ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY

PLANNING DEPARTMENT

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October 20, 2021

FROM: Nisha Chauhan, Senior Planner

TO: Interested Parties, Responsible Agencies and Community Members

SUBJECT: Notice of Preparation (Notice) of an Environmental Impact Report and Notice of Virtual Scoping Meeting for **Alameda Grant Line Solar 1** Project.

SUMMARY:

The County of Alameda (County) is issuing this notice to advise other agencies and the public that the County will be preparing an Environmental Impact Report (EIR) for the Alameda Grant Line Solar 1 (Project) within the East County area of unincorporated Alameda County. The EIR will be prepared in compliance with the California Environmental Quality Act (CEQA) and all relevant state and Federal laws. The County will serve as the CEQA lead agency for preparation of the EIR.

The County is issuing this Notice to alert interested parties and solicit agency and public input regarding the scope and content of the environmental analysis. It is also intended to advise the public that outreach activities conducted by the County and its representatives will be considered in the preparation of the EIR.

DATES: Due Date for Comments and Public Scoping Meeting Date/Details

Written comments on the scope of the Alameda Grant Line Solar 1 EIR, including the project objectives, impacts to be evaluated, methodologies to be used in the evaluations, and the alternatives to be considered, should be provided to the County by **November 19, 2021.** Due to the COVID-19 pandemic, a scoping meeting Zoom Webinar will be held on October 28, 2021, at 1:30 PM. The Webinar information is below:

Please click or enter the link below to join the webinar:

https://us02web.zoom.us/j/92158285462

Or by phone: 1 (669) 900 9128 or 1 (346) 248 7799 Webinar ID: 921 5828 5462

Details of the webinar will also be posted on the County's website:

www.acgov.org/cda/planning/landuseprojects/currentprojects.htm

The project objectives, description of the proposed project and alternatives currently under consideration will be presented in the scoping meeting video presentation and slides.

ADDRESSES:

Written comments on the project scope

should be sent to:

Nisha Chauhan Senior Planner
ATTN: Alameda Grant Line Solar Project EIR
Alameda County
CommunityDevelopment Agency
224 W. Winton Avenue, Suite 111
Hayward, CA 94544

Or, via email with the subject line "Alameda Grant Line Solar 1 Project EIR" to: nisha.chauhan@acgov.org

FOR FURTHER INFORMATION CONTACT: Nisha Chauhan, Planning Department, Alameda County Community Development Agency, 224 W. Winton Avenue, Suite 111, Hayward, CA 94544, or at 510- 670-6541

Attachments:
Project Description
Environmental Analysis

3. *Project Description*

Soltage, LLC is proposing to construct, install, operate, and maintain an approximately 2 MW alternating current (AC) solar photovoltaic (PV) facility known as the Alameda Grant Line Solar 1 (project). The project is located on a 23.07-acre site at West Grant Line Road and Great Valley Parkway in eastern unincorporated Alameda County, adjacent to the unincorporated community of Mountain House in San Joaquin County.

The proposed project was awarded a 15-year Power Purchase Agreement (PPA) with PG&E under their Electrical Renewable Market Adjusting Tariff (REMAT) program, which is a program specifically designed for small utility-scale local renewable energy projects (<5MW) that benefit the local communities around it by delivering renewable energy via the distribution grid. The project would have a PPA with PG&E and is anticipated to commence delivery in early 2023.

The power generated by the proposed project will be transmitted by Pacific Gas and Electric's (PG&E) distribution system at 12 kilovolts (kV) via the Herdlyn 1102 substation, located approximately 4.5 miles north of the project site, on Byron Highway near Clifton Court Forebay. The proposed project will interconnect to the local PG&E distribution grid immediately adjacent to the site, thereby providing clean, renewable energy to the electrical grid. The project would involve the construction of three new on-site utility poles along West Grant Line Road, which PG&E would connect its distribution grid to via an overhead distribution line extension from the existing 12kV pole on the south side of West Grant Line Road.

This chapter provides a detailed description of the proposed project, including the location, setting, characteristics of the project site, a project construction schedule, and a listing of required permits and approvals.

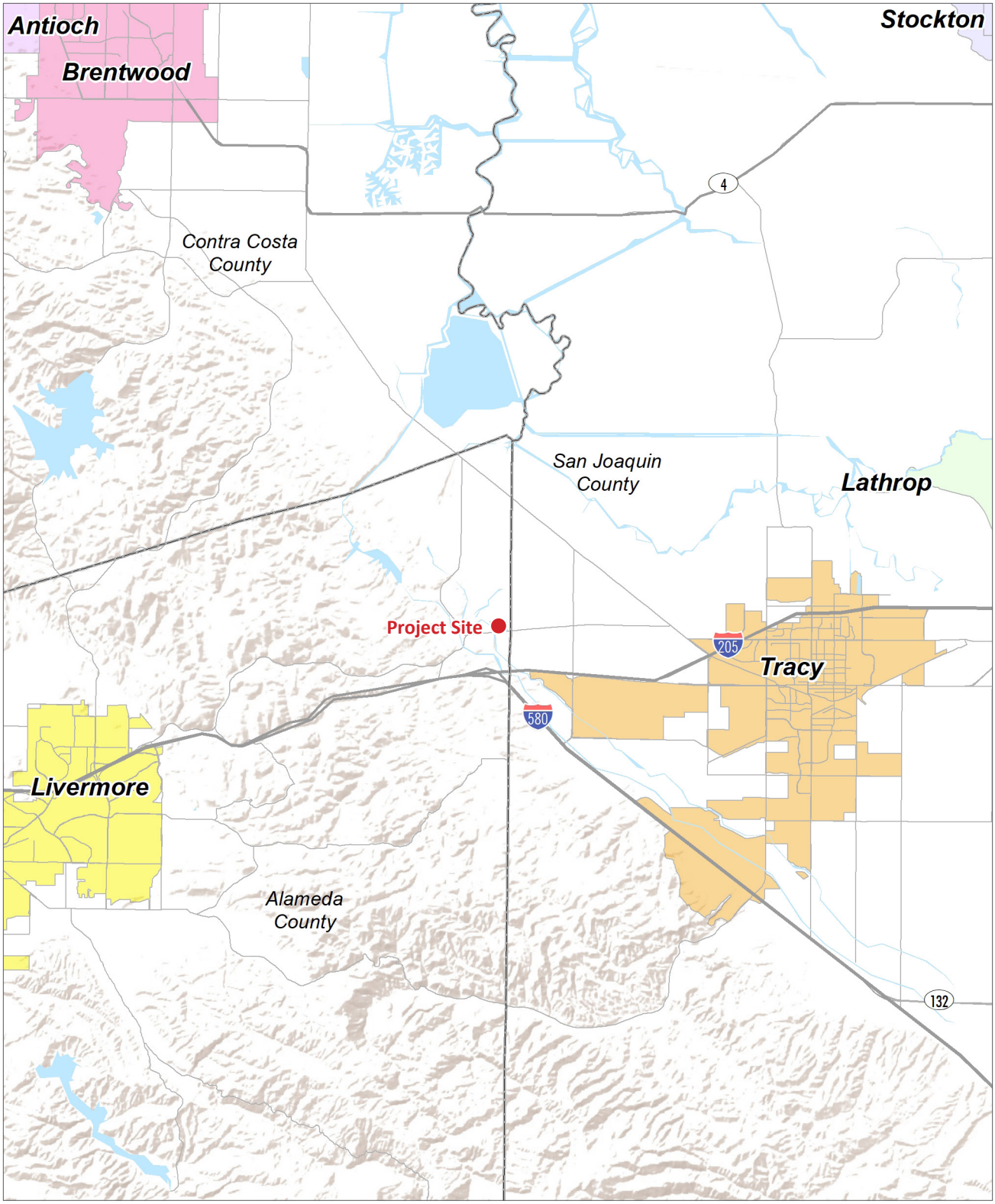
3.1 PROJECT SITE LOCATION AND CHARACTERISTICS

3.1.1 PROJECT SITE LOCATION AND SETTING

As shown on Figure 3-1, *Regional Location*, the project site is located in eastern Alameda County, at the San Joaquin County boundary, west of the City of Tracy. Alameda County is bordered by Contra Costa County to the north, San Joaquin County to the east, Santa Clara County to the south, and the City and County of San Francisco to the west. Regional access to Alameda County is provided via Interstate-80 (I-80), I-880, I-680, I-580 and I-205. Direct access to the project site is provided via the I-205 interchange at Mountain House Parkway.

PROJECT DESCRIPTION

As shown on Figures 3-2, *Local Vicinity*, and 3-3, *Aerial Photograph*, the project site is located in a rural agricultural area at the intersection of West Grant Line Road and Great Valley Parkway, adjacent to the unincorporated community of Mountain House in San Juaquin County. The project site is bounded by orchard land to the north, vacant agricultural land to the south, and single-family housing to the east across Great Valley Parkway. The Delta Mendota Canal is located west of the project site. Local vehicular access to the project site is provided via Mountain House Parkway and West Grant Line Road.



Source: ESRI, 2021.
Note: Unincorporated county areas are shown in white.

Project Site County Boundaries

0 3
Scale (Miles)

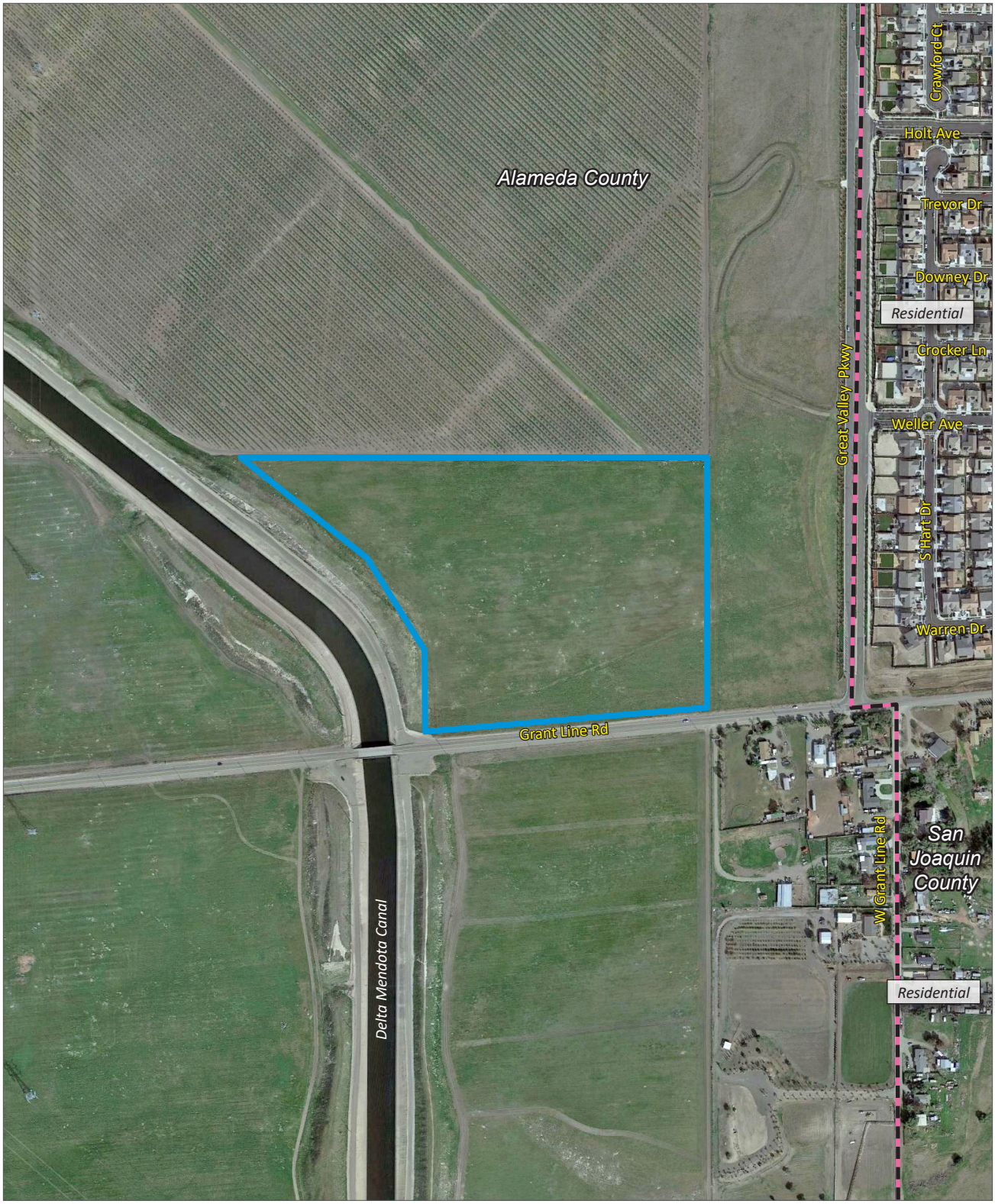
Figure 3-1
Regional Location

Source: ESRI, 2021.

0 2,000
Scale (Feet)

Project Boundary
County Boundary

Figure 3-2
Local Vicinity



Project Boundary

County Boundary

Source: Google Earth, 2021.

0 500

Scale (Feet)

Figure 3-3

Aerial Photograph

3.1.2 EXISTING SITE CONDITIONS

The 23.07-acre project site is assigned Assessor's Parcel Number (APN) 99B-7650-7-1. The project site is undeveloped.

3.1.3 GENERAL PLAN LAND USE AND ZONING DESIGNATION

3.1.3.1 GENERAL PLAN

The project site is located within the Alameda County *East County Area Plan* (ECAP), which amended the Alameda County General Plan in 2000 by voter-approved Measure D. The ECAP Planning Area encompasses 418 square miles in eastern Alameda County. The ECAP includes policies that address landscaping, grading, storm drainage, and flood control which are intended to preserve the rural, pastoral, character of the County lands, outside of the County's Urban Growth Boundary.

The ECAP land use designation on the project site is *Large Parcel Agriculture*. This designation permits, subject to the provisions of Measure D, agricultural uses, agricultural processing facilities (for example wineries, olive presses), limited agricultural support service uses (for example animal feed facilities, silos, stables, and feed stores), secondary residential units, visitor-serving commercial facilities (by way of illustration, tasting rooms, fruit stands, bed and breakfast inns), recreational uses, public and quasi-public uses, solid waste landfills and related waste management facilities, quarries, windfarms and related facilities, utility corridors, and similar uses compatible with agriculture.

3.1.3.2 ZONING

The project site is zoned Agricultural (A) District. Per Alameda County Municipal Code (ACMC) Section 17.06.030, the uses permitted in the A zoning district include one-family dwelling or one-family mobile home; one secondary dwelling unit; crop, vine or tree farm, truck garden, plant nursery, greenhouse, apiary, aviary, hatchery, horticulture; raising or keeping of poultry, fowl, rabbits, sheep or goats or similar animals; grazing, breeding or training of horses or cattle; winery or olive oil mill; fish hatcheries; and public or private hiking trails. Per ACMC Section 17.06.040, conditional uses may also include privately owned wind-electric generators. The County Planning Commission made findings in 2008 pursuant to ACMC Sections 17.54.050 and 17.54.060 regarding district classifications of uses not listed within the Ordinance.[1] The Planning Commission made findings that a solar electric facility would not be contrary to the specific intent clauses or performance standards established for the A District and could be permitted under a conditional use permit. The County reiterated these findings to reconfirm the conditional permissibility of similar solar uses within the A District in 2011[2] and 2012.[3]

[1] County of Alameda Planning Commission, June 16, 2008, Meeting Minutes.

[2] County of Alameda East County Board of Zoning Adjustments, December 15, 2011, Resolution No. Z-11-72, PLN2011-00009.

[3] County of Alameda Board of Supervisors, February 28, 2012, Planning Meeting, Summary Action Minutes.

