

Initial Study/ Mitigated Negative Declaration

American Canyon Solar P18-00114-UP Planning Commission Hearing November 28, 2018

COUNTY OF NAPA PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT 1195 THIRD STEET SUITE 210 NAPA, CA 94559 (707) 253-4417

Initial Study Checklist (form updated October 2016)

1. **Project Title:** American Canyon Solar, Use Permit #P18-00114-UP

- 2. Property Owner: Jhila Zarebi, Trustee of the Barrow Irrevocable Trust, 3356 Wilshire Dr., Redding, CA 96002
- 3. County Contact Person, Phone Number and email: Vincent Smith, 707-259-5934; vincent.smith@countyofnapa.org
- 4. Project Location and APN: This 21 acre parcel is located at 2180 American Canyon Rd. within the AW (Agricultural Watershed) Zoning District; APN 059-090-012 & -016
- 5. Project sponsor's name and address: Renewable Properties, LLC; contact Aaron Halimi, 100 Broadway, San Francisco, CA 94111
- 6. General Plan description: AWOS (Agricultural Watershed Open Space)
- 7. **Zoning:** AW (Agricultural Watershed)
- 8. Description of Project: Request for approval of a Use Permit to allow construction of an approximately 18-acre solar field on the 21-acre property. The solar field will utilize approximately 12,096 solar modules (panels) and 66 string inverters, which convert the sun's energy into usable, AC power. The solar panels will be mounted on steel racking systems which will be anchored to the ground using driven steel piers at an overall height of under 8-feet above grade. Single axis tracking technology will be used to allow the panels to move to efficiently track the sun throughout the day thereby maximizing the efficiency of solar collection. The solar panels will generate a total of 3 Megawatts of AC power when fully implemented. The power generated from this facility will be sold to Marin Clean Energy (MCE) through a long-term Power Purchase Agreement (PPA). The existing single-family home and several agricultural out-buildings will be removed as part of the project and a gravel maintenance road will be installed around a portion of the perimeter of the solar field for maintenance access purposes. No other physical improvements are proposed.

Once completed, the project will operate a passive solar energy collection facility requiring no on-site employees and minimal maintenance needs for vegetation removal and panel maintenance. It is predicted that visitation to the site would occur no more than 10-times per year. Panel maintenance, including washing, is typically conducted utilizing a water truck; however, the applicant is keeping the on-site water service (wells) in the event of a long term need.

9. Describe the environmental setting and surrounding land uses.

The 21-acre project site is located within the AW zoning district at 2180 American Canon Road approximately 1 mile southwest of the intersection of American Canyon Rd. and Interstate Highway 80 (I80). The parcel is comprised of approximately 14 acres of developed area active agricultural area (roads, animal stalls, exercise areas and the home), approximately 7 acres of grazing land supporting various agricultural uses such as chicken, sheep and goat farming. Site topography ranges from slopes of one to less than five percent with soil types including Clear Lake Clay. American Canyon Creek runs along the north and portions of the western property line; however, no portion of the parcel is within a mapped flood hazard zone. The primary vegetation is grasses used for pasture grazing purposes. There is an existing single family home and multiple small and medium sized agricultural buildings on the site that support raising farm animals.

The property is bordered on the west by Interstate Highway (I80), by rural residential and agricultural (grazing/animal) uses across American Canyon Creek to the north and adjacent to the south, and a horse-riding arena and boarding facility to the west. The property has access and frontage on American Canyon Rd. via a 25-foot wide "panhandle"; however, the bulk of the site is over 500 feet from American Canyon Rd. permits. The existing connection to American Canyon Rd. and the existing private culvert crossing of American Canyon Creek will be retained, requiring no improvements.

Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement).

12. **Tribal Cultural Resources.** Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun? On August 8, 2018, County Staff sent invitations to consult on the proposed project to Native American tribes who had a cultural interest in the area and who as of that date had requested to be invited to consult on projects, in accordance with the requirements of Public Resources Code section 21080.3.1. One response has been received from the Middletown Rancheria stating that they have no specific comments at this time.

The project will require various ministerial approvals by the County and Cal Fire, including but not limited to building permits and grading

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL IMPACTS AND BASIS OF CONCLUSIONS:

The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of the Napa County Environmental Resource Maps, the other sources of information listed in the file, and the comments received, conversations with knowledgeable individuals; the preparer's personal knowledge of the area; and, where necessary, a visit to the site. For further information, see the environmental background information contained in the permanent file on this project.

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

Name:

10.

Date

Napa County Planning, Building and Environmental Services Department

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AI	ESTHETICS. Would the project:				
a)	Have a substantial adverse effect on a scenic vista?			\boxtimes	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			\boxtimes	
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?			\boxtimes	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				\boxtimes

a-c. Visual resources are those physical features that make up the environment, including landforms, geological features, water, trees and other plants, and elements of the human cultural landscape. A scenic vista, then, would be a publicly accessible vantage point such as a road, park, trail, or scenic overlook from which distant or landscape-scale views of a beautiful or otherwise important assembly of visual resources can be taken-in.

In order to address potential visual impacts resulting from the solar array installation, the applicant prepared a Visual Assessment (May 2018). The site was evaluated from nine (9) different points along American Canyon Rd. to determine project visibility and possible visual and/or aesthetic impacts of the proposed solar arrays. Given the significant vegetative buffer between American Canyon Rd. and the site, that the closest proposed solar arrays are 600-ft from American Canyon Rd. and that the site is nearly flat (roughly 1% gradient), the visual analysis concludes that there will be no adverse visual impacts as a result of the proposed project.

