

APPENDIX D – COLUMBIA SOLAR IS/MND

CITY OF PITTSBURG MITIGATED NEGATIVE DECLARATION

Columbia Solar Energy AP-12-879 (RZ, DA, DR)

Adopted by the Pittsburg City Council on: _____

Notice is hereby given that the City of Pittsburg finds that no significant effect on the environment, as prescribed by the California Environmental Quality Act of 1970 (CEQA), as amended, will occur for the following proposed project:

Project Proponent: Columbia Solar Energy, LLC
5000 Hopyard Road, Suite 480
Pleasanton, CA 94588
Contact: Kevin Johnson
(925) 201-5240

Project Description: Columbia Solar Energy, LLC, has requested approval of: 1) a zoning amendment to add a limited overlay to the existing zoning designation in order to permit a solar photovoltaic array and to allow minor variations from development standards; 2) a development agreement; and 3) design review for plans to install a 20 megawatt (MW) ground mounted solar photovoltaic array covering a 115-acre project site. The project site is located at 900 Loveridge Road, within the IL (Limited Industrial) District. APN 073-200-021

Project Location: 900 Loveridge Road, Pittsburg, Contra Costa County, California (Assessor's Parcel Number 073-200-021)

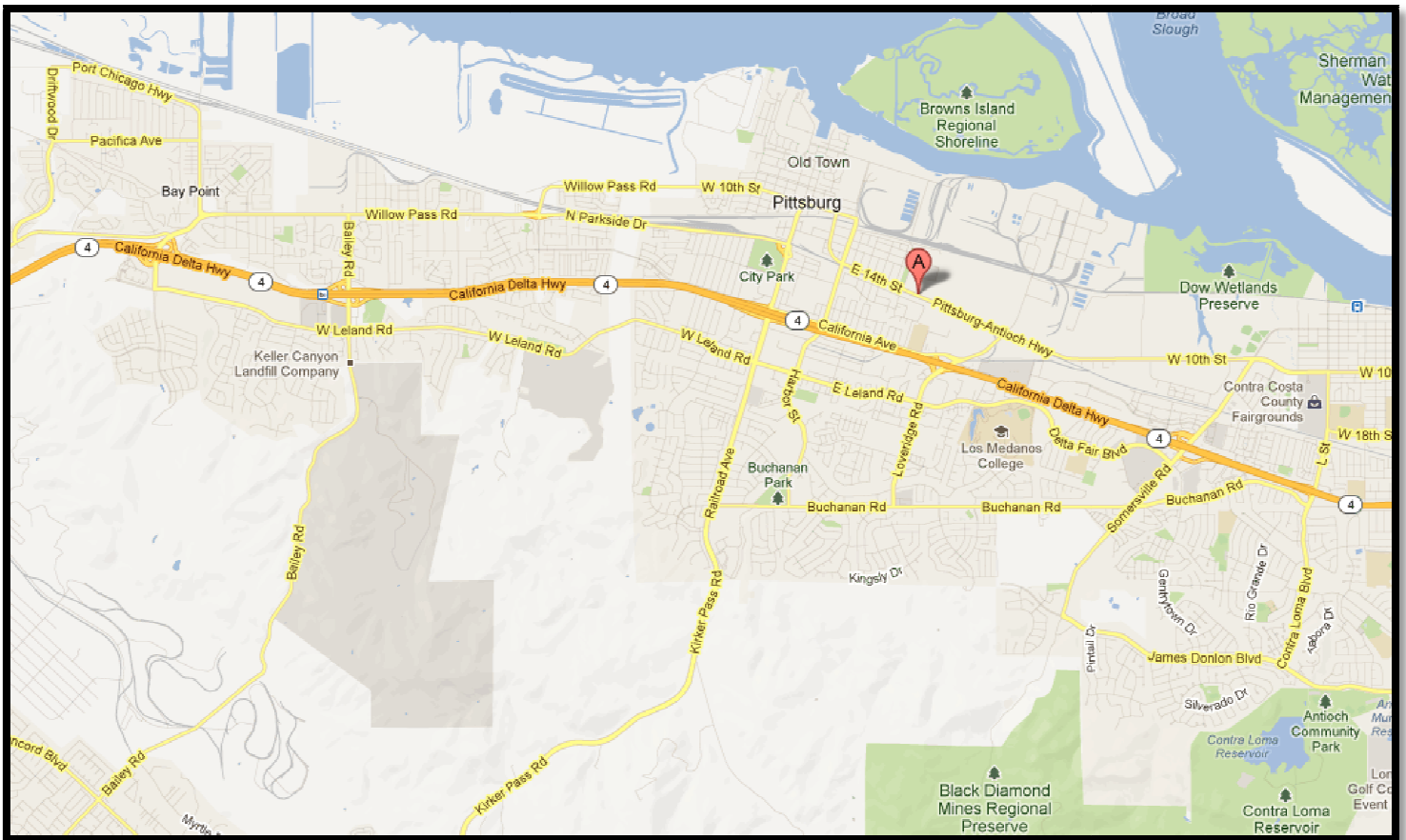
Finding: The project described above will not have a significant effect on the environment for the reasons stated below.

Statement of Reasons to Support the Finding:

Potentially Significant Impacts: The Initial Study prepared for the project identified potentially significant impacts in the categories of Biological Resources, Hazards and Hazardous Materials, Noise and Mandatory Findings of Significance. However, no significant effects upon the environment would occur as a result of this project because mitigation measures identified in the Initial Study would be incorporated as conditions of approval of the project, if approved, in order to reduce the potentially significant impacts of the project to a less than significant level.

Other: Impacts resulting from this project were found to be less than significant in the areas of Aesthetics, Agricultural Resources, Air Quality, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation and Traffic, and Utilities and Service Systems.

Attachments: Vicinity Map and Initial Study



Project Title: Columbia Solar Energy
AP-12-879 (DR, RZ, DA)

Location: 900 Loveridge Road
APN: 073-200-021



**California Environmental Quality Act
Initial Study
Columbia Solar Energy Project**

January 2013

Prepared For:
City of Pittsburg
65 Civic Avenue
Pittsburg, CA 94565

Prepared By:
Columbia Solar Energy, LLC
Dba Columbia Solar Energy Generation, LLC
5000 Hopyard Road
Pleasanton, CA 94588



123 Technology Drive West
Irvine, CA 92618

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION	1
1.1 Project Overview	1
1.2 California Environmental Quality Act.....	1
1.3 Environmental Review	2
2.0 PROJECT DESCRIPTION	3
2.1 Purpose	3
2.2 Project Location.....	5
2.3 Project Facilities	5
2.3.1 General	5
2.3.2 Generating Technologies.....	5
2.3.3 Energy Delivery.....	7
2.3.4 Ancillary Facilities and Requirements	9
2.3.5 Drainage and Erosion Control.....	10
2.4 Construction.....	11
2.5 Operation and Maintenance.....	12
2.6 Existing Uses and Site Restrictions.....	13
3.0 ENVIRONMENTAL CHECKLIST FORM	25
3.1 Environmental Factors Potentially Affected.....	26
3.2 Determination	27
3.3 Evaluation of Environmental Impacts	28
1. Aesthetics.....	29
2. Agriculture/Forest.....	31
3. Air Quality	32
4. Biological Resources.....	35
5. Cultural Resources.....	43
6. Geology and Soils	45
7. Greenhouse Gas Emissions	48
8. Hazards and Hazardous Materials.....	49
9. Hydrology and Water Quality.....	53
10. Land Use and Planning.....	57
11. Mineral Resources	59
12. Noise.....	60
13. Population and Housing.....	63
14. Public Services.....	64
15. Recreation	66

16. Transportation/Traffic	67
17. Utilities and Service Systems	70
18. Mandatory Findings of Significance	72
3.4 References	76
3.5 Preparers.....	78

FIGURES

Figure 1 – Project Overview Map	4
Figure 2 – Project Location Map.....	6
Figure 3 – View of Project Site looking east from Central Park.....	15
Figure 4 – View of Project Site looking northeast from Pittsburg-Antioch Highway	15
Figure 5 – View of Project Site looking northwest from Pittsburg-Antioch Highway	16
Figure 6 – View of Project Site looking south from BNSF railroad tracks	16

PRELIMINARY DESIGN DRAWINGS

GEN-1 – Cover Sheet	17
CIV-100.1 – Site Plan Existing (Boundary and Row)	18
CIV-100.2 – Site Plan Existing (Topography).....	19
CIV-101 – Conceptual Grading and Drainage Plan	20
CIV-102 – Conceptual Site Layout	21
CIV-110 – Details – Substation and Roadways	22
CIV-111 – Conceptual Details – PV Modules and Racking	23
CIV-112 – Details – Fencing, Enclosures and Road Sections	24

ATTACHMENTS

Attachment A	Construction Emission Estimate
Attachment B	Contra Costa County Fire Protection District Comments

1.0 INTRODUCTION

1.1 PROJECT OVERVIEW

1. Columbia Solar Energy, LLC has submitted to the City of Pittsburg (City) a request for approvals necessary for development of a 115-acre project site located on land that is owned by USS-POSCO Industries (UPI), west of Loveridge Road and north of the Pittsburg-Antioch Highway. The Project site is located adjacent to, and directly south of the existing UPI steel mill.
2. The project applicant proposes to construct a 20 megawatt (MW) ground mounted solar voltaic electric generating plant. A detailed project description can be found in Chapter 2.
3. Approvals from the City that would be necessary for the proposed solar energy project include: a Zoning Ordinance Amendment to establish a Limited Overlay District to authorize a Photovoltaic Array for the Project Site, Design Review required by the Limited Industrial District, approval of a Development Agreement, a Parcel Map Waiver and a Power Pole Easement.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT

1. The proposed Columbia Solar Energy Project approvals constitute a “project” as defined by the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 et seq.) and the “CEQA Guidelines” (California Code of Regulations, Title 14, Section 15000 et seq), and is thereby subject to the requirements of CEQA. For purposes of CEQA, the term “project” refers to the whole of an action which has the potential to result in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378). As the principal public agency responsible for approving the Columbia Solar Energy Project, the City of Pittsburg is the “lead agency” overseeing and administering the CEQA environmental review process.
2. As set forth in the provisions of CEQA Guidelines Section 15126.4, before deciding whether to approve a project, public agencies must consider the potential significant environmental impacts of the project and must identify feasible measures to minimize these impacts. Pursuant to CEQA Guideline Section 15064, if any aspect of the proposed project, either individually or cumulatively, may cause a significant effect on the environment,

regardless of whether the overall effect of the project is adverse or beneficial, an Environmental Impact Report (EIR) must be prepared.

3. This Initial Study is a factual document, prepared in conformance with CEQA, and written for the purpose of making the public and decision-makers aware of the potential environmental consequences of the project. For any project impact that is considered “significant,” the Initial Study identifies mitigation measures, where feasible, to reduce or avoid the significant effect. Before any action can be taken to approve the Columbia Solar Energy Project, the City of Pittsburg must certify that it has reviewed and considered the information in the Initial Study/Proposed Negative Declaration and that this document has been completed in conformity with the requirements of CEQA. Approval of a Negative Declaration does not approve or deny the proposed project.

1.3 ENVIRONMENTAL REVIEW

1. Consistent with CEQA, this Initial Study is a public information document for use by governmental agencies and the public to identify and evaluate potential environmental consequences of the proposed project and to recommend mitigation measures and/or standard conditions of approval to lessen or eliminate adverse impacts.
2. This Initial Study/Proposed Negative Declaration is available for public review for a thirty days, during which time written comments on the Initial Study may be submitted to:

Kristin Vahl Pollot
Associate Planner
City of Pittsburg
Planning Division
65 Civic Avenue
Pittsburg, CA 94565
kvahl@ci.pittsburg.ca.us

2.0 PROJECT DESCRIPTION

1. The Columbia Solar Energy Project (Project) is a proposed 20-megawatt AC (MWAC) solar photovoltaic (PV) power generation facility on an approximately 115-acre site (Project Site) owned by USS-POSCO Industries (UPI) and leased by Columbia Solar Generation, LLC within the City limits of Pittsburg (Figure 1). Construction is expected to take approximately one year, including approximately three months of final design, and is expected to begin in 2013 subject to receipt of required permits and approvals. Project construction would create an estimated 130 direct jobs during peak construction activity and an estimated 65 direct jobs on average over approximately nine-months during the field portion of construction work. There would be no full-time staff for operations. Once constructed, the facility would passively generate electric output from the sun during daylight hours without air, water, or noise emissions. Project operations would typically be unattended, with routine monitoring and maintenance by a crew of two to four people 40 days per year.
2. The Project Site is zoned Limited Industrial and located in an area of predominately industrial uses. The Project would be entirely compatible with surrounding uses. The Project Site is vacant land with relatively flat and featureless topography that is suitable for PV development with minimal clearing and grading. The Project Site is located on an area of the UPI property that was used for decades as a landfill for mill waste from the steel mill. Though remediated to the satisfaction of the responsible state agencies, the parcel underlying the Project Site is subject to a restrictive covenant that limits the types of land uses on the parcel. The proposed Project is an allowable use under the covenant.

2.1 PURPOSE

1. The purpose of the project is to provide economic and reliable renewable energy, using solar PV technology, and to deliver the electric output on a wholesale basis to Pacific Gas and Electric in support of California's requirement for all electrical retailers to meet defined thresholds for increased use of renewable energy by the end of 2013, 2016 and 2020, with an ultimate goal of 33 percent renewable energy by 2020. To meet this objective the project needs to be located on a site with sufficient acreage and suitable solar resource and that has nearby access to the wholesale electric grid.



Figure 1. Project Overview Map

2.2 PROJECT LOCATION

1. The Project would be located on land that is owned by UPI and leased to Columbia Solar Generation, LLC under a 30-year lease. The Project Site is adjacent to, and south of, the existing UPI steel mill. The Project Site is entirely within Contra Costa County on the southern portion of Assessor Parcel Number (APN) 073-200-021.
2. The Project is located entirely within the City of Pittsburg, west of Loveridge Road and north of the Pittsburg-Antioch Highway. The Burlington Northern Santa Fe owned railroad tracks separate the Project Site from the remainder of the UPI mill site to the north. A vicinity map showing the Project location is provided in Figure 2. Representative photographs of the Site and surrounding lands are provided in Figures 3 through 6.

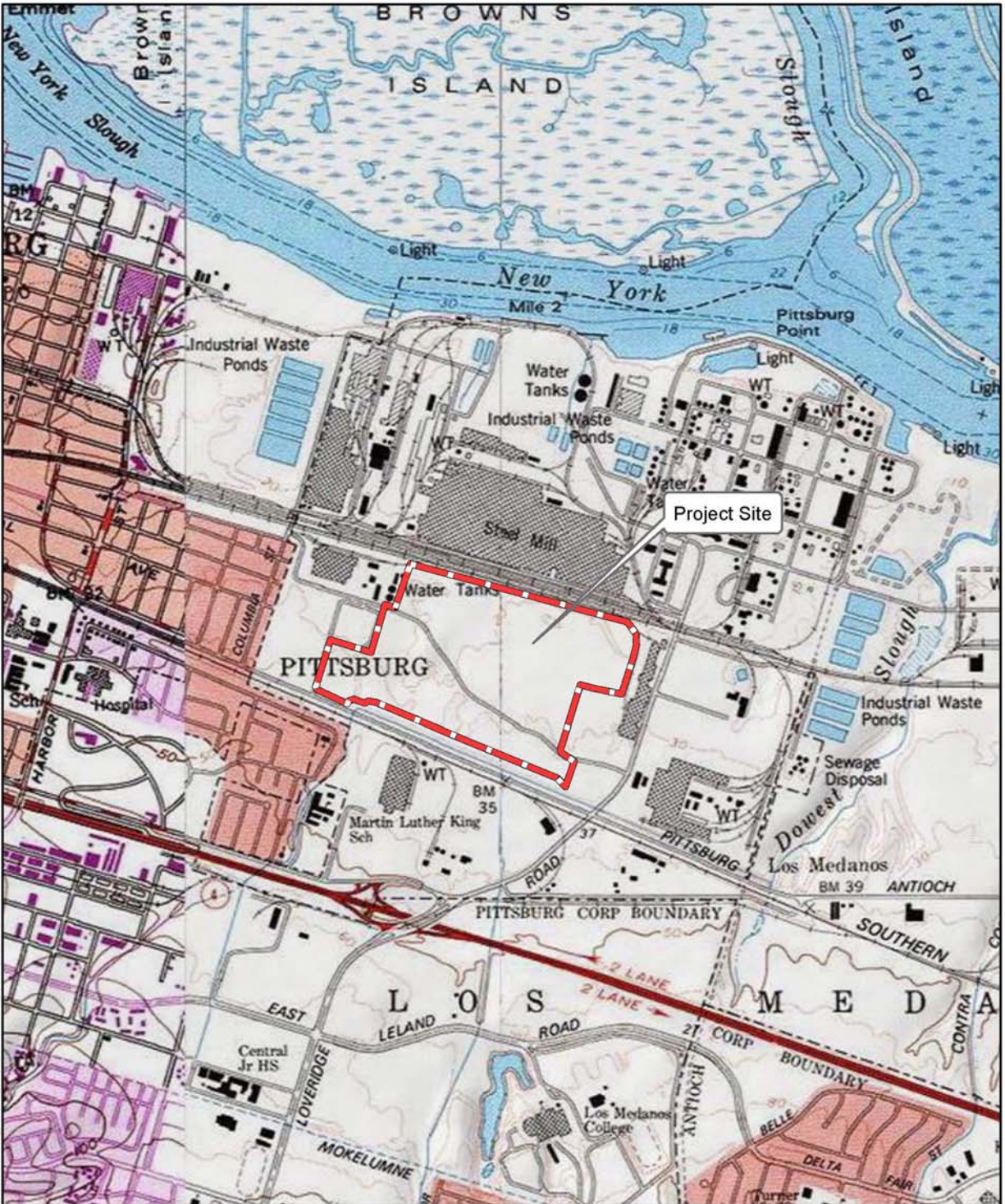
2.3 PROJECT FACILITIES

2.3.1 GENERAL

1. Project facilities consist of PV panels, inverters, related electric equipment (e.g. transformers, circuit breakers), equipment enclosures, an electric switchyard and, in one alternative configuration, a generation “tie line.” The PV panels are the predominant project feature and would encompass most of the Project Site. The PV panels are non-reflective and convert sunlight directly into direct current (DC) electricity. They consume no fossil fuels or water and produce no air emissions. The PV panels would be laid out on a uniform grid pattern with access roads provided at the Site perimeter and intermittently between panels in compliance with emergency access requirements and to facilitate maintenance. Site layout and design details are provided in Preliminary Design Drawings included at the end of this chapter.

2.3.2 GENERATING TECHNOLOGIES

1. Depending on final design optimization studies and commercial arrangements, the Project would utilize crystalline silicon or thin film PV technology on either tilted or horizontal single-axis trackers, or fixed tilt supports. Typical elevation details are provided in the Preliminary Design Drawings included at the end of this chapter.



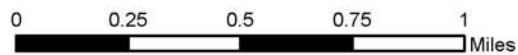
Legend

 Project Boundary

Columbia Project

Project Location Map

Figure 2



Basemap Source: 2011 National Geographic Society, i-cubed



Tilted Trackers

1. If tilted trackers are used to support the modules, the modules would be mounted south-facing and tilted about 15 to 25 degrees from horizontal. Tilted tracker units would be arranged rows oriented east/west and would be self-tracking or connected by drive shafts to drive motors that would rotate the solar panels from east to west, following the sun throughout the day.
2. If used, the drive motors would be located approximately every 600 feet along each east/west row and would be either mounted on piers or on small concrete foundations, approximately 8 feet by 12 feet in area and approximately 2 feet thick. The highest point on the tilted tracker units (the uppermost solar panel) would be approximately 22 feet above the ground surface.

Horizontal Trackers

1. If horizontal trackers are used, they would be mounted horizontally (not tilted to the south) and arranged in north/south rows. These tracking units would be powered by a drive motor to track the east/west path of the sun on a single axis throughout the day. This tracking technology may generate about 30% more energy than a traditional fixed-tilt system. The highest point for a horizontal tracker occurs during the morning and evening hours and is approximately 8 feet above the ground surface.

Fixed Tilt

1. If fixed-tilt panels are used, they would be constructed in east/west rows positioned to receive optimal solar energy, but the panels would not track the path of the sun. Fixed tilt panels are approximately 11 feet off the ground at the highest point.

2.3.3 ENERGY DELIVERY

1. The wiring from the solar panels would deliver direct current (DC) power along an underground trench or aboveground conduit to inverters located on electrical equipment pads. The electrical equipment at each inverter skid would be supported on a concrete slab approximately 16 feet by 26 feet in size. The electrical equipment enclosures would be approximately 13 feet high.

