



PLANNING AND BUILDING DEPARTMENT  
**C O U N T Y   O F   H U M B O L D T**  
MAILING ADDRESS: 3015 H STREET, EUREKA, CA, 95501-0579  
AREA CODE: 707-445-7541

## **NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION**

Humboldt County Planning and Building Department is providing notice of the intent to adopt a Mitigated Negative Declaration of environmental impact for the following project in accordance with the California Environmental Quality Act:

PROJECT TITLE: Hatchery Road Solar Project

PROJECT DESCRIPTION: The project will include a small-scale commercial energy generating facility that would construct a 4 megawatt (MW) solar facility on approximately 25.70 acres. The proposed project includes approximately of 13,664 solar photovoltaic (PV) module arrays, 32 string inverters, and associated electrical conductors and equipment needed to convert sun energy into usable AC power. The project will enhance electrical reliability for the existing Pacific Gas & Electric's (PG&E's) grid system. A small drainage though the middle of the property will be avoided by a 150' setback leaving the remainder of the land area covered by the solar arrays, which will be mounted on a racking system attached to steel piles driven into the ground. Single axis tracking technology will be utilized to allow the modules to efficiently track the sun throughout the day and maximize the efficiency of solar collection. The project proposes ongoing agricultural uses on the property, including but not limited to sheep grazing or the keeping of honey bees, on a rotational basis whereby pasture areas would be occupied for variable periods, allowing pasture rest periods to promote optimal vegetation quality management and maintenance of the project's pollinator habitat.

PURPOSE OF NOTICE: The purpose of this notice is to inform the public that the Department of Planning and Building plans to recommend that the Humboldt County Planning Commission adopt a Mitigated Negative Declaration for the project. An Initial Study was prepared to identify potentially significant impacts on the environment, and it was determined that the project will have a less than significant effect on the environment with the incorporation of specified mitigation measures.

LEAD AGENCY: County of Humboldt

ADDRESS WHERE COPY OF INITIAL STUDY IS AVAILABLE FOR REVIEW:

- Department of Planning and Building, 3015 H Street, Eureka, CA, 95501
- <http://co.humboldt.ca.us/planning>
- <https://ceqanet.opr.ca.gov/>

REVIEW PERIOD: The review period begins **xx**, 2020, and ends **xx**, 2020. Public comments regarding the correctness, completeness, or adequacy of the Initial Study are invited. Comments received by the end of the review period will be considered before adoption of the Mitigated Negative Declaration. Public meetings for the project are not planned at this time. Written comments should be addressed to the Humboldt County Department of Planning and Building, 3015 H Street, Eureka, CA, 95501.

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

**Hatchery Road Solar Project**

**Humboldt County, California**

**December 31, 2020**

Prepared by:  
LAK Associates, LLC  
For  
County of Humboldt  
3015 H Street,  
Eureka, CA, 95501



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## ATTACHMENTS

Attachment A	Mitigation Monitoring and Reporting Program
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## LIST OF ACRONYMS

CCA	Community choice aggregation
HCC	Humboldt County Code
in/sec ppv	Inches per second (peak particle velocity)
kW	kilowatt
LID	Low impact development
MW	megawatt
PG&E	Pacific Gas & Electric
PV	Photovoltaic
RCEA	Redwood Coast Energy Authority

## 1.1 PROJECT OVERVIEW

**Project Title:** Hatchery Road Solar Project

**Project Summary:** The proposed project would construct and operate a 4-megawatt photovoltaic solar array facility consisting of 13,664 solar photovoltaic (PV) module arrays, 32 string inverters, and associated electrical conductors and equipment needed to convert sun energy into usable AC power. The Project will enhance electrical reliability on Pacific Gas & Electric's (PG&E's) existing grid system.

The project area will be approximately 26-acres +/- . The solar arrays will be mounted on a racking system attached to steel piles driven into the ground. Single axis tracking technology will be utilized to allow the modules to efficiently track the sun throughout the day and maximize the effectiveness of solar collection. The bottom edge of the solar arrays will be approximately two to three feet above ground and the top edge of the solar arrays will be no more than eight feet above ground. The project proposes ongoing agricultural uses on the property, including but not limited to sheep grazing or the keeping of honey bees, on a rotational basis whereby pasture areas would be occupied for variable periods, allowing pasture rest periods to promote optimal vegetation quality management. The project includes a Pollinator Habitat Program that will increase agricultural crop yields by attracting native pollinators and beneficial predatory insects, improve soils by decreasing stormwater runoff and use of herbicides, and enhance wildlife and plant biodiversity. A chain link fence with barbed wire on top will be installed around the 26-acre area with gates for vehicle access. The project will provide a Decommissioning Plan to fully restore the site to its original condition at the end of the Project's useful life.

**Lead Agency Name and Address:** Humboldt County Planning and Building Department  
3015 H Street, Eureka, CA, 95501

**Contact Person:** Joshua Z. Dorris, Senior Planner  
707-268-3779

**Project Location:** Hatchery Road, Blue Lake, Humboldt County  
Latitude: 40.857947°N, Longitude: -123.993043°W

### **Affected Parcels:**

<b>Assessor Parcel Numbers (APN):</b>	313-091-019	313-091-020
<b>Owner:</b>	Victor Guynup Trust and Dorthea Guynup Trust	Victor Guynup Trust and Dorthea Guynup Trust
<b>General Plan Designation:</b>	AE (Agriculture Exclusive)  (Blue Lake Community	AE (Agriculture Exclusive)  (Blue Lake Community Area)
<b>Zoning:</b>	U (Unclassified)	U (Unclassified)
<b>Coastal Zone:</b>	No	No



**Other Public Agencies Whose Approval Is Required:**

- California Energy Commission
- Redwood Community Energy Authority

**Tribal Consultation:**

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, has consultation begun?

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 21083.3.2.) 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.

On November 20, 2020 Humboldt County Staff sent formal invitations to consult on the proposed project to Bear River Band of the Rohnerville Rancheria, Blue Lake Rancheria, and the Wiyot Tribe who have a cultural interest in the area and who as of that date had requested to be invited to consult on projects, in accordance with the requirements of Public Resources Code section 21080.3.1. [Discussion on Outcome: Responses have been received from \_\_\_\_\_.] [as appropriate: On (date), \_\_\_\_\_ declined the offer to consult.]

**CEQA Requirement:**

The proposed Hatchery Road Solar Project is subject to the requirements of the California Environmental Quality Act (CEQA). CEQA encourages lead agencies and applicants to modify their projects to avoid potentially significant adverse impacts (Public Resources Code Section 21080[c][2] and State CEQA Guidelines Section 15070[b] [2]).

The Lead Agency for the proposed project is the County of Humboldt, per CEQA Guidelines Section 21067. Compliance with CEQA is being implemented through the Department of Planning and Building. The purpose of this Initial Study is to provide a basis for determining whether to prepare an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration. This Initial Study is intended to satisfy the requirements of CEQA (Public Resources Code, Div. 13, Sec 21000-21177) and the State CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387).

Section 15063(d) of the State CEQA Guidelines states that an Initial Study shall contain the following information in brief form:

1. A description of the project including the project location
2. Identification of the environmental setting
3. Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to provide evidence to support the entries
4. Discussion of means to mitigate identified significant effects
5. Examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls
6. The name of the person or persons who prepared and/or participated in the Initial Study

The California Department of Fish & Wildlife is a trustee agency under CEQA.

The environmental checklist form contained in this document is based on Appendix G of the CEQA Guidelines (2019).

## **2. PROJECT DESCRIPTION**

### **2.1 Introduction**

#### **2.1.1 Project Overview**

The Hatchery Road Solar Project (project) will be located near the end of Hatchery Road south of the City of Blue Lake. A site location map is provided in Figure 1. The project will include a small-scale commercial energy generating facility consisting of 13,664 solar photovoltaic (PV) module arrays, 32 string inverters, and associated electrical conductors and equipment needed to convert the sun's energy into usable alternating current (AC) power. The project will enhance the reliability of Pacific Gas & Electric's (PG&E's) existing electric grid system.

The project area will be approximately 26-acres within the project fence. The majority of the land area will be covered by the solar arrays, which will be mounted on a racking system attached to steel piles driven into the ground. Single axis tracking technology will be utilized to allow the modules to efficiently track the sun throughout the day and maximize the productivity of solar collection. The bottom edge of the solar arrays will be approximately two to three feet above ground and the top edge of the solar arrays will be no more than eight feet above ground. A chain link fence with barbed wire on top will be installed around the project area with gates for access.

The electricity generated by the project will be exported onto PG&E's existing 12kV Blue Lake 1101 Distribution Circuit distribution grid along Hatchery Road. The project will largely rely upon PG&E's existing wires and poles so construction outside the project area will be minimal. Power generated by the facility will be sold to Redwood Coast Energy Authority (RCEA) through a long-term Power Purchase Agreement (PPA).

The project has a 35-year useful life, and during that period other components such as the weather station and power conversion devices may need to be replaced once or twice. The noise generated by the power conversion devices and transformers is minimal, consisting mostly of low humming and cooling fans. The power conversion area will be located in the middle of the project site and a point of interconnect will occur at the southwest corner of the property. Regular maintenance items over the life of the system will include washing the dust off the panels at least twice a year and managing vegetation growth.

The project applicant is RPCA Solar 5, LLC. RPCA Solar 5 LLC will coordinate with RCEA, PG&E, and the County of Humboldt for approvals and development of the project.

The project will fully-restore the site to its original condition at the end of its useful life through a Decommissioning Plan, subject to review and approval by the Planning and Building Director. The project applicant will provide a financial security to guarantee that the facility will be decommissioned, and the site will be returned to pre-project conditions.

#### **2.1.2 Purpose and Need**

The purpose of this project is to implement a locally based renewable energy generating facility, that will provide clean renewable electricity for the residents of Humboldt County. The project will enhance and improve the resilience of the grid by providing enough clean renewable energy to power roughly 1,192 homes in Humboldt County and reduce local resident's reliance on carbon-based fuels while lowering Green House Gas (GHG) emissions. The project will improve the resiliency and reliability of the grid, increase access to the locally generated electricity and provide greater local choice for clean, renewable

energy within RCEA's service territory. This project will participate in RCEA's Feed-In Tariff (FIT) Program and enter into a PPA with RCEA.

The project will result in public benefits such as improved reliability of the grid, increased safety, increased use of renewable energy, and decreased GHG.

The project will provide the following specific benefits:

- The project provides approximately 4,000 megawatt hours per year (MWh/yr) of renewable AC.
- The project will provide enough clean renewable energy to power roughly 1,200 homes in Humboldt County.
- The project will reduce resident's reliance on carbon-based fuels and lower GHG emissions.
- The project will enable RCEA to make significant progress in its mandate to deliver locally produced renewable electricity to its customers.

### **3. PROJECT LOCATION AND SETTING**

#### **3.1 Project Location**

The project site is located in unincorporated Humboldt County, approximately one and a half miles south of the City of Blue Lake, and 4.7 miles east of the City of Arcata. From Highway 101, the project site is accessed via Highway 299, Blue Lake Boulevard exit to Hatchery Road. The project site is depicted on the Korbel 7.5-minute U.S. Geological Survey quadrangle.

#### **Ownership**

The entire property comprises approximately 36.5 acres. The Assessor Parcel Numbers (APNs) of the two parcels affected by the project are APN 313-091-019 and APN 313-091-020 (Figure 1). These two parcels are owned by the Victor Guynup Trust and Dorthea Guynup Trust. The property owners also maintain approximately 241 acres in agricultural use immediately contiguous to these two parcels. The proposed solar facility will be developed via a long-term lease between the project applicant and the property owners.

#### **Project Setting and Surrounding Land Uses**

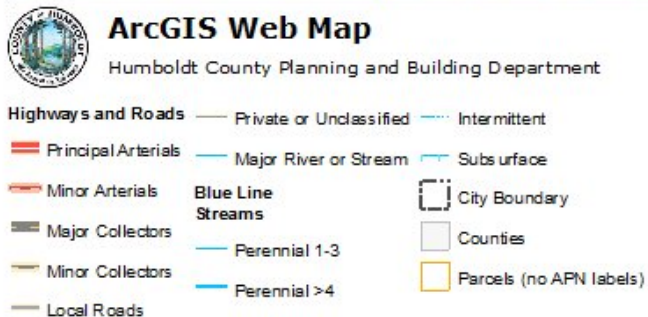
The project site is situated just east of Hatchery Road and north of the State Fish Hatchery facility adjacent to the Mad River. The property is bordered by rural residential, agricultural, industrial/mining development, timberland preserve, and recreational areas. The project area is located outside of the coastal zone.

The project site is situated in the North Coast Range geomorphic province and occupies a relatively flat marine terrace with a ground surface elevation of approximately 200 feet above mean sea level. In the vicinity of the project site, the Coast Range contains primarily sedimentary rocks underlain by Franciscan basement rocks. The dominant soil type is a silty clay loam.

##### **3.1.1 Existing Conditions**

The PV arrays will be installed in a currently unimproved grazing/grassy field with intermittent brushy vegetation and trees. The area where the interconnection switchgear will be installed is located at the southwestern edge of the larger parcel adjacent to Hatchery Road. The overhead 12kV line will require minor upgrades to accommodate the project. Site photos of existing conditions are provided in Figures 2a – 2c.