3.2 PROJECT OBJECTIVES

The project objectives are listed below:

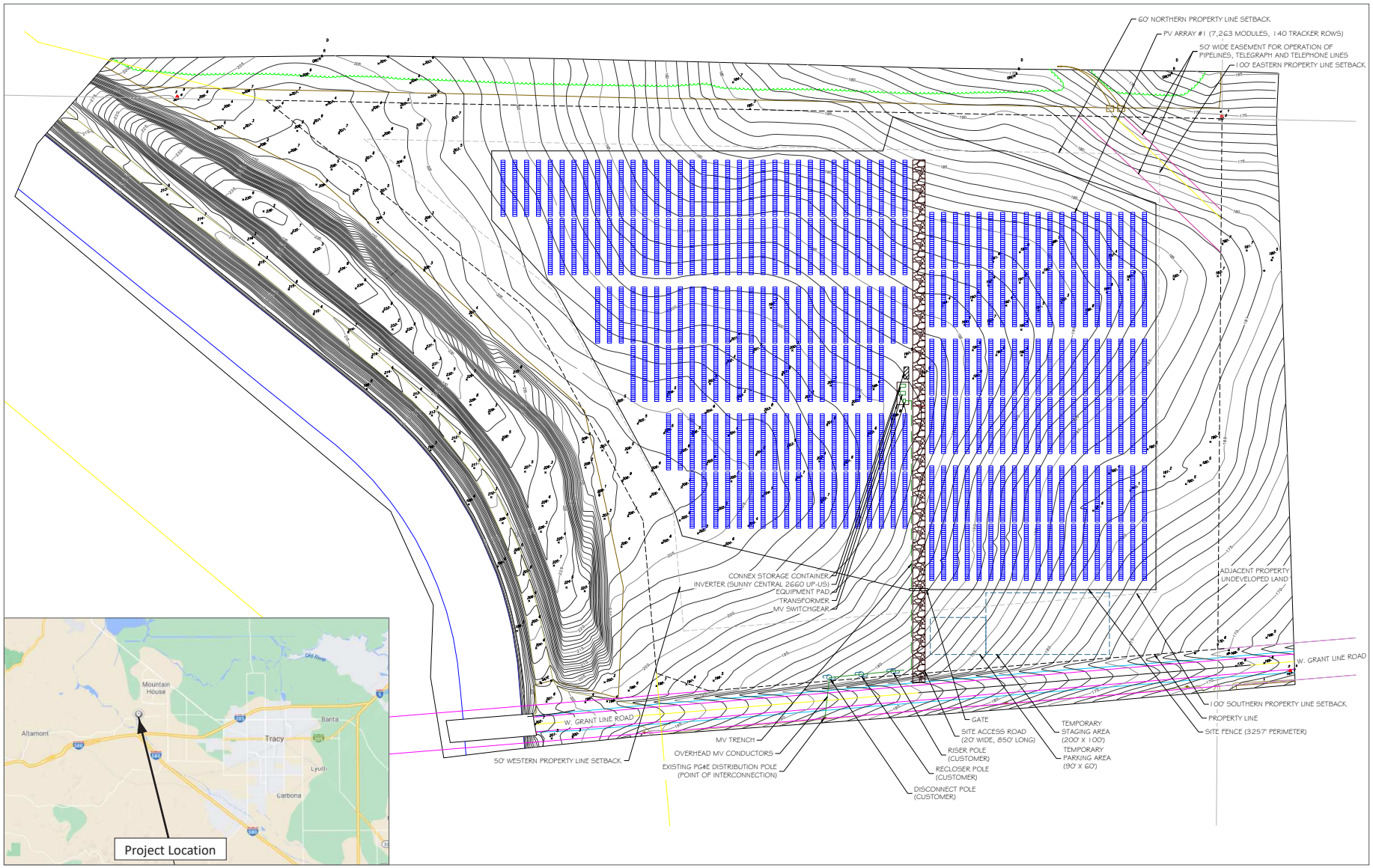
- Assist California in meeting renewable energy generation goals under Senate Bill (SB) 100. SB 100 requires 100 percent of all electric retail sales to end-use customers to come from renewable energy and zero-carbon resources by 2045;
- Create construction jobs and permanent jobs in the San Francisco Bay Area;
- Complete construction and achieve commercial operation in accordance with the schedule under the PPA;
- Locate solar power plant facilities as near as possible to electrical load to avoid capacity constraints of the transmission gird by utilizing distribution grid, and to provide system reliability;
- Utilize existing utility facilities, roads, and other infrastructure to the extent feasible to minimize impacts;
- Contribute to Alameda County climate change and renewable energy goals by generating fossil-free clean power for use by Alameda County and Bay Area residents;
- Site the project in an area with excellent solar energy resource capabilities, in order to maximize productivity from the photovoltaic panels;
- Minimize environmental impacts associated with solar development, construction, and operation, through low-impact design, short construction timeline with minimal ground disturbance, low impervious surfaces, the continued use of existing habitat by present wildlife, and ease of decommissioning at the end of the project's life in order to restore the site to its original conditions;
- Achieve economies of scale to provide approximately 2 MW's of affordable, local, wholesale solar electricity to Bay Area residents; and
- Help Bay Area Load Serving Entities in fulfilling their local renewable energy procurement goals.

3.3 PROPOSED PROJECT

The proposed project would consist of solar panels producing DC voltage that would be converted to AC voltage through one inverter and one transformer. As shown on Figure 3-4, *Alameda Grant Line Solar Groundmount Array Layout*, the inverter and transformer would be located in the center of the site mounted on a pad foundation. The inverter and transformer specifications will be submitted upon final design.

Although the specific panel technology that will be used has not been selected, Soltage is considering the Trina Solar Duomax Twin Bifacial Dual Glass 144 Half-Cell Module, 380-405W – DEG15HC.20(II) or similar model for the proposed project. Each panel consists of a module assembly (with frame) that is approximately 80 inches by 40 inches in size. The solar panels will be mounted on a steel racking frame that is positioned three to nine feet above ground to allow for vegetation control and periodic maintenance. The panels would include a single axis tracking system that is mounted on steel posts driven

into the ground and would have a +/- 60-degree range of motion driven by electric motors. As shown on Figure 3-4, *Alameda Grant Line Solar Groundmount Array Layout*, the solar arrays will be in three rows with the longest row in the rear. Final panel selection will be made during final design due to the ever-changing nature of the technology, however the panel used will be similar to the Trina Solar Duomax Twin module.



Source: Soltage LLC, 2021.

0 280
Scale (Feet)

SYMBOL LEGEND		
SYMBOL	NAME	DESCRIPTION
	TRACKER PV MOD.	TRINA SOLAR TSM-DE15H(II)

PV SYSTEM SUMMARY TABLE						
Array ID	Inverter ID	Mod Qty.	kW size	GCR	Tilt	Azimuth
1	Inv 1	7263	2868.89	34.7%	±60°	180°

NOTE:
SITE DIMENSIONS DERIVED FROM TOPOGRAPHICAL/GEOLOGICAL SURVEY

TOTAL SITE AREA: 1,004,825 sqft. / 23.068 Acres
USEABLE OPEN SPACE: 1,004,825 sqft. / 23.068 Acres
AREA INSIDE FENCING: 615416 sqft. / 14.128 Acres
PERCENTAGE OF SITE UTILIZED: 61.25%

Figure 3-4
Alameda Grant Line Solar 1 - Groundmount Array Layout

3.3.1 SITE PREPARATION, CONSTRUCTION, AND SOLAR INSTALLATION

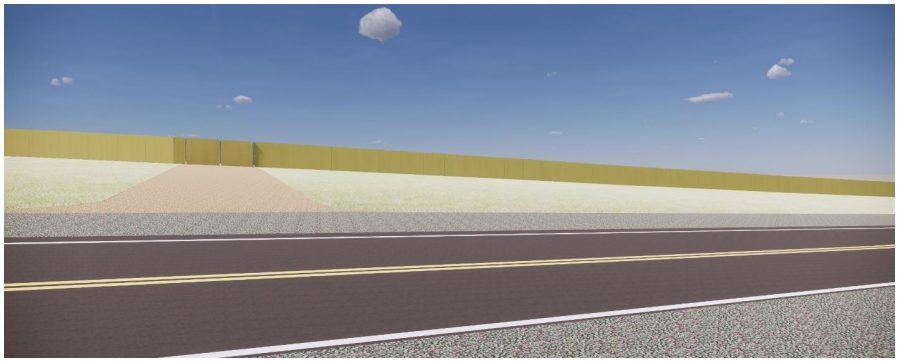
Construction of the proposed project would occur in one phase over a 3- to 4-month period. Site preparation would involve minor excavation to construct the gravel access road and electrical pads. All other areas of the site will be minimally cleared and grubbed as needed with minimal ground disturbance. Additional facilities within the project footprint necessary for the photovoltaic system includes internal vehicular access ways to facilitate construction and maintenance of the solar arrays and panels, temporary parking, an equipment laydown staging area to be used during construction and routine maintenance, and additional chain-link fencing that surrounds the solar arrays within the site boundary. The proposed project would introduce 500 square feet of impervious concrete for the inverter and transformer pad for use as a base for the inverter and transformer. Other impervious surfaces include, the gravel access road entrance, the level spreader, the storage container pad and solar array piers. As shown on Figure 3-4, the gravel access road will run north to south through the middle of the project site. The crushed aggregate rock used for the gravel access road would be delivered to the project site, requiring approximately 25 to 30 haul trips. The total estimated amount of impervious surface for the project is 2,200 square feet. Equipment used during the construction phase of the proposed project includes a backhoe, skid steer, telehandler, excavator, front loader, compactor, and pile driver.

The project utilizes 100-foot setbacks from the southern and eastern site boundaries to minimize the visual impact of the project from West Grant Line Rd and the housing development east of the site in San Joaquin County. The western and northern boundary setbacks are 50’ and 60’ respectively. Furthermore, the project will include a chain link fence with plastic slats matching the color of the landscape on the southern and eastern portion of the project site between the project site and West Grant Line Road to further reduce visual impact of the solar panels from the road. The proposed fence would be 9 to 10 feet high, located 100 feet north of the site’s southern boundary, and extend easterly east along the southern boundary of the project site. There will be a continuous fence installed around the perimeter of the entire solar arrays to prevent the public or unauthorized members from exposure to electrical hazards and equipment. Figure 3-5 depicts renderings of the proposed fencing that would surround the site and Figure 3-6 includes fence prototypes to be used for the proposed project.

Site preparation and construction activities would adhere to the requirements of ACMC Chapter 16.36, Grading Erosion and Sediment Control, and Section 17.64.150, Stormwater management.

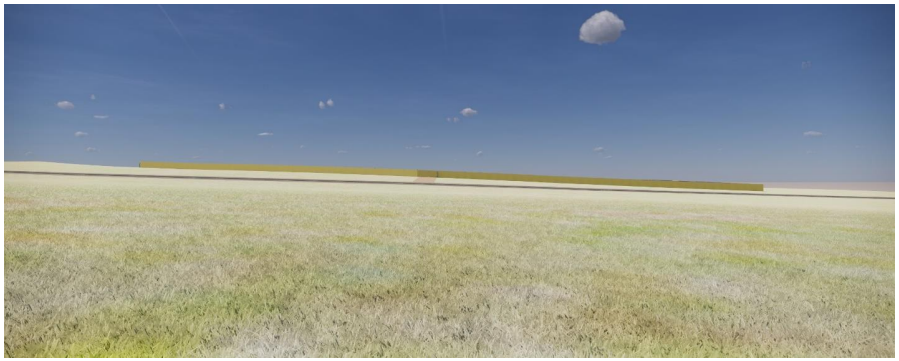
An electrical-powered video surveillance system would be installed on-site for security purposes. The system would connect to a central system at the equipment pad. A cellular radio (cell modem) would be installed to provide remote internet connection for monitoring and other internet reliant devices and systems.

No security or other nighttime lighting is proposed as part of the project.



View of Southern Fence line of Project from West Grant Line Road (looking North)

View of Eastern Fence line of Project from West Grant Line Road (looking West)

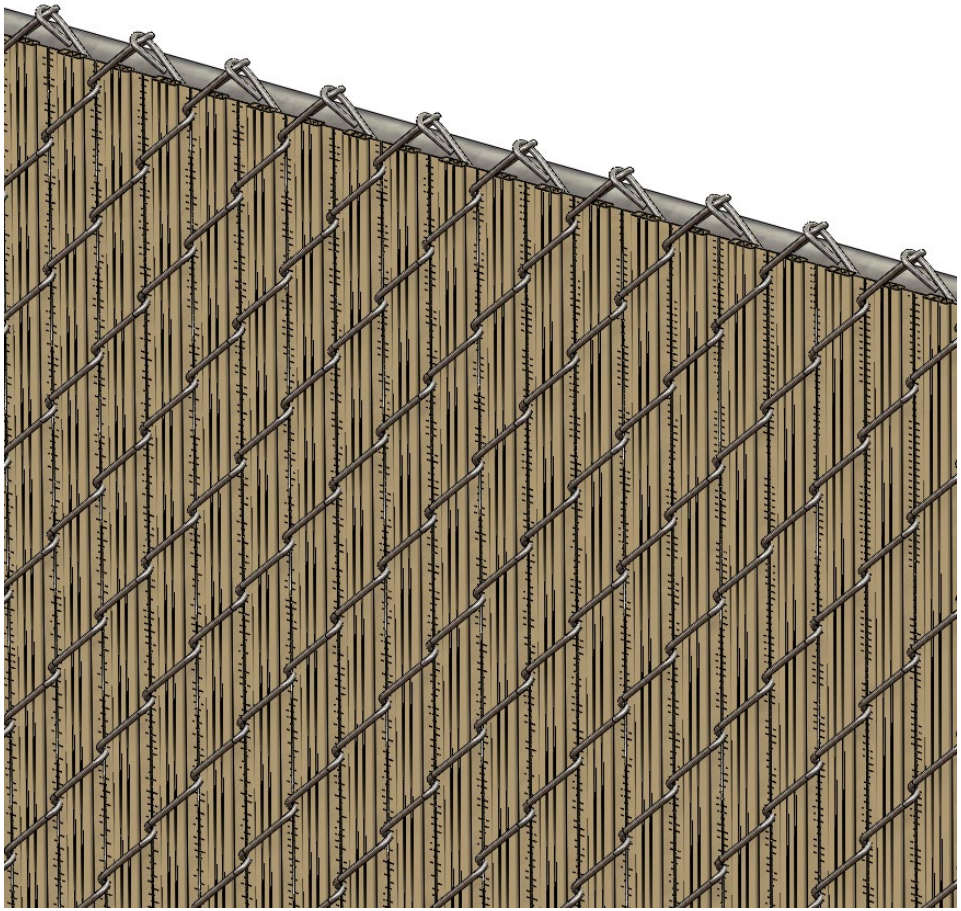


View of Southern Fence line of Project from Parcel opposite the road of the Project (across from West Grant Line Road looking North)

View of entire Eastern Fence line of Project from further east of the Project site along West Grant Line Road (looking West)

Source: Soltage, 2021.

Figure 3-5
Project Fencing Renderings



Source: Soltage, 2021.

Figure 3-6
Fence Prototypes

3.3.2 SITE ACCESS

Access to the project site would be provided via a gated, graveled driveways located on West Grant Line Road. The proposed gravel access road would be overlaid with 304 cubic yards of crushed aggregate rock. Internal vehicular access ways would remain un-graveled and would connect to the gravel access road throughout the site.

3.3.3 LIGHTING

Existing sources of lighting in the vicinity of the project include exterior lighting from nearby residential development. No on-site lighting, including security or emergency lighting, is proposed as part of the project because the proposed project would be inactive during the nighttime. PV facilities are most efficient in terms of generating electricity when they absorb as much sunlight as possible and reflect as little sunlight as possible.[4] As such, the iridescent blue panels are textured with indentations to reduce the amount of sunlight that is reflected off the surface and are coated with anti-reflective materials that maximize light absorption and reduce glare as much as possible.[5] Therefore, no light or glare will be produced from the proposed project.

3.3.4 PROJECT OPERATION

The project will interconnect to the PG&E distribution electrical grid on the North side of West Grant Line Road, via an overhead wire, which PG&E will construct and maintain during the life of the project. The project will erect three wooden utility poles along the southern edge of the project site, where the project's 12kV electrical output will be connected. PG&E's interconnection facilities will connect to the project at one of these wooden utility poles.

