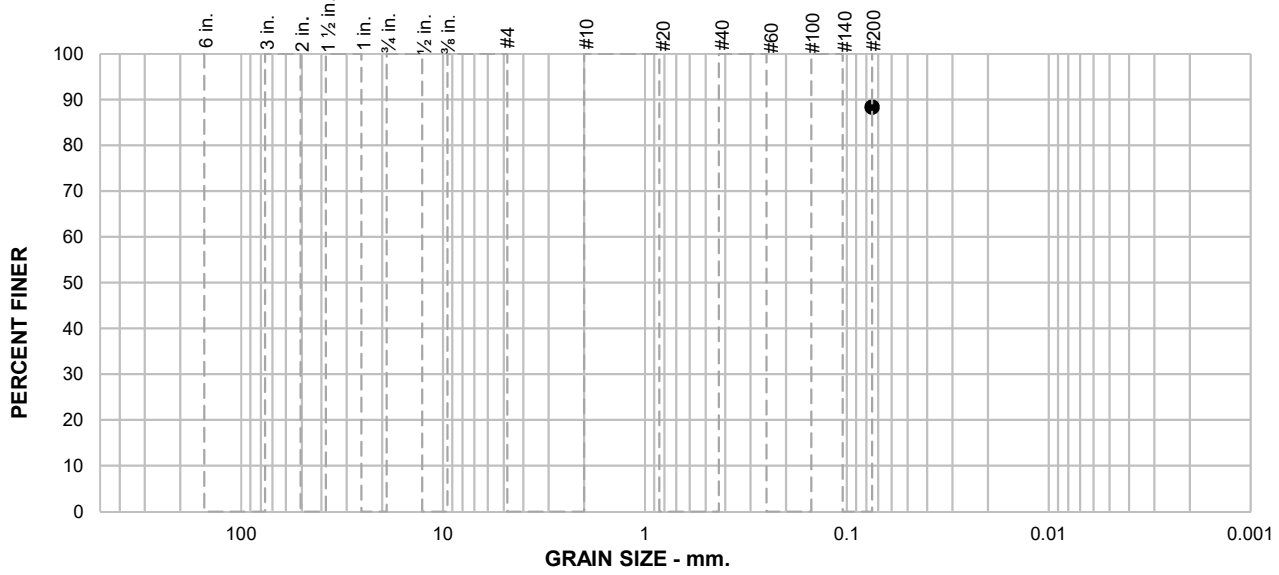
* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Buzz Oates
PROJECT NAME: Pedrick Road Warehouse
PROJECT NO: 20357.000.001 PH001
PROJECT LOCATION: Dixon, CA
REPORT DATE: 6/3/2022
TESTED BY: L. Schmitz
REVIEWED BY: M. Gilbert

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: P2@9.5

DEPTH (ft): 9.5

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						88.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	88.3		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = 24 LL = 45 PI = 21

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS = CL

REMARKS

PI: ASTM D4318, Wet Method

Soak time = 180 min
Dry sample weight = 449.6 g
Largest particle size < No. 4 Sieve

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Buzz Oates

PROJECT NAME: Pedrick Road Warehouse

PROJECT NO: 20357.000.001 PH001

PROJECT LOCATION: Dixon, CA

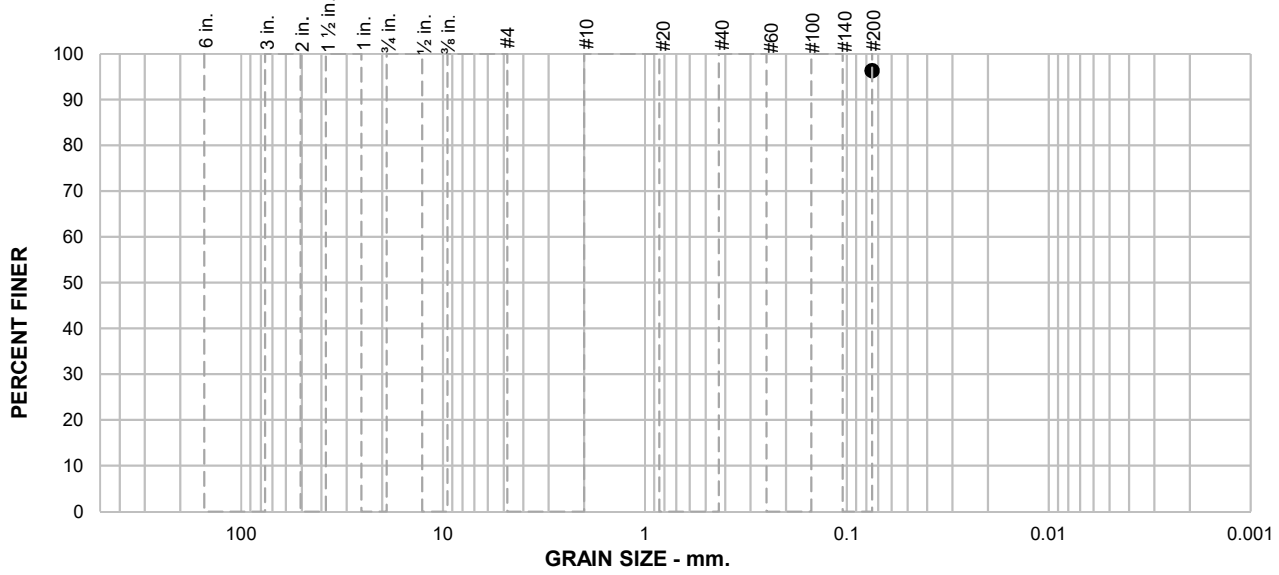
REPORT DATE: 6/6/2022

TESTED BY: L. Schmitz

REVIEWED BY: M. Gilbert

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: P3@9.5

DEPTH (ft): 9.5

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						96	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	96		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = LL = PI =

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS =

REMARKS

Soak time = 180 min
Dry sample weight = 754.4 g
Largest particle size ≥ No. 4 Sieve

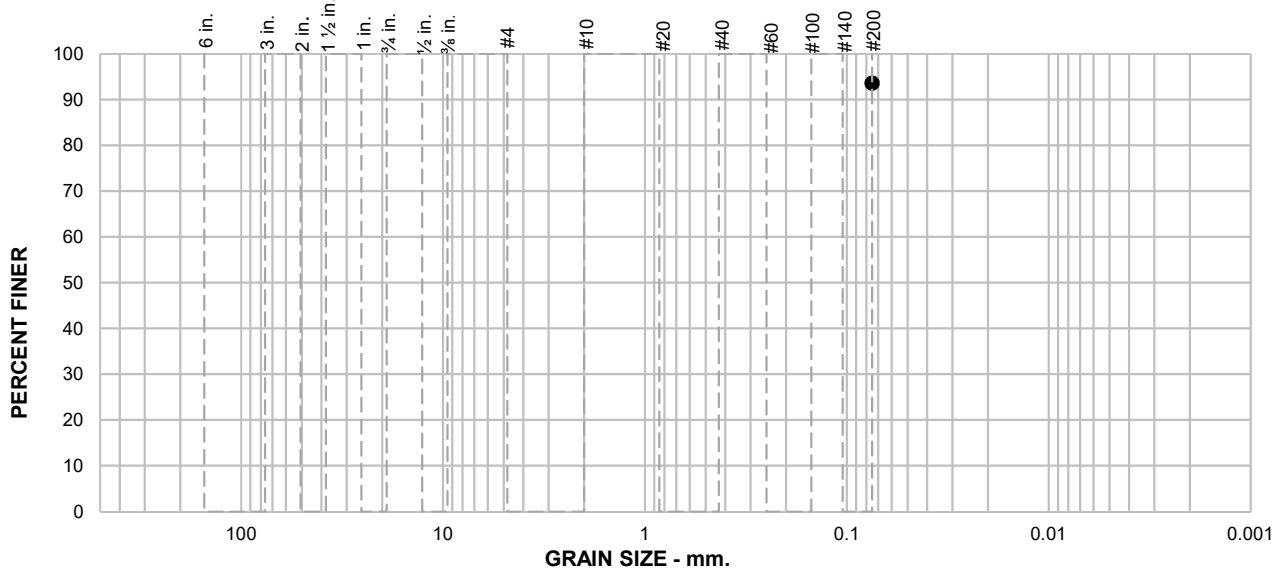
* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Buzz Oates
PROJECT NAME: Pedrick Road Warehouse
PROJECT NO: 20357.000.001 PH001
PROJECT LOCATION: Dixon, CA
REPORT DATE: 6/3/2022
TESTED BY: L. Schmitz
REVIEWED BY: M. Gilbert

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: P4@4

DEPTH (ft): 4

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						94	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	94		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = LL = PI =

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS =

REMARKS

Soak time = 180 min
Dry sample weight = 717.9 g
Largest particle size ≥ No. 4 Sieve

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Buzz Oates

PROJECT NAME: Pedrick Road Warehouse

PROJECT NO: 20357.000.001 PH001

PROJECT LOCATION: Dixon, CA

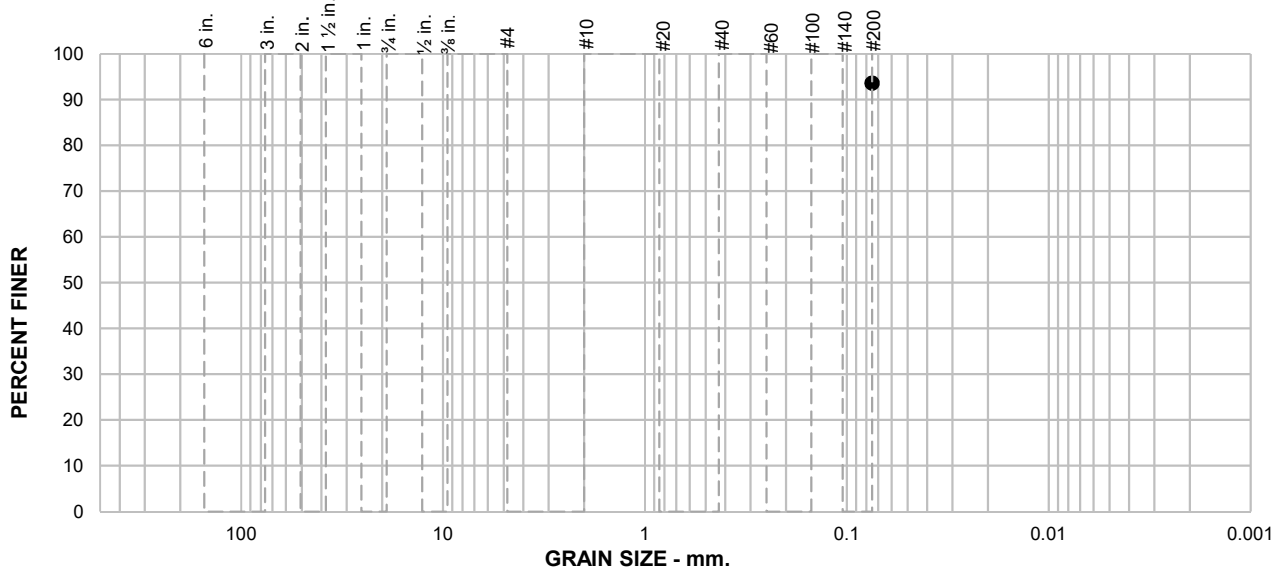
REPORT DATE: 6/3/2022

TESTED BY: L. Schmitz

REVIEWED BY: M. Gilbert

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: P5@3.5

DEPTH (ft): 3.5

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						94	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	94		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = LL = PI =

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS =

REMARKS

Soak time = 180 min
Dry sample weight = 762.7 g
Largest particle size ≥ No. 4 Sieve

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Buzz Oates

PROJECT NAME: Pedrick Road Warehouse

PROJECT NO: 20357.000.001 PH001

PROJECT LOCATION: Dixon, CA

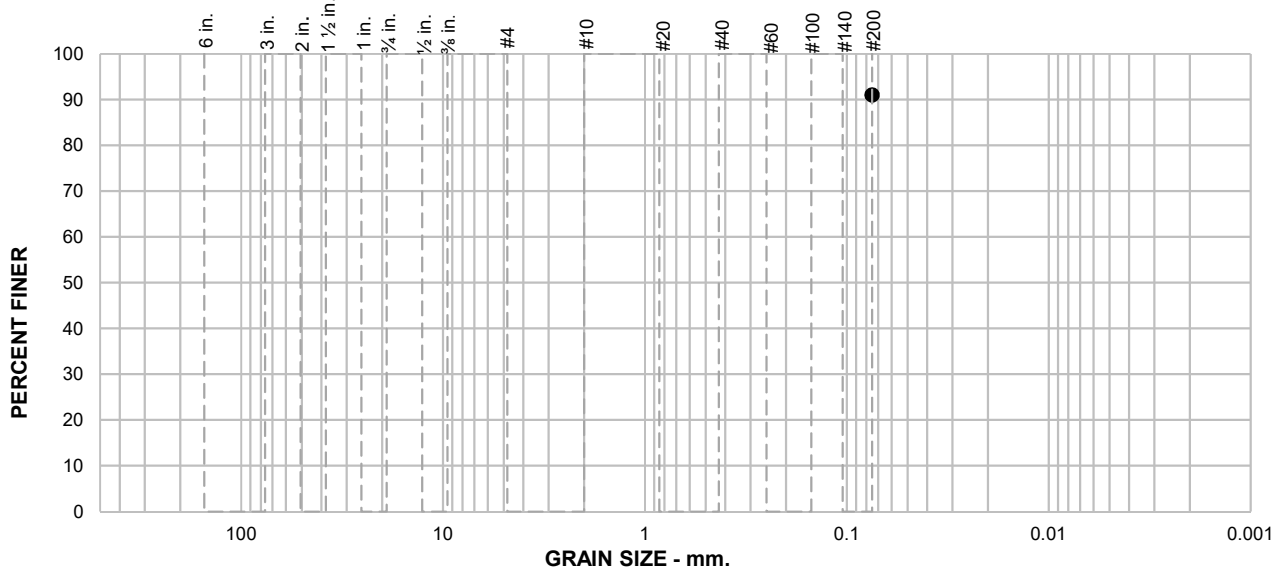
REPORT DATE: 6/3/2022

TESTED BY: L. Schmitz

REVIEWED BY: M. Gilbert

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: P6@4.5

DEPTH (ft): 4.5

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						91	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	91		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = 15 LL = 50 PI = 35

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS = CH

REMARKS

PI: ASTM D4318, Wet Method

Soak time = 180 min
Dry sample weight = 497.7 g
Largest particle size ≥ No. 4 Sieve

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Buzz Oates
PROJECT NAME: Pedrick Road Warehouse
PROJECT NO: 20357.000.001 PH001
PROJECT LOCATION: Dixon, CA
REPORT DATE: 6/6/2022
TESTED BY: L. Schmitz
REVIEWED BY: M. Gilbert

MOISTURE CONTENT REPORT
ASTM D2216

SAMPLE ID	1-B1@5	1-B1@16	1-B2@2.5	1-B2@10.5	1-B2@21	1-B3@1	1-B4@1.5	1-B4@7
DEPTH (ft.)	5	16	2.5	10.5	21	1	1.5	7
METHOD A OR B	B	B	B	B	B	B	B	B
MOISTURE CONTENT (%)	5.5	13.5	15.8	23.2	12.3	14.0	14.1	20.1

SAMPLE ID	1-B4@15	1-B4@21	P1@8	P2@9.5	P3@9.5	P4@4	P5@3.5	P6@4.5
DEPTH (ft.)	15	21	8	9.5	9.5	4	3.5	4.5
METHOD A OR B	B	B	B	B	B	B	B	B
MOISTURE CONTENT (%)	11.4	10.8	19.6	21.0	20.4	22.1	19.2	20.3

ENGEO
Expect Excellence

CLIENT: Buzz Oates
PROJECT NAME: Pedrick Road Warehouse
PROJECT NO: 20357.000.001 PH001
PROJECT LOCATION: Dixon, CA
REPORT DATE: 6/2/2022
TESTED BY: L. Schmitz
REVIEWED BY: M. Gilbert

MOISTURE-DENSITY DETERMINATION REPORT
ASTM D7263

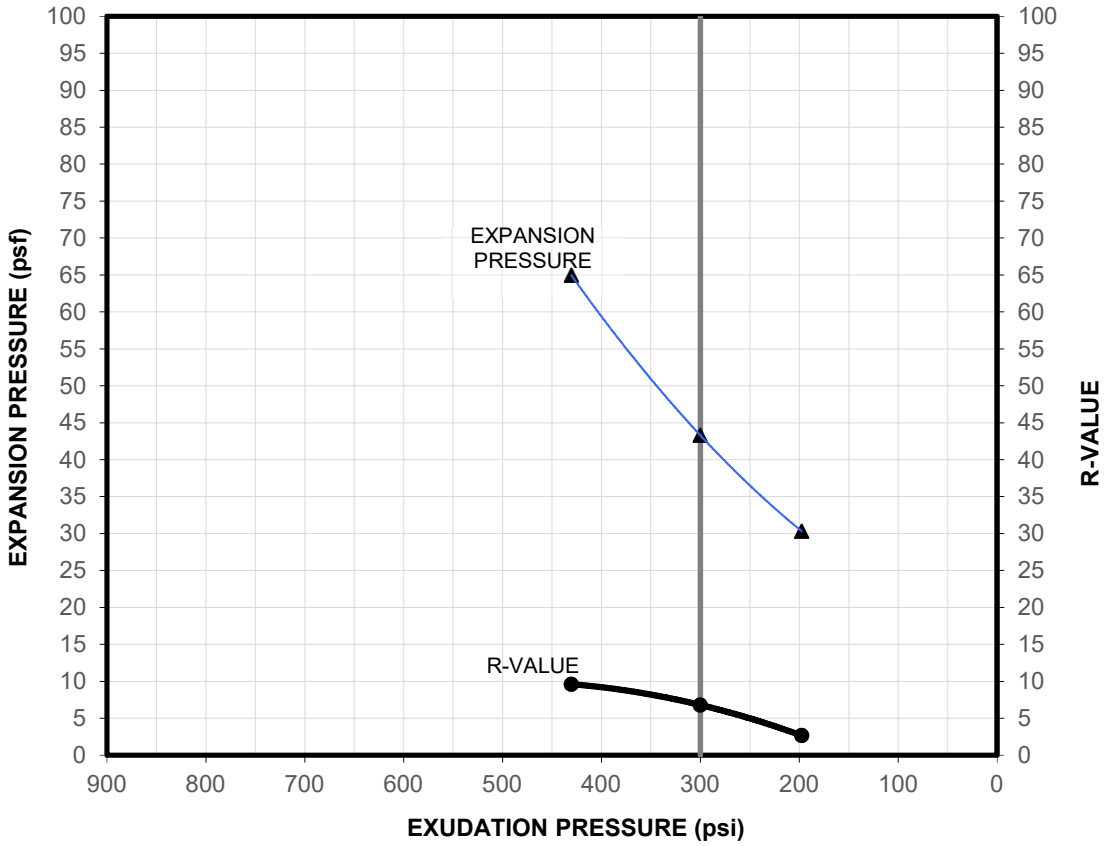
SAMPLE ID	1-B1@2	1-B2@6	1-B3@4	1-B3@10.5				
DEPTH (ft.)	2	6	4	10.5				
METHOD A OR B	B	B	B	B				
MOISTURE CONTENT (%)	7.9	19.5	16.8	17.4				
DRY DENSITY (pcf)	83.4	106.5	108.4	108.5				

ENGEO
Expect Excellence

CLIENT: Buzz Oates
PROJECT NAME: Pedrick Road Warehouse
PROJECT NO: 20357.000.001 PH001
PROJECT LOCATION: Dixon, CA
REPORT DATE: 6/2/2022
TESTED BY: L. Schmitz
REVIEWED BY: M. Gilbert

R-VALUE TEST REPORT

CTM 301



SAMPLE ID	MATERIAL DESCRIPTION	SAMPLE LOCATION
BS1@0.5	See exploration logs	BS1 at 0.5 feet

SPECIMENS	1	2	3
EXUDATION PRESSURE (psi)	430	300	198
EXPANSION PRESSURE (psf)	65	43	30
R-VALUE	10	7	3
MOISTURE CONTENT (%)	20.6	22.2	23.7
DRY DENSITY (pcf)	98.8	96.4	94.2
EXPANSION PRESSURE (psf) AT EXUDATION PRESSURE OF 300 psi		43	

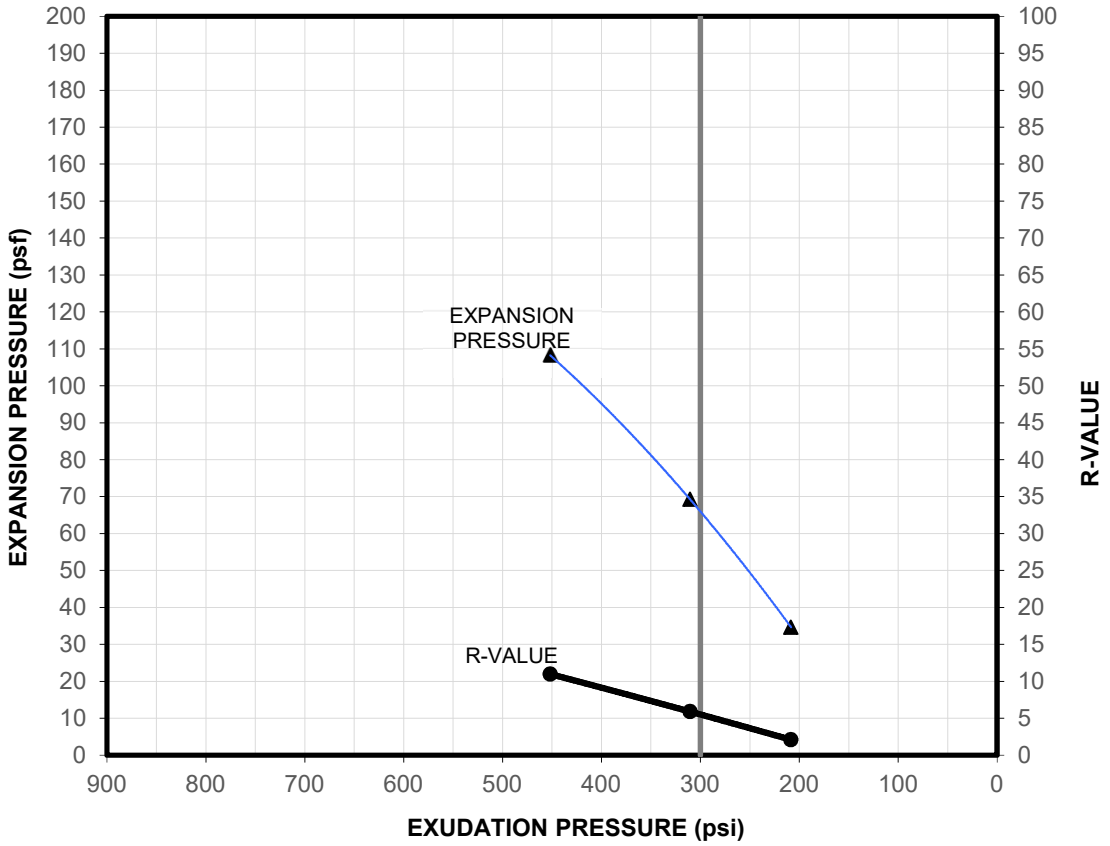
R-VALUE AT EXUDATION PRESSURE OF 300 psi	TEST RESULT
	7

ENGEO
Expect Excellence

CLIENT: Buzz Oates
PROJECT NAME: Pedrick Road Warehouse
PROJECT NO: 20357.000.001 PH001
PROJECT LOCATION: Dixon, CA
REPORT DATE: 6/3/2022
TESTED BY: L. Schmitz
REVIEWED BY: M. Gilbert

R-VALUE TEST REPORT

CTM 301



SAMPLE ID	MATERIAL DESCRIPTION	SAMPLE LOCATION
BS2@0.5	See exploration logs	BS2 at 0.5 feet

SPECIMENS	1	2	3
EXUDATION PRESSURE (psi)	452	311	208
EXPANSION PRESSURE (psf)	108	69	35
R-VALUE	11	6	2
MOISTURE CONTENT (%)	21.9	23.4	25.3
DRY DENSITY (pcf)	96.8	94.1	90.5
EXPANSION PRESSURE (psf) AT EXUDATION PRESSURE OF 300 psi		65	

R-VALUE AT EXUDATION PRESSURE OF 300 psi	TEST RESULT
	6

ENGEO
Expect Excellence

CLIENT: Buzz Oates
PROJECT NAME: Pedrick Road Warehouse
PROJECT NO: 20357.000.001 PH001
PROJECT LOCATION: Dixon, CA
REPORT DATE: 6/3/2022
TESTED BY: L. Schmitz
REVIEWED BY: M. Gilbert

Sunland Analytical

11419 Sunrise Gold Circle, #10
Rancho Cordova, CA 95742
(916) 852-8557

Date Reported 06/08/2022
Date Submitted 06/01/2022

To: Abram Magel
Engeo, Inc.
2213 Plaza Dr.
Rocklin, CA 95765

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : 20357.000.001 PH001 Site ID : 1-B2 @ 3.
Thank you for your business.

* For future reference to this analysis please use SUN # 87492-181939.

EVALUATION FOR SOIL CORROSION

Soil pH	7.40	
Minimum Resistivity	1.53 ohm-cm (x1000)	
Chloride	1.1 ppm	00.00011 %
Sulfate	18.8 ppm	00.00188 %

METHODS
pH and Min.Resistivity CA DOT Test #643
Sulfate CA DOT Test #417, Chloride CA DOT Test #422m

Sunland Analytical

11419 Sunrise Gold Circle, #10
Rancho Cordova, CA 95742
(916) 852-8557

Date Reported 06/08/2022
Date Submitted 06/01/2022

To: Abram Magel
Engeo, Inc.
2213 Plaza Dr.
Rocklin, CA 95765

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : 20357.000.001 PH001 Site ID : 1-B3 @ 3.5.
Thank you for your business.

* For future reference to this analysis please use SUN # 87492-181940.

EVALUATION FOR SOIL CORROSION

Soil pH	7.35	
Minimum Resistivity	1.34 ohm-cm (x1000)	
Chloride	1.4 ppm	00.00014 %
Sulfate	13.8 ppm	00.00138 %

METHODS
pH and Min.Resistivity CA DOT Test #643
Sulfate CA DOT Test #417, Chloride CA DOT Test #422m

APPENDIX C

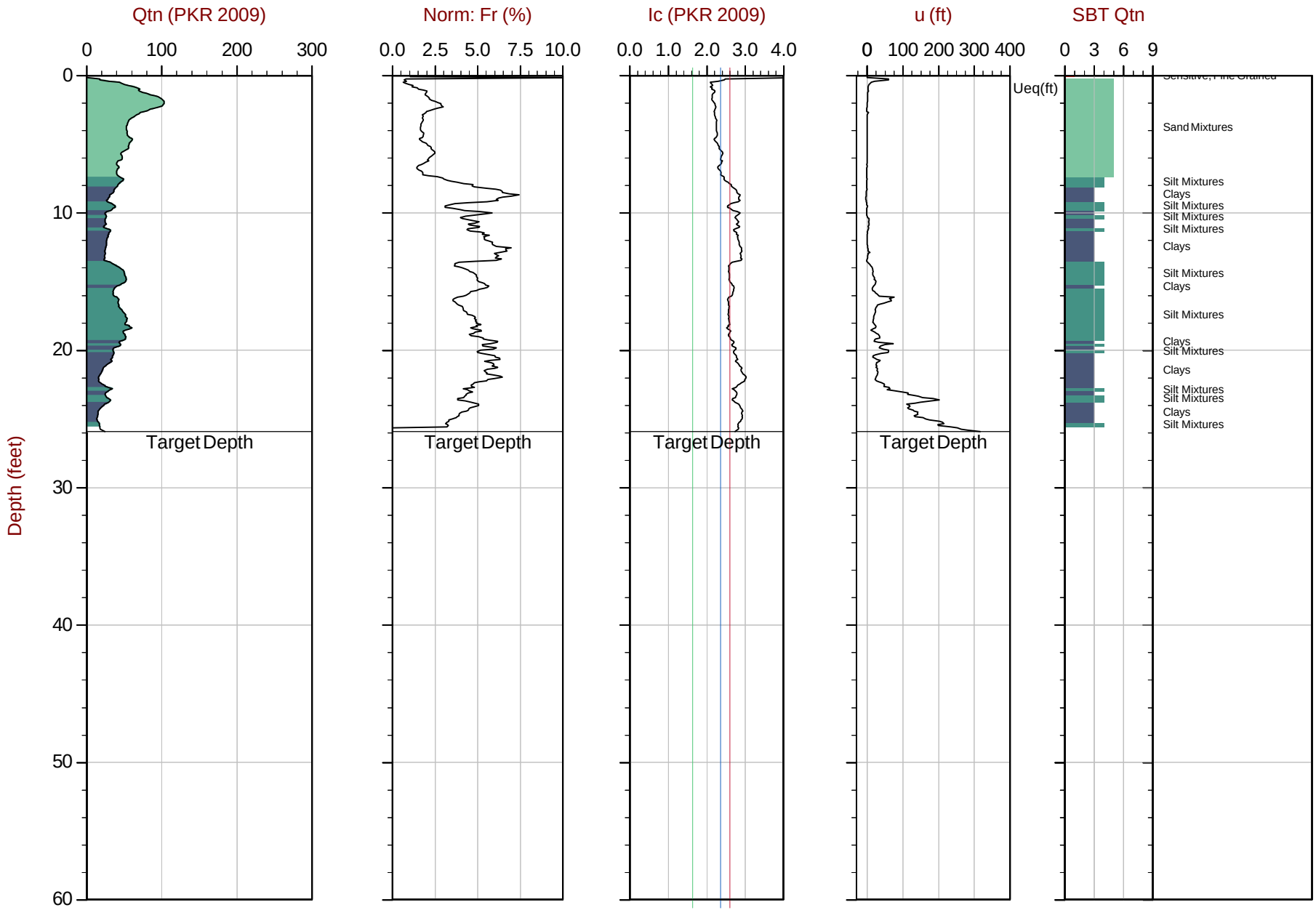
CPT DATA

CONETEC

ENGEO

Job No: 22-56-24229
Date: 2022-05-27 13:13
Site: Pedrick Rd Warehouse

Sounding: 1-CPT1
Cone: 811:T1500F15U35



Max Depth: 7.900 m / 25.92 ft
Depth Inc: 0.025 m / 0.082 ft
Avg Int: Every Point

File: 22-56-24229_CP01.COR
Unit Wt: SBTQtn (PKR2009)

SBT: Robertson, 2009 and 2010
Coords: UTM 10S N: 4260066m E: 603821m

Equilibrium Pore Pressure (Ueq) | Assumed Ueq | Dissipation, Ueq achieved | Dissipation, Ueq not achieved | Hydrostatic Line

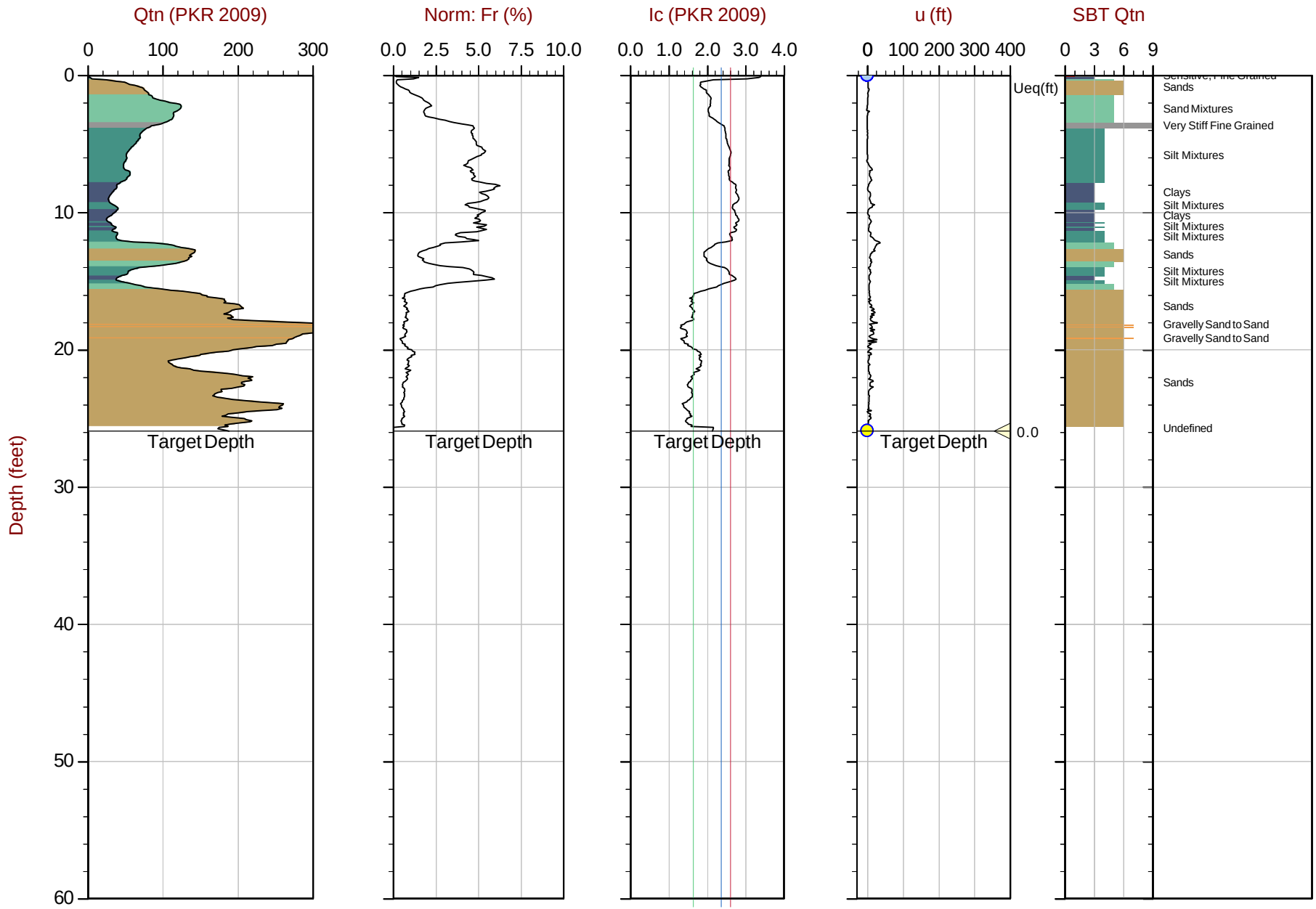
The reported coordinates were acquired from consumer grade GPS equipment and are only approximate locations. The coordinates should not be used for design purposes.

CONETEC

ENGEO

Job No: 22-56-24229
Date: 2022-05-27 15:07
Site: Pedrick Rd Warehouse

Sounding: 1-CPT2
Cone: 811:T1500F15U35



Max Depth: 7.900 m / 25.92 ft
Depth Inc: 0.025 m / 0.082 ft
Avg Int: Every Point

File: 22-56-24229_CP02.COR
Unit Wt: SBTQtn (PKR2009)

SBT: Robertson, 2009 and 2010
Coords: UTM 10S N: 4259991m E: 604287m

Equilibrium Pore Pressure (Ueq) | Assumed Ueq | Dissipation, Ueq achieved | Dissipation, Ueq not achieved | Hydrostatic Line

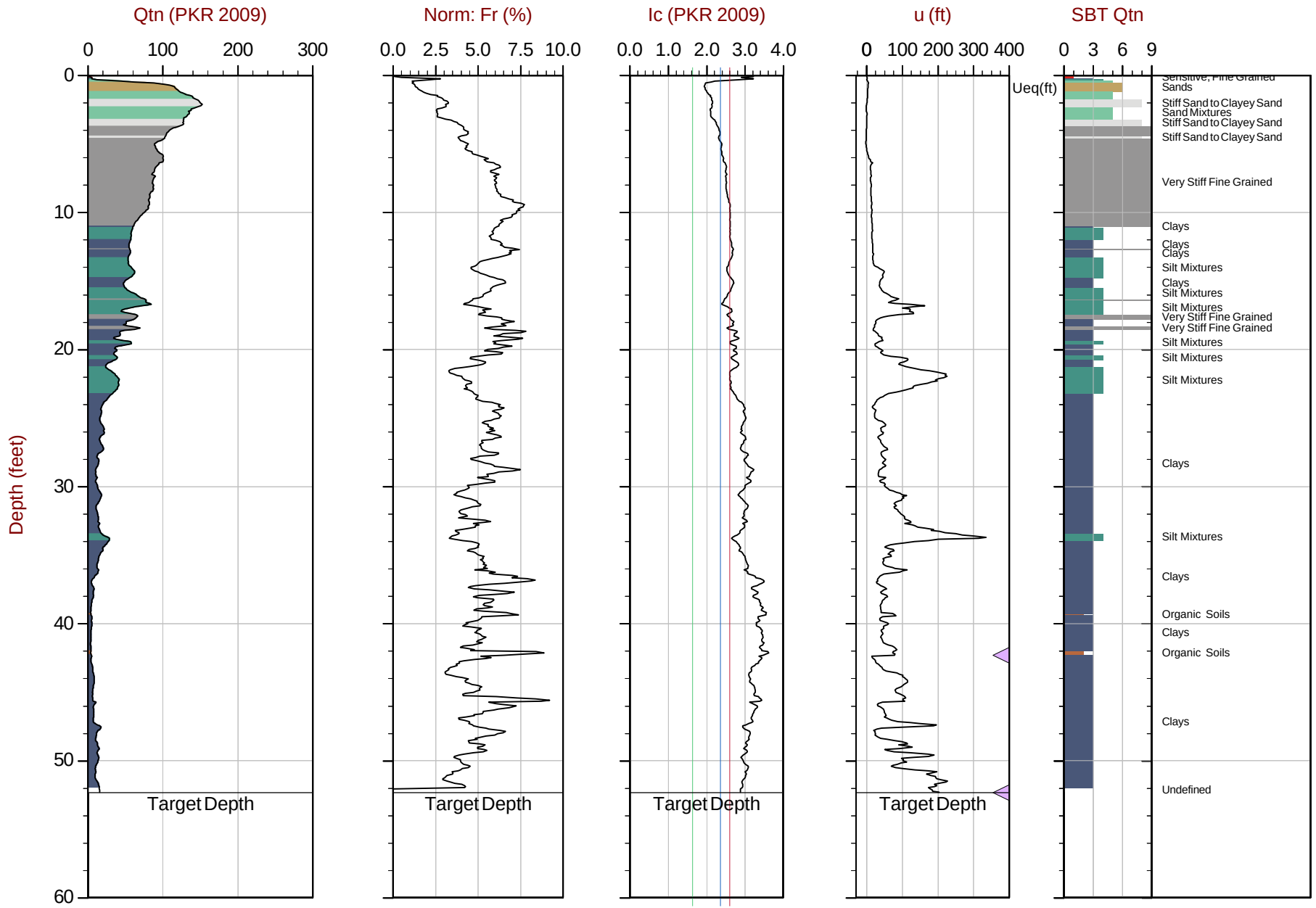
The reported coordinates were acquired from consumer grade GPS equipment and are only approximate locations. The coordinates should not be used for design purposes.

CONETEC

ENGEO

Job No: 22-56-24229
Date: 2022-05-27 09:47
Site: Pedrick Rd Warehouse

Sounding: 1-CPT3
Cone: 811:T1500F15U35



Max Depth: 15.950 m / 52.33 ft
Depth Inc: 0.025 m / 0.082 ft
Avg Int: Every Point

File: 22-56-24229_SP03.COR
Unit Wt: SBTQtn (PKR2009)

SBT: Robertson, 2009 and 2010
Coords: UTM 10S N: 4260078m E: 604039m

Equilibrium Pore Pressure (Ueq) | Assumed Ueq | Dissipation, Ueq achieved | Dissipation, Ueq not achieved | Hydrostatic Line

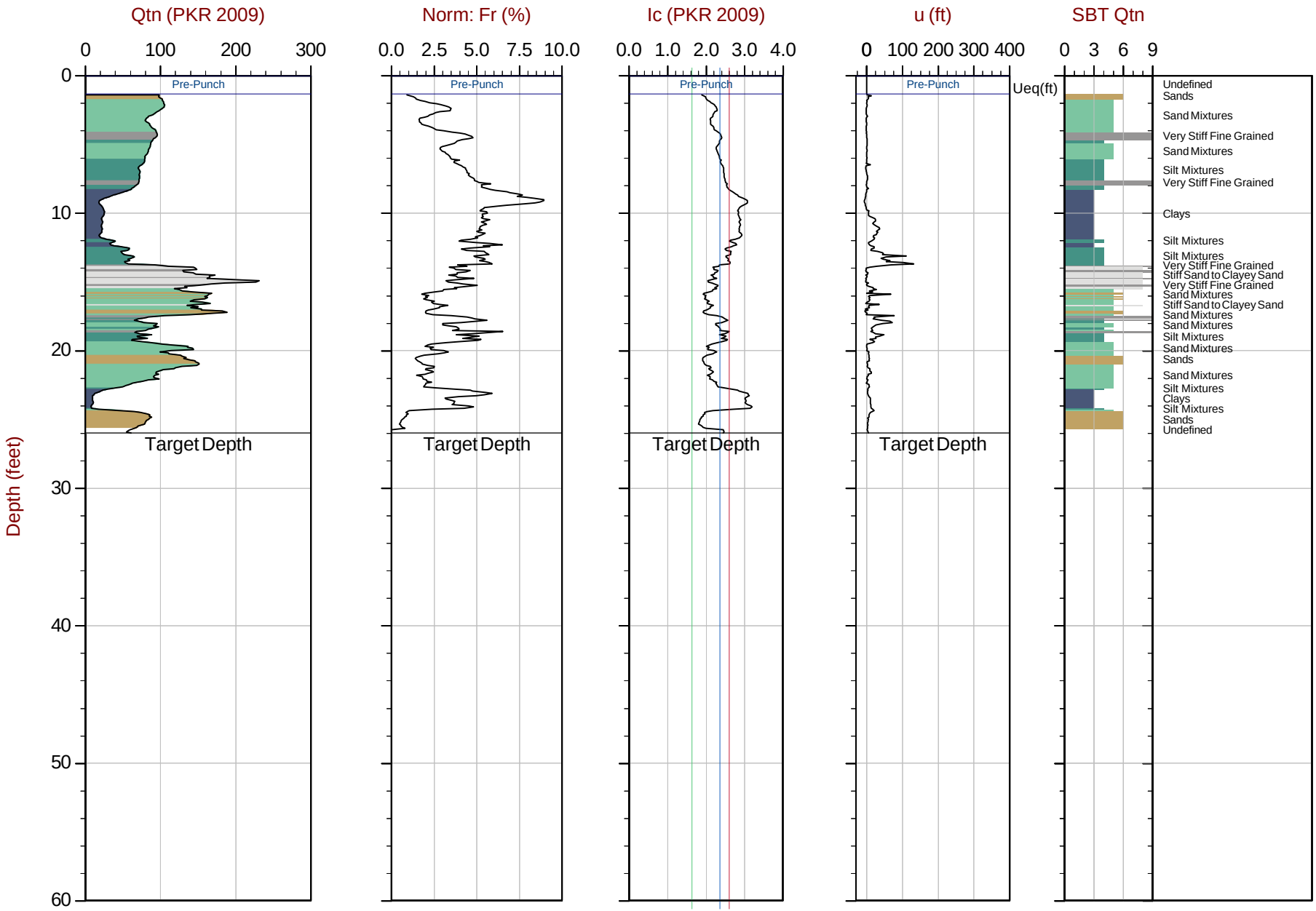
The reported coordinates were acquired from consumer grade GPS equipment and are only approximate locations. The coordinates should not be used for design purposes.

CONETEC

ENGEO

Job No: 22-56-24229
Date: 2022-05-27 14:05
Site: Pedrick Rd Warehouse

Sounding: 1-CPT4
Cone: 811:T1500F15U35



Max Depth: 7.925 m / 26.00 ft
Depth Inc: 0.025 m / 0.082 ft
Avg Int: Every Point

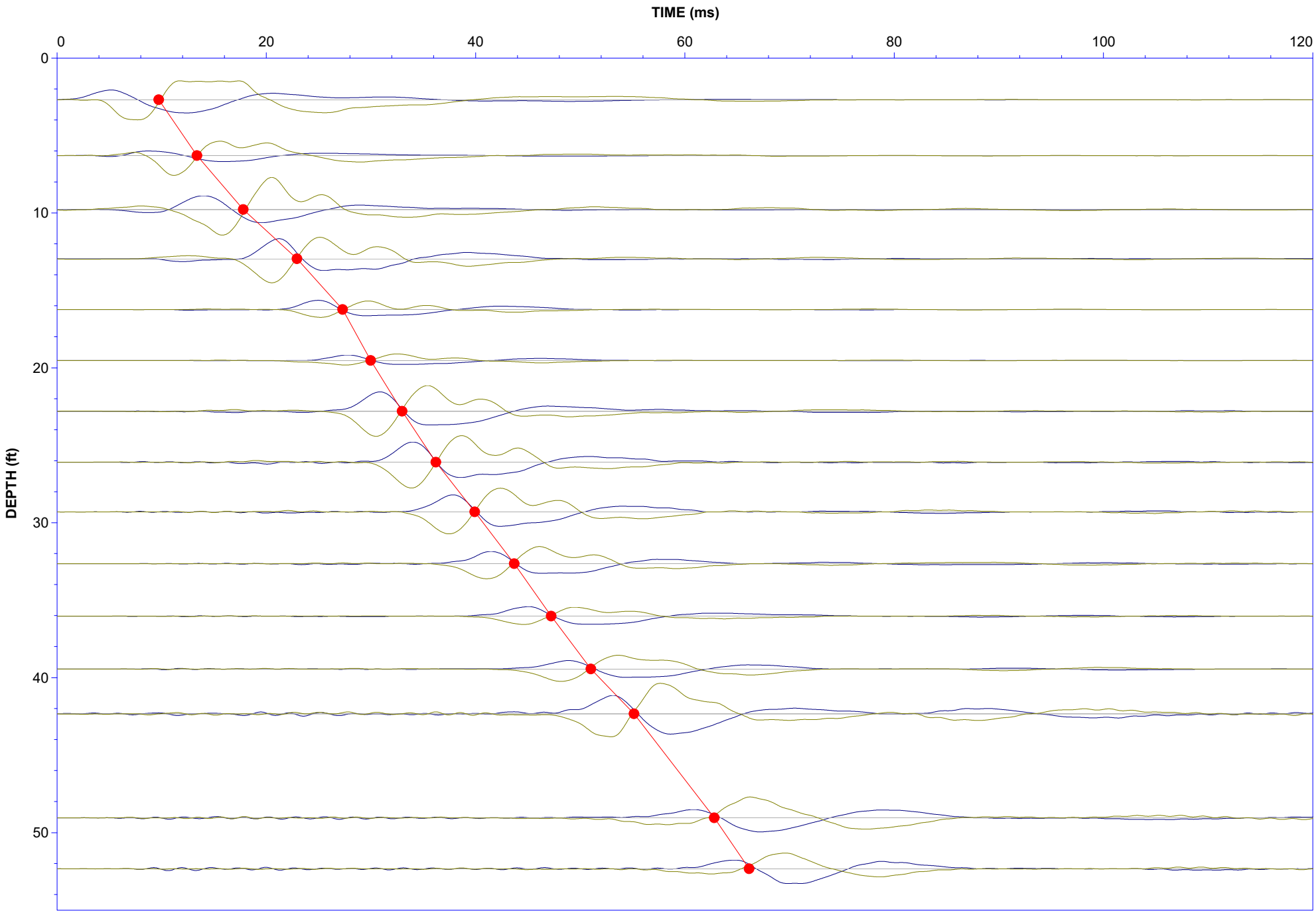
File: 22-56-24229_CP04.COR
Unit Wt: SBTQtn (PKR2009)

SBT: Robertson, 2009 and 2010
Coords: UTM 10S N: 4260159m E: 604167m

Equilibrium Pore Pressure (Ueq) | Assumed Ueq | Dissipation, Ueq achieved | Dissipation, Ueq not achieved | Hydrostatic Line

The reported coordinates were acquired from consumer grade GPS equipment and are only approximate locations. The coordinates should not be used for design purposes.

Job No: 22-56-24229 Client: ENGEO Project Title: Pedrick Rd Warehouse Filter: BP 0-500 Hz Hole: 1-CPT3 Filter: Shear Wave
Date: 05:27:22 08:29 Cone: 811:T1500F15U35



ENGEO
Expect Excellence

APPENDIX D

PHASE I ENVIRONMENTAL SITE ASSESSMENT

PHASE I ENVIRONMENTAL SITE ASSESSMENT
ASTM Standard E 1527-13

PEDRICK ROAD AT I80 PROPERTY
APN 0111-010-080
Pedrick Road
Dixon, Solano County, California

Brusca Project No. 137-010

Prepared for: **Buzz Oates Construction, Inc.**

March 17, 2022

Brusca Associates, Inc.
Environmental Engineering Geology

Table of Contents

EXECUTIVE SUMMARY ii
1.0 INTRODUCTION 1
1.1 PURPOSE AND KEY DEFINITIONS 1
1.2 PROPERTY INFORMATION AND LOCATION 2
1.3 SCOPE OF WORK 2
1.4 EXCEPTIONS AND LIMITATIONS 3
1.5 USER RELIANCE AND CONFIDENTIALITY 3
2.0 PHYSICAL SETTING 4
2.1 PHYSICAL SETTING SOURCES 4
2.2 TOPOGRAPHY 4
2.3 GEOLOGY AND SOILS 4
2.4 SURFACE WATER AND GROUNDWATER 4
3.0 SITE RECONNAISSANCE 5
3.1 SITE DESCRIPTION 5
3.2 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS 5
3.3 UTILITIES 5
3.4 COMMON SITE-SPECIFIC ENVIRONMENTAL CONCERNS 5
3.5 RESULTS OF SITE RECONNAISSANCE 6
4.0 ADJOINING SITE CONDITIONS AND USE 6
5.0 INTERVIEWS AND USER QUESTIONNAIRE 7
5.1 INTERVIEWS 7
5.2 USER QUESTIONNAIRE 7
6.0 PREVIOUS ENVIRONMENTAL INVESTIGATION 7
7.0 HISTORICAL RESEARCH 8
7.1 HISTORICAL INFORMATION SOURCES 8
7.2 SUMMARY OF PAST SITE CONDITIONS AND USAGE 9
7.3 PAST ADJOINING SITE USAGE 9
8.0 AGENCY RECORDS REVIEW 10
8.1 INFORMATION SOURCES 10
8.2 SUBJECT PROPERTY LISTINGS/RECORDS 11
8.3 NEARBY SITES LISTINGS/RECORDS 11
9.0 SIGNIFICANT DATA GAPS 13
10.0 FINDINGS, OPINIONS, AND CONCLUSIONS 13
11.0 STATEMENT OF QUALIFICATIONS 13
12.0 ENVIRONMENTAL PROFESSIONAL STATEMENT 14
13.0 CLOSING 14

ATTACHMENTS

Plate 1 - Vicinity Map
Plate 2 - Site Map

Appendix A – Photographs
Appendix B – User Questionnaire
Appendix C – Historical Information
Appendix D – Agency Listings Database Report (EDR)
Appendix E – Additional Information

EXECUTIVE SUMMARY

Brusca Associates, Inc. has prepared this *Phase I Environmental Site Assessment* of the subject property in general accordance with ASTM Standard E 1527-13. Our assessment has been performed to determine if the potential exists for significant site contamination from either on- or off-site sources for the purpose of identifying any *recognized environmental conditions* in connection with the subject property. We understand that this report will be used for environmental due diligence purposes related to a commercial real estate transaction involving the subject property.

The approximate 37.6-acre subject property is situated directly westerly of Pedrick Road and easterly of Interstate 80 in Dixon, Solano County, California. The subject property is addressed as Pedrick Road and is identified by the Solano County Assessor's Office as parcel number (APN) 0111-010-080. The subject site currently is comprised of undeveloped farmland. At the time of our reconnaissance, the property supported knee-high grasses. Utility poles and overhead power lines are situated along the southerly margin of the property. A few wooden produce advertisement signs are located on the far westerly portion of the property (along the margin of Interstate 80). Our reconnaissance identified no obvious evidence that current use or activities on the subject property have resulted in a significant release of hazardous substances or petroleum products to the environment on the subject property.

Our historical research indicates that the subject property has never been developed or supported any structures. It is indicated that the property has been used for farming activities (row and/or dry crops) since at least the 1930s. Our research indicates that a natural gas well was drilled to a total depth of 7,000 feet on the southwesterly portion of the subject property in 1988; it is reported that the well was a dry hole and was subsequently plugged and abandoned in early 1989. Our historical research has not revealed the likelihood that past on-site activities would have resulted in a significant release of hazardous substances or petroleum products to the environment on the subject property.

Neither our research of government agency information nor our observations of adjoining areas revealed evidence of nearby contamination conditions of sufficient magnitude or proximity to be considered a threat to the environment on the subject property.

This Phase I Environmental Site Assessment has not revealed evidence of *recognized environmental conditions* in connection with the subject property. In our opinion, the findings of this Phase I study do not warrant further due diligence environmental investigation of the subject property at this time. In consideration of the environmental condition of the property, please refer to the information contained in the remainder of this report.

Brusca Associates, Inc.
Environmental Engineering Geology

March 17, 2022

Buzz Oates Construction, Inc.
Attention: Joe Livaich
555 Capitol Mall, Suite 900
Sacramento, CA 95814

PHASE I ENVIRONMENTAL SITE ASSESSMENT
PEDRICK ROAD AT I80 PROPERTY
APN 0111-010-080
Pedrick Road
Dixon, Solano County, California
Brusca Project No. 137-010

1.0 INTRODUCTION

Brusca Associates, Inc. has completed this *Phase I Environmental Site Assessment* of the subject property at the request of Buzz Oates Construction, Inc. The approximate 37.6-acre subject property is situated directly westerly of Pedrick Road and easterly of Interstate 80 in Dixon, Solano County, California. The subject property is addressed as Pedrick Road and is identified by the Solano County Assessor's Office as parcel number (APN) 0111-010-080. The subject site currently is comprised of undeveloped farmland.

We understand that this report will be used for environmental due diligence purposes related to a commercial real estate transaction involving the subject property. This *Phase I Environmental Site Assessment* has been performed in general accord with the scope and limitations of the 2013 American Society for Testing and Materials (ASTM) *Standard Practice for Phase I Environmental Site Assessments Process* (E 1527-13).

1.1 PURPOSE AND KEY DEFINITIONS

The purpose of our assessment has been to identify any *recognized environmental conditions* in connection with the subject property to determine if the potential exists for significant site contamination from either on- or off-site sources. A *recognized environmental condition* is defined in the referenced standard as:

> "*the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."* A *de minimis condition* is defined as *"a condition that generally does not present a threat to human health or the environment and that*

generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions".

We have also considered whether any *historical recognized environmental conditions* or *controlled recognized environmental conditions* are associated with the property. A *historical recognized environmental condition* is defined as:

"a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)".

A *controlled recognized environmental condition* is defined as:

"a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)".

1.2 PROPERTY INFORMATION AND LOCATION

General Property Information/Location			
Property Name: Pedrick Road at I80 Property		Address: Pedrick Road, Dixon, California	
APN: 0111-010-080	County: Solano	Owner: Valley Iron, Inc.	
Location: See *Vicinity Map*, Plate 1			Size: Approx. 37.6 acres
Latitude/Longitude: 38.4828250, -121.8072220		Current Use: Agricultural	
Considered Future Use: Commercial/industrial			

1.3 SCOPE OF WORK

Protocol and ASTM Scope Items

This *Phase I Environmental Site Assessment* has been performed in general accord with the scope and limitations of the 2013 ASTM *Standard Practice for Phase I Environmental Site Assessments Process* (E 1527-13). A *Phase I Environmental Site Assessment* is the primary component of an "*All Appropriate Inquiry*" designed to evaluate the environmental integrity of a property as part of the due diligence required to qualify for Landowner Liability Protections under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The regulatory requirements and standards for

Phase I environmental site assessment were established by the Federal Environmental Protection Agency and are outlined in 40 CFR Part 312, *"The Final Rule for Standards and Practices for All Appropriate Inquiries (AAI)"*.

The scope of this investigation included:

- Review of physical setting information sources
- Historical research, including review of any available, relevant environmental reports
- Site reconnaissance and observations of adjacent and nearby properties
- Interviews of individuals knowledgeable of the property and agency representatives
- Review of regulatory agency listings and records, including an agency database report
- Evaluation of the collected information, and preparation of this report

Non-ASTM Scope Items

The scope of work associated with this *Phase I Environmental Site Assessment* has not included soil, soil gas, or groundwater sampling/testing, a chain-of-title document search, an evaluation of business environmental risk, an environmental compliance audit, research regarding use limitations (deed restrictions), or a property lien search. Our study also has not included evaluation of the following non-ASTM scope items: asbestos-containing building materials or naturally-occurring asbestos; lead-based paint; indoor air quality; industrial hygiene or safety; cultural or historic resources; ecological resources or endangered species; wetlands; biological agents; or, mold. We could develop a scope and cost estimate for performance of non-ASTM scope items upon request.

1.4 EXCEPTIONS AND LIMITATIONS

No significant exceptions to or deviations from the ASTM standard (E 1527-13) were made during the course of our work. The ASTM Standard E 1527-13 is designed to establish good commercial and customary practices to be implemented by the Environmental Professional in performing Phase I assessment of a property in a manner that satisfies CERCLA requirements. Our services are performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings and conclusions presented herein are based on the cited reference materials, conversations, reconnaissance, and other information obtained from a variety of sources deemed to be reliable. No warranty regarding the accuracy of our opinions or conclusions is expressed or implied. It should be understood that the scope of investigation described herein is not exhaustive, and performance of a *Phase I Environmental Site Assessment* cannot completely eliminate uncertainties regarding the potential for environmental impairment of a property.

1.5 USER RELIANCE AND CONFIDENTIALITY

Buzz Oates Construction, Inc. and PW Fund B Development, LLC may read and rely upon the information, findings, conclusions, and recommendations contained herein. Without prior written consent of the client, Brusca Associates, Inc. will keep confidential and not disclose to any person or entity, any data or information provided by the client or generated in conjunction with the performance of this study. Provisions of confidentiality shall not apply to data or information obtained from the public domain or acquired from third parties not under obligation to the client to maintain confidentiality.

2.0 PHYSICAL SETTING

2.1 PHYSICAL SETTING SOURCES

Sources used to determine the regional setting during this study have included the following:

- 1977 CGS Geologic Map of California (1:750,000)
- 1981 CGS Geologic Map of the Sacramento Quadrangle (1:250,000)
- 1985 USGS Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley (1:62,500)
- USGS Dixon Quadrangle (1:24,000)

2.2 TOPOGRAPHY

As shown on the USGS Dixon Quadrangle (see Plate 1), the subject property is situated at elevations on the order of 60 feet above sea level. The site is relatively flat, and surface gradients in the vicinity slope gently toward the southeast.

2.3 GEOLOGY AND SOILS

The subject property is situated within the Sacramento Valley in the Great Valley geomorphic province of California. The valley was formed by tilting of the Sierran Block with the western side dropping to form the valley and the eastern side uplifting to form the Sierra Nevada. The valley is characterized by a thick sequence of sediments derived from erosion of the adjacent Sierra Nevada to the east and the Coast Ranges to the west. These sedimentary rocks are mainly Cretaceous in age. The depth of the sediments varies from a thin veneer at the edges of the valley to depths in excess of 50,000 feet near the western edge of the valley. California Geological Survey (CGS) mapping indicates that the geologic materials in the vicinity of the subject site are identified as Quaternary alluvial fan deposits.

Soil mapping by the the US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) indicates that the majority of onsite soils are identified as Capay silty clay loam. This soil unit is indicated to be moderately well drained. Soils on the far northeasterly portion of the subject property are identified as Yolo loam; this soil unit is indicated to be well drained.

2.4 SURFACE WATER AND GROUNDWATER

There are no surface water bodies on the subject property. A stormwater retention pond associated with the northerly adjoining TEC Equipment facility borders the site to the north; this pond was dry at the time of our reconnaissance. The nearest prominent surface water feature, Putah Creek, is situated approximately three miles northeasterly of the subject site, at its closest point. Storm water generated on the subject property would appear to be directed towards adjoining properties and Pedrick Road. We observed no evidence of suspicious run-off to, or from the subject property during our recent site visit.

Groundwater conditions within the general area of the subject property have been considered utilizing information obtained from the California Department of Water Resources, Solano County, and the California Regional Water Quality Control Board. We also have considered groundwater elevation data

obtained during past groundwater monitoring and subsurface investigations on property to the south of the subject site (former Mistler facility, discussed later in this report). The available information indicates seasonally variable groundwater depths ranging from about 20 to 40 feet. The regional groundwater flow direction is indicated to be southeasterly.

3.0 SITE RECONNAISSANCE

Site Reconnaissance		
Date: February 22, 2022	Brusca Associates, Inc. Representative: Joe Brusca	Weather: Sunny
Site Layout: See Plate 2, *Site Map*	Site Photographs: See Appendix A	Limiting Conditions: None

3.1 SITE DESCRIPTION

The approximate 37.6-acre subject property is situated directly westerly of Pedrick Road and easterly of Interstate 80 in Dixon, Solano County, California. The subject property is addressed as Pedrick Road and is identified by the Solano County Assessor's Office as parcel number (APN) 0111-010-080. The subject site currently is comprised of undeveloped farmland. At the time of our reconnaissance, the property supported knee-high grasses. Utility poles and overhead power lines are situated along the southerly margin of the property. A few wooden produce advertisement signs are located on the far westerly portion of the property (along the margin of Interstate 80).

3.2 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS

No hazardous substances or petroleum products are used/stored on the subject site.

3.3 UTILITIES

Electricity and natural gas are provided to the subject site vicinity by the Pacific Gas and Electric Company (PG&E). Municipal drinking water and the local sewer utility are provided in the general area by the City of Dixon. Our scope of work has not included the determination of availability of utilities to the subject property.

3.4 COMMON SITE-SPECIFIC ENVIRONMENTAL CONCERNS

Potential Environmental Concern	Observations/Comments
Storage Tanks, Vent/Fill Pipes	None revealed by our reconnaissance or research
Petroleum Pipelines or Oil & Gas Wells	None revealed by our reconnaissance or research
Drums	None revealed by our reconnaissance or research
Unidentified Substance Containers	None revealed by our reconnaissance or research
Sumps	None revealed by our reconnaissance or research
Floor Drains	None revealed by our reconnaissance or research
Stains	None revealed by our reconnaissance or research
Septic Systems	None revealed by our reconnaissance or research

Potential Environmental Concern	Observations/Comments
Stressed Vegetation	None revealed by our reconnaissance or research
Solid Waste Disposal/Fill Placement	None revealed by our reconnaissance or research
Pools of Liquid/Standing Water	None revealed by our reconnaissance or research
Unusual Odors	None revealed by our reconnaissance or research
Polychlorinated Biphenyls (PCBs)	None revealed by our reconnaissance or research
Pits, Ponds, or Lagoons; Wastewater Treatment	None revealed by our reconnaissance or research
Wells	None revealed by our reconnaissance or research

3.5 RESULTS OF SITE RECONNAISSANCE

We observed no obvious evidence of contamination conditions, improper hazardous substance/petroleum products use or storage, environmentally suspicious dumping or discharge, or significant staining. Our reconnaissance identified no obvious evidence that current use or activities on the subject property have resulted in a significant release of hazardous substances or petroleum products to the environment on the subject property.

4.0 ADJOINING SITE CONDITIONS AND USE

The approximate 37.6-acre subject site is located within a agricultural area of Dixon, Solano County. The subject site is generally bounded by Interstate 80 to the west and Pedrick Road to the east. The property is bordered by a stormwater basin associated with a TEC Equipment facility to the north and by vacant farmland to the south. Information regarding adjoining and nearby site use is presented below.

Direction	Description
Northerly	Stormwater basin and TEC Equipment facility (truck and trailer sales); 8555 Pedrick Road
Southerly	Vacant farmland
Easterly (across Pedrick Road)	Vacant farmland
Westerly (across Interstate 80)	Vacant farmland

Our research and visual observations of adjoining and nearby properties did not identify current conditions or activities considered likely to have resulted in a significant release of hazardous substances or petroleum products affecting the environment on the subject property. Information obtained during our review of agency listings and records for adjoining and nearby sites, including the northerly adjoining TEC Equipment facility, is discussed in *Section 8.3* of this report.

5.0 INTERVIEWS AND USER QUESTIONNAIRE

5.1 INTERVIEWS

The following individuals were contacted in person, by phone, or by written communication to obtain information relevant to the environmental status and condition of the subject property.

Relationship to Property	Name/Affiliation	Comments
User Representative	Joe Livaich, Buzz Oates Construction, Inc.	See *Section 5.2*
Owner Representative/Key Site Manager	Noel Briscoe, Valley Iron, Inc.	See below

As a part of our research, we conducted an interview with a current owner representative, Noel Briscoe of Valley Iron, Inc.. Mr. Briscoe indicated that he has been familiar with the site since the property was acquired about three years ago, and that during that time property use has been limited to farming. Mr. Briscoe stated that there are no environmental liens or environmentally-related activity and use limitations associated with the subject property. Mr Briscoe also indicated that there are no known past hazardous substances/petroleum hydrocarbons releases or known contamination conditions on the property, and that there are no activities or features of potential environmental concern (including past or present underground storage tanks, above-ground storage tanks, on-site waste disposal, pits, sumps, oil-water separators, or septic systems) associated with the site.

Additional information obtained from interviews is presented in the relevant sections of this report.

5.2 USER QUESTIONNAIRE

In order to qualify for one of the Landowner Liability Protections offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user of this report must provide specific information (if available) to the environmental professional. A user representative (Joe Livaich of Buzz Oates Construction, Inc.) completed a *User Questionnaire* for the subject property; a copy of the completed *User Questionnaire* is presented in Appendix B. The responses presented on the *User Questionnaire* did not reveal any evidence of recognized environmental conditions in connection with the subject property.

6.0 PREVIOUS ENVIRONMENTAL INVESTIGATION

In 2019, West Associates prepared a *Phase I Environmental Transaction Study* of the subject property; a copy of the 2019 report is included in Appendix E.[1] At the time of the 2019 study, the subject property was comprised entirely of vacant farmland; the site conditions observed during our recent site visit are very similar to those described in the West Associates report. The 2019 study did not identify any recognized environmental conditions in connection with the subject property.

[1] West Associates; "Phase I Environmental Transaction Study, Unimproved Agricultural Property, Pedrick Road, Dixon, APN 111-010-080"; October 2019.

7.0 HISTORICAL RESEARCH

7.1 HISTORICAL INFORMATION SOURCES

General

As a part of this *Phase I Environmental Site Assessment*, historical research was performed to determine the past usage of the subject property and to evaluate the potential that past site usage resulted in recognized environmental conditions on the property. In accordance with ASTM Standard E 1527-13, our research has included evaluation of obvious uses of the property back to initial site development, or the 1940s, whichever is earlier. A number of different historical resources have been considered; the historical information sources considered are discussed below. Selected historical information (including aerial photographs, topographic maps, and city directory listings) is presented in Appendix C.

Aerial Photographs

We reviewed historical aerial photographs dated 1937, 1952, 1968, 1974, 1984, 1993, 2006, 2009, 2012, 2016 and 2020. All of the aerial photographs show the subject property as vacant/undeveloped farmland planted in row and/or dry crops; no onsite structures are evident on any of the aerial photographs. On the aerial photographs dated 2009 and 2012 small rectangular features are evident on the far southeasterly portion of the site; these features would appear to be stacks of hay bales.

USGS Topographic Maps

We reviewed U.S. Geological Survey topographic quadrangle maps (Dixon Quadrangle) dated 1907, 1915, 1952, 1953, 1968, 1975, 1981, 2012, 2015 and 2018. None of the quadrangle maps depicts any structures, features, or usage on the subject property.

Sanborn Fire Insurance Maps

Our research indicates that the area of the subject property is not covered by available Sanborn Fire Insurance Maps.

Local Street Directories

Our historical research included review of city directories (EDR Digital Archive and Haines Criss-Cross Directory) for the site vicinity to establish any past occupants of the subject property. City directory listings along Pedrick Road in the vicinity of the subject property are available from 1981 through 2017. The listings were generally documented in about five-year increments; the directory listings are included in Appendix C. No listings were identified for the subject property.

Oil and Gas Well Maps

Our review of California Department of Conservation Division of Oil and Gas records indicates that a natural gas well was drilled to a total depth of 7,000 feet on the southwesterly portion of the subject property in 1988. It is reported that the well was a dry hole and was subsequently plugged and abandoned in early 1989. Copies of the well records are included in Appendix E.

EDR Proprietary Listings

Environmental Data Resources (EDR) maintains proprietary databases of historic potential high-risk sites, including dry cleaners, gasoline stations, automotive stations, and manufactured gas plants. The proprietary databases were developed largely from historic business directories. As shown in the database report presented in Appendix D, the subject property does not appear in any of these databases.

Interviews

Interview information is presented in *Section 5.1* of this report.

Previous Environmental Report

Previous environmental investigation of the property was discussed in *Section 6.0* of this report.

7.2 SUMMARY OF PAST SITE CONDITIONS AND USAGE

The historical information obtained from the sources described above indicate that subject property has never been developed or supported any structures. It is indicated that the property has been used for farming activities (row and/or dry crops) since at least the 1930s. Our research indicates that a natural gas well was drilled to a total depth of 7,000 feet on the southwesterly portion of the subject property in 1988; it is reported that the well was a dry hole and was subsequently plugged and abandoned in early 1989. It is indicated that past site activities have not included the use or storage of significant quantities of hazardous substances or petroleum products. Our research and reconnaissance have not revealed evidence indicating the likelihood that past on-site activities would have resulted in a significant release of hazardous substances or petroleum products to the environment on the subject property.

The property has been farmed in row and/or dry crops since at least the 1930s. In our experience, previous agricultural chemical applications to farmland typically do not seriously impair the soil chemistry. Pesticide contamination is most commonly attributable to the rinsing of equipment after field application, when rinsing occurs in one place over a period of time. Such rinsing activities are usually performed at a farming headquarters or at an airport supporting crop dusting aircraft; our research has revealed no evidence of any previous crop dusting or farm headquarters facilities on the subject property.

7.3 PAST ADJOINING SITE USAGE

Information obtained from historical sources cited in *Section 7.1* indicates that adjoining and nearby properties historically have been farmed in row and dry crops. Pedrick Road was in place easterly of the property as early as the early 1900s, and Interstate 80 was in place to the west by the 1950s. An apparent rural residence was situated northeasterly of the property across Pedrick Road as early as the early 1900s and was removed by the early 2000s. The TEC Equipment truck and trailer sales facility and the associated stormwater pond directly northerly of the subject site was constructed around 2018. Properties to the south, east (across Pedrick Road) and west (across Interstate 80) have remained as vacant farmland. Our research has not identified past adjoining or nearby site usage considered likely

to have resulted in a release of hazardous substances or petroleum products that would have affected the environment on the subject property.

8.0 AGENCY RECORDS REVIEW

8.1 INFORMATION SOURCES

As a part of this *Phase I Environmental Site Assessment*, agency listings and records were reviewed and considered to evaluate the environmental status and condition of the subject property. Agency research has included obtaining an agency listings database report through a third-party provider; the database records search (including search radii) meets and exceeds the agency listings search provisions of ASTM Standard E 1527-13. The database report was obtained from Environmental Data Resources (EDR) and is presented in Appendix D. In addition to review of the agency database report, supplemental research was performed via online environmental databases (including Geotracker[2] and Envirostor[3]), and through direct communications and file review (as warranted) with various agencies (including local agencies not included in the database report).

Federal, State, and Tribal Listings/Records

A partial summary of federal, state, and tribal agency records and listings reviewed/researched, including the *Standard Environmental Record Sources* required by ASTM E 1527-13, is presented below. A significant number of additional lists were reviewed; for a comprehensive listing of the agency sources researched and descriptions of the agency listings, refer to the appended database report.

Federal Databases	Search Radius	Comments
NPL Site List	1 mile	No relevant listings/records identified
Proposed NPL Site List	1 mile	No relevant listings/records identified
NPL Liens List	Subject Property	No relevant listings/records identified
Delisted NPL Site List	1 mile	No relevant listings/records identified
CERCLIS List	0.5 mile	No relevant listings/records identified
CERCLIS Federal Facility List	0.5 mile	No relevant listings/records identified
CERCLIS NFRAP Site List	0.5 mile	No relevant listings/records identified
RCRA CORRACTS Facilities List	1 mile	No relevant listings/records identified
RCRA Non-CORRACTS TSD Facilities List	0.5 mile	No relevant listings/records identified
RCRA Generators List	0.25 mile	No relevant listings/records identified
US Engineering Controls Registry	0.5 mile	No relevant listings/records identified
US Institutional Controls Registry	0.5 mile	No relevant listings/records identified
LUCIS	0.5 mile	No relevant listings/records identified
ERNS List	Subject Property	No relevant listings/records identified

[2] Geotracker (www.geotracker.waterboards.ca.gov); environmental database of regulated facilities in California maintained by the State Water Resources Control Board.
[3] Envirostor (www.envirostor.dtsc.ca.gov); online database of contaminated sites, environmental cleanups, and permitted facilities in California maintained by the Department of Toxic Substances Control.

State/Tribal Databases	Search Radius	Comments
CA RESPONSE (equiv. NPL)	1 mile	No relevant listings/records identified
CA ENVIROSTOR (equiv. CERCLIS)	1 mile	No relevant listings/records identified
RWQCB SLIC List	0.5 mile	No relevant listings/records identified
Landfill/Solid Waste Disposal Site Lists	0.5 mile	Former Mistler Trucking appears on this listing; see *Section 8.3*
Leaking Storage Tank Lists	0.5 mile	Former Mistler Trucking appears on this listing; see *Section 8.3*
Registered Storage Tank Lists	0.25 mile	No relevant listings/records identified
Voluntary Cleanup Sites Lists	0.5 mile	No relevant listings/records identified
Brownfield Sites	0.5 mile	No relevant listings/records identified

Local Agency Listings/Records

The Solano County Environmental Health Department (SCEHD) is the local *Certified Unified Program Agency (CUPA)* responsible for sites located within Solano County. As the local CUPA, the SCEHD is certified and responsible for oversight of the following consolidated programs: Hazardous Materials Release Response Plans and Inventories (Business Plans); California Accidental Release Program; Underground Storage Tank Program; Aboveground Petroleum Storage Act; Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs; and, California Uniform Fire Code: Hazardous Materials Management Plans and Hazardous Material Inventory Statements. Our research indicates no environmentally-relevant listings or records pertaining to the subject property are maintained by the SCEHD. Additionally, our research does not indicate that other local agencies maintain any environmentally-relevant records or files pertaining to the subject property.

8.2 SUBJECT PROPERTY LISTINGS/RECORDS

Our research has not revealed that the subject property appears on the federal or state listings reviewed. Additionally, our research with local agencies, including the CUPA, indicates that none of these agencies maintains environmentally-relevant records or files pertaining to the subject property.

8.3 NEARBY SITES LISTINGS/RECORDS

Our research of agency listings and records indicates that a few nearby sites appear on agency listings within the search radii considered (up to one mile from the subject property). We researched and reviewed agency information regarding nearby listed sites to evaluate whether readily available information would suggest the potential for environmental impairment of the subject property from off-site areas. Our research and review of agency information regarding the nearby listed sites included consideration of the following:

- the nature/type of each listing
- the proximity of these sites to the subject site
- the nature of any nearby hazardous materials violations
- the magnitude and character of nearby known contamination conditions (including details regarding contaminant type, contamination extent, affected media, and agency status).

The agency information reviewed does not indicate that any of the nearby listed sites poses a significant threat to the environmental integrity of the subject property. Notable nearby listed sites are discussed below.

TEC Equipment, Inc., 8555 Pedrick Road, Dixon

A truck and trailer dealership, TEC Equipment Inc., currently operates at 8555 Pedrick Road directly northerly of the subject property. The appended agency listing database report indicates that the TEC Equipment Inc. site appears on the *California Environmental Reporting System for Hazardous Waste (CERS HAZ WASTE)* and *CERS* databases, the *Hazardous Waste Tracking System (HWTS)* database (this database generates reports on hazardous waste shipments for generators, transporters, and Treatment, Storage, and Disposal Facilities (TSDFs), and the *Resource Conservation Recovery Act Non-generators (RCRA-NONGEN)* database; non-generators do not presently generate hazardous waste. We reviewed records for the TEC Equipment, Inc. site maintained by the SCEHD; the available records dated 2017 through 2021 generally include facility information records for an onsite wastewater treatment system, permits, billing records, parcel maps, site maps, email correspondence, and documents pertaining to installation of a water supply well. None of the records reviewed indicates significant violations, spills, leaks, discharges or contamination conditions. Based on the available information, it does not appear that the TEC Equipment, Inc. site presents a significant environmental concern to the subject property.

Former Mistler Trucking, 8405 Pedrick Road, Dixon

The former Mistler Farm/Mistler Truck facility is addressed as 8405 Pedrick Road and is located approximately 1,500 feet southerly of the westerly portion of the subject property. The appended agency listing database report indicates that the Former Mistler Trucking facility appears on the *Leaking Underground Storage Tank (LUST)* database, the *California Environmental Reporting System (CERS)* database, the *Land Disposal Sites* listing (this listing includes landfill sites that have the potential to impact water quality in California), and the *Solid Waste Information System (SWF/LF)* listing; this listing includes active, closed, and inactive landfills.

Our firm has performed a number of environmental investigations at the former Mistler facility over the last few years. Our research has indicated that the LUST listing associated with this site is related to a 10,000-gallon above-ground storage tank (AST) was previously located at the Former Mistler Trucking site. Following review of site investigations, groundwater monitoring, and remedial excavation work performed in the area of subsurface contamination beneath the former AST, the Central Valley Regional Water Quality Control Board (CVRWQCB) determined that no further work was required regarding this case. Based on the available information, the distance to the subject property, and the regulatory agency status, the former AST at the Mistler facility is not considered an environmental concern to the subject site.

The solid waste/landfill listings associated with the Mistler facility are related to an unpermitted and abandoned landfill within the far westerly portion of the farm facility. Our firm has performed a number of investigations within and surrounding the former landfill, and we recently directed and oversaw the remedial excavation of the landfill materials for offsite disposal. The investigative data does not indicate that residual contaminants remain in the area of the landfill that would pose a threat to the subject property. Given the available information and the distance to the subject property, the former Mistler facility landfill is not considered an environmental concern to the subject site.

9.0 SIGNIFICANT DATA GAPS

Environmental assessment data gaps may affect the ability to identify recognized environmental conditions. Data gaps may include the inability to access relevant on-site structures or to communicate with individuals knowledgeable of the subject property or nearby contamination conditions. Lack of adequate historical information sources can also result in data gaps. In general, minor data gaps do not hinder an environmental professional's ability to render an opinion regarding potential environmental conditions associated with the subject property. There were no significant data gaps identified for this study.

10.0 FINDINGS, OPINIONS, AND CONCLUSIONS

Brusca Associates, Inc. has performed *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Standard E 1527-13 of the Pedrick road at I80 Property identified by the Solano County Assessor's Office as APN 0111-010-080. Any exceptions to, or deletions from, this practice are described in *Section 1.4* of this report. This assessment has revealed no evidence of existing, controlled, or historical recognized environmental conditions in connection with the property.

11.0 STATEMENT OF QUALIFICATIONS

Brusca Associates, Inc. is a multi-disciplinary geoscience consulting firm serving private and public-sector clients throughout Central and Northern California, and beyond. The firm specializes in environmental assessment and engineering geology consulting related to property acquisition, finance, due diligence, development, and regulatory compliance. Environmental services include: initial site assessment; soil, soil gas, and groundwater investigations; site characterization; groundwater monitoring; remedial feasibility studies; remedial design; and, clean-up oversight.

The Environmental Specialist for this study, Alycia Cridebring, holds a Bachelor of Science degree in Environmental Science and Management from the University of California at Davis, California. Ms. Cridebring has been an Environmental Specialist for Brusca Associates, Inc. since 2017.

The firm's founder and President, Joe Brusca, directly oversees all firm operations. Mr. Brusca holds a Bachelor of Science degree in Geology from the University of California at Davis, California, is a Professional Geologist and Certified Engineering Geologist in the State of California, and has over 30 years of environmental and geological consulting experience spanning a broad range of geographic areas, project types, and client needs. Mr. Brusca and key staff are certified for Hazardous Waste Site Operations training in accord with 29 CFR 1910.120.