Figure 1: Site location map



Printed: October 8, 2020 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:  
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Source: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



**Figure 2a and b: Photos of existing conditions**



**Figure 2a:** Northeast section of Project Area. Facing southwest. 7 May 2020, GANDA



**Figure 2b:** Central zone of Project Area. Facing south. 7 May 2020, GANDA



**Figure 2c and d: Photos of existing conditions**



**Figure 2c:** Southeast section of Project Area. Facing northwest. 7 May 2020, GANDA



**Figure 2d:** Eastern boundary of Project Area. Facing north. 8 May 2020, GANDA

## **3.2 Detailed Project Information**

### **3.2.1 New Facilities**

New facilities will include:

- 4-megawatt PV array
- Fence length: 6,500 Ft
- Total area of (pervious) access roads: 49,225 sq ft
- Total of four (4) Transformer Pad areas: 1,300 sf
- Total number of piles in tracker blocks: approximately 2,284 (this can vary due to structural calculations at later stages)
- Total number of piles used for inverter racks: 32 (1 per inverter)
- Total area of all piles (Tracker + Inverter): 140 sf
- Total Impervious Area: 1,440 sf

PG&E infrastructure: PG&E will manage and maintain its utility poles, pole mounted electrical protection and switching gear, and other equipment in a manner consistent with its obligations as owner and operator of the electric distribution system within its existing utility right of way.

#### **Grading**

The project will require very little soil disturbance. The PV arrays will follow the existing contour of the land and the surface under the array will be seeded as part of the pollinator habitat program. Due to the general uniformity of the ground surface where the arrays will be placed. It is unlikely that grading will be required. However, if grading is necessary, a grading plan will be developed in accordance with the County regulations for the project and will determine the extent of the disturbed soil area.

#### **Access Roads**

Access to the interior of the site will be provided via to access points from Hatchery Road. These access points will be constructed to comply with the County's rural driveway standard. Native compacted soils will provide access routes to the transformer pads and interior sections of the project site for emergency services and O&M activities. Any spoils from site construction would be recompacted as part of the access road area.

#### **Driven Steel Piles**

The PV arrays will be mounted on above ground racking supported on approximately 2,284 galvanized steel beams. These steel beams will be driven into the ground to an embedment depth of at least 6 feet using a small rubber track mounted machine specifically designed for that purpose. No excavation is required to install the steel beams.

#### **Fencing**

Approximately 6,250 feet of new chain link fencing will be installed around the project. The fencing will be seven feet high with barbed wire along the top edge. Depending on the final design of fencing, several cubic yards (CY) of soil may need to be excavated to install the footings. This material will be used onsite.

#### **Impermeable Surface**

The project will result in a minor increase in new impermeable surfaces due to the installation of new concrete slabs, and post/piles. The piles will be less than 6 inches in diameter, and result in approximately 140 sf of impervious coverage distributed across the project site. The PV panels which will be affixed to the post/piles will not result in more impermeable surfaces since the ground beneath the panels will



remain as natural covered pollinator habitat.

The total estimated area to be made impermeable due to construction of concrete inverter pad slabs under the project is approximately 1,300 sf combined with 140 sf created by the post/piles. The project will result in approximately 1,440 sf of impervious surfaces. Based on these calculations, more than 99.9% of the 36-acre project will remain pervious.

#### **Pollinator Habitat:**

The project proposes to cover approximately 1.6 acres (4%) of the 36-acre parcel for solar related project facilities and will leave the balance of the site preserved (95.6%) for installation of pollinator habitat. The project proposes continued agricultural use by incorporating a pollinator habitat including areas for animal grazing and/or apiaries used for beekeeping. The project, in coordination with the Pollinator Partnership, is proposing a plan to create a pollinator plant meadow using plant species native and endemic to Humboldt County. This project feature is intended to enhance the biological diversity of the subject property as well as provide some benefits to the neighboring parcels including the nearby fish hatchery.

The Pollinator Habitat Benefits Report from the Pollinator Partnership is included in the project application. Some relevant highlights include:

- Pollinator habitat creates heterogeneity in the landscape and provides habitat that can enhance ecosystem services, increase crop yields, and sustainability of production while also benefiting natural ecosystems and conservation of biodiversity.
- Pollinator habitat will enhance pest biocontrol and increase pollination of alfalfa and other pollination dependent high nutrition grazing forage crops. Pollinator habitat will attract and sustain native pollinators and beneficial predatory insects, many of which have the potential to migrate to nearby agricultural endeavors.
- Pollinators provide essential ecosystem services to rangelands and economic benefits to ranchers through the provision of pollination services essential to sustaining forbs and legumes which provide high-quality nutrients to livestock.
- Improved storm water retention, soil quality improvement, reduced erosion, greater plant and wildlife biodiversity, and improved aesthetics. increase carbon sequestration, create biodiversity reservoirs, reduce the need for farmers to create ecosystem service habitat in the immediate area, provide forage for native bees and honeybees, and improve landscape aesthetics.
- Pollinator habitat would benefit the Mad River, which runs directly east of the Property, providing buffer strips, hedgerows, and meadows to mitigate nonpoint source pollution from agricultural areas.

The condition of the plants and need for replacement shall be determined by a landscape designer, or other similar qualified party. The applicant will provide a site plan showing the composition and location of native plant mix before issuance of a building permit. An annual update summarizing O&M activities, as well as measures taken to ensure the success of the pollinator habitat, will be provided to the Humboldt County Planning and Building Director.

#### **Decommissioning Plan**

The Project will fully restore the site to its original condition at the end of the Project's useful life through implementation of a Decommissioning Plan. The Decommissioning Plan will provide the financial assurances to guarantee that the facility will be completely decommissioned and removed from the property utilizing industry standards and emergent best practices at the time of decommissioning.

The Decommissioning Plan will be submitted to the Humboldt County Planning and Building Director prior to the issuance of Building Permits for the proposed Hatchery Road Solar project. The Decommissioning Plan will include: removal of all above and below ground improvements; restoration of the surface grade, placement of topsoil over all removed structures, revegetation and erosion control as deemed necessary by the Director; a timeframe for improvement removal and site restoration; an engineer's cost estimate for all aspects of the removal and restoration plan; an agreement signed by the property owner and operator that they take full responsibility to implement the Decommissioning Plan; a plan to comply with all state and federal requirements for reuse, recycling and/or disposal of potentially hazardous waste.

The Decommissioning Plan will also include a Financial Assurance component that will be provided to Humboldt County in a form and amount acceptable to the County to guarantee that the expense of decommissioning and restoring the project site consistent with the approved Decommissioning Plan. The Financial Assurance will be submitted to and accepted by Humboldt County prior to issuance of any construction permits.

Most of the components of the solar facility are recyclable, and the ability to recycle parts is expected to increase over time. There are also substantial salvage values associated with many of the components through recondition, resell, and recycling programs. The electrical components and wire contain large amounts of copper and aluminum, the electrical equipment may be refurbished and reused, and the photovoltaic modules may be reused on other systems if they are determined to have substantial output upon decommissioning.

The Decommissioning Plan ensures the project site will be returned to its pre-project condition and function as land suitable for agricultural grazing use.

Figure 3 below depicts the proposed project layout.



### 3.2.2 Construction Activities

The following is a description of how construction of the project will likely proceed. Note that the licensed and bonded construction contractors selected to build the project will have the final say regarding the means and methods for construction and their preferred construction sequence will be honored within other applicable constraints.

Construction will begin as soon as weather permits. First the site will be prepared by clearing and grubbing any existing vegetation within the project area. Next, control points for the PV array layout and the fencing will be staked by a licensed surveyor. Next the fencing will be installed to allow site access control during construction. Then the steel piles will be driven into the earth using a small rubber track mounted machine designed specifically for this purpose. This will involve driving piles for the PV racking system, trenching for power circuits, pouring concrete pads, pulling wires, and installing electrical equipment. The project will install new power poles new overhead conductors, and new transformers and reclosers. Construction is anticipated to take about 3 to 4 months, after which final commissioning will begin. The system could be operational by July 2021.

### 3.2.3 Operation and Maintenance

The project will be remotely operated and require minimal long-term maintenance. Upon operation, the project is anticipated to require six regular inspections per year. Regular maintenance activities performed during a visit could include solar panel washing, vegetation and pollinator habitat management, and equipment maintenance per manufacturer recommendations. Equipment inspection would include visually inspecting PV inverters, transformers, main switchgear enclosures, weather station, and other components for signs of corrosion, or physical damage. Inspections would be conducted by professionally qualified and owner-authorized personnel. Water for panel washing would be trucked to the site. Runoff from washing activities would be captured on-site by percolating through the soils underlying the panels.

Ongoing operations activities would include remotely monitoring the site status and output of the system for alerts including faults, alarms, and output irregularities. Otherwise, the project will operate as a mostly self-sufficient and minimally invasive land use within the existing landscape.

Operation of the project will be automated with manual control possible via an onsite controller. Normal day-to-day operations will consist of a file being transmitted over the internet to the onsite controller for use in determining the desired output of the project.

Maintenance will include the following types of activities:

- Vegetation Management including maintenance and care of pollinator habitat
- Periodic PV Module Cleaning
- Operational Data Stewardship
- Periodic Equipment Inspection
- Monthly System Performance Evaluation

### **Vegetation Management**

Site vegetation will be maintained and managed so as not to interfere with operational efficiency of the project, however specific pollinator species will be selected so as to minimize the potential for such interference to occur. The project may require mowing and other manual clearing of vegetation at different times of the year as part of regular operations and maintenance activities. A final seed mix that accommodates the unique attributes of the project function and surrounding environment will be submitted prior to issuance of a building permit. The seed mix will be selected in coordination with the Pollinator Partnership and approved the Planning and Building Department prior to issuance of a building

permit.

### **PV Module Cleaning**

Cleaning requirements are anticipated to be minimal for the PV arrays due to the local climate and surrounding environs. However, if performance decreases due to the deposition of dust or ash, modules may need to be cleaned twice a year by spraying with a power washer. Over time a biofilm will typically develop along the bottom edge of the PV modules and will be addressed periodically as needed to prevent performance inefficiencies.

#### **3.2.4 Standards and Regulations**

The following codes and regulations apply to the construction and operation of the project:

- *California Building Code*. Governs how construction projects are designed to ensure safe operation.
- *California Electric Rule 21*. A tariff that describes interconnection, operating, and metering requirements for generation facilities connected to the distribution grid in California.
- *PG&E Service Requirements (Greenbook)*. Governs how infrastructure used to connect to the distribution grid is built.
- *California Independent System Operator New Resource Implementation Process and Requirements*. Governs how the project must be configured in order for the system to be eligible to participate in wholesale energy markets.
- *Western Electricity Coordinating Council Operating Rules*. Governs how the output from the project must be metered to be eligible for Renewable Energy Credits.
- *State Water Resources Control Board's General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ)*. Applicable for projects with disturbed soil area greater than one acre. Contains requires for best management practices to minimize construction-related impacts to stormwater.
- *Small Construction Site Erosion and Sediment Control Plan (Humboldt County Code Sect. 331)*. Applicable for projects with disturbed soil area less than once acre. Contains requirements for best management practices to minimize erosion and control sediment during construction.
- *Stormwater Quality Management and Discharge Control Ordinance (Humboldt County Code Sect. 337)*. Requires conformance with the Humboldt County Low Impact Development Stormwater Manual to maintain a site's pre-development runoff characteristics.

#### **3.2.5 Design Measures to Minimize Impacts**

This section describes the design features that were incorporated into the project to minimize environmental impacts.

A biological site assessment prepared by Garcia and Associates (GANDA) biologists concluded that there are three wetland features with a combined area of 0.329 acre on the property site. The project has been intentionally designed to include a 150- foot setback or buffer from all wetland features to avoid potential impacts to these features.

The PV modules will be mounted on driven steel beams and the surface beneath the modules will remain vegetated and permeable, rather than installing geotextile fabric and aggregate base. To keep the

pollinator vegetation from growing tall enough to shade the PV modules the array field has been designed to incorporate pollinator habitat and site-specific seed mix to support local pollinators. As mentioned, the pollinator habitat and seed mix will be selected to conform (i.e., not interfere) with the normal efficient operation of the project.

#### 4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by the proposed project, and would involve at least one impact that is determined to be a **“Potentially Significant Impact”**:

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

Detailed explanations are provided in the checklist on the following pages. 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 a less than significant level.

In the checklist the following definitions are used:

- i. **“Potentially Significant Impact”** means there is substantial evidence that an effect may be significant.
- ii. **“Less Than Significant with Mitigation Incorporated”** means the incorporation of one or more mitigation measures can reduce the effect from potentially significant to a less than significant level.
- iii. **“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.
- iv. **“No Impact”** means that the effect does not apply to the project, or clearly will not impact nor be impacted by the project.

**DETERMINATION:** (To be completed by the Lead Agency 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.
<b>X</b>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR 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.

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Signature

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Date



## 5.0 EVALUATION OF ENVIRONMENTAL IMPACTS

Pursuant to Section 15063 of the California Environmental Quality Act Guidelines, a brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources. 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 projects 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.

<b>I. AESTHETICS.</b> 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>X</b>	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				<b>X</b>
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?			<b>X</b>	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				<b>X</b>

### DISCUSSION:

Images and illustrations of the proposed project are included in Attachment A.

