Sealed Air Solar Farm Project
Site Plan Review (SPR) 2020-08

Initial Study / Negative Declaration

August 2020

Prepared for:

The City of
MADERA

Planning Department
205 W. 4th Street
Madera, CA 93637

Table of Contents

List of Figures

List of Tables

Chapter 1 Introduction

Provost & Pritchard Consulting Group has prepared this Initial Study/ Negative Declaration (IS/ND) on behalf of the City of Madera to address the environmental effects of the Sealed Air Solar Farm Project (project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et. seq. The City of Madera is the CEQA lead agency for this proposed Project.

The site and the proposed Project are described in detail in the Chapter 2 Project Description.

1.1 Regulatory Information

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, *et seq*.)-- also known as the CEQA Guidelines-- Section 15064(a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the proposed project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels. A negative declaration (ND) may be prepared instead if the lead agency finds that there is *no substantial* evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, an ND or *mitigated* ND shall be prepared for a project subject to CEQA when either:

a. *The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or*
b. *The IS identified potentially significant effects, but:*
    1. *Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed Mitigated ND and IS is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and*
    2. *There is no substantial evidence, in light of the whole record before the agency, that the proposed Project as revised may have a significant effect on the environment.*

1.2 Document Format

This IS/ND contains four chapters plus appendices. Chapter 1 Introduction, provides an overview of the proposed project and the CEQA process. Chapter 2 Project Description, provides a detailed description of proposed project components. Chapter 3 Determination identifies the environmental factors potentially affected based on the analyses contained in this IS and includes the Lead Agency's determination based upon those analyses. Chapter 4 Impact Analysis, presents the CEQA checklist and environmental analyses for all impact areas and the mandatory findings of significance. A brief discussion of the reasons why the project impact is anticipated to be less than significant or why no impacts are expected is included.

The CalEEMod Output Files, Phase I Environmental Site Assessment, and Phase II Environmental Site Assessment are provided as technical Appendix A, Appendix B, and Appendix C, respectively, at the end of this document.

Chapter 2 Project Description

2.1 Project Background

2.1.1 Project Title

Sealed Air Solar Farm
Site Plan Review (SPR) 2020-08

2.1.2 Lead Agency Name and Address

City of Madera
205 W. 4th Street
Madera, CA 93637

2.1.3 Contact Person and Phone Number

Lead Agency Contact

Gary Conte, AICP, Planning Manager
559.661.5430

2.1.4 Study Prepared By

Provost & Pritchard Consulting Group
286 West Cromwell Avenue
Fresno, CA 93711

2.1.5 Project Location

The project is located in Madera, California (see Figure 2-1). The proposed site of the Sealed Air Solar Farm Project is located at 1835 West Almond Avenue, Madera, California 93627 on Assessor's Parcel Numbers 009-330-001 and a portion of APN 009-330-033 (see Figure 2-2).

2.1.6 Latitude and Longitude

The centroid of the Project area is 36° 56' 46.9242 N, 120° 4' 41.16" W.

2.1.7 General Plan Designation

The project site is planned I (Industrial).

2.1.8 Zoning

The project site is zoned I (Industrial).

2.1.9 Description of Project

Project Background and Purpose

The applicant, SunPower Corporation Systems, proposes to install a solar farm (solar array field) and battery energy storage system (herein referenced as the "project" or "proposed project") in an open field owned and maintained by Sealed Air Corporation (Sealed Air) adjacent to Sealed Air's existing manufacturing facility. The purpose of the project is to provide Sealed Air with a renewable alternative electrical energy source for its manufacturing facility adjacent to the project site.

Project Description

The project will include the following components within the proposed 15.66-acre solar array field:

- 3-megawatt alternating current (MWac) output capacity / 3,539.25 kilowatts peak (kWP) ground-mounted solar photovoltaic (PV) single-axis tracker system with a central inverter.
- 739-kilowatt (kW) battery inverter / 2,958-kilowatt hour (kWh) battery mounted on a pad in the array field with the solar inverter.

The arrays will be positioned in a series of north-south aligning rows. The arrays are approximately 7 feet in height and will have the ability to rotate from east to west following alignment of the sun as it moves throughout the day. A seven (7)-foot-high chain link fence would surround the solar array field with a single vehicular gated entrance located on West Almond Avenue. A gravel fire access road and turnaround would extend from the entrance gate and provide access to the solar and battery inverter pad and battery disconnect equipment. Aside from the equipment pads, no pavement is proposed. The proposed project improvements are shown in Figure 2-3, Solar Array Layout.

The project also includes undergrounding an electrical conduit from the solar array field to Sealed Air's manufacturing facility. The electrical conduit will interconnect and tie into the existing main electrical equipment. The conduit would be laid within a 30-foot-wide strip of asphalt concrete parking area within the project site boundary, extending approximately 650 linear feet from the array field to the existing facility.

The project area supporting the solar arrays and other electrical equipment would be graded. Gravel would be applied to the entrance and drive leading to the solar and battery inverter pad and battery disconnect to support access during winter months, minimize dust, and provide weed control and abatement.

Construction of the project would involve vegetative and deleterious material removal (e.g., broken concrete), grading, and paving requirements. The project would require trenching and installation of electrical conduit and array footings.

Site access during construction would be via West Almond Avenue. Principal deliveries to the project site would include construction equipment, imported earthwork materials, photovoltaic (PV) panels, pedestals, and any additional hardware required to construct the project. Material and equipment staging areas as well as construction crew parking will be contained on-site.

Construction of the project is expected to take approximately four months to complete. Construction hours would be between the hours of 7 am and 5 pm, Monday through Friday. At this time, no project

construction commencement schedule has been identified. Project construction commencement is subject to securing the permits required for the project.

2.1.10 Site and Surrounding Land Uses and Setting

Environmental Setting

The 15.66-acre site consists of vacant land and approximately 19,500 square feet of asphalt concrete paved parking lot. A pile of broken concrete is located within the northern portion of the site. The concrete pile covers an area approximately 10 feet by 6 feet and is approximately 3 feet high. The site elevation is approximately 260 feet above mean sea level and generally slopes towards the west, southwest. Soils consist of loam to sandy loam texture with moderate to high infiltration rates and are moderate to well drained. Depth to first encountered groundwater is estimated to be approximately 205 feet. The hydrologic gradient is estimated to trend to the southwest. An unnamed canal is located approximately 855 feet south of the site.

Surrounding Land Uses

The project site is located at 1835 West Almond Avenue in the City of Madera, California (see Figure 2-1, Regional Location). The majority of project site is positioned within Madera County Assessor's Parcel Number (APN) 009-330-033 and the eastern portion of APN 009-330-001 (see Figure 2-2, Area of Potential Effect). The site is bordered to the north and east by a railroad spur line serving Sealed Air. To the south, the site is bordered by West Almond Avenue and to the west by Sealed Air's manufacturing facility.

The site is surrounded by vacant land and stockpiles of soil and concrete to the north, and vacant and developed industrial sites to the east, south, and west. The project site and surrounding area is designated and zoned for industrial uses.

Table 2-1 Existing Uses, General Plan Designations, and Zone Districts of Surrounding Properties

Direction from Project Site	Existing Use	General Plan Designation	Zone District
North	Vacant	Industrial	Industrial
East	Industrial	Industrial	Industrial
South	Vacant and Industrial	Industrial	Industrial
West	Industrial	Industrial	Industrial

2.1.11 Other Public Agencies Whose Approval May Be Required

The City of Madera has jurisdiction over the review and approval of the project. The City of Madera Planning Commission would be requested to take action on the following:

- Adoption of Negative Declaration with appropriate findings; and
- Approval of Site Plan Review.

The City of Madera would also issue the following ministerial permits for the proposed project if and once the above listed actions are taken:

- Grading Permit; and
- Building Permit.

Other agencies, including but not necessarily limited to the following, may have authority to issue permits prior to project implementation:

- San Joaquin Valley Air Pollution Control District; and
- Regional Water Quality Control Board.

2.1.12 Consultation with California Native American Tribes

Public Resources Code Section 21080.3.1, *et seq. (codification of AB 52, 2013-14)*) requires that a lead agency, within 14 days of determining that it will undertake a project, notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate a request for formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement will be made.