12.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professionals as defined in §312.10 of 40 CFR 312. An *Environmental Professional* is "*a person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases on, at, in, or to a property, sufficient to meet the objectives and performance factors in §312.20(e) and (f) of 40 CFR 312.*"

13.0 CLOSING

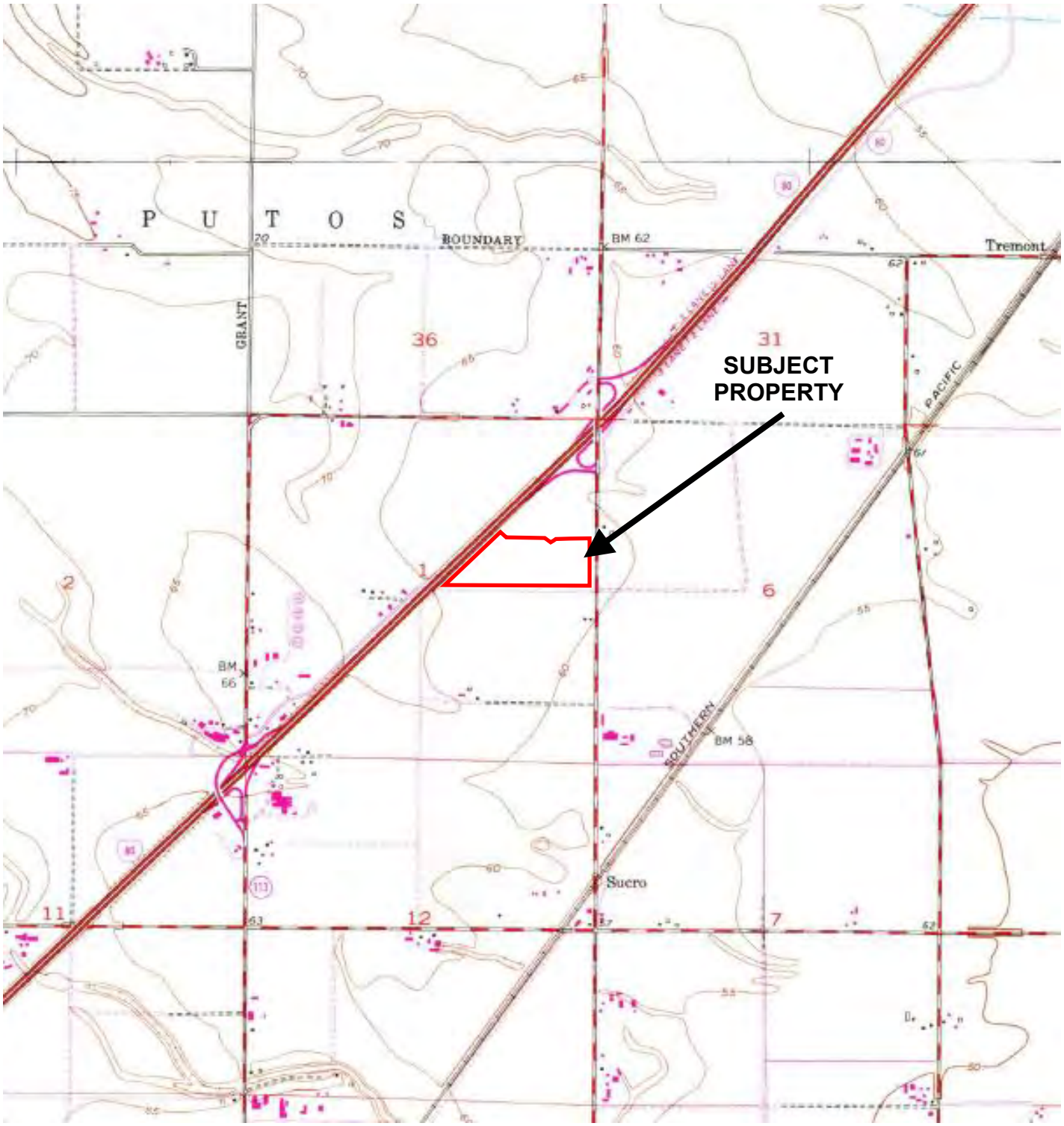
If you have any questions or require additional information, please contact the undersigned at (916) 677-1470.

Sincerely,

BRUSCA ASSOCIATES, INC.

Alycia Cridebring
Environmental Specialist

Joe Brusca
Principal Engineering Geologist
Certified Engineering Geologist No. 1948



SOURCE: U.S.G.S. 7.5-minute Dixon Quadrangle, California, 1981
1:24,000

Scale

Boundaries are approximate

Brusca Associates, Inc.
Environmental Engineering Geology

PLATE 1 - VICINITY MAP

Pedrick Road at I80 Property
Pedrick Road
Dixon, California

PROJ. MGR:	**Joe Brusca**	**DATE:**	**2/25/22**
DRAWN BY:	**AC**	**PROJ. #:**	**137-010**

All features and locations are approximate only

Brusca Associates, Inc.
Environmental Engineering Geology

PLATE 2 - SITE MAP
Pedrick Road at I80 Property
Pedrick Road
Dixon, California

PROJ. MGR:	**Joe Brusca**	**DATE:**	**2/25/22**
DRAWN BY:	**AC**	**PROJ. #:**	**137-010**

APPENDIX A – Photographs

Southerly view from the northeasterly property area

Westerly view from the northeasterly property area

Southwesterly view from the northeasterly property area

Southerly view from the northerly property area

Westerly view from the easterly property area

Westerly view from the southeasterly property area

Date of Photography: February 22, 2022

APPENDIX A – PHOTOGRAPHS

Northerly view from the southeasterly property area

Northwesterly view from the southeasterly property area

Northerly view from the central property area

Easterly view from the central property area

Southerly view from the central property area

Westerly view from the central property area

Easterly view from the southwesterly property area

Northeasterly view from the southwesterly property area

Northerly view from the southerly property area

Easterly view from the westerly property area

Easterly view from the northwesterly property area

Southerly view from the northwesterly property area

APPENDIX A – PHOTOGRAPHS

Southeasterly view from the northwesterly property area

Produce advertisement signage along northwesterly margin of the property

APPENDIX B – User Questionnaire

USER QUESTIONNAIRE

This *User Questionnaire* is part of the *Phase I Environmental Site Assessment* (ESA). To qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments") the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete. Attach additional sheets if necessary for further explanation.

User Representative Name:	Joe Livaich	***Signature:***	***Date:*** 2/23/22
Property Address:	Pedrick Road, Dixon, CA	***Parcel Number(s):***	0111-010-080

1. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?
☑ No ☐ Yes, Explain:

2. Are you aware of any activity and use limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?
☑ No ☐ Yes, Explain:

3. Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?
☑ No ☐ Yes, Explain:

4. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?
☐ No ☑ Yes, Explain: Fair market value.

5. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases?
☑ No ☐ Yes, Explain:

5a. Do you know the past uses of the property?
☐ No ☑ Yes, Explain: Agricultural production.

5b. Do you know of specific chemicals that are present or once were present at the property?
☑ No ☐ Yes, Explain:

5c. Do you know of spills or other chemical releases that have taken place at the property?
☑ No ☐ Yes, Explain:

5d. Do you know of any environmental cleanups that have taken place at the property?
☑ No ☐ Yes, Explain:

6. As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?
☑ No ☐ Yes, Explain:

ADDITIONAL INFORMATION

Certain information should be collected, if available, and provided to the environmental professional selected to conduct the Phase I ESA. This information is intended to assist the environmental professional but is not necessarily required to qualify for one of the LLPs.

Why is the Phase I ESA required? Due diligence for property acquisition and pursuit of entitlements to construct a high cube industrial warehouse building.
What is the nature of the property transaction (sale, purchase, exchange, bank loan, etc.)? Purchase.
What is the planned use of the property? High cube industrial warehouse building.
Is there any scope of services desired or required beyond ASTM 1527 Phase I ESA 1527? Not at this time.
Identify all parties who will rely on the Phase I ESA report. PW Fund B Development, LLC and Buzz Oates Construction, Inc.
Are there any special terms or agreements which must be agreed upon by the environmental professional? No.
Is there any other knowledge or experience with the property (for example, copies of prior environmental reports or documents relative to the environmental conditions of the property)? Yes. Previous Phase I dated October 2019 (West & Associates Environmental Engineers, Inc.)
Identify the current owner of the property and how the owner can be reached. Valley Iron, Inc. (Jon Quick, owner broker, jon.quick@colliers.com)
Identify the site contact and how the contact can be reached. Jon Quick, owner broker, jon.quick@colliers.com

APPENDIX C – Historical Information

- Aerial Photographs
- Topographical Quadrangle Maps
- Sanborn Fire Insurance Map Report
- Historical City Directories

Image Provided By EDR Aerials

Brusca Associates, Inc.
Environmental Engineering Geology

AERIAL PHOTOGRAPH - 2020
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR Aerials

Brusca Associates, Inc.
Environmental Engineering Geology

AERIAL PHOTOGRAPH - 2016
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR Aerials

Brusca Associates, Inc.
Environmental Engineering Geology

AERIAL PHOTOGRAPH - 2012
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

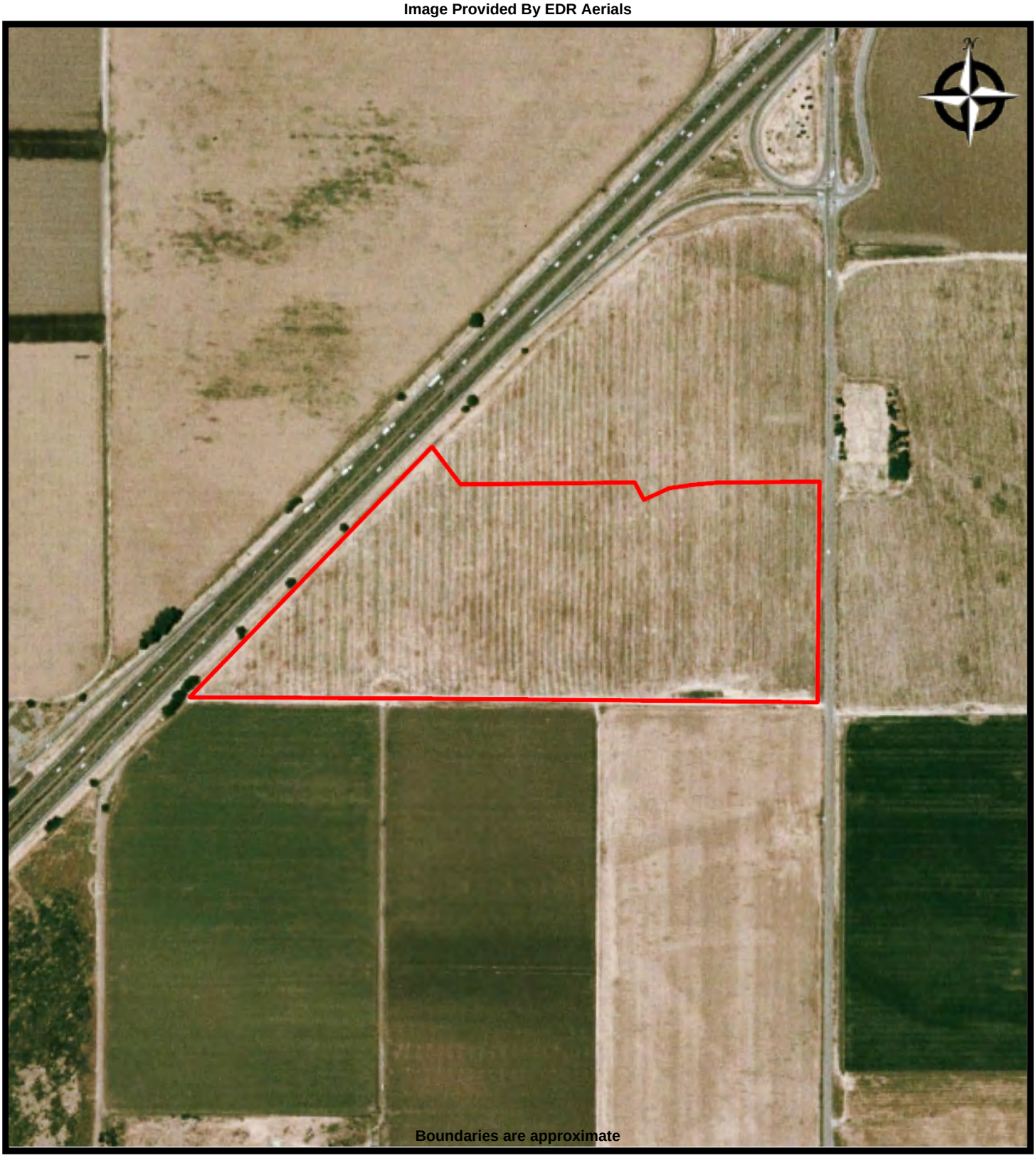
Image Provided By EDR Aerials

Brusca Associates, Inc.
Environmental Engineering Geology

AERIAL PHOTOGRAPH - 2009
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR Aerials

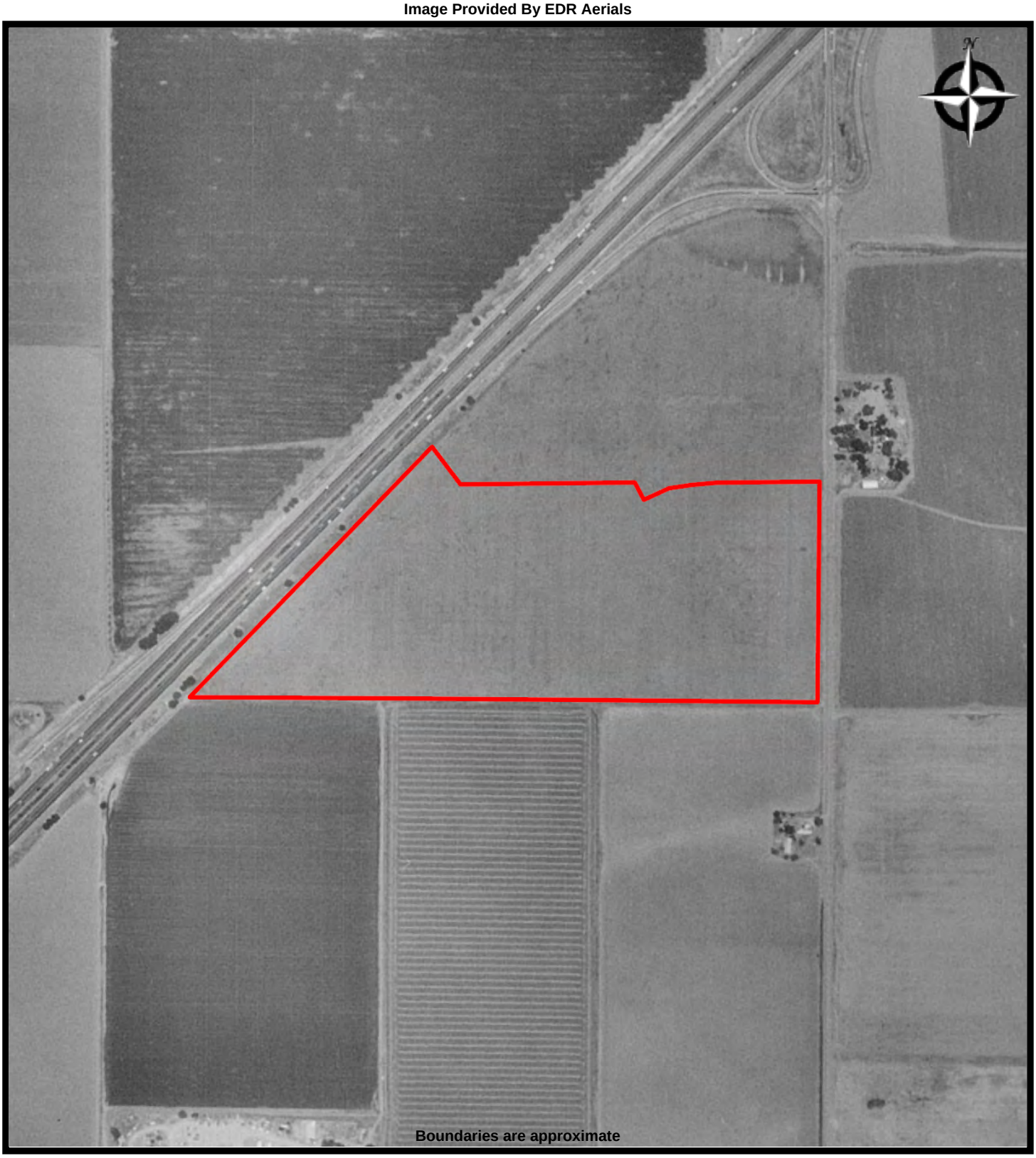


Brusca Associates, Inc.
Environmental Engineering Geology

AERIAL PHOTOGRAPH - 2006
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR Aerials



Brusca Associates, Inc.
Environmental Engineering Geology

AERIAL PHOTOGRAPH - 1993
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

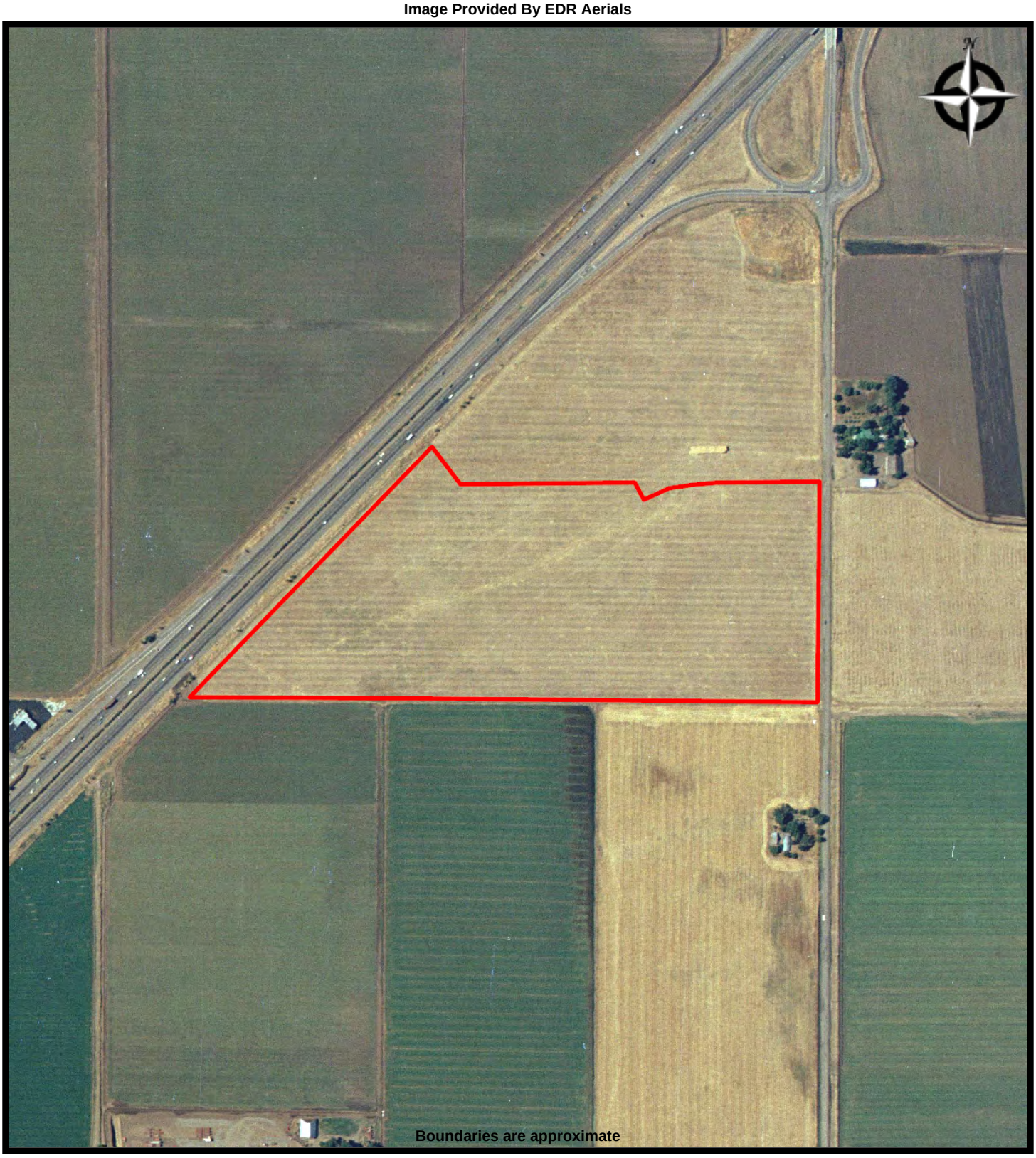
Image Provided By EDR Aerials

Brusca Associates, Inc.
Environmental Engineering Geology

AERIAL PHOTOGRAPH - 1984
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR Aerials

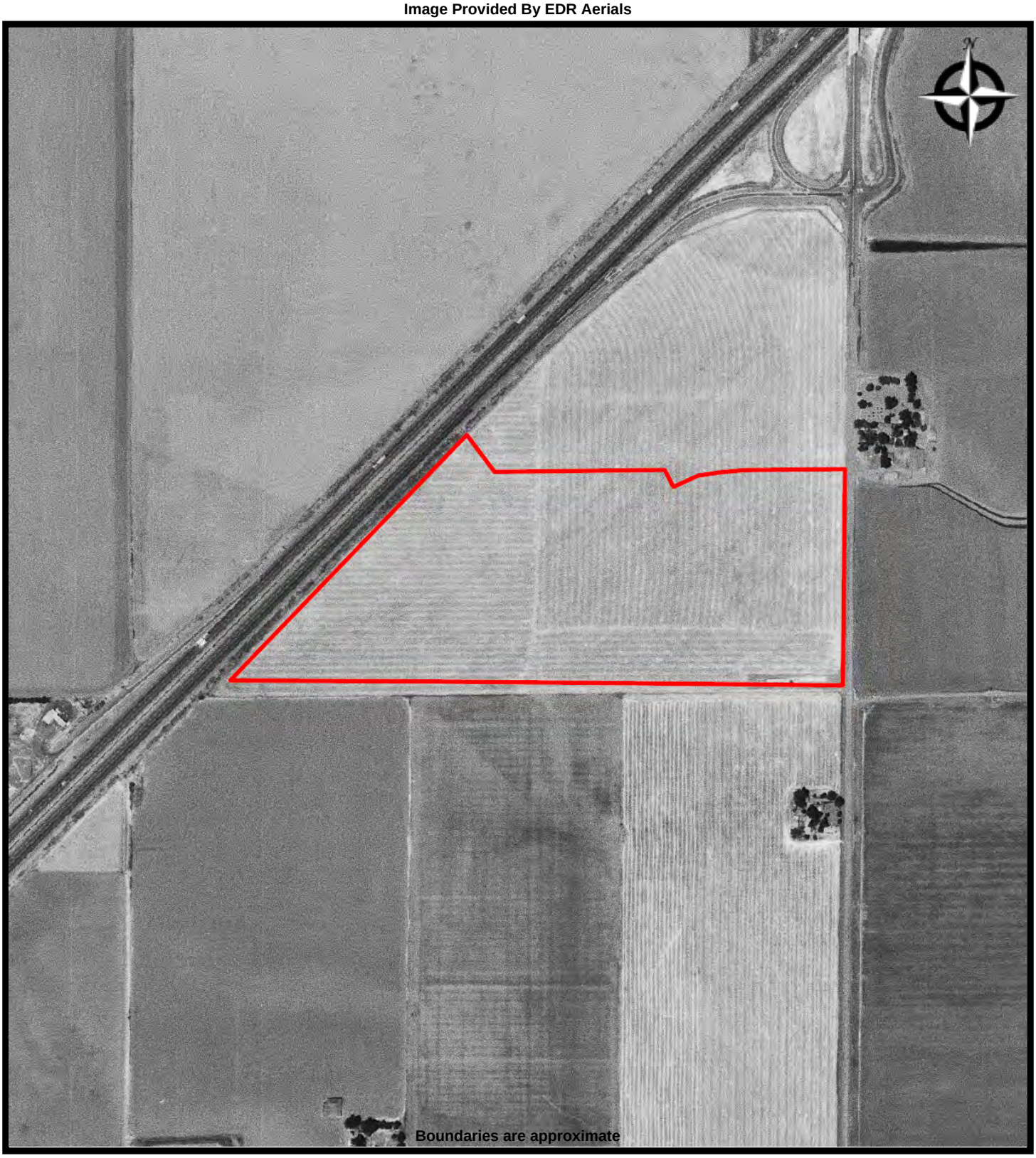


Brusca Associates, Inc.
Environmental Engineering Geology

AERIAL PHOTOGRAPH - 1974
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR Aerials

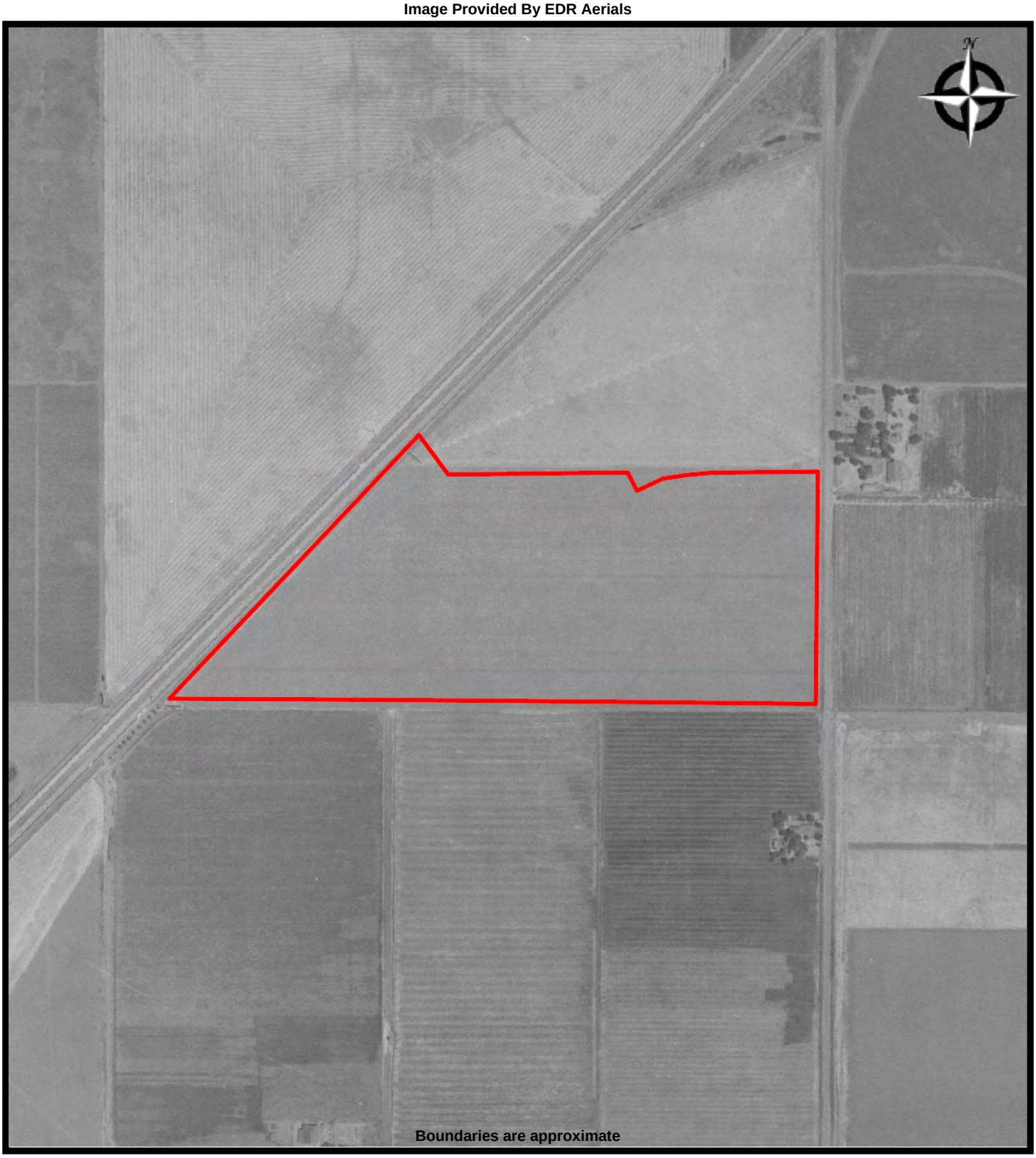


Brusca Associates, Inc.
Environmental Engineering Geology

AERIAL PHOTOGRAPH - 1968
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR Aerials



Brusca Associates, Inc.
Environmental Engineering Geology

AERIAL PHOTOGRAPH - 1952
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

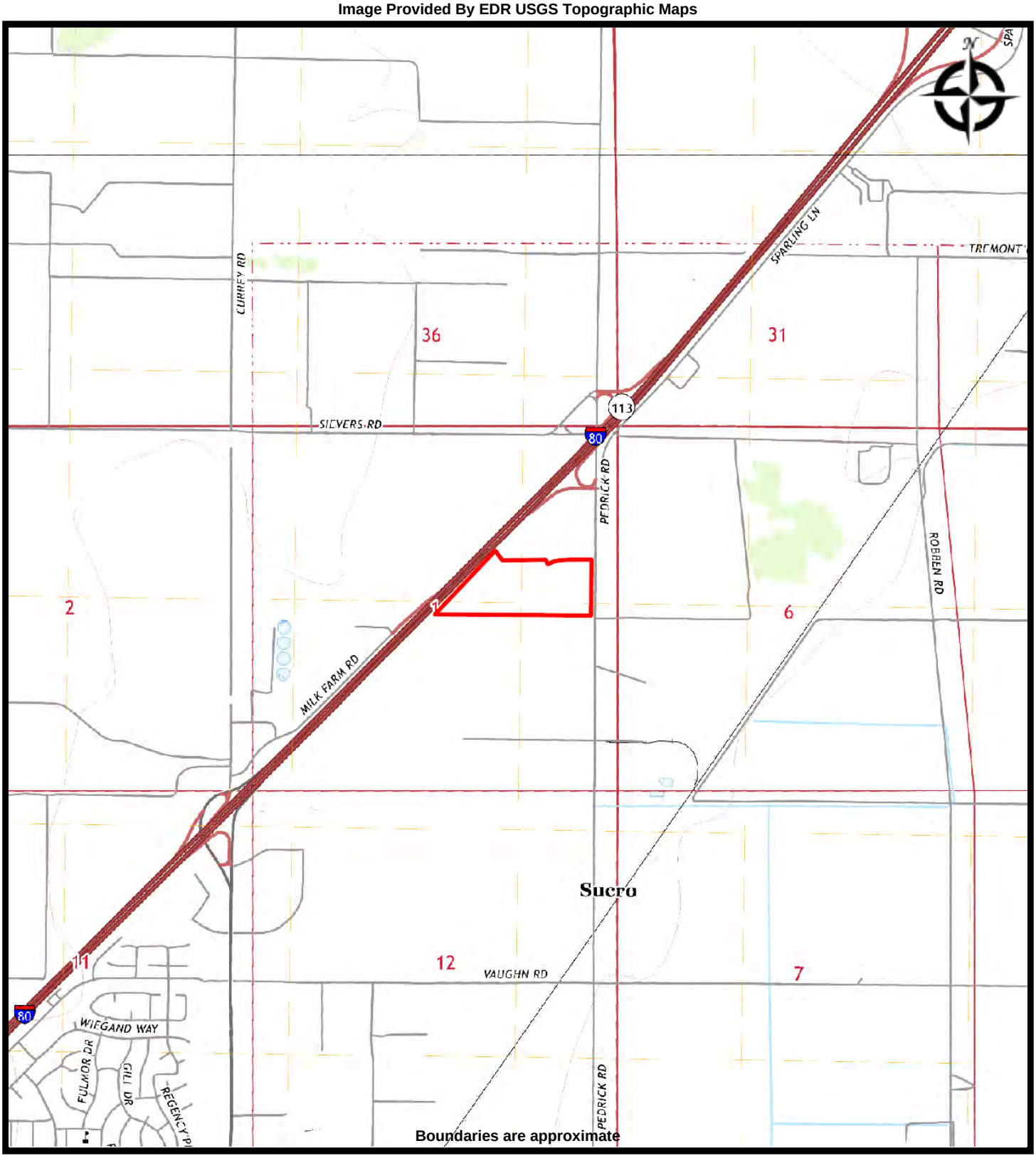
Image Provided By EDR Aerials

Brusca Associates, Inc.
Environmental Engineering Geology

AERIAL PHOTOGRAPH - 1937
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR USGS Topographic Maps

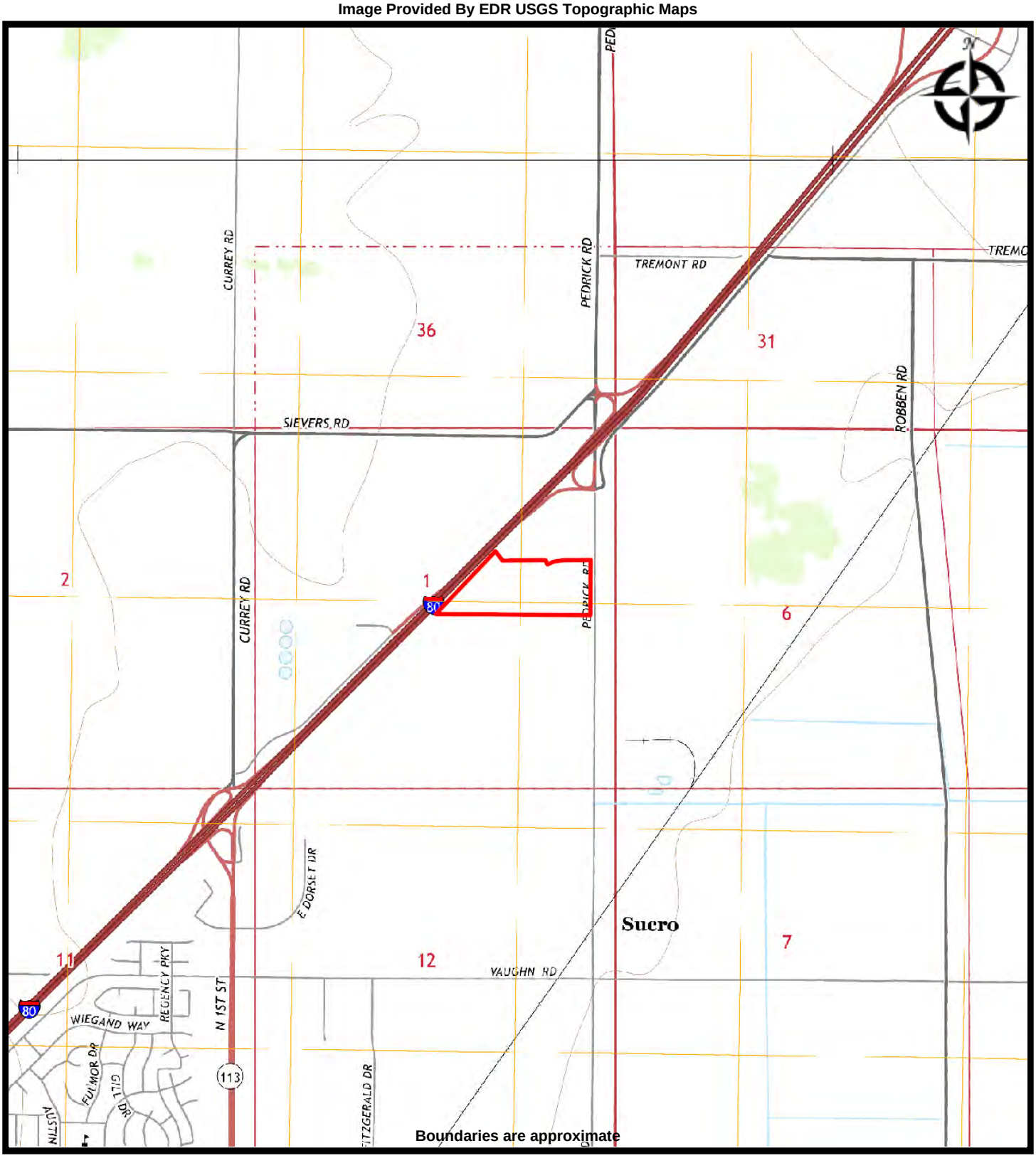


Brusca Associates, Inc.
Environmental Engineering Geology

TOPO MAP - 2018
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR USGS Topographic Maps

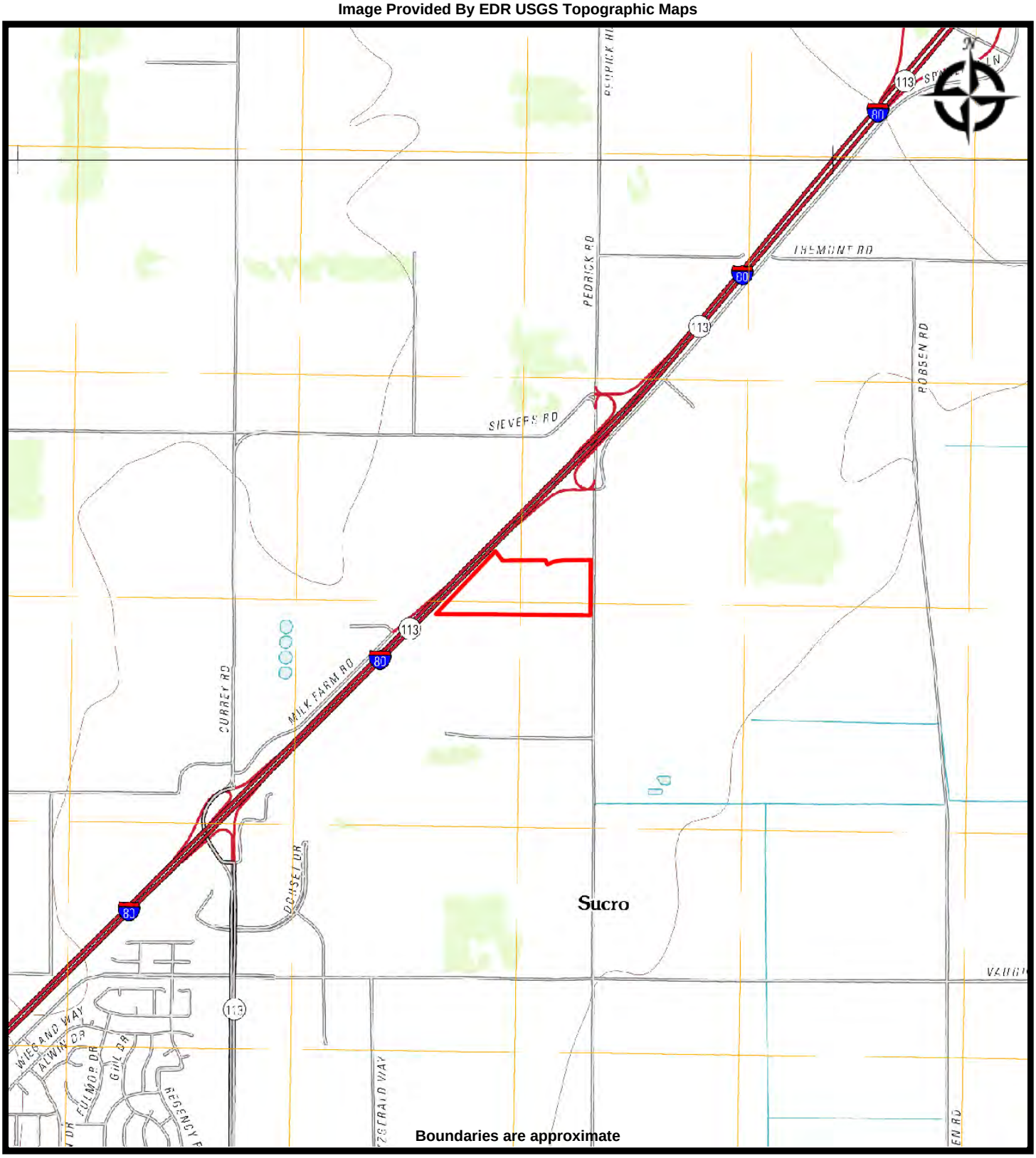


Brusca Associates, Inc.
Environmental Engineering Geology

TOPO MAP - 2015
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR USGS Topographic Maps

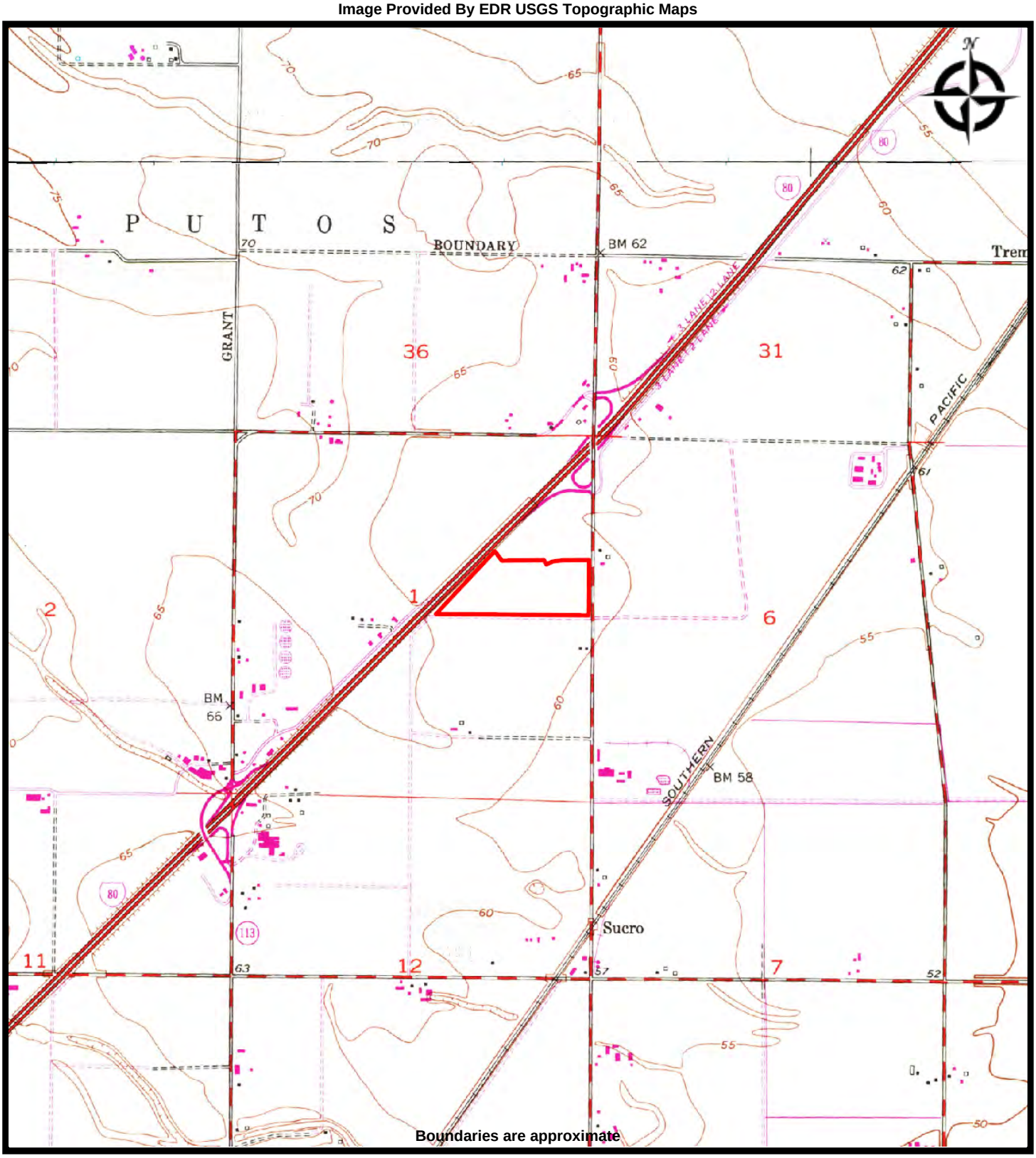


Brusca Associates, Inc.
Environmental Engineering Geology

TOPO MAP - 2012
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR USGS Topographic Maps

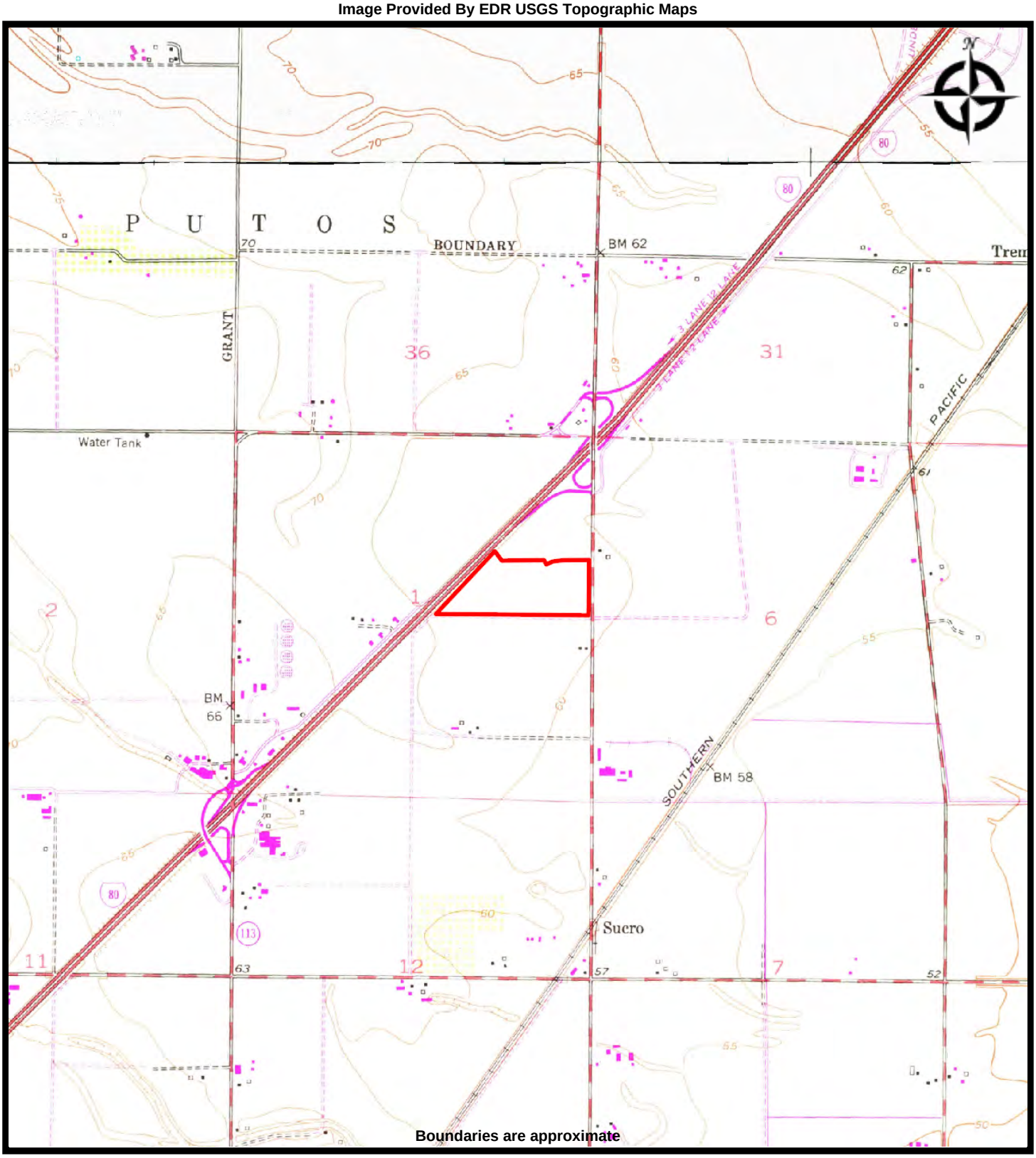


Brusca Associates, Inc.
Environmental Engineering Geology

TOPO MAP - 1981
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR USGS Topographic Maps



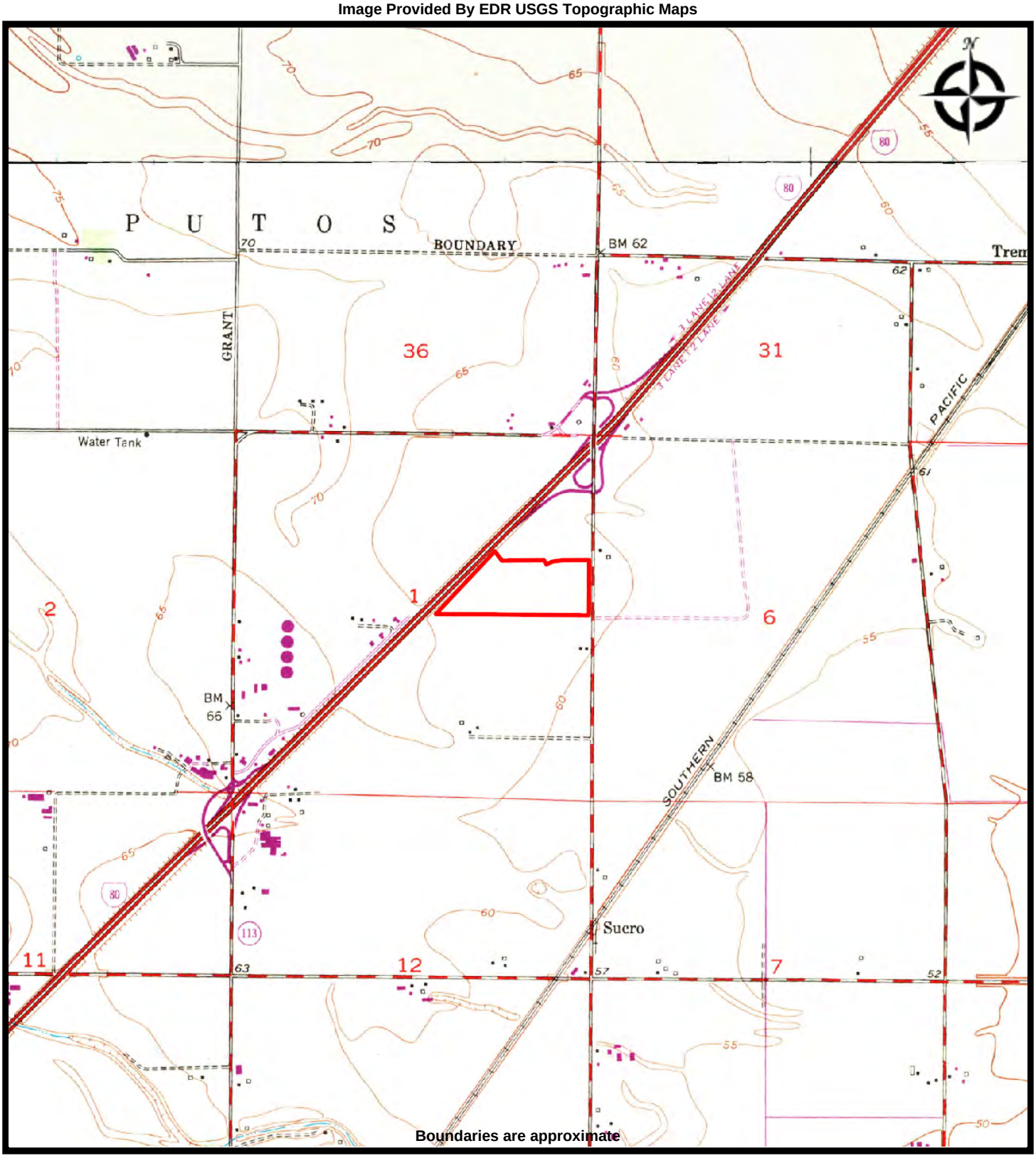
Boundaries are approximate

Brusca Associates, Inc.
Environmental Engineering Geology

TOPO MAP - 1975
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR USGS Topographic Maps

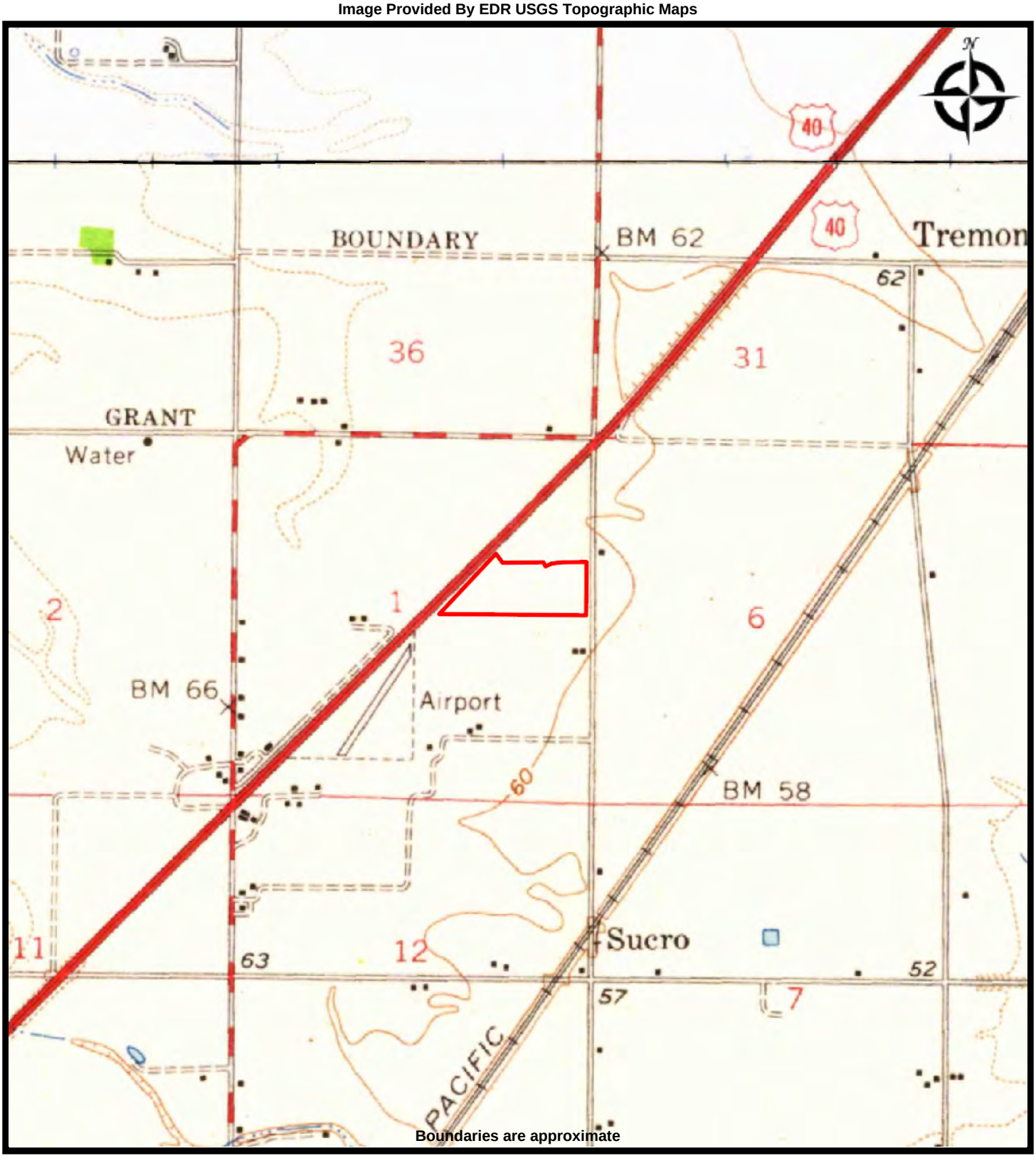


Brusca Associates, Inc.
Environmental Engineering Geology

TOPO MAP - 1968
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR USGS Topographic Maps

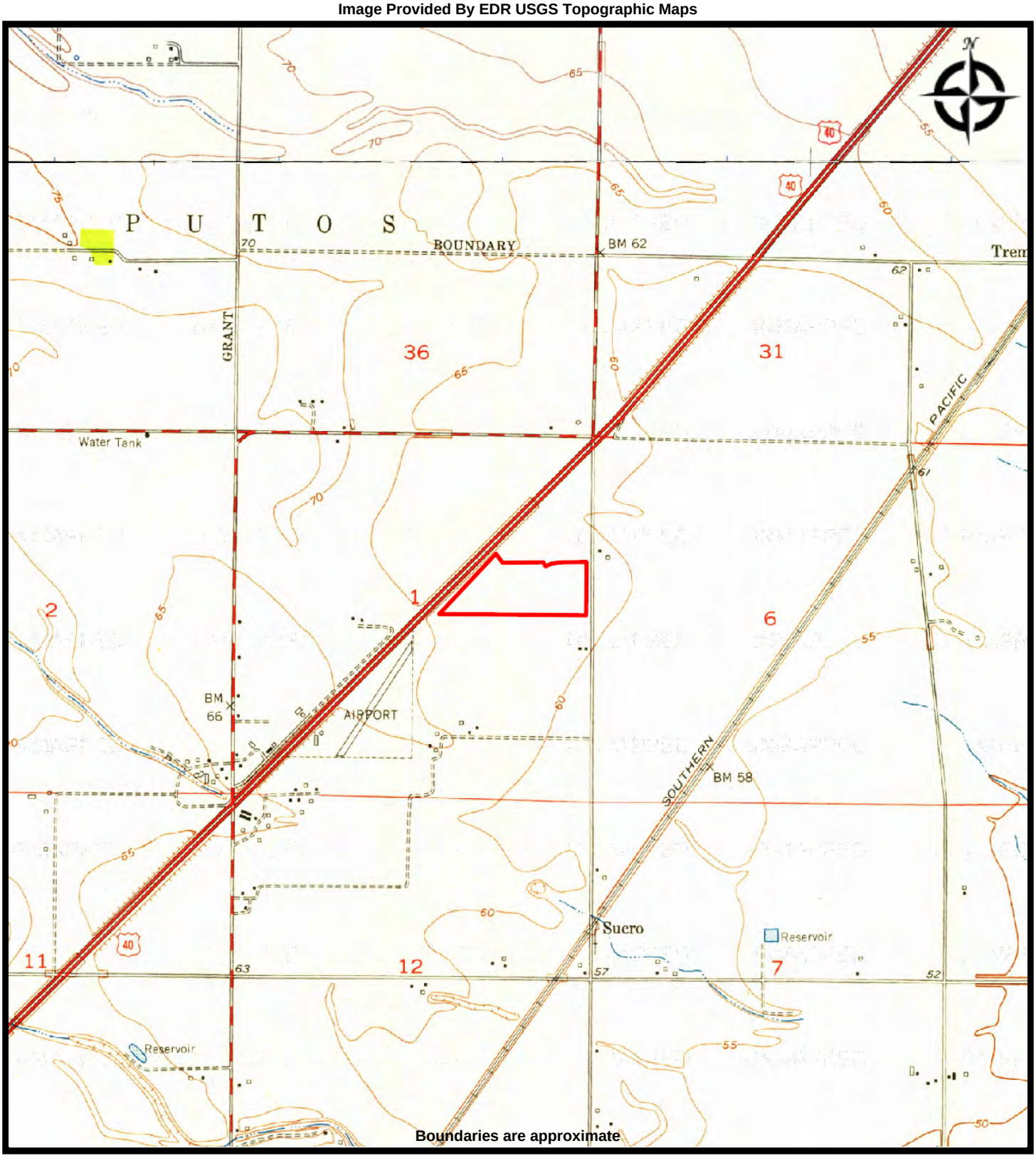


Brusca Associates, Inc.
Environmental Engineering Geology

TOPO MAP - 1953
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR USGS Topographic Maps

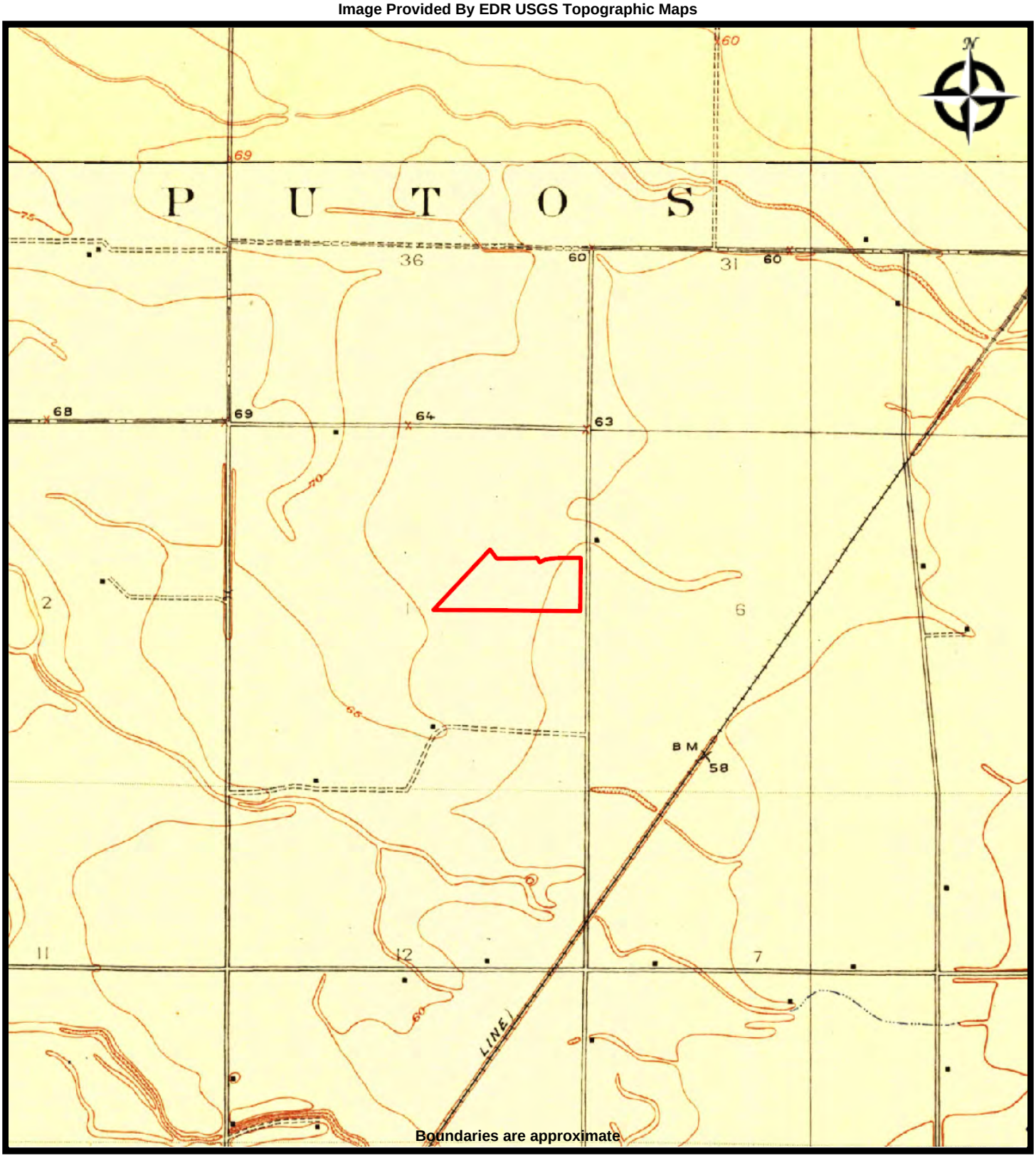


Brusca Associates, Inc.
Environmental Engineering Geology

TOPO MAP - 1952
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR USGS Topographic Maps

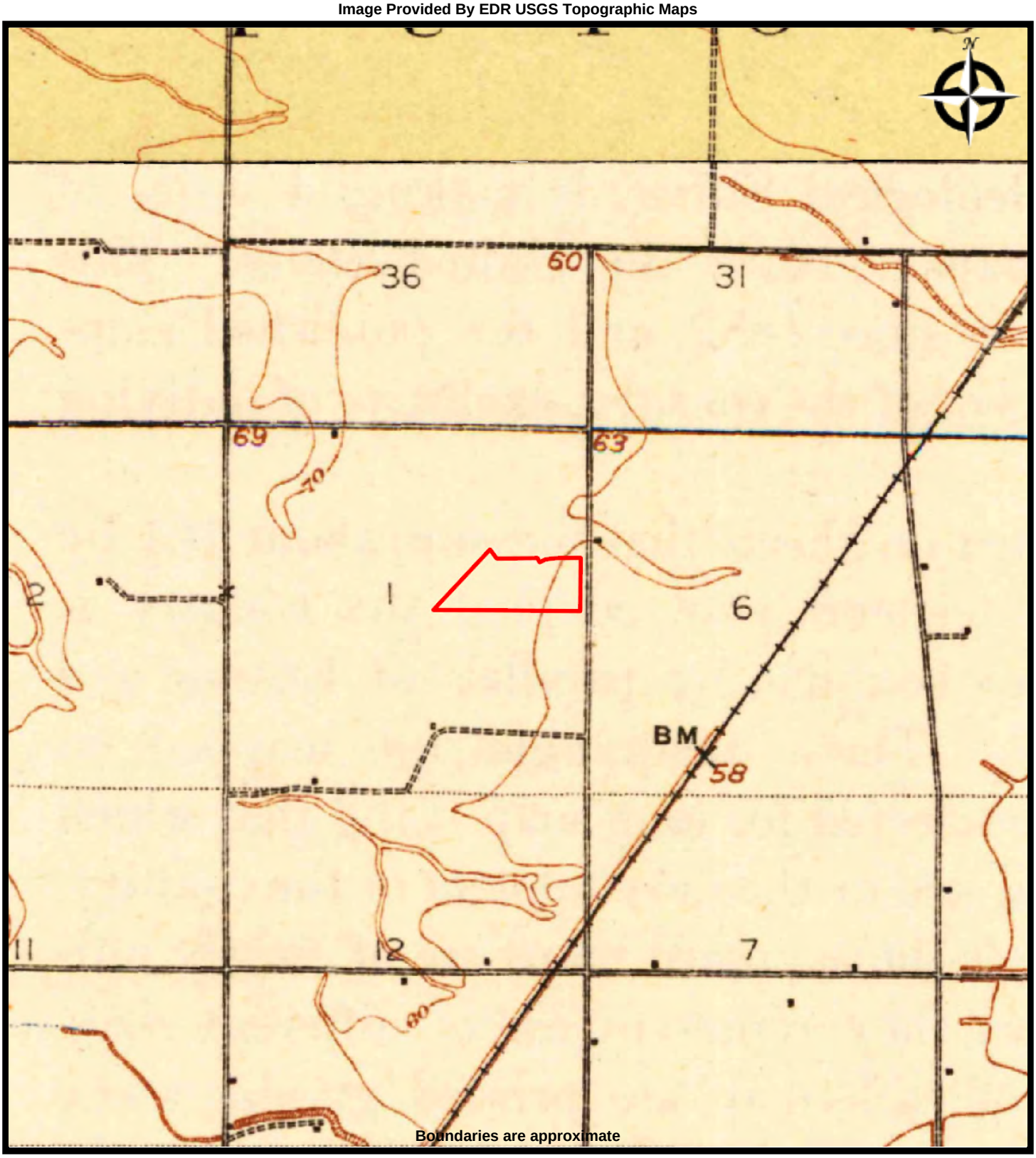


Brusca Associates, Inc.
Environmental Engineering Geology

TOPO MAP - 1915
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Image Provided By EDR USGS Topographic Maps



Brusca Associates, Inc.
Environmental Engineering Geology

TOPO MAP - 1907
PEDRICK ROAD AT I80 PROPERTY
Pedrick Road
Dixon, California 95620

PROJ. MGR: Joe Brusca
DRAWN BY: AC
DATE: 2/25/2022
PROJ. #: 137-010

Pedrick Road At I80 Property

Pedrick Road

Dixon, CA 95620

Inquiry Number: 6861760.3

February 16, 2022

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

02/16/22

Site Name:

Pedrick Road At I80 Property
Pedrick Road
Dixon, CA 95620
EDR Inquiry # 6861760.3

Client Name:

Brusca Associates, Inc.
PO Box 332
Roseville, CA 95661
Contact: Alycia Cridebring

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Brusca Associates, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 5543-44CA-A7D4

PO # NA

Project Pedrick Road at I80 property

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 5543-44CA-A7D4

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

Brusca Associates, Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2022 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Pedrick Road At I80 Property
Pedrick Road
Dixon, CA 95620

Inquiry Number: 6861760.5
February 17, 2022

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2020 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer. Reproduction of City Directories without permission of the publisher or licensed vendor may be a violation of copyright.

Data by
infoUSA®
Copyright©2008
All Rights Reserved

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☑	☐	EDR Digital Archive
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1986	☑	☐	Haines Criss-Cross Directory
1981	☑	☐	Haines Criss-Cross Directory
1977	☐	☐	Haines Criss-Cross Directory
1975	☐	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

Pedrick Road
Dixon, CA 95620

Year	*CD Image*	*Source*	
PEDRICK RD			
2017	pg A1	EDR Digital Archive	
2014	pg A2	EDR Digital Archive	
2010	pg A3	EDR Digital Archive	
2005	pg A4	EDR Digital Archive	
2000	pg A6	EDR Digital Archive	
1995	pg A8	EDR Digital Archive	
1992	pg A9	EDR Digital Archive	
1986	pg A10	Haines Criss-Cross Directory	
1981	pg A11	Haines Criss-Cross Directory	
1977	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1975	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

PEDRICK RD 2017

5814	EMIGH, ERIC M
5972	ALVARADO, JESUS V
6071	VEATCH, CONNOR L
6178	HERNANDEZ, EFRAIN
6188	HERNANDEZ, ALEJANDRO M
6347	ASAY, DONNA K
6378	CALESTINI, STEVE R
6447	MORENO, DAVID
6451	HORIGAN, DAVID J
6519	GREEN, JOANNE L
6521	HORIGAN, TIMOTHY C
6690	CHAVEZ, MARGARITO R
6915	OVERAA CONSTRUCTION
7032	CONTRERAS, MANUEL M
7134	MORRIS, SUSAN D
7401	CASTANIAS, RICHARD A
7444	ROBBEN, DUSTIN L
7462	ROBBEN, WILLIAM A
7500	ROBBEN, JENNA A
7570	DELATORRE, LETICIA
7631	BEI, SPENCER M
7690	LANGLOIS, BARBARA A
7696	MORALES, ANTONIO G
7699	DIXON TRACTOR & GRAVEL
7869	SMITH, GREGORY C
7925	TIMM PETER H DVM MPVM
7942	RAMIREZ, JOSE
8060	FORBES, DANIEL
8124	GONZALEZ, JUAN
8168	SARAGOSA, LOUIS M
8235	GREINER HEATING AIR SOLAR ENERGY IN
8665	76
8725	NELSON, KATHERINE R
8749	DIXON Y MACHINE INC
	TRI STAR METALS
8751	GROWERS AG
8757	YOLO LAND & CATTLE CO
8761	GREEN BELT CARRIERS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

PEDRICK RD 2014

5814	EMIGH, MARTIN J
5972	ALVARADO, JESUS V
6071	DY, SUSANNAH
6188	COMBER, DAVID B
6199	LARSON, BRETT
6378	CALESTINI, STEVE R
6447	ANGUIANO, ESTHER
6451	HORIGAN, DAVID J
6519	GREEN, JOANNE L
6521	HORIGAN, TIMOTHY C
6690	OCCUPANT UNKNOWN,
6770	ALVAREZ, FRANCISCO
7032	CONTRERAS, MANUEL M
7134	MORRIS, ROBERT G
7401	CASTANIAS, RICHARD P
7444	ROBBEN, LEON W
7462	CHERVINSKAS, MICHELLE A
7500	ROBBEN, DUSTIN L
7570	OCCUPANT UNKNOWN,
7601	OCCUPANT UNKNOWN,
7631	BEI, SPENCER M
7690	OCCUPANT UNKNOWN,
7696	OCCUPANT UNKNOWN,
7699	DIXON TRACTOR & GRAVEL
7850	OCCUPANT UNKNOWN,
7869	JOHNSTON, RUSSELL R
7925	DIXON VETERINARY CLINIC
	TIMM PETER H DVM MPVM
	TIMM, PETER H
7942	OCCUPANT UNKNOWN,
8060	FORBES, DANIEL
	THOMAS, MATTHEW A
	WEBB, ANNA
8120	WILLIAMS, GLENN M
8124	GONZALEZ, JUAN
8128	OCCUPANT UNKNOWN,
8168	MARTINEZ, JESUS R
8174	SARAGOSA, LORI A
8235	GREINER HEATING & AIR CONDITIONING
8308	OCCUPANT UNKNOWN,
8358	DIXON TRUCK & TRACTOR
	HAUGHN & SON TIRE
8725	NELSON, KATHERINE R
8749	DIXON Y MACHINE INC
	TRI STAR METALS
8751	GROWERS AG
8757	YOLO LAND & CATTLE CO
8761	GREEN BELT CARRIERS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

PEDRICK RD 2010

5814	EMIGH, MARTIN J
5972	ALVARADO, JESUS V
6071	WOOD, CHRISTINA
6188	COMBER, DAVID B
6199	LARSON, LARRY L
6347	RAYN, MILTON
6378	OCCUPANT UNKNOWN,
6447	ANGUIANO, ESTHER
6451	HORIGAN, DAVID J
6521	HORIGAN, TIMOTHY C
6690	CHAVEZ, MARGARITO R
6692	OCCUPANT UNKNOWN,
6725	PEDRICK, MABEL
7032	CONTRERAS, MANUEL M
7134	OCCUPANT UNKNOWN,
7177	NUNES, P C
7401	CASTANIAS, RICHARD P
7444	ROBBEN, LEON W
7462	ROBBEN, WILLIAM A
7500	OCCUPANT UNKNOWN,
7570	DELATORRE, LETICIA
7601	ROMANI, GENEVIEVE M
7625	ROMANI, EVA M
7631	BEI, SPENCER M
7690	OCCUPANT UNKNOWN,
7696	OCCUPANT UNKNOWN,
7850	OCCUPANT UNKNOWN,
7869	JOHNSTON, RUSSELL R
7900	OCCUPANT UNKNOWN,
7925	TIMM, PETER H
7942	VRAA, DANIEL V
8060	DUTRA, JAMES E
	PARTAIN, RUSSELL
	PEREZ, RAMON
8120	CRUZ, ORTEGA S
8124	OCCUPANT UNKNOWN,
8128	GONZALEZ, JUAN
8168	RIOS, JESUS
8174	MANZANO, VICTOR
8358	DIXON TRUCK & TRACTOR
8665	DIXON 76
8725	NELSON, KATHERINE R
8749	DIXON Y MACHINE INC
	TRI STAR METALS
8751	GROWERS AG SVC INC
8757	INTERNATIONAL LINE BUILDERS
	YOLO LAND & CATTLE CO
8761	GREEN BELT CARRIERS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

PEDRICK RD 2005

5814	EMIGH, MARTIN J
	MJ LIVESTOCK
5972	ALVARADO, JESUS
6178	SAVAGE, RUSS
6188	COMBER, DAVID B
	MOSEY DOE CREATIONS
6199	LARSON, LARRY L
6378	OCCUPANT UNKNOWN,
6521	HORIGAN, TIMOTHY C
6690	OCCUPANT UNKNOWN,
6692	OCCUPANT UNKNOWN,
6725	PEDRICK, MABEL
6770	OCCUPANT UNKNOWN,
7032	CONTRERAS, MANUEL M
7177	NUNES, P C
7340	CONTRERAS, MANUEL
7401	CASTANIAS, RICHARD P
7444	LEON ROBBEN
	ROBBEN, LEON W
7462	ROBBEN, WILLIAM A
7570	GUTIERREZ, ROGER G
7601	ROMANI, GENEVIEVE M
7625	ROMANI, EVA M
7631	OCCUPANT UNKNOWN,
7690	ANDERSON, JOE F
7696	OCCUPANT UNKNOWN,
7699	KETT, MIKE J
7850	OCCUPANT UNKNOWN,
7869	JOHNSTON, RUSSELL R
7900	OCCUPANT UNKNOWN,
7925	DIXON VETERINARY CLINIC
	TIMM PETER H TIMM DVM MPVM
	TIMM, PETER H
7934	OCCUPANT UNKNOWN,
8060	DUTRA, JAMES E
	PEREZ, RAMON
	TEMPEY, ANNE R
8120	LEAL, ARNULFO J
8124	OCCUPANT UNKNOWN,
8128	GONZALEZ, JUAN
8168	SARAGOSA, LOUIS M
8174	SARAGOSA, L A
8235	GREINER HEATING & AC
8308	MCINTYRE, IDELL J
8358	DIXON TRUCK & TRACTOR
	SMITH, TIMOTHY S
8405	OCCUPANT UNKNOWN,
8725	OCCUPANT UNKNOWN,
8749	CLOUSE, ROBERT W
	DIXON Y MACHINE INC

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

PEDRICK RD 2005 (Cont'd)

8751 GROWERS AG SERVICE INC
8757 TRIPLE M GRADING
8761 GREEN BELT CARRIERS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

PEDRICK RD 2000

5814	EMIGH, MARTIN
5972	ALVARADO, JESUS
6188	COMBER, DAVID B
6199	BOLIN, ALLEN
6347	RAYN, MILTON
6378	CALESTINI, STEPHEN
6447	ROBERTSON, JAMES M
6451	OCCUPANT UNKNOWN,
6521	HORIGAN, TIM
7177	BROWN, BEVERLY S
7401	KANEMOTO, LESLIE T
7444	ROBBEN, LEON
7500	ROBBEN, CHUCK
7570	GUTIERREZ, ROGER
	MYERS, TAMARA L
7625	ROMANI, GUIDO
7690	ANDERSON, JOE F
7696	OCCUPANT UNKNOWN,
7699	DIXON TRACTOR & GRAVEL
	KETT, MIKE
7840	OCCUPANT UNKNOWN,
7850	RIOS, ROBERTO M
7869	JOHNSTON, RUSSELL R
7925	DIXON VETERINARY CLINIC
	TIMM PETER H DVM MPVM OFFICE
7934	ALVARADO, SONIA P
8060	DUTRA, EVELYN
8120	INNISFAIL DAIRY
	OCCUPANT UNKNOWN,
8124	LEAL, ARNULFO
8128	GONZALEZ, JUAN
8168	MARTINEZ, J
	RIOS, JESUS
	SARAGOSA, L M
	VANETTI, MARY A
8235	GREINER HEATING & AIR CONDITIONING
	OCCUPANT UNKNOWN,
8250	OCCUPANT UNKNOWN,
8308	MCINTYRE, IDELL J
8405	SMITH, JEFF M
	WEBB, BILL
8475	OCCUPANT UNKNOWN,
8725	OCCUPANT UNKNOWN,
8749	CLOUSE, ROBERT
	DELANEY, BARBARA
	DIXON Y MACHINE INCORPORATED
	TRI STAR METALS
8751	GROWERS AG SERVICE INCORPORATED
	GROWERS AG SERVICE INCORPORATED OR
8757	TRI VALLEY GROWERS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

PEDRICK RD 2000 (Cont'd)

8761 GREEN BELT CARRIERS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

PEDRICK RD 1995

5972	OCCUPANT UNKNOWNN
6178	COMBER, DAVID C
6188	COMBER, DAVID B
6347	RAYN, MILTON
6378	CALESTINI, STEPHEN
6447	HORIGAN, JOHN L
6521	HORIGAN, TIM
6690	OCCUPANT UNKNOWNN
7340	CONTRERAS, MANUEL
7401	CASTANIAS, RICHARD P
7444	ROBBEN, LEON
7500	ROBBEN, CHUCK
7570	OCCUPANT UNKNOWNN
7601	OCCUPANT UNKNOWNN
7625	ROMANI, GUIDO
7690	ANDERSON, JOE F
7699	REHRMANN, HENRY
7869	JOHNSTON, RUSSELL R
7900	OCCUPANT UNKNOWNN
7925	DIXON VETERINARY CLINIC
7934	OCCUPANT UNKNOWNN
7942	SAWYER, NEAT
8060	DUTRA, HERB
8120	INNISFAIL DAIRY
	LYNDE, DAN
8124	LEAL, ARNULFO
8128	OCCUPANT UNKNOWNN
8168	RIOS, JESUS
	SARAGOSA, L M
8174	VANETTI, MARY A
8308	JOHNSON, ELNORA
8312	SMITHS TRUCK REPAIR
8380	DIXON CANNING CORP
8405	BOB MISTLER TRUCKING
	PERATA, STEVE
8534	OCCUPANT UNKNOWNN
8665	DIXON BP SNACK SHOP
8725	COVARRUBIAS, ALFREDO
8751	GROWERS AG SVC INC
8757	ADAMS TRUCKING INC
	TRI VALLEY GROWERS
8761	GREEN BELT CARRIERS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

PEDRICK RD 1992

6178	COMBER, DAVID C
6199	MAHNKE, JOHN
6347	RAYN, MILTON
6521	HORIGAN, TIM
7401	CHICHESTER, C
7444	ROBBEN, LEON
7500	ROBBEN, CHUCK
7625	ROMANI, GUIDO
7690	ANDERSON, LINFORD B
7699	REHRMANN, HENRY
7850	RIOS, ROBERTO M
7869	JOHNSTON, RUSSELL R
7900	GUTIERREZ, JOSE R
7925	DIXON VETERINARY
7934	ESTRADA, ARMANDO
7942	SAWYER, NEAT
8060	DUTRA, HERB
8120	INNISFAIL DAIRY
	LYNDE, DAN
8124	LEAL, ARNULFO
8168	SARAGOSA, L M
8245	STRUCTURE WELD
8308	JOHNSON, ELNORA
8475	BRODIE, D
8534	SCHMITT, ROBERT G
8725	COVARRUBIAS, ALFREDO
8757	ADAMS TRUCKING INC
	GREEN BELT CARRIERS
	PROCESSING TOMATO
	TRI VALLEY GROWERS
	TRIPLE M GRADNG STA