**I. (a) and (c) - Less Than Significant Impact:** For this analysis, a “scenic vista” is considered a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. According to 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. “Visual character or quality” refers to the visual attributes of the elements in a landscape and the relationships between those elements. Potential viewers affected by the project include travelers along Hatchery Road, neighbors, and potential users of the Mad River recreation areas. The new construction associated with the solar arrays will create a new visual improvement. Given the low profile (max eight-foot height) of the solar arrays and security fencing, the project’s PV arrays would be lower in height compared to roof-top solar panels commonly found in many communities.

The project may affect views from Hatchery Road toward the forested ridge along Poverty Point northeast of Blue Lake; however, the low profile of the project features, , complemented by the gently sloping terrain

and the setback from the roadway, would not substantially obstruct these views. Views from Hatchery Road are not rare or unique and the project will have no effect on panoramic views based on topography and existing conditions including obstructions such as trees, utility poles, and buildings.

The features introduced by the project will add anthropogenic elements which some may find will be inconsistent with the visual character of the surrounding area. Viewer response may be negative for viewers who place a high value on open space, or positive for viewers who place a high value on renewable energy. The limited expanse of the project feature and the limited importance of the affected viewpoints result in the impacts being less than significant.

**I. (b) - No Impact:** Hatchery Road is not an officially designated scenic highway. The project is not visible from State Route 299 or any other major arterial road.

**I. (d) - Less Than Significant Impact:** Solar PV panels function by absorbing radiation rather than reflecting radiation. Solar PV panels are constructed of dark-colored materials and covered with anti-reflective coatings to minimize optical reflection. Reflection from PV panels is typically comparable to, or less than, reflection from water surfaces and building windows. The potential for glare associated with reflection from the PV panels would be minimal during the day and the facility would not be lighted at night. No nighttime glare would occur as a result of the Project.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have a **Less Than Significant Impact** on Aesthetics.

<b>II. AGRICULTURE AND FORESTRY RESOURCES.</b> 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>X</b>		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				<b>X</b>
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 PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				<b>X</b>
d) Result in the loss of forest land or conversion of forest land to non-forest use?				<b>X</b>

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

The project site has an Agriculture Exclusive (AE) General Plan designation and utilities and energy facilities, which includes solar energy facilities, are a compatible use in this designation. (Humboldt County General Plan, Table 4-G.). Humboldt County General Plan policies are tailored towards limiting the conversion of agricultural land in order to balance economical and generational transitions in local land uses. Approximately 3,000 to 5,000 acres of agricultural land in Humboldt County has been converted to nonagricultural use each year since 1964. Rangeland has been converted to both timber production and residential uses. Productive dairy lands have been subject to partial or complete conversion for wildlife and conservation purposes. Depending upon interests and economics, farms can be broken up into smaller non-viable parcels or taken entirely out of production. For some of these property transfers, unfunded estate taxes can force the sale of all or portions of the ownership. Reductions in the valuation of agricultural land can affect the viability of current operations by limiting financing ability, estate transfers or income from property sales. The agricultural land use policies of the Humboldt County General Plan aim to strike a balance between continued protections of farmland so the agricultural industry can enjoy a stable land base well into the future, and limitations on land uses that reduce the value of agricultural land and impact profitability.

The General Plan also contains a “no-net-loss policy” to mitigate the cumulative effects of conversion of prime agricultural land and a “working-lands” policy to encourage continued agricultural production on lands placed into conservation easements or acquired by public agencies for conservation purposes.

**II. (a) – Less Than Significant with Mitigation Incorporated:** The Farmland Mapping and Monitoring Program has not 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. However, the project could potentially impact approximately 5.5-acres of land designated as Prime Agriculture Soils (Loleta and Duzen soils [NRCS 2020]) within the 36.5-acre site. The definitions used by NRCS to be considered prime soils requires the land to be irrigated. This site has not been used as irrigated agriculture for more than 10 years and has been used as seasonal pasture for livestock grazing. The Humboldt General Plan uses a definition for State Prime Agriculture Land that includes lands capable of an annual carrying capacity equivalent to one animal unit per acre. From present stocking levels the 36.5-acre project site would satisfy this criterion. Furthermore, the Humboldt County GIS with coverage similar to the NRCS Loleta and Duzen soils mapping has identified portions of the site as prime agricultural land. This mapping is 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. For the purpose of this analysis the County considers that the project has the potential to impact prime agricultural lands.

The proposed project is located within the Blue Lake Community Plan Area but is outside designated Urban Development Boundaries. The project proposes solar arrays on approximately 15% of the project site which has prime soils as mapped by Humboldt County and NRCS.

Consistent with General Plan Policy AG-P16: Protect Productive Agricultural Soils, the proposed project is designed to minimize impermeable surfaces and impacts to areas of lands planned for agriculture. Of the 36.5-acre site, the project proposes solar arrays that will create impervious surfaces including steel driven

piers (140 sf) to support the solar panel array, and the area for transformer pads (1,300 sf) – all which will cumulatively comprise of 1,440 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, and when the facility is ultimately decommissioned, the site will be fully-restored to its original condition. 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. According to the applicant, this method of construction does not alter the natural condition of the land, which can be restored to pre-construction conditions at the end of the project's useful life. With implementation of the pollinator habitat, the project can improve soil health, moisture retention, and increase biodiversity over its present condition. As noted above, the project sponsor will provide a Decommissioning Plan that ensures the project site will be restored to pre-project conditions through best management practices for soil/site remediation and materials recycling. A financial assurance contribution to Humboldt County provides the monetary security needed to ensure the final restoration of the project site after the facility's 35-year 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 net loss in agricultural land base and production suitable land or easements could be acquired as provided by the Policy, or , as is proposed by the project, measures will be instituted to ensure ongoing agricultural uses on the property, including but not limited to sheep grazing or the keeping of honey bees, on a rotational basis whereby pasture areas would be occupied for variable periods, allowing pasture rest periods to promote optimal vegetation quality management and maintenance of the project's pollinator habitat. To ensure the ongoing operations are viable, an Agricultural Management Plan, summarizing the aforementioned agricultural uses on the property, will be submitted subject to the approval of the Humboldt County Planning Director before issuance of a final inspection for the project. In addition, the placement of Financial Assurance with Humboldt County as part of the Decommissioning Plan ensures that the restoration of the project site is funded and there is no permanent loss or conversion of any agricultural lands.

Although the Project will convert agricultural lands, in order to reduce potential impacts to a Less than Significant level to maintain consistency with General Plan Policy AG-P6, incorporation of the proposed agriculture uses, including the pollinator habitat through the implementation of an Agriculture Management Plan will enable a majority of the project site to function as agricultural in nature. The Agriculture Management Plan will be subject to coordination with County of Humboldt Planning staff for project administration. With implementation of **Mitigation Measure AG-1**, the project will result in a less than significant impact to these resources and no further mitigation is required.

**II.(b) through (d) - No impact:** The subject property is not held in a Williamson Act contract and no forestlands are present within the project area. The project site is zoned U, which although considered "unclassified" allows utilities and energy facility uses upon the grant of a use permit. According to the

Humboldt County Environmental resource maps the area on which the solar panels will be installed contains no sensitive woodland or forested areas. In addition, the installation of the panels requires minimal site improvements which allow for agricultural practices such as the pollinator program or ongoing grazing and other uses not in conflict with the solar arrays. Finally, the project as proposed has a finite life span (35 years), at which time the solar arrays and support structures will be removed, and the land can return to agriculture production. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. No impacts would occur. Therefore, the project will result in no impact to these resources.

**II.(e) – Less Than Significant with Mitigation Incorporated:** The County (through its General Plan and Zoning Ordinance) allow for utility and energy facility land uses through application and approval of a Use Permit. The temporary nature of the Use Permit for a solar facility does not require the permanent conversion of agriculture lands, nor requires significant new infrastructure of development to service the project site. The proposed project, although compatible with existing agricultural uses surrounding the property, will convert less than 0.004% of the total agricultural acreage in Humboldt County. As discussed in Section II (a) above, the implementation of the Agriculture Management Plan to ensure continued agriculture uses on the property, including the proposed 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 development impacts 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**, the Agriculture Management Plan will 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.

**MITIGATION MEASURES:** The County of Humboldt will implement the following measures to ensure no significant impacts to Agriculture and Forestry Resources:

**MM AG-1: Agriculture Management Plan.** To maintain consistency with General Plan Policy AG-P6, 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. Prior to issuance of a certificate of occupancy for the project, the applicant shall submit the Agricultural Management Plan to the County of Humboldt Planning Director, summarizing the types and duration of agricultural uses as well as operator information for the property. The Agriculture Management Plan shall be subject to review by the Planning Director to confirm the effectiveness of the agricultural operations.

**FINDINGS:** The Project would have **Less than Significant Impacts** on Agriculture and Forestry Resources with **Mitigation Incorporated**.

<b>III. AIR QUALITY.</b> 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
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a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

#### DISCUSSION:

The project is located within the North Coast Air Basin and subject to the jurisdiction of the North Coast Unified Air Quality Management District (North Coast Unified AQMD, or Air District). The following information was obtained from the Air District website.

Humboldt County is listed as “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<sub>10</sub>), for which Humboldt County is designated “nonattainment.” PM<sub>10</sub> air emissions include chemical emissions and other inhalable particulate matter with an aerodynamic diameter of less than 10 microns. PM<sub>10</sub> 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). In 1995, the Air District conducted a study to identify the major contributors of PM<sub>10</sub>, which is summarized in the draft report entitled Particulate Matter PM<sub>10</sub> Attainment Plan. According to the Air District website, this report should be used cautiously as it is not a document that is required in order for the Air District to come into attainment for the state standard. Cars and trucks and other vehicles are considered a source of particulate matter within the district. Fugitive emissions as a result of vehicular traffic on unpaved roadways are the largest source of particulate matter emissions within the district.

In determining whether a project has significant air quality impacts on the environment, planners typically apply their local air district's thresholds of significance to projects in the review process. However, 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.

**III. (a), (b), (c) - Less Than Significant Impact:** Air quality impacts for the proposed project are associated with typical construction-related activities. Based on knowledge of emissions from similar projects, calculation of estimated emissions is not necessary in order to conclude with certainty that the project would have a less than significant impact on increases of any criteria pollutants, and would not result in

cumulatively considerable net increases of any criteria pollutants. The project would be consistent with the Air District's PM<sub>10</sub> Attainment Plan as the project is located in an urbanized area, does not include the operation of woodstoves or hearths, and would not emit PM<sub>10</sub> at levels that would exceed the Air District's threshold of 15 tons per year. This project will not conflict with or obstruct implementation of the Air District's air quality objectives or standards or contribute in a substantive way to a non-attainment of air quality objectives in the project area air basin.

The project is subject to the Air District's Rule 104, Section D, for fugitive dust emissions. Pursuant to Rule 104, no person shall allow handling, transporting, or open storage of materials in such a manner which allows or may allow unnecessary amounts of particulate matter to become airborne. Further, reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including:

- (1) Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust;
- (2) The use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
- (3) The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.
- (4) The prompt removal of earth or other track out material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

**III. (d) - Less Than Significant Impact:** The project site is not situated near schools, parks and playgrounds, day care centers, nursing homes, or hospitals. One residential dwelling unit is situated approximately 200 feet from the southwest end of the proposed solar array, and two dwelling units are situated approximately 200 feet from the solar array to the south in the State Hatchery area. Air emissions associated with the project are limited to construction-related emissions, which are minor and of limited duration, and do not present a significant exposure concern. Emissions from construction-related vehicles and equipment will dissipate into the atmosphere before they could expose people working or residing in the area to substantial pollutants.

**III. (e) - Less Than Significant Impact:** Construction of the project may result in minor, temporary, nuisance odors associated with construction activities. These odors would not persist after project completion.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have **Less Than Significant Impacts** on Air Quality.

<b>IV. BIOLOGICAL RESOURCES.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		<b>X</b>		

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
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?		X		
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?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
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?			X	

#### DISCUSSION:

Garcia and Associates (GANDA) biologists conducted a background review in order to identify biological and aquatic resources with known or potential occurrence on or in the vicinity of the site. A biological field survey of the Project Area and surrounding 100-foot buffer was conducted on May 7, 2020 in order to determine the potential presence of sensitive biological resources within the Project Area, as well as habitat suitability for special-status wildlife and plant species as designated by the United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the California Native Plant Society (CNPS).

A total of 40 special-status wildlife species were identified during the background review. Of these, two are known to occur or have a moderate or higher potential to occur in the Project Area and include northern red-legged frog (*Rana aurora*) and white-tailed kite (*Elanus leucurus*).

A total of 24 special-status plant species were identified during the background review, however, none are likely to occur within the Project Area due to the history of land use practices associated with livestock grazing on site. One potentially jurisdictional aquatic feature was found within the Project Area.

GANDA prepared a Preliminary Jurisdictional Delineation Report assessment and detailed the methods and results of the determination of wetlands or waters under potential regulatory jurisdiction. The Project Area lies approximately 600 ft west of designated USFWS critical habitat for steelhead (*Oncorhynchus mykiss*) and Chinook salmon (*Oncorhynchus tshawytscha*); however, neither of these species are expected to occur within or adjacent to the Project Area due to a lack of suitable aquatic habitat.

