County of Yolo
Department of Community Services

AT&T Jefferson Cell Tower Project

Initial Study/Mitigated Negative Declaration

March 2022

Prepared by

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TABLE OF CONTENTS

A. BACKGROUND 1
B. SOURCES 2
C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED 4
D. DETERMINATION 5
E. BACKGROUND AND INTRODUCTION 6
F. PROJECT DESCRIPTION 6
G. ENVIRONMENTAL CHECKLIST 6

I. AESTHETICS. 7
II. AGRICULTURE AND FORESTRY RESOURCES. 14
III. AIR QUALITY. 16
IV. BIOLOGICAL RESOURCES. 22
V. CULTURAL RESOURCES. 35
VI. ENERGY. 38
VII. GEOLOGY AND SOILS. 41
VIII. GREENHOUSE GAS EMISSIONS. 46
IX. HAZARDS AND HAZARDOUS MATERIALS. 48
X. HYDROLOGY AND WATER QUALITY. 53
XI. LAND USE AND PLANNING. 56
XII. MINERAL RESOURCES. 57
XIII. NOISE. 58
XIV. POPULATION AND HOUSING. 63
XV. PUBLIC SERVICES. 64
XVI. RECREATION. 65
XVII. TRANSPORTATION. 66
XVIII. TRIBAL CULTURAL RESOURCES. 67
XIX. UTILITIES AND SERVICE SYSTEMS. 69
XX. WILDFIRE. 71
XXI. MANDATORY FINDINGS OF SIGNIFICANCE. 72

Appendices

Appendix A: Biological Resources Assessment

INITIAL STUDY
MARCH 2022

A. BACKGROUND

1. Project Title: AT&T Jefferson Cell Tower Project

2. Lead Agency Name and Address: County of Yolo
Department of Community Services
292 West Beamer Street
Woodland, CA 95695

3. Contact Person and Phone Number: JD Trebec
Senior Planner
(530) 666-8036

4. Project Location: 38300 Jefferson Boulevard
Yolo County, CA 95612
Assessor Parcel Number (APN) 043-310-010

5. Project Sponsor's Name and Address: APC Towers III, LLC
8601 Six Forks Road, Suite 250
Raleigh, NC 27615

6. Existing General Plan Designation: Agriculture (AG)/
Agricultural District Overlay (ADO)

7. Existing Zoning Designation: Agricultural Intensive (A-N)/
Clarksburg Agricultural District Overlay (CADO)

8. Required County Approvals: Use Permit

9. Surrounding Land Uses and Setting:

The project site is located within a portion of a 5.61-acre parcel at 38300 Jefferson Boulevard southeast of Clarksburg in unincorporated Yolo County, California. The project site is identified by APN 043-310-010, and is currently developed with a farm residence, detached garage, well house, and barn. The site is generally surrounded by agricultural/crop land. A drainage canal is located along the site's western and southern boundaries, the Bogle Production Facility is situated to the west, and Jefferson Boulevard/State Route (SR) 84 is located to the east. The Yolo County General Plan designates the site as Agriculture (AG)/Agricultural District Overlay (ADO), and the site is zoned Agricultural Intensive (A-N)/Clarksburg Agricultural District Overlay (CADO).

10. Project Description Summary:

The AT&T Jefferson Cell Tower Project (proposed project) would involve construction of a 40-foot by 50-foot colocatable wireless communication facility to the northeast of the existing barn. The proposed facility would include a 140-foot-tall communication

tower/monopole with 12 antennas ranging in length from six feet to slightly more than 6.5 feet. In addition, the project would include development of a communications shelter, fiber distribution box, 30-kilowatt backup diesel generator, multi-meter/backhaul rack, and a walk-in cabinet on an elevated concrete pad. The facility would be enclosed by a chain-link security fence and include an expansion of the existing gravel driveway, in order to provide site access. The proposed project would require County approval of a Use Permit.

11. Status of Native American Consultation Pursuant to Public Resources Code Section 21080.3.1:

    In compliance with Assembly Bill (AB) 52 (Public Resources Code [PRC] Section 21080.3.1), a project notification letter was distributed on November 10, 2021 to the representatives of the Yocha Dehe Wintun Nation, Wilton Rancheria, United Auburn Indian Community of the Auburn Rancheria, Cortina Rancheria Band of Wintun Indians of California, Ione Band of Miwok Indians, and Torres Martinez Desert Cahuilla Indians. The Yocha Dehe Wintun Nation submitted a response on November 17, 2021, requesting formal consultation. Representatives from the County and Yocha Dehe Wintun Nation consulted on February 9, 2022. Based on the information subsequently provided, the Yocha Dehe Wintun Nation recommends the inclusion of cultural monitors during project development and ground disturbance and preconstruction cultural sensitivity training for all project personnel (see Mitigation Measures XVIII-1 through XVIII-3).

B. SOURCES

All the technical reports and modeling results used for the purposes of this analysis are available upon request and prior arrangement at the public counter at the Yolo County Department of Community Service, Planning Division, located at 292 West Beamer Street, Woodland, CA 95695. The following documents are referenced information sources utilized by this analysis:

1. California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. Available at: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/2030sp_pp_final.pdf. Accessed November 2021.
2. California Building Standards Commission. *California Green Building Standards Code*. Available at: https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen. Accessed November 2021.
3. California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/dlrp/ciff/app/. Accessed December 2021.
4. California Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed November 2021.
5. California Department of Forestry and Fire Protection. *Yolo County: Fire Hazard Severity Zones In SRA*. Available at: https://osfm.fire.ca.gov/media/6563/fhszs_map57.jpg. Accessed November 2021.
6. California Department of Resources Recycling and Recovery. *SWIS Facility/Site Activity Details: Yolo County Central Landfill (57-AA-0001)*. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/689?siteID=4033. Accessed November 2021.
7. California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Available at: https://dtsc.ca.gov/dtscs-cortese-list. Accessed November 2021.

8. California Department of Transportation. *California State Scenic Highway System Map*. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed November 2021.
9. California Energy Commission. *2019 Building Energy Efficiency Standards: Frequently Asked Questions*. Available at: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf. Accessed November 2021.
10. California Energy Commission. *California Energy Commission 2019 Building Energy Efficiency Standards What's New for Nonresidential*. Available at: https://www.energy.ca.gov/media/3455. Accessed November 2021.
11. California Geological Survey. *CGS Information Warehouse: Mineral Land Classification*. Available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/. Accessed November 2021.
12. California Historical Resources Information System, Northwest Information Center. *Record Search Results for the Proposed Bogle Cell Tower Project, NWIC File No.: 21-0668*. November 5, 2021.
13. EBI Consulting. *Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report*. August 4, 2020.
14. Federal Aviation Administration. *Advisory Circular: Obstruction Marking and Lighting*. Available at: https://www.faa.gov/documentLibrary/media/Advisory_Circular/Advisory_Circular_70_7460_1M.pdf. Accessed November 2021.
15. Federal Emergency Management Agency. *Flood Insurance Rate Maps 06113C0740G, effective June 18, 2010*. Available at: https://msc.fema.gov/portal/search?AddressQuery=-121.58432134879509%2C%2038.38045589069815#searchresultsanchor. Accessed November 2021.
16. Native American Heritage Commission. *Bogle Cell Tower Project, Yolo County*. December 2, 2021.
17. State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=yolo+county. Accessed November 2021.
18. Synthesis Planning. *Biological Resources Assessment: CA017 Bogle (also AT&T CVL06447) Telecommunications Project, Yolo County, California*. April 2021 (Revised October 2021).
19. U.S. Department of Agriculture Natural Resources Conservation Service. *Web Soil Survey*. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed December 2021.
20. Yolo County. *2030 Countywide General Plan Environmental Impact Report*. April 24, 2009.
21. Yolo County. *Environmental Impact Report Bogle Wind Turbine Project*. Available at: https://www.yolocounty.org/government/general-government-departments/community-services/planning-division/current-projects. Accessed November 2021.
22. Yolo County. *Yolo County Climate Action Plan: A Strategy for Smart Growth Implementation, Greenhouse Gas Reduction, and Adaptation of Global Climate Change*. Adopted March 15, 2011.
23. Yolo Habitat Conservancy. *Yolo Habitat Conservation Plan/Natural Community Conservation Plan*. April 2018.
24. Yolo Habitat Conservancy. *Yolo Habitat Conservation Plan/Natural Community Conservation Plan Final Environmental Impact Statement/Environmental Impact Report*. April 2018.
25. Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "less-than-significant with mitigation" as indicated by the checklist on the following pages.

☐ **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**
☐ **Noise**	☐ **Population and Housing**	☐ **Public Services**
☐ **Recreation**	☐ **Transportation**	✖ **Tribal Cultural Resources**
☐ **Utilities and Service Systems**	☐ **Wildfire**	☐ **Mandatory Findings of Significance**

D. DETERMINATION

On the basis of this initial study:

☐ 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.

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

Signature	Date
JD Trebec, Senior Planner	County of Yolo
Printed Name	For

E. BACKGROUND AND INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) 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. Where the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures are prescribed. The mitigation measures prescribed for environmental effects described in this IS/MND will be implemented in conjunction with the project, as required by CEQA. The mitigation measures will be incorporated into the proposed project through project conditions of approval. The County will adopt findings and a Mitigation Monitoring/Reporting Program for the project in conjunction with approval of the project.

Yolo County adopted the 2030 Countywide General Plan[1] (General Plan) and certified the associated 2030 Countywide General Plan Environmental Impact Report[2] (General Plan EIR) on November 10, 2009. The General Plan EIR was prepared as a program-level EIR, pursuant to Section 15168 of the CEQA Guidelines (Title 14, California Code of Regulations [CCR], Sections 15000 et seq.).

According to PRC Section 21083.3(b), if a development project is consistent with the general plan of a local agency and an EIR was certified with respect to that general plan, the analysis of that development project shall be limited to effects on the environment which are peculiar to the parcel or to the project and which were not addressed as significant effects in the prior EIR, or which substantial new information shows will be more significant than described in the prior EIR. Therefore, this IS/MND is limited to the effects peculiar to the parcel and not addressed as significant in the County's General Plan EIR.

F. PROJECT DESCRIPTION

The following section includes a description of the proposed project location and surrounding land uses, as well as a discussion of the project components and necessary discretionary actions.

Project Location and Setting

The project site is located within a portion of a 5.61-acre parcel at 38300 Jefferson Boulevard southwest of Clarksburg in unincorporated Yolo County (County) (see Figure 1 and Figure 2). The site is currently developed with a farm residence occupied by a caretaker, detached garage, well house, and barn. A drainage canal is located along the site's western and southern boundaries. The Bogle Production Facility, Bogle Vineyards' wine-production site, is located to the west of the project site. Jefferson Boulevard/SR 84 is located approximately 264 feet to the east. Within the greater project vicinity, the project site is situated 5.73 miles to the west of the City of Elk Grove and 7.04 miles to the southwest of the City of Sacramento within an unincorporated area of the County used for agricultural production. The site is surrounded on all sides by parcels zoned A-N/CADO. A 115-acre parcel planted with alfalfa is located to the west of the wine-production site, 80 acres of which are under a Swainson's hawk conservation easement that is approximately 3,230 feet west of the project site.[3] Another 80-acre parcel owned by Bogle Vineyards wraps around the winery facility and is planted with alfalfa and wine grapes. The County's General Plan designates the site as AG/ADO, and the site is zoned A-N/CADO.

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1 Yolo County. *2030 Countywide General Plan*. Adopted November 10, 2009.
2 Yolo County. *2030 Countywide General Plan Final Environmental Impact Report*. Certified November 10, 2009.
3 Yolo County. *Environmental Impact Report Bogle Wind Turbine Project* [pgs. 2-1 and 2-4]. Available at: https://www.yolocounty.org/government/general-government-departments/community-services/planning-division/current-projects. Accessed November 2021.

Figure 1
Regional Vicinity Location

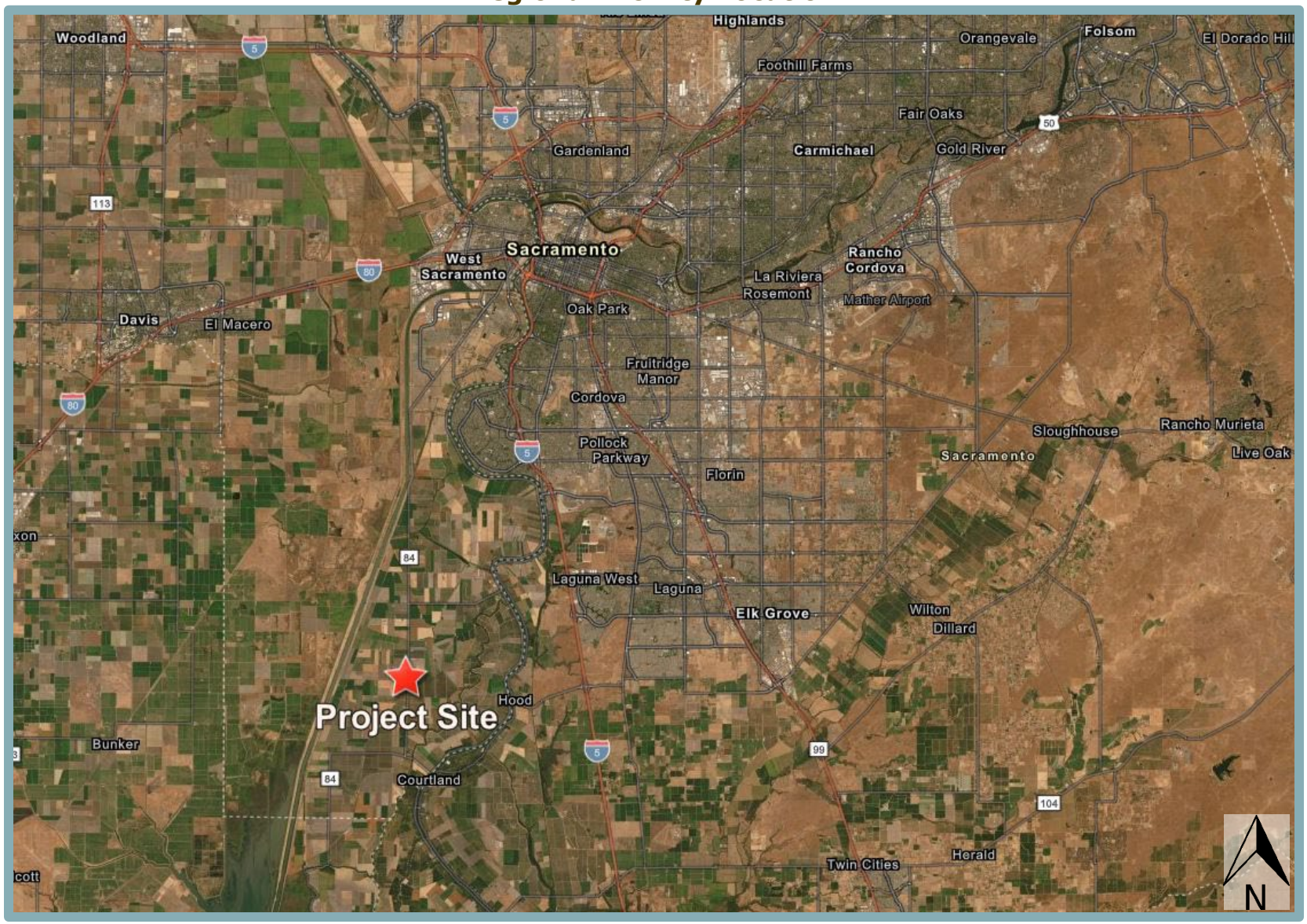


Figure 2
Project Site Map

Project Components

The proposed project would involve construction of a 40-foot by 50-foot (2,000 square feet [sf]) colocatable wireless communication facility to the northeast of the project site's existing barn (see Figure 3), with the proposed telecommunications facility consisting of several components. Construction activities are anticipated to occur over the course of approximately 90 working days.

The primary component would be a 140-foot-tall communication tower/monopole with 12 mounted antennas (see Figure 4). The tower/monopole would be located generally within the central area of the project site. As shown in Figure 5, the 12 antennas would be comprised of nine Kathrein-800-10965K antennas, each with a height of slightly more than 6.5 feet, and three Quintel-QS6656-3 antennas, each with a height of six feet. The antennas would be mounted to the tower/monopole by way of three platforms, with each platform consisting of three Kathrein antennas and one Quintel antenna.

In addition, the proposed project would include development of the following components: a communications shelter, fiber distribution box, 30-kilowatt emergency backup diesel generator, multi-meter/backhaul rack, and a walk-in cabinet. The communications shelter would generally be located to the west of the tower/monopole and would measure 11.5 feet by 12 feet. The fiber distribution box would be installed generally in the southeast portion of the project site and would measure 14 sf. The multi-meter/backhaul rack would be located immediately to the south of the fiber distribution box. The walk-in cabinet would be located on an elevated concrete pad, immediately to the north of the tower/monopole. The backup diesel generator would be sited to the north of the walk-in cabinet and would only operate as part of periodic maintenance testing and/or in the event of an emergency power loss.

The proposed communication facility would be enclosed by a six-foot-tall, chain-link security fence. The project site would be covered with gravel on portions not used for equipment installation. The tower site and backup generator would be installed within pre-disturbed areas.

Finally, the proposed project would include the installation of 250 feet of underground fiber-optic cable line between the tower/monopole site and existing telecommunications infrastructure to the southeast of the project site. The disturbance corridor would be approximately 10 feet wide.

Access

The proposed project would include an expansion of the existing gravel driveway in the eastern portion of the project site in order to provide site access. The gravel driveway would provide a connection to the communication facility from Jefferson Boulevard/SR 84, which is located approximately 264 feet to the east of the site. The proposed expansion would not include widening of the gravel driveway.

Use Permit

The proposed project would require County approval of a Use Permit. As detailed in Section 8-2.217 of the Yolo County Code of Ordinances, the purpose of a Use Permit is to allow the proper integration into the community of uses which may be suitable only in specific locations in a zone or only if such uses are designed or laid out on the site in a particular manner.

Per Table 8-2.304(d) in the County's Code of Ordinances, wireless communication facilities are allowed in the A-N zoning district with County approval of a Use Permit.

Figure 3
Proposed Site Layout

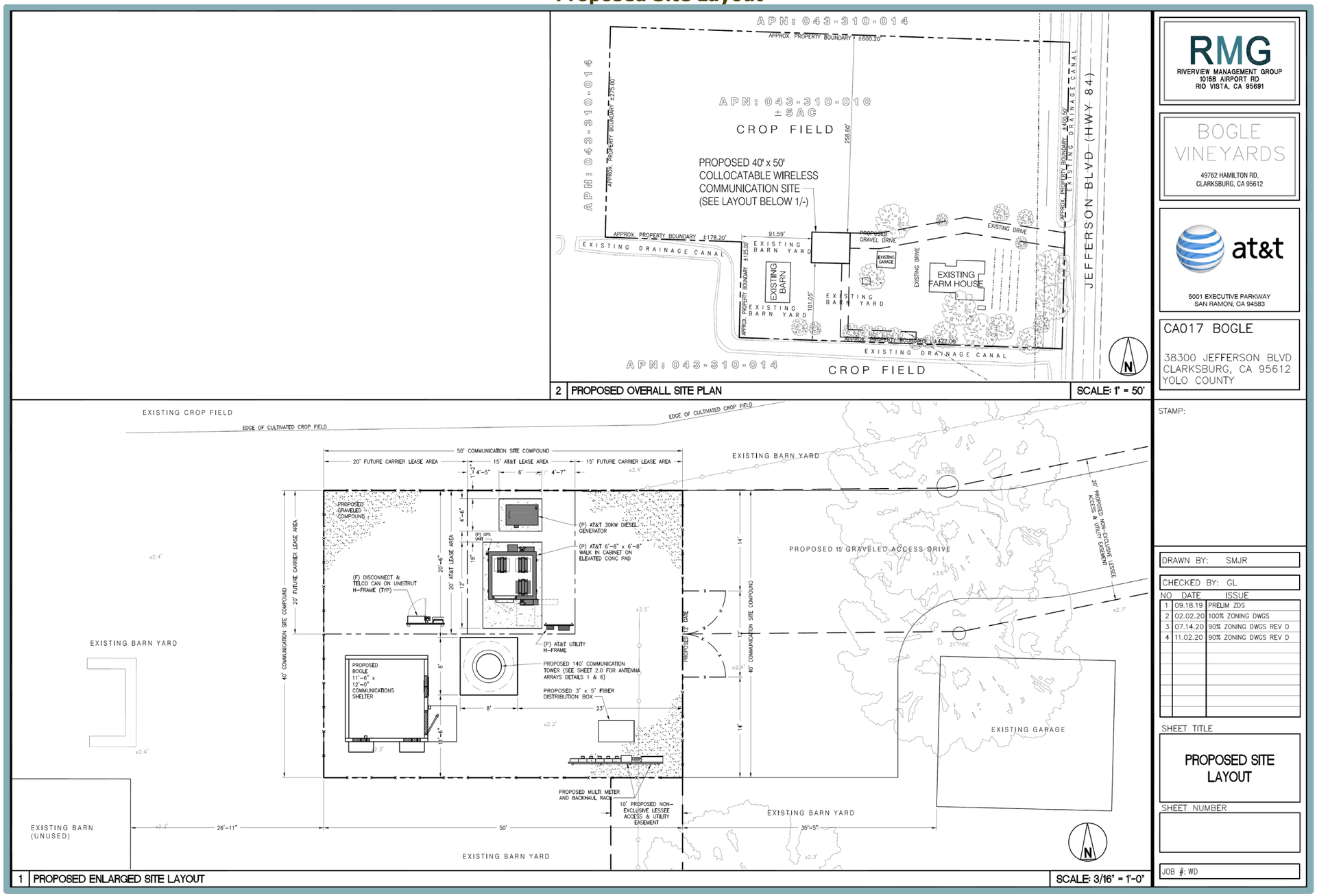


Figure 4
Tower/Monopole Elevations

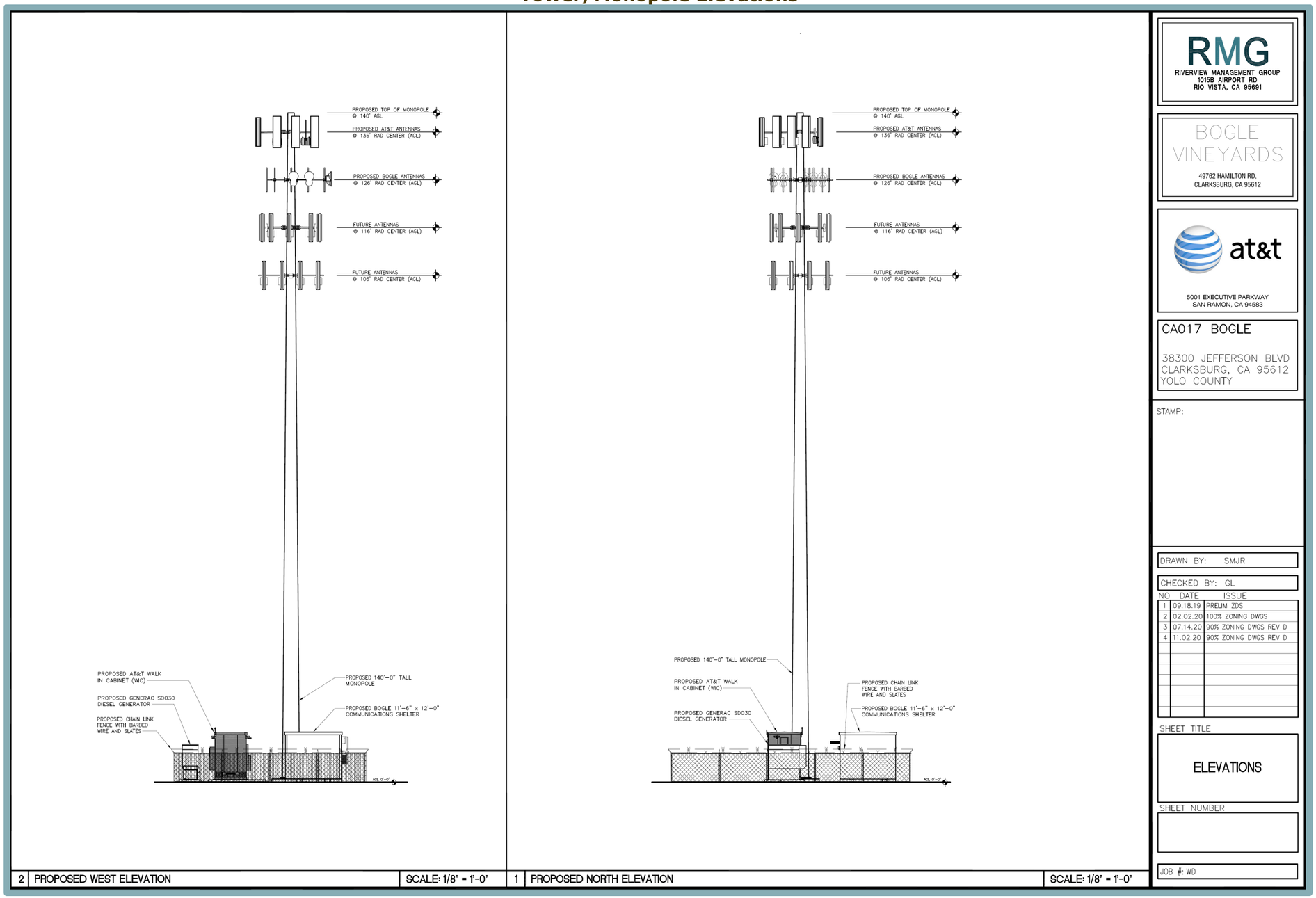


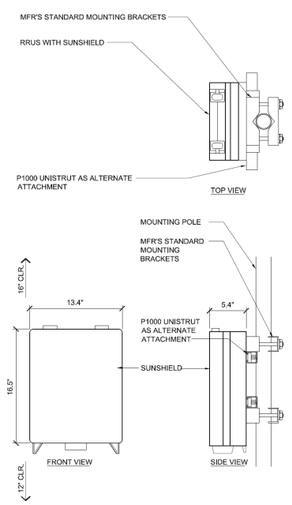
Figure 5
Antenna Array/Layout

ERICSSON RRUS 4415 B25 REMOTE RADIO UNIT

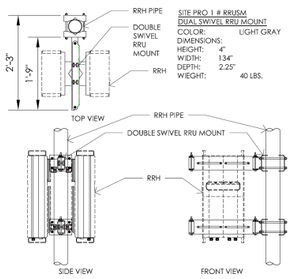
COLOR: WHITE

DIMENSIONS: 16.5" TALL X 13.4" WIDE X 5.4" DEEP (INCLUDING SUNSHIELD)

WEIGHT: +/- 46.0 LBS. (EXCLUDING MOUNTING HARDWARE)



5 | RRUS 4415 REMOTE RADIO UNIT | SCALE: 1 1/2" = 1'-0"



SITE PRO 1 # RRUSM
DUAL SWIVEL RRU MOUNT
COLOR: LIGHT GRAY
DIMENSIONS:
HEIGHT: 4"
WIDTH: 13.4"
DEPTH: 2.25"
WEIGHT: 40 LBS.

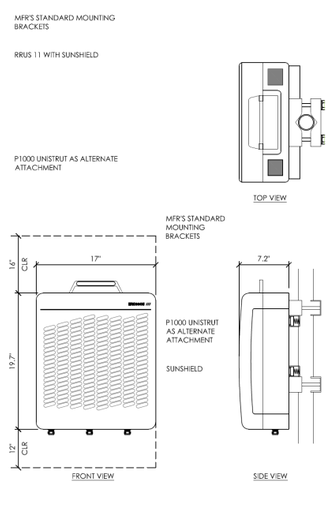
4 | DOUBLE SIDED RRH MOUNT | SCALE: 3/4" = 1'-0"

ERICSSON RRUS 11 REMOTE RADIO UNIT

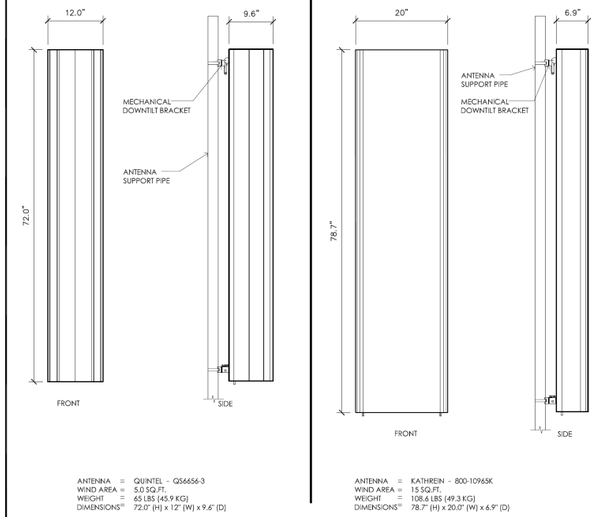
COLOR: WHITE

DIMENSIONS: 19.7" TALL X 17" WIDE X 7.2" DEEP (INCLUDING SUNSHIELD)

WEIGHT: +/- 50 LBS. (INCLUDING MOUNTING HARDWARE)

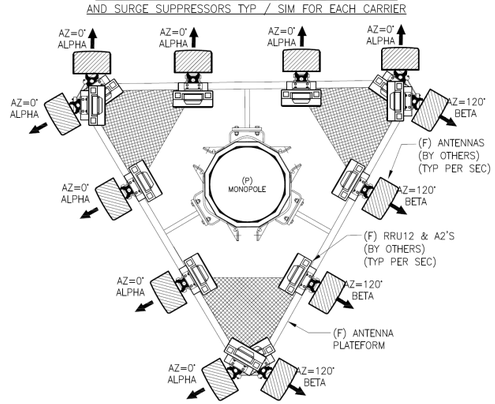


3 | RRUS 11 (RRUS 12 SIM.) | SCALE: 3/4" = 1'-0"

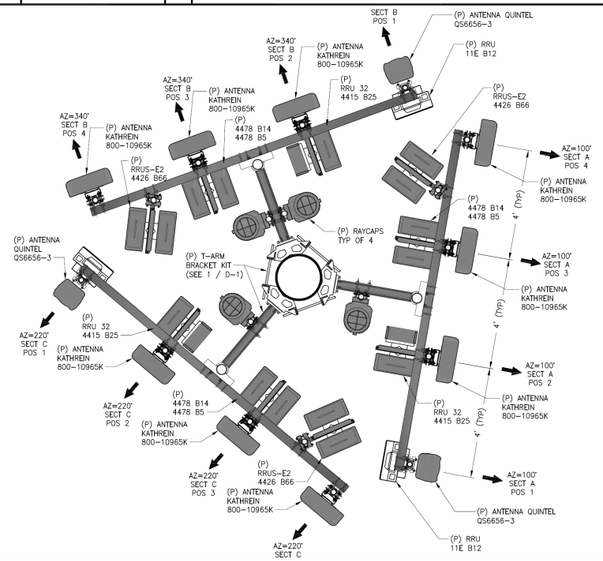


2 | AT+T ANTENNA TYPES | SCALE: 3/4" = 1'-0"

TOWER APPURTENANCES ANTENNA, REMOTE RADIO HEAD AND SURGE SUPPRESSORS TYP / SIM FOR EACH CARRIER



6 | TYPICAL ANTENNA ARRAY AT FUTURE RAD CENTER | SCALE: 1/2" = 1'-0"



1 | PROPOSED AT+T ANTENNA LAYOUT RAD CENTERS 126' | SCALE: 1/2" = 1'-0"

RMG
RIVERVIEW MANAGEMENT GROUP
1015B AIRPORT RD
RIO VISTA, CA 95691

BOGLE VINEYARDS
49762 HAMILTON RD,
CLARKSBURG, CA 95612

at&t
5001 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

CA017 BOGLE
38300 JEFFERSON BLVD
CLARKSBURG, CA 95612
YOLO COUNTY

STAMP:

DRAWN BY: SMJR

CHECKED BY: GL

NO	DATE	ISSUE
1	09.18.19	PRELIM ZDS
2	02.02.20	100% ZONING DWGS
3	07.14.20	90% ZONING DWGS REV D
4	11.02.20	90% ZONING DWGS REV D

SHEET TITLE

PROPOSED AT+T ANTENNA LAYOUTS

SHEET NUMBER

JOB #: WD

Discretionary Actions

Implementation of the proposed project would require the following discretionary actions by the County:

- Adoption of the IS/MND;
- Approval of the Mitigation Monitoring and Reporting Program; and
- Approval of a Use Permit.

G. ENVIRONMENTAL CHECKLIST

The following Checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project-specific mitigation measures recommended, as appropriate, as part of the proposed project.

For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

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

Discussion

a. Examples of typical scenic vistas include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista. The project site, which is currently developed with a farm residence, detached garage, well house, and barn, does not include typical scenic vistas on-site.

With respect to off-site areas that could potentially qualify as a scenic vista, according to the County's General Plan and General Plan EIR, the County has designated the following roadways as local scenic highways: (1) SR 16, Colusa County line to Capay; (2) SR 128, Winters to the Napa County line; (3) County Road (CR) 116 and CR 116B, Knights Landing to the eastern terminus of CR 16; (4) CR 16, CR 117, and Old River Road, CR 107 to West Sacramento; and (5) South River Road, West Sacramento limits to Sacramento County line. In addition, the County has designated the areas along the waterways of Cache and Putah creeks, the Yolo Bypass, and the Sacramento River as local scenic corridors. Of the aforementioned roadways and local scenic corridors, the nearest to the project site is the Sacramento River, which is located 3.2 miles to the east. Considering that development of the proposed project would be confined to the boundaries of the project site, the project would not change or remove a scenic vista or be visible from any of the aforementioned scenic vistas.

In addition, as shown in Table 8-2.304(d) in the County's Code of Ordinances, wireless communication facilities are allowed in the A-N zoning district with County approval of a Use Permit. As part of obtaining County approval of a Use Permit, the proposed project would be required to be consistent with all applicable development standards set forth in Section 8-2.1102(e) of the County's Code of Ordinances, which would include demonstrating the proposed structures would not significantly affect any designated public viewing area or scenic corridor.

Based on the above, the proposed project would not have a substantial adverse effect on a scenic vista. Therefore, the project would result in a ***less-than-significant*** impact.

b. According to the California Department of Transportation's (Caltrans) California State Scenic Highway System Map, the nearest officially designated State Scenic Highway to the project site is SR 160, which is located 3.3 miles to the east of the site.[4] The views of the project site from SR 160 are predominantly obscured by existing trees situated along both sides of the Sacramento River, which is adjacent to the western side of SR 160. Thus, the project site would not be visible from the nearest State scenic highway. Based on the above, the proposed project would not substantially damage scenic resources within a State scenic highway. Therefore, ***no impact*** would occur.

c. The project site is located in the unincorporated portion of the County, and the site is surrounded on all sides by parcels zoned A-N/CADO that are used for agricultural production. Therefore, the project site is located within a non-urbanized area, and the applicable threshold is whether the proposed project would substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Public views of the project site are afforded from Jefferson Boulevard/SR 84, which is located approximately 264 feet to the east of the site. Changes to the existing public views towards the site due to development of the proposed project are discussed below. For the purposes of this analysis, public views consist of both views towards the site from northbound and southbound motorists and/or bicyclists traveling along Jefferson Boulevard/SR 84.

With respect to views from the farm residence, as well as the surrounding homes in the project vicinity, CEQA case law has established that only public views, not private views, are protected under CEQA. For example, in *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal.App.4th 720 [3 Cal. Rptr.2d 488] the court determined that "we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188 [129 Cal.Rptr. 739]: '[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will adversely affect the environment of persons in general.'" Such a conclusion is consistent with the thresholds of significance established in Appendix G of the CEQA Guidelines. Therefore, it is appropriate to focus the aesthetic impact analysis on potential impacts to public views, rather than private views.

