Initial Study and Proposed Mitigated Negative Declaration
California Environmental Quality Act (CEQA) Environmental Study

North Coast Highway Solar Project
PLN-2020-16341

APNs 204-081-002, -004, -006, -007, and 204-171-001, -045, -047
Humboldt County, California

July 2024

Prepared by:
Steven Lazar
Humboldt County Planning & Building Department
3015 H Street
Eureka, CA 95502

with assistance from:
EPD Solutions, Inc.
3333 Michelson Drive Suite 500
Irvine, CA 92612

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1 PROJECT OVERVIEW

Project Title: North Coast Highway Solar

Lead Agency
Humboldt County Planning and Building Department – Planning Division
3015 H Street
Eureka, CA 95501
(707) 445-7541

Property Owner
Phil & Melinda Nyberg
1 Quali Canyon Rd.
Fortuna, CA 95540

Project Applicant
North Coast Highway Solar 1, LLC
North Coast Highway Solar 2, LLC
1814 Franklin Street #600
Oakland, CA 94612

North Coast Highway Solar 1, LLC c/o EDPR Renewable Energy
Nicole Haghpanah
100 Park Ave, Suite 2400,
New York, NY, 10017

Project Location
The project site is located in an unincorporated area of Humboldt County, 1 mile south of the City of Fortuna. The project is located on land comprised of APNs 204-081-002, -004, -006, -007 and 204-171-001, -045, -047, situated on the south side of State Route 36 between the communities of Alton and Hydesville along the boundary separating the Carlotta-Hydesville Community Planning Area (CHCP) from the Fortuna Area Community Planning Area (FACP).

As shown on Figure 1, Regional Location, regional access to the project site is provided by State Route 36 (SR-36) and State Route 101 (SR-101). SR-36 provides local access to the project site. In addition, the project site is located within the U.S. Geological Survey (USGS) Hydesville 7.5-minute quadrangle.

Project Site
The approximately 11.55-acre development footprint is within an approximately 85-acre agricultural holding comprised of six parcels under common ownership —APN 204-081-002, would contain the solar field and APNs 204-081-007 -004, and 204-171-047 would contain an access route that connects the solar field to SR-36. The solar field parcel is currently managed and utilized as irrigated pastureland and is primarily surrounded by a mixture of industrial and agricultural uses. The topography consists of gentle slopes to the east/southeast, and elevations within the project site range between 24 meters (m) (78.7 ft) to 34 m (111.5 feet) above mean sea level (AMSL).

Existing Land Use and Zoning Designations

General Plan Land Use Designation(s)

AE (Agricultural Exclusive)
RA5-20 (Residential Agriculture)
RE1-5 (Residential Estates)
AP (Airport Land use Compatibility Zone Overlay)

Zoning

AE-20 (Agriculture Exclusive specifying a 20-acre minimum parcel size)
AE-B-5(60) (Agriculture Exclusive specifying a 60-acre minimum parcel size)

Baseline Conditions: Surrounding Land Uses and Setting

The project site is bounded by Highway 36 to the north; Demello Road and a mixture of agricultural and industrial uses to the west; agricultural uses to the south; and River Bar Road and rural residential development to the east.

The land use, General Plan, and zoning designations of the areas surrounding the project site are listed below.

Direction	Land Use	General Plan Designation	Zoning Designation
North	Commercial Uses	AE (Agricultural Exclusive) AP (Airport Land Use Compatibility Zone Overlay)	AG-B-5 (60) AE (Agricultural Grazing) B-5 (Special Building Site)
South	Agricultural Uses	AE (Agricultural Exclusive) AP (Airport Land Use Compatibility Zone Overlay)	AE-B-5 (60) AE (Agriculture Exclusive) B-5 (Special Building Site)
East	Rural Residential Uses	RA5-20 (Rural Residential Agricultural) AP (Airport Land Use Compatibility Zone Overlay)	AG-B-5 (5) AE (Agricultural Grazing) B-5 (Special Building Site)
West	Agricultural Uses & Industrial Uses	AE (Agricultural Exclusive) AP (Airport Land Use Compatibility Zone Overlay) IG (Industrial, General) AP (Airport Land Use Compatibility Zone Overlay)	AG-B-5 (60) AE (Agricultural Grazing) B-5 (Special Building Site) MH-Q (Heavy Industrial – Qualified)

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Regional Location

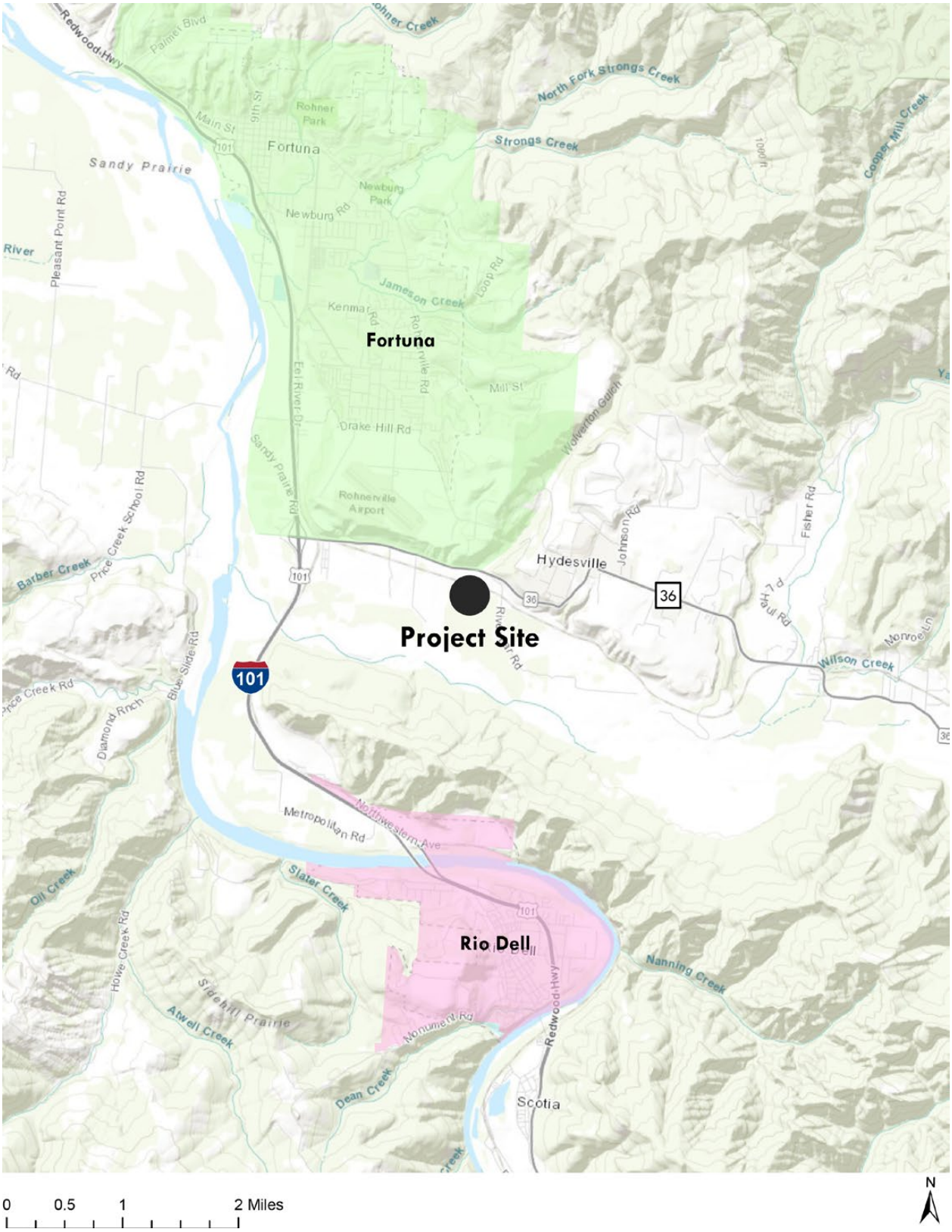

Figure 1: Regional Location

Local Vicinity

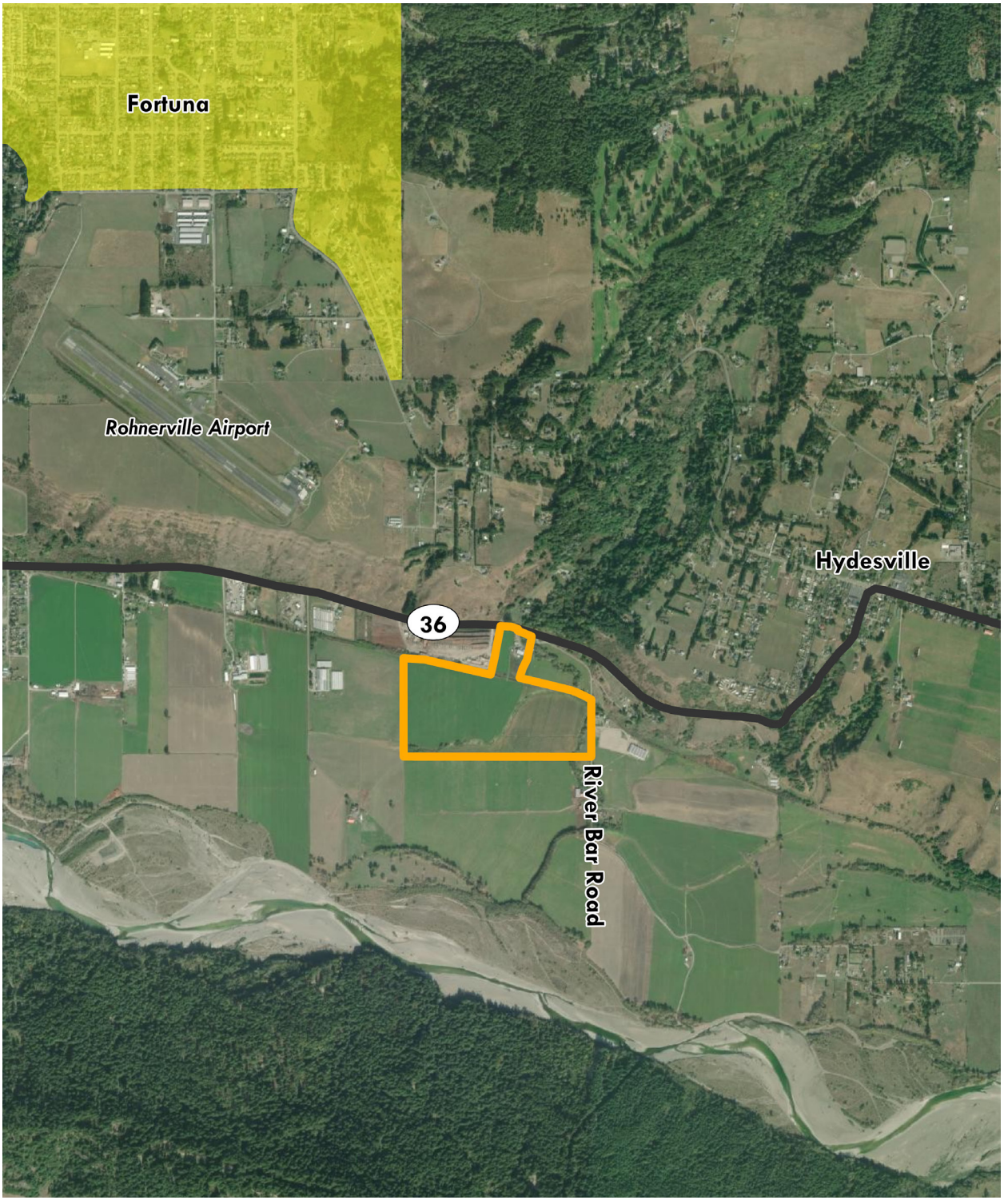

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Figure 2: Project Vicinity

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2 PROJECT DESCRIPTION

Project Overview

The project involves a proposal to install and operate photovoltaic solar power generation facilities totaling approximately 2.8 MWdc (subject to final design and site optimization) on an approximately 85-acre agricultural holding situated between the communities of Alton and Hydesville. An approximately 11.3-acre portion of the property is proposed to be fenced and developed with the planned solar arrays.

Figure 3, *Conceptual Site Plan*, details the location of the planned infrastructure and solar installation, and relationship to existing development on the site. Approximately 0.31 acres of land will host a graveled access road providing access to the rear of the property where the installation is proposed. To avoid and minimize potential effects on the property's agricultural productivity, the majority of road is situated within the footprint of existing ranch roads which already cross through the property. Approximately 300 feet of new road is proposed to be developed to connect with a new driveway encroachment along State Highway 36, approximately 70 feet west of the existing driveway encroachment. Installation of this new driveway will help prevent conflict with existing agricultural uses of the property. However, it is anticipated that vehicles would utilize the existing dirt driveway on APN 204-171-047 to access the project site during construction.

The proposed solar facility would include single-axis trackers, arrays of solar panels, string inverters, transformers, and associated electrical equipment to optimize efficiency and performance. Single-axis trackers are designed to rotate the arrays in the east-to-west plane to track the sun's movement across the horizon. The ground-mounted arrays would be supported on driven pipe piles, driven H-piles, or pre-drilled helical screw piles, with the foundation design to be finalized following completion of on-site geotechnical surveys and structural engineering. Once installed, the ground-mounted solar arrays would be up to approximately 8 feet in height depending on the time of day and degree of tilt of the panels.

The project includes installation of approximately 4,624 modules on ground-mounted solar arrays within two discrete areas. Arrays would convert sunlight to direct current (DC) electrical power which would then be converted to alternating current (AC) by string inverters before being delivered to the electrical system. Battery and power conversion devices would be co-located with the solar panels.

The solar facilities would be configured into two separate areas of arrays, sited to avoid impacts to drainage and natural resource features identified during on-site environmental surveys. The solar field will create a modest amount of new impervious surfaces. Impervious areas would include the piles supporting the panel arrays (440 sq. ft.) and concrete pads below electrical equipment (1,040 sq ft.). Total imperviousness is estimated to be approximately 1,500 sq. ft. of area on the property. The project includes installation of a 6-foot-high chain link fence around the solar arrays. Areas under the solar panels would remain vegetated and pervious.

The project would include installation of power poles to export power generated by the solar system and battery to PG&E's existing electricity grid. The energy produced will feed into PG&E's system and at times may backflow onto the transmission system. The project would largely rely upon PG&E's existing wires and poles, so construction outside the project area would be minimal. A pole-mounted computer controlled switch will be used to disconnect and reconnect the microgrid from the PG&E grid when islanded

microgrid operation is required due to a PG&E outage or another reason. The pole-mounted switch would be mounted on an existing power pole on the 12 kV power line on SR-36.

After construction, the facilities would be automated to allow operation with no staffing present. The project would operate year-round and generate electricity during daylight hours. Production and system health data, as well as onsite weather data, would be monitored and gathered electronically. Washing of the solar panels, which would be necessary to maintain efficiency, is anticipated to occur approximately two times per year. Such maintenance would require temporary staffing onsite and use of a water truck. Additionally, maintenance staff would visit the site on an as-needed basis when dispatched by the offsite operations center, which would continuously monitor the system.

The solar operations on the project site would run for approximately 20 years, which is the duration of the Power Purchase Agreement (PPA) with Pacific Gas & Electric. During that period other components such as the battery and power conversion devices may need to be replaced. The system has no moving parts except for electrical contacts that operate infrequently. The noise generated by the power conversion devices and transformers would be minimal, consisting mostly of low humming and cooling fans. Regular maintenance items over the life of the system will include washing the dust off the panels during the summer and managing vegetation.

Site Access

To provide access for construction and operation of the facility, the proposed project would include the development of up to a 12-foot-wide, all-weather access road for ingress and egress from SR-36. The access road would lead to a 20-foot-wide access gate that would be keyed to prevent unauthorized access to the project site. The all-weather access road would be capable of supporting County fire protection vehicles and would run the perimeter of the project footprint and between the arrays as needed. Interior access roads in compliance with Fire Department requirements would cross through the solar array field in between the rows as needed to facilitate installation, maintenance, and periodic cleaning of the solar modules.

Construction Duration and Phasing

Construction of the project is anticipated to last a total of 4 months. As shown on Table PD-1 below, construction activities include mobilization, site preparation, and facility construction and panel installation. The site preparation process would include the clearing of vegetation and minimal grading. Thereafter, shallow trenching would occur to install cable conduit that would run between the solar units and connect the output of each unit to inverters and from the inverters to the step-up transformer. The arrays would be installed with pile driven foundation systems that would extend 5 to 15 feet below the ground surface and would limit soil disturbance in the project area, with the final foundation system subject to completion of structural engineering.

Table PD-1: Construction Schedule

Construction Phase	Total Working Days
Mobilization	10
Site Preparation	20
Construction and Panel Installation	45

Purpose and Need

The purpose of the project is to construct solar photovoltaic energy generation facilities that would produce emissions-free renewable energy for the state's power grid. The project aids in the reduction of criteria air pollutants and greenhouse gas emissions from power generation by displacing polluting non-renewable sources of electricity generation, primarily natural gas. The project also aids in meeting renewable energy mandates established by the State's Renewables Portfolio Standard (RPS). Originally established in 2002, and most recently updated in 2018 by Senate Bill 100, the RPS requires retail sellers and publicly owned utilities to procure 60 percent of their electricity from eligible renewable energy resources by 2030 and requires all of the state's retail electricity supply to consist of zero-carbon resources by 2045.

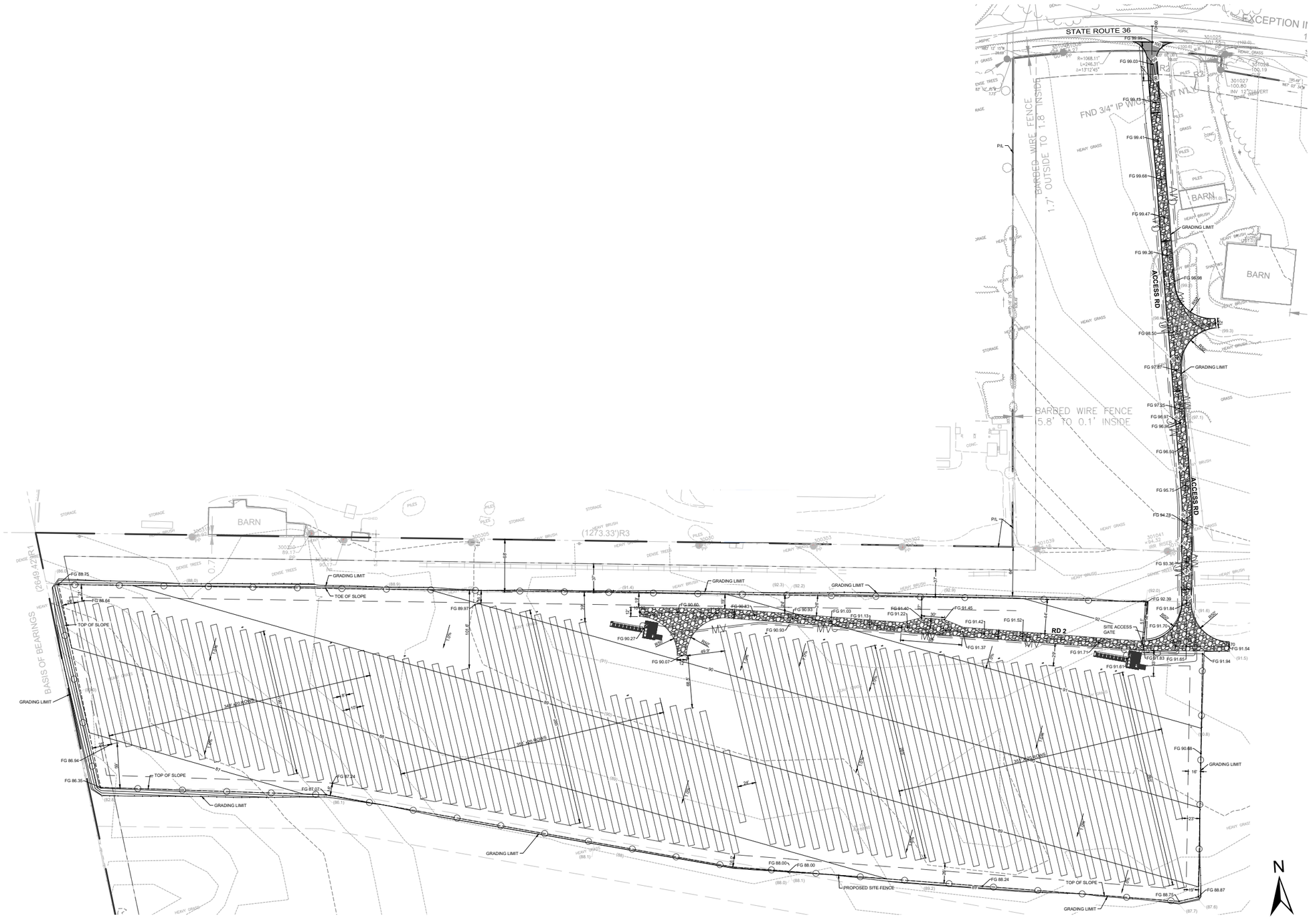
Electricity generated by the project would travel to and satisfy local residential, agricultural, commercial, and industrial electrical needs. When all electrical demands downstream are satisfied, excess power would be distributed to local distribution lines, sending the power downstream and satisfying additional local residential, agricultural, commercial, and industrial electrical demands.