2. The inverters would convert the DC power to alternating current (AC), which would then be stepped-up to medium voltage by transformers located on the inverter skid. From these medium voltage transformers, power would be delivered along an underground or aboveground collection system to the project substation where the electrical voltage would be further increased for interconnection to the electrical grid.
3. The Project is pursuing two mutually-exclusive locations for the project substation. The first location is near the northeast corner of the Project site and the second location is near the southeast corner of the Project site. The two locations being considered are shown in Figure 1. The substation footprint would occupy an area approximately 110 feet by 150 feet. Most structures in the substation would have a maximum height of approximately 20 feet except the static mast which would have a height of approximately 50 feet.
4. If the substation location near the southeast corner of the site is used, this substation would be interconnected to the existing PG&E electric system at or near the GWF switchyard adjacent to the southeast corner of the Project Site. The existing GWF interconnection facilities are currently unused and scheduled for removal and could be repurposed for this project. Columbia Solar is evaluating the technical and economic feasibility of using these existing interconnection facilities at their present location and is in discussion with PG&E and the California Independent System Operator regarding the possibility of their use. The Project may be required to relocate the interconnection facilities from the GWF site onto the Project Site or new interconnection facilities would be constructed on the Project site. In either case, PG&E would need to extend their existing 115kv transmission line approximately 500 feet west on City owned property adjacent to the Columbia Solar Site. This extension would require the installation of an additional wooden pole and related conductors.
5. If feasibility considerations dictate that the substation location near the northeast corner of the site be used instead, the Project would include the construction of an approximately 2,500-foot overhead 115 kV electric generation “tie line” (the Gen-tie Line) to electrically interconnect the Project to an existing unused bay on the Columbia Steel Substation located within the UPI mill site. The Gen-tie Line would be either a single-circuit or double-circuit line supported on towers (either wood, fiberglass, steel, or concrete) approximately 60-90 feet tall. Portions of the Gen-tie line may be located underground to provide proper separation from existing features. The Gen-tie Line would all be located entirely on privately owned land within the UPI mill site property.

2.3.4 ANCILLARY FACILITIES AND REQUIREMENTS

1. Primary access to the Project would be from an entrance created off UPI's private driveway entrance off the Pittsburg Antioch Highway near the western edge of the Project site. Secondary and/or emergency access would be from Loveridge Road on the eastern edge of the Project site (depending upon easement rights) or via the UPI parking lot on the western side of the Project site. Within the Project Site, the internal access roads would be compacted and graveled to provide for all-weather passage. Onsite width and minimum turning radii for onsite roads would follow Contra Costa County Fire Protection District (CCCFPD) requirements.
2. The Project Site would be secured with eight-foot-tall chain link fencing including a security wire top. A controlled access gate with a minimum width of 20 feet would be located at the Project entrance. Fence details are provided in the Preliminary Design Drawings included at the end of this chapter.
3. Fire protection would be provided by an existing fire hydrant located near the southeast corner of the Project Site. Deionized water for panel washing would be delivered as needed to the Project—no water treatment facilities are contemplated as part of the Project.
4. Portable sanitary facilities would be maintained onsite as needed both during construction and throughout operations, with periodic pump out by a licensed contractor.
5. No buildings are proposed as part of the Project. Secured, intermodal-type storage containers may be brought onsite temporarily to store parts and equipment during periodic maintenance activities.
6. The Project would include one or more meteorological monitoring stations to track insolation, temperature, wind direction, and wind speed. These stations are typically 6-8' feet tall and may include a taller (up to 10 meter) anemometer for measuring wind speed.
7. Lighting for both normal and emergency conditions would be provided and would be designed to provide the minimum illumination needed to ensure safety and security, would be downward-facing, and would be shielded to focus illumination on desired areas only. Lighting would be provided at gates for security and safety and may be provided within the Project switchyard.

2.3.5 DRAINAGE AND EROSION CONTROL

1. The Project area receives an average annual rainfall of approximately 13 inches. No storm water currently leaves the Site. Storm water runoff from the recycling center bordering the Project site to the east flows onto the site in an earthen channel in the Northeastern portion of the site. These pre-project conditions would be maintained under the proposed grading plan; there would be no change to drainage at the Project Site perimeter or on adjacent properties. Engineering assessment of pervious and impervious areas onsite before and after the proposed Project development is provided Preliminary Design Drawing CIV-101 at the end of this chapter. By retaining all storm water flows on site, the project would comply with the C.3. Storm Water Permit requirements and no Storm Water Control Plan would be required.
2. The topography on and adjacent to the Project Site has relatively low relief. The site ranges in elevation from approximately 14 to 40 feet above sea level. Grading would be required to smooth road locations and to control drainage. Conceptual site layout and drainage plans are provided in the Preliminary Design Drawings at the end of this chapter. Site grading design would depend upon final technology selection but, as much as possible, grading would preserve existing conditions in order to minimize earth moving. The Preliminary Design Drawings at the end of this chapter include grading at an existing drainage ditch and marsh that occur on a small portion of the site as further described in Section 4 of the Initial Study Checklist, and project impacts are assessed reflecting that this area may be impacted. The Applicant may elect during final design not grade this limited area of the site. The final grading plan would be subject to approval by the City's Engineering Department. If the drainage ditch and marsh are not disturbed by Project grading, then there would be no need for RWQCB approval of the Project.
3. To prevent an increase in the potential to emit dust during construction, disturbed surfaces would be stabilized with water as necessary. To prevent an increase in the potential to emit dust following grading, the Project design includes stabilizing disturbed areas as soon as practical. Crushed rock or similar material would be used on perimeter and intermediate access roads and the area surrounding the substation. As necessary, areas that are not graveled or occupied by foundations would be stabilized by re-vegetation, application of a non-toxic soil binder, or other means of stabilization.

2.4 CONSTRUCTION

1. Construction of the Project, from site preparation to commercial operation, is planned to take place over twelve months. This includes approximately three months of final engineering followed by approximately nine months of site construction. Construction activities would include three types of activities; site grading and preparation, assembly/installation, and commissioning/testing:
 - Site Grading and Preparation: The Project Site currently retains all on-site storm water and the site grading would be designed to avoid changes to surface water drainage characteristics at the Project Site boundaries and adjacent lands. The grading that would be necessary involves redistribution and smoothing of the surface soils, gravel surfacing for roads, substation and surrounding area, and minor grading of retention areas (if needed) along topographic contour lines to preserve existing infiltration capacity and prevent changes to offsite drainage. Onsite roads would be established around the Project Site perimeter and at intermediate intervals as shown in the Preliminary Design Drawings. Road sub-grades would be compacted and then surfaced with gravel or compacted soil. Heavy equipment used for site preparation work may include dozers, graders, backhoes, dump trucks, end loaders, compactors, cranes, and bobcats in addition to support trucks and equipment.
 - Assembly/Installation: This work would include the installation of the appropriate foundations and support structures, and installation the PV modules and related equipment. The Project is presently contemplated to use embedded foundations (e.g., piles or ground screws) to secure the PV racks to the ground. These footings would not require grading and would result in minimal surface disturbance. Geotechnical testing and final engineering for the footing design would occur prior to application for a grading permit. The final footing design and related engineering evaluations would be subject to approval in conjunction with building permit issuance. As an alternative to ground-penetrating footings, weighted (e.g., concrete) ballasts may be used to secure the PV racks on the soil surface. Details of the various footing designs are provided in the Preliminary Design Drawings.
 - Commissioning/Testing: Utilizing plant systems and contractor calibration and instrumentation, all facilities would be checked, tested, and adjusted before being placed into commercial operation.

2. Water would be required during construction to support dust control, soil compaction, and concrete placement. Construction water would be provided by UPI, the City of Pittsburg, or would be trucked to the Project Site. Sanitary facilities for construction would be provided with self-contained portable units maintained by a licensed contractor.

3. The onsite construction workforce would consist of laborers, craftspeople, supervisory personnel, and support personnel. Construction parking would be located onsite. The onsite assembly and construction workforce is expected to reach a peak of approximately 130 workers; the average number of workers on site is anticipated to be approximately 65. An estimated maximum of 30 truck deliveries per week would be required during construction to supply equipment, materials and project components. US Census Bureau data indicates that California-wide, 11.3 percent of people carpool to work (StateMaster, 2013). Rounding of this carpooling rate to 10 percent for an assumed voluntary carpool rate for this Project would result in average daily construction traffic as follows:

TRAFFIC SOURCE	DAILY ROUND TRIPS	TOTAL TRIPS GENERATED
Construction Worker Vehicles	58	116
Other Deliveries	6	12
TOTAL	64	128

While it is expected that some carpooling on the order of 10 percent may occur, the traffic analysis in the Initial Study checklist in Chapter 3.0 of this Initial Study does not take any traffic reduction credit for carpooling.

2.5 OPERATION AND MAINTENANCE

1. Operation and Maintenance (O&M) activities associated with a project of this type are minimal compared to those for conventional power plants. The operating facility typically would be unmanned. O&M activities are limited to monitoring of plant performance, performing periodic equipment maintenance, and responding to utility needs for plant adjustment. The project would automatically generate power during daylight hours.

2. Routine monitoring and maintenance requirements are minimal and would require a crew of 2 to 4 technicians visiting the site on an as-needed basis, estimated to be a total of 40 days per year. As necessary, additional temporary or contract personnel would be utilized for services such as security or specialized maintenance. The expected maintenance would generate little traffic during operations. The area surrounding the substation would be graveled and would have adequate space for parking several vehicles.
3. O&M vehicles would include light duty trucks (pickup, flatbed) and other light equipment for maintenance and module washing. Heavy equipment would not be utilized during normal project operation. Large or heavy equipment may be brought to the facility infrequently for equipment repair or replacement.
4. Minimal amounts of water would be required during operation for panel cleaning wash water and general maintenance. The need for panel washing would be determined on operating considerations, including actual soiling of the PV panels and any expected benefit from cleaning. Should cleaning be necessary, demineralized water would be sprayed on the PV panels to remove dust. An estimated 70,000 gallons of water would be necessary to wash all of the PV panels on the Project. This water would be trucked to the site.
5. Sanitary facilities for operations would be provided with self-contained portable units maintained by a licensed contractor. The periodic hauling of sanitary waste offsite by a licensed contractor is the only anticipated routine waste generation during project operations.

2.6 EXISTING USES AND SITE RESTRICTIONS

1. The Project site is undeveloped land. There are no existing structures or developed land on the site. The surrounding lands are used for industrial purposes.
2. Adjacent lands are comprised of a steel mill and a recycling center. There is also a park near the southwest corner of the site. There is a water tower near the northwest corner. There are railroad tracks adjacent to the northern boundary of the site.
3. The Project site is on a portion of a 483-acre property owned by UPI. The UPI property has been the site of a steel manufacturing and processing plant for over 100 years. Currently the site is primarily used for steel finishing, such as cold rolling and metal plating. For much

of its history, the site was used for steel manufacturing for using open hearth furnaces. The historic industrial uses of the UPI property resulted in contamination of soil and groundwater on the property. In the 1990's the UPI property was subject to an investigation under the federal Resource Conservation and Recovery Act (RCRA) to identify areas on the property that could release hazardous constituents to environmental media. A number of areas were identified and under the direction of the DTSC, UPI prepared and implemented RCRA Corrective Action to remediate the property.

4. The area of the UPI property that will be the Project site was formerly used as a disposal for mill waste; an area where furnace slag and other waste materials from steel production were discarded. In the course of the Corrective Action, soils in the Project site area were characterized and soil with contamination above certain health-based risk levels was removed. In 2005, the Department of Toxic Substances Control (DTSC) approved the Corrective Action Measures Completion Report submitted by UPI, affirming that the landfill area soils had been sufficiently remediated. A final condition of the landfill area remediation was the recording of a restrictive land use covenant (LUC) between UPI and DTSC. The LUC limits future use of the site to commercial or industrial uses and specifically prohibits certain other uses such as agriculture, schools, or hospitals. The LUC also requires that earth moving activity at the site be done in accordance with project-specific soil management and health and safety procedures to ensure protection of worker and public health.
5. The Soil Management Plan that will govern earth moving activity at the Project Site was prepared by UPI and approved by DTSC in 2009. The plan requires all grading, trenching and excavating activities to be monitored for potentially impacted materials or soils. Monitoring includes visual assessment as well as air quality testing. Should potentially impacted soils and materials be encountered, they will be separately stockpiled and characterized to determine whether contamination exists above DTSC-approved site clean-up levels. Similarly, below-grade soils will be characterized and removed if found to be contaminated above the established clean-up levels. Any soil or materials with contamination above the site-specific clean-up levels will be removed from the Project site and transported offsite for proper disposal.



Figure 3: View of Project Site looking east from Central Park



Figure 4: View of Project Site looking northeast from Pittsburg-Antioch Highway



Figure 5: View of Project Site looking northwest from Pittsburg-Antioch Highway



Figure 6: View of Project Site looking south from BNSF railroad tracks

DESIGN REVIEW APPLICATION PRELIMINARY DESIGN DRAWINGS COLUMBIA SOLAR ENERGY PROJECT PITTSBURG, CALIFORNIA



PROJECT APPLICANT
COLUMBIA SOLAR ENERGY, LLC
 5000 HOPYARD ROAD SUITE #480
 PLEASANTON, CA 94588
 PH: 925-201-5240
 FAX: 925-201-5230

DRAWING SCHEDULE

- | | |
|-----------|-------------------------------------------------|
| GEN-001 | COVER SHEET |
| CIV-100.1 | SITE PLAN - EXISTING (BOUNDARY AND ROW) |
| CIV-100.2 | EXISTING SITE TOPOGRAPHY |
| CIV-101 | CONCEPTUAL GRADING AND DRAINAGE PLAN |
| CIV-102 | CONCEPTUAL SITE LAYOUT |
| CIV-110 | DETAILS - SUBSTATION AND ROADWAYS |
| CIV-111 | DETAILS - PV MODULES AND RACKING |
| CIV-112 | DETAILS - FENCING, ENCLOSURES AND ROAD SECTIONS |

LEGEND:

- PROPERTY/PARCEL LINE
- PROJECT BOUNDARY AND SECURITY FENCE (EXISTING TO REMAIN)
- EXISTING TOPOGRAPHIC CONTOUR (10-FOOT MAJOR INTERVAL)
- EXISTING TOPOGRAPHIC CONTOUR (2-FOOT MINOR INTERVAL)
- PROPOSED GRADING TOPOGRAPHIC CONTOUR
- PROPOSED IMPERVIOUS AREAS
- DRAINAGE DIRECTION (SHEET FLOW) - EXISTING AND PROPOSED

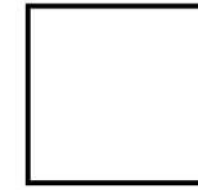
VICINITY MAP
NOT TO SCALE

NOT FOR CONSTRUCTION

SHEET SIZE 22"x34" - SCALE ACCORDINGLY

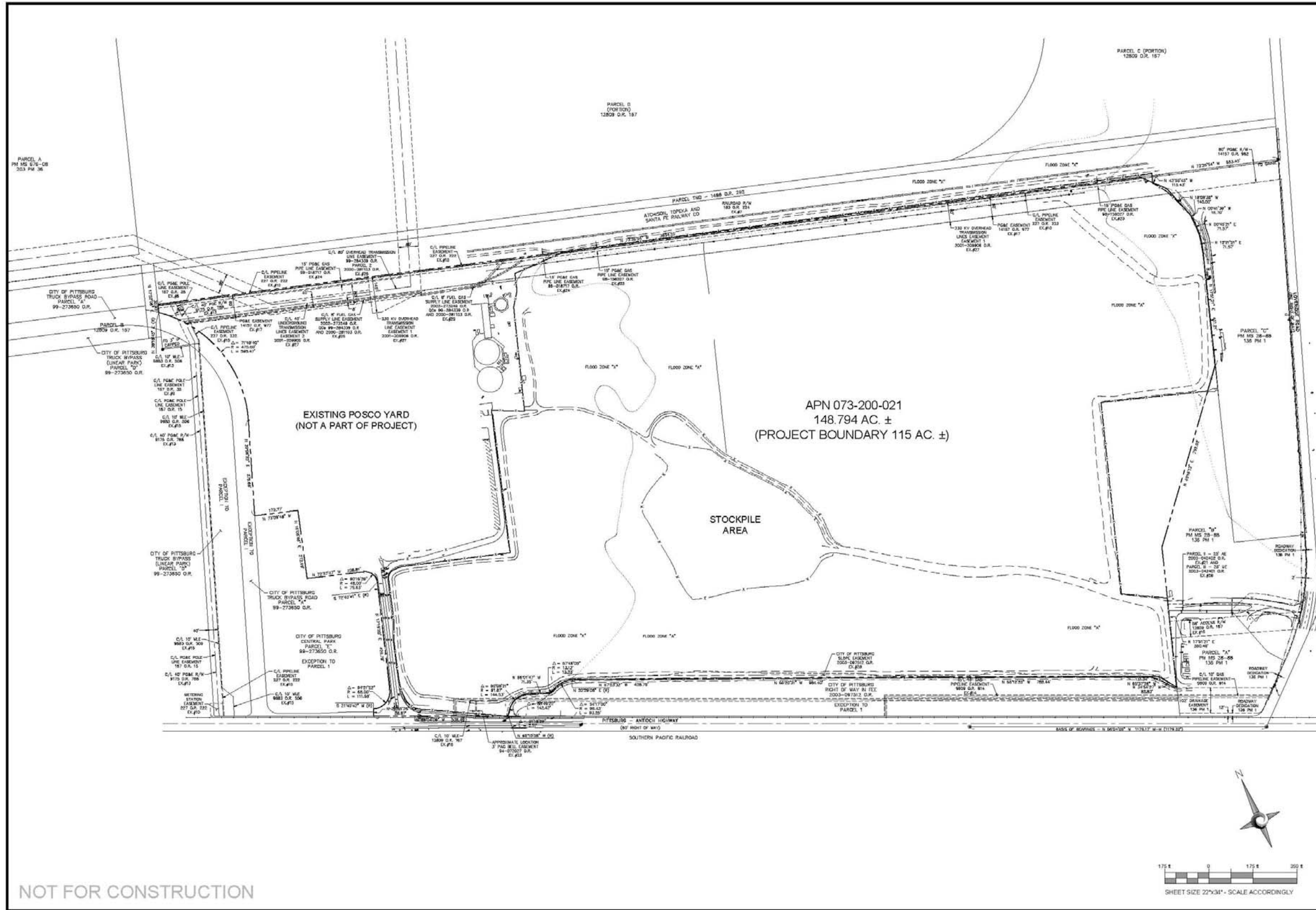
REV	DATE	DESCRIPTION	BY	CHKD	APP.
0	11-02-12	DESIGN REVIEW APPLICATION	AW		

COVER SHEET	COLUMBIA SOLAR ENERGY PROJECT APN 073-200-021 900 LOVERIDGE ROAD, PITTSBURG, CA
-------------	---------------------------------------------------------------------------------------



COLUMBIA SOLAR ENERGY, LLC 5000 HOPYARD ROAD SUITE #480 PLEASANTON, CA 94588 PH: 925-201-5240 FAX: 925-201-5230	SHEET NO: GEN-001
-----------------------------------------------------------------------------------------------------------------------------	-----------------------------

Columbia Solar Energy, LLC, 5000 Hopyard Road, Suite #480, Pleasanton, CA 94588. All rights reserved. 11/2/12.