As generally described in the **Environmental Setting and Surrounding Land Uses** section, above, this area is defined by rural residential uses, grazing pastures and a riding arena/horse boarding facility. The project would not result in a substantial damage to scenic resources or substantially degrade the visual character or quality of the site and its surroundings. The project site is currently developed with a single-family home and associated agricultural buildings and improvements. Up to 7 trees of varying species located in the center of the 21-acre site would be removed along with the existing site improvements; however, there are no rock outcroppings visible from the road or other designated scenic resources on the property. American Canyon Rd. is identified as a Scenic Corridor Roadway; however, the County's Viewshed Protection Program is not applicable to the proposed project as no construction is proposed on slopes in excess of 15 percent. Because there is minimal visual impact from the road, there is a less than significant impact to a scenic vista.

d. No new lighting is proposed as a component of the proposed solar array project.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
AGI	RICULTURE AND FOREST RESOURCES. ¹ Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Important (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?			\boxtimes	
c)	Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code Section 12220(g), timberland as defined in Public Resources Code Section 4526, or timberland zoned Timberland Production as defined in Government Code Section 51104(g)?				\boxtimes
d)	Result in the loss of forest land or conversion of forest land to non-forest use in a manner that will significantly affect timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, or other public benefits?				\boxtimes
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.			\boxtimes	
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.			\boxtimes	

a, b. The project site Is not Prime Farmland, Unique Farmland or Farmland of Statewide Importance. The site is designated as "Other Land (X)," as shown on the Farmland Mapping and Monitoring Program of the California Resources Agency. The proposed solar panel field will cover a majority of the site; however, the proposed use is recognized by the General Plan under <u>General Plan Agricultural Preservation and Land Use Policy AG/LU-29</u> which states "Governmental uses and public utility uses shall be permitted in appropriate locations. Only those new governmental and public utility uses which specifically implement programs mandated by the state or federal government shall be permitted in non-urban areas." The Project is a public utility use, the development of which is being driven by state regulations and policies mandating the increase of renewable energy sources. The Project works in partnership with Marin Clean Energy (MCE), which is a public utility/Community Choice Aggregator (CCA) that serves Napa County.

Public utilities or CCA's, such as MCE and other renewable energy resource providers, rely on companies such as the project applicant (Renewable Properties) to develop, finance, own and operate renewable energy facilities, ultimately entering into Power Purchase Agreements (PPAs) to sell/procure the energy generation from the project(s). CCAs are governmental entities formed by cities and counties to procure electricity for their residents, businesses, and municipal facilities. The PPAs associated with the American Canyon Solar project are part of the MCE Feed-In Tariff program and consist of standardized contracts that were previously approved through a public process.

Projects such as the American Canyon Solar Project are the only way for CCAs to cost effectively meet their state driven mandates by procuring renewable energy generation. Namely, as to renewable energy, the California legislature approved Senate Bill (SB) 1078 establishing California's Renewables Portfolio Standard (RPS) in 2002. Thereafter, the legislature accelerated California's RPS in 2006 under SB 107 by requiring that 20 percent of electricity retail sales be served by renewable energy resources by 2010. Subsequent policies implemented by the California Energy Commission advocated for a goal of 33 percent by 2020, and on November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08 requiring that "all retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020." In April 2011, Governor Edmund G. Brown, Jr. signed SB X1-2, which set the RPS target at 33 percent by 2020. This new RPS applied to all electricity retailers in the state, including publicly-owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators. Pursuant to state law mandates, all of these entities were required to meet the new RPS goals of 20 percent of retails sales from renewables by the end of 2013, 25 percent by the end of 2016, and the 33 percent by the end of 2020. Most recently, Governor Edmund G. Brown, Jr. signed into legislation SB 350 in October 2015, which requires retail sellers and publicly-owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030.

Furthermore, State mandates to improve air quality and fight global warming also rely on the development of renewable energy sources (such as solar). In 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which directed California to reduce GHG emissions to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. A year later, in 2006, the state legislature passed the Global Warming Solutions Act via Assembly Bill (AB) 32, establishing regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions. AB 32 put a

¹ "Forest land" is defined by the State as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." (Public Resources Code Section 12220(g)) The Napa County General Plan anticipates and does not preclude conversion of some "forest land" to agricultural use, and the program-level EIR for the 2008 General Plan Update analyzed the impacts of up to 12,500 acres of vineyard development between 2005 and 2030, with the assumption that some of this development would occur on "forest land." In that analysis specifically, and in the County's view generally, the conversion of forest land to agricultural use would constitute a potentially significant impact only if there were resulting significant impacts to sensitive species, biodiversity, wildlife movement, sensitive biotic communities listed by the California Department of Fish and Wildlife, water quality, or other environmental resources addressed in this checklist.

	Less Than		
Potentially	Significant	Less Than	
Significant	With	Significant	No Impact
Impact	Mitigation	Impact	
•	Incorporation	•	

cap on GHG emissions, setting a target of reducing GHG emissions to 1990 levels by 2020. As part of its implementation of AB 32 and Executive Order S-3-05, the California Air Resources Board (CARB) developed a Scoping Plan in 2008. The Scoping Plan, along with its Update in 2014, describes the approach California will take to reduce GHGs to achieve reduction targets and goals.

On April 20, 2015 Governor Edmund G. Brown Jr. signed Executive Order B-30-15, establishing a new GHG emissions reduction target 40 percent below 1990 levels by 2030. Executive Order B-30-15 also directed CARB to update the AB 32 Scoping Plan to reflect the path to achieving the 2030 target. In September 2016, Governor Brown also signed SB 32, which codified into statute the mid-term 2030 target established by Executive Order B30-15. The new 2030 GHG emissions reduction target places California on a trajectory towards meeting the goal of reducing statewide emissions to 80 percent below 1990 levels by 2050.

Specific to Short-Lived Climate Pollutants (SLCPs), SB 605, which was signed in September 2014, required CARB to develop a plan to reduce emissions of SLCPs. SB 1383, signed in September 2016, requires CARB to approve and begin implementing the plan by January 1, 2018. SB 1383 also sets targets for statewide reductions in SLCP emissions of 40 percent below 2013 levels by 2030 for methane and HFCs and 50 percent below 2013 levels for 2030 for anthropogenic black carbon. CARB adopted the SLCP Reduction Strategy in March 2017 pursuant to SB 605 and SB 1383, laying out options to accelerate SLCP emissions reductions in California through enacting regulations, creating incentives, and other market-supporting activities.

Consistent with the Scoping Plan targets and the State's 2014 GHG emissions inventory, the County is also charged with creating a Climate Action Plan (CAP) to achieve local community-wide GHG reduction targets. While the CAP is still undergoing environmental review, it will undoubtedly rely on renewable energy (such as solar) projects like the American Canyon Solar Project to achieve those GHG reduction targets.