Several policies, regulations, and standards have been adopted by the State of California to address global climate change issues. These include:

- Assembly Bill 32, the California Global Warming Solutions Act of 2006, requires California to reduce its greenhouse gas emissions to 1990 levels by 2020.
- Senate Bill 1368 of 2006 limits long-term investments in baseload generation by the state's utilities to power plants that meet an emissions performance standard for greenhouse gas emissions. The performance standard was established at 1,100 pounds of carbon dioxide per megawatt-hour.
- Governor's Green Building Order S-20-04, which mandates that State agencies evaluate the merits of using clean and renewable on-site energy generation technologies in all new building or large renovation projects. Incorporating solar PV technology supports energy reduction goals and achievement of Leadership in Energy and Environmental Design (LEED) building certifications from the U.S. Green Building Council.
- Governor's Executive Order S-03-05 establishes greenhouse gas emission reduction targets, creates the Climate Action Team, and directs the California Environmental Protection Agency (Cal/EPA) to coordinate efforts with meeting the targets with the heads of other state agencies.
- Governor's Executive Order S-20-06 establishes responsibilities and roles of Cal/EPA and state agencies in climate change.
- Governor's Executive Order S-01-07 establishes a 2020 target and Low Carbon Fuel Standard.
- Governor's Executive Order S-13-08 directs state agencies to plan for sea level rise and climate impacts through coordination of the state Climate Adaptation Strategy.
- Governor's Executive Order B-16-12 orders State agencies to facilitate the rapid commercialization of zero-emission vehicles.
- Governor's Executive Order B-18-12 calls for significant reductions in state agencies' energy purchases and greenhouse gas emissions. The Executive Order included a Green Building Action Plan.
- Governor's Executive Order B-30-15 requires California to reduce its greenhouse gas emissions to 40 percent below 1990 levels by 2030.
- Governor's Executive Order B-32-15 directs State agencies to develop an integrated freight action plan by July 2016. Among other things, the plan calls for targets for transportation efficiency and a transition to near-zero-emission technologies.
- Governor's Executive Order B-55-18 establishes a statewide goal of carbon neutrality no later than 2045, and to achieve and maintain net negative emissions thereafter.

Figure 3: Conceptual Site Plan(s)

Conceptual Site Plan




36
36
River Bar Rd
River Bar Rd
River Bar Rd
BARBED WIRE FENCE
OUTSIDE TO 1.8' INSIDE
FND 3/4" I.P. V.I.
ACCESS RD
BARN
BARBED WIRE FENCE
0.8' TO 0.1' INSIDE
ACCESS RD
RD 2
SITE ACCESS
GRADING LIMIT
TOP OF SLOPE
PROPOSED SITE FENCE

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3 DISCRETIONARY APPROVALS

In accordance with Sections 15050 and 15367 of the State CEQA Guidelines, the County is the designated Lead Agency for the proposed project and has principal authority and jurisdiction for CEQA actions and project approval. Responsible Agencies are those agencies that have jurisdiction or authority over one or more aspects associated with the development of a proposed project and/or mitigation. Trustee Agencies are State agencies that have jurisdiction by law over natural resources affected by a proposed project.

The following discretionary approvals by Humboldt County, as Lead Agency, are necessary for implementation of the proposed project:

HUMBOLDT COUNTY

- Adoption of a Mitigated Negative Declaration (MND)
- Approval of a Conditional Use Permit (CUP) to permit a Utility and Energy Facility

Other Public Agencies Whose Approval Is or May Be Required (permits, financing approval, or participation agreement):

- California Department of Transportation Encroachment Permit

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Though several tribes were contacted and engaged prior to preparation of this environmental document, none have requested consultation.

General Information concerning outreach to Tribes
A Phase I Cultural and Paleontological Assessment prepared by Material Culture Consulting (MCC) which is included as Appendix F. During the assessment process, a search of the Sacred Lands File by the Native American Heritage Commission (NAHC) was conducted for each of the project subareas. The Sacred Lands File search performed as part of the Phase I Cultural and Paleontological Assessment identified one previously recorded cultural resource within a 1-mile radius of the project site (CUL 2023).

The NAHC provided MCC with contact information for four tribes/individuals to reach out to for additional information on March 18, 2020. MCC sent letters on March 19, 2020 to all four Native American contacts, requesting any information related to cultural resources or heritage sites within or adjacent to the project area. Additional attempts at contact by letter, email, or phone call were made on April 2 and April 20, 2020. The following responses were received to the general information outreach communications:

a) On April 1, 2020, MCC received a letter from Rachel Sundberg, Tribal Historic Preservation Officer with the Cher-Ae-Heights Indian Community of the Trinidad Rancheria. Ms. Sundberg stated the project area is outside the geographical area of concern for the tribe and the tribe therefore has no interest in the project and no information to provide.

b) On April 17, 2020, MCC received an email from Mr. Ted Hernandez, chairperson for the Wiyot Tribe. Mr. Hernandez stated that the tribe's records show a known site where the project is located and recommended a survey with a Native American monitor present. MCC reached out to Mr. Hernandez to invite a representative to our survey efforts; however, due to COVID-19 restrictions, the tribe declined the invitation and requested a copy of the final report be submitted to them.

c) In December 2020, the Humboldt County Planning & Building Department contacted the Native American Heritage Commission (NAHC) requesting a list of tribal contacts for purposes of inviting consultation pursuant to AB52. On December 22, 2020, a list was provided to the Department by the NAHC which listed the same four tribes/individuals as contacts. On January 4, 2021, formal invitations to request consultation were mailed to each of the four contacts. No requests for consultation were received in response to these invitations. Only the Bear River Band of the Rohnerville Rancheria responded to the notification stating that formal consultation under AB 52 is not necessary. The

d) In June of 2023, referrals were circulated to various agencies for comment, including local tribes.

e) In February 2024, a targeted referral was emailed to the Tribal Historic Preservation Officers (THPO's) for the Bear River Band of the Rohnerville Rancheria and Wiyot Tribe, which included a copy of the cultural resources report prepared by MCC, as well as an updated site plan and project description. Some refinements were made to the Cultural Resources report and ground disturbance monitoring mitigation measure in response to feedback from Melanie McCavour, Bear River THPO.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

4 ENVIRONMENTAL CHECKLIST

This section includes the completed environmental checklist form. The checklist form is used to assist in evaluating the potential environmental impacts of the proposed project. The checklist form identifies potential project effects as follows: 1) Potentially Significant Impact; 2) Less Than Significant with Mitigation Incorporated; 3) Less Than Significant Impact; and, 4) No Impact. Substantiation and clarification for each checklist response is provided in Section 5 (Environmental Evaluation). Included in the discussion for each topic are standard condition/regulations and mitigation measures, if necessary, that are recommended for implementation as part of the proposed project.

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

X Aesthetics	X Agricultural and Forestry Resources	❑ Air Quality
X Biological Resources	X Cultural Resources	❑ Energy
X Geology/Soils	❑ Greenhouse Gas Emissions	❑ Hazards/Hazardous Materials
❑ Hydrology/Water Quality	❑ Land Use/Planning	❑ Mineral Resources
❑ Noise	❑ Population/Housing	❑ Public Services
❑ Recreation	❑ Transportation	X Tribal Cultural Resources
❑ Utilities/Service	❑ Wildfire	X Mandatory Findings of Significance

Determination: On the basis of this initial evaluation:

- ❑ I find that the proposed project **could not** have a significant effect on the environment, and a **Negative Declaration** will be prepared.
- X I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **Mitigated Negative Declaration** will be prepared.
- ❑ I find that the proposed project **may** have a significant effect on the environment, and an **Environmental Impact Report** (EIR) is required.
- ❑ I find that the proposed project **may** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **Environmental Impact Report** is required, but it must analyze only those effects that remain to be addressed.
- ❑ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **Negative Declaration** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **Negative Declaration**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Printed Name	Humboldt County Planning and Building Department

Evaluation of Environmental Impacts

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

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

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

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

(5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (California Code of Regulations, title 14 Section 15063(c) (3) (D)). In this case, a brief discussion should identify the following:

a) Earlier Analysis Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

Checklist and Evaluation of Environmental Impacts: An explanation for all checklist responses is included, and all answers take into account the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. The explanation of each issue identifies (a) the significance criteria or threshold, if any, used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance. In the **Checklist,** the following definitions are used:

- "**Potentially Significant Impact**" means there is substantial evidence that an effect may be significant.
- "**Potentially Significant Unless Mitigation Incorporated**" means the incorporation of one or more mitigation measures can reduce the effect from potentially significant to a less than significant level.
- "**Less Than Significant Impact"** means that the effect is less than significant and no mitigation is necessary to reduce the impact to a lesser level.
- "**No Impact"** means that the effect does not apply to the proposed project, or clearly will not impact nor be impacted by the project.

I. **Aesthetics**. Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
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 points). 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?	☐	☒	☐	☐

The discussion for item d) below is based on the Solar Glare Analysis prepared by EPD Solutions), included as Appendix A.

Discussion:

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

Less Than Significant Impact. Scenic vistas consist of expansive, panoramic views of important, unique, or highly valued visual features that are seen from public viewing areas. This definition combines visual quality with information about view exposure to describe the level of interest or concern that viewers may have for the quality of a particular view or visual setting. A scenic vista can be impacted in 2 ways: a development project can have visual impacts by either directly diminishing the scenic quality of the vista or by blocking the view corridors or "vista" of the scenic resource. Important factors in determining whether the proposed project would block scenic vistas include the project's proposed height, mass, and location relative to surrounding land uses and travel corridors.

In the Scenic Resources section of the Final Environmental Impact Report for the Humboldt County General Plan Update (Humboldt County, 2017), important scenic vistas in Humboldt County include viewpoints from major public roadways and public areas providing views of the coast, forests, open space, or agricultural lands, as well as views of historic districts, landmarks, and cultural sites.

The project site is located in a rural, predominantly agricultural area of Humboldt County. The project may affect views from SR-36 of open space and agricultural lands; however, the inherently low profile of the project features will considerably reduce the possibility of obstructing these views. Views from SR-36 are not rare or unique and are already impacted by other obstructions, such as industrial development and uses adjacent to the highway and immediately west of the project site.

The project area may be temporarily altered by equipment, construction materials, and workers during active construction. However, the changes to these views would be minor, temporary, and would generally be visible only to the public in the immediate vicinity of the project site.

In addition, the project will have no effect on views of the coast or forests, or views of historic districts, landmarks, and cultural sites as the project is not located within or near any of these important scenic vistas and involves no tree removal and minimal disturbance of shrubs or other woody vegetation. Thus, construction of the proposed project would not obstruct, interrupt, or diminish a scenic vista; and impacts would be less than significant.

b) Substantially damage scenic resources, including, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact. At this time, there are no officially designated State Scenic Highways within Humboldt County, although Highway 101 has been identified by the State Scenic Highway Mapping System as eligible for state listing for its entire length in Humboldt County. The project site is not visible from Highway 101. State Highways 36 and 299 have also both been identified as eligible for state listing. However, given the abundance of industrial development in the immediate vicinity of the project site, it is unlikely that this segment of Highway 36 would qualify for designation as scenic once a more thorough assessment is made of the existing visual character of the area using criteria for Visual Impact Assessments commonly applied by Caltrans. Therefore, impacts would be less than significant.

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

Less Than Significant Impact. As described previously, the project is located within a rural, predominantly agricultural area of Humboldt County. While generally pastoral in nature, the existing character of the site and surrounding area is neither unique nor of special aesthetic value or quality. Potential viewers affected by the project include travelers along SR-36 and single-family residential uses within the project area.

The property on which the project is located is managed for agricultural purposes as irrigated pasture. While northern portions of the property are visible from Highway 36, the area where the project is proposed is located at a lower elevation and is largely screened from view, in part by vegetation along the historic railroad right of way immediately north of the solar field, as well as vegetative screens and industrial development and uses on parcels immediately west of the property. Coupled with the distance from the highway ranging from 500-800 feet, a 10-foot difference in the natural grade between the highway (101 feet MSL) and the area targeted for the installation (88 to 91 feet MSL) will also help reduce visibility from the highway, even if the vegetative screening were to be lost. Therefore, impacts related to the degradation of existing visual character or public views would be less than significant.

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

Less Than Significant with Mitigation Incorporated. The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The project uses dark photovoltaic solar cells, which absorb rather than reflect sunlight.

Lighting

Construction of the proposed project would generally occur during daytime hours and could occur as late as 6:00 p.m. in order to meet the construction schedule. No overnight construction would occur. In the event that work is performed between dusk and 6:00 p.m., the construction crew would only use the minimum illumination needed to perform the work safely. All lighting would be directed downward

and shielded to focus illumination on the desired work areas only, and to prevent light spillage onto adjacent properties. As applicable, work in the solar field areas and on the distribution lines at night would be performed using light stands that would be directed to the active work area. Because lighting would be shielded and focused downward and lighting used to illuminate work areas would be turned off by 6:00 p.m., construction related lighting would be less than significant.

Project lighting, triggered by motion sensors, may be installed at entry and egress gates and at strategic locations around the facility. All project lighting will be shielded and directed downward to minimize the possibility of glare or spillover onto adjacent ownerships and will only be activated when maintenance crews access the site. Therefore, impacts related to lighting would be less than significant.

Glare

The potential impact of glint and glare from photovoltaic modules, concentrating solar collectors, receivers, and other components has received increased attention as a potential hazard or distraction for pilots, air-traffic control, and other personnel. Hazards from reflected solar radiation include the potential for permanent eye injury (e.g., retinal burn from concentrated sunlight) and temporary disability or distractions (e.g., glint, glare, after-images).

Most of the proposed construction activities are planned to occur during daylight hours. Increased truck traffic and the transport of the solar arrays and construction materials to the project site and transmission lines would temporarily increase glare conditions during construction. However, this increase in glare would be minimal and temporary. Construction activity would occur on focused areas of the project site as construction progresses, and sources of glare would not be stationary for prolonged periods of time. Additionally, the surface area of construction equipment would be minimal compared to the scale of the site. Therefore, construction of the project would not create a new source of substantial glare that would affect daytime or nighttime views in the area, and impacts would be less than significant.

The light reflected from the surface of solar panels can result in glint (a momentary flash of bright light) and glare (a continuous source of bright light). These two effects can cause a brief loss of vision which can hamper the safe maneuvering of the aircraft while in flight. Ocular impacts from solar glare can result in green glare or yellow glare. Green glare can be defined as glare with low potential to cause after image or flash blindness for a few seconds which would not hamper safe aircraft maneuvering. Yellow glare can be defined as glare with potential to cause temporary after-image lasting more than a few seconds that might hamper safe aircraft maneuvering. Yellow glare is not acceptable as per glare hazard model criteria and would require mitigation to reduce ocular impact to green glare or better.

A solar glare analysis of the proposed panel array(s) was prepared by EPD Solutions (Appendix A) to analyze the project's potential glare impacts throughout operations. The solar glare analysis analyzed the flight path and runways at the Rohnerville Airport and location and characteristics of the proposed panel arrays. The glare analysis also included modeling to estimate the potential amount of green glare and yellow glare, depending on the orientation and angle of the proposed arrays. The solar glare analysis determined that the project as modeled passes glare hazard model criteria, with zero minutes per year outside the 'green zone' of acceptable reflected energy (Appendix A). The panel configuration that will result in the greatest amount of annual energy production (1,986 kwh) uses a resting angle of 75˚ and a maximum tracking angle of 65˚, resulting in the creation of approximately 433 hours of green glare annually. The glare analysis and information was reviewed by the County's Aviation Department as well as the Battalion Chief of the CalFire Aviation Unit, which is based at the Rohnerville Airport (FOT). Cal-Fire's pilot team have indicated that the development should not be a factor for them conducting safe arrivals and departures to/from the FOT Airport. Furthermore, the

County's Airport Planning Consultants have run the project details through the FAA's Notice Criteria Tool regarding airspace and determined that the project would not require further evaluation from an airspace safety perspective.

Because there exists the possibility for creation of more dangerous yellow glare at certain angles and orientations, **Mitigation Measure AES-1** has been included to ensure that the configuration of the arrays remain within the parameters identified and analyzed in the solar glare analysis. To ensure no unsafe glare be caused, **Mitigation Measure AES-1** would be applicable for the life of the project.

Therefore, with the currently proposed configuration of the panel array(s) and mitigation measures included, the proposed project would not result in ocular hazards to flight operations. In addition, operation of the project as proposed would not create a new source of substantial glare that would affect daytime or nighttime views in the area, and impacts would be less than significant with mitigation.

Existing Plans, Programs, or Policies

The Humboldt County Airport Land Use Compatibility Plan (ALUCP)

Mitigation Measures

Mitigation Measure AES-1: Prevention of Hazardous Glare
All solar panels within the arrays shall include an anti-reflective coating and shall be positioned with a resting angle of 75˚ and a maximum tracking angle of 65˚ with the panel array(s) orientated at 180.0˚. Resting angles below 17˚ are prohibited as they were determined to produce yellow glare. The orientation and positioning of panels within the array(s) must be maintained in a fashion that prevents the creation of yellow glare, for the life of the project. Should future changes to the configuration and orientation of the panels be proposed, an updated analysis of solar glare shall be required and submitted to the County Aviation Department. Reconfiguration may only be authorized following review and approval by the County Aviation Department.

Sources

California Department of Transportation, California Scenic Highway Mapping System. Accessed: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/ (Accessed July 25, 2024).

Draft Environmental Impact Report, Humboldt County General Plan Update. September 2017. Accessed: https://humboldtgov.org/626/Draft-Environmental-Impact-Report-EIR (Accessed March 22, 2023).