NOT FOR CONSTRUCTION

NO.	DATE	DESCRIPTION	BY	CHKD.	APP.
0	11-02-12	DESIGN REVIEW APPLICATION			

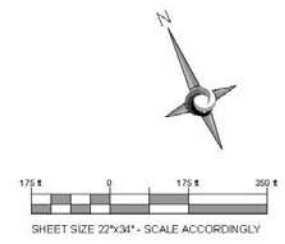
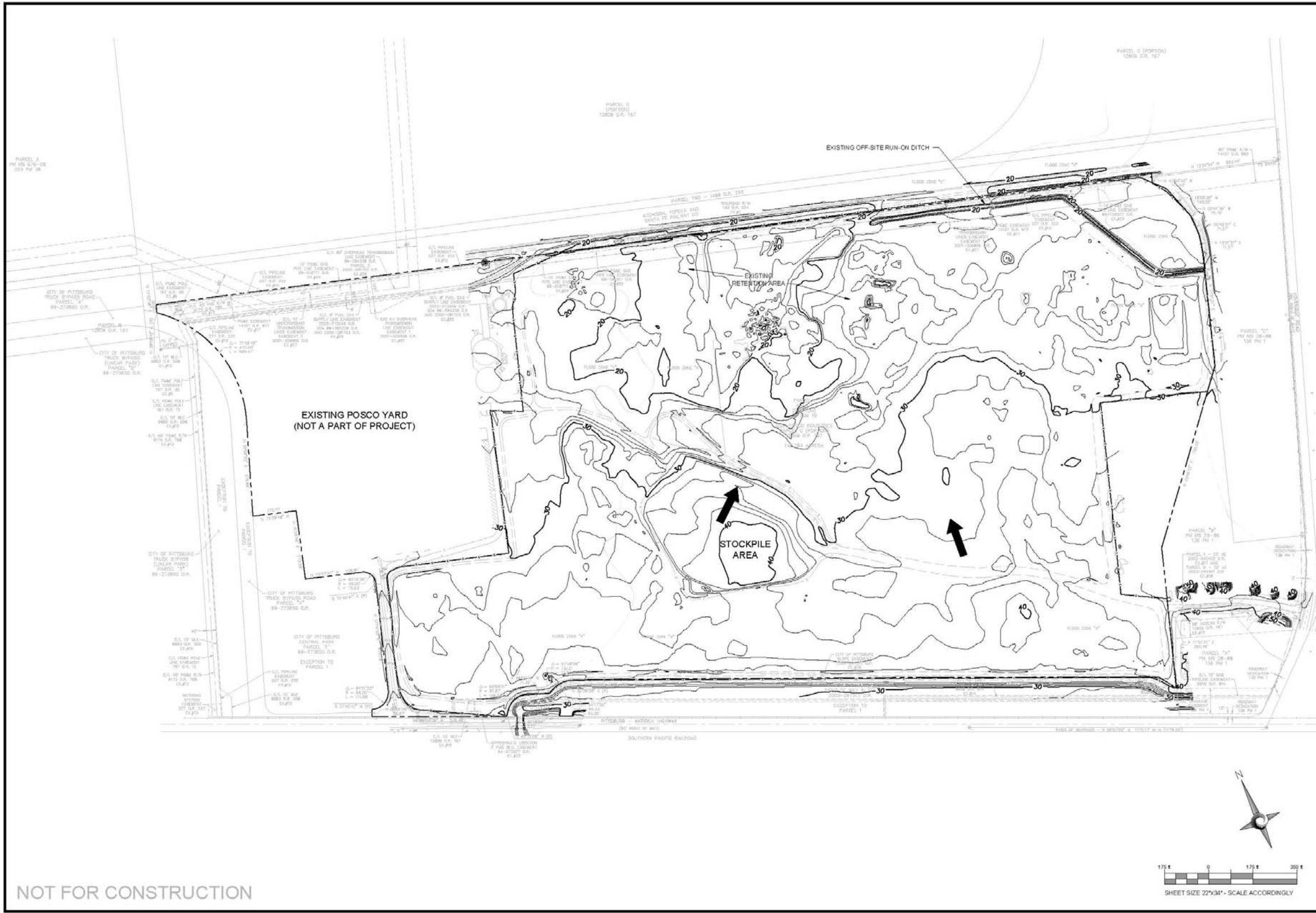
TITLE
SITE PLAN
EXISTING (BOUNDARY AND ROW)

PROJECT
COLUMBIA SOLAR ENERGY PROJECT
APN 073-200-021
900 LOVERIDGE ROAD, PITTSBURG, CA

Drawn By: CAROLAN ANTHONY (CarolanA@CIVIL.COM) Date Plotted: Friday, November 02, 2012 12:48:37 PM Plot Scale: Electrical 0.5 Scale: 1. DWG Location: I:\Environmental\0204 POSCO\DWG\MCH\11-02-12-SITE-PLAN-ROW.PLT

COLUMBIA SOLAR ENERGY, LLC
 5000 HOPKINSON ROAD, SUITE #400
 PLEASANTON, CA 94588
 FAX: 925-591-5220

SHEET NO.
CIV-100.1



REV	DATE	DESCRIPTION

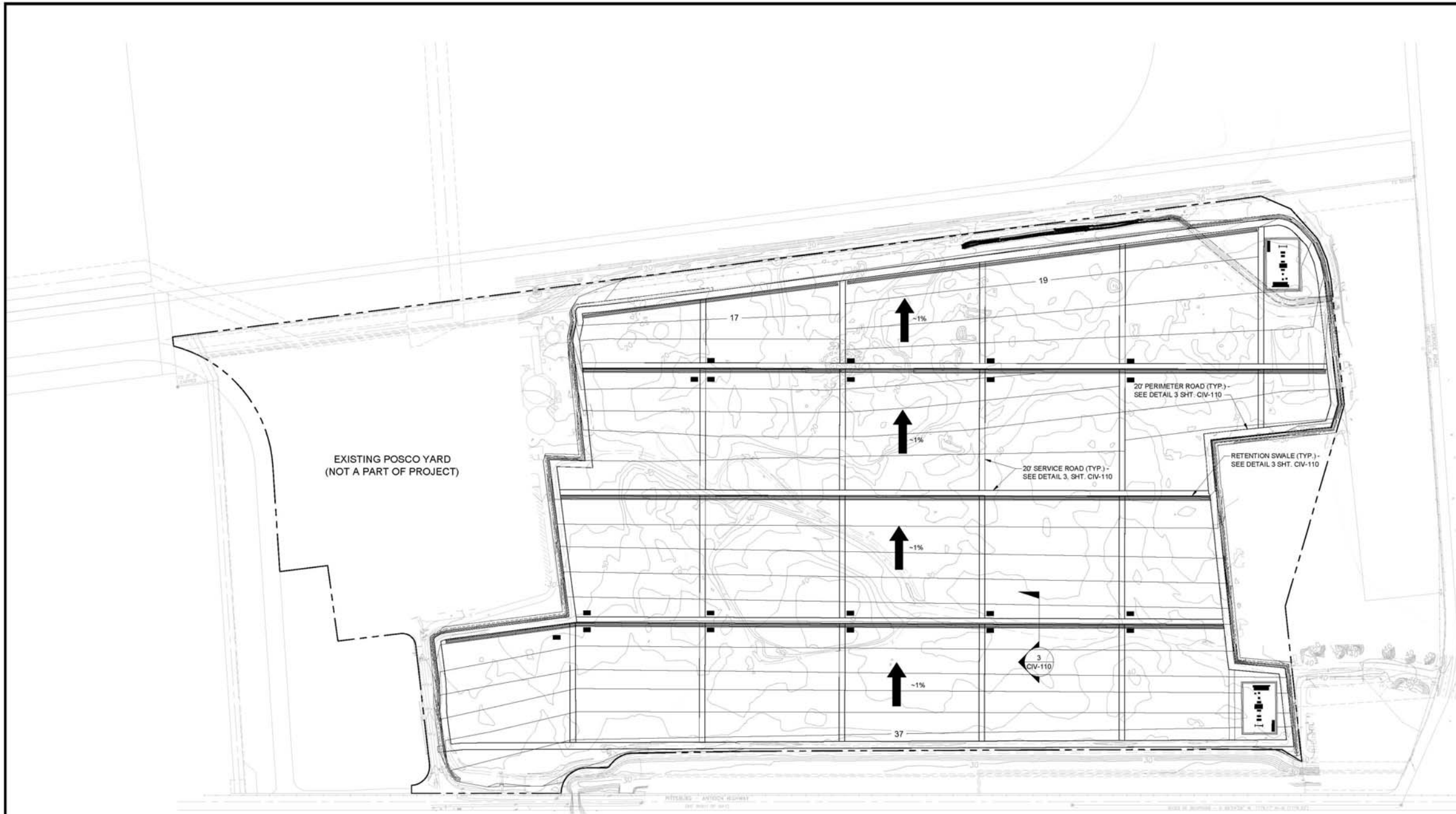
TITLE
**SITE PLAN
 EXISTING (TOPOGRAPHY)**

PROJECT
**COLUMBIA SOLAR ENERGY PROJECT
 APN 073-200-021
 900 LOVERIDGE ROAD, PITTSBURG, CA**

COLUMBIA SOLAR ENERGY, LLC
 5000 HOPKINSON ROAD, SUITE #400
 PLEASANTON, CA 94588
 TEL: 925-381-5200
 FAX: 925-381-5220

SHEET NO.
CIV-100.2

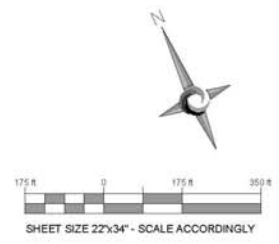
Drawn By: CAIBSA, A/PROJ (Sacramento, CA) Date Plotted: Friday, November 02, 2012 12:48:27 PM Plot Date: Electrical 05 Scale: 1.0000 Location: Environmental\0234\F0350\msh\msh\proj\CIV100.2_Site_Existing_Topography.dwg



NOT FOR CONSTRUCTION

Condition	Pervious Area (sf)	Impervious Area (sf)	Pervious Area (ac)	Impervious Area (ac)	% Impervious
Current	5016383	0	115.2	0	0%
Proposed	5005726	10657	114.9	0.24	0.21%

Note: Site is entirely self-retaining under current and proposed conditions and has no discharge.



DATE	DESCRIPTION	BY	CHECK	APP.
01-10-12	DESIGN REVIEW APPLICATION	AW	JW	KU

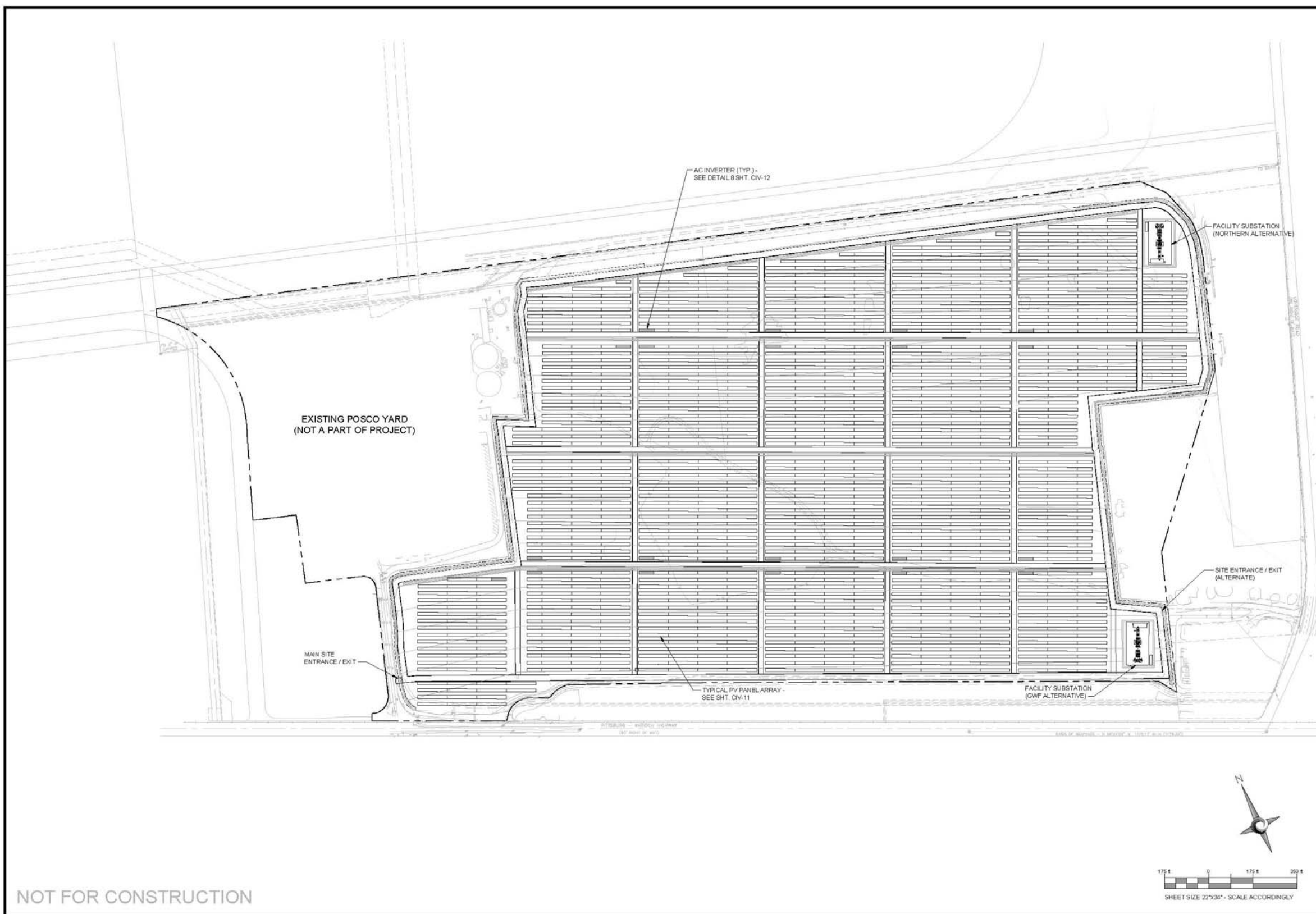
TITLE
CONCEPTUAL GRADING AND DRAINAGE PLAN

PROJECT
COLUMBIA SOLAR ENERGY PROJECT
 APN 073-200-021
 900 LOVERIDGE ROAD, PITTSBURG, CA

COLUMBIA SOLAR ENERGY, LLC
 5000 HOPKARD ROAD SUITE 4400
 PLEASANTON, CA 94588
 TEL: 925-251-5200
 FAX: 925-251-5229

SHEET NO.
CIV-101

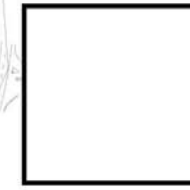
Drawn By: Carissa Anthony (carissa@csenergy.com) Date Plotted: Friday, November 02, 2012 12:48:18 PM Plot Scale: Electrical 0/8 Scale: 1 DWG Location: H:\Environment\073-200-021 POSCO Industrial\Chem\CA\0101.dwg



REV	DATE	DESCRIPTION	BY	CHKD	APP
0	11-05-12	DESIGN REVIEW APPLICATION	AW	JW	ICJ

TITLE
CONCEPTUAL SITE LAYOUT

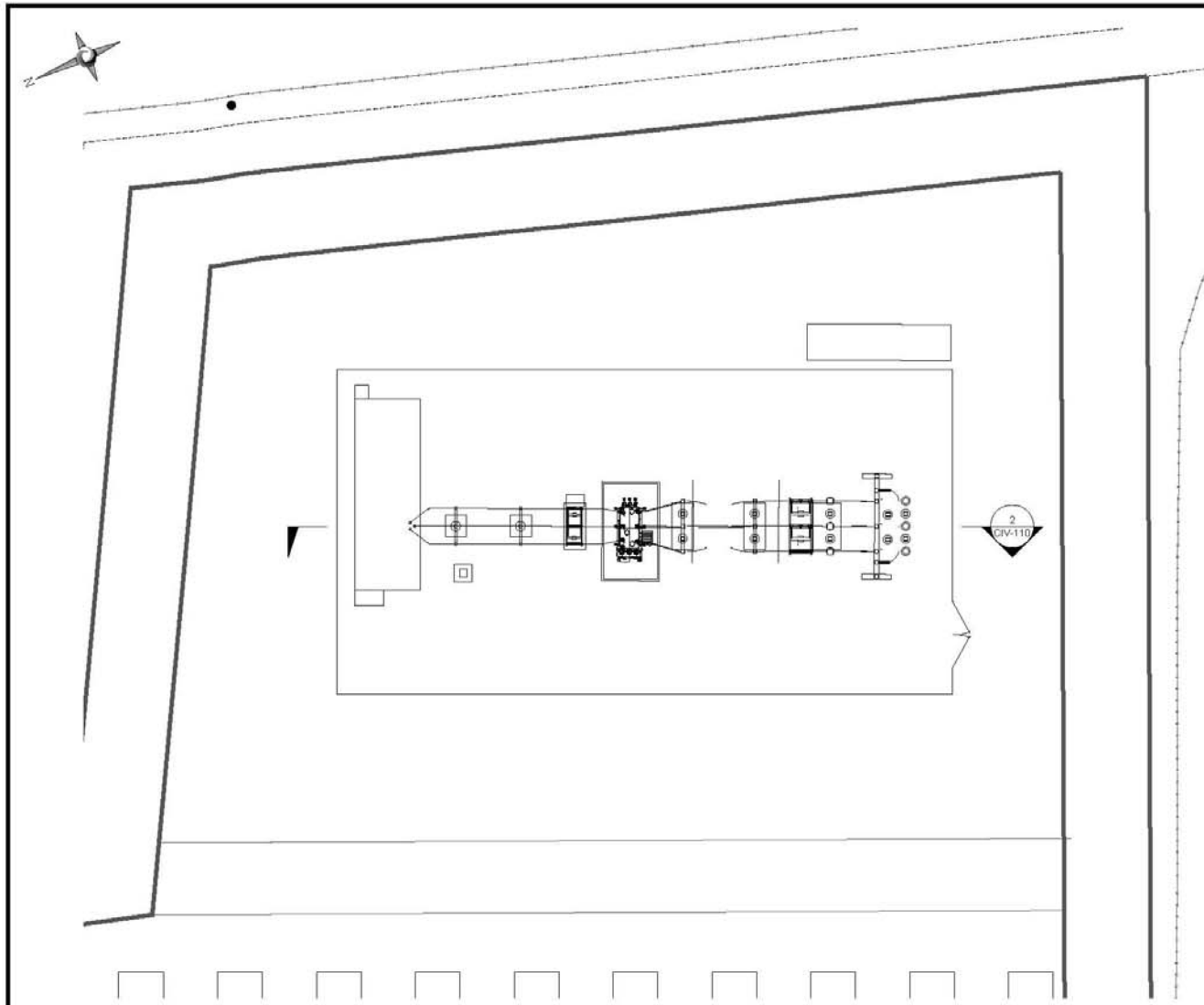
PROJECT
COLUMBIA SOLAR ENERGY PROJECT
 APN 073-200-021
 900 LOVERIDGE ROAD, PITTSBURG, CA



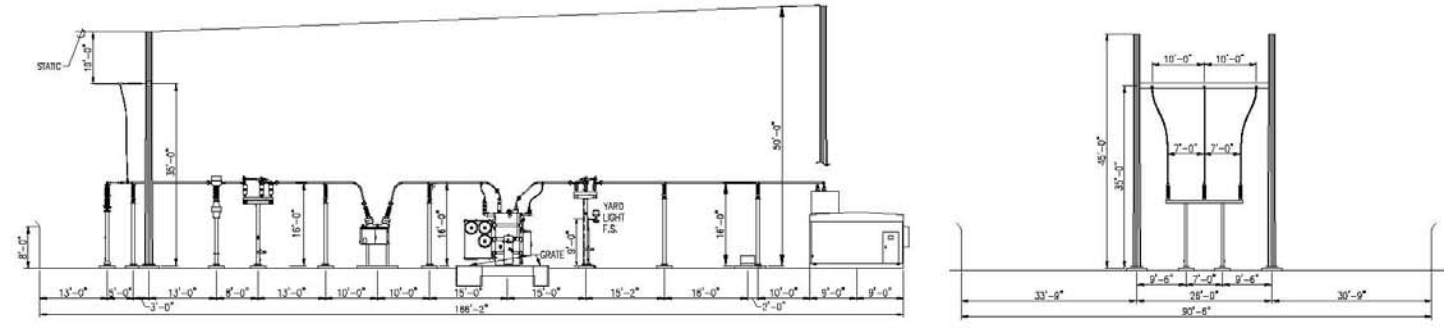
SHEET NO.
CIV-102

COLUMBIA SOLAR ENERGY, LLC
 5000 HOPKINS ROAD, SUITE #430
 PLEASANTON, CA 94588
 FAX: 925-381-5230

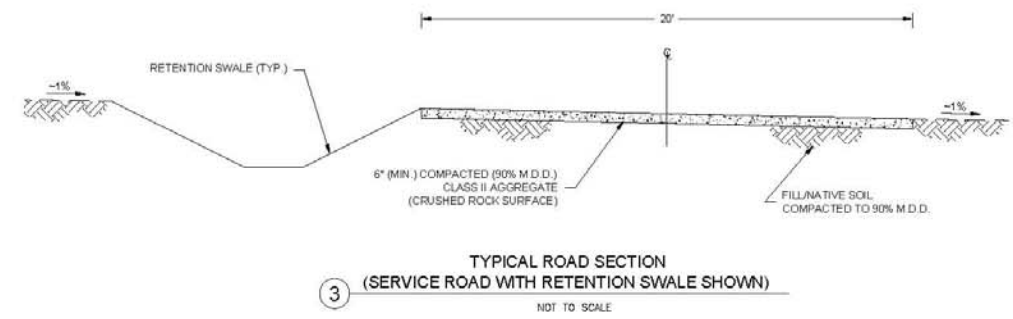
Drawn By: CA0304, APROVY (S:\projects\CA\102) Date Plotted: Friday, November 02, 2012 12:48:57 PM Plot Size: Electrical.DWG Scale: 1.0000 Location: R:\Environmental\0304\POSCO\0304-021\CIV-102_SiteLayout.dwg



1 SUBSTATION LAYOUT (TYP.)
SCALE: 1"=20'



2 SUBSTATION ELEVATION (TYP.)
NOT TO SCALE



3 TYPICAL ROAD SECTION
(SERVICE ROAD WITH RETENTION SWALE SHOWN)
NOT TO SCALE

NOT FOR CONSTRUCTION

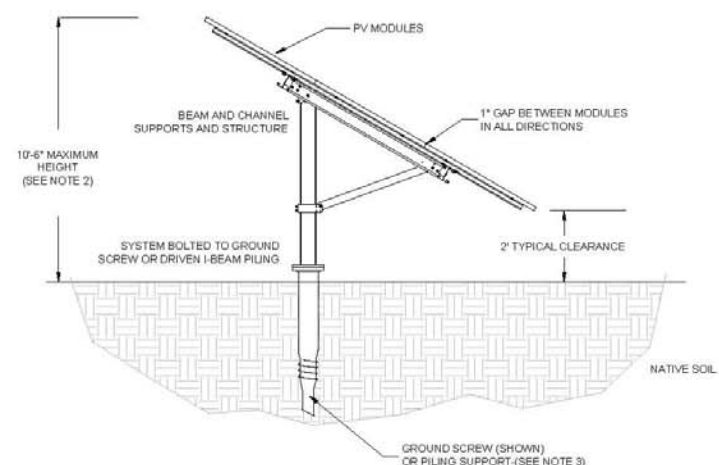
SHEET SIZE 22"x34" - SCALE ACCORDINGLY

REV	DATE	DESCRIPTION	BY	CHKD	APP
0	11-05-12	DESIGN REVIEW APPLICATION	AW	JW	

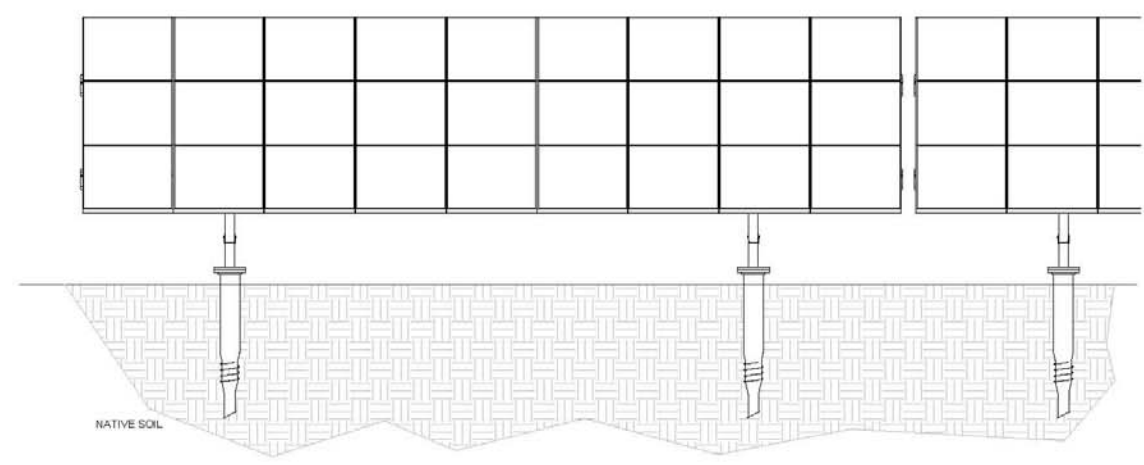
TITLE	DETAILS - SUBSTATION AND ROADWAYS
PROJECT	COLUMBIA SOLAR ENERGY PROJECT APN 073-200-021 900 LOVERIDGE ROAD, PITTSBURG, CA