View From Northbound Jefferson Boulevard/SR 84

Figure 6 shows the existing public view from northbound Jefferson Boulevard/SR 84. Currently, the view consists of the roadway and an adjacent drainage canal in the immediate foreground. The midground features utility poles, overhead electricity distribution lines, road signs, and an agricultural field. As the midground transitions to the background, several existing trees to the south of the project site's barn are within the viewshed, largely obscuring the site. The background consists of trees, aboveground electricity infrastructure, and scattered rural residences, all of which are lightly discernible against the backdrop of the sky. Photo simulations were conducted to represent the public view of the project site from northbound Jefferson Boulevard/SR 84, with a rendering of the proposed project (see Figure 7).

[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 November 2021.

Figure 6
Existing Public View from Northbound Jefferson Boulevard/SR 84

Figure 7
Simulated Public View from Northbound Jefferson Boulevard/SR 84

As shown in the simulation, the proposed tower/monopole and mounted antenna platforms are clearly discernible to the north of the existing barn; however, all other project components, such as the communications shelter, backup diesel generator, and chain-link fence, would be shielded from the public view by the existing trees. Given the presence of the existing aboveground utility infrastructure within the viewshed's foreground and background, the addition of the tower/monopole would not significantly alter the character of the public view. Following project construction, the character and visual quality of the view substantially remains that of a rural landscape comprised of agricultural production.

As previously discussed, the proposed wireless communication facilities are allowed in the A-N zoning district with County approval of a Use Permit. Given that the proposed project is consistent with the site's land use designation, such development was generally considered for the project site as part of the analysis within the County's General Plan EIR. In addition, as part of obtaining County approval of a Use Permit, the proposed project would be required to demonstrate consistency with all applicable development standards set forth in Section 8-2.1102(e) of the County's Code of Ordinances, including the requirement that the proposed structures would not significantly affect any designated public viewing area or scenic corridor. Furthermore, the proposed project would be required to comply with all applicable General Plan policies, such as Policy CC-1.18, which requires communication transmission facilities to be avoided along scenic roadways and routes.

Finally, the speed limit on Jefferson Boulevard/SR 84 within the project vicinity is 55 miles per hour (mph). As such, public views from motorists traveling northward past the project site would be temporary, occurring only as vehicles briefly pass by the site.

Based on the above, public views of the project site from northbound Jefferson Boulevard/SR 84 would not be considered to be substantially degraded by the proposed project.

View From Southbound Jefferson Boulevard/SR 84

Figure 8 shows the existing public view from southbound Jefferson Boulevard/SR 84. Currently, the view consists of the roadway in the immediate foreground. The midground features utility poles, overhead electricity distribution lines, and an agricultural field. Before the midground transitions to the background, the view includes the project site's existing residence, detached garage, barn, and associated trees. As the midground transitions to the background, the view includes a structure and several trees associated with the Bogle Production Facility. The background consists of trees and aboveground electricity infrastructure, all of which are lightly discernible against the backdrop of the sky.

Photo simulations were prepared with a rendering of the developed proposed project (see Figure 9). As shown in the simulation, the proposed tower/monopole and mounted antenna platforms are clearly discernible to the north of the existing barn; however, other project components, such as the communications shelter and backup diesel generator, are shielded by the chain-link fence and existing trees to the north and south of the detached garage.

Given the presence of the existing aboveground utility infrastructure within the viewshed's foreground and background, the addition of the tower/monopole would not significantly alter the character of the public view.

Figure 8
Existing Public View from Southbound Jefferson Boulevard/SR 84

Figure 9
Simulated Public View from Southbound Jefferson Boulevard/SR 84

Following project implementation, the character and visual quality of the view substantially remains that of a rural landscape comprised of agricultural production. As previously discussed, buildout of the project site with the proposed use was generally considered as part of the analysis within the County's General Plan EIR. Additionally, as part of obtaining County approval for a Use Permit, the proposed project would be required to demonstrate consistency with all applicable development standards set forth in Section 8-2.1102(e) of the County's Code of Ordinances. The proposed project would be required to be consistent with all applicable General Plan policies. Finally, as previously mentioned, given the speed limit on Jefferson Boulevard/SR 84, public views from motorists traveling southward past the project site would be temporary, occurring only as vehicles briefly pass by the site.

Based on the above, public views of the project site from southbound Jefferson Boulevard/SR 84 would not be considered to be substantially degraded by the proposed project.

Conclusion

Based on the above, the proposed project would not be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings, or conflict with regulations governing scenic quality. Thus, a ***less-than-significant*** impact would occur.

d. The project site is currently developed with a farm residence, detached garage, well house, and barn. Additionally, the Bogle Production Facility is located to the west of the project site. Therefore, the site and project vicinity contain existing sources of light and glare, such as porch and patio lights, landscape lighting, interior lighting visible through windows, architectural accent lighting, motion-activated security lighting, and glare from reflective surfaces such as windows.

Development of the proposed project could introduce new sources of light, as cell towers can include anti-collision safety features in order to prevent safety hazards with aircraft such as white strobing lights for use during the daytime hours and stable red lights during the nighttime hours. Typically, red lights operate on cell towers following sundown, as white strobe lights would be brighter than is necessary to prevent collisions. The standards relative to objects in the navigable airspace are set forth in Title 14 of the Code of Federal Regulations (CFR), Part 77. As noted in Title 14 CFR, Part 77.9, Construction or Alteration Requiring Notice, the Federal Aviation Administration (FAA) must be notified only for construction of structures in excess of 200 feet in height above ground level (AGL). As such, the proposed tower/monopole, which would be 140 feet AGL, would not be required to install anti-collision lighting. Nevertheless, the proposed project would be required to comply with all applicable standards for marking and lighting structures set forth by the FAA, including lighting for safety-related purposes.[5] Compliance with the foregoing standards would ensure the proposed tower/monopole does not create a new source of substantial light which would adversely affect day or nighttime views. In addition, cell tower components typically do not include reflective materials. Thus, the proposed cell tower would not create a new source of substantial glare. All other structures associated with the proposed project would not include sources of light and/or glare, as such potential

[5] Federal Aviation Administration. *Advisory Circular: Obstruction Marking and Lighting*. Available at: https://www.faa.gov/documentLibrary/media/Advisory_Circular/Advisory_Circular_70_7460_1M.pdf. Accessed November 2021.

sources would not be necessary for operation of the tower/monopole. Project operation would not generate light and glare from vehicle headlights, because the project would be unmanned.

Based on the above, the proposed project would not create a new source of substantial light which would adversely affect day or nighttime views in the project vicinity. Therefore, the project would result in a ***less-than-significant*** impact.

II. AGRICULTURE AND FORESTRY RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping Program of the California Resources Agency, to non-agricultural use?	☐	☐	✖	☐
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	✖	☐
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	✖
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	✖
e. Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use?	☐	☐	✖	☐

Discussion

a,e. According to the California Department of Conservation's California Important Farmland Finder, the project site is designated entirely as "Prime Farmland."[6] However, it should be noted that the proposed project would be implemented only within areas that have already been disturbed as part of development of the site's existing residence and associated structures. Such areas are not currently used for agricultural production. Therefore, project operation would not affect the current agricultural uses that are in effect in the immediate project vicinity, including the crop field immediately to the north of the project site. During project construction, storage areas for contractor equipment and materials would be within the existing disturbed areas, which would prevent impacts to off-site agricultural uses.

Based on the above, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Thus, a ***less-than-significant*** impact would occur.

b. The project site is zoned A-N/CADO and is not under a Williamson Act contract. As shown in Table 8-2.304(d) in the County's Code of Ordinances, wireless communication facilities are allowed in the A-N zoning district with County approval of a Use Permit. As such, with County approval of a Use Permit, the proposed project would be consistent with the uses allowed in the A-N zoning district.

As discussed above, the proposed project would be implemented only within areas that have already been disturbed as part of development of the site's existing residence and associated structures. Such areas are not currently used for agricultural production. Furthermore, as discussed in Section IV, Biological Resources, of this IS/MND, Mitigation Measure IV-3 requires the project to incorporate Best Management Practices (BMPs) to ensure potential impacts to off-site areas are reduced to a less-than-significant level.

[6] California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/dlrp/ciff/app/. Accessed December 2021.

Based on the above, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and a ***less-than-significant*** impact would occur.

c,d. 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]). As such, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland, or result in the loss of forest land or conversion of forest land to non-forest use. Thus, the project would result in ***no impact***.

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

Discussion

a,b. The project site is located within the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the of the Yolo-Solano Air Quality Management District (YSAQMD). The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require that federal and State ambient air quality standards (AAQS) be established, respectively, for six common air pollutants, known as criteria pollutants. The SVAB is designated nonattainment for the federal particulate matter 2.5 microns in diameter ($PM_{2.5}$) and the State particulate matter 10 microns in diameter (PM_{10}) standards, as well as for both the federal and State ozone standards.

The CAA requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The SIPs are modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. Due to the nonattainment designations, YSAQMD, along with the other air districts in the SVAB region, periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the federal AAQS, including control strategies to reduce air pollutant emissions through regulations, incentive programs, public education, and partnerships with other agencies.

General conformity requirements of the SIP include whether a project would cause or contribute to new violations of any federal AAQS, increase the frequency or severity of an existing violation of any federal AAQS, or delay timely attainment of any federal AAQS. In addition, a project would be considered to conflict with, or obstruct implementation of, an applicable air quality plan if the project would be inconsistent with the emissions inventories contained in the air quality plan. Emission inventories are developed based on projected increases in population, employment, regional vehicle miles traveled (VMT), and associated area sources within the region, which are based on regional projections that are, in turn, based on General Plans and zoning designations for the region.

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 reactive organic gas (ROG), nitrogen oxide (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.

The YSAQMD provides screening criteria to assess a project's potential to exceed the applicable thresholds for ROG, NO_x, and PM_{10} in Table 2 of the YSAQMD's *Handbook for Assessing and Mitigating Air Quality Impacts*. Table 2 provides the square footage at which various commercial projects could be assumed to exceed the YSAQMD's applicable thresholds. The smallest square footage listed is for a government office building measuring 75,000 sf. The proposed communication facility would be confined to 2,000 sf, which is well below the smallest square footage listed for commercial uses in the YSAQMD's screening criteria. Thus, due to the size of the proposed project, construction and operations of the proposed project are not anticipated to generate emissions in excess of the YSAQMD's thresholds of significance.

Furthermore, construction would be limited to minor ground disturbance to construct the proposed tower/monopole, associated aboveground structures, and underground infrastructure, as the project site is already graded and partially developed. In addition, construction activity associated with the proposed project is anticipated to occur over the course of approximately 90 working days. Given that such activities are considered minor and temporary, construction of the proposed project would not exceed the YSAQMD thresholds for construction emissions. Additionally, the proposed project would not directly result in any operational emissions beyond a negligible number of emissions associated with periodic testing of the project's backup diesel generator and vehicle emissions related to period maintenance. Therefore, the project operation would not exceed the YSAQMD thresholds for operational emissions.

Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By nature, air pollution is largely a cumulative impact. A single project is not sufficient in size to, by itself, result in nonattainment of AAQS. Because the proposed project would not result in emissions above the applicable thresholds of significance for ROG, NO_x, or PM_{10}, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State AAQS.

Because the proposed project would not result in construction-related or operational emissions of criteria air pollutants in excess of YSAQMD's thresholds of significance, conflicts with or obstruction of the implementation of the applicable regional air quality plans would not occur. In addition, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is

nonattainment under an applicable federal or State AAQS. Thus, a ***less-than-significant*** impact would result.

c. 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 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. Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics.

Within the context of the County's General Plan (specifically, Action CO-A107 in the Conservation and Open Space Element), the County considers the definition of sensitive receptors to pertain to "residentially designated land uses," rather than individual residences. As such, residential land uses and/or zoning districts would be considered sensitive receptors, and sensitive receptors would not include individual homes within zoning districts such as the project site's A-N/CADO zoning. Therefore, within the context of the County's General Plan, the on-site residence is not considered a sensitive receptor. The nearest existing sensitive receptor location for the purposes of this analysis would be in Clarksburg, over three miles from the project site.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and toxic air contaminant (TAC) emissions.

Localized Carbon Monoxide 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:[7]

- 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.

As discussed in Section XVII, Transportation, of this IS/MND, the proposed project is not anticipated to increase traffic to local roadways except during the construction period. Increases in vehicle traffic resulting from the proposed project would be minor and would only occur during the installation of the proposed monopole/tower, associated structures,

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

and underground infrastructure. As such, based on the YSAQMD screening criteria, the proposed project would result in a less-than-significant impact related to localized CO emissions concentrations and would not expose sensitive receptors to substantial concentrations of localized CO.

TAC Emissions

Another category of environmental concern is TACs. The California Air Resources Board (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. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the 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 does not include any operations that would be considered a substantial source of TACs. The project would include a backup diesel generator; however, the generator would only operate as part of periodic maintenance testing and/or in the event of an emergency power loss. Accordingly, operations of the proposed project would not expose sensitive receptors to excess concentrations of TACs.

Short-term, construction-related activities could result in the generation of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. Construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Health risks are typically associated with exposure to high concentrations of TACs over extended periods of time (e.g., 30 years or greater), whereas the construction period associated with the proposed project would be limited to approximately 90 days. All construction equipment and operation thereof would be regulated per the *In-Use Off-Road Diesel Vehicle Regulation*, which is intended to help reduce emissions associated with off-road diesel vehicles and equipment, including DPM. Project construction would also be required to comply with all applicable YSAQMD rules and regulations, particularly associated with permitting of air pollutant sources.

Due to the temporary nature of construction, which would occur over the course of approximately 90 working days, the relatively short duration of potential exposure to associated emissions, and the substantial distance between the project site and the nearest sensitive receptor, sensitive receptors would not be exposed to concentrations of pollutants for an extended period of time. Therefore, construction of the proposed project would not expose the nearest sensitive receptors to substantial pollutant concentrations.

Conclusion

Based on the above, the proposed project would not expose any sensitive receptors to substantial concentrations of pollutants, including localized CO or TACs, during construction or operation. Therefore, the proposed project would result in a ***less-than-significant*** impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

d. Emissions of pollutants have the potential to adversely affect sensitive receptors within a development project's vicinity. 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 questions '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.[8] 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, as discussed above, the nearest sensitive receptor to the project site is over three miles away. In addition, 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 distance to the nearest sensitive receptor, 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 create objectionable odors affecting a substantial number of people.

As previously discussed above, the proposed project would not directly result in any operational emissions beyond a negligible number of emissions associated with periodic testing of the project's backup diesel generator. In addition, the project does not meet any of the facility types identified by CARB or the YSAQMD as odor-generating; thus, the project would not generate substantial operational odors. Accordingly, the proposed project would not create objectionable odors affecting a substantial number of people.

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 and construction-related trucks would be covered at the end of the day. In addition, the YSAQMD requires that

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

grading operations do not take place during periods of high winds; however, as previously mentioned, the site is already graded and would require only minimal grubbing prior to construction. 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 BMPs noted in Policy CO-6.6 of the County'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 would only operate within the project site as part of periodic maintenance checks and would be restricted to areas overlain with gravel. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

Conclusion

For the aforementioned reasons, construction and operation of the proposed project would not result in emissions (such as those leading to odors and dust) that would affect a substantial number of people, and a ***less-than-significant*** impact would result.

IV. BIOLOGICAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	✖	☐	☐
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?	☐	✖	☐	☐
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?	☐	✖	☐	☐
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?	☐	☐	✖	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	✖	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	✖	☐

Discussion

a. The project site, which has been previously graded, is currently developed with a farm residence, associated residential structures, and a gravel driveway. The following is a discussion on the potential for the proposed project to affect on-site special-status species protected under CEQA. Where applicable, the discussion also addresses the project's compliance with applicable requirements set forth by the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), which would reduce potential impacts to special-status species.

Biological Resources Assessment

A Biological Resources Assessment (BRA) was prepared by Synthesis Planning to assess the extent to which the proposed project would impact on-site special-status plant and wildlife species (attached as Appendix A to this IS/MND).[9] An impact would include substantial adverse effects, 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 (CDFW) or U.S. Fish and Wildlife Service (USFWS). In addition, raptors (birds of prey), migratory birds, and other avian species are protected under the Migratory Bird Treaty Act of 1918 (MBTA) and California Fish and Game Code (CFGC) Section 3503.5. With respect to special-status plant species, the California Native Plant Society's (CNPS) Rare Plant

[9] Synthesis Planning. *Biological Resources Assessment: CA017 Bogle (also AT&T CVL06447) Telecommunications Project, Yolo County, California*. April 2021 (Revised October 2021).

Ranking (CRPR) system includes rankings for plants, from 1 to 4. Plants with a CRPR Rank of 1 or 2 are considered special-status plants under CEQA.

The BRA's analysis included review of background literature to determine the potential presence of sensitive vegetation communities, aquatic communities, and special-status plant and wildlife species. Resources reviewed included the USFWS quadrangle species lists, USFWS list of special-status animals for Yolo County, the CDFW's California Natural Diversity Database records, the CDFW's *Special Animals List*, the CDFW's *State and Federally Listed Endangered and Threatened Animals of California*, the CNPS electronic inventory records, and the 1990 CDFW publication *California's Wildlife, Volumes I-III*. Additionally, the BRA incorporated findings from a field survey conducted of the project site and a 200-foot buffer area on April 8, 2021.

Altogether, the determination of whether the proposed project would result in adverse impacts to State special-status species was based on CEQA, the CDFW, and the CNPS guidelines for special-status plants and animals. Impacts to special-status species were identified if: (1) such species occurred in habitats similar to those of the project site and buffer areas, and (2) were known to occur within the general project vicinity. For special-status species covered under the Yolo HCP/NCCP, the BRA identified the applicable avoidance and minimization measures (AMMs) that would be required of the project in order to engage in the "incidental take" of such species. The results of the BRA's evaluation are discussed below.

Special-Status Plants

As previously discussed, the project site has been subjected to previous disturbance through development of the site's current structures, which include a farm residence, detached garage, well house, and barn. The BRA identified 14 special-status plant species that have potential to occur in the general project vicinity (see Table 1 of the BRA for additional detail). Of the total, the BRA determined that potential habitat is available within the 200-foot buffer area around the project site to accommodate the following 10 special-status plant species:

- Watershield (*Brasenia schreberi*, CRPR Rank 2B.3), found in freshwater marshes and swamps and has a blooming period of May through September;
- Bristly sedge (*Carex comosal*, CRPR Rank 2B.1), found in marshes, swamps, lake margins, and wet places and has a blooming period of May through September;
- Bolander's water-hemlock (*Cicuta maculata var. bolanderi*, CRPR Rank 2B.1), found in marshes and freshwater/brackish marshes and has a blooming period of July through September;
- Woolly rose-mallow (*Hibiscus lasiocarpus var. occidentalis*, CRPR Rank 1B.2), found in freshwater marshes and swamps and has a blooming period of June through September;
- Delta tule pea (*Lathyrus jepsonii var. jepsonii*, CRPR Rank 1B), found in freshwater and brackish marshes and has a blooming period of May through September;
- Mason's lilaeopsis (*Lilaeopsis masonii*, CRPR Rank 1B.1), found in freshwater and brackish marshes and has a blooming period of April through November;
- Delta mudwort (*Limosella australis*, CRPR Rank 2B.1), found in freshwater and brackish marshes as well as riparian scrub and has a blooming period of May through August;
- Sanford's arrowhead (*Sagittaria sanfordii*, CRPR Rank 1B.2), found in marshes

and swamps and has a blooming period of May through October;
- Side-flowering skullcap (*Scutellaria lateriflora*, CRPR Rank 2B.2), found in meadows and seeps and has a blooming period of July through September; and
- Saline clover (*Trifolium depauperatum var. hydrophilum*, CRPR Rank 1B.2), found in marshes, valley and foothill grassland on mesic and alkaline soils, and vernal pools and has a blooming period of April through June.

The BRA field survey did not identify any occurrences of the above species, and the plants have not been documented within the boundaries of or in proximity to the project site. However, potential habitat occurs for each of the species within the drainage ditch immediately south of the project's proposed utility route, and 100 feet to the west of the proposed tower site. Potential aquatic habitat is also available just north and south of the existing access road where it connects with Jefferson Boulevard/SR 84.

Based on the above, if the above plant species were to bloom within the proposed disturbance area prior to project implementation, the proposed project could have a substantial adverse effect, either directly or through habitat modification, on special-status plant species.

Special-Status Wildlife

The BRA identified 18 special-status plant species that have potential to occur in the general project vicinity (see Table 1 of the BRA for additional detail). Of the total, the BRA determined that potential habitat is available on or near the project site to accommodate the following six species: tricolored blackbird; Swainson's hawk; song sparrow; yellow-headed blackbird; Western pond turtle; and giant garter snake. The potential impacts associated with each identified species is discussed in further detail below. Where applicable, a species' designation as a Covered Species under the Yolo HCP/NCCP is cited and applicable Yolo HCP/NCCP Avoidance and Minimization Measures (AMMs) are discussed.

Tricolored Blackbird

Tricolored blackbird (*Agelaius tricolor*) is a State-listed threatened species and covered under the Yolo HCP/NCCP. The highly colonial species requires open water, protected nesting substrate, and foraging habitat with insect prey within a few kilometers of the colony.

The BRA field survey did not identify any occurrences of the tricolored blackbird, and the species has not been documented within the boundaries of or in proximity to the project site. The BRA found that the species is not likely to be found within the project site, and the wetland habitat in the buffer area is very small in quantity. Nevertheless, the BRA concluded that the species could be present feeding in the general project buffer area. Should the species be present in such areas during project construction, adverse effects to the tricolored blackbird could occur.

Because tricolored blackbird could be potentially impacted by the proposed project, the project would be required to comply with all applicable provisions set forth by the Yolo HCP/NCCP for the incidental take of the species. In addition to paying all applicable fees to the Yolo Habitat Conservancy as part of obtaining an incidental take permit, the project would be required to implement AMM21. AMM21 requires a preconstruction planning-level survey within 14 days prior to the commencement of construction activities by a

qualified biologist to identify and quantify (in acres) tricolored blackbird nesting and foraging habitat within 1,300 feet of the proposed area of disturbance. If an active tricolored blackbird colony is present or has been present within the last five years within the planning-level survey area, the project would be subject to additional requirements set forth by AMM21.

Based on the above, through compliance with all applicable requirements set forth by the Yolo HCP/NCCP for the incidental take of tricolored blackbird, including required compliance with AMM21, the project would result in a less-than-significant impact to the special-status species.

Swainson's Hawk

Swainson's hawk (*Buteo swansoni*) is a State-listed threatened species and covered under the Yolo HCP/NCCP. The species inhabits grassland, shrubland, and agricultural areas where it has open areas to forage for its small prey and where roost sites are available. During the breeding season, the species requires nesting trees that usually either border agricultural fields, are in wetland borders, or are on abandoned farms. Swainson's hawk forages by soaring over open areas and by searching from perches.

While active nest sites were not observed during the field survey, an individual Swainson's hawk was observed flying over the northern buffer area of the project site. The species has also been documented approximately 0.59 miles south of the site. The BRA found that the species is not likely to be found within the project site. However, potential foraging and nesting habitat was observed in the immediate and general project buffer area. As such, the BRA concluded that Swainson's hawk could be potentially present. Should the species be present in such areas during project construction, adverse effects to Swainson's hawk could occur.

Because Swainson's hawk could be potentially impacted by the proposed project, the project would be required to comply with all applicable provisions set forth by the Yolo HCP/NCCP for the incidental take of the species, including payment of all applicable fees to the Yolo Habitat Conservancy for an incidental take permit. In addition, the project would be required to implement AMM16. AMM16 requires a preconstruction planning-level survey prior to the commencement of construction activities by a qualified biologist to identify nesting habitat for the species within 1,320 feet of the project footprint. If an active Swainson's hawk nest is present, the project would be subject to additional requirements set forth by AMM16.

Based on the above, through compliance with all applicable requirements set forth by the Yolo HCP/NCCP for the incidental take of Swainson's hawk, including required compliance with AMM16, the project would result in a less-than-significant impact to the special-status species.

Song Sparrow and Yellow-Headed Blackbird

Song sparrow (*Melospiza melodia*) and yellow-headed blackbird (*Xanthocephalus xanthocephalus*) are both California Species of Special Concern protected under the MBTA and CFGC. The species are not covered under the Yolo HCP/NCCP. Song sparrow is found in riparian and marsh habitat. Yellow-headed blackbird nests in freshwater emergent wetlands with dense vegetation and deep water, often along borders of lakes or ponds.

The BRA field survey did not identify any occurrences of the song sparrow or yellow-headed blackbird, and neither species have been documented within the boundaries of or in proximity to the project site. The BRA found that neither species is likely to be found within the project site, and the wetland habitat for each species in the buffer area is very small in quantity. Nevertheless, the BRA concluded that both species could be present feeding in the general project buffer area. Therefore, the BRA concluded that both song sparrow and yellow-headed blackbird could be potentially present. Thus, should the species be present in such areas during project construction, adverse effects to song sparrow and yellow-headed blackbird could occur.

Western Pond Turtle

Western pond turtle (*Emys marmorata*) is a California Species of Special Concern and covered under the Yolo HCP/NCCP. The species is a thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. The species requires basking sites and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.

The BRA field survey did not identify any occurrences of western pond turtle, and the species has not been documented within the boundaries of or in proximity to the project site. Potential upland aestivation habitat suitable for the species was not observed within the project site or buffer area. However, aquatic breeding and foraging habitat for western pond turtle was observed within a drainage ditch immediately south of the proposed utility route and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard/SR 84. Based on the availability of suitable breeding and foraging habitat near the project site, the BRA determined that western pond turtle could be potentially present. Should the species be present in such areas during project construction, adverse effects to western pond turtle could occur.

Because western pond turtle could be potentially impacted by the proposed project, the project would be required to comply with all applicable provisions set forth by the Yolo HCP/NCCP for the incidental take of the species, including payment of all applicable fees to the Yolo Habitat Conservancy for an incidental take permit. In addition, the project would be required to implement AMM14. AMM14 requires silt fencing and other sediment control devices to be placed around the project site prior to the commencement of construction activities to prevent western pond turtles from entering active work areas. In addition, due to the potential for the species to move through the project site, the AMM additionally includes provisions for construction personnel to, at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities during disturbing activities to prevent take of individuals.

Based on the above, through compliance with all applicable requirements set forth by the Yolo HCP/NCCP for the incidental take of western pond turtle, including required compliance with AMM14, the project would result in a less-than-significant impact to the special-status species.

Giant Garter Snake

Giant garter snake (*Thamnophis gigas*) is both a federally listed and State-listed threatened species and covered under the Yolo HCP/NCCP. Giant garter snake prefers

freshwater marsh and low-gradient streams. The species has also adapted to drainage ditches and irrigation canals.

The BRA field survey did not observe nesting habitat or burrows in the project site; however, potential nesting habitat and burrows are available in the general project buffer area. The closest documented sighting of giant garter snake to the site occurred approximately 5.09 miles southeast of the project site. The BRA found that potential aquatic breeding and foraging habitat for the species is available within the drainage ditch located immediately to the south of the proposed utility route and 100 feet to the west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road, at the connection to Jefferson Boulevard/SR 84. Based on the availability of aquatic habitat, the BRA determined that giant garter snake could be potentially present. Should the species be present in such areas during project construction, adverse effects to giant garter snake could occur.

Because giant garter snake could be potentially impacted by the proposed project, the project would be required to comply with all applicable provisions set forth by the Yolo HCP/NCCP for the incidental take of the species, including payment of all applicable fees to the Yolo Habitat Conservancy for an incidental take permit. In addition, the project would be required to implement AMM15. AMM15 requires a preconstruction planning-level survey prior to the commencement of construction activities by a qualified biologist to identify the presence of suitable habitat for giant garter snake within the project site and 200-foot buffer area surveyed in the BRA. If suitable habitat for giant garter snake is present, the project would be subject to additional requirements set forth by AMM15.

Based on the above, through compliance with all applicable requirements set forth by the Yolo HCP/NCCP for the incidental take of giant garter snake, including required compliance with AMM15, the project would result in a less-than-significant impact to the special-status species.

Conclusion

Based on the above information, because special-status plants, tricolored blackbird, Swainson's hawk, migratory birds and raptors protected under the MBTA and CFGC, western pond turtle, and giant garter snake have potential to occur within the project buffer area, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species. Through obtaining an incidental take permit and compliance with all applicable AMMs set forth by the Yolo HCP/NCCP, potential impacts to tricolored blackbird, Swainson's hawk, western pond turtle, and giant garter snake would be reduced to less-than-significant levels. However, because special-status plants and other migratory birds and raptors protected under the MBTA and CFGC are not covered under the Yolo HCP/NCCP, without provisions to confirm the foregoing species are not within the proposed area of disturbance prior to project construction, the project could result in a ***potentially significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Special-Status Plants

IV-1(a) *Prior to the issuance of grading or construction permits, a qualified biologist shall conduct focused plant surveys for watershield, bristly sedge, Bolander's water-hemlock, woolly rose-mallow, delta tule pea, Mason's lilaeopsis, delta mudwort, Sanford's arrowhead, side-flowering skullcap, and saline clover. The surveys shall be timed during the blooming season and shall cover all potentially suitable habitats on-site and within the 200-foot buffer area surveyed in the Biological Resources Assessment prepared for the proposed project. The results of the surveys shall be submitted to the Yolo County Community Services Department. If none of the species occur in the aforementioned area, further mitigation is not required.*

IV-1(b) *If the listed special-status plants are identified on-site or within the 200-foot buffer area during the focused plant surveys, the project applicant shall be responsible for ensuring construction activities avoid special-status plants through preparation of an Avoidance Plan Report detailing protection and avoidance criteria, measures, and the extent to which special-status plants were successfully avoided. The Avoidance Plan Report shall be subject to review and approval by the Yolo County Community Services Department.*

IV-1(c) *If avoidance is determined to be infeasible, the qualified biologist shall ensure seed collection for affected special-status plants is completed and plants are re-established at a minimum of a one-to-one ratio (number of newly established plants relative to the number of plants impacted) in a preserved, suitable habitat approved by the Yolo County Community Services Department.*

Re-established populations shall be monitored annually by the project applicant in accordance with an approved Habitat Mitigation and Monitoring Plan prepared in consultation with the Yolo County Community Services Department, with annual monitoring taking place for a minimum of five years. The Habitat Mitigation and Monitoring Plan shall include criteria, subject to approval by all applicable agencies, including the Yolo County Community Services Department, USFWS, and CDFW, detailing the survival ratio required of re-established populations and performance standards for further replanting for any re-established plant species that do not survive. Reports describing performance results shall be prepared and submitted for Year One, Three, and Five of the monitoring period.

Migratory Birds and Raptors (including Song Sparrow and Yellow-Headed Blackbird)

IV-2 *If ground-disturbing activities occur during the breeding season (generally February 1 through September 15), preconstruction surveys for active nests shall be conducted by a qualified biologist no more than 10 days prior to start of activities. Preconstruction nesting surveys shall be conducted for nesting migratory avian and raptor species in the project site and buffer area. Preconstruction biological surveys shall occur prior to the proposed project implementation, and during the appropriate survey periods for nesting activities for individual avian species. Surveys shall follow required*

CDFW and USFWS protocols, where applicable. A qualified biologist shall survey suitable habitat for the presence of the species. If a migratory avian or raptor species is observed and suspected to be nesting, a buffer area shall be established to avoid impacts to the active nest site. Identified nests shall be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. If nesting avian species are not found, project activities may proceed and no further mitigation shall be required. The results of the surveys shall be submitted to the Yolo County Community Services Department.

If active nesting sites are found, the following exclusion buffers shall be established, and project activities shall not occur within the buffer zones until young birds have fledged and are not reliant upon the nest or parental care for survival:

- *Minimum non-disturbance buffer of 250 feet around active nest of non-listed bird species and 250-foot non-disturbance buffer around migratory birds;*
- *Minimum non-disturbance buffer of 500 feet around active nest of non-listed raptor species and 0.5-mile non-disturbance buffer around listed species and fully protected species (tricolored blackbird and Swainson's hawk) until breeding season has ended or until a qualified biologist has determined that the birds have fledged and are not reliant upon the nest or parental care for survival;*
- *Once work commences, all nests shall be continuously monitored to detect any behavioral changes as a result of project activities. If behavioral changes are observed, the work causing that change shall cease and the appropriate regulatory agencies (i.e., CDFW, USFWS, etc.) shall be consulted for additional AMMs; and*
- *A variance from the foregoing non-disturbance buffers may be implemented when compelling biological or ecological reason exists to do so, such as when the project area would be concealed from a nest site by topography. Any variance from the foregoing buffers shall be supported by a qualified wildlife biologist. CDFW and USFWS shall be notified in advance of implementation of a non-disturbance buffer variance.*

b,c. Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or groundwater, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions. The U.S. Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB) have jurisdiction over modifications to stream channels, river banks, lakes, and other wetland features. The USACE's jurisdiction is established through the provisions of Section 404 of the Clean Water Act, which prohibits the discharge of dredged or fill material into waters of the U.S. without a permit, including certain wetlands and unvegetated "other waters of the U.S." The jurisdictional authority of the RWQCB is established pursuant to Section 401 of the Clean Water Act, which typically requires a water quality certification when an

individual or nationwide permit is issued by the USACE. The RWQCB also has jurisdiction over waters of the State under the Porter-Cologne Water Quality Control Act.

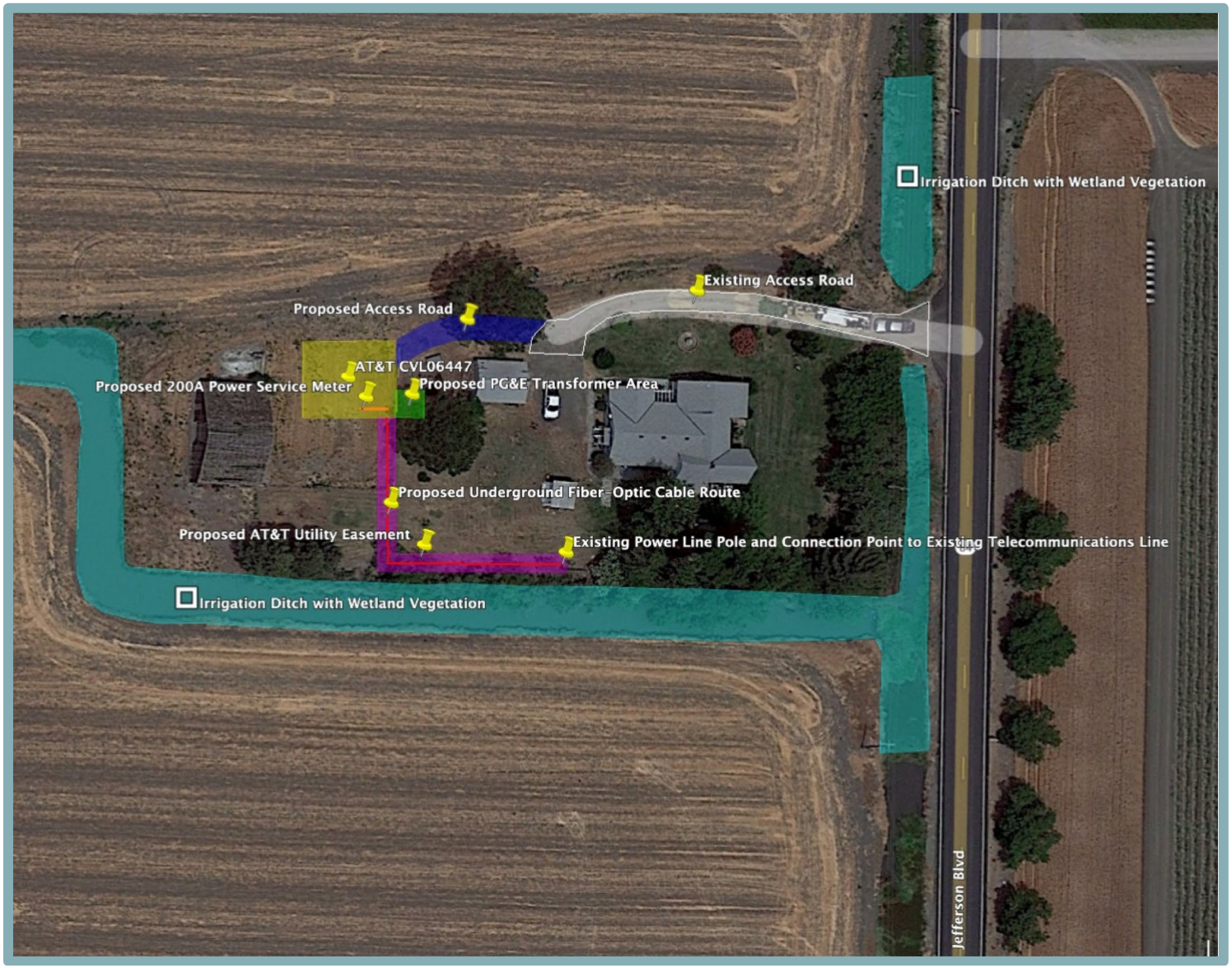
Riparian zones are the areas bordering rivers and other bodies of surface water. They include the floodplain as well as the riparian buffers adjacent to the floodplain. Riparian zones provide many environmental and recreational benefits to streams, groundwater, and downstream land areas. Groundwater is usually found at shallower depths in riparian zones than in the surrounding landscape. Riparian zones are visually defined by a greenbelt with a characteristic suite of plants that are adapted to and depend on the shallow water table.