Solar Glare Analysis, North Coast Highway Solar Project, Fortuna, California. February 23, 2024. Prepared by EPD Solutions (Appendix A).

II. Agriculture and Forestry Resources. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to 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 result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☒	☐	☐

Discussion:

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

Less Than Significant with Mitigation Incorporated. The project has the potential to impact prime agricultural lands. The project proposes solar arrays and an access road on approximately 11.55 acres of the 85-acre project site which has prime soils mapped by Humboldt County and NRCS. The Farmland Mapping and Monitoring Program has not yet been completed for Humboldt County; therefore there has been no designation of the site by the Department of Conservation as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (CDC, 2023). The County's GIS includes agricultural soil mapping derived from the Soils of Western Humboldt County California (1965) and the Soil Conservations Service's correlation of these soil series as rating Class I or II under the SCS Land Capability Classification System. Based on the County's GIS maps, the project could potentially impact approximately 11.55-acres of land designated as Prime Agriculture Soils within the 85-acre site (NRCS, 2023). The Humboldt General Plan EIR defines Prime Agriculture Land as lands rated Class I or Class II by the U.S. Soil Conservation Service, rated 80 through 100 percent in the Storie index, has a livestock carrying capacity of one animal unit per acre, land planted with fruit or crops, land capable of producing an unprocessed plant production, or additional lands in proximity to those define capable of an annual carrying capacity equivalent to one animal unit per acre.

Consistent with General Plan Policy AG-P16: Protect Productive Agricultural Soils, the project is designed to minimize impermeable surfaces and impacts to areas of lands planned for agriculture. Of the 11.55-acre disturbance area, the project proposes solar arrays that will create impervious surfaces including steel driven piers (440 sf) to support the solar panel array, and the area for transformer pads (1,040 sf) – all which will cumulatively comprise of 1,480 sf or 0.03-acres. Limited grading is proposed as the steel driven piles to support the arrays can be adjusted in height to maintain a uniform elevation without significant land alterations.

In addition, the proposed solar facility does not permanently change the underlying land, soil condition, or land use as a residence or commercial building would. Construction of the project consists of steel driven piles into the earth, which can be readily removed at the end of the project's useful life. This method of construction does not alter the natural condition of the land, which can be remediated and restored to pre-construction conditions at the end of the project's useful life.

The General Plan identifies solar facilities as a compatible use on lands designated as Agricultural Exclusive (AE). General Plan Policy AG-P6: Agricultural Land Conversion - No Net Loss allows for the conversion of AE-designated lands if certain findings can be made including no feasible alternatives and an overriding public interest. The findings also require mitigation to prevent a net reduction in agricultural land base and agricultural production. The project, while a solar facility, is a compatible use but is not agriculture and a loss of production would result as the land would not be suitable for its present use as pasture for cattle grazing. While decommissioning and restoration of the site is proposed at the end of its useful life, the conversion could extend from 25 to 35 years or perhaps longer if the facility is repowered. To mitigate for a potential loss in agricultural land, **Mitigation Measure AG-1** has been included to provide and promote more intensive agricultural uses (such as sheep grazing or the keeping of honey bees) on a rotational basis where pasture areas would be occupied for variable periods, as well as allowing pasture rest periods to promote optimal vegetation quality management and maintenance of pollinator habitat. As stated in **Mitigation Measure AG-1**, to ensure the ongoing operations are viable, an Agricultural Management Plan, summarizing the aforementioned

agricultural uses on the property, is required to be submitted subject to the approval of the Humboldt County Planning Director before finalization of the building permit for the solar farm installation.

Additionally, when the facility is ultimately decommissioned, the site will be fully-restored to its original condition as included as **Mitigation Measure AG-2**. With implementation of **Mitigation Measure AG-1** and **Mitigation Measure AG-2**, the project can improve soil health, moisture retention, and increase biodiversity over its present condition. As noted above, the project sponsor would provide a Decommissioning and remediation Plan that ensures the project site will be restored to pre-project conditions through best management practices for soil/site remediation and materials recycling.

Although the Project would temporarily occupy portions of agriculturally zoned lands, to maintain consistency with General Plan Policy AG-P6 and reduce potential impacts to a less than significant level, integrating intensified agriculture uses together with the solar development is proposed. This will be completed through development and implementation of an Agriculture Management Plan. The goal of the plan is to enable a majority of the project site to function in an agricultural capacity in tandem with the solar development. The Agriculture Management Plan would be subject to review and approval by the Planning & Building Department prior to implementation and administration. With implementation of **Mitigation Measure AG-1 and AG-2**, the project would result in a less than significant impact to these resources and no further mitigation is required.

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

Less than Significant Impact. The property on which the project is proposed is not enrolled under a Williamson Act contract. The closest lands under contract lie approximately ¼ of a mile west of the project site and are owned and operated by the property owner. The project site has an existing zoning designation of AE-B-5 (160) (AE (Agriculture Exclusive) and B-5 (Special Building Site). The project is permitted with a Conditional Use Permit in the AE (Agriculture Exclusive) zone, under the following category: "Utilities and energy facilities: the erection, construction, alteration, or maintenance of gas, electric, water or communications transmission facilities, and wind or hydroelectric solar or biomass generation, and other fuel or energy production facilities." The project would temporarily occupy portions of land historically used exclusively for agriculture. The project design allows pairing of intensified agriculture uses together with the solar development which is consistent with policies for protection of agricultural land found in the General Plan and Zoning Regulations. Conflict with nearby agricultural uses on and off the property or parcels under Williamson Act contract is therefore not expected and potential for impact will be less than significant.

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

No Impact. No forest land exists on or adjacent to the project site. The project site is comprised of pastureland and does not contain forest or timber resources. Thus, the project would not result in impacts related to conflict with an existing forest land or timberland zoning.

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

No Impact. No forested areas exist on the project site. Thus, the proposed project has no potential to 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 result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less Than Significant with Mitigation Incorporated. The Humboldt County General Plan and Zoning Ordinance allows for utility and energy facility land uses on lands planned and zoned Agriculture Exclusive (AE) as a conditionally permitted Use. The temporary nature of the solar facility installation does not require the permanent conversion of agriculture lands, nor does it require significant new substantial new infrastructure or manipulation of the land in such a way that it would result in the permanent loss of its agricultural productivity. The proposed project is designed to coexist with and complement existing agricultural uses on the property. As discussed in Section II (a) above, the implementation of the Agriculture Management Plan will ensure continued agriculture uses within this portion of the property. The cultivation of pollinator habitat and grazing or row crop uses would keep the project consistent with GP Policy AG-P6.

Due to the type and duration of the proposed use of the site, including agriculture activities, and the installation of the pollinator program, the project would not create a permanent development that would further lead to agriculture conversion of surrounding properties. Furthermore, the proposed project does not propose to rezone or subdivide any agricultural lands. With implementation of **Mitigation Measure AG-1 and Mitigation Measure AG-2**, the Agriculture Management Plan and Decommissioning & Remediation Plan would ensure the project results in a less than significant impact and would not create a change to surrounding Farmland to non-agriculture uses and impacts are considered less than significant with no further mitigation required.

Existing Plans, Programs, or Policies

Humboldt County General Plan Section 4.5 Agricultural Resources

AG-P6. Agricultural Land Conversion - No Net Loss. Lands planned for agriculture (AE, AG) shall not be converted to non-agricultural uses unless the Planning Commission makes the following findings:

A. There are no feasible alternatives that would prevent or minimize conversion;
B. The facts support an overriding public interest in the conversion; and
C. For lands outside of designated Urban Development Boundaries, sufficient off-setting mitigation has been provided to prevent a net reduction in the agricultural land base and agricultural production. This requirement shall be known as the "No Net Loss" agricultural lands policy. "No Net Loss" mitigation is limited to one or more of the following:
    1. Re-planning of vacant agricultural lands from a non-agricultural land use designation to an agricultural plan designation along with the recordation of a permanent conservation easement on this land for continued agricultural use; or
    2. The retirement of non-agricultural uses on lands planned for agriculture and recordation of a permanent conservation easement on this land for continued agricultural use; or

3. Financial contribution to an agricultural land fund in an amount sufficient to fully offset the agricultural land conversion for those uses enumerated in subsections a and b. The operational details of the land fund, including the process for setting the amount of the financial contribution, shall be established by ordinance.

AG-P16. Protect Productive Agricultural Soils. Development on lands planned for agriculture (AE, AG) shall be designed to the maximum extent feasible to minimize the placement of buildings, impermeable surfaces or non-agricultural uses on land as defined in Government Code Section 51201(c) 1- 5 as prime agricultural lands.

Mitigation Measures

Mitigation Measure AG-1: Agriculture Management Plan. To maintain consistency with General Plan Policy AG-P6 and to prevent a net reduction in land base and agricultural production, the project sponsor shall maintain continual operation of agricultural uses on the property, including but not limited to sheep grazing, the keeping of honey bees, or planting of row crops, on a rotational basis. During rotational periods, the plan shall include planting and maintenance of locally appropriate native plants, focusing on species that provide the greatest value to bees, moths, butterflies, and other native pollinators. Some potential options include yarrow (*Achillea millefolium*), farewell to spring (*Clarkia amoena*), California poppy (*Eschscholzia californica*), riverbank lupine (*Lupinus rivularis*), California bee plant (*Scrophularia californica*), and rough hedgenettle (*Stachys rigida*). To maintain habitat value, mowing should not occur during the bloom period, though targeted removal of invasive species is encouraged. Prior to finalization of the building permit for the project, the applicant shall submit an Agricultural Management Plan for review and approval by the Director of Planning & Building Department, or their designee. The plan shall summarize the types and duration of agricultural uses as well as operator information for the property. The Department reserves the right to reject or require revisions to the plan to ensure the effectiveness of the planned agricultural operations.

Mitigation Measure AG-2: Decommissioning & Remediation Plan. To ensure the project site will be restored to its original condition at the end of the Project's life, a decommissioning and remediation plan shall be submitted for review and approval to the Director of the Planning and Building Department, or their designee, prior to the issuance of Building Permits**.** The decommissioning plan shall include removal and proper disposal of all above and below ground improvements, restoration of the surface grade, placement of topsoil over all removed structures, and revegetation and erosion control as deemed necessary by the Director, as well as an estimated timeframe for completing site restoration, an engineer's cost estimate for all aspects of the removal and restoration plan, and an agreement signed by the property owner and operator.

Sources

Humboldt County Web GIS. Accessed: https://webgis.co.humboldt.ca.us/HCEGIS2.0m/ (Accessed January 2, 2024).

III. Air Quality. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
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?	☐	☐	☐	☒

The discussion below is based on the Air Quality, Greenhouse Gas, and Energy Analysis prepared by Vince Mirabella (AQ 2023), included as Appendix B.

Discussion:

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

No Impact. The project site is located in a portion of Humboldt County that is within the North Coast Air Basin (NCAB) and is under the jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD). Environmental review of new development requires coordination between NCUAQMD and the County to ensure project conditions are consistent with state air quality laws and to reduce impacts below levels of significance.

Humboldt County is listed as in "attainment" or "unclassified" for all federal and state ambient air quality standards except the state 24-hour standard for particulate matter of 10 microns or less (PM-10), where Humboldt County is designated as in "nonattainment." PM-10 air emissions include chemical emissions and other inhalable particulate matter with an aerodynamic diameter of less than 10 microns. PM-10 emissions include smoke from wood stoves, airborne salts, diesel exhaust, and other particulate matter naturally generated by ocean surf. Primary sources of particulate matter include on-road vehicles (engine exhaust and dust from paved and unpaved roads), open burning of vegetation (both residential and commercial), residential wood stoves, and stationary industrial sources (factories). Fugitive emissions as a result of vehicular traffic on unpaved roadways are the largest source of particulate matter emissions within the district.

The Air District has not formally adopted significance thresholds, but rather utilizes the Best Available Control Technology emission rates for stationary sources as defined and listed in the Air District's Rule 110 - New Source Review and Prevention of Significant Deterioration. The Air District does not currently have any thresholds for toxics, but recommends the use of the latest version of the California Air Pollution Control Officers Association's "Health Risk Assessments for Proposed Land Use Project" to evaluate and reduce air pollution impacts from new development (Humboldt County 2017).

The proposed project involves the development of a solar facility. The project would generate solar energy that would be conveyed to the PG&E power grid and would not lead to any growth in population. In addition, as described in the response below, the project would not result in emissions that would violate any air quality standard or contribute to an existing nonattainment. Thus, the project would not conflict with or obstruct implementation of the Air District's air quality objectives or standards or contribute in a substantive way to a nonattainment of air quality objectives in the project area air basin, and impacts would not occur.

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

Less Than Significant Impact. The NCUAQMD has not established significance criteria applicable to projects such as the North Coast Highway Solar Project. Instead, the NCUAQMD uses the Best Available Control Technology (BACT) emission rates for stationary sources, as defined in NCUAQMD Rule 110, which are listed in Table AQ-1 below as significance thresholds. The project is not expected to generate any appreciable amounts of fluorides, hydrogen sulfide, lead, reduced sulfur compounds, sulfur oxides, sulfuric mist, or total reduced sulfur compounds.

Table AQ-1: NCUAQMD Air Quality CEQA Significance Thresholds

Air Pollutant	Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
Oxides of Nitrogen (NO_x)	50	40
PM_{10}	80	15
$PM_{2.5}$	50	10
Reactive Organic Gases (ROG)	50	40
Carbon Monoxide (CO)	500	100
Hydrogen Sulfide (H2S)	50	10
Lead	3.2	0.6
Reduced Sulfur Compounds	50	10
Sulfur Oxides	80	40
Sulfuric Acid Mist	35	7
Total reduced Sulfur Compounds	50	10
Fluorides	15	2
Source: Air Quality, Greenhouse Gas, and Energy Analysis (Appendix B)		

Construction

Construction activities associated with the proposed project would generate pollutant emissions from site preparation and grading, construction workers traveling to and from project site, panel and other equipment installation, and the construction of equipment pads. The amount of emissions generated

on a daily basis would vary, depending on the intensity and types of construction activities occurring and the equipment that is being utilized.

The project proposes to develop a 2.8 MWac photovoltaic power generating facility. Project construction would occur in three major phases; Mobilization (Phase 1), Site Improvements and Grading (Phase 2), and Panel Installation and Connection (Phase 3). Heavy construction equipment would be moved on-site at the beginning of construction and would remain on-site throughout as needed. It is anticipated that daily vehicle traffic would consist of primarily worker's passenger cars/light trucks, flatbed delivery trucks, water trucks and porta let trucks. The highest number of trips would likely be from construction workers traveling to and from the site each day. The number of workers required during each phase has been estimated based on the number of workers and construction equipment that were required for the construction of other similar solar projects.

The project site is located in a rural area, relatively distant from population centers. As a result, the default vehicle trip distances used by the CalEEMod model for worker vehicles, vendor vehicles, and delivery haul trucks were modified to reflect longer trip travel distances. For purposes of this analysis, the average round-trip distances for vendor and worker vehicles was set at 50 miles, a distance that includes the cities of Fortuna, Eureka, and Arcata. The flatbed haul trucks that would transport the solar panels and other major equipment were assumed to travel to and from the San Francisco Bay Area at a round-trip distance of 500 miles (AQ 2023).

As shown in Table AQ-2, CalEEMod results indicate that construction emissions generated by the proposed project would not exceed NCUAQMD regional thresholds. Therefore, emissions from construction activities would be less than significant.

Table AQ-2: Construction Emissions

Phase	Maximum Daily Construction Emissions[1] (pounds/day)					
	ROG	**NO_X**	**CO**	**SO_x**	**PM-10**	**PM-2.5**
2024						
Mobilization	1.2	9.3	14	0.0	1.3	0.5
Site Improvement	4.7	40.7	42.1	1.7	8.9	4.6
Panel Installation and Connection	2.1	17.9	26.4	0.1	4.1	1.3
Maximum Daily Emissions - 2024	4.7	40.9	42.1	1.7	8.9	4.6
NCUAQMD Significance Thresholds	**50**	**50**	**500**	**80**	**80**	**50**
Emissions Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
ROG = reactive organic gases NOx = oxides of nitrogen PM-10 = particulate matter 10 microns or less in diameter
PM-2.5 = particulate matter 2.5 microns or less in diameter CO = carbon monoxide SO_x = sulfur oxides
PM emissions reflect NCUAQMD Rule 104(D) reductions for fugitive dust.
Source: Air Quality, Greenhouse Gas, and Energy Analysis (Appendix B)

Operation

Operational emissions would be limited to vehicle trips related to maintenance and cleaning of the solar panels. The proposed solar facility would be unstaffed and would not generate daily vehicle trips. However, it is conservatively assumed for air quality analysis purposes that up to 6 trips per day would be generated during maintenance of the project, with a round-trip travel distance of 25 miles by a light-heavy duty truck.

In addition to routine maintenance, the solar panels would be washed approximately once per quarter. A crew of approximately 5 to 10 maintenance workers would perform the quarterly panel washing. No heavy equipment would be required.

As shown in Table AQ-3 below, the proposed project would not result in long-term regional emissions of the criteria pollutants that would exceed NCUAQMD's applicable thresholds. Therefore, operation of the project would not result in a cumulatively considerable net increase of any criteria pollutant impacts, and operational impacts would be less than significant.

Table AQ-3: Maximum Daily Operational Emissions

Operational Activity	Maximum Daily Operational Emissions (pounds/day)				
	ROG	NO_x	CO	PM-10	PM-2.5
Total Project Operational Emissions	**0.3**	**3.1**	**0.8**	**1.4**	**0.2**
NCUAQMD Significance Threshold	**50**	**50**	**500**	**80**	**80**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**

Notes:
NOx = oxides of nitrogen PM-10 = particulate matter 10 microns or less in diameter ROG = reactive organic gases
PM-2.5 = particulate matter 2.5 microns or less in diameter CO = carbon monoxide
Source: Air Quality, Greenhouse Gas, and Energy Analysis (Appendix B)

c) Expose sensitive receptors to substantial pollutant concentrations?

No Impact. Sensitive air quality receptors can include uses such as residences, long-term health care facilities, rehabilitation centers, retirement homes, schools, playgrounds, childcare centers, and athletic facilities. The proposed project would not exceed any applicable criteria pollutant thresholds during construction and on-going operational activities; therefore, sensitive receptors would not be subjected to a significant air quality impact during project construction. There is no impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

d) Create objectionable odors affecting a substantial number of people?

No Impact. The proposed project would include the construction and installation of solar panels which would not create objectionable odors that would affect a substantial number of people. Solar energy generation is not odor-generating and would generate any objectionable odors. Potential odor generation associated with the proposed project would be limited to short-term construction sources

such as diesel exhaust; however, these odors would be short-term and would not affect a substantial number of people. No impacts related to odors would occur from implementation of the project.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Summary Air Quality, Greenhouse Gas, and Energy Analysis for the North Coast Highway Solar Project. March 30, 2023. Prepared by Vince Mirabella (Appendix B).

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 Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. 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 native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

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

The discussion below is based on the Biological Habitat Assessment, prepared by Phoenix Biological Consulting (Appendix C) included as Appendix C, the Aquatic Resources Delineation, prepared by Phoenix Biological Consulting (Appendix D), and the Special Status Plant Survey Report (Appendix E).

Discussion:

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

Less Than Significant Impact with Mitigation Incorporated. A Biological Habitat Assessment and Special Status Plant Survey Report was prepared for the project, which included a literature search, and a pedestrian survey to identify special status plants, wildlife, and habitats known to occur in the vicinity of the project site. General plant and wildlife surveys were also conducted to identify any biological resources on or adjacent to the project site.