COLUMBIA SOLAR ENERGY, LLC 5000 HOPKINS ROAD, SUITE #400 PLEASANTON, CA 94588 TEL: 925-381-5200 FAX: 925-381-5220	SHEET NO. CIV-110
-------------------------------------------------------------------------------------------------------------------------------	-----------------------------

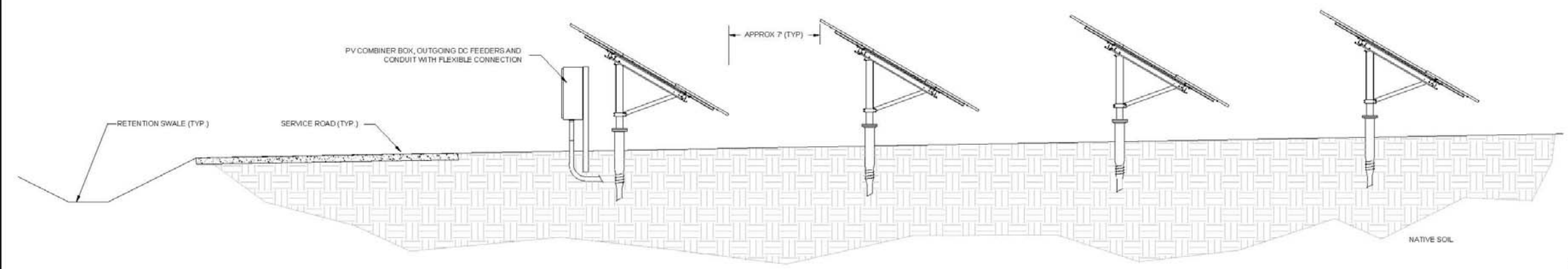
Drawn By: CA0004, APROVY (Checked: CAJLJ), Date Plotted: Friday, November 02, 2012 12:42:58 PM, Plot Size: Electrical 05, Scale: 1, DWG Location: R:\Environmental\B234\F0500\0000\0000\CIV110.DWG



4 TYPICAL PHOTOVOLTAIC MODULES AND RACK STRUCTURE - PROFILE ELEVATION
NOT TO SCALE



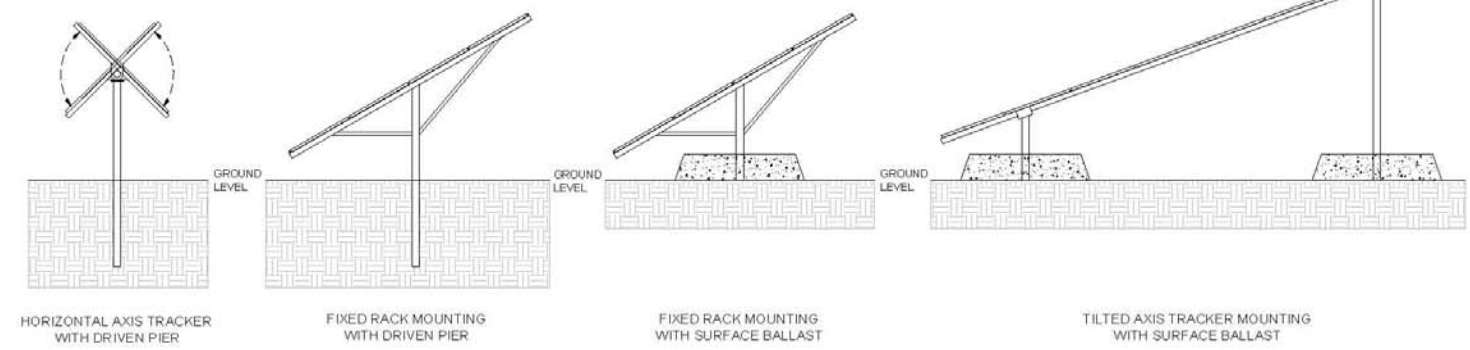
5 TYPICAL PHOTOVOLTAIC MODULES AND RACK STRUCTURE - LONGITUDINAL ELEVATION
NOT TO SCALE



6 TYPICAL ARRAY PROFILE WITH PV RACK STRUCTURES
SCALE: 1" = 4'-0"

GENERAL NOTE

1. PV MODULE DETAILS SHOWN REFLECT PRELIMINARY DESIGN BASED ON FIXED TILT TECHNOLOGY. DESIGN DETAILS ARE CONCEPTUAL AND PANEL SIZE, ORIENTATION, AND RACKING MAY VARY. FINAL DESIGN SUBMITTED FOR GRADING AND BUILDING PERMITS WILL BE BASED ON FINAL TECHNOLOGY SELECTED AND DETAILED ENGINEERING. SEE SITE DESIGN REVIEW APPLICATION NARRATIVE FOR DESCRIPTION OF TECHNOLOGIES.
2. IF FINAL DESIGN INCORPORATES HORIZONTAL AXIS TRACKER OR TILTED AXIS TRACKER TECHNOLOGY, THE TYPICAL MAXIMUM HEIGHT OF PHOTOVOLTAIC MODULES WILL BE APPROXIMATELY EIGHT FEET OR 22 FEET ABOVE THE SURROUNDING GROUND SURFACE, RESPECTIVELY. SEE SITE DESIGN REVIEW APPLICATION NARRATIVE FOR DESCRIPTION OF TECHNOLOGIES.
3. DEPTH OF GROUND SCREWS OR PILING SUPPORTS WILL BE BASED ON RESULTS OF GEOTECHNICAL INVESTIGATIONS TO BE COMPLETED FOR FINAL DESIGN. TYPICAL DEPTH FOR GROUND SCREWS IS EXPECTED TO BE APPROXIMATELY FOUR FEET AND TYPICAL DEPTH FOR DRIVEN PILES IS EXPECTED TO BE APPROXIMATELY 10 FEET.



7 PV MOUNTING ALTERNATIVES
NOT TO SCALE

NOT FOR CONSTRUCTION

SHEET SIZE 22"x34" - SCALE ACCORDINGLY

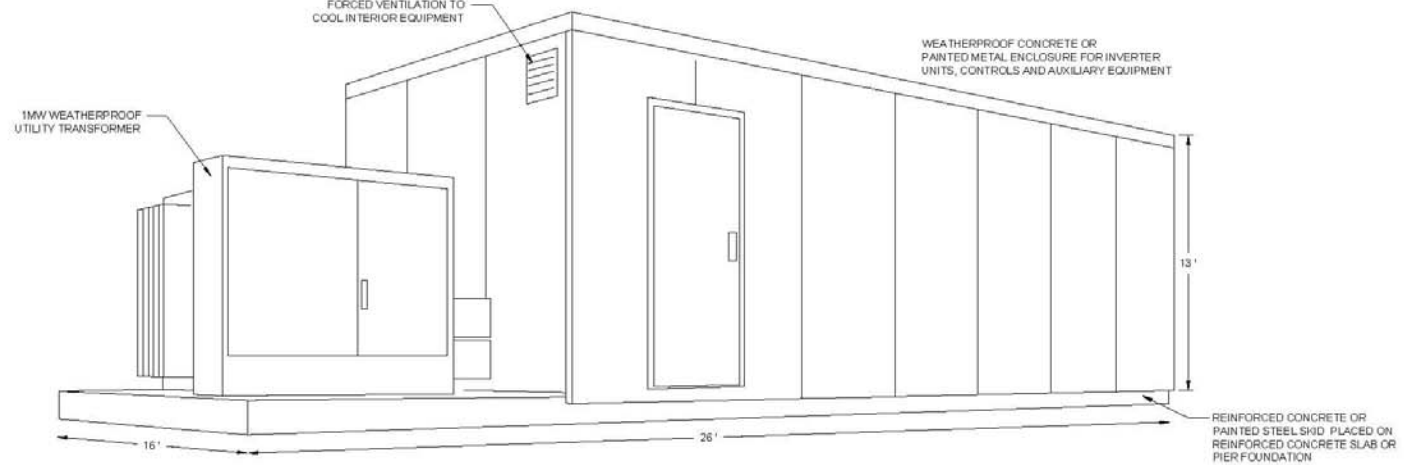
REV	DATE	DESCRIPTION	BY	CHKD	APP
0	11-05-12	DESIGN REVIEW APPLICATION			

TITLE	CONCEPTUAL DETAILS - PV MODULES AND RACKING
PROJECT	COLUMBIA SOLAR ENERGY PROJECT APN 073-200-021 900 LOVERIDGE ROAD, PITTSBURG, CA

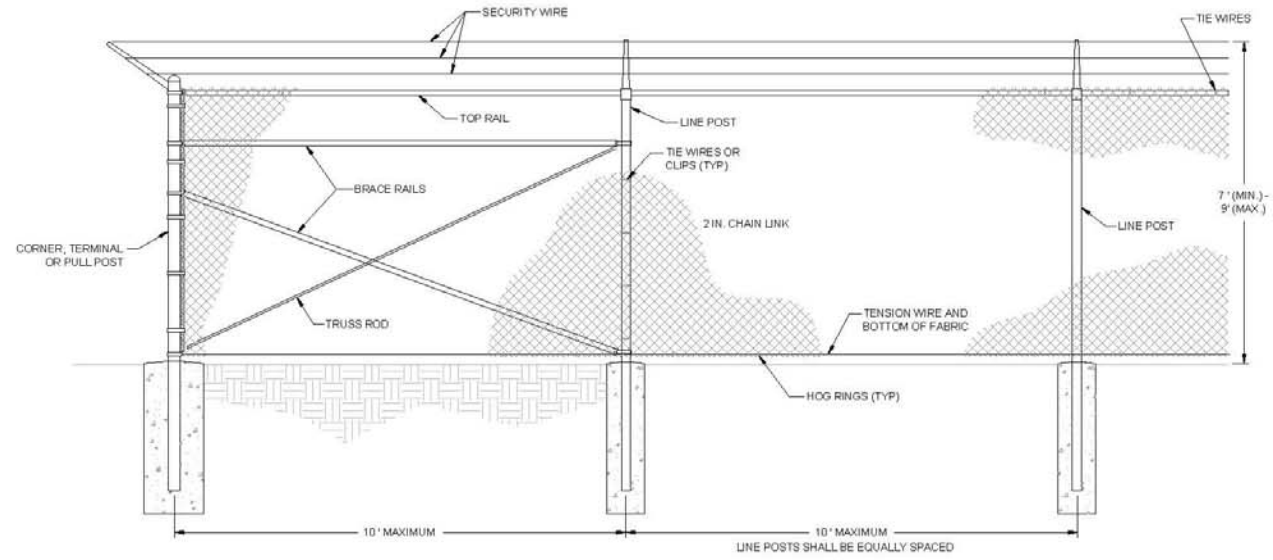
--

COLUMBIA SOLAR ENERGY, LLC 5000 HOPKINS ROAD, SUITE #400 PLEASANTON, CA 94588 TEL: 925-381-5200 FAX: 925-381-5220	SHEET NO. CIV-111
-------------------------------------------------------------------------------------------------------------------------------	-----------------------------

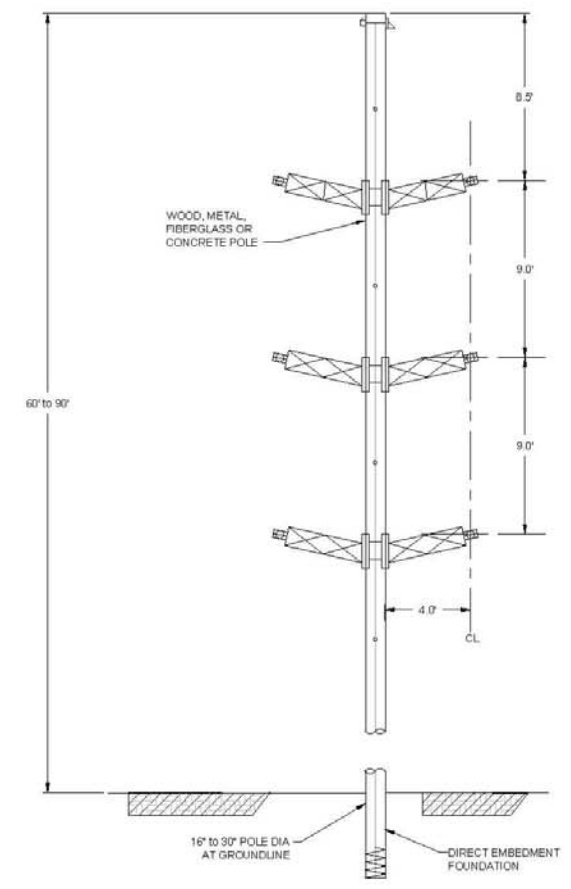
Drawn By: CA0504, Anthony (Garcia) Garcia, Date Plotted: 7/24/12, 12:42:43 PM, Plot Date: 7/24/12, 12:42:43 PM, Plot Size: Electrical 05, Scale: 1, DWG Location: E:\Environmental\B234\F050\0505\0505\0505\0505\0505.dwg



8 EXAMPLE 1MW AC INVERTER EQUIPMENT ENCLOSURE
NOT TO SCALE



9 CHAIN LINK FENCE DETAIL (TYP.)
NOT TO SCALE



10 TRANSMISSION LINE STRUCTURE (TYP.)
NOT TO SCALE

NOT FOR CONSTRUCTION

SHEET SIZE 22"x34" - SCALE ACCORDINGLY

REV	DATE	DESCRIPTION

TITLE DETAILS - FENCING, ENCLOSURES AND ROAD SECTIONS
PROJECT COLUMBIA SOLAR ENERGY PROJECT APN 073-200-021 900 LOVERIDGE ROAD, PITTSBURG, CA

COLUMBIA SOLAR ENERGY, LLC 5000 HOPKINS ROAD, SUITE #400 PLEASANTON, CA 94588 TEL: 925-381-5200 FAX: 925-381-5220	SHEET NO. CIV-112
-------------------------------------------------------------------------------------------------------------------------------	-----------------------------

Drawn By: CA0504, A.P.009, (S:\csm\civ\112) Date Plotted: 7/24/12 12:42 PM Plot Size: Electrical 05 - Scale: 1" = 10'-0" (0.8333333333333333)

3.0 ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Columbia Solar Energy

2. **Lead Agency Name and Address:** City of Pittsburg
65 Civic Avenue, Pittsburg, CA 94565

3. **Contact Person & Phone Number:** Kristin Vahl Pollot, 925-252-4920

4. **Project location:** 900 Loveridge Road, Pittsburg, CA

5. **Project Sponsor Name and Address:** Columbia Solar Energy, LLC
dba Columbia Solar Energy Generation, LLC
5000 Hopyard Road, Suite 480
Pleasanton, CA 94588
Attention: Kevin R. Johnson
925 201 5240
kjohnson@lspower.com

6. **General Plan Designation:** Industrial

7. **Zoning:** Existing: Limited Industrial (IL) District
Proposed: IL District with Limited Overlay

8. **Description of project:** A 20 MW ground mounted solar photovoltaic electric generating plant. See Chapter 2.0 of this Initial Study for details.

9. **Surrounding Land uses and setting:** Industrial – Surrounded predominantly by industrial uses including steel mill, recycling center. City park abuts one corner of the Project site.

10. **Other public agencies whose approval is required:** If the Applicant elects to fill a marsh and drainage ditch occupying a small portion of the site, then authorization from the Regional Water Quality Control Board would be required.

3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:


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

- | | |
|----------------------------------------------------|------------------------------------------------------------------------|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources |
| <input type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Biological Resources |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology and Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning |
| <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Department.)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.
- I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Kristin Pollot, Associate Planner
City of Pittsburgh

January 10, 2013
Date

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources the Lead Department cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the Lead Department has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level. (Mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced.)
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA processes, an effect has been adequately analyzed in an earlier EIR or negative declaration. (State CEQA Guidelines § 15063(c)(3)(D).) In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of, and adequately analyzed in, an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 7) The explanation of each issue should identify: the significance threshold, if any, used to evaluate each question, and; mitigation measures identified, if any, to reduce the impact to less than significance. Sources of thresholds include the General Plan, other planning documents, and City ordinances. Some thresholds are unique to geographical locations.
- 8) Climate Change Impacts: When determining whether a project's impacts are significant, the analysis should consider, when relevant, the effects of future climate change on : 1) worsening hazardous conditions that pose risks to the project's inhabitants and structures (e.g., floods and wildfires), and 2) worsening the project's impacts on the environment (e.g., impacts on special status species and public health).

1. AESTHETICS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project would not affect any hills or ridgelines or scenic vista. The Project would be located within a corridor of existing industrial development including large buildings, electric transmission lines, water towers and other tall structures. The closest residential neighborhoods occur west and southwest of the Project site separated from the Project site by Central Park and the Pittsburg-Antioch Highway. The project site is generally flat terrain. Once constructed, the most prominent visual feature of the Project would be the solar panel arrays that would encompass most of the site. The maximum height of the panels would be approximately 8 to 22 feet above the ground, depending on the technology used as described in Section 2.3.2. The size, scale and layout of solar panel arrays and ancillary facilities would not create a significant view obstruction or be out of scale or character with surrounding existing industrial uses. The panels use anti-reflective coatings to increase their conversion efficiency and, as a result, the PV modules would not create glare. The PV racks and panels are typically dark blue to gray, depending on ambient conditions. The inverter enclosures and other ancillary equipment would be painted a neutral color that ensures the Project is consistent with the surrounding industrial uses. The highest number of potential viewers would be travelers on the Pittsburg-Antioch Highway that passes along the south side of the Project site. Views from this highway would be substantially screened by an existing line of non-native ornamental trees located on the south side of the highway (See Figure 5 in Chapter 2.0 of this Initial Study). Project facilities would also be visible from Central Park, and from passenger trains that utilize the BNSF railway adjacent to the north side of the site.</p>				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: The Project site has been heavily disturbed by past industrial use and does not contain natural or undisturbed terrain or other features with high scenic quality. The Project would not impact any important historically significant building. The Project site does not contain any rock outcrops or other prominent natural visual features. Approximately 0.4 acre of non-native ornamental trees would be removed for the Project. This would be a less than significant impact on scenic resources.</p>				

c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: The height, bulk, pattern, scale and character of the Project features would not conflict with the visual character of existing surrounding predominantly industrial land uses. The height of the most prominent Project features, the solar panel arrays, would be lower than existing structures in the area. Therefore, the Project is not expected to substantially contrast with surrounding lands, thereby limiting the impact on views. Furthermore, the Project site and surrounding lands have been disturbed by past industrial activities and do not have natural terrain or other features with high scenic quality. Considering these factors, the Project would not substantially degrade existing visual character or quality of the site or surrounding areas.</p>				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: The Project features would be relatively low to the ground and therefore would not be a source of substantial shadows offsite. The photovoltaic technology proposed uses non-reflective panels to convert solar energy into electric energy. The panels are specially designed to absorb as much of the sun's energy as possible so as to maximize efficiency. They reflect much less of the sun's energy than normal glass because the panels are not reflective. Therefore, the Project would not be a substantial source of glare. Night lighting would be provided onsite for safety and security. Project lighting is designed to be directed downward and shielded to focus illumination on desired areas only. The minimum illumination levels required for safety and security would be used. Lighting would be provided at gates for safety and security and may be provided within the switchyard. As described in Section 2.3.4 of this Initial Study design measures provide for use of only downward-directed and shielded lighting with the minimum amount of lighting required for safety. The limited night lighting would not conflict with surrounding land use conditions and would not be expected to adversely affect night time views. Considering these factors, Project shadows, light and glare would have a less than significant impact on daytime and night time views in the area.</p>				

2. AGRICULTURE / FOREST

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: The Site is a former industrial waste site and contains no farmland.				
b) Conflict with existing zoning for agricultural use, or with a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: The Project would not conflict with zoning for agricultural use. The Project Site is not zoned for agriculture and is not under a Williamson Act Contract.				
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: The Project would not result in the conversion of any farmland or forest land.				