According to the BRA, jurisdictional wetlands or other waters of the U.S. or of the State, including streams or other small drainages, riparian habitats, or other aquatic features regulated by federal or State laws, are not present on the project site. However, wetland habitat observed in the manmade drainage canal adjacent to the site constitutes a special-status natural community. Project operation would not result in impacts to the wetland habitat in the drainage canal, as the project structures would be confined to the boundaries of the project site (see Figure 10). Nevertheless, during project construction, ground-disturbing activities could potentially result in impacts to the adjacent wetland habitat without sufficient measures to ensure appropriate staging areas are established for project vehicles, equipment, and materials to prevent contamination of the wetland habitat from vehicle and equipment fuels, debris, and dust.

As discussed below, the project site is within the boundaries of the Yolo HCP/NCCP, which includes Covered Activities for all natural communities. Accordingly, the proposed project would be subject to all applicable AMMs as part of obtaining an incidental take permit, including AMM3 and AMM8. AMM3 requires that during project construction, the project contractor muse ensure that workers confine land clearing to the minimum area necessary to facilitate construction activities where natural communities and habitat for Covered Species are present. As part of compliance, workers must restrict movement of heavy equipment to and from the project site to established roadways to minimize disturbance. AMM8 necessitates that construction staging and other temporary work areas for covered activities be located in areas that would ultimately be a part of the permanent project development footprint. If construction staging and other temporary work areas must be located outside of the permanent project footprint, AMM8 requires that they be located either in areas that do not support habitat for Covered Species or are easily restored to prior or improved ecological functions (e.g., grassland and agricultural land).

Based on the above, the proposed project would be required to comply with all applicable AMMs set forth by the Yolo HCP/NCCP, which would reduce the severity of potential project impacts. However, the Yolo HCP/NCCP does not set forth an AMM that requires specific BMPs to be incorporated during project construction that would prevent contamination of fuel and other construction materials into sensitive wetland habitat. Therefore, without the incorporation of industry standard BMPs during project construction, the proposed project could indirectly result in substantial adverse effects on a sensitive natural community in local or regional plans, policies, regulations or by the CDFW or USFWS or on a State- or federally protected wetland through direct removal, filling, hydrological interruption, or other means. Thus, the project could result in a ***potentially significant*** impact.

Figure 10
Off-site Wetland Habitat



Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

IV-3 *During project construction, the project contractor shall ensure the following Best Management Practices (BMPs) are implemented to prevent contamination of fuel and other construction materials into sensitive wetland habitat to the south of the proposed project site:*

- *The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the State and U.S.;*
- *Areas for fuel storage, refueling, and servicing of construction equipment shall be located in an upland location;*
- *Wash sites shall be located in upland locations to ensure wash water does not flow into adjacent wetlands;*
- *All construction equipment shall be in good working condition, showing no signs of fuel or oil leaks. All questionable motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals shall be replaced. The mechanical equipment shall be inspected on a daily basis to ensure no leaks. All leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of construction activity;*
- *Oil absorbent and spill containment materials shall be located on-site when mechanical equipment is in operation within 100 feet of a waterway. If a spill occurs, no additional work shall occur until (1) the mechanical equipment is inspected by the contractor and the leak has been repaired; (2) the spill has been contained; and (3) CDFW and the Yolo County Community Services Department are contacted and have evaluated the impacts of the spill; and*
- *To avoid debris contamination into drainages and other sensitive wildlife habitats, silt fence or other sediment control devices shall be placed around construction sites to contain spoils from construction excavation activities;*

The foregoing standard construction measures shall be included in the notes on the project grading and improvement plans, which shall be subject to confirmation by the Yolo County Community Services Department.

d. Movement corridors or landscape linkages are usually linear habitats that connect two or more habitat patches, providing assumed benefits to the species by reducing inbreeding depression and increasing the potential for recolonization of habitat patches. As previously discussed, the aboveground structures associated with the proposed project would be restricted to the boundaries of the project site, which has been previously disturbed through the development of the site's existing residence and associated structures. Due to the disturbed nature of the project site, the potential for use of the site as a wildlife corridor or native wildlife nursery site is limited. Additionally, in assessing the potential for the adjacent drainage canal to accommodate special-status fish species, the BRA concluded the drainage ditches do not provide adequate habitat for such species. Furthermore, the project site is located within an agricultural area of the County, and as

such, sufficient land in the greater vicinity of the site exists for continued wildlife movement in the area.

Based on the above, development of the proposed project would not substantially interfere 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, and a ***less-than-significant*** impact would occur.

e. Yolo County does not have an established tree preservation ordinance or policy. Additionally, the proposed project would not include the removal of any on-site trees. Therefore, the proposed project would not result in any impacts to trees. Additionally, as detailed under question 'f' below, the proposed project would be required to comply with all applicable AMMs set forth by the Yolo HCP/NCCP. Based on the above, the proposed project would not conflict with any local policies or ordinances protecting biological resources. Thus, a ***less-than-significant*** impact would occur.

f. The Yolo HCP/NCCP is a 50-year countywide conservation plan that became effective in January of 2019 and is intended to minimize regulatory hurdles by providing a means to coordinate and standardize mitigation and compensation requirements set forth by the federal and State Endangered Species Acts, CEQA, and other applicable laws and regulations related to biological and natural resources within the Yolo HCP/NCCP Plan Area.[10] The Yolo HCP/NCCP analyzes a range of anticipated activities, including mining, development, and agricultural uses, on 12 special-status species and their respective habitats, and created an agreement between State and federal wildlife regulators and local jurisdictions (Yolo County; the cities of Davis, West Sacramento, Winters, and Woodland; and the University of California, Davis), to allow landowners and developers in the aforementioned jurisdictions to engage in the "incidental take" of specific species in return for conservation commitments. In addition to various special-status species, the Yolo HCP/NCCP provides coverage for riparian and other wetland sensitive natural community types.

As shown in Exhibit 5-2 of the Yolo HCP/NCCP Environmental Impact Statement/Environmental Impact Report, the project site is located on land cover designated as "Cultivated Land – Grain/Hay Crops" by the Yolo HCP/NCCP. Grain and hay crops include irrigated and dryland grain and hay production operations.[11] As noted in the HCP/NCCP, grain and hay crops (dryland grain crops) support common wildlife species, including the mourning dove, northern harrier, western meadowlark, Brewer's blackbird, red-winged blackbird, coyote, California ground squirrel, and black-tailed jackrabbit. The land cover also provides important habitat for covered wildlife species such as the Swainson's hawk, white-tailed kite, and tricolored blackbird. As part of compliance with the Yolo HCP/NCCP, the proposed project has submitted an application for an incidental take permit to address potential impacts to special-status species and habitat that could be impacted by the project and would be subject to all applicable AMMs set required as part of compliance with the permit. The AMMs that would apply for the purposes of mitigating potential project impacts to special-status species and wetland habitat are discussed under questions 'a' and 'b.' In addition, the proposed project would be subject to AMM4 and AMM6, which include general requirements for construction,

[10] Yolo Habitat Conservancy. *Yolo Habitat Conservation Plan/Natural Community Conservation Plan*. April 2018.
[11] Yolo Habitat Conservancy. *Yolo Habitat Conservation Plan/Natural Community Conservation Plan Final Environmental Impact Statement/Environmental Impact Report* [pg. 5-5]. April 2018.

operations, and maintenance activities. AMM4 necessitates that workers cover open trenches and holes associated with covered activities that affect habitat for giant garter snake, western pond turtle, and California tiger salamander. AMM6 requires all construction personnel to participate in a worker environmental training program authorized by the Yolo Habitat Conservancy and administered by a qualified biologist. The project's required compliance with all applicable AMMs and other provisions of the Yolo HCP/NCCP would ensure that potential impacts to special-status species and protected habitats are reduced to less-than-significant levels.

Based on the above, the proposed project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan, and the project would result in a ***less-than-significant*** impact.

V. CULTURAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	✖	☐
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	☐	✖	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries.	☐	✖	☐	☐

Discussion

a. Historical resources are features that are associated with the lives of historically important persons and/or historically significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics.

A Cultural Resources Study (CRS) was prepared for the proposed project by Tom Origer & Associates to determine to what extent historical and archaeological resources could be impacted by the proposed project.[12] The CRS included examination of the library and project files at Tom Origer & Associates to assess the potential of project activities encountering archaeological sites and built environment within the study area (which encompassed the project site). In addition, a review was completed of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC) at Sonoma State University in Rohnert Park, California. Sources of information included, but were not limited to, the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest as listed in the California Office of Historic Preservation's *Historic Property Directory* and the *Built Environment Resources Directory*. Archival research included an examination of 19th and 20th century maps and aerial photographs to gain insight into the nature and extent of historical development in the general project vicinity as well as within the study area. Ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were also reviewed. Additionally, a request was sent as part of the CRS to the Native American Heritage Commission (NAHC) seeking information from the Sacred Lands File and the names of Native American individuals and groups that would be appropriate to contact regarding the project. Lastly, a field survey of the study area was completed on January 6, 2022. Surface examination consisted of the surveyor walking in 15-meter transects, with a hoe used, as needed, to expose the ground surface. Ground visibility ranged from good to excellent, with vegetation being the primary hindrance. Based on the records review and site reconnaissance, the CRS determined the buildings within the study area do not meet applicable criteria to be listed on the California Register of Historical Resources. As such, the CRS found that the study area does not contain historical resources.

[12] Tom Origer & Associates. *Cultural Resources Study for Project CVL06447 – AT&T Cellular Tower, Located at 38300 Jefferson Boulevard, Clarksburg, Yolo County, California*. January 13, 2022.

Based on the above, the project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. Therefore, the project would result in a ***less-than-significant*** impact.

b,c. According to the CRS, the project site has not been previously subjected to a cultural resources study. Only one study has been conducted within 0.25 mile of the study area, which was of Jefferson Boulevard/SR 84. Reported ethnographic sites within one mile of the study area have not been reported.

While known resources do not exist within the project site, the CRS noted that potential exists for unidentified subsurface deposits to be encountered within the site. Based on landform age and analysis of the site's environmental setting, the CRS determined that the site has moderate potential to contain buried archaeological site indicators. The moderate rating is based on a model for predicting a location's sensitivity for buried archaeological sites, which was formulated as part of the technical report *San Francisco Bay-Delta Regional Context and Research Design for Native American Archaeological Resources, Caltrans District 4*. A location's sensitivity is scored on a scale of one to 10, with a moderate rating having a score of three to 5.5. The project site has a rating of 4.7. However, in addition to the surface reconnaissance, the CRS field survey included excavation of an auger hole within the proposed area of disturbance. Archaeological site indicators were not observed in the auger hole or in the course of the surface survey.

CEQA Guidelines Section 15064.5(f) requires the lead agency for a project to ensure that provisions are made for accidentally discovered resources. In addition, California Health and Safety Code Section 7050.5 and PRC Section 5097.98 require that any human remains discovered within the project site be treated with respect and dignity. Upon discovery of human remains, all work in an area must cease immediately within 50 feet of the find, with nothing disturbed and the area secured. The coroner's office of the county where the remains are located must be called, and the coroner has two working days to examine the remains. All parties that discover human remains in California are required to follow a well-defined process.

The proposed project would require ground disturbance including excavation for the tower's foundation, which would range from six to 25 feet in depth, and a trench for the underground utility lines that would be four feet deep. As discussed above, the project site was found to have a moderate potential for buried cultural resources and, as a result, unknown archaeological resources, including human remains, could exist in the project vicinity. Additionally, the Yocha Dehe Wintun Nation requested during the tribal consultation that the project include cultural monitors during project development and ground disturbance, as discussed further in Section XVIII, Tribal Cultural Resources, of this IS/MND.

Based on the above, the possibility exists that construction of the proposed project could result in a substantial adverse change in the significance of archaeological and tribal cultural resource. Thus, a ***potentially significant*** impact to archaeological and tribal cultural resources could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

V-1 *Prior to commencement of construction activities, the applicant shall retain an archaeologist to prepare a written monitoring plan that describes the role of the tribal monitors, archaeological monitors, and developer's representatives, timelines for advanced notification to Yocha Dehe Wintun Nation prior to grading, and the procedures to follow in the event archaeological/tribal remains are uncovered. The procedures shall comply with Yocha Dehe Wintun Nation's "Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation." Proof of compliance shall be provided to the Yolo County Department of Community Services.*

V-2 *During grading, excavating, and trenching of soils within a 300-foot (north-to-south direction) by 200-foot (east-to-west direction) portion of the southwest corner of the project site, a tribal monitor and archaeological monitor shall be present on-site.*

A tribal monitor and archeological monitor shall be present on-site during excavation/trenching for the tower foundation, underground utilities and other project components in all portions of the project site.

The foregoing measures shall be included in the project's written monitoring plan, required in Mitigation Measure V-1.

VI. ENERGY. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	✖	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	✖	☐

Discussion

a,b. The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2019 California Green Building Standards Code and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the proposed project's potential effects related to energy demand during construction and operations are provided below.

California Green Building Standards Code

The 2019 California Green Building Standards Code, otherwise known as the CALGreen Code (Title 24 CCR, Part 11) is a portion of the California Building Standards Code (Title 24 CCR), which became effective on January 1, 2020.[13] The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CALGreen standards regulate the method of use, properties, performance, types of materials used in construction, alteration repair, improvement and rehabilitation of a structure or improvement to property.

Building Energy Efficiency Standards

The 2019 Building Energy Efficiency Standards are a portion of the California Energy Code (Title 24 CCR, Part 6), which expands upon energy efficiency measures from the 2016 Building Energy Efficiency Standards. Energy reductions relative to previous Building Energy Efficiency Standards are achieved through various regulations.[14] For nonresidential buildings, the most significant changes in compliance with the 2019 standards are in lighting design, alterations to a development's envelope, mechanical systems, and covered processes.[15]

Construction Energy Use

Construction of the proposed project would involve on-site energy demand and consumption related to the use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, and hauling and material delivery truck trips. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for

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13 California Building Standards Commission. *California Green Building Standards Code*. Available at: https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen. Accessed November 2021.

14 California Energy Commission. *2019 Building Energy Efficiency Standards: Frequently Asked Questions*. Available at: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf. Accessed November 2021.

15 California Energy Commission. *California Energy Commission 2019 Building Energy Efficiency Standards What's New for Nonresidential*. Available at: https://www.energy.ca.gov/media/3455. Accessed November 2021.

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. Project construction would not involve the use of natural gas appliances or equipment.

All construction equipment and operation thereof would be regulated in accordance with the CARB's *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. As such, compliance with local, State, and federal regulations would reduce short-term energy demand during the project's construction to the extent feasible and project construction would not result in a wasteful or inefficient use of energy.

Additionally, construction activities associated with the proposed project would be temporary and occur over the course of approximately 90 working days. Because the project has already been graded and site disturbance would be restricted to minimal grubbing, implementation of the various project components would require only minor construction activities and, thus, would generate only minor demand for electricity associated with such.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project 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.

Operational Energy Use

State and local authorities regulate energy use and consumption through various means and programs. Regulations at the State level are intended to reduce energy use and greenhouse gas (GHG) emissions. The proposed project would comply with such regulations, which include, among others, AB 1493 – Light-duty Vehicle Standards and Title 24 CCR, Part 6 – Energy Efficiency Standards.

Following implementation of the proposed project, PG&E would provide electricity to the project site. Apart from electricity consumed as part of the daily operation of the proposed tower/monopole, the only other energy required by the project would be for the backup diesel generator, which would run only in emergency situations and/or during brief maintenance tests occurring periodically. Operations of a backup generator in emergency situations would not be considered unnecessary and/or wasteful. Electricity supplied by PG&E would comply with the State's Renewable Portfolio Standard (RPS), which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 60 percent by 2030. Thus, a portion of the energy consumed during project operations would originate from renewable sources.

Conclusion

Based on the above, 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. Therefore, a ***less-than-significant*** impact would occur.

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

Discussion

ai-aii. While the project site does lie within a seismically active region and numerous faults in the area are considered active, the project site is not within a currently established California Earthquake Hazard Zone for surface fault rupture hazards.[16] In addition, the project site does not include active faults with the potential for surface fault rupture directly beneath the site. Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design life of the proposed development is considered low.

Additionally, the proposed structures would be properly engineered in accordance with all applicable provisions of the California Building Standards Code (CBSC) (Title 24 CCR), which includes engineering standards appropriate for the seismic area in which the project site is located. Proper engineering of the proposed project would ensure that seismic-related effects would not cause adverse impacts. Based on the above information, the proposed project would not directly or indirectly cause substantial adverse effects involving rupture of a known earthquake fault or strong seismic ground shaking, and a ***less-than-significant*** impact would occur.

aiii,aiv, c. The proposed project's potential effects related to liquefaction, landslides, lateral spreading, and subsidence are discussed in detail below.

[16] California Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed November 2021.

Liquefaction

Soil liquefaction is a state of soil particles suspension caused by a complete loss of strength when the effective stress drops to zero. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands. Liquefaction normally occurs under saturated conditions in soils such as sand in which the strength is purely frictional. Primary factors that trigger liquefaction are: moderate to strong ground shaking (seismic source), relatively clean, loose granular soils (primarily poorly graded sands and silty sands), and saturated soil conditions (shallow groundwater). Due to the increasing overburden pressure with depth, liquefaction of granular soils is generally limited to the upper 50 feet of a soil profile. However, liquefaction has occurred in soils other than clean sand.

According to the U.S. Department of Agriculture Web Soil Survey, the project site is underlain with Sacramento clay, which carries a shrink-swell numerical value of 1.00, indicating the soil is the most limited in avoiding liquefaction impacts for the foregoing type of development.[17] However, the proposed project would not involve the construction of habitable structures, and as a result, would not present any risk to humans. In addition, the project site is not located within an established California Geological Survey (CGS) Liquefaction Zone.[18] Furthermore, the proposed project would be engineered in accordance with all applicable provisions of the CBSC. General Plan Policy HS-1.2 requires that all development and construction proposals be reviewed by the County to ensure conformance to applicable building standards. The County's General Plan EIR assessed the potential for development facilitated by buildout of the General Plan to result in impacts related to seismic-related liquefaction and determined that with compliance with all applicable regulations set forth by the State and policies and actions set forth in the County's General Plan, potential impacts related to new development would be reduced to a less-than-significant level. The proposed project is allowed under the project site's General Plan land use designation and zoning, subject to approval of a Use Permit. As the proposed project would be subject to all applicable provisions of the CBSC and would be required to comply with all applicable policies and actions established by the General Plan, the proposed project would not result in impacts beyond those identified in the General Plan EIR.

Subsidence

Subsidence is the settlement of soils of very low density, generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. Given that the proposed project would comply with all applicable provisions of the CBSC, the potential for subsidence to pose a risk to the proposed development is relatively low.

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. The project site is generally flat, having already been graded. Thus, the proposed project would not be subject to landslide risks.

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[17] U.S. Department of Agriculture Natural Resources Conservation Service. *Web Soil Survey*. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed December 2021.

[18] California Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed November 2021.

Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. The project site, which is generally flat, is not located near any open faces that would be considered susceptible to lateral spreading. Therefore, the potential for lateral spreading to pose a risk to the proposed development is relatively low.

Conclusion

Based on the above, the relatively flat topography of the project site, the lack of habitable structures, and compliance with the CBSC would ensure that the proposed project would not be susceptible to on-site liquefaction, landslides, lateral spreading, or subsidence. Therefore, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction or landslides, and would not 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. Thus, a ***less-than-significant*** impact would occur.

b. Erosion refers to the removal of soil from exposed bedrock surfaces by wind or water. Although naturally occurring, erosion is often accelerated by human activities that disturb soil and vegetation.

The topography of the project site is generally level, and upon development of the site with structures, the amount of exposed soil that may be lost due to wind or stormwater runoff would be minimized, as the site would be overlain with gravel in areas that do not include equipment installation. In addition, the site has already been graded and site disturbance would involve only a minimal amount of grubbing. Furthermore, as discussed in Section IV, Biological Resources, of this IS/MND, the proposed project would be subject to the provisions of Mitigation Measure IV-3, which requires the project contractor to incorporate BMPs to prevent the transfer of construction materials into sensitive wetland habitat to the south of the project site. Such BMPs include placing silt fence or other sediment control devices around construction sites to contain spoils from construction activities.

Based on the above, the limited amount of site disturbance included as part of the proposed project and the required BMPs to which the project would be subject would ensure the project does not result in substantial soil erosion or loss of topsoil. Therefore, a ***less-than-significant*** impact would occur.

d. Expansive soils change in volume with changes in moisture and can shrink or swell, causing heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations.

The proposed project would be required to comply with all applicable CBSC standards to ensure the structural integrity of the proposed structures. In addition, General Plan Policy HS-1.2 requires that all development and construction proposals be reviewed by the County to ensure conformance to applicable building standards. The County's General Plan EIR assessed the potential for development facilitated by buildout of the General Plan to result in impacts related to geohazards, including expansive soils, and determined that with compliance with all applicable regulations set forth by the State and policies and

actions set forth in the County's General Plan, potential impacts related to new development would be reduced to a less-than-significant level. The proposed project is consistent with the project site's General Plan land use designation and zoning. As the proposed project would be subject to all applicable provisions of the CBSC and would be required to comply with all applicable policies and actions established by the General Plan, the proposed project would not result in impacts beyond those identified in the General Plan EIR.

Based on the above, through compliance with the CBSC and the General Plan, the proposed project would not be located on expansive soils and create substantial direct or indirect risks to life or property. Therefore, the project would result in a ***less-than-significant*** impact.

e. The proposed project does not include or require sewer collection, as the project does not include habitable structures. As such, the construction or operation of septic tanks or other alternative wastewater disposal systems is not included as part of the project. Therefore, ***no impact*** regarding the capability of soil to adequately support the use of septic tanks or alternative wastewater disposal systems would occur.

f. Paleontological resources are the fossil remains or traces of past life forms, including both vertebrate and invertebrate species, as well as plants. According to the County's General Plan EIR, paleontological resources are known to occur in the General Plan planning area, and the geological formations that underlie the County are, in general, paleontologically sensitive. As such, while the proposed project's site-disturbing activities would be confined to minimal grubbing as well as trenching associated with installation of underground utilities, the project site is within an area of paleontological sensitivity and could potentially impact unknown resources.

The General Plan EIR evaluated the potential for development facilitated by buildout of the General Plan to result in impacts to unique paleontological resources or sites and concluded that through compliance with applicable State regulations and policies and actions set forth by the General Plan, potential impacts would be reduced to a less-than-significant level. PRC Sections 5097 to 5097.6 prohibit the unauthorized disturbance or removal of paleontological resources. In addition, General Plan Actions CO-A61 and CO-A62 establish identification, evaluation, and mitigation requirements, as well as accidental discovery procedures. Action CO-A66 prohibits the unauthorized collection of cultural resources, which within the context of the General Plan includes paleontological specimens. Furthermore, as discussed in Section V, Cultural Resources, of this IS/MND, the CRS prepared for the proposed project included a field survey, which involved a surface reconnaissance of the project site and excavation of an auger hole within the proposed area of disturbance. According to the CRS, archaeological site indicators were not observed in the auger hole or in the course of the surface reconnaissance.

The proposed project is consistent with the project site's General Plan land use and zoning designations and would be required to adhere to the applicable provisions set forth in PRC Sections 5097 to 5097.6. However, without requirements to ensure the proposed project is consistent with all applicable General Plan policies and actions, construction of the project could inadvertently destroy a unique paleontological resource or site during ground-disturbing activities, should such a resource or site be located within the disturbance area.

Based on the above, the proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Therefore, the project could result in a ***potentially significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

VII-1 *During project construction activities, should paleontological resources be discovered, work shall be halted in the area within 75 feet of the find. The applicant shall notify the County Administrator, or a designee chosen by the Administrator, and the Yolo County Department of Community Services and retain a qualified paleontologist to inspect the discovery. The find must be recorded by a qualified archaeologist or paleontologist using relevant professional protocols and a report fully recording the find submitted to the County Administrator or designee chosen by the Administrator and the Yolo County Department of Community Services. The report shall include recommendations for appropriate removal and preservation of the artifact. If deemed appropriate in the report, the resource(s) shall then be salvaged and deposited at an appropriate venue, where the discovery would be properly curated and preserved for the benefit of current and future generations. The language of this mitigation measure shall be included on any grading plans approved by the Department of Community Services for the proposed project, where ground disturbance would be required.*

VIII. GREENHOUSE GAS EMISSIONS. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	✖	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	☐	☐	✖	☐

a,b. GHG emissions contribute to global climate change and are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, cumulative global GHG emissions that contribute to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O) associated with area sources, mobile sources or vehicles, and utilities (electricity and natural gas). The common unit of measurement for GHG is expressed in terms of annual metric tons of CO_2 equivalents ($MTCO_2e/yr$).

A number of regulations currently exist related to GHG emissions, predominantly AB 32, Executive Order S-3-05, and Senate Bill (SB) 32. AB 32 sets forth a statewide GHG emissions reduction target of 1990 levels by 2020. Executive Order S-3-05 sets forth a transitional reduction target of 2000 levels by 2010, the same target as AB 32 of 1990 levels by 2020, and further builds upon the AB 32 target by requiring a reduction to 80 percent below 1990 levels by 2050. SB 32 also builds upon AB 32 and sets forth a transitional reduction target of 40 percent below 1990 levels by 2030. In order to implement the statewide GHG emissions reduction targets, local jurisdictions are encouraged to prepare and adopt area-specific GHG reduction plans and/or thresholds of significance for GHG emissions. Action CO-A117 of the County's General Plan requires the implementation of cost-effective and innovative GHG emissions reduction technologies in building components and design. To fulfill General Plan Action CO-A117, Yolo County prepared a Climate Action Plan (CAP) in 2011. The CAP contains 15 primary measures to help the County's unincorporated areas achieve GHG reductions and successfully adapt to climate change.[19] To ensure implementation of the measures, the CAP provides specific action steps, performance targets, responsible parties, timeframes, and estimates of emission reduction potential; however, the measures do not specifically apply to the proposed project, as wireless communication facilities sized in similar scale to the project are not typically cumulatively considerable contributors of GHG emissions.

[19] Yolo County. *Yolo County Climate Action Plan: A Strategy for Smart Growth Implementation, Greenhouse Gas Reduction, and Adaptation of Global Climate Change*. Adopted March 15, 2011.

The primary source of GHG emissions for the project would be mobile source emissions during construction. Construction-related GHG emissions are a one-time release, and therefore, do not typically result in a significant contribution to global climate change. Construction activities associated with implementation of the proposed project would occur over approximately 90 work days and would include construction of the tower/monopole foundation, development of the associated structures, installation of underground utilities, and minor vegetation removal. As a result, because the use of heavy equipment would be limited and the overall construction period would be short in comparison to other development projects in the County, the emissions of construction-related GHG would be less than significant.

During operations, the only GHG emissions associated with the proposed project would be emissions associated with electricity generation necessary to power the proposed tower/monopole and small air-conditioner (a/c) units housed within the communication cabinet, as well as a negligible number of emissions associated with the project's backup diesel generator, which would operate during periodic maintenance testing and/or in the event of an emergency power loss. The electricity generated by PG&E would comply with the State RPS and, thus, would be carbon neutral by the year 2045. In addition, the proposed communication facility would not result in a change to regional VMT, as the project would not generate a significant number of new daily trips as part of project operation. Furthermore, because the proposed project is an allowable use under the site's General Plan land use designation, buildout of the project would be generally consistent with the assumptions used in the CAP. Consequently, operation and maintenance of the proposed project would not result in significant emissions of GHGs.

Based on the above, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Thus, a ***less-than-significant*** impact would occur.

IX. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	✖	☐
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?	☐	☐	✖	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	✖
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	✖
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	✖
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	✖	☐
g. Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?	☐	☐	✖	☐

Discussion

a. Projects that involve the routine transport, use, or disposal of hazardous materials are typically industrial in nature. As such, the proposed project's tower/monopole and associated structures would not involve the routine transport, use, disposal, or generation of substantial amounts of hazardous materials during project operation. It should be noted that according to applicant-provided information, small amounts of battery acid would be housed in spill-proof batteries within the proposed communication cabinet. However, the batteries would be installed and operated in accordance with the manufacturer's instructions.

The use, storage, and transport of hazardous materials by developers, contractors, business owners, industrial businesses, and others are required to be in compliance with local, State, and federal regulations during project construction and operation. Construction activities associated with implementation of 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. The project contractor is required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and Safety Code Section 25510(a), except as provided in subdivision (b),[20] the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the proposed project,

[20] Subdivision (a) does not apply to a person engaged in the transportation of a hazardous material on a highway that is subject to, and in compliance with, the requirements of Sections 2453 and 23112.5 of the Vehicle Code.

the Yolo County Environmental Health Division [YCEHD]) in accordance with the regulations adopted pursuant to Section 25510(a). The handler or an employee, authorized representative, agent, or designee of the handler shall provide all State, city, or county fire or public health or safety personnel and emergency response personnel with access to the handler's facilities. In the case of the proposed project, the contractors are required to notify the YCEHD in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures.

During project operation, the proposed wireless communications system would emit radio frequency electromagnetic energy (RF-EME) in the project vicinity. For RF-EME sources such as the proposed antennas, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. The MPE limits for RF-EME emissions are designed to provide a substantial margin of safety. The limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Importantly, Section 332, subdivision (c)(7)(B)(iv), of the Telecommunications Act provides:

> No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless services facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

As presented above, federal telecommunications jurisprudence has established that municipalities cannot regulate in the area of RF-EME emissions in any way.

The proposed project would not be manned during operations. As such, the project would not result in occupational exposures to RF-EME emissions. With respect to the general public, personal communication facilities (PCF) used by AT&T operate within a frequency range of 700 to 1,900 megahertz (MHz). PCFs typically consist of: (1) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and (2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCF telephones). Transceivers are typically connected to antennas by way of coaxial cables. Because of the short wavelength of PCF services, the antennas require line-of-site paths for good propagation and are typically installed aboveground.[21] Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or sky. Such a design, combined with the low-power PCFs, generally eliminates the possibility for exposure to approach MPE levels allowed under the FCC, with the exception of areas directly in front of the antennas. Given that the antennas would be installed at the top of the proposed 140-foot tower/monopole, the general public would not be exposed to MPE levels of RF-EME emissions.

Based on the above, the proposed project would be required to comply with all applicable provisions of the California Health and Safety Code, Title 23 of the CCR, and the FCC. Therefore, the proposed project would not create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials. Therefore, a ***less-than-significant*** impact would occur.

[21] EBI Consulting. *Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report*. August 4, 2020.

b. The following discussion provides an analysis of potential hazards and hazardous materials associated with upset or accident conditions related to the proposed construction activities and existing on-site conditions.

The project site has been disturbed and is currently developed with a farm residence, detached garage, well house, and barn. In addition, the site has already been graded, and ground disturbance associated with the proposed project would involve a minimal amount of grubbing. As discussed under question 'a,' during project construction, the project contractor would be required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials, including California Health and Safety Code Section 25510(a), which would ensure that any release or threatened release of a hazardous material is reported immediately to the YCEHD, the unified program agency, in accordance with all applicable State regulations. The YCEHD would then monitor the conditions and recommend appropriate remediation measures. In addition, the use, handling, and storage of hazardous materials is regulated by both the Federal Occupational Safety and Health Administration (Fed/OSHA) and the California Occupational Safety and Health Administration (Cal/OSHA). Cal/OSHA is also responsible for developing and enforcing workplace safety regulations. Based on the above, the proposed project would not create a significant hazard to the public or environment through reasonably foreseeable upset or accident conditions during project construction.

Following construction activities, the proposed communication facility would be unmanned and would not involve the storage of any hazardous materials. The proposed project would also operate in accordance with all applicable regulations established by the FAA, FCC, and the County. As such, project operation would not create a significant hazard to the public or environment through reasonably foreseeable upset or accident conditions.

It should be noted that two sites listed on the State Water Resource Control Board's (SWRCB) GeoTracker website are located within the project vicinity, immediately south of Hamilton Road.[22] However, both sites – the Lucas Property at 38600 Jefferson Boulevard and the Campbell Residence at 52333 Netherlands Road – are designated as "Completed – Case Closed" and would, therefore, not result in significant hazards to the public or environment as a result of the proposed project. In addition, a third site, the Hamatani Property at 49960 Central Avenue, is located in the vicinity to the north of the project site, to the west of Jefferson Boulevard/SR 84. However, the site is also designated as "Completed – Case Closed."

Based on the above, the proposed project would not create a significant hazard to the public or environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment. Therefore, the project would result in a ***less-than-significant*** impact.

c. The nearest existing school to the site, Delta High School, is located 3.7 miles to the northeast in the City of Elk Grove. Thus, the project site is not located within one-quarter mile of an existing or proposed school.

[22] State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=yolo+county. Accessed November 2021.

Therefore, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, and ***no impact*** would occur.

d. The project site is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[23] Therefore, the project would not create a significant hazard to the public or the environment, and ***no impact*** would occur.

e. The nearest public-use airport is Franklin Field Airport, which is located 9.5 miles to the southeast of the project site. Therefore, the project site is not located within an airport land use plan.

Based on the above, the project site is not located within an airport land use plan or within two miles of a public airport or public-use airport. Therefore, the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area, and ***no impact*** would occur.

f. The Yolo County Office of Emergency Services (OES) is the emergency management agency for the County. As part of OES' emergency preparedness resources, the County is divided into various Evacuation Zones, each of which includes a primary evacuation route. The project site is located in Zone 87, and Jefferson Boulevard/SR 84, Clarksburg Road, and Netherlands Road are the primary evacuation routes.

Implementation of the proposed project would not result in any modifications to Jefferson Boulevard/SR 84. During project construction, the project's required compliance with AMM3, discussed in Section IV, Biological Resources, of this IS/MND, would ensure that construction staging areas for vehicles and equipment are located in areas that would ultimately be a part of the permanent project footprint. As such, construction vehicles and equipment would not affect vehicles traveling along Jefferson Boulevard/SR 84. During project operation, the project would be unmanned. Therefore, operation of the proposed project would similarly not affect Jefferson Boulevard/SR 84, Clarksburg Road, and/or Netherlands Road. Furthermore, the project site is located in a rural area of the County, which primarily consists of agricultural production. As such, the proposed project would not be located in a heavily populated area of the County that could be affected, even in a limited capacity, by the proposed project.