The Special Status Plant Survey Report identified that 8 of the 36 special status plant species and 5 of the 15 special status wildlife species have a potential to occur on site due to existing environmental and management conditions. As discussed in the Special Plant Species Survey, seven special status plant species including coast fawn lily (*Erythronium revolutum*), *western lily (Lilium occidentale),* seacoast ragwort (*Packera bolanderi var. bolanderi*), Oregon polemonium (*Polemonium carneum*), maple-leaved checkerbloom (*Sidalcea malachroides),* Siskiyou checkerbloom (*Sidalcea malviflora ssp. Patula*), and coast checkerbloom (*Sidalcea oregana ssp. Eximia*) were determined to have a low potential to occur onsite. Marginal habitat for these species were determined to have the potential to occur in areas between the upper and lower fields. Of the six plant communities identified in the Project area, one (Coastal Willow (*Salix hookeriana)* Shrubland Alliance) has a state rank of S3 and one (Wolverton Gulch Riparian, *Alnus rubra* Forest Alliance) is considered sensitive due to it being protected under California Fish and Game Code as a riparian habitat. Neither of these sensitive plant communities would be impacted based on the design of the project as they are not within the project's disturbance area.

In addition, the project site has the potential to support, either seasonally or year-round, 5 special-status wildlife species. The potential special status wildlife species includes the northern red-legged frog (*Rana aurora*), western pond turtle (*Emys marmorata*), Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), and the coastal cutthroat trout (*Oncorhynchus clarkii clarkii*) (BIO 2023).

Overall, the results of the Habitat Assessment indicate that the site is situated within two farmed areas. Native but degraded habitats surround these areas to the north and east but based on the siting and design of the proposed project, these areas have largely been avoided. In addition, there is some nesting habitat on the project site, which includes foraging habitat for passerine and raptor species. However, all nesting birds are covered under the Migratory Bird Treaty Act and Section 3503.5 of the California Fish and Game Code. Therefore, **Mitigation Measure BIO-1** has been included to require pre-construction nesting bird surveys, as well as recommendations for vegetation removal outside of the

nesting bird season. With implementation of **Mitigation Measure BIO-1**, impacts related to protected bird species would be reduced to a less than significant level.

Thus, through adherence to the recommendations provided in the Habitat Assessment, and implementation of pre-construction nesting bird surveys, the project would be fully consistent with the CDFW and the USFWS, and impacts would be less than significant with implementation of MM BIO-1.

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

No Impact. Riparian habitats are those occurring along the banks of rivers and streams. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies, known to provide habitat for sensitive animal or plant species, or known to be important wildlife corridors.

Riparian habitat is located in Wolverton Gulch, a perennial stream that crosses through the northeast corner of the property before traveling approximately 1.5 miles to its confluence with the Van Duzen River. Associated riparian areas on the property are located at the eastern edge of APNs 204-081-002 and 204-171-047. According to the Aquatic Resources Delineation (Appendix D), an area near the northeast corner of the property is approximately 0.4 acres in size has potential for recognition as waters of the U.S. pursuant to the Clean Water Act. The total area of potential state jurisdictional features on the project site is 1.54-acres. The proposed project's disturbance area is located over 100 feet from these riparian areas. The proposed project has been designed to avoid the riparian area and provide an adequate buffer from construction and operation of the project to the riparian area. Thus, the proposed Project would not impact the 0.40-acre Wolverton Gulch or the 1.54 acres of potential state jurisdictional features. No other sensitive natural community is present on the project parcels. Thus, impacts to riparian habitat or other sensitive natural community will not occur.

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

No Impact. Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs.

As detailed previously, the project site consists of undeveloped land, and potential State and federally protected wetlands are present only at Wolverton Gulch, over 100 feet from the project impact area. The project was designed to avoid placing solar panels or other equipment within wetland areas identified onsite and would include fencing around the construction area. Thus, there would be no impacts to state or federally protected wetlands from implementation of the proposed project.

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

Less Than Significant Impact with Mitigation Incorporated. As previously discussed, the project site consists of undeveloped land. Wolverton Gulch riparian, Red alder habitat is present 150 feet east of the project development area in APN 204-081-002, associated with the Wolverton Gulch riparian area. The dominant species include red alder (*Alnus rubra*), arroyo willow (*Salix lasiolepis*) and sandbar willow (*Salix exigua*). Sub-dominant herbaceous species include watercress (*Nasturtium officinale*), Cyperus (*Cyperus sp.*) and water primrose (*Ludwigia sp.*).

The Willow-Alder riparian habitat associated with Wolverton Gulch provides adequate cover and habitat areas within the project area to be utilized as a wildlife corridor for the migration of fish, reptiles, amphibian and mammal species (BIO 2023). However, as discussed previously, based on the present layout plan of the proposed project, these areas would be avoided. Thus, the proposed project would have a less than significant impact on native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors.

In addition, there is some nesting habitat on the site, and foraging habitat may exist for passerine and raptor species. However, all native birds, including raptors, are protected under the Migratory Bird Treaty Act and Section 3503.5 of the California Fish and Game Code. **Mitigation Measure BIO-1** has been included to require pre-construction nesting bird surveys, as well as recommendations for vegetation removal outside of the nesting bird season. Thus, with implementation of **Mitigation Measure BIO-1**, project implementation would not interfere substantially with use of native wildlife nursery sites, and impacts would be less than significant.

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

No Impact. There are no local biological related policies or ordinances, such as a tree preservation policy or ordinance, that are applicable to the proposed project. The project site contains non-protected native shrubs and herbs, as well as non-native grasses and shrubs, but there are no trees on the project site. Therefore, implementation of the proposed project would not conflict with local polices or ordinances protecting trees and no impact would occur.

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

No Impact. See Response 4(a) above. Development of the project site would not conflict with local, regional, or state resource preservation and/or conservation policies. Therefore, no significant impacts would occur as a result of project implementation.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

Mitigation Measure BIO-1: Preconstruction Nesting Bird Surveys. To the extent feasible, conduct vegetation removal outside of the nesting bird season (generally between March 1 and August 31). If vegetation removal is required during the nesting bird season, conduct take avoidance surveys for nesting birds within 100 feet of areas proposed for vegetation removal. A survey must be conducted by a qualified biologist(s) no more than 7 days prior to vegetation removal. If active nests are observed, a qualified biologist will determine appropriate minimum disturbance buffers or other adaptive mitigation techniques (e.g., biological monitoring of active nests during construction-related activities, staggered schedules, etc.) to ensure that impacts to nesting birds are avoided until the nest is no longer active. If there is a lapse in project-related construction activities of 7 days or more, the biologist shall re-survey the area before work resumes.

Sources

Biological Habitat Assessment for North Coast Highway Solar Project. May 5, 2023. Prepared by Phoenix Biological Consulting (Appendix C)

Aquatic Resources Delineation, North Coast Highway Solar Project, Fortuna, Humboldt County, California. July 2, 2023. Prepared by Phoenix Biological Consulting (Appendix D).

Special Status Plant Survey Report, North Coast Highway Solar Project Fortuna, Humboldt County, California. July 15, 2023. Prepared by Phoenix Biological Consulting (Appendix E)

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 §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

The discussion below is based on the Phase I Cultural and Paleontological Assessment prepared by Material Culture Consulting (MCC) (CUL 2023), referenced as Appendix F. This document is on file with the Planning & Building Department. Because it contains sensitive information, it is being kept confidential and is omitted from the attachments.

Discussion:

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

Less Than Significant Impact. According to the *State CEQA Guidelines*, a historical resource is defined as something that meets one or more of the following criteria:

1) Listed in, or determined eligible for listing in, the California Register of Historical Resources;
2) Listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k);
3) Identified as significant in a historical resources survey meeting the requirements of PRC Section 5024.1(g); or
4) Determined to be a historical resource by the project's Lead Agency.

Portions of the property where project-related development is proposed are composed of relatively flat grassland land that has been managed as pasture for over 100 years. The Phase 1 Cultural and Paleontological Resources Assessment prepared for the project site included a cultural records search that was completed at the Northwest Information Center (NWIC). The research included review of the current listings (federal, state, and local) for evaluated resources and reviewed historic maps. The records search identified 26 prior cultural resources investigations within a 1-mile radius of the project area. Twelve of these studies intersect the project area itself. The records search also identified one previously recorded cultural resource within a 1-mile radius of the project area, a spur of the historic Northwestern Pacific Railroad (formerly the Eel River and Eureka RR), which is adjacent to the northern boundary of the solar lease area.

As required for compliance with CEQA guidelines and the data requirements of the Office of Historic Preservation (OHP), an intensive field survey was conducted to adequately identify, describe, report, and, if possible, evaluate any cultural resources identified within the project area boundaries. These intensive field surveys were conducted on April 30, 2020 and again on May 30, 2023.

A review of historical aerial photographs and maps show that the project site has been consistently used for agricultural activities as early as the 1940s, continuing into the present day. The historic aerials and topographic maps also show the Northwestern Pacific Railroad along the northern boundary, south of SR- 36. During the field survey performed by Material Culture Consulting, Inc., the historic railroad tracks, which qualify as a historical resource, were observed along the northern boundary of the project site behind chain link fencing. It was determined that the resource is already secure behind the existing fence and the development of the solar facility would not impact the historical resource. The former railroad right-of-way is targeted for development and future use as a portion of the Great Redwood Trail. Consultation with the Great Redwood Trail agency (GRTA) was performed during the referral process and resulted in some minor changes to the project configuration. Permission to improve the existing railroad right of way crossing must be secured through the GRTA prior to project implementation.

MCC concluded that further mitigation measures were need for protecting historical resources prior to implementation of the proposed project (CUL 2023). Therefore, the project would not cause a substantial adverse change in the significance of a historical resource, and impacts would be less than significant.

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

Less than Significant Impact with Mitigation Incorporated. The records search completed for the Phase I Cultural and Paleontological Assessment identified one previously recorded cultural resource within a 1-mile radius of the project site. It was determined that the potential for encountering significant cultural resources within the project area is considered low to moderate (CUL 2023). Project excavation activity is limited to shallow trenching for conduit and drilling/pile driving for installation of solar panels. While it is unlikely that crews would encounter significant cultural resources during the course of project development, **Mitigation Measures CUL-1** and **CUL-2** have been included to provide for archaeological monitoring during initial vegetation removal and grading and procedures in the event of inadvertent discoveries. With the implementation of these mitigation measures, the project would result in a less than significant impact related to archaeological resources.

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

Less Than Significant Impact with Mitigation Incorporated. IThe project site has not been previously used as a cemetery. Thus, human remains are not anticipated to be uncovered during project construction. As described previously, the proposed project would involve limited ground disturbance from pile installation and does not involve excavation or substantial grading activities that could unearth human remains. Also, no evidence of the burial of human remains at the site was identified in literature reviews or during the pedestrian survey. Existing regulations in the Health and Safety Code, Public Resources Code, and California Code of Regulations regulates the procedure for the proper handling of unidentified human remains; this process is summarized in PPP CUL-1 and **Mitigation Measure CUL-2**. With the implementation of these protocols, impacts related to the disturbance to any human remains, including those interred outside of formal cemeteries, would be less than significant.

Existing Plans, Programs, or Policies

The following PPP is incorporated into the project and would reduce impacts related to cultural resources. This action will be included in the project's mitigation monitoring and reporting program:

PPP CUL-1: Human Remains. Procedures of conduct following the discovery of human remains on non-federal lands have been mandated by California Health and Safety Code §7050.5, California Public Resources Code §5097.98, and California Code of Regulations (CCR) §15064.5(e). Should human remains be encountered, all work in the immediate vicinity of the burial must cease, and any necessary steps to ensure the integrity of the immediate area must be taken. The Humboldt County Coroner will be immediately notified. The Coroner must then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner has 24 hours to notify the NAHC, who will, in turn, notify the person they identify as the most likely descendent (MLD) of any human remains. Further actions will be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further

disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.

Mitigation Measures

Mitigation Measure CUL-1: Archaeological and Native American Monitoring Native American monitoring shall be provided by the Bear River Band of the Rohnerville Rancheria (BRB) and/or the Wiyot Tribe or their designee(s). The monitor(s) shall have the authority to halt and redirect work should any archaeological resources be identified during monitoring. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the find shall be evaluated for listing in the CRHR and National Register of Historical Places. The Tribe(s) may request that archaeological monitoring be performed under the direction of an archaeologist meeting the Secretary of Interior's PQS for Archaeology (as defined in the Code of Federal Regulations, 36 CFR Part 61). The Tribe(s) may also require that the archaeologist prepare a Cultural Resource Monitoring Program (CRMP) and to conduct monitoring of vegetation removal and rough grading activities. The CRMP shall address the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural, tribal cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this project. The CRMP may also require that the Archaeologist conduct Cultural Resource Sensitivity Training, focused on discussing the archaeological and tribal cultural resources that may be encountered during ground-disturbing activities as well as the procedures to be followed in such an event. The retained Qualified Archeologist may also be required to attend the pre-grade meeting with the grading contractors to explain and coordinate the requirements of the monitoring plan.

The monitoring schedule shall be established by the Tribe(s) and may be adjusted based on the scale of disturbance and sensitivity of the location where ground disturbance will occur. Monitoring may be decreased to spot-checking at the discretion of the monitors, as warranted by conditions such as encountering bedrock, a lack of prior discovery following initial monitoring, or similar circumstances. If monitoring is decreased to spot-checking, spot-checking should occur when ground-disturbance moves to a new location in the project site and when ground disturbance extends to depths not previously reached (unless those depths are within bedrock).

Mitigation Measure CUL-2: Inadvertent Discovery of Cultural Resources If cultural resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 60-foot buffer of the discovery location. A qualified archaeologist as well as the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

The Native American Heritage Commission (NAHC) can provide information regarding the appropriate Tribal point(s) of contact for a specific area; the NAHC can be reached at 916-653-4082. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242.

If the Coroner determines the remains to be Native American, the NAHC will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to PRC 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99

If the find is considered a "resource" the Tribe may request either protection in place or recovery, salvage and treatment of the deposits. Recovery, salvage and treatment protocols shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA Guidelines 15064.5 and 15126.4 in consultation with the County. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if unique archaeological resources cannot be preserved in place or left in an undisturbed state, recovery, salvage, and treatment shall be required at the developer/applicant's expense. If significant pre-contact and/or historic-era cultural resources, as defined by CEQA, are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to the County of Humboldt Planning and Building Department for review and comment. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

Sources

Phase I Cultural and Paleontological Assessment for the North Coast Highway Solar Facility Project, Near Fortuna City, Humboldt County, California. June 2023. Prepared by Material Culture Consulting (Appendix F). Because it contains sensitive information, it is being kept confidential and is omitted from the attachments provided to the public.

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?	☐	☐	☐	☒

The discussion below is based on the Air Quality, Greenhouse Gas, and Energy Analysis prepared by Vince Mirabella (AQ 2023), included as Appendix B.

Discussion:

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

Less Than Significant Impact. The project site is currently comprised of undeveloped agricultural pastureland. PG&E would provide temporary electric power for as-necessary lighting and electronic equipment such as computers inside temporary construction trailers. The electricity used for such activities would be temporary and would have a negligible contribution to the project's overall energy consumption. Additionally, natural gas is not anticipated to be required during the construction or operation of the proposed project.

Construction

During construction of the proposed project, energy would be consumed in three general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the project sites, construction worker travel to and from the project sites, as well as delivery truck trips;
2. Electricity associated with providing temporary power for lighting and electric equipment; and
3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction of the project would result in fuel consumption from the use of construction tools and equipment, vendor and haul truck trips, and vehicle trips generated from construction workers traveling to and from the site. Construction activities and corresponding fuel energy consumption would be temporary and localized, as the use of diesel fuel and heavy-duty equipment would not be a typical operational condition of the project. Also, there are no unusual project characteristics that would cause the use of construction equipment that would be less energy efficient compared with other similar construction sites in other parts of California. In addition, the extent of construction activities that would occur is limited to a 4-month period, and the demand for construction-related electricity and fuels would be limited to that time frame.

Construction contractors are required to demonstrate compliance with applicable California Air Resources Board (CARB) regulations governing the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment as part of the County's construction permitting process. In addition, compliance with existing CARB idling restrictions would reduce fuel combustion and energy consumption. The energy modeling shows that project construction electricity usage over the 4-month construction period is estimated to use 3,503 gallons of diesel fuel, as shown in Table E-1.

Table E-4: Estimated Construction Equipment Fuel Usage

Activity	Equipment	Project Number	Project Hours per day	Default Horse-power	Default Load Factor	Days of Construction	Total Horse power-hours	Fuel Rate (gal/hp-hr)	Fuel Use (gallons)
Mobilization	Off-Highway Trucks	1	4	376	0.38	15	8,573	0.0198	170
	Graders	1	8	148	0.41	15	7,282	0.02115	154
	Rubber Tired Loader	1	8	150	0.36	15	6,480	0.018658	121
	Rough Terrain Forklift	1	8	96	0.4	15	4,608	0.020817	96
Site Improvements	Excavator	2	8	36	0.38	15	3,283	0.019664	65
	Rubber Tired Dozer	2	8	367	0.4	15	35,232	0.020440	720
	Off-Highway Truck	1	6	376	0.38	15	12,859	0.019800	255
	Graders	1	8	148	0.41	15	7,282	0.021152	154
	Scraper	1	8	423	0.48	15	24,365	0.024985	609
	Paver	1	8	81	0.42	15	4,082	0.020817	85
	Rollers	1	8	36	0.38	15	1,642	0.0118412	32
Panel Installation and Connection	Bore/Drill Rigs	2	8	46	0.45	40	13,248	0.025673	340
	Rough Terrain Forklift	1	8	96	0.4	40	12,288	0.020817	256
	Tractors/Loaders/Backhoes	2	8	84	0.37	40	19,891	0.02965	477
	Welders	1	4	46	0.45	40	3,312	0.023965	79
	Air Compressor	1	8	37	0.48	40	5,683	0.023965	136
	Generator Set	1	8	14	0.74	40	3,315	0.023965	79
								TOTAL	**3,503**

Source: Air Quality, Greenhouse Gas, and Energy Analysis (Appendix B)

Table E-2 shows that construction workers would use approximately 6,009 gallons of fuel to travel to and from the project site, and haul trucks and vendor trucks would use approximately 12,077 gallons of diesel fuel.

Table E-2: Estimated Project Construction Vehicle Fuel Usage

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Haul Trucks	11,592	0
Vendor Trucks	485	0
Worker Vehicles	0	6,009
Construction Vehicles Total	12,077	6,009
Source: Air Quality, Greenhouse Gas, and Energy Analysis (Appendix B)		

Overall, construction activities would comply with all existing regulations, and would therefore not be expected to use fuel in a wasteful, inefficient, and unnecessary manner. Thus, no impacts related to construction energy usage would occur.

Operation

Operation of the project involves generation of 2.84 MWac of renewable energy. Any energy produced by the project would be released into the electrical grid by a connection with PG&E. Thus, the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would not occur.

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

No Impact. As described previously, the project involves generation of 2.84 MWac of renewable energy. Electricity generated by the project would travel to and satisfy local agricultural residences, agricultural, commercial, and industrial electrical needs. The project aids in meeting the renewable energy mandates established by the State's Renewable Portfolio Standard (RPS). The RPS requires retail sellers and publicly owned utilities to procure 60 percent of their electricity from eligible renewable energy resources by 2030 and requires all of the state's retail electricity supply to consist of zero-carbon resources by 2045. In addition, the project would assist the State in its goals for renewable energy as set forth by AB 32. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Summary of Air Quality, Greenhouse Gas, and Energy Analysis for the North Coast Highway Solar Project. March 30, 2023. Prepared by Vince Mirabella (Appendix B).