The City of Madera has not received a request from any California Native American tribes in the geographic area which it is traditionally and culturally affiliated with or that has otherwise requested to be notified about projects in the City of Madera.

Figure 2-1 Regional Location

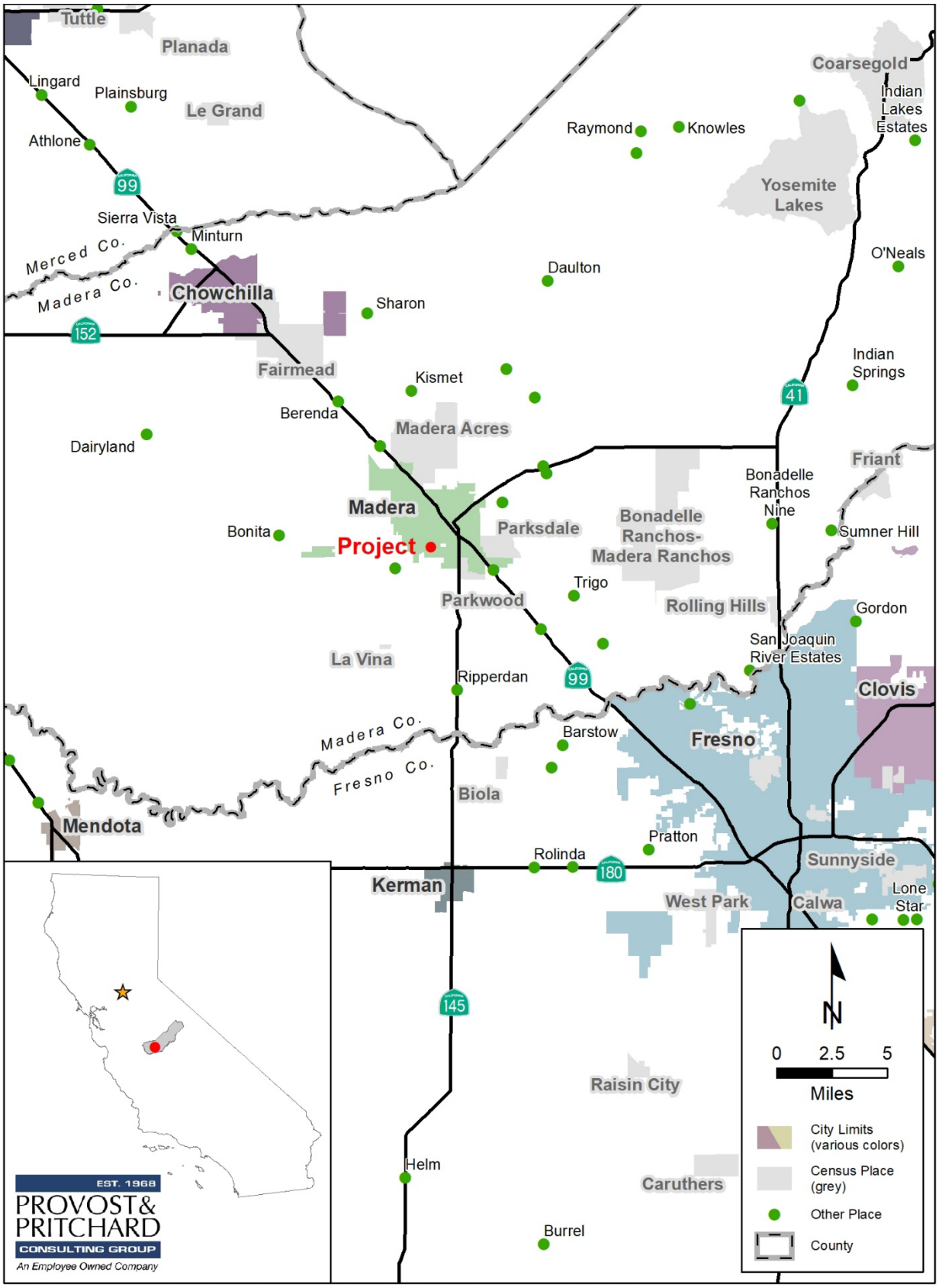
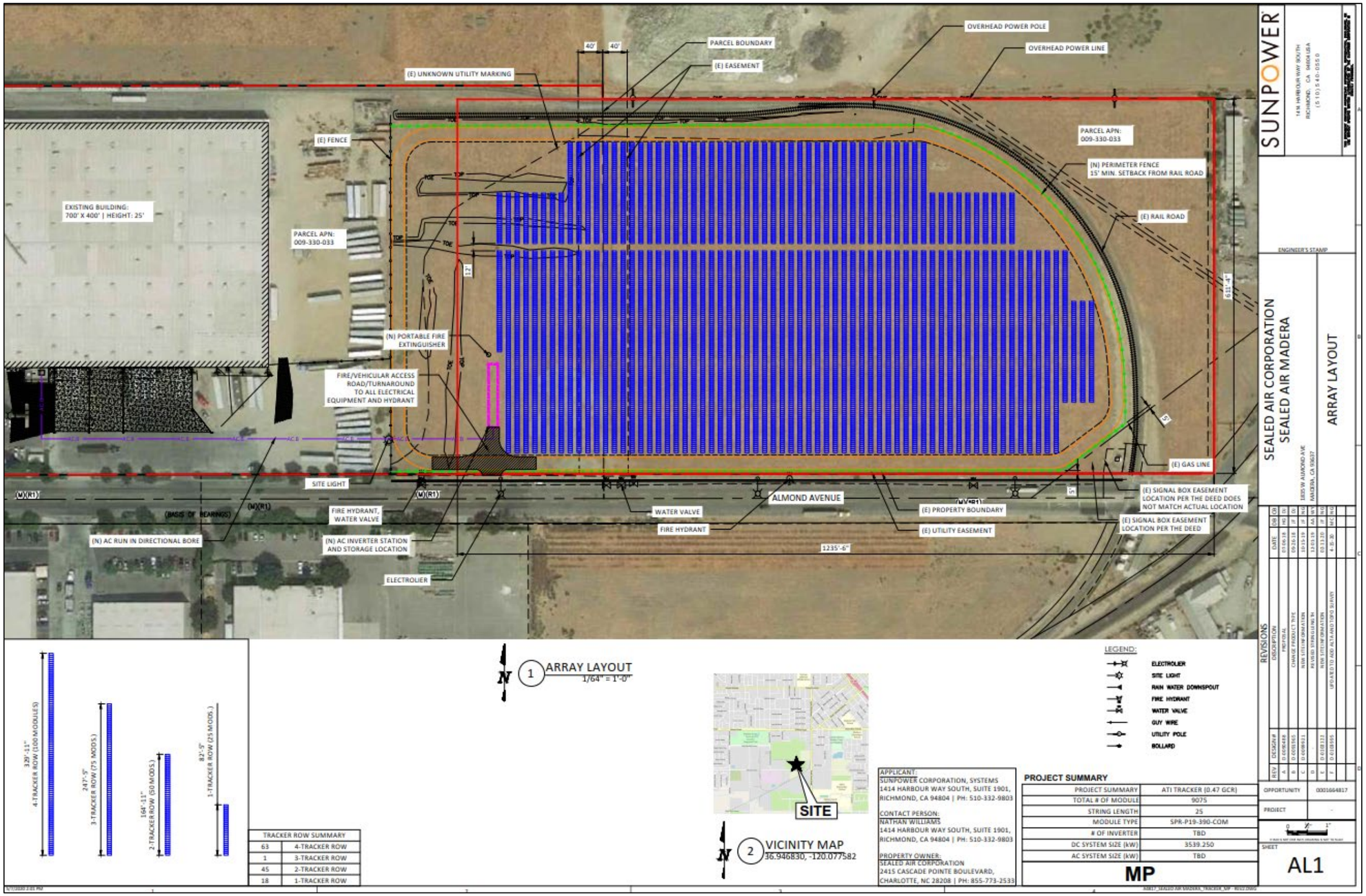


Figure 2-2 Area of Potential Effect

Figure 2-3 Solar Array Layout



Chapter 3 Determination

3.1 Environmental Factors Potentially Affected

As indicated by the discussions of existing and baseline conditions, and impact analyses that follow in Chapter 4, environmental factors not checked below would have no impacts or less than significant impacts resulting from the project. Environmental factors that are checked below would have potentially significant impacts resulting from the project. Mitigation measures are recommended for each of the potentially significant impacts that would reduce the impact to less than significant.