Based on the above, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Thus, the project would result in a ***less-than-significant*** impact.

g. Issues related to wildfire hazards are discussed in Section XX, Wildfire, of this IS/MND. As noted therein, 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) – Unincorporated.[24] Within the LRA, the project site is not located within a Very High or High Fire Hazard Severity Zone (FHSZ). Furthermore, the project would be consistent with what was anticipated for the site in the County's General

[23] California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Available at: https://dtsc.ca.gov/dtscs-cortese-list. Accessed November 2021.

[24] California Department of Forestry and Fire Protection. *Yolo County: Fire Hazard Severity Zones In SRA*. Available at: https://osfm.fire.ca.gov/media/6563/fhszs_map57.jpg. Accessed November 2021.

Plan, and the General Plan EIR concludes that compliance with applicable federal, State, and local laws and regulations would ensure impacts related to wildland fire hazards would be less than significant.

Based on the above, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, and a ***less-than-significant*** impact would occur.

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

Discussion

a. The proposed project would not include substantial ground-disturbing activities, as the project site has already been graded and stie disturbance would be limited to minimal grubbing. The SWRCB regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. However, because the proposed project would disturb less than one acre of land, the proposed construction activities would not be subject to applicable SWRCB regulations. Additionally, the proposed project would not result in new water discharges during project operation, as drainage infrastructure associated with the site's existing residence already exists on-site. Furthermore, the ground disturbance associated with the proposed project would be minimal and would occur over a short period of time (approximately 90 working days), and the contractor would be required to comply with the BMPs set forth in Mitigation Measure IV-3 of this IS/MND (see Section IV, Biological Resources). Therefore, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Based on the above, the proposed project would not substantially degrade surface water quality or conflict with any applicable water quality control or management plans. Thus, a ***less-than-significant*** impact would occur.

b,e. The project site is located within the Yolo Subbasin, which is a portion of the larger Sacramento Valley groundwater basin. According to the County's General Plan EIR, groundwater storage for all of the County is estimated to be 14,038,000 acre-feet and is

located between 20 and 420 feet below the surface. To ensure that Yolo Subbasin levels are managed sustainably, the Yolo Subbasin Groundwater Agency (YSGA) prepared the Yolo Groundwater Sustainability Plan (GSP). The YSGA Board of Directors will hold a special meeting to vote on formally adopting the GSP on January 24, 2022.

New impervious surfaces created by the proposed project would be limited to a relatively small, 64-sf foundation associated with the tower/monopole site, as well as an elevated concrete pad measuring a maximum area of 132 sf, upon which the walk-in cabinet would be situated. The majority of the site would be overlain with gravel to facilitate percolation without runoff.

Based on the above, the proposed project would not substantially decrease groundwater supplies, interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin, or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, a ***less-than-significant*** impact would occur.

ci-ciii. The proposed project's newly created impervious surfaces would be limited to the 64-sf foundation associated with the tower/monopole site and an elevated concrete pad upon which the walk-in cabinet would be situated, which would measure a maximum of 132 sf. The majority of the site would be overlain with gravel to facilitate percolation and water service would not be required as part of project operation. Because the project would not include water service, new runoff would not be created during project operation from activities typically associated with exterior water use, such as irrigation for landscaped areas.

With respect to potential erosion or siltation project impacts during construction activities, although a drainage canal is located along the western and southern boundaries of the project site, the canal would not be affected, given the requirements to which the project would be subject. The proposed project would be required to incorporate BMPs as set forth in Mitigation Measure IV-3 of this IS/MND (see Section IV, Biological Resources), which include incorporation of a silt fence or other sediment control devices to avoid debris contamination into drainages and other sensitive wildlife habitats as well as staging construction wash sites in upland locations to ensure was water does not flow into adjacent wetlands. Consequently, the proposed project would not substantially increase stormwater runoff relative to existing conditions.

Based on the above, the proposed project would not 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. Thus, a ***less-than-significant*** impact would occur.

civ. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map number 06113C0740G, the project site is located within Zone A, Special Flood Hazard Area.[25] FEMA defines Zone A as an area that is located within the 100-year

[25] Federal Emergency Management Agency. *Flood Insurance Rate Maps 06113C0740G, effective June 18, 2010*. Available at: https://msc.fema.gov/portal/search?AddressQuery=-121.58432134879509%2C%2038.38045589069815#searchresultsanchor. Accessed November 2021.

floodplain. However, Zone A also indicates that FEMA has not determined the water-surface elevation (i.e., base flood elevation) for the project area.

The proposed project would consist of very few aboveground structures and would be restricted to a 2,000-sf footprint. Following project implementation, the majority of the project site would be overlain with gravel to facilitate percolation without runoff. In addition, the site is located within an unincorporated area of the County dominated by agricultural production. As such, the site is generally surrounded on all sides by agricultural uses and would not substantially alter the general landscape of the immediate or greater project vicinity. During a flood event, water could flow past the proposed structures and potential flood flows would not be impeded or substantially redirected.

In addition, the proposed structures would be required to be elevated at least one foot above the base flood elevation or floodproofed, together with attendant utility facilities, such that the structures would be watertight with walls substantially impermeable to the passage of water, as required by Section 8-4.501 of the County's Code of Ordinances. Through such conformance, which would be subject to certification by a registered civil engineer or architect, the project would not result in flooding impacts.

Based on the above, the proposed project would not impede or redirect flood flows, and a ***less-than-significant*** impact would occur.

d. As discussed above, according to FEMA, the project site is located within Zone A, defined by FEMA as an area that is located within the 100-year floodplain. However, compliance with Section 8-4.501 of the County's Code of Ordinances would ensure that the project would not result in impacts related to flooding.

The project site is located more than 43 miles from the Pacific Ocean and tsunamis typically affect coastlines and areas up to one-quarter mile inland. Therefore, due to the project site's distance from the coast, potential impacts related to a tsunami are not applicable. Additionally, the project site is not susceptible to impacts resulting from a seiche because of the site's distance from any enclosed bodies of water.

Based on the above, the proposed project would not pose a risk related to the release of pollutants due to project inundation due to flooding, tsunami, or seiche, and a ***less-than-significant*** impact would occur.

XI. LAND USE AND PLANNING. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	✖	☐
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?	☐	☐	✖	☐

Discussion

a. A project risks dividing an established community if the project would introduce infrastructure or alter land use so as to change the land use conditions in the surrounding community or isolate an existing land use.

The project site is currently developed with an existing residence and associated structures; however, development of the proposed project would not remove the existing residence, nor displace any existing residents. Implementation of the proposed project would be consistent with the General Plan land use designation for the site. In addition, the project would be implemented within an unincorporated area of the County dominated by agricultural production with rural residences sparsely located within the greater project vicinity. Therefore, the proposed project would not substantially alter the character of the surrounding region and would not isolate an existing land use.

Based on the above, the project would not physically divide an established community, and a ***less-than-significant*** impact would occur.

b. The proposed project would be generally consistent with County's Code of Ordinances standards and General Plan policies and actions, as well as other applicable policies and regulations adopted for the purpose of avoiding or mitigating environmental effects. For example, with implementation of Mitigation Measures IV-1(a) through IV-3, the project would not conflict with any applicable policies, regulations, or ordinances related to the protection of biological resources. As discussed under Section XIII, Noise, of this IS/MND, all potential project noise impacts would be less than significant.

Based on the above, the proposed project would not cause a substantial adverse 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, and a ***less-than-significant*** impact would result.

XII. MINERAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	✖
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?	☐	☐	☐	✖

Discussion

a,b. According to the CGS Mineral Land Classification, the project site is not located in an area that has been designated as a mineral resource zone (MRZ) on the basis of geologic factors indicating the presence of mineral deposits.[26] In addition, the Conservation and Open Space Element of the County's General Plan identifies MRZs within the County. According to Figure CO-5 of the Conservation and Open Space Element, the project site is not located within a MRZ.

Based on the above, 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. Thus, the project would result in ***no impact***.

[26] California Geological Survey. *CGS Information Warehouse: Mineral Land Classification*. Available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/. Accessed November 2021.

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

Discussion

a. The following sections present information regarding sensitive noise receptors in proximity to the project site, the existing noise environment, and the potential for the proposed project to result in impacts during project construction and operation.

The following term is referenced in the sections below:

- Decibel (dB): A unit of sound energy intensity. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels. All references to dB in this section will be A-weighted unless otherwise noted; and
- Day-Night Average Sound Level (DNL or L_{dn})/Community Noise Equivalent Level (CNEL): The average sound level over a 24-hour day, with a +10 decibel weighting applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours.

Existing Noise Environment and Sensitive Noise Receptors

The existing noise environment at the project site is primarily defined by vehicle noise from traffic along Jefferson Boulevard/SR 84 to the east and operational noise associated with the Bogle Production Facility to the west.

Some land uses are considered more sensitive to noise than others, and thus, are typically referred to as sensitive noise receptors. Land uses often associated with sensitive noise receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise. In the project vicinity, the nearest individual existing noise sensitive land use is the farm residence located approximately 83 feet to the east of the project footprint.

However, it should be noted that within the context of the County's General Plan, the County considers the definition of noise sensitive receptors to pertain to "residentially designated land uses," rather than individual residences. As such, residential land uses and/or zoning districts would be considered sensitive receptors, and sensitive receptors would not include individual homes adjacent to agricultural land uses or within zoning districts such as the project site's A-N/CADO zoning. Therefore, within the context of the County's General Plan, the on-site residence is not considered a sensitive receptor. The

nearest existing sensitive land use would be Delta High School, approximately 3.7 miles to the northeast of the project site.

Standards of Significance

The County does not have a noise ordinance. Per the Noise Compatibility Guidelines shown in Figure HS-7 of the General Plan, the normally acceptable maximum community noise exposure for schools is 70 dB L_{dn} or CNEL. As such, for the purposes of this analysis, a significant impact would occur if noise generated during project construction or operation would exceed 70 dB at the Delta High School's nearest property line to the project site.

Goal HS-7 in the Health and Safety Element of the County's General Plan establishes a goal of achieving noise compatibility to protect people from the harmful effects of excessive noise. Accordingly, General Plan Action HS-A62 compels the County to regulate the location and operation of land uses to avoid or mitigate harmful or nuisance levels of noise to the following sensitive receptors: residential uses, hospitals and nursing/convalescent homes, hotels and lodging, and appropriate habitat areas. In addition, General Plan Action HS-A63 requires the County to review proposed development projects for compatibility with surrounding and planned uses in accordance with the Noise Compatibility Guidelines.

Project Construction Noise

During the construction of the proposed project, heavy equipment would be used for grubbing and building construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. In addition, noise exposure at any single point outside the project site would vary depending on the proximity of construction activities to that point. Standard construction equipment, such as backhoes, generators, and pneumatic tools, would be used on-site. Table 2 shows maximum noise levels associated with typical construction equipment.

Table 2
Construction Equipment Noise Levels

Equipment Description	Maximum Noise Level at 50 Feet (dB)
Air Compressor	78
Backhoe	78
Excavator	81
Generator	81
Pneumatic Tools	85

Source: Federal Highway Administration, Roadway Construction Noise Model User's Guide, January 2006.

Based on the equipment noise levels in the table, noise levels associated typical construction would generate maximum noise levels up to 85 dB at a distance of 50 feet. However, noise levels from a source decrease due to standard spherical spreading loss at a rate of six dB per every doubling of distance from the noise source. As discussed above, the project site contains an existing individual residence; however, within the context of the General Plan, the on-site residence is not considered a sensitive receptor. The nearest existing sensitive land use, as defined within the context of the County's General Plan, is located approximately 3.7 miles to the northeast from where construction activities would occur. Thus, the proposed project would not result in construction-related

noise in excess of the 70 dB threshold established for school sites by the Noise Compatibility Guidelines.

Project Operational Noise

As previously discussed, during operation, the proposed project would be unmanned. As such, the project would not result in noise from daily employee vehicle trips. The communication cabinet would have small a/c units that would generate noise during periods of inclement weather. However, such noise levels would be minimal and would not be discernible at the nearest existing sensitive land use located 3.7 miles away. Similarly, noise generated as part of routine maintenance checks of the of project's backup diesel generator would also not be discernible at the nearest property line of Delta High School.

Furthermore, as required by General Plan Action HS-A63, the County would review the proposed project to ensure the project is compatible with surrounding and planned uses in the project vicinity in accordance with the Noise Compatibility Guidelines. Therefore, project operation would not result in noise in excess of the 70 dB threshold established for school sites by the Noise Compatibility Guidelines.

Conclusion

Based on the above, the proposed project would not result in the 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 County's General Plan. Therefore, the project would result in a ***less-than-significant*** impact.

b. Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception of the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of PPV. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 3, which was developed by Caltrans, shows the vibration levels that would normally be required to result in damage to structures or annoyance from transient and continuous vibration. As shown in the table, the threshold for architectural damage to structures is 0.20 in/sec PPV, and continuous vibrations of 0.10 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors. In addition, Table 4 shows the typical vibration levels produced by construction equipment at various distances.

The proposed project would only cause elevated vibration levels during construction, as the project would not involve any uses or operations that would generate substantial groundborne vibration. During project construction, heavy equipment would be used for excavation and building construction, which would generate localized vibration in the

immediate vicinity of construction activities. The nearest existing structure to the project site is the single-family residence located 83 feet to the east.

Table 3
Effects of Vibration on People and Buildings

PPV		Human Reaction	Effect on Buildings
mm/sec	in/sec		
0.15 to 0.30	0.006 to 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10 to 15	0.4 to 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: ***Caltrans. Transportation Related Earthborne Vibrations. TAV-02-01-R9601. February 20, 2002.***

Table 4
Vibration Levels for Various Construction Equipment

Type of Equipment	PPV at 25 feet (in/sec)	PPV at 50 feet (in/sec)
Loaded Trucks	0.076	0.025
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.029

Source: ***Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.***

As shown in Table 4, vibration levels generated by common construction equipment at a distance of 50 feet from the source would be at most, 0.029 in/sec PPV. Therefore, given the 83-foot distance between the single-family residence and the proposed area of disturbance, vibration levels generated from on-site project construction activities at the residence would be well below Caltrans' 0.20 in/sec PPV threshold for damage to residential structures. In addition, construction activities would not result in vibration levels in excess of Caltrans' 0.10 in/sec PPV threshold for annoyance to sensitive receptors.

Based on the above, project operation would not include uses that would involve elevated vibration levels, and project construction would not generate excessive groundborne vibration or groundborne noise levels at the nearest existing sensitive receptors. Therefore, the project would result in ***less-than-significant*** impact.

c. The project site is not located within an airport land use plan or in the vicinity of a private air strip. The nearest public-use airport is Franklin Field Airport, which is located 9.5 miles to the southeast of the project site.

Based on the above, the project site is not located within an airport land use plan or within two miles of a public airport or public-use airport. Therefore, the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area, and ***no impact*** would occur.

XIV. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	✖	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	✖	☐

Discussion

a,b. The proposed project would include the construction of a wireless communication facility in a non-urbanized area of the County; however, the project would not include the extension of major infrastructure associated with water, sanitary sewer, storm drainage, or energy services. Given the nature of the proposed project, the project would not create a large number of jobs or result in an influx of new residents to the project area. In addition, the project would not include the construction of new housing or the demolition of existing residences.

Based on the above, the proposed project would not induce substantial unplanned population growth in the project area, either directly or indirectly, or displace substantial numbers of existing people or housing. Therefore, the project would result in a ***less-than-significant*** impact.

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:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Fire protection?	☐	☐	☐	✖
b. Police protection?	☐	☐	☐	✖
c. Schools?	☐	☐	☐	✖
d. Parks?	☐	☐	☐	✖
e. Other Public Facilities?	☐	☐	☐	✖

Discussion

a-e. The project site is currently serviced by the following providers: (1) fire protection by the Clarksburg Fire Protection District; (2) police protection by the Yolo County Sheriff's Office; (3) schools by the River Delta School Joint Unified District; (4) parks by the Yolo County Parks and Natural Resources Department; and (5) other public facilities by the Yolo County Library system.

The relevant CEQA threshold is whether the proposed project would precipitate the need for new or physically altered facilities to meet response times or other performance objectives, the construction of which could cause environmental impacts. The proposed project would not increase the need for public services, as it would involve the construction of a wireless communication facility, which would not be manned during operation. The project would not involve the extension of major infrastructure associated with water, sanitary sewer, storm drainage, or energy services. Therefore, the project would not generate population growth, either directly or indirectly.

Based on the above, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, and ***no impact*** would occur.

XVI. RECREATION. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	✖
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?	☐	☐	☐	✖

Discussion

a,b. The proposed project would not increase the use of existing recreational facilities, as the project would involve the construction of a wireless communication facility, which would not be manned during operation. The project would not involve the extension of major infrastructure associated with water, sanitary sewer, storm drainage, or energy services. Therefore, the project would not generate population growth, either directly or indirectly.

Based on the above, the proposed project would not increase the use of existing recreational facilities or include or require recreational facilities, the construction of which could have an adverse effect on the environment. Therefore, ***no impact*** would occur.

XVII.TRANSPORTATION. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	✖	☐
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	✖	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	✖	☐
d. Result in inadequate emergency access?	☐	☐	✖	☐

Discussion

a-d. The proposed project would include development of a wireless communication facility, with aboveground structures sited within a 2,000-sf project footprint, approximately 264 feet to the west of Jefferson Boulevard/SR 84.

During construction, the project would generate a minor amount of traffic on local roadways associated with construction worker commutes and the transport of materials for the proposed facility. Such construction would be limited and temporary in nature. The project would not involve the construction of new roadways or extension of existing roadways. It should be noted that the project would include improvements to the on-site gravel driveway; however, such improvements would not substantially affect roadways in the project vicinity, as the modifications to the driveway would be restricted to the project site. In addition, the project would not include development that would alter or increase demand for transit, bicycle, or pedestrian facilities.

While the proposed project would temporarily result in an increase in VMT during the construction period, operation and maintenance of the proposed facility would not affect local or regional VMT, as the only trips generated by project operation would involve periodic commutes for maintenance testing of the proposed structures. Such trips would result in a negligible increase in VMT.

Furthermore, because the proposed project would not alter the existing circulation network, the project would not substantially increase hazards due to a geometric design feature or incompatible uses or result in inadequate emergency access. During project construction, the project's required compliance with AMM3 would ensure that construction staging areas for vehicles and equipment are located in areas that would ultimately be a part of the permanent project footprint. As such, construction vehicles and equipment would not affect vehicles traveling along Jefferson Boulevard/SR 84.

Based on the above information, the proposed project would not: (1) conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; (2) conflict or be inconsistent with CEQA Guidelines Section 15064.3(b); (3) substantially increase hazards due to a geometric design feature or incompatible uses; or (4) result in inadequate emergency access. Therefore, the project would result in a ***less-than-significant*** impact.

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:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).	☐	✖	☐	☐
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.	☐	✖	☐	☐

Discussion

a,b. As discussed in Section V, Cultural Resources, of this IS/MND, the project site does not contain any recorded historic buildings or structures on any lists of historic resources. Similarly, the site does not contain any recorded archaeological resources. In addition, a request was sent by Raney Planning & Management, Inc. to the NAHC seeking information from the Sacred Lands File regarding the project site, which returned results indicating the site does not contain any known tribal cultural resources.[27]

In compliance with AB 52 (PRC Section 21080.3.1), a project notification letter was distributed by the County to tribes who have requested to be notified of projects requiring analysis under CEQA. The letters were distributed on November 10, 2021 to representatives of the Yocha Dehe Wintun, Wilton Rancheria, United Auburn Indian Community of the Auburn Rancheria, Cortina Rancheria Band of Wintun Indians of California, Ione Band of Miwok Indians, and Torres Martinez Desert Cahuilla Indians. The Yocha Dehe Wintun Nation submitted a response on November 17, 2021, requesting formal consultation. Representatives from the County and Yocha Dehe Wintun Nation consulted on February 9, 2022. Based on the information subsequently provided, the Yocha Dehe Wintun Nation requested the inclusion of cultural monitors during project development and ground disturbance and preconstruction cultural sensitivity training for all project personnel. The requests have been included in this IS/MND as mitigation measures.

Based on the above, the possibility exists that construction of the proposed project could result in a substantial adverse change in the significance of a tribal cultural resource. Thus, a ***potentially significant*** impact to tribal cultural resources could occur.

[27] Native American Heritage Commission. *Bogle Cell Tower Project, Yolo County*. December 2, 2021.

Mitigation Measure(s)

Implementation of the following mitigation measure, along with Mitigation Measures V-1 and V-2 from Section V, Cultural Resources, would reduce the above potential impact to a *less-than-significant* level.

XVIII-1 *Prior to commencement of construction activities, the applicant shall arrange for a member of Yocha Dehe Wintun Nation to conduct Cultural Sensitivity Training to the construction crew. Generally, the training would consist of a presentation to the construction crew about types of resources and evidence thereof, role of the Tribe, what to do if resources are uncovered, etc. To schedule Cultural Sensitivity Training prior to commencement of construction, the applicant shall contact the Cultural Resources Department Administrative Staff, Yocha Dehe Wintun Nation, Office (530) 796-3400, Email:* THPO@yochadehe-nsn.gov. *Proof of compliance with this measure shall be provided to the Yolo County Department of Community Services.*

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

Discussion

a-e. The proposed project would not require water or sanitary sewer services during project operation, and as such, would not include connection to such services. The majority of the project site would be overlain with gravel to facilitate percolation during project operation. Therefore, the project would not require connection to storm drainage infrastructure. The project would connect to existing PG&E infrastructure to the southeast of the project footprint and would include the installation of 250 feet of underground fiber-optic cable line between the tower/monopole site and existing telecommunications infrastructure to the southeast of the project site. Energy use associated with operation of the proposed project would be typical of wireless communication facilities, requiring a projected maximum of 50 kilowatt-hours (kWh) of electricity per day. Because electricity supplied by PG&E would comply with the State's RPS, a portion of the energy consumed during project operations would originate from renewable sources and, therefore, sufficient electricity supply would be available to serve the proposed project.

The majority of solid waste generated in the County is transported to the Yolo County Central Landfill.[28] According to the California Department of Resources Recycling and Recover (CalRecycle), the landfill has remaining capacity of 33,800,218 cubic yards and a cease operation date of February 21, 2124.[29] However, considering that the proposed communication facility would be unmanned, project operation would not result in the generation of solid waste. During construction activities, the project would be required to comply with the CALGreen Code, which requires diversion of at least 65 percent of construction waste from landfills. Thus, sufficient capacity would exist to accommodate

[28] Yolo County. *2030 Countywide General Plan* [pg. PF-34]. Adopted November 10, 2009.

[29] California Department of Resources Recycling and Recovery. *SWIS Facility/Site Activity Details: Yolo County Central Landfill (57-AA-0001)*. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/689?siteID=4033. Accessed November 2021.

the solid waste generated by the proposed project, and the project would be in compliance with federal, State, and local management and reduction statutes and regulations related to solid waste.

Based on the above, the proposed project would not: (1) require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects; (2) require water supplies; (3) require wastewater treatment services; (4) 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; or (5) conflict with federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, the project would result in a ***less-than-significant*** impact.

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

Discussion

a-d. According to CAL FIRE's Fire and Resource Assessment Program, the project site is located within a LRA – Unincorporated. Within the LRA, the project site is not located within a Very High or High FHSZ.[30] Furthermore, the project would be consistent with what was anticipated for the site in the City's General Plan, and the General Plan EIR concludes that compliance with applicable federal, State, and local laws and regulations would ensure impacts related to wildland fire hazards would be less than significant. During project operation, the project would be unmanned. Finally, as discussed in Section VII, Geology and Soils, and Section X, Hydrology and Water Quality, of this IS/MND, development of the proposed project would not expose people or structures to significant risks related to flooding or landslides.

Based on the above, the proposed project would not: (1) substantially impair an adopted emergency response plan or emergency evacuation plan; (2) exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, due to slope, prevailing winds, and other factors; (3) 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; or (4) 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. Therefore, a ***less-than-significant*** impact would occur.

[30] California Department of Forestry and Fire Protection. *Yolo County: Fire Hazard Severity Zones In SRA*. Available at: https://osfm.fire.ca.gov/media/6563/fhszs_map57.jpg. Accessed November 2021.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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?	☐	☐	✖	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	✖	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	✖	☐

Discussion

a. As described in this IS/MND, while implementation of the proposed project could have the potential to adversely impact the environment by reducing available habitat for tricolored blackbird, Swainson's hawk, migratory birds and raptors, western pond turtle, and giant garter snake, implementation of Mitigation Measures IV-1(a) through IV-3 and the project's required compliance with all applicable AMMs set forth by the Yolo HCP/NCCP would ensure that impacts to special-status species would be reduced to less than significant. Likewise, the proposed project has a moderate potential to eliminate unknown important prehistoric and cultural resources. Mitigation Measures V-1, V-2, and XVIII-1 would ensure that impacts to important prehistoric and cultural resources would be less than significant. The proposed project would implement and comply with applicable General Plan policies and County Code of Ordinances standards, as discussed throughout this IS/MND. With implementation of the mitigation measures required by this IS/MND, compliance with General Plan policies, Code of Ordinances standards, and application of standard BMPs during construction, development of the proposed project would not result in any of the following: 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. Therefore, a ***less-than-significant*** impact would occur.

b. The proposed project in conjunction with other development within Yolo County could incrementally contribute to cumulative impacts in the area. However, as demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level through compliance with the mitigation measures included in this IS/MND, as well as applicable General Plan policies, Code of Ordinances standards, and other applicable local and State regulations. In addition, the project would be consistent with the site's existing land use designation. Accordingly, buildout of the site with the proposed use was generally considered in the cumulative analysis of buildout of the General Plan planning area within the General Plan

EIR. Thus, the proposed project would not contribute any new or additional impacts not previously analyzed in the General Plan EIR. Therefore, when viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the proposed project would not result in a cumulatively considerable contribution to cumulative impacts in the County, and the project's incremental contribution to cumulative impacts would be ***less than significant***.

c. As described in this IS/MND, the proposed project would comply with all applicable General Plan policies, Municipal Code standards, other applicable local and State regulations, and mitigation measures included herein. The foregoing provisions have been established to ensure substantial adverse effects from proposed development projects, including those impacting human health, are prevented and/or reduced to a less-than-significant level. In addition, as discussed in Section III, Air Quality, Section IX, Hazards and Hazardous Materials, and Section XIII, Noise, of this IS/MND, the proposed project would not cause substantial effects to human beings, including effects related to exposure to air pollutants, hazardous materials and noise. Therefore, the proposed project's impact would be ***less than significant***.

Appendix A

Biological Resources Assessment

Biological Resources Assessment

CA017 Bogle
(also AT&T CVL06447)
Telecommunications Project
Yolo County, California

April 2021 (Revised October 2021)

Prepared for:

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TABLE OF CONTENTS

SUMMARY **1**

1.0 INTRODUCTION **3**

1.1 Project Description 3

2.0 STUDY METHODOLOGY **6**

2.1 Literature Search 6

2.2 Field Surveys 6

2.3 Impact Assessment Methodology 8

3.0 ENVIRONMENTAL BASELINE **9**

3.1 Wetlands and Waters of the U.S. and State 9

3.2 Vegetation Communities and Wildlife Habitat 11

4.0 SPECIAL-STATUS SPECIES AND THEIR HABITATS **13**

4.1 Regulatory Requirements 13

4.1.1 Federal Endangered Species Act (FESA) *13*

4.1.2 Federal Migratory Bird Treaty Act *13*

4.1.3 California Endangered Species Act (CESA) *13*

4.1.4 California Fish and Game Code *14*

4.1.5 California Fish and Game Code- Species Protection *14*

4.2 Special-Status Species Reviewed 16

4.3 Special-Status Wildlife Species 17

4.4 Critical Habitat 31

4.5 Special Status Natural Communities 31

5.0 IMPACTS ANALYSIS AND STANDARD CONSTRUCTION CONDITIONS **32**

6.0 CONCLUSIONS AND DETERMINATIONS **39**

7.0 LITERATURE CITED **40**

LIST OF TABLES

Table 1: Special-Status Species Potentially Occurring in the Project Area 16
Table 2: Special-Status Animal Species Potentially Affected 32

LIST OF APPENDICES

A: Project Figures
B: List of Plant Species Observed within the Proposed Project Area
C: Site Photos
D: Engineering Drawings
E: Biologist Profile

SUMMARY

The proposed project is situated 5.73 miles west of the City of Elk Grove and 7.04 miles southwest of the City of Sacramento in unincorporated Yolo County, California. The project is located 0.05 miles west of Jefferson Boulevard. This project is being undertaken to provide improved telecommunications services to the local area through the installation of a new communication tower and associated equipment. Synthesis Planning was contracted by the project proponent to perform this Biological Resources Assessment for the proposed project.

Four (4) vegetation communities were observed within the study area and include the following: 1. *Schoenoplectus acutus* Herbaceous Alliance, 2. Dryland Grain Crop Fields, 3. Landscaped Lawn, and 4. Ruderal-disturbed vegetation. As part of this Biological Resources Assessment the potential for occurrence of special-status plant species and special-status wildlife species was evaluated.

Best Construction Practices and Avoidance and Minimization Measures as well as Standard Construction Conditions to prevent take of individuals discussed above are included in this report.

List of Acronyms and Abbreviations

BMP	Best Management Practices
BRA	Biological Resources Assessment
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife (formerly CDFG)
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSC	California Species of Concern
ESHA	Environmentally Sensitive Habitat Area
FESA	Federal Endangered Species Act
FGC	Fish and Game Code
GGS	Giant Garter Snake
MBTA	Migratory Bird Treaty Act
NMFS	National Marine Fisheries Service
RWQCB	Regional Water Quality Control Board
SWPPP	Stormwater Pollution Prevention Plan
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
USACE	US Army Corps of Engineers
UTM	Universal Trans Mercator
WHR	Wildlife Habitat Relationships
Yolo County HCP/NCCP	Yolo County Habitat Conservation Plan/Natural Community Conservation Plan

1.0 INTRODUCTION

The purpose of this Biological Resources Assessment is to provide technical information and to review the proposed project study area, situated 5.73 miles west of the City of Elk Grove and 7.04 miles southwest of the City of Sacramento in unincorporated Yolo County, California. The project is located 0.05 miles west of Jefferson Boulevard (see Appendix A, Figures 1 and 2). This project is being undertaken to provide improved telecommunications services to the local area through the installation of a new communication tower and associated equipment. Synthesis Planning prepared this Biological Resources Assessment (BRA) to provide sufficient detail to determine the potential effects of the proposed project on federally- and state-listed wildlife and plant species. This BRA was conducted to determine the potential for special-status vegetation communities, plant and animal species to occur within the project study area, and to identify the limitations to potential development of the project. The BRA is prepared in accordance with legal requirements found in Section 7 (a)(2) of the Endangered Species Act (16 U.S. C 1536(c)) and also provides information required for an Initial Study/Mitigated Negative Declaration as part of the California Environmental Quality Act (CEQA) review for the project. The document presents technical information upon which later decisions regarding project affects are developed.

The project area is located in Section 12 of the Clarksburg 7.5- minute topographic quadrangle. The project site is located within Township 06N and Range 03E. Surrounding land uses consist of agricultural, recreational, rural residences, and open space.

1.1 Project Description

A review of zoning drawings indicated that the proposed action would include:

- Construction of a 40 feet by 50 feet (2,000 square feet) level pad area. The pad area would be covered with gravel on portions not used for equipment installation. The tower site would occur within pre-disturbed areas;

- Construction of a 13 feet by 15 feet (195 square feet) PG&E Transformer area to provide power to the proposed tower site. The site would occur within pre-disturbed areas;

- Installation of a 140 foot steel monopole tower on pad area;

- Installation of telecommunications equipment and other related equipment within various areas of the gravel pad;

- Installation of 6 foot tall chain link fence around the telecommunications site;

- Use of existing access road that may require new gravel. No widening of the road is proposed.

- Installation of 250 feet (0.05 miles) of underground fiber-optic cable line between tower site and existing telecommunications connection point. Cable will be installed in areas

previously disturbed or planned for disturbance during implementation of other components of the project. Disturbance corridor will be 10 feet wide.

Staging Areas and Fueling

Storage areas for contractor equipment and materials will be within the existing proposed disturbance areas. To prevent contamination of fuel and other construction materials into sensitive wetland habitat to the south of the proposed project site, the following standard construction measures will be implemented:

- The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the State and U.S.;

- Areas for fuel storage, refueling and servicing of construction equipment must be located in an upland location;

- Wash sites will be located in upland locations to ensure wash water does not flow into adjacent wetlands;

- All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. All questionable motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals shall be replaced. The mechanical equipment shall be inspected on a daily basis to ensure no leaks. All leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of construction activity;

- Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation within 100 feet of a waterway. If a spill occurs, no additional work shall occur until, 1) the mechanical equipment is inspected by the contractor and the leak has been repaired, 2) the spill has been contained, and 3) CDFW and Yolo County are contacted and have evaluated the impacts of the spill.

Construction Scheduling

The estimated time period for construction is 90 working days for the entire project. Work will begin as soon as all regulatory clearances and permits are obtained.

Operations and Maintenance

The facilities would be constructed to current construction-industry standards and codes.

Construction Best Management Practices

Construction BMPs will be incorporated in the construction of the project and include, but are not limited to, the following:

- To avoid debris contamination into drainages and other sensitive wildlife habitats, silt fence

or other sediment control devices will be placed around construction sites to contain spoils from construction excavation activities.

- Surveys for identified special-status species shall be conducted by qualified biologists at the appropriate times before construction starts to determine occupancy at the site. If no special-status species are found, no further action other than the Best Management Practices identified above are required. If individuals are found, including nesting birds, a buffer zone around the species or nest will be required at a sufficient distance to prevent take of individual species.

- Due to the potential for special-status species to occur, move through, or into the project area, an assigned employee, shall at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities during disturbing activities to prevent take of individuals. Wildlife species shall be allowed to leave the project site under their own power without any human harassment. All pipes or tubing Four (4) inches or greater shall be sealed by the relevant contractor with tape at both ends to prevent animals from entering the pipes at night. All trenches and other excavations shall be backfilled the same day they are opened, or shall have an exit ramp built into the excavation to allow animals to escape.

- Environmental Awareness Training shall be presented to all personnel working in the field on the proposed project site. Training shall consist of a brief presentation in which biologists knowledgeable of endangered species biology and legislative protection shall explain endangered species concerns. Training shall include a discussion of special-status plants and sensitive wildlife species. Species biology, habitat needs, status under the Endangered Species Act, and measures being incorporated for the protection of these species and their habitats shall also be discussed.

- Project site boundaries shall be clearly delineated by stakes and /or flagging to minimize inadvertent degradation or loss of adjacent habitat during project operations. Staff and/or its contractors shall post signs and/or place fence around the project site to restrict access of vehicles and equipment unrelated to project operations.

2.0 STUDY METHODOLOGY

This Biological Resources Assessment used the best available scientific and commercial data to evaluate the potential effects to biological resources from the proposed project. Literature review, aerial imagery and field surveys informed the descriptions of the vegetation communities, identification of present and past occurrences of special-status species in the vicinity of the proposed project, and the assessment of habitats for special-status animal species.