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

PEDRICK RD 1986

PEDRICK RD 95620 DIXON

RURAL ROUTE 2

6176	COMBER DAVID C	678-5951	3
6347	RAYN MILTON	678-2880	3
6521	HORIGAN TIM	678-3235	4
6770	DOTTERS LESTER R	678-5864	3
6965	DIXON MGRNT CNLD CT	676-3711	3
	DIXON MGRNT INFANT	678-2113	3
7401	REHRMAN FRED H	678-2585	5
7444	ROBBEN LEON	678-2843	3
7570	ROBBEN CHUCK	678-2684	3
7601	ROMANI M	678-5270	3
7625	ROMANI GUIDO	678-3278	3
7690	ANDERSON LINFORD B	678-5363	3
7699	REHRMANN HENRY	678-2580	3
7850	RIOS ROBERTO M	678-2829	5
7869	JOHNSTON RUSSELL R	678-5712	3
7925	TIMM PETER N DVM	678-5785	4
7934	BARRAGAN VICTOR	678-9731	5
	ESTRADA JOSE	676-2238	4
	MERCADO ESPERANZA	678-1342	5
7942	SAWYER NEAT	678-1162	5
8060	DUTRA HERB	678-5624	3
8120	ALVES CARLOS	678-9409	3
	LOPEZ CATARINO R	678-9325	4
8168	RIOS JESUS	678-3297	5
	SARAGOSA LOUIS	678-2642	4
8757	ADAMS TRUCKING INC	678-1677	4
	CA ST FOOD&AGRI DPT	678-3404	4
NO #	ANDERSON JOE CROPS	676-4363	4
NO #	CARMICHAEL BRUCE	678-9014	5
NO #	DAVIDSON MARSH	678-3769	8
NO #	DIXON CANNING CORP	678-4406	9
NO #	DIXON HOUSING	678-3200	
NO #	DIXON MIGRANT FARM	678-3200	
NO #	DIXON VETERNRY CLNC	678-5765	
NO #	DIXON Y MACNINE INC	678-2375	8
NO #	ESTRADA RAUL	678-4516	8
NO #	GLIDE ELSEN	678-3338	
NO #	GLIDE PETER	678-3338	
NO #	GREEN BELT CABRIERS	678-3769	9
NO #	GROWERS AG SERVICE	678-5564	8
NO #	JOHNSON ELNORA	678-5882	
NO #	MISTLER BOB TRCKNG	678-5230	
NO #	PARKER M	678-3294	7
NO #	PEREZ PEDRO	678-3765	9
NO #	ROBBEN TONY	678-2654	
NO #	SPARLING RAY	678-2801	
NO #	TRI VALLEY GROWERS	676-5776	4
NO #	TRIPLE M GRADNG STA	678-3409	
NO #	TRIPLE M SCALE NSE	678-3982	0
NO #	VANETTI JOHN J	678-5580	

★ 17 BUS 33 RES 0 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

PEDRICK RD 1981

PEDRICK RD 95620 DIXON

RURAL ROUTE 2

5270	TERRELL MARY F	678-4566	0
	WOODY ROBT L	678-4566	0
NO #	ABARCA ROBT	678-4168	+1
NO #	ANDERSON LINFORD	678-5363	
NO #	BELDEN WILLIAM F	678-5615	9
NO #	BESNEATTE DANE	678-4842	+1
NO #	**CALIF ST FOOD&AGRI**	**678-3404**	7
NO #	COMBER DAVID C	678-5951	
NO #	DAVIDSON MARSH	678-3769	8
NO #	**DIXON CANNING CORP**	**678-4406**	9
NO #	**DIXON HOUSING AUTH**	**678-3200**	
NO #	**DIXON MIGRANT CHLD**	**678-3711**	
NO #	**DIXON MIGRANT FARM**	**678-3200**	
NO #	**DIXON MIGRANT INFNT**	**678-2113**	
NO #	**DIXON VETERNRY CLNC**	**678-5765**	
NO #	**DIXON Y MACHINE INC**	**678-2375**	8
NO #	DOTTERS LESTER R	678-5864	
NO #	DUFF ROD	678-4725	+1
NO #	DUTRA HERB	678-5624	
NO #	EHMKE DALE	678-5373	9
NO #	ESTRADA RAUL	678-4516	8
NO #	GONZALEZ B	678-5022	9
NO #	**GREEN BELT CARRIERS**	**678-3769**	9
NO #	**GROWERS AG SERVICE**	**678-5564**	8
NO #	HORIGAN TIM	678-3235	6
NO #	JOHNSON ELNORA	678-5882	
NO #	JOHNSTON RUSSELL R	678-5712	9
NO #	**KYLO RADIO TRANSMTR**	**678-3989**	+1
NO #	**MAINE PRAIRIE WATER**	**678-5332**	
NO #	MCNAMARA M F	678-5374	
NO #	**MISTLER BOB TRCKNG**	**678-5230**	6
NO #	**PAC COAST PRODUCERS**	**678-3458**	6
NO #	PADILLA MAGDALENO	678-4025	0
NO #	PARKER M	678-3294	7
NO #	PEREZ PEDRO	678-3765	9
NO #	RAYN MILTON	678-2880	
NO #	REHRMAN FRED H	678-2585	7
NO #	REHRMANN HENRY	678-2580	6
NO #	RIOS JESUS	678-3297	
NO #	RIOS ROBERTO M	678-2829	+1
NO #	**RIVER GOLD FARMS**	**678-9201**	0
NO #	ROBBEN LEON	678-2843	
NO #	ROBBEN TONY	678-2654	6
NO #	ROCHA MATTHEW	678-3642	0
NO #	ROMANI GUIDO	678-3278	
NO #	ROMANI M	678-5270	
NO #	**RYANS TIRE SERV**	**678-4600**	8
NO #	SARAGOSA LOUIS	678-2642	
NO #	**SARAGOSA LOUIS SHOP**	**678-4200**	8
NO #	SPARLING RAY	678-2801	
NO #	**SPRECKELS SUGAR CO**	**678-2462**	
NO #	**TIMM PETER H DVM**	**678-5765**	
NO #	**TRI VALLEY GROWERS**	**678-5776**	9
NO #	**TRI VALLEY GROWERS**	**678-4037**	0
NO #	**TRIPLE M GRADNG STA**	**678-9968**	9
NO #	**TRIPLE M GRDG STA**	**678-3982**	0
NO #	**TRIPLE M SCALE HSE**	**678-3409**	6
NO #	**TRUCK A WAY**	**678-4280**	8
NO #	VALASQUEZ IGNACIO	678-4804	0
NO #	**VALLEY FARM LABOR**	**678-5505**	
NO #	VANETTI JOHN J	678-5580	
NO #	WIGHT BEN	678-2060	

★ 26 BUS 36 RES 5 NEW

APPENDIX D – Agency Listings Database Report

Pedrick Road At I80 Property
Pedrick Road
Dixon, CA 95620

Inquiry Number: 6861760.2s
February 18, 2022

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	113
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-6
Physical Setting Source Map	A-11
Physical Setting Source Map Findings	A-13
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2020 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

PEDRICK ROAD
DIXON, CA 95620

COORDINATES

Latitude (North):	38.4828250 - 38ˆ 28' 58.17''
Longitude (West):	121.8072220 - 121ˆ 48' 25.99''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	604036.8
UTM Y (Meters):	4259855.0
Elevation:	66 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	12021587 DIXON, CA
Version Date:	2018
North Map:	12021633 MERRITT, CA
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140606
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
PEDRICK ROAD
DIXON, CA 95620

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	MISTLER TRUCKING, FO	8405 PEDRICK RD	SWF/LF, LUST, LDS, CERS	Higher	930, 0.176, SW
A2	TEC EQUIPMENT INC	8555 PEDRICK RD	RCRA NonGen / NLR	Lower	999, 0.189, NNE
A3	TEC EQUIPMENT	8555 PEDRICK RD	CERS HAZ WASTE, CERS, HWTS	Lower	999, 0.189, NNE
B4	EXXON USA (MILK FARM	6618 MILK FARM RD	LUST, SWEEPS UST, Cortese, HIST CORTESE, Notify...	Higher	1222, 0.231, WSW
B5	TEXACO STATION/MILK	6615 MILK FARM RD	LUST, SWEEPS UST, Cortese, HIST CORTESE, Notify...	Higher	1281, 0.243, WSW
C6	MORGAN'S FRUIT STAND	6646 MILK FARM RD	LUST, UST, SWEEPS UST, Cortese	Higher	1680, 0.318, WSW
C7	MORGAN'S FRUIT STAND	6646 MILK FARM	LUST, HIST CORTESE, Notify 65	Higher	1680, 0.318, WSW
8	IKE'S LANDSCAPING	6647 MILK FARM	Notify 65	Higher	1894, 0.359, WSW
9	CAMPBELL SOUP SUPPLY	8380 PEDRICK RD	LUST, ENF, HAZNET, NPDES, CIWQS, CERS, HWTS	Lower	2234, 0.423, SSE
D10	CAMPBELLS SOUP	8680 PEDRICK ROAD	CPS-SLIC, CERS	Lower	2460, 0.466, NNE
D11	BP #11245	8665 PEDRICK RD	LUST, CERS	Lower	2565, 0.486, NNE
D12	BP #11245	8665 PEDRICK RD	Cortese, EMI, HAZNET, HWTS	Lower	2565, 0.486, NNE
D13	BP OIL COMPANY FACIL	8665 PEDRICK RD	LUST, SWEEPS UST, EMI, HIST CORTESE, CERS	Lower	2565, 0.486, NNE
E14	VALLEY FARMS TRANPOR	8656 SPARLING LN	LUST, Cortese	Lower	2611, 0.495, NNE
E15	VALLEY FARM TRANSPOR	8656 SPARLING LN	LUST, SWEEPS UST, HIST UST, HIST CORTESE, CERS	Lower	2611, 0.495, NNE
E16	CA DEPT OF TRANSPORT	8638 SPARLING LN	LUST, SWEEPS UST, Cortese, EMI, HIST CORTESE, CERS	Lower	2617, 0.496, NNE
17	FREMOUW ENVIRONMENTA	6940 TREMONT RD	LUST, AST, HAULERS, CERS HAZ WASTE, SWEEPS UST,...	Lower	4451, 0.843, NNE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROLS ..... Institutional Controls Sites List

Federal ERNS list

ERNS ..... Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE ..... State Response Sites

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR ..... EnviroStor Database

Lists of state and tribal leaking storage tanks

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST ..... Underground Storage Tank Listing
UST ..... Active UST Facilities
AST ..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST ..... Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing
VCP ..... Voluntary Cleanup Program Properties

Lists of state and tribal brownfield sites

BROWNFIELDS ..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register

HIST Cal-Sites ---- Historical Calsites Database
SCH ---- School Property Evaluation Program
CDL ---- Clandestine Drug Labs
Toxic Pits ---- Toxic Pits Cleanup Act Sites
US CDL ---- National Clandestine Laboratory Register
AQUEOUS FOAM ---- Former Fire Training Facility Assessments Listing
PFAS ---- PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

HIST UST ---- Hazardous Substance Storage Container Database
CERS TANKS ---- California Environmental Reporting System (CERS) Tanks
CA FID UST ---- Facility Inventory Database

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ---- Formerly Used Defense Sites
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees

INDIAN RESERV - Indian Reservations
FUSRAP - Formerly Utilized Sites Remedial Action Program
UMTRA - Uranium Mill Tailings Sites
LEAD SMELTERS - Lead Smelter Sites
US AIRS - Aerometric Information Retrieval System Facility Subsystem
US MINES - Mines Master Index File
ABANDONED MINES - Abandoned Mines
FINDS - Facility Index System/Facility Registry System
UXO - Unexploded Ordnance Sites
ECHO - Enforcement & Compliance History Information
DOCKET HWC - Hazardous Waste Compliance Docket Listing
FUELS PROGRAM - EPA Fuels Program Registered Listing
CA BOND EXP. PLAN - Bond Expenditure Plan
CUPA Listings - CUPA Resources List
DRYCLEANERS - Cleaner Facilities
EMI - Emissions Inventory Data
ENF - Enforcement Action Listing
Financial Assurance - Financial Assurance Information Listing
HAZNET - Facility and Manifest Data
ICE - ICE
HWT - Registered Hazardous Waste Transporter Database
MINES - Mines Site Location Listing
MWMP - Medical Waste Management Program Listing
NPDES - NPDES Permits Listing
PEST LIC - Pesticide Regulation Licenses Listing
PROC - Certified Processors Database
UIC - UIC Listing
UIC GEO - UIC GEO (GEOTRACKER)
WASTEWATER PITS - Oil Wastewater Pits Listing
WDS - Waste Discharge System
WIP - Well Investigation Program Case List
MILITARY PRIV SITES - MILITARY PRIV SITES (GEOTRACKER)
PROJECT - PROJECT (GEOTRACKER)
WDR - Waste Discharge Requirements Listing
CIWQS - California Integrated Water Quality System
CERS - CERS
NON-CASE INFO - NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS - OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS - PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT - SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ - Well Stimulation Project (GEOTRACKER)
HWTS - Hazardous Waste Tracking System
MINES MRDS - Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP - EDR Proprietary Manufactured Gas Plants
EDR Hist Auto - EDR Exclusive Historical Auto Stations
EDR Hist Cleaner - EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF - Recovered Government Archive Solid Waste Facilities List

EXECUTIVE SUMMARY

RGA LUST---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MISTLER TRUCKING, FO	***8405 PEDRICK RD***	***SW 1/8 - 1/4 (0.176 mi.)***	***1***	***9***
Database: SWF/LF (SWIS), Date of Government Version: 11/08/2021				
Facility ID: 48-CR-0024				
Operational Status: Closed				
Regulation Status: Unpermitted				

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 11 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MISTLER TRUCKING, FO	***8405 PEDRICK RD***	***SW 1/8 - 1/4 (0.176 mi.)***	***1***	***9***
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019				
Facility Status: A				
Facility Id: 80336				
EXXON USA (MILK FARM	***6618 MILK FARM RD***	***WSW 1/8 - 1/4 (0.231 mi.)***	***B4***	***18***
Database: LUST REG 5, Date of Government Version: 07/01/2008				
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019				
Database: LUST, Date of Government Version: 09/07/2021				

Facility Status: I
Status: Completed - Case Closed
Status: Case Closed
Facility Id: 80010
Global Id: T0609500358

TEXACO STATION/MILK ***6615 MILK FARM RD*** ***WSW 1/8 - 1/4 (0.243 mi.)*** ***B5*** ***22***
Database: LUST REG 5, Date of Government Version: 07/01/2008
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019
Database: LUST, Date of Government Version: 09/07/2021
Facility Status: I
Status: Completed - Case Closed
Status: Post remedial action monitoring
Facility Id: 80060
Global Id: T0609500360

MORGAN'S FRUIT STAND ***6646 MILK FARM RD*** ***WSW 1/4 - 1/2 (0.318 mi.)*** ***C6*** ***32***
Database: LUST REG 5, Date of Government Version: 07/01/2008
Status: Post remedial action monitoring

MORGAN'S FRUIT STAND ***6646 MILK FARM*** ***WSW 1/4 - 1/2 (0.318 mi.)*** ***C7*** ***34***
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019
Database: LUST, Date of Government Version: 09/07/2021
Facility Status: I
Status: Completed - Case Closed
Facility Id: 80114
Global Id: T0609500359

Lower Elevation	Address	Direction / Distance	Map ID	Page

CAMPBELL SOUP SUPPLY ***8380 PEDRICK RD*** ***SSE 1/4 - 1/2 (0.423 mi.)*** ***9*** ***41***
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019
Facility Status: I
Facility Id: 80333

BP #11245 ***8665 PEDRICK RD*** ***NNE 1/4 - 1/2 (0.486 mi.)*** ***D11*** ***57***
Database: LUST REG 5, Date of Government Version: 07/01/2008
Status: Remedial action (cleanup) Underway

BP OIL COMPANY FACIL ***8665 PEDRICK RD*** ***NNE 1/4 - 1/2 (0.486 mi.)*** ***D13*** ***61***
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019
Database: LUST, Date of Government Version: 09/07/2021
Facility Status: A
Status: Completed - Case Closed
Facility Id: 80011
Global Id: T0609500347

VALLEY FARMS TRANPOR ***8656 SPARLING LN*** ***NNE 1/4 - 1/2 (0.495 mi.)*** ***E14*** ***77***
Database: LUST REG 5, Date of Government Version: 07/01/2008
Status: Case Closed

VALLEY FARM TRANSPOR ***8656 SPARLING LN*** ***NNE 1/4 - 1/2 (0.495 mi.)*** ***E15*** ***78***
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019
Database: LUST, Date of Government Version: 09/07/2021
Facility Status: I
Status: Completed - Case Closed
Facility Id: 80020
Global Id: T0609500401

CA DEPT OF TRANSPORT ***8638 SPARLING LN*** ***NNE 1/4 - 1/2 (0.496 mi.)*** ***E16*** ***84***
Database: LUST REG 5, Date of Government Version: 07/01/2008
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019
Database: LUST, Date of Government Version: 09/07/2021

Facility Status: I
Status: Completed - Case Closed
Status: Case Closed
Facility Id: 80089
Global Id: T0609500331

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there is 1 CPS-SLIC site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAMPBELLS SOUP	***8680 PEDRICK ROAD***	***NNE 1/4 - 1/2 (0.466 mi.)***	***D10***	***55***

Database: SLIC REG 5, Date of Government Version: 04/01/2005
Database: CPS-SLIC, Date of Government Version: 09/07/2021
Global Id: SL0609563629
Facility Status: Completed - Case Closed

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 10/18/2021 has revealed that there is 1 CERS HAZ WASTE site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEC EQUIPMENT	***8555 PEDRICK RD***	***NNE 1/8 - 1/4 (0.189 mi.)***	***A3***	***16***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EXXON USA (MILK FARM	***6618 MILK FARM RD***	***WSW 1/8 - 1/4 (0.231 mi.)***	***B4***	***18***

Comp Number: 80010

TEXACO STATION/MILK	***6615 MILK FARM RD***	***WSW 1/8 - 1/4 (0.243 mi.)***	***B5***	***22***

Comp Number: 80060

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 09/13/2021 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEC EQUIPMENT INC	8555 PEDRICK RD	NNE 1/8 - 1/4 (0.189 mi.)	A2	13
EPA ID:: CAL000453149				

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 09/20/2021 has revealed that there are 6 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EXXON USA (MILK FARM	***6618 MILK FARM RD***	***WSW 1/8 - 1/4 (0.231 mi.)***	***B4***	***18***
Cleanup Status: COMPLETED - CASE CLOSED				
TEXACO STATION/MILK	***6615 MILK FARM RD***	***WSW 1/8 - 1/4 (0.243 mi.)***	***B5***	***22***
Cleanup Status: COMPLETED - CASE CLOSED				
MORGAN'S FRUIT STAND	***6646 MILK FARM RD***	***WSW 1/4 - 1/2 (0.318 mi.)***	***C6***	***32***
Cleanup Status: COMPLETED - CASE CLOSED				

Lower Elevation	Address	Direction / Distance	Map ID	Page
BP #11245	***8665 PEDRICK RD***	***NNE 1/4 - 1/2 (0.486 mi.)***	***D12***	***57***
Cleanup Status: COMPLETED - CASE CLOSED				
VALLEY FARMS TRANPOR	***8656 SPARLING LN***	***NNE 1/4 - 1/2 (0.495 mi.)***	***E14***	***77***
Cleanup Status: COMPLETED - CASE CLOSED				
CA DEPT OF TRANSPORT	***8638 SPARLING LN***	***NNE 1/4 - 1/2 (0.496 mi.)***	***E16***	***84***
Cleanup Status: COMPLETED - CASE CLOSED				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 6 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EXXON USA (MILK FARM Reg Id: 480100	***6618 MILK FARM RD***	***WSW 1/8 - 1/4 (0.231 mi.)***	***B4***	***18***
TEXACO STATION/MILK Reg Id: 480102	***6615 MILK FARM RD***	***WSW 1/8 - 1/4 (0.243 mi.)***	***B5***	***22***
MORGAN'S FRUIT STAND Reg Id: 480101	***6646 MILK FARM***	***WSW 1/4 - 1/2 (0.318 mi.)***	***C7***	***34***

Lower Elevation	Address	Direction / Distance	Map ID	Page
BP OIL COMPANY FACIL Reg Id: 480070	***8665 PEDRICK RD***	***NNE 1/4 - 1/2 (0.486 mi.)***	***D13***	***61***
VALLEY FARM TRANSPOR Reg Id: 480157	***8656 SPARLING LN***	***NNE 1/4 - 1/2 (0.495 mi.)***	***E15***	***78***
CA DEPT OF TRANSPORT Reg Id: 480013	***8638 SPARLING LN***	***NNE 1/4 - 1/2 (0.496 mi.)***	***E16***	***84***

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 11/15/2021 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FREMOUW ENVIRONMENTA EPA ID: CAR000171017 Cleanup Status: CLOSED	***6940 TREMONT RD***	***NNE 1/2 - 1 (0.843 mi.)***	***17***	***91***

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 03/12/2021 has revealed that there are 4 Notify 65 sites within approximately 1 mile of the target property.

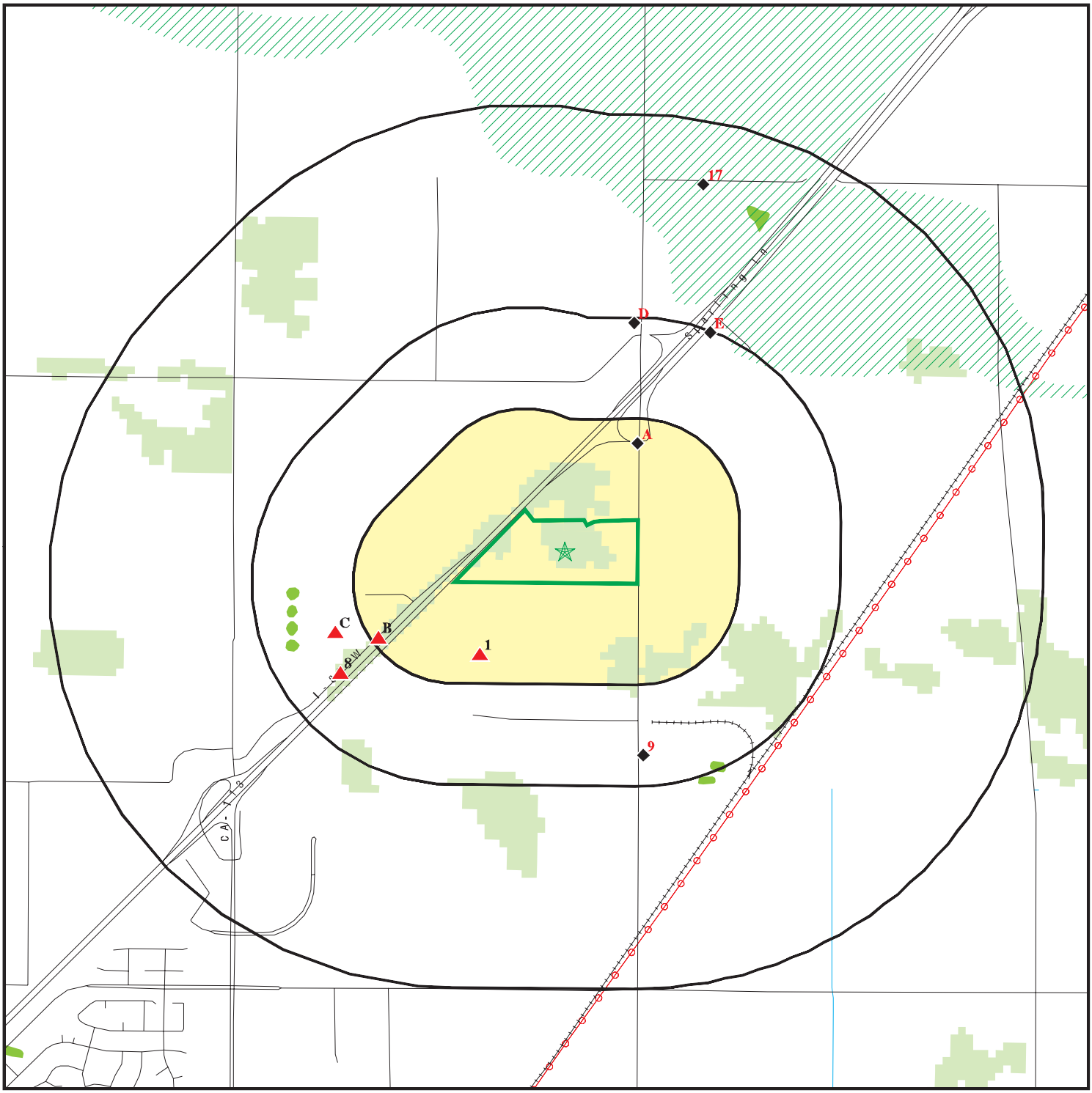
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EXXON USA (MILK FARM	***6618 MILK FARM RD***	***WSW 1/8 - 1/4 (0.231 mi.)***	***B4***	***18***
TEXACO STATION/MILK	***6615 MILK FARM RD***	***WSW 1/8 - 1/4 (0.243 mi.)***	***B5***	***22***
MORGAN'S FRUIT STAND	***6646 MILK FARM***	***WSW 1/4 - 1/2 (0.318 mi.)***	***C7***	***34***
IKE'S LANDSCAPING	6647 MILK FARM	WSW 1/4 - 1/2 (0.359 mi.)	8	41

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
	CDL

OVERVIEW MAP - 6861760.2S



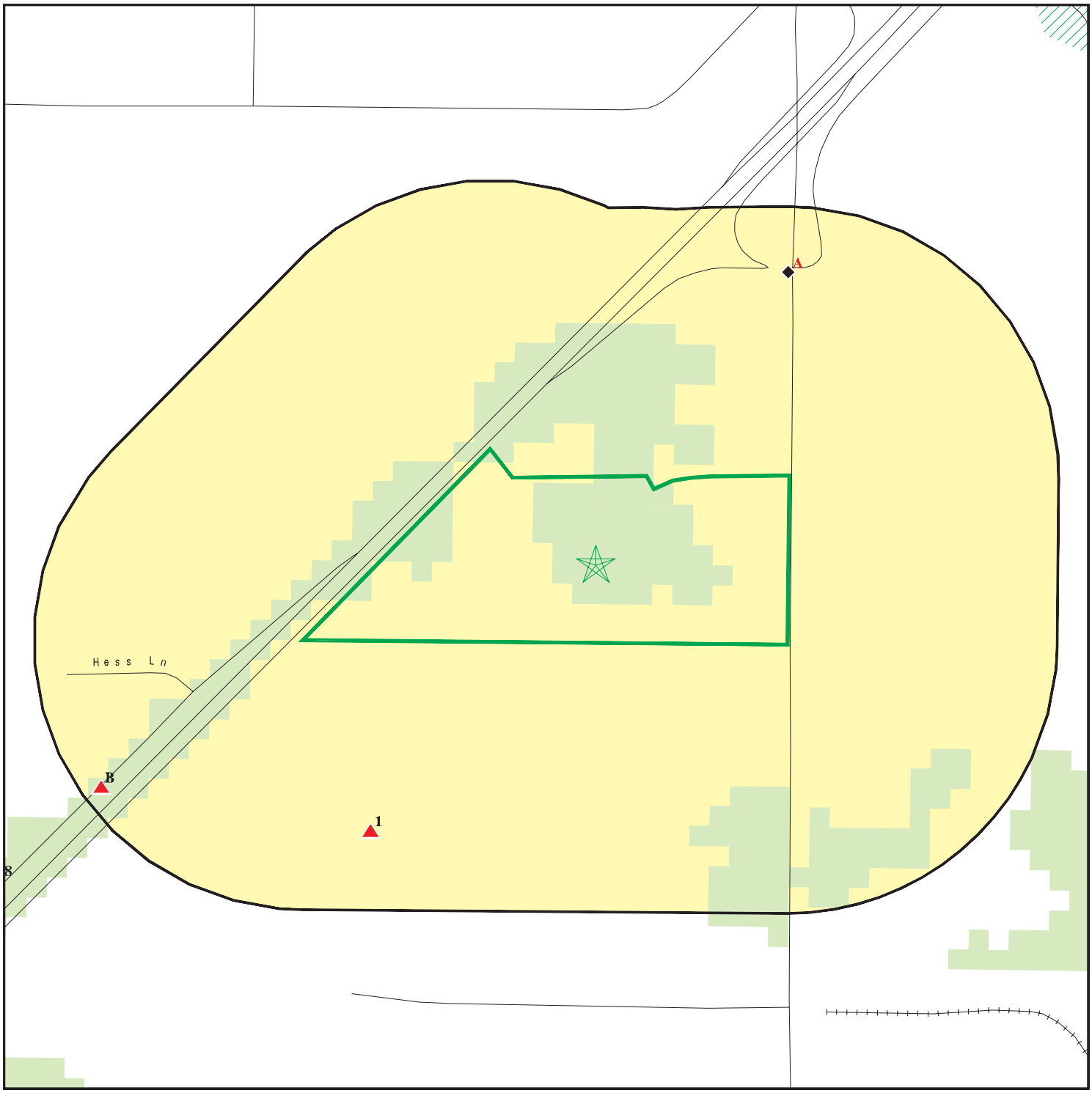
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Pedrick Road At I80 Property	CLIENT:	Brusca Associates, Inc.
ADDRESS:	Pedrick Road Dixon CA 95620	CONTACT:	Alycia Cridebring
LAT/LONG:	38.482825 / 121.807222	INQUIRY #:	6861760.2s
		DATE:	February 18, 2022 10:26 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 6861760.2S



Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
Sensitive Receptors
National Priority List Sites
Dept. Defense Sites

0 1/8 1/4 1/2 Miles

Indian Reservations BIA
Special Flood Hazard Area (1%)
0.2% Annual Chance Flood Hazard
National Wetland Inventory
State Wetlands

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Pedrick Road At I80 Property	CLIENT:	Brusca Associates, Inc.
ADDRESS:	Pedrick Road Dixon CA 95620	CONTACT:	Alycia Cridebring
LAT/LONG:	38.482825 / 121.807222	INQUIRY #:	6861760.2s
		DATE:	February 18, 2022 10:28 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	0	0	NR	0
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	1	0	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	3	8	NR	NR	11
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	1	NR	NR	1
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	1	NR	NR	NR	1
US CDL	0.001		0	NR	NR	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	2	NR	NR	NR	2
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	2	4	NR	NR	6
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	2	4	NR	NR	6
HWP	1.000		0	0	0	1	NR	1
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	2	2	0	NR	4
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	0	14	19	1	0	34

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
SW
1/8-1/4
0.176 mi.
930 ft.

MISTLER TRUCKING, FORMER
8405 PEDRICK RD
DIXON, CA 95620

SWF/LF
LUST
LDS
CERS

S107138770
N/A

Relative:
Higher

Actual:
67 ft.

SWF/LF (SWIS):

Name:	DIXON DOWNS/MISTLER FARMS
Address:	8405 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Region:	STATE
Facility ID:	48-CR-0024
SWIS Number:	48-CR-0024
Point of Contact:	Dawn Liang
Is Archived:	No
Is Closed Illegal Abandoned:	Yes
Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Operational Status:	Closed
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	C
EPA Federal Registry ID:	Not reported
ARB District:	Yolo-Solano
SWRCB Region:	Central Valley
Local Government:	Dixon
Reporting Agency Legal Name:	County of Solano
Reporting Agency Department:	Department of Resource Management
Enforcing Agency Legal Name:	County of Solano
Enforcing Agency Department:	Department of Resource Management
Regulation Status:	Unpermitted

Activity:

SWIS Number:	48-CR-0024
Site Name:	Dixon Downs/Mistler Farms
Activity:	Solid Waste Disposal Site
Activity Is Archived:	No
Category:	Disposal
Activity Classification:	Solid Waste Disposal Site
WDR Number:	Not reported
WDR Landfill Class:	Not reported
Cease Operation:	Not reported
Cease Operation Type:	Not reported
Inspection Frequency:	Quarterly
Throughput:	Not reported
Throughput Units:	Not reported
Remaining Capacity:	Not reported
Remaining Capacity Date:	Not reported
Capacity:	Not reported
Capacity Units:	Not reported
Total Acreage:	Not reported
Disposal Acreage:	Not reported
Permitted Elevation:	Not reported
Permitted Elevation Type:	Not reported
Permitted Depth:	Not reported
Permitted Depth Type:	Not reported
Point of Contact:	Dawn Liang
Site Operational Status:	Closed
Site Regulatory Status:	Unpermitted
Site Is Archived:	No

MISTLER TRUCKING, FORMER (Continued) **S107138770**

Is Closed Illegal Abandoned:	Yes
Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	C
EPA Federal Registry ID:	Not reported
County:	Solano
ARB District:	Yolo-Solano
SWRCB Region:	Central Valley
Local Government:	Dixon
Street Address:	8405 Pedrick Road
City:	Dixon
State:	CA
ZIP Code:	95620
Reporting Agency Legal Name:	County of Solano
Reporting Agency Department:	Department of Resource Management
Enforcing Agency Legal Name:	County of Solano
Enforcing Agency Department:	Department of Resource Management

Operator:

SWIS Number:	48-CR-0024
Site Name:	Dixon Downs/Mistler Farms
Site Operational Status:	Closed
Site Type:	Disposal Only
Site Regulatory Status:	Unpermitted
Latitude:	38.4792
Longitude:	-121.81111
Is Archived:	No
Operator:	Dixon Downs/Mistler Farms
Started On:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported
Contact Phone:	(916) 803-2900
Street Address:	401 Watt Avenue, Suite 4
Operator City:	Sacramento
Operator State:	CA
Operator Zip:	95864

Owner:

SWIS Number:	48-CR-0024
Owner:	Dixon Downs/Mistler Farms
Owner Address:	401 Watt Avenue, Suite 4
Owner City:	Sacramento
Owner State:	CA
Owner Zip:	95864
Site Name:	Dixon Downs/Mistler Farms
Site Operational Status:	Closed
Site Type:	Disposal Only
Site Regulatory Status:	Unpermitted
Latitude:	38.4792
Longitude:	-121.81111
Is Archived:	No
Started On:	Not reported
Contact Name:	Not reported

MISTLER TRUCKING, FORMER (Continued) **S107138770**

Contact Title: Not reported
Contact Email: Not reported
Contact Phone: (916) 803-2900

SOLANO CO. LUST:
Name: MISTLER TRUCKING, FORMER
Address: 8405 PEDRICK RD
City,State,Zip: DIXON, CA 95620
Region: SOLANO
Facility ID: 80336
Facility Status: A
Facility Status Desc: Active
Facility Phone: Not reported
Program: 29S
Inventory Number: 1
Inventory Type: SLIC - Spills, Leaks, Invest. & Cleanups (145)
Inventory Description: Not reported
Last service/permit exp: LETTER/REPORT WRITING
Last service date: 01/31/2019
District: SUP-DIST NO 3037
Inspector: Kaltreider, Misty
Call Back: Not reported

LDS:
Name: DIXON DOWNS, FORMER MISTLER TRUCKING CO
Address: 8405 PEDRICK RD
City,State,Zip: DIXON, CA 95620

Global Id: SL0609748481
Latitude: 38.47695
Longitude: -121.8111
Case Type: Land Disposal Site
Status: Pre-Title 27 CAI - Closed/No Monitoring
Status Date: 06/28/2019
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)
Caseworker: JEM
Local Agency: SOLANO COUNTY
RB Case Number: Not reported
LOC Case Number: 80336
File Location: Local Agency
Potential Media Affect: Aquifer used for drinking water supply
EDR Link ID: SL0609748481
Potential Contaminants of Concern: Diesel
Site History: **Information related to the designation of the 8405 Pedrick Road above-ground storage tank (AST) diesel fuel release as a Non-Case Informational Item can be found on the "Dixon Downs AST Diesel Fuel Release" Non-Case Informational Item page (GeoTracker Global ID #T10000017090).** See site documents for historical information. The former landfill is located on a seven-acre rectangular tract of land (APN# 111-040-010) just northeast of the town of Dixon, approximately 2000 feet west of Pedrick Road and south of Interstate 80 (Figure 1). It is situated in the N \\% of the SW]% of the SE]% of Section 1, Township 7 North, Range 1 East of the Mount Diablo Baseline and Meridian, among nearly flat irrigated agricultural fields sloping gently to the southeast. The surface elevation is approximately 65

MISTLER TRUCKING, FORMER (Continued) **S107138770**

feet above mean sea level. 1.2 SITE HISTORY AMEC Earth & Environmental (AMEC) conducted a Phase I Environmental Site Assessment in 2001. At that time, a residence, two barns, and an equipment repair building stood on the property. A small landfill occupied the western part of the Site and was identified as one of three potential areas of concern related to possible soil contamination. AMEC anticipated contents to be associated with farm operations that appear, from historic topographic maps and historic aerials, to have begun at the turn of the past century, including: domestic trash; building materials; and some automotive parts (e.g., batteries, cables, wires, oil filters, brake pads). Bobby Mistler, previous property owner, interviewed by AMEC, reported that unauthorized dumping of concrete roof tiles occurred in the more recent past. In 2005, a Phase II soil investigation was conducted by CRA. Six exploratory trenches were excavated in the area of the former landfill helping to delineate the boundaries. Refuse was discovered to underlie an area elongated north/south, approximately 160 feet long by 40 feet wide. The sides of the refuse layer were found to slope down toward the center of the landfill. The base of the refuse was found to extend beyond 10 feet, the maximum reach of the backhoe. Refuse observed in the trench included concrete roof tile, pieces of red clay pipe, bottles, and household items. One crushed 55-gallon drum was excavated during the investigation. Three soil samples were collected and analyzed for CAM17 metals by US EPA Methods 7471A and 6010B. Four metals (barium, chromium, nickel, and lead) were detected in concentrations exceeding the standard Designated Level Methodology criteria (CVRWQCB, 1989). CRA determined that because the metals did not occur in soluble form, they did not pose a threat to the groundwater. On this basis, CRA concluded that the landfill materials were nonhazardous. A geophysical survey concluded that the landfill extends to a depth of 17.9 feet below ground surface.

Click here to access the California GeoTracker records for this facility:

CERS:

Name:	DIXON DOWNS, FORMER MISTLER TRUCKING CO
Address:	8405 PEDRICK RD
City,State,Zip:	DIXON, CA 95620
Site ID:	230684
CERS ID:	SL0609748481
CERS Description:	Land Disposal Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	MARCY HANNUM - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 texas st #5500
Affiliation City:	FAIRFIELD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	7077843303,
Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	Joe Mello - CENTRAL VALLEY RWQCB (REGION 5S)

MISTLER TRUCKING, FORMER (Continued) **S107138770**

Entity Title:	Not reported
Affiliation Address:	11020 SUN CENTER DRIVE #200
Affiliation City:	RANCHO CORDOVA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Name:	DIXON DOWNS/MISTLER FARMS
Address:	8405 PEDRICK ROAD
City,State,Zip:	DIXON, CA
Site ID:	556562
CERS ID:	48-CR-0024
CERS Description:	Solid Waste and Recycle Sites

Affiliation:

Affiliation Type Desc:	Legal Owner
Entity Name:	Dixon Downs/Mistler Farms
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95864
Affiliation Phone:	9168032900,

Affiliation Type Desc:	Legal Operator
Entity Name:	Dixon Downs/Mistler Farms
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95864
Affiliation Phone:	9168032900,

A2 **TEC EQUIPMENT INC** **RCRA NonGen / NLR** **1026056957**
NNE **8555 PEDRICK RD** **CAL000453149**
1/8-1/4 **DIXON, CA 95620**
0.189 mi.
999 ft. **Site 1 of 2 in cluster A**

Relative:
Lower

Actual:
63 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		20200302
Handler Name:	TEC EQUIPMENT INC	
Handler Address:		8555 PEDRICK RD
Handler City,State,Zip:		DIXON, CA 95620
EPA ID:		CAL000453149
Contact Name:		EDWARD MATVEYEV
Contact Address:		750 NE COLUMBIA BLVD
Contact City,State,Zip:		PORTLAND, OR 97211
Contact Telephone:		503-247-4060
Contact Fax:		503-240-8737
Contact Email:		EMATVEYEV@TECEQUIPMENT.COM
Contact Title:		Not reported
EPA Region:		09

TEC EQUIPMENT INC (Continued) **1026056957**

Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	8555 PEDRICK RD
Mailing City,State,Zip:	DIXON, CA 95620
Owner Name:	TEC EQUIPMENT INC
Owner Type:	Other
Operator Name:	EDWARD MATVEYEV
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No

TEC EQUIPMENT INC (Continued) **1026056957**

Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200306
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TEC EQUIPMENT INC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	750 NE COLUMBIA BLVD
Owner/Operator City,State,Zip:	PORTLAND, OR 97211
Owner/Operator Telephone:	503-247-4602
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	EDWARD MATVEYEV
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	750 NE COLUMBIA BLVD
Owner/Operator City,State,Zip:	PORTLAND, OR 97211
Owner/Operator Telephone:	503-247-4060
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20200302
Handler Name: TEC EQUIPMENT INC	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	811111
NAICS Description:	GENERAL AUTOMOTIVE REPAIR

TEC EQUIPMENT INC (Continued) **1026056957**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

A3 **TEC EQUIPMENT** **CERS HAZ WASTE** **S126138043**
NNE **8555 PEDRICK RD** **CERS** **N/A**
1/8-1/4 **DIXON, CA 95620** **HWTS**
0.189 mi.
999 ft. **Site 2 of 2 in cluster A**

Relative:
Lower

Actual:
63 ft.

CERS HAZ WASTE:
Name: TEC EQUIPMENT
Address: 8555 PEDRICK RD
City,State,Zip: DIXON, CA 95620
Site ID: 564038
CERS ID: 10837069
CERS Description: Hazardous Waste Generator

CERS:
Name: TEC EQUIPMENT
Address: 8555 PEDRICK RD
City,State,Zip: DIXON, CA 95620
Site ID: 564038
CERS ID: 10837069
CERS Description: Chemical Storage Facilities

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: EDWARD MATVEYEV
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Identification Signer
Entity Name: EDWARD MATVEYEV
Entity Title: EHS Specialist
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: TEC Equipment Inc.
Entity Title: Not reported
Affiliation Address: 750 NE Columbia blvd
Affiliation City: Portland
Affiliation State: OR
Affiliation Country: United States

TEC EQUIPMENT (Continued) **S126138043**

Affiliation Zip: 97211
Affiliation Phone: (503) 285-7667,

Affiliation Type Desc: Parent Corporation
Entity Name: TEC Of California/TEC Equipment Inc.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: CUPA District
Entity Name: Solano County Env Health
Entity Title: Not reported
Affiliation Address: 675 Texas Street, Suite 5500
Affiliation City: Fairfield
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94533
Affiliation Phone: (707) 784-6765,

Affiliation Type Desc: Environmental Contact
Entity Name: Edward Matveyev
Entity Title: Not reported
Affiliation Address: 750 NE Columbia Blvd
Affiliation City: Portland
Affiliation State: OR
Affiliation Country: Not reported
Affiliation Zip: 97211
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 8555 Pedrick Rd
Affiliation City: Dixon
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95620
Affiliation Phone: ,

Affiliation Type Desc: Property Owner
Entity Name: David Thompson
Entity Title: Not reported
Affiliation Address: 750 NE Columbia Blvd
Affiliation City: Portland
Affiliation State: OR
Affiliation Country: United States
Affiliation Zip: 97211
Affiliation Phone: (503) 247-4655,

Affiliation Type Desc: Operator
Entity Name: TEC Equipment Inc.
Entity Title: Not reported
Affiliation Address: Not reported

TEC EQUIPMENT (Continued) **S126138043**

Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (707) 640-7200,

HWTS:
Name: TEC EQUIPMENT INC
Address: 8555 PEDRICK RD
Address 2: Not reported
City,State,Zip: DIXON, CA 95620
EPA ID: CAL000453149
Inactive Date: Not reported
Create Date: 03/02/2020
Last Act Date: 07/31/2020
Mailing Name: Not reported
Mailing Address: 750 NE COLUMBIA BLVD
Mailing Address 2: Not reported
Mailing City,State,Zip: PORTLAND, OR 972110000
Owner Name: DAVID THOMPSON
Owner Address: 750 NE COLUMBIA BLVD
Owner Address 2: Not reported
Owner City,State,Zip: PORTLAND, OR 97211
Contact Name: EDWARD MATVEYEV
Contact Address: 750 NE COLUMBIA BLVD
Contact Address 2: Not reported
City,State,Zip: PORTLAND, OR 97211

NAICS:
EPA ID: CAL000453149
Create Date: 2020-03-02 11:11:06.997
NAICS Code: 811111
NAICS Description: General Automotive Repair
Issued EPA ID Date: 2020-03-02 11:11:06.98000
Inactive Date: Not reported
Facility Name: TEC EQUIPMENT INC
Facility Address: 8555 PEDRICK RD
Facility Address 2: Not reported
Facility City: DIXON
Facility County: Not reported
Facility State: CA
Facility Zip: 95620

B4 **EXXON USA (MILK FARM)** **LUST** **S100179210**
WSW **6618 MILK FARM RD** **SWEEPS UST** **N/A**
1/8-1/4 **DIXON, CA 95620** **Cortese**
0.231 mi. **HIST CORTESE**
1222 ft. **Site 1 of 2 in cluster B** **Notify 65**
CERS

Relative:
Higher

Actual:
68 ft.

SOLANO CO. LUST:
Name: EXXON STATION (MILK FARM)
Address: 6618 MILK FARM RD
City,State,Zip: DIXON, CA 95620
Region: SOLANO
Facility ID: 80010

EXXON USA (MILK FARM) (Continued) **S100179210**

Facility Status: I
Facility Status Desc: Inactive
Facility Phone: Not reported
Program: 29S
Inventory Number: 1
Inventory Type: LOP - Closed Site (128)
Inventory Description: Not reported
Last service/permit exp: SITE VISITS
Last service date: 02/14/2013
District: SUP-DIST NO 3037
Inspector: Kaltreider, Misty
Call Back: Not reported

LUST:
Name: FORMER EXXON
Address: 6618 MILK FARM RD
City,State,Zip: DIXON, CA 95620
Lead Agency: SOLANO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500358
Global Id: T0609500358
Latitude: 38.47564
Longitude: -121.821126
Status: Completed - Case Closed
Status Date: 05/08/2000
Case Worker: Not reported
RB Case Number: 480100
Local Agency: SOLANO COUNTY
File Location: Not reported
Local Case Number: 80010
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0609500358
Contact Type: Local Agency Caseworker
Contact Name: SOLANO COUNTY
Organization Name: SOLANO COUNTY
Address: 675 TEXAS STREET, SUITE 2500
City: FAIRFIELD
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0609500358
Action Type: ENFORCEMENT
Date: 04/10/2001
Action: Closure/No Further Action Letter

Global Id: T0609500358
Action Type: Other
Date: 05/23/1989
Action: Leak Stopped

Global Id: T0609500358
Action Type: Other

EXXON USA (MILK FARM) (Continued) **S100179210**

Date: 05/23/1989
Action: Leak Discovery

Global Id: T0609500358
Action Type: Other
Date: 08/10/1989
Action: Leak Reported

LUST:
Global Id: T0609500358
Status: Open - Case Begin Date
Status Date: 05/23/1989

Global Id: T0609500358
Status: Open - Site Assessment
Status Date: 01/08/1991

Global Id: T0609500358
Status: Open - Site Assessment
Status Date: 06/07/1994

Global Id: T0609500358
Status: Completed - Case Closed
Status Date: 05/08/2000

LUST REG 5:
Name: FORMER EXXON
Address: 6618 MILK FARM RD
City: DIXON
Region: 5
Status: Case Closed
Case Number: 480100
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: JIM
Lead Agency: Local
Program: LUST
MTBE Code: 3

SWEEPS UST:
Name: EXXON USA (MILK FARM)
Address: 6618 MILK FARM RD
City: DIXON
Status: Not reported
Comp Number: 80010
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported

EXXON USA (MILK FARM) (Continued) **S100179210**

Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: 0

CORTESE:
Name: FORMER EXXON
Address: 6618 MILK FARM RD
City,State,Zip: DIXON, CA 95620
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0609500358
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

HIST CORTESE:
edr_fname: FORMER EXXON
edr_fadd1: 6618 MILK FARM
City,State,Zip: DIXON, CA 95620
Region: CORTESE
Facility County Code: 48
Reg By: LTNKA
Reg Id: 480100

NOTIFY 65:
Name: ABANDONED EXXON STATION
Address: 6618 MILK FARM
City,State,Zip: DIXON, CA 94080
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported
Global ID: Not reported
Status: Not reported

CERS:

EXXON USA (MILK FARM) (Continued) **S100179210**

Name: FORMER EXXON
Address: 6618 MILK FARM RD
City,State,Zip: DIXON, CA 95620
Site ID: 221249
CERS ID: T0609500358
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: SOLANO COUNTY - SOLANO COUNTY
Entity Title: Not reported
Affiliation Address: 675 TEXAS STREET, SUITE 2500
Affiliation City: FAIRFIELD
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

B5 **TEXACO STATION/MILK FARM** **LUST** **S100179213**
WSW **6615 MILK FARM RD** **SWEEPS UST** **N/A**
1/8-1/4 **DIXON, CA 95620** **Cortese**
0.243 mi. **HIST CORTESE**
1281 ft. **Site 2 of 2 in cluster B** **Notify 65**
CERS

Relative:
Higher

Actual:
68 ft.

SOLANO CO. LUST:
Name: TEXACO STATION
Address: 6615 MILK FARM RD
City,State,Zip: DIXON, CA 95620
Region: SOLANO
Facility ID: 80060
Facility Status: I
Facility Status Desc: Inactive
Facility Phone: Not reported
Program: 29S
Inventory Number: 1
Inventory Type: LOP - Closed Site (128)
Inventory Description: Ref Date = 5/6/2014
Last service/permit exp: ISSUANCE OF A CLOSURE DOCUMENT * Missing *
Last service date: 05/05/2014
District: SUP-DIST NO 3037
Inspector: Kaltreider, Misty
Call Back: Not reported

LUST:
Name: FORMER TEXACO
Address: 6615 MILK FARM RD
City,State,Zip: DIXON, CA 95620
Lead Agency: SOLANO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500360
Global Id: T0609500360
Latitude: 38.4757788664802
Longitude: -121.821813583374
Status: Completed - Case Closed
Status Date: 05/06/2014
Case Worker: Not reported

TEXACO STATION/MILK FARM (Continued) **S100179213**

RB Case Number: 480102
Local Agency: SOLANO COUNTY
File Location: Local Agency
Local Case Number: 80060
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Benzene, Toluene, Xylene, Diesel, Gasoline
Site History: See site documents for historical information. The SWRCB Cleanup Fund includes this site and the site located at 6646 Milk Farm Road as one case.

LUST:
Global Id: T0609500360
Contact Type: Local Agency Caseworker
Contact Name: SOLANO COUNTY
Organization Name: SOLANO COUNTY
Address: 675 TEXAS STREET, SUITE 2500
City: FAIRFIELD
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 03/09/2007
Action: Verbal Communication

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 05/19/2009
Action: Notice of Reimbursement

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 06/30/2009
Action: Staff Letter

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 01/30/2014
Action: Verbal Enforcement

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 02/28/2014
Action: Technical Correspondence / Assistance / Other

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 05/19/2009
Action: Staff Letter

Global Id: T0609500360
Action Type: RESPONSE
Date: 06/05/2006
Action: Monitoring Report - Quarterly

Global Id: T0609500360

TEXACO STATION/MILK FARM (Continued) **S100179213**

Action Type: RESPONSE
Date: 11/01/2012
Action: Site Assessment Report

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 10/28/2010
Action: Staff Letter

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 10/15/2007
Action: Meeting

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 06/17/2011
Action: Warning Letter

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 10/05/2010
Action: Verbal Enforcement

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 11/05/2013
Action: Warning Letter

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 09/13/2013
Action: Verbal Enforcement

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 03/12/2012
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0609500360
Action Type: Other
Date: 05/23/1989
Action: Leak Stopped

Global Id: T0609500360
Action Type: RESPONSE
Date: 04/08/2008
Action: Monitoring Report - Quarterly

Global Id: T0609500360
Action Type: RESPONSE
Date: 06/17/2011
Action: Other Report / Document

Global Id: T0609500360
Action Type: RESPONSE
Date: 12/23/1997

TEXACO STATION/MILK FARM (Continued) **S100179213**

Action: Final Remedial Action Report / Corrective Action Report

Global Id: T0609500360
Action Type: RESPONSE
Date: 03/19/1991
Action: Preliminary Site Assessment Report

Global Id: T0609500360
Action Type: RESPONSE
Date: 03/02/2004
Action: Monitoring Report - Quarterly

Global Id: T0609500360
Action Type: RESPONSE
Date: 03/31/1998
Action: Final Remedial Action Report / Corrective Action Report

Global Id: T0609500360
Action Type: RESPONSE
Date: 11/13/1990
Action: Preliminary Site Assessment Report

Global Id: T0609500360
Action Type: RESPONSE
Date: 09/20/2000
Action: Monitoring Report - Semi-Annually

Global Id: T0609500360
Action Type: RESPONSE
Date: 07/13/1989
Action: Tank Removal Report / UST Sampling Report

Global Id: T0609500360
Action Type: RESPONSE
Date: 05/11/2000
Action: Correspondence

Global Id: T0609500360
Action Type: RESPONSE
Date: 08/03/2010
Action: Monitoring Report - Other

Global Id: T0609500360
Action Type: RESPONSE
Date: 05/02/2014
Action: Site Assessment Report

Global Id: T0609500360
Action Type: RESPONSE
Date: 11/13/1990
Action: Preliminary Site Assessment Report

Global Id: T0609500360
Action Type: RESPONSE
Date: 04/30/2001
Action: Monitoring Report - Quarterly

TEXACO STATION/MILK FARM (Continued) **S100179213**

Global Id: T0609500360
Action Type: RESPONSE
Date: 05/08/2001
Action: Monitoring Report - Quarterly

Global Id: T0609500360
Action Type: RESPONSE
Date: 03/16/1995
Action: Other Report / Document

Global Id: T0609500360
Action Type: RESPONSE
Date: 08/29/1997
Action: Well Installation Report

Global Id: T0609500360
Action Type: RESPONSE
Date: 01/06/1995
Action: Other Report / Document

Global Id: T0609500360
Action Type: RESPONSE
Date: 04/14/1998
Action: Correspondence

Global Id: T0609500360
Action Type: RESPONSE
Date: 03/12/1990
Action: Correspondence

Global Id: T0609500360
Action Type: RESPONSE
Date: 11/29/1989
Action: Correspondence

Global Id: T0609500360
Action Type: RESPONSE
Date: 10/20/2004
Action: Other Report / Document

Global Id: T0609500360
Action Type: RESPONSE
Date: 01/27/2000
Action: Correspondence

Global Id: T0609500360
Action Type: RESPONSE
Date: 07/20/1998
Action: Correspondence

Global Id: T0609500360
Action Type: RESPONSE
Date: 06/20/1990
Action: Interim Remedial Action Report

Global Id: T0609500360
Action Type: RESPONSE

TEXACO STATION/MILK FARM (Continued) **S100179213**

Date: 03/16/1994
Action: Correspondence

Global Id: T0609500360
Action Type: RESPONSE
Date: 07/23/1992
Action: Other Report / Document

Global Id: T0609500360
Action Type: RESPONSE
Date: 02/17/2012
Action: Monitoring Report - Quarterly

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 07/12/2004
Action: File review

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 06/21/2011
Action: Meeting

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 12/02/2010
Action: Staff Letter

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 09/26/2012
Action: Notice to Comply

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 08/17/2012
Action: Notice to Comply

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 05/06/2014
Action: Closure/No Further Action Letter

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 12/14/2010
Action: Staff Letter

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 01/24/2012
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0609500360
Action Type: RESPONSE
Date: 01/20/2010
Action: Correspondence

TEXACO STATION/MILK FARM (Continued) **S100179213**

Global Id: T0609500360
Action Type: RESPONSE
Date: 08/30/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0609500360
Action Type: RESPONSE
Date: 06/20/2011
Action: Verbal Communication

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 10/20/2004
Action: * Historical Enforcement

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 03/03/2005
Action: File review

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 12/20/2002
Action: File review

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 09/30/2004
Action: File review

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 03/02/2004
Action: 13267 Monitoring Program

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 03/05/2013
Action: Staff Letter

Global Id: T0609500360
Action Type: Other
Date: 05/23/1989
Action: Leak Discovery

Global Id: T0609500360
Action Type: RESPONSE
Date: 11/30/2010
Action: Soil and Water Investigation Workplan

Global Id: T0609500360
Action Type: RESPONSE
Date: 10/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0609500360
Action Type: RESPONSE

TEXACO STATION/MILK FARM (Continued) **S100179213**

Date: 06/28/2011
Action: Verbal Communication

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 09/30/2002
Action: File review

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 11/30/2009
Action: Notice of Responsibility

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 01/25/2010
Action: Staff Letter

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 04/18/2012
Action: Warning Letter

Global Id: T0609500360
Action Type: ENFORCEMENT
Date: 02/20/2013
Action: LOP Case Closure Summary to RB

Global Id: T0609500360
Action Type: Other
Date: 08/10/1989
Action: Leak Reported

LUST:
Global Id: T0609500360
Status: Open - Case Begin Date
Status Date: 05/23/1989

Global Id: T0609500360
Status: Open - Site Assessment
Status Date: 01/08/1991

Global Id: T0609500360
Status: Open - Site Assessment
Status Date: 06/07/1994

Global Id: T0609500360
Status: Open - Remediation
Status Date: 08/31/2004

Global Id: T0609500360
Status: Open - Verification Monitoring
Status Date: 12/06/2007

Global Id: T0609500360
Status: Open - Eligible for Closure
Status Date: 03/01/2013

TEXACO STATION/MILK FARM (Continued) **S100179213**

Global Id: T0609500360
Status: Completed - Case Closed
Status Date: 05/06/2014

Global Id: T0609500360
Status: Completed - Case Closed
Status Date: 05/06/2014

Global Id: T0609500360
Status: Open - Eligible for Closure
Status Date: 05/06/2014

LUST REG 5:
Name: FORMER TEXACO
Address: 6615 MILK FARM RD
City: DIXON
Region: 5
Status: Post remedial action monitoring
Case Number: 480102
Case Type: Drinking Water Aquifer affected
Substance: DIESEL
Staff Initials: JIM
Lead Agency: Local
Program: LUST
MTBE Code: 1

SWEEPS UST:
Name: TEXACO STATION/MILK FARM
Address: 6615 MILK FARM RD
City: DIXON
Status: Not reported
Comp Number: 80060
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: 0

CORTESE:
Name: FORMER TEXACO
Address: 6615 MILK FARM RD
City,State,Zip: DIXON, CA 95620
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0609500360
Site/Facility Type: LUST CLEANUP SITE

TEXACO STATION/MILK FARM (Continued) **S100179213**

Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	FORMER TEXACO
edr_fadd1:	6615 MILK FARM
City,State,Zip:	DIXON, CA 95620
Region:	CORTESE
Facility County Code:	48
Reg By:	LTNKA
Reg Id:	480102

NOTIFY 65:

Name:	TEXACO STATION
Address:	6615 MILK FARM
City,State,Zip:	DIXON, CA 94080
Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported
Global ID:	Not reported
Status:	Not reported

CERS:

Name:	FORMER TEXACO
Address:	6615 MILK FARM RD
City,State,Zip:	DIXON, CA 95620
Site ID:	233113
CERS ID:	T0609500360
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	SOLANO COUNTY - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 TEXAS STREET, SUITE 2500
Affiliation City:	FAIRFIELD
Affiliation State:	CA

TEXACO STATION/MILK FARM (Continued) **S100179213**

Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

C6 **MORGAN'S FRUIT STAND** **LUST** **U003641635**
WSW **6646 MILK FARM RD** **UST** **N/A**
1/4-1/2 **DIXON, CA 95620** **SWEEPS UST**
0.318 mi. **Cortese**
1680 ft. **Site 1 of 2 in cluster C**

Relative:
Higher

Actual:
68 ft.

LUST REG 5:
Name: MORGAN'S FRUIT STAND
Address: 6646 MILK FARM RD
City: DIXON
Region: 5
Status: Post remedial action monitoring
Case Number: 480101
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: JIM
Lead Agency: Local
Program: LUST
MTBE Code: 4

SOLANO CO. UST:
Name: MORGAN'S FRUIT STAND
Address: 6646 MILK FARM RD
City,State,Zip: DIXON, CA 95620
Facility Id: 80114
Facility Status: Inactive
Decode for Facility Status: Closed
Facility Phone: Not reported

Inventory Number: 1
Inventory Type: Underground Storage Tank (1)
Inventory Description: Not reported
Permit Expire/Last Service: Not reported
Last Service Date: Not reported
District: SUP-DIST NO 3038
Inspector: Osier, Courtney A

Name: MORGAN'S FRUIT STAND
Address: 6646 MILK FARM RD
City,State,Zip: DIXON, CA 95620

Inventory Number: 2
Inventory Type: Underground Storage Tank (1)
Inventory Description: Not reported
Permit Expire/Last Service: Not reported
Last Service Date: Not reported
District: SUP-DIST NO 3038
Inspector: Osier, Courtney A

Name: MORGAN'S FRUIT STAND
Address: 6646 MILK FARM RD
City,State,Zip: DIXON, CA 95620

MORGAN'S FRUIT STAND (Continued) **U003641635**

Inventory Number:	3
Inventory Type:	Underground Storage Tank (1)
Inventory Description:	Not reported
Permit Expire/Last Service:	Not reported
Last Service Date:	Not reported
District:	SUP-DIST NO 3038
Inspector:	Osier, Courtney A

SWEEPS UST:

Name:	MORGAN'S FRUIT STAND/MILK FARM
Address:	6646 MILK FARM RD
City:	DIXON
Status:	Not reported
Comp Number:	80114
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	Not reported
Tank Status:	Not reported
Capacity:	Not reported
Active Date:	Not reported
Tank Use:	Not reported
STG:	Not reported
Content:	Not reported
Number Of Tanks:	0

CORTESE:

Name:	MORGAN'S FRUIT STAND
Address:	6646 MILK FARM RD
City,State,Zip:	DIXON, CA 95620
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0609500359
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

C7 **MORGAN'S FRUIT STAND** **LUST** **S100225686**
WSW **6646 MILK FARM** **HIST CORTESE** **N/A**
1/4-1/2 **DIXON, CA 95620** **Notify 65**
0.318 mi.
1680 ft. **Site 2 of 2 in cluster C**

Relative:
Higher

Actual:
68 ft.

SOLANO CO. LUST:

Name:	MORGAN'S FRUIT STAND
Address:	6646 MILK FARM RD
City,State,Zip:	DIXON, CA 95620
Region:	SOLANO
Facility ID:	80114
Facility Status:	I
Facility Status Desc:	Inactive
Facility Phone:	Not reported
Program:	29S
Inventory Number:	1
Inventory Type:	LOP - Closed Site (128)
Inventory Description:	Ref date = 5/16/2014
Last service/permit exp:	ISSUANCE OF A CLOSURE DOCUMENT * Missing *
Last service date:	05/05/2014
District:	SUP-DIST NO 3037
Inspector:	Kaltreider, Misty
Call Back:	Not reported

LUST:

Name:	MORGAN'S FRUIT STAND
Address:	6646 MILK FARM RD
City,State,Zip:	DIXON, CA 95620
Lead Agency:	SOLANO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500359
Global Id:	T0609500359
Latitude:	38.4808560628852
Longitude:	-121.814603805542
Status:	Completed - Case Closed
Status Date:	05/06/2014
Case Worker:	Not reported
RB Case Number:	480101
Local Agency:	SOLANO COUNTY
File Location:	Local Agency
Local Case Number:	80114
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	See site documents for historical information. This site is included with the former Texaco (Global ID T0609500360), 6615 Milk Farm Property, Dixon as one claim under the cleanup fund claim # 1391.

LUST:

Global Id:	T0609500359
Contact Type:	Local Agency Caseworker
Contact Name:	SOLANO COUNTY
Organization Name:	SOLANO COUNTY
Address:	675 TEXAS STREET, SUITE 2500
City:	FAIRFIELD
Email:	Not reported
Phone Number:	Not reported

MORGAN'S FRUIT STAND (Continued) **S100225686**

LUST:

Global Id:	T0609500359
Action Type:	ENFORCEMENT
Date:	10/15/2007
Action:	Meeting
Global Id:	T0609500359
Action Type:	ENFORCEMENT
Date:	05/19/2009
Action:	Notice of Reimbursement
Global Id:	T0609500359
Action Type:	ENFORCEMENT
Date:	06/30/2009
Action:	Staff Letter
Global Id:	T0609500359
Action Type:	ENFORCEMENT
Date:	06/21/2011
Action:	Meeting
Global Id:	T0609500359
Action Type:	ENFORCEMENT
Date:	01/30/2014
Action:	Warning Letter
Global Id:	T0609500359
Action Type:	RESPONSE
Date:	11/01/2012
Action:	Site Assessment Report
Global Id:	T0609500359
Action Type:	ENFORCEMENT
Date:	03/09/2007
Action:	Verbal Communication
Global Id:	T0609500359
Action Type:	ENFORCEMENT
Date:	10/28/2010
Action:	Staff Letter
Global Id:	T0609500359
Action Type:	ENFORCEMENT
Date:	06/17/2011
Action:	Warning Letter
Global Id:	T0609500359
Action Type:	ENFORCEMENT
Date:	10/05/2010
Action:	Verbal Enforcement
Global Id:	T0609500359
Action Type:	Other
Date:	05/23/1989
Action:	Leak Stopped
Global Id:	T0609500359

MORGAN'S FRUIT STAND (Continued) **S100225686**

Action Type: RESPONSE
Date: 04/08/2008
Action: Monitoring Report - Quarterly

Global Id: T0609500359
Action Type: RESPONSE
Date: 01/20/2010
Action: Correspondence

Global Id: T0609500359
Action Type: RESPONSE
Date: 02/13/1997
Action: Correspondence

Global Id: T0609500359
Action Type: RESPONSE
Date: 03/16/1995
Action: Other Report / Document

Global Id: T0609500359
Action Type: RESPONSE
Date: 10/05/2000
Action: Monitoring Report - Other

Global Id: T0609500359
Action Type: RESPONSE
Date: 03/19/1991
Action: Other Report / Document

Global Id: T0609500359
Action Type: RESPONSE
Date: 10/05/1989
Action: Correspondence

Global Id: T0609500359
Action Type: RESPONSE
Date: 12/21/1994
Action: Correspondence

Global Id: T0609500359
Action Type: RESPONSE
Date: 10/22/1993
Action: Other Report / Document

Global Id: T0609500359
Action Type: RESPONSE
Date: 03/31/1998
Action: Final Remedial Action Report / Corrective Action Report

Global Id: T0609500359
Action Type: RESPONSE
Date: 03/16/1994
Action: Correspondence

Global Id: T0609500359
Action Type: RESPONSE
Date: 11/13/1990

MORGAN'S FRUIT STAND (Continued) **S100225686**

Action: Tank Removal Report / UST Sampling Report

Global Id: T0609500359
Action Type: RESPONSE
Date: 06/20/1990
Action: Correspondence

Global Id: T0609500359
Action Type: RESPONSE
Date: 03/12/1990
Action: Other Report / Document

Global Id: T0609500359
Action Type: RESPONSE
Date: 07/23/1992
Action: Correspondence

Global Id: T0609500359
Action Type: RESPONSE
Date: 02/17/2012
Action: Monitoring Report - Other

Global Id: T0609500359
Action Type: RESPONSE
Date: 11/29/1989
Action: Other Report / Document

Global Id: T0609500359
Action Type: RESPONSE
Date: 02/17/2012
Action: Monitoring Report - Other

Global Id: T0609500359
Action Type: RESPONSE
Date: 02/27/1992
Action: Correspondence

Global Id: T0609500359
Action Type: RESPONSE
Date: 01/27/1997
Action: Correspondence

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 07/12/2004
Action: File review

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 09/30/2004
Action: File review

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 03/03/2005
Action: File review

MORGAN'S FRUIT STAND (Continued) **S100225686**

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 11/05/2013
Action: Warning Letter

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 09/26/2012
Action: Notice to Comply

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 09/13/2013
Action: Verbal Enforcement

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 05/06/2014
Action: Closure/No Further Action Letter

Global Id: T0609500359
Action Type: RESPONSE
Date: 08/30/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0609500359
Action Type: RESPONSE
Date: 06/05/2006
Action: Monitoring Report - Quarterly

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 03/02/2004
Action: 13267 Monitoring Program

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 10/20/2004
Action: * Historical Enforcement

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 02/20/2013
Action: LOP Case Closure Summary to RB

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 12/02/2010
Action: Staff Letter

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 08/17/2012
Action: Notice to Comply

Global Id: T0609500359
Action Type: ENFORCEMENT

MORGAN'S FRUIT STAND (Continued) **S100225686**

Date: 03/05/2013
Action: Staff Letter

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 02/28/2014
Action: Technical Correspondence / Assistance / Other

Global Id: T0609500359
Action Type: Other
Date: 05/23/1989
Action: Leak Discovery

Global Id: T0609500359
Action Type: RESPONSE
Date: 10/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0609500359
Action Type: RESPONSE
Date: 06/20/2011
Action: Verbal Communication

Global Id: T0609500359
Action Type: RESPONSE
Date: 06/28/2011
Action: Verbal Communication

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 09/30/2002
Action: File review

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 12/20/2002
Action: File review

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 01/25/2010
Action: Staff Letter

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 11/30/2009
Action: Notice of Responsibility

Global Id: T0609500359
Action Type: ENFORCEMENT
Date: 04/18/2012
Action: Warning Letter

Global Id: T0609500359
Action Type: Other
Date: 08/10/1989
Action: Leak Reported

MORGAN'S FRUIT STAND (Continued) **S100225686**

Global Id: T0609500359
Action Type: RESPONSE
Date: 11/30/2010
Action: Soil and Water Investigation Workplan

LUST:
Global Id: T0609500359
Status: Open - Case Begin Date
Status Date: 05/23/1989

Global Id: T0609500359
Status: Open - Site Assessment
Status Date: 05/17/1991

Global Id: T0609500359
Status: Open - Site Assessment
Status Date: 06/07/1994

Global Id: T0609500359
Status: Open - Remediation
Status Date: 08/26/2004

Global Id: T0609500359
Status: Open - Verification Monitoring
Status Date: 12/06/2007

Global Id: T0609500359
Status: Open - Eligible for Closure
Status Date: 02/05/2013

Global Id: T0609500359
Status: Completed - Case Closed
Status Date: 05/06/2014

HIST CORTESE:
edr_fname: MORGAN'S FRUIT STAND
edr_fadd1: 6646 MILK FARM
City,State,Zip: DIXON, CA 95620
Region: CORTESE
Facility County Code: 48
Reg By: LTNKA
Reg Id: 480101

NOTIFY 65:
Name: MORGAN'S FRUIT STAND
Address: 6646 MILK FARM
City,State,Zip: DIXON, CA 94080
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported
Global ID: Not reported

MORGAN'S FRUIT STAND (Continued) **S100225686**

Status: Not reported

8
WSW
1/4-1/2
0.359 mi.
1894 ft.

IKE'S LANDSCAPING
6647 MILK FARM
DIXON, CA 94080

Notify 65 **S100225687**
N/A

Relative:
Higher

Actual:
68 ft.

NOTIFY 65:

Name:	IKE'S LANDSCAPING
Address:	6647 MILK FARM
City,State,Zip:	DIXON, CA 94080
Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported
Global ID:	Not reported
Status:	Not reported

9
SSE
1/4-1/2
0.423 mi.
2234 ft.

CAMPBELL SOUP SUPPLY CO
8380 PEDRICK RD
DIXON, CA 95620

LUST **S105960090**
ENF **N/A**
HAZNET
NPDES
CIWQS
CERS
HWTS

Relative:
Lower

Actual:
63 ft.

SOLANO CO. LUST:

Name:	CAMPBELL SOUP SUPPLY CO LLC
Address:	8380 PEDRICK RD
City,State,Zip:	DIXON, CA 95620
Region:	SOLANO
Facility ID:	80333
Facility Status:	I
Facility Status Desc:	Inactive
Facility Phone:	707-678-4406 Ext 504
Program:	29S
Inventory Number:	1
Inventory Type:	SLIC - Closed Site (138)
Inventory Description:	Ref Date = 7/2/2015
Last service/permit exp:	LETTER/REPORT WRITING
Last service date:	07/02/2015
District:	SUP-DIST NO 3033
Inspector:	LaPlace, Colby S
Call Back:	Not reported

ENF:

Name:	CAMPBELL SOUP SUPPLY DIXON FACILITY
Address:	8380 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Region:	Not reported
Facility Id:	220383
Agency Name:	Campbell Soup Supply Company LLC

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Place Type:	Food Processor
Place Subtype:	Food Processing NEC
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	38.475556
Place Longitude:	-121.801111
SIC Code 1:	2033
SIC Desc 1:	Canned Fruits, Vegetables, Preserves, Jams, and Jellies
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	311421
NAICS Desc 1:	Fruit and Vegetable Canning (pt)
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	5
Threat To Water Quality:	2
Complexity:	B
Pretreatment:	N - POTW does not have EPA approved pretreatment prog.
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRINDFP
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	5A482012001
Reg Measure Id:	146414
Reg Measure Type:	WDR
Region:	Not reported
Order #:	R5-1995-0101
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	05/13/2014
Effective Date:	04/28/1995
Expiration/Review Date:	04/28/2010
Termination Date:	03/17/2010
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	251906
Region:	Not reported
Order / Resolution Number:	Not reported
Enforcement Action Type:	13267 Letter
Effective Date:	04/06/2004
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	12/31/2010
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	13267 Letter 04/06/2004 for Campbell Soup Supply Dixon Facility
Description:	13267 for nonsubmittal of monitoring reports
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	CAMPBELL SOUP SUPPLY DIXON FACILITY
Address:	8380 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Region:	Not reported
Facility Id:	220383
Agency Name:	Campbell Soup Supply Company LLC
Place Type:	Food Processor
Place Subtype:	Food Processing NEC
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	38.475556
Place Longitude:	-121.801111
SIC Code 1:	2033
SIC Desc 1:	Canned Fruits, Vegetables, Preserves, Jams, and Jellies
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	311421
NAICS Desc 1:	Fruit and Vegetable Canning (pt)
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	5
Threat To Water Quality:	2
Complexity:	B

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Miscellaneous
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRINDFP
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	5A482012001
Reg Measure Id:	368467
Reg Measure Type:	WDR
Region:	Not reported
Order #:	R5-2010-0038
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/24/2019
Effective Date:	03/18/2010
Expiration/Review Date:	03/18/2020
Termination Date:	06/06/2019
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	6/7/2019
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	410836
Region:	Not reported
Order / Resolution Number:	Not reported
Enforcement Action Type:	Notice of Violation
Effective Date:	12/05/2016
Adoption/Issuance Date:	12/05/2016
Achieve Date:	Not reported
Termination Date:	12/05/2016
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	NOV 12/05/2016 for Campbell Soup Supply Company LLC
Description:	Not reported
Program:	WDRINDFP
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Project $ Completed:	0
Total $ Paid/Completed Amount:	0
Name:	CAMPBELL SOUP SUPPLY DIXON FACILITY
Address:	8380 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Region:	Not reported
Facility Id:	220383
Agency Name:	Campbell Soup Supply Company LLC
Place Type:	Food Processor
Place Subtype:	Food Processing NEC
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	38.475556
Place Longitude:	-121.801111
SIC Code 1:	2033
SIC Desc 1:	Canned Fruits, Vegetables, Preserves, Jams, and Jellies
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	311421
NAICS Desc 1:	Fruit and Vegetable Canning (pt)
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	5
Threat To Water Quality:	2
Complexity:	B
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Miscellaneous
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRINDFP
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	5A482012001
Reg Measure Id:	368467
Reg Measure Type:	WDR
Region:	Not reported
Order #:	R5-2010-0038
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/24/2019
Effective Date:	03/18/2010

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Expiration/Review Date:	03/18/2020
Termination Date:	06/06/2019
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	6/7/2019
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	374251
Region:	Not reported
Order / Resolution Number:	Not reported
Enforcement Action Type:	Notice of Violation
Effective Date:	04/22/2010
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	04/22/2010
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	NOV 04/22/2010 for Campbell Soup Supply Co.
Description:	NOV sent for unauthorized discharge, failure to maintain facilty, and failure to notify.
Program:	WDRINDFP
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

HAZNET:

Name:	CAMPBELL SOUP
Address:	8380 PEDRICK RD
Address 2:	Not reported
City,State,Zip:	DIXON, CA 95621
Contact:	TOM MULDHART
Telephone:	5302193658
Mailing Name:	Not reported
Mailing Address:	8380 PEDRICK RD
Year:	2015
Gepaid:	CAC002812840
TSD EPA ID:	CAD982042475
CA Waste Code:	151 - Asbestos containing waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	4.6

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Additional Info:

Year:	2015
Gen EPA ID:	CAC002812840
Shipment Date:	20150513
Creation Date:	7/8/2015 22:15:37
Receipt Date:	20150513
Manifest ID:	012189860JJK
Trans EPA ID:	CAR000183152
Trans Name:	LD TRANSPORTATION LLC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982042475
Trans Name:	RECOLOGY HAY ROAD LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	4.6
Waste Quantity:	20
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

NPDES:

Name:	CAMPBELL SOUP SUPPLY CO
Address:	8380 PEDRICK RD
City,State,Zip:	DIXON, CA 95620
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	5S48I022706
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	07/07/2010
Operator Name:	Campbell Soup Supply Co
Operator Address:	PO Box 340

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Operator City:	Dixon
Operator State:	California
Operator Zip:	95620

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	405033
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S48I022706
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/07/2010
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Campbell Soup Supply Co
Discharge Address:	PO Box 340
Discharge City:	Dixon
Discharge State:	California
Discharge Zip:	95620
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	405033
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S48I022706
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	07/07/2010
Processed Date:	07/07/2010
Status:	Active
Status Date:	07/07/2010
Place Size:	52.82
Place Size Unit:	Acres
Contact:	David Kiehn
Contact Title:	Plant Manager
Contact Phone:	707-678-4406
Contact Phone Ext:	5517
Contact Email:	david_kiehn@campbellsoup.com
Operator Name:	Campbell Soup Supply Co
Operator Address:	PO Box 340
Operator City:	Dixon
Operator State:	California

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Operator Zip:	95620
Operator Contact:	David Kiehn
Operator Contact Title:	Plant Manager
Operator Contact Phone:	707-678-4406
Operator Contact Phone Ext:	5517
Operator Contact Email:	david_kiehn@campbellsoup.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Sacramento River
Certifier:	David Kiehn
Certifier Title:	Plant Manager
Certification Date:	30-JUN-15
Primary Sic:	2099-Food Preparations, NEC
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	CAMPBELL SOUP SUPPLY CO
Address:	8380 PEDRICK RD
City,State,Zip:	DIXON, CA 95620
Facility Status:	Active
NPDES Number:	CAS000001
Region:	5S
Agency Number:	0
Regulatory Measure ID:	405033
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	5S48I022706
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Effective Date Of Regulatory Measure:	07/07/2010
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	PO Box 340
Discharge Name:	Campbell Soup Supply Co
Discharge City:	Dixon
Discharge State:	California
Discharge Zip:	95620
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	405033
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S48I022706
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/07/2010
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Campbell Soup Supply Co
Discharge Address:	PO Box 340
Discharge City:	Dixon
Discharge State:	California
Discharge Zip:	95620
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	405033
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S48I022706
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	07/07/2010
Processed Date:	07/07/2010
Status:	Active

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Status Date:	07/07/2010
Place Size:	52.82
Place Size Unit:	Acres
Contact:	David Kiehn
Contact Title:	Plant Manager
Contact Phone:	707-678-4406
Contact Phone Ext:	5517
Contact Email:	david_kiehn@campbellsoup.com
Operator Name:	Campbell Soup Supply Co
Operator Address:	PO Box 340
Operator City:	Dixon
Operator State:	California
Operator Zip:	95620
Operator Contact:	David Kiehn
Operator Contact Title:	Plant Manager
Operator Contact Phone:	707-678-4406
Operator Contact Phone Ext:	5517
Operator Contact Email:	david_kiehn@campbellsoup.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Sacramento River
Certifier:	David Kiehn
Certifier Title:	Plant Manager
Certification Date:	30-JUN-15
Primary Sic:	2099-Food Preparations, NEC
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

CIWQS:

Name:	CAMPBELL SOUP SUPPLY CO

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Address:	8380 PEDRICK RD
City,State,Zip:	DIXON, CA 95620
Agency:	Campbell Soup Supply Co
Agency Address:	PO Box 340 8380 Pedrick Road, Dixon, CA 95620
Place/Project Type:	Industrial - Food Preparations, NEC
SIC/NAICS:	2099
Region:	5S
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	5S48I022706
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	07/07/2010
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.47571
Longitude:	-121.80097

Name:	CAMPBELL SOUP SUPPLY DIXON FACILITY
Address:	8380 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Agency:	Campbell Soup Supply Company LLC
Agency Address:	1 Campbell Place, Camden, NJ 08101
Place/Project Type:	Food Processing
SIC/NAICS:	2033
Region:	5S
Program:	WDR, WDRINDFP
Regulatory Measure Status:	Active
Regulatory Measure Type:	WDR
Order Number:	R5-2019-0055
WDID:	5A482012001
NPDES Number:	Not reported
Adoption Date:	06/07/2019
Effective Date:	06/07/2019
Termination Date:	Not reported
Expiration/Review Date:	06/07/2029
Design Flow:	5
Major/Minor:	Not reported
Complexity:	B
TTWQ:	2
Enforcement Actions within 5 years:	1
Violations within 5 years:	0
Latitude:	38.475556
Longitude:	-121.801111

CERS:

Name:	CAMPBELL SOUP SUPPLY CO
Address:	8380 PEDRICK RD
City,State,Zip:	DIXON, CA 95620

CAMPBELL SOUP SUPPLY CO (Continued) **S105960090**

Site ID: 528524
CERS ID: 804402
CERS Description: Industrial Facility Storm Water

Affiliation:
Affiliation Type Desc: Owner/Operator
Entity Name: Campbell Soup Supply Co
Entity Title: Operator
Affiliation Address: PO Box 3408380 Pedrick Road
Affiliation City: Dixon
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95620
Affiliation Phone: ,

HWTS:
Name: CAMPBELL SOUP
Address: 8380 PEDRICK RD
Address 2: Not reported
City,State,Zip: DIXON, CA 95621
EPA ID: CAC002812840
Inactive Date: 07/30/2015
Create Date: 04/30/2015
Last Act Date: 07/31/2015
Mailing Name: Not reported
Mailing Address: 8380 PEDRICK RD
Mailing Address 2: Not reported
Mailing City,State,Zip: DIXON, CA 956209606
Owner Name: TOM MULDHART
Owner Address: 8380 PEDRICK RD
Owner Address 2: Not reported
Owner City,State,Zip: DIXON, CA 956209606
Contact Name: TOM MULDHART
Contact Address: 8380 PEDRICK RD
Contact Address 2: Not reported
City,State,Zip: DIXON, CA 956209606

D10 **CAMPBELLS SOUP** **CPS-SLIC** **S106230512**
NNE **8680 PEDRICK ROAD** **CERS** **N/A**
1/4-1/2 **DIXON, CA 95620**
0.466 mi.
2460 ft. **Site 1 of 4 in cluster D**

Relative:
Lower

Actual:
64 ft.