Considering the Project is a utility use that will help meet the State of California's RPS requirements and climate action goals, the Project is allowed in agricultural areas pursuant to General Plan Policy AG/LU-27. It should also be noted that County was able to maintain the exceptions for utility uses in any zoning district, as outlined in Chapter 18.120 of the Napa County Code, due to General Plan Policy AG/LU-2. (Govt. Code § 65860 [County zoning ordinance must be consistent with its general plan]; see Governor's Office of Planning and Research, General Plan Guidelines (2003), p. 164 ["An action, program or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment"].)

Napa County Municipal Code Section 18.120.010.B.8 allows, with the approval of Use Permit, the following in every Zoning District within the County: "Other public utility uses including, without limitation, warehouses, storage yards, gas holders, substations, electric generating plants, reservoirs, storage tanks, pumping stations and communication equipment buildings". In addition, Zoning Code Section 18.120.010.B.9 further allows with the approval of a Use Permit: "Other public and quasi-public uses not included elsewhere in this section other than telecommunication facilities".

Given the General Plan Agricultural Preservation and Land Use Policy, AG/LU-29 and Zoning Ordinance Sections 18.120.010.B8 & 9 discussed above, and that the proposed solar facility satisfies the requirement of being a "public utility", the proposed solar facility use is considered an acceptable use of non-urban land (i.e. Agricultural Watershed and Open Space designated property such as the subject site). In addition, the site is designated "Other Land (X)" by the FMMA and is not Prime Farmland, Farmland of Statewide Significance or Unique Farmland. As such, there are no significant impacts to prime farmland created by the project. This site is uniquely suited for a solar power generation facility given: i) its location within an area of very low residential density and surrounding grazing and horse boarding uses; ii) the flat topography of the site such that views into the site are difficult from the surrounding properties and public roadways; iii) the dense vegetation screening the site from public views; and, iv) its location adjacent to Interstate Highway 80, a noise and light generating transportation corridor. Furthermore, since there is no Williamson Act contract associated with the project site, there would be no impacts from implementation of the proposed solar energy generation use.

c-e. The project site is zoned AW, which allow public utility electric generation uses upon grant of a use permit. According to the Napa County Environmental resource maps (based on the following layers – Sensitive Biotic Oak Woodlands, Riparian Woodland Forest and Coniferous Forest) the area on which the solar panels will be installed contains no sensitive woodland or forested areas. In addition, the installation of the panels requires minimal site improvements which could allow for ongoing grazing and other agricultural practices not in conflict with the solar arrays. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. No impacts would occur.

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
III.	AIR air o follo	QUALITY. Where available, the significance criteria established by the applicable quality management or air pollution control district may be relied upon to make the owing determinations. Would the project:				
	a)	Conflict with or obstruct implementation of the applicable air quality plan?				
	b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				\boxtimes
	c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				\boxtimes
	d)	Expose sensitive receptors to substantial pollutant concentrations?				\boxtimes
	e)	Create objectionable odors affecting a substantial number of people?				\boxtimes

On June 2, 2010, the Bay Area Air Quality Management District's (BAAQMD) Board of Directors unanimously adopted thresholds of significance to assist in the review of projects under the California Environmental Quality Act. These Thresholds are designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA and were posted on BAAQMD's website and included in BAAQMD's updated CEQA Guidelines (updated May 2012). The Thresholds are advisory and may be followed by local agencies at their own discretion.

The Thresholds were challenged in court. Following litigation in the trial court, the court of appeal, and the California Supreme Court, all of the Thresholds were upheld. However, in an opinion issued on December 17, 2015, the California Supreme Court held that CEQA does not generally require an analysis of the impacts of locating development in areas subject to environmental hazards unless the project would exacerbate existing environmental hazards. The Supreme Court also found that CEQA requires the analysis of exposing people to environmental hazards in specific circumstances, including the location of development near airports, schools near sources of toxic contamination, and certain exemptions for infill and workforce housing. The Supreme Court also held that public agencies remain free to conduct this analysis regardless of whether it is required by CEQA.

In view of the Supreme Court's opinion, local agencies may rely on Thresholds designed to reflect the impact of locating development near areas of toxic air contamination where such an analysis is required by CEQA or where the agency has determined that such an analysis would assist in making a decision about the project. However, the Thresholds are not mandatory and agencies should apply them only after determining that they reflect an appropriate measure of a project's impacts. These Guidelines may inform environmental review for development projects in the Bay Area, but do not commit local governments or BAAQMD to any specific course of regulatory action.

BAAQMD published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion. The May 2017 Guidelines update does not address outdated references, links, analytical methodologies or other technical information that may be in the Guidelines or Thresholds Justification Report. The Air District is currently working to revise any outdated information in the Guidelines as part of its update to the CEQA Guidelines and thresholds of significance.

a-c. The mountains bordering Napa Valley block much of the prevailing northwesterly winds throughout the year. Sunshine is plentiful in Napa County, and summertime can be very warm in the valley, particularly in the northern end. Winters are usually mild, with cool temperatures overnight and mild-to-moderate temperatures during the day. Wintertime temperatures tend to be slightly cooler in the northern end of the valley. Winds are generally calm throughout the county. Annual precipitation averages range from about 24 inches in low elevations to more than 40 inches in the mountains.

Ozone and fine particle pollution, or PM2.5, are the major regional air pollutants of concern in the San Francisco Bay Area. Ozone is primarily a problem in the summer, and fine particle pollution in the winter. In Napa County, ozone rarely exceeds health standards, but PM2.5 occasionally does reach unhealthy concentrations. There are multiple reasons for PM2.5 exceedances in Napa County. First, much of the county is wind-sheltered, which tends to trap PM2.5 within the Napa Valley. Second, much of the area is well north of the moderating temperatures of San Pablo Bay and, as a result, Napa County experiences some of the coldest nights in the Bay Area. This leads to greater fireplace use and, in turn, higher PM2.5 levels. Finally, in the winter easterly winds often move fine-particle-laden air from the Central Valley to the Carquinez Strait and then into western Solano and southern Napa County (BAAQMD, *In Your Community: Napa County, April 2016*)

The impacts associated with implementation of the project were evaluated consistent with guidance provided by BAAQMD. Ambient air quality standards have been established by state and federal environmental agencies for specific air pollutants most pervasive in urban environments. These pollutants are referred to as criteria air pollutants because the standards established for them were developed to meet specific health and welfare criteria set forth in the enabling legislation. The criteria air pollutants emitted by the development the proposed solar energy generation use include ozone, ozone precursors oxides of nitrogen and reactive organic gases (NOx and ROG), carbon monoxide (CO), nitrogen dioxide (NO2), and suspended particulate matter (PM10 and PM2.5). Other criteria pollutants, such as lead and sulfur dioxide (SO2), would not be substantially emitted by the proposed development or traffic, and air quality standards for them are being met throughout the Bay Area.