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

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

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Less Than Significant Impact. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. This act prohibits the location of structures designed for human occupancy across active faults and regulates construction within fault zones.

Humboldt County is located within a seismically active area of Northern California. The County is located within the two highest seismic risk zones of the California Building Code (CBC). In addition to causing ground shaking, an earthquake can trigger other natural disasters such as fire, landslides, and flooding, resulting in loss of life and property damage. Seismic hazards in the County include earthquake ground shaking, surface fault rupture, liquefaction, and tsunami potential in the coastal zone areas. Geologic hazards that are not specifically related to earthquakes include landslides and unstable soils (Humboldt County, 2017).

The project site itself lies north of the Mendocino Triple Junction, where the North American, Pacific and Gorda plates meet. The local geologic setting of the project site is characterized by the Little Salmon fault and the Eel River. According to the Humboldt County GIS, the project site is relatively stable, is not within a liquefaction zone, and is not within an Alquist-Priolo Fault Zone (Humboldt County GIS, 2023). Thus, impacts would be less than significant.

ii. Strong seismic ground shaking?

Less Than Significant Impact. As discussed previously, the project site is within a seismically active region and is potentially subject to strong ground acceleration from earthquake events along major regional faults. The proposed project would be unstaffed and would not include any habitable structures. Further, the structures installed on the site would comply with the applicable standards of the CBC, including, as appropriate, a site-specific geotechnical analysis. This requirement is incorporated into the project as PPP GEO-1. With the application of PPP GEO-1, impacts related to the exposure of people or structures to substantial adverse effects from strong seismic ground shaking would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Soil liquefaction is a phenomenon in which saturated, cohesionless soils layers, located within approximately 50 feet of the ground surface, lose strength due to cyclic pore water pressure generation from seismic shaking or other large cyclic loading. During the loss of stress, the soil acquires "mobility" sufficient to permit both horizontal and vertical movements. Soil properties and soil conditions such as type, age, texture, color, and consistency, along with historical depths to ground water are used to identify, characterize, and correlate liquefaction susceptible soils.

The California Geological Survey (CGS) identifies areas of California that are considered susceptible to liquefaction on their Information Warehouse: Regulatory Maps web-based mapping program (CGS 2015). According to this map, the project site is not located in an area considered to be susceptible to liquefaction.

In addition, the proposed project would be an unstaffed facility and would not include any habitable structures. Structures installed on the site would comply with the California Building Code, including, as

appropriate, a site-specific geotechnical analysis. This requirement is incorporated into the project as PPP GEO-1. With the application of PPP GEO-1, impacts related to the exposure of people or structures to impacts from seismic-related ground failure, including liquefaction, would be less than significant.

iv. Landslides?

No Impact. Landslides and other slope failures are secondary seismic effects that are common during or soon after earthquakes. Areas that are most susceptible to earthquakes induced landslides are steep slopes underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits.

As described above, the project site is located in a seismically active region subject to strong ground shaking. However, the project site is flat and does not contain any hills or any other areas that could be subject to landslides. Therefore, the project would not cause potential substantial adverse effects related to slope instability or seismically induced landslides.

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

Less Than Significant Impact. Active construction sites are a source of topsoil erosion if site drainage is not controlled. The implementation of PPP WQ-1, which requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) and an Erosion & Sediment Control Plan in compliance with NPDES standards, would minimize the risk of construction-period soil erosion or loss of topsoil. Once construction is completed, soils would be stabilized and monitored according to the SWPPP until a Notice of Termination for the NPDES construction permit is filed with the RWQCB. During operations, there would be no activity on the site that could cause soil erosion or the loss of topsoil. With the implementation of PPP WQ-1, impacts related to soil erosion and the loss of topsoil would be less than significant.

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

Less Than Significant Impact. As described previously, the project site is a flat area that is not a risk related to landslides and not within an area identified as a potentially liquefiable area, and effects related to liquefaction and lateral spreading would not occur.

The proposed project would be an unstaffed facility and would not include any habitable structures. Additionally, the solar equipment installed on the site would comply with the applicable standards of the California Building Code, which has been incorporated into the project as PPP GEO-1. With the application of PPP GEO-1, potential impacts related to unstable geologic units or soils resulting in on- or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse would be less than significant.

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

Less Than Significant Impact. Expansive soils contain certain types of clay minerals that shrink or well as the moisture content changes; the shrinking or swelling can shift, crack, or break structures built on such soils. Arid or semiarid areas with seasonal changes of soil moisture experiences, such as southern

California, have a higher potential of expansive soils than areas with higher rainfall and more constant soil moisture.

The two soil types found on the project site are Weott silty loam, 0 to 2 percent slopes, and Jollygiant silty clay loam, 0 to 2 percent slopes (NRCS 2023). As such, there are low amounts of clayey soils on the project site, meaning there are little to no expansive soils. In addition, the proposed project would be an unstaffed facility and would not include any habitable structures. The solar equipment installed on the site would comply with the California Building Code, including a site-specific geotechnical analysis. This requirement is incorporated into the project as PPP GEO-1. With the application of PPP GEO-1, impacts related to expansive soils would be less than significant.

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

No Impact. The project would not use septic tanks or alternative methods for disposal of wastewater into subsurface soils. Furthermore, the proposed project would connect to existing public wastewater infrastructure. Therefore, the project would not result in any impacts related to septic tanks or alternative wastewater disposal methods.

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

Less Than Significant Impact with Mitigation Incorporated. A Phase 1 Cultural and Paleontological Assessment prepared for the project by Material Culture Consulting (MCC) included a locality search conducted through the Natural History Museum of Los Angeles County (LACM) to identify any previously identified paleontological resources near the project site.

The Phase 1 Cultural and Paleontological Assessment found that most of the project site is comprised of younger Quaternary Alluvium, derived broadly as alluvial fan deposits derived from the surrounding elevated terrain and/or from the Van Duzen River located to the south. Older Quaternary deposits are mapped in the northwestern portion of the project site. While younger Quaternary Alluvium deposits may not contain significant vertebrate fossils in the uppermost layers, older Quaternary deposits at relatively shallow depth may contain significant fossil vertebrate remains. However, no previously recorded fossil localities are located within one mile of the project site.

In addition, a cultural and paleontological survey was conducted for the project site on April 30, 2020 and May 30, 2023. The project site is located within agricultural pastureland. Field conditions were poor to fair, with dense vegetation impacting the visibility. No paleontological resources were observed during the survey.

Based on the results of the Phase 1 Cultural and Paleontological Assessment, MCC determined that the project area has a low to moderate sensitivity to have the potential for construction activities of the proposed project to impact underlying paleontological resources. However, excavation extending more than ten feet below surface has the potential to impact the paleontologically sensitive older Quaternary sediments. MCC recommends periodic paleontological spot checks should be conducted when excavation exceeds depths of ten feet to determine if older, paleontologically sensitive sediments are present. If present, monitoring should be implemented. Monitoring is not required during drilling or pile driving for installation of solar panel pylons (CUL 2023).

Therefore, **Mitigation Measure PAL-1** has been included to require periodic paleontological spot checks and that a professional paleontologist be hired to oversee monitoring. With implementation of **Mitigation Measure PAL-1**, impacts to paleontological resources would be less than significant.

Existing Plans, Programs, or Policies

The following PPPs are incorporated into the project and would reduce impacts related to geology and soils. These actions will be included in the project's mitigation monitoring and reporting program:

PPP GEO-1: California Building Code. The project is required to comply with the California Building Code as included in the Section 336-5 of the County's Code to preclude significant adverse effects associated with seismic hazards. California Building Code related and geologist and/or civil engineer specifications for the project are required to be incorporated into grading plans and specifications as a condition of project approval.

PPP WQ-1: Stormwater Pollution Prevention Plan. Prior to the initiation of ground disturbance, the project developer shall have a Stormwater Pollution Prevention Plan (SWPPP) prepared by a QSD (Qualified SWPPP Developer) that shall incorporate all necessary Best Management Practices (BMPs) to comply with the National Pollutant Discharge Elimination System (NPDES) requirements to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site to confirm compliance.

Mitigation Measures

Mitigation Measure PAL-1: Paleontological Resources. Prior to the start of construction, the following mitigation measures will be implemented to avoid potential impacts to significant paleontological resources if they are encountered during the course of construction activities:

- A trained and qualified paleontological monitor will perform spot-check and/or monitoring of any excavations on the project that have the potential to impact paleontological resources in undisturbed native sediments below 10 feet in depth. The monitor will have the ability to redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. Monitoring is not required during drilling or pile driving for installation of solar panel pylons.
- The project paleontologist may re-evaluate the necessity for paleontological monitoring after examination of the affected sediments during excavation.
- Any potentially significant fossils observed shall be collected and recorded in conjunction with best management practices and Society of Vertebrate Paleontology professional standards.
- Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.
- A report documenting the results of the monitoring, including any salvage activities and the significance of any fossils, will be prepared and submitted to the appropriate personnel.

Sources

Phase I Cultural and Paleontological Assessment for the North Coast Highway Solar Facility Project, Near Fortuna City, Humboldt County, California. June 2023. Prepared by Material Culture Consulting (Appendix F). Because it contains sensitive information, it is being kept confidential and is omitted from the attachments provided to the public.

California Geological Survey (CGS). Information Warehouse: Regulatory Maps Web-based Mapping program. Accessed: http://www.conservation.ca.gov/CGS/ (Accessed on January 3, 2024).

Natural Resources Conservation Service (NRCS). Web Soil Survey. Accessed: http://websoilsurvey.nrcs.usda.gov (Accessed on January 3, 2023).

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 gases?	☐	☐	☐	☒

The discussion below is based on the Summary of Air Quality, Greenhouse Gas, and Energy Analysis prepared by Vince Mirabella (AQ 2023), included as Appendix B.

Explanation

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHGs), play a critical role in the Earth's radiation amount by trapping infrared radiation from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses.

Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Transportation is responsible for 37 percent of the state's greenhouse gas emissions, followed by electricity generation. Emissions of CO_2 and N_2O are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean.

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. GHG statues and executive orders (EO) include AB 32, SB 1368, EO S-03-05, EO S-20-06 and EO S-01-07. These regulations require the use of alternative energy, such as solar power. Solar projects produce electricity with no GHG emissions and assist in offsetting GHG emissions produced by fossil-fuel-fired power plants.

GHG Thresholds

The NCUAQMD has not yet identified recommended GHG significance thresholds for the evaluation of development projects subject to CEQA review. However, various other air districts in the state have identified recommended GHG significance thresholds for stationary sources, including the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the Bay Area Air Quality Management District (BAAQMD). At the present time, no federal, state, or local air quality regulatory agency has an adopted quantitative threshold of significance for construction or operational-related GHG emissions. Therefore, project GHG emissions were compared to the SMAQMD's and BAAQMD's GHG threshold of 1,100 $MTCO_2e$ per year for land use development projects to provide a context within which to determine the significance the project's GHG construction and operational emissions.

Discussion:

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

No Impact.

Construction

Construction activities produce combustion emissions from various sources, such as site grading, heavy-duty construction vehicles onsite, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions from onsite construction activities would vary daily as construction activity levels change. The CalEEMod computer model estimated that the construction activities for the proposed project would generate 14 $MTCO_2e$ per year when amortized over 20 years.

Operations

Project operations would generate GHG emissions primarily as a result of worker vehicle trips. Additionally, the project's construction-related GHG emissions, amortized over 20 years, are added to the operational emissions estimate. Operational-period worker trips and amortized construction emissions total 16 $MTCO_2e$ per year.

In addition, the CalEEMod Emission Summary concluded that on an annual basis, the project would generate approximately 1,150 megawatt-hours (MWh) per year of energy, which would be distributed through PG&E facilities. The default CalEEMod GHG emission factor for PG&E's energy production is 870 pounds of CO_2 per MWh of electrical energy produced. Therefore, the solar energy generated from the project would result in a net reduction of 1,150 $MTCO_2e$ per year, assuming use of the renewable energy generated by the project instead of electricity generated by fossil-fueled sources. As the project's annual GHG emissions would generate approximately 16 $MTCO_2e$ of GHG emissions

per year, the net reduction in GHG emissions would be approximately 1,134 $MTCO_2e$ per year and 22,687 $MTCO_2e$ over the 20-year project life. Therefore, no adverse impacts related to greenhouse gas emissions would occur from implementation of the proposed project.

Table GHG-1: Project Total GHG Emissions

Activity	Annual GHG Emissions ($MTCO_2e$)
Project Operational Emissions *Mobile*	2
Project Construction Emissions	14
Offset Electricity Emissions	16
Total Project Construction, Operation, and Offset Electricity	-1,134
Significance Threshold	**1,100**
Project Exceeds Threshold?	**NO**
Source: Air Quality, Greenhouse Gas, and Energy Analysis (Appendix B)	

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

No Impact. The project would provide renewable energy and consequently would assist the State in its goals for renewable energy as set forth by AB 32. As such, the project would not conflict with the goals for AB 32 in reducing GHG emissions and no impacts would occur.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Summary of Air Quality, Greenhouse Gas, and Energy Analysis for the North Coast Highway Solar Project. March 30, 2023. Prepared by Vince Mirabella (Appendix B).

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 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 complied 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 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 a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

The discussion below is based on the Phase I and Phase II Environmental Site Assessment (ESA) prepared by Hillmann Consulting, included as Appendix G and Appendix H.

Discussion:

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

Less Than Significant Impact.

Construction

During construction, the project would involve the transport of general construction materials (i.e., concrete, metal, fuel, etc.), as well as the materials necessary to construct the proposed solar arrays. Construction activities would involve the limited use of hazardous materials, such as fuels and greases, for the fueling and servicing of construction equipment. Such substances may be stored in temporary storage tanks/sheds that would be located on the project site. Although these types of materials are not acutely hazardous, they are classified as hazardous materials and create the potential for

accidental spillage, which could expose workers. The use, storage, transport, and disposal of hazardous materials for construction of the facility would be carried out accordance with federal and state regulations. No extremely hazardous substances (such as those governed under Title 40, Part 335 of the Code of Federal Regulations) would be used, stored, transported, or disposed of during project construction. Thus, impacts related to construction would be less than significant.

Operation

The solar panels and inverters would produce no waste during operation. Solar panels are in a solid and non-leachable state and should a solar panel break it would not be a source of pollution and would not result in pollutants in stormwater. Solar panels would be cleaned on a quarterly basis by spraying demineralized water on the panels to remove dust and other material buildup. Cleaning water would infiltrate into the ground or evaporate as it drips off the solar modules. No cleaning agents would be used during this process. Overall, the project would result in less than significant hazards related to the routine transport, use, or disposal of hazardous materials.

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

Less Than Significant Impact. A Phase I ESA was conducted for the project site and determined that the historic agricultural use of the site is considered to be a recognized environmental condition (REC). Additionally, the adjoining property at 1576 CA-36 was formally occupied by Eel River Lumber Products sawmill and a 550-gallon underground storage tank was installed in 1979 and removed from the site in 1987. A Supplemental Subsurface Investigation Report (Phase II ESA) was conducted and none of the soil samples had detectable concentrations of VOC. No further sampling or analysis was required (Appendix H).

Construction

With the exception of construction-related materials such as fuels, lubricants, adhesives, and solvents, the proposed project would not generate or require the use or storage of hazardous substances. As described in the previous response, hazardous materials used in construction of the facility would done in compliance with federal and state regulations that limit potential risks related to upset and accident conditions. In addition, no extremely hazardous substances would be used, stored, transported, or disposed of during project construction. Thus, impacts related to the release of hazardous materials during construction would be less than significant.

Operation

Also, as described in the previous response, operation of the solar facility would not utilize hazardous materials. The solar panels used in the proposed project consist of sealed collections of solar cells that require no chemicals and produce no waste materials. There is no battery storage system contemplated, thus minimizing the need for transporting, using, or disposing of the hazardous materials that may be associated with the project. As such, impacts associated with a hazard to the public or the environment from the release of hazardous materials would not occur from operation of the project.

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

No Impact. Construction, operation, and decommissioning of the project would include the use of common hazardous materials, such as diesel fuel, lubricants, and detergents. These materials would be handled consistent with State and federal regulations. The closest school to the project site is Hydesville Elementary School, located approximately 1.5 miles east of the project site. Thus, the project would not emit hazardous or handle acutely hazardous materials, substances, or waste near the school, and no impact would occur.

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

No Impact. A database search was completed to determine if the project site or any nearby properties are identified as currently having hazardous materials. The record search performed using the Department of Toxic Substances Control's (DTSC) Hazardous Waste and Substances Site List – Site Cleanup (Cortese List) determined that the project site is not located on or near by a site which is included on a list of hazardous materials sites pursuant to Government Code Section 65962.5 (DTSC 2023). Thus, as a result, impacts related to hazards from being located on or adjacent to a hazardous materials site would not occur from implementation of the proposed project.

e) For a project 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?

Less Than Significant Impact. The project site is located approximately 0.5 mile to the south of the Rohnerville Airport. The project site is zoned AE, RE1-5, AP, which includes an Airport Land Use Compatibility Zone Overlay. Figure 5B of the 2007 Rohnerville Airport Master Plan Report indicates that the future 60 CNEL would be largely contained within the airport property and would likely remain within the area planned PF that contains the airport. As a result, noise levels near to the airport would be considered normally acceptable for uses allowed by adjacent land use designations (Humboldt County 2017). In addition, the project site would be unstaffed and would not generate permanent onsite employees. Therefore, impacts related to a safety hazard from airport operations would not occur from implementation of the project.

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

Less Than Significant Impact. The project site is located on agricultural pastureland. The project does not involve substantial persons or traffic trips at the project site that could hinder or impair emergency response or evacuation. After construction, the project site would not require daily employees. Hence, the project would not impair implementation of an emergency response plan or emergency evacuation plan, and impacts would not occur.

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

Less Than Significant Impact. The project site is not in an area designated by California Department of Forestry and Fire Prevention (CAL FIRE 2020) as a Fire Hazard Severity Zone. In addition, the project site is flat and surrounded by flat areas. There are no slope or hillsides that would become unstable. In addition, the project would not include construction of structures for human habitation and there would be no permanent employees stationed at the site. Thus, impacts would be less than significant.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

California Department of Forestry and Fire Protection (CAL FIRE). Fire Hazard Severity Zone Map. Accessed: https://forestwatch.maps.arcgis.com/apps/Styler/index.html?appid=5e96315793d445419b6c96f89ce5d153 (Accessed March 15, 2023).

Draft Environmental Impact Report, Humboldt County General Plan Update. September 2017. Accessed: https://humboldtgov.org/626/Draft-Environmental-Impact-Report-EIR (Accessed April 4, 2023).

Department of Toxic Substances Control Cortese List. Accessed: https://dtsc.ca.gov/dtscs-cortese-list/ (Accessed March 15, 2023).

Phase I Environmental Site Assessment. April 5, 2022. Prepared by Hillman Consulting. (Appendix G)

Supplemental Subsurface Investigation Report. April 5, 2022. Prepared by Hillman Consulting (Appendix H).

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 groundwater 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 off-site;	☐	☐	☒	☐
(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) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. Operation of the proposed solar facilities would not require the regular use of water or produce any form of wastewater. Waste Discharge Requirements per the Regional Water Quality Control Board (RWQCB) are not applicable to the project. As further explained below, the project would result in less-than-significant impacts related to the violation of water quality standards.