**IV. (a) and (b) - Less Than Significant with Mitigation Incorporated:** Per the May 2020 field survey, the



screening survey confirmed the absence of potentially sensitive species within the project area. Six of the 24 special-status plant taxa reviewed were determined to have a low potential to occur within the Project Area and the remaining 18 are not expected to occur due to previous disturbance related to cattle grazing and a lack of suitable habitat. Special-status plants are not addressed further, and no mitigation is required.

Forty special-status wildlife species were included in the results of the database searches (CDFW 2020; USFWS 2020a). Of these, fifteen special-status wildlife species have been documented within a two-mile radius of the Project Area. Seven salmonid species have potential to occur within the Mad River but are not expected to occur on the Project due to a lack of suitable habitat. Of the remaining eight species, two have a moderate or greater potential to occur. These two species are discussed in more detail below. The GANDA report includes a discussion of all 40 special-status wildlife species reviewed during this analysis.

Northern red-legged frogs (NRLF) occur in California from Mendocino County north to the Oregon border (CDFW 2014). Northern red-legged frogs may occur from sea-level up to 3,800 ft elevation. Egg laying occurs from January to March and eggs are attached to submerged vegetation. Once egg laying is complete, adult northern red-legged frogs leave the breeding site and disperse overland to areas of thick vegetation where they remain through the spring and summer (Jennings and Hayes 1995). Dense undergrowth along intermittent and perennial streams in coastal redwood forests provide suitable habitat for adults and subadults (Jennings and Hayes 1995).

According to the CNDDDB, there are four documented occurrences of northern red-legged frog within two miles of the Project Area. A record from November 5, 2016 describes 15 individuals captured from a breeding pond 0.4 mile east of the Project Area. Egg masses have been observed in this pond intermittently since 2006 (CDFW 2020). A record from 2001 describes two individuals captured at the Mad River Hatchery, just south of the Project Area.

All native birds in California are protected by the federal Migratory Bird Treaty Act (MBTA) and provisions of the California Fish and Game Code. Section 3503.5 of the California Fish and Game Code specifically protects raptors. Ground disturbance, noise, or removal of vegetation that would result in destruction of active bird nests or disruption of breeding/nesting activity could be a violation of the MBTA and the California Fish and Game Code, as well as a significant impact under CEQA.

The white-tailed kite is a non-migratory species that is a resident of California's coastal and valley lowlands. It is rarely found far from agricultural areas and is the only North American kite that hovers while hunting for prey, which consists of small rodents (especially voles), reptiles, insects, and small birds. Nests are constructed of loosely piled sticks and twigs, lined with grass, and placed near the top of trees. This species' home range may be as large as 3 square miles, with a mean breeding home range of 0.2 mile. White-tailed kites breed between February and October with an average clutch size of four to five eggs (Zeiner et al. 1988-1990). According to the CNDDDB, there are no documented occurrences of white-tailed kite within two miles of the Project Area. No white-tailed kites were observed during the May 7, 2020 biological survey; however, this species is known to occur within this region of Humboldt County and suitable nesting habitat occurs in the low-canopy oak woodland in the vicinity of the Project Area. This species could forage within the Project Area. Due to the extensive suitable habitat around the Project Area, white-tailed kites have a moderate potential to occur within the Project Area.

Avoidance and minimization measures have been incorporated as mitigation to reduce potential impacts to sensitive species. With the implementation of the **Mitigation Measures BIO-1 through BIO-6**, potential impacts to white-tailed kite and red-legged frog would be less than significant.

**IV. (c) - Less Than Significant with Mitigation Incorporated:** A field investigation was performed by GANDA on May 7, 2020, in accordance with the Army Corps of Engineers Wetlands Delineation Manual (USACE 1987), and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (USACE 2010) and A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States (USACE 2014). The Delineation Area of approximately 38 acres encompasses the proposed Project, including access and staging areas. GANDA documented the location and extent of aquatic features within the Delineation Area to make a preliminary determination of whether these aquatic features meet the definition of waters of the United States (U.S.), including wetlands, as defined by the Clean Water Act (CWA), pursuant to which the U.S. Army Corps of Engineers (USACE) may exert jurisdiction. The GANDA report also addresses potential Regional Water Quality Control Board (RWQCB) jurisdiction and California Department of Fish and Wildlife (CDFW) jurisdiction over aquatic features.

Existing information identified no known aquatic features at the project site. However, based on a field delineation, three aquatic features were documented, in total occupying 0.329 acre. These three features have different vegetation types but are continuous and located within the same linear depression. The aquatic features were mapped in the field based on the extent of hydrophytic vegetation, wetland hydrology, and hydric soils. These features are not adjacent to and not contiguous with traditional navigable waters, and are likely not waters of the U.S. subject to USACE jurisdiction; the three features may still fall under CDFW and RWQCB jurisdiction. The project development area is set back 150 feet from the wetland features, and avoids any potential short or long term impact to these features. As such, no permits from the USACE, RWQCB or CDFW are required. However, in light of temporary construction activities and machinery required to build the project, implementation of **Mitigation Measure BIO-7** would prevent accidental chemical transmission (e.g., oil and lubricants) into waterways and appropriate materials will be kept on site to prevent and manage potential spills. As such, the potential impact is considered less than significant with implementation of mitigation measure MM BIO-7.

**IV. (d) - Less Than Significant with Mitigation Incorporated:** The Biological Constraints Analysis prepared for this property included protocols for the detection of native or migratory wildlife species and corridors. No evidence of wildlife corridors nor any sensitive species were observed during the field survey. No NRLF were observed during the May 7, 2020 biological survey; however, due to the close proximity between the Project Area and known breeding populations along the Mad River, NRLF have a moderate potential to occur within the Project Area. Northern red-legged frogs may breed along the Mad River and may use the riparian corridor east of the Project Area for summer refugia. NRLF may also disperse overland within the Project area.

If Project construction occurs during the white-tailed kite nesting season (February 1 through August 31), implementation of avoidance and mitigation measures (AMMs), such as nesting bird surveys prior to the start of construction is recommended. If necessary, seasonal buffers will be implemented to avoid disturbances to occupied nests. With the implementation of the **Mitigation Measures BIO-1 through BIO-6**, potential impacts to white-tailed kite and red-legged frog would be less than significant. Furthermore, installation of the security fence and of the solar arrays would not preclude wildlife from moving through the Project site. Impacts would be less than significant, and no further mitigation is required.

**IV. (e) and (f) - Less Than Significant Impact:** The Humboldt County General Plan contains policies for streamside management areas, wetland and wetland buffer areas, and other sensitive and critical habitats. The project area does not contain any mapped streamside management areas, wetlands, or wetland buffer areas in the General Plan. Based on the monitoring and analysis described in Section IV. (a through c) above

the project area does not contain any sensitive species but has a moderate potential for suitable foraging habitat. However, there are three aquatic features with a combined area of 0.329-acres within the Delineation Area. These wetland features were mapped in the field based on the extent of hydrophytic vegetation, wetland hydrology, and hydric soils. These features are not adjacent to and not contiguous with traditional navigable waters and are likely not waters of the U.S. subject to USACE jurisdiction but may still fall under CDFW and/or RWQCB jurisdiction. The project has been designed to include a 150-foot buffer around all potential wetland areas. The project area is not subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. As such, impacts would be less than significant, and no mitigation is required

#### **MITIGATION MEASURES:**

The County of Humboldt will implement the following measures to ensure no significant impacts to native migratory bird species:

**MM BIO-1: Workers Environmental Awareness Training (WEAT).** All workers will receive a WEAT training by a qualified biologist. The WEAT will educate workers about all special-status species and related habitats potentially present in the Project Area, and the nature and purpose of protective measures, including BMPs and other required measures. Work areas, including staging areas, will be limited to those shown in the final Project description and included in the WEAT training. All heavy equipment, vehicles, and construction activities will be confined to these designated areas. A copy of all applicable AMMs will be kept on site at all times.

**MM BIO-2: Delineation of Work Area and Work Period.** Work areas, staging areas, and access roads will be limited to those shown in the final project description. Exclusion buffers around environmentally sensitive areas (ESAs) such as wetlands or active bird nests will be clearly flagged or fenced with temporary construction fencing. All heavy equipment, vehicles, and construction activities will be confined to designated work areas. Vehicle speeds on unpaved roads will not exceed 15 miles per hour. Because dusk, nighttime, and dawn are often the times when NRLF is most actively foraging and dispersing, all construction activities shall cease one half hour before sunset and not begin prior to one half hour before sunrise.

**MM BIO-3: Site Maintenance.** Trash dumping, firearms, open fires (such as barbecues), hunting, and pets will be prohibited at the work site. All trash and waste items generated by construction or crew activities will be properly contained in a covered trash receptacle and removed from the Project Area daily or secured inside a covered, locking container. This includes biodegradable items such as apple cores and banana peels that attract predators such as raccoons and American crows that could prey upon sensitive wildlife species, which would be considered a potentially significant impact under CEQA.

**MM BIO-4: Wildlife Entrapment.** All Project personnel will visually check for animals beneath vehicles and equipment immediately prior to operation to minimize the potential for special-status species to be harmed by crushing or entrapment, which would be considered a potentially significant impact under CEQA. Any pipes, culverts, or other open-ended materials and equipment stored onsite for one or more overnight periods will be inspected for animals prior to moving, burying, or capping to ensure that no animals are present within these materials and equipment. To prevent accidental entrapment of wildlife during construction, all excavated holes, ditches, or trenches greater than six inches deep will be covered at the end of each work day by plywood or a similar material, or escape routes will be constructed with the materials that allow trapped wildlife to escape without slipping or being injured. After opening and before filling, any holes, ditches, or trenches will be thoroughly inspected for trapped animals by the project biologist or construction crew.

If a special-status species is discovered in the Project Area, the Project Manager or Project biologist will be contacted. The Project Manager or Project biologist will report the sighting to the appropriate natural resource agency(ies) (e.g., CDFW, USFWS, etc.) within 24 hours when required by the agency. The animal will be allowed to move off site on its own. Special-status species will not be taken or harassed. No threatened or endangered species will be moved unless under the direction of the appropriate agency and by a qualified and/or permitted biologist.

**MM BIO-5: Northern Red-legged Frog.** A preconstruction survey will be performed no more than 3 days prior to the onset of construction to determine if any suitable burrows occur for NRLF on the site. Any small mammal burrows that will be impacted by pier installation or other ground penetrating activities shall be excavated by a permitted and agency approved biologist prior to construction activities. If any NRLF are observed during the preconstruction survey, CDFW shall be consulted to determine the best way to avoid impacts to NRLF. Ground-disturbing activities should be conducted during the dry season (May 15-October 15) to minimize take of NRLF. If construction activities are conducted within the dry season (May 15-October 15), exclusion fencing shall be installed around the work area prior to October 15 to prevent NRLF from migrating into work areas. The fencing material and design shall be reviewed and approved in writing by CDFW before installation. In the event a NRLF is encountered on site during construction, all construction activities will cease until the animal has left the project area on its own and is no longer in danger of harm. The project construction manager or project biologist will report the sighting to CDFW within 24 hours. No one other than a CDFW-approved biologist is permitted to handle or capture NRLF, and NRLF will not be taken or harassed.

**MM BIO-6: Preconstruction Nesting Bird Survey:** A nesting bird survey shall be completed by a qualified biologist no earlier than 14 days prior to any construction during the nesting season (February 15-August 31) to determine if any native birds are nesting on or near the site (including a 500-foot buffer for osprey, 660-foot buffer for bald eagle (USFWS 2007), and a 0.25 mile buffer for northern spotted owl (USFWS 2012)). If any active nests are observed during surveys, a suitable avoidance buffer from the nests shall be determined by the qualified biologist based on species, location, and extent and type of planned construction activity. Construction within the buffer would be avoided until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist. Suitable nesting habitat (i.e., trees and vegetation) shall only be removed outside of the bird breeding season to avoid impacts to nesting birds. Upon completion of the survey, a memo will be provided to the Planning and Building Department prior to initiation of any work that will describe the methods and results of the survey and any related recommendations.

**MM BIO-7: Wetlands and Water Quality:** When handling and/or storing chemicals (fuel, hydraulic fluid, etc.) near waterways, all applicable laws/regulations and best management practices (BMPs) will be followed to prevent chemical transmission into waterways. Appropriate materials will be kept on site to prevent and manage spills. All construction equipment will be well maintained to prevent fuel, lubricants, or other fluid leaks. Equipment, when not in use, will be stored in upland areas outside of the boundaries of aquatic features (e.g., marsh) or other water bodies. Use of erosion and sediment control BMPs will follow County requirements or the Project Stormwater Pollution Prevention Plan (SWPPP) if required. BMPs composed of straw must be certified weed free. BMPs will not include micro-filament netting to avoid entrapment of wildlife. No fill or runoff will be allowed to enter wetlands or waterways.

**FINDINGS:** The Project would have **Less than Significant Impacts** on Biological Resources with **Mitigation Incorporated**.

<b>V. CULTURAL RESOURCES.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in 15064.5?			<b>X</b>	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?		<b>X</b>		
c) Disturb any human remains, including those interred outside of formal cemeteries?		<b>X</b>		

#### **DISCUSSION:**

The project area does not contain any buildings or structures that have the potential to be a historical resource. The applicant retained GANDA (2020) to perform an archaeological investigation of the project area to evaluate the potential presence of archaeological resources. Investigation efforts included a review of regional archaeological and ethno-geographic literature, pertinent historical maps and aerial photography; a project area record search at the California Historical Resources Information System's Northwest Information Center (NWIC) in Rohnert Park, California; a pedestrian field survey; and correspondence with local Native American tribal representatives.