During the operation period of the project, the solar modules will be washed one to two times per year with an electronic cleaning system. This cleaning system dramatically reduces the amount of water needed to clean the modules. The water source is from the orchard located immediately north of the project, which is owned by the same property owner. It is expected that water for washing will be delivered by a 500- gallon water truck with one trip per cleaning event.

3.3.5 PROJECT DECOMMISSIONING

The project is anticipated to have an expected useful life of at least 40 years. Once the expected useful life of the solar PV facility is over, it would either be refurbished and repowered or disassembled and decommissioned by the project owner. If refurbishing and repowering the solar PV facility is elected,

[4] SunShot, United States Department of Energy, Meister Consultants Group, Solar and Glare, June 2014, http://solaroutreach.org/wp-content/uploads/2014/06/Solar-PV-and-Glare-_Final.pdf, accessed April 9, 2018.

[5] SunPower, PV Systems, Low Levels of Glare and Reflectance vs. Surrounding Environment, https://us.sunpower.com/sites/sunpower/files/media-library/white-papers/wp-pv-systems-low-levels-glare-reflectance-vs-surrounding-environment.pdf, accessed April 9, 2018.

Soltage would be required to obtain all required agreements with the landowner and all required permit approvals.

Project decommissioning would occur in accordance with the terms of the CUP and would involve the removal of all above-ground facilities and fencing, buried electrical conduits, and concrete foundations in accordance with a decommissioning plan, further described below. Equipment associated with the solar PV facility would be recycled, repurposed, or disposed of off-site, as appropriate and in accordance with all then-applicable laws and regulations.

In the event that activities associated with decommissioning involve exposure and disturbance of soils, measures for erosion and sediment control would be implemented in accordance with a future, separate, Stormwater Pollution Prevention Plan (SWPPP) specifically tailored for decommissioning. It is anticipated that decommissioning activities would involve the use of heavy equipment and labor similar to that used for construction of the project.

Post decommissioning, all areas compacted during original construction or by equipment used for decommissioning would be restored in a manner comparable to adjacent properties, or to the zoning or general plan land use designation applicable to the site at the time of decommissioning or to pre-project conditions. A decommissioning plan would be prepared and submitted to Alameda County that includes steps that would be taken to restore the site to pre-project conditions to the extent feasible.

3.4 REQUIRED PERMITS AND APPROVALS

The County of Alameda is the Lead Agency for the preparation and certification of the Focused EIR. Where appropriate, responsible, trustee, and other agencies will be consulted during the Focused EIR process. Subsequent development entitlements for the project may require approval of State, federal, and regional responsible and trustee agencies that may rely on the Focused EIR for decisions in their areas of expertise.

Approval of the project would require the following permits and approvals from the County of Alameda:

- Conditional Use Permit
- Variance
- Building Permit
- Grading Permit
- Encroachment Permit
- Fire Clearance and Approval

4. Environmental Analysis

4.1 INTRODUCTION

This section describes the existing environmental conditions in the project area and environmental impacts that could occur with implementation of the proposed project pursuant to Appendix F, Energy Conservation, and Appendix G, Environmental Checklist, of the CEQA Guidelines as amended per Assembly Bill 52 (Tribal Cultural Resources) and the California Supreme Court in a December 2015 opinion [California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD), 62 Cal. 4th 369 (No. S 213478)]. Where appropriate, this Initial Study includes a general discussion of the environmental effects associated with potential future installation of the proposed PV facility on the project site.

4.2 SOURCES

All documents cited in this analysis and used in its preparation are hereby incorporated by reference into this Initial Study. Copies of documents referenced herein are available for review at the Alameda County Planning Department (224 West Winton Avenue, Room 111, Hayward, CA 94544), the East County Office Martinelli Center (3585 Greenville Road, Livermore, CA, 94550), and on the County website (https://www.acgov.org/cda/planning/).

4.3 ENVIRONMENTAL ANALYSIS AND FINDINGS

I. AESTHETICS

Except as provided in Public Resources Code Section 21099 (transit priority area/major transit stop), would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Have a substantial adverse effect on a scenic vista?	■	❒	❒	❒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	■	❒	❒	❒
c) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	■	❒	❒	❒

Except as provided in Public Resources Code Section 21099 (transit priority area/major transit stop), would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	■	❒	❒	❒

DISCUSSION

a) Would the proposed project have a substantial adverse effect on a scenic vista?

This threshold will be assessed in the full project EIR.

b) Would the proposed project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

This threshold will be assessed in the full project EIR.

c) If the proposed project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

This threshold will be assessed in the full project EIR.

d) Would the proposed project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

This threshold will be assessed in the full project EIR.

MITIGATION MEASURES

Any necessary mitigation measures will be included in the project EIR.

II. AGRICULTURAL AND FORESTRY RESOURCES

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	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?	■	❒	❒	❒

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	■	❒	❒	❒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	❒	❒	❒	■
d) Result in the loss of forest land or conversion of forest land to non-forest use?	❒	❒	❒	■
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or of conversion of forest land to non-forest use?	■	❒	❒	❒

DISCUSSION

a) *Would the proposed project 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?*

This threshold will be assessed in the full project EIR.

b) *Would the proposed project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

This threshold will be assessed in the full project EIR.

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

Neither the project site nor the immediately surrounding areas are zoned for forest land, timberland, or timber production. Additionally, there are no lands within Alameda County zoned for or currently featuring timberland or timber production.[1] The proposed project would therefore not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Therefore, there would be *no impact*.

[1] Alameda County, East County Area Plan, Land Use Diagram, page 136.

d) *Would the proposed project result in the loss of forest land or conversion of forest land to non-forest use?*

There is no forest land on the project site or in close proximity to the project site. Therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use. Accordingly, there would be *no impact*.

e) *Would the proposed project 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 of conversion of forest land to non-forest use?*

This threshold will be assessed in the full project EIR.

MITIGATION MEASURES

Any necessary mitigation measures will be included in the project EIR.

III. AIR QUALITY

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	■	❒	❒	❒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non-attainment under applicable federal or State ambient air quality standards?	■	❒	❒	❒
c) Expose sensitive receptors to substantial pollutant concentrations?	■	❒	❒	❒
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	■	❒	❒	❒

DISCUSSION

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

This threshold will be assessed in the full project EIR.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non-attainment under applicable federal or State ambient air quality standards?

This threshold will be assessed in the full project EIR.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

This threshold will be assessed in the full project EIR.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

This threshold will be assessed in the full project EIR.

MITIGATION MEASURES

Any necessary mitigation measures will be included in the project EIR.

IV. BIOLOGICAL RESOURCES

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on a plant or animal population, or essential habitat, defined as a candidate, sensitive or special-status species?	■	❒	❒	❒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community type?	■	❒	❒	❒
c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	■	❒	❒	❒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species, their wildlife corridors or nursery sites?	■	❒	❒	❒
e) Conflict with any local ordinances or policies protecting biological resources?	■	❒	❒	❒
f) Conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan?	■	❒	❒	❒

DISCUSSION

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on a plant or animal population, or essential habitat, defined as a candidate, sensitive or special-status species?

This threshold will be assessed in the full project EIR.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community type?

This threshold will be assessed in the full project EIR.

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

This threshold will be assessed in the full project EIR.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species, their wildlife corridors or nursery sites?

This threshold will be assessed in the full project EIR.

e) Would the project conflict with any local ordinances or policies protecting biological resources?

This threshold will be assessed in the full project EIR.

f) Would the project conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan?

This threshold will be assessed in the full project EIR.

MITIGATION MEASURES

Any necessary mitigation measures will be included in the project EIR.

V. CULTURAL RESOURCES

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	❒	❒	❒	■
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	❒	❒	■	❒
c) Disturb any human remains, including those interred outside of formal cemeteries?	❒	❒	■	❒

REGULATORY FRAMEWORK

Federal

American Indian Religious Freedom Act and Native American Graves and Repatriation Act

The American Indian Religious Freedom Act recognizes that Native American religious practices, sacred sites, and sacred objects have not been properly protected under other statutes. It establishes as national policy that traditional practices and beliefs, sites (including right of access), and the use of sacred objects shall be protected and preserved. Additionally, Native American remains are protected by the Native American Graves and Repatriation Act of 1990.

Paleontological Resources Preservation Act

The federal Paleontological Resources Preservation Act of 2002 limits the collection of vertebrate fossils and other rare and scientifically significant fossils to qualified researchers who have obtained a permit from the appropriate state or federal agency. Additionally, it specifies these researchers must agree to donate any materials recovered to recognized public institutions, where they will remain accessible to the public and to other researchers. This Act incorporates key findings of a report, *Fossils on Federal Land and Indian Lands*, issued by the Secretary of Interior in 2000, which establishes that most vertebrate fossils and some invertebrate and plant fossils are considered rare resources.[2]

State

Public Resources Code Section 5097.5

California PRC Section 5097.5 prohibits "knowing and willful" excavation or removal of any "vertebrate paleontological site…or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands." Public lands are defined to include lands owned by or under the jurisdiction of the State or any city, county, district, authority, or public corporation, or any agency thereof.

State Laws Pertaining to Human Remains

Any human remains encountered during ground-disturbing activities are required to be treated in accordance with California Code of Regulations Section 15064.5(e) (CEQA), Public Resources Code Section 5097.98, California Health and Safety Code Section 7050.5. California law protects Native American burials, skeletal remains, and associated grave goods regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Specifically, Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location

[2] U.S. Department of the Interior. *Fossils on Federal & Indian Lands, Report of the Secretary of the Interior*, May 2000. https://www.blm.gov/sites/blm.gov/files/programs_paleontology_quick%20links_Assessment%20of%20Fossil%20Management%20on%20Federal%20&%20Indian%20Lands,%20May%202000.pdf, accessed September 24, 2021.

other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are determined to be of Native American origin, the county coroner must contact the California Native American Heritage Commission (NAHC) within 24 hours of this identification. An NAHC representative will then identify a Native American Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. In addition, CEQA Guidelines Section 15064.5 specifies the procedures to be followed in case of the discovery of human remains on non-federal land. The disposition of Native American burials falls within the jurisdiction of the NAHC.

Assembly Bill 52

Assembly Bill 52 (AB 52), the Native American Historic Resource Protection Act, sets forth a proactive approach intended to reduce the potential for delay and conflicts between Native American and development interests. Projects subject to AB 52 are those that file a notice of preparation for an EIR or notice of intent to adopt a negative or mitigated negative declaration on or after July 1, 2016. AB 52 adds tribal cultural resources (TCR) to the specific cultural resources protected under CEQA. Under AB 52, a TCR is defined as a site, feature, place, cultural landscape (must be geographically defined in terms of size and scope), sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources. A Native American Tribe or the lead agency, supported by substantial evidence, may choose at its discretion to treat a resource as a TCR. AB 52 also mandates lead agencies to consult with tribes, if requested by the tribe, and sets the principles for conducting and concluding consultation.

Local

East County Area Plan

The ECAP includes the following policies specific to cultural resources and applicable to the proposed project.

- Policy 136: The County shall identify and preserve significant archaeological and historical resources, including structures and sites which contribute to the heritage of East County.
- Policy 137: The County shall require development to be designed to avoid cultural resources or, if avoidance is determined by the County to be infeasible, to include implement appropriate mitigation measures that offset the impacts.

Alameda County Municipal Code

The overall purpose to ACMC Chapter 17.62, Historic Preservation Ordinance, is to outline a consistent process for making determinations of historical significance and identify significant architectural, historic, prehistoric and cultural structures, sites, resources and properties within Alameda County. ACMC Section 17.62.040, Cultural resource surveys, requires the County to maintain a list of cultural resources surveys to generate an inventory of potential historic resources collectively known as the *Alameda County*

Register. The project site is located within the Historical and Cultural Resource Survey, East Alameda County, prepared by Michael R. Corbett in June 2005.[3]

EXISTING CONDITIONS

Paleontological Resources

Paleontological resources (fossils) are the remains and/or traces of prehistoric plant and animal life exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, and wood are found in the geologic deposits (rock formations) in which they were originally buried. Paleontological resources represent a limited, non-renewable, sensitive scientific and educational resource.

The potential for fossil remains at a location can be predicted through previous correlations that have been established between the fossil occurrence and the geologic formations within which they are buried. For this reason, knowledge of the geology of a particular area and the paleontological resource sensitivity of particular rock formations, make it possible to predict where fossils will or will not be encountered.

The natural geology of the project site is comprised of Holocene and/or Pleistocene (2.5 million years ago to present) alluvium, lake, playa, and terrace deposits. These deposits primarily consist of non-marine sedimentary rocks but can include marine deposits near the coast.[4] A previous study conducted by Far Western Anthropological Research Group Inc., indicated that buried prehistoric archaeological sites are likely to be found within or underneath Holocene-age depositional land forms. In addition, prehistoric settlements associated with these landforms tend to be located near San Francisco and San Pablo bays and along major, inland watercourses. Although Holocene-age landforms have the potential to contain buried archaeological deposits, the probability of encountering such resources varies significantly.

Archaeological Resources

At the time of European settlement, the project site was included in the territory controlled by the Costanoan or Ohlone Native Americans whose territory extended along the Pacific coast from San Francisco Bay to Point Sur and inland to the coast range of mountains. The Ohlone were hunter-gatherers and maintained organized complex social structures with as many as 30 or 40 villages consisting of up to 15 families. Sites were often situated near sources of fresh water in ecotones where plant and animal life were diverse and abundant. There are no known archaeological remains on the project site; however, given the County's rich Native American history, it is possible that prehistoric and, to a lesser extent, historic-period archeological resources could be found on the project site.

Historical Resources

Historic resources include sites, structures, districts, landmarks, or other physical evidence of past human activity generally greater than 50 years old. The project site is located within the East Alameda County

[3] Alameda County Municipal Code, Title 17 (Zoning), Chapter 17.62 (Historic Preservation Ordinance).

[4] California Department of Conservation, Geologic Map of California (2010), https://maps.conservation.ca.gov/cgs/gmc/, accessed on September 24, 2021.

Survey area which has a history of farming and ranching. The area was formally established and named Murray Township in 1853 after an early settler named Michael Murray. The population grew shortly after, and settlers quickly established ranches. Trails that connected the ranchos were expanded into roads capable of carrying freight wagons, carriages, and horse and buggy traffic.[5] To recognize the importance of individual properties, historic districts, and contributing resources as key components of the County's heritage, the County compiled a list of County landmarks and contributing buildings known as the *Alameda County Register*. The project site is not recognized as a landmark.[6]

DISCUSSION

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

The types of cultural resources that meet the definition of historical resources under CEQA Section 21084.1 generally consist of districts, sites, buildings, structures, and objects that are significant for their traditional, cultural, and/or historical associations. Under CEQA, both prehistoric and historic-period archaeological sites may qualify based on historical associations.[7] As such, the two main historical resources that are subject to impact, and that may be impacted by implementation of the proposed project, are historical archaeological deposits and historical architectural resources. Impacts to archaeological resources are discussed under Criterion (b).

As described above, the project site is not recognized as a historic landmark.[8] With no historical resources available on the project site, there would *no impact.*

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Archaeological deposits that meet the definition of historical resource under CEQA Section 21084.1 or CEQA Guidelines Section 15064.5 could be present within the project site and could be damaged or destroyed by ground-disturbing construction activities (e.g., site preparation and grading) associated with the proposed project. Should this occur, the ability of the deposits to convey their significance, either as containing information about prehistory or history, or as possessing traditional or cultural significance to Native American or other descendant communities, would be materially impaired.

As described above, Alameda County was inhabited by the Ohlone Native Americans. Therefore, it is possible that unknown buried archaeological materials could be found during ground-disturbing activities, including unrecorded Native American prehistoric archaeological materials. While the ECAP includes

[5] Historical and Cultural Resource Survey, East Alameda County, Michael R. Corbett, June 17, 2005.

[6] Alameda County Landmarks & Contributing Buildings, Identified in 2005-2008 Comprehensive Survey, https://www.acgov.org/cda/planning/landuseprojects/documents/phrcList.pdf, accessed on September 24, 2021.