	Less Than		
Potentially	Significant	Less Than	
Significant	With	Significant	No Impact
Impact	Mitigation	Impact	
-	Incorporation	•	

BAAQMD has not officially recommended the use of its thresholds in CEQA analyses and CEQA ultimately allows lead agencies the discretion to determine whether a particular environmental impact would be considered significant, as evidenced by scientific or other factual data. BAAQMD also states that lead agencies need to determine appropriate air quality thresholds to use for each project they review based on substantial evidence that they include in the administrative record of the CEQA document. One resource BAAQMD provides as a reference for determining appropriate thresholds is the *California Environmental Quality Act Air Quality Guidelines* developed by its staff in 2010 and as updated through May 2017. These guidelines outline substantial evidence.

As mentioned above, in 2010, the BAAQMD adopted and later incorporated into its 2011 CEQA Guidelines project screening criteria (Table 3-1 – Operational-Related Criteria Air Pollutant and Precursors Screening Level Sizes) and thresholds of significance for air pollutants, which have now been updated by BAAQMD through May 2017. Because the proposed use is not on the list of pollutant generating uses, the project would not significantly impact air quality and does not require further study (BAAQMD CEQA Guidelines, May 2017 Pages 3-2 & 3-3.). Furthermore, given the nature of this use non pollutant generating use once the facility is fully operational, the project will not contribute to air pollution and would not result in a conflict or obstruction of an air quality plan.

The project falls well below the screening criteria as noted above, and consequently will not significantly affect air quality individually or contribute considerably to any cumulative air quality impacts.

d. In the short term, potential air quality impacts may result from the minor earthmoving and construction activities required for project construction related to the new maintenance drive along the northern portion of the solar panel installation. Earthmoving and construction emissions would have a temporary effect; consisting mainly of dust generated during grading and other construction activities and exhaust emissions from construction related equipment and vehicles. The Air District recommends incorporating feasible control measures as a means of addressing construction impacts. If the proposed project adheres to these relevant best management practices identified by the Air District and the County's standard conditions of project approval, construction-related impacts are considered less than significant:

7.1 SITE IMPROVEMENTS

c. AIR QUALITY

During all construction activities the permittee shall comply with the most current version of BAAQMD Basic Construction Best Management Practices including but not limited to the following, as applicable:

- 1. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The BAAQMD's phone number shall also be visible.
- 2. Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, grading areas, and unpaved access roads) two times per day.
- 3. Cover all haul trucks transporting soil, sand, or other loose material off-site.
- 4. Remove all visible mud or dirt traced onto adjacent public roads by using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- 5. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 6. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting off equipment when not in use or reducing the maximum idling time to five (5) minutes (as required by State Regulations). Clear signage shall be provided for construction workers at all access points.
- 8. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator. Any portable engines greater than 50 horsepower or associated equipment operated within the BAAQMD's jurisdiction shall have either a California Air Resources Board (ARB) registration Portable Equipment Registration Program (PERP) or a BAAQMD permit. For general information regarding the certified visible emissions evaluator or the registration program, visit the ARB FAQ <u>http://www.arb.ca.gov/portable/perp/perpfact_04-16-15.pdf</u> or the PERP website <u>http://www.arb.ca.gov/portable/portable.htm</u>.

Furthermore, while earthmoving and construction on the site would generate dust particulates in the short-term, the impact would be less than significant with dust control measures as specified in Napa County's standard condition of approval relating to dust:

7.1 SITE IMPROVEMENTS

b.

DUST CONTROL

Water and/or dust palliatives shall be applied in sufficient quantities during grading and other ground disturbing activities on-site to minimize the amount of dust produced. Outdoor construction activities shall not occur when average wind speeds exceed 20 mph.

e. The passive nature of the solar energy facility will not create pollutants or objectionable odors affecting a substantial number of people.

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IV.	BIC	DLOGICAL RESOURCES. Would the project:				
	a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the 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 US Fish and Wildlife Service?		\boxtimes		
	c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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?				\boxtimes
	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?				\boxtimes

A Biological Constraints Analysis was prepared for this property in March 2018 by Garcia & Associates. The report concluded that Special-status wildlife species and migratory birds were evaluated for their potential to occur and be affected by the Project. Based on the presence of suitable habitat, four of the eleven special-status wildlife species identified from desktop research have potential to occur in the Project Area: western bumblebee (*Bombus occidentalis,* tracked by CDFW), California red-legged frog (*Rana draytonii,* federally threatened), white-tailed kite (*Elanus leucurus,* state fully protected), and yellow warbler (*Setophaga petechia,* state species of special concern). None of these species were observed during field surveys. Eighty-two special-status plant species were evaluated for their potential to occur and to be affected by the Project. Of these, none have potential to occur within the Project Area based on absence of suitable habitat. The biological constraint analysis recommends Avoidance and Minimization Measures to avoid and minimize impacts to biological resources from the Project.

a, b. Suitable upland habitat is present in portions of the Project Area, and suitable aquatic habitat is present in the stream that borders the buffered Project Area. Documented occurrences of California Red-Legged Frog (CRLF) are also present within one mile of the Project. Because the Project is not anticipated to occur within the stream and no burrows or logs are present in the Project Area (man-made structures may still provide upland shelter), direct impacts to CRLF from the Project are not expected. The northern Project Area along the stream and access road are the areas of suitable upland habitat that could be affected. The lack of aquatic habitat, burrows or other shelter in the remainder of the Project Area limits the probability of CRLF occurring in the area that will be directly impacted by the Project.