SLIC REG 5:
Name: Campbell's Soup
Address: 8680 Pedrick Rd
City: Dixon
Region: 5
Facility Status: Preliminary Assessment
Unit: Facility is a Spill or site
Pollutant: TPH-d,
Lead Agency: SOL Co.
Date Filed: / /
Report Date: / /
Date Added: Not reported
Date Closed: Not reported

CAMPBELLS SOUP (Continued) **S106230512**

CPS-SLIC:

Name:	CAMPBELLS SOUP
Address:	8680 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	07/02/2015
Global Id:	SL0609563629
Lead Agency:	SOLANO COUNTY LOP
Lead Agency Case Number:	80333
Latitude:	38.4748591375621
Longitude:	-121.803220510483
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	SOLANO COUNTY
RB Case Number:	Not reported
File Location:	Local Agency Warehouse
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Diesel
Site History:	See site documents for historical information.

Click here to access the California GeoTracker records for this facility:

CERS:

Name:	CAMPBELLS SOUP
Address:	8680 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Site ID:	189542
CERS ID:	SL0609563629
CERS Description:	Cleanup Program Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	SOLANO COUNTY - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 TEXAS STREET, SUITE 2500
Affiliation City:	FAIRFIELD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	zzz - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title:	Not reported
Affiliation Address:	11020 SUN CENTER DRIVE #200
Affiliation City:	RANCHO CORDOVA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

D11 **BP #11245** **LUST** **S108541461**
NNE **8665 PEDRICK RD** **CERS** **N/A**
1/4-1/2 **DIXON, CA 95620**
0.486 mi.
2565 ft. **Site 2 of 4 in cluster D**

Relative:
Lower

Actual:
64 ft.

LUST REG 5:

Name:	BP #11245
Address:	8665 PEDRICK RD
City:	DIXON
Region:	5
Status:	Remedial action (cleanup) Underway
Case Number:	480070
Case Type:	Drinking water wells have been affected
Substance:	REGULR GASOLINE
Staff Initials:	JIM
Lead Agency:	Local
Program:	LUST
MTBE Code:	7

CERS:

Name:	BP #11245
Address:	8665 PEDRICK RD
City,State,Zip:	DIXON, CA 95620
Site ID:	225708
CERS ID:	T0609500347
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	SOLANO COUNTY - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 TEXAS STREET, SUITE 2500
Affiliation City:	FAIRFIELD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

D12 **BP #11245** **Cortese** **S113037223**
NNE **8665 PEDRICK RD** **EMI** **N/A**
1/4-1/2 **DIXON, CA 95620** **HAZNET**
0.486 mi. **HWTS**
2565 ft. **Site 3 of 4 in cluster D**

Relative:
Lower

Actual:
64 ft.

CORTESE:

Name:	BP #11245
Address:	8665 PEDRICK RD
City,State,Zip:	DIXON, CA 95620
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0609500347
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported

BP #11245 (Continued) **S113037223**

Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

EMI:

Name:	ARCADIS US, INC.
Address:	8665 PEDRICK ROAD
City,State,Zip:	DIXON, CA
Year:	2018
County Code:	48
Air Basin:	SV
Facility ID:	5798
Air District Name:	YS
SIC Code:	8711
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.9943502825
Reactive Organic Gases Tons/Yr:	2.65
Carbon Monoxide Emissions Tons/Yr:	0.13
NOX - Oxides of Nitrogen Tons/Yr:	0.22
SOX - Oxides of Sulphur Tons/Yr:	0.03
Particulate Matter Tons/Yr:	0.010416666667
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.01

Name:	ARCADIS US, INC.
Address:	8665 PEDRICK ROAD
City,State,Zip:	DIXON, CA
Year:	2019
County Code:	48
Air Basin:	SV
Facility ID:	5798
Air District Name:	YS
SIC Code:	8711
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.9943502825
Reactive Organic Gases Tons/Yr:	2.65
Carbon Monoxide Emissions Tons/Yr:	0.13
NOX - Oxides of Nitrogen Tons/Yr:	0.22
SOX - Oxides of Sulphur Tons/Yr:	0.03
Particulate Matter Tons/Yr:	0.010416666667
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.01

HAZNET:

Name:	BP #11245
Address:	8665 PEDRICK RD

BP #11245 (Continued) **S113037223**

Address 2:	Not reported
City,State,Zip:	DIXON, CA 956200000
Contact:	SARAH SAMUELS
Telephone:	3603711500
Mailing Name:	Not reported
Mailing Address:	PO BOX 80249
Year:	2016
Gepaid:	CAL000039108
TSD EPA ID:	NVT330010000
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.0076
Year:	2006
Gepaid:	CAL000039108
TSD EPA ID:	CAD982444481
CA Waste Code:	134 - Aqueous solution with total organic residues less than 10 percent
Disposal Method:	T01 - Treatment, Tank
Tons:	0.336
Year:	1992
Gepaid:	CAL000039108
TSD EPA ID:	CAD004771168
CA Waste Code:	134 - Aqueous solution with total organic residues less than 10 percent
Disposal Method:	R01 - Recycler
Tons:	0.2293
Year:	1990
Gepaid:	CAL000039108
TSD EPA ID:	CAD083166728
CA Waste Code:	352 - Other organic solids
Disposal Method:	R01 - Recycler
Tons:	1.4595

Additional Info:

Year:	2006
Gen EPA ID:	CAL000039108
Shipment Date:	20060117
Creation Date:	5/6/2006 18:30:32
Receipt Date:	20060120
Manifest ID:	24505795
Trans EPA ID:	CAR000129304
Trans Name:	FILTER RECYCLING SVS INC-NO
Trans 2 EPA ID:	CAD982444481
Trans 2 Name:	FILTER RECYCLING SERVICES INC
TSDF EPA ID:	CAD982444481
Trans Name:	FILTER RECYCLING SERVICES INC
TSDF Alt EPA ID:	CAD982444481
TSDF Alt Name:	Not reported
Waste Code Description:	134 - Aqueous solution with <10% total organic residues
RCRA Code:	Not reported

BP #11245 (Continued) **S113037223**

Meth Code:	T01 - Treatment, Tank
Quantity Tons:	0.336
Waste Quantity:	80
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	BP #11245
Address:	8665 PEDRICK RD
Address 2:	Not reported
City,State,Zip:	DIXON, CA 956200000
EPA ID:	CAL000039108
Inactive Date:	06/30/2016
Create Date:	08/01/1990
Last Act Date:	01/12/2017
Mailing Name:	Not reported
Mailing Address:	PO BOX 80249
Mailing Address 2:	Not reported
Mailing City,State,Zip:	RCHO STA MARG, CA 926880000
Owner Name:	BP WEST COAST PRODUCTS LLC
Owner Address:	PO BOX 6038
Owner Address 2:	Not reported
Owner City,State,Zip:	ARTESIA, CA 907020000
Contact Name:	SARAH SAMUELS
Contact Address:	PO BOX 6038
Contact Address 2:	Not reported
City,State,Zip:	ARTESIA, CA 907020000

NAICS:

EPA ID:	CAL000039108
Create Date:	2006-11-27 18:30:15.000
NAICS Code:	44711
NAICS Description:	Gasoline Stations with Convenience Stores
Issued EPA ID Date:	1990-08-01 00:00:00
Inactive Date:	2016-06-30 00:00:00
Facility Name:	BP #11245
Facility Address:	8665 PEDRICK RD
Facility Address 2:	Not reported
Facility City:	DIXON
Facility County:	Not reported
Facility State:	CA
Facility Zip:	956200000

D13 **BP OIL COMPANY FACILITY #11245** **LUST** **S104493281**
NNE **8665 PEDRICK RD** **SWEEPS UST** **N/A**
1/4-1/2 **DIXON, CA 95620** **EMI**
0.486 mi. **HIST CORTESE**
2565 ft. **Site 4 of 4 in cluster D** **CERS**

Relative:
Lower

Actual:
64 ft.

SOLANO CO. LUST:

Name:	SAPNA ENTERPRISES - DBA DIXON UNION 76
Address:	8665 PEDRICK RD
City,State,Zip:	DIXON, CA 95620
Region:	SOLANO
Facility ID:	80011
Facility Status:	A
Facility Status Desc:	Active
Facility Phone:	707-678-4360
Program:	29S
Inventory Number:	1
Inventory Type:	Drinking Well Impact (114)
Inventory Description:	Change from A to W case type 2/26/03 BP, former
Last service/permit exp:	ISSUANCE OF A CLOSURE DOCUMENT
Last service date:	04/26/2019
District:	SUP-DIST NO 3037
Inspector:	Kaltreider, Misty
Call Back:	Not reported

LUST:

Name:	BP #11245
Address:	8665 PEDRICK RD
City,State,Zip:	DIXON, CA 95620
Lead Agency:	SOLANO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500347
Global Id:	T0609500347
Latitude:	38.4909170100625
Longitude:	-121.804196834564
Status:	Completed - Case Closed
Status Date:	04/25/2019
Case Worker:	Not reported
RB Case Number:	480070
Local Agency:	SOLANO COUNTY
File Location:	Local Agency
Local Case Number:	80011
Potential Media Affect:	Well used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	See site documents for historical information.

LUST:

Global Id:	T0609500347
Contact Type:	Local Agency Caseworker
Contact Name:	SOLANO COUNTY
Organization Name:	SOLANO COUNTY
Address:	675 TEXAS STREET, SUITE 2500
City:	FAIRFIELD
Email:	Not reported
Phone Number:	Not reported

LUST:

Global Id:	T0609500347
Action Type:	ENFORCEMENT

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Date: 03/19/2007
Action: Verbal Communication

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 06/29/2009
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 06/30/2009
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 12/12/2011
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 05/01/2017
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 08/29/2003
Action: Staff Letter

Global Id: T0609500347
Action Type: RESPONSE
Date: 06/17/2009
Action: CAP/RAP - Final Remediation / Design Plan

Global Id: T0609500347
Action Type: RESPONSE
Date: 08/18/1994
Action: Other Workplan

Global Id: T0609500347
Action Type: RESPONSE
Date: 12/28/1992
Action: Preliminary Site Assessment Report

Global Id: T0609500347
Action Type: RESPONSE
Date: 04/10/2000
Action: Other Workplan

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/07/2003
Action: Other Report / Document

Global Id: T0609500347
Action Type: RESPONSE
Date: 08/07/1987
Action: Soil and Water Investigation Report

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Global Id: T0609500347
Action Type: RESPONSE
Date: 09/29/2003
Action: CAP/RAP - Other Report

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/24/1987
Action: Other Report / Document

Global Id: T0609500347
Action Type: RESPONSE
Date: 03/08/2001
Action: Interim Remedial Action Report

Global Id: T0609500347
Action Type: RESPONSE
Date: 05/06/1993
Action: Proposed Plan

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/28/2016
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 12/13/1999
Action: Site Assessment Report

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/30/2017
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 02/15/2005
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 08/10/2006
Action: Technical Correspondence / Assistance / Other

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 10/03/2005
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 07/18/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0609500347
Action Type: ENFORCEMENT

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Date: 11/19/1996
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 03/02/2017
Action: Meeting

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 12/12/2016
Action: Meeting

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 02/09/2017
Action: Verbal Communication

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 08/06/2018
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 01/08/2018
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 05/13/1997
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 05/20/1993
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 08/01/2003
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 12/07/1994
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 01/08/2018
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 06/04/2018
Action: Staff Letter

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 04/25/2019
Action: Closure/No Further Action Letter

Global Id: T0609500347
Action Type: Other
Date: 07/21/1987
Action: Leak Stopped

Global Id: T0609500347
Action Type: RESPONSE
Date: 08/25/2009
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 09/24/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/13/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/30/2012
Action: Final Remedial Action Report / Corrective Action Report

Global Id: T0609500347
Action Type: RESPONSE
Date: 04/30/2015
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/11/2014
Action: Monitoring Report - Semi-Annually

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/11/2014
Action: Monitoring Report - Semi-Annually

Global Id: T0609500347
Action Type: RESPONSE
Date: 04/22/2016
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 10/30/2017
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Date: 08/26/2003
Action: Proposed Plan

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 10/21/2004
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 09/16/2004
Action: * Historical Enforcement

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 10/14/2003
Action: * Historical Enforcement

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 07/08/2008
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 03/29/2011
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 01/19/2011
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 06/04/2018
Action: Notification - Public Participation Document

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 02/26/2003
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 10/13/2000
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 02/20/2018
Action: Verbal Communication

Global Id: T0609500347
Action Type: RESPONSE
Date: 02/17/2009
Action: Monitoring Report - Quarterly

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Global Id: T0609500347
Action Type: RESPONSE
Date: 10/24/2008
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 09/24/2007
Action: Monitoring Report - Other

Global Id: T0609500347
Action Type: RESPONSE
Date: 05/10/2007
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 05/14/2009
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0609500347
Action Type: RESPONSE
Date: 12/14/2011
Action: Other Report / Document

Global Id: T0609500347
Action Type: RESPONSE
Date: 10/12/2011
Action: Site Assessment Report

Global Id: T0609500347
Action Type: RESPONSE
Date: 01/15/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0609500347
Action Type: RESPONSE
Date: 01/15/2015
Action: Monitoring Report - Semi-Annually

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 11/22/2003
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 08/02/2005
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Date: 11/27/2003
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 08/01/2003
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 02/05/2004
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 07/30/2004
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 05/07/2008
Action: Site Visit / Inspection / Sampling

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 03/11/2005
Action: * Historical Enforcement

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 04/27/2004
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 04/14/2005
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 11/19/2014
Action: Meeting

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 08/15/2012
Action: Staff Letter

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 03/29/1993
Action: Notice of Responsibility

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 04/27/2000
Action: Staff Letter

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 10/05/2018
Action: Email Correspondence

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 04/30/2018
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 05/10/2018
Action: Staff Letter

Global Id: T0609500347
Action Type: Other
Date: 07/24/1987
Action: Leak Discovery

Global Id: T0609500347
Action Type: RESPONSE
Date: 09/22/2006
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 02/28/2007
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/09/2008
Action: Other Report / Document

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/31/2006
Action: Other Workplan

Global Id: T0609500347
Action Type: RESPONSE
Date: 03/14/2008
Action: Preliminary Site Assessment Workplan

Global Id: T0609500347
Action Type: RESPONSE
Date: 11/09/2006
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 04/28/2006
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Date: 09/23/2008
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 02/19/2008
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 08/08/2007
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 01/17/2006
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 01/14/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0609500347
Action Type: RESPONSE
Date: 03/23/2011
Action: Soil and Water Investigation Workplan

Global Id: T0609500347
Action Type: RESPONSE
Date: 01/15/2014
Action: Monitoring Report - Semi-Annually

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 03/26/2003
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 02/26/2003
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 08/29/2003
Action: * Historical Enforcement

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 07/01/2002
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 07/08/2002
Action: File review

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 05/13/2008
Action: File review

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 01/31/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0609500347
Action Type: ENFORCEMENT
Date: 03/02/2017
Action: Staff Letter

Global Id: T0609500347
Action Type: Other
Date: 07/24/1987
Action: Leak Reported

Global Id: T0609500347
Action Type: RESPONSE
Date: 01/15/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0609500347
Action Type: RESPONSE
Date: 01/31/2013
Action: Correspondence

Global Id: T0609500347
Action Type: RESPONSE
Date: 04/30/2015
Action: Monitoring Report - Quarterly

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/11/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0609500347
Action Type: RESPONSE
Date: 07/30/2015
Action: Monitoring Report - Quarterly - Regulator Responded

Global Id: T0609500347
Action Type: RESPONSE
Date: 04/23/2018
Action: Request for Closure - Regulator Responded

Global Id: T0609500347
Action Type: RESPONSE
Date: 01/29/2018
Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0609500347
Action Type: RESPONSE

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Date: 01/02/2018
Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0609500347
Action Type: REMEDIATION
Date: 11/21/2000
Action: Soil Vapor Extraction (SVE)

Global Id: T0609500347
Action Type: REMEDIATION
Date: 04/16/2007
Action: Soil Vapor Extraction (SVE)

Global Id: T0609500347
Action Type: REMEDIATION
Date: 10/18/2004
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0609500347
Action Type: REMEDIATION
Date: 12/02/2014
Action: Soil Vapor Extraction (SVE)

LUST:
Global Id: T0609500347
Status: Open - Case Begin Date
Status Date: 07/21/1987

Global Id: T0609500347
Status: Open - Site Assessment
Status Date: 04/03/1993

Global Id: T0609500347
Status: Open - Remediation
Status Date: 11/21/2000

Global Id: T0609500347
Status: Open - Remediation
Status Date: 09/24/2003

Global Id: T0609500347
Status: Open - Remediation
Status Date: 01/31/2008

Global Id: T0609500347
Status: Open - Verification Monitoring
Status Date: 03/02/2017

Global Id: T0609500347
Status: Open - Eligible for Closure
Status Date: 06/01/2018

Global Id: T0609500347
Status: Completed - Case Closed
Status Date: 04/25/2019

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

SWEEPS UST:

Name:	BP OIL COMPANY FACILITY #11245
Address:	8665 PEDRICK RD
City:	DIXON
Status:	Active
Comp Number:	80011
Number:	9
Board Of Equalization:	44-027706
Referral Date:	06-18-93
Action Date:	03-31-94
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	48-000-080011-000001
Tank Status:	A
Capacity:	10000
Active Date:	05-31-92
Tank Use:	M.V. FUEL
STG:	P
Content:	PRM UNLEADED
Number Of Tanks:	3

Name:	BP OIL COMPANY FACILITY #11245
Address:	8665 PEDRICK RD
City:	DIXON
Status:	Active
Comp Number:	80011
Number:	9
Board Of Equalization:	44-027706
Referral Date:	06-18-93
Action Date:	03-31-94
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	48-000-080011-000002
Tank Status:	A
Capacity:	12000
Active Date:	05-31-92
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Name:	BP OIL COMPANY FACILITY #11245
Address:	8665 PEDRICK RD
City:	DIXON
Status:	Active
Comp Number:	80011
Number:	9
Board Of Equalization:	44-027706
Referral Date:	06-18-93
Action Date:	03-31-94
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	48-000-080011-000003
Tank Status:	A
Capacity:	10000
Active Date:	05-31-92
Tank Use:	M.V. FUEL

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

STG: P
Content: PRM UNLEADED
Number Of Tanks: Not reported

EMI:

Name:	SAPNA ENTERPRISES INC.
Address:	8665 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Year:	2012
County Code:	48
Air Basin:	SV
Facility ID:	5026
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO/SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.72267389341
Reactive Organic Gases Tons/Yr:	0.72
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	SAPNA ENTERPRISES INC.
Address:	8665 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Year:	2013
County Code:	48
Air Basin:	SV
Facility ID:	5026
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO/SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.72
Reactive Organic Gases Tons/Yr:	0.72
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	SAPNA ENTERPRISES, INC.
Address:	8665 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Year:	2014
County Code:	48
Air Basin:	SV
Facility ID:	5026
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO/SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Total Organic Hydrocarbon Gases Tons/Yr:	0.82
Reactive Organic Gases Tons/Yr:	0.82
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	SAPNA ENTERPRISES, INC.
Address:	8665 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Year:	2015
County Code:	48
Air Basin:	SV
Facility ID:	5026
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO/SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.82
Reactive Organic Gases Tons/Yr:	0.82
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	SAPNA ENTERPRISES, INC.
Address:	8665 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Year:	2016
County Code:	48
Air Basin:	SV
Facility ID:	5026
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.82
Reactive Organic Gases Tons/Yr:	0.82
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

Name:	SAPNA ENTERPRISES, INC.
Address:	8665 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Year:	2017
County Code:	48
Air Basin:	SV
Facility ID:	5026
Air District Name:	YS
SIC Code:	5541

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.86
Reactive Organic Gases Tons/Yr:	0.86
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

Name:	SAPNA ENTERPRISES, INC.
Address:	8665 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Year:	2018
County Code:	48
Air Basin:	SV
Facility ID:	5026
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.86
Reactive Organic Gases Tons/Yr:	0.86
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

Name:	SAPNA ENTERPRISES, INC.
Address:	8665 PEDRICK ROAD
City,State,Zip:	DIXON, CA 95620
Year:	2019
County Code:	48
Air Basin:	SV
Facility ID:	5026
Air District Name:	YS
SIC Code:	5541
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.86
Reactive Organic Gases Tons/Yr:	0.86
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

HIST CORTESE:

edr_fname:	BP#11245
edr_fadd1:	8665 PEDRICK
City,State,Zip:	DIXON, CA 95620
Region:	CORTESE
Facility County Code:	48

BP OIL COMPANY FACILITY #11245 (Continued) **S104493281**

Reg By: LTNKA
Reg Id: 480070

CERS:
Name: SAPNA ENTERPRISES, INC.
Address: 8665 PEDRICK ROAD
City,State,Zip: DIXON, CA 95620-9783
Site ID: 469644
CERS ID: 110021336062
CERS Description: US EPA Air Emission Inventory System (EIS)

E14 **VALLEY FARMS TRANPORT** **LUST** **S101304635**
NNE **8656 SPARLING LN** **Cortese** **N/A**
1/4-1/2 **DIXON, CA 95620**
0.495 mi.
2611 ft. **Site 1 of 3 in cluster E**

Relative:
Lower

Actual:
63 ft.

LUST REG 5:
Name: VALLEY FARMS TRANPORT
Address: 8656 SPARLING LN
City: DIXON
Region: 5
Status: Case Closed
Case Number: 480157
Case Type: Soil only
Substance: WASTE OIL
Staff Initials: JIM
Lead Agency: Local
Program: LUST
MTBE Code: 1

CORTESE:
Name: VALLEY FARMS TRANPORT
Address: 8656 SPARLING LN
City,State,Zip: DIXON, CA 95620
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0609500401
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

E15 **VALLEY FARM TRANSPORT, INC.** **LUST** **U001612730**
NNE **8656 SPARLING LN** **SWEEPS UST** **N/A**
1/4-1/2 **DIXON, CA 95620** **HIST UST**
0.495 mi. **HIST CORTESE**
2611 ft. **Site 2 of 3 in cluster E** **CERS**

Relative: Lower

Actual: 63 ft.

SOLANO CO. LUST:

Name:	VALLEY FARM TRANS TRUCKING
Address:	8656 SPARLING LN
City,State,Zip:	DIXON, CA 95620
Region:	SOLANO
Facility ID:	80020
Facility Status:	I
Facility Status Desc:	Inactive
Facility Phone:	707-678-4404
Program:	29S
Inventory Number:	1
Inventory Type:	LOP - Closed Site (128)
Inventory Description:	Not reported
Last service/permit exp:	ISSUANCE OF A CLOSURE DOCUMENT 03/31/93
Last service date:	06/22/2001
District:	SUP-DIST NO 3037
Inspector:	Kaltreider, Misty
Call Back:	Not reported

LUST:

Name:	VALLEY FARMS TRANPORT
Address:	8656 SPARLING LN
City,State,Zip:	DIXON, CA 95620
Lead Agency:	SOLANO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500401
Global Id:	T0609500401
Latitude:	38.490615
Longitude:	-121.800656
Status:	Completed - Case Closed
Status Date:	09/05/2000
Case Worker:	Not reported
RB Case Number:	480157
Local Agency:	SOLANO COUNTY
File Location:	Not reported
Local Case Number:	80020
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

LUST:

Global Id:	T0609500401
Contact Type:	Local Agency Caseworker
Contact Name:	SOLANO COUNTY
Organization Name:	SOLANO COUNTY
Address:	675 TEXAS STREET, SUITE 2500
City:	FAIRFIELD
Email:	Not reported
Phone Number:	Not reported

LUST:

Global Id:	T0609500401
Action Type:	ENFORCEMENT

VALLEY FARM TRANSPORT, INC. (Continued) **U001612730**

Date: 09/05/2000
Action: Closure/No Further Action Letter - #9/5/2000

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 06/25/2001
Action: Closure/No Further Action Letter

Global Id: T0609500401
Action Type: RESPONSE
Date: 10/19/1999
Action: Monitoring Report - Quarterly

Global Id: T0609500401
Action Type: RESPONSE
Date: 07/07/1999
Action: Monitoring Report - Quarterly

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 07/11/2000
Action: Other Report - #7/11/2000

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 07/20/2000
Action: Closure Summary - #7/20/2000

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 07/28/1998
Action: Other Report - #7/28/1998

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 02/25/2000
Action: Other Report - #2/25/2000

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 10/07/1999
Action: Other Report - #10/7/1999

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 07/08/1996
Action: Other Report - #7/8/1996

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 07/11/2000
Action: Other Report - #7/11/2000

Global Id: T0609500401
Action Type: Other
Date: 02/05/1992
Action: Leak Stopped

VALLEY FARM TRANSPORT, INC. (Continued) **U001612730**

Global Id: T0609500401
Action Type: RESPONSE
Date: 10/19/1999
Action: Monitoring Report - Quarterly

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 07/02/2001
Action: Other Report - #7/2/2001

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 09/24/1997
Action: Other Report - #9/24/1997

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 07/08/1996
Action: Other Report - #7/8/1996

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 01/02/1996
Action: Unauthorized Release Form - #1/2/1996

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 12/02/1997
Action: Staff Letter - #12/2/1997

Global Id: T0609500401
Action Type: ENFORCEMENT
Date: 02/28/1992
Action: Staff Letter - #2/28/1992

Global Id: T0609500401
Action Type: Other
Date: 02/05/1992
Action: Leak Discovery

Global Id: T0609500401
Action Type: Other
Date: 04/23/1992
Action: Leak Reported

LUST:
Global Id: T0609500401
Status: Open - Case Begin Date
Status Date: 02/05/1992

Global Id: T0609500401
Status: Open - Site Assessment
Status Date: 02/05/1992

Global Id: T0609500401
Status: Completed - Case Closed
Status Date: 09/05/2000

VALLEY FARM TRANSPORT, INC. (Continued) **U001612730**

SWEEPS UST:

Name:	VALLEY FARM TRANSPORT, INC.
Address:	8656 SPARLING LN
City:	DIXON
Status:	Not reported
Comp Number:	80020
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	48-000-080020-000004
Tank Status:	Not reported
Capacity:	1000
Active Date:	Not reported
Tank Use:	OIL
STG:	PRODUCT
Content:	BULK OIL
Number Of Tanks:	2

Name:	VALLEY FARM TRANSPORT, INC.
Address:	8656 SPARLING LN
City:	DIXON
Status:	Not reported
Comp Number:	80020
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	48-000-080020-000005
Tank Status:	Not reported
Capacity:	550
Active Date:	Not reported
Tank Use:	OIL
STG:	WASTE
Content:	WASTE OIL
Number Of Tanks:	Not reported

Name:	VALLEY FARM TRANSPORT, INC.
Address:	8656 SPARLING LN
City:	DIXON
Status:	Active
Comp Number:	80020
Number:	9
Board Of Equalization:	Not reported
Referral Date:	06-18-93
Action Date:	06-18-93
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	48-000-080020-000001
Tank Status:	A
Capacity:	10000
Active Date:	02-27-92
Tank Use:	M.V. FUEL

VALLEY FARM TRANSPORT, INC. (Continued) **U001612730**

STG: P
Content: DIESEL
Number Of Tanks: 3

Name: VALLEY FARM TRANSPORT, INC.
Address: 8656 SPARLING LN
City: DIXON
Status: Active
Comp Number: 80020
Number: 9
Board Of Equalization: Not reported
Referral Date: 06-18-93
Action Date: 06-18-93
Created Date: 02-29-88
Owner Tank Id: 2
SWRCB Tank Id: 48-000-080020-000002
Tank Status: A
Capacity: 10000
Active Date: 02-27-92
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Name: VALLEY FARM TRANSPORT, INC.
Address: 8656 SPARLING LN
City: DIXON
Status: Active
Comp Number: 80020
Number: 9
Board Of Equalization: Not reported
Referral Date: 06-18-93
Action Date: 06-18-93
Created Date: 02-29-88
Owner Tank Id: 3
SWRCB Tank Id: 48-000-080020-000003
Tank Status: A
Capacity: 3000
Active Date: 02-27-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

HIST UST:
Name: VALLEY FARM TRANSPORT INC
Address: 8656 SPARLING LANE
City,State,Zip: DIXON, CA 95620
File Number: 0002136E
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002136E.pdf
Region: STATE
Facility ID: 00000001022
Facility Type: Other
Other Type: TRUCK YARD
Contact Name: ROBERT B. NICKUM
Telephone: 1966784404
Owner Name: ROBERT & CLAUDIA NICKUM

VALLEY FARM TRANSPORT, INC. (Continued) **U001612730**

Owner Address:	835 SUNSET DRIVE
Owner City,St,Zip:	DIXON, CA 95620
Total Tanks:	0005
Tank Num:	001
Container Num:	1
Year Installed:	1976
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	1/4 PLA
Leak Detection:	Visual
Tank Num:	002
Container Num:	2
Year Installed:	1976
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	1/4 PLA
Leak Detection:	Visual
Tank Num:	003
Container Num:	3
Year Installed:	1976
Tank Capacity:	00003000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	3/16"
Leak Detection:	Visual
Tank Num:	004
Container Num:	4
Year Installed:	1976
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	10
Leak Detection:	Visual
Tank Num:	005
Container Num:	5
Year Installed:	1976
Tank Capacity:	00000550
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	12
Leak Detection:	Visual

Click here for Geo Tracker PDF:

HIST CORTESE:

edr_fname:	VALLEY FARMS TRANSPORT
edr_fadd1:	8656 SPARLING
City,State,Zip:	DIXON, CA 95620
Region:	CORTESE
Facility County Code:	48

VALLEY FARM TRANSPORT, INC. (Continued) **U001612730**

Reg By: LNTKA
Reg Id: 480157

CERS:
Name: VALLEY FARMS TRANPORT
Address: 8656 SPARLING LN
City,State,Zip: DIXON, CA 95620
Site ID: 258104
CERS ID: T0609500401
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: SOLANO COUNTY - SOLANO COUNTY
Entity Title: Not reported
Affiliation Address: 675 TEXAS STREET, SUITE 2500
Affiliation City: FAIRFIELD
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

E16 **CA DEPT OF TRANSPORTATION** **LUST** **S104493283**
NNE **8638 SPARLING LN** **SWEEPS UST** **N/A**
1/4-1/2 **DIXON, CA 95620** **Cortese**
0.496 mi. **EMI**
2617 ft. **Site 3 of 3 in cluster E** **HIST CORTESE**
CERS

Relative:
Lower

Actual:
63 ft.

SOLANO CO. LUST:
Name: CAL TRANS DIXON YARD
Address: 8638 SPARLING LN
City,State,Zip: DIXON, CA 95620
Region: SOLANO
Facility ID: 80089
Facility Status: I
Facility Status Desc: Inactive
Facility Phone: 707-762-6641
Program: 29S
Inventory Number: 1
Inventory Type: LOP - Closed Site (128)
Inventory Description: Not reported
Last service/permit exp: ISSUANCE OF A CLOSURE DOCUMENT
Last service date: 12/30/1998
District: SUP-DIST NO 3037
Inspector: Kaltreider, Misty
Call Back: Not reported

LUST:
Name: CA DEPT OF TRANSPORTATION
Address: 8638 SPARLING LN
City,State,Zip: DIXON, CA 95620
Lead Agency: SOLANO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500331
Global Id: T0609500331

CA DEPT OF TRANSPORTATION (Continued) **S104493283**

Latitude:	38.4898049
Longitude:	-121.800704
Status:	Completed - Case Closed
Status Date:	02/02/1998
Case Worker:	Not reported
RB Case Number:	480013
Local Agency:	SOLANO COUNTY
File Location:	Not reported
Local Case Number:	80089
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0609500331
Contact Type:	Local Agency Caseworker
Contact Name:	SOLANO COUNTY
Organization Name:	SOLANO COUNTY
Address:	675 TEXAS STREET, SUITE 2500
City:	FAIRFIELD
Email:	Not reported
Phone Number:	Not reported

LUST:

Global Id:	T0609500331
Action Type:	ENFORCEMENT
Date:	02/02/1998
Action:	Closure/No Further Action Letter

Global Id:	T0609500331
Action Type:	RESPONSE
Date:	01/08/1993
Action:	Unauthorized Release Form

Global Id:	T0609500331
Action Type:	RESPONSE
Date:	01/28/1988
Action:	Correspondence

Global Id:	T0609500331
Action Type:	RESPONSE
Date:	03/06/1991
Action:	Correspondence

Global Id:	T0609500331
Action Type:	Other
Date:	03/07/1991
Action:	Leak Stopped

Global Id:	T0609500331
Action Type:	RESPONSE
Date:	07/29/1992
Action:	Other Report / Document

Global Id:	T0609500331
Action Type:	RESPONSE
Date:	10/15/1993

CA DEPT OF TRANSPORTATION (Continued) **S104493283**

Action: Other Report / Document

Global Id: T0609500331
Action Type: RESPONSE
Date: 06/06/1995
Action: Correspondence

Global Id: T0609500331
Action Type: RESPONSE
Date: 06/07/1995
Action: Correspondence

Global Id: T0609500331
Action Type: ENFORCEMENT
Date: 08/23/1994
Action: Staff Letter

Global Id: T0609500331
Action Type: Other
Date: 03/07/1991
Action: Leak Discovery

Global Id: T0609500331
Action Type: Other
Date: 01/08/1993
Action: Leak Reported

Global Id: T0609500331
Action Type: RESPONSE
Date: 11/07/1986
Action: Correspondence

Global Id: T0609500331
Action Type: RESPONSE
Date: 03/20/1991
Action: Correspondence

Global Id: T0609500331
Action Type: RESPONSE
Date: 12/18/1997
Action: Other Report / Document

Global Id: T0609500331
Action Type: RESPONSE
Date: 11/09/1997
Action: Other Report / Document

Global Id: T0609500331
Action Type: RESPONSE
Date: 10/10/1997
Action: Correspondence

Global Id: T0609500331
Action Type: RESPONSE
Date: 11/07/1994
Action: Correspondence

CA DEPT OF TRANSPORTATION (Continued) **S104493283**

LUST:
Global Id: T0609500331
Status: Open - Case Begin Date
Status Date: 01/28/1988

Global Id: T0609500331
Status: Open - Site Assessment
Status Date: 01/28/1988

Global Id: T0609500331
Status: Open - Site Assessment
Status Date: 03/06/1992

Global Id: T0609500331
Status: Completed - Case Closed
Status Date: 02/02/1998

LUST REG 5:
Name: CA DEPT OF TRANSPORTATION
Address: 8638 SPARLING LN
City: DIXON
Region: 5
Status: Case Closed
Case Number: 480013
Case Type: Soil only
Substance: GASOLINE
Staff Initials: JIM
Lead Agency: Local
Program: LUST
MTBE Code: N/A

SWEEPS UST:
Name: CAL TRANS
Address: 8638 SPARLING LN
City: DIXON
Status: Not reported
Comp Number: 80089
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: 0

CORTESE:
Name: CA DEPT OF TRANSPORTATION

CA DEPT OF TRANSPORTATION (Continued) **S104493283**

Address:	8638 SPARLING LN
City,State,Zip:	DIXON, CA 95620
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0609500331
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

EMI:

Name:	CALIFORNIA DEPARTMENT OF TRANSPORTATION
Address:	8638 SPARLING LANE
City,State,Zip:	DIXON, CA 95620
Year:	2012
County Code:	48
Air Basin:	SV
Facility ID:	5150
Air District Name:	YS
SIC Code:	9621
Air District Name:	YOLO/SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	CALIFORNIA DEPARTMENT OF TRANSPORTATION
Address:	8638 SPARLING LANE
City,State,Zip:	DIXON, CA 95620
Year:	2013
County Code:	48
Air Basin:	SV
Facility ID:	5150
Air District Name:	YS
SIC Code:	9621
Air District Name:	YOLO/SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported

CA DEPT OF TRANSPORTATION (Continued) **S104493283**

Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: CALIFORNIA DEPARTMENT OF TRANSPORTATION
Address: 8638 SPARLING LANE
City,State,Zip: DIXON, CA 95620
Year: 2014
County Code: 48
Air Basin: SV
Facility ID: 5150
Air District Name: YS
SIC Code: 9621
Air District Name: YOLO/SOLANO AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: CALIFORNIA DEPARTMENT OF TRANSPORTATION
Address: 8638 SPARLING LANE
City,State,Zip: DIXON, CA 95620
Year: 2015
County Code: 48
Air Basin: SV
Facility ID: 5150
Air District Name: YS
SIC Code: 9621
Air District Name: YOLO/SOLANO AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

Name: CALIFORNIA DEPARTMENT OF TRANSPORTATION
Address: 8638 SPARLING LANE
City,State,Zip: DIXON, CA 95620
Year: 2016
County Code: 48
Air Basin: SV
Facility ID: 5150
Air District Name: YS
SIC Code: 9621

CA DEPT OF TRANSPORTATION (Continued) **S104493283**

Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

Name:	CALIFORNIA DEPARTMENT OF TRANSPORTATION
Address:	8638 SPARLING LANE
City,State,Zip:	DIXON, CA 95620
Year:	2017
County Code:	48
Air Basin:	SV
Facility ID:	5150
Air District Name:	YS
SIC Code:	9621
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.014314342972
Reactive Organic Gases Tons/Yr:	0.01
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

Name:	CALIFORNIA DEPARTMENT OF TRANSPORTATION
Address:	8638 SPARLING LANE
City,State,Zip:	DIXON, CA 95620
Year:	2018
County Code:	48
Air Basin:	SV
Facility ID:	5150
Air District Name:	YS
SIC Code:	9621
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.014314342972
Reactive Organic Gases Tons/Yr:	0.01
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

Name:	CALIFORNIA DEPARTMENT OF TRANSPORTATION
Address:	8638 SPARLING LANE
City,State,Zip:	DIXON, CA 95620
Year:	2019
County Code:	48
Air Basin:	SV

CA DEPT OF TRANSPORTATION (Continued) **S104493283**

Facility ID:	5150
Air District Name:	YS
SIC Code:	9621
Air District Name:	YOLO-SOLANO AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.014314342972
Reactive Organic Gases Tons/Yr:	0.01
Carbon Monoxide Emissions Tons/Yr:	Not reported
NOX - Oxides of Nitrogen Tons/Yr:	Not reported
SOX - Oxides of Sulphur Tons/Yr:	Not reported
Particulate Matter Tons/Yr:	Not reported
Part. Matter 10 Micrometers and Smllr Tons/Yr:	Not reported

HIST CORTESE:

edr_fname:	CA DEPT OF TRANSPORTATION
edr_fadd1:	8638 SPARLING
City,State,Zip:	DIXON, CA 95620
Region:	CORTESE
Facility County Code:	48
Reg By:	LNTKA
Reg Id:	480013

CERS:

Name:	CA DEPT OF TRANSPORTATION
Address:	8638 SPARLING LN
City,State,Zip:	DIXON, CA 95620
Site ID:	193943
CERS ID:	T0609500331
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	SOLANO COUNTY - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 TEXAS STREET, SUITE 2500
Affiliation City:	FAIRFIELD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

---

17 **FREMOUW ENVIRONMENTAL SERVICES, INC.** **LUST** **U001612732**
NNE **6940 TREMONT RD** **AST** **N/A**
1/2-1 **DIXON, CA 95620** **HAULERS**
0.843 mi. **CERS HAZ WASTE**
4451 ft. **SWEEPS UST**
HIST UST
Relative: **CERS TANKS**
Lower **HWP**
HWT
Actual: **NPDES**
64 ft. **CIWQS**
CERS
HWTS

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

LUST:
Name: LYNCH, WM (TREDMONT EQUIPMENT)
Address: 6940 TREMONT RD
City,State,Zip: DIXON, CA 95620
Lead Agency: SOLANO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500328
Global Id: T0609500328
Latitude: 38.4307349
Longitude: -121.7789628
Status: Completed - Case Closed
Status Date: 03/19/1996
Case Worker: Not reported
RB Case Number: 480008
Local Agency: SOLANO COUNTY
File Location: Not reported
Local Case Number: 80612
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0609500328
Contact Type: Local Agency Caseworker
Contact Name: SOLANO COUNTY
Organization Name: SOLANO COUNTY
Address: 675 TEXAS STREET, SUITE 2500
City: FAIRFIELD
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0609500328
Action Type: ENFORCEMENT
Date: 03/19/1996
Action: Closure/No Further Action Letter

Global Id: T0609500328
Action Type: RESPONSE
Date: 10/28/1986
Action: Correspondence

Global Id: T0609500328
Action Type: RESPONSE
Date: 09/11/1987
Action: Other Report / Document

Global Id: T0609500328
Action Type: Other
Date: 10/30/1986
Action: Leak Reported

LUST:
Global Id: T0609500328
Status: Open - Case Begin Date
Status Date: 10/30/1986

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Global Id: T0609500328
Status: Open - Site Assessment
Status Date: 09/11/1987

Global Id: T0609500328
Status: Completed - Case Closed
Status Date: 03/19/1996

AST:

Name:	FREMOUW ENVIRONMENTAL SERVICES, INC.
Address:	6940 TREMONT RD
City/Zip:	DIXON,95620
Certified Unified Program Agencies:	Not reported
Owner:	Theodore Fremouw
Total Gallons:	Not reported
CERSID:	10159449
Facility ID:	48-000-080612
Business Name:	Fremouw Environmental Services, Inc.
Phone:	7074483700
Fax:	70744834909
Mailing Address:	PO Box 2875
Mailing Address City:	Vacaville
Mailing Address State:	CA
Mailing Address Zip Code:	95696
Operator Name:	Fremouw Environmental Services, Inc.
Operator Phone:	7074483700
Owner Phone:	7074483700
Owner Mail Address:	PO Box 2875
Owner State:	CA
Owner Zip Code:	95696
Owner Country:	United States
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	CAL000372559

HAULERS:

Name:	FREMOUW ENVIRONMENTAL SERVICES, INC.
Address:	6940 TREMONT RD
City,State,Zip:	DIXON, CA
Facility ID:	1707306
Facility Phone:	(707) 448-3700
Business Email Address:	wjordan@hazwasteremoval.com
Contact Person:	Wendy Jordan
Mailing Address:	6940 Tremont Rd
Mailing City:	Dixon
Mailing State:	CA
Mailing Zip:	95620
Mailing County:	Solano
Mailing Phone:	Not reported
Current Status:	Active

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Current Hauler Status: Not reported
Accepting Tires From Public: Not reported
Regulatory Status Last Changed: Not reported
Business Types: Not reported

CERS HAZ WASTE:
Name: FREMOUW ENVIRONMENTAL SERVICES, INC.
Address: 6940 TREMONT RD
City,State,Zip: DIXON, CA 95620
Site ID: 117982
CERS ID: 10159449
CERS Description: Hazardous Waste Generator

SWEEPS UST:
Name: WM LYNCH COMPANY
Address: 6940 TREMONT RD
City: DIXON
Status: Not reported
Comp Number: 80612
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: 0

HIST UST:
Name: W M LYNCH CO AND KIP INCORPOR
Address: 6940 TREMONT ROAD
City,State,Zip: DIXON, CA 95620
File Number: 0002142C
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002142C.pdf
Region: STATE
Facility ID: 00000009163
Facility Type: Other
Other Type: CONSTRUCTION & RENTA
Contact Name: CARL D. TEUSCHER
Telephone: 9166782305
Owner Name: W. M. LYNCH CO.
Owner Address: 6940 TREMONT ROAD
Owner City,St,Zip: DIXON, CA 95620
Total Tanks: 0002

Tank Num: 001
Container Num: 01
Year Installed: 1973
Tank Capacity: 00009980
Tank Used for: PRODUCT

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Type of Fuel: UNLEADED
Container Construction Thickness: 1/4
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 02
Year Installed: 1973
Tank Capacity: 00009980
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: 1/4
Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

CERS TANKS:
Name: FREMOUW ENVIRONMENTAL SERVICES, INC.
Address: 6940 TREMONT RD
City,State,Zip: DIXON, CA 95620
Site ID: 117982
CERS ID: 10159449
CERS Description: Aboveground Petroleum Storage

HWP:
EPA ID: CAR000171017
Name: FREMOUW ENVIRONMENTAL SERVICES INC
Address: 6940 TREMONT RD
Cleanup Status: CLOSED
Latitude: 38.49574
Longitude: -121.7993
Facility Type: Historical - Non-Operating
Facility Size: Not reported
Supervisor: Not reported
Site Code: Not reported
Senate District: Not reported
Assembly District: Not reported
Public Information Officer: Not reported
Commercial Offsite Facility Types: Not reported
Quarterly Update: 3/29/2017- Fremouw Enviromental Services was never regulated as a TSDF. This facility is a hazardous waste transporter only, see compliance evaluation inspection report for further details.
Project Manager Lead: Not reported
Project Manager: Not reported
Permit Type: RCRA
Permit Effective Date: Not reported
Permit Expiration Date: Not reported
Calenviroscreen Score: 56-60%
Total Planned Hours: Not reported
Total Planned Amount: Not reported
Total Actual Hours: Not reported

Closure:
EPA ID: CAR000171017
Facility Type: Historical - Non-Operating
Facility Name: FREMOUW ENVIRONMENTAL SERVICES INC
Project Manager: Not reported
Project Manager Lead: Not reported

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Supervisor: Not reported
Facility Size: Not reported
Facility Status: CLOSED
Activity Type: Closure Administrative
Final Date: Not reported
Type: RCRA
Title Description: Closure Administrative of a Hazardous Waste Transporter
Due Date: Not reported
Comments: This facility was a haz was transporter and never regulated as a TSDF.
Unit Names: Unit1
Event Description: Closure Administrative - ISSUE CLOSURE VERIFICATION
Actual Date: 03/29/2017

HWT:
Name: UNI WASTE LLC
Address: 6940 TREMONT RD
City,State,Zip: DIXON, CA 95620
Reg Num: 6888
Expiration Date: 08/31/2022

NPDES:
Name: FREMOUW ENVIRONMENTAL SERVICES
Address: 6940 TREMONT ROAD
City,State,Zip: DIXON, CA 95620
Facility Status: Active
NPDES Number: CAS000001
Region: 5S
Agency Number: 0
Regulatory Measure ID: 455823
Place ID: Not reported
Order Number: 97-03-DWQ
WDID: 5S48I025528
Regulatory Measure Type: Enrollee
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 06/03/2015
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: 6940 Tremont Road
Discharge Name: Stu Jordan
Discharge City: Dixon
Discharge State: California
Discharge Zip: 95620
Status: Not reported
Status Date: Not reported
Operator Name: Not reported
Operator Address: Not reported
Operator City: Not reported
Operator State: Not reported
Operator Zip: Not reported

NPDES as of 03/2018:
NPDES Number: CAS000001
Status: Active
Agency Number: 0
Region: 5S

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Regulatory Measure ID:	455823
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S48I025528
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	06/03/2015
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Stu Jordan
Discharge Address:	6940 Tremont Road
Discharge City:	Dixon
Discharge State:	California
Discharge Zip:	95620
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	455823
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S48I025528
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	06/03/2015
Processed Date:	06/03/2015
Status:	Active
Status Date:	06/03/2015
Place Size:	6.5
Place Size Unit:	Acres
Contact:	Stu Jordan
Contact Title:	VP and Compliance Manager
Contact Phone:	800-559-3274
Contact Phone Ext:	Not reported
Contact Email:	sjordan@hazwasteremoval.com
Operator Name:	Stu Jordan
Operator Address:	6940 Tremont Road
Operator City:	Dixon
Operator State:	California
Operator Zip:	95620
Operator Contact:	Stu Jordan
Operator Contact Title:	VP and Compliance Manager
Operator Contact Phone:	800-559-3274
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	sjordan@hazwasteremoval.com
Operator Type:	Private Business
Developer:	Not reported

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Unidentified NHD waters 336 and 460 DPA discharge map
Certifier:	Stu Jordan
Certifier Title:	Compliance Manager
Certification Date:	24-JUN-15
Primary Sic:	4212-Local Trucking Without Storage
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	FREMOUW ENVIRONMENTAL SERVICES
Address:	6940 TREMONT ROAD
City,State,Zip:	DIXON, CA 95620
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	5S48I025528
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Status:	Active
Status Date:	06/03/2015
Operator Name:	Stu Jordan
Operator Address:	6940 Tremont Road
Operator City:	Dixon
Operator State:	California
Operator Zip:	95620

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	455823
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S48I025528
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	06/03/2015
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Stu Jordan
Discharge Address:	6940 Tremont Road
Discharge City:	Dixon
Discharge State:	California
Discharge Zip:	95620
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	455823
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S48I025528
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	06/03/2015
Processed Date:	06/03/2015
Status:	Active
Status Date:	06/03/2015
Place Size:	6.5
Place Size Unit:	Acres
Contact:	Stu Jordan
Contact Title:	VP and Compliance Manager
Contact Phone:	800-559-3274
Contact Phone Ext:	Not reported
Contact Email:	sjordan@hazwasteremoval.com

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Operator Name:	Stu Jordan
Operator Address:	6940 Tremont Road
Operator City:	Dixon
Operator State:	California
Operator Zip:	95620
Operator Contact:	Stu Jordan
Operator Contact Title:	VP and Compliance Manager
Operator Contact Phone:	800-559-3274
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	sjordan@hazwasteremoval.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Unidentified NHD waters 336 and 460 DPA discharge map
Certifier:	Stu Jordan
Certifier Title:	Compliance Manager
Certification Date:	24-JUN-15
Primary Sic:	4212-Local Trucking Without Storage
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

CIWQS:

Name:	FREMOUW ENVIRONMENTAL SERVICES
Address:	6940 TREMONT ROAD
City,State,Zip:	DIXON, CA 95620
Agency:	Stu Jordan
Agency Address:	6940 Tremont Road, Dixon, CA 95620
Place/Project Type:	Industrial - Local Trucking Without Storage
SIC/NAICS:	4212
Region:	5S
Program:	INDSTW

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	5S48I025528
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	06/03/2015
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	1
Violations within 5 years:	1
Latitude:	38.49575
Longitude:	-121.79934

CERS:

Name:	FREMOUW ENVIRONMENTAL SERVICES
Address:	6940 TREMONT ROAD
City,State,Zip:	DIXON, CA 95620
Site ID:	532367
CERS ID:	835810
CERS Description:	Industrial Facility Storm Water

Affiliation:

Affiliation Type Desc:	Owner/Operator
Entity Name:	Stu Jordan
Entity Title:	Operator
Affiliation Address:	6940 Tremont Road
Affiliation City:	Dixon
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95620
Affiliation Phone:	,

Name:	FREMOUW ENVIRONMENTAL SERVICES, INC.
Address:	6940 TREMONT RD
City,State,Zip:	DIXON, CA 95620
Site ID:	117982
CERS ID:	10159449
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	117982
Site Name:	Fremouw Environmental Services, Inc.
Violation Date:	04-20-2017
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 03/13/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Site ID: 117982
Site Name: Fremouw Environmental Services, Inc.
Violation Date: 04-20-2017
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 03/13/2018.
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 117982
Site Name: Fremouw Environmental Services, Inc.
Violation Date: 04-20-2017
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 03/13/2018.
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Self Reported
Eval Date: 05-15-2013
Violations Found: No
Eval Type: Facility Self Disclosure to DTSC
Eval Notes: Facility Self Disclosure - Transporter
Eval Division: Department of Toxic Substances Control
Eval Program: DTSC_ENF
Eval Source: ENVSTORHAZ,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-16-2009
Violations Found: No
Eval Type: DTSC Compliance Evaluation Inspection
Eval Notes: Compliance Evaluation Inspection - Transporter
Eval Division: Department of Toxic Substances Control
Eval Program: DTSC_ENF
Eval Source: ENVSTORHAZ,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-06-2012
Violations Found: Yes
Eval Type: DTSC Focused Compliance Inspection
Eval Notes: Focused Compliance Inspection - Universal Waste Electronics Collector
Return To Compliance: 2013-01-02 00:00:00
Eval Division: Department of Toxic Substances Control
Eval Program: DTSC_ENF
Eval Source: ENVSTORHAZ,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2017
Violations Found: No
Eval Type: Routine done by local agency

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-27-2017
Violations Found: Yes
Eval Type: DTSC Compliance Evaluation Inspection
Eval Notes: Compliance Evaluation Inspection - Transporter Return To Compliance: 2017-04-27 00:00:00
Eval Division: Department of Toxic Substances Control
Eval Program: DTSC_ENF
Eval Source: ENVSTORHAZ,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-15-2011
Violations Found: Yes
Eval Type: DTSC Compliance Evaluation Inspection
Eval Notes: Compliance Evaluation Inspection - Transporter Return To Compliance: 2012-03-14 00:00:00
Eval Division: Department of Toxic Substances Control
Eval Program: DTSC_ENF
Eval Source: ENVSTORHAZ,

Coordinates:
Site ID: 117982
Facility Name: Fremouw Environmental Services, Inc.
Env Int Type Code: HWG
Program ID: 10159449
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 38.496060
Longitude: -121.798540

Affiliation:
Affiliation Type Desc: Identification Signer
Entity Name: Stu Jordan
Entity Title: Vice President
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Parent Corporation

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Entity Name: Advanced Chemical Transport, Inc.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: CUPA District
Entity Name: Solano County Env Health
Entity Title: Not reported
Affiliation Address: 675 Texas Street, Suite 5500
Affiliation City: Fairfield
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94533
Affiliation Phone: (707) 784-6765,

Affiliation Type Desc: Facility Contact
Entity Name: WENDY JORDAN
Entity Title: Not reported
Affiliation Address: 6940 TREMONT RD
Affiliation City: DIXON
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95620
Affiliation Phone: 7074483700,

Affiliation Type Desc: Operator
Entity Name: Fremouw Environmental Services, Inc.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (707) 448-3700,

Affiliation Type Desc: Document Preparer
Entity Name: Stu Jordan
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: Stu Jordan
Entity Title: Not reported
Affiliation Address: PO Box 2875
Affiliation City: Vacaville
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95696

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: PO Box 2875
Affiliation City: Vacaville
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95696
Affiliation Phone: ,

Affiliation Type Desc: Facility Owner
Entity Name: FREMOUW ENVIRONMENTAL SERVICES INC
Entity Title: Not reported
Affiliation Address: 6940 TREMONT RD
Affiliation City: DIXON
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95620
Affiliation Phone: 7074483700,

Affiliation Type Desc: Legal Owner
Entity Name: Theodore Fremouw
Entity Title: Not reported
Affiliation Address: PO Box 2875
Affiliation City: Vacaville
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95696
Affiliation Phone: (707) 448-3700,

Name: FREMOUW ENVIRONMENTAL SERVICES, INC.
Address: 6940 TREMONT RD
City,State,Zip: DIXON, CA 95620
Site ID: 117982
CERS ID: CAR000171017
CERS Description: Hazardous Waste

Violations:
Site ID: 117982
Site Name: Fremouw Environmental Services, Inc.
Violation Date: 04-20-2017
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 03/13/2018.
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 117982
Site Name: Fremouw Environmental Services, Inc.
Violation Date: 04-20-2017
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95,

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Section(s) Multiple
Violation Description: Business Plan Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 03/13/2018.
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 117982
Site Name: Fremouw Environmental Services, Inc.
Violation Date: 04-20-2017
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 03/13/2018.
Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Self Reported
Eval Date: 05-15-2013
Violations Found: No
Eval Type: Facility Self Disclosure to DTSC
Eval Notes: Facility Self Disclosure - Transporter
Eval Division: Department of Toxic Substances Control
Eval Program: DTSC_ENF
Eval Source: ENVSTORHAZ,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-16-2009
Violations Found: No
Eval Type: DTSC Compliance Evaluation Inspection
Eval Notes: Compliance Evaluation Inspection - Transporter
Eval Division: Department of Toxic Substances Control
Eval Program: DTSC_ENF
Eval Source: ENVSTORHAZ,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-06-2012
Violations Found: Yes
Eval Type: DTSC Focused Compliance Inspection
Eval Notes: Focused Compliance Inspection - Universal Waste Electronics Collector
Return To Compliance: 2013-01-02 00:00:00
Eval Division: Department of Toxic Substances Control
Eval Program: DTSC_ENF
Eval Source: ENVSTORHAZ,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-27-2017
Violations Found: Yes
Eval Type: DTSC Compliance Evaluation Inspection
Eval Notes: Compliance Evaluation Inspection - Transporter Return To Compliance: 2017-04-27 00:00:00
Eval Division: Department of Toxic Substances Control
Eval Program: DTSC_ENF
Eval Source: ENVSTORHAZ,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-15-2011
Violations Found: Yes
Eval Type: DTSC Compliance Evaluation Inspection
Eval Notes: Compliance Evaluation Inspection - Transporter Return To Compliance: 2012-03-14 00:00:00
Eval Division: Department of Toxic Substances Control
Eval Program: DTSC_ENF
Eval Source: ENVSTORHAZ,

Coordinates:
Site ID: 117982
Facility Name: Fremouw Environmental Services, Inc.
Env Int Type Code: HWG
Program ID: 10159449
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 38.496060
Longitude: -121.798540

Affiliation:
Affiliation Type Desc: Identification Signer
Entity Name: Stu Jordan
Entity Title: Vice President
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Parent Corporation
Entity Name: Advanced Chemical Transport, Inc.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	CUPA District
Entity Name:	Solano County Env Health
Entity Title:	Not reported
Affiliation Address:	675 Texas Street, Suite 5500
Affiliation City:	Fairfield
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94533
Affiliation Phone:	(707) 784-6765,
Affiliation Type Desc:	Facility Contact
Entity Name:	WENDY JORDAN
Entity Title:	Not reported
Affiliation Address:	6940 TREMONT RD
Affiliation City:	DIXON
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95620
Affiliation Phone:	7074483700,
Affiliation Type Desc:	Operator
Entity Name:	Fremouw Environmental Services, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 448-3700,
Affiliation Type Desc:	Document Preparer
Entity Name:	Stu Jordan
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Stu Jordan
Entity Title:	Not reported
Affiliation Address:	PO Box 2875
Affiliation City:	Vacaville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95696
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Affiliation Address: PO Box 2875
Affiliation City: Vacaville
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95696
Affiliation Phone: ,

Affiliation Type Desc: Facility Owner
Entity Name: FREMOUW ENVIRONMENTAL SERVICES INC
Entity Title: Not reported
Affiliation Address: 6940 TREMONT RD
Affiliation City: DIXON
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95620
Affiliation Phone: 7074483700,

Affiliation Type Desc: Legal Owner
Entity Name: Theodore Fremouw
Entity Title: Not reported
Affiliation Address: PO Box 2875
Affiliation City: Vacaville
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95696
Affiliation Phone: (707) 448-3700,

HWTS:
Name: UNI WASTE LLC
Address: 6940 TREMONT RD
Address 2: Not reported
City,State,Zip: DIXON, CA 95620
EPA ID: CAR000272773
Inactive Date: Not reported
Create Date: 06/07/2017
Last Act Date: 07/09/2020
Mailing Name: Not reported
Mailing Address: 6940 TREMONT RD
Mailing Address 2: Not reported
Mailing City,State,Zip: DIXON, CA 95620
Owner Name: FREMOUW ENVIRONMENTAL SERVICES INC
Owner Address: 6940 TREMONT RD
Owner Address 2: Not reported
Owner City,State,Zip: DIXON, CA 95620
Contact Name: WENDY JORDAN
Contact Address: 6940 TREMONT RD
Contact Address 2: Not reported
City,State,Zip: DIXON, CA 95620

NAICS:
EPA ID: CAR000272773
Create Date: 2017-06-07 09:06:00.543
NAICS Code: 99999
NAICS Description: Not Otherwise Specified
Issued EPA ID Date: 2017-06-07 09:06:00.46000
Inactive Date: Not reported

FREMOUW ENVIRONMENTAL SERVICES, INC. (Continued) **U001612732**

Facility Name:	UNI WASTE LLC
Facility Address:	6940 TREMONT RD
Facility Address 2:	Not reported
Facility City:	DIXON
Facility County:	Not reported
Facility State:	CA
Facility Zip:	95620

Count: 1 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
DIXON	S107536018		7200 BLOCK MIDWAY RD (X - PEDR	95620	CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: EPA
Telephone: N/A
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: EPA
Telephone: N/A
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: EPA
Telephone: N/A
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 12/29/2021
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 84

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/18/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/19/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/13/2021
Date Data Arrived at EDR: 09/21/2021
Date Made Active in Reports: 12/15/2021
Number of Days to Update: 85

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/16/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/08/2021
Date Data Arrived at EDR: 11/09/2021
Date Made Active in Reports: 01/28/2022
Number of Days to Update: 80

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83
Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27
Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29
Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/30/2021
Number of Days to Update: 84

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 08/18/2021
Date Data Arrived at EDR: 09/08/2021
Date Made Active in Reports: 12/03/2021
Number of Days to Update: 86

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 12/08/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/06/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 02/09/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/14/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/20/2021
Date Data Arrived at EDR: 09/21/2021
Date Made Active in Reports: 12/08/2021
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 12/16/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/10/2021
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/17/2021
Number of Days to Update: 68
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/15/2022
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/08/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 09/14/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 11/23/2021
Number of Days to Update: 12

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 11/16/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/16/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 10/18/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/12/2022
Number of Days to Update: 85

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 11/16/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/16/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Quarterly

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 12/01/2019
Date Data Arrived at EDR: 08/19/2021
Date Made Active in Reports: 10/28/2021
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 12/10/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/08/2021
Date Made Active in Reports: 12/01/2021
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/18/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/12/2022
Number of Days to Update: 85

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/25/2021
Date Data Arrived at EDR: 09/03/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/22/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 11/30/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/12/2021
Date Data Arrived at EDR: 09/13/2021
Date Made Active in Reports: 09/28/2021
Number of Days to Update: 15

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/16/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 09/30/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/12/2022
Number of Days to Update: 85

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 10/26/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 84

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/14/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/07/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 09/28/2021
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/01/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/16/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/18/2021
Date Data Arrived at EDR: 10/20/2021
Date Made Active in Reports: 01/10/2022
Number of Days to Update: 82

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/12/2021
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 12/15/2021
Number of Days to Update: 40
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/19/2020
Date Data Arrived at EDR: 01/08/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 73
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/07/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/29/2021
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/29/2021
Date Data Arrived at EDR: 08/24/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 87
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 70
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 11/30/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/02/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/04/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 12/27/2021
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/08/2022
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2021
Date Data Arrived at EDR: 10/13/2021
Date Made Active in Reports: 01/10/2022
Number of Days to Update: 89

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/03/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 90

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/04/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/03/2022
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/02/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 11/22/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/28/2021
Number of Days to Update: 89

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 12/20/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/22/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/22/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/14/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 12/15/2021
Number of Days to Update: 91

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 12/14/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/05/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 08/17/2021
Number of Days to Update: 91

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 11/22/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 01/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 01/04/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 34
Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/11/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 78
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/20/2021
Date Data Arrived at EDR: 09/21/2021
Date Made Active in Reports: 12/08/2021
Number of Days to Update: 78
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/16/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 77

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/17/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 81

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 78

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 84

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 10/05/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/18/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 80

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/07/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 80

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/05/2021
Date Made Active in Reports: 12/22/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 01/04/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/18/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 79

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 11/30/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 11/09/2021
Date Made Active in Reports: 01/27/2022
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 79

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 11/30/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 11/29/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/12/2021
Date Data Arrived at EDR: 03/16/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 12/08/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/25/2021
Number of Days to Update: 83

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/07/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 12/14/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/08/2021
Date Made Active in Reports: 12/01/2021
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 11/30/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/18/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/12/2022
Number of Days to Update: 85

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55
Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 12/29/2021
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 12/29/2021
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3
Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 07/13/2021
Date Data Arrived at EDR: 07/14/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 84
Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 12/29/2021
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/28/2021
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 09/30/2021
Date Data Arrived at EDR: 10/01/2021
Date Made Active in Reports: 12/15/2021
Number of Days to Update: 75

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/28/2021
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 11/01/2021
Date Data Arrived at EDR: 11/02/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 83

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 12/28/2021
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/28/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 10/22/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 85

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 10/01/2021
Date Data Arrived at EDR: 11/02/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 83

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 12/01/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 77

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/09/2021
Date Data Arrived at EDR: 06/23/2021
Date Made Active in Reports: 09/17/2021
Number of Days to Update: 86

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 12/21/2021
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 10/18/2021
Date Data Arrived at EDR: 10/20/2021
Date Made Active in Reports: 01/12/2022
Number of Days to Update: 84

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 82

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 82

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/10/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 12/08/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/08/2021
Date Data Arrived at EDR: 10/08/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 82

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/11/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 81

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/07/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/16/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 10/13/2021
Date Made Active in Reports: 01/04/2022
Number of Days to Update: 83

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 01/07/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 11

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 09/14/2021
Number of Days to Update: 89

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 04/24/2022
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/07/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 12/20/2021
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/24/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 01/07/2022
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/26/2021
Date Data Arrived at EDR: 10/27/2021
Date Made Active in Reports: 01/20/2022
Number of Days to Update: 85

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 10/08/2021
Date Data Arrived at EDR: 11/04/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 81

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 10/08/2021
Date Data Arrived at EDR: 11/02/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 10/29/2021
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/20/2022
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/29/2021
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/09/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 81

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 09/29/2021
Date Data Arrived at EDR: 09/30/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/08/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 09/29/2021
Date Data Arrived at EDR: 09/30/2021
Date Made Active in Reports: 12/15/2021
Number of Days to Update: 76
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/08/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/18/2021
Date Data Arrived at EDR: 09/28/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 77
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/29/2021
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 11/02/2021
Number of Days to Update: 90
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/29/2021
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80
Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/02/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 77
Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 11/30/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/03/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 7

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/09/2021
Next Scheduled EDR Contact: 12/27/2021
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 79

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/10/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/02/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 12/14/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 12/14/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 01/10/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 11/23/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 10/18/2021
Date Data Arrived at EDR: 10/20/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 04/26/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/29/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 79
Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/20/2021
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/29/2021
Date Data Arrived at EDR: 10/21/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 84
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 09/08/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 82
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 09/23/2021
Date Data Arrived at EDR: 09/28/2021
Date Made Active in Reports: 12/15/2021
Number of Days to Update: 78
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 12/20/2021
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 10/26/2021
Date Data Arrived at EDR: 10/27/2021
Date Made Active in Reports: 01/20/2022
Number of Days to Update: 85

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/11/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 81

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/07/2022
Next Scheduled EDR Contact: 04/18/2022
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/10/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 02/24/2021
Number of Days to Update: 13

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/14/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/06/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

Â© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PEDRICK ROAD AT I80 PROPERTY
PEDRICK ROAD
DIXON, CA 95620

TARGET PROPERTY COORDINATES

Latitude (North):	38.482825 - 38ˆ 28’ 58.17’’
Longitude (West):	121.807222 - 121ˆ 48’ 26.00’’
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	604036.8
UTM Y (Meters):	4259855.0
Elevation:	66 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12021587 DIXON, CA
Version Date:	2018
North Map:	12021633 MERRITT, CA
Version Date:	2018

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

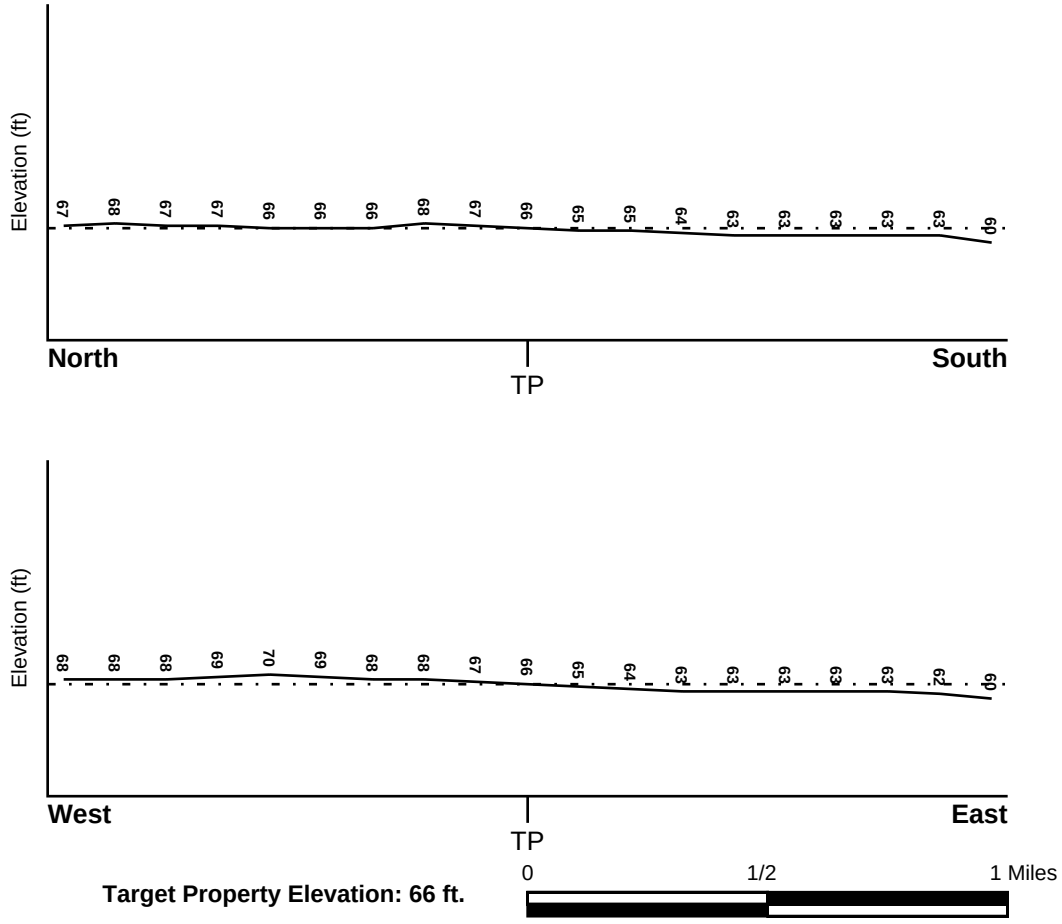
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ESE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 66 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06095C0200F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
Not Reported	

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
DIXON	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
A1	1/4 - 1/2 Mile WSW	ESE
B6	1/4 - 1/2 Mile NNE	SE
B19	1/4 - 1/2 Mile NNE	SE
J51	1/2 - 1 Mile WSW	NE,SE
J52	1/2 - 1 Mile WSW	Varies
J54	1/2 - 1 Mile WSW	Varies
1G	1/4 - 1/2 Mile NNE	SE
2G	1/4 - 1/2 Mile NNE	SE

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
3G	1/4 - 1/2 Mile WSW	ESE
4G	1/2 - 1 Mile WSW	NE,SE
5G	1/2 - 1 Mile WSW	Varies
6G	1/2 - 1 Mile WSW	Varies

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

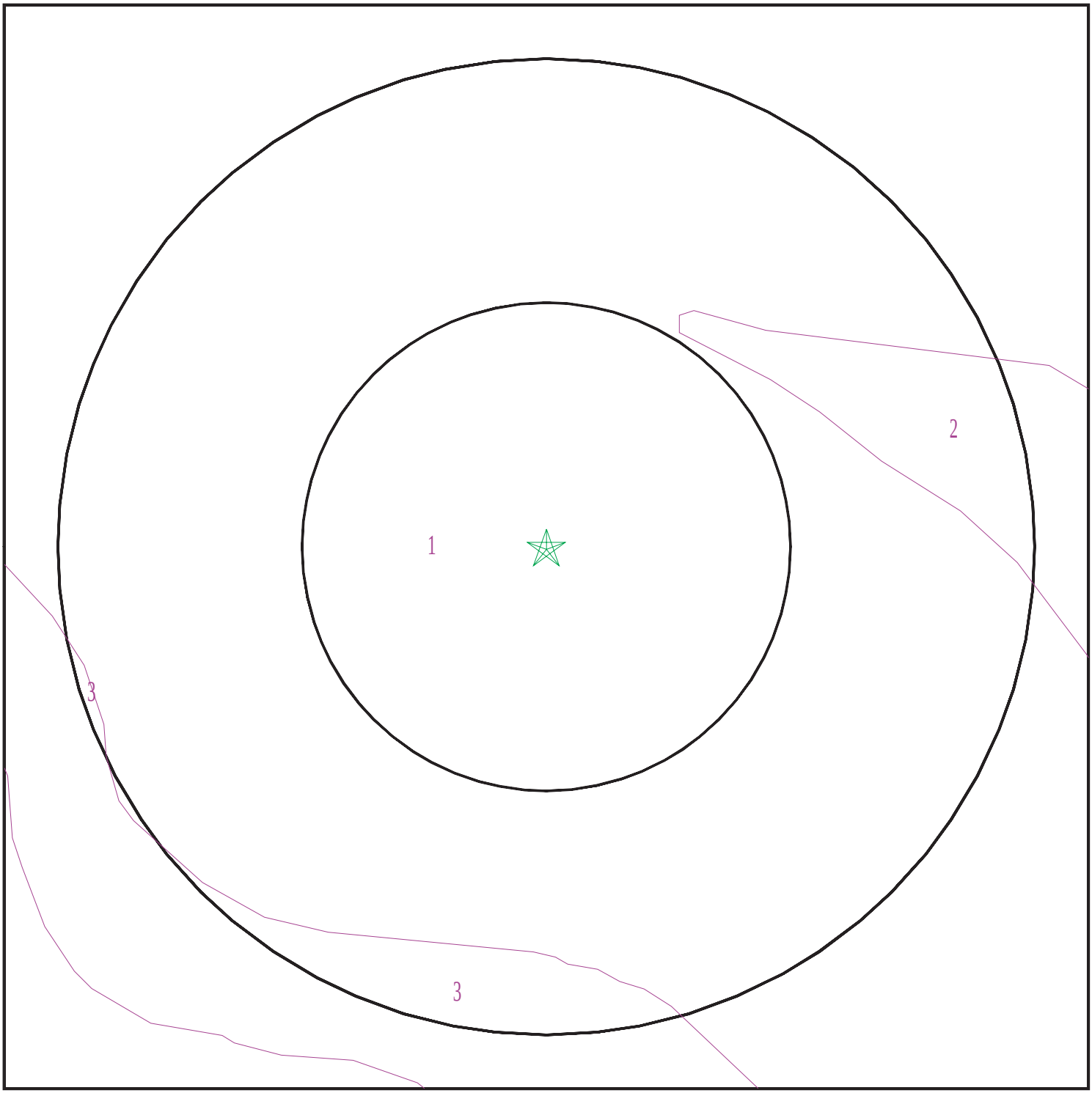
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6861760.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Pedrick Road At I80 Property	CLIENT:	Brusca Associates, Inc.
ADDRESS:	Pedrick Road Dixon CA 95620	CONTACT:	Alycia Cridebring
LAT/LONG:	38.482825 / 121.807222	INQUIRY #:	6861760.2s
		DATE:	February 18, 2022 10:28 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Capay

Soil Surface Texture: silty clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
2	20 inches	50 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
3	50 inches	79 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: Yolo

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	27 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 8.4 Min: 6.6
2	27 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 8.4 Min: 6.6

Soil Map ID: 3

Soil Component Name: Brentwood

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6
2	5 inches	33 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6
3	33 inches	59 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
11	USGS40000188569	1/4 - 1/2 Mile North
F24	USGS40000188511	1/2 - 1 Mile SSE
G32	USGS40000188577	1/2 - 1 Mile NNE
H41	USGS40000188500	1/2 - 1 Mile SSE
J53	USGS40000188512	1/2 - 1 Mile WSW
K56	USGS40000188606	1/2 - 1 Mile North
N68	USGS40000188476	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	CAEDF0000018443	1/4 - 1/2 Mile WSW
A3	CAEDF0000000997	1/4 - 1/2 Mile WSW
A4	CAEDF0000085957	1/4 - 1/2 Mile WSW
A5	CAEDF0000126360	1/4 - 1/2 Mile WSW
A7	CAEDF0000081790	1/4 - 1/2 Mile WSW
A8	CAEDF0000018598	1/4 - 1/2 Mile WSW
C9	CADWR9000039375	1/4 - 1/2 Mile SSE
C10	CADWR9000039374	1/4 - 1/2 Mile SSE
D12	CAEDF0000007226	1/4 - 1/2 Mile SSW
D13	CAEDF0000072756	1/4 - 1/2 Mile SSW
E14	20369	1/4 - 1/2 Mile NNE
D15	CAEDF0000013639	1/4 - 1/2 Mile SSW
D16	CAEDF0000069890	1/4 - 1/2 Mile SSW
D17	CAEDF0000102031	1/4 - 1/2 Mile SSW
E18	CADDW0000016949	1/4 - 1/2 Mile NNE
E20	20351	1/4 - 1/2 Mile NNE
E21	CADDW0000004118	1/2 - 1 Mile NNE
C22	CADDW0000012781	1/2 - 1 Mile SSE
F23	CADWR0000030611	1/2 - 1 Mile SSE
F25	CAUSGSN00001586	1/2 - 1 Mile SSE
G26	CAEDF0000033844	1/2 - 1 Mile NNE
G27	CADDW0000012098	1/2 - 1 Mile NNE
G28	CAEDF0000045425	1/2 - 1 Mile NNE
G29	CAEDF0000057536	1/2 - 1 Mile NNE
G30	CAEDF0000015181	1/2 - 1 Mile NNE
G31	CAEDF0000037419	1/2 - 1 Mile NNE
G33	CAEDF0000004677	1/2 - 1 Mile NNE
G34	CAEDF0000004449	1/2 - 1 Mile NNE
G35	CAEDF0000044515	1/2 - 1 Mile NNE
F36	CADWR9000039370	1/2 - 1 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

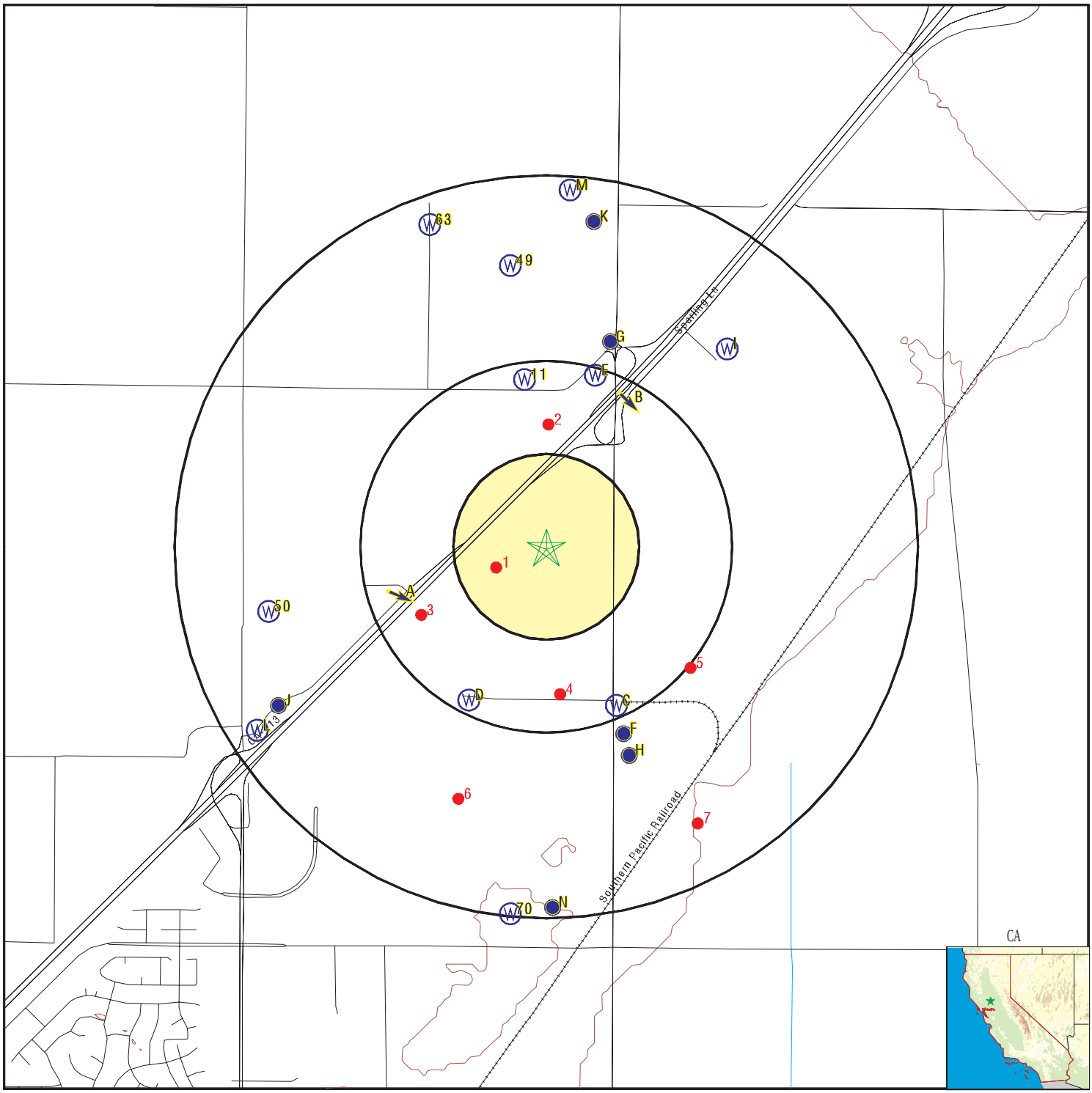
MAP ID	WELL ID	LOCATION FROM TP
G37	CAEDF0000034123	1/2 - 1 Mile NNE
G38	CAEDF0000088025	1/2 - 1 Mile NNE
G39	CAEDF0000143920	1/2 - 1 Mile NNE
H40	CADWR0000031525	1/2 - 1 Mile SSE
H42	CADWR9000039369	1/2 - 1 Mile SSE
H43	CAUSGSN00010917	1/2 - 1 Mile SSE
G44	CAEDF0000018705	1/2 - 1 Mile NNE
H45	CADWR0000034060	1/2 - 1 Mile SSE
G46	CAEDF0000071955	1/2 - 1 Mile NNE
I47	20385	1/2 - 1 Mile NE
I48	CADDW0000004809	1/2 - 1 Mile NE
49	CADWR0000025616	1/2 - 1 Mile North
50	CADWR9000039388	1/2 - 1 Mile WSW
K55	CAUSGSN00006072	1/2 - 1 Mile North
K57	CADDW0000011392	1/2 - 1 Mile North
L58	CAEDF0000095413	1/2 - 1 Mile WSW
L59	CAEDF0000137351	1/2 - 1 Mile WSW
L60	CAEDF0000134500	1/2 - 1 Mile WSW
L61	CAEDF0000107445	1/2 - 1 Mile WSW
L62	CAEDF0000043430	1/2 - 1 Mile WSW
63	CADWR9000039442	1/2 - 1 Mile NNW
L64	CAEDF0000138739	1/2 - 1 Mile WSW
M65	20368	1/2 - 1 Mile North
L66	CAEDF0000043464	1/2 - 1 Mile WSW
L67	CAEDF0000082315	1/2 - 1 Mile WSW
N69	CAUSGSN00007033	1/2 - 1 Mile South
70	CADWR0000032239	1/2 - 1 Mile South
M71	CADWR9000039452	1/2 - 1 Mile North

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG14000009114	1/8 - 1/4 Mile WSW
2	CAOG14000009008	1/4 - 1/2 Mile North
3	CAOG14000009141	1/4 - 1/2 Mile WSW
4	CAOG14000083320	1/4 - 1/2 Mile South
5	CAOG14000083317	1/2 - 1 Mile SE
6	CAOG14000083321	1/2 - 1 Mile SSW
7	CAOG14000083316	1/2 - 1 Mile SSE

PHYSICAL SETTING SOURCE MAP - 6861760.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Pedrick Road At I80 Property	CLIENT:	Brusca Associates, Inc.
ADDRESS:	Pedrick Road Dixon CA 95620	CONTACT:	Alycia Cridebring
LAT/LONG:	38.482825 / 121.807222	INQUIRY #:	6861760.2s
		DATE:	February 18, 2022 10:28 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database | EDR ID Number

A1
WSW
1/4 - 1/2 Mile
Higher

AQUIFLOW **53161**

Site ID:	Not Reported
Groundwater Flow:	ESE
Shallow Water Depth:	22.23
Deep Water Depth:	34.10
Average Water Depth:	Not Reported
Date:	02/05/1993

A2
WSW
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000018443**

Well ID:	T0609500359-FMW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	FMW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500359&assigned_name=FMW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500359&assigned_name=FMW-1		

A3
WSW
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000000997**

Well ID:	T0609500359-FMW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	FMW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500359&assigned_name=FMW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500359&assigned_name=FMW-2		

A4
WSW
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000085957**

Well ID:	T0609500359-FMW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	FMW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500359&assigned_name=FMW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500359&assigned_name=FMW-4		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A5
WSW
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000126360**

Well ID:	T0609500359-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500359&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500359&assigned_name=MW-4		

B6
NNE
1/4 - 1/2 Mile
Lower

AQUIFLOW **53184**

Site ID:	Not Reported
Groundwater Flow:	SE
Shallow Water Depth:	25
Deep Water Depth:	33
Average Water Depth:	Not Reported
Date:	06/23/1994

A7
WSW
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000081790**

Well ID:	T0609500359-DMW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	DMW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500359&assigned_name=DMW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500359&assigned_name=DMW-3		

A8
WSW
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000018598**

Well ID:	T0609500359-FMW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	FMW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500359&assigned_name=FMW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500359&assigned_name=FMW-3		

C9
SSE
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR9000039375**

State Well #:	07N02E06N001M	Station ID:	52618
Well Name:	6N1	Basin Name:	Solano

Well Use:	Other	Well Type:	Single Well
Well Depth:	0	Well Completion Rpt #:	Not Reported

C10
SSE **CA WELLS** **CADWR9000039374**
1/4 - 1/2 Mile
Lower

State Well #:	07N02E06N004M	Station ID:	52617
Well Name:	6N4	Basin Name:	Solano
Well Use:	Other	Well Type:	Single Well
Well Depth:	0	Well Completion Rpt #:	Not Reported

11
North **FED USGS** **USGS40000188569**
1/4 - 1/2 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	008N001E36Q001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19640827	Well Depth:	260
Well Depth Units:	ft	Well Hole Depth:	481
Well Hole Depth Units:	ft		

D12
SSW **CA WELLS** **CAEDF0000007226**
1/4 - 1/2 Mile
Higher

Well ID:	SL0609748481-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0609748481&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0609748481&assigned_name=MW-3		

D13
SSW **CA WELLS** **CAEDF0000072756**
1/4 - 1/2 Mile
Higher

Well ID:	SL0609748481-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0609748481&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0609748481&assigned_name=MW-1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E14
NNE
1/4 - 1/2 Mile
Lower

CA WELLS **20369**

Seq:	20369	Prim sta c:	4800818-001
Frds no:	4800818001	County:	48
District:	04	User id:	ENG
System no:	4800818	Water type:	G
Source nam:	WELL 01 - TREATED	Station ty:	WELL/AMBNT
Latitude:	382922.9	Longitude:	1214815.9
Precision:	3	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4800818	System nam:	Pedrick Produce
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

D15
SSW
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000013639**

Well ID:	SL0609748481-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0609748481&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0609748481&assigned_name=MW-4		

D16
SSW
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000069890**

Well ID:	SL0609748481-MW-X	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-X
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0609748481&assigned_name=MW-X&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0609748481&assigned_name=MW-X		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

D17
SSW
1/4 - 1/2 Mile
Higher

CA WELLS **CAEDF0000102031**

Well ID:	SL0609748481-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0609748481&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0609748481&assigned_name=MW-2		

E18
NNE
1/4 - 1/2 Mile
Lower

CA WELLS **CADDW0000016949**

Well ID:	4800818-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4800818-001&store_num=		
GeoTracker Data:	Not Reported		

B19
NNE
1/4 - 1/2 Mile
Lower

AQUIFLOW **53060**

Site ID:	Not Reported
Groundwater Flow:	SE
Shallow Water Depth:	18
Deep Water Depth:	35
Average Water Depth:	Not Reported
Date:	07/28/1998

E20
NNE
1/4 - 1/2 Mile
Lower

CA WELLS **20351**

Seq:	20351	Prim sta c:	4800732-001
Frds no:	4800732001	County:	48
District:	04	User id:	ENG
System no:	4800732	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT
Latitude:	382923.5	Longitude:	1214812.6
Precision:	3	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4800732	System nam:	Bp Service Station
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

Sample date:	07-MAR-18	Finding:	27.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-FEB-18	Finding:	27.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	04-JAN-18	Finding:	26.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-DEC-17	Finding:	24.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	02-NOV-17	Finding:	25.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	03-OCT-17	Finding:	22.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-SEP-17	Finding:	23.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	03-AUG-17	Finding:	20.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-JUL-17	Finding:	18.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-JUN-17	Finding:	21.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-MAY-17	Finding:	19.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	03-APR-17	Finding:	18.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-MAR-17	Finding:	17.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-FEB-17	Finding:	22.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	04-JAN-17	Finding:	22.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-DEC-16	Finding:	22.
Chemical:	NITRATE (AS N)	Report units:	MG/L

Dlr:	0.4		
Sample date:	08-NOV-16	Finding:	23.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-OCT-16	Finding:	23.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-SEP-16	Finding:	21.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	09-AUG-16	Finding:	20.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-JUL-16	Finding:	20.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	06-JUN-16	Finding:	18.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-APR-16	Finding:	17.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	03-MAR-16	Finding:	18.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-FEB-16	Finding:	18.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-FEB-16	Finding:	18.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-JAN-16	Finding:	18.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	03-DEC-15	Finding:	18.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	01-OCT-15	Finding:	69.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-SEP-15	Finding:	65.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-AUG-15	Finding:	72.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	02-JUL-15	Finding:	31.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-APR-15	Finding:	60.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-MAR-15	Finding:	67.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-FEB-15	Finding:	66.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-JAN-15	Finding:	66.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-DEC-14	Finding:	74.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-NOV-14	Finding:	71.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-OCT-14	Finding:	71.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	08-SEP-14	Finding:	70.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-AUG-14	Finding:	68.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-JUL-14	Finding:	66.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-JUL-14	Finding:	65.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-JUL-14	Finding:	66.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-JUL-14	Finding:	65.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-JUL-14	Finding:	60.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	02-JUN-14	Finding:	68.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	01-MAY-14	Finding:	63.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	03-APR-14	Finding:	73.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	04-MAR-14	Finding:	72.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	06-FEB-14	Finding:	70.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-JAN-14	Finding:	74.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	05-DEC-13	Finding:	76.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-NOV-13	Finding:	78.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-OCT-13	Finding:	72.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	16-SEP-13	Finding:	78.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-AUG-13	Finding:	77.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	20-JUN-13	Finding:	77.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	25-APR-13	Finding:	77.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	19-MAR-13	Finding:	71.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	22-FEB-13	Finding:	67.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JAN-13	Finding:	67.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	07-DEC-12	Finding:	59.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	15-NOV-12	Finding:	69.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-OCT-12	Finding:	67.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-SEP-12	Finding:	65.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-AUG-12	Finding:	73.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	30-JUL-12	Finding:	8.4
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-JUL-12	Finding:	70.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	31-MAY-12	Finding:	73.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

E21
NNE **CA WELLS** **CADDW0000004118**
1/2 - 1 Mile
Lower

Well ID:	4810034-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4810034-001&store_num=		
GeoTracker Data:	Not Reported		

C22
SSE **CA WELLS** **CADDW0000012781**
1/2 - 1 Mile
Lower

Well ID:	4800727-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	DOMESTIC WELL	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4800727-001&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F23
SSE **CA WELLS** **CADWR0000030611**
1/2 - 1 Mile
Lower

Well ID:	07N02E06N001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07N02E06N001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07N02E06N001M&store_num=		
GeoTracker Data:	Not Reported		

F24
SSE **FED USGS** **USGS40000188511**
1/2 - 1 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	007N002E06N001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19741207	Well Depth:	385
Well Depth Units:	ft	Well Hole Depth:	425
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1979-11-08
Feet below surface:	61.7	Feet to sea level:	Not Reported
Note:	The site had been pumped recently.		