Construction

Implementation of the project has the potential to generate stormwater pollutants during the construction phase. Stormwater runoff from the project site could contain pollutants such as soils and sediments that are released during grading and excavation activities, as well as chemical and petroleum-related pollutants due to spills or leaks from heavy equipment and machinery. Other common pollutants that may result from construction activities include solid or liquid chemical spills; concrete and related cutting or curing residues; wastes from paints, sealants, solvents, detergents, glues, acids, lime, plaster, and cleaning agents; and heavy metals from equipment.

Hazardous materials (such as fuels, solvents, and coatings, among others) associated with construction activities would be stored and used in accordance with manufacturer's specifications and applicable hazardous material regulations. However, soil disturbance (from construction activities associated with

site grading, mounting of the solar panels, equipment installation, electrical conduit trenching, and scraping for the access roads) could cause soil erosion and the eventual release of sediment into stormwater runoff.

The National Pollutant Discharge Elimination System (NPDES) permit program was established to control water pollution by regulating point sources that discharge pollutants into Waters of the U.S. Pursuant to Section 402(p) of the Clean Water Act (CWA), which requires regulations for permitting of certain stormwater discharges, the SWRCB issued the statewide NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No 2009-009-DWQ, as amended), which became effective on July 1, 2010.

Under this Construction General Permit, individual NPDES permits or Construction General Permit coverage must be obtained for discharges of stormwater from construction sites with a disturbed area of one or more acres and are required to either obtain individual NPDES permits for stormwater discharges or be covered by the Construction General Permit. Compliance with SWPPP requirements is incorporated into the project by PPP WQ-1, listed in Section VII.

Coverage under the Construction General Permit is accomplished by completing and filing Permit Registration Documents (PRDs) with the SWRCB prior to commencement of construction activities. Among the PRDs are a Risk Assessment, a Site Map, and a SWPPP. The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction. The Construction General Permit requires dischargers to assess the risk level of a project based on both sediment transport and receiving water risk, and each project would then be categorized into Risk Level 1, 2, or 3, with increased monitoring required for certain higher-risk sites.

Pursuant to permit requirements, the applicant will be required to implement the BMPs outlined in the project's SWPPP, which would be implemented by PPP WQ-1, which would limit the potential of construction-related pollutants in stormwater runoff. Compliance with this requirement would ensure that temporary water quality impacts associated with construction activities would be less than significant.

Operation

During operations, the project would not require the use of chemicals, hazardous materials, or other pollutants that could impact waters. Panels would be washed quarterly by spraying a biodegradable cleaning solution to remove dust and other material buildup from the panels. The biodegradable solution would infiltrate into the ground or evaporate as it drips off the solar modules. No chemical cleaning agents would be used during this process.

The solar panels and inverters would produce no waste during operation. Solar panels are in a solid and non-leachable state. Thus, should any solar panels break, it would not be a source of pollution in stormwater. Therefore, operational impacts related to water quality would be less than significant.

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

Less Than Significant Impact.

Construction

With the exception of construction-related materials such as fuels, lubricants, adhesives, and solvents, the proposed project would not generate or require the use or storage of hazardous substances. As described in the previous response, hazardous materials used in construction of the facility would done in compliance with federal and state regulations that limit potential risks related to upset and accident conditions. In addition, no extremely hazardous substances would be used, stored, transported, or disposed of during project construction. Thus, impacts related to the release of hazardous materials during construction would be less than significant.

Operation

Also, as described in the previous response, operation of the solar facility would not utilize hazardous materials. The solar panels used in the proposed project consist of sealed collections of solar cells that require no chemicals and produce no waste materials. There is no battery storage system contemplated, thus minimizing the need for transporting, using, or disposing of the hazardous materials that may be associated with the project. As such, impacts associated with a hazard to the public or the environment from the release of hazardous materials would not occur from operation of the project.

c) i) 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 result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. The project would not involve any substantial alteration to the drainage pattern of the area. No major earth movement is required to place piles supporting the modules. Piles would be separated from each other and would therefore avoid creating an impervious surface that would substantially re-route storm flows; rather, water would flow around each pile and continue in the same direction that currently prevails. Furthermore, the piles would not result in a new source of erosion or siltation. Therefore, impacts related to alteration of the drainage pattern of the area or an increase in runoff that results in erosion, siltation, or flooding on- or offsite, would be less than significant.

c) ii) 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. The project would not involve any substantial alteration to the drainage pattern of the area. The project does not require significant grading. No major earth movement is required to place piles supporting the modules. Piles would be separated from each other and would therefore avoid creating an impervious surface that would substantially re-route storm flows; rather, water would flow around each pile and continue in the same direction that currently prevails. Furthermore, the piles would not result in a substantial increase in impervious surfaces. The project site is undeveloped and would remain pervious, with the exception of the piles, which would not be

substantial. Therefore, impacts related to alteration of the drainage pattern or an increase in runoff that results in flooding on- or off-site would be less than significant.

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

Less Than Significant Impact. As described in the previous response, installation of the proposed solar equipment would not result in a substantial increase in impervious surfaces. The equipment installation area is undeveloped and would remain pervious, with the exception of the installation of piles and inverter pads, which would not be substantial. Therefore, the project would not generate runoff that would exceed drainage facilities or provide substantial additional sources of polluted runoff, and impacts would be less than significant.

c) iv) 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 impede or redirect flood flows?

No Impact. The Federal Emergency Management Agency (Panel 06023C1240F) shows that the project site is not within a 100-year flood hazard area. The proposed array is sited on a terrace approximately 20 feet higher in grade than the closest mapped portion of the 100-year flood hazard area.

In addition, the piles and inverter pads installed by the project would be separated from each other and would not create an impervious surface that would impede or re-route storm flows; rather, water would flow around each pile and continue in the same direction that currently prevails. Thus, the project would not impede, or redirect flood flows and impacts would not occur.

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

No Impact. As described in the previous response, the project site is not within a 100-year flood hazard area. In addition, the project site is not in proximity to any coastline and is therefore not subject to inundation by tsunami.

A seiche is an oscillating surface wave in a restricted or enclosed body of water generated by ground motion, usually during an earthquake. Inundation from a seiche can occur if the wave overflows a containment wall or the banks of a water body. The project site is not in proximity to any water body. Thus, potential impacts related to seiche would not occur. Overall, the project site is not located in a flood hazard, tsunami, or seiche zone, and risk of pollutant release related to these types of hazard zones would not occur.

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

Less Than Significant Impact. The project would require a temporary source of water during the 4-month construction process. This limited and short-term use of water would not have the potential to substantially deplete groundwater supplies.

During operations, the solar facility would be unstaffed. There would be no restrooms needed for the solar facility and no process water would be required. Water would be required twice per year for cleaning of modules, which would be trucked onto the site for efficient use at the solar panels. This may require up to 2 gallons per module per year. Based on the 4,624 solar modules proposed for the project, a water demand of 9,248 gallons per year would result from the project. This water would be imported to the site and would not be pumped from groundwater.

The project would include solar modules mounted on driven piles, subject to final structural design. The project would result in a minor increase in imperviousness at the site from installation of piles in the undeveloped portion of the project site, which would not significantly impede groundwater recharge. Due to the negligible amount of water required for the project and the lack of significant new impervious area, impacts related to the depletion of groundwater supplies or interference with groundwater recharge would be less than significant.

Existing Plans, Programs, or Policies

The following PPPs are incorporated into the project and would reduce impacts related to hydrology and water quality. These actions will be included in the project's mitigation monitoring and reporting program:

PPP WQ-1: Stormwater Pollution Prevention Plan. See *Section VII.*

Mitigation Measures

None.

Sources

California Department of Forestry and Fire Protection (CAL FIRE). 2020. Fire Hazard Severity Zone Map. Accessed: https://forestwatch.maps.arcgis.com/apps/Styler/index.html?appid=5e96315793d445419b6c96f89ce5d153 (Accessed March 15, 2023).

Draft Environmental Impact Report, Humboldt County General Plan Update. September 2017. Accessed: https://humboldtgov.org/626/Draft-Environmental-Impact-Report-EIR (Accessed April 1, 20023).

Federal Emergency Management Agency Flood Map Service Center. Map Number 06023C1240F. Accessed: https://msc.fema.gov (Accessed March 15, 2023).

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) Physically divide an established community?

No Impact. The physical division of an established community could occur if a major road (expressway or freeway, for example) were built through an existing community or neighborhood, or if a major development was built which was inconsistent with the land uses in the community such that it divided the community. The environmental effects caused by such a facility or land use could include lack of, or disruption of, access to services, schools, or shopping areas. It might also include the creation of blighted buildings or areas due to the division of the community.

The project site is currently comprised of agricultural pastureland and is primarily surrounded by agricultural uses, with other agricultural land and industrial, and rural residential uses present in the project vicinity. There are no established communities immediately adjacent or within the project area. The proposed project would develop portions of an agricultural property with a solar facility. The shift at the project site from a pastureland site to a solar facility would not physically divide an established community. In addition, the project would not change roadways or install any infrastructure that would result in a physical division. Thus, the proposed project would not result in impacts related to physical division of 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?

Less than Significant with Mitigation Incorporated. The project would comply with applicable county plans, regulations, and standards as discussed below.

General Plan

Land use designations that would support a small solar power plant outside of the coastal zone include Agricultural Exclusive (AE), Agricultural Grazing (AG), and Timberland (T). The project site currently has a mixture of General Plan land use designations: Agricultural Exclusive(AE); Residential Estates (RE); and the Airport Land Use Compatibility Zone Overlay (AP). Policy E-P3 of the Energy Element of the Humboldt County General Plan states that "The County shall support renewable energy development projects including biomass, wind, solar, 'run of the river' hydroelectric, and ocean energy, consistent with this Plan that increases local energy supply." In addition, the General Plan Land Use Element states that the AE land use designation allows for allows for Utilities & Energy Facilities, which includes the erection, construction, alteration, or maintenance of gas, electric, water or communications transmission facilities, and wind or hydroelectric solar or biomass generation, and other fuel or energy production facilities.

Section E-IM10 of the Energy Element of the Humboldt County General Plan, regarding renewable energy permitting, includes the following implementation measure: "Develop a clear permit process to provide for the installation of renewable and distributed energy systems. Identify zones where renewable and distributed energy generation facilities will be allowed as a permitted use." This implementation program has yet to be undertaken.

Furthermore, the Airport Land Use Compatibility Zone Overlay limits the maximum allowable residential density and building occupancy for each land use designation subject to such zones, to the Airport/Land Use Safety Compatibility Criteria of the Airport Land Use Compatibility Plan, however, the proposed project does not include any habitable structures. Therefore, the planned installation of solar PV generating facilities within the project site would be consistent with the county's General Plan. Project-related glare concerns have been addressed through the design, angle, and orientation of the proposed solar array(s) and are the restrictions included in Mitigation Measure AES-1, which prohibits panel configurations that could produce "yellow glare".

Zoning

The project site is currently zoned AE-B-5 (160) (Agriculture Exclusive; Special Building Site). The Humboldt County General Plan and Zoning Ordinance allows for utility and energy facility land uses on lands planned and zoned Agriculture Exclusive (AE) as a conditionally permitted use. The project site is not restricted by a Williamson Act contract or other agricultural contract. Thus, the project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Existing Plans, Programs, or Policies

AG-P6. **Agricultural Land Conversion - No Net Loss.** Lands planned for agriculture (AE, AG) shall not be converted to non-agricultural uses unless the Planning Commission makes the following findings:

A. There are no feasible alternatives that would prevent or minimize conversion;
B. The facts support an overriding public interest in the conversion; and
C. For lands outside of designated Urban Development Boundaries, sufficient off-setting mitigation has been provided to prevent a net reduction in the agricultural land base and agricultural production. This requirement shall be known as the "No Net Loss" agricultural lands policy. "No Net Loss" mitigation is limited to one or more of the following:
    1. Re-planning of vacant agricultural lands from a non-agricultural land use designation to an agricultural plan designation along with the recordation of a permanent conservation easement on this land for continued agricultural use; or
    2. The retirement of non-agricultural uses on lands planned for agriculture and recordation of a permanent conservation easement on this land for continued agricultural use; or
    3. Financial contribution to an agricultural land fund in an amount sufficient to fully offset the agricultural land conversion for those uses enumerated in subsections a

and b. The operational details of the land fund, including the process for setting the amount of the financial contribution, shall be established by ordinance.

AG-P16. **Protect Productive Agricultural Soils.** Development on lands planned for agriculture (AE, AG) shall be designed to the maximum extent feasible to minimize the placement of buildings, impermeable surfaces or non-agricultural uses on land as defined in Government Code Section 51201(c) 1- 5 as prime agricultural lands.

Mitigation Measures

MM AG-1: Agriculture Management Plan. To maintain consistency with General Plan Policy AG-P6 and to prevent a net reduction in land base and agricultural production, the project sponsor shall maintain continual operation of agricultural uses on the property, including but not limited to sheep grazing, the keeping of honey bees, or planting of row crops, on a rotational basis. During rotational periods, the plan should include planting and maintenance of locally appropriate native plants, focusing on species that provide the greatest value to bees, moths, butterflies, and other native pollinators. Some potential options include yarrow (*Achillea millefolium*), farewell to spring (*Clarkia amoena*), California poppy (*Eschscholzia californica*), riverbank lupine (*Lupinus rivularis*), California bee plant (*Scrophularia californica*), and rough hedgenettle (*Stachys rigida*). To maintain habitat value, mowing should not occur during the bloom period, though targeted removal of invasive species is encouraged. Prior to finalization of the building permit for the project, the applicant shall submit an Agricultural Management Plan for review and approval by the Director of Planning & Building Department, or their designee. The plan shall summarize the types and duration of agricultural uses as well as operator information for the property. The Department reserves the right to reject or require revisions to the plan to ensure the effectiveness of the planned agricultural operations.

MM AG-2: Decommissioning & Remediation Plan. To ensure the project site will be restored to its original condition at the end of the Project's life, a decommissioning and remediation plan shall be submitted for review and approval to the Director of the Planning and Building Department, or their designee, prior to the issuance of Building Permits**.** The decommissioning plan shall include removal and proper disposal of all above and below ground improvements, restoration of the surface grade, placement of topsoil over all removed structures, and revegetation and erosion control as deemed necessary by the Director, as well as an estimated timeframe for completing site restoration, an engineer's cost estimate for all aspects of the removal and restoration plan, and an agreement signed by the property owner and operator.

MM-AES-1: Prevention of Hazardous Glare

All Solar panels within the arrays shall include an anti-reflective coating and be positioned with a resting angle of 75˚ and a maximum tracking angle of 65˚ with the panel array(s) orientated at 180.0˚. Resting angles below 17˚ are prohibited as they were determined to produce yellow glare. The orientation and positioning of panels within the array(s) must be maintained in a fashion that prevents the creation of yellow glare, for the life of the project. Should future changes to the configuration and orientation of the panels be proposed, an updated analysis of solar glare shall be required. Reconfiguration may only be authorized following review and approval by the County Aviation Department.

Sources

Draft Environmental Impact Report, Humboldt County General Plan Update. September 2017. Accessed: https://humboldtgov.org/626/Draft-Environmental-Impact-Report-EIR (Accessed March 15, 2023).

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

No Impact. The project site is not within a Significant Mineral Aggregate Resource Area (SMARA) Study Area and there are no designated mineral resource sites in the immediate project vicinity (CDC 2023). Therefore, development of the site would not result in the loss of availability of a known mineral resource that would be of value to the region, and impacts would not occur.

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

No Impact. The project site is currently comprised of undeveloped agricultural pastureland. As described in the previous response, the project site is not within a Significant Mineral Aggregate Resource Area (SMARA) Study Area and there are no designated mineral resource sites in the project vicinity. Therefore, implementation of the project would not result in the loss of locally important mineral resources, and impacts would not occur.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

California Department of Conservation. 2023. Mineral Land Classification. Accessed: https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc (Accessed March 15, 2023).

XIII. Noise. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or ground borne 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?	☐	☐	☒	☐

Humboldt County General Plan Noise Element

Humboldt County has adopted local guidelines to identify the existing and projected future noise environment in Humboldt County and provide policy direction and implementation efforts to protect county residents from exposure to excessive noise levels. The Noise Element of the Humboldt County General Plan provides the county's approach to managing noise levels to minimize the exposure of community residents to excessive noise. The analysis follows the guidelines adopted by the Office of Noise Control of the California Department of Health Services.

Discussion:

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

Less Than Significant Impact.

Construction

The proposed project would create noise during the 4-month construction process. The construction noise would be short-term and periodic in nature and generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators, and pile drivers. Pile driving and grading equipment would cause the loudest noise levels. Minimal grading would be required for the proposed project. Construction noise levels generated by commonly-used grading equipment (i.e., loaders, graders, and trucks) generate noise levels that are identified in Table N-1.

Table N-1: Typical Construction Equipment Noise Levels

Construction Equipment	Noise Level at 50 Feet (dBA, L_{max})	Noise Level at 50 Feet (dBA, L_{eq})
Chain Saw	83.7	76.7
Compactor (Ground)	83.2	76.2
Concrete Pump Truck	81.4	74.4
Concrete Saw	89.6	82.6
Dozer	81.7	77.7
Dump Truck	76.5	72.5
Excavator	80.7	76.7
Front End Loader	79.1	75.1
Generator	80.6	77.6
Grader	85.0	81.0
Jackhammer	88.9	81.9
Paver	77.2	74.2
Pile Driver	101.0	95.0
Pneumatic Tools	85.2	82.2
Pumps	80.9	77.9
Scraper	83.6	79.6
Tractor	84.0	80.0

Source: FHWA, 2006.

Noise impacts would be significant if they caused a violation of any adopted standards. Noise generated by the construction of the project would be temporary (limited to the anticipated four month construction period and the decommissioning period), and no permanent noise sources would be created. In addition, Humboldt County does not currently have ordinances that address construction noise. Thus, impacts related to construction noise standards would not occur.

Operation

The facility would be unstaffed during operation, with visits by maintenance personnel on an infrequent basis. Occasional visits by fewer than five staff persons for maintenance and quarterly cleaning of the solar panels would result in a negligible noise increase, which would be short-term and transitory. Therefore, operational noise impacts would be less than significant.

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

Less Than Significant Impact. Construction of the project would introduce temporary groundborne vibrations and noise levels in the project vicinity. Generally, the steps involved in construction would include the mowing of vegetation within the solar field, compacting native earth access roads (or installing aggregate base access roads), installing fencing, installing piles for array supports, placing underground conduit, and installation of solar panels and electrical equipment. The potential impacts would diminish over time and end at the completion of construction activities. Decommissioning and site reclamation activities are not expected to result in significant groundborne vibration or noise impacts. Thus, impacts would be less than significant.

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

Less Than Significant Impact. The project site is located approximately 0.5 mile to the south of the Rohnerville Airport. Figure 5B of the 2007 Rohnerville Airport Master Plan Report indicates that the future 60 CNEL would be largely contained within the airport property and would likely remain within the area planned PF that contains the airport. As a result, noise levels near to the airport would be considered normally acceptable for uses allowed by adjacent land use designations (Humboldt County 2017). Thus, aircraft noise impacts would be less than significant.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Draft Environmental Impact Report, Humboldt County General Plan Update. September 2017. Accessed: https://humboldtgov.org/626/Draft-Environmental-Impact-Report-EIR (Accessed January 4, 2023).

Federal Highway Administration Construction Noise Handbook. 2006. Accessed: https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm

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 (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion:

a) Induce substantial unplanned population growth in an area, either directly or indirectly?