[7] California Code of Regulations (CCR), Title 14, Chapter 3, Section 15064.5(c), Determining the Significance of Impacts on Historical and Unique Archaeological Resources.

[8] Alameda County Landmarks & Contributing Buildings, Identified in 2005-2008 Comprehensive Survey, https://www.acgov.org/cda/planning/landuseprojects/documents/phrcList.pdf, accessed on September 24, 2021.

policies that require the protection of archeological resources, ground-disturbing activities associated with the proposed project could have the potential to uncover and damage or destroy unknown resources. Consequently, without mitigation the proposed project could result in significant impacts to archaeological resources. However, the impact would be *less than significant* with implementation of Mitigation Measure CULT (b), listed below.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Human remains associated with pre-contact archaeological deposits could exist on the project site and could be encountered during ground-disturbing activities. Any human remains encountered during ground-disturbing activities are required to be treated in accordance with California Code of Regulations Section 15064.5(e) (CEQA), Public Resources Code Section 5097.98, and California Health and Safety Code Section 7050.5, which state the mandated procedures of conduct following the discovery of human remains. Descendant communities may ascribe religious or cultural significance to such remains, and may view their disturbance as an unmitigable impact. Consequently, without mitigation the proposed project could result in significant impacts with respect to human remains. However, the impact would be *less than significant* with implementation of Mitigation Measure CULT (c), as shown below.

MITIGATION MEASURES

Mitigation Measure CULT (b): If any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, all work within 50 feet of the resources shall be halted and a qualified archaeologist shall be consulted to assess the significance of the find according to CEQA Guidelines Section 15064.5. If any find is determined to be significant, representatives from the County and the archaeologist would meet to determine the appropriate avoidance measures or other appropriate mitigation. All significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the County shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, proposed project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) would be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is being carried out.

Mitigation Measure CULT (c): Procedures of conduct following the discovery of human remains have been mandated by Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98 and the California Code of Regulations Section 15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Alameda County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours, who will, in turn, notify the person the NAHC identifies as the Most Likely Descendant (MLD) of any human remains. Further actions shall be

determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.

VI. ENERGY

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	❒	❒	■	❒
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	❒	❒	❒	■

REGULATORY FRAMEWORK

Federal

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (Public Law 110-140) seeks to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. It also seeks to improve the energy performance of the federal government. The act sets increased CAFE standards; the Renewable Fuel Standard; appliance energy-efficiency standards; building energy-efficiency standards; and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration.[9]

State

Renewables Portfolio Standard

The California Renewables Portfolio Standard (RPS) was established in 2002 under Senate Bill (SB) 1078 and was amended in 2006, 2011, and 2018. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. The California Public Utilities Commission is

[9] United States Environmental Protection Agency, 2019, Summary of the Energy Independence and Security Act Public Law 110-140 (2007), https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act, accessed September 29, 2021.

required to provide quarterly progress reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout California. SB 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. SB 100 (de Leon) passed in 2018, established RPS requirements of 44 percent by 2024, 50 percent by 2026, 52 percent by 2027, and 60 percent by 2030 and also puts California on the path to 100-percent fossil-fuel-free electricity by the year 2045.[10]

Local

Alameda County Municipal Code

ACMC Chapter 15.08, Building Code, includes mandatory requirements for the installation of photovoltaic solar energy systems.[11] The proposed projects are to result in designs that consume less energy than they would under the existing State Energy Code.

EXISTING CONDITIONS

The project site is located in a rural agricultural area and is generally undeveloped with no history of energy consumption.

DISCUSSION

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

The proposed project would be generating renewable energy, and thus would offset energy consumed during project construction and generate net negative energy use. The proposed solar PV facility would connect to an existing PG&E distribution line and generate electrical energy that would be used by local consumers. Therefore, the impact would be *less than significant*.

b) Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

The proposed project would generate renewable energy, in line with the goals of State plans. Additionally, the proposed solar PV facility would connect to an existing PG&E distribution line and generate electrical energy that would be used by local consumers. Therefore, there would be *no impact*.

[10] California Energy Commission, 2017, 2016 Appliance Efficiency Regulations, https://documents.pub/document/2016-appliance-efficiency-regulations-i-abstract-the-current-appliance-efficiency.html, accessed September 29, 2021.

[11] Alameda County Municipal Code, Title 15 (Building and Construction), Chapter 15.08 (Building Code).

MITIGATION MEASURES

No mitigation measures are required.

VII. GEOLOGY AND SOILS

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	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?	❒	❒	❒	■
ii) Strong seismic ground shaking?	❒	❒	❒	■
iii) Seismic-related ground failure, including liquefaction?	❒	❒	❒	■
iv) Landslides, mudslides or other similar hazards?	❒	❒	❒	■
b) Result in substantial soil erosion or the loss of topsoil?	❒	❒	■	❒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	❒	❒	❒	■
d) Be located on expansive soil, as defined by Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	❒	❒	■	❒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	❒	❒	❒	■
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	❒	❒	■	❒

REGULATORY FRAMEWORK

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures used for human occupancy.[12] The main purpose of the act is to prevent the construction of buildings used for human occupancy on top of the traces of active faults. Although the act

[12] Originally titled the *Alquist-Priolo Special Studies Zones Act* until renamed in 1993, Public Resources Code Division 2, Chapter 7.5, Section 2621.

addresses the hazards associated with surface fault rupture, it does not address other earthquake-related hazards, such as seismically-induced ground shaking, liquefaction, or landslides.[13]

The law requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults, and to publish appropriate maps that depict these zones.[14] The maps are then distributed to all affected cities, counties, and State agencies for their use in planning and controlling new or renewed construction. In general, construction within 50 feet of an active fault zone is prohibited. The project site is located within the Clifton Bay Forebay 7.5-minute Quadrangle Alquist-Priolo Earthquake Fault Zone. The Clifton Bay Forebay 7.5-minute Quadrangle covers approximately 59 square miles of land in Contra Costa, Alameda, and San Joaquin Counties. The areas subject to seismic hazard within the quadrangle includes a small fraction of the unincorporated census-designated place of Byron, Contra Costa County.[15]

California Building Code

The State of California provides minimum standards for building design and construction through Title 24 of the California Code of Regulations (CCR). The California Building Code is located in Part 2 of Title 24. The California Building Code is updated every three years, and the most recent current version went into effect in January 2017. The California Building Code contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

Local

Alameda County General Plan

The Alameda County General Plan Safety Element, adopted in 2013, provides a policy framework to resolve development issues that arise from known or previously unknown hazards. The Safety Element is organized into four chapters that include descriptive information, analysis and policies pertaining to geologic, seismic, flood, and fire hazards within the County. The focus of the Safety Element is to minimize human injury, loss of life, property damage, and economic and social dislocation due to natural and human-made hazards. The Safety Element includes the following policies under Goal 1 specific to geology and soils, and applicable to the proposed project.

- P2: Structures should be located at an adequate distance away from active fault traces, such that surface faulting is not an unreasonable hazard.
- P6: The County shall not approve new development in areas with potential for seismic and geologic hazards unless the County can determine that feasible measures will be implemented to

[13] California Geological Survey, Alquist-Priolo Earthquake Fault Zones, https://www.conservation.ca.gov/cgs/alquist-priolo, accessed on September 24, 2021.

[14] Public Resources Code, Division 2, Geology, Mines and Mining, Chapter 7.5, Earthquake Fault Zoning, Section 2622(a).

[15] California Geological Survey, Department of Conservation, Seismic Hazard Zone Report for the Clifton Court Forebay 7.5-Minute Quadrangle, Contra Costa County, California, https://www.conservation.ca.gov/cgs/Documents/Publications/SHZR/SHZR_131_Clifton_Court_Forebay_a11y.pdf, accessed on September 24, 2021

reduce the potential risk to acceptable levels, based on site-specific analysis. The County shall review new development proposals in terms of the risk caused by seismic and geologic activity.

- P7: The County, prior to approving new development, shall evaluate the degree to which the development could result in loss of lives or property, both within the development and beyond its boundaries, in the event of a natural disaster.
- P11: All construction in unincorporated areas shall conform to the Alameda County Building Ordinance, which specifies requirements for the structural design of foundations and other building elements within seismic hazard areas.

East County Area Plan

The ECAP includes the following policies specific to geology and soils, and applicable to the proposed project.

- Policy 134: The County shall not approve new development in areas with potential natural hazards (flooding, geologic, wildland fire, or other environmental hazards) unless the County can determine that feasible measures will be implemented to reduce the potential risk to acceptable levels, based on site-specific analysis.
- Policy 135: The County, prior to approving new development, shall evaluate the degree to which the development could result in loss of lives or property, both within the development and beyond its boundaries, in the event of a natural disaster.
- Policy 309: The County shall not approve new development in areas with potential for seismic and geologic hazards unless the County can determine that feasible measures will be implemented to reduce the potential risk to acceptable levels, based on site-specific analysis. The County shall review new development proposals in terms of the risk caused by seismic and geologic activity.
- Policy 310: The County, prior to approving new development, shall evaluate the degree to which the development could result in loss of lives or property, both within the development and beyond its boundaries, in the event of a natural disaster.

Alameda County Municipal Code

The ACMC provisions apply to building structure and safety with regards to reducing impacts related to geologic hazards. Like similar jurisdictional authorities that issue building permits, the County is required to enforce the California Building Standards Code (which includes the current CBC). The County has adopted all sections of the CBC Title 24, Part 2, in Chapter 15.08, Building Code.[16]

EXISTING CONDITIONS

Faults

The County has been subjected to numerous seismic events, originating both on faults within the County and in other parts of the region. Six major Bay Area earthquakes have occurred since 1800 that have affected the County, and at least two of the faults that produced them run through or into the County.

[16] Alameda County Municipal Code, Title 15 (Buildings and Construction), Chapter 15.08 (Building Code).

Active faults within the County include the Hayward-Rodgers Creek fault system, Calaveras fault, and the Greenville-Las Positas fault. Potentially active faults within the County include the Verona fault, Williams fault, Midway fault, and Mocho fault. The Working Group of California Earthquake Probabilities has determined that earthquakes of equally destructive forces are a certainty within the region. According to their findings, the Hayward-Rodgers Creek fault system is estimated to have a probability of 31% of producing an earthquake of a magnitude of 6.7 (M 6.7) or higher within the next 30 years, this probability is the highest of the Bay Area faults.[17] In the event of an M 6.8 earthquake on the Hayward-Rodgers Creek fault system, the seismic forecasts presented on ABAG's interactive GIS website (developed by a cooperative working group that included the USGS and the California Geological Survey (CGS) suggest that the project site is expected to experience "strong" shaking.[18] However, no mapped earthquake faults run through or adjacent to the project site.[19] Thus, surface fault rupture is not considered a significant hazard within the project area.

Liquefaction

Liquefaction typically occurs in areas where moist, fine-grained, cohesionless sediment or fill materials are subjected to strong, seismically-induced ground shaking. Under certain circumstances, the ground shaking can temporarily transform an otherwise solid material to a fluid state. Liquefaction is a serious hazard because buildings in areas that experience liquefaction may subside and suffer major structural damage. Liquefaction is most often triggered by seismic shaking, but it can also be caused by improper grading, landslides, or other factors. In dry soils, seismic shaking may cause soil to consolidate rather than flow, a process known as densification. According to hazard maps published by the CGS, the project site lies within an area susceptible to very low category of liquefaction.[20] Such areas require stronger shaking events to cause liquefaction. Geologic map units included in the Moderate category include latest Pleistocene and Holocene Bay and other estuarine mud, alluvial fan and levee deposits, and stream terrace deposits.

Landslides

Landslides are gravity-driven movements of earth materials that can include rock, soil, unconsolidated sediment, or combinations of these materials. The rate of landslide movement can vary considerably. Some landslides move rapidly, as in a soil or rock avalanche, while other landslides creep or move slowly for extended periods of time. The susceptibility of a given area to landslides depends on many variables, although the general characteristics that influence landslide hazards are well understood. Some of the more important factors that can increase the likelihood of landslides are: 1) loose slope materials such as unconsolidated soil and weakly indurated or highly fractured bedrock; 2) steep slopes; 3) the orientation

[17] Alameda County, Safety Element of the General Plan, https://www.acgov.org/cda/planning/generalplans/documents/SafetyElementAmendmentFinal.pdf, pages 3 to 7.

[18] Association of Bay Area Governments (ABAG), 2013, Interactive Hazards Map, Earthquake Shaking Scenarios., https://abag.ca.gov/our-work/resilience/data-research/hazard-viewer, accessed on September 24, 2021.

[19] California Department of Conservation, Earthquake Zones of Required Investigation, https://maps.conservation.ca.gov/cgs/EQZApp/, accessed September 24, 2021.

[20] Association of Bay Area Governments (ABAG), 2013, Interactive Hazards Map, Earthquake Shaking Scenarios., https://abag.ca.gov/our-work/resilience/data-research/hazard-viewer, accessed on September 24, 2021.

of planar elements in earth materials such as bedding, foliation, joints, etc.; 4) increased moisture in soil or bedrock; 5) sparse vegetation; 6) eroded slopes or man-made cuts; and 7) strong seismic shaking. Due to the prevailing gentle topography and lack of steep slopes, earthquake-induced landslides are unlikely to occur at the project site or in the immediate vicinity.

Soils

The volume of expansive soils can change dramatically depending on moisture content. When wet, these soils can expand; conversely, when dry, they can contract or shrink. Sources of moisture that can trigger this shrink-swell phenomenon include seasonal rainfall, landscape irrigation, utility leakage, and/or perched groundwater. Expansive soils are typically very fine-grained with a high to very high percentage of clay, typically montmorillonite, smectite, or bentonite clay. The dominant soil type on the project site is Linne clay loam. Linne clay loam is well drained with a medium runoff potential and a very low capacity to transmit water.[21]

DISCUSSION

a) Would the project 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; (ii) Strong seismic ground shaking; (iii) Seismic-related ground failure, including liquefaction; (iv) Landslides, mudslides or other similar hazards?

As discussed in Section 5.1, the California Supreme Court in a December 2015 opinion (*CBIA v. BAAQMD*) confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, and not the effects the existing environment may have on a project. Therefore, the introduction of structures to existing seismic hazards would not be considered an impact under CEQA. Nevertheless, the County currently has policies that address existing seismic hazards and new development. The impact analysis for this criterion, presented below, is followed by an assessment of the proposed project's mandatory compliance with relevant ECAP and Countywide policies.

i. The project site is located on a parcel that is not in an earthquake fault zone but has not been evaluated for liquefication or seismic landslide hazards. However, the proposed project would not introduce residential development on the project site or expose people to strong seismic ground shaking. In addition, the project would not exacerbate this existing hazard pursuant to the CBIA v. BAAQMD case. Therefore, there would be *no impact.*

ii. An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the project site. The degree of shaking is dependent on the magnitude of the event, the distance to its zone of rupture, and local geological conditions. In the event of an M 6.8 earthquake on the Hayward-Rodgers Creek fault system the project site is expected

[21] United States Department of Agriculture (USDA), Natural Resources Conservation Service, Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app, accessed on September 24, 2021.

to experience "strong" shaking.[22] Because the project site is located in a seismically active region, strong ground shaking would be expected during the lifetime of the proposed project. However, the project would not exacerbate this existing hazard pursuant to the CBIA v. BAAQMD case. Therefore, there would be *no impact*.

iii. The project site is located within an area susceptible to very low category of liquefaction. Accordingly, a strong seismic event could cause liquefaction on the project site.[23] However, the project would not exacerbate this existing hazard pursuant to the CBIA v. BAAQMD case. Therefore, there would be *no impact*.

iv. The topography of the project site is generally flat, and the proposed project would not result in an erosion or landslide hazard. Therefore, there would be *no impact*.