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Conflict with or obstruct implementation of applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: The Project is located in the Bay Area Air Quality Management District (BAAQMD). The Project would not conflict with or obstruct implementation of Plans prepared by the BAAQMD. The proposed project would not add dwelling units or structures that would generate operational emissions, or add full-time employees that would commute to and from the site on a daily basis. A crew of two to four persons anticipated to be from the existing local labor force would maintain the site approximately 40 days out of the year. Furthermore, construction emissions would be temporary. The emissions from construction were calculated and found to be less than the BAAQMD significance thresholds.</p> <p>Project construction would result in fugitive dust emissions and fuel-burning emissions, primarily during an approximately six month period encompassing the Site Preparation and equipment Assembly/Installation activities. Estimated construction emissions calculations are provided in Attachment A and are below the significance thresholds established by BAAQMD. Particulate emissions estimates in Attachment A are broken down into exhaust particulates and fugitive dust particulates separately because the particulate matter significance thresholds are for exhaust particulates only and do not apply to fugitive dust particulates.</p> <p>The Project design includes controlling dust during construction by water application. At minimum, active construction areas would have to be watered at least twice daily pursuant to requirements of a site-specific Soil Management Plan (SMP) required by a restrictive land use covenant (LUC) that applies to the site as described further in Section 8 of this Initial Study Checklist. A nontoxic dust palliative may also be used. To prevent an increase in the potential to emit dust following grading, the Project design includes stabilizing disturbed areas as soon as practical as described in Section 2.3.5. Crushed rock would be used on perimeter and intermediate access roads and the area surrounding the substation. Areas that are not graveled or occupied by foundations would be stabilized by re-vegetation, application of a non-toxic soil binder, or other means of stabilization.</p> <p>The following requirements as set forth in Title 13 of the California Code of Regulations for diesel-fueled construction equipment would additionally help to ensure that emission levels during Project construction do not conflict with or obstruct implementation of BAAQMD's air quality plans:</p> <ul style="list-style-type: none"> • Individual diesel truck idling in excess of five consecutive minutes would be prohibited consistent with Title 13 of the California Code of Regulations §2485. • Diesel-power construction equipment would use low-sulfur diesel fuel pursuant to requirements of Title 13 of the California Code of Regulations §2281. 				

Project operations would generate minimal emissions to air. The facility would typically be unattended. The primary emissions from operations would be minor occasional fugitive dust and exhaust emissions from internal combustion engines (e.g., vehicles) used for as-needed monitoring and maintenance activities. This work would typically use light vehicles and would occur an estimated 40 days per year. The facility would generate electricity year-round displacing the need for generation from power plants that burn fossil fuel. Therefore, Project operations would be expected to result in a net reduction of emissions to air overall.

b) Violate any applicable federal or state air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------	--------------------------	-------------------------------------	--------------------------

Less than Significant Impact: The Project would not exceed BAAQMD construction-related significance thresholds, and would not generate substantial operational emissions. Further, the operational components of the Project would not add residential or non-residential dwelling units or be growth-inducing. The construction emissions would be temporary, and less than the BAAQMD significance thresholds. The Project would not diminish an existing air quality rule or future compliance requirement. As a result, the Project would not violate any applicable federal or state air quality standards or contribute substantially to an existing or projected air quality violation.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------	--------------------------	-------------------------------------	--------------------------

Less than Significant Impact: BAAQMD is state and/or federal nonattainment for ozone and particulate matter (both PM-2.5 and PM-10). The Project is a solar electric generating facility that would reduce the demand for fossil fuel generated electric power and thereby result in a long-term reduction in emissions of oxides of nitrogen (NOx) and volatile organic compounds (VOCs) that are precursors to ozone. The facility would generate electricity without particulate emissions. The particulate emissions from maintenance (2 to 4 staff 40 days per year) during Project operations would be too negligible to result in a cumulative net increase in PM-10 or PM-2.5 concentrations. Project construction emissions are shown in Attachment A and would not exceed BAAQMD construction-related significance thresholds. These thresholds are designed to establish the level at which the BAAQMD believes emissions would cause significant environmental impacts under CEQA when considered in conjunction with other sources. The Project would not conflict with any air quality plan, regulation or rule and would provide a long-term air quality benefit by displacing electric demand from fossil fuel fired generation. Considering these factors, the Project would not result in a cumulatively considerable net increase of any non-attainment criteria pollutant.

d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: There are no hospitals, schools, convalescent homes or other sensitive receptors located proximal to the site, with the exception of a city park located adjacent to the westernmost corner of the Project site. The Project is a solar PV generating facility that would convert solar energy to electric energy without pollutant emissions. During construction, emissions would be controlled to a level that is less than significant as described in Response 3a above, and construction emissions would be short term. Considering these factors, the Project would not expose sensitive receptors to substantial pollutant concentrations.</p>				
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project would not be a source of odors. The Project is a solar PV generating facility that would convert solar energy to electric energy without odor emissions.</p>				

4. BIOLOGICAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (DFG) or U.S. Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less Than Significant Impact With Mitigation Incorporated: The entire Project site is an industrial parcel composed entirely of disturbed land. Past and current soil management has limited perennial vegetation to a few areas within the site. The site does not contain native habitat or critical habitat for wildlife listed as threatened or endangered by state or federal agencies. Neighboring lands are also developed and provide little if any habitat resource. Representative photographs of the Site and surrounding lands are provided in Chapter 2.0 of this Initial Study.

The Project site is bounded on the south by Kirker Creek. A city-maintained flood control channel installed north of Kirker Creek provides an additional buffer between the Project Site and the flow line of the creek. As noted in Section 2.3.5, Project grading would be designed to retain storm water onsite; no storm water would flow from the Project site to Kirker Creek and there would be no grading impact to the creek.

The site is comprised primarily of ruderal grasslands consisting of sparse nonnative vegetation dominated by a mixture of annual grasses and weeds, including black mustard (*Brassica nigra*), Italian thistle (*Carduus pycnocephalus*), stinkweed (*Dittrichia graveolens*), pepperweed (*Lepidium latifolium*), wild radish (*Raphanus sativus*) softchess (*Bromus hordeaceus*), yellow star thistle (*Centaurea solstitialis*), and rat-tail fescue (*Vulpia myuros*). The project site has previously been used as a landfill and the site has on occasion been bulldozed. Surface soils onsite are composed of fill and foreign debris and no native soils appear to be present. Debris piles, old pipes, and twisted rebar are found throughout the site. The predominant substrate is a loose mixture of rock and non-native, sandy soils. Conditions on the site are highly degraded and disturbed and, therefore, sensitive plants are not anticipated to occur. Small mammal burrows are widely distributed throughout the ruderal areas. Small mammals observed onsite included black-tailed jackrabbit (*Lepus californicus*), cottontail rabbit (*Sylvilagus audubonii*), and California ground squirrel (*Spermophilus beecheyi*). Western fence lizards (*Sceloporus occidentalis*) have been observed in rock and debris piles. Field and meadow birds that have been observed onsite included western meadowlarks (*Sturnella neglecta*), rock doves (*Columba livia*), mourning doves (*Zenaida macroura*), and song sparrow (*Melospiza melodia*). Predacious birds that have been observed onsite include Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chysaetos*), peregrine falcon (*Falco peregrinus*),

and burrowing owl (*Athene cunicularia*). Coyote (*Canis latrans*) sign and trails have been observed as well (TRC 2012a). White-tailed kite (*Elanus leucurus*) is also known to occur in the area and may utilize the site for foraging.

The project site includes a 0.1 acre seasonal freshwater marsh, located at the north-central portion of the site. This marsh does not support perennial water. The marsh has no obvious outlet, and is fed by a drainage ditch which runs through the northeast corner of the project site. It lies within a larger topographical depression that is dominated by invasive upland species. The ground cover surrounding the marsh is several feet deep in wood chips, gravel, and other imported material.

The site includes approximately 0.5 acre of black walnut trees along the site edges. Additionally, larger trees that are offsite within the area may provide suitable nesting sites for Swainson's hawk, golden eagle and peregrine falcon. Two golden eagles (one adult, one immature) were observed at the Project site during an October 30, 2012 site visit. The adult was observed perching on the fence along the southern edge of the Project site; the immature eagle circled the trees south of the site. No courtship or nesting behaviors were observed.

The site occurs within the area of the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan (the "Plan") and the Applicant proposal includes obtaining coverage under and complying with the Plan. An application for coverage under the Plan, along with results of the required planning surveys, was submitted to the City of Pittsburg on November 27, 2012. The Plan provides an incidental take permit for covered species for participating local jurisdictions including the City of Pittsburg. The Plan provides mitigation measures for covered species that reduce impacts on those species from urban development in accordance with the Plan to less than significant levels as documented in the Draft and Final EIR for the Plan (East Contra Costa County Habitat Conservation Plan Association and US Fish and Wildlife Service, 2006). Analysis regarding impacts on biological resources in the Final and Draft EIR were relied upon for this analysis. The Final and Draft EIR are available at <https://www.ci.pittsburg.ca.us>. The Plan implements a conservation strategy that includes preservation of over 30,000 acres of land, restoration of covered species habitat and vegetation communities to compensate for direct and indirect impacts and to contribute to the recovery of listed species and help prevent the listing of non-listed covered species, and management of the preserves to maximize the functions of habitats for covered species. A planning-level biological resource survey has been conducted on the site in accordance with the Plan (TRC 2012a). Sensitive species observed onsite during the Project planning level survey include the burrowing owl, golden eagle and peregrine falcon. In addition, Swainson's hawk has been observed onsite by surveys conducted for a previously permitted soil stockpiling project. Golden Eagle, peregrine falcon and white-tailed kite are fully protected species under State law. The site does not have nesting habitat for these species, but these species use the site for foraging. Other species covered by the Migratory Bird Treaty Act (MBTA) also utilize the site.

Burrowing owl (*Athene cunicularia*) is considered a Species of Special Concern by CDFG and also are protected under the MBTA. Typical burrowing owl habitat is flat or low-lying open and sparsely vegetated areas of California. They are often closely associated with ground squirrels and other burrowing mammals. The burrows of these animals are used for nesting and refuge. Individual owls often forage in open areas where they seek large invertebrates and small mammals. This species was observed onsite and breeding and foraging habitat occurs onsite. This species is covered by the Plan and would be mitigated by species-specific avoidance and minimization measures incorporated in the Plan that would be required for the Project pursuant to mitigation measure BIO-1. As required by the Plan, no more than 30 days prior to Project construction, a qualified biologist would conduct a pre-construction survey for burrowing owls

in conformance with the Plan. The survey would establish the presence or absence of western burrowing owl and habitat features and evaluate use by owls in accordance with CDFG's western burrowing owl survey guidelines (CDFG, 1993). The Project site and surrounding lands under the same ownership within a 500-foot radius would be surveyed. If burrowing owls are identified during the breeding season (February 1 –August 31), then all nest sites would be avoided by Project construction during the remainder of the breeding season or while the nest is occupied by adults or young, or relocation may occur if a qualified biologist monitors the nest and determines that the birds have not yet begun egg-laying or juveniles have fledged. If burrowing owls are identified during the non-breeding season (September 1-January 31), active burrows would be avoided by Project construction if possible or the owls would be passively relocated if avoidance is not possible. If burrowing owls are identified by the pre-construction survey, then no-disturbance buffer zones distances would be established by the City in coordination with CDFG and construction monitoring would be required and would focus on ensuring that the buffer zone distances are adhered to. If passive relocation is required, then it would be conducted by a qualified biologist in accordance with CDFG's western burrowing owl relocation protocol (CDFG, 1995).

Golden eagle (*Aquila chysaetos*) is considered a State Fully Protected (no take) species. They are also fully protected by the federal government under the Bald and Golden Eagle Protection Act. Within California they are locally common in appropriate habitat. Golden eagles are often associated with large open habitats including desert scrub, annual and perennial grasslands, and oak savannas. Nesting habitat includes large oaks, pines, power transmission towers, cliff faces, and other high and easily accessible structures. Suitable habitat must also have populations of ground squirrel, cottontail, and hare, upon which they forage. This species has been observed onsite and foraging habitat occurs onsite. Nesting habitat does not occur onsite but may occur in large trees offsite in the vicinity. This species is covered by the Plan and would be mitigated by species-specific avoidance measures incorporated in the Plan that would be required for the Project pursuant to mitigation measure BIO-1. Prior to Project construction, a qualified biologist would conduct a pre-construction survey in conformance with the Plan to establish whether occupied golden eagle nests occur within 0.5 mile of the Project site. If active nests are found, then Project construction activity buffer zone distances from the nest would be established in a Construction Monitoring Plan required to be approved by the City. The City would coordinate with CDFG to determine the appropriate buffer size. Construction monitoring would be required under the Construction Monitoring Plan and would focus on ensuring that the buffer zone is adhered to.

Peregrine falcon (*Falco peregrinus*) is considered a State Fully Protected species and is also protected under the MBTA. They are generally wide-ranging in California but sparsely distributed. Breeding habitat in California is primarily along coastal areas and east of the Sierra Nevada mountain range. This species prefers open habitat with abundant prey and prefers breeding sites in proximity to water with nearby vertical structures such as cliffs, steep banks, tall buildings and bridges with niches or ledges to serve as nesting sites. This species primarily feeds on birds, however, they also hunt mammals. This species has been observed onsite and foraging habitat occurs onsite. Nesting habitat does not occur onsite but may occur in large trees or other tall structures offsite in the vicinity. This species is covered by the MBTA and would be mitigated by compliance with the MBTA and through avoidance of impacts to Fully Protected species as required by the Plan. These requirements of the Plan, along with mitigation measure BIO-2 would ensure that the Project does not have a substantial adverse impact on this species.

Swainson's hawk (*Buteo swainsoni*) is considered a State Threatened species and is also protected under the MBTA. Swainson's hawks are generally found through the central portion

of southern California and throughout the Central Valley of California. Nesting habitat includes sycamores, cottonwoods and other tall trees. In California, they are often observed feeding during or after the harvest of crop species that host large small mammal populations. This species has been observed onsite and foraging habitat occurs onsite. Nesting habitat does not occur onsite but may occur in large trees offsite in the vicinity. This species is covered by the Plan and would be mitigated by species-specific avoidance measures incorporated in the Plan that would be required for the Project pursuant to mitigation measure BIO-1. Prior to ground disturbing activities during the nesting season (March 15-September 15), a qualified biologist would conduct a pre-construction survey no more than one month prior to construction to establish whether occupied Swainson's hawk nests occur within 1,000 feet of the Project site. If occupied nests are found, then Project construction activity buffer zone distances from the nest would be established in a Construction Monitoring Plan required to be approved by the City. The City would coordinate with CDFG to determine the appropriate buffer size. Construction monitoring would be required under the Construction Monitoring Plan and would focus on ensuring that the buffer zone is adhered to. During the nesting season, construction activities would be avoided within the buffer zone to prevent nest abandonment. If young fledge prior to September 15, construction activities can proceed normally. If an active nest site is present but shielded from view and noise by other development or other features, the City may waive this avoidance measure if approved by CDFG.

White-tailed kite (*Elanus leucurus*) is considered a State Fully Protected species and is also protected under the MBTA. This species generally is a year-round resident of California coastal and valley lowlands with open habitat and is rarely found away from agricultural areas. This species preys primarily on voles and other small mammals and occasionally on birds, insects, reptiles and amphibians. Preferred foraging habitat consists of grasslands, meadows, farmland and emergent wetlands. This species nests at the top of dense oak, willow and other tree stands located near open foraging habitat. This species is known to occur in the site vicinity and may utilize the site for foraging habitat. Nesting habitat does not occur onsite but may occur in large trees or other tall structures offsite in the vicinity. This species is covered by the MBTA and would be mitigated by compliance with the MBTA and through avoidance of impacts to Fully Protected species as required by the Plan. These requirements of the Plan, along with mitigation measure BIO-2 would ensure that the Project does not have a substantial adverse impact on this species.

The Plan includes prescribed monitoring, avoidance and mitigation measures that would be implemented to ensure that the Project does not have a substantial adverse effect on covered species identified as candidate, sensitive or special status or species covered by the MBTA. Prescribed monitoring and avoidance measures included in the Plan that are applicable to the Project include:

- Avoiding impacts to no-take (fully protected) species. Conservation Measure 1.11 in the Plan requires that covered activities avoid direct impacts on fully protected wildlife. Implementation of mitigation measure BIO-1 would make this Conservation Measure a requirement of the Project.
- Complying with the MBTA. Conservation Measure 1.11 in the Plan requires that covered activities comply with the MBTA and avoid killing or possessing covered migratory birds, their young, nests, feathers, or eggs. Implementation of mitigation measure BIO-1 would make that this Conservation Measure a requirement of the Project, and mitigation measure BIO-2 would further help to ensure that impacts to species protected under the MBTA are less than significant.

- Conducting monitoring during construction as required by Section 6.4.3 of the Plan to ensure that disturbance limits, best management practices and Plan restrictions are being implemented properly. Implementation of mitigation measure BIO-1 would make this a requirement of the Project.
- Pre-construction surveys for the burrowing owl onsite and within 500 feet and implementing avoidance measures in accordance with the Plan if occupied burrows are identified. Preconstruction surveys and avoidance requirements for burrowing owl are prescribed by Section 6.4.3 of the Plan. Implementation of mitigation measure BIO-1 would require the Project to follow these requirements.
- The Project site does not contain nesting habitat for the golden eagle or Swainson's hawk, but large trees near the site would be surveyed for nests prior to construction. If occupied nests are identified, avoidance and minimization measures are prescribed by Section 6.4.3 of the Plan. Implementation of mitigation measure BIO-1 would require the Project to follow these requirements.
- If pre-construction surveys indicate the presence of burrowing owl, Swainson's hawk or golden eagle, then the Applicant would be required to submit a construction monitoring plan to the Plan's implementing entity for approval as prescribed by Section 6.4.3 of the Plan. Implementation of mitigation measure BIO-1 would require the Project to follow this requirement.
- Mitigation fees would be required as prescribed by Section 9.3.1 of the Plan. BIO-1 would require the Project to follow these requirements, which would include mitigation fees for:
 - Approximately 106 acres of ruderal grassland.
 - Approximately 0.4 acre of non-native woodland.
 - Approximately 0.1 acre of seasonal freshwater marsh if the marsh area is disturbed. If the Applicant elects not to disturb this marsh area, then the mitigation would not be required. This Initial Study evaluates the impacts for both scenarios and the impacts under either scenario would be less than significant considering mitigation if the marsh is disturbed.

The Plan is designed to provide for comprehensive species, wetlands and ecosystem conservation within the region and to contribute to the recovery of endangered species in Northern California. Implementing the proposed Project with monitoring, avoidance and mitigation measures following requirements of the Plan would not have a substantial adverse effect on any sensitive species. The site is not expected to provide nesting habitat or critical habitat for any additional candidate, sensitive or special status species not addressed in the Plan. Mitigation Measures BIO-1 would ensure that requirements of the Plan are incorporated in the Project so that Project impacts to biological resources covered by the Plan would be less than significant. Mitigation Measures BIO-2 would ensure that Project impacts to fully protected wildlife species or MBTA-covered species not already addressed by the Plan would be less than significant.

Mitigation Measure BIO-1:

The Applicant shall obtain permit coverage from the City of Pittsburg under the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan prior to the issuance of a grading permit for the Project site. Upon receipt of permit coverage, the

Project shall be constructed in compliance with all requirements of the approved permit.

Mitigation Measure BIO-2:

To avoid direct impacts to the peregrine falcon and other fully protected wildlife species or MBTA-protected species not already addressed under the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan, within 14 days of construction activities, a USFWS/CDFG approved biologist shall conduct preconstruction nesting bird surveys for protected species during the nesting season (March 1-September 15) in suitable habitat within 500 feet of the construction site, where access is permitted. If an active nest is located, then the need and/or extent of no disturbance buffer(s) around the nest location shall be determined through consultation with CDFG to avoid disturbance or destruction of the nest site until after the breeding season or after a qualified biologist determines that the young have fledged. The extent of no disturbance buffers shall be based on consideration of the anticipated levels of noise or disturbance, ambient levels of noise and other disturbances, and topographic or other barriers. If determined in consultation with CDFG that construction activities would not affect an active nest, activities may proceed without restriction.

<p>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or DFG or USFWS?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------	-------------------------------------	--------------------------	--------------------------

Less Than Significant Impact With Mitigation Incorporated: The Project site is almost exclusively ruderal grassland and disturbed urban area. The Project site has been 100 percent disturbed by past industrial activities and does not include any natural communities. Approximately 0.1 acre of the site consists of seasonal freshwater marsh that may qualify as a wetland under the Plan. As described in Response 4.a, above, if the Project fills this isolated feature, then the Applicant would mitigate the loss of wetland pursuant to requirements of the Plan. With the inclusion of mitigation measure BIO-1, the Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community.

<p>c) Have a substantial adverse effect on federally protected wetlands (including marshes, vernal pools, and coastal wetlands) or waters of the United States, as defined by § 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------	--------------------------	--------------------------	-------------------------------------

No Impact: The Project is not anticipated to affect any federal protected wetland or waters of the US. A Project-specific jurisdictional analysis concluded that the onsite water features are isolated and not subject to jurisdiction under the Clean Water Act Section 404 (TRC 2012b). This jurisdictional analysis utilized the Corps' 1987 three-parameter (vegetation, hydrology, and soils) methodology to delineate jurisdictional waters of the U.S. The Arid West Supplement was also used in conjunction with the 1987 Corps Manual. Where differences in the two documents occur, the Arid West Supplement took precedence over the Corps Manual. This methodology requires the collection of data on soils, vegetation, and hydrology at several locations to establish the jurisdictional boundary of wetlands. Prior to beginning the field delineation, aerial

photographs of the project area and U.S. Geological Survey (USGS) 7.5-minute series quadrangle maps were evaluated to determine the location of potential jurisdictional waters of the U.S., including wetlands and historical blue-line features. The Natural Resources Conservation Service (NRCS) soil mapping data for the Project Site were also reviewed.