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

The analyses of environmental impacts in Chapter 4 Impact Analysis result in an impact statement, which shall have the following meanings.

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Less than Significant with Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less Than Significant Impact. This category is identified when the proposed Project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

3.2 Determination

On the basis of this initial evaluation:

☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

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

_____ _____

Signature Date

_____

Printed Name/Position

Chapter 4 Impact Analysis

4.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

4.1.1 Environmental Setting

The visual character of the immediate project vicinity is an urban industrial built environment. The project site, which is visible from West Almond Avenue, is a vacant field that is periodically disced for weed control. The surrounding project area is dominated by developed industrial uses with vacant properties designated and zoned for industrial development. Existing sources of lighting in the vicinity of the project include streetlights along West Almond Avenue and exterior lighting from nearby industrial development.

Topography is relatively flat and there are no natural drainages in the immediate area surrounding the project. The Fresno River, approximately 1.5 miles to the north, the San Joaquin River, approximately 8 miles to the south, and the foothill region of the Sierra Nevada, approximately 25 miles to the northeast, are the nearest significant topographic reliefs. There are no state or county designated scenic highways or historical buildings or properties present in the project vicinity.

4.1.2 Impact Assessment

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

No impact. Scenic vistas are generally interpreted as long-range views of a specific scenic feature (e.g., open space, mountain ridges, ocean views). The project is not located near a scenic vista, nor does the project provide notable scenic values such as undisturbed open space, prominent landforms, or features. The project will not result in the obstruction of federal, state, or locally classified scenic areas, historic properties, community landmarks, or formally classified scenic resources, such as a scenic highway, national or state scenic area, or scenic vista. Therefore, there would be *no impact.*

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

No impact. The project is not located along a State-designated Scenic Highway.[1] Furthermore, there are no notable trees, rock outcroppings, or historical buildings on the project that would be affected, and the project would not alter long-range views to ridgelines or other natural features. Therefore, there would be *no impact.*

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

Less than significant impact. Installation of the proposed project would represent a change in the existing visual character of the project site and its surroundings; however, the project will not substantially degrade the existing visual character or quality of the site and its surroundings. Nor would the project conflict with applicable zoning and other regulations governing scenic quality. The project would have a *less than significant impact* on visual character.

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

Less than significant impact. The project would not introduce new sources of indoor or outdoor lighting to the project site and therefore would not introduce new sources of nighttime light pollution to the area. The proposed solar arrays, which are comprised of iridescent blue panels, could introduce new sources of daytime glare to the project site and surroundings. PV facilities are most efficient in terms of generating electricity when they absorb as much sunlight as possible and reflect as little sunlight as possible.[2] As such, PV facilities, by design, do not produce as much glare and reflectance as standard window glass, car

[1] California Department of Transportation website, Officially Designated State Scenic Highways, http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/ , accessed on July 20, 2020.

[2] Sunshot, United States Department of Energy, Meister Consultants Group, Solar and Glare, June 2014, http://solaroutreach.org/wp-content/uploads/2014/06/Solar-PV-and-Glare_Final.pdf, accessed July 20, 2020.

windshields, white concrete, or snow given the design criteria is to maximize refracted light through the iridescent blue panels.[3] The overall impact of additional glare will be ***less than significant.***

4.2 Agriculture and Forestry Resources

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

4.2.1 Environmental Setting

Pursuant to the California Department of Conservation, the project site is located on land identified as "Farmland of Local Importance".[4] Farmland of Local Importance is defined as land of importance to the

[3] SunPower, PV Systems, Low Levels of Glare and Reflectance vs. Surrounding Environment, https://us.sunpower.com/sites/sunpower/files/media-library/white-paper/wp-pv-systems-low-levels-glare-reflectance-vs-surrounding environment.pdf, accessed on July 20, 2020.

[4] California Department of Conservation, California Important Farmland Finder, https://maps.conservation.ca.gov/planning/Data Viewer/California Important Farmland: 2016, accessed July 20, 2020.

local agricultural economy as determined by each county's board of supervisors and a local advisory committee. In some counties, Confined Animal Agricultural facilities are part of Farmland of Local Importance, but they are shown separately. In review of available historical aerial photographs of the site and vicinity, past agricultural operations on the site and surrounding area included livestock operations on the eastern three-quarters of the site and on land to the south of the site. The western quarter of the site was subject to row crop agriculture. Livestock operations appeared to cease by 1981. Since then, the site has remained fallow.

Neither the project site nor surrounding properties are subject to a Williamson Act contract. The site is designated and zoned Industrial land in both the City's General Plan and Zoning Code.

4.2.2 Impact Assessment

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

No impact. The project would not convert land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency) to non-agricultural use. Therefore, there would be *no impact*.

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

No impact. The project would not conflict with existing zoning for agricultural use and there are no Williamson Act contracts affecting the project site or surrounding properties. Therefore, there would be *no impact.*

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

No impact. Neither the project site nor surrounding properties are defined as forest land (as defined by Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)). Therefore, there would be *no impact*.

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

No impact. The project site neither contains nor is adjacent to forested lands. Furthermore, the project site and its adjacent lands are not designated or zoned for timberland or timberland protection. Thus, the project would not conflict with or result in the loss of forest land or conversion of forest land to a non-forest use. Therefore, there would be *no impact*.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No impact. As described above, the project has not been in agricultural use since 1981. Surrounding properties have either been developed for industrial purposes or remain fallow. Accordingly, the proposed project would not introduce changes in the existing environment that would result in the conversion of Farmland to a non-agricultural use or conversion of forest land to a non-forest use. Therefore, there would be *no impact.*

4.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

4.3.1 Environmental Setting

The project site is located within the San Joaquin Valley Air Basin (SJVAB). The SJVAB, which occupies the southern half of California's Central Valley, is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). Other air quality regulatory agencies that share responsibility with regulating SJVAB's air quality to ensure that all state and federal ambient air quality standards are attained within the SJVAB include the California Air Resources Board (CARB) and the United States Environmental Protection Agency (USEPA). The SJVAPCD, which is responsible for the attainment of state and federal air quality standards in the SJVAB, develops rules, regulations, and policies to comply with applicable state and federal air quality legislation.

The SJVAPCD air quality-related planning documents, rules, and regulations applicable to this project include:

Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). The GAMAQI provides assistance in evaluating potential air quality impacts of projects in the SJVAB, by providing guidance on evaluating short-term (construction) and long-term (operational) air emissions. The GAMAQI provides criteria and

thresholds for determining whether a project may have a significant adverse air quality impact, specific procedures and modeling protocols for quantifying and analyzing air quality impacts, methods to mitigate air quality impacts, and information for use in air quality assessments and environmental documents. The thresholds of significance are summarized, as follows:

Short-Term Emissions of Particulate Matter (PM10): Construction impacts associated with the proposed project would be considered significant if the feasible control measures for construction in compliance with Regulation VIII as listed in the SJVAPCD guidelines are not incorporated or implemented, or if project-generated emissions would exceed 15 tons per year (TPY).

Short-Term Emissions of Ozone Precursors (ROG and NOX): Construction impacts associated with the proposed project would be considered significant if the project generates emissions of Reactive Organic Gases (ROG) or NO_X that exceeds 10 TPY.

Long-Term Emissions of Particulate Matter (PM10): Operational impacts associated with the proposed project would be considered significant if the project generates emissions of PM_{10} that exceed 15 TPY.

Long-Term Emissions of Ozone Precursors (ROG and NOX): Operational impacts associated with the proposed project would be considered significant if the project generates emissions of ROG or NOX that exceeds 10 TPY.

Conflict with or Obstruct Implementation of Applicable Air Quality Plan: Due to the region's nonattainment status for ozone, $PM_{2.5}$, and PM_{10}, if the project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NO_x) or PM_{10} would exceed the SJVAPCD's significance thresholds, then the project would be considered to conflict with the attainment plans. In addition, if the project would result in a change in land use and corresponding increases in vehicle miles traveled, the project may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans.