The proposed project would be required to implement measures to avoid significant hazards from site soils and geologic conditions in compliance with the County's ECAP and Countywide policies, and the ACMC (listed above), which are required for all projects in Alameda County. Compliance with these regulations is required of all projects in the County as conditions of project approval; therefore, there would be *no impact* with respect to geologically-related hazards.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Compliance with existing regulatory requirements such as the CBC, and implementation of erosion control best management practices during construction on the project site would reduce the impacts associated with soil erosion or the loss of topsoil. Frequently-implemented soil stabilization best management practices include hydroseeding and short-term biodegradable erosion control blankets; linear sediment barriers such as silt fences, sandbag barriers, or straw bale barriers; fiber rolls, gravel bag berms, and check dams to break up slope length or flow; silt fences or other means of inlet protection at storm drain inlets; post-construction inspection of all drainage infrastructure for accumulated sediment; and clearing of accumulated sediment in such drainage structures. It should be noted that the proposed project would result in a minimal amount of grading on the project site. Therefore, adherence to existing regulatory requirements would ensure that the impacts associated with substantial erosion or the loss of topsoil resulting from construction of the proposed project would be *less than significant*.

c) Would the project 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?

As previously discussed, the potential for landslides is judged low in light of the essentially flat topography. Furthermore, existing developments in the immediate vicinity of the project site constructed on sites typified by similar topography and underlying geology, have not experienced landslides, lateral spreading,

[22] Association of Bay Area Governments (ABAG), 2013, Interactive Hazards Map, Earthquake Shaking Scenarios., https://abag.ca.gov/our-work/resilience/data-research/hazard-viewer, accessed on September 24, 2021.

[23] Association of Bay Area Governments (ABAG), 2013, Interactive Hazards Map, Earthquake Shaking Scenarios., https://abag.ca.gov/our-work/resilience/data-research/hazard-viewer, accessed on September 24, 2021.

subsidence, liquefaction, or collapse.[24] Given this experience, the proposed project is unlikely to result in significant adverse impacts related to unstable geologic units or soil. Therefore, there would be *no impact.*

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

As described above, the dominant soil type on the project site is Linne clay loam. In light of the on-site clay loam characteristics, the soil is considered to be potentially expansive and subject to expansion and contraction as a result of seasonal or human-made soil moisture. Expansive soils can undergo significant volume changes as a result of wetting or drying. This volume change can cause damage to foundations and pavement, however the proposed project does not include paved roadways or parking areas, and the only foundations would be the 500 square foot concrete pad for the inverter and transformer. The adverse effects of expansive soils can be avoided through proper subsoil preparation, drainage, and foundation design. In order to design a suitable foundation, expansive soils need to be recognized through appropriate sampling and soils testing. Such testing is generally part of a detailed, design-level geotechnical investigation performed prior to construction. Procedures employed in expansive soils testing are found in many codes and regulations. For example, Chapter 18, Sections 1803.5.3 and 1808.6 of the CBC set forth investigation and foundation requirements related to expansive soils. Adherence to these regulatory requirements would ensure that the impacts would be *less-than-significant* level.

e) Would the project 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?

The proposed project would not require the construction or use of septic tanks or alternative wastewater disposal systems. Therefore, there would be *no impact*.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

A records search, additional research, field survey, and Native American Sacred Lands File search were conducted for the Phase I Cultural Resources Assessment of the project area.[25] Although the project area transects a very small portion of a linear cultural resource (Grant Line Road), the resource itself is marginal. With the exception of a single isolated artifact, no resources are documented within a half-mile of the project area, no previously undocumented resources were identified by the survey and parcel soils predate human occupation of the region. While no paleontological resources have been identified on the project site, because the proposed project requires excavation where no such excavation has previously occurred fossils of potential scientific significance that have not been recorded could be encountered. Therefore, ground-disturbing construction associated with development under the proposed project could cause damage to, or destruction of, paleontological resources. Impacts to paleontological resources

[24] U.S. Geologic Survey, U.S. Landslide Inventory Map, https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=ae120962f459434b8c904b456c82669d, accessed on September 24, 2021.

[25] PlaceWorks, LSA, September 2021, *Phase I Cultural Resources Assessment*

or site or unique geologic features on-site would be reduced to a *less-than-significant* level with implementation of Mitigation Measure GEO (f), listed below.

MITIGATION MEASURES

Mitigation Measure GEO (f): The construction contractor shall incorporate the following in all grading, demolition, and construction plans:

- In the event that fossils or fossil-bearing deposits are discovered during grading, demolition, or building, excavations within 50 feet of the find shall be temporarily halted or diverted.
- The contractor shall notify the City of Cupertino Building Department and a City-approved qualified paleontologist to examine the discovery.
- The paleontologist shall document the discovery as needed, in accordance with Society of Vertebrate Paleontology standards (Society of Vertebrate Paleontology 1995), evaluate the potential resource, and assess the significance of the finding under the criteria set forth in CEQA Guidelines Section 15064.5.
- The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find.
- If the project applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the proposed project based on the qualities that make the resource important. The excavation plan shall be submitted to the City for review and approval prior to implementation.

VIII. GREENHOUSE GAS EMISSIONS

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	■	❒	❒	❒
b) Conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	■	❒	❒	❒

DISCUSSION

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

This threshold will be assessed in the full project EIR.

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

This threshold will be assessed in the full project EIR.

MITIGATION MEASURES

Any necessary mitigation measures will be included in the project EIR.

IX. HAZARDS AND HAZARDOUS MATERIALS

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

REGULATORY FRAMEWORK

Federal

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Key federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, and the Resource Conservation and Recovery Act (RCRA). Laws and regulations established by the USEPA are enforced in Alameda County by the California Environmental Protection Agency (discussed below).

State

California Environmental Protection Agency

The California Environmental Protection Agency was created in 1991 by Executive Order W-5-91. Several State regulatory boards, departments, and offices were placed under the Agency's umbrella to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of State resources. The California Environmental Protection Agency also oversees the unified hazardous waste and hazardous materials management regulatory program (Unified Program).

California Department of Toxic Substances Control

The California DTSC, which is a department of California Environmental Protection Agency, is authorized to carry out the federal hazardous waste program in California to protect people from exposure to hazardous wastes. The department regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California. Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow federal and State requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

California Building Code

The State of California provides minimum standards for building design and construction through Title 24 of the CCR. The California Building Code is located in Part 2 of Title 24 and is adopted by reference in Chapter 15.08, Building Code, of the ACMC. The California Building Code is updated every three years. Commercial and residential buildings are plan-checked by County building officials for compliance with the typical fire safety requirements of the California Building Code.

California Fire Code

ACMC Chapter 6.04 adopts the California Fire Code by reference. The California Fire Code adopts by reference the International Fire Code (IFC) with necessary State amendments. Updated every three years, the California Fire Code includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Typical fire safety requirements include installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Emergency Management Agency

The California Emergency Management Agency (CalEMA) was established as part of the Governor's Office on January 1, 2009—created by AB 38 (Nava), which merged the duties, powers, purposes, and responsibilities of the former Governor's Office of Emergency Services with those of the Governor's Office

of Homeland Security. The California Emergency Management Agency is responsible for the coordination of overall State agency response to major disasters in support of local government. The agency is responsible for assuring the State's readiness to respond to and recover from all hazards—natural, human-made, emergencies, and disasters—and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts.

California Department of Forestry and Fire Protection

The CAL FIRE has mapped fire threat potential throughout California.[26] CAL FIRE ranks fire threat based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The rankings include no fire threat, moderate, high, and very high fire threat. Additionally, CAL FIRE produced the *2019 Strategic Fire Plan for California*, which contains goals, objectives, and policies to prepare for and mitigate for the effects of fire on California's natural and built environments.[27]

Regional

San Francisco Bay Regional Water Quality Control Board

The Porter-Cologne established the State Water Resource Board (SWRCB) and the San Francisco Bay RWQCB, which regulates water quality in the project area. The San Francisco Bay RWQCB has the authority to require groundwater investigations when the quality of groundwater or surface waters of the State is threatened, and to require remediation actions, if necessary.

Bay Area Air Quality Management District

The BAAQMD has primary responsibility for control of air pollution from sources other than motor vehicles and consumer products, which are the responsibility of California Environmental Protection Agency and CARB. The BAAQMD is responsible for preparing attainment plans for non-attainment criteria pollutants, control of stationary air pollutant sources, and the issuance of permits for demolition and renovation activities affecting asbestos containing materials (District Regulation 11, Rule 2) and lead (District Regulation 11, Rule 1).

Local

Alameda County General Plan

The Safety Element includes the following policies under Goal 1 specific to hazards and hazardous materials, and applicable to the proposed project.

- P1: Uses involving the manufacture, use or storage of highly flammable (or toxic) materials and highly water reactive materials should be located at an adequate distance from other uses and

[26] California Department of Forestry and Fire Protection (CAL FIRE), Fire Hazard Severity Zone Viewer, https://egis.fire.ca.gov/FHSZ/, accessed on September 27, 2021.

[27] California Department of Forestry and Fire Protection (CAL FIRE), *2019 Strategic Fire Plan for California,* https://www.fire.ca.gov/about-us/strategic-plan/, accessed on September 27, 2021.

should be regulated to minimize the risk of on-site and off-site personal injury and property damage. The transport of highly flammable materials by rail, truck, or pipeline should be regulated and monitored to minimize risk to adjoining uses.

- P4: New or expanding businesses shall be required to demonstrate compliance with the hierarchy of waste management strategies listed in Policy 1 (P1) of this Goal as a condition of receiving land use and business permits.
- P8: Developers shall be required to conduct the necessary level of environmental investigation to ensure that soil, groundwater and buildings affected by hazardous material releases from prior land uses and lead or asbestos in building materials will not have a negative impact on the natural environment or health and safety of future property owners or users. This shall occur as a pre-condition for receiving building permits or planning approvals for development on historically commercial or industrial parcels.
- P9: The safe transport of hazardous materials through the unincorporated areas shall be promoted by implementing the following measures:
    - Maintain formally-designated hazardous material carrier routes to direct hazardous materials away from populated and other sensitive areas.
    - Maintain formally-designated hazardous material carrier routes to direct hazardous materials away from populated and other sensitive areas.
    - Maintain formally-designated hazardous material carrier routes to direct hazardous materials away from populated and other sensitive areas.
    - Encourage businesses to ship hazardous materials by rail.

Alameda County Department of Environmental Health

The Alameda County Department of Environmental Health (ACDEH) Certified Unified Program Agency (CUPA) is the administrative agency that coordinates and enforces numerous local, state, and federal hazardous materials management and environmental protection programs in the county. As the local CUPA, the ACDEH administers the following programs:

- Hazardous Materials Business Plan Program
- Hazardous Waste Generator Program
- Underground Storage Tank Program
- California Accidental Release Program
- Tiered Permitting Program
- Aboveground Storage Tank Program

Alameda County Emergency Operations Plan

An Emergency Operations Plan (EOP) is required for each local government in California. The guidelines for the plan come from the Federal Emergency Management Agency (FEMA), and are modified by the State Office of Emergency Services (OES) for California needs and issues. The purpose of the plan is to provide a legal framework for the management of emergencies and guidance for the conduct of business

in the Emergency Operations Center (EOC). The *Alameda County Emergency Operations Plan* was adopted by the Board of Supervisors on December 8, 2012.[28]

EXISTING CONDITIONS

Hazardous Materials Sites

The term "hazardous material" is defined in different ways for different regulatory programs. The California Health and Safety Code Section 25501 definition of a hazardous material is: "any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment." The DTSC divides hazardous material sites into three categories: clean-up sites, permitted sites, and other sites. Sites listed within these three categories can be at various stages of evaluation or clean up, from the beginning to the end of the process. California Government Code Section 65962.5 requires the California Environmental Protection Agency to compile, maintain, and update specified lists of hazardous material release sites. The CEQA Statute (PRC Section 21092.6) requires the Lead Agency to consult the lists compiled pursuant to Government Code Section 65962.5 to determine whether a proposed project and any alternatives are identified as contaminated sites.

The required lists of hazardous material release sites are commonly referred to as the "Cortese List" after the legislator who authored the legislation. Those requesting a copy of the Cortese List are referred directly to the appropriate information resources contained on internet websites hosted by the boards or departments referenced in the statute, including DTSC's online EnviroStor database and the SWRCB's online GeoTracker database. These two databases include hazardous material release sites, along with other categories of sites or facilities were reviewed to identify known or suspected sources of contamination. A search of DTSC's EnviroStor and SWRCBs GeoTracker database on September 27, 2021 revealed that there are no listings within the project site and no open cases in close proximity to the project site. [29, 30]

Schools

The project site is not located within 0.25 miles from a school. The closest school, Peter Hansen Elementary School, is located approximately 0.35 miles to the northeast of the site.

Aircraft Hazards

The project site is not located within 2 miles of a public airport or public use airport. The closest airport to the project site is Byron Airport, located 5 miles northwest of the project. The closest private aircraft

[28] County of Alameda, Alameda County Emergency Operations Plan, December 2012, https://www.acgov.org/ready/documents/EmergencyOperationsPlan.pdf, accessed on September 27, 2021.

[29] State Water Resources Control Board, GeoTracker, http://www.geotracker.waterboards.ca.gov, accessed on September 27, 2021.

[30] Department of Toxic Substances Control, EnviroStor, http://www.envirostor.dtsc.ca.gov, accessed on September 27, 2021.

facility is the PG&E Livermore Training Center Heliport located approximately 8 miles southwest of the proposed project site.[31] Tracy Municipal Airport, a public-use airport is located 8 miles southeast of the project site.[32]

DISCUSSION

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

The proposed PV facility would not involve the routine transport of hazardous waste, thus, no impacts to the public or the environment would occur. Potential impacts during construction of the proposed project could include potential spills associated with the use of fuels and lubricants in construction equipment. These potential impacts would be short-term in nature and would be reduced to less-than-significant levels through compliance with applicable local, State, and federal regulations, as well as the use of standard equipment operating practices by experienced, trained personnel. Additionally, during the operation phase of the proposed project, common cleaning substances, PV facility maintenance products, and similar items could be used on the project site. These potentially hazardous materials, however, would not be of a type or occur in sufficient quantities to pose a significant hazard to public health and safety or the environment. Compliance with the applicable laws, regulations, and conditions of approval, would minimize hazards associated with the routine transport, use, or disposal of hazardous materials to the maximum extent practicable. Therefore, impacts would be *less than significant*.

b) Would the project 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?

As discussed in Criterion (a) of this section, the operation phase of the proposed project could involve the use of common cleaning substances and PV facility maintenance products; however, these potentially hazardous substances would not be of a type or occur in sufficient quantities on-site to pose a significant hazard to public health and safety or the environment. The use of these materials would be subject to existing federal and State regulations. Compliance with these regulations would ensure that the risk of accidents and spills are minimized to the maximum extent practicable. Therefore, impacts related to accidental release of hazardous materials would be *less than significant*.

c) Would the project emit hazardous emissions or handle hazardous materials, substances or waste within 0.25 miles of an existing or proposed school?

The project site is not located within 0.25 miles of a school. The closest school, Peter Hansen Elementary School, is located approximately 0.35 miles to the northeast of the site. Therefore, there would be *no impact*.

[31] California Public and Private Airports, Alameda County Public and Private Airports, http://www.tollfreeairline.com/california/alameda.htm, accessed on September 27, 2021.

[32] AirNav, Airport information, http://www.airnav.com/airports/us/CA, accessed on September 27, 2021.

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

Based on information gathered from a review of the applicable regulatory databases, including EnviroStor and the GeoTracker, described above, to identify known or suspected sources of contamination, it was determined that the project site does not contain any known hazardous materials spills or storage sites. Additionally, the Phase I Environmental Site Assessment conducted for this project found no recognized environmental conditions (RECs).[33] Therefore, there would be *no impact*.

e) For a project within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people living or working in the project area?

The project site is not located within 2 miles of a public airport or public use airport. The closest airports to the project site are Byron Airport, located 5 miles northwest, and Tracy Municipal Airport, located 8 miles southeast.[34] Therefore, there would be *no impact*.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project would not involve any material changes to public streets, roads, or evacuation infrastructure and it would not include the construction of any features that might impair the implementation of any relevant emergency operation plan. Furthermore, the proposed project would not change existing emergency response and rescue access routes within Alameda County. Therefore, there would be *no impact*.