The fieldwork for the jurisdictional analysis was conducted on October 30, 2012. The entire Project Site was inspected on foot and representative data points were collected as appropriate to confirm the lack of wetlands or determine the extent of wetland boundaries. Boundaries for wetlands and other water features on the Project site were surveyed and mapped with a hand-held Global Positioning System (GPS) unit. The water features mapped on the Project site consist of a seasonal freshwater marsh and a man-made drainage ditch. The seasonal freshwater marsh contained no surface water or saturated soil conditions during the field survey, but supported a dense patch of hardstem bulrush (*Schoenoplectus acutus*). The wetland amounts to 0.10 acre and is hydrologically fed by the man-made drainage ditch. The earthen drainage ditch contained no water during the field survey. The drainage ditch conveys storm water runoff associated with the neighboring developed parcel and other developed land on UPI property. The ditch was essentially devoid of vegetation during the field survey and appears to be regularly maintained. Storm water associated with offsite areas enters the ditch through a culvert and flows west until it empties into the seasonal freshwater marsh delineated near the site's north-central boundary. The drainage ditch comprises 0.51 acres of the Project Site. Since the site retains all storm water (including the storm water that flows onto the site from neighboring developed land) and has no surface water connection to offsite water features, the onsite features do not appear to have a significant nexus with any traditional navigable water. Consequently, the onsite wetland and drainage ditch do not appear to be federally protected wetlands or appear to be Clean Water Act Section 404 jurisdictional. The Applicant is awaiting verification of these findings by the Corps.

<p>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------	--------------------------	-------------------------------------	--------------------------

Less Than Significant Impact With Mitigation Incorporated: There are no perennial surface waters in the site vicinity and, therefore, no fish habitat would be affected.

The Project site and adjacent lands have been 100 percent disturbed by past industrial activities. The terrain is nearly flat with no natural geographic barriers or corridors. There are no identified wildlife migratory corridors on the Project site. Kirker Creek, south site of the site, is a potential wildlife corridor and would not be impacted. As described in Response 4a, above, the Applicant would be required to conduct pre-construction surveys that would include surveys for potential nest sites for burrowing owl, Swainson's hawk, and golden eagle. If any of these species are determined present by pre-construction surveys, then avoidance and monitoring would be required during construction in accordance with the Plan. Considering these factors, the Project would not interfere substantially with the movement of any wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

<p>e) Conflict with any local policies or ordinances, protecting biological resources, such as tree preservation</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-----------------------------------------------------------------------------------------------------------------------------	--------------------------	--------------------------	--------------------------	-------------------------------------

policy or ordinance?				
<p>No Impact: The City is a joint powers authority member of the Plan. As described in Response 4a, above, the Project would be implemented in accordance with the Plan. Therefore, there would be no conflict. There is no other local policy or ordinance protecting biological resources that is applicable to the Project.</p>				
<p>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The City is a joint powers authority member of the Plan. As described in Response 4a, above, the Project would be implemented in accordance with the Plan. Therefore, there would be no conflict. There is no other Habitat Conservation Plan, Natural Community Conservation Plan or approved local, regional or state habitat conservation plan applicable to the Project.</p>				

5. CULTURAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: The Project site has no building or structures, and a historic aerial map review indicated that there have been no previous structures within the Project footprint.				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: A cultural resource records search was conducted through the Northwest Information Center. The record search found no previously recorded cultural resources within the Project boundaries. There are no known prehistoric archaeological sites within a one mile radius. A search of the Native American Heritage Commission (NAHC) Sacred Lands File failed to indicate the presence of Native American cultural resources in the immediate Project area (NAHC, 2012). The entire Project site has been intensively disturbed by landfilling activities from 1939 to 1992 and by solid waste management unit remediation activities approved by the DTSC with a Corrective Action Measures Completion Report submitted in 2005. The entire Project site has been utilized to dispose of industrial waste materials including slag, scale, dried sludge, construction debris, and other wastes (URS, 2009a). Most recently the Project site has been utilized as a stockpile for clean fill soil. Due to its history of intensive surface and subsurface disturbance native soil horizons that could contain significant archaeological resources are not anticipated to be encountered.				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: The entire Project site has been intensively disturbed by landfilling activities from 1939 to 1992 and by solid waste management unit remediation activities approved by the DTSC with a Corrective Action Measures Completion Report submitted in 2005. The entire Project site has been utilized to dispose of industrial waste materials including slag, scale, dried sludge, construction debris, and other wastes (URS, 2009a). Native soil horizons that could contain significant paleontological resources are not anticipated to be encountered during Project construction as there would be minimal grading.				

d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: A cultural resource records search was conducted through the California Historical Resources Information System (CHRIS) Northwest Information Center and did not indicate any known burials within the Project area, or within one mile of the Project area (CHRIS, 2012). A search of the Native American Heritage Commission (NAHC) Sacred Lands File failed to indicate the presence of Native American cultural resources in the immediate Project area (NAHC, 2012).</p>				

6. GEOLOGY AND SOILS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault as delineated on the most recent Alquits-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mine and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: There is no active or potentially active fault zone, Seismic Hazard Zone, or Alquist-Priolo Earthquake Fault Zone on the Site or surrounding areas, so there is no evidence of a potential earthquake fault rupture hazard. The closest active fault is the Clayton segment of the Clayton-Marsh Creek-Greenville Fault, located more than 6 miles to the southwest (Jennings and Bryant, 2010).</p>				
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: The Coast Ranges mountains that occur west of the Project site are dissected by a number of regional fault zones associated with the overall San Andreas fault system demarking the intersection of the North American and Pacific tectonic plates. As described in Response (a)(i) above, the closest active fault is the Clayton Fault, located more than 6 miles southwest. Other major faults in the region include the Green Valley/Concord Fault (10 miles west), Calaveras Fault (15 miles west), Rogers Creek Fault Zone (27 miles west), Hayward Fault Zone (28 miles west), and the San Andreas Fault Zone (41 miles west). Strong ground motions could occur in the vicinity of the Project from an earthquake on any of these regional faults. Strong seismic ground shaking would be a potentially substantial seismic hazard if structures are not appropriately designed. The potential for seismic ground motions to damage structures is typically mitigated through proper design and construction to withstand predicted ground motions. The California Building Code seismic standards are designed to mitigate the potential for people or structures to be exposed to substantial risks from seismically-induced ground motions. Conformance with this code would be assured through the Building Permit process of the City of Pittsburg. Adherence to City and California building code requirements would limit the risk of damage or injury from seismic ground shaking to level that is less than significant.</p>				

iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: Liquefaction can occur when there is a loss of shear strength in saturated granular soils cause by seismically-induced pore water pressures. The loss of shear strength in soils can reduce the ability of the soil to support overlying loads, such as equipment foundations. If liquefaction occurs, the surface structures may settle into the ground or tilt. The liquefaction potential of a site is dependent on characteristics of ground shaking, soil type, soil density, and depth-to- groundwater. The Project site is situated in the lowland zone of Pittsburg where shallow geology consists of young unconsolidated sediments. The General Plan Health and Safety Element identifies the Project site area as having a high potential for liquefaction. U.S. Geological Survey has identified the area as having a moderate potential for liquefaction (Knudsen, et al., 2000).</p> <p>The Project does not include occupied structures that could pose a significant risk to people in the event of a large earthquake. Key Project facilities, including the substation and transmission line, would be designed to withstand the potential for liquefaction based on geotechnical studies to be completed for final design. The majority of the site would consist of ground-mounted solar panels that are not as susceptible to damage from liquefaction as buildings and other rigid structures. The Project does not include any occupied structures. Considering these factors, the liquefaction hazard is less than significant.</p>				
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project site occurs in an area that is nearly flat-lying. There are no substantial slopes on or adjacent to the site that could result in a landslide hazard.</p>				
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project site has been 100 percent disturbed by decades of industrial activity, remediation of impacted soils, soil stockpiling and other activities. Surface soils on the site are composed of fill and foreign debris and no native soil horizons are evident. Furthermore, storm water drainage is contained within the site so there is no runoff away from the site to transport soils offsite. Therefore, the Project would have no impact on soil erosion or loss of topsoil.</p>				

<p>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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: There are no substantial slopes on or adjacent to the Project site. Therefore, the Project does not have any potential to result in landslides. Lateral spreading is a phenomenon that can occur from seismic shaking or other lateral loading when the ground surface is not laterally supported on one or more sides, for example, on ridge tops or near edges of terraces or cliff faces. It can also occur near the edges of areas that liquefy during seismic shaking because the liquefied soil does not provide lateral support. The Project vicinity is mapped to have a high potential for liquefaction so liquefaction and potentially related lateral spreading is possible. Soil collapse occurs when loosely compacted soils are disturbed by seismic shaking, rewetting, or other activities. Some soils at the site may be loosely compacted so soil collapse is a potential hazard. The Project does not include any structures that could pose a significant risk to people in the event of a large earthquake and liquefaction. Key Project facilities, such as the substation and transmission line, would be designed to withstand the potential for liquefaction and soil collapse. The majority of the site would consist of ground-mounted solar panels that are not as susceptible to damage from soil collapse, liquefaction or lateral spreading compared to buildings or other large structures, making the project a suitable use for this site with regard to these geologic hazards. Subsidence can occur when pore pressures are reduced in unconsolidated geologic materials below a valley floor due to the withdrawal of fluids. The Project would not increase groundwater extraction or other withdrawal of fluids from unconsolidated geologic deposits. Therefore, the Project does not have potential to create subsidence.</p>				
<p>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: Expansive soils are clayey soils that have a high plasticity index. Typical shallow reinforced concrete spread footing foundations, such as those for buildings and other foundations covering a considerable area of ground, can be affected by expansive soils if such soils are present close to the ground surface. The Proposed Project does not include any spread footing foundations that could be adversely affected by expansive soils. Footings for the substation, inverter pads and the gen-tie poles would be designed to incorporate recommendations of geotechnical studies that would be required for final design.</p>				
<p>e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: Self-contained portable sanitary facilities would be used during construction and operation and would be pumped periodically by a licensed contractor. No septic tanks or other waste water disposal systems are planned.</p>				

7. GREENHOUSE GAS EMISSIONS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Generate greenhouse gas (GhGs) emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: The Project is a solar PV generating facility that would convert solar energy into electric energy without GhG emissions, with the primary exception being CO2 that would be generated from vehicle and equipment emissions for construction and maintenance activities. Once constructed, the electric energy produced by the Project would reduce the dependency on fossil fuel-produced electric energy thereby providing a long-term GhG benefit. Considering that the Project would operate as an unmanned facility and would require relatively minimal maintenance vehicle trips (40 days per year), and considering that limiting climate change is the focus of California's goals for implementing solar PV and other renewable energy technologies, Project GhG emissions would be less than significant both individually and cumulatively.</p>				
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project is a solar PV generating facility that would convert solar energy into electric energy without GhG emissions. Once constructed, the electric energy produced by the Project would reduce the dependency on fossil fuel-produced electric energy thereby providing a long-term GhG benefit. The Project would not conflict with any plan, policy or regulation adopted for the purposes of reducing the emissions of GhGs.</p>				

8. HAZARDS AND HAZARDOUS MATERIALS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less than Significant Impact: Project construction would require the short-term transport, use and disposal of hazardous materials such as fuels, lubricants, adhesives, solvents and paints. Storage and use of hazardous materials onsite during construction could create a significant hazard to construction workers, the public or the environment if such materials are not properly contained. The Project would be required to implement a comprehensive hazard communication program in accordance with 29 CFR 1910 to ensure that construction workers are knowledgeable in the identification and proper handling of hazardous materials to prevent unsafe exposure and to avoid spills. Furthermore, the construction site would not be open to the public. With these measures, the routine use of hazardous materials on the construction site would not create a significant hazard to the public or the environment.

Deliveries of bulk fuels, lubricants and other hazardous materials to the site would be subject to Department of Transportation (DOT) regulations at 49 CFR 172 and 173 for hazardous materials transport. These regulations include requirements for hazardous material transport licensing, packaging and containment standards, labeling and other protection measures to prevent hazardous materials incidents during transport and to facilitate response in the event of a hazardous material accident. Hazardous wastes produced by Project construction would be minimal and would be transported away from the site in accordance with these same DOT regulations as well as requirements of California Code of Regulations Title 22 Division 4.5 for worker training, shipping and disposal of hazardous waste. With these existing regulations in place, and considering the short term of construction activities, the transport, production, and disposal of hazardous materials associated with Project construction would not create a significant hazard to the public or the environment.

The primary hazardous material that would be present at the site for operations would be oil in oil-filled electrical equipment (e.g., transformers). This use of oil for dielectric in oil-filled electric equipment is not a consumptive use so there is no need for routine transport or handling of oil. The oil filled equipment is operated normally closed and sealed. On infrequent occasions, oil-filled equipment may require filtering or replacement of oil if it becomes contaminated. Used oil would be recycled. Transport and handling of used oil and any other hazardous waste generated would be subject to regulation under California Code of Regulations Title 22 (22 CCR) Division 4.5. Considering these factors this use would not create a significant hazard to the public.

If Cadmium-Telluride thin-film technology is used for Project solar panels, then the modules may be hazardous waste when disposed. Both cadmium individually and cadmium-telluride have toxic properties. Under normal conditions, these compounds are sealed inside the modules and not exposed to the environment so the panels are not hazardous. In the event of a thin film module malfunction, the affected panels would be disposed of or recycled under 22 CCR Division 4.5 regulations for hazardous waste and recyclable materials. These regulations are designed to ensure that waste handling, transport, storage and disposal or recycling does not pose a significant hazard to the public or the environment.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: Project operation would use only a few hazardous materials and only in relatively small quantities. It does not require the storage of bulk fuels, lubricants, or chemical reagents. Hazardous waste is not routinely generated or managed onsite. The primary hazardous material that would be present at the site would be oil in oil-filled electrical equipment (e.g., transformers). The site is located in a primarily industrial area and setbacks for Project facilities consistent with zoning would be adequate to ensure public protection. Because of these factors and the passive nature of solar energy conversion by PV technology, the risk of a project upset or accident scenario during operations to create a hazard to the public or the environment is less than significant.</p> <p>Project construction also would not create a significant hazard to the public or the environment from upset or accident conditions. Project construction would require the short-term use of hazardous materials such as fuels, lubricants, adhesives, solvents and paints. Workers would be trained to properly identify hazardous materials and to handle them in accordance with applicable regulations to minimize the potential for a release. The general public would be excluded from the construction. Considering these factors, Project construction would not create a significant hazard to the public or the environment due to upset or accident conditions.</p>				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: There is no existing or proposed school within one-quarter mile of the Project site. Furthermore, the Project is a solar PV generating facility that would convert solar energy into electric energy without hazardous emissions. The primary hazardous air emissions generated by Project operations would be emissions from vehicle and equipment exhaust for construction and maintenance activities. Construction emissions would be short-term and would be below the BAAQMD's significance thresholds (see Response 3a, above).</p>				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact With Mitigation Incorporated: The Site is identified on the California Department of Toxic Substances Control (DTSC) list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The site is also listed on multiple databases compiled by the State Water Resources Control Board (reference Geotracker Database found at http://geotracker.waterboards.ca.gov/). The proposed Project site is an area of the United States Steel-POSCO Industries (UPI) property known as Site L-A. Steel manufacturing and finishing have been conducted at the UPI plant site since 1909. The Site L-A area was used from 1939 to 1992 as an onsite landfill for disposal of byproducts from steel manufacturing and waste</p>				

materials from steel mill maintenance, demolition and administration. Slag, sludge, scale, and petroleum wastes from steel manufacturing were disposed of, as well as various non-hazardous materials and debris. Under a corrective action for the entire UPI property, supervised by the Department of Toxic Substances Control (DTSC), Site L-A was characterized and a number of individual disposal locations within Site L-A were identified and remediated to DTSC-approved site-specific clean-up levels. The completed corrective action measures included excavation and offsite disposal of known materials with hazardous constituent concentrations exceeding cleanup levels (URS, 2009a, DTSC, 2010). The cleanup levels are designed to be protective for industrial/commercial worker exposures. Construction worker exposure would be further controlled to safe levels by a project-specific Soil Management Plan (SMP) and Health and Safety Plan (HSP) required by a restrictive land use covenant (LUC).

In 2005, the DTSC approved the Corrective Action Measures Completion Report submitted by UPI, affirming that the landfill area soils had been sufficiently remediated. A final condition of the landfill area remediation was the recording of an LUC between UPI and DTSC. The LUC limits future use of the site to commercial or industrial uses and specifically prohibits certain other uses such as agriculture, schools, or hospitals. The LUC also requires that any earth moving activity at the site be performed in accordance with the SMP and HSP (USS-Posco and DTSC, 2010). The SMP requires monitoring for potentially unknown deposits of hazardous materials during any site grading activities, and their testing and removal if encountered. Responsibility for removal and disposal of contaminated soil or material, if it is encountered, is expected to remain the responsibility of UPI. Furthermore, the SMP requires dust control during grading, restriction of public access to the site, and construction worker health and safety and monitoring measures to protect workers and the public. The HSP implements a comprehensive health and safety program for site workers (URS, 2009b).

The site has remained vacant and there are no developed structures or similar improvements on the Project Site. In recent years, UPI has been importing and stockpiling clean fill soil to Site L-A for use in redevelopment of the site. The proposed Project grading plan is designed to minimize the amount of grading to be performed and earth moving would be performed in conformance with the SMP and HSP ensuring that the public, workers and the environment would be protected in the event that residual hazardous constituents are encountered. Clean soil being imported to the site would be used on the surface of final graded areas. Considering these factors, the occurrence of the site on the list of hazardous materials sites compiled pursuant to Government Code § 65962.5 would not create a significant hazard to the public or the environment provided that mitigation measures HAZ-1 is implemented.

Mitigation Measure HAZ-1:

The Applicant shall comply with all relevant requirements of the *Covenant to Restrict Use of Property, Environmental Restriction (Re; A limited portion of County of Contra Costa APN 073-200-021 UPI Pittsburg Facility Site L-A Property, DTSC site code number 520024)*, DOC-2010-0132574-00 recorded by the Contra Costa County Clerk-Recorder's office on July 1, 2010.

<p>e) For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The site is not located in an airport land use plan nor is it within two miles of a public airport or public use airport.</p>				
<p>f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The site is not located in the vicinity of a private airstrip.</p>				
<p>g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The proposed Project would not affect any aspect of emergency response planning. The proposed Project would be constructed on an existing undeveloped parcel and would not affect access on any existing public or private through-way. The Project would not present a material hazard that could affect emergency response planning and site access would adhere to CCCFPD requirements. Considering these factors, the Project would not impact implementation or physically interfere with emergency plans.</p>				
<p>h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project is not located in an identified high fire hazard zone. It is surrounded by developed lands in the City and is isolated from the urban-rural interface. There are no wildlands on or adjacent to the Project site. Pursuant to California Fire Code Section 304.1.2, the Project owner would be required to maintain the site free of vegetation capable of being ignited or endangering property.</p>				

9. HYDROLOGY AND WATER QUALITY

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: Surface drainage on the Project site is generally northward to the north end of the site where drainage is closed and storm water is retained onsite. As described in Section 2.3.5, Project grading would be designed to continue to retain storm water flows onsite consistent with existing conditions so there would be no surface runoff from the site. Subsurface features of the Project, such as conduits and PV rack foundations would not extend to depths where groundwater is found. Project operations would not require store hazardous materials, with the exception of oil-filled equipment in the Project Substation, which would be designed to be compliant with applicable spill control regulations. Construction and operations workers would be trained to properly identify hazardous materials and to handle them in accordance with applicable regulations to minimize the potential for a release.</p> <p>A construction stormwater discharge NPDES permit would not be required for onsite construction work because the site has closed drainage and does not discharge. A Linear Underground/Overhead Project Construction NPDES permit would not be required for the gen-tie construction offsite because gen-tie construction work is expected to disturb less than one acre. As described in Section 2.3.5, Project grading may place fill in a low area of which 0.1 acre is classified as seasonal freshwater marsh and an adjoining man-made drainage ditch. These features are isolated and, therefore, not jurisdictional under the federal Clean Water Act, but are jurisdictional under the State Porter-Cologne Water Quality Act. Accordingly, to fill these features by grading would require that first a Report of Waste Discharge be submitted to the Regional Water Quality Control Board pursuant to California Water Code 13260. The RWQCB may issue waste discharge requirements for the discharge of fill if needed to protect water quality. Such requirements would focus ensuring that the fill would not affect the beneficial uses of waters of the State. The Project is anticipated to comply with all relevant water quality standards and any waste discharge requirements that may be issued. If the Applicant elects not to disturb these features as described in Section 2.3.5, then no Report of Waste Discharge would be required for the Project. The Project would not be expected to violate water quality standards whether or not the fill occurs and RWQCB issues waste discharge requirements, so the impact would be less than significant.</p>				
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact: The Project would not deplete groundwater supplies or interfere with groundwater recharge. The Project would use minimal water during construction for dust control and compaction of road and electrical equipment subgrades. This use would be short term. During operations, the Project would not typically use any water except for deionized water purchased and trucked to the site for panel washing. The Project would have a fire fighting water supply conforming with CCCFPD requirements, typically with no consumptive use except occasional flushing of lines to ensure proper reliability. Water for fire suppression would be supplied to the project by the existing fire main located at the southeastern corner of the property, near the GWF facility.

The Project would not interfere with groundwater recharge. The site is suitable for Project construction with minimal grading and the grading plan is designed to prevent runoff from the site. Existing grading directs surface flow generally northward toward the northern end of the site where it ponds and infiltrates and evaporates. The Project grading plan is designed to maintain a similar drainage condition. The impervious area that would be added by the proposed Project constitutes less than one percent of the site area. The Project grading plan includes retention/infiltration trenches or basins sized to retain and infiltrate the runoff from impervious areas. With these measures, there would be no depletion of groundwater supply or recharge and the Project would not be expected to have any measurable effect on existing groundwater wells in the region.

<p>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------	--------------------------	--------------------------	-------------------------------------

No Impact: Under existing conditions, the site retains stormwater so that there is no runoff. Existing grading directs surface flow generally northward toward the northern end of the site where it ponds and infiltrates and evaporates. The Project grading plan is designed to maintain a similar drainage condition. The proposed Project requires minimal grading and the grading plan is designed to maintain drainage onsite and to result in no hydromodification at the Project boundaries. With no hydromodification at the Project boundaries, there would be no impact. The final grading and drainage plan would be subject to approval by the City’s Building Division.