Local Mobile-Source CO Concentrations: Local mobile source impacts associated with the proposed project would be considered significant if the project contributes to CO concentrations at receptor locations in excess of the CAAQS (i.e. 9.0 ppm for 8 hours or 20 ppm for 1 hour).

Exposure to toxic air contaminants (TAC) would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 10 in 1 million or would result in a Hazard Index greater than 1.

Odor impacts associated with the proposed project would be considered significant if the project has the potential to frequently expose members of the public to objectionable odors.

Rule 2280 Portable Equipment Registration. Portable equipment used at project sites for less than six consecutive months must be registered with the SJVAPCD. The SJVAPCD will issue the registration 30 days after receipt of application.

Rule 8011 General Requirements: Fugitive Dust Emission Sources. Operations, including construction operations, must control fugitive dust emissions in accordance with SJVAPCD Regulation VIII. The SJVACPD requires the implementation of control measures for fugitive dust emissions. For projects in which construction-related activities would disturb equal to or greater than one (1) acre of surface

area, the SJVAPCD recommends that demonstration of receipt of an SJVAPCD approved "Dust Control Plan" or "Construction Notification Form," before issuance of the first grading permit, be made a condition of approval.

Rule 9510 Indirect Source Review. This rule requires project applicants to reduce operational emission of oxides of nitrogen (NO_x) by 33 percent of the project's operational baseline and 50 percent of the project's operational suspended particulate matter less than 10 microns in diameter (PM_{10}) emissions. Projects subject to SJVAPCD's District Rule 9510 are required to submit an Air Impact Assessment (AIA) application to the SJVAPCD no later than applying for final discretionary approval of a proposed project, and to pay any applicable off-site mitigation fees before issuance of the first building permit.

Air quality is determined by the type and amount (concentration) of contaminants emitted into the atmosphere, the size and topography of the SJVAB, and its meteorological conditions. National and State air quality standards specify the upper limits of concentrations and duration in the ambient air for the following air pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), suspended particulate matter less than 10 microns in diameter (PM_{10}), suspended particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), sulfur dioxide (SO_2) and lead (Pb). These pollutants are commonly referred to as "criteria pollutants." The SJVAPCD also conducts monitoring for two other State standards: sulfates and visibility.

The SJVAPCD, together with the CARB, maintains ambient air quality monitoring stations in the SJVAB. The air quality monitoring station closest to the project site is the Madera – 28261 Avenue 14 monitoring station. The pollutants monitored at this station are O_3, $PM_{2.5}$, and PM_{10}. Air quality trends for CO, NO_2, and SO_2 are not monitored at this air quality monitoring station. Madera County – Road 29½, north of Avenue 8 monitoring station monitors NO_2. The nearest station monitoring CO and SO_2 is in Fresno – 3727 North First Street.

The 2017 to 2019 monitoring results from these stations indicate the state 1-hour O_3 standard was exceeded 3 times in 2017, 2 times in 2018, and an unknown number of times 2019. Additionally, the State 8-hour O_3 standard was exceeded 29 times in 2017, 17 times in 2018, and unknown number of times in 2019. Furthermore, the federal 8-hour O_3 standard was exceeded 27 times in 2017, 14 times in 2018 and 10 times in 2019. The state PM_{10} standard was exceeded 16 times in 2017 and 23 times in 2018. The CO, NO_2, and SO_2 standards were not exceeded in this area during the 3-year period.

The CARB is required to designate areas of the state as attainment, non-attainment, or unclassified for all state standards. An attainment designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A non-attainment designation indicates that a pollutant concentration violated that standard at least once, excluding those occasions when the violation was caused by an exceptional event, as defined in the criteria. An unclassified designation signifies that data does not support either an attainment or non-attainment status. The California Clean Air Act divides the air districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category. The USEPA also designates areas as attainment, non-attainment, or classified. The air quality data are also used to monitor progress in attaining air quality standards.

The CARB has designated the SJVAB as being a severe non-attainment for 1-hour O_3, and non-attainment for 8-hour O_3, PM_{10}, and for $PM_{2.5}$. The CARB has designated the Air Basin as attainment for NO_2, SO_2, Pb, and as an attainment / unclassified area for CO and all other air contaminants.

The USEPA has designated the SJVAB as being an extreme non-attainment area for 8-hour O_3, and non-attainment for $PM_{2.5}$. USEPA has designated the SJVAB as attainment / unclassified for CO, NO_2, SO_2 and no designation / classification for PM. There is no federal standard for 1-hour O_3.

There are no stationary sources that generate air quality emissions on the project site.

Short-term and long-term emissions associated with the project were calculated using California Emissions Estimator Model (CalEEMod, Version 2016.3.2) based on project information available. Emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. Emissions were quantified based on anticipated construction schedules provided by the project applicant. All remaining assumptions were based on the default parameters contained in the model. Modeling assumptions and output files are included in Appendix A.

4.3.2 Impact Assessment

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

Less than significant impact. The proposed project is the installation of a PV facility on the project site. These types of facilities are not considered a regionally significant project that would affect regional vehicle miles traveled and warrant intergovernmental review pursuant to CEQA Guidelines Section 15206(b)(2). In addition, a PV facility would not result in the increase of population or housing foreseen in the City, County or regional planning efforts. Therefore, the proposed project would not have the potential to substantially affect housing, employment, and population projections within the region which is the basis of the Clean Air Plan projections. Moreover, the proposed project is not a regional base project - the project is designed to only meet the energy needs of Sealed Air. The project would not exceed the thresholds established to identify projects that have the potential to generate substantial amount of criteria air pollutants. Since the proposed project would not exceed the established thresholds, the proposed project would not be considered by SJVAPCD to be a substantial emitter of criteria air pollutants. Therefore, the project will not conflict with or obstruct implementation of the applicable air quality plan and the impacts would be ***less than significant.***

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

Less than significant impact. Since SJVAPCD does not have screening criteria for PV facilities, a quantified analysis of the project's construction emissions was conducted using CalEEMod version 2016.3.2 based on information available. According to the CalEEMod results, the project would have a ***less than significant impact*** on air quality when compared to the significance thresholds of annual criteria pollutant emissions (see Table 4-1) for short-term construction-generated activities.

Table 4-1. Unmitigated Short-Term Construction-Generated Emissions of Criteria Air Pollutants

Source	Annual Emissions (Tons/Year)					
	ROG	NOX	CO	SOX	PM_{10}	$PM_{2.5}$
Maximum Annual Proposed Project Emissions[1]	0.1741	1.6979	1.2488	-[2]	0.3536	0.1872
SJVAPCD Significance Thresholds	*10*	*10*	*100*	*27*	*15*	*15*
Exceed Thresholds?	No	No	No	No	No	No

*1. Emissions were quantified using CalEEmod Output Files Version 2016.3.2. Refer to **Appendix A** for modeling results and assumptions. Totals may not sum due to rounding.*
2. Results for sulfur dioxide (SOX) were negligible.

A quantified analysis of the project's long-term operational emissions was also conducted using CalEEMod version 2016.3.2 based on information available. According to the CalEEMod results, the project would have a ***less than significant impact*** on air quality when compared to the significance thresholds of annual criteria pollutant emissions (see Table 4-2) for long-term operational activities.

Table 4-2. Unmitigated Long-Term Operational Emissions of Criteria Air Pollutants

Source	Annual Emissions (Tons/Year)					
	ROG	NOX	CO	SOX	PM_{10}	$PM_{2.5}$
Maximum Annual Proposed Project Emissions[1]	0.0466	0	-[2]	0	0	0
SJVAPCD Significance Thresholds	*10*	*10*	*100*	*27*	*15*	*15*
Exceed Thresholds?	No	No	No	No	No	No

*1. Emissions were quantified using CalEEmod Output Files Version 2016.3.2. Refer to **Appendix A** for modeling results and assumptions. Totals may not sum due to rounding.*
2. Results for carbon monoxide (CO) were negligible.