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

The project site is located within an area of moderate Fire Hazard Severity for the Local Responsibility Area, but does not contain any areas of moderate, high, or very high Fire Hazard Severity for the State Responsibility Area.[35] Therefore, the impact would be *less than significant*.

MITIGATION MEASURES

No mitigation measures are required.

[33] PlaceWorks, June 2021, *Phase I Environmental Site Assessment Report*

[34] AirNav, Airport information, http://www.airnav.com/airports/us/CA, accessed on September 27, 2021.

[35] California Department of Forestry and Fire Protection (CAL FIRE), Fire Hazard Severity Zone Viewer, https://egis.fire.ca.gov/FHSZ/, accessed on September 29, 2021.

X. HYDROLOGY AND WATER QUALITY

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

REGULATORY FRAMEWORK

Federal

Clean Water Act

The Clean Water Act (CWA) of 1977, as administered by the USEPA, seeks to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The CWA employs a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The CWA authorizes the USEPA to implement water-quality regulations. The National Pollutant Discharge Elimination System (NPDES) permit program under Section 402(p) of the CWA controls water pollution by regulating stormwater discharges into the waters of the United States. California has an approved State NPDES program. The USEPA has delegated authority for water permitting to the SWRCB and the San Francisco Bay Regional Water Quality Control Board (RWQCB).

Section 303(d) of the CWA requires that each state identify water bodies or segments of water bodies that are "impaired" (i.e., not meeting one or more of the water-quality standards established by the state). These waters are identified in the Section 303(d) list as waters that are polluted and need further attention to support their beneficial uses. Once the water body or segment is listed, the state is required to establish Total Maximum Daily Load (TMDL) for the pollutant causing the conditions of impairment. TMDL is the maximum amount of a pollutant that a water body can receive and still meet water-quality standards. Typically, TMDL is the sum of the allowable loads of a single pollutant from all contributing point and non- point sources. The intent of the 303(d) list is to identify water bodies that require future development of a TMDL to maintain water quality. In accordance with Section 303(d), the RWQCB has identified impaired water bodies within its jurisdiction, and the pollutants or stressors responsible for impairing the water quality.

National Pollutant Discharge Elimination System

The CWA-established NPDES permit program regulates municipal and industrial discharges to surface waters of the United States from their municipal separate storm sewer systems (MS4s). Under the NPDES program, all facilities that discharge pollutants into waters of the United States are required to obtain a NPDES permit. Requirements for stormwater discharges are also regulated under this program.

Alameda County lies within the jurisdiction of San Francisco Bay RWQCB (Region 2) and is subject to the waste discharge requirements of the Municipal Regional Stormwater Permit (MRP; Order No. R2-2015-0049) and NPDES Permit No. CAS612008, which was issued on November 19, 2015 and became effective as of January 1, 2016. The permit governs a variety of activities in the Alameda County such as industrial and commercial businesses, new and redevelopment projects, construction sites, storm drain operation and maintenance, creek monitoring, pesticide applications, and illegal dumping of water and other pollution in the County's storm drain.

National Flood Insurance Program

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 mandate the Federal Emergency Management Agency (FEMA) to evaluate flood hazards. FEMA provides Flood Insurance Rate Maps (FIRMs) for local and regional planners to promote sound land use and floodplain development and identify potential flood areas based on current conditions. To delineate a FIRM, FEMA conducts engineering studies called Flood Insurance Studies (FISs). Using information gathered in these studies, FEMA engineers and cartographers delineate Special Flood Hazard Areas on FIRMs. The project site is identified in FIRM No. 06001C0225G. According to the FIRM, the project site is located outside of the 100-year floodplain in an area of minimal flood hazard.[36]

[36] Federal Emergency Management Agency, Flood Map Service Center, https://msc.fema.gov/portal/home, accessed on September 27, 2021.

State Regulations

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act is the basic water-quality control law for California. Under this Act, the SWRCB has ultimate control over State water rights and water-quality policy. In California, the California EPA has delegated authority to issue NPDES permits to the SWRCB. The SWRCB, through its nine RWQCBs, carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a Water Quality Control Plan, or Basin Plan, that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region's ground and surface water, and local water-quality conditions and problems. The county is within the San Francisco Bay Basin[37] and is under the jurisdiction of the San Francisco Bay RWQCB (Region 2) which monitors surface water quality through implementation of the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) and designates beneficial uses for surface water bodies and groundwater within the San Francisco Bay region. The Basin Plan for the San Francisco Basin was last updated on May 4, 2017 and will continue to be updated as deemed necessary to maintain pace with technological, hydrological, political, and physical changes in the region.[38] This Basin Plan describes the water quality that must be maintained to support the designated beneficial uses and provides programs, projects, and other actions necessary to achieve the standards established in the Basin Plan. The Basin Plan also contains water quality criteria for groundwater.

Statewide General Construction Permit

Construction projects of one acre or more are regulated under the General Construction Permit (GCP), Order No. 2012-0006-DWQ, issued by the SWRCB. Under the terms of the permit, applicants must file Permit Registration Documents (PRDs) with the SWRCB prior to the start of construction. The PRDs include a Notice of Intent (NOI), risk assessment, site map, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and a signed certification statement. The PRDs are submitted electronically to the SWRCB via the Stormwater Multiple Application and Report Tracking System (SMARTS) website.

The SWPPP must demonstrate conformance with applicable Best Management Practices (BMPs), including a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project location. The SWPPP must list BMPs that would be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for nonvisible pollutants if there is a failure of the BMPs, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Some sites may require implementation of a Rain Event Action Plan (REAP). The GCP also requires applicants to

[37] California Regional Water Quality Control Board, 2017. San Francisco Basin (Region 2), Water Quality Control Plan (Basin Plan), https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/fig/fig_1-01.pdf, accessed on September 27, 2021.

[38] California Regional Water Quality Control Board, 2017. San Francisco Basin (Region 2), Water Quality Control Plan (Basin Plan), May 2017, https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html, accessed on September 27, 2021.

comply with post-construction runoff reduction requirements. Since the proposed project would disturb more than one acre, it would be subject to these requirements.

Local

Alameda County General Plan

The Safety Element includes the following policies under Goal 3 specific to hydrology and water quality, and applicable to the proposed project.

- P2: Surface runoff from new development shall be controlled by on-site measures including, but not limited to structural controls and restrictions regarding changes in topography, removal of vegetation, creation of impervious surfaces, and periods of construction such that the need for off-site flood and drainage control improvements is minimized and such that runoff from development will not result in downstream flood hazards.
- P9: Development shall comply with applicable NPDES requirements.
- P12: The County shall require new development to pay their fair share of storm drainage and flood control improvements.
- P13: The County shall regulate new development on a case-by-case basis to ensure that project storm drainage facilities shall be designed so that peak rate flow of storm water from new development will not exceed the rate of runoff from the site in its undeveloped state.

East County Area Plan

The ECAP includes the following policies specific to hydrology and water quality, and applicable to the proposed project.

- Policy 306: The County shall protect surface and groundwater resources by:
    - preserving areas with prime percolation capability and minimizing placement of potential sources of pollution in such areas;
    - minimizing sedimentation and erosion through control of grading, quarrying, cutting trees, removal of vegetation, placement of roads and bridges, use of off-road vehicles, and animal-related disturbance of the soil;
    - not allowing the development of septic systems, automobile dismantlers, waste disposal facilities, industries utilizing toxic chemicals, and other potentially polluting substances in Creekside, reservoir, or high groundwater table areas when polluting substances could come in contact with flood waters, permanently or seasonally high groundwaters, flowing stream or creek waters, or reservoir waters; and,
    - avoiding establishment of excessive concentrations of septic systems over large land areas.

Alameda County Municipal Code

ACMC Chapter 15.36, Grading Erosion and Sediment, includes regulations for work on private property within the unincorporated area of the county in order to safeguard life, limb, health, property, and public welfare; to protect creeks, watercourses, and other drainage facilities from illicit discharges of surface

runoff generated in or draining through the permit work area; and to ensure that the construction and eventual use of a graded site is in accordance with the county general plan and all applicable county ordinances.[39]

EXISTING CONDITIONS

Surface Water

The project site lies within the Lower Old River of the San Joaquin Delta Watershed which spans 104 square miles and encompasses the northeastern tip of the county.[40]

Groundwater

According to the California Division of Water Resources (DWR), the project site is located within the San Joaquin Valley-Tracy groundwater subbasin.[41] The groundwater subbasin covers 539 square miles and is defined by the areal extent of unconsolidated to semi consolidated sedimentary deposits that are bounded by the Diablo Range on the west; to the Mokelumne and San Joaquin Rivers on the north; the San Joaquin River to the east; and the San Joaquin-Stanislaus County line on the south. The Tracy Subbasin is drained by the San Joaquin River and one of its major westside tributaries, Corral Hallow Creek. The total storage capacity of the groundwater basin is estimated at about 1,300,000 acre-feet. There is insufficient published data available to provide a groundwater budget for the subbasin.[42]

Flooding

FEMA prepares maps of the 100-year floodplains for communities in the United States. For areas within the 100-year floodplain, there is a one percent chance of flooding for any given year and these areas are considered to be at high-risk. Maps are also available for 500-year floods, which mean that in any given year, the risk of flooding in the designated area is 0.2 percent. Areas within the 100-year floodplain that are financed by federally backed mortgages are subject to mandatory federal insurance requirements and building standards to reduce flood damage. According to FEMA, the project site is outside of the 100-year floodplain.[43]

[39] Alameda County Municipal Code, Title 15 (Building and Construction), Chapter 15.36 (Grading Erosion and Sediment).

[40] Alameda Countywide Clean Water Program, Public Draft SWRP, https://www.cleanwaterprogram.org/images/2018-10_PUBLIC_DRAFT_ACCWP_SWRPApp1-4.pdf, accessed on September 27, 2021.

[41] California Division of Water Resources, Groundwater Basin Boundary Assessment Tool, https://gis.water.ca.gov/app/bbat/, accessed on September 27, 2021.

[42] California Division of Water Resources, California's Groundwater Bulletin 118, San Joaquin River Hydrologic Region, San Joaquin Valley Groundwater Basin, Tracy Subbasin, https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/5_022_15_TracySubbasin.pdf, accessed on September 27, 2021.

[43] Federal Emergency Management Agency, Flood Map Service Center, https://msc.fema.gov/portal/home, accessed on September 27, 2021.

Dam inundation

Dam failure is the uncontrolled release of impounded water behind a dam. Flooding, earthquakes, blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, and terrorism can all cause a dam to fail.[44] The project site is not located within a dam inundation zone.[45]

DISCUSSION

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Clearing, grading, excavation, and construction activities have the potential to impact water quality through soil erosion and increased silt and debris discharged into runoff. Additionally, the use of construction materials such as fuels, solvents, and paints may present a risk to surface water quality. Temporary storage of construction materials and equipment in work areas or staging areas could create the potential for a release of hazardous materials, trash, or sediment to the storm drain system.

The proposed project would disturb less than one acre of soil on the project site. Therefore, given the relatively low area of disturbance, the proposed project would not be required to comply with the NPDES General Construction Permit (GCP).

All development projects within Alameda County must also comply with the ACMC Chapter 15.36, Grading Erosion and Sediment, which requires projects within the County to ensure that the construction and eventual use of a graded site is in accordance with the Alameda County general plan and all applicable county ordinances.[46] Therefore, the proposed project would not contribute to an exceedance of stormwater runoff off-site. Furthermore, during project operation the project would not be a point-source generator of water pollutants and would therefore not violate any water quality standard. Accordingly, the proposed project would not violate any water quality standards or waste discharge requirements and impacts would be *less than significant*.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The proposed project would introduce 2,200 square feet (0.417 acres) of impervious surface on the project site which represents approximately 0.20 percent of the 23.07-acre site. Accordingly, the vast majority of the project site would remain permeable and available for groundwater recharge. Water for project operation and irrigation would be delivered to the project site via a 500-gallon water truck; no connections to municipal water or groundwater wells are proposed. The water used during construction and water operation would be provided from the orchard located immediately north of the project, which

[44] California Office of Emergency Services, 2013, *California Multi-Hazard Mitigation Plan.*

[45] Alameda County, Safety Element of the General Plan, https://www.acgov.org/cda/planning/generalplans/documents/SafetyElementAmendmentFinal.pdf, pages 42 to 44.

[46] Alameda County Municipal Code, Title 15 (Building and Construction), Chapter 15.36 (Grading Erosion and Sediment).

is owned by the same property owner. Therefore, the proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge and impacts would be *less than significant*.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) Result in substantial erosion, siltation, or flooding on- or off-site; (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; (iv) Impede or redirect flood flows?

i. As described under Criterion (b) of this section, the proposed project would not substantially increase the amount of impervious surface area on the project site. In addition, the proposed project would be required to comply with the requirements of ACMC Chapter 15.36 to ensure the adequate control of runoff and prevention of onsite flooding. Therefore, the potential impacts related to substantial erosion, siltation, or flooding on- or off-site would be *less than significant.*

ii. As described under Criterion (b) of this section, the proposed project would not substantially increase the amount of impervious surface area on the project site. In addition, the proposed project would be required to comply with the requirements of ACMC Chapter 15.36 to ensure the adequate control of runoff and prevention of onsite flooding. Therefore, the potential impacts related to the rate or amount of surface runoff in a manner that would result in flooding on- or off-site would be *less than significant.*

iii. As described under Criterion (b) of this section, the proposed project would not substantially increase the amount of impervious surface area on the project site. In addition, the proposed project would be required to comply with the requirements of ACMC Chapter 15.36 to ensure the adequate control of runoff and prevention of onsite flooding. Therefore, the potential impacts related to existing or planned stormwater drainage systems and additional sources of polluted runoff would be *less than significant*.

iv. The most recent FIRM shows that the project site is located outside of the 100-year floodplain. Therefore, there would be *no impact*.

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

The project site is not located in a flood hazard, tsunami, or seiche zones. Therefore, there would be *no impact*.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

There are no water quality control plans or sustainable groundwater management plans within the area of the proposed project. In addition, given that the proposed project would entail usage of 1,000 gallons of

water per year from the adjoining orchard's supply, there would be *no impact* to groundwater resources on the project site or vicinity.

MITIGATION MEASURES

No mitigation measures are required.

XI. LAND USE AND PLANNING

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Physically divide an established community?	❒	❒	■	❒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	■	❒	❒	❒

DISCUSSION

a) Would the project physically divide an established community?

The proposed project would develop the 23.07-acre site with a solar PV facility. The proposed project would retain the existing roadway patterns, and would not introduce any new major roadways or other physical features through existing residential neighborhoods or other communities that would create new barriers. Therefore, the proposed project would not divide any established community and impacts would be *less than significant.*

b) Would the project 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?

This threshold will be assessed within the full project EIR.

MITIGATION MEASURES

Any necessary mitigation measures will be included in the project EIR.

XII. MINERAL RESOURCES

Would the proposed project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	❒	❒	❒	■
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	❒	❒	❒	■

REGULATORY FRAMEWORK

State

Surface Mining and Reclamation Act of 1974

The CGS classifies lands into Aggregate and Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geology Board, as mandated by the Surface Mining and Reclamation Act of 1974. These MRZs identify whether known or inferred significant mineral resources are present in areas. Lead agencies are required to incorporate identified MRZs resource areas delineated by the State into their General Plans.[47]

Local

Alameda County Municipal Code

ACMC Chapter 6.80, Surface Mining and Reclamation, regulates surface mining operations and reclamation of Mined Lands within the unincorporated area of the County pursuant to the California Surface Mining and Reclamation Act of 1975 in order to ensure the continued availability of important mineral resources. Pursuant to Section 6.80.031, Mineral Resource Protection, mine development is encouraged in compatible areas and incompatible land uses that may impede or preclude mineral extraction or where processing is discouraged.

EXISTING CONDITIONS

The California Department of Conservation, Geological Survey (CGS) classifies lands into Aggregate and Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geology Board, as mandated by the Surface Mining and Reclamation Act of 1974.[48] These MRZs identify whether

[47] Public Resources Code Section 2762(a)(1).