Level reading date:	1974-12-07	Feet below surface:	60.50
Feet to sea level:	Not Reported	Note:	Not Reported

F25
SSE **CA WELLS** **CAUSGSN00001586**
1/2 - 1 Mile
Lower

Well ID:	USGS-382833121480801	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-382833121480801	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-382833121480801&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G26
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000033844**

Well ID:	T0609500347-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-5		

G27
NNE
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000012098**

Well ID:	4800732-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4800732-001&store_num=		
GeoTracker Data:	Not Reported		

G28
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000045425**

Well ID:	T0609500347-MW-11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-11		

G29
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000057536**

Well ID:	T0609500347-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-1		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G30
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000015181**

Well ID:	T0609500347-MW-14	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-14
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-14&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-14		

G31
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000037419**

Well ID:	T0609500347-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-2		

G32
NNE
1/2 - 1 Mile
Lower

FED USGS **USGS40000188577**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	008N001E36R003M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19670925	Well Depth:	306
Well Depth Units:	ft	Well Hole Depth:	306
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1980-01-10
Feet below surface:	44.05	Feet to sea level:	Not Reported
Note:	Not Reported		

G33
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000004677**

Well ID:	T0609500347-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3

GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-3&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-3

G34
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000004449**

Well ID: T0609500347-MW-13 Well Type: MONITORING
Source: EDF Other Name: MW-13
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-13&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-13

G35
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000044515**

Well ID: T0609500347-MW-8 Well Type: MONITORING
Source: EDF Other Name: MW-8
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-8&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-8

F36
SSE
1/2 - 1 Mile
Lower

CA WELLS **CADWR9000039370**

State Well #: 07N02E06N002M Station ID: 5282
Well Name: Not Reported Basin Name: Solano
Well Use: Industrial Well Type: Unknown
Well Depth: 918 Well Completion Rpt #: 1231

G37
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000034123**

Well ID: T0609500347-MW-6 Well Type: MONITORING
Source: EDF Other Name: MW-6
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-6&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-6

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G38
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000088025**

Well ID:	T0609500347-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-4		

G39
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000143920**

Well ID:	T0609500347-MW-12	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-12		

H40
SSE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000031525**

Well ID:	07N02E06N002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07N02E06N002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07N02E06N002M&store_num=		
GeoTracker Data:	Not Reported		

H41
SSE
1/2 - 1 Mile
Lower

FED USGS **USGS40000188500**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	007N002E06N002M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19740314	Well Depth:	918
Well Depth Units:	ft	Well Hole Depth:	1003
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1974-03-14
Feet below surface:	44.00	Feet to sea level:	Not Reported
Note:	Not Reported		

H42
SSE
1/2 - 1 Mile
Lower

CA WELLS **CADWR9000039369**

State Well #:	07N02E06N003M	Station ID:	5283
Well Name:	07N02E06N003M	Basin Name:	Solano
Well Use:	Industrial	Well Type:	Single Well
Well Depth:	980	Well Completion Rpt #:	Not Reported

H43
SSE
1/2 - 1 Mile
Lower

CA WELLS **CAUSGSN00010917**

Well ID:	USGS-382829121480801	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-382829121480801	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-382829121480801&store_num=		
GeoTracker Data:	Not Reported		

G44
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000018705**

Well ID:	T0609500347-MW-7	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-7
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-7&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-7		

H45
SSE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000034060**

Well ID:	07N02E06N003M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07N02E06N003M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07N02E06N003M&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G46
NNE
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000071955**

Well ID:	T0609500347-MW-9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500347&assigned_name=MW-9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500347&assigned_name=MW-9		

I47
NE
1/2 - 1 Mile
Lower

CA WELLS **20385**

Seq:	20385	Prim sta c:	4810016-001
Frds no:	4810016001	County:	48
District:	04	User id:	ENG
System no:	4810016	Water type:	G
Source nam:	WELL 01 - TREATED	Station ty:	WELL/AMBNT/SUPPLY
Latitude:	382925.1	Longitude:	1214749.3
Precision:	3	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	4810016	System nam:	Pioneer Roofing Tile
Hqname:	Not Reported	Address:	8668 SPARLING LANE
City:	DIXON	State:	CA
Zip:	95620	Zip ext:	Not Reported
Pop serv:	36	Connection:	2
Area serve:	Not Reported		

I48
NE
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000004809**

Well ID:	4810016-002	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01 - RAW	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4810016-002&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

49
North
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000025616**

Well ID:	08N01E36J001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	08N01E36J001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=08N01E36J001M&store_num=		
GeoTracker Data:	Not Reported		

50
WSW
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000039388**

State Well #:	07N01E01M002M	Station ID:	7375
Well Name:	Not Reported	Basin Name:	Solano
Well Use:	Irrigation	Well Type:	Unknown
Well Depth:	153	Well Completion Rpt #:	DWR

J51
WSW
1/2 - 1 Mile
Higher

AQUIFLOW **53182**

Site ID:	Not Reported
Groundwater Flow:	NE,SE
Shallow Water Depth:	19.41
Deep Water Depth:	28.35
Average Water Depth:	Not Reported
Date:	01/09/1990

J52
WSW
1/2 - 1 Mile
Higher

AQUIFLOW **53156**

Site ID:	Not Reported
Groundwater Flow:	Varies
Shallow Water Depth:	19.4
Deep Water Depth:	21.5
Average Water Depth:	Not Reported
Date:	05/10/1994

J53
WSW
1/2 - 1 Mile
Higher

FED USGS **USGS40000188512**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	007N001E01N003M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19600520	Well Depth:	290
Well Depth Units:	ft	Well Hole Depth:	297
Well Hole Depth Units:	ft		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database | EDR ID Number

J54
WSW
1/2 - 1 Mile
Higher

AQUIFLOW **53062**

Site ID:	Not Reported
Groundwater Flow:	Varies
Shallow Water Depth:	19.4
Deep Water Depth:	21.9
Average Water Depth:	Not Reported
Date:	05/10/1994

K55
North
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00006072**

Well ID:	USGS-382944121481301	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-382944121481301	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-382944121481301&store_num=		
GeoTracker Data:	Not Reported		

K56
North
1/2 - 1 Mile
Higher

FED USGS **USGS40000188606**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	008N001E36J001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvial Fan Deposits	Aquifer Type:	Not Reported
Construction Date:	19620923	Well Depth:	140
Well Depth Units:	ft	Well Hole Depth:	140
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1979-10-22
Feet below surface:	45.59	Feet to sea level:	Not Reported
Note:	The site had been pumped recently.		

Level reading date:	1962-09-23	Feet below surface:	65.00
Feet to sea level:	Not Reported	Note:	Not Reported

K57
North
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000011392**

Well ID:	4800817-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=4800817-001&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L58
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000095413**

Well ID:	T0609500360-DMW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	DMW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500360&assigned_name=DMW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500360&assigned_name=DMW-1		

L59
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000137351**

Well ID:	T0609500360-DMW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	DMW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500360&assigned_name=DMW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500360&assigned_name=DMW-2		

L60
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000134500**

Well ID:	T0609500360-EMW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	EMW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500360&assigned_name=EMW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500360&assigned_name=EMW-5		

L61
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000107445**

Well ID:	T0609500360-TMW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	TMW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500360&assigned_name=TMW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500360&assigned_name=TMW-4		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L62
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000043430**

Well ID:	T0609500360-TMW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	TMW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500360&assigned_name=TMW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500360&assigned_name=TMW-1		

63
NNW
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000039442**

State Well #:	08N01E36K001M	Station ID:	7613
Well Name:	Not Reported	Basin Name:	Solano
Well Use:	Stockwatering	Well Type:	Unknown
Well Depth:	140	Well Completion Rpt #:	Not Reported

L64
WSW
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000138739**

Well ID:	T0609500360-TMW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	TMW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500360&assigned_name=TMW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500360&assigned_name=TMW-2		

M65
North
1/2 - 1 Mile
Higher

CA WELLS **20368**

Seq:	20368	Prim sta c:	4800817-001
Frds no:	4800817001	County:	48
District:	04	User id:	ENG
System no:	4800817	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT
Latitude:	382947.2	Longitude:	1214818.9
Precision:	3	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	4800817	System nam:	Triple M Grading

Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

L66
WSW **CA WELLS** **CAEDF0000043464**
1/2 - 1 Mile
Higher

Well ID:	T0609500360-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500360&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500360&assigned_name=MW-3		

L67
WSW **CA WELLS** **CAEDF0000082315**
1/2 - 1 Mile
Higher

Well ID:	T0609500360-TMW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	TMW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0609500360&assigned_name=TMW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0609500360&assigned_name=TMW-3		

N68
South **FED USGS** **USGS40000188476**
1/2 - 1 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	007N001E12H001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvial Fan Deposits	Aquifer Type:	Not Reported
Construction Date:	19670921	Well Depth:	208
Well Depth Units:	ft	Well Hole Depth:	329
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1979-12-18
Feet below surface:	33.05	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
N69 **South** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAUSGSN00007033**

Well ID:	USGS-382808121482101	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-382808121482101	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-382808121482101&store_num=		
GeoTracker Data:	Not Reported		

	Database	EDR ID Number
70 **South** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CADWR0000032239**

Well ID:	07N01E12H001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	07N01E12H001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=07N01E12H001M&store_num=		
GeoTracker Data:	Not Reported		

	Database	EDR ID Number
M71 **North** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADWR9000039452**

State Well #:	07N01E07M001M	Station ID:	49212
Well Name:	SID DW-50	Basin Name:	Solano
Well Use:	Irrigation	Well Type:	Single Well
Well Depth:	915	Well Completion Rpt #:	Not Reported

			Database	EDR ID Number
1G **NNE** **1/4 - 1/2 Mile** **Lower**	Site ID:	Not Reported	**AQUIFLOW**	**53060**
	Groundwater Flow:	SE		
	Shallow Water Depth:	18		
	Deep Water Depth:	35		
	Average Water Depth:	Not Reported		
	Date:	07/28/1998		

			Database	EDR ID Number
2G **NNE** **1/4 - 1/2 Mile** **Lower**	Site ID:	Not Reported	**AQUIFLOW**	**53184**
	Groundwater Flow:	SE		
	Shallow Water Depth:	25		
	Deep Water Depth:	33		
	Average Water Depth:	Not Reported		
	Date:	06/23/1994		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
3G **WSW** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported ESE 22.23 34.10 Not Reported 02/05/1993	**AQUIFLOW**	**53161**
4G **WSW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported NE,SE 19.41 28.35 Not Reported 01/09/1990	**AQUIFLOW**	**53182**
5G **WSW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported Varies 19.4 21.5 Not Reported 05/10/1994	**AQUIFLOW**	**53156**
6G **WSW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported Varies 19.4 21.9 Not Reported 05/10/1994	**AQUIFLOW**	**53062**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
WSW **OIL_GAS** **CAOG14000009114**
1/8 - 1/4 Mile

API #:	0409520834	Well #:	1-1
Well Status:	Plugged	Well Type:	Dry Hole
Lease Name:	Sparling	Field Name:	Any Field
Area Name:	Any Area	GIS Source:	hud
Confidential Well:	N	Directionally Drilled:	N
Spud Date:	09/08/1988		

2
North **OIL_GAS** **CAOG14000009008**
1/4 - 1/2 Mile

API #:	0409520332	Well #:	1
Well Status:	Plugged	Well Type:	Dry Hole
Lease Name:	Sparling	Field Name:	Any Field
Area Name:	Any Area	GIS Source:	hud
Confidential Well:	N	Directionally Drilled:	N
Spud Date:	12/12/1976		

3
WSW **OIL_GAS** **CAOG14000009141**
1/4 - 1/2 Mile

API #:	0409520988	Well #:	1
Well Status:	Plugged	Well Type:	Dry Hole
Lease Name:	E. Dixon Unit 1	Field Name:	Any Field
Area Name:	Any Area	GIS Source:	hud
Confidential Well:	N	Directionally Drilled:	N
Spud Date:	11/05/1994		

4
South **OIL_GAS** **CAOG14000083320**
1/4 - 1/2 Mile

API #:	0409520813	Well #:	1
Well Status:	Plugged	Well Type:	Dry Gas
Lease Name:	Rendall	Field Name:	Dixon, East, Gas (ABD)
Area Name:	Any Area	GIS Source:	hud
Confidential Well:	N	Directionally Drilled:	N
Spud Date:	11/28/1987		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

5
SE
1/2 - 1 Mile

OIL_GAS **CAOG14000083317**

API #:	0409500394	Well #:	1
Well Status:	Plugged	Well Type:	Dry Hole
Lease Name:	Mary M. Collier	Field Name:	Dixon, East, Gas (ABD)
Area Name:	Any Area	GIS Source:	hud
Confidential Well:	N	Directionally Drilled:	N
Spud Date:	04/27/1960		

6
SSW
1/2 - 1 Mile

OIL_GAS **CAOG14000083321**

API #:	0409520984	Well #:	1
Well Status:	Plugged	Well Type:	Dry Hole
Lease Name:	Vaughn	Field Name:	Dixon, East, Gas (ABD)
Area Name:	Any Area	GIS Source:	hud
Confidential Well:	N	Directionally Drilled:	N
Spud Date:	08/31/1994		

7
SSE
1/2 - 1 Mile

OIL_GAS **CAOG14000083316**

API #:	0409520388	Well #:	1
Well Status:	Plugged	Well Type:	Dry Gas
Lease Name:	E. Dixon	Field Name:	Dixon, East, Gas (ABD)
Area Name:	Any Area	GIS Source:	hud
Confidential Well:	N	Directionally Drilled:	N
Spud Date:	04/09/1979		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95620	5	0

Federal EPA Radon Zone for SOLANO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SOLANO COUNTY, CA

Number of sites tested: 41

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.993 pCi/L	95%	5%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	-0.433 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

Â© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

APPENDIX E – Additional Information

- Assessor's Parcel Map
- 2019 West Associates Report
- Natural Gas Well Records

N. 1/2 SEC. 1, T.7N., R.1E., M.D.B. & M.

Tax Area Code
63001
2028

111–01

Bk. 110

Bk. 108

U.S. SUR. STA. 32

U.S. SURVEY STATION 32

SIEVERS (CO. RD. NO. 436)

ROAD NO. 475)

CURREY (CO. RD. 63001

ROAD 2029 NO. 1041)

PEDRICK (CO. RD. 63020

INTERSTATE 80 HIGHWAY

NO. 2042 2028

63001

63000

63003

2028

2026

2027

2047

2487.22'

2526.35'

2335.24'

1317.32'

1449.73'

1043.66'

2338.53'

860.06'

852.25'

1670.60'

N.89°31'19"W 681.94'

N.89°31'19"W. 1656.77'

N.89°32'W

S.89°31'19"E.

S.0°51'41"W.

N.0°06'07"E.

S.0°03'17"W

N.89°37'50"W.

N.89°39'28"W.

N.44°47'E.

N.49°11'E. 481.68'

N.49°11'0"E. 138.09'

N.43°03'55"E 214.86'

N.70°03'36"E. 312.98'

N.89°35'24"W. 225'

N.49°42'35"E. 519.01'

N.42°39'30"W. 123.33'

N.45°09'54"W. 125'

N.44°50'06"E. 584'

N.89°51'54"W. 665.05'

N.89°51'54"W. 413.13'

N.19°18'08"W. 46'

N.0°08'06"E.

R=270' L=426.71'

L=230.69' R=680'

272.30'

270'±

570'±

263.05'

60'

72'

1"= 400'

HWY. STA. 315+99.90

HWY. STA. 279+12.0

SEC. 1

P. M. 41 – 18

P. M. 44 61

20' PIPELINE EASM'T

(I–M–189)

(80)

(40)

SOLANO IRRIGATION DISTRICT

2

1. 2. 3.

3

05

02

04

1.	R=340'	L=	84.11'
2.	S.89°32'04"E.		225.02'
3.	N.2°27'56"E.		30.00'

6 Pcl.1
39.86Ac.

2
75.76Ac.

5 REM.
116.03Ac.

7 Pcl.1
21.58Ac.

8 Pcl.2
37.57Ac.

Assessor's Block Numbers Shown in Ellipses, Assessor's Parcel Numbers Shown in Circles

REVISION	DATE	BY
010–20 Chg.(Dd)	10–25–07	JS
SBE 07–007	2–26–07	DV
010–7,8 (PM)	6–27–03	SE
SBE 99–008	9–16–98	BW

NOTE: This map is for assessment purposes only. It is not intended to define legal boundary rights or imply compliance with land division laws.

CITY OF DIXON & VICINITY
Assessor's Map Bk. 111 Pg. 01
County of Solano, Calif.

08–09

Copyright © 1996, Solano County Assessor/Recorder, All rights Reserved

WEST ASSOCIATES
ENVIRONMENTAL ENGINEERS, INC.

PHASE I
ENVIRONMENTAL TRANSACTION STUDY

UNIMPROVED AGRICULTURAL PROPERTY
PEDRICK ROAD, DIXON
APN 111-010-080

***Prepared for*:**

VALLEY IRON, INC.
Fresno

Prepared by:

WEST & ASSOCIATES ENVIRONMENTAL ENGINEERS, INC.
Vacaville, California

October 2019

EXECUTIVE SUMMARY

This report presents results of a Phase I environmental transaction study conducted at the request of our client, Valley Iron, Inc., for an agricultural property located in the city of Dixon, Solano County, California. The property is comprised of one legal parcel 37.57 acres in size.

The scope of work for this project conformed to guidelines contained in ASTM Standard E 1527-07, "Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process". The objective is to identify any potential “Recognized Environmental Conditions”, as defined by ASTM E 1527.

The following methods were employed to conduct this environmental investigation:

- Visual survey of the subject property and adjacent properties
- Regulatory agency file inquiry
- Review of publically available environmental database’s
- Interview with persons having first-hand knowledge of the property
- Interview with environmental regulatory personnel
- Title search and review
- Inspection of current and historic aerial photographs

The following environmental issues were included in the scope of this investigation:

- Aboveground and underground storage tanks
- Hazardous materials storage and/or use areas
- Hazardous waste management
- Poly Chlorinated Biphenyls (PCBs)
- Suspect asbestos containing building materials
- Lead paint
- Environmental liens or deed restrictions
- Potential offsite sources of contamination

Each of the above listed potential environmental issues was successfully investigated in conformance with guidelines for Phase 1 environmental assessments as presented in ASTM E 1527-07.

The objective of this investigation was to identify Recognized Environmental Conditions (RECs); historic RECs; potential RECs or data gaps preventing a reasonable evaluation of any RECs present at the property. A REC is defined by ASTM E 1527-07 as “the presence, or likely presence of any hazardous substances or petroleum products in, at or on the property do to release to the environment; under conditions indicative of a release to the environment; or under conditions which pose a material threat of a future release to the environment”

No Recognized Environmental Conditions, potential RECs or historic RECs were identified. One data gap was identified relating to the potential presence of agricultural chemical residues in surface soil. In addition, two dozen old tires were observed lying on the ground at the southeast property corner. The tires should be removed to proper disposal.

TABLE OF CONTENTS

SECTION **PAGE**

EXECUTIVE SUMMARY i
TABLE OF CONTENTS ii
ACKNOWLEDGEMENTS iii
1.0 INTRODUCTION 1
1.1 Objective and Scope 1
2.0 SITE DESCRIPTION 1
2.1 Legal Description 2
2.2 Regulatory Organization 2
2.3 Regional Location 2
2.4 Physical Characteristics 2
2.5 Flora and Fauna 3
2.6 Historic Property Usage 3
2.7 Onsite Waste Disposal Activities 3
2.8 Pits, Ponds & Lagoons 3
2.9 Adjacent Land Use 3
3.0 ENVIRONMENTAL INVESTIGATION 4
3.1 Site Inspection 4
3.2 Aboveground and Underground Storage Tanks 5
3.3 Hazardous Materials Storage and Use 5
3.4 Hazardous Waste Management 5
3.5 Agricultural Residues 5
3.6 Process Wastewater 6
3.7 Sewage Treatment 6
3.8 Storm Water Management 6
3.9 Poly Chlorinated Biphenyls 6
3.10 Asbestos Containing Building Materials (ACM) 6
3.11 Lead Paint 6
3.12 Offsite Contaminant Sources 7
4.0 TITLE REVIEW 7
5.0 REGULATORY AGENCY FILE REVIEW 7
6.0 INTERVIEW WITH KNOWLEGABLE PERSONS 8
6.1 Environmental Regulatory Personnel 8
6.2 Real Estate Professionals 8
7.0 ENVIRONMENTAL DATABASE SEARCH 8
8.0 INSPECTION OF AERIAL PHOTOGRAPHS 9
9.0 EVALUATION OF HISTORIC SANBORN MAPS 9

APPENDICES

Appendix A
- Plate 1 – Vicinity Map
- Plate 2 – Assessor's Parcel Map
- Plate 3 – USGS Topographic Map
- Plate 4 – Recent Aerial Photo - 2018
- Plate 5 – Aerial Photo – June 2003
- Plate 6 – Aerial Photo – March 2011

Appendix B
- Site Photographs

Appendix C
- Environmental Database Search List

ACKNOWLEDGEMENTS

This Phase 1 environmental transaction study was prepared under authorization of our client, Valley Iron, Inc. and is intended for their exclusive use.

In the event this Study is submitted to a lending institution for purposes of satisfying environmental due diligence, it is understood that a potential lender can rely on this report as the borrower's best effort to document environmental conditions prevailing at the property.

Credentials

This Phase 1 Environmental Transaction Study has been prepared by Mr. Brian W. West PE, registered as a civil engineer in the state of California. The information contained in this Report has received appropriate technical review and approval. The conclusions represent professional judgments and are founded upon the findings of the investigations identified in the Report and the interpretation of such data based on my experience and expertise, according to the existing standard of care for work of this nature.

I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in 40 CFR Part 312.10. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the Site. I have developed and performed the All Appropriate Inquiry in conformance with the standards and practices set forth in 40 CFR Part 321.10.

Disclaimer

A Phase 1 Environmental Transaction Study is limited in its scope and environmental impacts may exist which could not be discovered by such investigations. West & Associates has made every reasonable effort to discover and interpret the information and current conditions regarding the site.

This Environmental Site Assessment includes the review of agency lists and reports prepared by others. West & Associates believes that the information presented in this Report is reliable, but cannot guarantee the accuracy of information provided by others.

This Report should be considered in its entirety and its various Sections should not be taken out of context.

1.0 INTRODUCTION

This report presents results of a Phase I Environmental Transaction Study conducted by West & Associates Environmental Engineers, Inc. for the subject property located west of Pedrick Road and east of the Interstate 80 freeway in the city of Dixon. There is no street address assigned to the subject property. The site regional location is depicted on *Plate 1*, appearing in the *Appendix*.

The property is comprised of one legal parcel, identified as follows:

APN 0111-010-080; 37.57 acres in size.

This Phase 1 Environmental Transaction Study was performed in conformance with the American Society of Testing & Materials (ASTM) Standard Practice for Phase 1 ESA's (ASTM E1520-07) and the "All Appropriate Inquiry Final Rule".

The Site is an unimproved agricultural property exclusively devoted to agricultural production of seasonal crops.

1.1 Objective and Scope

The objective of this Study was to investigate existing and past land use practices and site operations in order to identify any "Recognized Environmental Conditions" (RECs); potential RECs; historic RECs or data gaps preventing the reasonable evaluation of a REC.

A Recognized Environmental Condition (REC) is defined by ASTM E 1527-07 as "the presence, or likely presence of any hazardous substances or petroleum products in, at or on the property do to release to the environment; under conditions indicative of a release to the environment; or under conditions which pose a material threat of a future release to the environment."

In conformance with ASTM E1520-07 standards, the following methods of investigation were employed during the completion of this Phase 1 ESA investigation.

- Visual inspection of the subject property and adjacent properties
- Regulatory agency file inquiry
- Review of public access environmental databases
- Interview with persons having first-hand knowledge of the property
- Regulatory agency personnel interview
- Inspection of aerial photographs
- Review of title documents
- Analysis of historic Sanborn maps

The scope of this report also includes developing recommendations for additional investigation (Phase II), if appropriate.

2.0 SITE DESCRIPTION

In this Section the physical, cultural, legal and environmental characteristics of the subject site are presented.

2.1 Legal Description

The subject property consists of one legal parcel:

1. APN 111-010-080; which is 37.57 acres in size

The Solano County Assessor's Office parcel map, depicting the property lines, lot numbers and locations of the subject parcel appears as *Plate 2* in the *Appendix*.

The Site is within the city limits of Dixon in Solano County. The property is zoned agricultural.

2.2 Regulatory Organization

The lead environmental regulatory agency for the site is the Solano County Department of Resource Management, located in Fairfield.

Other regulatory agencies with jurisdiction include:

- State of California Department of Toxic Substances Control, Region 1
- State of California Department of Fish and Wildlife
- California Regional Water Quality Board, Central Valley Region
- US Environmental Protection Agency, Region IX

2.3 Regional Location

The study area is located at an altitude of 60 feet, in the uplands of the Sacramento/San Joaquin Delta.

2.4 Physical Characteristics

Topography: The property and surrounding vicinity is flat. There is a slight slope from west to east. Surface topography at the Site has been graded to promote efficient application of irrigation water. Topography in and around the subject property appears on the USGS map presented in the *Appendix* as *Plate 3*.

Property Usage: The Site is entirely devoted to seasonal agricultural production. There are no perennial crops planted on the property.

Existing property development patterns can be best viewed on *Plate 4*, a recent aerial photo.

Geology: The Site is located on the alluvial Sacramento Valley plain 10 miles west of the Sacramento/San Joaquin Delta. The alluvial deposits in this vicinity are many hundreds of feet deep.

Surface Waters: As described previously, the Site has been graded with just enough slope to maintain a consistent and predictable flow of irrigation water to all portions of the property. There are no storm water improvements. All water flow is overland. Any stormwater runoff which may occur flows through open channels and eventually reaches the Yolo Bypass 9 miles east of the Site.

Groundwater: There are no known groundwater monitoring wells on the site property or any other properties within a two mile radius. The closest known groundwater monitoring well is at the Ramos Oil cardlock facility at 1900 North First Street.

Review of the monitoring data collected at the Ramos Oil property reveals that the depth to groundwater is reported to be 27-30 feet below ground surface as of April 2019.

The groundwater gradient (i.e. flow direction) is west to east, which is typical for the western side of the Sacramento Valley.

Soils: As described previously, the Site sits on hundreds of feet of alluvial deposits which comprise the Sacramento Valley.

Surface soils at the Site have been mapped by the Soil Conservation Service (SCS). The SCS reports that the predominant soil type is silty clay loam.

Wells: There are no records of any wells past or present at the Site

2.5 Flora and Fauna

The majority of the Site acreage is plowed and replanted annually. The I-80 margin provides some minor habitat for a small population of native and non-native flora. Otherwise, no significant population of native flora is present at the site.

The subject property provides wildlife habitat consistent with the crop being grown at the time. Between crops, when the fields are fallow, the site does not provide any significant wildlife habitat.

2.6 Historic Property Usage

Typical of most land in and around Dixon, the Site has predominantly been used for agricultural purposes. According to persons with knowledge of Dixon real estate, approximately 20 years ago the property was owned by Mistler Brothers. Mistler farmed the property and also operated a custom harvesting operation. Farm equipment and trucks were parked at the Site. No visual evidence of that operation remains today.

2.7 Onsite Waste Disposal Activities

There is no past or present onsite waste disposal at the Site.

2.8 Pits, Ponds & Lagoons

There are no existing pits, ponds or lagoons on the property. Inspection of aerial photographs dating to 2003 did not reveal the presence of any historic pits, ponds or lagoons.

2.9 Adjacent Land Use

The Site is bounded by Interstate 80 on the northwest. Immediately to the north, parcel APN 111-010-007, was until recently an agricultural property similar to the Site. In 2018 the parcel to the north was taken out of agricultural production and is currently being developed as a truck sales and maintenance facility.

To the east of the Site, on the other side of Pedrick Road, all adjacent properties are 100% agricultural in usage.

To the south of the Site all adjacent properties are agricultural.

Current adjacent land use patterns can be viewed in the aerial photo appearing as *Plate 4*.

3.0 ENVIRONMENTAL INVESTIGATION

Potential environmental issues at the subject property include:

- Aboveground and underground storage tanks
- Hazardous materials storage and/or use areas
- Hazardous waste management
- Agricultural residues
- Process wastewater
- Sewage treatment
- Storm water management
- Lead paint
- Asbestos building materials
- Offsite contaminant sources

In this Section, the results of the environmental investigation with respect to each potential environmental concern are addressed.

3.1 Site Inspection

A physical inspection of the property was made on October 9, 2019. The Inspector was the principal author of this report, Brian W. West PE.

On the date of the site inspection the Site was entirely fallow. No crops were in cultivation.

The Site is bordered by a PG&E pole line on the south, however no electrical transformers were observed to be installed on or bordering the property.

Several trees and billboards were present on the northwest, bordering the freeway. It appeared that all were within the freeway right of way.

It was observed that a new chain link fence had been installed on the north property line. All other property lines were unfenced. It was also observed that a storm water detention basin had recently been constructed on the parcel bordering to the north.

On the date of the survey, several dozen old tires were present at the eastern end of the southerly property line. Tires are not regulated as a hazardous material and do not represent a contaminant potential. However, under prevailing California regulations, disposal of waste tires is restricted, primarily because tires take so long to decompose in solid waste landfills.

In the following Sections, a description of property conditions pertinent to the potential environmental issues listed in Section 3.0 is presented.

3.2 Aboveground and Underground Storage Tanks

No evidence of any underground tanks, such as fill ports or vent lines, was observed during the property site inspection. That finding is consistent with Solano County records, which do not reflect any permits for underground tank installation, operation or removal.

Similarly, no evidence of any fixed above ground tanks was observed during the site inspection.

Neither underground tanks or fixed aboveground storage tanks are identified as a Recognized Environmental Condition at the Site.

3.3 Hazardous Materials Storage and Use

There are no fixed facilities at the Site for the storage of hazardous materials. No maintenance of farm equipment occurs at the property requiring the storage or use of lubricating oils, hydraulic fluids or other machinery related hazardous materials.

Agricultural chemicals are seasonally used at the property, however pesticides, herbicides or fertilizers are not stored on site.

3.4 Hazardous Waste Management

Agricultural chemicals containing hazardous compounds are seasonally used at the Site, however these materials are either used in their entirety or, if not used entirely, taken away from the property for use elsewhere, no waste products are generated. As described in Section 3.3, no other bulk hazardous materials are present at the Site.

Hazardous waste management is not considered a Recognized Environmental Condition at the Site.

3.5 Agricultural Residues

The Site has been in continuous intensive agricultural production for over 150 years. During that time tons of fertilizers, pesticides, herbicides, soil amendments and other chemicals have been applied to the soil. It takes years for some of these chemicals to breakdown in the environment, consequently it can be expected that soil testing would detect low concentrations of chemical residues, however most likely well below any recognized hazardous threshold.

The presence of agricultural chemical residues in soil is only a potential concern if the land use is being changed from agricultural to non-agricultural use. There are established Environmental Screening Levels (ESLs) associated with chemical residues for residential, commercial and industrial land use, but there are no established ESLs for agricultural property. This is in recognition of the fact that agricultural property receives annual applications of various chemicals, so residual concentrations are irrelevant.

The presence of agricultural residues in soil is of little concern at those areas planned to be paved or covered with buildings. Similarly, areas to be landscaped usually do not pose an exposure hazard to occupants.

Agricultural chemical contamination may be a complicating factor to offsite soil disposal. The degree of complication would be dependent on the contaminant concentrations and intended disposal site.

Agricultural chemical residue concentrations in unpaved outdoor storage areas may be of concern. Dust generation could result in human exposure to hazardous chemicals. The absence of any data profiling agricultural chemical residues in shallow soil at the Site is considered a data gap.

3.6 Process Wastewater

There is no routine generation of process wastewater at the Site. Agricultural products are grown, but not processed, on-site. There is no source of water at the Site, other than crop irrigation water. Consequently, there is no available water supply for processing of any sort.

3.7 Sewage Treatment

There is no sewage generation or treatment at the Site.

3.8 Storm Water Management

There are no storm water management improvements at the Site. Rain water flows overland to the western side of the property bordering Pedrick Road. There is no storm water retention or treatment at the Site.

Storm water is not considered a Recognized Environmental Condition at the Site.

3.9 Poly Chlorinated Biphenyls

Polychlorinated Biphenlys (PCBs) are chemical compounds occasionally found in high voltage transformer oil. Small quantities of PCBs can also be found in fluorescent light fixtures. PCBs are a highly regulated hazardous material and can result in costly cleanups if spilled or leaked into the environment.

As described previously, there are no transformers present at the property. There are no fluorescent lights at the property. Consequently PCBs are not considered a Recognized Environmental Condition.

3.10 Asbestos Containing Building Materials (ACM)

There are no potentially asbestos containing building materials at the Site, consequently ACM is not considered a Recognized Environmental Condition.

3.11 Lead Paint

There are no painted surfaces at the Site, consequently lead paint is not considered a Recognized Environmental Condition.

3.12 Offsite Contaminant Sources

Every parcel abutting the Site has been historically used for intensive agricultural production. Only the parcel to the north is now undergoing development to a non agricultural use.

The growers surrounding the Site utilize agricultural chemicals similar to those used on the Site itself. Agricultural chemicals from adjacent parcels could migrate onto the property via airborne or water borne transport. However, any chemicals arriving from offsite would be dwarfed in magnitude by the same chemicals applied directly to property soils by the tenant farmer.

Consequently, contaminants arriving from offsite are not considered a Recognized Environmental Condition.

4.0 TITLE REVIEW

A Preliminary Title report for the property, prepared by Old Republic Title Company dated August 2019 was reviewed for this Study. The Title Report was reviewed for any for information regarding any deed restrictions, environmental liens, easements or other disclosures of an environmental nature recorded on the property title.

Review of the title report identified nothing of an environmental nature recorded on the property title. No Recognized Environmental Condition was identified based on the title review.

5.0 REGULATORY AGENCY FILE REVIEW

The Solano County Department of Resource Management (DRM) has primary responsibility for environmental regulation at the Site. Compliance activities under the jurisdiction of the Solano DRM include:

- Hazardous Materials Management Plans
- Underground and Aboveground Storage Tank Permits
- Hazardous Waste Disposal Manifests
- Hazardous Materials Inspection Reports
- Hazardous Materials Storage Permits
- Nuisance Complaints
- Response to Hazmat Leaks and Spills
- Illegal dumping of hazardous waste
- Well and septic permits

A Solano County DRM file review was conducted for this project. It was determined that the DRM had only one record on file for the Site. In 1988 Solano County issued a permit for a natural gas well installation at the Site. The well was never drilled and the permit expired on December 31, 1999. No other files or records pertaining to the property exist.

The other environmental regulatory agency with jurisdiction at the property is the State of California Department of Toxic Substances Control (DTSC), Region 1. Inquiry with the DTSC revealed that there was no record of any files pertaining to the Site.

It is concluded that there are no potential Recognized Environmental Conditions identified at the Site based on regulatory agency file review.

6.0 INTERVIEWS WITH KNOWLEDGABLE PERSONS

Three interviews with persons having knowledge of the property were interviewed for this project.

6.1 Environmental Regulatory Personnel

As described previously, the environmental regulatory agency with primary jurisdiction at the property is the Solano County Department of Resource Management, located in Fairfield. The individual within the Solano RMD with responsibility for the Dixon area is Mr. Jeffrey Bell , Senior Hazardous Materials Specialist.

Mr. Bell was interviewed for this project. He was not aware of any environmental problem associated with the property, or any adjacent properties. It is concluded that no Recognized Environmental Condition is identified based on interview with regulatory personnel.

6.2 Real Estate Professionals

Two real estate professionals were interviewed for this project. Mr. Jon Quick with Colliers was interviewed to determine if any environmental information had been disclosed by the Seller. Mr. Quick reported that the Seller had environmental information to disclose.

Mr. Gary Archer, with Archer Ficklin Brokers in Dixon was interviewed. Mr. Archer has been selling agricultural real estate in the Dixon area for over 20 years. According to Mr. Archer the property has been exclusively used for agriculture with the exception of the few years when Mistler Brothers also parked farm equipment there. Mr. Archer does not remember the presence of any supporting facilities. The equipment was parked at whatever convenient spot was available at the time.

7.0 ENVIRONMENTAL DATABASE SEARCH

Federal, State and Regional environmental regulatory agencies maintain public domain databases containing information on real property. A total of 10 environmental databases were searched for information related to the property, or adjacent properties. The list of databases searched is presented in *Appendix C*.

No listings were found for the property in any of the databases searched. Similarly, no listings were identified for any properties abutting the Site.

The closest site listed in any database was the Ramos Oil site mentioned previously, 2 miles southwest of the property.

It is concluded that there are no identified Recognized Environmental Conditions affecting the Site based on a search of environmental databases.

8.0 INSPECTION OF AERIAL PHOTOGRAPHS

A total of eleven historic aerial photographs were reviewed for this Environmental Site Assessment. The photographs spanned the time period of 16 years, from 2003 to 2019.

The most recent aerial photo reviewed, taken in September 2019, is presented in *Plate 4*. The oldest, from July 2003, is presented in *Plate 5*. A representative aerial photo from the middle of the 16 year time span (2011) is presented in *Plate 6*.

A comparison of the images in *Plates 4, 5 & 6* does not reveal any significant changes at the property over a span of 16 years. Nothing of an environmental concern is evident in any of the photographs.

It is concluded that no Recognized Environmental Condition is identified at the property by review of historic aerial photographs extending back 16 years to 2003.

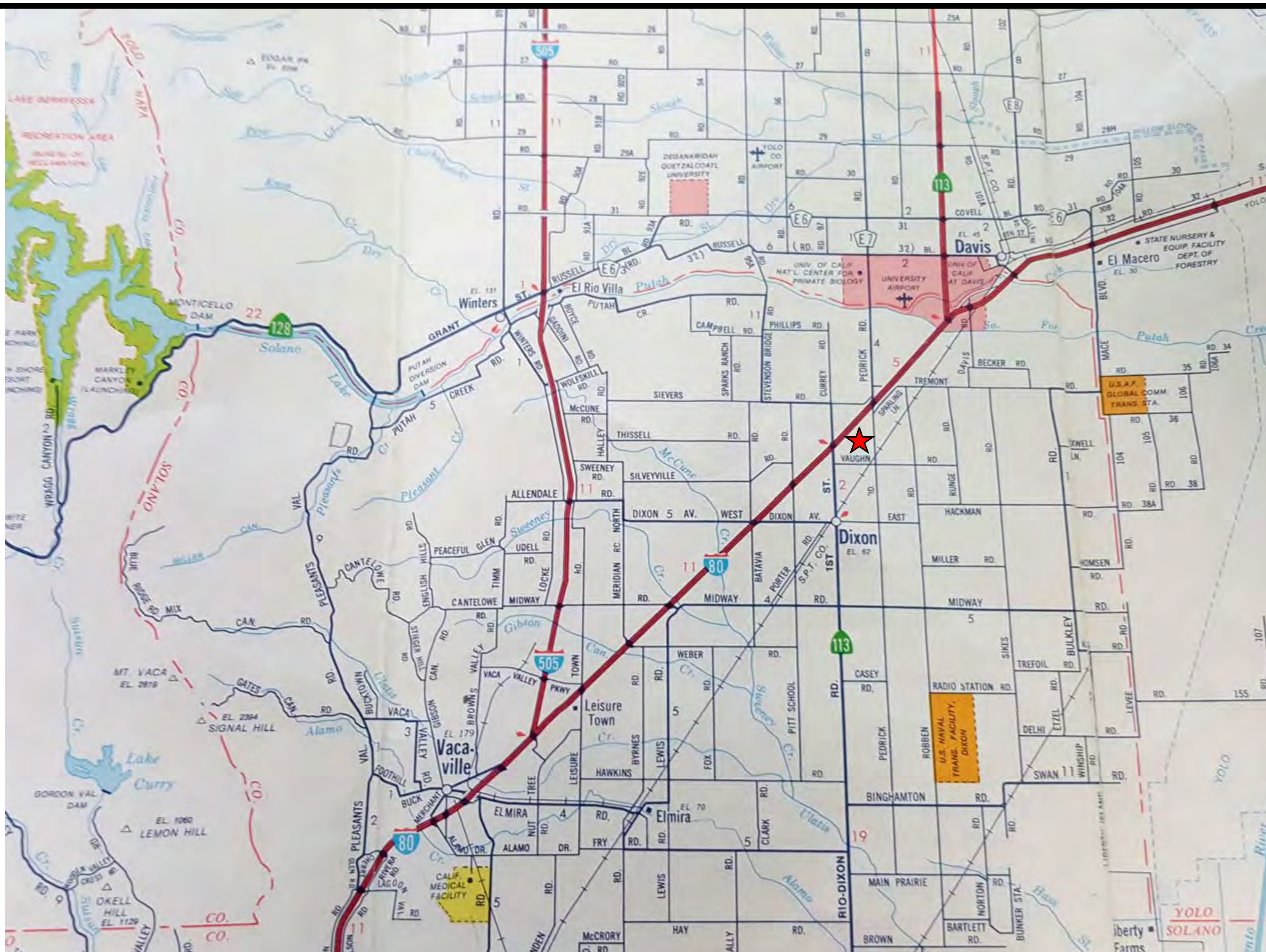
9.0 EVALUATION OF HISTORIC SANBORN MAPS

Historic fire insurance maps can provide valuable information describing past site activities at a property and adjacent properties. Environmental Record Search (ERS) was retained to conduct a search for historic fire insurance maps pertinent to the property.

It was reported by ERS that no fire insurance maps were available for the Site or adjacent properties. It is concluded that no Recognized Environmental Conditions were identified based on inspection of historic fire insurance maps.

APPENDIX A

Plates 1-6



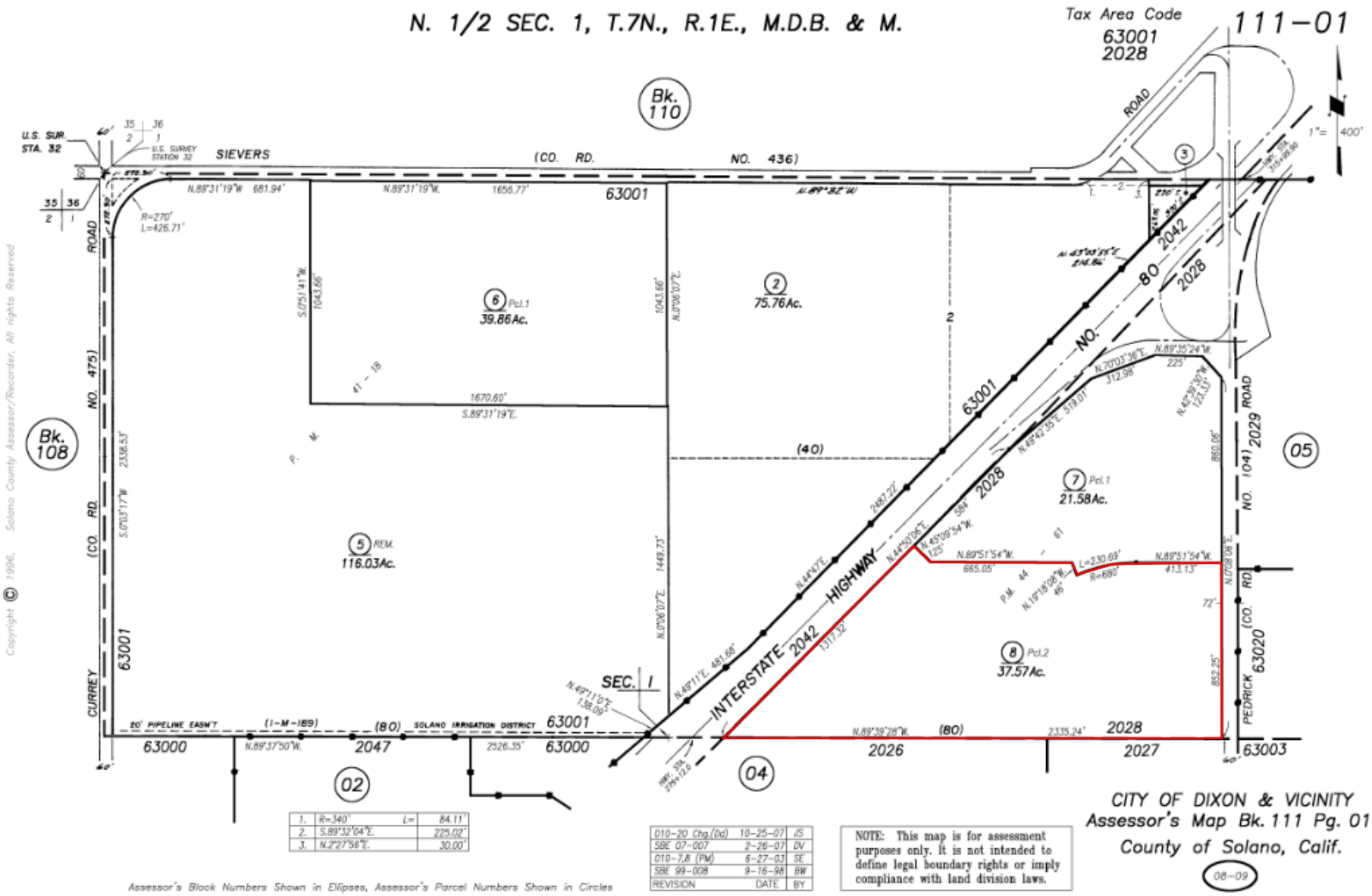
WEST & ASSOCIATES ENVIRONMENTAL ENGINEERS
PO Box 5891, Vacaville, CA 95696

Project Name: Unimproved Agricultural Property	Date: October 2019
Location: Pedrick Road, Dixon	
Drawing By: DLG	Scale: NS

Legend

★ Site Location

PLATE 1
Regional Site Location
APN #111-010-080



Copyright © 1996, Solano County Assessor/Recorder, All rights Reserved

1.	R=340' L=	84.11'
2.	S.89°32'04"E.	225.02'
3.	N.2°27'56"E.	30.00'

010-20 Chg.(Da)	10-25-07	JS
SBE 07-007	2-26-07	DV
010-7,8 (PM)	6-27-03	SE
SBE 99-008	9-16-98	BW
REVISION	DATE	BY

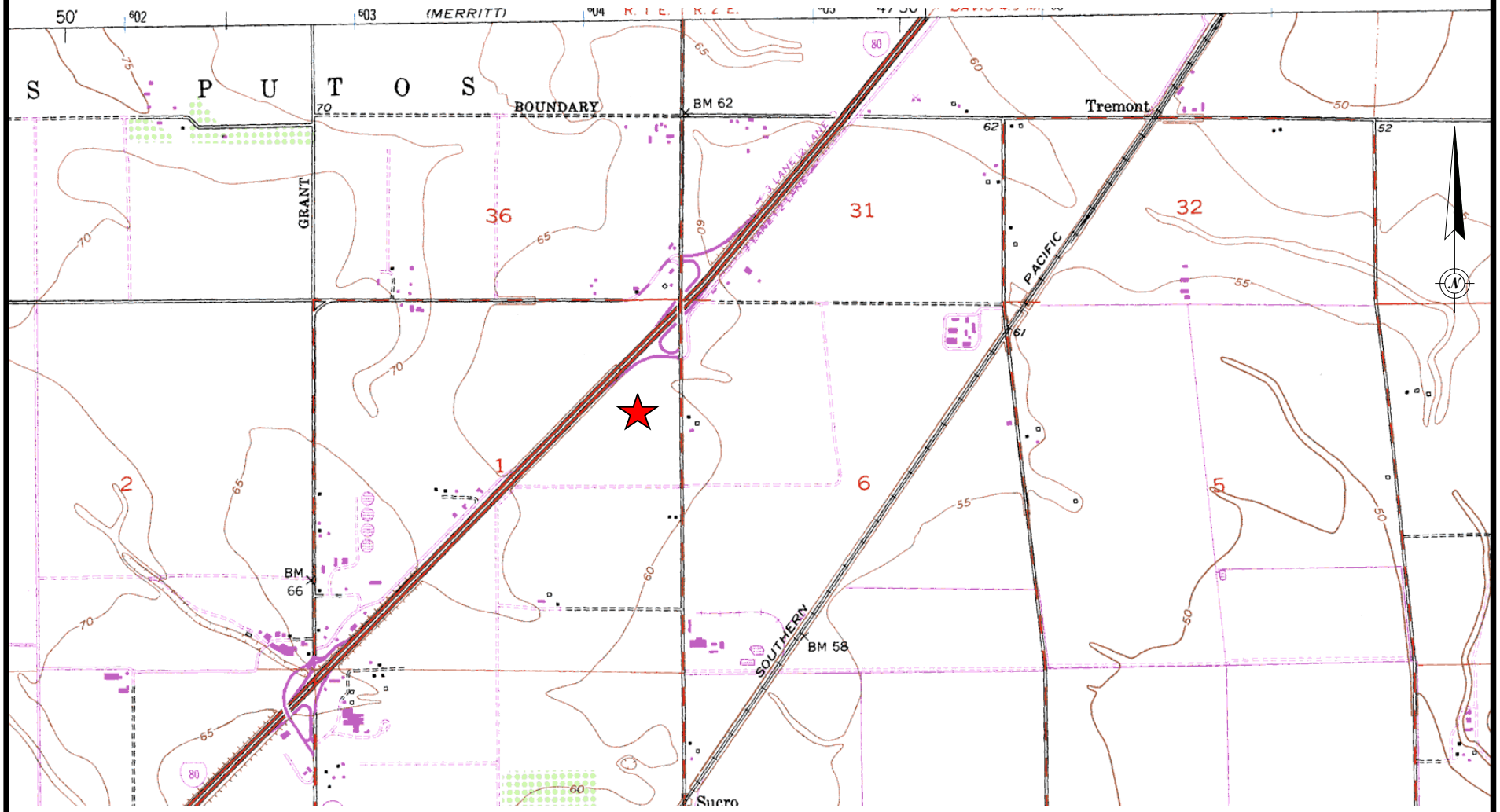
WEST & ASSOCIATES ENVIRONMENTAL ENGINEERS
865 Cotting Lane, Ste F, Vacaville, CA 95688

Project Name: Unimproved Agricultural Property	Date: October 2019
Location: Pedrick Road, Dixon	
Drawing By: DLG	Scale: NS

Legend

APN #111-010-080

PLATE 2
Assessor's Parcel Map
APN #111-010-080



WEST & ASSOCIATES ENVIRONMENTAL ENGINEERS
865 Cotting Lane, Ste F, Vacaville, CA 95688

Project Name: Unimproved Agricultural Property	Date: October 2019
Location: Pedrick Road, Dixon	
Drawing By: DLG	Scale: NS

Legend

★ Property Location

PLATE 3
USGS Topographic Map
APN #111-010-080

WEST & ASSOCIATES ENVIRONMENTAL ENGINEERS
865 Cotting Lane, Ste F, Vacaville, CA 95688

Project Name: Unimproved Agricultural Property	Date: October 2019
Location: Pedrick Road, Dixon	
Drawing By: DLG	Scale: See Above

Legend

PLATE 4
2018 Aerial Photo
APN #111-010-080

WEST & ASSOCIATES ENVIRONMENTAL ENGINEERS
865 Cotting Lane, Ste F, Vacaville, CA 95688

Project Name: Unimproved Agricultural Property	Date: October 2019
Location: Pedrick Road, Dixon	
Drawing By: DLG	Scale: See Above

Legend

PLATE 5
Aerial Photo - July 2003
APN #111-010-080

WEST & ASSOCIATES ENVIRONMENTAL ENGINEERS
865 Cotting Lane, Ste F, Vacaville, CA 95688

Project Name: Unimproved Agricultural Property	Date: October 2019
Location: Pedrick Road, Dixon	
Drawing By: DLG	Scale: See Above

Legend

PLATE 6
Aerial Photo - July 2011
APN #111-010-080

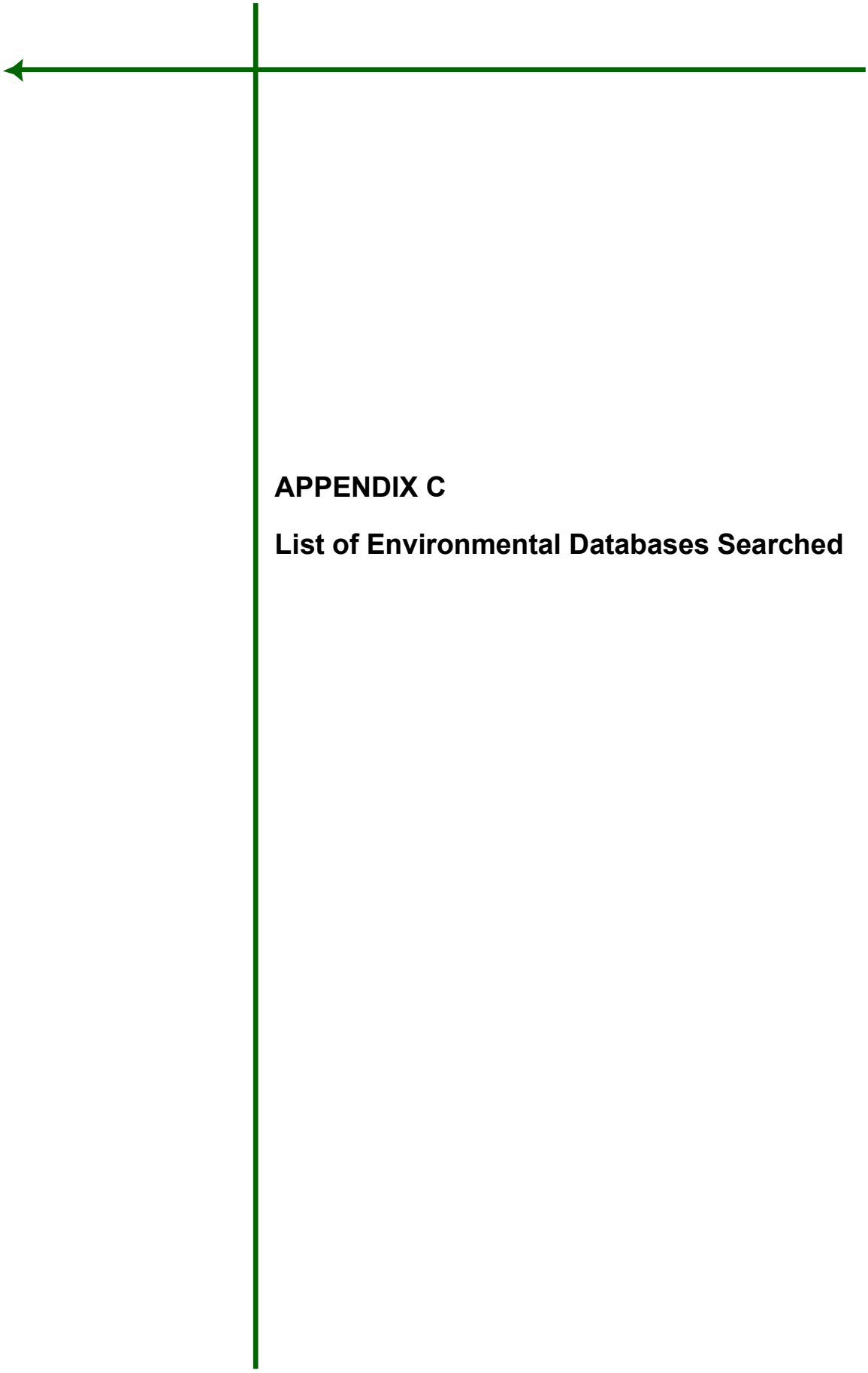
APPENDIX B

Site Photographs

Unimproved Agricultural Property
Site Photographs
APN #111-010-080

Property View – South to North

South Property Line with Tires



APPENDIX C

List of Environmental Databases Searched

WEST ASSOCIATES

LIST OF ENVIRONMENTAL DATABASES SEARCHED

GeoTracker

The GeoTracker Database lists sites in California with known groundwater contamination. It is maintained by the State Water Resources Control Board.

EnviroStor

The EnviroStor Database lists contaminated site in California under jurisdiction of the State Department of Toxic Substances Control.

CA FID UST

The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

SWEEPS UST

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

RCA SQG

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCTA) of 1975 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

LUST

The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data comes from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

UST

The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCTA). The data comes from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

HIST CORTESE

The sites for the list are designated by the State Water Resource Control Board (LUST), the integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (CALSITES). This listing is no longer updated by the state agency.

CUPA Listings

A listing of site included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections and enforcement activities.

NOTIFY 65

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF WELL ABANDONMENT

Woodland, California

January 12, 1989

William Hathaway, Agent
H. T. HILLIARD & COMPANY
6840 Grant Avenue
Carmichael, CA 95608

Your report of abandonment of well "Sparling" 1-1 (Name and number),
A.P.I. No. 095-20834, Section 1, T. 7N, R. 1E, M.D. B. & M.,
—field, Solano County,
dated 1/5/89, received 1/9/89, has been examined in conjunction with records filed in this office, and we have determined that all of the requirements of this Division have been fulfilled.

Environmental inspection made and approved 12/29/88.

Bond #1158621, Dated 7/18/88
BGT/km

M. G. MEFFERD
State Oil and Gas Supervisor
By Robert A. Reid
Deputy Supervisor
ROBERT A. REID

OG159 (4/88/DWRR/2M)

DIVISION OF OIL AND GAS

CHECK LIST - RECORDS RECEIVED AND WELL STATUS

Company H. T. HILLIARD & CO Well No. "SPARLING" 1-1

API No. 095-20834 Sec. 1, T. 7N, R. 1E, MD B.&M.

County SOLANO Field

RECORDS RECEIVED	DATE
Well Summary (Form OG100)	1/9/88
History (Form OG103)	
Core Record (Form OG101)	
Directional Survey	
Sidewall Samples	
Other	
Date final records received	
Electric logs: MUD	10/5/88
D/L	
DIPMETER	

STATUS		STATUS	
Producing - Oil	___	Water Disposal	___
Idle - Oil	___	Waterflood	___
Abandoned - Oil	___	Steamflood	___
Drilling - Idle	___	Fire Flood	___
Abandoned - Dry Hole	X	Air Injection	___
Producing - Gas	___	Gas Injection	___
Idle - Gas	___	CO_2 Injection	___
Abandoned - Gas	___	LPG Injection	___
Gas-Open to Oil Zone	___	Observation	___
Gas Storage	___	Waterflood Source	___

DATE _____ "E" well Yes ☐ No ☐

RECOMPLETED

REMARKS

ENGINEER'S CHECK LIST

1. Summary, History, & Core record (dupl.) ✓
2. Electric Log ✓
3. Operator's Name ✓
4. Signature ✓
5. Well Designation ✓
6. Location ✓
7. Elevation ✓
8. Notices ✓
9. "T" Reports ✓
10. Casing Record ✓
11. Plugs ✓
12. Surface Inspection ✓
13. Production
14. E Well on Prod., enter EDP
15. Directional Survey

CLERICAL CHECK LIST

1. Location change ___ (F-OGD165)
2. Elevation change ___ (F-OGD165)
3. Form OGD121
4. Form OG159 (Final Letter)
5. Form OGD150b (Release of Bond)
6. Duplicate logs to archives
7. Notice of Records due (F-OGD170)
8. EDP (F-OGD42A-1, 2)

APPROVED

FINAL LETTER

RECORDS NOT APPROVED

Reason:

RECORDS APPROVED MFC

RELEASE BOND

Date Eligible

(Use date last needed records were received.)

MAP AND MAP BOOK 88-7000

LONG BEACH OFFICE - USE REVERSE SIDE

OGD2 (8/87/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

Rec'd 1-9-89 gt

API No. 095-20834

WELL SUMMARY REPORT

Operator	Well				
H. t. HILLIARD & COMPANY	Sparling No. 1				
Field	**County**	**Sec.**	**T.**	**R.**	**B.&M.**
	Solano	1	7N	1E	MD

Location (Give surface location from property or section corner, street center line and/or California coordinates)

2800' north & 1700' west from the southeast corner Section 1

Elevation of ground above sea level

+ 61'

Commenced drilling (date)
September 8, 1988

Completed drilling (date)
September 15, 1988

Commenced producing (date)
NEVER
☐ Flowing ☐ Pumping
☐ Gas lift

Name of producing zone(s)

Total depth

(1st hole)	(2nd)	(3rd)
7000'		

Present effective depth
Surface

Junk
None

Depth measurements taken from top of:
☐ Derrick Floor ☐ Rotary Table ☒ Kelly Bushing
Which is 12 feet above ground

GEOLOGICAL MARKERS	DEPTH

Formation and age at total depth

	Clean Oil (bbl per day)	Gravity Clean Oil	Percent Water including emulsion	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production						
Production After 30 days						

CASING RECORD (Present Hole)

Size of Casing (API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)
8-5/8"	Surface	722'	23#	X-42, ERW	N	12¼"	295 sax	Shoe

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

Well Abandoned September 17, 1988

Was the well directionally drilled? If yes, show coordinates at total depth
☐ Yes ☒ No

Electrical log depths
722'-6962'

Other surveys
Acoustic Velocity, Dipmeter, Mud.

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Name	Title	
W. N. Hathaway	Petroleum Engineer	
Address	**City**	**Zip Code**
131 Stony Circle, Suite 1000A	Santa Rosa, CA	95401
Telephone Number	**Signature**	**Date**
805-578-2372		January 5, 1989

SUBMIT IN DUPLICATE

OG100 (6/81/GSR1/5M)

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator H. T. HILLIARD & COMPANY Field ..... County Solano
Well Sparling No. 1, Sec. 1, T 7N, R 1E, MD B. & M.
A.P.I. No. 095-20834 Name W. N. Hathaway (Person submitting report) Title Petroleum Engr. (President, Secretary or Agent)
Date January 4, 1989

Signature

131 Stony Circle, Suite 1000A, Santa Rosa, CA 95401 (Address) 707-578-2372 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1988	
09-08	Moved in H. L. Camp Drilling, Rig No. 1. Drilled 12¼" hole to 98'.
09-09	Depth 722'. 8-5/8" @ 722'. Ran 16 joints 8-5/8" OD, 23#, X-42, ST&C, 8RT, R3, new, ERW casing including guide shoe & 1 centralizer. Cemented shoe @ 722' with 195 sacks Class G cement premixed with 6% gel & 3% CaCl2 followed with 100 sacks Class G cement premixed with 3% CaCl2. Had good cement returns. Landed casing. Tested weld to 2000 psig. Installed BOE and tested to 1500 psig. Test witnessed and approved by DOG.
09-10	Drilled 7-7/8" hole to 2456'. Mud 70 pcf.
09-11	Depth 2912'. Mud 71 pcf. Drilling gorge.
09-12	Depth 4174'. Mud 72 pcf. Installed EnergyLog mud loggers @ 3450'.
09-13	Depth 5510'. Mud 76 pcf.
09-14	Depth 6201'. Mud 77 pcf.
09-15	Total depth 7000'. Mud 77 pcf. Ran Welex DIG/AVL log 722'-6962' & Dipmeter log 3200'-6800'.
09-16	Equalized 100 sacks Class G cement premixed 3% CaCl2 @ 2890'. Located top of plug @ 2571'. Witnessed and approved by DOG. Witnessed and approved by DOG.
09-17	Equalized 80 sacks Class G cement premixed 3% CaCl2 @ 772'. Located top of plug @ 512'. Placement witnessed and approved by DOG. Cut off casing 5' below ground surface, plugged with 25 lineal feet of cement, welded steel plate on stub. Abandoned well.
12-31	Ready for environmental inspection.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 688-501

PERMIT TO CONDUCT WELL OPERATIONS

-- (field code)
-- (area code)
-- (new pool code)
-- (old pool code)

William Hathaway, Agent
H.T. Hilliard & Company
6840 Grant Avenue
Carmichael, cA 95608

Woodland, California
October 6, 1988

Your ____ proposal to abandon well "Sparling" 1-1,
A.P.I. No. 095-20834, Section 1, T. 7N, R. 1E, M.D. B. & M.,
-- field, -- area, -- pool,
Solano County, dated 9/28/88, received 10/4/88 has been examined in conjunction with records filed in this office.

THE PROPOSAL, COVERING WORK ALREADY COMPLETED IN ACCORDANCE WITH PRIOR AGREEMENT, IS APPROVED.

THIS DIVISION IS NOTIFIED:

1. To inspect and approve the clean-up of the wellsite before approval of abandonment will be issued.

Bond # 1158621, dated 7/18/88
MFC/km

Engineer _____

Phone _____

M. G. MEFFERD, State Oil and Gas Supervisor

By _____
Deputy Supervisor
JOHN C. SULLIVAN

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (11/86/DWRR/5M)

Orig: DOG
cc : DOG
HTH
File

Abd.
D. H.

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
OCT 4 1988
WOODLAND, CALIFORNIA

Notice of Intention to Abandon Well

This notice must be given at at least five days before work is to begin.

FOR DIVISION USE ONLY			
CARDS	BOND	FORMS	
		OGD114	OGD121
✓	$ 115,000 dated 7-18-88	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon well Sparling No. 1-1, API No. 095-20834,

Sec. 1, T. 7N, R. 1E, MD B. & M., _____ Field, Solano County.

commencing work on _____, 19____.

The present condition of the well is:

1. Total depth
   7000'
2. Complete casing record, including plugs and perforations
   Casing: 8-5/8" cemented @ 722'.

3. Last produced _____
   (Date) (Oil, B/D) (Gas, Mcf/D) (Water, B/D)

   or

4. Last injected _____
   (Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure)

Additional data for dry hole (show depths):

5. Oil or gas shows
   None

6. Stratigraphic markers

7. Formation and age at total depth
   Cretaceous-Winters
8. Base of fresh water sands 2790'

The proposed work is as follows: The following work was accomplished on September 16 & 17, 1988 under prior approval of the Division to Saeed Irani:

1. Equalized 100 sacks Class G cement premixed 3% CaCl2 @ 2890'. Located top of plug @ 2571'. Witnessed and approved by DOG.
2. Equalized 80 sacks Class G cement premixed 3% CaCl2 @ 772'. Located top of plug @ 512'. Placement witnessed and approved by DOG.
3. Cut casing 5' below ground. Plugged casing with 25 lineal feet of cement. Welded steel plate on stub.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address 131 Stony Circle, #1000A
(Street)
Santa Rosa, CA 95401
(City) (State) (Zip)
Telephone Number (707) 578-2372
(Area Code) (Number)

H. T. Hilliard & Co.
(Name of Operator)
By W. N. Hathaway
(Print Name)
(Signature) 9/28/88
(Date)

Form OG108 (9/81/DWRR/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 688-215

DIVISION OF OIL AND GAS

Report on Operations

William Hathaway
H. T. HILLIARD & COMPANY
6840 Grant Avenue
Carmichael, CA 95608

Woodland Calif.
September 13, 1988

Your operations at well "Sparling" 1-1, API No. 095-20834, Sec. 1, T. 7N, R. 1E, M.D.B.& M. --- Field, in Solano County, were witnessed on 9/10/88. R. Thesken, representative of the supervisor, was present from 0315 to 0400. There were also present C. Brooks, D.F.

Present condition of well: 8-5/8" cem. 722'. T.D. 724' (standing cemented).

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION: The blowout prevention equipment and its installation on the 8-5/8" casing are approved.

REMARKS: No Deficiencies.

9-16-88
RLH/Saeed
TD 7000' No shows
BFW 2790'
DCG Pick 2750'
Will pwc 2890'-2690' or above
8 5/8" cem. 722
[illegible] or above
pwc 30'-5

J. NIVED

RT:et

M. G. MEFFERD

John C. Sullivan

OG109 (9/83/GSR1/15M)

Camp #1
Spud 9-8-88

KLH-

DIVISION OF OIL AND GAS
BLOWOUT PREVENTION EQUIPMENT MEMO

T 215

Operator H.T. Hilliard Co Well "Sparling" 1-1 Field - County Solano

VISITS:	Date	Engineer	Time	Operator's Rep.	Title
1st	9-10-88	R. Thiskin	0315 to 0400	C. Brooks	D.F.
2nd			to		

Casing record of well: 8 5/8" 2 in. 722'. T.D. 724' (Standing cemented).

OPERATION: Testing (~~inspecting~~) the blowout prevention equipment and installation.
DECISION: The blowout prevention equipment and its installation on the 8 5/8 "casing are approved.

REQUIRED BOPE CLASS: III B3 m

Proposed Well Opns: drill ahead MPSP: _____ psi
Hole size: 12 1/4 " fr. surface ' to 724 ' , 7 7/8 " to — ' & _____ " to _____ '

CASING RECORD (BOPE ANCHOR STRING ONLY)					Cement Details	Top of Cement	
Size	Weight(s)	Grade(s)	Shoe at	CP at	195 sx 6' w/ 6% gel + 3% CaCl2 tailed	Casing	Annulus
8 5/8	24#	7-55	722		by 100 sx 6' w/ 3% CaCl2		returns

BOP STACK							a	b	a/b	TEST DATA			
API Symb.	Ram Sz.	Mfr.	Model or Type	Size (in.)	Press. Rtg.	Date Last Overhaul	Gal. to Close	Rec.Time (Min.)	Calc. GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press.
		Hyd	Gas		2000							9-10	1200
		Sh	BR		✓							✓	1500
		Sh	BR		✓						Comp	✓	✓

ACTUATING SYSTEM

Accum. Unit(s) Wkg. Press. 3000 psi
Total Rated Pump Output _____ gpm
Distance From Well Bore 50+ ft.

	Mfr.	Accum. Cap.	Precharge
1	Koomey	50 gal.	1500 psi
2		gal.	psi

CONTROL STATIONS	Elec.	Hyd.
✓ Manif. at accum. unit		✓
✓ Remote at Drlr's. stn.	✓	
Other:		

EMERG. BACKUP SYST.	Press.	Wkg. Fl.
✓ N2 Cyl No: 3 Type:	1	gal.
Other:	2	gal.
	3	gal.
	4	gal.
	5	gal.
	6	gal.