As described in Mitigation Measures section below a preconstruction survey for CRLF is recommended and, if necessary, seasonal buffers will be implemented to avoid disturbances to breeding sites. With the implementation of the Mitigation Measures below, direct impacts to CRLF are not anticipated. The Project may affect upland habitat, but Project activities are not likely to affect individuals or lead to a downward trend of the CRLF population.

The Project Area is located in suitable nesting and foraging habitat for white-tailed kite. No nests were observed at the time of the survey; however, the removal of trees as a result of Project development could limit future nest sites.

As described in the Mitigation Measures section below, a preconstruction nesting bird survey is recommended prior to any Project development. If necessary, seasonal buffers will be implemented to avoid disturbances to nests. With the implementation of the Mitigation Measures, direct impacts to white-tailed kites are not anticipated. The Project may affect habitat, but Project activities are not likely to affect individuals or lead to a trend towards a loss of viability.

Suitable habitat for yellow warbler exists along the small riparian corridor that borders the access road and northern boundary of the Project Area. No nests were observed at the time of the survey; however, if trees are to be removed, especially willows, for Project development, this and other Project-related disturbances could impact or limit future nest sites. As currently shown on the development plans, no disturbance will occur within the riparian corridor and no trees within the corridor are proposed for removal.

As described in the Mitigation Measures below, a preconstruction nesting bird survey is recommended prior to any Project activities that occur during the nesting season. If necessary, seasonal buffers will be implemented to avoid disturbances to nests. With the implementation of these Mitigation Measures, direct impacts to yellow warbler are not anticipated. The Project may minimally affect habitat, but Project activities are not likely to affect individuals or lead to a downward population trend for the species.

c. The Biological Constraints Analysis prepared for this property included protocols for the detection of wetlands and potential impacts of the project's development on adjacent wetland/riparian habitat. There are no wetlands on the property or within the boundary of the proposed project improvements and

	Less Than		
Potentially	Significant	Less Than	
Significant	With	Significant	No Impact
Impact	Mitigation	Impact	
•	Incorporation		

the location of the improvements do not pose impacts to the adjacent American Canyon Creek. The project improvements require very little site disturbance such that runoff and erosion control are not substantial concerns.

- d. The Biological Constraints Analysis prepared for this property included protocols for the detection of native or migratory wildlife species and corridors. No evidence of wildlife corridors, raptor nests, wildlife dens, burrows or other unique or sensitive biological habitats or resources were observed as a result of the field survey.
- e, f. The tree removal for this project is incidental, is not a component of a significant stand of trees and is of a mix of non-native species. As such, the tree removal does not result in the loss of significant wildlife or other sensitive habitat. Implementation of the project does not result in conflict with any County of Napa General Plan policy or ordinance protection vegetation or wildlife. In addition, there are no Habitat Conservation Plans, or other local or state habitat conservation plans that apply to this site.

Mitigation Measures:

- BIO-1. Prior to working on the Project, all Project personnel shall attend a preconstruction environmental training to review potential special-status wildlife that could be found in the Project Area and ensure that mitigations measures for the Project are understood and implemented.
- BIO-2. Work areas, staging areas, and access roads shall be limited to those shown in the final Project description. All heavy equipment, vehicles, and construction activities shall be confined to these designated areas.
- BIO-3. All trash and waste items generated by construction or crew activities shall be properly contained and removed from the Project Area.
- BIO-4. All Project personnel shall visually check for animals beneath vehicles and equipment immediately prior to operation. Any pipes, culverts, or other openended materials and equipment stored onsite for one or more overnight periods shall be inspected for animals prior to moving, burying, or capping to assure that no animals are present within the materials and equipment. To prevent accidental entrapment of wildlife during construction, all excavated holes, ditches, or trenches greater than 1 foot deep shall be covered at the end of each work day by suitable materials or escape routes shall be constructed. After opening and before filling, such holes, ditches, and trenches shall be thoroughly inspected for trapped animals.
- BIO-5. If a special-status species is discovered in the Project Area, the Project Manager shall be contacted. The Project Manager shall report the sighting to the appropriate natural resource agency(ies) (e.g., CDFW, USFWS, etc.) within 24 hours. The animal shall be allowed to move off site on its own. Special-status species shall not be taken or harassed.
- BIO-6. A copy of all applicable permits and approvals, with associated maps, conditions, and Mitigation Measures shall be kept onsite at all times.
- BIO-7. Where temporarily disturbed areas are stabilized, erosion control seed mixes should incorporate native forb species to replace foraging habitat for western bumblebee.
- BIO-8. A preconstruction survey to determine the presence of CRLF is required if Project activities are anticipated to occur within the sensitive period for CRLF (October-June).
- BIO-9. Complete avoidance of the stream and associated drainages along the access road and on the northern boundary of the Project is required. Fencing, flagging, or other highly visible material to mark the boundary of the stream shall be installed prior to commencement of construction.
- BIO-10. In the event a CRLF is encountered onsite, construction activities shall cease until the animal has left the location on its own shall and is no longer in danger. The Project Manager shall report the sighting to the appropriate natural resource agency(ies) (e.g., CDFW, USFWS, etc.) within 24 hours. No one other than a USFWS-approved biologist is permitted to handle or capture CRLF, and CRLF shall not be taken or harassed.
- BIO-11. In the event that construction activities occur within the nesting bird season (generally February 15–August 31), a qualified biologist shall conduct a preconstruction survey for nesting birds within 14 days prior to the start of Project activities. If active nests are found, a qualified biologist shall determine appropriate avoidance buffers and may monitor associated Project activities.
- BIO-12. As specified by the Project SWPPP (if required), erosion, sediment, and material stockpile best management practices (BMPs) shall be employed between work areas and adjacent wetlands or waterways. No fill or runoff shall be allowed to enter wetlands or waterways.
- BIO-13. Any erosion and sediment control materials (e.g., hay bales, straw wattles, erosion blankets, etc.) shall not include micro-filament netting, to avoid entrapment of wildlife. Any straw erosion and sediment control materials shall be composed of certified weed free material.
- BIO-14. Extreme caution shall be exercised when handling and or storing chemicals (fuel, hydraulic fluid, etc.) near waterways. All applicable laws/regulations and BMPs shall be followed.
- BIO-15. Appropriate materials shall be kept on site to prevent and manage spills. All construction equipment shall be well maintained to prevent fuel, lubricants, or other fluid leaks. Equipment, when not in use, shall be stored in upland areas outside of the boundaries of the stream-channel or other water bodies.