[48] Public Resources Code, Division 2, Geology, Mines and Mining, Chapter 9, Surface Mining and Reclamation Act of 1975, Article 4, State Policy for the Reclamation of Mined Lands, Section 2762(a)(1).

known or inferred significant mineral resources are present in areas. The study area does not contain areas for mineral resources where there is adequate information indicating significant mineral deposits or the high likelihood of significant mineral deposits present.[49] In addition, the ECAP does not assign land use designations for mineral resources within eastern Alameda County.

DISCUSSION

a) – b) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or result in the loss of availability of a locally important mineral resources recovery site delineated on a local general plan, specific plan, or other land use plan?

As discussed above, the project site is not identified as containing any mineral deposits. Therefore, there would be *no impact.*

MITIGATION MEASURES

No mitigation measures are required.

XIII. NOISE

Would the proposed project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	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 in other applicable local, state, or federal standards?	■	❒	❒	❒
b) Generation of excessive groundborne vibration or groundborne noise levels?	■	❒	❒	❒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	■	❒	❒	❒

[49] California Department of Conservation, 2016. Mines Online. https://maps.conservation.ca.gov/mol/Index.html, accessed September 30, 2021.

DISCUSSION

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

This threshold will be assessed in the full project EIR.

b) Would the project expose people to or generate excessive groundborne vibration or ground borne noise levels?

This threshold will be assessed in the full project EIR.

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

This threshold will be assessed in the full project EIR.

MITIGATION MEASURES

Any necessary mitigation measures will be included in the project EIR.

XIV. POPULATION AND HOUSING

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Induce substantial unexpected population growth or growth for which inadequate planning has occurred, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	❒	❒	❒	■
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	❒	❒	❒	■

EXISTING CONDITIONS

The population of Alameda County in 2019 was estimated at 1,671,329 with a total of 622,922 housing units. The average number of persons per household in Alameda County was estimated at 2.82.[50] The

[50] United States Census Bureau, Quick Facts, Alameda County, https://www.census.gov/quickfacts/alamedacountycalifornia, accessed on September 28, 2021.

project site is located in a rural agricultural area and is generally undeveloped. No additional housing is proposed as part of the project.

DISCUSSION

a) Would the project induce substantial unexpected population growth or growth for which inadequate planning has occurred, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed project, a solar PV facility, would not involve new housing or employment centers; thus, the proposed project would not induce substantial population growth in the area. Therefore, there would be *no impact.*

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

The proposed project, would not involve new housing or employment centers; thus the proposed project would result in no impact related to population growth. The existing single-family home would remain on-site and no additional housing is proposed as part of the project thus, no housing or residents would be displaced. Therefore, there would be *no impact.*

MITIGATION MEASURES

No mitigation measures are required.

XV. PUBLIC SERVICES

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	❒	❒	❒	■
Police protection?	❒	❒	❒	■
Schools?	❒	❒	❒	■
Libraries?	❒	❒	❒	■

REGULATORY FRAMEWORK

State

California Fire Code

As discussed in Section IX, Hazards and Hazardous Materials, ACMC Chapter 6.04 adopts the California Fire Code by reference. The California Fire Code adopts by reference the International Fire Code (IFC) with necessary State amendments. Updated every three years, the California Fire Code includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Typical fire safety requirements include installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

Local

East County Area Plan

The ECAP includes the following policies specific to public services and applicable to the proposed project.

- Policy 241: The County shall provide effective law enforcement, fire, and emergency medical services to unincorporated areas.
- Policy 242: The County shall reserve adequate sites for sheriff, fire, and emergency medical facilities in unincorporated locations within East County.

EXISTING CONDITIONS

Fire Protection Services

Fire protection service for the project site is provided by Alameda County Fire Department (ACFD). The ACFD protects approximately 508 square miles and a daytime population of approximately 394,000 people. The ACFD has 29 stations within Alameda County and provides all-risk emergency services to the unincorporated areas of Alameda County (excluding Fairview), the cities of San Leandro, Dublin, Newark, Union City and Emeryville, the Lawrence Berkeley National Laboratory and the Lawrence Livermore National Laboratory. Fire Station No. 20, located at 7000 East Avenue in Livermore, is the closest station to the project site.[51]

Police Protection Services

Police protection service for the project site is provided by the Alameda County Sheriff's Office (Sheriff's Office). The Sheriff's Office provides law enforcement services to unincorporated areas of the Alameda

[51] Alameda County Fire Department, About Us, https://fire.acgov.org/AboutUs/aboutus.page, accessed on September 28, 2021.

County, Hayward, Cherryland, Ashland, San Lorenzo, San Leandro, Sunol, Pleasanton and Livermore. The Sheriff's Office has 5 locations within Alameda County and has over 1,500 employees, both sworn and professional staff. The Sheriff's Office nearest the project site is located at 6361 Clark Avenue in Dublin.[52]

School Services

The project site is located within the Lammersville Joint Unified School District (LUSD) boundary.[53] LUSD currently operates seven K-8 elementary schools, and one high school. The closest K-8 elementary school is Peter Hansen Elementary located at 1400 S. Durant Terrace in Mountain House, 0.35 miles northeast of the project site. The closest high school is Mountain House High School located at 1090 S. Central Parkway in Mountain House, 0.76 miles northeast of the project site.[54]

Library Services

The Alameda County Library System operates 10 library branches within Alameda County. The closest library to the project site is the Dublin library located at 200 Civic Plaza in Dublin.

DISCUSSION

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, and libraries?*

The primary purpose of a public services impact analysis is to examine the impacts associated with physical improvements to public service facilities required to maintain acceptable service ratios, response times or other performance objectives. Public service facilities need improvements (i.e., construction, renovation or expansion) as demand for service increases. Increased demand is typically driven by increases in population. The proposed project would have a significant environmental impact if it would exceed the ability of public service providers to adequately serve residents, thereby requiring construction of new facilities or modification of existing facilities.

As discussed in Section X, Hydrology and Water Quality, any refuse generated by project construction or decommissioning of the project would be delivered to an existing land fill with adequate capacity. Alameda County is primarily served by the Vasco Road Sanitary Landfill and the Altamont Landfill and Resource Recovery. The Vasco Road landfill has a permitted capacity of 2,518 tons of solid waste per day

[52] Alameda County Sheriff's Office, About Us, https://www.alamedacountysheriff.org/about-us/facility-directory-table-list/-sortn-FCPhone/-sortd-desc/-selcat-15, accessed on September 28, 2021.

[53] Lammersville Unified School District, About LUSD District Boundaries, https://www.lammersvilleschooldistrict.net/apps/pages/index.jsp?uREC_ID=1210612&type=d&pREC_ID=1446502, accessed on September 28, 2021.

[54] Lammersville Unified School District, Schools, https://www.lammersvilleschooldistrict.net/, accessed on September 28, 2021.

and a remaining permitted capacity of 7,379,000 cubic yard with an estimated "cease of operation date" of December 31, 2022.[55] The Altamont Landfill and Resource Recovery has a permitted capacity of 11,150 tons of solid waste per day and a remaining permitted capacity of 65,400,000 cubic yard with an estimated "cease of operation date" of December 1, 2070.[56]

Additionally, as discussed above in Section XIV, Population and Housing, the proposed project would not result in a net increase of residents at the project site or elsewhere in the region because it does not propose housing and is not a major regional employer. Therefore, the proposed project would not impact fire or police protection services, schools or library services. Accordingly, there would be *no impact* with respect to public services.

MITIGATION MEASURES

No mitigation measures are required.

XVI. PARKS AND RECREATION

Would the proposed project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?	❒	❒	❒	■
b) Result in substantial adverse physical impacts associated with the provision of new or physically altered park and recreational facilities, or result in the need for new or physically altered park and recreational facilities, the construction of which could cause significant environmental impacts?	❒	❒	❒	■

REGULATORY FRAMEWORK

Local

Alameda County General Plan

The Alameda County General Plan Recreation Element (Countywide Recreation Element), adopted in 1956 and amended in 1994, provides a framework for private and public acquisition and development of recreation areas and facilities. It contains general planning objectives related to promote and preserve recreational opportunities throughout the County.

[55] CalRecycle, SWIS Facility/Site Activities: Vasco Road Sanitary Landfill (01-AA-0010), https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/9?siteID=8, accessed on September 28, 2021.

[56] CalRecycle, SWIS Facility/Site Activities: Altamont Landfill and Resource Recovery (01-AA-0009), https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/7?siteID=7, accessed on September 28, 2021.

East County Area Plan

The ECAP includes the following policies specific to parks and recreation, and applicable to the proposed project.

- Policy 52: The County shall preserve open space areas for the protection of public health and safety, provision of recreational opportunities, production of natural resources (e.g., agriculture, windpower, and mineral extraction), protection of sensitive viewsheds, preservation of biological resources, and the physical separation between neighboring communities.
- Policy 54: Policy 54: The County shall approve only open space, park, recreational, agricultural, limited infrastructure, public facilities (e.g., limited infrastructure, hospitals, research facilities, landfill sites, jails, etc.) and other similar and compatible uses outside the Urban Growth Boundary.

EXISTING CONDITIONS

Alameda County contains numerous recreational facilities, including major parks and open space areas, local parks, and private recreational facilities. The closest parks to the project site include Altamont Creek Park, Summit Park, and Christensen Park.

DISCUSSION

a) – b) *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? Does the proposed project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Increased demand for existing neighborhood and regional parks or other recreational facilities is typically driven by increases in population. The proposed project, a solar PV facility, would not result in a net increase of residents at the project site or elsewhere in the region because it does not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, the proposed project would not contribute to the deterioration of existing facilities nor require the construction or expansion of existing recreational facilities. Accordingly, there would be *no impact* with respect to parks and recreation.

MITIGATION MEASURES

No mitigation measures are required.

XVII. TRANSPORTATION

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

REGULATORY FRAMEWORK

Local

East County Area Plan

The ECAP includes the following policies specific to transportation and circulation, and applicable to the proposed project.

- Policy 183: The County shall seek to minimize traffic congestion levels throughout the East County street and highway system.
- Policy 184: The County shall seek to minimize the total number of Average Daily Traffic (ADT) trips throughout East County.
- Policy 190: The County shall require new non-residential developments in unincorporated areas to incorporate Transportation Demand Management (TDM) measures and shall require new residential developments to include site plan features that reduce traffic trips such as mixed-use development and transit-oriented development projects.
- Policy 193: The County shall ensure that new development pays for roadway improvements necessary to mitigate the exceedance of traffic Level of Service standards (as described below) caused directly by the development. The County shall further ensure that new development is phased to coincide with roadway improvements so that (1) traffic volumes on intercity arterials significantly affected by the project do not exceed Level of Service D on major arterial segments within unincorporated areas, and (2) that traffic volumes on Congestion Management Program (CMP) designated roadways (e.g., Interstate Highways 580 and 680 and State Highway 84) significantly affected by the project do not exceed Level of Service E within unincorporated areas. If LOS E is exceeded, Deficiency Plans for affected roadways shall be prepared in conjunction with the Congestion Management Agency. LOS shall be determined according to Congestion Management Agency adopted methodology. The County

shall encourage cities to ensure that these Levels of Service standards are also met within unincorporated areas.

Alameda County Congestion Management Program

The Alameda County Congestion Management Program (CMP) identifies countywide strategies to respond to future transportation on needs and procedures to reduce congestion. The CMP identifies existing and desired traffic conditions on a variety of roadways throughout the county. All freeways and state highways, and selected arterial roadways, are designated elements of the CMP Roadway System. The nearest CMP roadways to the project site is North Front Road-Altamont Pass Road-Grant Line and I-580.

EXISTING CONDITIONS

Roadways and Intersections

Roadways near the project site are shown on Figure 3-1, *Regional Location*, Figure 3-2, *Local Vicinity*, and on Figure 3-3, *Aerial Photograph,* in Chapter 3, Project Description.

- Grant Line Road near the project site is a two-lane east-west roadway. The intersection of Grant Line Road and Great Valley Parkway is unsignalized with a stop at the eastbound approach at Great Valley Parkway.
- Great Valley Parkway is a four-lane north-south local roadway. The intersection of Grant Line Road and Great Valley Parkway is unsignalized with a stop at the southbound approach at Grant Line Road.
- Interstate 580 (I-580) provides regional access to the vicinity of the project. I-580 at Grant Line Road is a freeway with five westbound lanes and four eastbound lanes.

Bicycle and Pedestrian Facilities

There are no bicycle lanes or sidewalks on any of the roadways near the project site.

Public Transit

There are no public transit stops near the project site.

DISCUSSION

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

Construction

Construction of the proposed project is expected to occur in one phase over a 3- to 4- month period. Site Construction of the proposed project would occur in one phase over a 3- to 4-month period. Site preparation would involve minor excavation to construct the gravel access road and electrical pads. No

soil import or export is required. The crushed aggregate rock used for the gravel access road would be delivered to the project site, requiring approximately 25 to 30 haul trips.

Construction of the project is estimated to generate up to five to ten trips per day (five worker commute trips and one haul trip). These trips are nominal and would represent a small fraction of the capacity of Grant Line Road and Great Valley Parkway. These trips would be temporary in nature (for up to 4 months) and would be dispersed throughout the day.

Operation

Project operation would generate occasional trips by project maintenance workers to perform routine maintenance and repairs, and a 500-gallon water truck that would make deliveries to the project site approximately 2 times per year and would not affect the capacity of the roadway system.

Given the low volumes of project construction traffic, and even lower volumes of projected operational traffic, the project would not be in conflict with any program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Therefore, *no impact* would occur.

Pedestrian, Bicycle Facilities, and Public Transit

There are no bike lanes or sidewalks on any of the roadways near the project site. Project construction would generate a limited number of trips and project operation would generate minimal trips. No public transit routes operate near the project site. Therefore, there would be *no impact* with respect to bicycle or pedestrian facilities or public transit.

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

According to the California Office of Planning and Research *Technical Advisory on Evaluating Transportation Impacts*,[57] "absent substantial evidence indicating a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact." Therefore, given that there would be minimal operational traffic, VMT impacts would be *less than significant*.

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

Site access would be via proposed earthen driveways intersecting Grant Line Road. The intersections would be at right angles and their designs would not create hazards. Project access would be reviewed and approved in conformance to Alameda County roadway design and sight distance standards. A review of aerial photography and photos taken at the project site indicate that the road is flat and at grade, no

[57] Governor's Office of Planning and Research, Technical Advisory on Evaluating Transportation Impacts in CEQA, November 2017, http://www.opr.ca.gov/docs/20171127_Transportation_Analysis_TA_Nov_2017.pdf.

major obstructions, sharp curves and hazards are present in the vicinity of the site. Project development would not place incompatible uses on area roadways. Impacts would be *less than significant*.

d) Would the project result in inadequate emergency access?

Project development would not impact emergency access. Construction equipment and materials would be staged on-site and not on public roadways. A 20-foot wide gravel access road running north to south through the middle of the project site will be conducted to provide access to all project components. Therefore, *no impact* would occur.

MITIGATION MEASURES

No mitigation measures are required.

XVIII. TRIBAL CULTURAL RESOURCES

Would the proposed 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 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: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resource Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance to a California Native American tribe.	■	❒	❒	❒

DISCUSSION

a) *Would the proposed 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:

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

This threshold will be assessed in the full project EIR.

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

This threshold will be assessed in the full project EIR.

MITIGATION MEASURES

Any necessary mitigation measures will be included in the project EIR.

XIX. UTILITIES AND SERVICE SYSTEMS

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

REGULATORY FRAMEWORK

State

California Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, which was passed in California in 1969 and amended in 2013, the State Water Resources Control Board (SWRCB) has authority over State water rights and water quality policy. This act divided the State into nine regional basins, each under the jurisdiction of a RWQCB to oversee water quality on a day-to-day basis at the local and regional level. RWQCBs engage in a number of water quality functions in their respective regions. RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. Alameda County is overseen by the San Francisco Bay RWQCB.