2.1 Literature Search

Information on special-status plant and animal species was compiled through a review of the literature and database searches. Database searches for known occurrences of special-status species focused on the Clarksburg U.S. Geologic Service 7.5-minute topographic quadrangle. The following sources were reviewed to determine which special-status plant and wildlife species have been documented in the vicinity of the project site:

- U.S. Fish and Wildlife Service (USFWS) quadrangle species lists (USFWS 2021)
- USFWS list of special-status animals for Yolo County (USFWS 2021)
- California Natural Diversity Database records (CNDDB) (CNDDB 2021)
- California Department of Fish and Wildlife's (CDFW) Special Animals List (CDFW 2021)
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2021)
- California Native Plant Society (CNPS) Electronic Inventory records (CNPS 2021)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)

The USFWS electronic list of Endangered and Threatened Species was queried electronically (www.fws.gov/sacramento/es_spp_lists-overview.htm). The CalFish IMAPS Viewer (www.calfish.org/DataandMaps/CalFishGeographicData), developed by CDFW Biogeographic Branch for analysis of fisheries, was also reviewed.

The CDFW BIOS website and the *California Essential Habitat Connectivity Project: A strategy for conserving a connected California* (Spencer et al. 2010) were reviewed for wildlife movement information. The CDFW BIOS website and the CNDDB were review for documented nursery sites. Other sources of information regarding reported occurrences include locations previously reported to the U.C Berkeley Museum of Vertebrate Zoology and the California Academy of Sciences.

2.2 Field Surveys

Cord Hute, Senior Biologist for Synthesis Planning, conducted botanical and biological surveys of the project site and buffer area on April 8, 2021. Mr. Hute analyzed on-site and buffer area habitats for suitability for special-status plant and animal species during these surveys.

A reconnaissance-level biological survey of the project site was conducted. Habitat types encountered during the surveys were characterized primarily by dominant and subdominant plant

species, and wildlife use was described based on known and anticipated occurrences. Species were recorded as present if they were observed, if species' vocalizations were heard, or if diagnostic field signs were found (i.e., scat, tracks, pellets). Surveys were conducted on the project site and in an area approximately 200 feet wide around the project site (hereafter referred to as the project buffer area).

Special-status wildlife species, in particular, were surveyed for to determine the presence or absence of such species or their habitat.

The survey was conducted to identify the following:

- Suitability of habitat(s) to support sensitive wildlife species;
- Presence of wildlife species and their habitats;
- Potential of the site to contain sensitive habitats, including vernal pools, natural wetlands, etc.;
- Potential of the site to support sensitive small mammal species;
- Potential of the site to support sensitive avian species (e.g., migratory birds, raptors, waterfowl, etc.);
- Habitat condition, quality and vegetation associations; and
- On-site, adjacent and surrounding land uses.

Synthesis utilized the guidance of Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2021). Plant surveys were conducted using demographic survey techniques/guidelines including conducting floristically based surveys, identifying to species level for all plants encountered, and identifying to the level necessary to detect sensitive plants, if present. When possible, the surveys were conducted within the correct phenological time to detect targeted sensitive plant species. The identity of plant species not currently blooming were determined, where feasible, by other characteristics or features of the plants structure. Botanical field surveys were conducted in a manner which maximized the likelihood of locating special status plants and sensitive natural communities that were present. Botanical field surveys were floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. Surveys were limited to habitats known to support special status plants. During field surveys, the entire project site and a 200 foot buffer area around the project site were surveyed on 30 foot transects through the entire survey area. Botanical field surveys were conducted at the times of year when plants will be both evident and identifiable (during flowering or fruiting). See Section 5 for survey results and impacts discussion.

Synthesis utilizes GIS Pro, a mobile software program, to collect field data on plant and animal species identified during surveys. The program is installed on an Apple iPad. Aerial topographic maps and satellite photographic images are loaded into the GIS Pro program on the iPad in order to provide as accurate location data as possible during the documentation of individual plant species populations. In addition, the iPads operate on an internal GIS locater independent of cellular service data coverage, which ensures the most accurate location possible during remote field work. When a special-status plant species or population was observed, the surveying biologist creates a population polygon (or area) in GIS Pro. The polygon is drawn corresponding to the location and shape and size of boundaries

of the population. The date the species is observed, the biologist's name, and species name are recorded in the polygon record. Data on the estimated number of individual plants observed in each population may also be collected. A CNDDB field survey form is completed for each special-status species or population identified. In the case of the proposed project, no sensitive wildlife species were observed during surveys.

2.3 Impact Assessment Methodology

The on-site vegetation communities, present and past occurrence locations of federally and state listed species and federal and state species of concern within close proximity of the proposed project area, and habitats for special-status plant and animal species were examined. Based on the current site conditions, the potential for occurrence on the site for special-status biological resources was evaluated and the project description was used to determine any potential direct or indirect effects.

The determination of whether the proposed project may result in adverse impacts to federally-listed special-status species was based on guidelines established by the USFWS under Section 7(a) of the Federal Endangered Species Act (FESA), under which a project that may have an adverse effect impact on listed biological resources must be assessed. FESA states that, "each federal agency shall...insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered or threatened or result in the destruction or adverse modification of habitat of such species." Thus, components of the proposed project were deemed to have an adverse impact on special-status biological resources if they could result in effects as described in the above statement to any listed species or its habitat.

The determination of whether the proposed project may result in adverse impacts to State special-status species was based on CEQA, the CDFW and the CNPS guidelines for special status plants and animals.

Potential impacts from the project to habitats not occupied by species but for which habitats occurred was also evaluated.

3.0 ENVIRONMENTAL BASELINE

The project area is located within the North Coast Bioregion, a bioregion that encompasses the area from southwestern Oregon to southern Monterey County and contains the southern extent of the mixed hardwood forest with redwood. The North Coast Bioregion is delineated by the Pacific Ocean on the west and the Coast Ranges Mountains on the east and encompasses those lands west of the highest ridgeline dividing areas that drain directly into the Pacific Ocean from those areas that drain toward the interior. Habitats within this bioregion include both mesic (moist) habitats, such as freshwater marsh, and xeric (dry) habitats, such as chaparral, and are typical of a Mediterranean type climate. Average rainfall in the area is 40 inches (Welsh 1994).

3.1 Wetlands and Waters of the U.S. and State

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions. Technical standards have been developed as a method of defining wetlands through consideration of three criteria: hydrology, soils, and vegetation (USACE 1987).

The U.S. Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB) have jurisdiction over modifications to stream channels, river banks, lakes, and other wetland features. Jurisdiction of the Corps is established through the provisions of Section 404 of the Clean Water Act, which prohibits the discharge of dredged or fill material into "waters" of the United States without a permit, including certain wetlands and unvegetated "other waters of the U.S." The Corps also has jurisdiction over navigable waters, including tidally influenced ones below Mean High Water, under Section 10 of the Rivers and Harbors Act. Jurisdictional authority of the CDFG is established under Section 1602 of the Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. The Fish and Game Code states that it is "unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake" without notifying the Department, incorporating necessary mitigation, and obtaining a Streambed Alteration agreement. The Wetlands Resources Policy of the CDFW states that the Fish and Game Commission will "strongly discourage development in or conversion of wetlands... unless, at a minimum, project mitigation assures there will be no net loss of either wetland habitat values or acreage." Jurisdictional authority of the RWQCB is established pursuant to Section 401 of the Clean Water Act, which typically requires a water quality certification when an individual or nationwide permit is issued by the Corps. The RWQCB also has jurisdiction over "waters of the State" under the Porter-Cologne Water Quality Control Act.

In addition to the definition and classification procedures developed by federal agencies, some California resource and regulatory agencies have developed their own wetland definition and classification procedures. Although these State agency procedures are generally based on the USFWS and USACE definition and classification procedure described above, they do differ in specific details.

Numerous State agencies regulate, manage, or otherwise control natural resources within California through a wide variety of general and specific laws and directives, which are carried out by resource departments, commissions, and boards.

The Keene–Nejedly California Wetlands Preservation Act (1976) is the only State legislation besides the Coastal Act to define wetlands. The act states there "is a need for an affirmative and sustained public policy and program directed at their [wetlands] preservation, restoration, and enhancement, in order that such wetlands shall continue in perpetuity". The act provided for acquisition of ten important wetlands, using funds from several sources, and was intended to support preparation of a statewide wetlands plan. However, acquisition funds were not allocated in 1976.

The State Regional Water Quality Control Boards primary role is to enforce the federal Clean Water Act, and in doing so, assert regulatory authority over development activities affecting the water quality of navigable water and wetlands. Under Section 401(a)(1) of the Clean Water Act:
Any applicant for a Federal license or permit to conduct any activity...which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State...that any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of this Act.

In turn, California Code of Regulations Section 3831(k) defines the State certification required under Section 401 as:

> *'Water Quality Certification' means a certification that there is a reasonable assurance that an activity which may result in a discharge to navigable waters of the United States will not violate water quality standards, where the activity requires a federal license or permit.*

In practice, the regional boards have applied their authority over water quality standards to all waters of the State, including wetlands. Discharge to wetlands and riparian wetlands may violate water quality objectives (e.g., turbidity, temperature, or salinity); impair beneficial uses (e.g., groundwater recharge, recreation, wildlife habitat, fish migration, and shellfish harvesting); and conflict with the anti-degradation policy.

The California Department of Fish and Wildlife has Statewide resource responsibilities and authority that directly and indirectly influence projects and activities in coastal zone wetlands. In addition to being responsible for the maintenance and protection of California's fish and wildlife, the CDFW has authorities under California's Public Resources Code, and the federal Fish and Wildlife Coordination Act to regulate or comment on activities in wetland and riparian areas. The CDFW also assumes primary responsibility for implementation of the California State Endangered Species Act, and the Streambed Alteration Agreement (Fish and Game Code Sections 1601–1603). This agreement is one of the State's few direct legal instruments for the protection of streams, rivers, and lakes. The CDFW also comments directly to the USACE concerning fish and wildlife aspects of Section 10 and Section 404 permits. CDFW's official position regarding the protection of wetlands is that development projects should not result in a net loss of either wetland acreage or wetland habitat value.

A delineation of wetlands and watercourses within the project study area was conducted by a Synthesis Planning wetland ecologist during the site visit. Synthesis Planning did not identify wetland habitat or stream courses within the proposed project site. Wetland habitat was observed within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential wetland habitat was also observed just north and south of the existing access road where it connects with Jefferson Boulevard. No disturbance to these habitat areas are proposed as described previously in the Project Description.

AT&T will implement the following general construction measures to ensure no disturbance or impacts occur to wetland habitat areas in the project buffer:

- To avoid debris contamination into drainages, wetlands, and other sensitive habitats, silt fence or other sediment control devices will be placed around construction sites to contain spoils from construction excavation activities.

- Environmental awareness training shall be presented to all personnel working in the field on the proposed project site. Training shall consist of a brief presentation in which biologists knowledgeable of wetland habitat, streams, and other waters, and legislative protection shall explain concerns.

- Project site boundaries shall be clearly delineated by stakes and /or flagging to minimize inadvertent degradation or loss of adjacent habitat during project operations. Staff and/or its contractors shall post signs and/or place fence around the project site to restrict access of vehicles and equipment unrelated to project operations.

3.2 Vegetation Communities and Wildlife Habitat

Wildlife habitat classifications for this report is based on the California Department of Fish and Game's Wildlife Habitat Relationships (WHR) System (CDFG 1988) which places an emphasis on dominant vegetation, vegetation diversity and physiographic character of the habitat. The value of a site to wildlife is influenced by a combination of the physical and biological components of the immediate environment, and includes such features as type, size, and diversity of vegetation communities present and their degree of disturbance. As a plant community is degraded by loss of understory species, creation of openings, and a reduction in canopy area, a loss of structural diversity generally results. Degradation of the structural diversity of a community typically diminishes wildlife habitat quality, often resulting in a reduction of wildlife species diversity.

Vegetation communities are often classified based on the dominant plant species within the community. Wildlife habitats are typically distinguished by vegetation type, with varying combinations of plant species providing different resources for use by wildlife. As a result, wildlife habitats are often classified on a more inclusive manner of the structure of the habitat rather than the specifics of the plant species, resulting in several vegetation communities occurring under one type of wildlife habitat.

The following is a discussion of existing vegetation communities found within the proposed project site and buffer area. Four (4) vegetation community types were observed within the study area. Where appropriate vegetation community types are described using The Manual of California Vegetation Online Website (CNPS 2021). Vegetation types observed were: 1. *Schoenoplectus acutus* Herbaceous Alliance, 2. Dryland Grain Crop Fields, 3. Landscaped Lawn, and 4. Ruderal-disturbed vegetation. For a list of plant species observed in these vegetative communities during biological surveys, please refer to Appendix B.

1. *Schoenoplectus acutus* Herbaceous Alliance was observed within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. This vegetation community was also observed just north and south of the existing access road where it connects with Jefferson Boulevard. *Schoenoplectus acutus* is co-dominant in the herbaceous layer with *Typha angustifolia*. *Salix exigua* shrubs were also observed in scattered patches within this vegetation community. This vegetation community is classified as a wetland type.

2. Dryland Grain Crop Fields were observed to the north, east, west and south of the proposed project site. The fields were planted to common oats (*Avena sativa*) and wheat (*Triticum aestivum*) at the time of our surveys.

3. Landscaped Lawn was observed within the utility right-of-way and the proposed PG&E transformer site. Vegetation in this community is typically limited to ornamental trees, shrubs and similar plantings and lawns.

4. **Ruderal-disturbed** vegetation was observed within the proposed tower site, portions of the buffer area of the tower site, and along portions of the existing access road. This vegetation type is comprised mostly of non-native weedy herbaceous forb plants.

4.0 SPECIAL-STATUS SPECIES AND THEIR HABITATS

4.1 Regulatory Requirements

4.1.1 Federal Endangered Species Act (FESA)

To determine whether the proposed project may result in adverse effects to federally listed species, the criteria used was based on guidelines established by the USFW under Section 7(a) of the FESA, in which a project that may have an adverse effect on listed biological resources must be assessed. FESA (16 U.S. Code [USC 1531–1544) provides for the conservation of species that are Endangered or Threatened throughout all or a significant portion of their range, as well as the protection of habitats on which they depend.

Section 7 requires federal agencies to consult with USFWS or NMFS, or both, before performing any action (including actions such as funding a program or issuing a permit) that may affect listed species or designated Critical Habitat. The section 7 consultations are designed to assist Federal agencies in fulfilling their duty to ensure federal actions "do not jeopardize" the continued existence of a species or destroy or adversely modify Critical Habitat.

The USFWS defines temporary and permanent effects as areas denuded, manipulated, or otherwise modified from their pre-project conditions, thereby removing one or more essential components of a listed species' habitat as a result of project activities that include, but are not limited to, construction, staging, storage, lay down, vehicle access, parking, etc. According to the USFWS, temporary effects are limited to one construction season and, at a minimum, are fully restored to baseline habitat values or better within one year following initial disturbance. Permanent effects are not temporally limited and include all effects not fulfilling the criteria for temporary effects.

4.1.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (Title 16, United States Code [USC], Part 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 Code of Federal Regulations [CFR] 21, 50 CFR 10). Most actions that result in taking of, or the permanent or temporary possession of, a protected species constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. The Migratory Bird Permit Memorandum (MBPM-2) dated April 15, 2003, clarifies that destruction of most unoccupied bird nests (without eggs or nestlings) is permissible under the MBTA; exceptions include nests of federally threatened or endangered migratory birds, bald eagles (*Haliaeetus leucocephalus*), and golden eagles (*Aquila chrysaetos*). USFWS is responsible for overseeing compliance with the MBTA.

4.1.3 California Endangered Species Act (CESA)

The California Endangered Species Act (CESA (FGC §§ 2050–2116) is administered by CDFW. The CESA prohibits the "taking" of listed species except as otherwise provided in state law. The

CESA includes FGC Sections 2050–2116, and policy of the state to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat. The CESA requires mitigation measures or alternatives to a proposed project to address impacts to any State listed endangered, threatened or candidate species, or if a project would jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy. Section 86 of the FGC defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Unlike the ESA, CESA applies the take prohibitions to species under petition for listing (state candidates) in addition to listed species. Section 2081 of the FGC expressly allows CDFW to authorize the incidental take of endangered, threatened, and candidate species if all of the following conditions are met:

- The take is incidental to an otherwise lawful activity.
- The impacts of the authorized take are minimized and fully mitigated.
- Issuance of the permit will not jeopardize the continued existence of the species.
- The permit is consistent with any regulations adopted in accordance with §§ 2112 and 2114 (legislature-funded recovery strategy pilot programs in the affected area).
- The applicant ensures that adequate funding is provided for implementing mitigation measures and monitoring compliance with these measures and their effectiveness.

The CESA provides that if a person obtains an incidental take permit under specified provisions of the ESA for species also listed under the CESA, no further authorization is necessary under CESA if the federal permit satisfies all the requirements of CESA and the person follows specified steps (FGC § 2080.1).

4.1.4 California Fish and Game Code

The California Constitution establishes the California Fish and Game Commission (Commission) (CA Constitution Article 4, § 20). The California Fish and Game Code (FGC) delegates the power to the Commission to regulate the taking or possession of birds, mammals, fish, amphibian and reptiles (FGC § 200). The Commission has adopted regulations setting forth the manner and method of the take of certain fish and wildlife in the California Code of Regulations, Title 14.

4.1.5 California Fish and Game Code- Species Protection

The FGC establishes CDFW (FGC § 700) and states that the fish and wildlife resources of the state are held in trust for the people of the state by and through CDFW (FGC § 711.7(a)). All licenses, permits, tag reservations and other entitlements for the take of fish and game authorized by FGC are prepared and issued by CDFW (FGC § 1050 (a)).

Provisions of the FGC provide special protection to certain enumerated species such as:

§ 3503 protects eggs and nests of all birds.
§ 3503.5 protects birds of prey and their nests.
§ 3511 lists fully protected birds.

§ 3513 protects all birds covered under the federal Migratory Bird Treaty Act.
§ 3800 defines nongame birds.
§ 4150 defines nongame mammals.
§ 4700 lists fully protected mammals.
§ 5050 lists fully protected amphibians and reptiles.
§ 5515 lists fully protected fish species.

4.1.6 Yolo County

Yolo County General Plan

Yolo County's 2030 Countywide General Plan was adopted in November 2009. The General Plan is used to guide land use decisions. It sets forth numerous goals with policy frameworks and implementation programs. The following goals are presented in The Conservation and Open Space Element, Section 7 of the General Plan, and are relevant to the Project:

- Goal CO-1 - Provide a diverse, connected and accessible network of open space, to enhance natural resources and their appropriate use.
- Goal CO-2 - Protect and enhance biological resources through the conservation, maintenance, and restoration of key habitat areas and corresponding connections that represent the diverse geography, topography, biological communities, and ecological integrity of the landscape.

The Project is consistent with the Yolo County General Plan. Avoidance and mitigation measures are in place for impacts to biological and other resources. Below are General Plan Policies relevant to the Project. Each policy is followed by a short discussion of how the Project relates to the policy:

- Policy CO-1.21 - emphasize the use of native grasses, shrubs and trees as the primary focus of restoration within resource parks and other open spaces.
- Policy CO-2.10 - Encourage the restoration of native habitat.
- Policy CO-2.11 - Ensure that open space buffers are provided between sensitive habitat and planned development.
- Policy CO-2.22 - Prohibit development within a minimum of 100 feet from the top of banks for all lakes, perennial ponds, rivers, creeks, sloughs, and perennial streams. A larger setback is preferred. The setback will allow for fire and flood protection, a natural riparian corridor (or wetland vegetation), a planned recreational trail where applicable, and vegetated landscape for stormwater to pass through before it enters the water body. Recreational trails and other features established in the setback should be unpaved and located along the outside of the riparian corridors whenever possible to minimize intrusions and maintain the integrity of the riparian habitat. Exceptions to this action include irrigation pumps, roads and bridges, levees, docks, public boat ramps, and similar uses, so long as these uses are sited and operated in a manner that minimizes impacts to aquatic and riparian features.
- Policy CO-2.38 - Avoid adverse impacts to wildlife movement corridors and nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds). Preserve the functional value of movement corridors to ensure that essential habitat areas do not become isolated from one

another due to the placement of either temporary or permanent barriers within the corridors. Encourage avoidance of nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds) during periods when the sites are actively used and that nursery sites which are used repeatedly over time are preserved to the greatest feasible extent or fully mitigated if they cannot be avoided.

Yolo County Natural Community Conservation Plan and Habitat Conservation Plan

The Yolo Habitat Conservation Plan/Natural Community Conservation Plan ('Yolo HCP/NCCP') is a comprehensive, regional approach to addressing development and habitat conservation for the benefit of Federal and State special-status species in Yolo County. The Yolo Habitat Conservancy (YHC), formerly the Yolo County HCP/NCCP Joint Powers Agency (JPA), directed the preparation of the Yolo HCP/NCCP and is responsible for its implementation. The Yolo HCP/NCCP is intended to minimize regulatory hurdles by providing a means to coordinate and standardize mitigation and compensation requirements of FESA, CESA, CEQA, and other applicable laws and regulations relating to biological and natural resources within the planning area. The Yolo HCP/NCCP analyzes a range of future anticipated activities, including mining, development and agricultural uses, on 12 special-status species and their respective habitats. The Yolo HCP/NCCP created an agreement between State/Federal wildlife regulators and local jurisdictions (Yolo County, the cities of Davis, West Sacramento, Winters and Woodland, and University of California, Davis), to allow land owners and developers in those jurisdictions to engage in the "incidental take" of specific species in return for conservation commitments. A Public Review Draft of the Yolo HCP/NCCP (ICF 2017) and an accompanying draft EIR/EIS for that Plan was released for public review in the summer of 2017. The Final Yolo HCP/NCCP and the Final EIR/EIS was published on April 30, 2018. Subsequently, incidental take permits were issued by the U.S. Fish & Wildlife Service and the California Department of Fish & Wildlife. Implementation of the Yolo HCP/NCCP began in January 2019.

4.2 Special-Status Species Reviewed

For the purposes of this Biological Resources Assessment, special-status species include those that are federally listed as Endangered, Threatened or Proposed for federal listing (candidate) under the USFWS. Other species also evaluated in this Biological Assessment include non-listed federal and California Special Species of Concern (CSC) and those species that fall under the jurisdiction of the USFWS such as the Migratory Bird Treaty Act (MBTA) and the CDFW, such as CEQA Section 15380(d).

Impacts to special-status species were assessed if: (1) those species occurred in habitats similar to those of the project sites and buffer areas, and (2) were known to occur within the general vicinity of the proposed project sites.

Federally and State-Listed Plant Species. Review of the USFWS (USFWS 2021), the CNPS (CNPS 2021), and the CNDDB (CNDDB 2021) revealed that 14 listed plant species and species of concern have potential to occur in the general project area. Please refer to Table 1 for a list of these species and their habitat requirements. Potential habitat is present for 10 of these 14 plant species within the project buffer area. No habitat was identified within the project site. Botanical

surveys were conducted on April 8, 2021. These surveys were conducted within the blooming period of 2 of the 10 special-status plant species identified as potentially occurring within the project buffer area. Survey findings for the 2 targeted special-status plant species (Mason's lilaeopsis and saline clover) that had blooming periods during surveys was negative. We cannot say with certainty if any of the remaining 8 plant species are present in the project buffer area. Proposed project activities are proposed within previously disturbed areas, and as such, no impacts to habitat areas where the special-status plant species may occur are proposed. Therefore, no impacts to those species are expected due to project implementation, and we do not recommend any further special-status plant surveys.

4.3 Special-Status Wildlife Species

The following is a discussion of species having potential to occur on site and/or are species that are prominent in today's regulatory environment. This document does not address impacts to species that may occur in the region but for which no habitat occurs on site. Species-specific information described below is primarily from USFWS 2021 and CDFW 2021, unless otherwise noted.

Tricolored Blackbird - Tricolored blackbirds look very much like the abundant and widespread red-winged blackbird (*Agelaius phoeniceus*), to which they are closely related. The plumage of adult male tricolored blackbird is glossy black and may sometimes show an iridescent blue-green sheen in bright sunlight. Adult females are brown dorsally and have brown streaks on their breasts that merge into a dark brown belly, unlike the belly of female red-winged blackbirds which is streaked. Females may or may not have a brightly-colored epaulet. Juveniles are similar to females but paler. After-hatch year (1 year old) males are dark brown, not black, and have orange, not red, epaulets. Adult male epaulets are typically scarlet red, unlike the epaulet of the male red-wing blackbird which is orange-red. The band below the epaulet is bright white, not yellow or buffy as in the red-winged blackbird. Breeding males average 65-68 grams and breeding females average 40-45 grams. Total body length is 18-24 cm.

The bills of both sexes are long, narrow, round, and pointed. Both sexes have narrow, pointed wings, giving the bird a flight profile that has more pointed wings than does the red-winged blackbird. Flight is typically undulating, with powered down-strokes followed by upward glides. Foraging birds fly out from and return to the breeding colony head-to-tail, "follow the leader", and form long flight lines that may persist and allow the birds to be seen at relatively great distances. Foraging flocks appear to roll across the landscape as birds in the rear of foraging flocks fly up to the front. Foraging flocks may consist of hundreds or, in rare cases, even thousands of birds and be seen from some distance.

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Birds					
Tri-colored blackbird	*Agelaius tricolor*	-	CT	Highly colonial species. Most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	**Potentially present.** This species may be present feeding in the general project buffer area, but is not likely to be found in the proposed project site. Wetland habitat in the project buffer area within drainage ditches is not well developed and is very small in quantity. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3).
Swainson's hawk	*Buteo swansoni*	-	CT	Inhabits grassland, shrubland, and agricultural areas where it has open areas to forage for its small prey and where roost sites are available. In breeding season, also requires nesting trees, usually trees bordering agricultural fields, in wetland borders, and on abandoned farms. Forages by soaring over open areas and by searching from perches.	**Potentially present.** This species may be present feeding in the general project buffer area, but is not likely to be found in the proposed project site. Potential nesting habitat observed in the immediate and general project buffer area. An individual Swainson's hawk was observed flying over the northern buffer area of the project site. This species has also been documented approximately 0.59 miles south of the proposed project site (CDFW 2021) (see Figure 3). No active nest sites observed during biological survey.
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT	CE	Riparian forest.	**No potential.** Unlikely to occur due to lack of suitable habitat within the project site or buffer area.
White-tailed kite	*Elanus leucurus*	-	Fully Protected	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Found in open grasslands, meadows, or marshes foraging close to isolated, dense-topped trees for nesting and perching.	**No potential.** Unlikely to occur due to lack of suitable habitat within the project site or buffer area.

Song sparrow (Modesto population)	*Melospiza melodia*	-	CSC	Riparian and marsh habitat.	**Potentially present.** This species may be present feeding in the general project buffer area, but is not likely to be found in the proposed project site. Wetland habitat in the project buffer area within drainage ditches is not well developed and is very small in quantity. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3).
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	-	CSC	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds.	**Potentially present.** This species may be present feeding in the general project buffer area, but is not likely to be found in the proposed project site. Wetland habitat in the project buffer area within drainage ditches is not well developed and is very small in quantity. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3).
Mammals					
American Badger	*Taxidea taxus*	-	CSC	The species is found in a variety of open herbaceous and shrub vegetation types/habitats with dry, friable soils. It is widely distributed in California, with the exception of the humid coastal belt, occurring from sea-level to alpine meadows and coniferous forests.	**No potential.** Unlikely to occur due to lack of suitable habitat within the project site or buffer area.
Amphibians and Reptiles					
California tiger salamander	*Ambystoma californiense*	FT	CT	Primarily inhabit non-native grassland providing underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	**No potential.** Unlikely to occur due to lack of suitable habitat within the project site or buffer area.
Western pond turtle	*Emys marmorata*	-	CSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Require basking sites and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	**Potentially Present.** No potential upland aestivation habitat suitable for this species was observed within the project site or buffer area. Aquatic breeding and foraging habitat for this species was observed within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and

					south of the existing access road where it connects with Jefferson Boulevard. No sign of this species was observed during biological surveys. This species has not been documented within the general vicinity of the proposed project site according to CNDDB (CDFW 2021) (see Figure 3).
Giant garter snake	*Thamnophis gigas*	FT	CT	Prefers fresh water marsh and low gradient streams. Has adapted to drainage ditches and irrigation canals.	**Potentially present.** Potential aquatic breeding and foraging habitat for this species was observed within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard. Potential nesting habitat and burrows present in the general project buffer area. However, no nesting habitat and burrows present in the proposed project site/disturbance area. The closest documented sighting of this species is approximately 5.09 miles southeast of the proposed project site (CDFW 2021) (see Figure 3).
Fish					
Delta smelt	*Hypomesus transpacificus*	FT	CT	Found only from the Suisun Bay upstream within the Delta in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties. Shortly before spawning, adults migrate upstream from the brackish-water habitat associated with mixing zone and disperse widely into river channels and tidally influenced backwater sloughs. Spawn in shallow, fresh or slightly brackish water upstream of the mixing zone. Most spawning happens in tidally influenced backwater sloughs and channel edgewaters.	**No potential.** Unlikely to occur due to lack of suitable habitat within the project site or buffer area. The drainage ditches in the project buffer do not provide adequate habitat for this species.
Steelhead – Central California DPS	*Onocorhynchus mykiss irideus population 11*	FT	-	After maturing for 1 to 3 years in the ocean, adult steelhead typically begin their spawning migration into the Sacramento and San Joaquin Delta System in fall and winter. Adult steelhead enter the mainstream Sacramento River in July, peak in abundance in the fall, and continue migrating through February and March. Juvenile steelhead will remain in fresh water	**No potential.** Unlikely to occur due to lack of suitable habitat within the project site or buffer area. The drainage ditches in the project buffer do not provide adequate habitat for this species.

				and continue to rear for 1 to 3 years before migrating to the ocean in November through May to mature. Smolt typically migrate to the ocean during March through June.	
Sacramento splittail	*Pogonichthys macrolepidotus*	-	CSC	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay, associated marshes, slow moving river sections, and dead end sloughs. Require flooded vegetation for spawning and foraging for young.	**No potential.** Unlikely to occur due to lack of suitable habitat within the project site or buffer area. The drainage ditches in the project buffer do not provide adequate habitat for this species.
Longfin smelt	*Spirinchus thaleichthys*	FC	CT	The longfin smelt is a pelagic (living in open water) schooling fish known to inhabit the San Francisco Bay-Delta. Longfin smelt migrate to the fresher water of the Delta to spawn in the winter, returning to bay waters in late spring.	**No potential.** Unlikely to occur due to lack of suitable habitat within the project site or buffer area. The drainage ditches in the project buffer do not provide adequate habitat for this species.
Insects					
Conservancy fairy shrimp	*Branchinecta conservatio*	FE	-	Endemic to the grasslands of the northern two-thirds of the Central Valley. Found in large, turbid pools. Inhabit astatic pools located in swales formed by old braided alluvium filled by winter and spring rains.	**No potential**. Unlikely to occur due to lack of suitable habitat within the project site or buffer area.
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	-	Endemic to the grasslands of the Central Valley, Central Coast Mountains, and South Coast Mountains in astatic rain-filled pools. Inhabit small clear-water sandstone-depression pools and grassed swales, earth slumps, or basalt-flow depression pools.	**No potential**. Unlikely to occur due to lack of suitable habitat within the project site or buffer area.
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	FT	-	Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for stressed elderberry shrubs.	**No potential.** Unlikely to occur due to lack of suitable habitat (elderberry bushes) within the project site or buffer area.
Vernal pool tadpole shrimp	*Lepidurus packardi*	FE	-	Inhabit vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands.	**No potential**. Unlikely to occur due to lack of suitable habitat within the project site or buffer area.
Plants					
Watershield	*Brasenia schreberi*	-	List 2B.3	Found in freshwater marshes and swamps. Elevational range: 1 to 2,180 meters. Blooming period: May through September.	**Potentially present.** Potential habitat for this species occurs within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard. No individuals of this species were observed during surveys. This species has not been documented within

					the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3b).
Bristly sedge	*Carex comosa*	-	List 2B.1	Marshes, swamps, lake margins, and wet places. Elevational range: -5 to 1,010 meters. Blooming period: May through September.	**Potentially present.** Potential habitat for this species occurs within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3b).
Pappose tarplant	*Centromadia parryi ssp. parryi*	-	List 1B.2	Coastal prairies, meadows, seeps, coastal salt marsh, valley and foothill grassland. Vernally mesic, often alkaline sites. Elevational range: 2 to 420 meters. Blooming period: May through November.	**No potential**. Unlikely to occur due to lack of suitable habitat within the project site or buffer area.
Parry's rough tarplant	*Centromadia parryi ssp. rudis*	-	List 4.2	Vernal pools and valley and foothill grassland. Elevational range: 0 to 100 meters. Blooming period: May through October.	**No potential**. Unlikely to occur due to lack of suitable habitat within the project site or buffer area.
Bolander's water-hemlock	*Cicuta maculata var. bolanderi*	-	List 2B.1	Marshes and freshwater/brackish marshes. Elevational range: 0 to 200 meters. Blooming period: July through September.	**Potentially present.** Potential habitat for this species occurs within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3b).
Woolly rose-mallow	*Hibiscus lasiocarpus var. occidentalis*	-	List 1B.2	Freshwater marshes and swamps. Found in moist, freshwater-soaked river banks and low peat islands in sloughs. Elevational range: 0 to 120 meters. Blooming period: June through September.	**Potentially present.** Potential habitat for this species occurs within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard. No individuals of this

					species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3b).
Northern California black walnut	*Juglans hindsii*	-	List 1B.1	Riparian forest and woodland. Found in deep alluvial soils associated with a creek or stream. Elevational range: 0 to 395 meters. Blooming period: April through May.	**No potential**. Unlikely to occur due to lack of suitable habitat within the project site or buffer area.
Delta tule pea	*Lathyrus jepsonii var. jepsonii*	-	List 1B	Freshwater and brackish marshes. Typically on marsh and slough edges, along with *Typha*, *Aster lentus*, *Rosa californicus*, *Juncus spp.*, *Scirpus*, etc. Elevational range: 0 to 5 meters. Blooming period: May through September.	**Potentially present.** Potential habitat for this species occurs within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3b).
Heckard's pepper-grass	*Lepidium latipes var heckardii*	-	List 1B	Valley and foothill grassland, alkaline flats. Elevation range: 1 to 30 meters. Blooming period: March through May.	**No potential**. Unlikely to occur due to lack of suitable habitat within the project site or buffer area.
Mason's lilaeopsis	*Lilaeopsis masonii*	-	Rare / List 1B.1	Freshwater and brackish marshes, riparian scrub. Elevational Range: 0 to 10 meters. Blooming period: April through November.	**Potentially present.** Potential habitat for this species occurs within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3b).
Delta mudwort	*Limosella australis*	-	List 2B.1	Freshwater and brackish marshes, riparian scrub. Usually on mud banks of the delta in marshy or scrubby riparian associations, often with Mason's lileaopsis. Elevational range: 0 to 5 meters. Blooming period: May through August.	**Potentially present.** Potential habitat for this species occurs within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the

					existing access road where it connects with Jefferson Boulevard. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3b).
Sanford's arrowhead	*Sagittaria sanfordii*	-	List 1B.2	Marshes and swamps. Found in standing or slow-moving freshwater ponds, marshes, and ditches. Elevational range: 0 to 605 meters. Blooming period: May through October.	**Potentially present.** Potential habitat for this species occurs within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3b).
Side-flowering skullcap	*Scutellaria lateriflora*	-	List 2B.2	Meadows and seeps, marshes and swamps. Elevational range: 0 to 500 meters. Blooming period: July through September.	**Potentially present.** Potential habitat for this species occurs within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3b).
Saline clover	*Trifolium depauperatum var. hydrophilum*	-	List 1B.2	Found in marshes, valley and foothill grassland on mesic and alkaline soils, and vernal pools. Elevational range: 1 to 335 meters. Blooming period: April through June.	**Potentially present.** Potential habitat for this species occurs within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the

					proposed project site (CDFW 2021) (see Figure 3b).