<p>d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------	--------------------------	--------------------------	-------------------------------------

No Impact: Under existing conditions, there is no stormwater runoff from the Site. The proposed Project requires minimal grading and the grading plan is designed to maintain drainage onsite and to result in no change in the runoff conditions at the Project boundaries. The Project grading plan includes retention/infiltration trenches or basins sized to retain and infiltrate any storm water runoff from impervious areas. Less than one percent of the site would be made impervious due to Project improvement. The final grading and drainage plan would be subject to approval by the City’s Building Division. The grading plan and site facilities would be designed to accommodate precipitation onsite without flooding and the Project would not affect flooding offsite since there would be no hydromodification at the site boundaries.

<p>e) 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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: Project grading and drainage is designed to result in no hydromodification at the project boundaries. Therefore, existing and planned stormwater drainage systems would not be affected.</p>				
<p>f) Otherwise substantially degrade water quality?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Less than Significant Impact: The Project's potential to degrade water quality is addressed in Response a, above, The Project does not have reasonably foreseeable potential to substantially degrade water quality.</p>				
<p>g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project does not involve placement of housing.</p>				
<p>h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: The east and west portions of the Project site are outside the mapped 100-year flood hazard zone and the middle portion of the site is within the mapped 100-year flood hazard zone for Kirker Creek. This zone is subject to inundation by the one percent annual chance flood. The PV module arrays would be mounted on vertical piles or ballasts with a diameter near the ground that would be small compared to the spacing between supports so flood flows would not be materially impeded or redirected. Electrical equipment would be elevated above flood level and also would not inhibit flow due to their small area and sparse distribution in the flood hazard zone. Overall surface grades in the vicinity are nearly flat (on the order of one percent grade) so when flooding occurs it is slow moving and shallow. The PV modules and electrical equipment would be elevated above the one percent annual chance flood water elevation. The final grading and drainage plan would be subject to approval by the City Building Division. The City would review the grading plan and drainage design to ensure that design criteria are met for no hydromodification at the Project site boundaries. With no hydromodification at the site boundaries, impact on flood flows would be less than significant.</p>				

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: During operations the site would typically be unmanned. A portion of the site is in the 100-year flood plain as currently mapped by Federal Emergency Management Agency (FEMA). The Project would be designed to not be impacted by flooding nor change flood conditions on surrounding properties. The PV panels, electrical equipment and the substation would be designed to not be adversely impacted by flooding. Considering these factors, the Project would not expose people or structures to a significant risk of loss, injury or death involving flooding.</p>				
j) Place structures in areas subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: There are no large water bodies close enough to impact the Project facilities by seiche or tsunami. The Project site is located more than one-half mile from the closest major water body, the New York Slough. The site is not susceptible to mudflows due to existing engineered drainage controls at site boundaries to the south (i.e., Pittsburg-Antioch Highway and Kirker Creek Channel) and to the north (i.e., BNSF Railway).</p>				

10. LAND USE AND PLANNING

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project site occurs on a portion of an existing contiguous parcel that does not have public access. The site is surrounded primarily by industrial uses. The Project would not block any existing access or otherwise divide any established community.</p>				
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project site is undeveloped; there are no existing structures. The adjacent lands in all directions are in the City of Pittsburg jurisdiction. Adjacent lands are comprised of a steel mill and a recycling center. There is also a park adjacent to the southwest corner of the Site. There are railroad tracks adjacent to the northern boundary of the site.</p> <p>The City of Pittsburg General Plan identifies the Project site as Industrial and the site is zoned Limited Industrial. Surrounding lands are also designated as Industrial in the City of Pittsburg General Plan, except for adjacent lands near the southwest corner designated as parklands (Central Park).</p> <p>The Zoning Code (“Code”) (Section 18.54.005) defines the purpose of the Limited Industrial District is to provide “opportunities for...limited industrial uses in transitional areas between heavy industry and residential and commercial land uses. Code Section 18.08.120(D) defines “Photovoltaic Array” as follows: “System of power-generating solar modules or panels designed to capture sunlight and convert it into electricity. This classification includes facilities capable of storing electricity and distributing it on the utility grid, but excludes panels installed on or adjacent to a structure for the purpose of providing power exclusively to that structure.” This definition distinguishes a “photovoltaic array” from the kind of major power generating plant that constitutes a “major utility” under Code Section 18.08.060(W). The proposed Project would passively generate electric power and reduce demand for fossil fuel electric generation. The passive nature of the solar electric generation makes it an appropriate fit for the Limited Industrial District because it would provide for a land use transition between the heavy industry of the UPI property north of the site and other surrounding industrial uses, and the residential area across the Pittsburg-Antioch Highway to the southwest of the site. The Project constitutes a “Photovoltaic Array” as defined above. Code Chapter 18.74 provides for the creation of a Limited Overlay District for a particular site in appropriate circumstances. The Project Approvals include a zoning amendment to establish a Limited Overlay District to authorize a Photovoltaic Array for the Project Site. Pursuant to Code Section 18.74.040, the development regulations typically applicable for the IL zoning district would</p>				

be adjusted to accommodate the Project as set forth in the Project Description, which shall be deemed to constitute an “overlay plan” as contemplated by Code Section 18.74.030. The project encompassed by this Initial Study includes rezoning with an overlay zone specifying solar PV electric generation as an allowable use on the Project Site as described above, with Design Review, in the Limited Industrial District Zoning District. Setback, lot coverage, landscaping and other requirements would be specified consistent with the Project Description, and would accommodate the Project layout as designed.

With adoption of the overlay zone, the Project would be consistent with the City zoning code. The Project site also is governed by a restrictive land use covenant (LUC) between UPI and DTSC. The proposed project is consistent with the LUC as previously described in Response 8.d of this Initial Study.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
----------------------------------------------------------------------------------------------------------	--------------------------	--------------------------	--------------------------	-------------------------------------

No Impact: The Project site is within the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan. The Project would be required to provide mitigation in accordance with the requirements of the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan and there would be no conflict.

11. MINERAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project site area is classified by the California Department of Conservation as Mineral Resource Zone (MRZ)-1. This designation means that the State has determined adequate information exists to indicate “that no significant mineral deposits are present” or to judge that “little likelihood exists for their presence” (California Department of Conservation, 1996).</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: No important mineral resources have been identified on the Project site.</p>				

12. NOISE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project result in:				
a) Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less Than Significant Impact With Mitigation Incorporated: Applicable noise standards for the Project consist of CalOSHA regulations for worker and City General Plan Goals and ordinances related to noise control. OSHA standards require all facility noise levels be limited to 85 dBA to protect worker safety. If workers frequent areas of a facility that exceed 85 dBA, than a hearing conservation program must be implemented by the employer. The City General Plan Goals and City Ordinances include applicable provisions limiting noise for compatibility with land uses as follows:

- Policy 12-P-1 establishes standards for land use compatibility with various noise levels. The maximum exterior noise level considered to be “normally acceptable” for single-family residential uses is 60 dBA, and the maximum exterior noise level considered to be “conditionally acceptable” for single-family residential uses is 70 dBA.
- Policy 12-P-9 in the Noise Element of the General Plan requires that generation of loud noises on construction sites is limited to normal business hours between 8 am and 5 pm.
- The City’s Noise Ordinance (Section 9.44.010) prohibits the use of pile drivers, pneumatic hammers, and similar equipment between the hours of 10 pm and 7 am, but does not establish noise level limits related to fixed noise sources or construction noise.
- The City’s Building and Construction Ordinance (Section 15.88.060.A.5) prohibits grading noise, including warming up equipment motors, within 1,000 feet of a residence between the hours of 5:30 p.m. and 7 am weekdays, unless otherwise approved by the City Engineer.

Construction would generate noise on the Project site consistent with typical construction activities. Most construction activity would occur within an approximately six month period encompassing the site preparation and PV assembly/installation. Heavy equipment and other mechanized equipment and vehicles would be used. Internal combustion engines, mechanized equipment, grading, material handling and other activities would generate noise. The noise levels from construction activities would vary during the different construction tasks, depending upon the activity locations and number and types of activities. Mitigation measure NOISE-1 would ensure that noise generated by construction crews onsite is controlled consistent with General Plan Policy 12-P-9. In addition, loud construction activities would be further limited to hours dictated by City ordinances.

Project operations would generate minimal noise, primarily from fans used to cool electrical equipment and transformers. Noise is attenuated by distance and ground effects. Accounting only for distance attenuation in open air and ignoring ground effect attenuation, there is generally a 6 dB

decrease in noise for every doubling of distance from the source. That is, a piece of equipment meeting the Project specification of no more than 85 dBA at 3 feet distance, would generate a sound level of 79 dBA at 6 feet, 73 dBA at 12 feet, 67 dBA at 24 feet, and so on. The preliminary layout anticipates onsite electrical equipment locations to be a minimum distance of 600 feet or more from the closest residence. An 85 dBA noise level at 3 feet would be attenuated to less than 40 dBA at this distance and would not typically be discernible considering background noise from surrounding industrial activities adjacent transportation corridors including the Pittsburg-Antioch Highway, and other sources. The distance to the nearest residences is far enough so that even the cumulative noise of the project electrical equipment at this sound level would not be expected to be noticeable at any residential neighborhood location. Furthermore, because the facility would only generate electricity during daylight hours, fans and transformers would not operate at night. Mitigation measure NOISE-2 would ensure that noise levels from Project operations stationary equipment is less than significant.

The facility would typically be unmanned. Light mobile equipment, a water truck, electric and pneumatic tools, generators and other equipment may be used when maintenance crews are onsite, anticipated approximately 40 days per year. Noise generated by maintenance crews, when present, would have peak levels that would be short-term and consistent with typical building construction work. Maintenance staff would work under a hearing conservation program as required by CalOSHA. Because maintenance work may occasionally have noise characteristics similar to construction, maintenance noise levels could at times conflict with the General Plan Policy 12-P-9 in the Noise Element of the General Plan if not mitigated. Mitigation measure NOISE-1 ensures that noise generated by maintenance crews onsite is controlled consistent with Policy 12-P-9 so that the impact is less than significant.

Mitigation Measure NOISE-1:

Project construction, maintenance and grading shall only occur between the hours between 7:00 am and 5:30 pm Monday through Friday.

Mitigation Measure NOISE-2:

Stationary electrical equipment purchased for the Project shall be specified to have “A” weighted sound pressure levels not to exceed 85 dBA at a three foot distance.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
---------------------------------------------------------------------------------------------------------	--------------------------	--------------------------	-------------------------------------	--------------------------

Less Than Significant Impact: The levels of ground-born vibration generated by Project construction would be low and land uses adjacent to the Project site are predominately industrial uses or transportation corridors (i.e., railways and highways) that are not sensitive to groundborne vibration. A park is located adjacent to the westernmost corner of the Project site and the closest residences are located over 300 feet from closest construction activities. If driven pile supports are used for PV array racking, the supports would be 0.5 foot or less in diameter and approximately 10 feet or less in depth, so they would not require a large amount of energy to drive. Consequently, groundborne vibration from pile driving, if used, is not anticipated to be noticeable at the closest residences. Pile driving and other groundborne noise generating work such as grading would be limited to daytime hours by City Noise Ordinance Section 9.44.010, City Building and Construction Ordinance Section 15.88.060.A.5, and mitigation measure NOISE-1. Considering the relatively low levels of groundborne vibration anticipated, limitations on hours of construction activities, and the distance to closest residences, groundborne vibration impacts would be less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Less than Significant Impact: Construction noise impacts would be short term and, therefore, would not result in a permanent increase of ambient noise. Operation of the facility would generate low noise levels during the daytime. These daytime noise levels would not be substantial due to the low level noise sources and surrounding environment characteristics described in the response to Response 12a, above. The facility would not generate noise at night when it is not operating. Considering these factors, the Project would not result in a substantial permanent increase in ambient noise levels.				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Less Than Significant Impact With Mitigation Incorporated: Construction would result in a temporary increase in ambient noise levels as described in Response 12a above. In addition, operations would result in periodic increases in ambient noise when maintenance crews are utilizing power tools or other noise-generating equipment as described in Response 12a above. Mitigation measures NOISE-1 would ensure that noise generated by construction and maintenance crews onsite is controlled consistent with City standards. Because noise levels would be consistent with City standards, the impact would be less than significant.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: The site is not located in an airport land use plan nor is it within two miles of a public airport or public use airport.				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: The site is not located in the vicinity of a private airstrip.				

13. POPULATION AND HOUSING

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project is not expected to generate population growth. The Project does not propose any housing or commercial development, nor extension of roads or expansion of infrastructure. Construction jobs would be short term and are expected to be filled by the existing workforce without relocation. During operations, the facility would typically be unmanned. Maintenance operations are expected to require a crew of two to four persons approximately 40 days per year. Maintenance would be provided by a contractor. It is expected that maintenance staff positions would be filled with the existing workforce without relocation. Therefore, no growth is anticipated.</p>				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project would not displace any housing. No housing occurs on the Project site.</p>				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project would not displace people or housing. No housing occurs on the Project site.</p>				

14. PUBLIC SERVICES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project would be designed and constructed to follow Contra Costa County Fire Protection District (CCCFPD) requirements for access, fire water supply, and vegetation management. The CCCFPD has issued comments on the Project included in Attachment B that define key applicable fire code requirements that the Project would be required to adhere to as part of the design. As stated in Attachment B, final Project design would be subject to CCCFPD review and approval. Prior to construction, the applicant would coordinate with the CCCFPD and provide an emergency response plan with emergency coordinator contact information and mechanisms for emergency access when the facility is untended. Project access/egress gates and perimeter and interior access roads onsite would be designed to provide for CCCFPD access to all areas of the site. Onsite roads would be constructed with a compacted subgrade and compacted gravel surface and would be maintained in a drivable condition for the duration of the Project. Access/Egress gates would be constructed in compliance with specifications of Contra Costa County Fire Prevention Regulations. Pursuant to California Fire Code Section 304.1.2, the Project owner would be required to maintain the site free of vegetation capable of being ignited or endangering property. All electrical systems for the Project would be required to be constructed in accordance with applicable codes. With adherence to these requirements, the Project poses a low fire hazard and is not expected to create a capacity or service level problem. No new or modified government facilities are needed to provide fire protection for the Project.</p>				
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project site is located in the City of Pittsburg which provides police protection and public safety within the City limits. Construction and operation of the Project would not generate a material demand on police services. Specifically, the Project would be enclosed with an 8-foot-tall chain link fence and a controlled access gate to ensure impacts on police protection services would be less than significant. Construction and operation of the Project is not expected to generate population growth and the solar generation facility would be typically unmanned during operation. As such, the Project is not expected to result in an adverse impact on City of Pittsburg Police Department response times, service ratios, or other performance objectives, nor would the Project result in the need for new or modified police facilities to serve the site. No new or modified government facilities are needed to provide police protection for the Project.</p>				

Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: As described in Response 13.a, above, the Project is not expected to generate population growth. Therefore, no new demands on school facilities are expected. Therefore, there would be no impact on school capacities, service levels or performance objectives. The Project would not require new or physically altered school facilities.				
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: As described in Response 13.a, above, the Project is not expected to generate population growth. Therefore, no new demands on park facilities are expected. Therefore, there would be no impact on park capacities, service levels or performance objective. The Project would not require new or physically altered park facilities.				
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: As described in Response 13.a, above, the Project is not expected to generate population growth, extend roads or other public infrastructure. The Project would not require new or physically altered public facilities. It would not create new demands on public facilities other than the less than significant demands for fire protection and protection services previously described.				

15. RECREATION

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: As described in Response 13.a, above, the Project is not expected to generate population growth. Therefore, no increase is expected in the use of any park or recreational facility. Therefore, there would be no impact on park capacities, service levels or performance objective. The Project would not require new or physically altered park facilities.</p>				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project does not include recreational facilities. Furthermore, as described in Response 13.a, above, the Project is not expected to generate population growth. Therefore, it would not require the construction or expansion of any recreational facility.</p>				

16. TRANSPORTATION/TRAFFIC

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less Than Significant Impact: Project-related vehicles typically would access the site via State Route 4, Loveridge Road, and the Pittsburg-Antioch Highway. State Route 4 is a freeway. Loveridge Road and the Pittsburg-Antioch Highway are Major Arterials. Major Arterials are identified in the General Plan as moderate to high speed roads with moderate to high traffic volume (15,000 to 55,000 vehicles per day). Construction field work for the Project would occur over a nine month period during which the average number of construction workers is expected to be approximately 65. Some voluntary carpooling is expected as described in Section 2.17 of this Initial Study checklist. However, even not accounting for any carpooling, average construction worker traffic is estimated to be approximately 65 trips in one hour inbound to the site in the morning and 65 trips outbound during one hour in the afternoon. In addition, deliveries during construction would average approximately six for an average day. Project construction worker and delivery traffic would incrementally add to existing traffic congestion on State Route 4 and other roads to the site, but would be less than significant because of the relatively small number of trips generated and the short term of construction. Project construction, including parking and staging, would be off-street on private property where it would not affected access to any public transportation.</p> <p>Project operations would typically be unattended, with routine monitoring and maintenance by a crew of two to four people 40 days per year. This would require one or two vehicles 40 days per year, which would be a negligible traffic impact. The Project would not involve new construction or realignment of any roads. The Project would be developed in conformance with all applicable plans, policies, programs, and ordinances related to transportation.</p>				

b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: As described in Response 16a above, the proposed Project would have minimal impact on traffic circulation during construction and operation. Minimal traffic would occur during Project operation as a result of routine monitoring and maintenance consisting of a crew of two to four persons 40 days per year. This long-term level of traffic from the Project is negligible and would not conflict with regional and local traffic management planning.</p>				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project would not affect any airport, air travel facility, or flight path in any way. The Project would be expected to obtain workers for construction and operation from the existing workforce in the region and materials and supplies would be delivered as needed via ground transportation. Therefore, no increase in air traffic levels would occur. Based on these factors, the Project would not change air traffic patterns or increase air traffic levels or locations.</p>				
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: The Project does not include new construction or realignment of any existing road facilities. The Project site occurs on a portion of an existing parcel and the Project would not require new or modified streets or intersections. The vehicle trips generated by the Project would not be incompatible with existing infrastructure or uses. During operations, the site would typically be unmanned. Routine monitoring and maintenance is expected to consist of a crew of two to four persons 40 days per year. Considering this low traffic level and the location and design of the Project site driveway Project operations would not substantially increase hazards due to design features or incompatible uses.</p> <p>Vehicles providing deliveries to the Project site would be subject to size, weight and load restrictions of the California Vehicle Code Division 15, including permits for oversize loads as required by the California Vehicle Code Section 35780 and California Code of Regulations Title 21 Section 1411.1 et seq. Considering existing laws and regulations for oversize loads and the Major Arterial infrastructure in the vicinity, oversize loads would not be an incompatible use.</p> <p>Considering these factors, neither Project construction nor operation would substantially increase hazards due to a design feature or incompatible use.</p>				

e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project would not result in inadequate emergency access. The Project would not obstruct any existing access route, and onsite access roads would be provided in accordance with CCCFPD requirements. The Pittsburg-Antioch Highway immediately South of the site provides adequate emergency response access to the site location. The Project design includes emergency access roads at the site perimeter and in the interior of the site in accordance with CCCFPD requirements. Emergency access roads would be installed prior to construction or combustible storage onsite and would be maintained in a drivable condition for the duration of the Project. Roads would have a minimum 20-foot width and minimum outside turning radius of 42-foot radius and capable of supporting an imposed fire apparatus loading of 37 tons.</p>				
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: Project construction, including parking and staging, would be off-street on private property where it would not affected access to any public transportation. Development of the Project would utilize the existing road network and would not impact or conflict with bike trails, pedestrian access, transit services, or other modes of alternative transportation. None of these facilities exist in the Project vicinity and the Project is not anticipated to have any impact on pedestrian traffic in the area due to the industrial location, and considering that the Project would not block or modify any existing pedestrian access. The Project would not impact any transit service or Transit Oriented District development standards in any adopted policies, plans, or programs supporting alternative transportation.</p>				

17. UTILITIES AND SERVICE SYSTEMS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: The Project would not discharge wastewater. No wastewater treatment requirements are applicable to the Project.				
b) Create water or wastewater system capacity problems, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Less than Significant Impact: The Project would obtain water during construction from the City owned fire main system along Loveridge Road or the USS POSCO water treatment facility located adjacent to the Project site. Water for construction is a short term use and is within the capacity of either water system. Operations water demand is limited to DI water that would be obtained from a reagent vendor, and water for fire protection. Water for fire protection is not typically a consumptive use; only minor consumption is typical for occasional flushing of the system to ensure reliability. Fire protection water would be provided via the existing fire hydrant along Loveridge Road North of the Pittsburg Antioch Highway. Existing infrastructure can provide adequate flow to meet fire protection requirements. The Project would not discharge wastewater. Portable sanitary facilities would be used onsite for construction and operations with regular pumping and maintenance by a licensed contractor. Considering these factors, the Project would not create result in any capacity problems for water or wastewater or require expansion of existing water or wastewater facilities.				
c) Create drainage system capacity problems, or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No Impact: Existing drainage patterns would not be substantially altered by the Project because the grading plan is designed to result in no hydromodification at the Project boundaries. The final grading and drainage plan would be subject to approval by the City Engineering Department. Because there would be no hydromodification at the Project boundaries, the Project would have no impact on existing or future drainage system capacity or result in the need for new storm water drainage facilities.				