v	CUI		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	、 、					
	a)	Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?			\boxtimes	

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?			\boxtimes	
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?				
d)	Disturb any human remains, including those interred outside of dedicated cemeteries?			\boxtimes	

Discussion: a-c. A

According to the Napa County Environmental Resource Maps (based on the following layers – Historical sites points & lines, Archaeology surveys, sites, sensitive areas, and flags) no historic sites have been identified on the property. The site was surveyed in April 2018 but no sites were identified within the proposed project area (*Cultural Resources Survey Report: American Canyon Solar Project, Napa County*). The site field survey did conclude that although there is a moderate to high sensitivity factor for buried resources, the field survey resulted in negative findings. However, if resources are found during any earth disturbing activities associated with the project, construction of the project is required to cease, and a qualified archaeologist would be retained to investigate the site in accordance with the following standard condition of approval:

7.2 ARCHEOLOGICAL FINDING

In the event that archeological artifacts or human remains are discovered during construction, work shall cease in a 50-foot radius surrounding the area of discovery. The permittee shall contact the PBES Department for further guidance, which will likely include the requirement for the permittee to hire a gualified professional to analyze the artifacts encountered and to determine if additional measures are required.

If human remains are encountered during project development, all work in the vicinity must be halted, and the Napa County Coroner informed, so that the Coroner can determine if an investigation of the cause of death is required, and if the remains are of Native American origin. If the remains are of Native American origin, the permittee shall comply with the requirements of Public Resources Code Section 5097.98.

d. No human remains have been encountered on the property and no information has been encountered that would indicate that this project would encounter human remains. Most construction activities would occur on previously disturbed portions of the site (14-acres of the 21 acre site used for active agricultural activities). However, if resources are found during project grading, construction of the project is required to cease, and a qualified archaeologist would be retained to investigate the site in accordance with standard condition of approval noted above. Impacts would be less than significant.

				Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VI.	GE	OLO	GY AND SOILS. Would the project:				
	a)	Exp the	oose people or structures to potential substantial adverse effects, including 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?				\boxtimes
		iii)	Seismic-related ground failure, including liquefaction?				\boxtimes
		iv)	Landslides?				\boxtimes
	b)	Re	sult in substantial soil erosion or the loss of topsoil?				\boxtimes

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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?				\boxtimes
d)	Be located on expansive soil creating substantial risks to life or property? Expansive soil is defined as soil having an expansive index greater than 20, as determined in accordance with ASTM (American Society of Testing and Materials) D 4829.				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				\boxtimes

а.

- i.) There are no known faults on the project site as shown on the most recent Alquist-Priolo Earthquake Fault Zoning Map. As such, the proposed project would result in a less than significant impact with regards to rupturing a known fault.
- ii.) All areas of the Bay Area are subject to strong seismic ground shaking. Construction of the project would be required to comply with the latest building standards and codes, including the California Building Code that would reduce any potential impacts to a less than significant level.
- iii.) No subsurface conditions have been identified on the project site that indicated a susceptibility to seismic-related ground failure or liquefaction. Compliance with the latest edition of the California Building Code for seismic stability would result in less than significant impacts.
- iv.) According to the Napa County Environmental Resource Maps (Landslides line, polygon, and geology layers) there are no known landslide areas within the area of the subject site proposed for modification as part of the project.
- b. The proposed improvements would occur on slopes of less than five percent. The project would require incorporation of best management practices and would be subject to the Napa County Stormwater Ordinance which addresses sediment and erosion control measures and dust control, as applicable. Impacts would be less than significant.
- c/d. Based on the Napa County Environmental Sensitivity Maps (liquefaction layer) the improvements are proposed for an area which has a very low susceptibility for liquefaction. Impacts would be less than significant.

e. No waste water will be generated by the proposed project.

Mitigation Measures: None required

1/11	00		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VII.	GR	EENHOUSE GAS EMISSIONS. Would the project:				
	a)	Generate a net increase in greenhouse gas emissions in excess of applicable thresholds adopted by the Bay Area Air Quality Management District or the California Air Resources Board which may have a significant impact on the environment?				\boxtimes
	b)	Conflict with a county-adopted climate action plan or another applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				\boxtimes

Discussion:

Napa County has been working to develop a Climate Action Plan (CAP) for several years. In 2012, a Draft CAP (March 2012) was recommended using the emissions checklist in the Draft CAP, on a trial basis, to determine potential greenhouse gas (GHG) emissions associated with project development and operation. At the December 11, 2012, Napa County Board of Supervisors (BOS) hearing, the BOS considered adoption of the proposed CAP. In addition to reducing Napa County's GHG emissions, the proposed plan was intended to address compliance with CEQA for projects reviewed by the County and to lay the foundation for development of a local offset program. While the BOS acknowledged the plan's objectives, the BOS requested that the CAP be revised to better address transportation-related greenhouse gas, to acknowledge and credit past accomplishments and voluntary efforts, and to allow more time for establishment of a cost-effective local offset program. The Board also requested that best management practices be applied and considered when reviewing projects until a revised CAP is adopted to ensure that projects address the County's policy goal related to reducing GHG emissions.