Prior to fieldwork, background research included a search of previously conducted cultural resources studies and findings at the Northwest Information Center (NWIC) located at California State University, Sonoma in Rohnert Park, California. The record search included the Area of Potential Effect (APE), and 0.25-mile radius surrounding. The results (NWIC File Number (No.) 19-1843) found no cultural resources intersecting the APE and one cultural resource within the 0.25-mile radius. No previous cultural resource studies are within the APE, and three previous cultural resource studies have been conducted within the 0.25-mile radius. A Sacred Lands File (SLF) search of the APE was initiated on April 21, 2020, with the California Native American Heritage Commission (NAHC). The NAHC responded via email indicating the area was negative for SLF and provided a list of Native American contacts to contact for more information regarding the APE. GANDA sent letters to the list of tribal contacts on April 27, 2020.

On May 2, 2020 Janet Eidsness, Tribal Historic Preservation Officer (THPO) of the Blue Lake Rancheria, communicated with GANDA to inform them that the consultation letter was received and that there are no known archaeological resources/tribal cultural resources (TCRs) within the APE. The Blue Lake Rancheria THPO proposed that GANDA test for buried archaeological deposits within the top 3 feet (ft) of the ground and informed GANDA that the Wiyot area THPOs (Blue Lake, Bear River, and Wiyot) typically work with the Applicant's consulting archaeologist to agree to the scope of work.

Background archival research indicates that the project area was traditionally occupied by the Wiyot people. Villages were typically located around the shores of the Humboldt Bay and near the mouths of rivers. No village sites were ethnographically reported in the project vicinity. The project is also within an area of historic-era use by loggers and agriculturalists beginning in the late 1800's, including David Worth, one of the first settlers to the region. The records search at the NWIC revealed that the project area has been subject to five previous cultural resources investigations. Fourteen additional investigations have been conducted within 0.5 miles of, but outlying the project area. A review of the ethnohistory and history of the project locale indicated only a slight possibility of the presence of significant remnants of cultural activity

(Roscoe & Associates, 2018).

An intensive pedestrian survey was conducted on May 19, 2020 and December 22, 2020, by Samantha Dunham and Jessica Neal of GANDA. The May 2020 survey was conducted using 15-meter-wide parallel transects. Approximately 30.89 acres were intensively surveyed, however 7.27 acres were inaccessible due to a large herd of cattle and bull that were present, yielding conditions unsafe. Once the cattle had been removed, Samantha Dunham and Jessica Neal returned on December 22 to survey the remainder of the APE and conduct additional subsurface testing in the eastern portion of the APE. Subsurface testing was conducted by hand auguring a total of 11 holes up to a depth of 90 centimeters (cm) below surface (bs). No subsurface cultural resources were identified through the auger and testing. No vehicles were used other than on paved, dirt, or gravel roads. The intensive pedestrian survey resulted in recording one historic-period cultural resource (HS-01) consisting of a power pole, ground water pump, water trough, and fence post within the survey area. The newly recorded cultural resource is recommended not eligible for listing on the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR). No tribal cultural, or unique archaeological resources, as defined in 14 CCR 15064.5(a), and PRC Sections 21074, and 21083.2(g), were identified in the project area during this investigation.

GANDA also confirmed HS-01 is a newly recorded historic-period cultural resource that consists of four features associated with cattle grazing pasture. It is located near the center of the APE, approximately 900 ft east of Hatchery Road. The resource appears to be a ground water pump used to deliver water to a water trough for cattle. The resource consists of four components or features: a concrete cattle water trough (1); a ground water pump (2); two wood poles, one being a power pole containing both a “69” and “71” year date nail (3); and a wooden fence post (4). Six pieces of milled wood were located near the ground water pump, but no other associated artifacts were observed.

Based upon the background research, survey results, and subsurface testing performed to date, GANDA considers the Project area low to moderately sensitive for cultural resources. While the surface and subsurface investigations and high amount of disturbance due to use (pastureland and farmland) did not locate any archaeological resources, **Mitigation Measure CULT-1** is recommended prior to construction.

**V. (a) – Less Than Significant Impact:** As a result of GANDA survey efforts, the study resulted in positive results with the identification of a historic-period agricultural grazing resource (HS-01). This historic-period cultural resource is recommended not eligible for listing on the CRHR and NRHP, and auger probes resulted in negative observations for cultural materials. The project has been intentionally designed to avoid impacts to this identified resource. Therefore, the impact is considered less than significant, and no mitigation is required.

**V. (b) - Less Than Significant with Mitigation Incorporated:** There are no known or designated, tribal cultural, or unique archaeological resources within the project area. However, there is a small potential that the proposed project activities could inadvertently uncover archaeological materials that would need to be evaluated further to determine their significance. A mitigation measure (MM CULT-1) is incorporated as a precautionary measure to ensure appropriate response in the event of inadvertent discovery of cultural resources. With mitigation a less than significant impact would occur.

**V. (c) - Less Than Significant with Mitigation Incorporated:** The proposed project activities have the potential to inadvertently uncover human remains during construction. A mitigation measure (MM CULT-1) is incorporated as a precautionary measure to ensure appropriate response in the event of inadvertent discovery of cultural resources. With mitigation a less than significant impact would occur.

**MITIGATION MEASURES:**

**MM CULT-1: Protect Archaeological Resources during Construction Activities.** Although the surface and subsurface investigations did not locate any archaeological resources, unknown resources have the potential to occur and could be disturbed during project construction. To ensure protection of unknown resources, the following is recommended.

- While the project has been designed to avoid potential impacts to historical site (HA-01), should this resource require removal to facilitate construction, a qualified archaeological monitor and consulting Native American monitor shall be present during the resulting ground-disturbing activity (including but not limited to vegetation clearing/grubbing, pile-driving, transformer and inverter pads, trenching, gravel access roads, etc.) for project development in order to assure there are no subsurface archaeological deposits present beneath the historic-period cultural resource.
- If archaeological resources are encountered during any ground disturbing activities associated with the project, the applicant shall immediately suspend all ground disturbing work at the find location within 100 feet of the finding (or a reasonable buffer zone as determined by a qualified archaeologist), contact the County Planning & Building Department, and retain a qualified professional archaeologist to analyze the significance of the find and formulate further mitigation (e.g., Project relocation, excavation plan, and protective cover) in consultation with culturally affiliated tribes or other descendant groups, where applicable.
- Pursuant to California Health and Safety Code §7050.5, if known or suspected Native American or other human remains are encountered, all ground-disturbing work must cease in the vicinity of the discovery, and the County Coroner shall be contacted. The respectful treatment and disposition of remains and associated grave offerings shall be in accordance with Public Resource Code (PRC) §5097.98. The applicant and successors in interest are ultimately responsible for ensuring compliance with this condition. In the event the project design changes and ground disturbance is anticipated beyond the APE as it is currently defined, further surveys shall be conducted in those new areas to assess the presence of cultural resources. Any newly discovered or previously recorded sites within the additional survey areas shall be recorded (or updated) on appropriate Department of Parks and Recreation (DPR) 523-series forms. If avoidance of these resources is not feasible, then an evaluation and/or data recovery program shall be drafted and implemented.

**FINDINGS:** The Project would have **Less than Significant Impacts** on Cultural Resources **with Mitigation Incorporated**.

<b>VI. ENERGY.</b> 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>X</b>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				<b>X</b>

**DISCUSSION:**

**VI. (a and b) - No Impact:** The Project as proposed is the construction and operation of a renewable solar facility. After construction, there would be no full-time employees associated with the subject property. Furthermore, as discussed in the Section III Air Quality of this Initial Study above, Humboldt County is working on development of a Climate Action Plan (CAP). Information on the County CAP can be obtained at the Humboldt County Department of Planning and Building or <https://humboldt.gov/2464/Climate-Action-Plan>. Energy would be consumed during the operational phase of the project. Once constructed, the facility would not require typical energy consuming infrastructure including but not limited to building heating and cooling, lighting, appliances, and electronics. The proposed facility of renewable energy solar panels is estimated to generate annual electric production of 4 Megawatts (MW) to interconnect to the existing electrical distribution system.

Compliance with the California Building Code and Best Management Practices would further reduce emissions and ensure no overall environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during operation. Therefore, these impacts would be considered less than significant.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have **No Impact** on Energy.

<b>VII. GEOLOGY AND SOILS.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			<b>X</b>	
ii) Strong seismic ground shaking?			<b>X</b>	
iii) Seismic-related ground failure, including liquefaction?				<b>X</b>
iv) Landslides?				<b>X</b>
b) Result in substantial soil erosion or the loss of topsoil?				<b>X</b>
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?				<b>X</b>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				<b>X</b>



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

#### DISCUSSION:

In February 2020, BSK Associates prepared a geotechnical investigation for the proposed project. BSK conducted a site visit with soil borings in January 2020. The project site, a vacant grassland field used for grazing cattle, is located in southeast quarter of Section 31, Township 6 North, Range 2 East of the Humboldt Meridian. The NAD 83 GPS coordinates for the center of the Site are 40.8583 degrees North latitude and 123.9921 degrees West longitude. The Coast Ranges are northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet elevation above sea level), and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. Strata dip beneath alluvium of the Great Valley. To the west is the Pacific Ocean. The coastline is uplifted, terraced and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The northern Coast Ranges are dominated by irregular, knobby, landslide-topography of the Franciscan Complex. The eastern border is characterized by strike-ridges and valleys in Upper Mesozoic strata. In several areas, Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma and Clear Lake volcanic fields. The Coast Ranges are subparallel to the active San Andreas Fault.

All construction projects are subject to the seismic safety standards in the California Building Code. The County's geologic hazards regulations are provided in Humboldt County Code, Title III (Land Use Development), Division 3 (Building Regulations), Chapter 6 (Geologic Hazards). Potential seismic hazards include surface fault rupture, liquefaction, and landsliding.

**VII. (a)(i) - Less Than Significant Impact:** The site is located within the Mad River fault zone, associated with the McKinleyville fault. The site is located in a seismic safety area of low instability per Humboldt County's General Plan. The proposed project site is not located within an Alquist-Priolo Geologic Hazard Zone (A-P Zone). Zones of Required Investigation referred to as "Seismic Hazard Zones" in CCR Section 3722, are areas shown on Seismic Hazard Zone Maps where Site investigations are required to determine the need for mitigation of potential liquefaction and/or earthquake-induced landslide ground displacements. An Earthquake Fault Zone is a regulatory zone that encompasses traces of Holocene-active faults to address hazards associated with surface fault rupture (California Geological Survey, 2018). Surface fault rupture is the result of fault movement that breaks to the surface of the earth (either suddenly or slowly) and is the result of tectonic movement that originates at depth. Surface fault rupture poses a hazard because the displacement that occurs can severely damage buildings.

The Mad River Earthquake Fault Zone contains a series of northeast-dipping thrust faults and associated folds that is approximately 10 kilometers wide and extends at least 43 kilometers onshore southeast from Trinidad Head (Hart, 1999). At least 37 subparallel, partly interconnected strands have been mapped. The principal faults of the zone are designated (from southwest to northwest) as the Fickle Hill, Mad River, McKinleyville, Blue Lake, and Trinidad faults.

The purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent the construction of structures

for human occupancy across traces of active faults. The project is not subject to the Alquist-Priolo Earthquake Fault Zoning Act because it does not include structures for human occupancy. The project will be designed in accordance with the California Building Code and other applicable standards. Because the project does not include occupied structures, the likelihood of exposing people or structures to potential substantial adverse effects is less than significant.

**VII. (a)(ii) - Less Than Significant Impact:** The project area is located in a region of high seismicity, and the facility will likely be subjected to high levels of seismically-induced shaking over the period of its useful life. The level of shaking at the site will depend on the earthquake magnitude and the distance to the source. There is a high probability the project site will experience shaking associated with a seismic event of magnitude seven or greater during its lifetime. The project area does not have unique characteristics or hazards that would elevate the risk of strong seismic ground shaking. Construction of the project would be required to comply with the latest building standards and codes, including the California Building Code that would reduce any potential impacts to a less than significant level.

**VII. (a) (iii) - No Impact:** Liquefaction involves a sudden loss in strength of a water-saturated soil, and results in temporary transformation of the soil into a fluid mass. Recent alluvial floodplain soils and coastal sand deposits exhibit the highest liquefaction hazard (Humboldt County, 2018 – Safety Element). The project area is situated outside of mapped liquefaction hazard zones (Humboldt County, 2015).

**VII. (a) (iv) - No Impact:** Hazards related to slope instability and landslides are generally associated with mountain terrain, bluffs, and steep riverbanks. The project area is situated on a gradually varying, moderately sloped ground surface. Landslide hazards are not expected for slopes less than 15%. The potential for a landslide as a result of project activities or the completed project is considered negligible.

**VII. (b) - No Impact:** The project involves limited grading and will utilize sediment and erosion control best management practices during construction. The disturbed soil area will be re-seeded with herbaceous vegetation following the completion of construction. Soil erosion or loss of topsoil will be minimal.