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

No impact. The project would not expose sensitive receptors to substantial pollutant concentrations. The nearest sensitive receptors to the project site include multi-family housing approximately 1,250 feet (one-quarter mile) to the north and single-family and duplex units approximately 1,570 feet (0.3 mile) to the northeast of the project.[5] No schools, convalescent homes, hospitals or other sensitive receptors are within a one-half mile of the project site. Therefore, there would be ***no impact.***

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

Less than significant impact. During construction activities, construction equipment exhaust and application of asphalt, structural coating and other construction applications would temporarily emit odors. Use of cleaning solutions used during periodic cleaning of the PV panels and equipment will also emit odors. However, construction nor operations of the PV facilities are anticipated to generate substantial odors that would affect a substantial number of people. Therefore, the project would result in a ***less than significant impact.***

[5] Google Earth, accessed on August 9, 2020.

4.4 Biological Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

4.4.1 Environmental Setting

Neither the City of Madera General Plan Update nor its Environmental Impact Report (EIR) identified threatened or endangered species in the project area.

The project site is void of any natural features, such as seasonal drainages, riparian or wetland habitat, rock outcroppings, or other native habitat or associated species. No shrubs or trees are present on or immediately adjacent to the project site. The property is periodically disced for weed control. No wetlands were reported or observed on the site.[6] Development of the site would not conflict with any local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or State habitat conservation plan.

4.4.2 Impact Assessment

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

Less than significant impact. The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Therefore, the project would result in a *less than significant impact*.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No impact. The project site and its surroundings are absent of any riparian habitat, sensitive natural communities of special concern or of any critical habitat designated by the California Department Fish and Wildlife or by the United States Fish and Wildlife Service as critical habitat essential for the preservation and recovery of state and/or federally listed plant or animal species. The project would not result in any direct or indirect impacts to riparian corridor, stream channel, or potentially viable habitat in which sensitive species could be found. Therefore, this project would have *no impact*.

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

No impact. Project site soils are composed of loam to sandy loam texture. Soils have moderately course textures, moderate to high infiltration rates, and are moderate to well drained. Therefore, the proposed project would have *no impact* on federally protected wetlands as defined by Section 404 of the Clean Water Act.

d) Would the project 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?

No impact. The project site does not present any features of a river, creek, stream, or other form of water course, nor does the project site include features of a wildlife corridor. Wildlife movement corridors are

[6] Natural Wetlands Inventory, https://www.fws.gov/wetlands/data/mapper.html, accessed on August 9, 2020.

absent from the project site. Therefore, the project would have ***no impact*** on the movement of any native resident or migratory fish or wildlife species or on an established native resident or migratory wildlife corridor.

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

No impact. The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Therefore, this project will have ***no impact***.

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

No impact. Neither the project site nor the immediate area surrounding the project site are subject to an adopted or proposed local, regional, or state adopted habitat conservation plan (HCP), or similar types of conservation plans. Therefore, the project would not conflict with the provisions of an adopted or proposed HCP or similar approved local, regional, or state habitat conservation plan. As such, the project will have ***no impact***.

4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

4.5.1 Environmental Setting

Neither the City of Madera General Plan Update nor its Environmental Impact Report (EIR) identify known recorded archeological sites or historic properties within or in the immediate vicinity of the project site. Nor did the EIR indicate the presence of Native American traditional cultural place(s) within or adjacent to the project site.

4.5.2 Impact Assessment

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

No impact. Based on the City of Madera General Plan Update EIR, the project site and its surroundings are absent of any known historic properties. The project is devoid of structures. No historic properties would be affected by the proposed project. Therefore, the project would result in *no impact*.

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

Less than significant impact. While no known archaeological deposits are present on the project site, it is possible that unknown buried archaeological materials could be found during ground disturbing activities, including unrecorded Native American prehistoric archaeological materials. If such resources were discovered, the impact to archeological resources could be significant. General Plan Action Item HC-9.2 requires a condition of approval on all discretionary projects that the Planning Department be notified immediately if any prehistoric, archaeologic, or fossil artifact or resource is uncovered during construction. All construction must stop and an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to evaluate the finds and recommend appropriate action. Implementation of the required condition, in accordance with the provisions of Public Resources Code Section 21083.2, would reduce the impact to *less than significant*.

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

Less than significant impact. There are no known formal cemeteries or known interments to have occurred on the project site. Though unlikely, there is the possibility human remains may be present beneath the project site. Should human remains be discovered during ground disturbing construction activities, such discovery could be considered significant. Any human remain encountered during ground disturbing activities are required to be treated in accordance with California Code of Regulations Section 15064.5(e), Public Resources Code Section 5097.98, and California Health and Safety Code Section 7050.5, which state the mandated procedures of conduct following discovery of human remains. Additionally, General Plan Action Item HC-9.2 requires a condition of approval on all discretionary projects that all construction must stop if any human remains are uncovered, and the County Coroner must be notified according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in CEQA Section 15064.5 (d) and (e) shall be followed. If human remains are determined to be of possible Native American descent, the Coroner shall notify the Native American Heritage Commission who will appoint a "Most Likely Descendent" and the local Native American Tribe representative to identify and preserve Native American remains, burial, and cultural artifacts. Implementation of the required condition and above-referenced sections would reduce the impact to *less than significant*.

4.6 Energy

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

4.6.1 Environmental Setting

The purpose of the PV facility is to provide an energy source to the existing Sealed Air facility to decrease Sealed Air's demand on the electrical grid and increase the use of renewable energy to support facility operations.

4.6.2 Impact Assessment

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

Less than significant impact. Project construction will result in energy consumption. On-site use of heavy equipment will require fuel to operate and various petroleum products to maintain equipment in operational order. Maintenance of the PV facility may also be subject to the use of fuel. However, it is not expected the project will consume significant quantities of fuel or lubricants or result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. The project will have a *less than significant impact*.

The project will result in the increased use of renewable energy source by Sealed Air and Sealed Air's demand on the electrical grid from energy sources that otherwise may be produced by petroleum driven turbines. This will result in long-term beneficial impact.

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

No impact. State and local authorities regulate energy use and consumption. These regulations at the State level intended to reduce energy use and greenhouse gas (GHG) emissions. These include, among others, Assembly Bill (AB) 1493 – Light-Duty Vehicle Standards; California Code of Regulations Title 24, Part 6 – Energy Efficiency Standards; and California Code of Regulations Title 24, Part 11 – California Green Building Standards. The project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, this project will have *no impact.*

4.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☐	☒

4.7.1 Environmental Setting

The project site is located in the central portion of the San Joaquin Valley. The San Joaquin Valley is part of the Great Valley Geomorphic Province topographic and structural basin bound on the east by the Sierra Nevada and the west by the Coast Range. The Sierra Nevada, a fault block dipping gently to the southwest, is composed of igneous and metamorphic rocks of pre-Tertiary age which comprise the basement complex beneath the Valley. The subsurface of the project site and surrounding vicinity is characterized by a thick sequence of unconsolidated sediments. Subsurface material beneath the site is primarily composed of alluvial fan deposits and floodplain over-bank deposits including interbedded silts, sands, clays, and gravels. Project site soils are of loam to sandy loam texture. Soils have moderately course textures, moderately to high infiltration rates, and are moderate to well drained.[7]

There are no known faults on the project site or in the immediate area. The project site is subject to relatively low seismic hazards compared to many other parts of California. Potential ground shaking produced by earthquakes generated on regional faults lying outside the immediate vicinity in the project area may occur. Due to the distance of the known faults in the region, no significant ground shaking is anticipated on this site. Seismic hazards on the built environment are addressed in the Uniform Building Code (UBC) that is utilized by the City of Madera Building Department to monitor safe construction within the City limits.

The project site and the greater City of Madera consists of lands with less than two percent slope grade, and therefore are not subject to landslides.