AUXILIARY EQUIPMENT

		No.	Sz. (in.)	Rated Press.	Connections Weld	Connections Flan.	Connections Thrd.
✓	Fill-Up Line						
	Kill Line						
✓	Control Valve(s)	1					
	Check Valve(s)	1					
	Auxil. Pump Connec.						
✓	Choke Line						
✓	Control Valve(s)	1					
✓	Pressure Gauge						
✓	Adjustable Choke(s)	2					
✓	Bleed Line						
✓	Upper Kelly Cock						
✓	Lower Kelly Cock						
✓	Standpipe Valve						
✓	Standpipe Pressure Ga.						
✓	Pipe Safety Valve						
✓	Internal Preventer						

HOLE FLUID MONITORING EQUIPMENT	Alarm Aud.	Alarm Vis.	Class
✓ Calibrated Mud Pit			A
✓ Pit Level Indicator	✓		B
✓ Pump Stroke Counter	✓		B
✓ Pit Level Recorder		✓	
Flow Sensor			C
Mud Totalizer			
Calibrated Trip Tank			
Other:			

REMARKS: No DS

Hole Fluid Type	Weight	Storage Pits

OGD9 (3/83/DWRR/3M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 688-446

PERMIT TO CONDUCT WELL OPERATIONS

WELL CLASSIFICATION: Development

--- (field code)
--- (area code)
--- (new pool code)
--- (old pool code)

William Hathaway
H. T. HILLIARD & CO.
6840 Grant Avenue
Carmichael, Ca 95608

Woodland, California
September 8, 1988

Your proposal to drill well "Sparling" 1-1,
A.P.I. No. 095-20834, Section 1, T. 7N, R. 1E, M.D. B. & M.,
--- field, --- area, --- pool,
Solano County, dated 9/02/88, received 9/08/88 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. The 8-5/8 " casing is cemented with sufficient cement to fill behind this casing from the shoe to the ground surface.
2. The 4½ " casing is cemented with sufficient cement to fill behind this casing from the shoe to at least 500 feet above the uppermost oil or gas zone.
3. Drilling fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts is used.
4. Blowout prevention equipment conforming to Class III B 2M requirements is installed on the 8-5/8 " casing and maintained in operating condition at all times. See Manual M07 and attached sheet.
5. Blowout prevention equipment conforming to Class "III" 3 M requirements is installed on the 4½ " casing and maintained in operating condition at all times. See Manual M07 and attached sheet.
6. Fresh water protection for this well shall be as shown on attached exhibit A.
7. The division is furnished copies of any draw down or back pressure tests performed. In addition, the Division will monitor the production for a period of six months and if anomalous water production is indicated, remedial action will be ordered.
8. THIS DIVISION IS NOTIFIED:
   a. Before deviating from the proposed casing program and/or placing any plugs in the hole. Additional requirements shall be outlined at that time.
   b. To witness a test of the installed blowout prevention equipment prior to drilling out the shoe of the 8-5/8 " casing. The blind/blank rams shall be tested by the operator prior to calling the Division inspector. Test information of the blind/blank ram test shall be entered on the tour sheet along with the signature of the person in charge.

NOTE: 1) Information on file in this office indicates that the base of the useable fresh water deposits should be encountered at a depth of approximately 2750 feet.

Bond #1158621, dated 7/18/88
RLH:et

Engineer _____

Phone _____

M. G. MEFFERD, State Oil and Gas Supervisor

By _____
Deputy Supervisor
JOHN C. SULLIVAN

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (11/88/DWRR/5M)

EXHIBIT A

NO. P. 688-446

Date SEPTEMBER 8, 1988

H. T. HILLIARD & CO.

WELL NO. "SPARLLNG" 1-1 Sec. 1 T. 7N R. 1E

Field --- County SOLANO

FRESH WATER PROTECTION REQUIREMENTS FOR THE ABOVE WELL ARE AS FOLLOWS:

Fresh waters are to be protected by cement behind the 4½" casing. Sufficient cement shall be used to fill to at least 100 feet above the base of the fresh water deposits, which is estimated to be at 2750'. To insure the above, one of the following operations shall be performed:

a. The 4½ casing shall be cemented through the shoe with 125 percent of the volume of cement calculated to fill the casing/hole annulus from the shoe to 100 feet above the base of the fresh water deposits.

b. The 4½ casing shall be cemented through ports, set between 50 feet and 100 feet below the base of the fresh water deposits, with sufficient cement to fill 300 feet of the casing/hole annulus.

c. A cement bond, temperature survey, or other survey shall be run to determine that the cement in the annulus is 100 feet above the base of the fresh water deposits.

If either item "a" or "b" is not performed, or if a survey in item "c" indicates an unsatisfactory cement lift, the well casing shall be recemented to comply with the above requirements.

STATE OF CALIFORNIA—RESOURCES AGENCY GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
221 WEST COURT STREET, SUITE 1
WOODLAND, CALIFORNIA 95695
(916) 662-4683

September 8, 1988

William Hathaway, Agent
H. T. HILLIARD & COMPANY
6840 Grant Avenue
Carmichael, CA 95608

RE: H. T. Hilliard & Co.
"Sparling" 1-1
Sec. 1, T. 7N., R. 1E, M.D.B. & M.
Solano County

Dear Mr. Hathaway:

This office is in receipt of your request of 9/2/88 regarding confidential status for the above well. The request is denied as the well is classified as a "Development" well. Assembly Bill 3002, which became effective January 2, 1985, restricts confidential status to "Exploratory" wells or "Development" wells where there are extenuating circumstances.

Yours truly,

John C. Sullivan
DEPUTY SUPERVISOR

JCS:cm

Orig: DOG
cc: DOG
HTH
Rig
File

D.G.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well

...ION OF OIL AND G...
RECEIVED
SEP 8 1988
WOODLAND, CALIFORNI...

C.E.Q.A. INFORMATION			
EXEMPT ☐ CLASS ____	NEG. DEC. ☒ S.C.H. NO. ____	E.I.R. ☐ S.C.H. NO. ____	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
See Reverse Side			

FOR DIVISION USE ONLY					
MAP	SEC. SURVEY	CHKD	ENTD	SCANNED	
GIC	1N 2E-1d	JV	JM	✓	✓

1158021 dated 9-8-88

(East Dixon Gas)

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well Sparling No. 1-1, well type _____, API No. 095-20834 (Assigned by Division)

Sec. 1, T. 7N, R. 1E, MD B. & M., [redacted] Field, Solano County

Legal description of mineral-right lease, consisting of 200± acres, is as follows: SW/4 NE/4 and SE/4 of Section 1./ (Attach map or plat to scale.)

Please copy W. N. Hathaway, 6840 Grant Ave., Carmichael, CA 95608

~~Confidential status is requested.~~ No. 105.

Do mineral and surface leases coincide? Yes X No ____. If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well 2800 feet North (Direction) along section ~~line~~ (Cross out one) and 1700 feet West (Direction)

at right angles to said line from the Southeast corner of section ~~property~~ (Cross out one) 1 or

Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☒

If well is to be directionally drilled, show proposed coordinates (from surface location) at total depth: NO

____ feet (Direction) and ____ feet (Direction)

Elevation of ground above sea level 61 feet.

All depth measurements taken from top of Kelly Bushing (Derrick Floor, Rotary Table, or Kelly Bushing) that is 12 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES API	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING (Linear Feet)
8-5/8"	24#	J-55, ERW	Surface	700'	700'	700'
4-1/2"	10.5#	K-55, Smls	Surface	7000'	7000'	CP @ fresh

(A complete drilling program is preferred and may be submitted in lieu of the above program.)

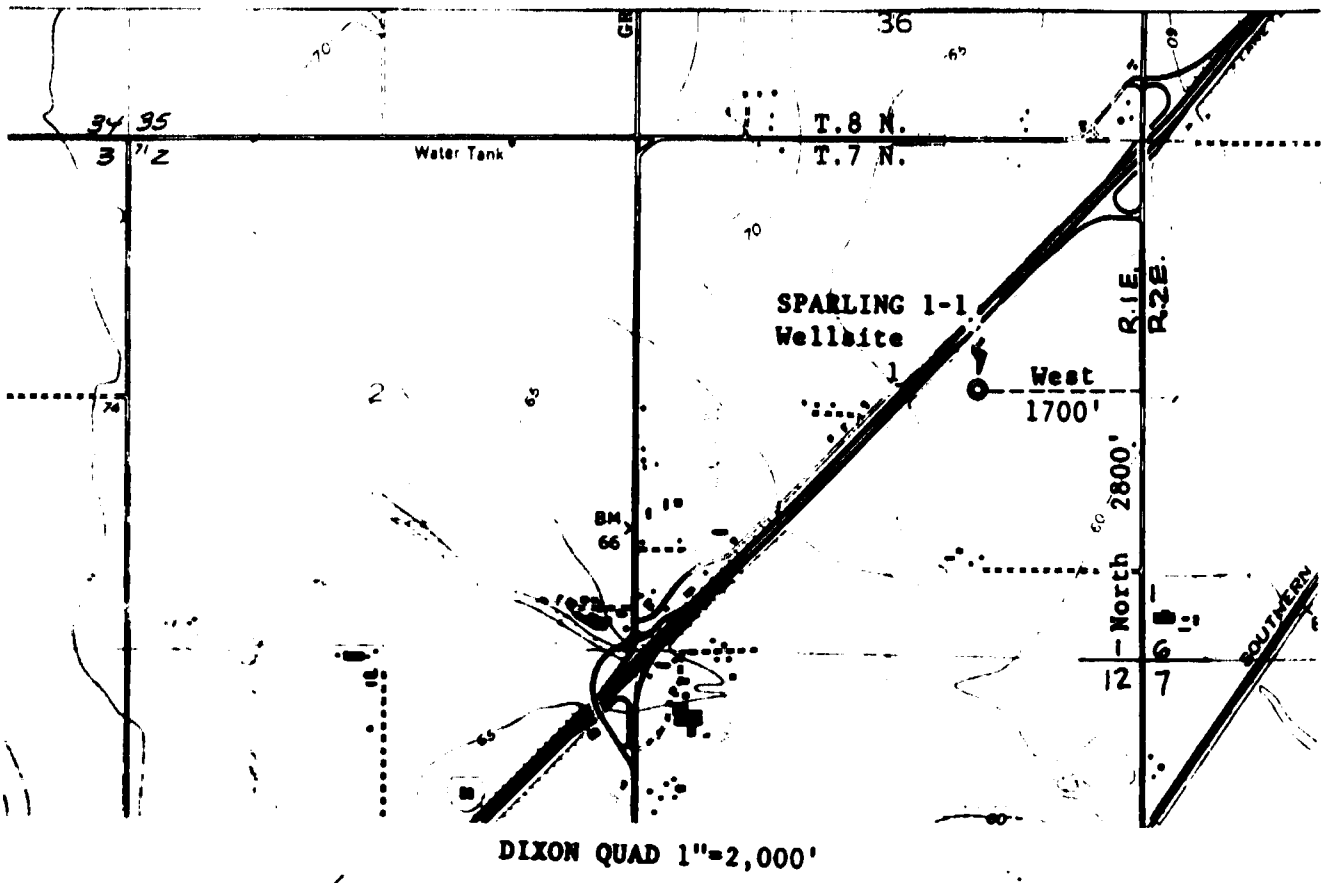
Intended zone(s) of completion Exploratory (Name, depth, and expected pressure) Estimated true vertical depth 7000'

It is understood that if changes in this plan become necessary we are to notify you immediately.

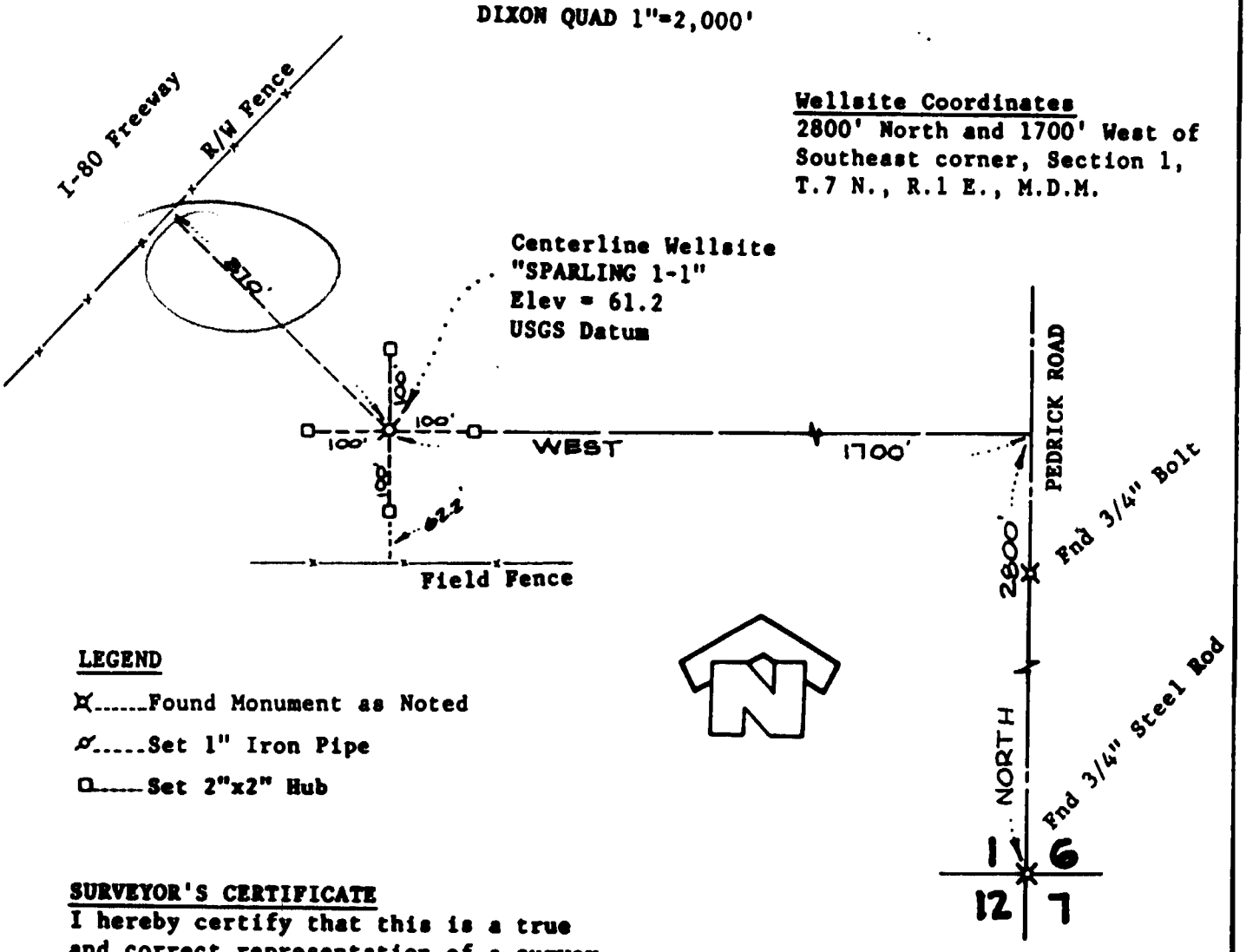
Name of Operator	Type of Organization (Corporation, Partnership, Individual, etc.)	
H. T. Hilliard & Co.	Individual	
Address	**City**	**Zip Code**
131 Stony Circle	Santa Rosa, CA	95401
Telephone Number / **Name of Person Filing Notice**	**Signature**	**Date**
578-2372 / A. Irani		9/2/88

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

OG105 (9/83/GSR1/5M)



DIXON QUAD 1"=2,000'



Wellsite Coordinates
2800' North and 1700' West of Southeast corner, Section 1, T.7 N., R.1 E., M.D.M.

LEGEND

⊠.....Found Monument as Noted

⌀.....Set 1" Iron Pipe

□.....Set 2"x2" Hub

SURVEYOR'S CERTIFICATE

I hereby certify that this is a true and correct representation of a survey made by me or under my direction on August 29, 1988.

Everett E. Thorne, L.S. 3686

BASIS OF BEARINGS

All bearings shown hereon are referenced to the East line of Section 1, T.7 N., R.1 E., M.D.M., the bearing of which is assumed North.

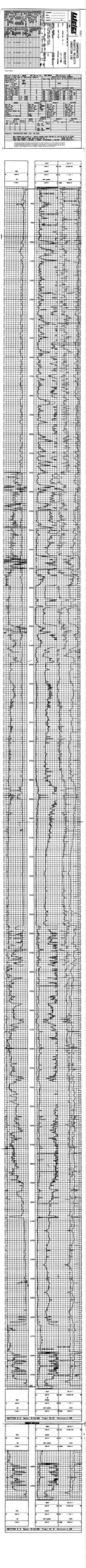
COOPER, THORNE & ASSOCIATES, INC.
CIVIL ENGINEERING AND LAND SURVEYING
3233 MONIER CIRCLE, SUITE 1
RANCHO CORDOVA, CA 95742
(916) 638-0919

Wellsite Survey for
H. T. Hilliard & Co.

"SPARLING 1-1"

Section 1, T.7 N., R.1 E., M.D.M.
Solano County, California

AUG. 88
1" = 200'
JH ET
8716-57
87787



2MUD1

ENERGYLOG

OCT 13 1988
WOODLAND, CALIFORNIA

ENERGY WELL LOGGING SERVICE

COMPANY	H. T. HILLIARD & COMPANY
WELL	"Sparling" No. 1-1
FIELD	East Dixon
LOCATION	Sec. 1, T7N-R1E-MDB&M
	Fr SE cor 2800'N 1700'W
COUNTY	Solano — STATE CA
ELEVATION	61'(GL) 77'(KB)
API WELL INDEX NO.	095-20834
SPUD DATE	8 Sept 88 — TIME 7:00PM
LOG DATES	12 Sept 88 TO 15 Sept 88
LOG DEPTHS	3500' TO 7000'
LOGGING GEOLOGISTS	Terry Clark, Leif Jonsson, Teresa Aydelotte
ENERGYLOG UNIT	Geronimo
CO. GEOLOGIST	Mike Pepper
CO. ENGINEER	Hathaway Engineering
CO. PUSHER	
DRILLING CO.	H. L. Camp Drilling Co.
RIG	one — PUSHER Carl Brooks
MUD COMPANY	Geowestern
MUD ENGINEER	Jay Walker
MUD TYPE	Gypsum/Omnipol
PUMPS: No. 1	National A-P-60 8 1/2 X 5 1/2
No. 2	Omega D-750 8 X 5 1/2

HOLE SIZE		CASING SIZE	
12 1/4"	TO 722'	8 5/8"	TO 722'
7 7/8"	TO 7000'		TO
	TO		TO
	TO		TO

LITHOLOGY SYMBOLS: CHERT, VOLCANICS, INTRUSIVE, LIMESTONE, DOLOMITE, GYPSUM AND ANHYDRITE, SALT, COAL AND LIGNITE, CLAY, SHALE, SILTSTONE, SANDY SILTST, SAND, CNTS SS, CONGLOMERATE

MUD DATA		OTHER DATA	
w	WEIGHT pcf	TG	TRIP GAS
v	VISCOSITY	STG	SHORT TRIP GAS
f	FILTRATE	CG	CONNECTION GAS
fc	FILTER CAKE	CR	CIRCULATED RETURNS
sd	SAND % VOL	NR	NO RETURNS
s	SALINITY ppm Cl⁻	LAT	LOGGED AFTER TRIP
sol	SOLIDS % VOL	C	CARBIDE
T	TEMPERATURE° F	DST	DRILL STEM TEST
Rm	RESISTIVITY OF MUD at 75°F	]	DST INTERVAL
Rf	RESISTIVITY OF FILTRATE at 75°F	[	CORE INTERVAL
		⅃	CASING POINT

DRILLING DATA			
NB	NEW BIT	DIRECT. CO.	
RRB	RERUN BIT	DIRECT. ENGR.	
RTB	RETIP BIT	DIRECT. K.O.P.	
CB	CORE BIT		
WOB	WEIGHT ON BIT (lbs.)		
RPM	ROTARY REVS/MIN		
Pp	PUMP PRESSURE (psi)		
SPM	STROKES/MINUTE		

LIVE OIL IN MUD OR CUTTINGS: • SLIGHT TRACE; •• TRACE; ••• FAIR; •••• GOOD; ••••• EXCELLENT

OIL based on live oil in unwashed cuttings, mud, and % staining of washed cuttings.
GAS detector calibration records 100 units with a mixture of 2% by volume methane in air.
CHROMATOGRAPH values at parts per million (PPM).
DEPTHS derived from drillers pipe measurements at kelly bushing.

ENERGYLOG — DRILL RATE (FT/HR) AND DATA — LITH. — DEPTH — DITCH GAS (TOTAL GAS, PETROLEUM VAPORS, LIVE OIL IN MUD) — CUTTINGS GAS (TOTAL, PET VAP, LIVE OIL) — REMARKS

REMARKS

Ran 16 jts 8 5/8" J-55 24# casing to 722'

Rig water salinity = 90ppm

CL:gry brn/varic,pred sft gry brn mod hyd & sol cl,com m-dk gry frm subfis cl,mnr rd brn frm slty cl,mnr lt gry slty-cl sdy cl

C=24u / 36v / 85ss
Lag=21min / 120spm / #1

w 71 v 36

CL:dk gry stgs,pred sft mod hyd gry brn cl,abnt frm dk-m gry subfis occ slty clst, gd tr sft lt brn w hyd lmpy cl,occ tr v sft lt gry cl/sd

w 71 v 34 f 7.6 fc 2/32
pH 8.3 s 250 sd tr sol 6.5

3746' 3° 15'

CL:m gry stgs,pred dk gry brn sft mod sol cly,abnt m gry slty sft clst,tr lt buff clst, tr mega fos frags,occ tr gnsh fri sltst

SST:m gry stgs,m gry-cl gnsh gry f-m sqnt slp qtz&flds sst /incl of blk glauc & som calc cmtd,mnr bl-gn frm-fri sltst, abnt m gry sft cl,occ tr kaol

CL:m gry-gnsh gry sft mod sol w hyd cl

CLY:m-lt gry occ brn stgs,mod sol hyd sft stky,occ dk gry sft plty-ang mic-mica sltst, tr vf fros qtz sd,biot,forams BATHYSIPHON

4174' 3°00'

C=46u / 36v / 85ss
Lag=21min / 143spm / #1

w 72 v 36

CL:m-lt gry occ tan stgs,sft stky lmpy hyd mod sol,occ dk gry ang-blky sltst,mnr vf-f qtz sd

SLTST:dk-m gry frm-sft plty-ang sli calc mic-mica sbfis grad to lt gry-brn sft cohes cl,mnr vf-f sbrnd-sbang fros qtz sd,tr glauc

SD:m gnsh gry stgs,f-crs p srt sbrnd-sbang pred clr lse qtz, com lt gry grygn blky micmic sli calc sltst,com w hyd mod-v sol cl mtrx

w 71 v 34 f 7.6 fc 2/32
pH 8.3 s 250 sd tr sol 7

loc som lig

SD:m gn gry stgs,f-m occ crs p srt sbrnd-sbang clr lse qtz in sft w hyd mod-v sol cl mtrx,com lt gry sft-frm blky mic sltst,tr pyr

4670' 2°00'

C=42u / 34v / 110ss
Lag=32min / 108spm / R#1

SD:m grygn stgs,f-m sbrnd mod-w srt lse qtz in m grygn sft w hyd mod sol cl mtrx,com gry blky micmic sli calc sltst,tr pyr & pyr forams

w75 v 35

SD:m gry grygn stgs,f-m occ crs mod srt sbang clr-fros qtz in sft w hyd mod-v sol cl mtrx ,com m gry blky mic sli sdy sltst,tr loc lt gry-wh blky hd calc cmt sst strgs,tr spot musc,tr glauc

Rm 3.9 Rf 4.4 s 100 T 101°

5166' 2°45'

SD:lt-m gry occ tan stgs,f-m occ crs mod srtd ang-sbang sli rnd pred fros-clr qtz in sol kaol cl mtrx,mnr blky-plty sli calc sdy dk brn sltst,musc,shl frags,silc mat,r cht

CLST:dk gry-m gry occ lt gry stgs,lmpy stky mod sol pred sft grad to sdy sltst and m-f sbang-sbrnd fros qtz,tr shl frags

Rm 4.1 Rf 5.0 s 100 T 111°

SD:m gry-lt gry stgs,f-vf sbrnd-sbang m-w srtd clr-fros qtz,calc cmtd hd sd strgs,sft kaol mtrx,tr blky and conch lig,varic frags,r musc,dissem pyr,silc mat,biot

C=44u / 34v / 130ss
Lag=37 min / 112spm / #1

SD:m-lt gry occ dk gry-grn stgs,vf-f w srtd sbrnd-rnd clr [illegible] qtz grad to sft stky lt brn cl,mnr sltst,r shl frags

5727' 1°30'

w 76 v 36 f 5.6 fc 2/32
pH 8.3 s 250 sd tr sol 9

SD:m gry grybrn stgs,f-m pred clr sbrnd mod w srt lse qtz in sft w hyd v sol cl mtrx

SD:dk-m gry occ lt brn stgs, vf-f w srtd sbrnd-rnd clr occ fros qtz in mod sol m-lt gry cl mtrx,intb w/hd calc cmtd sd strgs,mnr mic-mica brn sltst,r musc,pyr,shl frags

Rm 4.7 Rf 5.1 s 220 T 98°

w 77 v 38

CL:dk gry-brn occ lt gry stgs, sft lmpy mod sol stky w hyd, occ brn sft-frm plty mic-mica sltst

6258' 1°00'

C=30u / 38v / 145ss
Lag=42 min/ 116spm / #2

w 76 v 38

CL:dk-m gry-brn occ lt gry stgs,sft lmpy mod sol stky w hyd,occ brn sft-frm plty mic-mica sltst,mnr vf-f rnd qtz sd

Rm 4.1 Rf 5.1 s 200 T 92°

w 77 v 37 f 5.8 fc 2/32
pH 8.3 s 200 sd tr sol 9

CL:m-dk grybrn stgs,sft w hyd mod sol stky grad to m grybrn sft blky micmic sli sdy occ carb sltst,tr vf clr sd,tr foram

Rm 4.4 Rf 5.2 s 200 T 100°

SD:m-dk grybrn stgs,vf-f sb-rnd-rnd clr w srt qtz sli consol lt gry-wh sft w hyd kao mtrx,in sft m grybrn w hyd mod sol cl,com m brnsh sft-frm blky mic sli carb sltst

SLTST:m grybrn stgs,m-dk gry blky plty micmic mod sdy sli-mod calc sli carb,in m grybrn sft w hyd mod sol cl mtrx,tr-com vf clr sbrnd-sbang w srt qtz,tr foram,calc cmt sst

SD:m-dk gry grybrn stgs,vf-m occ crs clr-fros sbrnd lse qtz w/ loc sbd wh-lt gry blky hd calc cmt & kao cl mtrx sst, com lt brn blky micmic sli sdy mod calc sltst,tr lig,pyr

SD:dk-m gry stgs,f-vf mod srtd sbrnd-sbang fros-clr qtz in a stky mod sol w hyd cl mtrx,hd calc cmtd sd strgs,abd lt-dk brn mic-mica lam plty sltst, r lig,Foss frags:DENTALIUM

Rm 5.1 Rf 4.9 s 200 T 102°

7000' 1°30'

Ran Welex DIL/Acoustic & Dip-meter

APPENDIX E

DRAINAGE STUDY

CITY OF DIXON, CALIFORNIA

DIXON INNOVATION CENTER

M&P Project No. 22-0022-00 (v.2)

DRAINAGE STUDY

February 28, 2024

PREPARED BY:

mortonpitalo

600 Coolidge Drive, Suite 140
Folsom, CA 95630
Telephone: (916) 927-2400
Fax: (916) 357-7888

TABLE OF CONTENTS

1. BACKGROUND

2. PURPOSE

3. SITE HYDROLOGY

3.1. PRE-DEVELOPMENT CONDITIONS
3.2. POST-DEVELOPMENT CONDITIONS

4. ON-SITE HYDROLOGIC ANALYSIS

4.1 DESIGN RUNOFF FOR WATERSHED AREAS FROM 0 TO 100-ACRES
4.2 RETENTION BASIN DESIGN

5. SUMMARY OF RESULTS

5.1 ON-SITE DRAINAGE PIPE NETWORK
5.2 BASIN SIZING
5.2 NPDES PERMITTING

6. REFERENCES

CITY OF DIXON ENGINEERING DESIGN STANDARDS, 2022
"SOLANO COUNTY HYDROLOGY MANUAL", SOLANO COUNTY WATER AGENCY, JUNE 1999
"DRAINAGE ALTERNATIVES FOR THE NEQ, CITY OF DIXON", WEST YOST & ASSOCIATES, JUNE 2020

LIST OF FIGURES:

Figure 1: Vicinity Map

LIST OF APPENDICES:

Appendix A: Pre-Development Drainage Watershed Exhibit

Appendix B: Post-Development Drainage Watershed Exhibit

Appendix C: City Design Charts 4-4 & 4-6

Appendix D: On-Site Basin Layout

Appendix E: Retention Pond Calculations (City Design Section 4)

DRAINAGE STUDY

PROJECT: DIXON INNOVATION CENTER
LOCATION: CITY OF DIXON, CA
DATE: FEBRUARY 28, 2024

1. BACKGROUND

This drainage study provides design standards for storm drain facilities within the proposed Dixon Innovation Center (DIC) project. The project is located on approximately 38-acres within a portion of the City of Dixon in Solano County California (APN 0111-010-080). The project is located within the City of Dixon's Northeast Quadrant Specific Plan (NQSP). NQSP is located south of I-80, north of Vaughn Road, east of N. First Street, and west of Pedrick Road. See **Figure 1** Vicinity Map.

Figure 1 – Vicinity Map

The project is located within FEMA FIRM Panel 06095C0200F (revised date August 2, 2012). The project is located within Zone X, which is an area determined to be outside the 0.2% (500-year) annual chance floodplain.

2. PURPOSE

The main objective of this study is to provide the required drainage improvements necessary to serve the Dixon Innovation Center (DIC) project without an increase in flows or water surface elevations either upstream or downstream of the project consistent with the City's drainage design requirements. No specific on-site site development is proposed with this entitlement. A future first phase of development will be submitted at a later date with a Design Review application.

Per the City's Storm Drain Design Standards, storm drainage systems shall be designed to:

- ✓ *Convey the 10-year storm in the pipe system. This item will be addressed with the on-site pipe network proposed with the first on-site Design Review application.*
- ✓ *Convey the 100-year storm overland without impact to life safety or structure. This item will be addressed with the on-site pipe network proposed with the first on-site Design Review application.*
- ✓ *Retention ponds will be designed to store the 100-year, 4-day storm assuming 25% of the pond is utilized prior to the storm event. Retention ponds shall provide storage using the 100-year monthly design rainfall and utilizing the City of Dixon spreadsheet analysis as shown in Figure 4-2 of the City of Dixon Engineering Design Standards*

3. SITE HYDROLOGY

3.1. PRE-DEVELOPMENT CONDITIONS

There is currently no drainage infrastructure within the Dixon Innovation Center limits. Historically, the site area has been used for agricultural purposes. The area to the north has been hydrologically isolated from the project and is served by an on-site retention basin facility. There is no shed-on to the site and the project topography slopes generally to the east and southeast. See **Appendix A**.

3.2. POST-DEVELOPMENT CONDITIONS

The project will consist of approximately 38-acres of existing farmland which will be developed for Industrial use under a separate Design Review application. A specific development plan is not being considered with this study; rather, this study is identifying the storm drain obligations required to meet the City's drainage design criteria to mitigate off-site impacts. An on-site retention pond has been identified at the west end of the project, sized to meet the ultimate

buildout of the site with an assumed overall site impervious percentage of 85%. See **Appendix B.**

4. ON-SITE HYDROLOGIC ANALYSIS

As part of the future Design Review for development of the project, an on-site hydraulic analysis will be prepared identifying pipes sizes required and routing to meet City of Dixon Engineering Design Standards. Per the City of Dixon Engineering Design Standards, the storm drain system shall be designed to accommodate the 10-year storm event with the hydrologic grade line (HGL) at least 1.0-foot below the gutter flow line elevations. Site grading will be designed to allow on-site 100-year flows to be conveyed overland to the on-site basin without impacting life safety or structures. The proposed on-site storm drain network will be constructed in a manner to allow the system to be rerouted from the on-site basin over to the future public storm drain network in Professional Drive when available.

An additional analysis shall be performed to address 100-year overland release routing to the Professional Drive frontage at such time the on-site retention basin is no longer required.

The following criteria, set forth in the City of Dixon Engineering Design Standards, shall be used to compute the final design of the runoff and verify conformance with the proposed on-site retention basin design.

- Pipe Material RCP.
- Manning's "n" for RCP pipe is 0.013.
- Minimum storm drain main pipe size is 18 inches, the minimum diameter of a lateral from a drainage inlet to a manhole is 12 inches.
- Minimum flow velocity of at least 2.0 feet/sec flowing full.

4.1 DESIGN RUNOFF FOR WATERSHED AREAS FROM 0 TO 100-ACRES

The City of Dixon Drainage Design Standards identifies the use of runoff charts for areas up to 100-acres. These charts, Figures 4-4 & 4-6, are provided in **Appendix C.** Based on the charts, the following project peak flows have been calculated:

- ✓ 10-Year peak flow: 46.0 cfs
- ✓ 100-Year peak flow: 66.0 cfs

For design purposes, this analysis has assumed an 85% impervious percentage for the proposed industrial land use.

4.2 RETENTION BASIN DESIGN

The on-site retention basin, designed per City standards DS4-9, will be utilized to retain on-site stormwater accumulations. The retention pond was sized to accommodate ultimate buildout of

the site per the spreadsheet "Retention Pond Sizing" obtained from the city, per City of Dixon Engineering Design Standards, Section DS4-9 – Retention Pond Criteria. See **Appendix D.** Soil infiltration rates were obtained immediately adjacent to the site with infiltration rates of 0.5 in/day up to 11.0 in/day. An average of the various test location infiltration rates was calculated and a safety factor of 3.0 was applied to achieve a preliminary design infiltration rate of 2 inches per day. See **Appendix E** for Retention Basin sizing spreadsheet**.**

The proposed basin will provide a minimum of 42.1 acre-feet of storage with a design percolation rate of 2 inches per day, although there is evidence that a higher infiltration rate can be expected. The retention basin is proposed to be approximately 11 feet deep with no outfall. The proposed basin will remain in operation until an NEQSP piped drainage solution is available to accommodate on-site flows to a regional basin facility.

Design results were as follows:

- ✓ Pond Area: 5.16 acres (13% of the gross project area)
- ✓ Pond Depth: 11 feet including 1 foot of freeboard
- ✓ Pond Side Slopes: 4:1
- ✓ Max Pond Storage: 42.1 ac-ft

5. SUMMARY OF RESULTS

5.1 On-Site Drainage Pipe Network

The drainpipe network will be designed with the first Design Review application.

5.2 Basin Sizing

A new on-site retention basin will be constructed to mitigate the drainage impacts of the Dixon Innovation Center Project. The retention basin will provide 42.1 acre-feet of storage at a pond depth of 11 feet including a minimum of 1-foot of freeboard.

With the installation of the on-site retention basin, there will be no increase in peak flow and/or water surface elevations up shed or down shed of the project site.

5.2 NPDES Permitting

A Storm Water Pollution Prevention Plan (SWPPP) will be prepared in conformance with the State Water Resources Control Board's latest General Construction Permit Guidelines. The SWPPP will be implemented during the construction phases of the project.

6. REFERENCES

City of Dixon Engineering Design Standards, 2022

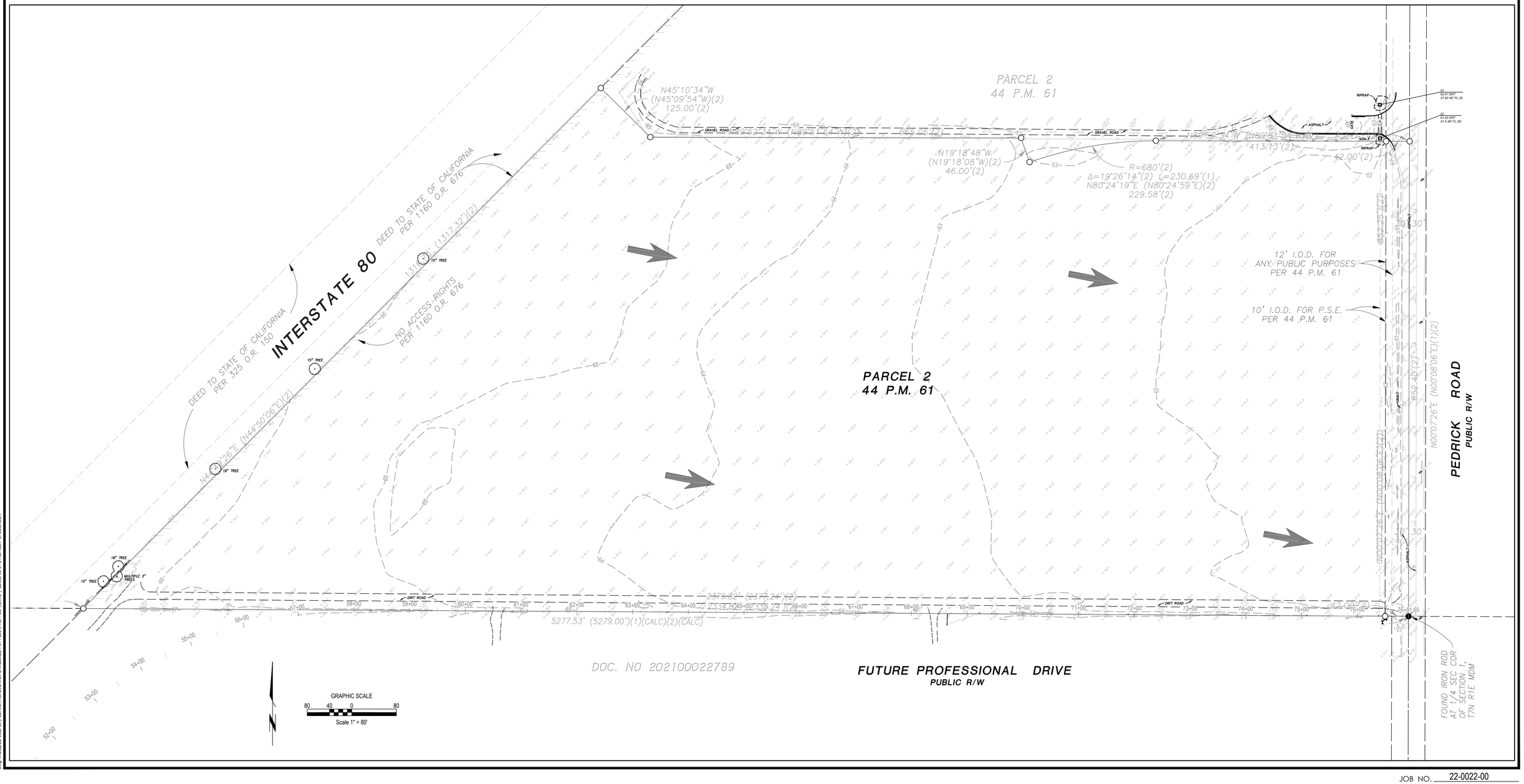
"Solano County Hydrology Manual", Solano County Water Agency, June 1999

"Drainage Alternatives for the NEQ, City of Dixon", West Yost & Associates, June 2020

APPENDIX A:

Pre-Development Drainage Watershed Map

EXHIBIT A
DIXON INNOVATION CENTER
PROJECT PRE-DEVELOPMENT DRAINAGE WATERSHED EXHIBIT (24.0228)

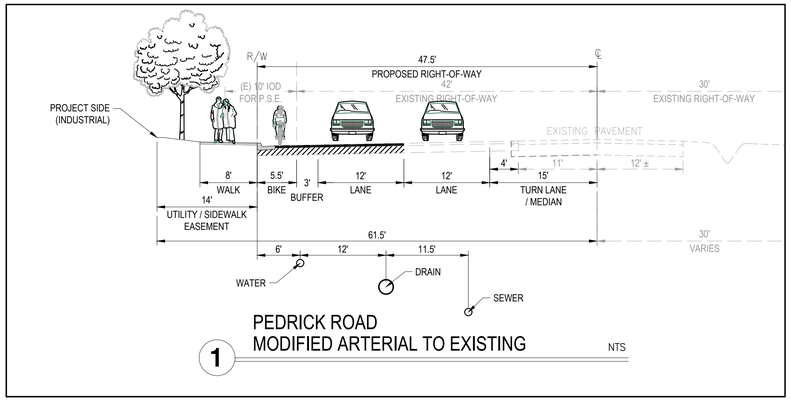


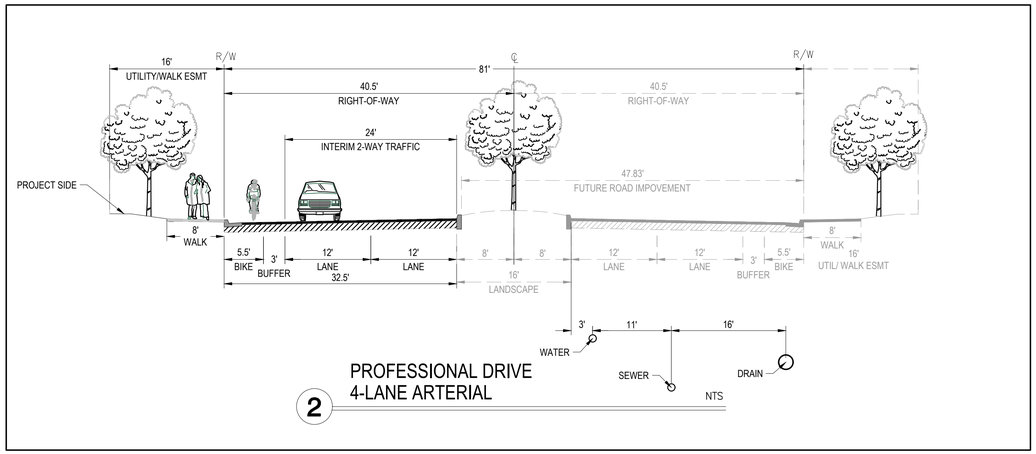
Dwg: X:\2022\22-0022-00 (PEDRICK ROAD)\DWG\PLAN\220022-PW1-PB8 (PRE-POST).DWG | Saved: 03-01-24 08:48am SPEDERSEN

JOB NO. 22-0022-00

APPENDIX B:

Post-Development Drainage Watershed Map





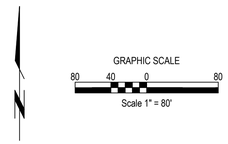
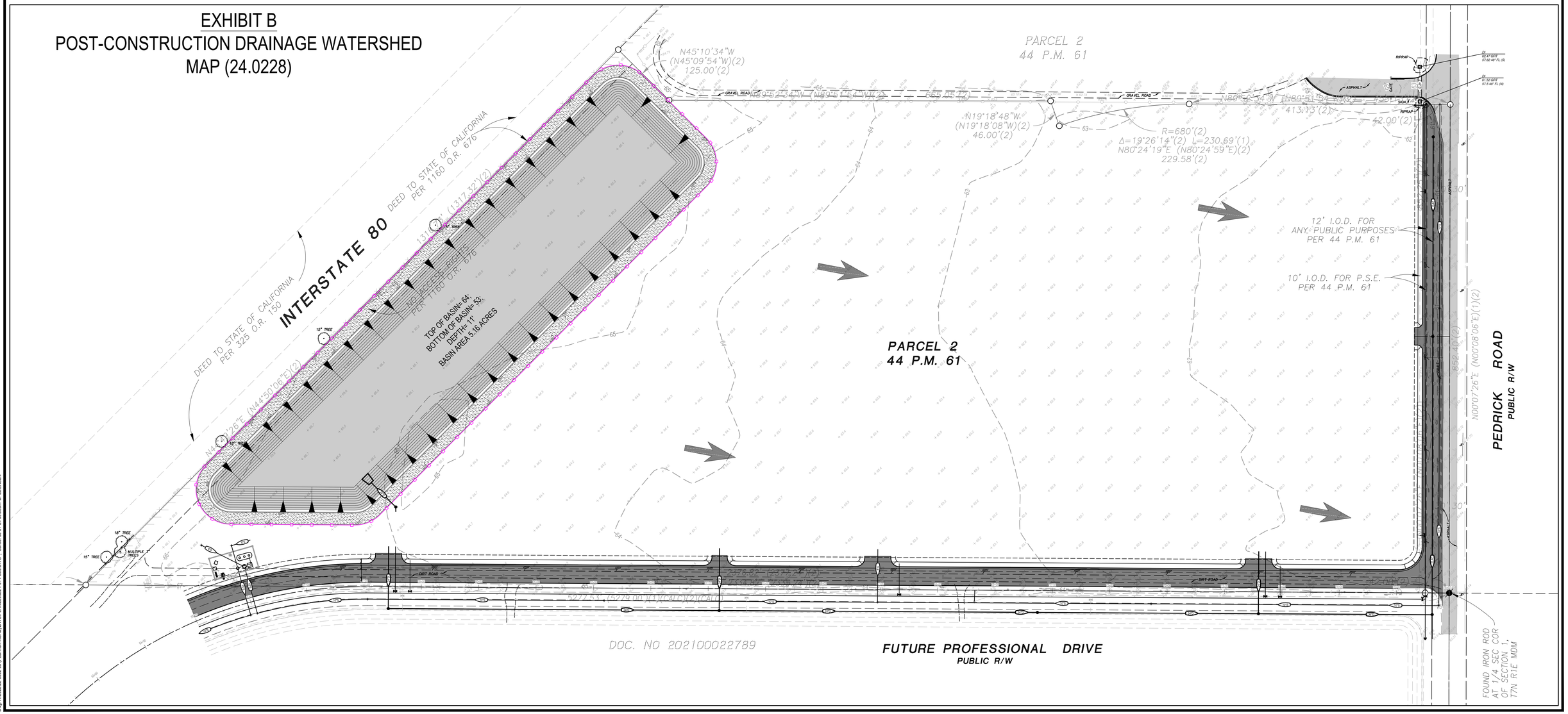


EXHIBIT B
POST-CONSTRUCTION DRAINAGE WATERSHED MAP (24.0228)

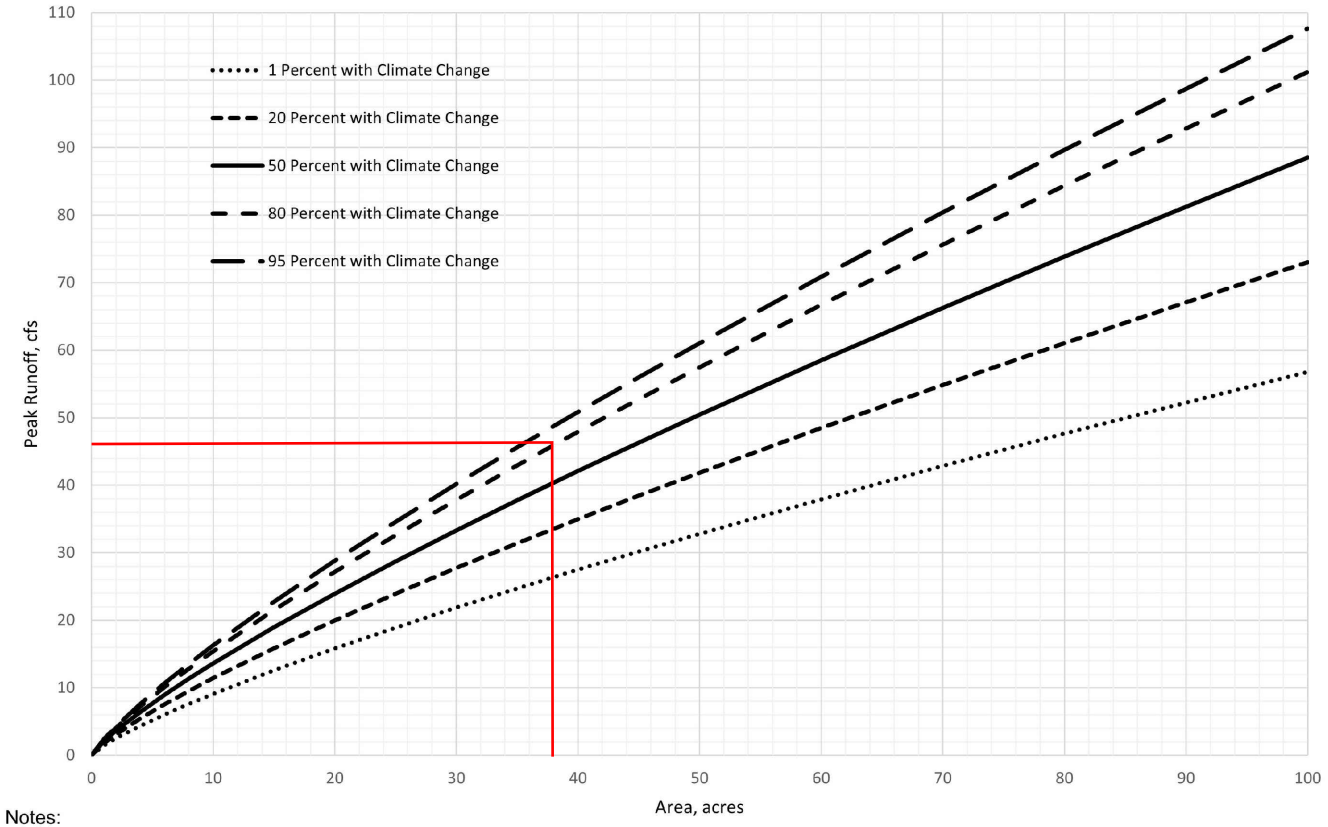


Dwg: X:\2022\22-0022-00\ (PEDRICK ROAD)\(HWDP)_HW220022-PH1P000.DWG | Saved: 03-31-24 09:39am SPIDERSEN

JOB NO. 22-0022-00

APPENDIX C:

City Design Charts



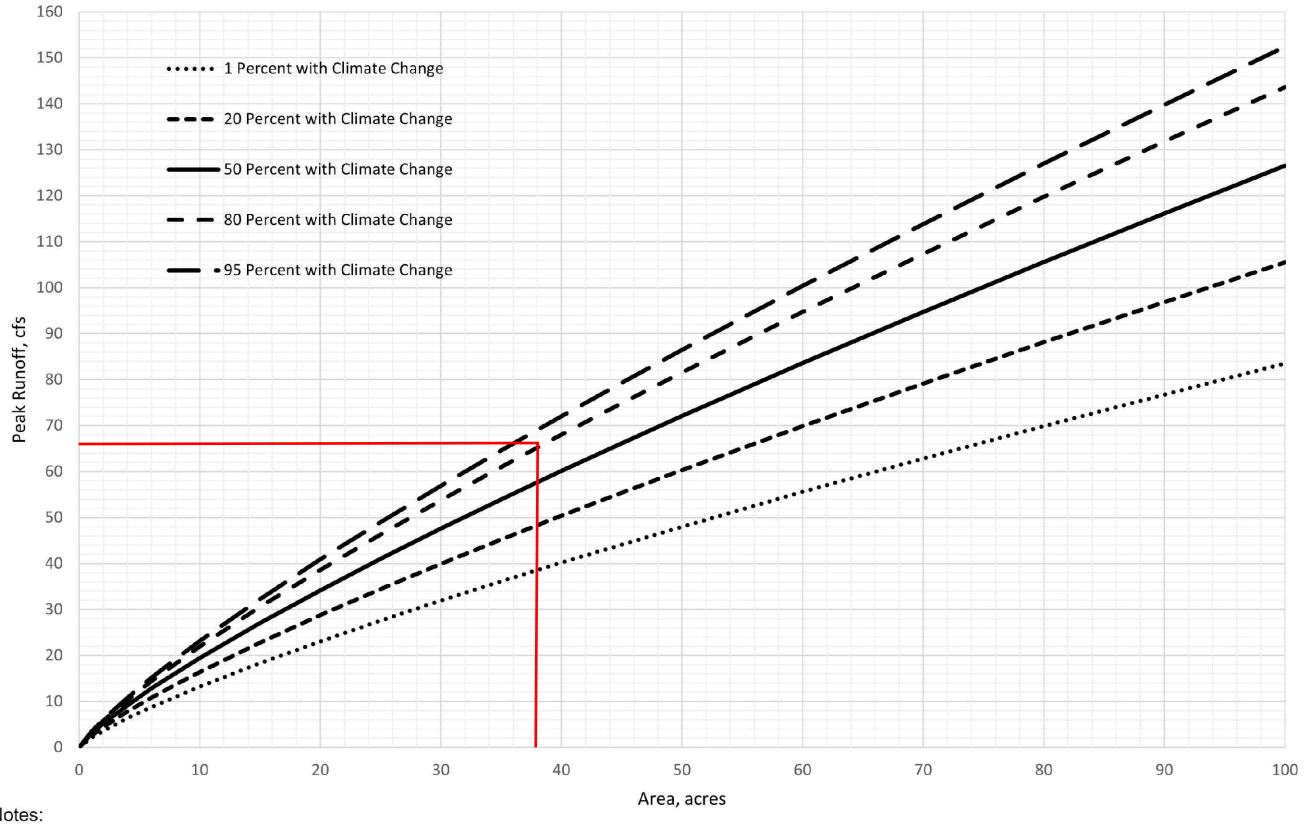
Notes:
These runoff curves for developed land were generated with the Sacramento Method in XPSWMM, as follows:
- Hydrologic soil group (HSG) D was used (for the high clay content and for compaction during construction activities).
- The watershed is fullly developed (for the channelization data).
- An average ground slope of 0.001 was used.
- The lag time parameters were calculated as length of waterhsed, $L = 737.9 * A^{0.5}$ where A = area (in acres), and $L_c = 0.5 * L$.

CITY OF DIXON
ENGINEERING
DESIGN STANDARD

Approved: March 2022

10-YEAR PEAK FLOW
80 - 640 ACRES

FIG. 4-4



Notes:
These runoff curves for developed land were generated with the Sacramento Method in XPSWMM, as follows:
- Hydrologic soil group (HSG) D was used (for the high clay content and for compaction during construction activities).
- The watershed is fullly developed (for the channelization data).
- An average ground slope of 0.001 was used.
- The lag time parameters were calculated as length of waterhsed, $L = 737.9 * A^{0.5}$ where A = area (in acres), and $L_c = 0.5 * L$.

CITY OF DIXON
ENGINEERING
DESIGN STANDARD

Approved: March 2022

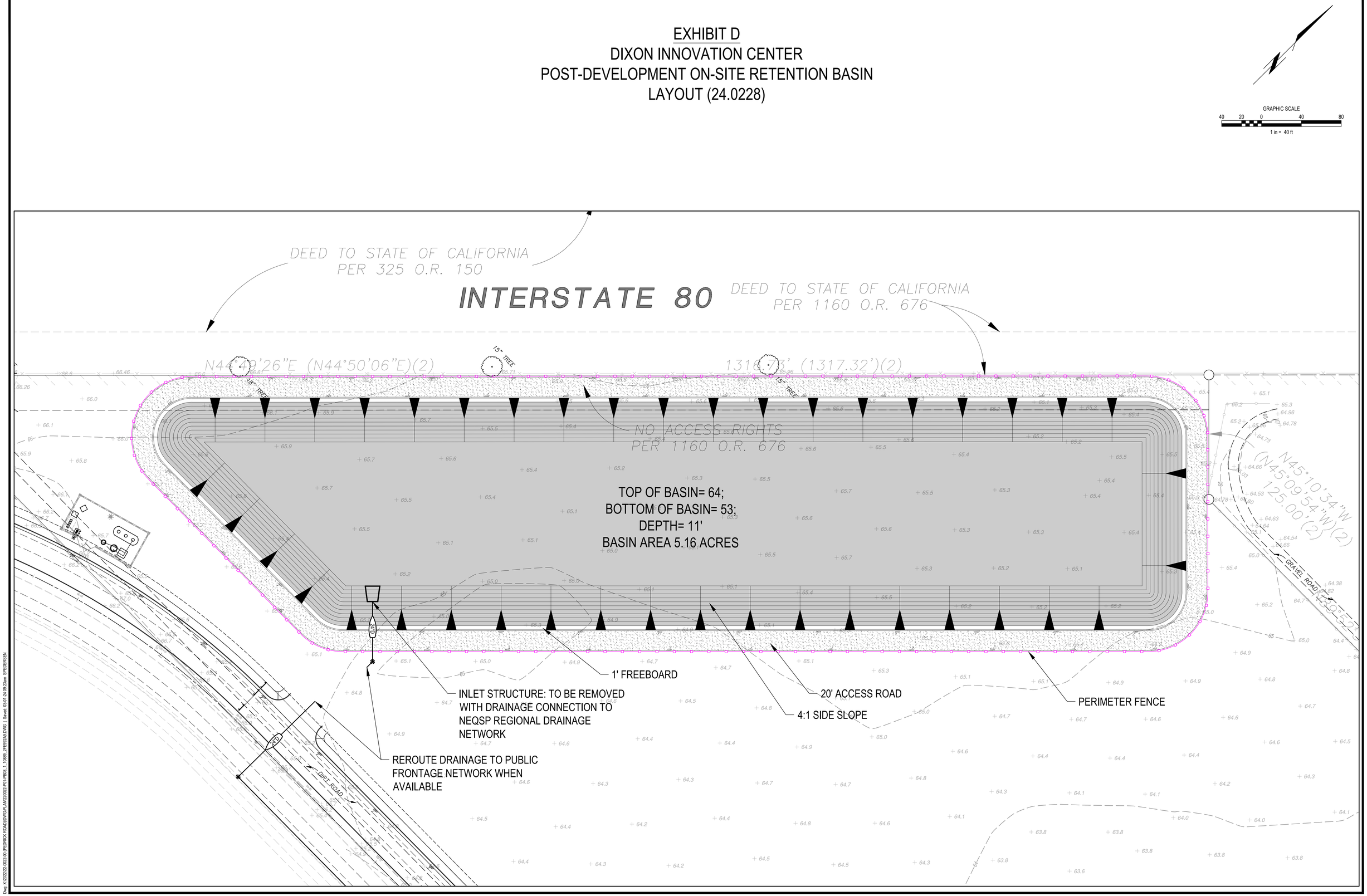
100-YEAR PEAK FLOW
80 - 640 ACRES

FIG. 4-6

APPENDIX D:

Post-Development On-Site Retention Basin Layout

EXHIBIT D
DIXON INNOVATION CENTER
POST-DEVELOPMENT ON-SITE RETENTION BASIN
LAYOUT (24.0228)



JOB NO. 22-0022-00

APPENDIX E:

On-Site Retention Pond Calculations

Dixon Innovation Center
Preliminary Pond Sizing

Rainfall-Runoff Analysis

Impervious Acreage:	32.64	85%
Pervious Acreage:	5.76	
Total Acreage:	**38.4**	

Date	Design Rainfall	Impervious Area Runoff	Effective Rainfall	Pervious Runoff	Total Runoff
	in	ac-ft	in	ac-in	ac-ft
October	0.33	0.90	0.00	0.00	0.90
November	4.21	11.45	1.55	0.74	12.20
December	2.86	7.78	0.76	0.36	8.14
January	12.86	34.98	5.61	2.69	37.67
February	8.61	23.42	6.60	3.17	26.59
March	9.62	26.17	4.73	2.27	28.44
April	1.43	3.89	0.06	0.03	3.92
May	0.67	1.82	0.00	0.00	1.82
June	0.71	1.93	0.00	0.00	1.93
July	0.35	0.95	0.00	0.00	0.95
August	0.00	0.00	0.00	0.00	0.00
September	0.00	0.00	0.00	0.00	0.00
Total	**41.65**	**113.29**	**19.31**	**9.27**	**122.56**
Maximum	**12.86**	**34.98**	**6.60**	**3.17**	**37.67**

Retention Basin Water Balance Analysis

Retention Pond Area (acres):	5.16	25% of Maximum Volume (ac-ft):	10.5
Retention Pond Depth (ft)	11.0		
Retention Pond Side Slope (_H:1V)	4		

Start-of-Month Volume of Stored Water	Water Surface Area	Water Depth	Potential Unit Evaporation Rate	Potential Evaporation Loss	Potential Unit Percolation Loss [(a)]	Potential Percolation Loss	Total Loss	End-of-Month Volume of Stored Water
ac-ft	ac	ft	in	ac-ft	in	ac-ft	ac-ft	ac-ft
0.00	0.0	0.0	4.03	0.00	62.00	0.00	0.00	0.90
0.90	3.5	0.3	2.10	0.61	60.00	17.32	0.90	12.20
12.20	3.9	3.3	1.55	0.50	62.00	20.18	12.20	8.14
8.14	3.8	2.3	1.55	0.49	62.00	19.41	8.14	37.67
37.67	4.8	9.1	2.24	0.90	56.00	22.56	23.46	40.80
40.80	5.0	9.8	3.72	1.54	62.00	25.59	27.13	42.11
42.11	5.0	10.0	5.10	2.12	60.00	24.94	27.06	18.97
18.97	4.2	5.0	6.82	2.37	62.00	21.53	18.97	1.82
1.82	3.5	0.5	7.80	2.27	60.00	17.47	1.82	1.93
1.93	3.5	0.6	8.68	2.54	62.00	18.12	1.93	0.95
0.95	3.5	0.3	7.75	2.24	60.00	17.32	0.95	0.00
0.00	0.0	0.0	5.70	0.00	62.00	0.00	0.00	0.00
			57.04	**15.57**	**730.00**	**204.45**	**122.56**	
42.1	**5.0**	**10.0**	**8.68**	**2.54**	**62.00**	**25.59**	**27.13**	**42.1**

(a) These percolation rates are based on on-site testing and reflect 20% of the calculated percolation rate witnessed during field tesing.

Infiltration Rate (in/day): 2

Depth: 10.0

APPENDIX F

VMT ASSESSMENT

DKS 1970 BROADWAY, SUITE 740, OAKLAND, CA 94612 • 510.763.2061 • DKSASSOCIATES.COM

DIXON INNOVATION CENTER VMT ASSESSMENT

DATE: October 22, 2024

TO: Nick Pappani | Raney Planning and Management

FROM: Alexandra Haag | DKS Associates
Erin Vaca | DKS Associates

SUBJECT: Dixon Innovation Center VMT Assessment DRAFT R.2 Project #22161-000

INTRODUCTION

This memorandum documents the VMT characteristics of the Dixon Innovation Center (DIC) project in Dixon California. The project site falls within the Northeast Quadrant Specific Plan area of Dixon. The project is bounded by Pedrick Road to the east, the TEC Equipment facility (truck and trailer dealer) to the north and the future Professional Drive to the south. The project will construct the frontage portion of Professional Drive connecting to Pedrick Road. The project consists of 563,828 square feet of industrial business park uses on about 37.6 acres. A preliminary site plan is shown in **Figure 1**.

The VMT characteristics of the DIC project are also compared to a "No Project" condition. This condition corresponds to the highway commercial land use that would otherwise be permitted. Under the No Project condition, the project site is represented as 377 thousand square feet of highway commercial uses.

METHODOLOGY AND ANALYSIS STANDARDS

- This assessment utilizes the methodologies specified in the City of Dixon's Transportation Impact Analysis guidelines to calculate the VMT characteristics of the proposed project. Per the guidelines, projects that cannot be presumed to have a less than significant impact will require a formal VMT analysis. Projects that would significantly alter existing or planned land uses also require project specific VMT calculations.
- The City of Dixon maintains a traffic model that may be used to analyze the VMT characteristics of proposed projects and has been applied to analyze the Dixon Innovation Center project. VMT tabulation scripts and a VMT analysis spreadsheet previously developed to set the City's VMT baseline and thresholds of significance were also applied.

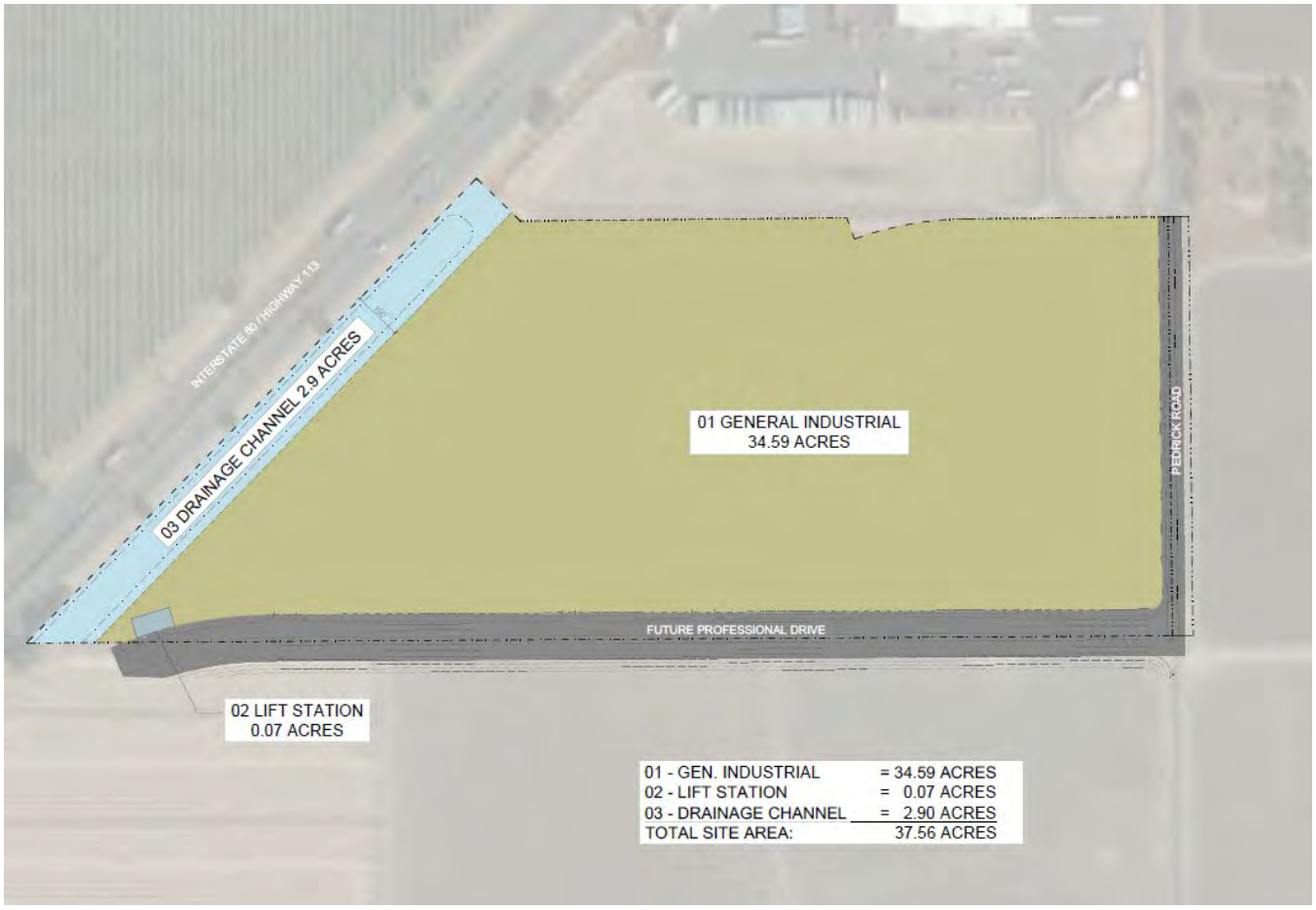


FIGURE 1: PRELIMINARY PROJECT SITE PLAN

DIXON TRAVEL DEMAND MODEL

The Dixon travel demand model is a three-step model maintained by the City of Dixon to forecast local vehicular traffic flows. The model's baseline scenario was calibrated to land use as of late 2018 and spring 2019 traffic counts. Model inputs include housing units, and employment by type. The model outputs include average weekday trip generation and distribution, as well as network traffic assignments by time period.

The model study area includes the land within the Dixon city limits as well as a few adjacent Sphere of Interest zones in unincorporated Solano County. The model network links at the gateway zones include a distance adjustment to estimate the true trip length of trips entering and leaving the model study area. These distance adjustments were derived from average trip lengths for trips crossing these gateways in the California Statewide Travel Demand Model. Thus, the Dixon travel model can be used to estimate total daily VMT for both internal-internal trips and internal-external trips. More information on the model can be found in the model development report (City of Dixon Travel Model Update, October 2019).

VMT CALCULATIONS IN THE DIXON MODEL

VMT calculations using the Dixon travel demand model are carried out within the model with final processing in a spreadsheet as follows:

1. Sum daily trip matrices in production-attraction format for all home-based trip purposes (home based work, home based local shopping, home-based regional shopping, home-based school, and the home-based other).

2. Multiply home-based trip matrices by distance skim matrix for the midday period to calculate a home-based VMT matrix.

3. Multiply home-based work matrix by distance skim matrix for the a.m. peak period to calculate a home-based work VMT matrix.

4. Export row and column sums of the VMT matrices to a table that includes trips and VMT for every Transportation Analysis Zone (TAZ) as the production (residential location) and attraction (employment location) zone.

5. Combine the tabular VMT outputs with population and jobs by TAZ to calculate the relevant VMT metrics.

For this analysis, population by TAZ as developed for the Dixon General Plan 2040 was applied for calculation of VMT per capita. Total employment by TAZ was applied for the calculation of VMT per job.

LAND USE INPUTS

Employment in the DIC project TAZ was calibrated to approximate the daily trip generation reported in the Traffic Impact Analysis Report (November 27, 2023), which assumes 7,014 daily trips, 761 AM peak hour and 688 PM peak hour trips. The Traffic Analysis Report trip generation was based on the ITE trip generation rate for Business Parks (code 770) or 12.44 average daily trips per thousand square feet. This was translated into 2,080 office service jobs for the traffic model inputs.

The No Project condition was represented by 600 retail jobs based on an employment density of 628 square feet per job. Land use inputs for the project site are summarized in **Table 1**.

TABLE 1: DIXON TRAFFIC MODEL LAND USE INPUTS (TAZ 100)

	OFFICE-SERVICE JOBS	RETAIL JOBS
DIC PROJECT	2080	
NO PROJECT		600

Source: DKS Associates.

LAND USE AND NETWORK ASSUMPTIONS

The land use scenario developed to analyze the Dixon Innovation Center project reflects an assumed opening year of 2025. The 2025 land use inputs for the City of Dixon traffic model were modified to reflect only approved projects that are expected to be in place at the time of the DIC project opening. Any land use development project that did not have an approved building permit at the time of Notice of Preparation (NOP) was excluded from analysis.

For the DIC project scenario, the analysis assumed full buildout of the Innovation Center as phasing is currently unknown.

The following road network improvements were assumed for the 2025 opening year scenario:

- Widening of southbound Pedrick Road to two lanes along the Dixon Innovation Center frontage.
- Construction of Professional Drive (two lanes) along the Dixon Innovation Center frontage.

THRESHOLDS OF SIGNIFICANCE

Table 2 summarizes the adopted baseline VMT rates and thresholds of significance. The proposed thresholds are 85 percent of the existing baseline VMT per capita or employee, as calculated over the Dixon model area for residential and employment land uses. Projects expected to generate daily VMT per unit at or under the applicable threshold can be presumed to have a less than significant VMT impact. Projects expected to generate VMT over the applicable threshold of significance must demonstrate mitigation to avoid a finding of impact.

TABLE 2: CITY OF DIXON ADOPTED VMT BASELINES AND THRESHOLDS OF SIGNIFICANCE FOR LAND DEVELOPMENT PROJECTS

LAND USE	AVERAGE VMT RATE	85% AVERAGE VMT RATE
RESIDENTIAL	21.8 VMT/Capita	18.6 VMT/Capita
NON-RESIDENTIAL (EMPLOYMENT)	16.7 VMT/Job	14.2 VMT/Job

Source: Dixon SB 743 Implementation Procedures Report (2022).

ANALYSIS

PROJECT SCREENING

Per the City of Dixon's adopted transportation analysis procedures, projects may be presumed to have less than significant VMT impacts due to small size, proximity to high quality transit, and housing affordability. In addition, projects located in areas that have been shown to generate VMT below the selected threshold of significance may be presumed to have less than significant impacts and no further analysis would be required.

Once a project's local transportation analysis requirements are determined, VMT analysis requirements are determined following the process diagrammed in **Figure 2**. The proposed Dixon Innovation Center Project does not meet any of the criteria for a presumption of less than significant impacts, as discussed below.

SCREENING CRITERION: SMALL OR INFILL PROJECTS

The Governor's Office of Planning and Research (OPR) advises that projects generating fewer than 110 trips per day could be presumed to have less than significant VMT impacts. According to the ITE Trip Generation Manual 11th Edition and the Traffic Impact Analysis (November 2023) prepared by Flecker Associates, the proposed project would generate 7,041 daily trips, therefore, the project cannot be presumed to have a less than significant impact.

SCREENING CRITERION: LOW INCOME HOUSING

OPR advises that residential projects consisting of 100 percent affordable housing units may be presumed to have less than significant VMT impacts. The proposed Dixon Innovation Center project does not include any affordable housing units and therefore does not meet this screening criterion.

SCREENING CRITERION: LOCAL SERVING RETAIL

The OPR technical guidance recommends that retail projects be analyzed in terms of net VMT impacts (i.e., total VMT that would occur with and without the project). By increasing retail opportunities closer to homes and workplaces, local serving retail may decrease overall VMT if it substitutes for longer trips. OPR advises that projects of 50,000 or fewer square feet for an individual retail establishment may be used to distinguish local serving retail from more regional establishments that draw customers from greater distances. The proposed project does not include local serving retail so this screening criterion is not applicable.

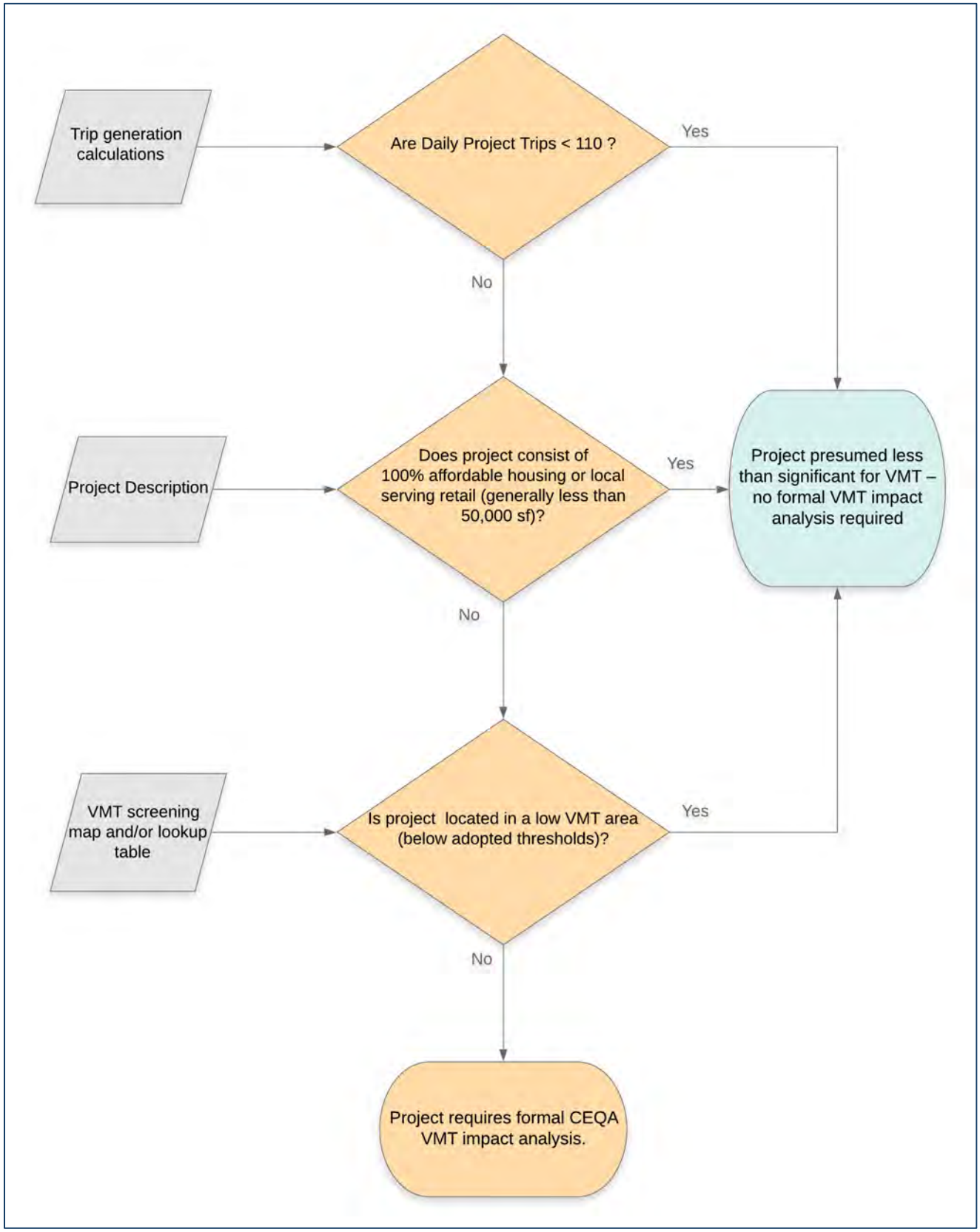


FIGURE 2: VMT SCREENING PROCESS

SCREENING CRITERION: PROXIMITY TO TRANSIT

Section 15064.3 of the CEQA Guidelines specifies that residential or office projects within one-half mile of an existing major transit station or stop along an existing high-quality transit corridor can be presumed to have a less than significant transportation impact. Per OPR guidance and Public Resources Code § 21064.3, major transit stops are defined as a site containing an existing rail transit station or the intersection of at least two bus routes with a frequency of service interval of at least 15 minutes during the morning and afternoon peak commute periods. High-quality transit corridors are defined as having fixed route bus service with service intervals no longer than 15 minutes during the peak commute hours. There is currently no transit service in Dixon that meets these criteria.

SCREENING CRITERION: LOCATION IN LOW VMT AREA

The OPR technical guidance discusses screening of residential and office projects based on location. Residential and office projects that are in areas with low VMT, and that incorporate similar features will also tend to generate similarly low VMT. VMT screening maps have been prepared for the City of Dixon using the City's travel demand model. **Figure 3** shows the VMT generation rates for Home Based Work VMT per Non-Agricultural Employees land uses. The project location falls into an area with no existing non-agricultural land use and therefore it is not possible to assume VMT rates for the project based on the screening map. Per Dixon SB 743 Implementation Guidelines, projects sited in these areas require a formal VMT analysis.

OPENING YEAR SCENARIOS

Two opening year scenarios were analyzed using the Dixon Traffic Model, representing the DIC Project and No Project scenarios. Two additional variations of these scenarios were prepared representing different assumptions about the presence of the Dixon 257/Campus project to the south of the project site within the NEQSP area. Note that the Dixon 257/Campus project is undergoing the environmental and approval process as of this writing.

As summarized in **Table 3**, the VMT per employee of the project TAZ does not vary much with the land use assumed for the project TAZ, resulting in about 17 VMT per employee. However, the total daily VMT of the project site TAZ would be higher with retail uses than with the proposed DIC business park uses (i.e., the No Project scenarios).

For the scenarios labeled, "No Campus", the lands to the south of the DIC site are assumed to develop as analyzed under the Dixon General Plan EIR. Under the scenarios labeled "With Campus Buildout", the presence of the more intensive land uses associated with the Dixon 257/Campus project would increase local interaction with the project site, reducing the VMT per employee of the DIC project site from about 17 to 16.

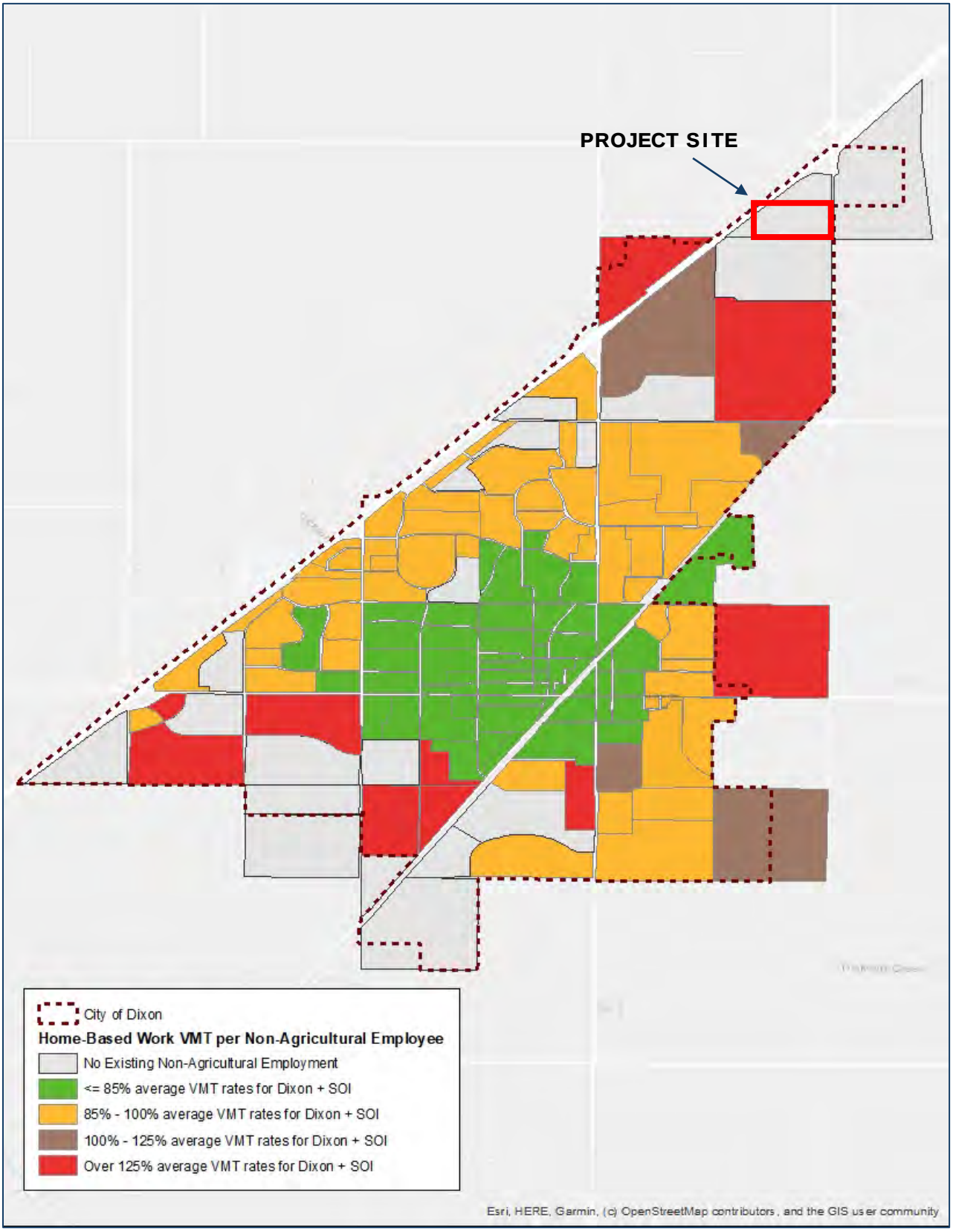


FIGURE 3: VMT PER EMPLOYEE BY TRANSPORTATION ANALYSIS ZONE

TABLE 3: OPENING YEAR VMT RATES

SCENARIO	SITE EMPLOYMENT	HBW VMT PER EMPLOYEE	PCT MITIGATION REQUIRED [a]	TOTAL DAILY VMT [b]
DIXON INNOVATION CENTER LAND USE, NO CAMPUS	2080 office	17.03	16.6%	119,962
DIXON INNOVATION CENTER LAND USE, WITH CAMPUS BUILDOUT	2080 office	15.94	10.9%	108,161
NO PROJECT (HIGHWAY COMMERCIAL) - NO CAMPUS	600 retail	17.07	16.8%	139,003
NO PROJECT (HIGHWAY COMMERCIAL) - WITH CAMPUS BUILDOUT	600 retail	15.91	10.7%	125,415

[a] Based on a threshold of significance of 14.2 VMT per employee.