<p>d) Have sufficient reliable water supplies available to serve the project demands from existing entitlements and resources, or are there new or expanded entitlements needed?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: Project water needs are minimal. Construction water requirements are described in Section 17b of this Initial Study checklist. Water needed for panel washing during the operating life of the facility would be obtained from a commercial demineralized water vendor (e.g. Culligan, Betz, Nalco) that has the existing capacity to serve this need.</p>				
<p>e) 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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>No Impact: The Project is an unmanned electric energy generation project and would not need any waste water services. Portable sanitary facilities would be used onsite for construction and operations with regular pumping and maintenance by a licensed contractor.</p>				
<p>f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: Most construction debris would consist of recyclable materials such as wood pallets, plastic and paper packaging and scrap metal that can be taken to the adjacent waste recycling center. Furthermore, construction would only generate waste for a short period of time. The Project is a solar PV generation facility that would convert solar energy into electric energy without substantial waste generation during operations. Quantities of non-hazardous and hazardous waste generated by routine operations would be negligible. If Cadmium-Telluride thin-film technology is used for Project solar panels, then the modules may be hazardous waste when disposed. Both cadmium individually and cadmium-telluride have toxic properties. Under normal conditions, these compounds are sealed inside the modules and not exposed to the environment so the panels are not hazardous. In the event of a thin film module malfunction, the affected panels would be disposed of or recycled under 22 CCR Division 4.5 regulations for hazardous waste and recyclable materials. If Cadmium-Telluride thin-film technology is used for Project solar panels, Project decommissioning would also require the panels to be disposed of or recycled under 22 CCR Division 4.5 regulations for hazardous waste and recyclable materials.</p>				

18. MANDATORY FINDINGS OF SIGNIFICANCE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Less than Significant Impact: The Project would be constructed on a disturbed site surrounded by predominantly industrial uses in an urbanized area. The Project site does not contain any native plant communities or habitat (see Section 4, Biological Resources, in this Initial Study checklist) and has been used historically as an industrial landfill. The Project site is within the East Contra Costa County Habitat Conservation Plan and natural Community Conservation Plan area, and the Applicant has submitted an application to comply with and receive permit coverage under the Plan. Mitigation measure BIO-1 ensures that the Project would mitigate biological impacts consistent with the Plan. No fish habitat is present on the Project site. Considering the disturbed nature of the site, the location in an urbanized and industrial area, and Mitigation measure BIO-1 for impacts to biological resources, the Project would not have the potential to degrade the quality of the environment, substantially reduce the habitat of any fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, nor reduce the number of restrict the range or a rare or endangered plant or animal. No significant historic or prehistoric resources are known to occur onsite based on records searches (see Section 5 in this Initial Study checklist). Therefore, the Project would not eliminate any important example of the major periods of California history or prehistory.</p>				

<p>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)?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------	-------------------------------------	--------------------------	--------------------------

Less Than Significant Impact With Mitigation Incorporated: As described in preceding sections of this Initial Study checklist, the Project would have no impact on agricultural or forest lands, cultural resources, water quality, mineral resources, growth, population, housing, schools, parks, libraries, or recreation, and the Project would not conflict with zoning, land use, biological resource conservation plans, air quality protection plans, energy plans or policies, transportation, traffic and congestion management plans, or other established environmental plans or policies. Because the Project would have no impact or conflict in these topic areas, there is no potential for the Project to have a cumulative effect in these topic areas with other past, current or probable future projects.

The Project would have a less than significant cumulative impact to aesthetic resources. The Project would be constructed as an infill development that is surrounded by predominantly industrial uses, including heavy industry. The proposed solar electric generation use of the site is consistent with the Limited Industrial District's purpose of providing "opportunities for limited industrial uses in transitional areas between heavy industry and residential and commercial land uses" (see Response 10.b). Because the Project facilities would be low to the ground and non-reflective, Project aesthetics would be consistent with the purpose of this zoning. Considering these factors, the cumulative impact on aesthetic resources would be less than significant.

Air quality cumulative impacts are addressed in Section 3 of this Initial Study checklist and are less than significant.

As described in Section 4 of this Initial Study checklist, Project impacts to biological resources would be limited due to the Project site being disturbed and primarily ruderal grassland habitat in an urban surrounding. The Project site does not contain any native plant communities or habitat (see Section 4, Biological Resources, in this Initial Study checklist) and has been used historically as an industrial landfill. Mitigation measure BIO-1 ensures that the Project would mitigate biological impacts consistent with the East Contra Costa County Habitat Conservation Plan and natural Community Conservation Plan. This plan takes into account cumulative affects throughout the region and would contribute to endangered species recovery throughout northern California (East Contra Costa County Habitat Conservation Plan Association and US Fish and Wildlife Service, 2006). Considering these factors, implementing the Project with mitigation measure BIO-1 would have a less than significant cumulative impact on biological resources.

As described in Section 6 of this Initial Study checklist, project impacts related to geology and soils would be less than significant and would be limited to potential impacts of ground shaking from regional earthquakes, including secondary hazards such as liquefaction, and slope hazards at some locations along the Project alignment. These hazards, by nature, are project-specific geologic hazards that do not have the potential for cumulative effects. The Project would have no impact on seismic hazards at other locations, and no other reasonably foreseeable project could affect seismic hazards at the site. Therefore, there is no cumulative impact related to seismic shaking.

As described in Section 7 of this Initial Study checklist, once constructed, the electric energy produced by the Project would reduce the dependency on fossil fuel-produced electric energy, thereby providing a long-term GhG benefit. Considering that the Project would operate as an unmanned facility and would require relatively minimal maintenance vehicle trips (40 days per year), and considering that limiting climate change is the focus of California's goals for implementing solar PV and other renewable energy technologies, Project GhG emissions would be less than significant both individually and cumulatively.

As described in Section 8 of this Initial Study checklist, Project impacts related to hazards and hazardous materials would be less than significant with mitigation incorporated and are limited to scenarios in which there is risk of an accidental release or exposure to hazardous materials. Construction of the Project would require the use of fuels, lubricants and other hazardous materials typical of construction sites and would be short term. No cumulative impact is anticipated. Operations would require few hazardous materials, primarily insulating oil in electric equipment. No cumulative impact is anticipated.

The Project would not violate any water quality standard or waste discharge requirements or affect water quality. Therefore, there would be no cumulative effect in these areas. Project impacts related to hydrology would be less than significant and would be limited to placement of solar array facilities within the 100-year flood plain. The Project grading plan would be subject to review by the City's Building Division and would be designed avoid hydromodification at the Project site boundaries. Therefore, there would be no cumulative effect to flood conditions.

As described in Response 12a, Project construction noise would be typical of construction work and would be limited to allowable daytime hours pursuant to mitigation measure NOISE-1. With loud construction noise only during allowable hours consistent with the City General Plan and applicable ordinances (See Response 12a), the noise impact of construction would be less than significant individually and cumulatively. Following construction, the Project facilities would be quiet at night when no power is being generated and would have low noise levels when operating during the day due to noise emission limits required by mitigation measure NOISE-2. The Project would be constructed as an infill development that is surrounded by predominantly industrial uses, including heavy industry. The proposed solar electric generation use of the site is consistent with the Industrial classification under the General Plan, and with the Limited Industrial District's stated purpose of providing "opportunities for limited industrial uses in transitional areas between heavy industry and residential and commercial land uses" (see Response 10.b). Because the Project facilities would only generate noise during the daytime and would be relatively quiet, Project noise levels would be consistent with the purpose of this zoning. Considering these factors, the cumulative noise impact would be less than significant.

As described in Section 16 of this Initial Study checklist, the Project would generate insignificant long-term traffic. Operations would typically be unattended, with routine monitoring and maintenance by a crew of two to four staff 40 days per year. This would require one or two vehicles 40 days per year, which would be a negligible traffic impact. The Project would not involve new construction or realignment of any roads. The Project would be developed in conformance with all applicable plans, policies, programs, and ordinances related to transportation. Considering these factors, cumulative traffic impacts would be less than significant.

As described in Section 17 of this Initial Study checklist, the Project is not expected to place a material demand on public services or utilities. Considering the anticipated low demand of the Project, the cumulative impact on public resources would not be significant. The Project does not propose interconnections to utilities with the exception of the generation tie-in. PG&E's interconnection review process would ensure that there are no impacts to grid reliability.

Considering the factors addressed above, the Project would not have significant cumulative impacts on the environment.

c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
----------------------------------------------------------------------------------------------------------------------------------------------	--------------------------	-------------------------------------	--------------------------	--------------------------

Less Than Significant Impact With Mitigation Incorporated:

The Project does not have the potential for environmental effects that could cause substantial adverse effects on human beings, either directly or indirectly, other than those addressed in preceding sections of this Initial Study checklist. As described in preceding sections of this Initial Study checklist, the Project would have no impact on agricultural or forest lands, cultural resources, water quality, mineral resources, growth, population, housing, schools, parks, libraries, or recreation, and the Project would not conflict with zoning, land use, biological resource conservation plans, air quality protection plans, energy plans or policies, transportation, traffic and congestion management plans, or other established environmental plans or policies. The project would not have substantial adverse effects on aesthetics, air quality, energy consumption, geology and soils, greenhouse gasses, hydrology, public services, transportation or utilities and services. With recommended mitigation measures BIO-1, BIO-2, HAZ-1, NOISE-1 and NOISE-2 identified in Sections 4, 8, and 12, respectively, of this Initial Study checklist, it would have less than significant impacts related to biological resources, hazardous materials, and noise. There would be no significant cumulative impacts. The Project is a renewable energy project that would produce electric energy from solar energy without emissions to help to satisfy California’s legislated goals to reduce greenhouse gas emissions to mitigate anthropogenic climate change. The Project is anticipated to provide an overall environmental benefit to human beings through reduction of direct and indirect effects of climate change.

3.4 REFERENCES

The California Burrowing Owl Consortium. 1993. *Burrowing Owl Survey Protocol and Mitigation Guidelines*. Technical Report of the Burrowing Owl Consortium, Alviso, California.

California Department of Conservation, Division of Mines and Geology. 1996. DMG Open File Report 96-03, *Update of Mineral Land Classification: Aggregate Materials in the South San Francisco Bay Production-Consumption Region*.

California Department of Fish and Game. 1995. Staff Report on Burrowing Owl Mitigation. Sacramento, California.

California Historical Resources Information System (CHRIS). Re: *Columbia/198234.0001.0000*. Results of record search for the Project area obtained by TRC from the CHRIS Northwest Information Center at Sonoma State University November 26, 2012.

City of Pittsburg. 2001a. *Pittsburg 2020: A Vision for the 21st Century City of Pittsburg General Plan Draft Environmental Impact Report*. SCH No. 1999072109. Viewed at www.ci.pittsburg.ca.gov December 2012.

City of Pittsburg. 2001b. *Pittsburg 2020: A Vision for the 21st Century City of Pittsburg General Plan Final Environmental Impact Report*. SCH No. 1999072109. Viewed at www.ci.pittsburg.ca.gov December 2012.

City of Pittsburg. 2012. General Plan, *Pittsburg 2020: A Vision for the 21st Century*. Adopted 2001. Viewed at www.ci.pittsburg.ca.gov December 2012.

Department of Toxic Substances Control (DTSC), 2010. *Land Use Covenant Recording and Completion of the Corrective Action Remedy for Site L-A, USS-POSCO Industries, 900 Loveridge Road, Pittsburg, CA, EPA ID No. CAD 009 150 194*. Letter to Dave Allen (USS-POSCO Industries) from Andrew Berna-Hicks (DTSC) dated July 26, 2010.

East Contra Costa County Habitat Conservation Plan Association, 2006. *Final East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan*. Viewed at www.co.contra-costa.ca.gov December 2012.

East Contra Costa County Habitat Conservation Plan Association and US Fish and Wildlife Service, 2006. *East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan Final Environmental Impact Statement/Environmental Impact Report*. Viewed at www.co.contra-costa.ca.gov December 2012.

Jennings, Charles W. and Bryant, William A., 2010. California Geological Survey Geologic Data Map No. 6. *Fault Activity Map of California*.

Knudsen, Keith L., Sowers, Janet M., Witter, Robert C., Wentworth, Carl M., and Helley, Edward J. 2000. U.S. Geologic Survey Open-File Report 00-444, *Preliminary Maps of Quaternary Deposits and Liquefaction Susceptibility, Nine-County San Francisco Bay Region, California*.

Native American Heritage Commission. Re: *Proposed Solar Project, Contra Costa County*. Letter to TRC dated December 19, 2012.

StateMaster, 2013. *Labor Statistics . Percent of Workers Who Traveled to Work by Carpool by State*. <http://www.statemaster.com>. Site visited January 7, 2013.

TRC 2012a. *City/ County of Pittsburg. Application Form and Planning Survey Report to Comply with and Receive permit Coverage under the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan*. Submitted to the City of Pittsburg by Columbia Solar Energy, LLC November 27, 2012.

TRC, 2012b. *Delineation of Waters of the United States, Columbia Solar Energy Project, City of Pittsburg, California*.

URS Corporation, 2009a. *Soil Management Plan Site L-A Grading, Trenching, and Excavating Activities (Revision 1)*.

URS Corporation, 2009b. *Health and Safety Plan Site L-A Grading, Trenching, and Excavating Activities (Revision 1)*.

USS-POSCO Industries and DTSC, 2010. *Covenant to Restrict Use of Property, Environmental Restriction (Re; A limited portion of County of Contra Costa APN 073-200-021 UPI Pittsburg Facility Site L-A Property, DTSC site code number 520024)*. DOC-2010-0132574-00 recorded by the Contra Costa County Clerk-Recorder's office on July 1, 2010.

3.5 PREPARERS

TRC Companies
123 Technology Drive West
Irvine, CA 92618
(949) 727-9336

Joseph Stenger, PG, CEM, Project Director
Susan Underbrink, RPA, Senior Archaeologist
Mike Farmer, Senior Biologist
Molly Sandomire, Biologist
Joshua Taylor, Lead Planner
James Ryan, Environmental Engineer

ATTACHMENT A
CONSTRUCTION EMISSION ESTIMATE

**ATTACHMENT A
COLUMBIA SOLAR ENERGY PROJECT
CONSTRUCTION AIR EMISSIONS ESTIMATES**

OVERVIEW

The proposed Columbia Solar Energy Project is a nominal 20-megawatt (MW) solar photovoltaic (PV) power generation facility proposed for construction and operation on an approximately 115-acre site located in Pittsburg, California. The PV modules are non-reflective and directly convert sunlight into direct current (DC) electricity. Once operational, they consume no fossil fuels or water, and produce no air emissions. Construction will disturb a total of approximately 108 acres.

The site location falls within the Bay Area Air Quality Management District (BAAQMD). The BAAQMD significance thresholds for construction activities are outlined in the following table:

BAAQMD SIGNIFICANCE THRESHOLDS FOR CONSTRUCTION ACTIVITIES

Criteria Pollutant	Average Daily Threshold (pounds)
Carbon Monoxide (CO)	None Established
Oxides of Nitrogen (NOx)	54
Volatile Organic Compounds (VOC)	54
Oxides of Sulfur (SOx)	None Established
Exhaust Particulate Matter (PM10)	82
Exhaust Particulate Matter (PM2.5)	54

Source: BAAQMD CEQA Guidelines, June 2010.

It should be noted that the BAAQMD's June 2010 adopted thresholds of significance were challenged in a lawsuit recently and on March 5, 2012 the Alameda County Superior Court issued a judgment finding that the Air District had failed to comply with CEQA when it adopted the thresholds. The court subsequently issued a writ of mandate ordering the District to set aside the thresholds and cease dissemination of them until the Air District had complied with CEQA. The court's order permits the Air District to develop and disseminate these CEQA Guidelines, as long as they do not implement the thresholds of significance. Considering this is likely a temporary retraction of the thresholds of significance it remains prudent to evaluate the significance of the project impacts relative to the previously established thresholds of significance.

CONSTRUCTION ACTIVITIES

Field construction of the proposed project is expected to last approximately nine months. The construction workforce is expected to consist of primarily of local laborers, craftspeople, supervisory personnel, and support personnel. The average daily number of workers onsite is expected to be approximately 65. Development is planned to be generally continuous without phases. Disturbed areas will be watered to mitigate fugitive dust.

The site is suitable for development with minimal civil work. Limited civil work (e.g., grading) will occur to smooth the site to support installation of the PV arrays and prepare access ways and perimeter roads. Assembly activities include the installation of foundations, erection of the support structures, and the installation of the PV modules and related fixtures.

CALCULATION METHODOLOGY

Emissions were estimated in accordance with the BAAQMD CEQA Guidelines dated May, 2012 which recommends the use of URBEMIS Version 9.2.4 Emissions Estimation Software. BAAQMD CEQA thresholds for construction emissions are in terms of average daily emissions; therefore average daily equipment operation data entered into URBEMIS was estimated by averaging the anticipated equipment inventory on a month-by-month basis.

EMISSIONS ESTIMATE

The following table summarizes the calculated construction emissions from the URBEMIS program.

Average Daily Construction Emissions

Source	ROG (lbs/day)	CO (lbs/day)	NO _x (lbs/day)	PM ₁₀ (dust) (lbs/day)	PM ₁₀ (exhaust) (lbs/day)	PM _{2.5} (dust) (lbs/day)	PM _{2.5} (exhaust) (lbs/day)	CO ₂ (lbs/day)
^c Diesel Equipment (exhaust)	3.81	42.72	40.98	0.00	2.51	0.00	2.33	8362.21
^d Fugitive Dust - Disturbed Surfaces	0.00	0.00	0.00	305.37	0.00	63.77	0.00	0.00
Worker Vehicles	0.11	3.64	0.20	0.02	0.01	0.01	0.01	408.37
Totals	3.92	46.36	41.18	305.40	2.52	63.78	2.34	8770.58
Significance Thresholds	54	^a NE	54	^a NE	^b 82	^a NE	^b 54	^a NE
Significant?	No	No	No	No	No	No	No	No

^aNE = None established.

^bApplies to exhaust emissions only

^cAssumes all equipment is model year 2010

^dAssumes twice a day site watering

ASSUMPTIONS FOR AVERAGE CONDITIONS

- Dozer - 1 @ 8 hours a day
- Backhoe- 1 @ 8 hours a day
- Bobcat – 4 @ 8 hours a day
- Quad Cart – 4 @ 8 hours a day
- Forklift – 2 @ 8 hours a day
- Water Trucks - 1 trucks @ 8 hours a day
- Fugitive Dust - Emission factor of 20 lbs/day/acre default from UREMIS Version 9.2.4. Assuming twice a day watering mitigation PM₁₀ and PM_{2.5} control efficiency of 55%.
- Delivery Trucks – 1 Flatbed @ 2 hours/day and 1 Dump Truck @ 1 hour/day
- Worker Vehicles - 65 employees, with 10% carpool factor applied

ATTACHMENT B
CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT COMMENTS



December 3, 2012

Ms. Joan Lamphier
City of Pittsburg – Planning Division
Civic Center – 65 Civic Avenue
Pittsburg, CA 94565

Subject: Columbia Solar Energy Project: AP-12-879
900 Loveridge Road, Pittsburg
APN 098-340-088
CCCFPD Project No.: P-2012-06883

Dear Ms. Lamphier:

We have reviewed the development plan and design review application to establish a 20-megawatt AC solar generation facility on a 115 acre site at the subject location. The following is required for Fire District approval in accordance with the 2010 California Fire Code (CFC), the 2010 California Building Code (CBC), and adopted standards:

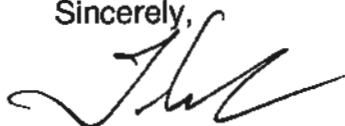
1. Access gates for Fire District apparatus shall be a minimum of 20-feet wide. Access gates shall slide horizontally or swing inward and shall be located a minimum of 30 feet from the street. Electrically operated gates shall be equipped with a Knox Company key-operated switch. Manually operated gates shall be equipped with a non-casehardened lock or approved Fire District lock. Contact the Fire District for information on ordering the key-operated switch. (D103.5) CFC.
2. The developer shall provide an adequate and reliable water supply for fire protection as set forth in the California Fire Code. (507.1) CFC
3. The developer shall provide hydrants of the East Bay type. (C103.1) CFC
4. The developer shall submit three (3) copies of site improvement/emergency access plans indicating proposed fire apparatus access and hydrant locations for review and approval prior to obtaining a building permit. Emergency apparatus access shall have an all-weather driving surface of not less than 20-feet unobstructed width with a minimum outside turning radius of 45 feet, and must be capable of supporting the imposed fire apparatus loading of 37 tons. **Final quantities and placement of hydrants shall be determined by this office.** (501.3) CFC

5. ***Emergency apparatus access roadways and hydrants shall be installed, in service, and inspected by the Fire District prior to construction or combustible storage on-site.*** (501.4) CFC
6. The owner shall cut down and remove all weeds, grass, vines, or other growth that is capable of being ignited and endangering property. (304.1.2) CFC
7. The developer shall submit three (3) complete sets of plans and specifications of the subject project, including plans for any of the following required deferred submittals, to the Fire District for review and approval ***prior to*** construction to ensure compliance with minimum requirements related to fire and life safety. Plan review and inspection fees shall be submitted at the time of plan review submittal. (105.4.1), (901.2) CFC, (107) CBC
 - Private underground fire service
 - Special suppression systems
8. This project shall be in conformance with the 2010 Edition of NFPA 850 (Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations).

Our preliminary review comments shall not be construed to encompass the complete project. Additional plans and specifications may be required after further review.

If you have any questions regarding this matter, please contact this office at (925) 941-3300.

Sincerely,



Ted Leach
Fire Inspector

TL/cm

c: **Columbia Solar Energy, LLC**
5000 Hopyard Road, Suite 480
Pleasanton, CA 94588