4.7.2 Impact Assessment

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

a-i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No impact. Groundshaking intensity is largely a function of distance from the earthquake epicenter and underlying geology. Generally, the City of Madera, which is located on deep alluvial and unconsolidated sediments, could experience strong shaking during a large earthquake. The most common impact associated with strong ground shaking is damage to structures. The UBC establishes minimum standards for structures located in regions subject to ground shaking hazard areas. Structures constructed on-site would be required by state law and City ordinances to be constructed in accordance with UBC and to adhere to all current earthquake construction requirements. The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. No known faults with evidence of historic activity cut through the valley soils in the project vicinity. The major

[7] Moore Twining Associates, Inc., *Phase I Environmental Site Assessment, Proposed Ground Mounted Solar Array 1835 West Almond Avenue, Madera, CA 93637*, p4.

active faults and fault zones occur at some distance to the east, west, and south of the project site. Due to the geology of the project area and its distance from active faults, the potential for loss of life, property damage, ground settlement, or liquefaction to occur in the project vicinity is considered minimal. The project would not introduce residential development on the project nor expose people to strong seismic ground shaking. Therefore, the project would result in ***no impact***.

a-ii) Strong seismic ground shaking?

No impact. The project site is not within an Alquist-Priolo Earthquake Fault Zone. The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. Ground shaking generally decreases with distance and increases with the depth of unconsolidated alluvial deposits. The most likely source of potential ground shaking is attributed to the San Andreas (approximately 85 miles west), Owens Valley (approximately 100 miles east), and the White Wolf faults. Based on this premise and taking into account the distance to the causative faults, the potential for ground motion in the vicinity of the project site is such that a minimal risk can be assigned. Therefore, the project would result in ***no impact***.

a-iii) Seismic-related ground failure, including liquefaction?

No impact. The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Liquefaction describes a phenomenon in which a saturated soil loses strength during an earthquake as a result of induced shearing strains. Lateral and vertical movement of the soil mass combined with loss of bearing usually results. Loose sand, high groundwater conditions (where the water table is less than 30 feet below the surface), higher intensity earthquakes, and particularly long duration of ground shaking are the requisite conditions for liquefaction. None of these conditions is present at the project site. Therefore, the project would result in ***no impact***.

a-iv) Landslides?

No impact. The project site is generally flat. Due to the flat and level topography, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Therefore, the project would result in ***no impact***.

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

Less than significant impact. Compliance with existing regulatory requirements such the UBC and implementation of erosion control best management practices during any significant construction on the project site would reduce the impacts associated with soil erosion or the loss of topsoil. The project will result in minimal soil coverage. Drainage from the PV panels and equipment will primarily infiltrate naturally into the soil. Adherence to existing regulatory requirements would ensure that the impacts associated with the project would be ***less than significant***.

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

No impact. Due to the relatively flat topography of the project site and greater surrounding area, landslides are not considered a potentially significant geologic hazard. The project site overall has a less than two percent slope. Therefore, the project would result in *no impact*.

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

No impact. The project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), not creating substantial direct or indirect risks to life or property. The project soil types consist of loam to sandy loam textures. Therefore, the project would result in *no impact*.

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

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

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

No impact. The project would not directly or indirectly destroy known unique paleontological resource or site or unique geologic feature. Therefore, there would be *no impact*.

4.8 Greenhouse Gas Emissions

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

4.8.1 Environmental Setting

Climate change is a public health and environmental concern around the world. Globally, temperature, precipitation, sea level, ocean currents, wind patterns, and storm activity are all affected by the presence of greenhouse gas (GHG) emissions in the atmosphere. Human activity contributes to emissions of six

primary GHG gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of GHGs are linked to climate change.

In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006, which aims to reduce GHG emissions in California. GHGs, as defined by AB 32, include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires the CARB, the State agency that regulates statewide air quality, to adopt rules and regulations that would achieve GHG emissions equivalent to 1990 statewide levels by 2020. CARB has not adopted a specific threshold of significance for GHG emissions. However, the Bay Area Air Quality Management District (BAAQMD) has developed a threshold of significance. The BAAQMD's approach to developing a threshold of significance for GHG emissions was to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce Statewide GHG emissions. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact and would be considered significant. If mitigation can be applied to lessen the emissions such that the project meets its share of emission reductions needed to address the cumulative impact, the project would normally be considered less than significant. Although the project is not located in the Bay Area, the BAAQMD's threshold for significance for GHG emissions is based on the Statewide AB 32 objectives and have been used in this analysis.

The Conservation Element of the 2011 City of Madera General Plan Update includes several goals, policies, and programs in the Air Quality, GHG Emissions, and Climate Change sections that address and promote practices that meet or exceed all State and federal standards and meet or exceed all current and future State-mandated targets for reducing GHG emissions. The City also requires applicants for all public and private development to integrate appropriate methods that reduce GHG emissions consistent with the Energy and Green Building sections of the Conservation Element, General Plan Policies CON-40 through 46.

4.8.2 Impact Assessment

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

Less than significant impact. The project would not, by itself, generate significant GHG emissions or contribute to global warming. GHG emissions from construction activities are one-time, short-term emissions and therefore would not significantly contribute to long-term cumulative GHG emissions impacts of the project. According to the CalEEMod results for unmitigated construction (see Table 4-3), the project would not exceed the established threshold of significance. Therefore, construction emissions would be *less than significant*.

Table 4-3. Unmitigated Short-Term Construction-Generated Emissions of CO2e

Source	Annual Corban Dioxide Equivalent Emissions in Metric Tons (MT CO2e/Year)
Maximum Annual Proposed Project Emissions[1]	257.1264
AB 32 Consistency Threshold for Land-Use Development Projects[2]	*1,100*
Exceed Thresholds?	No

1. *Emissions were quantified using CalEEmod Output Files Version 2016.3.2. Refer to **Appendix A** for modeling results and assumptions.*
2. *As published in the Bay Area Air Quality Management District's CEQA Air Quality Guidelines. Available online at http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en Accessed [August 14, 2020.]*

Due to the nature of the proposed project, its development and operation would generate minimal emission of GHG from transportation sources, water use, wastewater generation, and solid waste generation. Project operation would generate occasional trips by maintenance workers to perform routine maintenance and repairs, and a water truck that would make deliveries to the project site for cleaning purposes. In addition, the proposed project would be generating renewable energy, and thus would generate net negative energy use. Furthermore, electricity produced by the project would help lower the overall GHG emissions impact from powering an industrial use served by the proposed energy source. According to the CalEEMod results for unmitigated operational activities, the project emissions for the carbon dioxide equivalent (CO2e) is negligible and would not exceed the threshold of significance. Therefore, emissions for both construction and operations would be *less than significant*.

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

No impact. The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, the project would have *no impact.*

4.9 Hazards and Hazardous Materials

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

4.9.1 Environmental Setting

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws and regulations. Laws and regulations established by the USEPA are enforced by the California Protection Agency (CAL-EPA). CAL-EPA also oversees the unified hazardous waste and hazardous materials management regulatory program. California Health and Safety Code Section 25501

defines a hazardous material as "any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment." Section 21092.6 of the CEQA Statutes requires the Lead Agency to consult the lists compiled pursuant to Government Code Section 65962.5 to determine whether a proposed project and any alternative are identified as contaminated sites.

The required lists of hazardous material release sites are commonly referred to as the "Cortese List". The list includes the California Department of Toxic Substance Control's (DTSC) online EnviroStar database and the State Water Resources Control Board's (SWRCB) online GeoTracker database. These two databases include hazardous release sites, along with other categories of sites or facilities where known or suspected sources of contamination were identified. A search of DTSC's EnviroStor and SWRCB's GeoTracker database on August 8, 2020 revealed no hazardous material release sites at the project site or in the immediate vicinity.

The project site was subject to Phase I and Phase II Environmental Site Assessment. A copy of each report is provided in Appendix B and Appendix C of this document, respectively.

4.9.2 Impact Assessment

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

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

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

Less than significant impact. The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Therefore, impacts would be *less than significant*.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than significant impact. There is one school within one-quarter mile of the proposed project. The South Madera High School athletic fields located adjacent to South Pine Street is one-quarter mile from the project site. As noted above in the response to item (a), compliance with applicable laws and regulations

would minimize hazards risks to a level of less than significant. Therefore, the project would result in a ***less than significant impact*** on school facilities.

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

No impact. The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, it would not create a significant hazard to the public or the environment. Therefore, there would be ***no impact***.