Groundwater Management Act (1992)

The Groundwater Management Act of the California Water Code (Assembly Bill [AB] 3030), signed into law on September 26, 1992, and effective on January 1, 1993, provides guidance for applicable local agencies to develop voluntary Groundwater Management Plans (GMP) in State-designated groundwater basins. The GMPs can allow agencies to raise revenue to pay for measures influencing the management of the basin, including extraction, recharge, conveyance, facilities' maintenance, and water quality.[58]

Sustainable Groundwater Management Act (2014)

The Sustainable Groundwater Management Act of 2014 (SGMA) consists of three legislative bills, Senate Bill (SB) 1168, AB 1739, and SB 1319. The legislation provides a framework for long-term sustainable groundwater management across California. Under the roadmap laid out by the legislation, local and regional authorities in medium and high priority groundwater basins will form Groundwater Sustainability Agencies (GSAs) that oversee the preparation and implementation of a local Groundwater Sustainability Plan (GSP). The project site is located within the Alameda County Flood Control and Water Conservation District, Zone 7 (Zone 7 Water Agency) GSA formed in 2016.[59] Groundwater Sustainability Plans will have to be developed and in place by 2022. GSAs will have until 2040 to achieve groundwater sustainability.[60]

State Updated Model Water Efficient Landscape Ordinance

The updated Model Water Efficient Landscape Ordinance requires cities and counties to adopt updated water efficient landscape ordinances by February 1, 2016 or to adopt a different ordinance that is at least

[58] Department of Water Resources Planning and Local Assistance Central District, Groundwater, *Groundwater Management*, http://www.cd.water.ca.gov/groundwater/gwab3030.cfm, accessed on May 14, 2018.

[59] Alameda County Flood Control and Water Conservation District, Zone 7, Decision to Become the Exclusive Groundwater Sustainability Agency For Livermore Valley Groundwater Basin (DWR Basin 2-10), file:///C:/Users/cgarcia/Downloads/153_Zone_7_Water_Agency_GSA_2017-01-20%20(1).pdf, accessed on May 10, 2018.

[60] UC Davis, Division of Agriculture and Natural Resources, 2014. Groundwater web page, http://groundwater.ucdavis.edu/SGMA/, accessed on June 26, 2017.

as effective in conserving water as the updated Model Ordinance. The Water Efficient Landscape Policy is adopted in ACMC Chapter 17.64, Water Efficient Landscape. Pursuant to ACMC Sections 17.64.090 and 17.64.100, project applicants are required to submit a landscape plan that irrigation plan to the County for review to ensure that it meets California Code of Regulation requirements.

Assembly Bill 939

AB 939 established the California Integrated Waste Management Board and required all California counties to prepare integrated waste management plans. AB 939 also required all municipalities to divert 25 percent of their solid waste from landfill disposal by January 1, 1995. Fifty percent of the waste stream was to be diverted by the year 2000.

EXISTING CONDITIONS

There is no active irrigation system on the project site. The proposed project would not disrupt these services. The proposed PV facility would not require connections to municipal water, sewer service, or natural gas. Water for project operation and irrigation would be replenished from the orchard located immediately north of the project, which is owned by the same property owner, and be delivered to the project site approximately two times per year via a 500-gallon water truck. The proposed PV facility would connect to an existing PG&E distribution line and generate electrical energy. Given the rural nature of the project site, stormwater runoff drains primarily through natural drainage swales and ditches.

Alameda County is primarily served by the Vasco Road Sanitary Landfill and the Altamont Landfill and Resource Recovery. The Vasco Road landfill has a permitted capacity of 2,518 tons of solid waste per day and a remaining permitted capacity of 7,379,000 cubic yard with an estimated "cease of operation date" of December 31, 2022.[61] The Altamont Landfill and Resource Recovery has a permitted capacity of 11,150 tons of solid waste per day and a remaining permitted capacity of 65,400,000 cubic yard with an estimated "cease of operation date" of December 1, 2070.[62]

[61] CalRecycle, SWIS Facility/Site Activities: Vasco Road Sanitary Landfill (01-AA-0010), https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/9?siteID=8, accessed on September 28, 2021.

[62] CalRecycle, SWIS Facility/Site Activities: Altamont Landfill and Resource Recovery (01-AA-0009), https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/7?siteID=7, accessed on September 28, 2021.

DISCUSSION

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

The proposed project, a solar PV facility, would not generate wastewater. Therefore, there would be *no impact.*

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

As stated in the Existing Conditions section, the proposed project would not require connections to municipal water. Water for project operation and irrigation would be replenished from the orchard located immediately north of the project, which is owned by the same property owner, and be delivered to the project site approximately two times per year via a 500-gallon water truck. Therefore, the proposed project would be anticipated to use up to 1,000 gallons per year. Alameda County Flood Control and Water Conservation District, Zone 7, directly serves 13 retail municipal connections, including commercial and institutional water uses, the total population served through direct connections is less than 3,000 with a five-year (2016 – 2020) average retail water demand of approximately 800 acres feet per year (AFY), or 260.7 million gallons per year (gpy). Therefore, the water use by the proposed project represents a nominal amount of water in comparison to overall water use in the service area of Zone 7. Furthermore, the 2020 Urban Water Management Plan (UWMP) for Zone 7 states that Zone 7's future water supplies are expected to keep pace with water demands through temporary water transfers and long-term projects.[63] Therefore, project operation would be anticipated to have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. Therefore, the impact would be *less than significant*.

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

The proposed project, a solar PV facility, would not generate wastewater. Therefore, there would be *no impact*.

d) Would the project 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?

The proposed project would not demolish any structures and the project components would all be delivered for on-site assembly. Refuse generated by project construction would be delivered to either the Vasco Road Sanitary Landfill or the Altamont Landfill and Resource Recovery both of which service

[63] Alameda County Flood Control and Water Conservation District - Zone 7, 2021, https://www.zone7water.com/sites/main/files/file-attachments/0_final_2020_uwmp.pdf?1624903044, accessed October 20, 2021.

Alameda County. Project operation and maintenance would generate a minimal amount of solid waste per year. As discussed above, both the Vasco Road Sanitary Landfill or the Altamont Landfill and Resource Recovery have adequate capacity to serve Alameda County. Therefore, implementation of the project would not generate solid waste that exceeds State or local standards, or exceeds the capacity of the landfill, or otherwise impairs the attainment of solid waste reduction goals. The impact would be *less than significant*.

e) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

The proposed project would be required to comply with local, State, and federal solid waste regulations. As discussed in Criterion (f) of this section, the proposed project would not demolish any structures and refuse generated by project construction would be delivered to an existing landfill with adequate capacity. In addition, project operation would generate a minimal amount of solid waste. Therefore, the impact would be *less than significant*.

XX. WILDFIRE

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

REGULATORY FRAMEWORK

Federal

Healthy Forests Restoration Act

The Healthy Forests Restoration Act (US Code Title 16, Chapter 84, Section 6501) was approved on December 3, 2003 to reduce wildfire risk to communities, municipal water supplies, and other at-risk federal land through planning, prioritizing, and hazardous fuel reduction projects. This act provides regulations for the protection of watersheds, forests, and rangeland, such as the land surrounding the

proposed project, from catastrophic wildfires across the landscape. This includes improving systems to detect insect and disease infestations in hardwood forests.

National Cohesive Wildland Fire Management Strategy

In the Federal Land Assistance, Management, and Enhancement Act of 2009 (FLAME Act), Congress mandated the development of a national cohesive wildland fire management strategy for all lands within the United States. The strategy includes a set of guidelines for safe and effective response to wildfires, including structural protections and wildfire prevention to maximize the effectiveness of response efforts. This strategy also provides guidance on vegetation and fuels management, including designing and placing fuel treatments; increasing use of prescribed burns; and expanding the use of all methods to improve the resiliency of forests.

State

Fire Hazard Severity Zones

The California Department of Forestry and Fire Protection (CAL FIRE) designates fire hazard severity zones as authorized under California Government Code Sections 51175 et seq. CAL FIRE considers many factors such as fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for the area. There are three hazard zones in state responsibility areas: moderate, high and very high. CAL FIRE designates FHSZs within three types of areas depending on what level of government is financially responsible for fire protection:

- LRA: Local Responsibility Area: cities and counties are financially responsible for wildfire protection.
- SRA: State Responsibility Area.
- FRA: Federal Responsibility Area.

Building Standards for Structures in Fire Hazard Severity Zones

California Building Code (California Code of Regulations, Title 24, Part 2) Chapter 7A

Chapter 7A of the California Building Code (CBC), Materials and Methods for Exterior Wildfire Exposure, prescribes building materials and construction methods for new buildings in a Fire Hazard Severity Zone. Chapter 7A contains requirements for roofing; attic ventilation; exterior walls; exterior windows and glazing; exterior doors; decking; protection of underfloor, appendages, and floor projections; and ancillary structures. The CBC is updated on a three-year cycle; the current 2019 CBC took effect in January 2020.

California Fire Code (California Code of Regulations, Title 24, Part 9) Chapter 49

Chapter 49 of the California Fire Code (CFC), Requirements for Wildland-Urban Interface Fire Areas, prescribes construction materials and methods in fire hazard severity zones; requirements generally parallel CBC Chapter 7A. The CFC is updated on a three-year cycle; the current 2019 CFC took effect in January 2020.

Defensible Space

California Public Resources Code Sections 4291 et seq. requires that brush, flammable vegetation, or combustible growth within 100 feet of buildings be removed. Vegetation that is more than 30 feet from the building, less than 18 inches high, and important for soil stability, may be maintained; as may single specimens of trees or other vegetation that is maintained so as to manage fuels and not form a means of rapid fire transmission from other nearby vegetation to a structure. Requirements regarding hazardous vegetation and fuel management are also contained in Sections 4906 and 4907 of the California Fire Code.

California Public Resources Code Section 4290 requires that all parcels one acre or larger shall provide a minimum 30-foot setback for buildings from all property lines and/or the center of the road.

EXISTING CONDITIONS

Wildland fire protection in California is the responsibility of either the State, local government, or the federal government. State Responsibility Areas (SRA) are the areas where the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. The SRA includes a 31-million-acre area, in which the State Department of Forestry and Fire Protection (CAL FIRE) provides a basic level of wildland fire prevention and protection services. Local Responsibility Areas (LRA) include lands within incorporated cities, cultivated agriculture lands, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, or by CAL FIRE under contract to local government.[64] CAL FIRE determines fire hazard zones within the LRA using an extension of the SRA Fire Hazard Severity Zone model as the basis. The LRA hazard rating reflects flame and ember intrusion from adjacent wildlands and from flammable vegetation in the urban area.

CAL FIRE designates fire hazard severity zones (FHSZs) as authorized under California Government Code Sections 51175 et seq. CAL FIRE considers many factors such as fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for the area. There are three types of FHSZs: moderate, high, and very high.

According to the California Office of Emergency Services, a Wildland-Urban Interface (WUI) is defined as any area where structures and other human development meet or intermingle within wildland vegetation.[65] Developments in the wildland-urban interface exacerbate fire occurrence and fire spread in several ways, including:

- Increased numbers of human-caused wildfires.
- Wildfires become harder to fight.
- Firefighting resources are diverted from containing the wildfire to protecting lives and homes.

[64] California Department of Forestry and Fire Prevention (CAL FIRE), Office of the State Fire Marshall, Fire Hazard Severity Zones, https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildfire-prevention-engineering/fire-hazard-severity-zones/, accessed September 29, 2021.

[65] Cal OES. 2018. California State Hazard Mitigation Plan.

- Letting natural fires burn becomes impossible; leading to buildup of fuel, increasing wildfire hazard further.[66]

The project site is located within an LRA and the ACFD currently provides fire protection and emergency medical services to the city and project site. The nearest SRA is approximately 1 mile to the west and is designated as a Moderate FHSZ. The nearest Very High FHSZ within the Alameda County LRA is located approximately 4 miles to the southwest.[67] The project site is located within the CalOES defined WUI, which is an area of transition between wildland (unoccupied land) and land with human development (occupied land);[68] therefore, impacts related to wildfire are discussed below.

Wildland Fires

The severity of the wildfire hazard is determined by the relationship between three factors: fuel classification, topography, and critical fire weather frequency. The project site is located within an area of moderate Fire Hazard Severity for the Local Responsibility Area, but does not contain any areas of moderate, high, or very high Fire Hazard Severity for the State Responsibility Area.[69]

DISCUSSION

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

The Alameda County Office of Emergency Services is responsible for coordinating agency response to disasters or other large-scale emergencies in the County of Alameda. The Alameda County EOP establishes emergency planning, mitigation, response, and recovery policies within the city.

As described in Section IX, Hazards and Hazardous Materials, the proposed project would not block roads or impede emergency access to surrounding properties or neighborhoods during either construction or operation of the project. During demolition and construction, vehicles, equipment, and materials would be staged and stored on a portion of the project site and no staging would occur in the public right-of-way.

As stated in Section IX, Hazards and Hazardous Materials, the proposed project would not interfere or impair with an adopted emergency response plan, or emergency evacuation plan; therefore, impacts would be *less than significant*.

[66] Radeloff, Volker; Helmers, David; Kramer, H., et al. 2018. Rapid Growth of the US Wildland-Urban Interface Raises Wildfire Risk. Proceedings of the National Academy of Sciences (PNAS): Volume 115 No. 13., https://www.pnas.org/content/pnas/115/13/3314.full.pdf, accessed on September 29, 2021.

[67] California Department of Forestry and Fire Protection (CAL FIRE), Fire Hazard Severity Zone Viewer, https://egis.fire.ca.gov/FHSZ/, accessed on September 29, 2021.

[68] CAL FIRE. 2018. Wildland-Urban Interface Fire Threat. http://www.arcgis.com/home/item.html?id=d45bf08448354073a26675776f2d09cb, accessed September 29, 2021.

[69] California Department of Forestry and Fire Protection (CAL FIRE), Fire Hazard Severity Zone Viewer, https://egis.fire.ca.gov/FHSZ/, accessed on September 29, 2021.

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

The project site is characterized as generally flat and surrounding by low topographic relief. Prevailing winds in the area derive from the west from February to November, and from the north from November to February, with the windier part of the year occurring from April to September with wind speeds averaging 7.7 miles per hour.[70] The project site is not located within an SRA or Very High FHSZ in an LRA.

The proposed landscaping solar panels will be mounted on a steel racking frame that is positioned three to nine feet above ground to allow for vegetation control and periodic maintenance, as discussed in Chapter 3, Project Description. ACMC Chapter 6.04, Alameda County Fire Code, would require the proposed project to comply with the 2019 California Fire Code and 2015 International Fire Code, which provide specific regulations governing conditions hazardous to life and property from fire or explosion.[71] Therefore, the proposed project would have fire prevention and management measures and would not expose occupants and the surrounding neighborhoods to pollutant concentrations or the uncontrolled spread of wildfire. Impacts would be *less than significant,* and no mitigation would be required.

c) Require the installation of 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?

As discussed in Chapter 3, Project Description, the project will erect three wooden utility poles along the southern edge of the project site, where the project's 12kV electrical output will be connected. PG&E's interconnection facilities will connect to the project at one of these wooden utility poles. Therefore, installation and maintenance of infrastructure would not exacerbate wildfire risks and new infrastructure would not cause temporary or ongoing impacts on the environment. Impacts would be *less than significant*.

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

As stated in criterion b), the project site is characterized as generally flat and is surrounded by low topographic relief. The project site is not located within a floodplain or an area that has a high potential for landslides. As discussed in Section X, Hydrology and Water Quality, the proposed project would introduce 2,200 square feet (0.417 acres) of impervious surface on the project site which represents approximately 0.20 percent of the 23.07-acre site. Accordingly, the vast majority of the project site would remain permeable. Therefore, the proposed project would not expose people or structures to flooding or landslides that result from post-fire instability and runoff, and impacts would be *less than significant*.

[70] Weather Spark. 2019. https://weatherspark.com/y/1090/Average-Weather-in-Mountain-House-California-United-States-Year-Round, September 29, 2021.

[71] Alameda County Municipal Code, Title 6 (Health and Safety), Chapter 6.04 (Alameda County Fire Code).

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	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?	■	❒	❒	❒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	■	❒	❒	❒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	■	❒	❒	❒

DISCUSSION

a) Does the project have the potential to 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?

This threshold will be assessed in the full project EIR.

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)?

This threshold will be assessed in the full project EIR.

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

This threshold will be assessed in the full project EIR.