No Impact. The project does not include housing or business, which would directly induce growth. The project includes installation and operation of solar power facilities on undeveloped land. Solar power generation is consistent with policies adopted by the State of California to replace fossil-fuel power generation with renewable energy generation. The project would connect to the existing electricity

grid and would not extend or expand infrastructure. Overall, there are no features of the project that would be expected to induce substantial population growth. Thus, indirect growth would not occur.

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

No Impact. The project site is currently comprised of undeveloped agricultural pastureland and does not contain any housing or people. The proposed project would not displace any existing housing or people and would not necessitate the construction of housing elsewhere. Thus, impacts would not occur.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

None.

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:

Fire Services

There are 39 fire departments providing fire protection to unincorporated communities and cities in Humboldt County including: one County Service Area (CSA); seven Community Service Districts (CSDs); 18 Fire Protection Districts (FPDs), one Resort Improvement District (RID), one city fire department, one

Joint Powers Authority that is comprised of a city and an FPD, and 12 fire companies in unincorporated towns not associated with local government agencies (including the Hoopa and Yurok Volunteer Fire Departments) that may be established pursuant to Sections 14825 through 14860 of the California Health and Safety Code.

The County's larger population centers of Eureka and Arcata/McKinleyville have fire departments with paid staff and multiple stations. Fire districts in Blue Lake, Shelter Cove (RID No. 1) and Fortuna have recently added paid Chiefs to better handle administrative and incident management responsibilities as well to address the planning and response needs of their communities. Other communities typically have one station staffed by all-volunteers. The smallest communities have the most limited resources, often relying on community contributions and used equipment to provide service.

Fire protection for the project site is provided by the Fortuna Fire Protection District. There are three fire stations within the Fortuna Fire Protection District, which protect the general areas of Fortuna, Hydesville, Fernbridge, and U.S. 1010 from Rio Dell to Fernbridge. The nearest fire station, Fortuna Fire District Station No. 4, is located in Hydesville approximately 1.5 miles from the project site at 3494 CA-36, Hydesville, CA 95547 (Humboldt County 2017).

Police Services

Police services within Humboldt County are provided by each of the seven cities within their jurisdictional boundaries, and the Hoopa and Yurok Tribe within their respective tribal lands. The Humboldt County Sheriff's Office provides a variety of public safety services countywide, including court and corrections services and law enforcement services for the unincorporated areas of the county. The California Highway Patrol is responsible for enforcing traffic laws on roadways within the unincorporated areas on state highways throughout the county.

The Humboldt County Sheriff's Office serves the project site. The Sheriff's Office Operations Bureau is made up of seven units under the command of the Undersheriff. The most visible of these units is the Patrol Unit. Sheriff's Deputies assigned to the Patrol Unit are responsible for responding to emergency calls for service, criminal investigations, and crime prevention through neighborhood and beat patrols. Patrol has one main station in Eureka, substations in Garberville, Willow Creek, and McKinleyville, and four resident deputy posts. The Sheriff's Office has mutual aid agreements with cities and the California State Highway Patrol. Mutual aid is provided between agencies where the agency of jurisdiction can request manpower or resources from allied agencies or agencies within surrounding areas (Humboldt County 2017).

Schools

Humboldt County communities are currently served by 32 public school districts. In addition, there are schools operated by the Humboldt County Office of Education and private schools. The largest district in the County in terms of enrollment is the Eureka City Unified School District, which has almost 4,000 students. There are four other districts with enrollments over 1,000 students. Average district enrollment in Humboldt County is approximately 550 students (Humboldt County 2017). The project is located within the Hydesville Elementary School District. The nearest public education facility to the project site is Hydesville Elementary School, located approximately 1.8 miles east of the project site.

Parks

Most parks in Humboldt County are regional in scope; outside the incorporated cities there are few local community or neighborhood parks. There are nearly 468,000 acres of federally managed parklands in the County, including National Forest, National Parks, and National Wildlife Areas, and 7,600 acres of Bureau of Land Management Reserve Lands. The County has about 76,000 acres of State Beach, State Parks, and State Reserve Lands. Humboldt County operates approximately 850 acres of parkland that includes ocean beaches, river access, boat ramps, and trails (Humboldt County 2017).

a) Result in substantial adverse physical impacts associated with the provision of 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:

Fire protection?
Police protection?
Schools?
Parks?
Other public facilities?

No Impact. The proposed project would not create a new fire or public safety hazard. Maintenance procedures would include equipment maintenance of the solar panels and other components, including repairs inside the facility, as well as vegetation management. Therefore, the risk of fire would be low, and the project would not require extensive fire protection services that would require alteration or construction of fire stations or other fire suppression infrastructure. The solar facility would be unstaffed, self-contained, and enclosed with wildlife friendly security fencing. Thus, no impact on police protection or services is anticipated. The proposed project would not cause permanent relocation of employees; therefore, there would be no additional demand for schools, parks, or other public facilities. The project would not result in the need for new or physically altered government facilities nor affect response time or other performance objectives. Thus, no impact would occur.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Draft Environmental Impact Report, Humboldt County General Plan Update. September 2017. Accessed: https://humboldtgov.org/626/Draft-Environmental-Impact-Report-EIR (Accessed March 15, 2023).

XVI. Recreation. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Humboldt County General Plan Conservation and Open Space Element

The Conservation Element guides the conservation, development, and utilization of natural resources (water, forests, soils, rivers, mineral deposits, and others), while the Open Space Element guides the comprehensive and long-range preservation and conservation of open-space lands. Together, these elements present a framework of goals and policies for use and protection of all the natural resource and open space assets of the County.

Approximately 1.4 million of the county's 2.3 million acres are used for agricultural and timber production. More than 550,000 acres are protected open space, forests, and recreation areas. Within county boundaries, there are 4 federal parks and beaches; 10 state parks; and 16 county parks and beaches, recreational areas, and reserves. There is also considerable National Forest land, as well as a number of city parks and open space areas owned by non-profit conservation groups (Humboldt County 2017).

Discussion:

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

No Impact. The proposed would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. No new residences would be constructed as part of the proposed project, and the project would not induce population growth. Thus, impacts related to recreation would not occur from implementation of the project.

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

No Impact. As described in the previous response, the proposed would not develop residences or induce population growth. The project does not include or require the construction or expansion of recreational facilities. The project lease area lies adjacent to a former railroad right-of-way that is planned to be converted into a multi-modal trail facility, as part of the Great Redwood Trail. The project has been designed to be compatible with this future recreational amenity. Thus, impacts related to recreation would not occur from implementation of the project.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Draft Environmental Impact Report, Humboldt County General Plan Update. September 2017. Accessed: https://humboldtgov.org/626/Draft-Environmental-Impact-Report-EIR (Accessed March 15, 2023).

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) Would the project 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?	☐	☐	☐	☒

The discussion below is based on the Trip Generation Analysis prepared by EPD Solutions, Inc. (EPD 2023), included as Appendix I.

Discussion:

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

Less Than Significant Impact.

Construction

Construction activities associated with the project would generate vehicular trips from construction workers traveling to and from project site, delivery of construction supplies and import materials to, and export of debris from the project site.

It is anticipated that construction activity would follow 3 major phases:

Phase 1 – Mobilization
Phase 2 – Site Improvements and Grading
Phase 3 – Panel Installation and Connection

Heavy construction equipment would be moved on-site at the beginning of construction and would remain on-site throughout as needed. These trips have not been included in the construction trip generation calculation, as they would not occur daily basis during construction. It is anticipated that daily vehicle traffic would be primarily made up of worker's passenger cars/light trucks, dump trucks during any soil import/export, flatbed delivery trucks, water trucks and porta let trucks. The highest number of trips would likely be from construction workers traveling to and from the site each day. The number of workers required during each phase has been estimated based on the required workers and construction equipment that were required for the construction of other similar solar projects.

Most of the construction workers are expected to arrive on-site before 7 AM and would depart prior to the 4 PM to 6 PM peak commute period. However, the trip generation assumes that 25 percent of workers may arrive during the peak period between 7 AM and 9 AM and could depart between 4 PM and 6 PM. Most construction and delivery trucks would arrive and depart the site throughout the day. For the trip generation, it has been assumed that at least one of each type of off-site construction vehicle would arrive or depart the site during the peak hours.

The construction trip generation is shown in Table T-1 below, which has been calculated for total trips and for passenger car equivalent (PCE). A PCE factor is applied to truck trips to account for the fact that trucks utilize more capacity on the roadway than a passenger car due to larger size and slower acceleration. PCE factors of 2.0 for medium trucks and 3.0 for heavy trucks were used for this analysis and are conservative based on the guidance for passenger car equivalent factors found in the Highway Capacity Manual, 6th Edition.

As shown in Table 1, the phase with the highest construction trip generation would be during the Panel Installation and Connection phase with 134 daily and 17 peak hour trips. When adjusted to account for PCE, Phase 3 would generate 158 daily and 20 peak hour trips.

Table T-1: Construction Trip Generation

		Vehicle Trips			PCE Trips		
	PCE	Daily	AM Peak Hour	PM Peak Hour	Daily	AM Peak Hour	PM Peak Hour
Phase 1 - Mobilization							
Workers (estimated 10 workers)[1]	1.0	30	4	4	30	4	4
Flatbed Delivery Trucks	3.0	4	2	2	12	6	6
Porta Let Trucks	2.0	2	1	1	4	2	2
		36	7	7	46	12	12
Phase 2 - Site Improvements and Grading							
Workers (estimated 20 workers)[1]	1.0	70	9	9	70	9	9
Concrete Trucks	2.0	6	1	1	12	2	2
Porta Let Trucks	2.0	2	1	1	4	2	2
		78	11	11	86	13	13
Phase 3 - Panel Installation and Connection							
Workers (estimated 40 workers)[1]	1.0	120	15	15	120	15	15
Flatbed Delivery Trucks	3.0	10	1	1	30	3	3
Porta Let Trucks	2.0	4	1	1	8	2	2
		134	17	17	158	20	20

PCE = Passenger Car Equivalent

[1] Worker trips are assumed to be outside of the peak hours. However, it is estimated that 25 percent of workers may arrive or depart the site during the AM or PM peak commute periods.

Since all trips would use SR- 36, the Caltrans Guide for the Preparation of Traffic Impact Studies was used to determine the thresholds for traffic impacts on LOS. The guidelines state that projects that generate less than 50 peak hour trips are generally exempt from a traffic impact study. Since the highest peak hour volume in PCE is 20 during Phase 3, it is assumed that this project would be exempt and would have a less than significant LOS Impact.

In addition, construction activities would only occur for a period of four months. The short-term vehicle trips from construction of the project would generate less than significant traffic related impacts.

Operation

Operation of the project would require significantly fewer trips than generated during the construction phase. The project would not be permanently staffed during operation. The site would be accessed by maintenance personnel a few times per month to perform ongoing repair and maintenance of the facility.

In addition to routine maintenance, the solar panels would be washed approximately once per quarter. A crew of approximately 5 to 10 maintenance workers would perform the quarterly panel washing. No heavy equipment would be required.

Furthermore, pedestrian and bicycle facilities are not located within the project vicinity. Plans for future development of these facilities do not indicate potential conflicts with the project site, as they generally focus on facilities located within the urban areas of the County. Due to the relative position of the project site as compared to the location of mass transit and nonmotorized transportation facilities, no impacts would be anticipated to occur to these facilities.

Overall, project construction and operations would not generate a significant number of vehicle trips and would not conflict with roadway measures of effectiveness of the circulation system. Similarly, there would be no project impact on existing or planned public transit routes, pedestrian facilities, or bicycle routes. Thus, a less than significant impact would occur.

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

Less Than Significant Impact. Senate Bill (SB) 743 was signed by Governor Brown in 2013 and required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating Transportation impacts. SB 743 specified that the new criteria should promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks and a diversity of land uses. The bill also specified that delay-based level of service could no longer be considered an indicator of a significant impact on the environment. In response, Section 15064.3 was added to the CEQA Guidelines beginning January 1, 2019. Section 15064.3 - Determining the Significance of Transportation Impacts states that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts and provides lead agencies with the discretion to choose the most appropriate methodology and thresholds for evaluating VMT. Section 15064.3(c) states that the provisions of the section applied statewide beginning on July 1, 2020.

The County of Humboldt has not adopted VMT analysis guidelines; therefore, guidelines from the OPR Technical Advisory on Evaluating Transportation Impacts In CEQA, December 2018, are applied. The OPR guidelines state that small projects with less than 110 average daily trips are generally exempt from having to analyze VMT. The operation of the project would generate a maximum of 6 daily trips. Thus, the project would have a less than significant impact on VMT.

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

Less Than Significant Impact. The project would not substantially increase hazards due to a geometric design feature. The project would construct a new driveway from SR-36, which would allow access to the site. The driveway alignment would be reviewed by the County in order to ensure that it meets all applicable California Department of Transportation (Caltrans) requirements including site visibility and design standards. To ensure the safety of the public, the facility's perimeter would be secured with a chain link fence for a total height of 6 feet. All employees and contractors would be required to adhere to the appropriate health and safety plans and emergency response plans. All construction and operation contractors would be trained and required to operate under a health and safety program that meets industry and OSHA standards. In addition, no roadway modifications are proposed as part of the project. Thus, no impact would occur.

d) Result in inadequate emergency access?

No Impact. Design of the proposed project includes an all-weather access road, which would provide access to the project site from SR-36. The project would utilize either stationary fixed-tilt, ground-mounted racking or single-axis trackers for its mounting structures. The proposed perimeter road would be designed to County standards. The chosen racking solution would be constructed in compliance with Humboldt County Fire Department requirements to provide for driveway ingress and egress, maintenance, and emergency vehicles. Thus, no impact would occur.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Trip Generation Analysis for North Coast Highway Solar Project. March 1, 2023. Prepared by EPD Solutions, Inc. (Appendix I).

XVIII. Tribal Cultural Resources.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource 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:				

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resource Code section 5020.1(k), or	☐	☐	☐	☒
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

The discussion below is based on the Phase I Cultural and Paleontological Assessment, prepared by Material Culture Consulting (MCC)(CUL 2023), included as Appendix F. Preparation of the report included cultural records searches, a search of the Sacred Lands File by the Native American Heritage Commission (NAHC), outreach efforts with Native American tribal representatives, background research, and a pedestrian field survey.

Discussion:

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

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

No Impact. The project site is a proposed within agricultural pastureland. The Sacred Lands File search performed as part of the Phase I Cultural and Paleontological Assessment did not identified the former railroad right-of-way as the only known historical resource found within the project area. The sacred lands search within the project area also identified one previously recorded cultural resource within a 1-mile radius of the project site (CUL 2023). There are no known resources listed on a local register of historical resources or recognized as historically significant which would be potentially adversely affected by the proposed project. Thus, no impacts would occur.

a) ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant Impact with Mitigation Incorporated. As part of the Phase I Cultural and Paleontological Assessment prepared by Material Culture Consulting (MCC), a search of the Sacred Lands File by the Native American Heritage Commission (NAHC) was conducted for each of the project subareas. The records search identified one previously recorded cultural resource within a 1-mile radius of the project site, which consisted of a prehistoric lithic scatter and non-human burial. Intensive field surveys were conducted on April 30, 2020 and again on May 30, 2023 to identify, describe, report, and, if possible, evaluate any cultural resources identified within the project area boundaries. It was determined by MCC that the potential for encountering significant cultural resources within the project area is considered low to moderate (CUL 2023). Given there exists the potential for discovery of Tribal Cultural Resources during project-related ground disturbance,

Mitigation Measures CUL-1 & CUL-2 have been included to provide archaeological monitoring during initial vegetation removal and grading and procedures in the event of inadvertent discoveries.

On April 17, 2020, MCC received an email from Mr. Ted Hernandez, chairperson for the Wiyot Tribe. Mr. Hernandez stated that the tribe's records show a known site where the project is located and recommended a survey with a Native American monitor present. MCC reached out to Mr. Hernandez to invite a representative to our survey efforts; however, due to COVID-19 restrictions, the tribe declined the invitation and requested a copy of the final report be submitted to them.

On January 4, 2021, formal invitations to request consultation were mailed to three local tribes including the Bear River Band of the Rohnerville Rancheria, Cher-Ae Heights Indian Community of the Trinidad Rancheria, and the Wiyot Tribe. No requests for consultation were received in response to these invitations. Only the Bear River Band of the Rohnerville Rancheria responded to the notification stating that formal consultation under AB 52 is not necessary. Although tribal cultural resources are known to existing in the broader region, local tribes provided no specific information regarding any tribal cultural resources that may be impacted by the project. Thus, impacts related to tribal cultural resources are less than significant.

In June of 2023, referrals were circulated to various agencies for comment, including local tribes. In February 2024, a targeted referral was emailed to the Tribal Historic Preservation Officers (THPO's) for the Bear River Band of the Rohnerville Rancheria and Wiyot Tribe, which included a copy of the cultural resources report prepared by MCC, as well as an updated site plan and project description. Some refinements were made to the Cultural Resources report and ground disturbance monitoring mitigation measures in response to feedback from Melanie McCavour, Bear River THPO.

With the implementation of **Mitigation Measures CUL-1 & CUL-2**, the project would result in a less than significant impact related to archaeological resources.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

Mitigation Measure CUL-1: Archaeological and Native American Monitoring Native American monitoring shall be provided by the Bear River Band of the Rohnerville Rancheria (BRB) and/or the Wiyot Tribe or their designee(s). The monitor(s) shall have the authority to halt and redirect work should any archaeological resources be identified during monitoring. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the find shall be evaluated for listing in the CRHR and National Register of Historical Places. The Tribe(s) may request that archaeological monitoring be performed under the direction of an archaeologist meeting the Secretary of Interior's PQS for Archaeology (as defined in the Code of Federal Regulations, 36 CFR Part 61). The Tribe(s) may also require that the archaeologist prepare a Cultural Resource Monitoring Program (CRMP) and to conduct monitoring of vegetation removal and rough grading activities. The CRMP shall address the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural, tribal cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this project. The CRMP may also require that the Archaeologist conduct Cultural Resource Sensitivity Training, focused on discussing the archaeological and tribal cultural resources

that may be encountered during ground-disturbing activities as well as the procedures to be followed in such an event. The retained Qualified Archeologist may also be required to attend the pre-grade meeting with the grading contractors to explain and coordinate the requirements of the monitoring plan.

The monitoring schedule shall be established by the Tribe(s) and may be adjusted based on the scale of disturbance and sensitivity of the location where ground disturbance will occur. Monitoring may be decreased to spot-checking at the discretion of the monitors, as warranted by conditions such as encountering bedrock, a lack of prior discovery following initial monitoring, or similar circumstances. If monitoring is decreased to spot-checking, spot-checking should occur when ground-disturbance moves to a new location in the project site and when ground disturbance extends to depths not previously reached (unless those depths are within bedrock).

Mitigation Measure CUL-2: Inadvertent Discovery of Cultural Resources If cultural resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 60-foot buffer of the discovery location. A qualified archaeologist as well as the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

The Native American Heritage Commission (NAHC) can provide information regarding the appropriate Tribal point(s) of contact for a specific area; the NAHC can be reached at 916-653-4082. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the NAHC will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to PRC 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99

If the find is considered a "resource" the Tribe may request either protection in place or recovery, salvage and treatment of the deposits. Recovery, salvage and treatment protocols shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA Guidelines 15064.5 and 15126.4 in consultation with the County. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if unique archaeological resources cannot be preserved in place or left in an undisturbed state, recovery, salvage, and treatment shall be required at the developer/applicant's expense. If significant pre-contact and/or historic-era cultural resources, as defined by CEQA, are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to the County of Humboldt Planning and Building Department for review and comment. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

Sources

Phase I Cultural and Paleontological Assessment for the North Coast Highway Solar Facility Project, Near Fortuna City, Humboldt County, California. June 2020. Prepared by Material Culture Consulting (Appendix F). Because it contains sensitive information, it is being kept confidential and is omitted from the attachments provided to the public.