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

Less than significant impact. The nearest airport (Madera Municipal Airport) is located approximately 2.6 miles to the north of the project site and is subject to occasional overflights.[8] A portion of the project site is within the airport's adopted airport land use compatibility plan.[9] The northwestern corner of the existing Sealed Air site lies within Compatibility Zone D (Other Airport Environs). As such, the project would need to adhere to an adopted airport land use plan. The project site's risk level for safety and airspace protection is considered low. The risk concern is only with uses for which potential consequences are severe (e.g., very-high intensity activities in a confined area).[10] Therefore, the project would result in a ***less than significant impact***.

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

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

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

No impact. The project site is not located within an area of moderate, high, or very high Fire Hazard Severity for the Local Responsibility Area, nor does it contain any areas of moderate, high, or very high Fire Hazard Severity for the State Responsibility Area. Therefore, there would be ***no impact***.

[8] Google Aerial Map, Accessed August 9, 2020.

[9] Mead & Hunt, Inc., *Madera Countywide Airport Land Use Compatibility Plan*, Compatibility Policy Map, Madera Municipal Airport.

[10] Ibid, p3-39.

4.10 Hydrology and Water Quality

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

4.10.1 Environmental Setting

The City of Madera is within the San Joaquin River watershed and Basin Hydrological Study Area covering roughly 13,500 square miles, or approximately the southern two-thirds of the San Joaquin Valley. The San Joaquin River watershed is divided into numerous hydrologic areas and subareas. The Madera hydrologic area encompasses the southwestern and northwestern portions of the City and extends northwest to the City of Chowchilla, draining into the Fresno River and its tributaries. The Fresno River is the main hydrologic feature in the City. The river flows west from the Sierra Nevada before entering the Chowchilla Bypass in western Madera County. The Fresno River is dry throughout most of the year, with flows depending mainly on water releases from upstream water agencies.[11]

The City of Madera is not within or adjacent to the boundaries of a sole source aquifer. The nearest sole source aquifer is the Fresno County Sole Source Aquifer, located approximately 8 miles to the south.

FEMA FIRM Panel No. 06039C1155E (September 26, 2008) indicates that the project site is located in Zone X, an area of minimal flood hazard.

4.10.2 Impact Assessment

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

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

The project would disturb more than one acre of soil on the project site. Therefore, the proposed project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit (GCP). The GCP requires the submittal of Permit Registration Documents (PRDs) to the State Water Resources Board (SWRCB) prior to the start of the construction. The PRDs include a Notice of Intent (NOI), risk assessment, site map, annual fee, signed certification statement, Stormwater Pollution Prevention Plan (SWPPP), and post-construction water balance calculations. The SWPPP describes the incorporation of best management practices to control sedimentation, erosion, and the potential for hazardous materials contamination of runoff during construction.

Upon completion of the project, rainwater and water used for cleaning the solar arrays would runoff on-site into the permeable ground beneath the panels. Therefore, the project would not contribute to an exceedance of stormwater runoff off-site. Furthermore, during project operation, the project would not be a point source generator of water pollutants and would therefore not violate any water quality standard. The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, the project impacts would be *less than significant*.

[11] City of Madera, *City of Madera General Plan Update, Draft Environmental Impact Report*, p4.9-1.

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

Less than significant impact. The project would introduce less than an acre of impervious surface on the project site. Accordingly, the vast majority of the site would remain permeable and available for recharge in the groundwater basin. Water for operation would likely be delivered to the project site via 5,000-gallon water tender. No connection to municipal water or groundwater wells is proposed. The water used during construction and water operation would be replenished from a fire hydrant located in the project vicinity. Therefore, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin and the impacts would be *less than significant*.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

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

Less than significant impact. The project site does not contain any waterways and therefore implementation of the proposed project would not alter the course of a stream or river. However, the project would require grading or soil exposure during construction. If not controlled, the transport of these materials via local stormwater systems into local waterways could temporarily increase sediment concentrations. To minimize this impact, the proposed project would be required to comply with all of the requirements of the state GCP, including preparation of PRDs and submittal of a SWPPP to the SWRCB prior to start of construction activities. Mandatory compliance with state regulations would ensure that impacts from erosion and siltation would be *less than significant*.

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

Less than significant impact. The project would not substantially increase the amount of impervious surface area on the project site. In addition, the project would be required to comply with all of the requirements of the state GCP as described above to ensure the adequate control of runoff and prevention of on-site flooding. Therefore, the potential impacts to flooding on- or off-site would be *less than significant*.

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

Less than significant impact. The project would not substantially alter the existing drainage pattern of the site or area. The project would be required to comply with the City's Master Plan, ordinances, and standard practices for stormwater drainage. Therefore, the project impacts would be *less than significant*.

iv) impede or redirect flood flows?

Less than significant impact. All project-related storm flows will be captured on site and percolated in the existing soil base. Therefore, the project impacts would be *less than significant*.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundations?

No impact. The project is not located in flood hazard, tsunami, or seiche zones and it will not risk the release of pollutants due to project inundation. Therefore, there would be *no impact*.

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

No impact. The project does not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. Therefore, there would be *no impact*.

4.11 Land Use and Planning

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

4.11.1 Environmental Setting

The project site is within the City limits. The site is designated in the City's General Plan as (I) Industrial and zoned (I) Industrial. The proposed solar tracker system and battery energy storage is a compatible industrial land use.

4.11.2 Impact Assessment

a) Would the project physically divide an established community?

No impact. The project would not physically divide an established community, neighborhood, or industrial business center. The project is located on property owned by Sealed Air with the purpose of providing a renewable source of energy to meet the needs of its manufacturing facility adjacent to the proposed project site. Therefore, there would be *no impact*.

b) Would the project cause a significant environmental conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No impact. The project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, there would be *no impact*.

4.12 Mineral Resources

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

4.12.1 Environmental Setting

The California Geological Survey (CGS) is responsible for the classification and designation of areas within California containing or potentially containing significant mineral resources. The CGS classifies lands into Aggregate and Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geologic Board, as mandated by the Surface Mining and Reclamation Act of 1974. These MRZs identify whether known or inferred significant mineral resources are presented in areas. Lead agencies are required to incorporate identified MRZs resource areas delineated by the state into their general plans.[12] According to the findings of the City of Madera General Plan Update EIR, the project site does not have the potential to affect the availability of any state or locally designated mineral resource.

4.12.2 Impact Assessment

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

No impact. The project site is not identified as containing any mineral deposits. Therefore, the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. As such, there would be *no impact*.

b) Would the project 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?

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

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

4.13 Noise

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

4.13.1 Environmental Setting

The project site is located in an industrial sector of the community with various types of industrial uses and undeveloped properties surrounding the site. There are no residential or other sensitive land uses within the vicinity of the project site. The existing noise environment surrounding the proposed project site is primarily controlled by vehicle and truck traffic on surrounding roadways, a rail spur that bounds the project site to the north and east, and existing industrial manufacturing facilities operating in the vicinity of the project site.

4.13.2 Impact Assessment

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

Less than significant impact. The proposed project would include various equipment items including modules (panels), inverters, transformers, and a control panel. The only equipment items expected to generate notable levels of noise would be the inverters and, to a lesser extent, the transformers. Other equipment noise would be negligible. The project would require occasional and sporadic maintenance activities, but these would not be expected to produce notable noise levels at off-site receptors. While maintenance crews would travel to the site on a scheduled basis, the very low number of trips, combined with the existing traffic flows in this industrial tract, would result in a negligible increase in roadway noise. Thus, activity and traffic generated noise volumes would be ***less than significant.***

b) Would the project result in generation of excessive ground borne vibration or ground borne noise levels?

Less than significant impact. Construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. Construction activities can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. The generation of vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight damage at the highest levels. Given the type of improvements, it is not anticipated the project would generate excessive ground-borne vibration or ground-borne noise levels. Therefore, the project would have a ***less than significant impact***.

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

No impact. The project site is not located within two miles of an airport. The Madera Municipal Airport is approximately 2.6 north of the project site. Therefore, there is ***no impact***.

4.14 Population and Housing

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

4.14.1 Environmental Setting

The project site is a vacant, undeveloped property in an existing industrial area of the City. There are no homes on the site or adjacent to the project site, nor are there existing homes within the immediate vicinity of the site.