Status Codes:

Federal
FE = Federally listed as Endangered
FT = Federally listed as Threatened
FC = Federal Candidate species

State
CE = California listed as Endangered
CT = California listed as Threatened
CR = California listed as Rare
CFP = California Fully Protected
CSC = Species of Special Concern
WL = CDFW Watch List
FP = Fully Protected

California Rare Plant Rank (formerly known as CNPS Lists)
California Rare Plant Rank 1A = Plants presumed extinct in California
California Rare Plant Rank 1B = Plants rare, threatened, or endangered in California and elsewhere
California Rare Plant Rank 2A = Plants presumed extirpated from California, but more common elsewhere
California Rare Plant Rank 2B = Plants rare or endangered in California, but more common elsewhere
California Rare Plant Rank 3 = Plants about which we need more information; a review list
California Rare Plant Rank 4 = Plants of limited distribution; a watch list.
California Rare Plant Rank Rarity Status of .1 = Seriously endangered in California
California Rare Plant Rank Rarity Status of .2 = Fairly endangered in California

Status, distribution, and habitat information from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database RareFind 5 (CDFW 2021); California Native Plant Society, California Rare Plant Electronic Inventory (CNPS 2021); and USFWS Online Endangered Species Database (USFWS 2021).

This species was formerly abundant both in coastal California, where it was considered the most abundant bird from Los Angeles to San Diego in the mid-19th Century, and in the Central Valley of California through interior southern California to northern Baja California (Grinnell 1915. Since 1980, breeding has occurred in 46 California counties, although the species has essentially been extirpated as a breeder in coastal locations and persists in very small numbers (12,000 in 2017) at widely scattered sites in southern California. Gaps also occur in the breeding distribution in the Central Valley. Small colonies of tens of individuals persist in northern Baja California, a single colony of fewer than 30 individuals breeds in western Nevada, formerly up to 2,000 birds breed at several scattered sites in Oregon, and since 1998 a few tens of birds have bred in a few locations near Walla Walla, Washington.

This species is a resident in Washington, Oregon and Baja California, absent in Nevada. It may also occur in small numbers along coastal regions and portions of northern California outside of the Central Valley. Wintering populations concentrate in the Sacramento-San Joaquin Delta and formerly along the central coast in Monterey, Marin, and Sonoma counties, where they occur in multispecies flocks with other blackbirds, brown-headed cowbirds, and European starlings. Wintering tricolors are associated with open rangeland in the Sacramento-San Joaquin Delta and with dairies along the central California Coast. From mid-October to February flocks to 25,000 frequented dairies on the outer Point Reyes Peninsula in Marin County, but few birds (< 1,000) have been seen during winter there since 2012.

Often described as nonterritorial, but both males and females maintain breeding territories held for the duration of a single nesting effort. Territories include only nesting space, not foraging areas, and range in size from less than one to several square meters, with most territories between 2 and 6 square meters. In some instances, especially in especially high nest densities, tricolor territories may be vertically stacked. Males may arrive on the breeding sites 1-3 days before the females, typically in mid-to-late March in southern California and the San Joaquin Valley although the onset of breeding has occurred as early as late February since 2014 and has been shown to be advancing. The tricolor typically nests twice, and the second breeding attempt often occurs in a different, more northerly location for Central Valley breeders, although when breeding conditions permit, second breeding attempts may occur in the same or immediately adjacent locations. Comparable movements have not been reported in southern California, where the species is believed to be resident.

Tricolored blackbirds, like other blackbird species, are fundamentally granivores; however, tricolors consume a wide variety of plant and animal foods, and respond opportunistically to the most abundant, readily available food resource. In the San Joaquin Valley, most tricolors feed on stored grains associated with dairies, with additional animal foods taken from both aquatic and terrestrial habitats up to 9 km from the colony. Birds may forage over a wide area, but females forming eggs and adults feeding nestlings typically concentrate foraging efforts on small, highly productive habitats, including shrublands (often excellent sources of caterpillars), pasturelands (many types of insects, but especially grasshoppers during grasshopper "breakout" years), wetlands (aquatic insect larvae), and rice paddies (aquatic insect larvae).

This species may be present feeding in the general project buffer area, but is not likely to be found in the proposed project site. Wetland habitat in the project buffer area within drainage ditches is

not well developed and is very small in quantity. Vegetation in the wetland area is herbaceous in nature, and therefore, provides lower value as nesting habitat for this species. No individuals of this species were observed during surveys. No known or potential nesting sites of this species were observed during biological surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3).

Swainson's Hawk - Swainson's hawks typically nest in scattered trees within grassland, shrubland, or agricultural landscapes (e.g., along stream courses or in open woodlands). Nests are typically at the edges of narrow bands of riparian vegetation, in isolated oak woodland, and in lone trees, roadside trees, or farmyard trees, as well as in adjacent residential areas. Historically and in existing native habitat, Swainson's hawk forage in open stands of grass-dominated vegetation, sparse shrublands, and small, open woodlands. In many parts of range today, the species has adapted well to foraging in agricultural areas (especially in alfalfa), but cannot forage in most perennial crops or in annual crops that grow higher than native grasses, where prey are more difficult to find. Swainson's hawks also forage in areas with cultivation activities that expose prey (e.g., flood irrigation, primarily in alfalfa fields; burning; and disking).

Swainson's hawks are known to forage within a 10-mile radius of nest sites, suggesting that the presence of suitable foraging habitat within the vicinity of nesting habitat is essential to their reproductive success. Main foods taken on breeding grounds are vertebrates (mammals, birds, and reptiles).

This species may be present feeding in the general project buffer area, but is not likely to be found in the proposed project site. Suitable foraging habitat [vegetated upland areas] for the Swainson's hawk was identified throughout the project site and buffer area during biological surveys. Potential nesting habitat was observed in the immediate and general project buffer area. An individual Swainson's hawk was observed flying over the northern buffer area of the project site. This species has also been documented approximately 0.59 miles south of the proposed project site (CDFW 2021) (see Figure 3). No active nest sites were observed during biological surveys.

Song Sparrow (Modesto Population) - Adult song sparrows have brown upperparts with dark streaks on the back and are white underneath with dark streaking and a dark brown spot in the middle of the breast. They have a brown cap and a long brown rounded tail. Their face is gray with a brown streak through each eye. They are highly variable in size across numerous subspecies. The body length ranges from 4.3 to 7.1 inches and wingspan can range from 7.1 to 10.0 inches. Body mass ranges from 0.42 to 1.87 ounces. The maximum lifespan in the wild is 11.3 years. The eggs of the song sparrow are brown with greenish-white spots. Females lay three (3) to five (5) eggs per clutch, with an average incubation time of 13–15 days before hatching.

The Modesto song sparrow is endemic to California, residing only in the north-central portion of the Central Valley (Grinnell and Miller 1944). Highest densities occur in the Butte Sink area of the Sacramento Valley and in the Sacramento-San Joaquin River Delta. Seasonal Status in California Occurs year round; breeding season extends from late March to early August.

Grinnell and Miller (1944) described the Modesto song sparrow as a "common" resident occurring primarily below 200 feet elevation in the Central Valley from Colusa County in the Sacramento

Valley south through the Delta (exclusive of Suisun Marsh) to the northern San Joaquin Valley of Stanislaus County. No quantitative estimates of historic abundance exist. Within its historic range this subspecies was probably closely tied to the distribution of suitable freshwater wetlands and early successional riparian thickets. Historic locations of confirmed breeding include Butte Creek, Butte, Colusa, and Sutter counties; Colusa, Colusa County; Sacramento, Sacramento County; Stockton, San Joaquin County; and the confluence of the San Joaquin and Tuolumne rivers, Stanislaus County (Grinnell and Miller 1944).

The general outline of the breeding range today remains largely unchanged. Despite limited historic data, it seems likely the over 90% loss of wetlands and riparian forests in the Central Valley greatly reduced overall numbers and extirpated the subspecies locally within its range. The Modesto song sparrow remains locally numerous in areas where, by today's standards, extensive wetlands remain. Hence, the Delta and Butte Sink areas represent current centers of abundance for the subspecies. In the northern portion of its range, song sparrows occur in low densities at Delevan and Colusa National Wildlife Refuges and are absent as breeders from the Sacramento National Wildlife Refuge. Immediately adjacent to the Butte Sink, song sparrows breed in sparsely vegetated irrigation canals, yet are almost entirely absent from the mainstem and tributaries of the Sacramento River above Sacramento.

Singing song sparrows also occur in roadside irrigation ditches east of the Sacramento River above the Tisdale Bypass, Sutter County, and within Sutter National Wildlife Refuge. Song sparrows also are numerous in the Delta, particularly in southwestern Sacramento County and northwestern San Joaquin County. Unlike in the Butte Sink, song sparrows in the Delta and northern San Joaquin Valley are locally numerous along riparian corridors, such as the Cosumnes, Mokeumne, and Stanislaus rivers, and sparse along vegetated irrigation canals and levees.

The ecological requirements of the Modesto song sparrow are largely undescribed. Grinnell and Miller (1994) noted the subspecies' affinity for emergent freshwater marshes dominated by tules (*Scirpus* spp.) and cattails (*Typha* spp.) as well as riparian willow (*Salix* spp.) thickets. These song sparrows also nest in riparian forests of valley oak (*Quercus lobata*) with a sufficient understory of blackberry (*Rubus* spp.), along vegetated irrigation canals and levees, and in recently planted valley oak restoration sites. Song sparrows forage primarily on the ground, but foraging behavior is highly opportunistic, perhaps reflecting changes in resource availability and distribution. The year-round diet of the song sparrow in California is roughly 79% vegetable and 21% animal matter, the latter taken mostly in May. Nests usually are placed below one (1) meter in a wide variety of plant species. Pairs will raise two (2), and perhaps three (3) broods, and will re-nest following nest failure.

This species may be present feeding in the general project buffer area, but is not likely to be found in the proposed project site. Wetland habitat in the project buffer area within drainage ditches is not well developed and is very small in quantity. Therefore, we conclude it is unlikely that this species would nest in these areas. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3).

Yellow-Headed Blackbird - The male yellow-headed blackbird has a bright yellow hood and black body. A white patch on the wing can be seen both while perched or flying. The female's coloring is more subdued. She can be best identified by her duller-yellow supercilium, throat, and breast. The rest of her body is grayish-brown, and she has white streaks extending down her breast. Juveniles are similar in appearance to the females. Both male and female yellow-headed Blackbirds are 9.5 inches long and have sharply pointed black bills.

The yellow-headed blackbird breeds widely and abundantly across western Canada and the United States, but is patchily distributed in the southwestern portion of its breeding range. This blackbird species migrates broadly across western and central North America, to wintering grounds largely in western and northern Mexico. Greatest breeding densities are found in regions with large and productive marshes, particularly in the eastern Prairies and Great Plains. The yellow-headed blackbird is a monotypic species. Seasonal status in California occurs primarily as a migrant and summer resident from April to early October. This species breeds from mid-April to late July. Small numbers winter, mainly in the southern Central Valley and the Imperial and Colorado River valleys.

The yellow-headed blackbird formerly bred throughout much of the state except the coastal region north of the San Francisco Bay area and west of the Sacramento Valley and most of the southern deserts (Grinnell and Miller 1944). The stronghold was northeastern California (Oregon border south to Owens Valley), but the species also bred in large marshy lakes in high mountains, the Central Valley, the coastal district from Marin and southern Sonoma south to Los Angeles and Riverside counties, the Colorado River Valley, and perhaps San Diego County. Breeding was documented from near sea level up to 6600 feet at Baldwin Lake in the San Bernardino Mountains. Grinnell and Miller (1944) considered the species a “common summer resident to eastward” but “less common west of the Sierra Nevada and sparse along the coast.” They also noted population decreases from the 1920s to the 1940s, particularly in southern California, because of draining of marshes. In Yolo County, two small colonies (5–30 nests) are usually present each year, but they shift in location and may be present in wetter years only.

Yellow-headed blackbirds breed almost exclusively in marshes with tall emergent vegetation, such as tules (*Scirpus* spp.) or cattails (*Typha* spp.), generally in open areas and edges over relatively deep water. They nest locally in low vegetation such as spikerush (*Eleocharis*). Nests are fabricated from dry vegetation and placed in dense cover. Because of the need for deeper water, breeding marshes often are on the edges of water bodies such as lakes, reservoirs, or larger ponds. Males choose territories with ample open water, and within these females tend to choose edges with moderately dense vegetation and extensive channels, characteristics suited for adequate support for nests and safety from predators. Most nests are attached to cattails and tules, but some are built in willows (*Salix* spp.) and tamarix (*Tamarix gallica*). Females raise one brood but will renest following failure. Overall, the diet is seeds and, to a minor extent, insects. During breeding, however, adults forage primarily on insects and feed young almost entirely aquatic insects such as damselflies. Birds forage within breeding territories if resource abundance is high but in uplands, often agricultural fields, otherwise. Yellow-headed blackbirds are territorial when food resources are available within the territory; otherwise they can be loosely colonial and nonterritorial when food is obtained outside of the territory. The species is highly polygynous, so within a male’s territory there may be one (1) to six (6) females. Territory size varies widely, tending to be greater

where foraging takes place within the territory. Factors regulating populations in California are not well understood, but the quantity and quality of habitat—related to water levels—have a direct effect on population sizes.

This species may be present feeding in the general project buffer area, but is not likely to be found in the proposed project site. Wetland habitat in the project buffer area within drainage ditches is not well developed and is very small in quantity. Therefore, we conclude it is unlikely that this species would nest in these areas. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2021) (see Figure 3).

Western Pond Turtle - The western pond turtle is a California species of special concern. It is the only native aquatic (freshwater) turtle found in California. Western pond turtles are found in freshwater habitats throughout most of the state (west of the Sierra Nevada crest) up to elevations of about 4,700 feet. They require some slow or slack water aquatic habitat, and are uncommon in high-flow streams. Western pond turtle presence seems to be associated with the presence of basking sites and hatchlings require shallow water habitat with dense algal vegetation in which to forage. Western pond turtles leave aquatic sites to reproduce, aestivate and overwinter, and so upland habitat is an important life history component for the species. Western pond turtles are known to travel up to 100 meters upland from their aquatic habitat in search of a nesting location. These turtles require an upland oviposition site in clay or sandy soils in the vicinity of the aquatic site and may overwinter on land or may remain active in water during the winter season depending on factors poorly understood at this time.

No potential upland aestivation habitat suitable for this species was observed within the project site or buffer area. Aquatic breeding and foraging habitat for this species was observed within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard. No sign of this species was observed during biological surveys. This species has not been documented within the general vicinity of the proposed project site according to CNDDB (CDFW 2021) (see Figure 3).

Giant Garter Snake (GGS) - GGS typically inhabit sloughs, marshes, and drainage canals characterized by slow flowing or standing water, permanent summer water, mud bottoms, earthen banks, and an abundance of preferred forage species. The GGS is highly aquatic, but avoids areas of dense riparian overstory, preferring stands of emergent aquatic vegetation, such as bulrushes and cattails, and herbaceous terrestrial cover composed of annual and perennial grasses, blackberry, and mustard. This vegetation, along with burrows, undercut banks, and large rocks, provide escape cover. In addition, areas devoid of overstory shading are required for basking areas for thermoregulation. GGS rely on canals and ditches as movement corridors. These corridors are vital to giant garter snake dispersal and, most importantly, for continuing genetic exchange between subpopulations. Un-vegetated canals may be used as disposal corridors, but they typically do not remain in exposed canals due to increased vulnerability to predators. Essential habitat components of the giant garter snake consist of the following:

- Adequate water during the snake's active period (early spring through mid-fall) to provide

a prey base and cover;

- Emergent, herbaceous wetland vegetation, such as cattail and bulrushes, for escape cover and foraging habitat; and

- Upland habitat for basking, cover, and retreat sites, and refuge from floodwaters (USFWS 1999B, Brode 1988).

Potential aquatic breeding and foraging habitat for this species was observed within a drainage ditch immediately south of the proposed utility route, and 100 feet west of the proposed tower site. Potential aquatic habitat also was observed just north and south of the existing access road where it connects with Jefferson Boulevard.

No individual GGS were observed during biological surveys. Biological surveys were conducted near the end of the inactive period of the species (October 1 through April 30). Potential nesting burrows were not observed within the proposed project site. However, some scattered burrows were observed within the project buffer area near the agricultural drainage ditches. The closest documented sighting of this species is approximately 5.09 miles southeast of the proposed project site (CDFW 2021) (see Figure 3). No critical habitat for GGS has been designated within the project area, including the proposed project site and buffer area. GGS are not expected to occur in the project site and buffer area based on the results of biological surveys and CNDDB occurrence records.

4.4 Critical Habitat

Federally-designated critical habitat for delta smelt was identified within and surrounding the project site (USFWS 2021).

4.5 Special Status Natural Communities

Wetland habitat observed in the man-made drainage ditches adjacent to the project site constitutes a special status natural community. No special-status natural communities were identified within the proposed project site.

5.0 IMPACTS ANALYSIS AND STANDARD CONSTRUCTION CONDITIONS

This section summarizes the potential biological impacts from implementation of the proposed project. The analysis of these effects is based on a reconnaissance-level biological survey of the project site and buffer area, a review of existing databases and literature, and personal professional experience with biological resources of the region. Potential effects to federally- and state-listed special-status animal species may occur from the proposed project. Standard Construction Conditions for these biological impacts are provided below. A synopsis of the species potentially affected is presented in Table 2, and is followed by Standard Construction Conditions to avoid "take" of individuals.

Table 2: Special Status Animal Species Potentially Affected by the Proposed Project

Species	Status (Federal/State)	Habitat Present/Absent	Avoidance Yes/No
Tri-colored blackbird	-/Threatened	Present	Yes
Swainson's hawk	-/Threatened	Present	Yes
Song sparrow, Modesto Population	-/CSC	Present	Yes
Yellow-headed blackbird	-/CSC	Present	Yes
Western pond turtle	-/CSC	Present	Yes
Giant garter snake	FT/CT	Present	Yes

Potential Impacts to Common Wildlife and Plant Populations from Project Activities

Direct mortality or injury to common wildlife and plant populations could occur during ground disturbance activities associated with implementation of the project. Small vertebrate, invertebrate, and plant species are particularly prone to impact during project implementation because they are much less to non-mobile, and cannot easily move out of the path of project activities. Other more mobile wildlife species, such as most birds and larger mammals, can avoid project-related activities by moving to other adjacent areas temporarily. Increased human activity and vehicle traffic in the vicinity may disturb some wildlife species. Because common wildlife species found in the project area are locally and regionally common, potential impacts to these resources are considered less than significant. Therefore, no avoidance or minimization measures are proposed at this time.

Potential Impacts to Nesting Special-Status Avian Species from Project Activities

Implementation of the proposed project could potentially impact individual, foraging, and nesting migratory birds, raptor species, tri-colored blackbird, Swainson's hawk, song sparrow (Modesto Population), and yellow-headed blackbird should they become established within the proposed project buffer area prior to project implementation. Actively nesting birds could potentially be

affected due to noise and vibration from project activities, if nests are located close enough to project activities. Project related noise and vibration could cause the abandonment of active nest sites, eggs, and young. Impacts to these species would be considered significant. In the event that nesting birds become established in the proposed project site or buffer area, the following Standard Construction Conditions measures will be implemented:

If ground disturbing activities occur during the breeding season of these avian species (generally February through mid-September), surveys for active nests will be conducted by a qualified biologist no more than 10 days prior to start of activities. Pre-construction nesting surveys shall be conducted for nesting migratory avian and raptor species in the project site and buffer area. Pre-construction biological surveys shall occur prior to the proposed project implementation, and during the appropriate survey periods for nesting activities for individual avian species. Surveys will follow required CDFW and USFWS protocols, where applicable. A qualified biologist will survey suitable habitat for the presence of these species. If a migratory avian or raptor species is observed and suspected to be nesting, a buffer area will be established to avoid impacts to the active nest site. Identified nests should be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. If no nesting avian species are found, project activities may proceed and no further Standard Construction Conditions measures will be required. If active nesting sites are found, the following exclusion buffers will be established, and no project activities will occur within these buffer zones until young birds have fledged and are no longer reliant upon the nest or parental care for survival.

- Minimum no disturbance of 250 feet around active nest of non-listed bird species and 250 foot no disturbance buffer around migratory birds;
- Minimum no disturbance of 500 feet around active nest of non-listed raptor species;
- and 0.5-mile no disturbance buffer from listed species and fully protected species (tri-colored blackbird and Swainson's hawk) until breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.
- Once work commences, all nests should be continuously monitored to detect any behavioral changes as a result of project activities. If behavioral changes are observed, the work causing that change should cease and the appropriate regulatory agencies (i.e. CDFW, USFWS, etc.) shall be consulted for additional avoidance and minimization measures.
- A variance from these no disturbance buffers may be implemented when there is compelling biological or ecological reason to do so, such as when the project area would be concealed from a nest site by topography. Any variance from these buffers is advised to be supported by a qualified wildlife biologist and is recommended that CDFW and USFWS be notified in advance of implementation of a no disturbance buffer variance.

AT&T will incorporate the following mitigation measures from the Yolo County Habitat Conservation Plan/Natural Community Conservation Plan during implementation of the proposed project to protect Swainson's hawk:

AMM16, Minimize Take and Adverse Effects on Habitat of Swainson's Hawk. The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent, with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000) within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated onsite biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior.

For covered operations and maintenance activities that involve pruning or removal of a potential Swainson's hawk nest tree, the project proponent will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

AT&T will incorporate the following mitigation measures from the Yolo County Habitat Conservation Plan/Natural Community Conservation Plan during implementation of the proposed project to protect tricolored blackbirds:

AMM21, Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird. The project proponent will retain a qualified biologist to identify and quantify (in acres) tricolored blackbird nesting and foraging habitat (as defined in Appendix A, *Covered Species Accounts*) within 1,300 feet of the footprint of the covered activity. If a 1,300-foot buffer from nesting habitat cannot be maintained, the qualified biologist will check records maintained by the Conservancy to determine if tricolored blackbird nesting colonies have been active in or within 1,300 feet of the project footprint during the previous five years. If there are no records of nesting tricolored blackbirds on the site, the qualified biologist will conduct visual surveys to determine if an active colony is present, during the period from March 1 to July 30, consistent with protocol described by Kelsey (2008).

Operations and maintenance activities or other temporary activities that do not remove nesting habitat and occur outside the nesting season (March 1 to July 30) do not need to conduct planning or construction surveys or implement any additional avoidance measures.

If an active tricolored blackbird colony is present or has been present within the last five years within the planning-level survey area, the project proponent will design the project to avoid adverse effects within 1,300 feet of the colony site(s), unless a shorter distance is approved by the Conservancy, USFWS, and CDFW. If a shorter distance is approved, the project proponent will still maintain a 1,300-foot buffer around active nesting colonies during the nesting season but may apply the approved lesser distance outside the nesting season. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

Potential Impacts to Giant Garter Snake from Project Activities

Implementation of the proposed project (specifically, ground disturbance activities within potential basking habitat areas during construction activities) could potentially result in impacts on individual or small populations of giant garter snakes. It should be noted that no potential nesting burrows were observed in areas proposed for ground disturbance activities. However, the possibility remains that individual giant garter snakes could cross through the project site on their way to other areas. If individual snakes are present during construction activities, the possibility exists that direct mortality of individual giant garter snakes could occur. AT&T will incorporate the following mitigation measures from the Yolo County Habitat Conservation Plan/Natural Community Conservation Plan during implementation of the proposed project to protect giant garter snakes. With the implementation of the following measures, impacts to this species would be avoided:

AMM15, Minimize Take and Adverse Effects on Habitat of Giant Garter Snake. The project proponent will avoid effects on areas where planning-level surveys indicate the presence of suitable habitat for giant garter snake. To avoid effects on giant garter snake aquatic habitat, the project proponent will conduct no in-water/in-channel activity and maintain a permanent 200-foot non-disturbance buffer from the outer edge of potentially occupied aquatic habitat. If the project proponent cannot avoid effects of construction activities, the project proponent will implement the measures below to minimize effects of construction projects:

- Conduct preconstruction clearance surveys using USFWS-approved methods within 24 hours prior to construction activities within identified giant garter snake aquatic and adjacent upland habitat. If construction activities stop for a period of two weeks or more, conduct another preconstruction clearance survey within 24 hours prior to resuming construction activity.
- Restrict all construction activity involving disturbance of giant garter snake habitat to the snake's active season, May 1 through October 1. During this period, the potential for direct mortality is reduced because snakes are expected to move and avoid danger.
- In areas where construction is to take place, encourage giant garter snakes to leave the site on their own by dewatering all irrigation ditches, canals, or other aquatic habitat (i.e., removing giant garter snake aquatic habitat) between April 15 and September 30.

Dewatered habitat must remain dry, with no water puddles remaining, for at least 15 consecutive days prior to excavating or filling of the habitat. If a site cannot be completely dewatered, netting and salvage of giant garter snake prey items may be necessary to discourage use by snakes.

- Provide environmental awareness training for construction personnel, as approved by the Conservancy. Training may be implemented through the distribution of approved brochures and other materials that describe resources protected under the Yolo HCP/NCCP and methods for avoiding effects. If a live giant garter snake is encountered during construction activities, immediately notify the project's biological monitor and USFWS and CDFW. The monitor will stop construction in the vicinity of the snake, monitor the snake, and allow the snake to leave on its own. The monitor will remain in the area for the remainder of the work day to ensure the snake is not harmed or, if it leaves the site, does not return. The qualified biologist will work with the Conservancy, USFWS and CDFW to redirect the snake away from the disturbance area within three days of reporting the snake's presence at the construction site to USFWS and CDFW.
- Employ the following management practices to minimize disturbances to habitat:
    - Install temporary fencing to identify and protect adjacent marshes, wetlands, and ditches from encroachment from construction equipment and personnel.
    - Maintain water quality and limit construction runoff into wetland areas through the use of hay bales, filter fences, vegetative buffer strips, or other accepted practices. No plastic, monofilament, jute, or similar erosion-control matting that could entangle snakes or other wildlife will be permitted.

Modifications to this AMM may be made with the approval of the Conservancy, USFWS, and CDFW.

Potential Impacts to Western Pond Turtle from Project Activities

Implementation of the proposed project could potentially result in significant adverse effects on western pond turtles. These effects could result in the direct mortality of individual northwestern pond turtles should they be present in the project site during project activities. No degradation of upland nesting or aquatic breeding habitat would occur as the project will take place within actively disturbed areas. However, the possibility remains that individual turtles may cross the project site. Potential impacts to western pond turtles would be avoided through the implementation of the following measures (*AMM14, Minimize Take and Adverse Effects on Habitat of Western Pond Turtle*):

- To prevent special-status wildlife species from entering the project work area, silt fence or other sediment control devices will be placed around construction site to prevent wildlife species from entering active work areas.

- Due to the potential for special-status species to move through the project site, construction personnel shall at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities during disturbing activities to prevent take of individuals. All pipes or tubing Four (4) inches or greater shall be sealed by the relevant contractor with tape at both ends to prevent animals from entering the pipes at night. All

trenches and other excavations shall be backfilled the same day they are opened, or shall have an exit ramp built into the excavation to allow animals to escape.

- As part of the worker environmental training awareness program, project personnel shall be trained to identify this species, its natural history, its habitat, and protective measures.

General Construction and Operations Mitigation Measures

AT&T will incorporate the following general mitigation measures from the Yolo County Habitat Conservation Plan/Natural Community Conservation Plan during implementation of the proposed project to protect biological resources:

AMM3, Confine and Delineate Work Area. Where natural communities and covered species habitat are present, workers will confine land clearing to the minimum area necessary to facilitate construction activities. Workers will restrict movement of heavy equipment to and from the project site to established roadways to minimize natural community and covered species habitat disturbance. The project proponent will clearly identify boundaries of work areas using temporary fencing or equivalent and will identify areas designated as environmentally sensitive. All construction vehicles, other equipment, and personnel will avoid these designated areas.

AMM4, Cover Trenches and Holes during Construction and Maintenance. To prevent injury and mortality of giant garter snake and western pond turtle, workers will cover open trenches and holes associated with implementation of covered activities that affect habitat for these species or design the trenches and holes with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.

AMM5, Control Fugitive Dust. Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.

AMM6, Conduct Worker Training. All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by the project proponent. The training will provide education regarding sensitive natural communities and covered species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the FESA and NCCPA Permits. The training may be accomplished through the distribution of informational materials with descriptions of sensitive biological resources, photographs of covered species, and regulatory protections to construction personnel prior to initiation of construction work.

AMM8, Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas. Project proponents should locate construction staging and other temporary work areas for covered activities in areas that will ultimately be a part of the permanent project development footprint. If construction staging and other temporary work areas must be located outside of permanent project footprints, they will be located either in areas that do not support habitat for covered species or are easily restored to prior or improved ecological functions (e.g., grassland and agricultural land). Construction staging and other temporary work areas located outside of project footprints will be sited in areas that avoid adverse effects on the following:

- Serpentine, valley oak woodland, alkali prairie, vernal pool complex, valley foothill riparian, and fresh emergent wetland land cover types.
- Occupied western burrowing owl burrows.[6]
- Nest sites for covered bird species and noncovered raptors during the breeding season.

6.0 CONCLUSIONS AND DETERMINATIONS

This project will incorporate reasonable and prudent measures for avoidance and minimization, described in Section 1.0, and species-specific avoidance and minimization measures. As a result, the project is not anticipated to result in take of any of the listed species or habitats described in this biological assessment.

Provided the precautions outlined above are followed, it has been concluded by Synthesis that the proposed project would:

- Have less than significant impacts upon federal and California endangered, threatened, proposed or candidate species;

- Not result in destruction or adverse modification of a critical habitat area of a federal or California endangered or threatened species; and

- Not result in "take" of migratory birds protected under the Migratory Bird Treaty Act and other state, local or federal laws.

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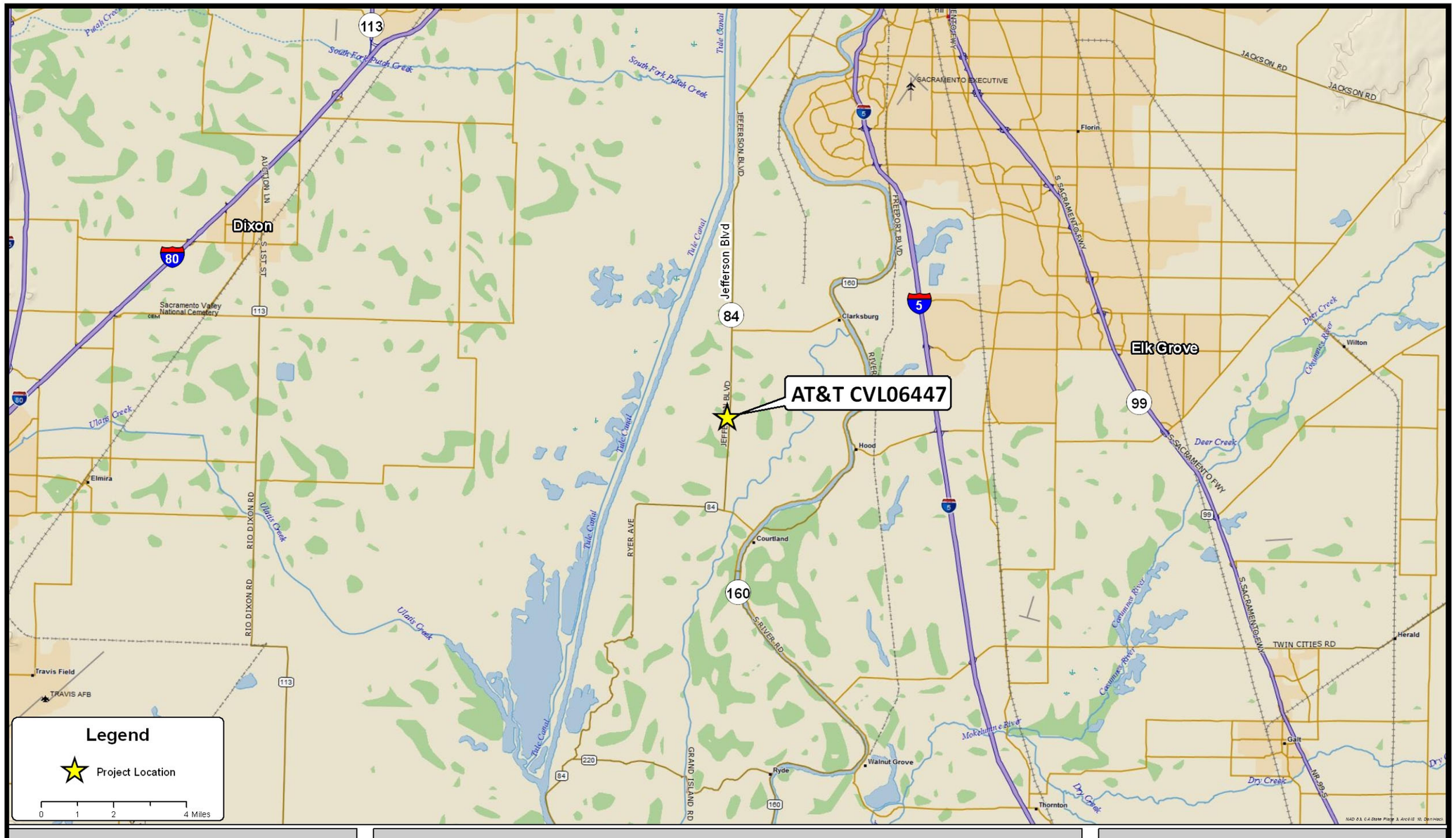
Appendix A
Project Figures



Synthesis Planning
442 San Marin Drive
Novato, California 94945
Telephone (415) 328-7923