[b] Total daily VMT associated with project site TAZ.

Sources: Dixon SB 743 Implementation Procedures Report (2022), Dixon Travel Model.

CUMULATIVE PLUS APPROVED PLUS PROJECT

Although the VMT impacts of projects should be assessed under conditions as close to the VMT baseline as possible, a 2040 model run was conducted for informational purposes. This model run reflects the anticipated future land use in Dixon and full buildout of the NEQSP roadway network, both of which have VMT-reducing effects. As shown in **Table 4**, while the cumulative VMT results are lower than the baseline average for the City of Dixon, the home-based work VMT still exceeds the threshold of significance by 9.5%.

TABLE 4: CUMULATIVE PLUS PROJECT VMT RATES

LAND USE	DIXON THRESHOLD OF SIGNIFICANCE	PROJECT SITE VMT	MITIGATION REQUIRED
NON-RESIDENTIAL (EMPLOYMENT)	14.2 VMT/Job	15.7 VMT/job	9.5%

Sources: Dixon SB 743 Implementation Procedures Report (2022), Dixon Travel Model.

SUMMARY OF FINDINGS

The VMT characteristics of the Dixon Innovation Center project site are closely tied to its location. Whether the land use is office or retail jobs, the home-based VMT lands at about 17 per employee. The presence of more intensive land uses associated with the proposed Dixon 257/Campus project to the south of the project site would reduce the DIC site VMT per employee to about 16. However, the retail uses representing a No Project condition would result in greater overall VMT (including all trip purposes) associated with the project site than for the Project condition.

APPENDIX G

WATER STUDY

DIXON INNOVATION CENTER (DIC)

TECHNICAL MEMORANDUM

Supplemental Water Capacity Analysis**

** This technical memo serves to identify the water facilities required based on the anticipated build-out of the Dixon Innovation Center (DIC) and to show that those off-site facilities have been accounted for in THE CAMPUS (Dixon 257) DRAFT WATER STUDY dated February 2024. This study was submitted back to the City of Dixon February 16th, 2024, and has been included for reference in this technical memo. The West Yost Technical Memorandum dated June 22, 2023 has also been reference in this memo.

TABLE OF CONTENTS

I. BACKGROUND 2
II. PURPOSE 3
III. LAND USE 3
PRE-DEVELOPMENT CONDITIONS: 3
POST-DEVELOPMENT CONDITIONS: 3
IV. WATER INFRASTRUCTURE 3
EXISTING WATER FACILITIES: 3
PROPOSED WATER FACILITIIES: 3
On-Site 3
Off-Site 4
V. CONCLUSION 5
Water Capacity: 5
VI. THE CAMPUS (Dixon 257) DRAFT WAER STUDY dated January 2024 5
VII. WEST YOST TECHNICAL MEMORANDUM dated June 22, 2023 5
NEQ Potable Water Hydraulic Evaluation 5

I. BACKGROUND

The Dixon Innovation Center project site is approximately 38 acres and is located in Dixon, CA, in the Central Valley region of Northern California, along the Interstate 80 (I-80) freeway corridor (APNs 0111-010-080). The project is located within the City of Dixon's Northeast Quadrant Specific Plan (NQSP). The project site is located within the area of land bounded by existing industrial to the north, Pedrick Road to the east, Interstate 80 to the west and undeveloped property to the south (future Professional Drive alignment). See **Figure 1** below for the vicinity map.

FIGURE 1- VICINITY MAP

II. PURPOSE

The main objective of this Technical Memo (TM) is to estimate design water demands produced by the proposed Dixon Innovation Center (DIC) project at full build-out. Additionally, this TM seeks to address preliminary sizing of the backbone water infrastructure required to serve the associated NEQSP shed area. To that end, and to minimize duplicate information between adjacent projects, this TM references the THE CAMPUS (Dixon 257) DRAFT WATER STUDY dated February 2024 which accounts for all of the existing and proposed off-site water demands as well as the proposed on-site Dixon Innovation Center (DIC) demands.

III. LAND USE

PRE-DEVELOPMENT CONDITIONS:

Historically, this site has been used for farming. The existing topography of the site is very flat and generally drains from the west to the east.

POST-DEVELOPMENT CONDITIONS:

The 38-acre Dixon Innovation Center project site is currently zoned Highway Commercial (2018 Zoning Map, CH-PUD) and has a General Plan designation of Industrial. It is understood the City is of Dixon is considering a Zoning Ordinance and Zoning Map update under which the project site would be zoned IG-NESP. The updated General Plan designation would remain Industrial. The site is proposed to be developed for Industrial uses.

IV. WATER INFRASTRUCTURE

EXISTING WATER FACILITIES:

There are currently no existing water facilities on or adjacent that serve the project. The existing facility adjacent to the north is currently on a well system with an additional on-site tank to meet fire demands. The adjacent project will be required to connect to the proposed water network when available.

PROPOSED WATER FACILITIES:

On-Site

With the future on-site Design Review application, the proposed on-site water network will be designed to meet the design criteria set forth in the City of Dixon Engineering Standards & Specifications (March 2022). To ensure off-site infrastructure provides for the full build-out of the DIC project, the following on-site design calculations have been provided.

Water Demands:

According to the WSMP, the City of Dixon's peak water supply capacity is sized to meet Maximum Day Demand for each of its zones. It must also be able to meet four hours of Peak Hour Demand with source capacity, storage capacity, and/or emergency source connections. To determine how the Dixon Innovation Center project will affect the City of Dixon's ability to meet these demand requirements, it is necessary to estimate the Maximum Day Demand and Peak Hour Demand for the site.

Maximum Day Demand and Peak Hour Demand for the Dixon Innovation Center (DIC) has been calculated based on the design criteria from Chapter 5 of the WSMP. Per Section 5.1.1 of the WSMP, Average Day Demand is calculated by multiplying area by the Unit Demand Factor, which is dependent

on land use. Per Section 5.1.2, Maximum Day Demand is 2.2 times Average Day Demand and Peak Hour Demand is 3.3 times Average Day Demand. **Table 1** shows the unit water demand factors used as part of this study. The table is based on Table 5-3 from Section 5.1.1 of the WSMP.

Water Unit Demand Factors	
Land Use	Unit Demand Factor, af/ac/yr
Industrial	1.5
Maximum Day Demand Factor: 2.2 times Average Day Demand Peak Hour Demand Factor: 3.3 times Average Day Demand	

Table 1 – Water Unit Demand Factors from the WSMP

Water demands were calculated based on the proposed Industrial land use (**Table 1)** Unit Demand Factors. The total on-site water supply shed area is 38 acres. Roadway areas were assumed to have no water demand. **Table 2** summarizes the results of the water demand calculation.

Project Water Demands				
Project Area (ac.)	Average Water Demand (af/yr)	Average Day Demand (mgd)	Maximum Day Demand (mgd)	Peak Hour Demand (mgd)
38	57	0.051	0.112	0.168

Table 2 – Project Water Demands

Based on this information, the proposed water demands for the Dixon Innovation Center (DIC), listed in Table 2 above, need to be accounted for in the off-site water network.

Off-Site

Based on the information provided in the West Yost Technical Memorandum date June 22, 2023 (attached), construction of the off-site water distribution system identified in The Campus Draft Water Study, with the construction of the new NEQ Water Well 1, will provide the necessary infrastructure and capacity to serve the Dixon Innovation Center (DIC).

Refer to Table 1, scenario 3 of the Technical Memo for reference to the Dixon Innovation Center (DIC) area, labeled as “Buzz Oates” in the memo.

V. CONCLUSION

Water Capacity:

The Dixon Innovation Center project is a 38-acre industrial project in northern Dixon along Highway 80. Based on the proposed land use, it is anticipated to require a peak hour demand of 0.168 mgd (million gallons per day). A water well (NEQ Well 1) located south of the project along Professional Drive provide the required water system pressure and flow to serve the project. Preliminary sizing of the water main network is provided in The Campus (Dixon 257) Draft Water Study dated February 2024.

VI. THE CAMPUS (Dixon 257) DRAFT WAER STUDY dated January 2024

See Attached

VII. WEST YOST TECHNICAL MEMORANDUM dated June 22, 2023

NEQ Potable Water Hydraulic Evaluation

See Attached

CITY OF DIXON, CALIFORNIA

THE CAMPUS (Dixon 257)

M&P Project No. 20-0024-00 (v.3)

DRAFT WATER STUDY

February 2024

PREPARED BY:

mortonpitalo

600 Coolidge Drive, Suite 140
Folsom, CA 95630
Telephone: (916) 927-2400
Fax: (916) 357-7888

TABLE OF CONTENTS:

1. BACKGROUND 2
2. PURPOSE 2
3. LAND USE 2
4. CITY OF DIXON WATER SYSTEM MASTER PLAN 3
  4.1. EXISTING INFRASTRUCTURE 3
  4.2. PROPOSED INFRASTRUCTURE 3
5. DISTRIBUTION AND FIRE FLOW REQUIREMENTS 6
6. WATER DEMANDS 6
7. CONCLUSIONS 7
8. REFERENCES 8

LIST OF FIGURES:

Figure 1 – Vicinity Map 2
Figure 2 – Existing Water Infrastructure from WSMP 3
Figure 3 – Proposed Water Infrastructure per the WSMP 4
Figure 4 – Proposed Water Infrastructure for the Campus Project 4

LIST OF TABLES:

Table 1 – Distribution System Pressures 6
Table 2 – Fire Flow Requirements for New Development within the NEQ 6
Table 3 – Water Unit Demand Factors from the WSMP 7
Table 4 – Project Water Demands 7

LIST OF EXHIBITS:

Exhibit 1 – Proposed Land Use Mix
Exhibit 2 – Water Plan
Exhibit 3 – Proposed Well Detail
Exhibit 4 – Water System Performance and Operational Criteria
Exhibit 5 – Water Supply Calculations

1. BACKGROUND

This water study provides a preliminary water infrastructure plan and design standards for water facilities within the proposed Campus project. The project is located on approximately 259.7-acres within a portion of the City of Dixon in Solano County California (APNs 0111-040-010, -020, -030, -040, and 0111-080-050). The project is located within the City of Dixon's Northeast Quadrant and is part of the Northeast Quadrant Specific Plan (NQSP). The NQSP area is located south of I-80, north of Vaughn Road, east of N. First Street, and west of Pedrick Road. See **Figure 1** for the vicinity map.

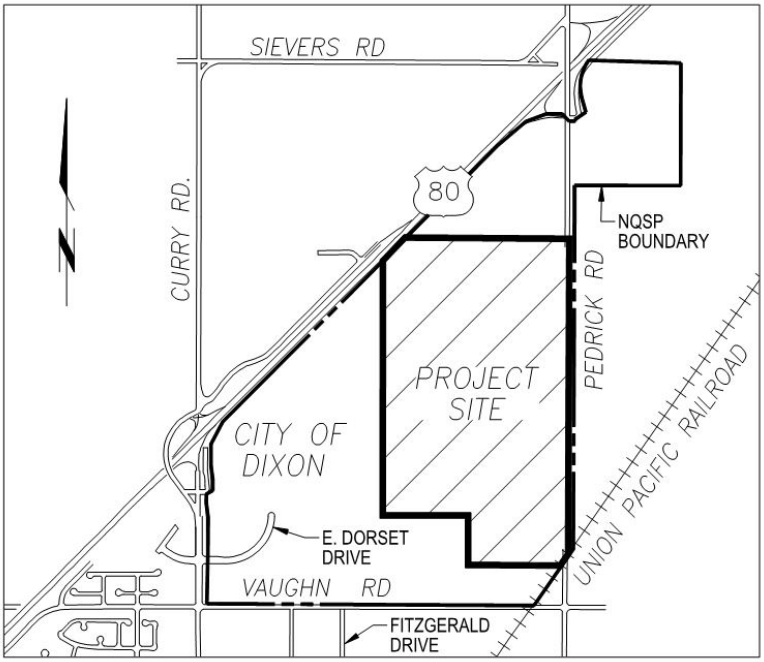


Figure 1 – Vicinity Map

2. PURPOSE

The main objective of this study is to determine the water demands of The Campus project. This study also seeks to determine the water infrastructure requirements based on the City of Dixon 2021 Water System Master Plan (WSMP) and to provide a preliminary water infrastructure plan that will meet the needs of the proposed site.

3. LAND USE

Historically, the Campus site has been used for farming. The majority of the site is presently under cultivation with field and row crops with a small portion of the site uncultivated due to the presence of old, concrete building foundations. The existing topography of the site is very flat and generally drains from the west to the east at one-third percent.

The project site is zoned as Corridor Mixed Use (CMU). The site area will be broken up into multiple proposed land uses. The majority of the site, totaling 128.2 acres, will be single-family residential (SFR). The northern portion of the site will contain 46.7 acres of light industrial area (LI), 9.7 acres of multi-family residential (MFR), 2.0 acres of neighborhood commercial (CC),

and a proposed well site on 1.6 acres. The proposed well will be discussed in the following section. See **Exhibit 1** for the Proposed Land Use Mix.

4. CITY OF DIXON WATER SYSTEM MASTER PLAN

4.1. EXISTING INFRASTRUCTURE

The City of Dixon 2021 Water System Master Plan (WSMP) by West Yost Associates determined the existing conditions of the Dixon water system and recommended water system improvements to meet the needs future development. The City of Dixon's existing water system is broken up into three zones, the North, South and Core Zones and the Zones are hydraulically connected to each other. The Campus site lies within the North Zone. The Dixon water system relies completely on groundwater wells. The city has three existing wells, one of which is a standby well (Industrial Well) for the city, and two storage tanks serving the Core and North Zone service areas. The total capacity of the two operational wells is 3,300 gallons per minute and the total usable volume of the tanks is 1.8 million gallons. Two existing booster pump stations serve the Core and North Zones. Existing 12" water pipelines exist south-west of the project site in East Dorset Drive and to the south of the project in Vaughn Road. **Figure 2** is taken from Figure 2-3 of the WSMP and shows the existing water system in the North Zone near the project site.

Figure 2 – Existing Water Infrastructure from WSMP

4.2. PROPOSED INFRASTRUCTURE

Figure 3 is taken from Figure 8-1 of the WSMP and shows proposed future water facilities in the North Zone. The WSMP proposes construction of a new 1,500 gallon per minute well in the Northeast Quadrant (North Zone) by 2030. In future buildout conditions, an additional well and 0.40 MG of useable storage are proposed within the Northeast Quadrant (North Zone). The

usable storage calculation does not take into consideration requirements for dead storage or overflow requirements. Construction of a new 1,500 gpm well is proposed as part of the Campus project and will be located in the northwest portion of the site. The proposed well site can accommodate a future storage tank and an additional well will be constructed within the Northeast Quadrant in future build-out conditions when deemed necessary by the City of Dixon. The future second well site will tentatively be located at the northeast edge of the specific plan. In addition to the proposed well, **Figure 3** shows proposed 12" water mains serving the site and the parcels north with two connections in East Dorset Drive and two connections in Vaughn Road.

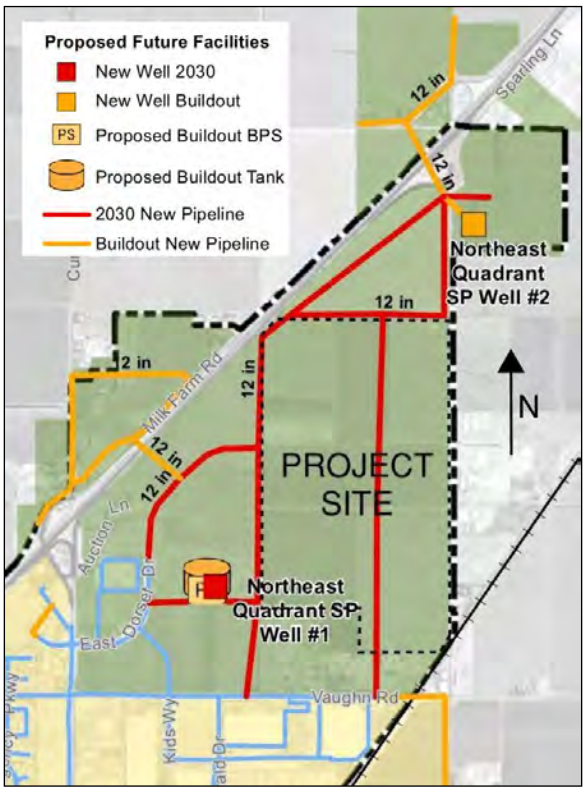


Figure 3 – Proposed Water Infrastructure per the WSMP

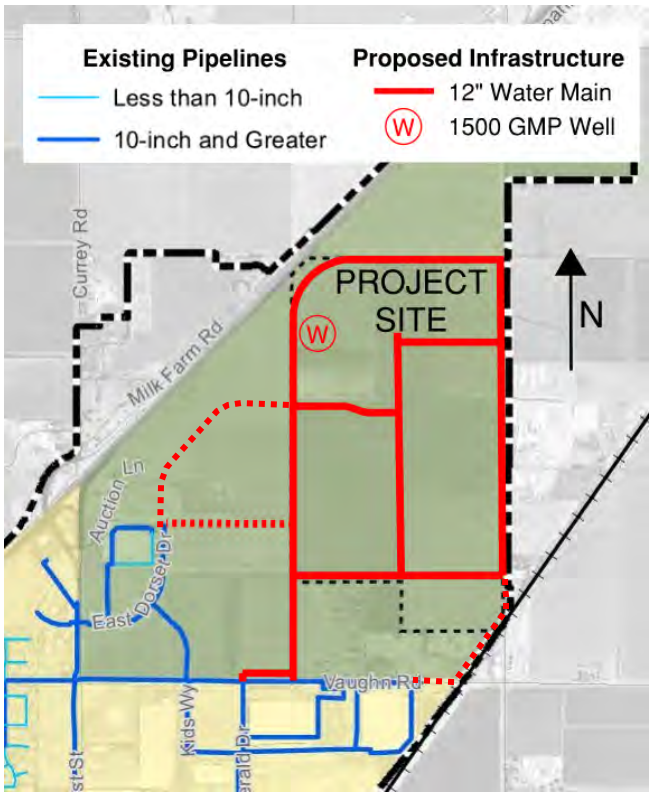


Figure 4 – Proposed Water Infrastructure for the The Campus Project

Figure 4 shows the water infrastructure proposed as part of the Campus project. Note that the proposed water main alignments and well location differ from **Figure 3**. The Campus project will follow the intention of the WSMP by providing a new well within the North Zone and extending the water distribution system up to the northern boundary of parcel. However, the water main alignments will differ from the WSMP slightly. One connection will be provided to Vaughn Road. A second connection will also be provided. Three options for the second connection are shown on Figure 4 (dashed red lines). To limit the impacts on the City's existing water system during construction, the new 1,500 gpm well and water pipelines included in The Campus project will be constructed and in operation prior to beginning construction of other buildings withing the project. Infrastructure that is not susceptible to fire (like roads and underground utilities) can be constructed prior to the well and water pipelines being fully

constructed and connected to the City's existing water system. In addition, construction water trucks will be limited to filling between the hours of 9 AM and 4 PM, which do not correspond to the other peak demands on the water system.

Exhibit 2 is the Water Plan and Shed Map. It shows the water infrastructure proposed as part of the Campus project in more detail than **Figure 4**, as well as the water supply sheds which will be discussed in Section 6. The proposed well will be based on Detail DF-6 from the Dixon Engineering Design Standards. This detail is provided as **Exhibit 3.**

5. DISTRIBUTION AND FIRE FLOW REQUIREMENTS

Exhibit 4 is a summary of water system performance and operational criteria taken directly from the WSMP. The WSMP provides requirements for fire flow, water supply capacity, water distribution system capacity, pumping facility capacity and water storage capacity. It also has requirements for system pressure, pipe diameter, pipe material and flow velocity. Pipelines serving multi-family residential, commercial, and industrial developments shall be a minimum of 12 inches in size. **Table 1** provides minimum and maximum distribution system pressures.

Distribution System Pressures	
Minimum Pressure – Normal Operating Conditions	50 psi
Minimum Pressure – Peak Hour Conditions	45 psi
Minimum Pressure – Fire Flow Conditions	20 psi
Maximum Pressure	80 psi

Table 1 – Distribution System Pressures

Table 2 provides the fire flow requirements that pertain to the Campus project, based on Table 5-4 from the WSMP. The project lies within the Northeast Quadrant (NEQ) which has larger fire flow requirements than other areas within the city. For planning purposes, fire flows are assumed to be met concurrently with a Maximum Day Demand condition, while maintaining a residual system pressure of 20 psi throughout the City of Dixon's service area. Calculation of Maximum Day Demand is discussed in Section 6.

Fire Flow Requirements for New Developments within the NEQ		
Land Use	**Flow, gpm**	**Duration, hours**
Single-Family Residential	1,000	3
Multi-Family Residential	2,500	3
Commercial in the Northeast Quadrant (NEQ)	4,000	3
Industrial in the NEQ and Future Areas East of Railroad Tracks	4,000	3
Note 1: Unique projects or projects with alternate materials may require higher fire flow and should be reviewed by the Fire Marshal on a case-by-case basis. Note 2: Fire flows are to be supplied at a minimum residual pressure of 20 psi.		

Table 2 – Fire Flow Requirements for New Development within the NEQ

6. WATER DEMANDS

According to the WSMP, the City of Dixon's peak water supply capacity is sized to meet Maximum Day Demand for each of its zones. It must also be able to meet four hours of Peak Hour Demand with source capacity, storage capacity, and/or emergency source connections. To determine how the Campus project will affect the City of Dixon's ability to meet these demand requirements, it is necessary to estimate the Maximum Day Demand and Peak Hour Demand for the site.

Maximum Day Demand and Peak Hour Demand have been calculated based on the design criteria from Chapter 5 of the WSMP. Per Section 5.1.1 of the WSMP, Average Day Demand is calculated by multiplying area by the Unit Demand Factor, which is dependent on land use. Per

Section 5.1.2, Maximum Day Demand is 2.2 times Average Day Demand and Peak Hour Demand is 3.3 times Average Day Demand. **Table 3** shows the unit water demand factors used as part of this study. The table is based on Table 5-3 from Section 5.1.1 of the WSMP.

Water Unit Demand Factors	
Land Use	**Unit Demand Factor, af/ac/yr**
Single-Family	2.7
Multi-Family	3.9
Commercial/Public	1.3
Industrial	1.5
Landscape	3.0
Maximum Day Demand Factor: 2.2 times Average Day Demand Peak Hour Demand Factor: 3.3 times Average Day Demand	

Table 3 – Water Unit Demand Factors from the WSMP

Water demands were calculated based on the land uses shown on the **Exhibit 1** Proposed Land Use Mix and the **Table 3** Unit Demand Factors. The total on-site water supply shed area is 259.6 acres. The proposed well site was assumed to have water demands similar to that of an industrial site. Roadway areas were assumed to have no water demand. **Exhibit 2** shows the water supply sheds as well as proposed water infrastructure. **Exhibit 5** provides the full water demand calculation. **Table 4** summarizes the results of the water demand calculation.

Project Water Demands				
Project Area (ac.)	Average Water Demand (af/yr)	Average Day Demand (mgd)	Maximum Day Demand (mgd)	Peak Hour Demand (mgd)
259.6	562.7	0.502	1.105	1.658

Table 4 – Project Water Demands

7. CONCLUSIONS

The Campus project will extend the City of Dixon's water system northeastward with connections in East Dorset Drive and Vaughn Road. The project will also provide a 1500 gallon per minute well in the northwest corner of the project. Using the methodology from the WSMP, this study estimated average annual water demand for the project to be 562.7 acre-feet. Maximum Day Demand and Peak Hour Demand were estimated to be 1.105 and 1.658 million gallons per day respectively. In the future, an additional well and 0.26 MG of storage will be constructed within Dixon's North Zone. The well site being proposed can accommodate a future tank. The future second well site will tentatively be located at the northeast edge of the specific plan.

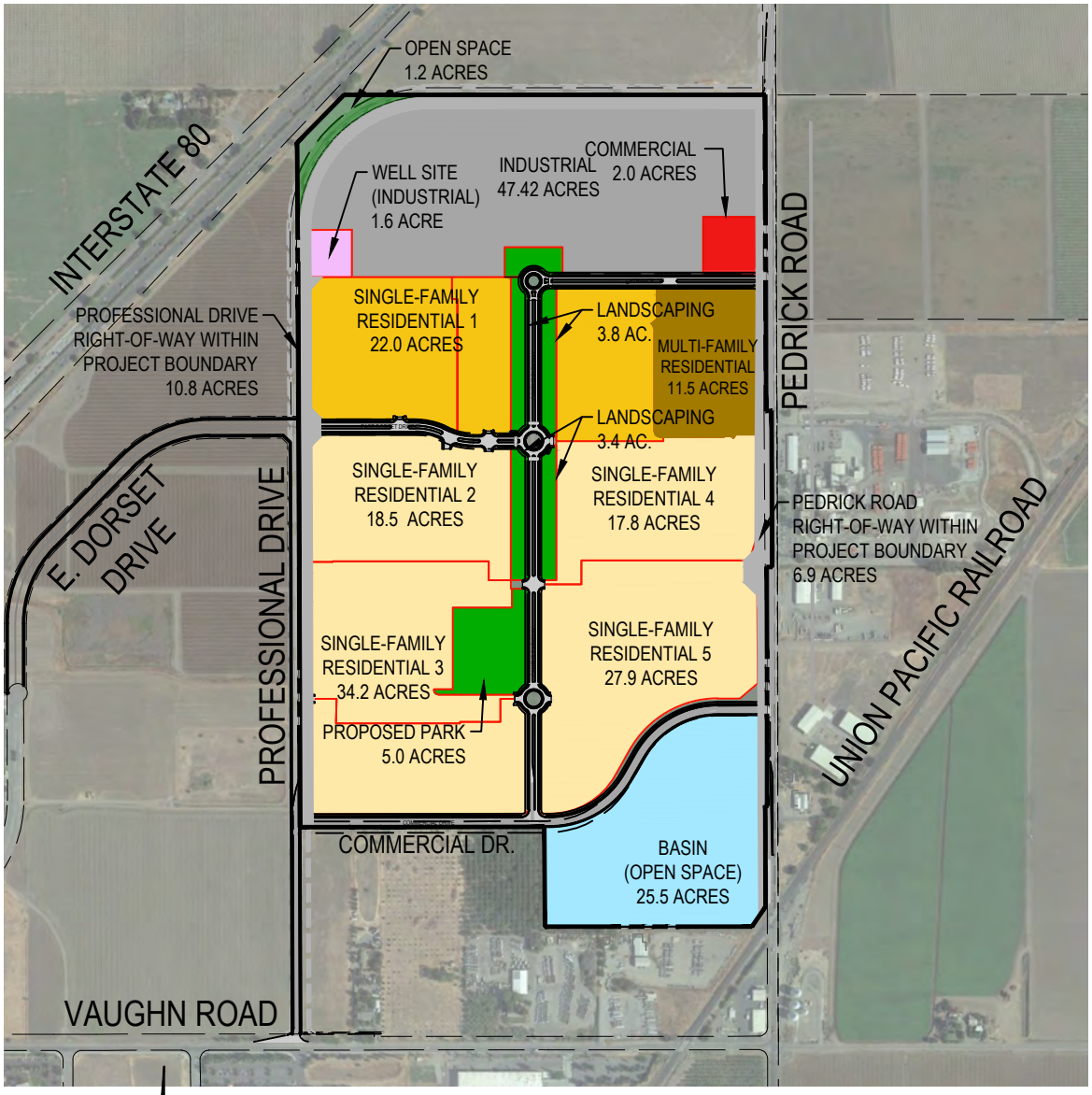
This is a preliminary study of proposed water infrastructure. Further analysis must be conducted to confirm that proposed water infrastructure improvements will meet the performance and operational criteria of the City of Dixon's Water System Master Plan. This includes modeling the proposed system to ensure that minimum system pressure is maintained during fire flow conditions.

8. REFERENCES

1. City of Dixon Engineering Design Standards, 2022

2. City Dixon – 2021 Water System Master Plan Update (Addendum to 2016 WSMP)

3. City of Dixon 2016 Water System Master Plan and Strategic Asset Management Plan, West Yost, 2016



LEGEND

EXISTING ROADWAYS

FUTURE ROADWAYS

PROJECT BOUNDARY

GRAPHIC SCALE

1000 500 0 1000

Scale

LAND USE TABLE

LAND USE	ACRES
SINGLE-FAMILY RESIDENTIAL	120.1
MULTI-FAMILY RESIDENTIAL	11.5
INDUSTRIAL	47.4
NEIGHBORHOOD COMMERCIAL	2.0
WELL SITE	1.6
ROADS, OPEN SPACE AND BASIN	63.6
PARK AND LANDSCAPING	13.4
TOTAL SITE AREA	**259.6**

Dwg: X:\2020\20-0024-00 (MAGNA PARCEL-DIXON)\DWG\PLAN\EXHIBITS\DIXON 257 TECHNICAL STUDIES NOVEMBER 2022\DIXON 257 WATER STUDY LAND USE MIX EXHIBIT 23.0103.DWG | Saved: 01-04-23 07:23am DFIELD

MORTON & PITALO, INC.
CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING
Folsom * Fresno
600 Coolidge Drive, Suite #140
Folsom, CA 95630
phone: (916) 984-7621
web: www.mpengr.com

DRAWN:	DF	JOB NO:	20-0024-00
CHECKED:	GB	DATE:	JULY 2023
SCALE:		SHEET:	1 of 1

EXHIBIT 1

DIXON 257 WATER STUDY

PROPOSED LAND USE MIX

DIXON, CALIFORNIA

GRAPHIC SCALE

500 250 0 500

1 in = 500 ft

LEGEND

- SINGLE- FAMILY (SFR) LAND USE
- MULTI-FAMILY (MFR) LAND USE
- LIGHT INDUSTRIAL (LI) LAND USE
- COMMERCIAL (CC) LAND USE
- LANDSCAPING AND OPEN SPACE
- ROADWAYS
- EXISTING ROADWAYS
- FUTURE ROADWAYS
- PROJECT BOUNDARY
- WATER SUPPLY SHED BOUNDARY
- W — PROPOSED WELL SITE
- 12"W — PROPOSED WATER MAIN
- EX12"W — EXISTING WATER MAIN
- EX42"IRR — EXISTING IRRIGATION MAIN
- 12"W — ALTERNATIVE WATER MAIN

INTERSTATE 80 (I-80)

INTERSTATE 80

PEDRICK ROAD

PEDRICK ROAD

E. DORSET DRIVE

E. DORSET DRIVE

PROFESSIONAL DRIVE

COMMERCIAL DRIVE

ENTERPRISE DRIVE

VAUGHN ROAD

VAUGHN ROAD

BASIN

3237 LF ~ 12" WTR

1037 LF ~ 12" WTR

109 LF ~ 12" WTR

1294 LF ~ 12" WTR

76 LF ~ 12" WTR

892 LF ~ 12" WTR

904 LF ~ 12" WTR

1619 LF ~ 12" WTR

1324 LF ~ 12" WTR

727 LF ~ 12" WTR

1578 LF ~ 12" WTR

694 LF ~ 12" WTR

1298 LF ~ 12" WTR

1848 LF ~ 12" WTR

12"W

EX12"W

EX42"IRR

EX36"IRR

W

Dwg: X:\2020\20-0024-00 (MAGNA PARCEL-DIXON)\DWG\PLAN\EXHIBITS\THE CAMPUS TECHNICAL STUDY JANUARY 2024\DIXON 257 WATER PLAN 24.0216.DWG | Saved: 07-11-23 12:10pm GBARDINI

MORTON & PITALO, INC.

CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING

Folsom * Fresno

600 Coolidge Drive, Suite #140

Folsom, CA 95630

phone: (916) 984-7621

web: www.mpengr.com

DRAWN:	DF	JOB NO:	20-0024-00
CHECKED:		DATE:	JAN 2024
SCALE:	1" = 500'	SHEET:	1 of 1

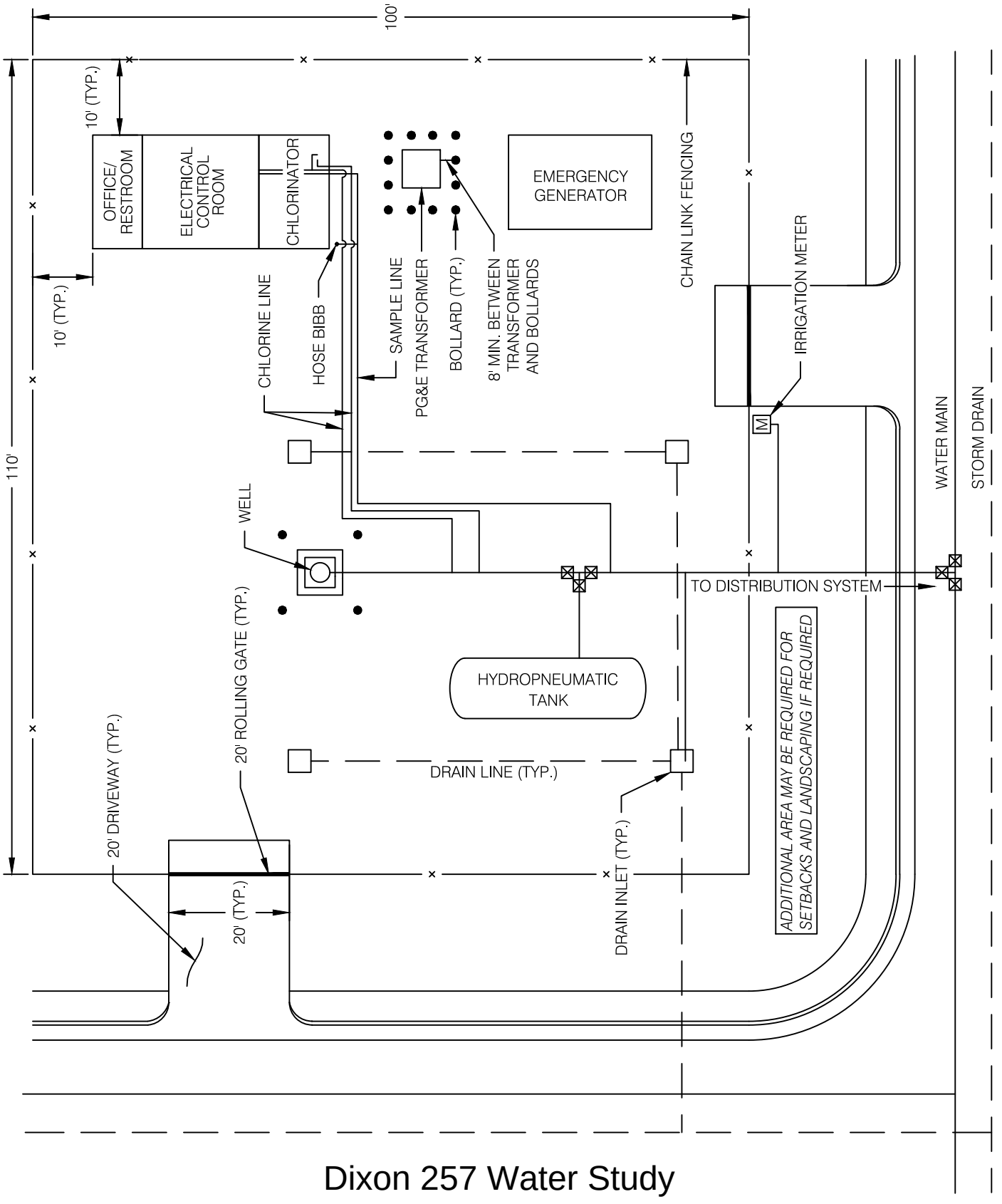
EXHIBIT FOR

DIXON 257 WATER STUDY

EXHIBIT 2

WATER PLAN

DIXON, CA



Dixon 257 Water Study
Exhibit 3 - Proposed Well Detail

DF-6	TYPICAL DIRECT FEED WELL FACILITY	APPROVED: MARCH 2022	CITY OF DIXON ENGINEERING STANDARD DETAIL

Table 3. Summary of Recommended Potable Water System Performance and Operational Criteria

Component	Criteria	Remarks / Issues
Fire Flow Requirements (flow [gpm] @ duration [hours])[a]		
Single Family Residential	1,000 gpm @ 3 hours	
Multi Family Residential	2,500 gpm @ 3 hours	
Commercial and Industrial	3,500 gpm @ 3 hours	Includes schools
Commercial and Industrial in Northeast Quadrant	4,000 gpm @ 3 hours	
Water Supply Capacity[b]		
Supply / Pumping Capacity	Provide firm supply capacity equal to maximum day demand	Firm groundwater supply capacity is defined as the largest facility out of service for maintenance
Water Distribution System Capacity[b]		
Maximum Day Demand plus Fire Flow	Provide firm capacity equal to maximum day demand plus fire flow	
Peak Hour Demand	Provide firm capacity equal to peak hour demand	
Pumping Facility Capacity[b]		
Pumping Capacity	Provide the greater of maximum day concurrent with fire flow or peak hour demand	Assumes firm pumping capacity. Firm pumping capacity is defined as the total booster pump station capacity with the largest pump out of service
Backup Power	Provide backup power at all wells and pump stations	
Water Storage Capacity[c]		
Operational	20 percent of maximum day demand	
Fire	Largest fire flow for each zone	North/Core Zone: 4000 gpm x 3 hrs = 0.72 million gallons (MG) South Zone: 3500 gpm x 3 hrs = 0.63 MG
Emergency	1 x average day demand (minimum)	Provided by the City's backup power at all pumping facilities
Total Water Storage Capacity	Operational + Fire + Emergency	
Distribution System Pressures[d]		
Minimum Pressure - Normal Operating Conditions	50 psi	
Minimum Pressure - Peak Hour Conditions	45 psi	
Maximum Pressure	80 psi	
Minimum Pressure - Fire Flow Conditions	20 psi	At all customer service connections
Water Transmission and Distribution Pipelines[a]		
Minimum Pipeline Diameter	6-inch; 12-inch for multi-family residential, commercial, and industrial developments with more than two units	Locate new distribution pipelines within designated utility corridors wherever possible
Maximum Velocity - Normal Operating Conditions	6 ft/s	Criteria based on requirements for new development. Existing distribution mains will be evaluated on case-by-case basis. Evaluation will include age, material, type, velocity, headloss and pressure
Maximum Velocity - Fire Flow Conditions	12 ft/s	
Hazen Williams "C" Factor	130	For consistency in hydraulic modeling
Pipeline Material	Polyvinyl chloride (PVC)	For consistency in hydraulic modeling

(a) Criteria based on the City's Engineering Design Standards, August 2014 Section 5.

(b) Criteria included in the City's 2000 Master Plan

(c) Water storage capacity fire component criteria updated to provide redundancy in the North/Core and South Zones

(d) Criteria based on SCADA data and actual system operation pressures.

Morton & Pitalo, Inc

Project: Dixon 257 Water Study
Job No. 20-0024-00
Date: 1/4/2023

References: *City of Dixon Engineering Design Standards (Mar. 2022),*
City of Dixon 2016 Water System Master Plan and Strategic Asset Management Plan

Assumptions:
1. Proposed well site is assumed to be part of the Industrial land use

Table 3-6. Recommended Unit Water Demand Factors	
Water Use Type	**Unit Demand Factor, af/ac/yr**
Single Family Residential (SFR)	2.7
Multi-Family Residential (MFR)	3.9
Commercial	1.3
Industrial	1.5
Landscape	3.0

*Table from page 3-12 of 2016 Water System Master Plan

Table 3-8 Peaking Factors	
Maximum Day Demand Factor	2.2 times average day demand
Peak Hour Demand Factor	3.3 times average day demand

*Table from page 3-13 of 2016 Water System Master Plan

Design Flows

Name of Proposed Land Use	Area (Ac.)	Unit Water Demand Factor (af/ac/yr)	Average Water Demand (af/yr)	Average Day Demand (mgd)	Maximum Day Demand (mgd)	Peak Hour Demand (mgd)
Industrial	**46.7**	1.5	70.1	0.063	0.138	0.206
Well Site	**0.3**	1.5	0.5	0.000	0.001	0.001
Commercial	**2.0**	1.3	2.6	0.002	0.005	0.008
SFR 1	**20.0**	2.7	54.0	0.048	0.106	0.159
SFR 2	**20.2**	2.7	54.5	0.049	0.107	0.161
SFR 3	**30.9**	2.7	83.4	0.074	0.164	0.246
SFR 4	**28.3**	2.7	76.4	0.068	0.150	0.225
SFR 5	**28.8**	2.7	77.8	0.069	0.153	0.229
MFR	**9.7**	3.9	37.8	0.034	0.074	0.111
Park	**5.5**	3.0	16.5	0.015	0.032	0.049
Landscaping	**9.0**	3.0	27.0	0.024	0.053	0.080
Basin & O. Space	**20.7**	3.0	62.1	0.055	0.122	0.183
Roadways	**37.5**	0	0	0	0	0
Totals:	**259.6**		**562.7**	**0.502**	**1.105**	**1.658**

WEST YOST
Water. Engineered.

2020 Research Park Drive
Suite 100
Davis CA 95618

530.756.5905 phone
530.756.5991 fax
westyost.com

TECHNICAL MEMORANDUM

DATE: June 22, 2023

Project No.: 066-60-23-29
SENT VIA: EMAIL

TO: Deborah Barr, PE, City Engineer/Director of Utilities, City of Dixon

CC: Josh Hudson, Water Operations Supervisor, City of Dixon

FROM: Bonnie Robison, PE, RCE #85779

REVIEWED BY: Brenda Estrada, PE, RCE #67062
Roberto Vera, PE, RCE# 83500

SUBJECT: Northeast Quadrant Potable Water Hydraulic Evaluation

The City of Dixon (City) requested a water system evaluation for the City's Northeast Quadrant (NEQ), located within City limits. The purpose of this Technical Memorandum (TM) is to summarize West Yost's hydraulic evaluation of the City's existing water distribution system and its ability to support the NEQ. The following sections summarize the evaluation:

- Development Overview
- Hydraulic Evaluation
- Findings and Conclusions

DEVELOPMENT OVERVIEW

The NEQ encompasses approximately 643 acres of undeveloped land in the northeast portion of the City, within City limits. The Northeast Quadrant Specific Plan established policies and guidelines for the ultimate development of the NEQ. Planned growth for the NEQ includes a mix of commercial, light industrial, high-density residential, or mixed-use developments.

Within the NEQ, the Dixon 257 Development (Dixon 257) and the Buzz Oates Innovation Center are anticipated to be the next projects to be developed. Dixon 257 is a proposed mixed-use development totaling 259.7 acres, including 128.2 acres of single-family residential development, 9.7 acres of multi-family residential development, and 46.7 acres of light industrial development. The remainder will be a mix of neighborhood commercial, park and open space, and a designated well site.[1] Dixon 257 is bounded by Vaughn Road to the south, Pedrick Road to the east, and agricultural lands to the north and west. The Buzz Oates Innovation Center is a proposed industrial/business park to be located on a 37.6-acre

[1] Land use types provided in the *Draft Water Study* for the project dated January 2023, prepared by Morton Pitalo and provided by the City on April 13, 2023.

property immediately north of Dixon 257. Much of the remaining area within the NEQ outside of the Dixon 257 and the Buzz Oates Innovation Center projects are in preliminary stages of development.

The proposed Dixon Milk Farm Development (Milk Farm) is located on the north side of Interstate 80 across from the NEQ and would be a master-planned commercial center. The Milk Farm was evaluated individually in a prior hydraulic evaluation by West Yost but is also included in this evaluation.[2]

The backbone water pipelines serving the NEQ are planned to be 12 inches in diameter connecting to existing 12-inch diameter transmission pipelines and following Dixon 257's proposed road alignments. Figure 1 shows the NEQ location and evaluated pipelines.

HYDRAULIC EVALUATION

The City's potable water hydraulic model was used to evaluate if the existing system, with and without planned and proposed improvements would provide adequate pressures and flows while meeting adopted system performance criteria.

Existing maximum day demands allocated in the City's hydraulic model are based on 2019 consumption records, which were used to calibrate and validate the City's hydraulic model for the 2021 Water Master Plan Update (WMPU). For the purposes of this evaluation, the Homestead and Brookfield residential developments were assumed to be built out under baseline system conditions. Future backbone pipelines modeled in this evaluation are consistent with the pipelines identified and evaluated in the City's 2021 WMPU. The following sections provide additional details regarding the modeled scenarios, model assumptions, performance criteria, evaluation results, and recommendations for thresholds for when the proposed wells and tanks are needed (see page 10 for finding and conclusions).

Evaluated Scenarios

Table 1 summarizes the scenarios that were evaluated. Scenarios were developed and evaluated to determine what infrastructure needs to be online to adequately support planned developments. An extended period simulation (EPS) over a 7-day period was performed for Scenarios 1 through 6, to determine whether the City's distribution system could adequately serve planned and existing development under normal (i.e., maximum day demand or peak hour demand) conditions. Results shown do not include the first 24 hours of the simulation as the model scenario is influenced by initial setting and achieves equilibrium after the initial 24 hours. Scenarios 7 through 12 were evaluated under steady-state maximum day demand plus fire flow conditions, to determine if sufficient fire flow could be provided for the proposed land uses.

Table 2 summarizes the system demand assumptions for each scenario. The existing customer demands shown in Table 2 are the maximum day demands and do not reflect the peak hour demand which is equal to 1.67 times the maximum day demand. The peak demand occurs typically between 6 AM to 8 AM. The hydraulic evaluation addresses the peak demands as the EPS scenario applies the system's diurnal curve to the maximum day demands. These demands do not include construction water demands that will occur during the NEQ and Milk Farm construction.

[2] West Yost. *Dixon Milk Farm Development Water System Hydraulic Evaluation TM.* December 20, 2022.

Table 1. Summary of Evaluated Scenarios

Scenario	Name	Demand Condition	Evaluated Conditions	
			Developments	Facility Status
Normal Operations Scenarios				
1	Baseline	Existing maximum day	- Homestead and Brookfield areas are fully developed	- Homestead Well is online (assumed 1,500 gpm capacity) - Industrial Well is offline - Fitzgerald Booster Pump Station is on standby
2	Baseline + NEQ Growth	Existing + NEQ maximum day	- Northeast Quadrant (NEQ) is fully developed - Milk Farm is fully developed	- Same as Baseline
3	Baseline + NEQ Well 1	Existing + Partial NEQ maximum day	- NEQ is partially developed (Dixon 257, Buzz Oates) - Milk Farm is fully developed	- Same as Baseline - A new NEQ Well 1 is online (assumed 1,500 gpm capacity)
4	Scenario 3 + NEQ Growth	Existing + Partial NEQ maximum day	- NEQ is partially developed (Dixon 257, Buzz Oates, and additional growth) - Milk Farm is fully developed	- Same as Baseline - A new NEQ Well 1 is online (assumed 1,500 gpm capacity)
5	Scenario 4 + NEQ Tank	Existing + Partial NEQ maximum day	- NEQ is partially developed (Dixon 257, Buzz Oates, and additional growth) - Milk Farm is fully developed	- Same as Baseline - A new NEQ Well 1 is online (assumed 1,500 gpm capacity) - A new 0.4 MG NEQ tank is online
6	Scenario 2 + All NEQ Facilities	Existing + NEQ maximum day	- Northeast Quadrant (NEQ) is fully developed - Milk Farm is fully developed	- Same as Baseline - A new NEQ Well 1 is online (assumed 1,500 gpm capacity) - A new 0.4 MG NEQ tank is online - A new NEQ Well 2 is online (assumed 1,500 gpm capacity)
Fire Flow Scenarios				
7	Maximum day + fire flow		Same as Scenario 1	
8			Same as Scenario 2	
9			Same as Scenario 3	
10			Same as Scenario 4	
11			Same as Scenario 5	
12			Same as Scenario 6	

Table 2. Maximum Day Demand Assumptions

Demand Type	Demand, gpm					
	Scenario 1 and 7	Scenario 2 and 8	Scenario 3 and 9	Scenario 4 and 10	Scenario 5 and 11	Scenario 6 and 12
Existing Customers[(a)]	3,437	3,437	3,437	3,437	3,437	3,437
Milk Farm[(b)]	0	187	187	187	187	187
NEQ[(c)]						
Dixon 257	0	793	793	793	793	793
Buzz Oates Innovation Center	0	69	69	69	69	69
Additional NEQ Development	0	509	0	245	352	509
NEQ Subtotal	0	1,371	862	1,107	1,214	1,371
Totals	**3,437**	**4,995**	**4,486**	**4,731**	**4,838**	**4,995**

(a) Existing customer demands include maximum day demands for the existing City system with the Homestead and Brookfield residential areas fully developed.

(b) Milk Farm Development demands are based on the Dixon Milk Farm Development Water System Hydraulic Evaluation TM dated December 20, 2022, and include irrigation demands and non-revenue water.

(c) NEQ demands are calculated using demand factors presented in Table 3 of the City's 2021 Water Master Plan Update and include non-revenue water.

gpm = gallons per minute

Hydraulic Model Assumptions

The following are model updates and assumptions made for the purposes of this evaluation:

- The existing system assumes the Fitzgerald Facilities are on standby and the Industrial Well is out of service. The City is exploring options to drill a new well to replace the Industrial Well at the Fitzgerald Facilities site which would allow regular operation of the Fitzgerald Facilities. However, the replacement Industrial well is unlikely to be available within the timeframe of the NEQ development. Therefore, the Industrial Well was assumed to be offline under all scenarios and the Fitzgerald Facilities are assumed to be available only under fire flow conditions.
- The School Well was recently rehabilitated to lower the suction inlet and add a new variable frequency drive (VFD) pump. These updates are reflected in the hydraulic model. The modifications result in more reliable production capacity from the well.
- The Homestead Well is currently under construction to support development within the Southwest Dixon Specific Plan area. Therefore, the well is assumed to be operational prior to the timeframe of the NEQ development at a capacity of 1,500 gallons per minute (gpm). Actual capacity of the well may vary upon completion based on hydrologic conditions and final well design.
- The Valley Glen Well is currently used as a backup well to provide support as needed to maintain pressures. Typically, the Park Lane booster pump station maintains pressures in the southern part of the system without the Valley Glen Well running. Therefore, the Valley Glen Well was assumed to run only if the Park Lane booster pump station was unable to maintain system pressure within 2 pounds per square inch (psi) of its downstream pressure

set point. As development continues and demands increase, the Valley Glen Well will be expected to operate more often to help maintain pressure during peak hour demand conditions.

- The modeled demands do not account for any temporary use of water during construction of water facilities or development projects. During well construction, a constant well drilling demand of approximately 188 gpm can be expected. During construction of development projects, water trucks are regularly filled throughout the day using construction hydrant meters. The water trucks can increase system demands by up to 1,550 gpm depending on the number and size of trucks and the timing of the filling.

Performance Criteria

The criteria used to evaluate the City's water system model results are based on the planning and design criteria developed in the 2021 WMPU. The applicable water system performance and operational criteria are summarized below.

- Allowable Pressures Under Normal Operating Conditions[3]
  - Minimum System Pressure: 50 psi
  - Maximum System Pressure: 80 psi
- Minimum Pressure – Fire Flow Conditions
  - 20 psi minimum residual water pressure under a maximum day plus fire flow demand test condition at all customer service locations throughout the City's water system.
- Maximum Velocity – Fire Flow Conditions
  - 12 feet per second (fps) maximum velocity in the NEQ proposed pipelines.
  - Velocities more than 12 fps can dislodge accumulations in the pipes, scour or remove linings, and result in damage to facilities.
- Fire Flow Requirements
  - The required fire flow is based on land use corresponding to the City's 2021 Water Master Plan Update, as shown in Table 3.

Table 3. Summary of Required Fire Flow per Project Land Use[(a)]

Description	Fire Flow Land Use	Fire Flow Requirement, gpm
Single Family Residential	Single-Family Residential	1,000
Multi-Family Residential	Multi-Family Residential	2,500
Industrial	Commercial and Industrial in NEQ	4,000
Neighborhood Commercial	Commercial and Industrial in NEQ	4,000
Well Site	Commercial and Industrial in NEQ	4,000

(a) Additional proposed land uses identified within the NEQ and Dixon 257, including roads, open space, parks, and landscaping, do not have fire flow requirements.

Source: City of Dixon 2021 Water System Master Plan Update

[3] Table 3 from the City of Dixon's 2021 Water Master Plan Update. It should be noted the City typically operates between 55 psi and 65 psi throughout the system.

Hydraulic Evaluation Results

Scenarios 1 through 6, previously summarized in Table 1, were evaluated using the City's hydraulic model which was calibrated in 2021. For each scenario, the production capacity for the system's facilities were reviewed to confirm the flow produced is similar to what is observed during summer months, when maximum day demands typically occur. Table 4 summarizes the average production flow rate for each facility from the six-day model scenario results.

Table 4. Average Well Production[(a)]

Facility	Average Production, gpm					
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Watson Ranch Well	820	965	825	835	785	845
Park Lane Well	2,155	2,160	2,155	2,145	2,155	2,155
School Well	960	1,310	1,170	1,330	1,310	1,330
Valley Glen Well	1,205	1,255	1,655	-	-	-
Homestead Well	445	1,280	610	725	665	730
Fitzgerald Well	-	-	-	-	-	-
NEQ Well 1	-	-	1,100	1,370	1,520	1,535
NEQ Well 2	-	-	-	-	-	380

(a) The average production for each facility is based on the average production from the six-day model scenario results only when the facility was active.

The following sections provide additional details for each of the evaluated scenarios.

Maximum Day Demand Conditions

The following sections summarize evaluation findings for Scenarios 1 through 6, which evaluate distribution system performance under normal demand conditions (i.e., maximum day demand, peak hour demand) under the varying demand/land use assumptions as summarized in Table 1.

Scenario 1 – Baseline

Conclusion: Existing water facilities can supply existing city demands. However, the Valley Glen Well is required for this scenario even though the Valley Glen Well is considered the City's backup well.

Figure 2 shows the minimum pressure results of the City's water system, including the existing system with the full buildout of the Homestead and Brookfield residential developments. Minimum pressures occur during peak hour demand. Model results indicate pressures are maintained above 53 psi throughout the whole system (achieving required design pressures) with pressures south of the railroad and around South Lincoln Avenue above 60 psi.

Average pressures within the system range between 56 to 68 psi with the overall system average pressure of 62 psi. The lowest pressure areas are located along the western border of City limits where the highest elevations are located and at the northern edge of the City, furthest from high production wells.

It should be noted that School Well and Homestead Well run continuously for the seven-day period. Watson Ranch Well and Park Lane Well cycle on to maintain the levels in the tanks. Valley Glen Well operates during peak morning demand periods.

Scenario 2 – Baseline Plus NEQ Growth

Conclusion: Existing water facilities cannot supply the NEQ demands, even using the Valley Glen Well (the City's backup well).

Figure 3 shows that the City's water system is unable to meet the maximum day demand condition for Scenario 2, which includes the addition of the Milk Farm and NEQ demands to baseline demands. Although the City's supply facilities appear to have adequate capacity to meet maximum day demands, there are not sufficient transmission pipelines to convey water throughout the system to meet demands in the northern part of the City and maintain minimum system pressures. Additional facility improvements will be necessary to support proposed NEQ development.

It should be noted that Scenario 2 hydraulic evaluation results assume Watson Ranch Well, School Well, and Homestead Well are all operating continuously, and Park Lane Well cycles on to maintain the levels in the tanks. Valley Glen Well operates during peak demand periods. The Watson Ranch Well is also operating above its typical summer capacity to try and meet demands; however, minimum system pressures are unable to be maintained.

Scenario 3 – Baseline Plus NEQ Well 1

Conclusion: Future NEQ Well 1 can supply Dixon 257, Buzz Oates Innovation Center, and Milk Farm demands. However, the Valley Glen Well is required for this scenario even though it is considered the City's backup well. Therefore, it is essential that the NEQ Well 1 be online prior to any of the Dixon 257, Buzz Oates Innovation Center, or Milk Farm water demands can be served (including construction water demands).

Figure 4 shows the minimum pressure results of the City's water system for Scenario 3 where the NEQ demands occur during maximum day demand condition with a new 1,500 gpm well in the NEQ online (NEQ Well 1). Although minimum pressures occur during peak hour demand, indicate pressures are maintained above 53 psi throughout the whole system (achieving required design pressures) with pressures south of the railroad and around South Lincoln Avenue above 60 psi. Average pressures within the system range between 56 to 68 psi with the overall system average pressure of 61 psi.

For this evaluation, School Well, Homestead Well, and NEQ Well 1 run continuously for the seven-day period. Watson Ranch Well and Park Lane Well cycle on to maintain levels in the tanks. Valley Glen Well operates during peak morning demand periods.

Scenario 4 – Scenario 3 Plus NEQ Growth

Conclusion: Future NEQ Well 1 can accommodate 245 gpm of additional demand beyond Scenario 3. An additional 245 gpm of demand represents 48 percent of the remaining NEQ development beyond Dixon 257, Buzz Oates Innovation Center, and Milk Farm. Any demands greater than the 245 gpm (including construction water demands) cannot be supported until a new NEQ Tank is constructed.

Figure 5 shows the minimum pressure results of the City's water system for Scenario 4 where the NEQ demands occur during maximum day demand condition, along with 245 gpm of additional maximum day demands in the NEQ. The additional demands were added to the model in the south and west areas of the NEQ and represent the estimated extent of additional development that can occur in the NEQ before a new water storage tank is needed. The need for a new water storage tank will be impacted by the location of future demands, so any additional proposed development should be evaluated on a case-by-case basis to determine if City criteria are met.

Although minimum pressures occur during peak hour demand, pressures are maintained above 52 psi throughout the whole system (achieving required design pressures) with pressures south of the railroad and around South Lincoln Avenue above 60 psi. Average pressures within the system range between 54 to 67 psi with the overall system average pressure of 59 psi.

For this evaluation, School Well, Homestead Well, and NEQ Well 1 run continuously for the seven-day period. Watson Ranch Well and Park Lane Well cycle on to maintain levels in the tanks. Valley Glen Well does not operate as the Park Lane booster pump station is able to maintain pressures in the southern part of the system.

Scenario 5 – Scenario 4 Plus NEQ Tank

Conclusion: The future 0.4 MG NEQ Tank and NEQ Well 1 can accommodate up to 107 gpm of additional demand beyond Scenario 4. The NEQ Tank must be constructed prior to serving any water demands more than 245 gpm in addition to Dixon 257, Buzz Oates Innovation Center, and Milk Farm. The additional 352 gpm of demand (245 gpm + 107 gpm = 352 gpm) represents 69 percent of the remaining NEQ development beyond Dixon 257, Buzz Oates Innovation Center, and Milk Farm. Any demands greater than the 352 gpm (including construction water demands) cannot be supported until a second NEQ Well is constructed.

Figure 6 shows the minimum pressure results of the City's water system for Scenario 5 where the NEQ demands occur during maximum day demand condition, along with 107 gpm of additional maximum day demands in the NEQ. A new 0.4 MG storage tank in the NEQ is online, fed by NEQ Well 1. The 0.4 MG storage tank provides a minimum of 0.26 MG of usable storage as recommended in the 2016 Water System Master Plan. The additional demands were added to the model in the western part of the NEQ and represent the estimated extent of additional development that can occur in the NEQ before a second well is needed. The need for a second well in the NEQ will be impacted by the location of future demands, so any additional proposed development should be evaluated on a case-by-case basis to determine if City criteria are met.

Although minimum pressures occur during peak hour demand, pressures are maintained above 50 psi throughout the whole system (achieving required design pressures) with pressures south of the railroad and around South Lincoln Avenue above 60 psi. Average pressures within the system range between 55 to 67 psi with the overall system average pressure of 59 psi.

For this evaluation, School Well, Homestead Well, Watson Ranch Well, and NEQ Well 1 run continuously for the seven-day period. Park Lane Well cycles on to maintain levels in the tanks. Valley Glen Well does not operate as the Park Lane booster pump station is able to maintain pressures in the southern part of the system.

Scenario 6 – Scenario 2 Plus All NEQ Facilities

Conclusion: The two future NEQ wells and the 0.4 MG NEQ tank can supply all NEQ and Milk Farm demands. The NEQ Well 2 must be constructed prior to serving any water demands more than 352 gpm in addition to Dixon 257, Buzz Oates Innovation Center, and Milk Farm.

Figure 7 shows the minimum pressure results of the City's water system for Scenario 6 where the NEQ demands occur during maximum day demand condition with the NEQ and Milk Farm fully developed. A new 1,500 gpm well in the NEQ is online (NEQ Well 2). Although minimum pressures occur during peak hour demand, pressures are maintained above 53 psi throughout the whole system (achieving required

design pressures) with pressures south of the railroad and around South Lincoln Avenue above 60 psi. Pressures in the NEQ are above 53 psi with a few areas near NEQ Well 2 above 60 psi. Average pressures within the system range between 54 to 67 psi with overall system the average pressure of 59 psi.

It should be noted that School Well, Homestead Well, and NEQ Well 2 run continuously for the seven-day period. Watson Ranch Well, Park Lane Well, and NEQ Well 1 cycle on to maintain levels in the tanks. Valley Glen Well does not operate as the Park Lane booster pump station is able to maintain pressures in the southern part of the system.

Maximum Day Demand plus Fire Flow Condition

The following sections summarize evaluation findings for Scenarios 7 through 12, which evaluate distribution system performance under maximum day demand plus fire flow conditions, under the varying demand/land use assumptions as summarized in Table 1. The hydraulic model results represent flow available from the water distribution system only and do not account for losses through a hydrant lateral, fire hydrant assembly, or other fire protection system appurtenances.

For fire flow evaluations, it is assumed that all 12-inch distribution pipelines within the NEQ will need to be capable of meeting the fire flow criteria of 4,000 gpm, to be able to support commercial and industrial requirements presented in Table 3. In-tract pipelines should be modeled once development plans are finalized to confirm that all pipelines meet the applicable criteria.

Scenario 7 – Baseline

Conclusion: Fire flow demands can be met at most locations within the existing City system.

Figure 8 shows the available fire flow results of the baseline system under maximum day demand plus fire flow demand conditions. Available fire flow results at most locations within the existing system exceed the required minimum fire flow while maintaining a minimum residual pressure of 20 psi at all customer service locations throughout the City's water system. Locations that do not meet the applicable fire flow requirements are typically located either at pipeline dead ends or within commercial developments where higher fire flow requirements would result in velocities greater than the maximum velocity criteria of 12 fps in existing 8-inch pipelines. Available fire flow ranges from 1,058 gpm to 7,291 gpm.

Scenario 8 – Baseline Plus NEQ Growth

Conclusion: Fire flow demands cannot be met.

Model results for Scenario 2 for the baseline condition with the Milk Farm and NEQ developments indicate that the system is unable to meet a maximum day demand condition without fire flow demands. Therefore, because the system is unable to meet normal operation criteria, it will also be unable to provide fire flow demands in addition to maximum day demands.

Scenario 9 – Baseline Plus NEQ Well 1

Conclusion: Fire flow demands can be met.

Figure 9 shows the available fire flow results within the NEQ under maximum day demand plus fire flow demand conditions. The model results at all locations within the NEQ exceed the required minimum fire flow while maintaining a minimum residual pressure of 20 psi at all customer service locations and without exceeding the velocity criterion of 12 fps in the proposed pipelines. Available fire flow in the NEQ ranges

from 4,444 gpm to 6,961 gpm. Available fire flow in the existing system is not negatively impacted compared to Scenario 7.

Scenario 10 – Scenario 9 Plus NEQ Growth

Conclusion: Fire flow demands can be met.

Figure 10 shows the available fire flow results within the NEQ under maximum day demand plus fire flow demand conditions. The model results at all locations within the NEQ exceed the required minimum fire flow while maintaining a minimum residual pressure of 20 psi at all customer service locations and without exceeding the velocity criterion of 12 fps in the proposed pipelines. Available fire flow in the NEQ ranges from 4,461 gpm to 7,142 gpm. Available fire flow in the existing system is not negatively impacted compared to Scenario 7.

Scenario 11 – Scenario 10 Plus NEQ Tank

Conclusion: Fire flow demands can be met.

Figure 11 shows the available fire flow results within the Project area under maximum day demand plus fire flow demand conditions. The model results at all locations within the NEQ exceed the required minimum fire flow while maintaining a minimum residual pressure of 20 psi at all customer service locations and without exceeding the velocity criterion of 12 fps in the proposed pipelines. Available fire flow in the NEQ ranges from 4,984 gpm to 8,170 gpm. Available fire flow in the existing system is not negatively impacted compared to Scenario 7.

Scenario 12 – Scenario 8 Plus All NEQ Facilities

Conclusion: Fire flow demands can be met.

Figure 12 shows the available fire flow results of the City's existing system under maximum day demand plus fire flow demand conditions. Available fire flow results at all locations within the NEQ exceed the required minimum fire flow while maintaining a minimum residual pressure of 20 psi at all customer service locations throughout the City's water system and without exceeding the velocity criterion of 12 fps in the proposed pipelines. Available fire flow in the NEQ ranges from 4,092 gpm to 8,535 gpm. Available fire flow in the existing system is not negatively impacted compared to Scenario 7.

FINDINGS AND CONCLUSIONS

West Yost's findings and conclusions are summarized for this hydraulic evaluation of the City's water system. The hydraulic evaluation performed for the NEQ is based on the assumptions listed in Table 1. If any of these items are changed or modified, other than described in this TM, additional hydraulic evaluation may be required.

- The NEQ will add a total of 1,371 gpm of maximum day demand to the City's water system at full build out.
- Full development of the NEQ, along with development of the Milk Farm, results in the existing City system being unable to support maximum day, peak hour, and fire flow demands within the system without additional supply being added in the NEQ area.
- A new well in the NEQ (NEQ Well 1) must be constructed before any construction can begin in the NEQ or at the Milk Farm. Assuming the well operates at a capacity of 1,500 gpm, this

new well will be able to support the development of Dixon 257, the Buzz Oates Innovation Center, the Milk Farm, and an additional 245 gpm of demand within the NEQ.

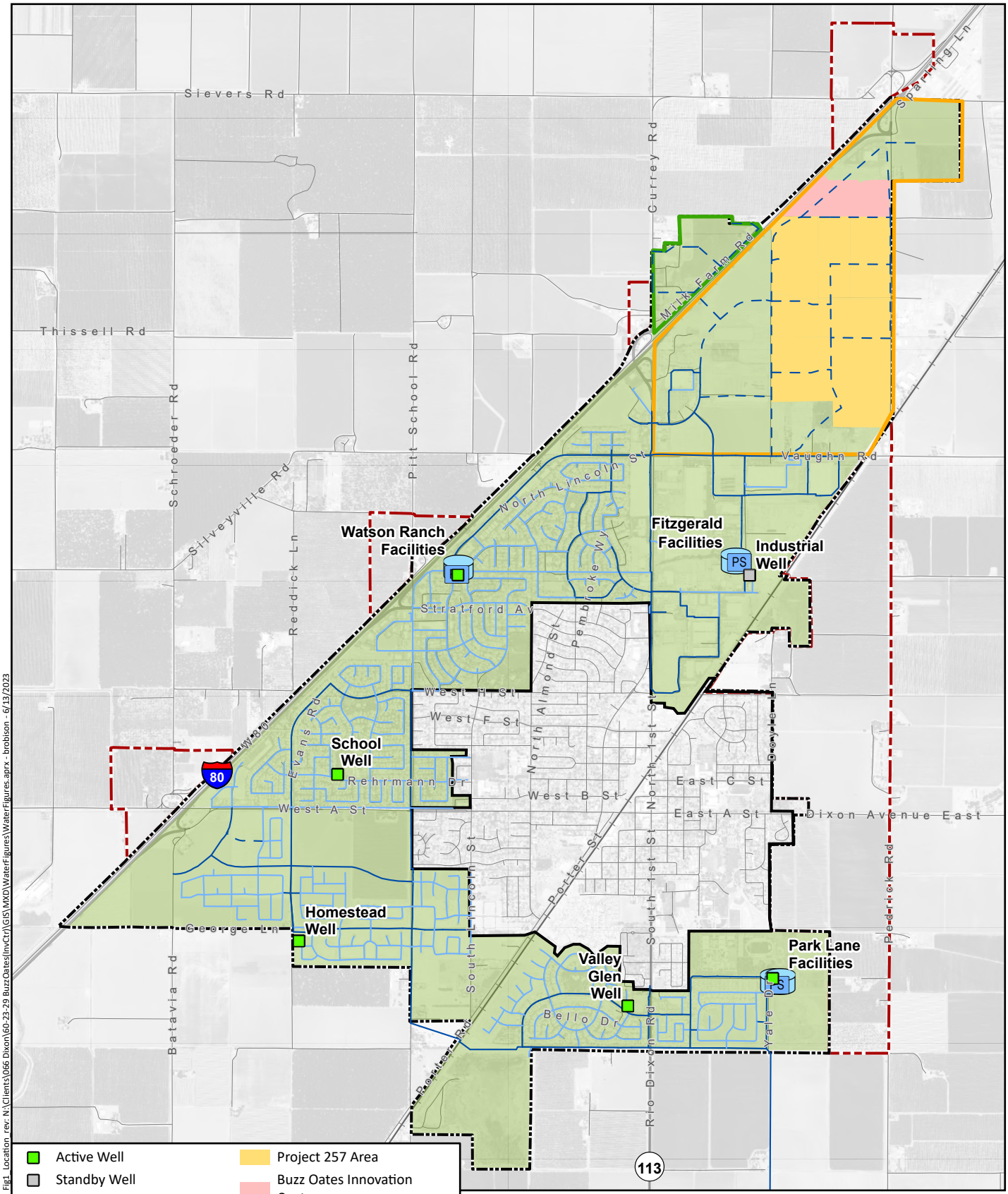
- In addition to NEQ Well 1, a new 0.4 MG storage tank in the NEQ must be constructed to support any future development that increases total NEQ demand above 1,107 gpm, including construction water demands, and the total City water demand to above 4,731 gpm.
- A second well in the NEQ (NEQ Well 2) must be constructed to support any future development that increases total NEQ demand above 1,214 gpm, including construction water demands, and the total City water demand to above 4,838 gpm.
- Full development of the NEQ, along with development of the Milk Farm, can be supported by NEQ Well 1, NEQ Well 2, and the 0.4 MG storage tank.

Recommended Facility Development Thresholds

- **NEQ Well 1:** NEQ Well 1 is needed prior to the start of construction of the Dixon 257, Milk Farm, and Buzz Oates Innovation Center projects.

- **NEQ Tank:** The NEQ Tank is needed prior to the start of any construction beyond Dixon 257, Milk Farm, Buzz Oates Innovation Center, and approximately 48 percent of the remaining NEQ development.

- **NEQ Well 2:** NEQ Well 2 is needed prior to the start of any construction beyond Dixon 257, Milk Farm, Buzz Oates Innovation Center, and approximately 68 percent of the remaining NEQ development.