4.14.2 Impact Assessment

a) Would the project induce substantial unplanned 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)?

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

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

No impact. The proposed project site is an existing vacant, undeveloped property. There are no existing homes on the site. Thus, the proposed project would not displace substantial numbers of existing people or housing and will not necessitate the construction of replacement housing elsewhere. Therefore, there would be *no impact*.

4.15 Public Services

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

4.15.1 Environmental Setting

Fire, emergency, medical, and police protection services for the project site is provided by the City of Madera. The City of Madera has a contract service with CalFire to provide management and staffing of the

City's fire stations and equipment. Ambulance services is provided by a private contractor. The project site is located within the Madera Unified School District. The District oversees pre-K through 12 education services. Parks are operated and maintained by the City of Madera.

4.15.2 Impact Assessment

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

Fire Protection:

Less than significant impact. Construction and operation of the proposed project would not require additional fire protection to service the project. There would be no alteration to acceptable service ratios or response times or other performance objectives that are currently experienced at the project site. Nor would the proposed project substantially degrade or reduce the available water for fire suppression purposes in the City. Therefore, the project would have a ***less than significant impact***.

Police Protection:

Less than significant impact. The project site is currently served by the Madera Police Department and would continue to be served by the Madera Police Department. The proposed PV array panels, invertors, and other equipment will be constructed in a secured fenced and gated environment. The project would not result in the need for new or altered services, or a substantial alteration to the patrol requirements from City's Police Department. Therefore, the project would have a ***less than significant impact***.

Schools:

No impact. The proposed project would not result in the construction of new residences and no additional employees would be required to operate or maintain the proposed project. Therefore, the project would have ***no impact*** on school facilities.

Parks:

No impact. The proposed project would not result in the construction of new residences and no additional employees would be required to operate or maintain the proposed project. Therefore, the project would have ***no impact*** on parks.

Other Public Facilities:

No impact. Due to the nature of the proposed project, the project would not result in a need for additional or other public facilities. The proposed project would have ***no impact***.

4.16 Recreation

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) 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?	☐	☐	☐	☒

4.16.1 Environmental Setting

The City of Madera operates and maintains a number of recreational facilities in the City, including Town and Country Park, which is the nearest park to the project site. Town and Country Park is located approximately one-quarter mile to the northwest of the site.

4.16.2 Impact Assessment

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?

No impact. Increased demand for existing parks or other recreational facilities is typically driven by an increase in population. The proposed project, a solar PV facility, would not result in a net increase of residents at the project site or elsewhere. Therefore, the project would not contribute to the deterioration of existing facilities. Therefore, there is *no impact*.

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?

No impact. Increased demand for existing parks or other recreational facilities is typically driven by an increase in population. The proposed project, a solar PV facility, would not result in a net increase of residents at the project site or elsewhere. Therefore, the project would not the construction of new facilities or expansion of existing facilities. Therefore, there is *no impact*.

4.17 Transportation

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

4.17.1 Environmental Setting

The project site is served by a network of local and collector streets. There are no bicycle lanes or sidewalks on any of the roadways serving the project area.

4.17.2 Impact Assessment

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

No impact. Project construction traffic would be a negligible fraction of traffic volumes on the network of streets servicing the project area. Operation and maintenance of the project, once completed, is expected to result in limited traffic volumes. The project would not conflict with any program plan, ordinance, or policy addressing the circulation system, including transit, roadway, and bicycle and pedestrian facilities. The proposed project would not result in the need to modify existing traffic management programs or policies. Therefore, there would be *no impact*.

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

No impact. The project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). The project is not located within one-half mile of an existing major transit stop or along an existing high-quality transit corridor. Therefore, there would be ***no impact.***

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

Less than significant impact. Site access would be provided by single driveway leading from West Almond Avenue. The driveway would be at a right angle and the design would not create hazards. Project access would be reviewed and approved in conformance to City street specifications and sight distance standards. Therefore, the project would result in a *less than significant impact*.

d) Would the project result in inadequate emergency access?

No impact. The proposed project would not impact emergency access. Construction equipment and materials would be staged on-site and not on public roadways. An all-weather entry would be constructed to service the project site. Therefore, *no impact* would occur.

4.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

4.18.1 Environmental Setting

A previous sacred lands search did not identify any sensitive Native American cultural resources either within or near the project site. California Native American tribes traditionally and culturally affiliated with the project area did not request consultation pursuant to Public Resources Code Section 21080.3.1.

4.18.2 Impact Assessment

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

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

No impact. The project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and the project is not listed or eligible for listing in the California Register of Historical Resources (CRHR), or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). As described above, no known tribal cultural resources have been identified (as defined in Section 21074) within the project area. Therefore, the project would ***not impact*** the significance of a tribal cultural resource that is either listed in, or eligible for listing in, the CRHR, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).

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

Less than significant impact. The project site is not a resource determined by the lead agency (City of Madera), in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. The project site is not listed as a historical resource in the California Register of Historical Sources. As described above, no known tribal cultural resources have been identified (as defined in Section 21074) within the project area, and no substantial information has been provided to the City to indicate otherwise. Therefore, the project would have a ***less than significant impact*** on the significance of a tribal cultural resource.

4.19 Utilities and Service Systems

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

4.19.1 Environmental Setting

The project would not result in generation of any additional wastewater or bring about the need for new wastewater treatment facilities. The City's community sewage disposal system would continue to comply with its Waste Discharge Requirements. The project would not significantly increase the demand on water supplies; adequate domestic water and fire flows should be available to the property. There would not be a significant reduction in the amount of groundwater otherwise available for public water supplies as a result of this project. The project would not increase the need for additional stormwater drainage facilities. The project site would be required to comply with the City's Master Plan, ordinances, and standard practices. The project would not bring about a significant increase in the demand for solid waste disposal services and facilities.

4.19.2 Impact Assessment

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

No impact. The project would not require the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities which would result in significant environmental effects. Therefore, there is *no impact*.

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

No impact. The proposed project would not require the extension of existing water services. No water services will be provided on site. Therefore, there is *no impact*.

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

No impact. The proposed project would result in expanding or extending City sewer services to the project site. The proposed project does not include the construction of on-site wastewater services. Therefore, there is *no impact*.

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

Less than significant impact. The project would not result in the demolition of existing structures. Refuse generated during construction would be picked up the City's contracted waste hauler. Project operation and maintenance would generate a minimal amount of solid waste. Therefore, the project would have a *less than significant impact*.

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

Less than significant impact. The project would be required to comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, the impact would *less than significant*.

4.20 Wildfire

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

4.20.1 Environmental Setting

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The project will be developed consistent with all regulations of the California Fire Code.

4.20.2 Impact Assessment

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

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

No impact. The project would not substantially impair an adopted emergency response and/or emergency evacuation nor is the site located near a state responsibility area or classified as a very high fire hazard severity zone. There would be *no impact*.

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

No impact. The project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Nor is the site located near a state responsibility area or classified as a very high fire hazard severity zone. There would be *no impact*.

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

No impact. The project would not require the installation or maintenance of roads and will not exacerbate fire risk or result in temporary or ongoing impacts to the environment as the project is also not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. There would be *no impact*.

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

No impact. The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Nor is the site located near a state responsibility area or classified as a very high fire hazard severity zone. There would be *no impact*.

4.21 CEQA Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

4.21.1 Environmental Setting

Based upon staff analysis and comments from experts, it has been determined that the proposed project could generate some limited adverse impacts in the areas of Aesthetics, Air Quality, Biologic Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Public Services, Transportation, Tribal Cultural Resources, and Utilities and Service Systems.

The potential impacts identified in this Initial Study are considered to be less than significant since they will cease upon completion of construction or do not exceed a threshold of significance. Therefore, a Negative Declaration is the appropriate level of documentation for this project.

4.21.2 Impact Assessment

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than significant impact. The project would not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. Impacts are considered to be *less than significant*.

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

Less than significant impact. The project would not have cumulatively considerable impacts that are considered beyond *less than significant*.

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

Less than significant impact. The project would not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. Impacts are considered to be *less than significant*.

Appendix A: CalEEMod Output Files

Appendix B: Phase I Environmental Site Assessment

Appendix C: Phase II Environmental Site Assessment