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 stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have insufficient 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 does not have 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?	☐	☐	☐	☒

Water Service

Municipal water supplies are provided primarily from surface water sources by four water service districts, along with several cities and numerous community service districts. The Humboldt Bay Municipal Water District provides the majority of drinking water within the county. It supplies treated drinking water to seven municipal agencies, who in turn serve all communities in the greater Humboldt Bay region. The district also delivered large volumes of water to two pulp mills for industrial purposes; however, both pulp mills have ceased operation. In addition, there are 18 other entities that provide water service, including cities, special districts, and public utility companies.

The district currently has 40 - 45 million gallons per day (MGD) of water available beyond which is needed for its municipal customers. This additional supply is an asset for the area and would support new agricultural, commercial and industrial development (Humboldt County 2017).

Wastewater

There are 17 cities and special districts in Humboldt County that currently provide wastewater services, 14 of which operate wastewater collection systems and treatment plants; the remaining 3 operate only collection systems. In addition, there are two privately owned water and wastewater systems in company towns that are not regulated by the California Public Utilities Commission, that are transitioning to municipal systems. At least two additional special districts are considering developing new wastewater systems to address public health concerns in their community. The remainder of the County is served by on-site septic systems (Humboldt County 2017).

As such, in most of unincorporated areas within Humboldt County, such as the proposed project site, wastewater treatment services are not provided, and development relies on individual septic systems.

Solid Waste

Humboldt County currently administers a Countywide Integrated Waste Management Plan (CIWMP) through individual city and county solid waste diversion programs and under certain circumstances, on a multijurisdictional basis by Humboldt Waste Management Authority (HWMA). The county is continuing to work toward achieving the higher diversion rates in municipal waste streams, including the establishment of curbside recycling collection in the unincorporated area. As of June 2014, the county, through HWMA, would haul its solid waste to the Potrero Hills Landfill located in Solano County, California. This landfill would allow the county to meet its landfill disposal needs over the next 20 years.

Discussion:

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

No Impact. No employees would be permanently stationed at the site, and the solar facility does not include restrooms. The proposed project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. The project would utilize a biodegradable cleaning solution in lieu of water for the routine cleaning of panels. Because the site would not contain a permanent workforce and no toilet facilities would be required, there would be no demand for wastewater service, and wastewater infrastructure would not be developed. Therefore, no impacts related to requiring the construction of new or expansion of existing water or wastewater facilities would occur from implementation of the proposed project.

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

Less than Significant Impact. Based on the 4,800 solar modules proposed for the project, a water demand of 9,600 gallons per year would result from the project. This is substantially less than the average annual water use for a single-family home. Because of the limited water supply requirements for the project, a less-than-significant impact associated with the need for new or expanded water supply entitlements would occur from implementation of the proposed project.

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

No Impact. During construction, wastewater would be contained within portable toilet facilities and disposed of at an approved site. No employees would be permanently stationed at the site, and the solar facility does not include restrooms. Thus, operation of the proposed project would not generate wastewater and would not impact existing wastewater treatment facilities.

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

Less Than Significant Impact. Non-recyclable construction and operational waste would be disposed of at the Dry Creek landfill located in Jackson County, Oregon or other local landfill permitted to accept such waste. Construction waste would be sorted onsite and recyclable materials would be transported to an appropriate regional recycling facility through Recology Humboldt County, who is the only permitted hauler in the county. It is estimated that 10 percent of total construction waste would be recycled. Utilizing a factor of 10 cubic yards of solid waste for every MW, the project would produce a maximum of total of 20 cubic yards of solid waste during construction, of which approximately two cubic yards would be recycled. The destination of where separated recyclable materials go is market-driven. Operation and maintenance activities would produce negligible volumes of solid and liquid waste, which would be disposed of in accordance with applicable requirements.

Anticipated solid waste flows include concrete, metal, plastics, and PV panels. Recyclable materials, including solar panels, would be removed from the waste stream and recycled prior to disposal of solid waste in an approved landfill. If the solar facility is decommissioned after the closure of the Dry Creek Landfill, waste would be hauled to the nearest active landfill facility.

Thus, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and the project would not impair the attainment of solid waste reduction goals. Thus, impacts related to landfill capacity would be less than significant.

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

No Impact. The project would comply with all federal, state, and local statutes and regulation related to solid waste. The project would consist of short-term construction activities (with short-term waste generation limited to minor quantities of construction debris), and thus would not result in long-term solid waste generation. Solid wastes produced during the construction phase of this project, or during future decommissioning activities would be disposed of in accordance with all applicable statutes and regulations. Accordingly, anticipated impacts from the proposed project related to landfill capacity and compliance with applicable regulations would be less than significant.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Draft Environmental Impact Report, Humboldt County General Plan Update. September 2017. Accessed: https://humboldtgov.org/626/Draft-Environmental-Impact-Report-EIR (Accessed June 16, 2020).

CalReycyle Solid Waste Information System. Accessed at: https://www2.calrecycle.ca.gov/SWFacilities/Directory (Accessed March 15, 2023).

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

No Impact. The project site is not in an area designated by California Department of Forestry and Fire Prevention (CAL FIRE 2022) as a Fire Hazard Severity Zone. The proposed solar PV facility with battery energy storage component would not generate substantial long-term traffic. The project site would be accessed by an all-weather access road for ingress and egress from SR-36, which would allow sufficient access for emergency personnel and vehicles in the event of a wildland fire. In addition, the project would not result in any permanent road closures or affect any existing emergency shelters. Furthermore, the proposed project would not interfere with an adopted emergency response plan or evacuation plan. As a result, this impact is considered less than significant. No impact would occur.

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

No Impact. As discussed previously, the project site is not in an area designated by CAL FIRE as a Fire Hazard Severity Zone (CAL FIRE 2022). In addition, the project site consists of grassland on flat terrain. The project would not include construction of structures for human habitation and there would be no permanent employees stationed at the site. Thus, no impact related to other factors that would expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would occur from the project.

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

No Impact. The project would require installation of an all-weather access road, drive aisles between solar arrays, transformers, and electrical equipment. As described previously, the project site consists of grassland on flat terrain and is not in an area designated by CAL FIRE as a Fire Hazard Severity Zone (CAL FIRE 2022). The project does not include any infrastructure that would exacerbate fire risks. Thus, impacts related to infrastructure that could exacerbate fire risks would not occur with the proposed project.

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

No Impact. As described previously, the project site consists of grassland on flat terrain and is not in an area designated by CAL FIRE as a Fire Hazard Severity Zone (CAL FIRE 2022). There are no slope or hillsides that would become unstable. In addition, the project would not include construction of structures for human habitation and there would be no permanent employees stationed at or near the site. The project would not expose people to significant risks, including flooding, landslides, slope instability, or changes in drainage patterns. Thus, impacts related to flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes would not occur from the proposed project.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fire Hazard Severity Zone Map. Accessed: March 15, 2023

https://forestwatch.maps.arcgis.com/apps/Styler/index.html?appid=5e96315793d445419b6c96f89ce5d153 (Accessed March 15, 2023).

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) 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?

Less Than Significant with Mitigation Incorporated.

As described in Section 2, *Agriculture and Forestry Resources*, the project has the potential to conflict with land use policies designed to prevent conversion of agricultural land. **Mitigation Measure AG-1** requires preparation of an Agriculture Management Plan to enable pairing agricultural uses with the planned solar installation to offset the minor amount of land taken out of production as part of the proposal. **Mitigation Measure AG-2** requires preparation of a Decommissioning and Remediation Plan to ensure the site is restored to its original condition when the solar project is no longer operational. With implementation of **Mitigation Measures AG-1 and AG-2**, impacts related to agricultural resources would be reduced to a less than significant level.

As described in Section 4, *Biological Resources*, the project would not 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, or reduce the number or restrict the range of a rare or endangered plant or animal.

The Habitat Assessment (BIO 2023) describes that there is some nesting habitat on the site and foraging habitat may exist for passerine and raptor species. All nesting birds are covered under the Migratory Bird Treaty Act and Section 3503.5 of the California Department of Fish and Wildlife code. Hence, **Mitigation Measure BIO-1** requires pre-construction nesting bird surveys, as well as recommendations for vegetation removal outside of the nesting bird season. With implementation of **Mitigation Measure BIO-1**, impacts related to protected bird species would also be reduced to a less than significant level.

As described in Section 5, *Cultural Resources*, the potential for encountering significant cultural resources within the project area is considered low to moderate (CUL 2023). However, project excavation activity is limited to shallow trenching for conduit and drilling/pile driving for installation of solar panels. Thus, it is unlikely that crews would encounter significant cultural resources during the course of project development. **Mitigation Measures CUL-1 & CUL-2** have been included to provide archaeological monitoring for initial vegetation removal and grading and procedures in the event of inadvertent discoveries. Thus, with the implementation of **Mitigation Measures CUL-1 & CUL-2**, the project would result in a less than significant impact related to archaeological resources.

As described in Section 7, *Geology and Soils*, based on the results of the Phase 1 Cultural and Paleontological Assessment, MCC recommends the project site be considered low to moderate sensitivity to have the potential for construction activities of the proposed project to impact underlying paleontological resources. Thus, **Mitigation Measure PAL-1** has been included to require periodic paleontological spot checks and that a professional paleontologist be hired to oversee monitoring. With implementation of **Mitigation Measure PAL-1**, impacts to paleontological resources would be reduced to a less than significant level.

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

Less Than Significant with Mitigation Incorporated. Mitigation Measures AES-1, AG-1, AG-2, BIO-1, CUL-1, CUL-2, and PAL-1 are incorporated into the project to minimize impacts related to biological resources, cultural/archaeological resources, and paleontological resources, respectively. No project impacts were identified that could combine with the impacts of other projects to be cumulatively considerable. With the implementation of these mitigation measures, impacts would not combine to be cumulatively considerable.

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

Less Than Significant Impact. Impacts that could result in substantial adverse effects on human beings, either directly or indirectly, would be less than significant as mitigated.

As described in Section 1, *Aesthetics*, the project has the potential to create glare hazardous to aviation at the nearby Rohnerville Airport. Without controlling the panel configuration and orientation, the project could generate yellow glare capable of causing a temporary after-image lasting more than a few seconds that can hamper safe aircraft maneuvering. The glare analysis included in Appendix A evaluates the project's potential for creating glint and glare and has determined that harmful yellow glare is generated in configurations where the resting angle of the panels is less than 17 degrees. The currently proposed configuration of the panel array(s) includes a maximum tracking angle of 65° and a resting angle of 75° degrees. This orientation was evaluated in the glare analysis which found it would not generate any yellow glare and would generate approximately 432 hours of green glare annually. According to the report, unlike yellow glare, green glare has low potential for causing after image or flash blindness. The glare analysis and information was reviewed by the County's Aviation Department as well as the Battalion Chief of the CalFire Aviation Unit, which is based at the Rohnerville Airport (FOT). Cal-Fire's pilot team have indicated that the development should not be a factor for them conducting safe arrivals and departures to/from the FOT Airport. Furthermore, the County's Airport Planning Consultants have run the project details through the FAA's Notice Criteria Tool regarding airspace and determined that the project would not require further evaluation from an airspace safety perspective.

Because there exists the possibility for creation of more dangerous yellow glare at certain angles and orientations, **Mitigation Measure AES-1** includes restrictions on the configuration of the panel array(s) to prevent the production of yellow glare, which can pose a hazard to aircraft, and will be applicable for the life of the project.

Existing Plans, Programs, or Policies are in place to minimize the potential for impacts. These include PPP WQ-1 (Stormwater Pollution Prevention Plan), PPP CUL-1 (Human Remains), and PPP GEO-1 (Code Compliance). With the application of standard requirements of development and project-specific mitigation measures, impacts related to human beings would be less than significant.

Existing Plans, Programs, or Policies

PPP CUL-1. Human Remains. See Section 5.

PPP WQ-1. Stormwater Pollution Prevention Plan. See Section 7.

PPP GEO-1. Code Compliance. See Section 7.

Mitigation Measures

Mitigation Measure AES-1: Prevention of Hazardous Glare. See Section 1.

Mitigation Measure AG-1: Agriculture Management Plan. See Section 2.

Mitigation Measure AG-2: Decommissioning & Remediation Plan. See Section 2.

Mitigation Measure BIO-1. Preconstruction Nesting Bird Survey. See Section 4.

Mitigation Measure CUL-1. Cultural Resources Monitoring Program. See Section 5.

Mitigation Measure CUL-2: Inadvertent Discovery of Cultural Resources. See Section 5.

Mitigation Measure PAL-1. Paleontological Resources. See Section 7.

Sources

None.

Mitigation Monitoring & Reporting Program

All of the following mitigation measures are required to mitigate impacts from the proposed project:

Mitigation Measure AES-1: Prevention of Hazardous Glare
All Solar panels within the arrays shall include an anti-reflective coating and be positioned with a resting angle of 75˚ and a maximum tracking angle of 65˚ with the panel array(s) orientated at 180.0˚. Resting angles below 17˚ are prohibited as they were determined to produce yellow glare. The orientation and positioning of panels within the array(s) must be maintained in a fashion that prevents the creation of yellow glare, for the life of the project. Should future changes to the configuration and orientation of the panels be proposed, an updated analysis of solar glare shall be required. Reconfiguration may only be authorized following review and approval by the County Aviation Department.

Mitigation Measure AG-1: Agriculture Management Plan. To maintain consistency with General Plan Policy AG-P6 and to prevent a net reduction in land base and agricultural production, the project sponsor shall maintain continual operation of agricultural uses on the property, including but not limited to sheep grazing, the keeping of honey bees, or planting of row crops, on a rotational basis. During rotational periods, the plan should include planting and maintenance of locally appropriate native plants, focusing on species that provide the greatest value to bees, moths, butterflies, and other native pollinators. Some potential options include yarrow (*Achillea millefolium*), farewell to spring (*Clarkia amoena*), California poppy (*Eschscholzia californica*), riverbank lupine (*Lupinus rivularis*), California bee plant (*Scrophularia californica*), and rough hedgenettle (*Stachys rigida*). To maintain habitat value, mowing should not occur during the bloom period, though targeted removal of invasive species is encouraged. Prior to finalization of the building permit for the project, the applicant shall submit an Agricultural Management Plan for review and approval by the Director of Planning & Building Department, or their designee. The plan shall summarizing the types and duration of agricultural uses as well as operator information for the property. The Department reserves the right to reject or require revisions to the plan to ensure the effectiveness of the planned agricultural operations.

Mitigation Measure AG-2: Decommissioning & Remediation Plan. To ensure the project site will be restored to its original condition at the end of the Project's life, a decommissioning and remediation plan shall be submitted for review and approval to the Director of the Planning and Building Department, or their designee, prior to the issuance of Building Permits**.** The decommissioning plan shall include removal and proper disposal of all above and below ground improvements, restoration of the surface grade, placement of topsoil over all removed structures, and revegetation and erosion control as deemed necessary by the Director, as well as an estimated timeframe for completing site restoration, an engineer's cost estimate for all aspects of the removal and restoration plan, and an agreement signed by the property owner and operator.

Mitigation Measure BIO-1: Preconstruction Nesting Bird Surveys. To the extent feasible, conduct vegetation removal outside of the nesting bird season (generally between March 1 and August 31). If vegetation removal is required during the nesting bird season, conduct take avoidance surveys for nesting birds within 100 feet of areas proposed for vegetation removal. A survey must be conducted by

a qualified biologist(s) no more than 7 days prior to vegetation removal. If active nests are observed, a qualified biologist will determine appropriate minimum disturbance buffers or other adaptive mitigation techniques (e.g., biological monitoring of active nests during construction-related activities, staggered schedules, etc.) to ensure that impacts to nesting birds are avoided until the nest is no longer active. If there is a lapse in project-related construction activities of 7 days or more, the biologist shall re-survey the area before work resumes.

Mitigation Measure CUL-1: Archaeological and Native American Monitoring Native American monitoring shall be provided by the Bear River Band of the Rohnerville Rancheria (BRB) and/or the Wiyot Tribe or their designee(s). The monitor(s) shall have the authority to halt and redirect work should any archaeological resources be identified during monitoring. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the find shall be evaluated for listing in the CRHR and National Register of Historical Places. The Tribe(s) may request that archaeological monitoring be performed under the direction of an archaeologist meeting the Secretary of Interior's PQS for Archaeology (as defined in the Code of Federal Regulations, 36 CFR Part 61). The Tribe(s) may also require that the archaeologist prepare a Cultural Resource Monitoring Program (CRMP) and to conduct monitoring of vegetation removal and rough grading activities. The CRMP shall address the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural, tribal cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this project. The CRMP may also require that the Archaeologist conduct Cultural Resource Sensitivity Training, focused on discussing the archaeological and tribal cultural resources that may be encountered during ground-disturbing activities as well as the procedures to be followed in such an event. The retained Qualified Archeologist may also be required to attend the pre-grade meeting with the grading contractors to explain and coordinate the requirements of the monitoring plan.

The monitoring schedule shall be established by the Tribe(s) and may be adjusted based on the scale of disturbance and sensitivity of the location where ground disturbance will occur. Monitoring may be decreased to spot-checking at the discretion of the monitors, as warranted by conditions such as encountering bedrock, a lack of prior discovery following initial monitoring, or similar circumstances. If monitoring is decreased to spot-checking, spot-checking should occur when ground-disturbance moves to a new location in the project site and when ground disturbance extends to depths not previously reached (unless those depths are within bedrock).

Mitigation Measure CUL-2: Inadvertent Discovery of Cultural Resources If cultural resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 60-foot buffer of the discovery location. A qualified archaeologist as well as the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

The Native American Heritage Commission (NAHC) can provide information regarding the appropriate Tribal point(s) of contact for a specific area; the NAHC can be reached at 916-653-4082. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety

Code 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the NAHC will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to PRC 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99

If the find is considered a "resource" the Tribe may request either protection in place or recovery, salvage and treatment of the deposits. Recovery, salvage and treatment protocols shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA Guidelines 15064.5 and 15126.4 in consultation with the County. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if unique archaeological resources cannot be preserved in place or left in an undisturbed state, recovery, salvage, and treatment shall be required at the developer/applicant's expense. If significant pre-contact and/or historic-era cultural resources, as defined by CEQA, are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to the County of Humboldt Planning and Building Department for review and comment. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

Mitigation Measure PAL-1: Paleontological Resources. Prior to the start of construction, the following mitigation measures will be implemented to avoid potential impacts to significant paleontological resources if they are encountered during the course of construction activities:

- A trained and qualified paleontological monitor will perform spot-check and/or monitoring of any excavations on the project that have the potential to impact paleontological resources in undisturbed native sediments below 10 feet in depth. The monitor will have the ability to redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. Monitoring is not required during drilling or pile driving for installation of solar panel pylons.
- The project paleontologist may re-evaluate the necessity for paleontological monitoring after examination of the affected sediments during excavation.
- Any potentially significant fossils observed shall be collected and recorded in conjunction with best management practices and Society of Vertebrate Paleontology professional standards.
- Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.
- A report documenting the results of the monitoring, including any salvage activities and the significance of any fossils, will be prepared and submitted to the appropriate personnel.

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