**VII. (c) - No Impact:** Due to the relative flat slopes of the project area and the general design of the project for ground surface stability, there is negligible potential for instability to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

**VII. (d) - No Impact:** Expansive soils are those soils with significant clay content that expand when wet and shrink when dry. Soils with a high content of expansive minerals can form deep cracks in drier seasons, which can be detrimental to foundations and other structural members. The predominant soil types at the project site are not expansive soils.

**VII. (e) - No Impact:** The project does not involve placement of septic tanks or alternative disposal systems.

**VII. (f) – Less Than Significant with Mitigation Incorporation:** As discussed in **Section VII(a)(ii)** above, the proposed Project shall comply with the latest building standards and codes, including the California Building Code. The final building permit plan set shall be submitted to the County Engineer for review and approval. However, paleontological resources could be encountered when excavation occurs in previously undisturbed soil and bedrock.

The implementation of the following **Mitigation Measure GEO-1**, which requires that excavation activities be halted should a paleontological resource be encountered and the curation of any substantial find, would

reduce this impact to a less-than significant level.

## **MITIGATION MEASURES:**

**MM GEO-1: Protect Archaeological Resources during Construction Activities.** Should paleontological resources be encountered during project subsurface construction activities located in previously undisturbed soil and bedrock, all ground-disturbing activities within 25 feet shall be halted and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. For purposes of this mitigation, a “qualified paleontologist” shall be an individual with the following qualifications: 1) a graduate degree in paleontology or geology and/or a person with a demonstrated publication record in peer-reviewed paleontological journals; 2) at least two years of professional experience related to paleontology; 3) proficiency in recognizing fossils in the field and determining their significance; 4) expertise in local geology, stratigraphy, and biostratigraphy; and 5) experience collecting vertebrate fossils in the field.

If the paleontological resources are found to be significant and project activities cannot avoid them, measures shall be implemented to ensure that the project does not cause a substantial adverse change in the significance of the paleontological resource. Measures may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the County for review. If paleontological materials are recovered, this report also shall be submitted to a paleontological repository such as the University of California Museum of Paleontology, along with significant paleontological materials. Public educational outreach may also be appropriate.

The Project sponsor shall inform its contractor(s) of the sensitivity of the project site for paleontological resources and shall verify that the following directive has been included in the appropriate contract specification documents:

“The subsurface of the construction site may contain fossils. If fossils are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be halted and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Fossils can include plants and animals, and such trace fossil evidence of past life as tracks or plant imprints. Marine sediments may contain invertebrate fossils such as snails, clam and oyster shells, sponges, and protozoa; and vertebrate fossils such as fish, whale, and sea lion bones. Vertebrate land mammals may include bones of mammoth, camel, saber tooth cat, horse, and bison. Contractor acknowledges and understands that excavation or removal of paleontological material is prohibited by law and constitutes a misdemeanor under California Public Resources Code, Section 5097.5.”

**FINDINGS:** The Project would have **Less Than Significant Impacts** on Geology and Soils **with Mitigation Incorporated.**

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 (GHG), either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG?			X	

#### DISCUSSION:

Section 15064.4 of the CEQA guidelines specifies how the significance of impacts from greenhouse gas (GHG) emissions is to be determined. The Lead Agency is to make a good faith effort to describe, calculate, or estimate the amount of GHG emissions that will result from a project. The Lead Agency is also to consider the following factors when accessing the impacts of the GHG emissions on the environment:

1. Extent to which the project may increase or reduce GHG emissions, relative to the existing environmental setting
2. Whether the project emissions exceed a threshold of significance that the Lead Agency determines applies to the project
3. Extent to which the project complies with regulations adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions

Global climate change is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere. The primary GHGs contributing to global climate change are carbon dioxide, methane, nitrous oxide, and fluorinated compounds. These gases allow visible and ultraviolet light from the sun to pass through the atmosphere, but prevent heat from escaping back out into space.

Among the potential consequences of global climate change are rising sea levels and adverse impacts to water supply, water quality, agriculture, forestry, and ecosystems. In addition, global climate change may increase electricity demand for cooling, decrease the availability of hydroelectric power, and affect regional air quality and public health.

In California, the largest emitter of GHGs is the transportation sector, followed by electricity generation. Carbon dioxide, methane, and nitrous oxide emissions are byproducts of fossil fuel combustion. GHG emissions are typically reported as carbon dioxide equivalents (CO<sub>2</sub>e) to account for the fact that different GHGs have different potentials to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. The project site is within the jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD) which has not yet identified recommended GHG significance thresholds for the evaluation of development subject to CEQA review. However, for informational purposes the project was analyzed whether it exceeded the thresholds of significance for GHG emissions adopted by the 2017 California Environmental Quality Act Air Quality Guidelines prepared by the Bay Area Air Quality Management District (BAAQMD). Expressing emissions in CO<sub>2</sub>e takes the contributions of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only carbon dioxide was being emitted (BAAQMD, 2017).

**VIII. (a) and (b) - Less than Significant Impact:** Project construction activities could result in a small, temporary increase in GHG emissions, including exhaust emissions from on-road trucks, worker commute vehicles, and off-road heavy-duty equipment (assuming these vehicles and equipment would not otherwise be operating). The proposed project is consistent the Goals and Policies of the County's General Plan contained in Chapter 12 of the Energy Element (i.e., Goal E-G3 and Policy E-P13) by providing a reliable source of locally based renewable energy. The energy generated by the project will be available for local consumption and via RCEA, Humboldt County's CCA.

The proposed project will enhance and improve the resilience of the grid by providing enough clean renewable energy to power roughly 1,192 homes in Humboldt County. This project would further reduce local resident's reliance on carbon-based fuels and lower GHG emissions, both of which are stated as broader community goals and objectives. Reducing GHG emissions is one of the primary aims of the Humboldt County Climate Action Plan (CAP), currently in late stage development.

The project is a low-impact development that does not require municipal water, groundwater, or sewer service. The project will not generate any traffic and once built, requires very little ongoing maintenance. Operation of the facility will generate minimal vehicle trips and a negligible increase in GHG emissions. Even assuming an average of one trip per day, total project emissions would be less than 12 MTCO<sub>2</sub>e per year, which is substantially less than the emission threshold of 1,100 MT CO<sub>2</sub>e (BAAQMD, 2017). The only potential emissions from the project would result during the construction period. Construction-related emissions resulting from the proposed project are expected to be similar to a recent solar project, the ACV Airport Microgrid Project, located at the Humboldt County Airport (Humboldt DPW, 2018). The less than significant construction-related emissions estimate for the ACV Microgrid Project was based on emissions evaluated in the Initial Study for the Humboldt Bay Trail South project (GHD 2018) of 285 MT/yr CO<sub>2</sub>e over a two-year period (GHD, 2018), which is an order of magnitude below the BAAQMD threshold of significance. Therefore, the project would generate a less than significant impact.

The solar facility is a zero-emission electricity source, and the project will result in a substantial net decrease in GHG emissions by serving as an alternative source for fossil-fuel based power. It is estimated that the project will result in avoided emissions of 900 MT/yr CO<sub>2</sub>e. This project directly aligns with federal, state, and local plans that aim to reduce GHG emissions through alternative power supplies.

Based on the negligible percentage of construction- and operation-related GHG emissions, and the substantial net overall reduction in GHG emissions represented by the project, it can be firmly concluded that the project would not have a significant impact through GHG generation, and that the project will not conflict with an applicable plan, policy or regulation for GHG reduction.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have a **Less Than Significant Impact** on Greenhouse Gas Emissions.

<b>IX. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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?				X
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?				X
f) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

#### DISCUSSION:

**IX. (a) and (b) - Less Than Significant Impact:** Construction activities would involve the use of hazardous materials, such as fuels and lubricants. These materials are commonly used during construction, would be used in small quantities, and are not acutely hazardous. Numerous laws and regulations ensure the safe transportation, use, storage, and disposal of hazardous materials. For example, Caltrans and the California Highway Patrol regulate the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. The construction contract will include standard provisions for the safe handling of hazardous materials and spill prevention control and countermeasures.

Worker safety regulations cover hazards related to the prevention of exposure to hazardous materials and a release to the environment from hazardous materials use. The California Division of Occupational Safety and Health (Cal-OSHA) also enforces hazard communication program regulations, which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees.

The hazardous materials associated with pad-mounted transformers are used in small quantities. Maintenance of on-site pad-mounted transformers is a standard practice with established protocols.

**IX. (c) - No Impact:** The project will not emit hazardous emissions, handle hazardous or acutely hazardous materials, substances, or waste.

**IX. (d) - No Impact:** The project is not located on a site included on a list compiled pursuant to Government Code Section 65962.5.

**IX. (e) - No Impact:** The project is not located within two miles of a public airport and is not located within an airport land use designation.

**IX. (f) - No Impact:** No physical change to the environment will occur as a result of this project that would interfere with emergency responses or evacuations. The Project has been reviewed and has been determined to meet Humboldt County Road and Street Standards for the proposed access and driveway and is acceptable as presented. Therefore, the project would not obstruct emergency vehicle access.

**IX. (g) - No Impact:** The project would not increase exposure of people and/or structures to a significant loss, injury or death involving wild land fires. The project would comply with current California Department of Forestry and California Building Code requirements for fire safety. No impacts would occur.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have a **Less Than Significant Impact** on Hazards and Hazardous Materials.

<b>X. HYDROLOGY AND WATER QUALITY.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			<b>X</b>	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				<b>X</b>
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,			<b>X</b>	
i) which would result in substantial erosion or siltation on- or off-site?			<b>X</b>	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			<b>X</b>	

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?			X	
(iv) impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

#### DISCUSSION:

While the project is not anticipated to require any grading work, a grading plan will be developed during the design phase for the project if more than one acre of grading becomes necessary. The grading plan will determine the extent of the disturbed soil area. If this area exceeds one acre, coverage under the State Water Resources Control Board's General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ) would be obtained. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. The SWPPP identifies appropriate erosion control measures and other Best Management Practices (BMPs). If this area is more than one acre, an Erosion and Sediment Control Plan would be developed in accordance with Humboldt County Code Section 331-14(h)(6)(D).

In addition to construction-related stormwater management, the project will need to comply with the Humboldt County Low Impact Development (LID) Stormwater Manual which addresses post-construction stormwater conditions (Humboldt County Code, Section 337-13). LID is a site development strategy that prevents chemical pollution of stormwater and maintains or reproduces the runoff characteristics that existed prior to development. Basic principles of LID include minimizing contact between pollutants and stormwater, retaining natural areas, minimizing new impervious surfaces, incorporating measures to promote storage and infiltration of stormwater, and treating runoff that leaves the site. LID is implemented largely through site design, site civil engineering, and landscaping. The specific compliance requirements for LID will be determined during the design phase.

**X. (a) - Less than Significant Impact:** Construction activities necessary to construct the project would be conducted in accordance with either the state Construction General Permit or the County construction Stormwater Quality Management and Discharge Control Ordinance. Appropriate stormwater BMPs, including erosion, sediment and non-stormwater controls will be implemented to protect water quality at all times through construction. Implementation of BMPs and erosion control measures will reduce potential water quality impacts during project construction activities to a less-than-significant level by requiring measures to control erosion and sedimentation of receiving water bodies. As a result, the potential impact on water quality during construction and operation would be less than significant.

**X. (b) - No Impact:** The project does not include any groundwater withdrawals. The project will be designed to maintain on-site infiltration of stormwater, which benefits groundwater recharge.

**X. (c) (i, ii, iii, iv), - Less than Significant Impact:** Maintaining drainage patterns will be one of the design goals for the grading plan. New impervious surfaces will be minimal and site soils are known to have high infiltration capacity. The project area is adjacent to the Mad River floodplain so the project will be required



to comply with provisions of the LID Stormwater Manual to ensure no off-site siltation or erosion. An existing drainage area in the central part of the project site will be maintained with a 150' buffer for new construction. Foundation requirements for the solar arrays are minimal and do not require excess grading or significant cut. These factors support the conclusion that the project will not cause substantial erosion, siltation, or flooding by altering drainage patterns, and will not contribute to an exceedance of stormwater drainage systems, nor provide substantial additional sources of polluted runoff.

**X (d) – Less than Significant Impact:** The elevation of the project area precludes any risk of inundation by seiche or tsunami. There is mudflow potential due to natural occurrences at the project site due to proximity to Mad River, however the project does not include the development of structures inhabited by people. Furthermore, no materials or pollutants would be stored on site.

**X. (f) - No Impact:** The project site is located within the Mad River Watershed and Mad River Lowland Groundwater Basin. The Mad River watershed area is governed by the Sustainable Groundwater Management Act administered by the California Department of Water Resources to ensure that local governments and water agencies of high and medium priority basins halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. As the project would result in minimal grading or subsurface disturbance, there would be no other potential causes of substantial degradation of water quality. As discussed in Section X.a above, the project would be required to comply with state and local construction permit standards and there would be no impact as a result of the project.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have a **Less than Significant Impact** on Hydrology and Water Quality.

<b>XI. LAND USE AND PLANNING.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				<b>X</b>
b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?		<b>X</b>		

#### **DISCUSSION:**

**XI. (a) - No Impact:** The project is situated on an unimproved grassland used for grazing and does not have the potential to divide an established community. Although there are nearby residences, the project site is not adjacent to an urban growth area or within an existing community.