In July 2015, the County re-commenced preparation of the CAP to: i) account for present day conditions and modeling assumptions (such as but not limited to methods, emission factors, and data sources), ii) address the concerns with the previous CAP effort as outlined above, iii) meet applicable State requirements, and iv) result in a functional and legally defensible CAP. On April 13, 2016 the County, as the part of the first phase of development and preparation of the CAP, released Final Technical Memorandum #1: 2014 Greenhouse Gas Emissions Inventory and Forecast, April 13, 2016. This initial phase included: i) updating the unincorporated County's community-

	Less Than		
Potentially	Significant	Less Than	
Significant	With	Significant	No Impact
Impact	Mitigation	Impact	
	Incorporation		

wide GHG emissions inventory to 2014, and ii) preparing new GHG emissions forecasts for the 2020, 2030, and 2050 horizons. Additional information on the County CAP can be obtained at the Napa County Department of Planning, Building and Environmental Services or http://www.countyofnapa.org/CAP/.

a/b. Overall increases in Greenhouse Gas (GHG) emissions in Napa County were assessed in the Environmental Impact Report (EIR) prepared for the Napa County General Plan Update and certified in June 2008. GHG emissions were found to be significant and unavoidable in that document, despite the adoption of mitigation measures incorporating specific policies and action items into the General Plan.

Consistent with these General Plan action items, Napa County participated in the development of a community-wide GHG emissions inventory and "emission reduction framework" for all local jurisdictions in the County in 2008-2009. This planning effort was completed by the Napa County Transportation and Planning Agency in December 2009, and served as the basis for development of a refined inventory and emission reduction plan for unincorporated Napa County.

In 2011, the Bay Area Air Quality Management District (BAAQMD) released California Environmental Quality Act (CEQA) Project Screening Criteria and Significance of Thresholds [1,100 metric tons per year (MT) of carbon dioxide and carbon dioxide equivalents (CO2e)]. This threshold of significance is appropriate for evaluating projects in Napa County.

During our ongoing planning effort, the County requires project applicants to consider methods to reduce GHG emissions consistent with Napa County General Plan Policy CON-65(e). (Note: Pursuant to State CEQA Guidelines Section 15183, because this initial study assesses a project that is consistent with an adopted General Plan for which an environmental impact report (EIR) was prepared, it appropriately focuses on impacts which are "peculiar to the project," rather than the cumulative impacts previously assessed.)

GHGs are the atmospheric gases whose absorption of solar radiation is responsible for the greenhouse effect, including carbon dioxide, methane, ozone, and the fluorocarbons, that contribute to climate change (a widely accepted theory/science explain human effects on the atmosphere). Carbon Dioxide (CO2) gas, the principal greenhouse gas (GHG) being emitted by human activities, and whose concentration in the atmosphere is most affected by human activity, also serves as the reference gas to compare other greenhouse gases. Agricultural sources of carbon emissions include forest clearing, land-use changes, biomass burning, and farm equipment and management activity emissions (http://www.climatechange.ca.gov/glossary/letter_c.html). Equivalent Carbon Dioxide (CO2e) is the most commonly reported type of GHG emission and a way to get one number that approximates total emissions from all the different gasses that contribute to GHG (BAAMD CEQA Air Quality Guidelines, May 2017). In this case, carbon dioxide (CO2e) is used as the reference atom/compound to obtain atmospheric carbon CO2 effects of GHG. Carbon stocks are converted to carbon dioxide equivalents (CO2e) by multiplying the carbon total by 44/12 (or 3.67), which is the ratio of the atomic mass of a carbon dioxide molecule to the atomic mass of a carbon atom (http://www.nciasi2.org/COLE/index.html).

One time "Construction Emissions" associated with development project include: i) the carbon stocks that are lost (or released) when existing vegetation is removed in preparation for a new structure and associated infrastructure; and ii) emissions associated with the energy used to develop and prepare the project area and construct the project, including construction equipment and worker vehicle trips (hereinafter referred to as Equipment Emissions). These emissions also include underground carbon stocks (or Soil carbon) associated with any existing vegetation that is proposed to be removed. As previously stated, this project includes installation of solar arrays as well as the construction of a new maintenance road adjacent to the northerly edge of the solar field.

In addition to the one time Construction Emissions, "Operational Emissions" of the project are also considered and include: i) any reduction in the amount of carbon sequestered by existing vegetation that is removed as part of the project compared to a "no project" scenario (hereinafter referred to as Operational Sequestration Emissions); and ii) ongoing emissions from the project, including vehicle trips associated with employees. See Section XVI, Transportation/Traffic, for anticipated number of operational trips. Construction Emissions from the proposed solar project would be the primary source of emissions given that over the long-term omissions from a passive solar array are insignificant. Additionally, the number of vehicle trips accessing the site will substantially reduce give the removal of the single-family home and active agricultural activities, to be replaced with the solar field that needs maintenance activities at roughly 1 vehicle trip per month upon completing the installation.

As discussed in the Air Quality section of this Initial Study, in 2010, the BAAQMD adopted and later incorporated into its 2011 CEQA Guidelines project screening criteria (Table 3-1 – Criteria Air Pollutants and Precursors & GHG Screening Level Sizes) and thresholds of significance for air pollutants, including GHG emissions, which have now been updated by BAAQMD through May 2017. Given the passive nature of solar arrays, regardless of size and scope, the project will not to exceed the 1,100 MT of CO2e/yr GHG threshold of significance.

As discussed above, the proposed project would not exceed the 1,100 MT/yr of CO2e as the only emissions generating aspect of the use would be maintenance vehicle trips; substantially fewer trips than the existing single-family home and agricultural uses.

Mitigation Measures: None required.

Potentially Significant Impact

Less Than Significant With Mitigation Incorporation

Less Than

Significant

Impact

No Impact

VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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?				\boxtimes
b)	Create a significant hazard to the public or the environment through reasonable 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?				\boxtimes
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 for people residing or working in the project area?				
f)	For a project within the vicinity of a private airstrip, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				\boxtimes
h)	Expose people or structures to a significant risk of loss, injury or death involving wild-land fires, including where wild-lands are adjacent to urbanized areas or where residences are intermixed with wild-lands?				\boxtimes