FIGURE 1

Project Vicinity Map

AT&T
2600 Camino Real
San Ramon, California 94583

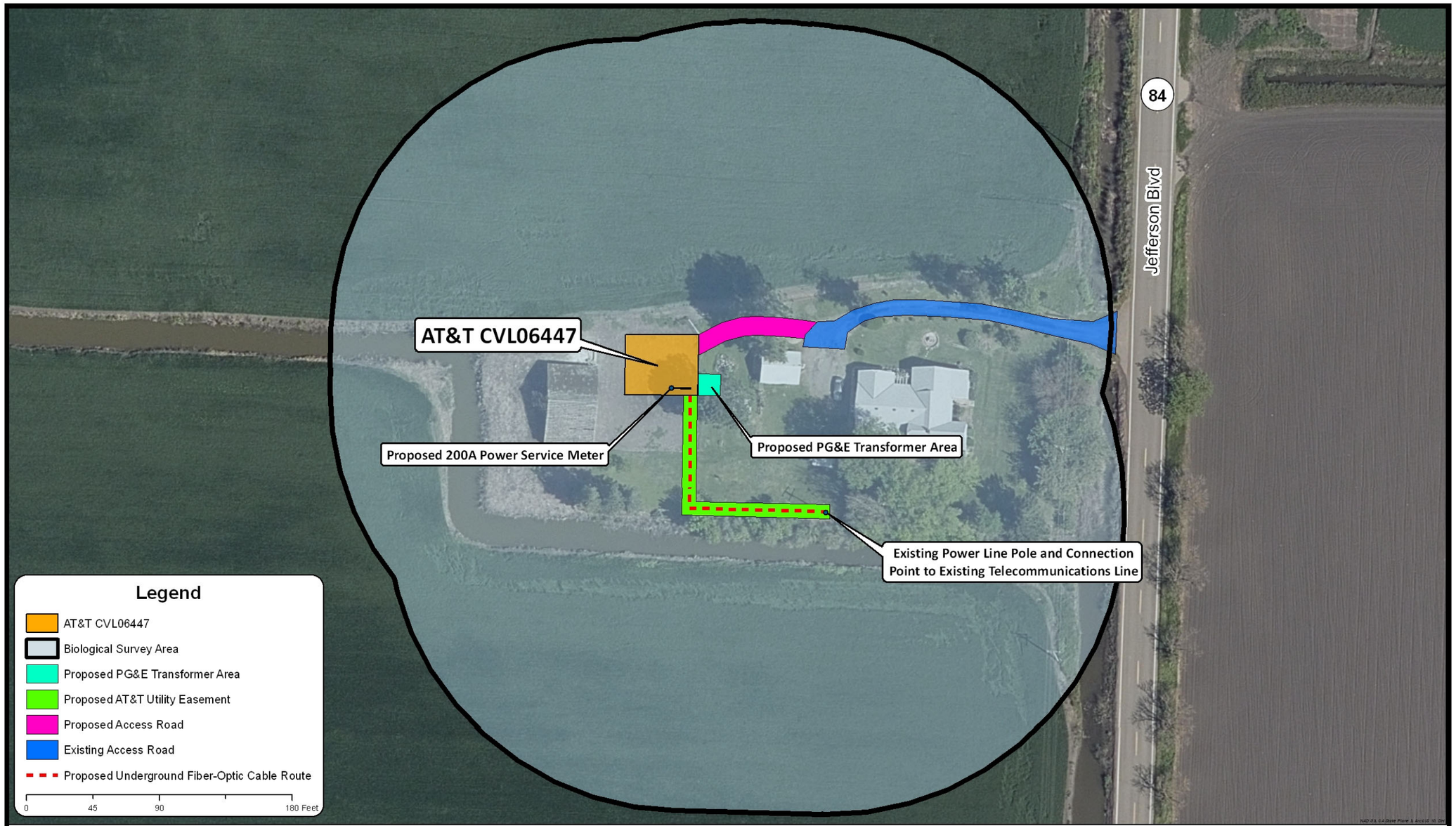


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FIGURE 2

Project Location Map

AT&T
2600 Camino Real
San Ramon, California 94583

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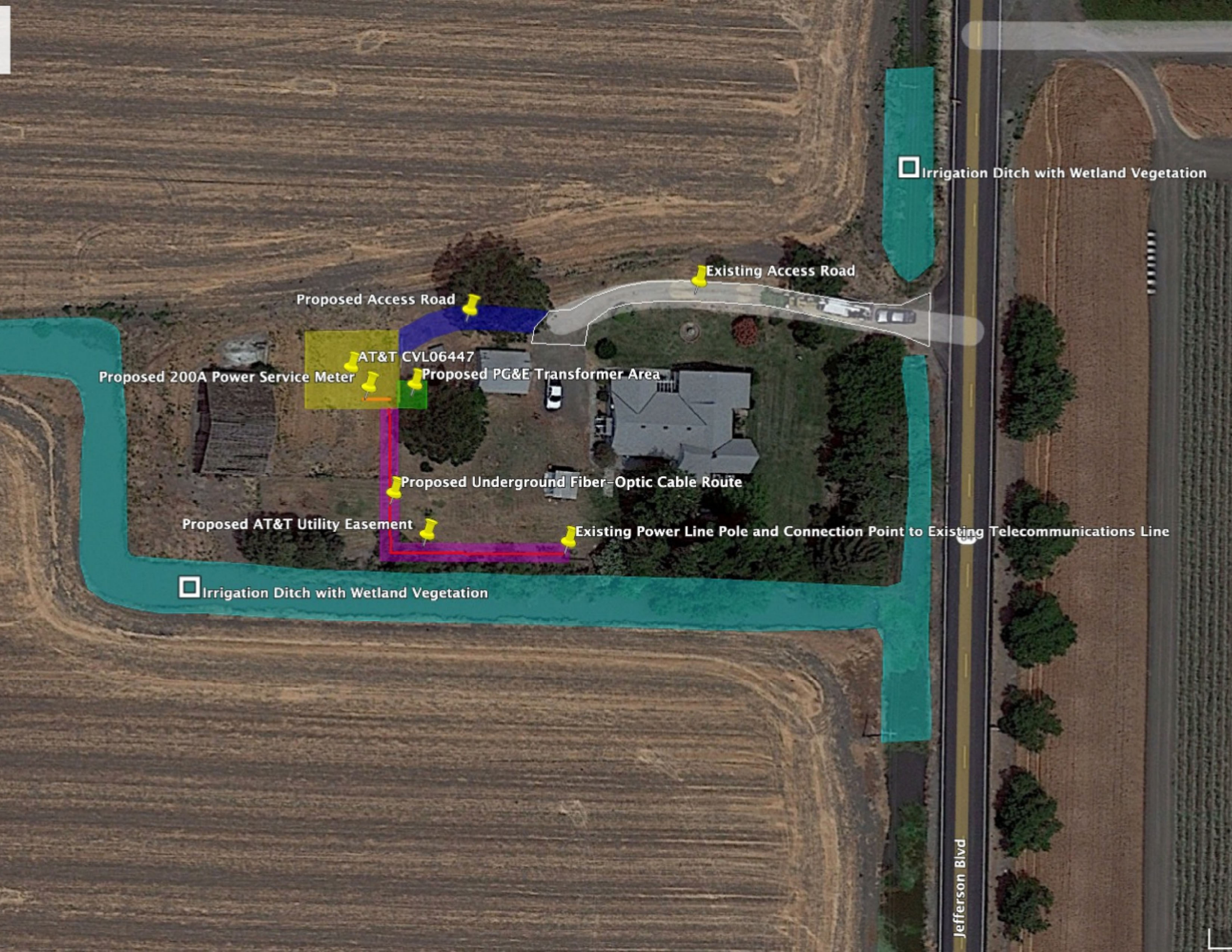
FIGURE 3

CNDDB Species Occurrences in the Vicinity of Project Area

AT&T
2600 Camino Real
San Ramon, California 94583


Irrigation Ditch with Wetland Vegetation
Existing Access Road
Proposed Access Road
AT&T CVL06447
Proposed 200A Power Service Meter
Proposed PG&E Transformer Area
Proposed Underground Fiber-Optic Cable Route
Proposed AT&T Utility Easement
Existing Power Line Pole and Connection Point to Existing Telecommunications Line
Irrigation Ditch with Wetland Vegetation
Jefferson Blvd

Appendix B
List of Plant Species Observed During Biological Surveys

Common Name (Scientific Name)
Century plant (*Agave americana*)
Bur chervil (*Anthriscus caucalis*)
Slender wild oat (*Avena barbata*)
Common oats (*Avena sativa*)
Black mustard (*Brassica nigra*)
Rescue brome (*Bromus catharticus*)
Soft chess (*Bromus hordeaceus*)
Smooth brome (*Bromus inermis*)
White goosefoot (*Chenopodium album*)
Poison hemlock (*Conium maculatum*)
Field bindweed (*Convolvulus arvensis*)
Globe artichoke (*Cynara cardunculus var. scolymus*)
Bermuda grass (*Cynodon dactylon*)
Broadleaf filaree (*Erodium botrys*)
Red-stem filaree (*Erodium cicutarium*)
Fig (*Ficus carica*)
Mexican ash (*Fraxinus uhdei*)
Curlycup gumweed (*Grindelia squarrosa*)
Common sunflower (*Helianthus annuus*)
Bristly oxtongue (*Helminthotheca echioides*)
Hare barley (*Hordeum murinum spp. leporinum*)
Spanish bluebells (*Hyacinthoides hispanica*)
Black walnut (*Juglans nigra*)
English walnut (*Juglans regia*)
Perennial pepperweed (*Lepidium latifolium*)
Common mallow (*Malva neglecta* Wallr.)
Cheeseweed (*Malva parviflora*)
Alfalfa (*Medicago sativa*)
Yellow sweet clover (*Melilotus officinalis*)
Pennyroyal (*Mentha pulegium*)
Oleander (*Nerium oleander*)
Hooker's evening primrose (*Oenothera elata*)
Prickly pear cactus (*Opuntia cochenillifera*)
Bristly ox tongue (*Picris echioides*)
Torrey pine (*Pinus torreyana*)
English plantain (*Plantago lanceolata*)
Common plantain (*Plantago major*)
European plum (*Prunus domestica*)
Pyracantha (*Pyracantha angustifolia*)
Radish (*Raphanus sativus*)
China rose (*Rosa chinensis*)
Himalayan blackberry (*Rubus bifrons*)
Curly dock (*Rumex crispus*)
Sandbar willow (*Salix exigua*)
Softstem bulrush (*Schoenoplectus acutus*)
Redwood (*Sequoia sempervirens*)

Blessed milkthistle (*Silybum marianum*)
Dandelion (*Taraxacum officinale*)
Narrow-leaved cattail (*Typha angustifolia*)
California bay (*Umbellularia californica*)
Mexican fan palm (*Washingtonia robusta*)

Appendix C
Site Photos

Proposed tower site. View looking south from northern edge.

Proposed utility easement south of project site. View looking east.

Proposed utility easement south of project site. View looking west from existing connection point to telecommunications line.

Existing access road to project site. View looking west from connection point of access road with Jefferson Boulevard.

Agricultural drainage ditch south of proposed project site. View looking east along canal.

Appendix D
Engineering Drawings

BOGLE

CA017
38300 JEFFERSON BLVD
CLARKSBURG, CA 95612

LATITUDE: 38° 22' 49.80"
LONGITUDE: 121° 35' 03.42"
ELEVATION: 2.00' AMSL

SITE NUMBER: CVL06447
SEARCH RING NAME: XXX
SITE NAME: CLARKSBURG ROAD
ADDRESS: 38300 JEFFERSON BLVD, CLARKSBURG, CA 95612

JURISDICTION: YOLO COUNTY
SITE TYPE: MONOPOLE/SHELTER
FA#: 00000000
PTN#: XXX
USID#: XXXXXX
EQUIPMENT: (12) ANTENNAS AT 136' RAD CENTER &
(21) REMOTE RADIO UNITS
(4) RAYCAPS, (10) DC PWR TRNK &
(3) FIBER CABLES
(1) WALK IN CABINET
(1) 30KW DIESEL EMERGENCY BACKUP GENERATOR

AT&T SITE INFORMATION

1. CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING CONDITIONS, AND DIMENSIONS OF THE JOB SITE PRIOR TO STARTING WORK, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK OR BE RESPONSIBLE FOR THE SAME.

2. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

3. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR WORK PROCEEDING IN A SAFE AND ORDERLY MANNER IN ACCORDANCE WITH THE APPLICABLE CODES AND REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION. CONTRACTOR AND/OR THEIR EMPLOYEES MUST IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER OF ANY NECESSARY CHANGES TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.

4. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

5. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.

6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

7. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE IMPLEMENTATION ENGINEER AND WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE.

8. KEEP GENERAL AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS AND RUBBISH. REMOVE ALL EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST OR SMUDGES OF ANY NATURE.

9. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC.. DURING CONSTRUCTION. UPON COMPLETION OF WORK CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.

10. THESE DRAWINGS ARE FORMATTED FOR 24"x36" (SIZE D). DO NOT SCALE OTHER SIZED VERSIONS OF THESE DRAWINGS.

11. THE FACILITY IS AN UNOCCUPIED DIGITAL TELECOMMUNICATION FACILITY.

12. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

13. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.

14. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.

15. CONTRACTOR SHALL CONTACT USA BEFORE PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.

16. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH U.L. LISTED AND FIRE CODE APPROVED MATERIALS.

17. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2–A OR 2–A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT AREA DURING CONSTRUCTION.

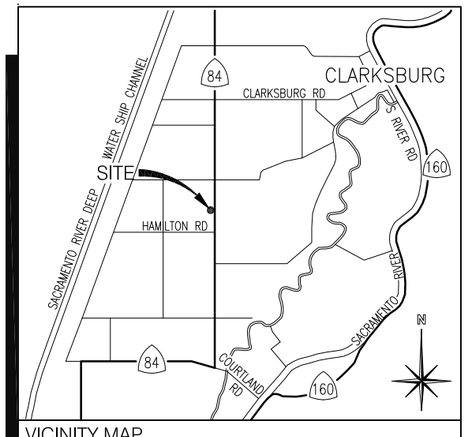
18. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CHAPTER 23 OF THE UBC REGARDING EARTHQUAKE PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS AND MECHANICAL EQUIPMENT. ALL WORK MUST BE IN ACCORDANCE WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.

19. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.

20. REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWING (SHEET C–1), SHALL NOT BE USED TO IDENTIFY OR ESTABLISH THE BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT/ENGINEER.

21. PENETRATIONS OF ROOF MEMBRANES SHALL BE PATCHED/FLASHED AND MADE WATERTIGHT USING LIKE MATERIALS IN ACCORDANCE WITH NRCA ROOFING STANDARDS AND DETAILS. CONTRACTOR SHALL OBTAIN DETAILING CLARIFICATION FOR SITE–SPECIFIC CONDITIONS FROM ARCHITECT/ENGINEER, IF NECESSARY, BEFORE PROCEEDING.

GENERAL NOTES



VICINITY MAP

1015 AIRPORT RD
RIO VISTA, CA 94571

–TAKE HWY 12 EAST TO HWY 160 N
–HWY 160 N TO SUTTER SLOUGH BRIDGE RD / S RIVER RD
–MAKE LEFT ONTO COURTLAND RD W
–MAKE RIGHT ONTO HWY 84 N (JEFFERSON BLVD)
–COME TO ADDRESS 38300 JEFFERSON BLVD ON LEFT

38300 JEFFERSON BLVD
CLARKSBURG, CA 95612

DIRECTIONS

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

2016 CALIFORNIA ADMINISTRATIVE CODE (INCL. TITLES 24 & 25)	2015 INTERNATIONAL BUILDING CODE (IBC)
2016 CALIFORNIA BUILDING CODES	2015 INTERNATIONAL FIRE CODE (IFC)
2016 CALIFORNIA MECHANICAL CODES	2015 UNIFORM PLUMBING CODE (UPC)
2016 CALIFORNIA PLUMBING CODES	2015 UNIFORM MECHANICAL CODE (UMC)
2016 CALIFORNIA ELECTRICAL CODES	LOCAL BUILDING CODES
ANSI / EIA–222 G	CITY / COUNTY ORDINANCES

ALONG WITH ANY OTHER APPLICABLE LOCAL AND STATE LAWS AND REGULATIONS.

APPLICABLE CODES

SITE NAME:	BOGLE
PSL#	CA017
SITE ADDRESS:	38300 JEFFERSON BLVD CLARKSBURG, CA 95612
APPLICANT:	RIVERVIEW MANAGEMENT GROUP 1015B AIRPORT RD RIO VISTA, CA 94571
PROPERTY OWNER:	BOGLE VINEYARDS 49762 HAMILTON RD CLARKSBURG, CA 95612
CONTACT:	SALOMON MARTINEZ PH: 209–601–3781
A.P.N.	043–310–010
CURRENT ZONING:	AN
JURISDICTION:	YOLO COUNTY

PROJECT SUMMARY

ARCHITECTURAL/ENGINEERING/SURVEYING

RIVERVIEW MANAGEMENT GROUP
1015B AIRPORT RD
RIO VISTA, CA 94571
PH: 209–601–3781
FAX: (707) 374–6194
CONTACT: SAL MARTINEZ

GILBERT LABRIE, AIA ARCHITECT
CA LIC. NO. C7880
EMAIL: architect@labrie.com

PROJECT TEAM

- (1) PROPOSED 140' COLOCATABLE MONOPOLE
- (1) CARRIER RAD CENTERS @ 136'
  (1) BOGLE COMMUNIATION ARRAY @ 126'
  (2) FUTURE CARRIER RAD CENTERS @ 116' & 106'
- (4) 8' ANTENNAS PER SECTOR
  (3) SECTORS (TOTAL OF 12 ANTENNAS PER RAD CENTER)
- (±28) RRUS PER CARRIER @ RAD CENTERS
- (±3) RAYCAPS PER CARRIER @ RAD CENTERS
- EQUIPMENT CABINETS AS SHOWN ON SITE PLAN
- CHAIN–LINK FENCE AND SLATS

PROJECT DESCRIPTION

SHT. NO.	DESCRIPTION
T–1	TITLE SHEET
T–2	SITE SIGNAGE
T–3	BATTERY SPEC
C–1	SURVEY
A–1	PROPOSED OVERALL SITE PLAN & SITE LAYOUT
A–2	PROPOSED AT&T ANTENNA LAYOUT AND DETAILS
A–3	ELEVATIONS
A–4	WALK IN CABINET AND DETAILS
A–5	GENERATOR SPECS

SHEET INDEX

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RIO VISTA, CA 95691

BOGLE VINEYARDS
49762 HAMILTON RD,
CLARKSBURG, CA 95612

at&t
5001 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

CA017 BOGLE

38300 JEFFERSON BLVD
CLARKSBURG, CA 95612
YOLO COUNTY

STAMP:

DRAWN BY: SMJR

CHECKED BY: GL

NO	DATE	ISSUE
1	09.18.19	PRELIM ZDS
2	02.02.20	100% ZONING DWGS
3	07.14.20	90% ZONING DWGS REV D
4	11.02.20	90% ZONING DWGS REV D

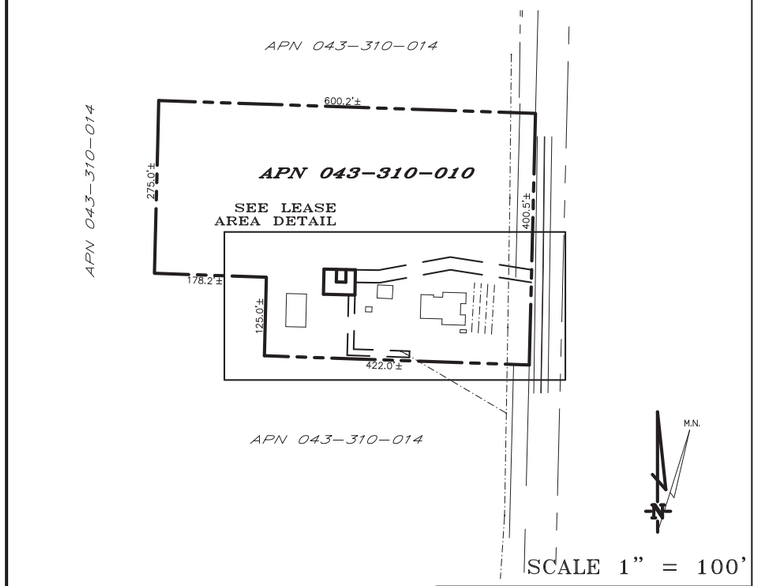
SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

JOB #: WD



SCALE 1" = 100'

OVERALL PROJECT AREA

DATE OF SURVEY: 09-30-20

SURVEYED BY OR UNDER DIRECTION OF: KENNETH D. GEIL, R.C.E. 14803

LOCATED IN THE COUNTY OF YOLO, STATE OF CALIFORNIA

BEARINGS SHOWN ARE BASED UPON MONUMENTS FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY.

ELEVATIONS SHOWN ON THIS PLAN ARE BASED UPON U.S.G.S. N.A.V.D. 88 DATUM. ABOVE MEAN SEA LEVEL.

N.G.V.D. 1929 CORRECTION: SUBTRACT 2.47' FROM ELEVATIONS SHOWN.

CONTOUR INTERVAL: N.A.

FEMA FLOOD ZONE "A" PER FIRM 06113C0740G DATED 06-18-2010 NO BASE FLOOD ELEVATION NOTED ON FIRM

CONTRACTOR IS RESPONSIBLE TO VERIFY LEASE AREA PRIOR TO CONSTRUCTION.

ASSESSOR'S PARCEL NUMBER: 043-310-010

OWNER(S): BOGLE FAMILY LIMITED PARTNERSHIP
49762 HAMILTON RD.
CLARKSBURG, CA 95612

Project Name: CVL06447

Project Site Location: 38300 Jefferson Blvd.
Clarksburg, CA 95612
Yolo County

Assessor's Parcel No.: 043-310-010

Date of Observation: 10-01-20

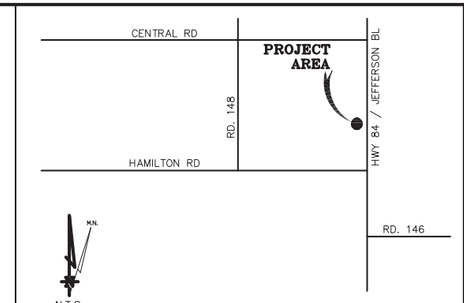
Equipment/Procedure Used to Obtain Coordinates: Trimble GeoXT post processed with Pathfinder Office software.

Type of Antenna Mount: Proposed Monopole

Coordinates:
Latitude: N 38°22'49.80" (NAD83) N 38°22'50.12" (NAD27)
Longitude: W 121°35'03.42" (NAD83) W 122°35'59.58" (NAD27)

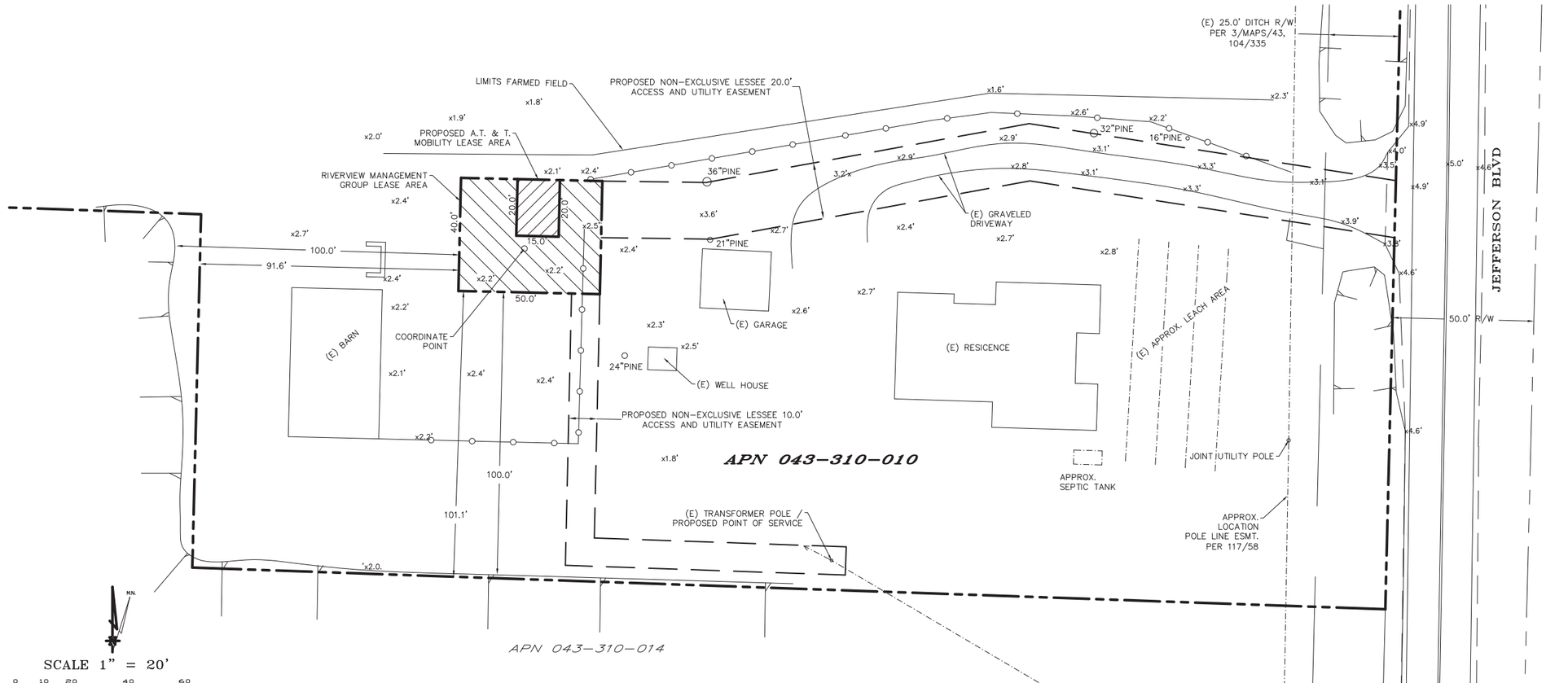
Latitude: N 38.380500° (NAD83) N 38.380589° (NAD27)
Longitude: W 121.584283° (NAD83) W 122.599883° (NAD27)

ELEVATION of Ground at Structure (NAVD88) 2' AMSL



VICINITY MAP

BOUNDARY SHOWN IS BASED ON MONUMENTATION FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP WITH PROPERTY LINES AND EASEMENTS BEING A GRAPHIC DEPICTION BASED ON INFORMATION GATHERED FROM VARIOUS SOURCES OF RECORD AND AVAILABLE MONUMENTATION FOUND DURING THE FIELD SURVEY. NO EASEMENTS WERE RESEARCHED OR PLOTTED. PROPERTY LINES AND LINES OF TITLE WERE NOT INVESTIGATED NOR SURVEYED. NO PROPERTY MONUMENTS WERE SET.



SCALE 1" = 20'

0 10 20 40 60

LEASE AREA DETAIL

DEPT | APPROVED | DATE
A&C
RE
RF
INT
EE\IN
OPS
EE\OUT

Surveyor
GEIL ENGINEERING
ENGINEERING • SURVEYING • PLANNING
1228 HIGH STREET
AUBURN, CALIFORNIA 95603
Phone: (530) 885-0406
Fax: (530) 823-1399

Surveyor

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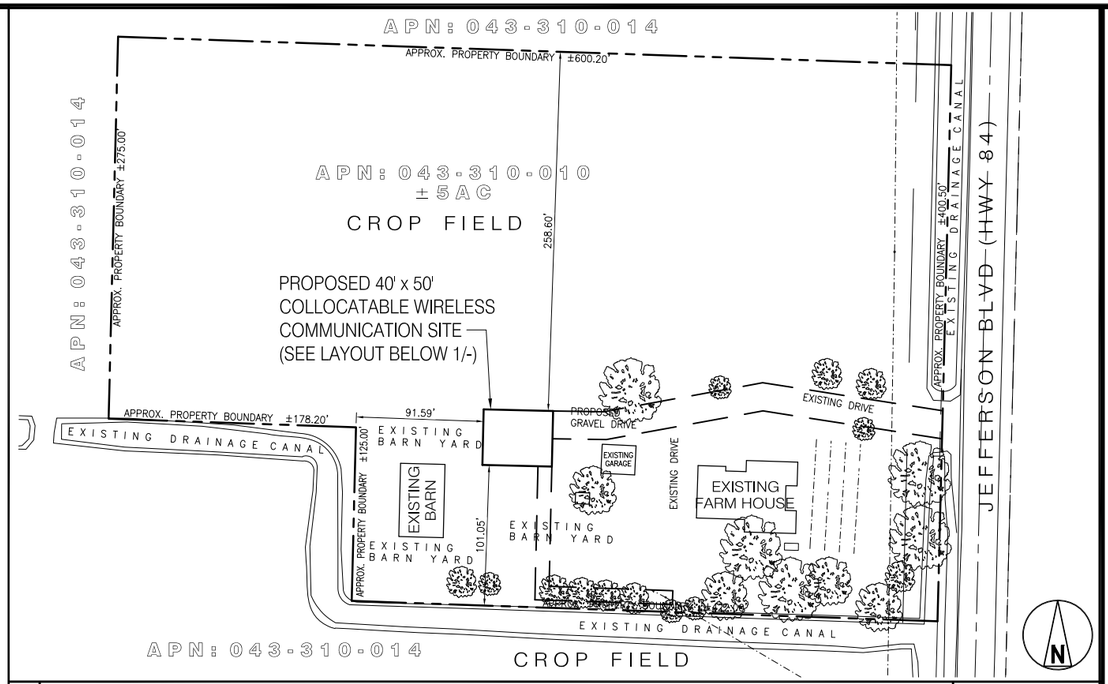
RIVERVIEW MANAGEMENT GROUP
1015B AIRPORT RD
RIO VISTA, CA 95691

38300 Jefferson Blvd.
Clarksburg, CA 95612

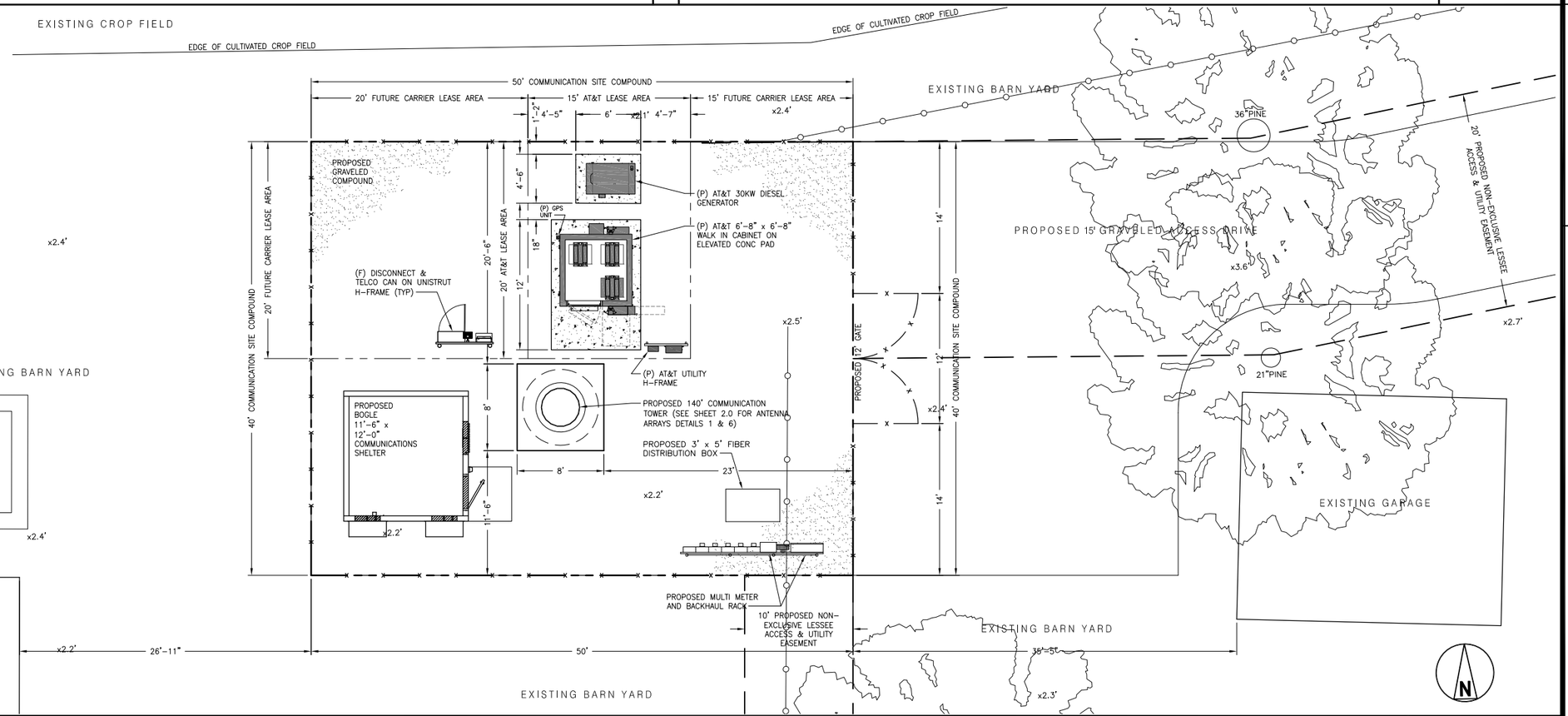
PLOT PLAN AND
SITE TOPOGRAPHY

REVISIONS
10-02-20 Initial Submittal DG
10-21-20 corr. apn DG

Sheet C-1



2 **PROPOSED OVERALL SITE PLAN** SCALE: 1" = 50'



1 **PROPOSED ENLARGED SITE LAYOUT** SCALE: 3/16" = 1'-0"

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YOLO COUNTY

STAMP:

DRAWN BY: SMJR

CHECKED BY: GL

NO	DATE	ISSUE
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2	02.02.20	100% ZONING DWGS
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4	11.02.20	90% ZONING DWGS REV D

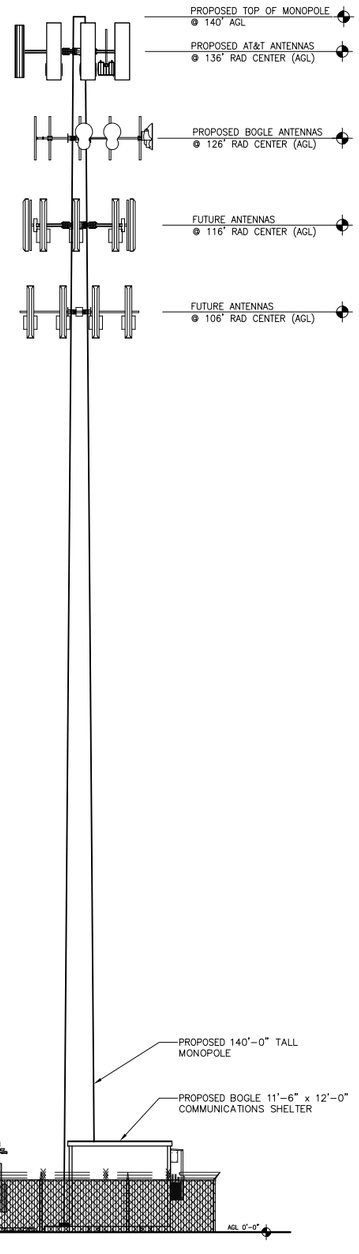
SHEET TITLE

PROPOSED SITE LAYOUT

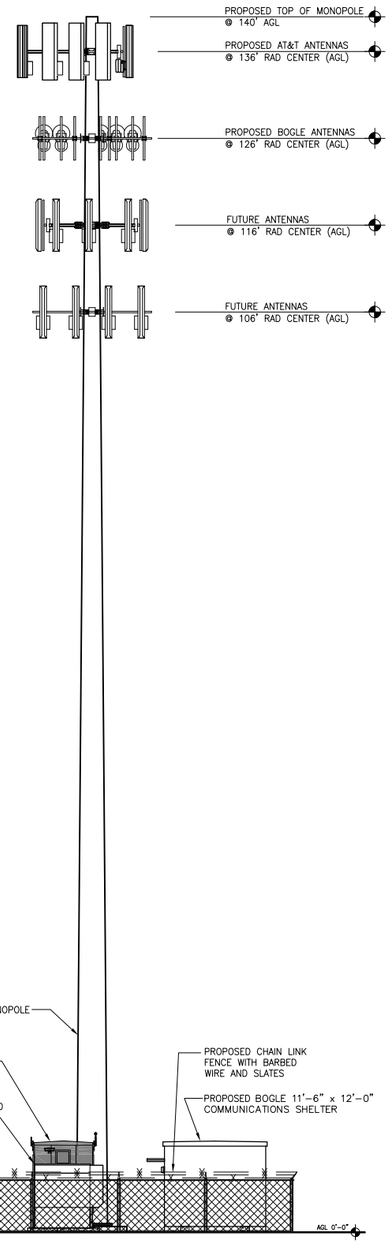
SHEET NUMBER

A-1

JOB #: WD



2 PROPOSED WEST ELEVATION — SCALE: 1/8" = 1'-0"



1 PROPOSED NORTH ELEVATION — SCALE: 1/8" = 1'-0"

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4	11.02.20	90% ZONING DWGS REV D

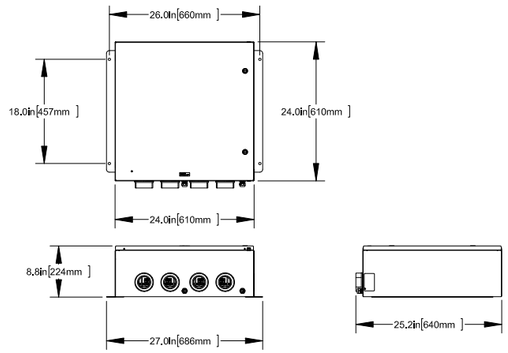
SHEET TITLE

ELEVATIONS

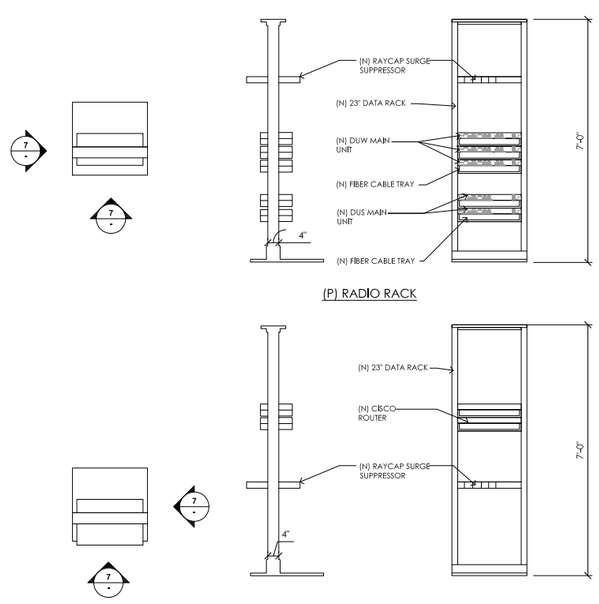
SHEET NUMBER

A-3

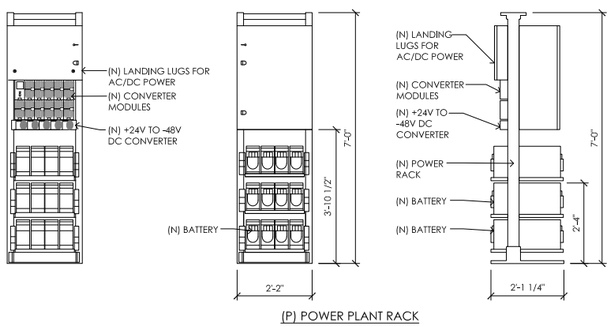
JOB #: WD



8 RAYCAP DC12-48-60-0-25E — SCALE: 1" = 1'-0"

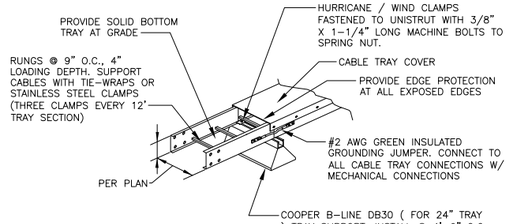


7 INTERIOR RADIO + TRANSPORT RACKS — SCALE: N.T.S.



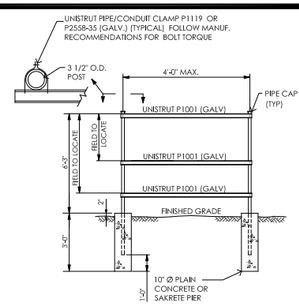
6 INTERIOR POWER PLANT + BATTERY RACK — SCALE: N.T.S.