**XI. (b) - Less Than Significant with Mitigation Incorporation:** The General Plan designation for APN 313-091-019 and APN 313-091-020 is Agricultural Exclusive (AE). The General Plan's Land Use Element expressly allows "Utilities & Energy Facilities," such as the project. (General Plan, Table 4-G.) The zoning for the site is Unclassified (U). The Humboldt County Code designates all of the unincorporated area of the County not otherwise zoned as the Unclassified (or "U" Zone). These are areas that have not been sufficiently studied to justify precise zoning classifications. According to the Humboldt County Code, the proposed project is considered a utility and energy facility consistent with the General Plan and allowed in the U zoning subject to the grant of a Use Permit (HCC §314-8.1) The proposed project is consistent the Goals and Policies of

the County's General Plan contained in Chapter 12 of the Energy Element (i.e., Goal E-G3 and Policy E-P13) because it will provide a reliable source of locally based renewable energy. The energy generated by the project will be available for local consumption via the Redwood Coast Energy Authority (RCEA), Humboldt County's Community Choice Aggregator (CCA).

The proposed project will provide enough clean renewable energy to power roughly 1,200 homes in Humboldt County. This project would further reduce local resident's reliance on carbon-based fuels and lower GHG emissions, both of which are stated as broader community goals and objectives. Reducing GHG emissions is one of the primary aims of the Humboldt County Climate Action Plan (CAP), currently in late stage development. Furthermore, as discussed in Section II Agriculture and Forestry Resources above, the project can be considered consistent with General Plan Policy AG-P6: Agricultural Land Conversion - No Net Loss 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 net loss in agricultural land base and production suitable land or easements could be acquired as provided by the Policy, or , as is proposed by the project, measures will be instituted to ensure ongoing agricultural uses on the property, including but not limited to sheep grazing or the keeping of honey bees, on a rotational basis whereby pasture areas would be occupied for variable periods, allowing pasture rest periods to promote optimal vegetation quality management and maintenance of the project's pollinator habitat. To ensure the ongoing operations are viable, an Agricultural Management Plan, summarizing the aforementioned agricultural uses on the property, will be submitted subject to the approval of the Humboldt County Planning Director before issuance of a final inspection for the project. In addition, the placement of Financial Assurance with Humboldt County as part of the Decommissioning Plan ensures that the restoration of the project site is funded and there is no permanent loss or conversion of any agricultural lands.

Although the Project has been designed to result in no permanent "net loss" of agricultural land due to the installation of pollinator habitat, seasonal grazing, and a decommissioning plan, the No-Net Loss policy still requires mitigation to ensure consistency with the Humboldt County General Plan. Therefore, in order to reduce potential impacts to a Less than Significant level, implementation of **Mitigation Measure AG-1** will require the establishment of the Agriculture Management Plan subject to the monitoring and reporting plan.

The project is a low-impact development that does not require municipal water, groundwater, or sewer service. The project will not generate any traffic and once built, requires very little ongoing maintenance.

**MITIGATION MEASURES: Implementation of MM AG-1** will ensure the ongoing agricultural operations on the subject property are maintained through the life of the solar project.

**FINDINGS:** The Project would have a **Less Than Significant Impact** on Land Use and Planning with **Mitigation Incorporated**.

<b>XII. MINERAL RESOURCES.</b> 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>X</b>
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?				<b>X</b>

**DISCUSSION:**

**XII. (a) and (b) - No Impact:** The project site does not contain mineral resources that are of value to the region or state. The quantity of grading, excavation or gravel required for this project is a negligible amount compared to the total gravel extracted in the region.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have **No Impact** on Mineral Resources.

<b>XIII. NOISE.</b> 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>X</b>	
b) Generation of excessive groundborne vibration or groundborne noise levels?			<b>X</b>	
e) 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?				<b>X</b>

**DISCUSSION:**

Ambient (background) noise levels at the subject property are affected by transient (short-term) noise events associated with the gravel quarry on Old Hatchery Road just north of the project site. During construction which is expected to last approximately 3 to 4 months, earth moving equipment will be utilized for clearing, grubbing, and grading, and a vibratory pile driver will be used to set the array piles. A truck mounted drill rig will be used to predrill holes for the array posts. The “pile driver” (a small rubber track

mounted machine) produces noise of approximately 100 decibels at a distance of 50 feet. Pile driving is expected to take approximately three weeks to complete, and will be conducted during the week during normal construction hours. Due to the predrilling activity, the overall ambient noise level is expected to be lower than it would be if predrilling did not occur. As such, predrilling will enable a quicker and less disruptive install overall. The nearest sensitive receptor, a private residence, is located more than 650 feet northwest of the northern fence line of the project<sup>1</sup>. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. At this distance, the noise generated by the pile driving will attenuate and decibel levels are predicted to be less than 25 dBA. During operation, the AC/DC inverters inside the building will generate a low-level noise (less than 70 decibels at one meter).

**XIII. (a) - Less Than Significant Impact:** Noises generated by the proposed project will result in temporary, but not permanent, noise increases. Humboldt County does not currently have ordinances that address construction noise. The noise associated with facility operations is negligible and will not result in a substantial permanent increase in ambient noise above existing levels. The highest noise levels generated by the project would result from the short-term use of heavy equipment and vibratory pile driving machinery during construction activities; however, increases in noise levels will be temporary and limited to daytime hours, and will not be present after the project is constructed.

**XIII. (b) - Less Than Significant Impact:** Operations of solar utilities is not typically associated with groundborne vibrations, but construction may cause temporary noise and vibration. Construction activities will require the use of heavy equipment, drill rig truck, forklift, and pile driving. Some groundborne noise and vibration could occur during construction of the proposed project, primarily during driving of the steel support piers into the ground. Noise levels are a function of the distance between noise source and sensitive receptors and will also vary based on the type of pile driver, the depth of the pile, and soil conditions (Caltrans, 2013). Vibrations and noise will attenuate with increasing distance. It is expected the pile driver will produce noise of approximately 100 decibels at a distance of 50 feet. This activity is expected to last no more than 3 to 4 weeks. There are nearby residential structures located southwest (property owner's property) of Hatchery Road or south of project site within the Fish Hatchery facility (not inhabited). The nearest occupied private residence is approximately 650 feet to the northwest from where pile driving may occur.

Although rare, construction-induced vibrations have the potential to be structurally damaging to buildings located adjacent to the construction site. While small rubber track mounted machine designed specifically for this purpose is unlikely to generate substantial ground-borne vibration that might exceed standard vibration thresholds, it is possible this activity could cause a nuisance condition for nearby residences.

Ground-borne vibration is typically measured by using "peak particle velocity descriptor" (ppv). Caltrans (2013) cites a study by the American Association of State Highway and Transportation Officials (AASHTO) which identifies maximum vibration levels for preventing damage to structures from intermittent construction or maintenance activities. The maximum vibration levels are 0.2-0.3 in/sec ppv for residential buildings with plastered walls, and 0.4-0.5 in/sec ppv for residential buildings in good repair with gypsum board walls. Furthermore, the construction process would be relatively short-term compared to the lifetime of the solar installation. Sources of vibration would not exist during project operations, and no impact is expected.

At a distance of more than 650 feet, the closest residence will experience negligible increase in noise levels, and because groundborne noise and vibration dissipate with distance, the residence is not expected to

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<sup>1</sup> The property owners have a residential property to the southeast of the project site which was not factored into the sensitive receptor evaluation.

experience a perceptible increase in groundborne noise or exposure to groundborne vibration. Based on the above, the proposed project would not cause excessive groundborne vibration or groundborne noise levels, and the impact is expected to be less than significant. The proposed project will require consistency with the Humboldt County General Plan Noise Element for construction activities and would be limited to applicable policies and standards for acceptable noise levels. Impacts would be less than significant.

**XIII. (c) - No Impact:** The project is not situated within the jurisdiction of the Humboldt County Airports Land Use Compatibility Plan (Humboldt County, 1993).

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have a **Less Than Significant Impact** on Noise

<b>XIV. POPULATION AND HOUSING.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial 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>X</b>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				<b>X</b>

**DISCUSSION:**

**XIV. (a) through (c) - No Impact:** The proposed project has no association with population or housing.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have **No Impact** on Population and Housing.

<b>XV. PUBLIC SERVICES.</b> 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>X</b>
b) Police protection?				<b>X</b>

c) Schools?				<b>X</b>
d) Parks?				<b>X</b>
e) Other public facilities?				<b>X</b>

**DISCUSSION:**

**XV. (a) through (e) - No Impact:** The proposed project in and of itself would not impact public services.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have **No Impact** on Public Services.

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

**DISCUSSION:**

**XVI (a) and (b) - No Impact:** The proposed project has no association with recreational facilities.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have **No Impact** on Recreation.

<b>XVII. TRANSPORTATION / TRAFFIC.</b> 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>X</b>

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)				<b>X</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)?				<b>X</b>
d) Result in inadequate emergency access?				<b>X</b>

**DISCUSSION:**

**XVII. (a) and (b) - No Impact:** The project will not permanently increase vehicle trips. There will be a small increase in vehicle trips generated during construction activities, ending once construction is complete. Periodic maintenance of the panels is expected to generate less trips per day than any typical land use including single-family residences and/or agriculture uses. Therefore, the project would not result in impacts related to vehicle miles traveled (VMT) and would not conflict with CEQA Guidelines section 15064.3. No impacts would occur.

**XVII. (c) - No Impact:** Emergency vehicles will have alternative routes for reaching necessary locations. There would be no impact to hazards due to a geometric design feature or inadequate emergency access, or incompatible uses, and no mitigation is required

**XVII. (d) - No Impact:** The proposed project does not include infrastructure for transportation and would not conflict with an applicable plan for emergency access.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have a **Less Than Significant Impact** to Transportation/Traffic.

<b>XVIII. TRIBAL CULTURAL RESOURCES.</b> Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?		<b>X</b>		

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

**XVIII. (a) and (b) – Less Than Significant Impact with Mitigation Incorporated:** GANDA corresponded with the THPO of the Blue Lake Rancheria who informed GANDA that they work cooperatively with the Bear River and Wiyot THPOs. GANDA was instructed to test for buried archaeological deposits within the top 3 feet (ft) of the ground. The results of the ground investigation did not discover any previously unknown resources and there are no documented or designated, tribal cultural, or unique archaeological resources within the project area.

However, there is a small potential that the proposed project activities could inadvertently uncover archaeological materials that would need to be evaluated further to determine their significance. A mitigation measure (MM CULT-1) is incorporated as a precautionary measure to ensure appropriate response in the event of inadvertent discovery of cultural resources. As such the potential for project activities to inadvertently uncover archaeological materials is less than significant. However, the tribes requested the opportunity to observe ground-disturbing activities that will penetrate deeper than one foot below ground surface. This request was incorporated into Mitigation Measure CULT-1.

**MITIGATION MEASURES:** MM CULT-1 would reduce potential impacts to Tribal Resources during Construction Activities.

**FINDINGS:** The Project would have **Less Than Significant Impact** on Tribal Resources **with Mitigation Incorporated**.

<b>XIX. UTILITIES AND SERVICE SYSTEMS.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				X
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.				X
c) Result in a determination by the wastewater treatment				X



provider, which serves the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				<b>X</b>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				<b>X</b>

#### DISCUSSION:

**XIX. (a and b) - No Impact:** The project will not result in generation of wastewater requiring treatment. Given that no wastewater will be generated by the proposed passive solar project, the project would not exceed wastewater treatment requirements of the Regional Water Quality Control Board and would not result in a significant impact on the environment relative to wastewater discharge.

**XIX. (c) - No Impact:** The passive nature of the solar field will result in no new or increased waste water from the site that would be sent to any wastewater facility. Any storm water facilities would be constructed on site as part of the LID design.

**XIX. (d) - No Impact:** The project will generate very limited solid waste, and only during construction.

**XIX. (e) - No Impact:** The project would not result in a substantial increase in solid waste.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have **No Impact** on Utilities and Service Systems.

<b>XX. WILDFIRE.</b> 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>X</b>	
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?			<b>X</b>	
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?			<b>X</b>	

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?			X	
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**DISCUSSION:**

**XX. (a - d) - Less Than Significant Impact:** The subject property is currently undeveloped as grazing lands. It is also located in the Cal Fire State Responsibility Area (SRA) and the fire hazard severity zone is classified as High Fire Severity. There are only two trees on the project site and the proposed project does not include any residential structures or places where persons would work or reside. Although the project is proposing new overhead utility lines to connect the facility to the adjacent PG&E overheard power lines, all new construction would be required to comply with current PG&E development standards. As a result, the project would not increase exposure of people and/or structures to a significant loss, injury or death involving wildland fires. The project has been reviewed by the Humboldt County Planning and Building Department for compliance with road and access standards and there are no project features that would impair an adopted emergency response plan or evacuation plan. The project would comply with current California Department of Forestry and California Building Code requirements for fire safety. The project site is currently served by overhead utilities for power but would not require significant infrastructure installation or maintenance to existing infrastructure as a result of the proposed project. The proposed Project includes new on-site overhead delivery lines from the solar arrays to the main overhead distribution lines at Hatchery Road but would be subject to any Humboldt County Engineering and Blue Lake Fire Protection District required standards for new development, including distance and clearance from existing vegetation. Therefore, impacts would be considered less than significant, and no mitigation is required.