Active Well
Standby Well
Future Well
Booster Pump Station
Storage Tank
Existing 6" to 10" Diameter Pipelines
Existing 12" and Greater Diameter Pipelines
Proposed Future 12-inch Diameter Pipelines
Project 257 Area
Buzz Oates Innovation Center
Milk Farm Development
Northeast Quadrant
City Water Service Area
California Water Service Area
City Limits
Sphere of Influence

N

0 3,000
US Feet

WEST YOST

Figure 1
Project Location

City of Dixon
Northeast Quadrant
Potable Water Evaluation

Fig1_Location_rev: N:\Clients\066 Dixon\60-23-29 BuzzOates(InvCtr)\GIS\MXD\WaterFigures\WaterFigures.aprx - brobison - 6/13/2023

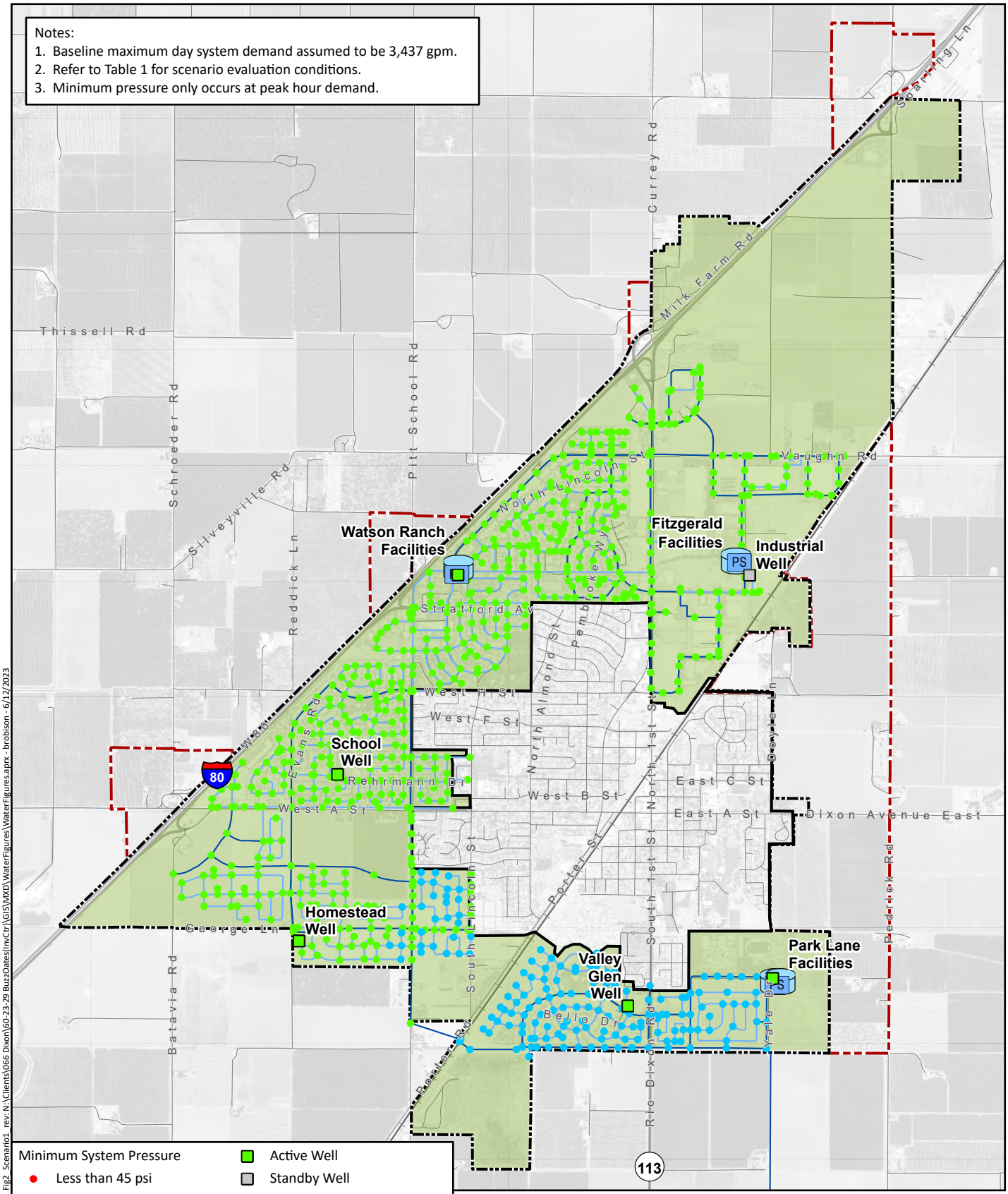


Fig2_Scenario1_rev: N:\Clients\066 Dixon\60-23-29 BuzzOates(nvCtr)\GIS\MXD\WaterFigures\WaterFigures.aprx - brobison - 6/12/2023

Figure 2
Scenario 1: Baseline
Minimum System Pressure

City of Dixon
Northeast Quadrant
Potable Water Evaluation

WEST YOST

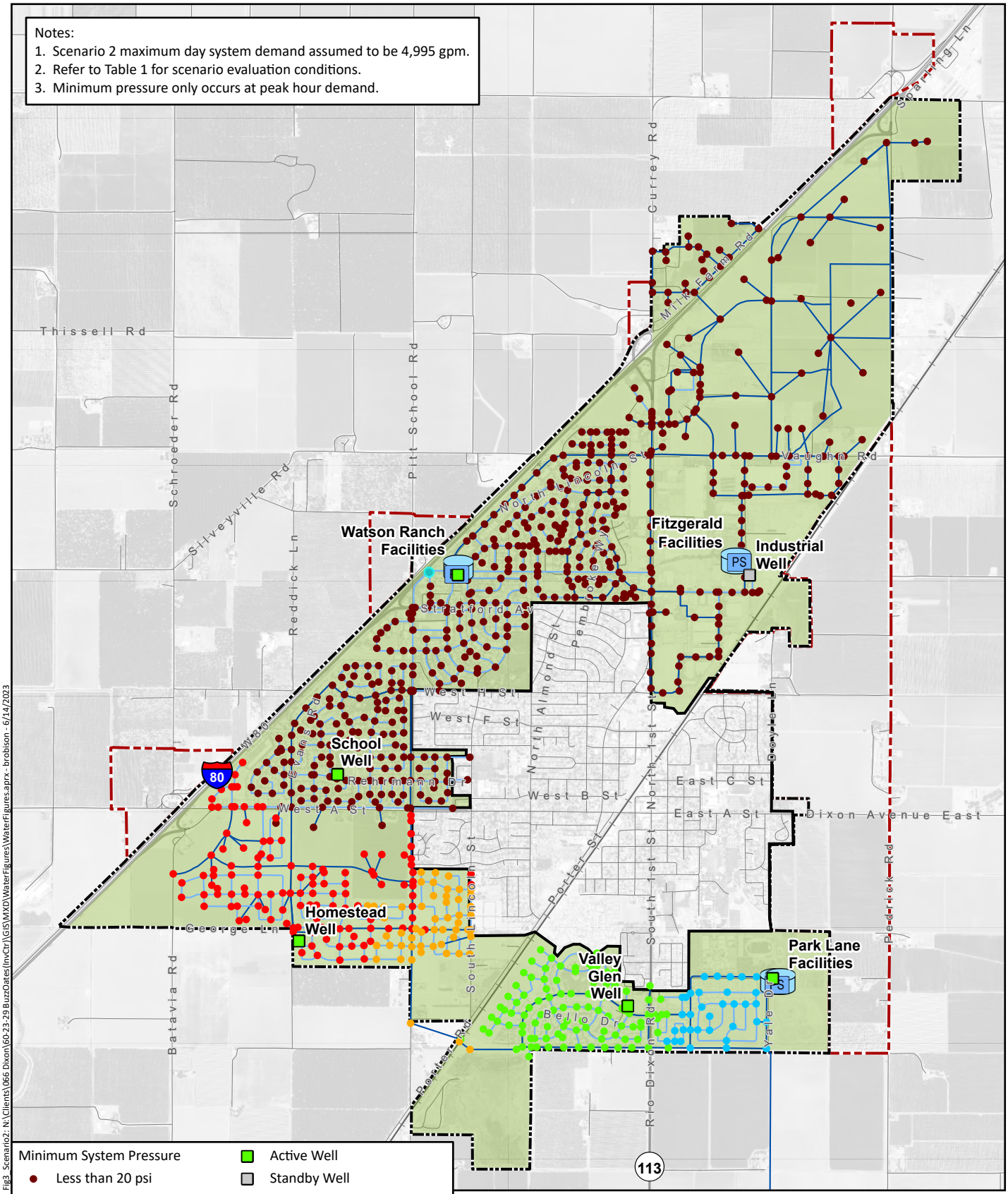


Fig3_Scenario2: N:\Clients\066 Dixon\60-23-29 BuzzOates(InvCtr)\GIS\MXD\WaterFigures\WaterFigures.aprx - brobison - 6/14/2023

Figure 3
Scenario 2: Baseline +NEQ Growth
Minimum System Pressure

City of Dixon
Northeast Quadrant
Potable Water Evaluation

WEST YOST

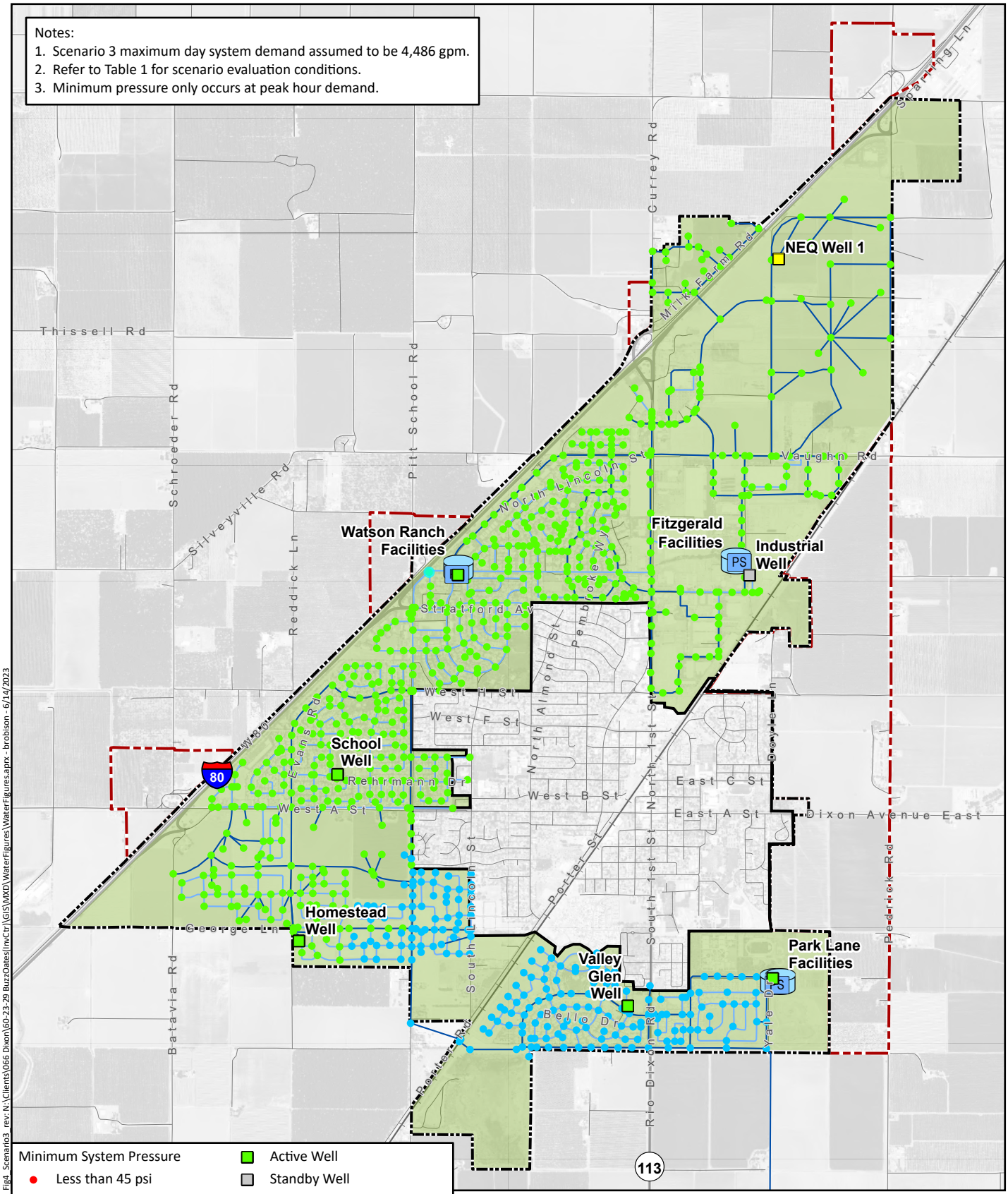


Figure 4
Scenario 3: Baseline + NEQ Well 1
Minimum System Pressure

City of Dixon
Northeast Quadrant
Potable Water Evaluation

WEST YOST

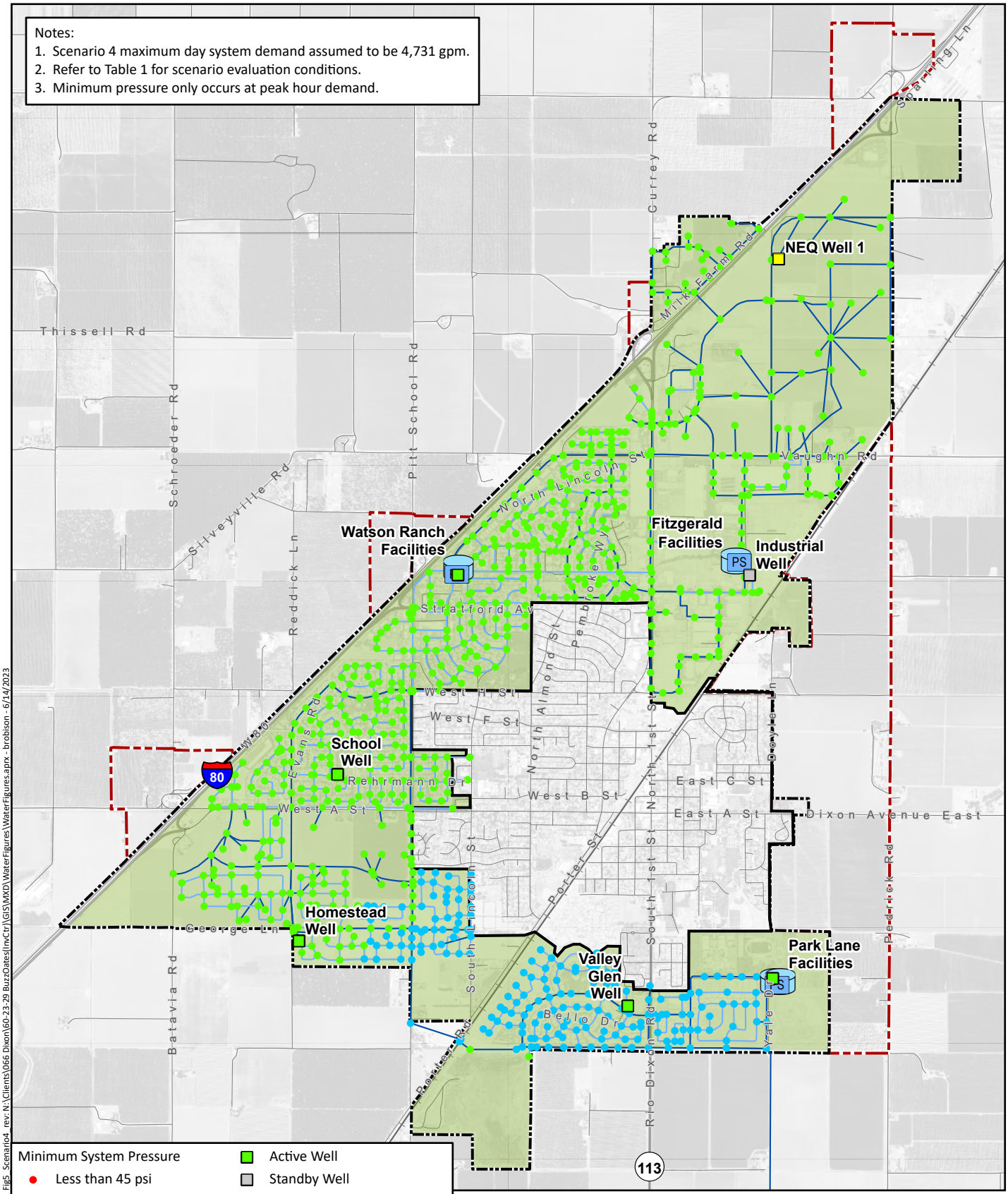


Fig5_Scenario4_rev: N:\Clients\066 Dixon\60-23-29 BuzzOates(nvCtr)\GIS\MXD\WaterFigures\WaterFigures.aprx - brobison - 6/14/2023

Figure 5
Scenario 4: Scenario 3 + NEQ Growth
Minimum System Pressure

City of Dixon
Northeast Quadrant
Potable Water Evaluation

WEST YOST

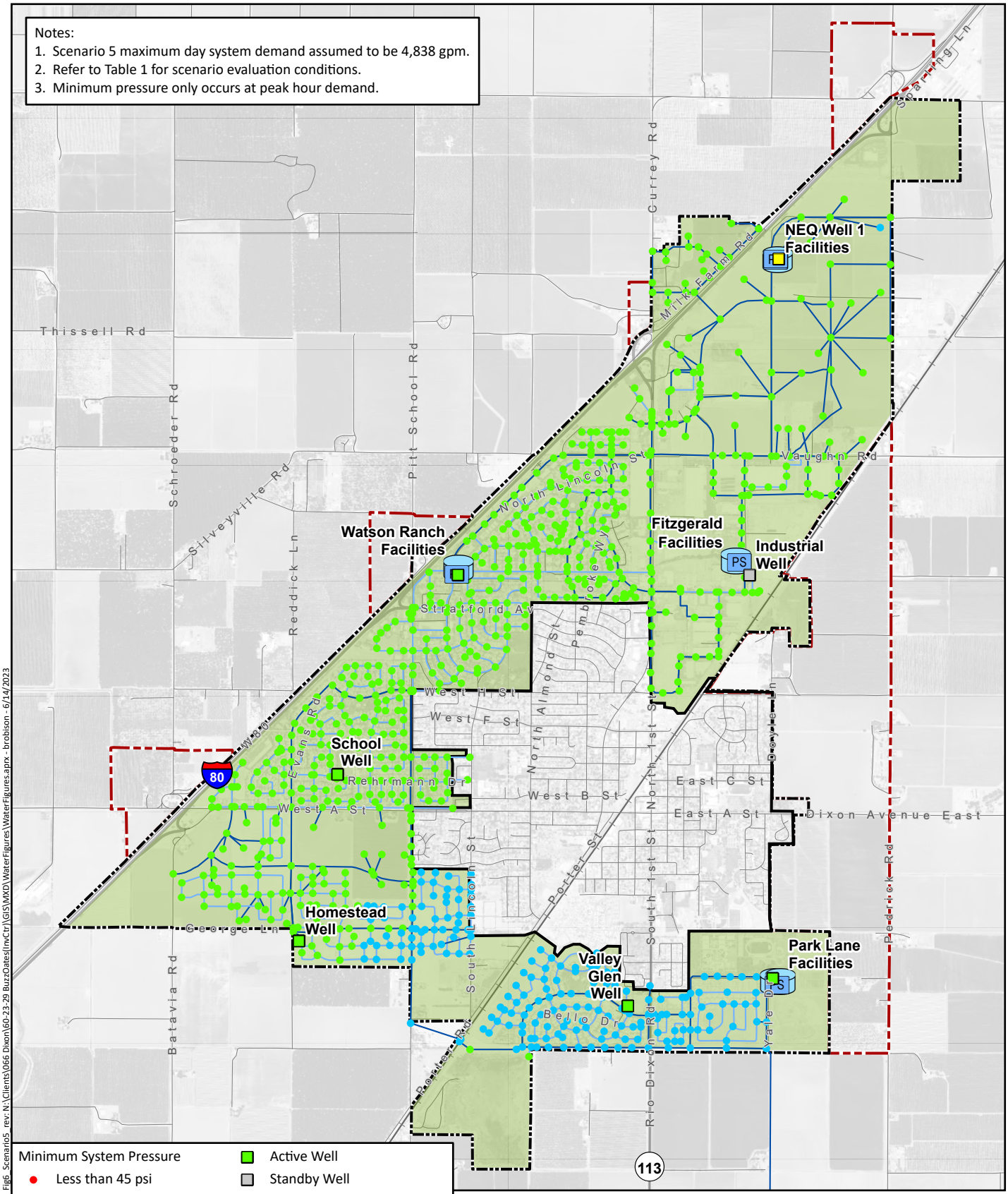


Fig6_Scenario5_rev: N:\Clients\066 Dixon\60-23-29 BuzzOates(nvCtr)\GIS\MXD\WaterFigures\WaterFigures.aprx - brobison - 6/14/2023

Figure 6
Scenario 5: Scenario 4 + NEQ Tank
Minimum System Pressure

City of Dixon
Northeast Quadrant
Potable Water Evaluation

WEST YOST

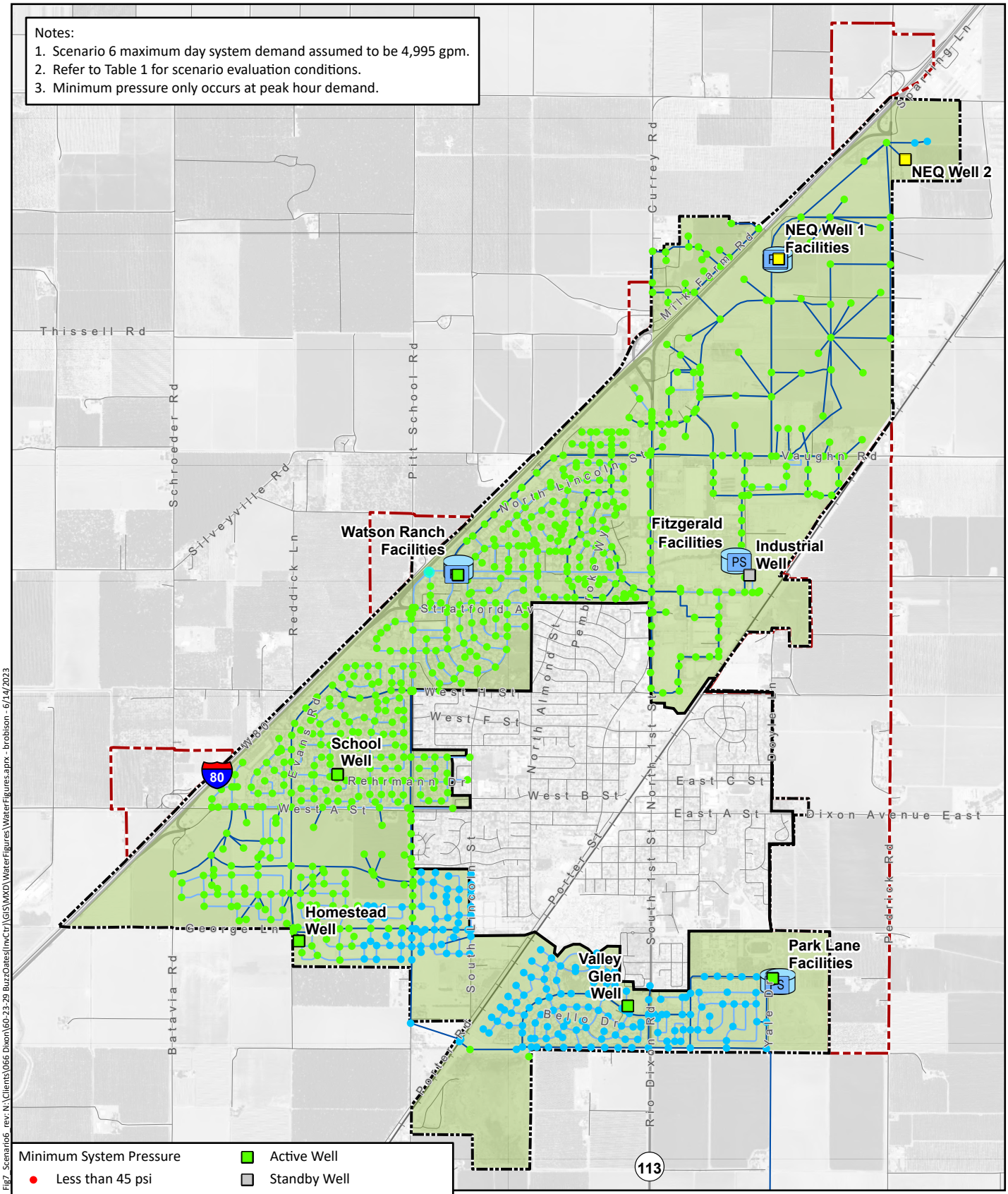


Figure 7
Scenario 6: Scenario 2 + All NEQ Facilities
Minimum System Pressure

City of Dixon
Northeast Quadrant
Potable Water Evaluation

WEST YOST

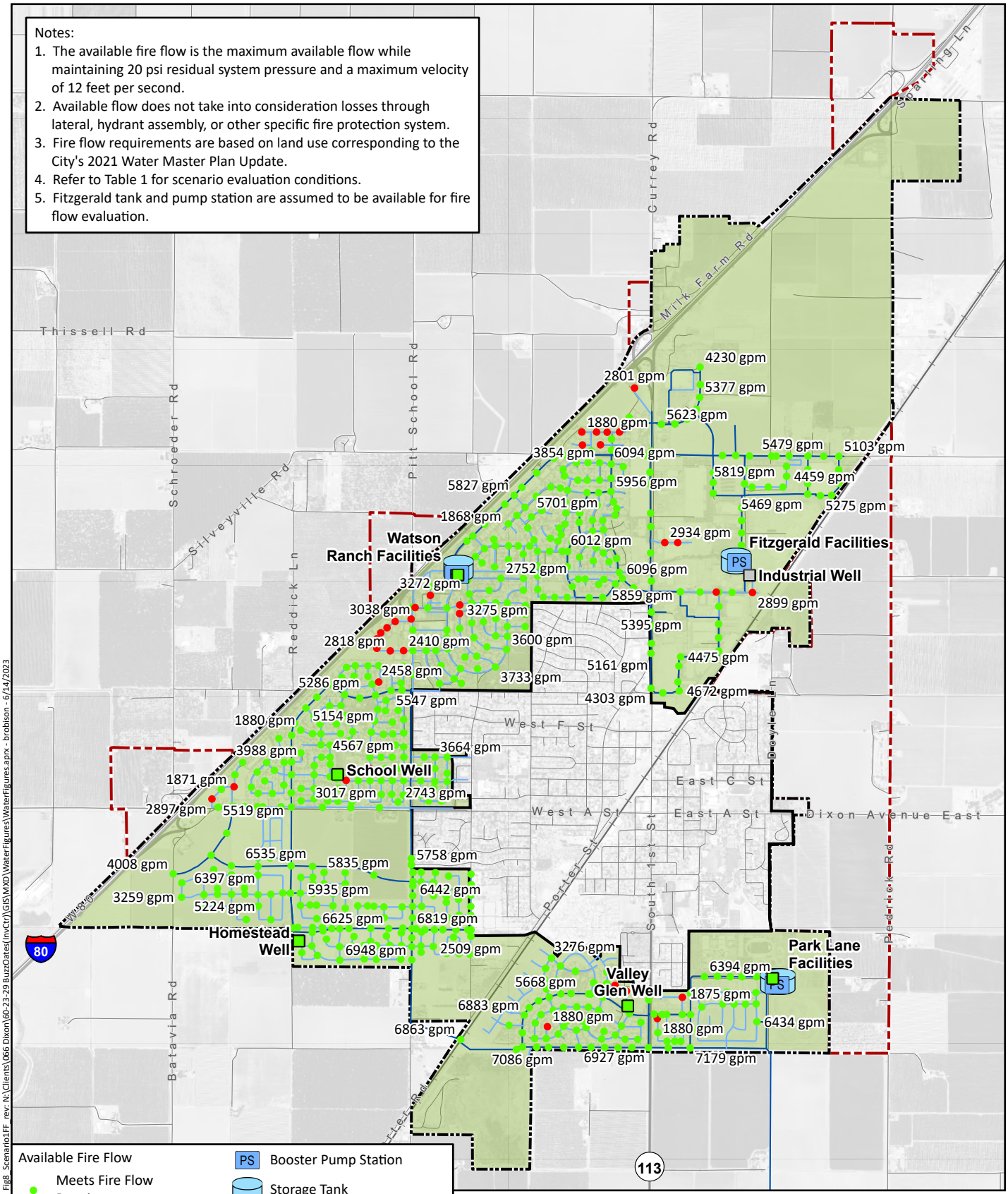


Figure 8
Scenario 7: Baseline Available Fire Flow

City of Dixon
Northeast Quadrant
Potable Water Evaluation

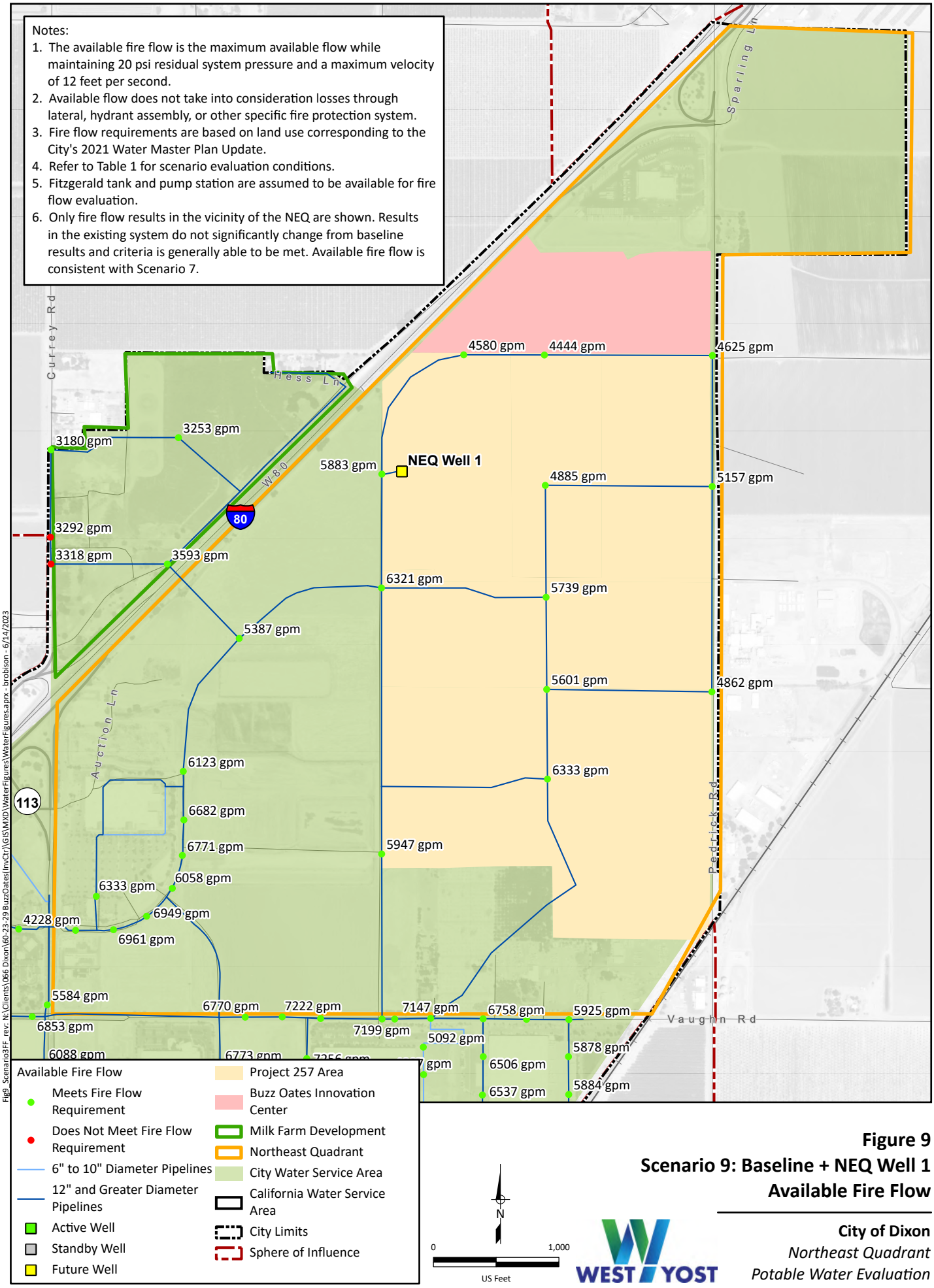


Figure 9
Scenario 9: Baseline + NEQ Well 1
Available Fire Flow

City of Dixon
Northeast Quadrant
Potable Water Evaluation

WEST YOST

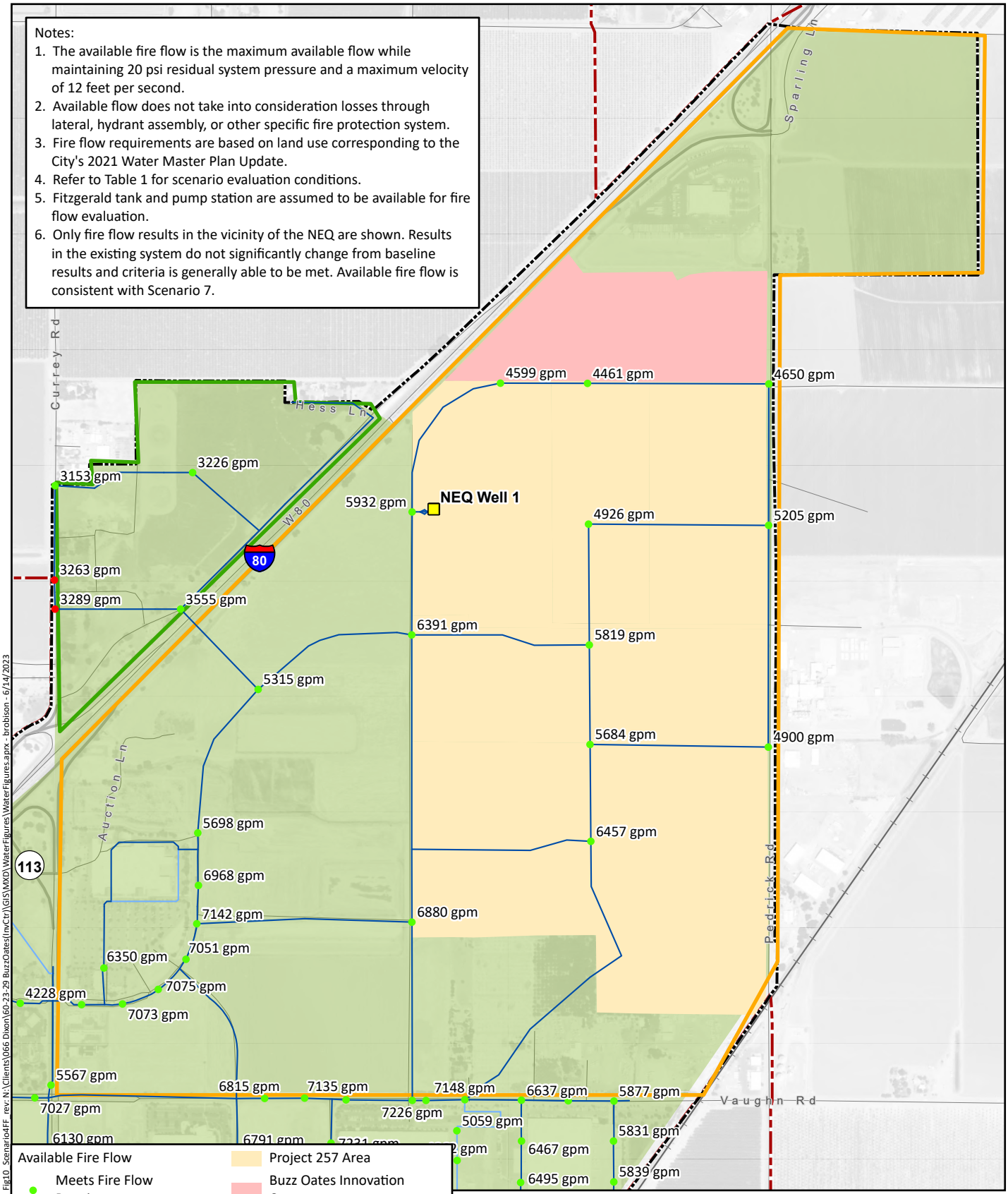


Figure 10
Scenario 10: Scenario 9 + NEQ Growth
Available Fire Flow

City of Dixon
Northeast Quadrant
Potable Water Evaluation

WEST YOST

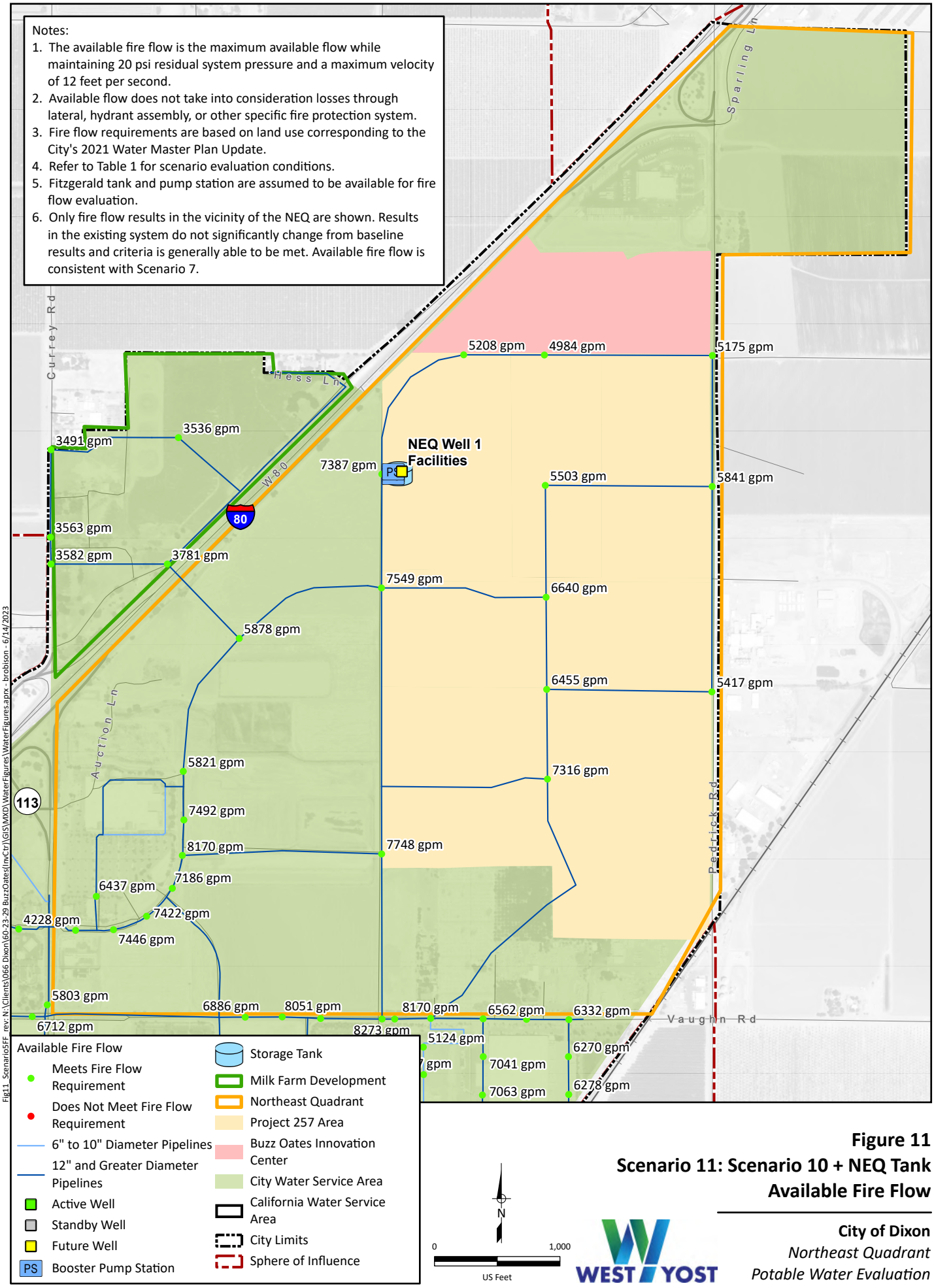


Figure 11
Scenario 11: Scenario 10 + NEQ Tank
Available Fire Flow

City of Dixon
Northeast Quadrant
Potable Water Evaluation

WEST YOST

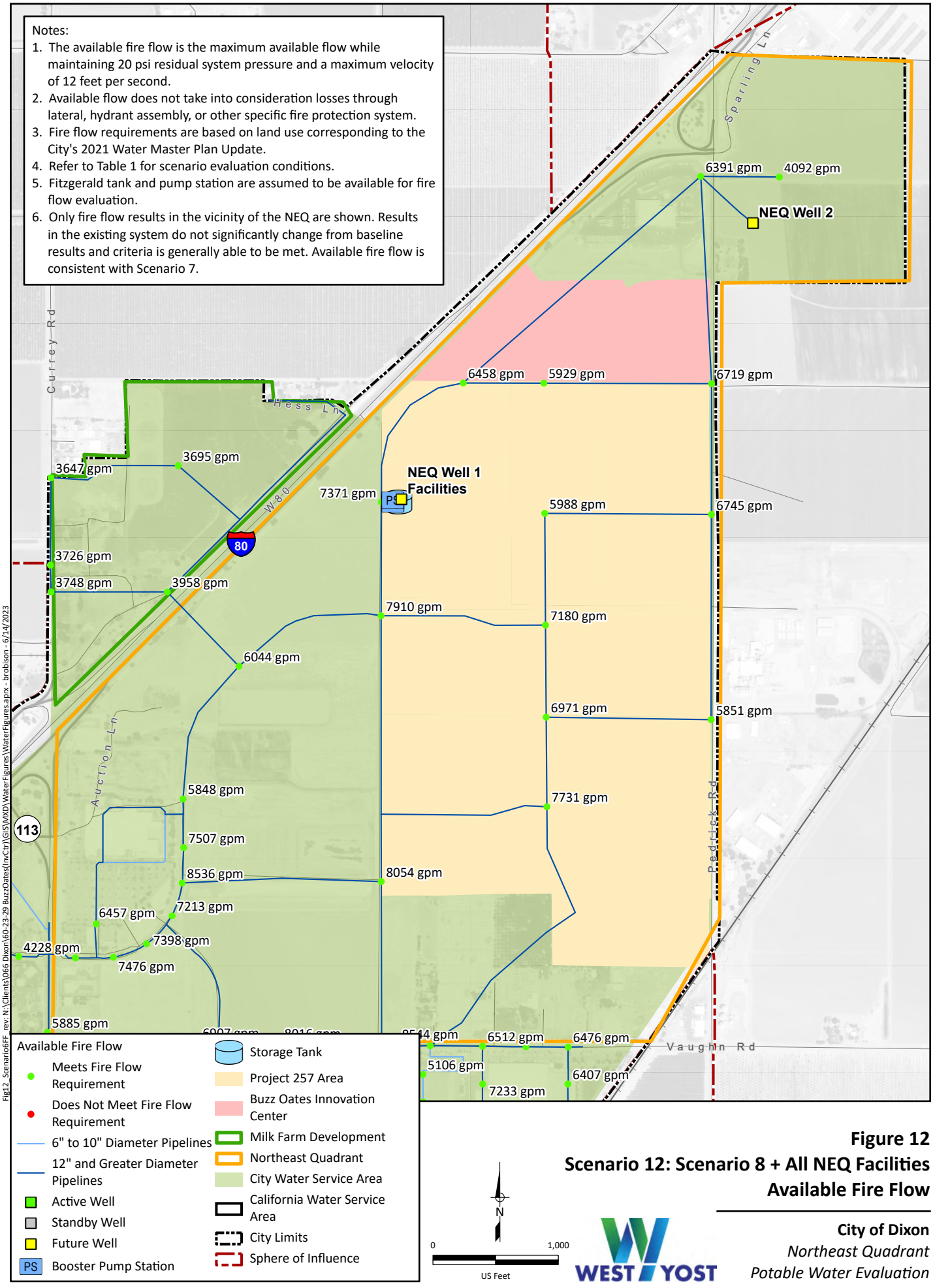


Figure 12
Scenario 12: Scenario 8 + All NEQ Facilities
Available Fire Flow

City of Dixon
Northeast Quadrant
Potable Water Evaluation

WEST YOST

APPENDIX H

SEWER STUDY

DIXON INNOVATION CENTER (DIC)

TECHNICAL MEMORANDUM

Supplemental Sewer Capacity Analysis**

** This technical memo serves to identify the sewer facilities required based on the anticipated build-out of the Dixon Innovation Center (DIC) and to show that those off-site facilities have been accounted for in the DRAFT SEWER STUDY FOR THE CAMPUS dated January 2024. This study was submitted back to the City of Dixon February 16th, 2024 and has been included for reference in this technical memo

TABLE OF CONTENTS

I. BACKGROUND 2
II. PURPOSE 3
III. LAND USE 3
PRE-DEVELOPMENT CONDITIONS: 3
POST-DEVELOPMENT CONDITIONS: 3
IV. SEWER INFRASTRUCTURE 3
EXISTING SEWER FACILITIES: 3
PROPOSED SEWER FACILITIIES: 3
On-Site 3
Off-Site 4
V. CONCLUSION 4
Sanitary Sewer Capacity: 4
VI. DRAFT SEWER STUDY FOR THE CAMPUS dated January 2024 5

I. BACKGROUND

The Dixon Innovation Center project site is approximately 38 acres and is located in Dixon, CA, in the Central Valley region of Northern California, along the Interstate 80 (I-80) freeway corridor (APNs 0111-010-080). The project is located within the City of Dixon's Northeast Quadrant Specific Plan (NQSP). The project site is located within the area of land bounded by existing industrial to the north, Pedrick Road to the east, Interstate 80 to the west and undeveloped property to the south (future Professional Drive alignment). See **Figure 1** below for the vicinity map.

FIGURE 1- VICINITY MAP

II. PURPOSE

The main objective of this Technical Memo (TM) is to estimate design sewer flows produced by the proposed Dixon Innovation Center (DIC) project and future contributing sewer shed areas up/downstream at full build out conditions and provide preliminary sizing of the backbone sanitary sewer infrastructure required to serve the shed area. To that end, and to minimize duplicate information between adjacent projects, this TM references the DRAFT SEWER STUDY FOR THE CAMPUS dated January 2024 which accounts for all of the existing and proposed off-site sewer flows as well as the proposed on-site Dixon Innovation Center (DIC) flows through the shed area down to the treatment plant.

III. LAND USE

PRE-DEVELOPMENT CONDITIONS:

Historically, this site has been used for farming. The existing topography of the site is very flat and generally drains from the west to the east.

POST-DEVELOPMENT CONDITIONS:

The 38-acre Dixon Innovation Center project site is currently zoned Highway Commercial (2018 Zoning Map, CH-PUD) and has a General Plan designation of Industrial. It is understood the City is of Dixon is considering a Zoning Ordinance and Zoning Map update under which the project site would be zoned IG-NESP. The updated General Plan designation would remain Industrial. The site is proposed to be developed for Industrial uses.

IV. SEWER INFRASTRUCTURE

EXISTING SEWER FACILITIES:

There are currently no existing sewer facilities on or adjacent to the project.

PROPOSED SEWER FACILITIIES:

On-Site

With the future on-site Design review application, the proposed on-site sewer network will be designed to meet the design criteria set forth in the City of Dixon Engineering Standards & Specifications (March 2022). To ensure off-site infrastructure provides for the full build-out of the DIC project, the following on-site design calculations have been provided.

Design Flows:

To evaluate the proposed off-site sanitary sewer main required to support the development of the Dixon Innovation Center project, the site was modeled using the City's Industrial design standards. Section DS6-03.A of the standards provides the following equation for calculation of design sewer flow:

$Q_d = Q_p + I\&I$, where

Q_d = Design flow

Q_p = Peak flow = Average Daily Flow x Peaking Factor

I&I = Infiltration & Inflow Factor

Section DS6-03.A in the standards provides the following design flows per land use:

Design Flows from City of Dixon Engineering Standards		
Land Use	**Average Daily Flow**	**I+ I Factor**
Industrial	1,400 gpd per net acre	500 gpd per gross ac.

The DIC project area contributing to the ultimate sewer network is based on the following:

Project Area Inputs		
Land Use	**Gross Area (Ac.)**	**Net Area (Ac.)**
Industrial	37.0	29.6

*Note: Net Acres is assumed as 80% of Gross Acres

Based on this information, the proposed design flows from the on-site DIC project that need to be accounted for in the off-site sewer network are as shown below. Since the total shed area being analyzed in the overall study is roughly 500-acres, a peaking factor of 2.5 has been used to determine required sewer flows (Section DS6-03.A). See Exhibit 3 in The Campus Draft Sewer Report

Design Sewer Flows Summary			
Shed Name from The Campus Draft Sewer Report	**Total Gross Shed Area (Ac.)**	**Q_d (mgd)**	**Q_d (cfs)**
A6 (DIC Site)	37	0.1499	0.2319

Off-Site

Pipe sizing and routing information is provided in The Campus Draft Sewer Report dated January 2024. The design flows required to serve the DIC project have been accounted for in the sewer report analysis as shown in Exhibit 1 & 3 of the report (see attached).

V. CONCLUSION

Sanitary Sewer Capacity:

The Dixon Innovation Center project is a 38-acre industrial project in northern Dixon along Highway 80. Based on the proposed land use, it is anticipated to generate a total design sanitary sewer flow of 0.1499 mgd (million gallons per day) including a peaking factor of 2.5. A sanitary lift station located at the southwest corner of the site will lift project and up-shed sewer flows to allow gravity flow south from the project site. The proposed sanitary sewer main in the future Professional Drive alignment, will route project/up-shed and adjacent industrial, commercial, SFR & MFR parcels southward to the existing 18" sewer main in Vaughn Road, where it will be carried to the existing wastewater treatment plant south of the site. Preliminary sizing of the sewer trunk main is provided in The Campus Draft Sewer Report dated January 2024.

VI. DRAFT SEWER STUDY FOR THE CAMPUS dated January 2024

See Attached

CITY OF DIXON, CALIFORNIA

THE CAMPUS

M&P Project No. 20-0024-00 (v.4)

DRAFT SEWER STUDY

January 2024

PREPARED BY:

mortonpitalo

600 Coolidge Drive, Suite 140
Folsom, CA 95630
Telephone: (916) 927-2400
Fax: (916) 984-9617

TABLE OF CONTENTS:

1. BACKGROUND 2
2. PURPOSE 2
3. LAND USE 2
3.1. PRE-DEVELOPMENT CONDITIONS 2
3.2. POST-DEVELOPMENT CONDITIONS 3
4. SEWER ANALYSIS 6
4.1. DESIGN FLOWS 6
4.2. CAPACITY ANALYSIS 8
5. CONCLUSIONS 9
6. REFERENCES 10

LIST OF FIGURES:

Figure 1 – Vicinity Map 2
Figure 2 – Existing Sanitary Sewer 3
Figure 3 – Proposed Sanitary Sewer 4
Figure 4 – The Campus Proposed Land Uses 5

LIST OF TABLES:

Table 1 – Design Flows from City of Dixon Engineering Standards 6
Table 2 – Sewer Shed Summary 6
Table 3 – Design Sewer Flows Summary 7
Table 4 – Sewer Capacity Analysis Summary 8

LIST OF EXHIBITS:

Exhibit 1 – Proposed Land Use Mix
Exhibit 2 – Sewer Plan and Shed Map
Exhibit 3 – Sanitary Sewer Design Calculations

1. BACKGROUND

The Campus project site is approximately 259.7 acres and is in Dixon, CA, in the Central Valley region of Northern California, along the Interstate 80 (I-80) freeway corridor (APNs 0111-040-010, -020, -030, -040, and 0111-080-050). The project is located within the City of Dixon's Northeast Quadrant Specific Plan (NQSP). The project site is located within the area of land bounded by Pedrick Road to the east, Interstate 80 to the northwest and undeveloped property to the south, west and north. See **Figure 1** below for the vicinity map.

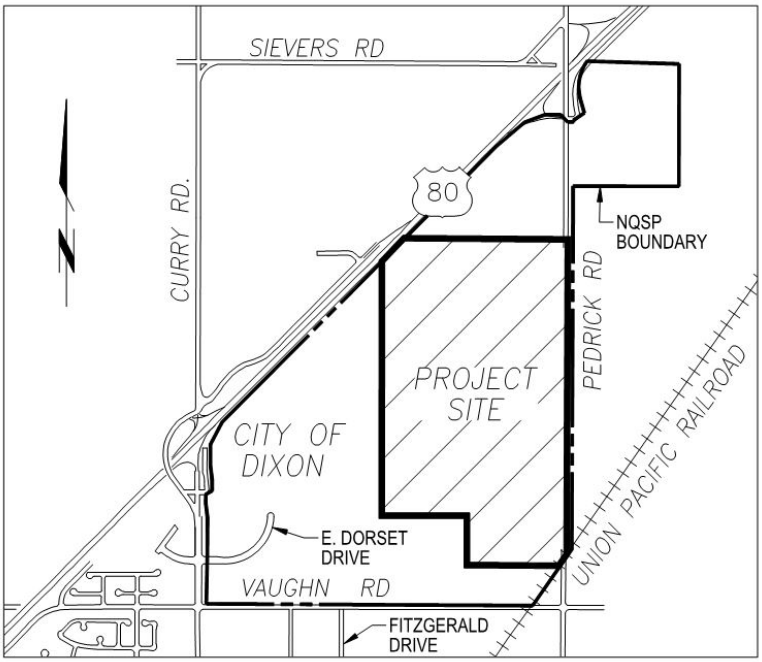


Figure 1 – Vicinity Map

2. PURPOSE

The main objective of this study is to estimate design sewer flows produced by The Campus project and upstream tributary areas at full build out conditions and provide preliminary sizing of the backbone sanitary sewer infrastructure. To ensure compliance, the proposed on-site sewer system will be designed such that it meets the design criteria previously set forth in the City of Dixon Engineering Standards & Specifications (March 2022).

Note: This study does not evaluate downstream impacts on the existing sewer mains in Vaughn Road and Fitzgerald Drive since the properties participated in the North First Street Assessment District to have the sewer oversized from Vaughn Road to Hall Park. The allocation of capacity for the NEQSP was approximately 2.85 mgd.

3. LAND USE

3.1. PRE-DEVELOPMENT CONDITIONS

Historically, the site has been used for farming. Most of the site is presently under cultivation with field and row crops with a small portion of the site uncultivated due to the presence of old, concrete building foundations. The existing topography of the site is very flat and generally drains from the west to the east at one-third percent.

Figure 2 shows the existing sanitary infrastructure near the project site. The image is from the Dixon Sewer System Map. The existing 18" sewer main in Vaughn Road, south of the site, will be used as the tie-in for the project. Sewer flows in Vaughn Road are carried by the 21" sewer main in Fitzgerald Drive southward towards the existing wastewater treatment facility south of the city.

Figure 2 – Existing Sanitary Sewer

3.2. POST-DEVELOPMENT CONDITIONS

The project site is zoned as Corridor Mixed Use (CMU). The site area will be broken up into multiple proposed land uses. Approximately 55% of the site will be single-family residential of varying densities (816 units). The northern portion of the site will contain 50 acres of light industrial area, 10.0 acres of multi-family residential (225 Units), and approximately 2.0 acres of neighborhood commercial. The remainder of the site will be comprised of roads, parks, and a detention basin. See **Exhibit 1** for the Proposed Land Use Mix map.

A sanitary sewer trunk main is proposed to serve the project, and approximately 288 offsite acres north and northwest of the project. The 288-acres parcels are comprised of approximately 121-acres (zoned light industrial) located within the NQSP, and two additional sewer shed areas on the north side of Interstate 80 that are located within the existing city limits and/or sphere of influence. These area are zoned for commercial development. Due to elevation restrictions, these offsite shed areas along with the parcels north the The Campus site will drain via gravity sewers to a future sewer lift station located at the northern end of the The Campus project.

The sanitary sewer trunk main will run from the north boundary line of The Campus southward within the future Professional Drive right-of-way. The proposed sewer main will continue southward along Professional Drive and tie into the existing 21" sewer main in Fitzgerald Way. See **Figure 3** for the approximate alignment of the proposed sanitary sewer main. The proposed sewer main with sizes and contributing sewer sheds are shown in **Exhibit 2**, the Sewer Plan and Shed Map.

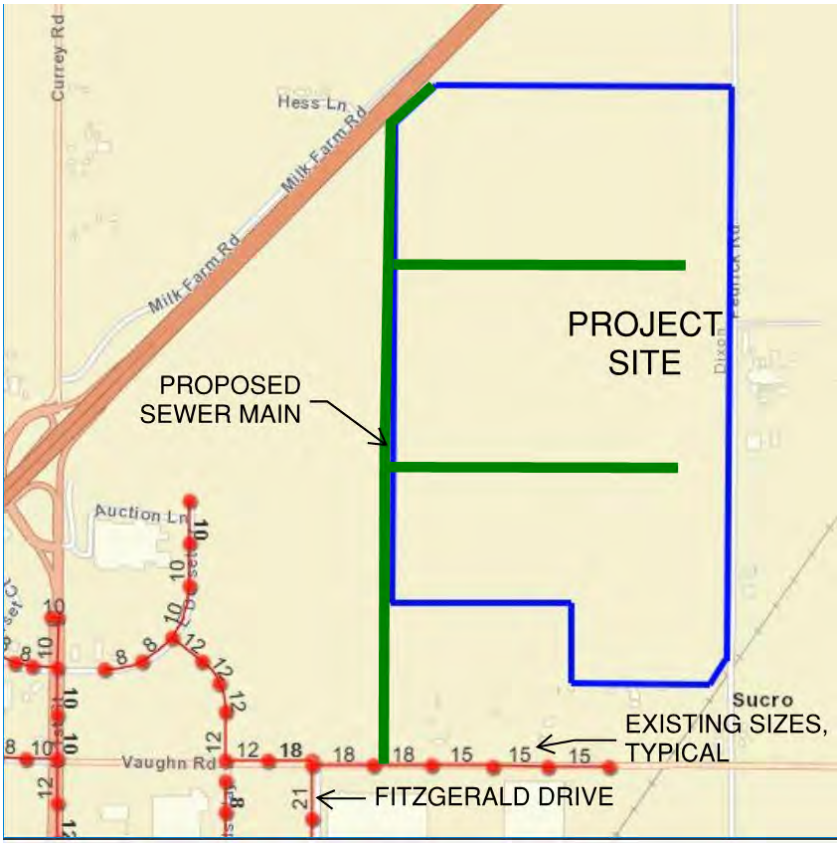


Figure 3 – Proposed Sanitary Sewer

Figure 4 – Proposed Land Use Table

CAMPUS CENTER, DIXON, CA LAND USE SUMMARY - DECEMBER 2023						
				Dwelling Units (du)		
VILLAGE / PARCEL	LAND USE	ZONING	GROSS AREA (acres)	DENSITY (du/ac)	DU's (units)	CAMU LAND USE
RESIDENTIAL						
VILLAGE 1	CAMU	CAMU-PD	27.90	4.6	128	LDR
VILLAGE 2	CAMU	CAMU-PD	18.05	5.3	95	LDR
VILLAGE 3	CAMU	CAMU-PD	11.23	8.7	98	MDR
VILLAGE 4	CAMU	CAMU-PD	6.46	9.3	60	MDR
VILLAGE 5	CAMU	CAMU-PD	15.80	7.6	120	MDR
VILLAGE 6	CAMU	CAMU-PD	18.80	6.9	130	LDR
VIILAGE 7	CAMU	CAMU-PD	18.89	5.1	96	LDR
VILLAGE 8	CAMU	CAMU-PD	15.60	5.7	89	LDR
VILLAGE 9	CAMU	CAMU-PD	11.54	19.5	225	HDR
Residential Total:			**144.27**	**7.2**	**1041**	
COMMERCIAL AND EMPLOYMENT USES						
COMMERCIAL						
PARCEL 11	CAMU	CAMU-PD	2.49			CC
Sub-Total:			**2.49**			
LIGHT INDUSTRIAL (TECH / BUSINESS PARK)						
PARCEL 12	CAMU	CAMU-PD	47.87			T/BP-LI
Sub-Total:			**47.87**			
Commercial and Employment Total:			**50.36**			
PUBLIC						
PARCEL 10 (Detention Po	CAMU	CAMU-PD	25.14			P/QP
PARCEL 13 (Well Site)	CAMU	CAMU-PD	1.58			P/QP
PARCEL 20 (Drainage Ch	CAMU	CAMU-PD	1.18			P/QP
Public / Quasi-Public Total:			**27.9**			
PARKS, OPEN SPACE & PUBLIC USES						
PARKS AND OPEN SPACE						
PARCEL 14	CAMU	CAMU-PD	2.36			P/R
PARCEL 15	CAMU	CAMU-PD	1.64			P/R (Paseo)
PARCEL 16	CAMU	CAMU-PD	1.58			P/R (Paseo)
PARCEL 17	CAMU	CAMU-PD	1.42			P/R (Paseo)
PARCEL 18	CAMU	CAMU-PD	1.42			P/R (Paseo)
PARCEL 19	CAMU	CAMU-PD	5			P/R
Parks and Open Space Total:			**13.42**			
ROADS / R.O.W.		CAMU-PD	**23.66**			
Campus Center Total:			**259.61**			

4. SEWER ANALYSIS

4.1. DESIGN FLOWS

To evaluate the proposed on-and off-site sanitary sewer main required to support the development of the The Campus project, the site was split into twelve sewer sheds, nine on-site and three off-site representing the 288-acres to the north. Design sewer flows for each shed were calculated based on the City of Dixon Engineering Design Standards. Section DS6-03.A of the standards provides the following equation for calculation of design sewer flow:

$$Q_d = Q_p + I\&I, \text{ where}$$

Q_d = Design flow
Q_p = Peak flow = Average Daily Flow x Peaking Factor
I&I = Infiltration & Inflow Factor

Section DS6-03.A in the standards provides the following design flows per land use:

Design Flows from City of Dixon Engineering Standards		
Land Use	**Average Daily Flow**	**I+ I Factor**
Single-Family	250 gpd per unit	500 gpd per gross ac.
Multi-Family	3,600 gpd per net acre	500 gpd per gross ac.
Commercial/Public	1,100 gpd per net acre	500 gpd per gross ac.
Industrial	1,400 gpd per net acre	500 gpd per gross ac.

*Note: Net Acres is assumed as 80% of Gross Acres

Table 1 – Design Flows from City of Dixon Engineering Standards

The following is assumed for the sewer design flows for the Park Land Use areas: no contribution to the average flow; I+I Factor of 500 gpd per gross acres.

Since the east and west sheds being analyzed are less than 500-acres, a peaking factor of 2.5 is used per Section DS6-03.A. The total shed discharge into the Fitzgerald sewer is 796 acres with a corresponding peaking factor of 2.2.

Exhibit 2 shows the twelve sewer sheds on the east sewer trunk line. **Table 2** summarizes each sewer shed, land use, and area (gross and net). The total on-site sewer shed area is 490 acres.

Sewer Shed Summary			
Shed Name	**Land Use**	**Gross Area (Ac.)**	**Net Area (Ac.)**
G2	RC	83.0	66.4
A8	LI	59.0	59.8
A7	LI	24.0	19.2
A6	LI	37.0	29.6
G1	RC	84.0	67.2
A4	LI	61.4	49.1
A10	SFR/MFR	84.1/12.2	67.28/10.37
A3	SFR	76.0	64.6
A1	LI	57.0	45.6
A1.1	LI	13.0	10.4
A0	NEQSP	796	
SFR – Single-Family Residential MFR – Multi-Family Residential LI – Light Industrial CC - Commercial			

Table 2 – Sewer Shed Summary

Exhibit 3 provides design flow calculations for each sewer shed. Average daily flows for each shed and Infiltration & Inflow factors were based on Table 1, with Net Acres assumed to be 80% of Gross Acres. Resulting design flows are provided in **Table 3** on the following page.

Design Sewer Flows Summary			
Shed Name	**Total Gross Shed Area (Ac.)**	**Q_d (mgd)**	**Q_d (cfs)**
G2	83.0	0.224	0.35
A8	59.0	0.389	0.60
A7	24.0	0.469	0.72
A6	37.0	0.591	0.91
G1	84.0	0.227	0.35
A4	61.4	1.012	1.56
A10	75	0.445	0.69
A3	97	1.701	2.63
A1	57.0	1.870	2.89
A1.1	13.0	0.078	0.12
A0	796	2.538	3.93
Design Flow (NFSAD) = 2.85 mgd (4.41 cfs)			

Table 3 – Design Sewer Flows Summary

4.2. CAPACITY ANALYSIS

Sewer pipes were sized per Section DS6-03.B of the standards based upon the sewer mains flowing at 70% capacity using Manning's formula:

$$Q=A(1.49/n)(R^{2/3})(S^{1/2}), \text{ where}$$

Q = Flow, in cubic feet per second (cfs)
A = Area of pipe in square feet (sf)
R = Hydraulic Radius (Area/Wetted Perimeter)
S = Slope of pipe
n = Manning's roughness coefficient of 0.013

Per Section DS6-03.C, sewer pipes were designed such that sewer velocity is greater or equal to 2 feet per second (fps) when flowing full with a maximum velocity of 10 feet per second for pipes flowing greater than 50% of capacity. Sewer flowing less than 50% of capacity area designed to have a slope that allows for a velocity of 2.5 fps when flowing full.

For simplicity, the proposed sanitary sewer main was broken into six sewer pipe sections and seven sewer nodes. It was assumed that sewer flows from each shed enter the system at the sewer nodes. The pipe sections and sewer nodes are shown in **Exhibit 2**. The sewer nodes for this study may or may not correspond to true sanitary sewer manhole locations. Actual manhole locations will be determined later on in the design process.

Exhibit 3 provides pipe sizing calculations and shows that all sewer pipes carry design flows at less than or equal to 70% pipe capacity. It has been assumed that the standard requiring sewers which will not exceed 50% capacity to have a design velocity of 2.5 feet per second will be waived. The minimum velocity flowing full equal to 2 feet per second for each pipe section. Pipe slopes vary between 0.11% and 0.25% and must remain low due to the flatness of the site and the ability to serve areas within the City of Dixon sphere of influence north of Interstate 80. A Manning's n of 0.013 was used for all pipes. A summary of the capacity analysis is provided in **Table 4**.

Table 4 – Sewer Capacity Analysis Summary

		DESIGN FLOW			PIPE DATA							70%	%
		PWWF	PWWF	Pipe	Manning's	Pipe U/S	Pipe D/S		Pipe	Calc.	Full Pipe	Full Pipe	of pipe
Node	Node	Q_{PWWF}	Q_{PWWF}	Dia.	'n' Value	Flowline	Flowline	Length	Slope	Velocity	Flow	Flow	capacity
U/S	D/S	(mgd)	(cfs)	(in.)	(n)	(feet)	(feet)	(ft.)		(FPS)	(CFS)	(CFS)	
G2	**A8**	0.2241	0.35	**8.00**	0.013	57.84	48.22	1850.0	***0.0052***	2.34	0.87	0.61	40%
A8	**A7**	0.3893	0.60	**8.00**	0.013	48.22	43.70	870.0	**0.0052**	2.65	0.87	0.61	69%
A7	**A6**	0.4685	0.72	**10.00**	0.013	43.53	41.35	870.0	0.0025	2.11	1.10	0.77	66%
A6	**A5**	0.5906	0.91	**12.00**	0.013	41.18	36.00	2100.0	0.0025	2.13	1.78	1.25	51%
G1	**A5**	0.2268	0.35	**8.00**	0.013	42.24	36.00	1200.0	***0.0052***	2.34	0.87	0.61	40%
A5	**A4**	0.8174	1.26	**15.00**	0.013	55.65	54.07	930.0	0.0017	2.11	2.66	1.86	47%
A4	**A9**	1.0115	1.56	**15.00**	0.013	54.07	52.17	1120.0	0.0017	2.25	2.66	1.86	59%
A10	**A9**	0.4454	0.69	**12.00**	0.013	55.66	52.42	1620.0	0.0020	1.94	1.59	1.12	43%
A9	**A3**	1.4569	2.25	**18.00**	0.013	51.92	49.37	1500.0	0.0017	2.43	4.33	3.03	52%
A3	**A2**	1.7010	2.63	**18.00**	0.013	49.37	48.47	670.0	0.0013	2.31	3.85	2.70	68%
A2	**A1**	1.7010	2.63	**18.00**	0.013	48.47	47.09	1250.0	0.0011	2.15	3.49	2.44	75%
A1.1	**A1**	0.0780	0.12	15.00	0.013	51.34	47.89	2300.0	0.0015	1.05	2.50	1.75	5%
A1	**A0**	**1.8699**	**2.89**	**18.00**	**0.013**	**46.99**	**46.30**	**625.0**	**0.0011**	**2.18**	**3.49**	**2.44**	**83%**
B6	**B5**	0.0891	0.14	**8.00**	0.013	61.26	58.46	800.0	***0.0035***	1.53	0.71	0.50	19%
B5	**B4**	0.1452	0.22	10.00	0.013	58.29	55.21	1140.0	*0.0027*	1.60	1.14	0.80	20%
B4	**B3**	0.3084	0.48	10.00	0.013	55.21	53.28	715.0	0.0027	2.00	1.14	0.80	42%
B3	**B2**	0.4188	0.65	10.00	0.013	53.28	52.10	438.0	0.0027	2.16	1.14	0.80	57%
B2.1	**B2**	0.0270	0.04	8.00	0.013	55.63	52.26	612.0	0.0055	1.27	0.90	0.63	5%
B2	**B1**	0.4944	0.76	12.00	0.013	51.93	48.86	1137.0	0.0027	2.23	1.85	1.30	41%
B1	**A0**	0.5901	0.91	12.00	0.013	48.66	48.06	674.0	0.0009	1.54	1.06	0.74	86%
A0	**Outfall**	2.5380	3.93	21.00	0.013	45.86	44.97	990.0	0.0009	2.22	4.75	3.33	83%

*Note: Manning's n = 0.013

5. CONCLUSIONS

The Campus project is a large mixed-use project in northern Dixon along Highway 80. Based on the proposed land use, it is anticipated to generate a total design sanitary sewer flow of 1.0 million gallons per day. A sanitary sewer main is proposed to route sewer flows from the project site and adjacent industrial parcels southward to the existing 21" sewer main in Fitzgerald Drive, where it well be carried to the existing wastewater treatment plant south of the city. Preliminary sizing of the sewer trunk main is provided in **Table 4** of this study.

6. REFERENCES

1. “City of Dixon Engineering Standards & Specifications”, City of Dixon, City Engineer / Public Works Department, August 26, 2014.
2. “Sewer System Map for the City of Dixon, California”, Dixon Engineering, ArcGIS.com, dixonca.maps.argis.com
3. City of Dixon Sewer Collection System Master Plan, City of Dixon / Stantec Consulting Services, March 2023

Dwg: X:\2020\20-0024-00 (MAGNA PARCEL-DIXON)\DWG\PLAN\EXHIBITS\NEQSP-SEWER- 20240220.DWG | Saved: 02-20-24 01:10pm GBARDINI

CITY OF DIXON
NORTHEAST QUADRANT SPECIFIC PLAN
WASTEWATER SYSTEM
DIXON, CALIFORNIA
JANUARY 2024
SEWER PLAN & SHED MAP

NOT TO SCALE

PROJECT BOUNDARY

LI 59.0 Ac

8" SS 57.84 (G2)

8" SS 48.22 (A8)

8" 43.70 (N) (A7)
10" 43.53 (S)

10" 41.35 (N) (A6)
12" 41.18 (W)

1,850LFx8"SS S=0.0052

870LFx8"SS S=0.0052

870LFx10"SS S=0.0025

PEDRICK ROAD

RC 83.0 Ac

LI 24.0 Ac

LI 37.0 Ac

LI 61.4 Ac

MFR 12.2 Ac 225 du

BASIN 28.3 Ac

LI 13.0 Ac

COMMERCIAL DRIVE

51.34 (E) 15" SS (A1.1)

VAUGHN ROAD

2300LF (E) 15"SS S=0.0015

(E) 15"S S=0.0015

625LF x 18"SS S=0.0011

N. FITZGERALD

(E) 21" SS

(E) 12" SS

8" 36.00 (W)
12" 36.00 (E)
15" 55.65

A5 LIFT STATION

2100LFx12"SS S=0.0025

12" SS 55.66 (A10)

1620LFx12"SS S=0.0020

SFR 76.0 313 du

LI 37.0 Ac

18" SS 49.37 (A3)

18" SS 48.47 (A2)

18" 47.09 (N) (A1)
18" 46.99 (W)

INTERSTATE 80

15" SS(N) 54.07
15" SS 54.07 (A4)

SFR 84.1 Ac 503 du

12" SS 52.42(E)
15" SS 52.17(N)
18" SS 51.92(S)

930LFx15"SS S=0.0017

1120 LFx 15" SS

1500 LFx 18" SS

670 LFx 18" SS

1230LFx 18" SS

S=0.0017

S=0.0017

S=0.0013

S=0.0011

1200LFx8"SS S=0.0052

8" 42.24 (N) (G1)

PROFESSIONAL DRIVE

8" 61.26 (B6)

LI 33.0 Ac

LI 17.0 Ac

LI 29.0 Ac

LI 20.0 Ac

18" 46.10 (S)
18" 46.30 (E)

800LFx 8" SS S=0.0038

8" 58.46 (B5)
10" 58.29

LI 22.0 Ac

LI 29.0 Ac

10" 55.21 (S) (B4)

10" 53.28 (B3)

8" 52.26 (SW) (B2)
10" 52.10 (NE)
12" 51.93 (SE)

18" 46.01 (N) (E)
15" 47.89 (E)
21" 45.86 OUT

DORSET DRIVE

EXIST 1140LFx10"S S=0.0027

(E) 10"SS

ROAD

(E) 12" SS

UNNAMED

RC 25.0 Ac

RC 84.0 Ac

RC 14.0 Ac

RC 11.0 Ac

(E) 8"SS S=0.0055

8"55.63 (B2.1)

RC 7.0 Ac

RC 10.0Ac

12" 48.66 (N)
12" 48.86 (E) (B1)

PROJECT BOUNDARY

Legend

Sewer Main & Manhole	
Lift Station	
Sewer Shed Boundary	
Exist Sewer Line	
Land Use	RC / MUA / LI
Gross Sewer Tributary Area	33.0 Ac
Sewer Size and Invert	8" 50.50 (N) / 10" 50.30 (W)
Approx Lenth, Pipe Diameter, Slope	2000LFx 12" SS S=0.0015
Sewer Node	(A3)

UPDATE, JULY 2023

EXHIBIT ___

INTERSTATE 80

SHED S2
121.42 AC.

SEWER LIFT STATION
INV OUT = 55.65'

Q_d = 0.852 MGD
(1.3 CFS)

SITE
BOUNDARY

SHED S3
84.0 AC.

INTERSTATE 80 (I-80)

15"S

SEWER SECTION 1
930 LF ~ 15" SS @ S = 0.17%

SHED S4
48.9 AC.

Q_d = 1.013 MGD
(1.6 CFS)

MH 1
INV IN = 54.07'
INV OUT = 54.07'

SHED S8
25.13 AC.
180 du

SHED S6
15.87 AC.
98 du

SHED S5
11.61 AC.
225 du

SEWER SECTION 2
1120 LF ~ 15"
SS @ S = 0.17%

E. DORSET
DRIVE

15"S

Q_d = 1.33 MGD
(2.06 CFS)

MH 3
INV IN = 55.05'
INV OUT = 55.05'

Q_d = 0.310 MGD
(0.48 CFS)

Q_d = 0.089 MGD
(0.1 CFS)

12"S

12"S

MH 4
INV IN (N) =52.17'
INV IN (E) = 52.42'
INV OUT = 51.92'

SEWER SECTION 4
1317 LF ~ 12" SS @ S = 0.20%

SEWER SECTION 3
972 LF ~ 12" SS @ S = 0.20%

SHED S9
24.12 AC.
130 du

SHED S7
20.33 AC.
95 du

MH 2
INV IN = 57.00'
INV OUT = 57.00'

SEWER SECTION 5
1500 LF ~ 18" SS
@ S = 0.17%

15"S

SHED S12
38.82 AC.
185 du

SHED S11
19.01 AC.
68 du

SHED S10
14.20 AC.
60 du

MH 6
INV IN = 53.14'
INV OUT = 53.14'

SEWER SECTION 6
911 LF ~ 10"
SS @ S = 0.24%

MH 5
INV IN = 55.32'
INV OUT = 55.32'

10"S

10"S

PROFESSIONAL DRIVE

Q_d = 1.599 MGD
(2.47 CFS)

Q_d = 0.12 MGD
(0.19 CFS)

Q_d = 0.055 MGD
(0.1 CFS)

MH 7
INV IN (N)= 49.37'
INV IN (E)= 59.94'
INV OUT = 49.37'

SEWER SECTION 7
1333 LF ~ 10" SS
@ S = 0.24%

PEDRICK ROAD

REALIGNED VAUGHN ROAD

BASIN

UNION PACIFIC RAILROAD

SEWER SECTION 8B
670 LF ~ 18" SS @ S = 0.13%

SEWER SECTION 8A
1230 LF ~ 18" SS @ S = 0.11%

18"S

MH 8
= 47.10'

SMH
INV = 47.09 (N)
INV=46.99 (W)

18"S

EX18"S

EX15"S

VAUGHN ROAD

VAUGHN ROAD

EX21"S

FITZGERALD DRIVE

ENTERPRISE
DRIVE

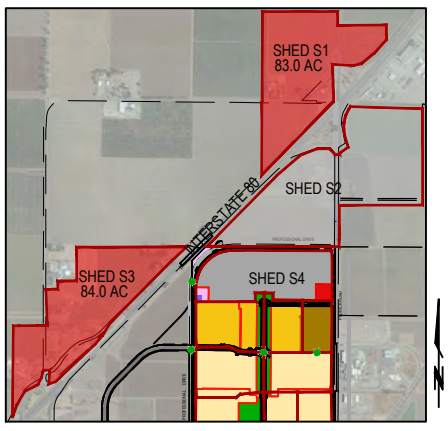
GRAPHIC SCALE
1000 500 0 1000
Scale

LEGEND

- EXISTING ROADWAYS
- FUTURE ROADWAYS
- PROJECT BOUNDARY
- SEWER SHED BOUNDARY
- 15"S — PROPOSED SEWER MAIN SIZE AND DIRECTION
- EX18"S — EXISTING SEWER MAIN SIZE AND DIRECTION
- SEWER NODE
- PROPOSED SEWER TRUNK MAIN
- EXISTING SEWER MAIN
- Q_d=0.1 MGD (0.2 CFS) — DESIGN SEWER FLOW
- INV = 48.60 — SEWER PIPE INVERT

LAND USE

- SINGLE-FAMILY RESIDENTIAL (LDR)
- SINGLE-FAMILY RESIDENTIAL (MDR)
- MULTI-FAMILY RESIDENTIAL (HDR)
- LIGHT INDUSTRIAL (LI)
- COMMERCIAL (CC)
- PROPOSED WELL SITE (LIGHT INDUSTRIAL ASSUMED FOR CALCULATIONS)
- PARK
- PROPOSED ROADWAY



OFFSITE SHED
SCALE - 1" = 3500'

BENCHMARK:
COUNTY OF SOLANO BM SOL 50; ELEVATION 66.52 (NAVD 88)

Dwg: X:\2020\20-0024-00 (MAGNA PARCEL-DIXON)\DWG\PLAN\EXHIBITS\THE CAMPUS TECHNICAL STUDY JANUARY 2024\DIXON 257 SEWER PLAN_V4-20240220.DWG | Saved: 02-20-24 01:13pm GBARDINI

MORTON & PITALO, INC.
CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING
Folsom ∗ Fresno
600 Coolidge Drive, Suite #140
Folsom, CA 95630
phone: (916) 927-2400
web: www.mpengr.com

DRAWN:	DF	JOB NO:	20-0024-00
CHECKED:		DATE:	JANUARY 20204
SCALE:	1" = 500'	SHEET:	1 of 1

EXHIBIT FOR

THE CAMPUS SEWER STUDY

EXHIBIT 2

SEWER PLAN AND SHED MAP

DIXON, CA

EXHIBIT 3 - SANITARY SEWR DESIGN CALCULATIONS

NQSP MASTER SEWER PLAN

January 30, 2024

		Comments	AVERAGE DAILY SEWER FLOWS													INFILTRATION	
			Land Use		Land Use			Land Use		Land Use		Added	Peaking	Added	Cumu.	I & I	I&I
Node	Node		(RC)	Av. Daily Flow	(SFR)	(SFR)	Av. Daily Flow	(MFR)	Av. Daily Flow	(LI / MU)	Av. Daily Flow	Flows	Factor	Area	Area	Rate	Δ
U/S	D/S		Area (Acres)	(GPD / Acre)	Area (Acres)	Dwelling Units	(GPD / DU)	Area (Acres)	(GPD / Acre)	Area (Acres)	(GPD / Acre)	(MGD)		(Acres)	(Acres)	(gpd/acre)	(mgd)
G2	A8	GP Area 4	83.00	1100.00								0.0730	2.50	83	83	500	0.0415
A8	A7									59.00	1400.00	0.0661	2.50	0	83	500	0.0000
A7	A6									24.00	1400.00	0.0269	2.50	24	107	500	0.0120
A6	A5									37.00	1400.00	0.0414	2.50	37	144	500	0.0185
G1	A5	GP Area 3	84.00	1100.00								0.0739	2.50	84	84	500	0.0420
		LIFT STATION										0.0000					
A5	A4											0.0000	2.50	0	228	500	0.0000
A4	A9		*2.00*	1100.00						46.90	1400.00	0.0679	2.50	49	277	500	0.0245
A10	A9				63.10	503	250.00	12.20	3600.00			0.1631	2.50	75	75	500	0.0377
A9	A3											0.0000	2.50	0	352	500	0.0000
A3	A2				97.00	313	250.00					0.0783	2.50	97	449	500	0.0485
A2	A1											0.0000	2.50	0	449	500	0.0000
A1.1	A1	(Exist. 15" sewer in Vaughn Road)	13.00	1100.00						13.00	1400.00	0.0260	2.50	26	26	500	0.0130
A1	A0	**Dual sewer in Vaughn Road**								**57.00**	**1400.00**	**0.0638**	**2.20**	**57**	**532**	**500**	**0.0285**
B6	B5	(Future Sewer Main)	33.00	1100.00								0.0290	2.50	33	33	500	0.0165
B5	B4	(Future Sewer Main)								17.00	1400.00	0.0190	2.50	17	50	500	0.0085
B4	B3	(Existing Sewer)	25.00	1100.00						29.00	1400.00	0.0545	2.50	54	104	500	0.0270
B3	B2	(Existing Sewer)	14.00	1100.00						22.00	1400.00	0.0370	2.50	36	140	500	0.0180
B2.1	B2	(Existing Sewer)	10.00	1100.00								0.0088	2.50	10	10	500	0.0050
B2	B1	(Existing Sewer)	18.00	1100.00								0.0158	2.50	18	168	500	0.0090
B1	A0	(Existing Sewer)								29.00	1400.00	0.0325	2.50	29	197	500	0.0145
A0	Outfall											0.0000	2.20	0	755	500	0.0000

Note:

1. The peaking factor is 2.5 for area less than 500. Peaking Facor is 2.2 for area between 500-1500acres.
2. The Net developed area is assumed to be 80% of the gross area.
3. Elevations are on NAVD88 Datum. Conversion to NGVD29 is -2.467 feet.

Q_a=Qp + Inflow and Infiltration (I & I)

Qp = Average daily flow x Peaking Factor
Inflow and Infiltration is 500gpd per acre.

Average Daily Flow:			
Land Use		**Average Daily Flow**	**I & I**
		(GPD)/ Acre	(GPD)/ Acre
Single Family		250	500 per DU
Multi Family		3600	500
Commercial/ Public		1100	500
Mixed Use Area		2030	500
Industrial		1400	500
Schools		5000	500

NQSP SEWER SYSTEM

EXHIBIT 3 - SANITARY SEWR DESIGN CALCULATIONS

20-0024-00
01/30/2024
G. Bardini

		Comments		DESIGN FLOW			PIPE DATA													
			Added Flow	PWWF	PWWF	Pipe	Manning's	Pipe U/S	Pipe D/S		Pipe	Apprx.	Crown	Manhole	HGL at	Calc.	Full Pipe	70% Full Pipe	% of pipe	Full Pipe
Node U/S	Node D/S		Δ (MGD)	Q_{PWWF} (mgd)	Q_{PWWF} (cfs)	Dia. (in.)	'n' Value (n)	Flowline (feet)	Flowline (feet)	Length (ft.)	Slope	Rim Elev. Elev (ft)	Elev (ft)	Depth (ft)	Upstrm Structure	Velocity (FPS)	Flow (CFS)	Flow (CFS)	capacity	Velocity (Ft/S)
G2	**A8**	**GP Area 4**	0.2241	0.2241	0.35	**8.00**	0.013	57.84	48.22	1850.0	***0.0052***	**62.00**	58.51	4.2	**54.55**	2.34	0.87	0.61	40%	2.5
A8	**A7**		0.1652	0.3893	0.60	**8.00**	0.013	48.22	43.70	870.0	**0.0052**	**62.00**	48.89	13.8	**54.55**	2.65	0.87	0.61	69%	2.5
A7	**A6**		0.0792	0.4685	0.72	**10.00**	0.013	43.53	41.35	870.0	0.0025	**60.00**	44.36	16.5	**51.75**	2.11	1.10	0.77	66%	2.0
A6	**A5**		0.1221	0.5906	0.91	**12.00**	0.013	41.18	36.00	2100.0	0.0025	**60.00**	42.18	18.8	**51.75**	2.13	1.78	1.25	51%	2.3
G1	**A5**	**GP Area 3**	0.2268	0.2268	0.35	**8.00**	0.013	42.24	36.00	1200.0	***0.0052***	**65.50**	42.91	23.3	**36.44**	2.34	0.87	0.61	40%	2.5
		LIFT STATION																		
A5	**A4**		0.0000	0.8174	1.26	**15.00**	0.013	55.65	54.07	930.0	0.0017	66.00	56.90	10.4		2.11	2.66	1.86	47%	1.0
A4	**A9**		0.1941	1.0115	1.56	**15.00**	0.013	54.07	52.17	1120.0	0.0017	**65.52**	55.32	11.4	**58.65**	2.25	2.66	1.86	59%	2.2
A10	**A9**		0.4454	0.4454	0.69	**12.00**	0.013	55.66	52.42	1620.0	0.0020	64.30	56.66	8.6	**57.89**	1.94	1.59	1.12	43%	2.0
A9	**A3**		0.0000	1.4569	2.25	**18.00**	0.013	51.92	49.37	1500.0	0.0017	62.70	53.42	10.8	**57.89**	2.43	4.33	3.03	52%	2.5
A3	**A2**		0.2441	1.7010	2.63	**18.00**	0.013	49.37	48.47	670.0	0.0013	59.80	50.87	10.4	**53.81**	2.31	3.85	2.70	68%	2.2
A2	**A1**		0.0000	1.7010	2.63	**18.00**	0.013	48.47	47.09	1250.0	0.0011	63.00	49.97	14.5	**51.56**	2.15	3.49	2.44	75%	2.0
A1.1	**A1**	**(Exist. 15" sewer in Vaughn Road)**	0.0780	0.0780	0.12	15.00	0.013	51.34	47.89	2300.0	0.0015	61.00	52.59	9.7	**50.65**	1.05	2.50	1.75	5%	2.0
A1	**A0**	**Dual sewer in Vaughn Road**	**0.1689**	**1.8699**	**2.89**	**18.00**	**0.013**	**46.99**	**46.30**	**625.0**	**0.0011**	**61.50**	**48.49**	**14.5**	**48.10**	**2.18**	**3.49**	**2.44**	**83%**	**2.0**
B6	**B5**	**(Future Sewer Main)**	0.0891	0.0891	0.14	**8.00**	0.013	61.26	58.46	800.0	***0.0035***	68.00	61.93	6.7	**60.38**	1.53	0.71	0.50	19%	2.0
B5	**B4**	**(Future Sewer Main)**	0.0561	0.1452	0.22	10.00	0.013	58.29	55.21	1140.0	*0.0027*	66.00	59.12	7.7	**56.28**	1.60	1.14	0.80	20%	2.1
B4	**B3**	(Existing Sewer)	0.1632	0.3084	0.48	10.00	0.013	55.21	53.28	715.0	0.0027	65.00	56.05	9.8	**53.34**	2.00	1.14	0.80	42%	2.1
B3	**B2**	(Existing Sewer)	0.1104	0.4188	0.65	10.00	0.013	53.28	52.10	438.0	0.0027	65.00	54.12	11.7	**51.63**	2.16	1.14	0.80	57%	2.1
B2.1	**B2**	(Existing Sewer)	0.0270	0.0270	0.04	8.00	0.013	55.63	52.26	612.0	0.0055	64.00	56.29	8.4	**53.55**	1.27	0.90	0.63	5%	2.6
B2	**B1**	(Existing Sewer)	0.0486	0.4944	0.76	12.00	0.013	51.93	48.86	1137.0	0.0027	64.00	52.93	12.1	**50.30**	2.23	1.85	1.30	41%	2.4
B1	**A0**	(Existing Sewer)	0.0957	0.5901	0.91	12.00	0.013	48.66	48.06	674.0	0.0009	65.00	49.66	16.3	**48.00**	1.54	1.06	0.74	86%	1.4
A0	**Outfall**		0.0000	2.5380	3.93	21.00	0.013	45.86	44.97	990.0	0.0009	62.50	47.61	16.6	**44.60**	2.22	4.75	3.33	83%	2.0
															44.14					

Note:

1. The peaking factor is 2.5 for are
2. The Net developed area is assu
3. Elevations are on NAVD88 Datu

Q_a=Qp + Inflow and Infiltration (I &

Qp = Average daily flow x Peaking
Inflow and Infiltration is 500gpd per

Land Use: (Based on NQSP Land Use Changes)

CH- HIGHWAY COMMERCIAL
CC- COMMUNITY COMMERCIAL
PAO - PROFESSIONAL AND ADMINISTRATIVE OFFICE
ML - LIGHT INDUSTRIAL
MU - MIXED USE AREA
AG - AGRICULTURE/ PARK