NOTE:
WHEN CABLE TRAY COVERS ARE SPECIFIED, THEY SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTALLATION PROCEDURES AND INSTRUCTIONS FOR 'HIGH WIND CONDITIONS'. THIS INCLUDES CONNECTOR TYPE AND SPACING.

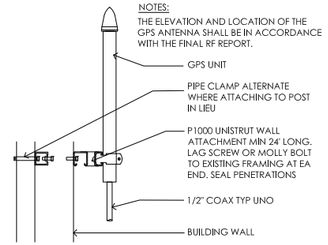


NOTES:
1. RUN #2 AWG BCW GROUND CONDUCTOR ALONG OUTSIDE OF CABLE TRAY PER ELEC. AND GROUNDING AT BOTH ENDS
2. CABLE TRAYS SHALL BE FREE OF SHARP OBJECTS AND BURRS WHICH COULD INJURE CABLES. COVERS SHOULD BE FASTENED USING HOLD DOWN CLIPS. SHEET METAL SCREWS ARE NOT ACCEPTABLE.
3. PROVIDE HURRICANE / WIND CLAMPS EACH SIDE, EACH SUPPORT BLOCK

5 CABLE TRAY DETAIL — SCALE: 3/4" = 1'-0"



4 H-FRAME MOUNT — SCALE: 3/4" = 1'-0"



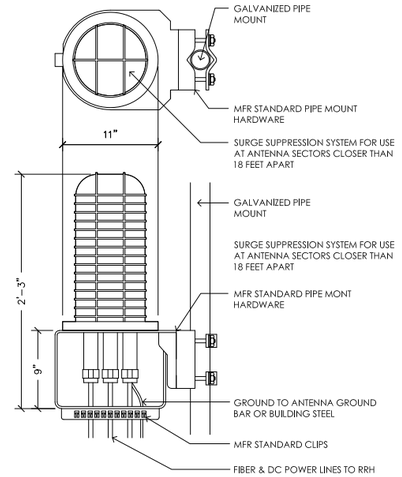
3 GPS MOUNT — SCALE: 3/4" = 1'-0"

RAYCAP DC6-48-60-18-8F & DC6-48-60-0-8F
SURGE SUPPRESSION SOLUTION

COLOR: BLACK/SILVER

DIMENSIONS: 11" DIA X 27" TALL W/ 9" BASE

WEIGHT: +/- 50 LBS. (INCLUDING MOUNTING HARDWARE)



2 DC POWER CONN. — SCALE: 1 1/2" = 1'-0"

1 WALK IN CABINET (WIC) — SCALE: 1/2" = 1'-0"

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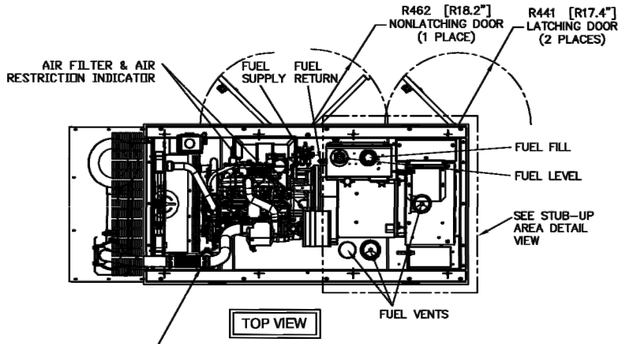
4	11.02.20	90% ZONING DWGS REV D

SHEET TITLE
WIC ELEVATIONS + DETAILS

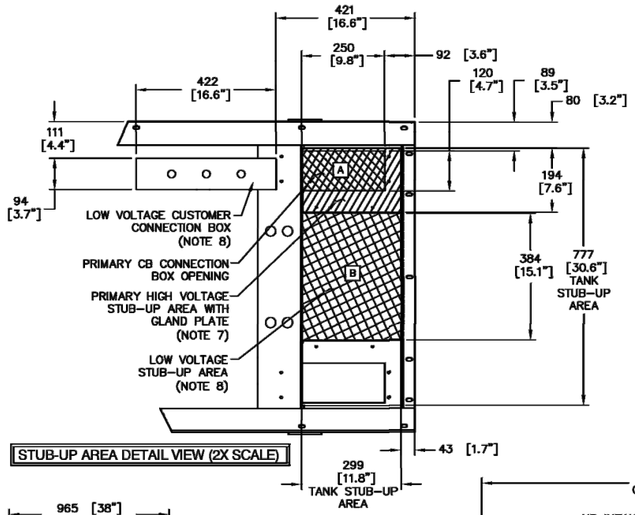
SHEET NUMBER
A-4

JOB #: WD

0J7500B



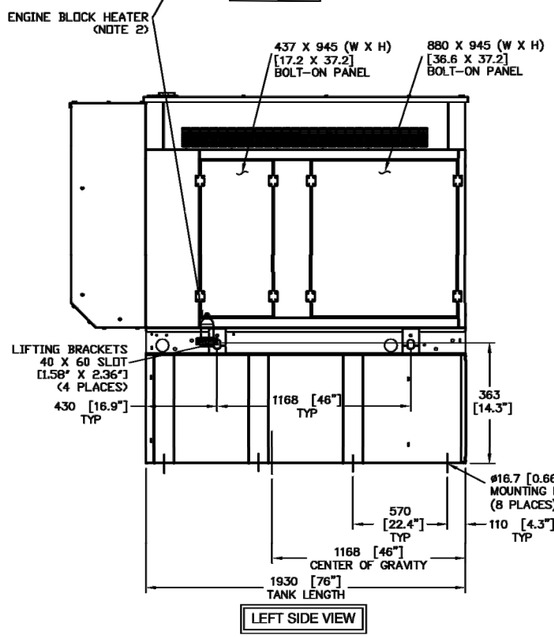
TOP VIEW



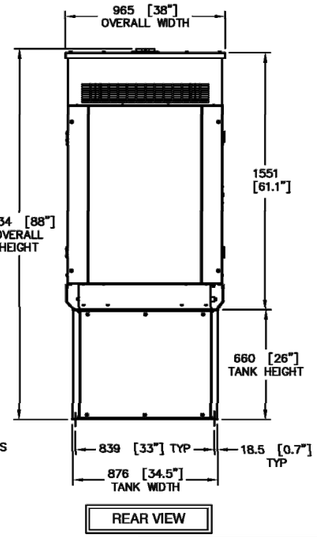
STUB-UP AREA DETAIL VIEW (2X SCALE)

RECOMMENDED ELECTRICAL STUB-UPS
(SEE DETAILED VIEW & TOP VIEW)

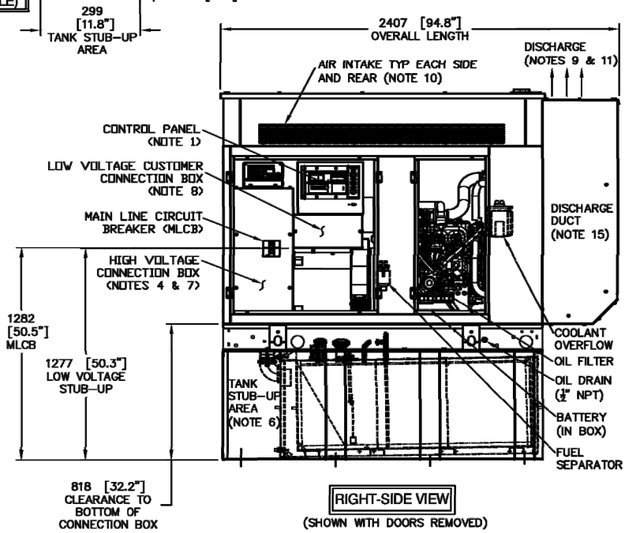
DESCRIPTION	INSIDE BASE
HIGH VOLTAGE STUB-UP AREA 1) AC LOAD LEAD CONDUIT AREA. 2) 120/240 VAC FROM UTILITY (BY OTHERS) (GLAND PLATE INCLUDED)	A
LOW VOLTAGE STUB-UP AREA 1) TRANSFER SWITCH/ COMMUNICATION CONDUITS. COMMUNICATIONS AND 2-WIRE START MUST NOT BE RUN IN CONDUIT WITH AC WIRING. (SEE NOTE 8)	B



LEFT SIDE VIEW



REAR VIEW



RIGHT-SIDE VIEW
(SHOWN WITH DOORS REMOVED)

NOTES:

1. CONTROL PANEL INCLUDES BATTERY CHARGER WITH THREE PRONG CORD.
2. 1500W 120VAC ENGINE BLOCK HEATER WITH THREE PRONG CORD.
3. 12 VOLT NEGATIVE GROUND SYSTEM.
4. GENERATOR MUST BE GROUNDED.
5. CENTER OF GRAVITY & WEIGHT MAY SHIFT SLIGHTLY DUE TO UNIT OPTIONS.
6. STUB-UPS: BASE TANK REQUIRES ALL STUB-UPS TO BE IN THE REAR TANK STUB-UP AREA.
7. HIGH VOLTAGE STUB-UP AREA INCLUDES THE AC LOAD LEAD CONNECTION TO THE MAIN LINE CIRCUIT BREAKER, THE NEUTRAL CONNECTION, AND AUXILIARY 120/240V CONNECTION.
8. CONNECTION POINTS FOR CONTROL WIRES. BOTTOM OF LOW VOLTAGE CUSTOMER CONNECTION BOX HAS KNOCKOUTS FOR 1/2" AND 3/4" CONDUIT FITTINGS.
9. MUST ALLOW FREE FLOW OF DISCHARGE AIR AND EXHAUST. SEE SPEC SHEET FOR MINIMUM AIR FLOW AND MAXIMUM RESTRICTION REQUIREMENTS.
10. MUST ALLOW FREE FLOW OF INTAKE AIR. SEE SPEC SHEET FOR MINIMUM AIR FLOW AND MAXIMUM RESTRICTION REQUIREMENTS.
11. GENERATOR MUST BE INSTALLED SUCH THAT FRESH COOLING AIR IS AVAILABLE AND THAT DISCHARGE AIR FROM THE RADIATOR IS NOT RECIRCULATED.
12. IT IS THE RESPONSIBILITY OF THE INSTALLATION TECHNICIAN TO ENSURE THAT THE GENERATOR INSTALLATION COMPLIES WITH ALL APPLICABLE CODES, STANDARDS, AND REGULATIONS.
13. 132 GALLON USEABLE CAPACITY BASETANK IS INCLUDED WITH GENERATOR.
14. UNIT IS SHIPPED WITH FUEL SUPPLY AND RETURN LINES DISCONNECTED AND PLUGGED BETWEEN ENGINE AND FUEL TANK. THIS HAS BEEN DONE TO FACILITATE PRESSURE TESTING OF THE TANK IN THE FIELD. FOR INFORMATION REGARDING CONNECTING THE FUEL SUPPLY AND RETURN LINES PRIOR TO START UP, SEE THE FUEL TANK FIELD TESTING PROCEDURE (0E5082) SUPPLIED IN THE TANK LOOSE VENTS KIT, WHICH IS SHIPPED WITH THIS GENERATOR.
15. SEE DRAWING 0C3850 FOR DISCHARGE DUCT REMOVAL. REMOVAL OF DUCT WILL PROVIDE ACCESS TO MUFFLER FOR SERVICING.

WEIGHT DATA: (INCLUDES EMPTY FUEL TANK)
GENERATOR: 1318 KG (2905 LBS)
GENERATOR WITH WOODEN SHIPPING SKID: 1377 KG (3035 LBS)

UNITS: mm [INCHES]

INSTALLATION DRAWING

INSTALL SD030

DIESEL 2.4L G16

L2A Y02 SSM

132 GAL BASETANK*

ISSUE DATE: 01/15/14

GENERAC POWER SYSTEMS
Waukesha
P.O. BOX 8
WAUKESHA, WIS. 53187

FILE NAME 0J7500B-B.DWG | SIZE B

SCALE 1 = 30 | FIRST USE 0066710

DWG NO. 0J7500B | REV B

*OPTIONAL 190 GAL BASETANK
(HEIGHT OF UNIT SHALL INCREASE BY
11" WITH SAME WIDTH AND LENGTH)

RMG
RIVERVIEW MANAGEMENT GROUP
1015B AIRPORT RD
RIO VISTA, CA 95691

BOGLE VINEYARDS
49762 HAMILTON RD,
CLARKSBURG, CA 95612

at&t
5001 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

CA017 BOGLE
38300 JEFFERSON BLVD
CLARKSBURG, CA 95612
YOLO COUNTY

STAMP:

DRAWN BY: SMJR

CHECKED BY: GL

NO	DATE	ISSUE
1	09.18.19	PRELIM ZDS
2	02.02.20	100% ZONING DWGS
3	07.14.20	90% ZONING DWGS REV D
4	11.02.20	90% ZONING DWGS REV D

SHEET TITLE
GENERATOR SPECS

SHEET NUMBER
A-5

JOB #: WD

Appendix E
Biologist Profile

Cord E. Hute, Principal, Senior Project Principal Biologist Principal Environmental Planner

Mr. Hute has 23 years of experience in environmental permitting, planning, biological surveys, biological monitoring, and project management. His expertise includes environmental planning and project permitting; aquatic and terrestrial ecological surveys; endangered species surveys; Environmental Impact Reports (EIRs) and Environmental Impact Statements (EISs) under CEQA and NEPA; Biological Assessments and Environmental Assessments (EAs); environmental oversight/monitoring of construction projects; state and federal Endangered Species Act (ESA) consultations; wetland delineation and permitting; and wetland mitigation. He has provided services to both the private and public sectors— including telecommunications, utilities, oil and gas, public transportation projects, and residential and commercial development.

Cord has adeptly handled planning, permitting, and construction-monitoring projects throughout California, Nevada, Utah, Arizona, and New Mexico. He has managed and prepared innumerable environmental documents required to satisfy local, state, and federal agencies. And he has consulted and successfully negotiated with a variety of agencies, including the U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), Bureau of Land Management (BLM), NOAA Fisheries, California Department of Fish and Game (CDFG), California Regional Water Quality Control Boards (RWQCB), California State Lands Commission (CSLC), California Public Utilities Commission (CPUC), and the San Francisco Bay Conservation and Development Commission (BCDC).

Fields of Competence

- Regulatory permitting
- NEPA and CEQA compliance
- Wetland and water course delineation
- Threatened and Endangered species consultations
- Botanical and wildlife field surveys
- Biological, habitat, and environmental assessments
- Regulatory and resource agency consultations and negotiations
- Environmental oversight and monitoring of construction projects
- Clean Water Act Section 401 and 404 compliance
- Mitigation and monitoring plans
- Horizontal directional drilling impacts and mitigation
- Project management

Education

- B.S., Environmental Science and Biology, University of Dubuque, 1995

Professional Affiliations

- Society of Wetland Scientists
- Society for Ecological Restoration
- The Wildlife Society

Key Projects

Pacific Gas and Electric (PG&E) Intergrated Vegetation Management Program Project (2016 - Present), Butte, Plumas, and Yuba Counties, California. As a consultant to North State Forestry and PG&E, conducted special-status plant and frog surveys, nesting avian surveys, and water quality sampling for the PG&E Integrated Vegetation Management Program within the Plumas National Forest. Monitored vegetation clearing and herbicide application activities after completion of biological surveys. Managed a crew of 6 biologists to complete the project tasks.

Pacific Gas and Electric (PG&E) Intergrated Vegetation Management Program Project (2013 - Present), Sonoma, Alameda, Contra Costa, Butte, Plumas, and Yuba Counties, California. As a consultant to High Country Forestry, conducted special-status plant, frog, and nesting avian surveys for the PG&E Integrated Vegetation Management Program within multiple Counties within California. Monitored vegetation clearing and herbicide application activities after completion of biological surveys. Managed a crew of biologists to complete the project tasks.

Bottlerock Energy Nesting Avian Species Surveys (2010-Present), The Geysers, Lake County, California. In support of Bottlerock Energy's compliance with California Energy Commission's permit to operate their geothermal power plant in the Geyser's, Lake County, California, provided yearly nesting avian species surveys for 104 constructed wooden nesting boxes and surrounding forest habitat. Surveys have included three (3) rounds of surveys per year between April and May of the year. Nesting avian species identified during the efforts included ash-throated flycatcher, chestnut-backed chickadee, tree swallows, violet green swallow, western bluebird, and red-tailed hawk. As part of the survey effort, prepared an annual survey report for submission to the California Energy Commission.

Crown Castle California State-Wide Fiber-Fed Distributed Antenna Communications System Projects (2016 - Present), Los Angeles, Orange, Riverside, San Diego, San Mateo, San Luis Obispo, Monterey, Santa Barbara, Ventura, San Francisco, Alameda, Contra Costa, and San Joaquin Counties, California. Conducted biological and archaeological studies and surveys for over 5,000 individual fiber trenching, boring, pole placement, and node locations. Prepared biological and archeological technical reports for the studied locations for submission to the CPUC. Prepared CEQA analysis for project that complied with CPUC requirements and guidelines. Prepared and submitted Section 106 SHPO packages for numerous pole locations. Consulted with local, state, and federal resource agencies. Participated in the CPUC CEQA environmental review process for the projects.

AT&T St. Mary's College Cell Tower Installation Project (2015 and 2018), San Ramon, Contra Costa County, California. Conducted biological surveys of proposed project site. Prepared biological resources survey report for proposed project. Consulted with local, state, and federal resource agencies.

Crown Castle San Diego County (Lake Murray, Caso Serra, and Blue Cypress Projects) Fiber-Fed Distributed Antenna Communications System Project (2016), San Diego County, California. Conducted biological and archaeological studies and surveys for 40 individual fiber trenching locations within the City of San Diego, California. Prepared biological and archeological technical reports for the studied locations for submission to the CPUC. Prepared CEQA analysis for project that complied with CPUC requirements and guidelines. Consulted with local, state, and federal resource agencies. Participated in the CPUC CEQA environmental review process for the project.

Crown Castle Palo Alto Fiber-Fed Distributed Antenna Communications System Project (2016), Palo Alto, Santa Clara County, California. Conducted biological and archaeological studies and surveys for 20 individual fiber trenching locations. Prepared biological and archeological technical reports for the studied locations for submission to the CPUC. Prepared CEQA analysis for project that complied with CPUC requirements and guidelines. Consulted with local, state, and federal resource agencies. Participated in the CPUC CEQA environmental review process for the project.

Crown Castle Pacific Grove Fiber-Fed Distributed Antenna Communications System Project (2016), Pacific Grove, Monterey County, California. Conducted biological and archaeological studies and surveys for 12 individual fiber trenching locations within the City of Pacific Grove, California. Prepared biological and archeological technical reports for the studied locations for submission to the CPUC. Prepared CEQA analysis for project that complied with CPUC requirements and guidelines. Consulted with local, state, and federal resource agencies. Participated in the CPUC CEQA environmental review process for the project.

Horizon Tower, LLC. Napa Valley expo Communications Tower Installation Project, City of Napa, Napa County, California. In support of project, conducted biological surveys of the project area and prepared a biological assessment report. Prepared a draft Initial Study/Negative Declaration for submittal to the 25th District Agricultural Association. Consulted with local, state, and federal agencies regarding the proposed project.

Crown Castle San Diego County Fiber-Fed Distributed Antenna Communications System Project (2014-2015), San Diego County, California. Conducted biological and archaeological studies and surveys for 141 individual fiber trenching locations throughout San Diego County. Prepared biological and archeological technical reports for the studied locations for submission to the CPUC. Prepared CEQA analysis for project that complied with CPUC requirements and guidelines. Consulted with local, state, and federal resource agencies. Participated in the CPUC CEQA environmental review process for the project.

New Path Networks City of Temecula/Murrieta Fiber-Fed Distributed Antenna Communications System Project: Cities of Temecula/Murrieta, Western Riverside County, California. Prepared a Proponent's Environmental Assessment for the installation of fiber-fed distributed antenna communications systems within the Cities of Temecula and Murrieta in western Riverside County, California. Managed the environmental planning of the proposed project. Consulted with local, state, and federal resource agencies. Conducted biological surveys of the proposed project areas. Participated in the CPUC CEQA environmental review process for the project.

***Pacific Gas and Electric Company Nesting Avian Species Surveys and Wetland Streamcourse Delineations (2014-2015), The Geysers, Sonoma and Lake County, California*.** Under contract to High Country Forestry, provided nesting avian species surveys and stream course/wetland delineation of vegetation planned for removal under power lines. In support of the project, prepared daily survey reports for submittal to High Country Forestry and Pacific Gas and Electric.

***Bottlerock Energy Nesting Avian Species Surveys (2010-2018), The Geysers, Lake County, California*.** In support of Bottlerock Energy's compliance with California Energy Commission's permit to operate their geothermal power plant in the Geyser's, Lake County, California, provided yearly nesting avian species surveys for 104 constructed wooden nesting boxes and surrounding forest habitat. Surveys have included three (3) rounds of surveys per year between April and May of the year. Nesting avian species identified during the efforts included ash-throated flycatcher, chestnut-backed chickadee, tree swallows, violet green swallow, western bluebird, and red-tailed hawk. As part of the survey effort, prepared an annual survey report for submission to the California Energy Commission.

Extenet Systems Highway 35 Distributed Antenna System Project, San Mateo County, California, Pre-Construction Nesting Avian Species Surveys (March 2011 through August 2013), San Mateo County, California. Prior to project implementation, prepared a Proponent's Environmental Assessment (CPUC-specific Initial Study and Mitigated Negative Declaration document) for the installation of fiber-fed distributed antenna communications systems within the Cities of Temecula and Murrieta in western Riverside County, California. Managed the environmental planning of the proposed project. Consulted with local, state, and federal resource agencies. Conducted biological surveys of the proposed project areas. Participated in the CPUC CEQA environmental review process for the project. Provided pre-construction nesting avian species surveys and active nest site monitoring for a 15-mile telecommunication project located in San Mateo County, California south of San Francisco. Nesting avian species identified during the efforts included long-eared owl, marbled murrelet, red-tailed hawk, western scrub jay, California quail, and acorn woodpecker. Managed the CPUC regulatory compliance program for the proposed project.

Foothills Resources, Inc. Grizzly Bluff Natural Gas Field Development Project Environmental Impact Report: Humboldt County, California.
As selected consultant to Humboldt County, completed sensitive species biological surveys, prepared biological assessment, conducted visual simulations, conducted air quality analysis, and prepared a programmatic and final environmental impact reports (EIR) for the project. Conducted public meetings required under CEQA. Consulted with regulatory agencies (including USACE, RWQCB, USFWS, CDFG, CPUC, CSLC, as well as others) during the preparation of the EIR and the public review process.

Bradford Island Levee Raising and Widening Project, Contra Costa County, California, Nesting Avian Species Surveys (2013-2015), Contra Costa County, California. In support of Reclamation District # 2059's levee improvement

project, provided yearly and pre-construction nesting avian species surveys for proposed work areas on Bradford Island in Contra Costa County, California. Recently finished pre-construction avian nesting surveys on April 17, 2014. Nesting avian species identified during the efforts included Swainson's hawk, red-tailed hawk, great horned owl, Barn swallow, common sparrow, red-winged blackbird, mourning dove, common grebe, American crow, cliff swallow, and western meadowlark. Provided avian nest monitoring during construction activities for the above species to ensure that no impacts occurred to actively nesting avian species.

Terminous Tract Levee Raising and Widening Project, San Joaquin County, California, Nesting Avian Species Surveys (2012-2014), San Joaquin County, California. In support of Reclamation District # 548's project, provided yearly and pre-construction nesting avian species surveys for proposed work areas on Terminous Tract in San Joaquin County, California. Nesting avian species identified during the efforts included Swainson's hawk, red-tailed hawk, Barn swallow, red-winged blackbird, mourning dove, American crow, and cliff swallow. Provided avian nest monitoring during construction activities for the above species to ensure that no impacts occurred to actively nesting avian species.

Sensitive Species Surveys, Biological Assessments, Wetland and Water Course Delineations, Environmental Permitting, CEQA/NEPA Analysis, and Environmental Monitoring for Various Exploratory Natural Gas Wells, Seismic Surveys, Natural Gas Pipelines, and Development of Natural Gas and Oil Fields: State of California. Between 2004 and 2019, conducted sensitive species protocol-level biological surveys for a number of threatened and endangered species, including blunt-nosed leopard lizard, giant kangaroo rat, San Joaquin antelope squirrel, San Joaquin kit fox, Southwestern willow flycatcher, California condor, and numerous plant species. Conducted nesting avian species surveys. Prepared and conducted biological assessments. Prepared numerous environmental permitting packages for submission to BLM, USACE, RWQCB, USFWS, CDFG, CPUC, CSLC, planning departments of Contra Costa, Solano, Glenn, San Joaquin, Colusa, Sutter, Sacramento, Kern, Kings, Monterey, San Luis Obispo, Santa Barbara, and Ventura Counties, and numerous cities within these counties. Secured permits and approvals from these permitting agencies. Consulted with local, state, and federal agencies regarding the proposed projects. Managed the preparation of, conducted CEQA/NEPA analysis for, and prepared sections for inclusion in environmental assessments, initial studies, mitigated negative declarations, environmental assessments, and environmental impact reports and studies. Conducted environmental training and compliance monitoring of projects.

Naftex, Inc. Oil and Natural Gas Exploration Project, Kern County, California. In support of oil and natural gas exploration activities within the Edison Area east of Bakersfield within BLM lands, conducted biological surveys for special-status plant and animal species (including San Joaquin kit fox, blunt-nosed leopard lizards, San Joaquin antelope squirrel, burrowing owls, giant, short-nosed, and Tipton, and Hermann's kangaroo rats, kern mallow, San Joaquin woolly-threads, California jewelflower, Hoover's woolly-star, Bakersfield cactus, and oil netstraw, as well as other species). Prepared biological assessment reports and BLM Sensitive Species Review Form in support of biological surveys conducted. Conducted pre-construction biological surveys for special-status species prior to implementation of project activities, and prepared reports documenting findings of surveys.

Daybreak Oil and Gas, Inc. Poso Creek New Bear and Sunday Oil and Natural Gas Exploration Project, Kern County, California. In support of oil and natural gas exploration activities within the Poso Creek Area northeast of Bakersfield, conducted biological surveys for special-status plant and animal species (including San Joaquin kit fox, blunt-nosed leopard lizards, San Joaquin antelope squirrel, burrowing owls, giant, short-nosed, and Tipton, and Hermann's kangaroo rats, kern mallow, San Joaquin woolly-threads, California jewelflower, Hoover's woolly-star, Bakersfield cactus, and oil netstraw, as well as other species). Prepared biological assessment report in support of biological surveys conducted. Conducted pre-construction biological surveys for special-status species prior to implementation of project activities, and prepared reports documenting findings of surveys.

E & B Natural Resources Management Company Wheeler Ridge Oil and Natural Gas Exploration Project, Kern County, California. Conducted protocol-level biological surveys for blunt-nosed leopard lizards, San Joaquin antelope squirrels, San Joaquin kit foxes, and western burrowing owls within the proposed well pad, buffer areas, and access roadways.

Gasco Cymric and Willow Oil and Natural Gas Exploration Project, Kern County, California. Conducted protocol-level biological surveys for blunt-nosed leopard lizards, San Joaquin antelope squirrels, San Joaquin kit foxes, and western burrowing owls within the proposed well pad, buffer areas, and access roadways.

Legacy Energy Oil and Natural Gas Exploration Project, Kern County, California. Conducted protocol-level biological surveys for blunt-nosed leopard lizards, San Joaquin antelope squirrels, San Joaquin kit foxes, and western burrowing owls within the proposed well pad, buffer areas, and access roadways.

Venoco, Inc. Sevier # 1-29 Oil and Natural Gas Exploration Project, Kern County, California. Conducted pre-construction biological surveys for special-status wildlife species, including San Joaquin kit foxes. Prepared pre-construction survey reports detailing the findings of the survey effort. Conducted environmental training of construction and drilling personnel.

Venoco, Inc. Monterey County Oil and Natural Gas Exploration Program, Monterey County, California. Conducted biological surveys for special-status plant and animal species for eight (8) individual well sites south of the Salinas Valley and the San Ardo Oil Filed in southern Monterey County. Prepared biological assessment reports for each well site in support of biological surveys conducted. Prepared Conditional Use Permit applications for each well. Participated in the CEQA environmental review process for each of the projects. Conducted environmental awareness training of construction and drilling personnel.

Salinas Energy Corporation Paris Valley Oil and Natural Gas Exploration Program, Monterey County, California. Conducted biological surveys for special-status plant and animal species for four (4) individual well sites within Paris Valley Area in south central Monterey County. Prepared biological assessment reports for each well site in support of biological surveys conducted. Prepared Conditional Use

Permit applications for each well. Participated in the CEQA environmental review process for each of the projects. Conducted environmental awareness training of construction and drilling personnel.

Cirque Resources LP Kern Water Bank Oil and Natural Gas Exploration Project, Kern County, California. Conducted biological surveys for special-status plant and animal species (including San Joaquin kit fox, blunt-nosed leopard lizards, San Joaquin antelope squirrel, burrowing owls, giant kangaroo rats, kern mallow, San Joaquin woolly-threads, California jewelflower, Hoover's woolly-star, Bakersfield cactus, and oil netstraw, as well as other species). Prepared biological assessment report in support of biological surveys conducted. Prepared greenhouse gases analysis of proposed project activities.

E and B Natural Resources Management Company South Cuyama Oil and Natural Gas Exploration Project, Santa Barbara County, California. Conducted biological surveys for special-status plant and animal species (including San Joaquin kit fox, blunt-nosed leopard lizards, burrowing owls, Kern sphinx moth, etc.). Prepared biological assessment reports for submittal to BLM and Santa Barbara County in support of biological surveys conducted. Prepared Santa Barbara County Air Pollution Control District Authority to Construct/Permit to Operate permit application for the proposed project.

E and B Natural Resources Management Company Titan/Apollo Oil and Natural Gas Exploration Project, Santa Barbara County, California. Conducted biological surveys for special-status plant and animal species (including San Joaquin kit fox, blunt-nosed leopard lizards, burrowing owls, Kern sphinx moth, etc.). Prepared biological assessment report in support of biological surveys conducted. Prepared Santa Barbara County Air Pollution Control District Authority to Construct/Permit to Operate permit application for the proposed project.

E and B Natural Resources Management Company Belgian Anticline 3D Seismic Survey Project, Kern County, California. Conducted biological surveys for special-status plant and animal species. Prepared biological assessment report in support of biological surveys conducted. Comanaging environmental monitoring effort for field implementation of the project. As part of field implementation of project, conducting environmental awareness training of project personnel, biological surveys and mapping of sensitive habitats and species, environmental monitoring of seismic survey activities, documentation of species and habitat impacts, and preparing final reports for submission to the Bureau of Land Management, California Department of Fish and Game, U.S. Fish and Wildlife Service, BLM, as well as other regulatory agencies with jurisdiction over project.

Venoco, Inc. West Montalvo 3-D Seismic Survey Project, Cities of Oxnard and Ventura, and Ventura County, California. In support of Venoco, Inc.'s proposed 3-D seismic survey, conducted biological surveys of the seismic study area and prepared a biological assessment report. Prepared a draft Initial Study/Mitigated Negative Declaration for submittal to Ventura County incorporating information from the Ventura County General Plan, zoning ordinances, and utilizing the requirements of the Ventura County Initial Study Assessment Requirements. Prepared regulatory permitting packages for submission to Ventura County, City of Oxnard, City of Ventura, California State Parks, and other regulatory agencies. Consulted with local, state, and federal agencies regarding the proposed project.

United States National Park Service Fort Baker Saterlee Road Improvement Project (2015), Marin County, California. Conducted pre-construction biological surveys for *Lupinus albifrons*, the host plant for Mission Blue butterfly, a federally endangered species. In areas where this host plant species is identified, identified exclusion buffer zones and installed construction exclusion fencing at a minimum of 50 feet from identified lupine plants. Placed signs on the fencing identifying the areas as "Environmentally Sensitive Areas (ESA)". Conducted pre-construction nesting avian surveys of the project site and buffer area. Installed exclusionary buffer fencing that complied with the requirements of the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. Prepared a pre-construction biological survey report detailing the findings of the biological surveys and mitigation measures implemented to protect these sensitive species. Participated in onsite meetings with the National Park Service and construction contractor to discuss project construction and the implementation of best management practices and mitigation measures to protect sensitive environmental resources. Prepared an environmental awareness training program binder for use during the project. The training program binder contained information on the regulatory requirements the project must comply with, the sensitive wildlife species (including mission blue butterfly and nesting migratory avian species) and habitats that may be present within the project site and buffer areas, photographs of sensitive wildlife species that may be encountered within the project site and buffer, mitigation and best management measures that shall be implemented during project implementation to protect sensitive biological resources, and a section on archeological and cultural resources that describes these resources and measures to protect them. Conducted environmental awareness training sessions with project team. Provided full time environmental monitoring during project implementation.