**MITIGATION MEASURES:** No mitigation required.

**FINDINGS:** The Project would have a **Less Than Significant Impact** on Wildfire.

<b>XXI. MANDATORY FINDINGS OF SIGNIFICANCE.</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?		X		

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

#### DISCUSSION:

**XXI. (a) – Less Than Significant Impact with Mitigation Incorporated:** The project will not degrade the quality of the environmental, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal. Although no special status species were observed on the project site, potential biological impacts related to special status bird species would be reduced to less than significant levels through implementation of AMAs (by constructing the project outside of applicable nesting seasons), or through implementation of **Mitigation Measures BIO-1 through BIO-7** if construction occurs during identified nesting season as stated in **Section IV: Biological Resources** above. There is potential for historic or prehistoric resources to occur on site and Project construction activities could disturb previously unknown resources as a result of the Project. As stated in **Section V: Cultural Resources, Section VII: Geology and Soils, and Section XVIII: Tribal Cultural Resources** above, in the event archaeological artifacts are found, **Mitigation Measures CULT-1 and GEO-1** would reduce potential impacts to less than significant levels which would be incorporated into the project. Therefore, impacts would be considered less than significant with mitigation incorporated.

**XXI. (b) - Less Than Significant Impact:** The project does not have impacts that are individually limited but cumulatively considerable. Potential air quality, greenhouse gas emissions, hydrology and traffic associated impacts are discussed in their respective sections above. The analysis determined that all potential impacts were less than significant and would not contribute significantly to cumulative impacts. The proposed project is consistent with Use Permit approvals from Humboldt County and does not propose new development that would have a significant impact on the environment or substantially change the existing conditions. With the imposition of standard and project specific conditions of approval, the project does not have impacts that are individually limited, or cumulatively considerable.

**XXI. (c) - No impact:** No evidence for direct or indirect impacts with the potential to cause substantial adverse effects on human beings were identified.

**FINDINGS:** The Project would have a **Less than Significant Impact with Mitigation Incorporation** on Mandatory Findings of Significance.

## 6.1 REFERENCES

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## **ATTACHMENT A**

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### **Mitigation Monitoring and Reporting Program**

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**Mitigation Monitoring and Reporting Program Hatchery Road Solar Project**

Environmental Factor	Mitigation Measure	Implementation Responsibility	Monitoring/Reporting Responsibility	Timing
<b>Agriculture and Forestry Resources</b>	<b>MM AG-1: Agriculture Management Plan.</b> To maintain consistency with General Plan Policy AG-P6, 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. Prior to issuance of a certificate of occupancy for the project, the applicant shall submit the Agricultural Management Plan to the County of Humboldt Planning Director, summarizing the types and duration of agricultural uses as well as operator information for the property. The Agriculture Management Plan shall be subject to review by the Planning Director to confirm the effectiveness of the agricultural operations.	Project Sponsor/County of Humboldt	County of Humboldt	Prior to Final Permit Approval
<b>Biological Resources</b>	<b>MM BIO-1: Workers Environmental Awareness Training (WEAT).</b> All workers will receive a WEAT training by a qualified biologist. The WEAT will educate workers about all special-status species and related habitats potentially present in the Project Area, and the nature and purpose of protective measures, including BMPs and other required measures. Work areas, including staging areas, will be limited to those shown in the final Project description and included in the WEAT training. All heavy equipment, vehicles, and construction activities will be confined to these designated areas. A copy of all applicable AMMs will be kept on site at all times.	Project Sponsor	County of Humboldt	Prior to construction
<b>Biological Resources</b>	<b>MM BIO-2: Delineation of Work Area and Work Period.</b> Work areas, staging areas, and access roads will be limited to those shown in the final project description. Exclusion buffers around environmentally sensitive areas (ESAs) such as wetlands or active bird nests will be clearly flagged or fenced with temporary construction fencing. All heavy equipment, vehicles, and construction activities will be confined to designated work areas. Vehicle speeds on unpaved roads will not exceed 15 miles per hour. Because dusk, nighttime, and dawn are often the times when NRLF is most actively foraging and dispersing, all construction activities shall cease one half hour before sunset and should not begin prior to one half hour before sunrise.	Project Sponsor	County of Humboldt	Prior to construction



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<b>Biological Resources</b>	<p><b>MM BIO-3: Site Maintenance.</b> Trash dumping, firearms, open fires (such as barbecues), hunting, and pets will be prohibited at the work site. All trash and waste items generated by construction or crew activities will be properly contained in a covered trash receptacle and removed from the Project Area daily or secured inside a covered, locking container. This includes biodegradable items such as apple cores and banana peels that attract predators such as raccoons and American crows that could prey upon sensitive wildlife species, which would be considered a potentially significant impact under CEQA.</p>	Project Sponsor	County of Humboldt	Prior to construction
<b>Biological Resources</b>	<p><b>MM BIO-4: Wildlife Entrapment.</b> All Project personnel will visually check for animals beneath vehicles and equipment immediately prior to operation to minimize the potential for special-status species to be harmed by crushing or entrapment, which would be considered a potentially significant impact under CEQA. Any pipes, culverts, or other open-ended materials and equipment stored onsite for one or more overnight periods will be inspected for animals prior to moving, burying, or capping to ensure that no animals are present within these materials and equipment. To prevent accidental entrapment of wildlife during construction, all excavated holes, ditches, or trenches greater than six inches deep will be covered at the end of each work day by plywood or a similar material, or escape routes will be constructed with the materials that allow trapped wildlife to escape without slipping or being injured. After opening and before filling, any holes, ditches, or trenches will be thoroughly inspected for trapped animals by the project biologist or construction crew.</p> <p>If a special-status species is discovered in the Project Area, the Project Manager or Project biologist will be contacted. The Project Manager or Project biologist will report the sighting to the appropriate natural resource agency(ies) (e.g., CDFW, USFWS, etc.) within 24 hours when required by the agency. The animal will be allowed to move off site on its own. Special-status species will not be taken or harassed. No threatened or endangered species will be moved unless under the direction of the appropriate agency and by a qualified and/or permitted biologist.</p>	Project Sponsor	County of Humboldt	Prior to construction
<b>Biological Resources</b>	<p><b>MM BIO-5: Northern Red-legged Frog.</b> A preconstruction survey will be performed no more than 3 days prior to the onset of construction to determine if any suitable burrows occur for NRLF on the site. Any small mammal burrows that will be impacted by pier</p>			

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	<p>installation or other ground penetrating activities shall be excavated by a permitted and agency approved biologist prior to construction activities. If any NRLF are observed during the preconstruction survey, CDFW shall be consulted to determine the best way to avoid impacts to NRLF. Ground-disturbing activities should be conducted during the dry season (May 15-October 15) to minimize take of NRLF. If construction activities are conducted within the dry season (May 15-October 15), exclusion fencing shall be installed around the work area prior to October 15 to prevent NRLF from migrating into work areas. The fencing material and design shall be reviewed and approved in writing by CDFW before installation. In the event a NRLF is encountered on site during construction, all construction activities will cease until the animal has left the project area on its own and is no longer in danger of harm. The project construction manager or project biologist will report the sighting to CDFW within 24 hours. No one other than a CDFW-approved biologist is permitted to handle or capture NRLF, and NRLF will not be taken or harassed.</p>	Project Sponsor	County of Humboldt	Prior to construction
Biological Resources	<p><b>MM BIO-6: Preconstruction Nesting Bird Survey:</b> A nesting bird survey shall be completed by a qualified biologist no earlier than 14 days prior to any construction during the nesting season (February 15-August 31) to determine if any native birds are nesting on or near the site (including a 500-foot buffer for osprey, 660-foot buffer for bald eagle (USFWS 2007), and a 0.25 mile buffer for northern spotted owl (USFWS 2012). If any active nests are observed during surveys, a suitable avoidance buffer from the nests shall be determined by the qualified biologist based on species, location, and extent and type of planned construction activity. Construction within the buffer would be avoided until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist. Suitable nesting habitat (i.e., trees and vegetation) shall only be removed outside of the bird breeding season to avoid impacts to nesting birds. Upon completion of the survey, a memo will be provided to the Planning and Building Department that will describe the methods and results of the survey and any related recommendations.</p>	Project Sponsor	County of Humboldt	Prior to construction
Biological Resources	<p><b>MM BIO-7: Wetlands and Water Quality:</b> When handling and/or storing chemicals (fuel, hydraulic fluid, etc.) near waterways, all applicable laws/regulations and best management practices (BMPs) will be followed to prevent chemical transmission into waterways. Appropriate materials will be kept on site to prevent and manage spills. All construction equipment will be well maintained to prevent fuel, lubricants, or</p>			

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	<p>other fluid leaks. Equipment, when not in use, will be stored in upland areas outside of the boundaries of aquatic features (e.g., marsh) or other water bodies. Use of erosion and sediment control BMPs will follow County requirements or the Project Stormwater Pollution Prevention Plan (SWPPP) if required. BMPs composed of straw must be certified weed free. BMPs will not include micro-filament netting to avoid entrapment of wildlife. No fill or runoff will be allowed to enter wetlands or waterways.</p>	Project Sponsor	County of Humboldt	Prior to construction
<b>Cultural Resources</b>	<p><b>MM CULT-1: Protect Archaeological Resources during Construction Activities.</b> Although the surface and subsurface investigations did not locate any archaeological resources, unknown resources have the potential to occur and could be disturbed during project construction. To ensure protection of unknown resources, the following is recommended.</p> <ul style="list-style-type: none"> <li>While the project has been designed to avoid potential impacts to historical site (HA-01), should this resource require removal to facilitate construction, a qualified archaeological monitor and consulting Native American monitor shall be present during the resulting ground-disturbing activity (including but not limited to vegetation clearing/grubbing, pile-driving, transformer and inverter pads, trenching, gravel access roads, etc.) for project development in order to assure there are no subsurface archaeological deposits present beneath the historic-period cultural resource.</li> <li>If archaeological resources are encountered during any ground disturbing activities associated with the project, the applicant shall immediately suspend all ground disturbing work at the find location within 100 feet of the finding (or a reasonable buffer zone as determined by a qualified archaeologist), contact the County Planning &amp; Building Department, and retain a qualified professional archaeologist to analyze the significance of the find and formulate further mitigation (e.g., Project relocation, excavation plan, and protective cover) in consultation with culturally affiliated tribes or other descendant groups, where applicable.</li> <li>Pursuant to California Health and Safety Code §7050.5, if known or suspected Native American or other human remains are encountered, all ground-disturbing work must cease in the vicinity of the discovery, and the County Coroner shall be contacted. The respectful treatment and disposition of remains and associated grave offerings shall be in accordance with Public Resource Code (PRC) §5097.98. The applicant and successors in interest are ultimately responsible for ensuring compliance with this</li> </ul>	Project Sponsor	County of Humboldt	During construction

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	<p>condition. In the event the Project design changes and ground disturbance is anticipated beyond the APE as it is currently defined, further surveys shall be conducted in those new areas to assess the presence of cultural resources. Any newly discovered or previously recorded sites within the additional survey areas shall be recorded (or updated) on appropriate Department of Parks and Recreation (DPR) 523-series forms. If avoidance of these resources is not feasible, then an evaluation and/or data recovery program shall be drafted and implemented.</p>			
<p><b>Geology and Soils</b></p>	<p><b>MM GEO-1: Protect Archaeological Resources during Construction Activities.</b> Should paleontological resources be encountered during project subsurface construction activities located in previously undisturbed soil and bedrock, all ground-disturbing activities within 25 feet shall be halted and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. For purposes of this mitigation, a “qualified paleontologist” shall be an individual with the following qualifications: 1) a graduate degree in paleontology or geology and/or a person with a demonstrated publication record in peer-reviewed paleontological journals; 2) at least two years of professional experience related to paleontology; 3) proficiency in recognizing fossils in the field and determining their significance; 4) expertise in local geology, stratigraphy, and biostratigraphy; and 5) experience collecting vertebrate fossils in the field.</p> <p>If the paleontological resources are found to be significant and project activities cannot avoid them, measures shall be implemented to ensure that the project does not cause a substantial adverse change in the significance of the paleontological resource. Measures may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the County for review. If paleontological materials are recovered, this report also shall be submitted to a paleontological repository such as the University of California Museum of Paleontology, along with significant paleontological materials. Public educational outreach may also be appropriate.</p> <p>The Project sponsor shall inform its contractor(s) of the sensitivity of the project site for paleontological resources and shall verify that the following directive has been included in the appropriate contract specification documents:</p>	<p>Project Sponsor</p>	<p>County of Humboldt</p>	<p>During construction</p>

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	<p>“The subsurface of the construction site may contain fossils. If fossils are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be halted and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Fossils can include plants and animals, and such trace fossil evidence of past life as tracks or plant imprints. Marine sediments may contain invertebrate fossils such as snails, clam and oyster shells, sponges, and protozoa; and vertebrate fossils such as fish, whale, and sea lion bones. Vertebrate land mammals may include bones of mammoth, camel, saber tooth cat, horse, and bison. Contractor acknowledges and understands that excavation or removal of paleontological material is prohibited by law and constitutes a misdemeanor under California Public Resources Code, Section 5097.5.”</p>			
<b>Land Use and Planning</b>	<b>Implementation of MM AG-1: Agriculture Management Plan.</b>	Project Sponsor/County of Humboldt	County of Humboldt	Prior to Final Permit Approval
<b>Tribal Cultural Resources</b>	<b>Implementation of MM CULT-1: Protect Archaeological Resources during Construction Activities.</b>	Project Sponsor	County of Humboldt	During construction