- a. The proposed project would not involve the transport of hazardous materials. No impacts would occur.
- b. Hazardous materials such as diesel, maintenance fluids, and paints would be used onsite during construction. Should they be stored onsite, these materials would be stored in secure locations to reduce the potential for upset or accident conditions. The proposed project consists of installation of solar arrays which would not be expected to use any substantial quantities of hazardous materials. Therefore, it would not be reasonably foreseeable for the proposed project to create upset or accident conditions that involve the release of hazardous materials into the environments. No impact would occur.
- c. There are no schools located within one-quarter mile from the existing winery building. According to Google Earth, the nearest school to the project site is Pacific Union College, located approximately 3.6 miles to the northwest. No impacts would occur.
- d. Based on a search of the California Department of Toxic Substances Control database, the project site does not contain any known EPA National Priority List sites, State response sites, voluntary cleanup sites, or any school cleanup sites. No impact would occur as the project site is not on any known list of hazardous materials sites.
- e. No impact would occur as the project site is not located within an airport land use plan.
- f. No impact would occur as the project site is not located within the vicinity of any private airports.
- g. The proposed project's existing access driveway meets Napa County Road and Street Standards. Therefore, the project would not obstruct emergency vehicle access. The project has been reviewed by the County Fire Department and Engineering Services Division and found acceptable, as conditioned.
- h. The project would not increase exposure of people and/or structures to a significant loss, injury or death involving wild land fires. The project would comply with current California Department of Forestry and California Building Code requirements for fire safety. No impacts would occur.

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IX.	HY	DROLOGY AND WATER QUALITY. Would the project:				
	a)	Violate any water quality standards or waste discharge requirements?				\boxtimes
	b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre- existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				\boxtimes
	c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			\boxtimes	
	d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			\boxtimes	
	e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
	f)	Otherwise substantially degrade water quality?				\boxtimes
	g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				\boxtimes
	h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				\boxtimes
	i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
	j)	Inundation by seiche, tsunami, or mudflow?				\boxtimes
Discuss	sion:					

- a/b. The project would not violate any water quality standards or waste discharge requirements nor substantially deplete local groundwater supplies as, other than intermittent washing maintenance of the solar arrays, the passive solar use does not demand water resources on a regular basis. The Division of Environmental Health reviewed this project and, given the removal of the single-family home and agricultural uses, found no significant concerns with groundwater availability or use.
- c-d. The project would not substantially alter the drainage pattern on site or cause a significant increase in erosion or siltation on or off the project site. The minimal improvements necessary for installation of the solar arrays on this site will not require substantial grading or site disturbance. Impacts would be less than significant.
- e. The preliminary grading and drainage plan has been reviewed by the Engineering Division. As conditioned, impacts would be less than significant.
- f. A review of all parcels within 500-feet of the subject site's property line was conducted to identify any potential hazardous spills and none were identified. No impacts from the project to water quality would occur.
- g/h. The proposed solar array is not a housing project and the site is not within the 100-year floodplain. No construction is proposed within either the 100 year or 500 year flood hazard zones. No impacts would occur.
- i/j. The parcel is not located in an area that is subject to inundation by tsunamis, seiches, or mudflows. No impacts would occur.

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
X. I	LAN	D USE AND PLANNING. Would the project:				
á	a)	Physically divide an established community?				\boxtimes
ł	o)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				\boxtimes
C	c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?				\boxtimes

a-c. The project would not occur within an established community, nor would it result in the division of an established community.

The project complies with the Napa County Code and all other applicable regulations. Mitigation measures BIO-1 through BIO-4, discussed under the "Biological Resources" section above, are intended to address any potential biological impacts from the proposed project and are precautionary in nature. The subject parcel is located in the AW (Agricultural Watershed) zoning district, which allows solar array project such as the proposed project subject to use permit approval. The proposed project is compliant with the physical limitations of the Napa County Zoning Ordinance.

Agricultural Preservation and Land Use Policy AG/LU-1 of the 2008 General Plan states that the County shall, "preserve existing agricultural land uses and plan for agriculture and related activities as the primary land uses in Napa County." Furthermore, the property's General Plan land use designation is AWOS (Agriculture, Watershed, and Open Space), which, under <u>General Plan Agricultural Preservation and Land Use Policy AG/LU-29</u> states "Governmental uses and public utility uses shall be permitted in appropriate locations. Only those new governmental and public utility uses which specifically implement programs mandated by the state or federal government shall be permitted in non-urban areas." As discussed in Section II Agriculture and Forest Resources above, the General Plan Agricultural Preservation and Land Use Policy, AG/LU-29 and Zoning Ordinance Sections 18.120.010.8 & 9 allow for the proposed solar facility therefore, the proposed solar facility use is considered an acceptable use of non-urban land (i.e. Agricultural Watershed and Open Space designated property such as the subject site). In addition, also discussed in Section II above, the site is uniquely suited for the solar energy generation use given the physical location adjacent to Interstate 80, the flat topography and the surrounding screening vegetation. As such, there are no significant impacts to Land Use created by the project.

There are no applicable habitat conservation plans or natural community conservation plans applicable to the property. No impacts would occur.

Mitigation Measures: None required.

XI.	MIN	ERAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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?				\boxtimes
	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?				\boxtimes

Discussion:

a/b. Historically, the two most valuable mineral commodities in Napa County in economic terms have been mercury and mineral water. More recently, building stone and aggregate have become economically valuable. Mines and Mineral Deposits mapping included in the Napa County Baseline Data Report (*Mines and Mineral Deposits*, BDR Figure 2-2) indicates that there are no known mineral resources nor any locally important mineral resource recovery sites located on the project site. No impacts would occur.

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XII.	NO	ISE. Would the project result in:				
	a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
	b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
	c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
	d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				\boxtimes
	e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
	f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes

- a/b. The project would result in a temporary increase in noise levels during installation of the proposed site improvements and solar arrays. Construction activities would be limited to daylight hours using properly muffled vehicles. Noise generated during this time is not anticipated to be significant. As such, the project would not result in potentially significant temporary construction noise impacts or operational impacts. Although the movement of the ground-mounted arrays will generate noise in order to track the sun for maximum energy collection, the noise generated by the panel movement is roughly 35decibles, is well below the 45 decibel maximum noise limitations for daytime noise in this location, and well below the 70-75 decibel existing ambient noise environment, as measured by the County of Napa General Plan Final EIR. This ambient noise environment is a result of proximity to Interstate Highway 80. In addition, the panels do not move during nighttime hours, therefore no noise is generated during the most sensitive noise period of a 24-hour day. As such, the proposed project would not result in long-term significant construction noise impacts. Conditions of approval identified below would require construction activities to be limited to daylight hours, vehicles to be muffled, and backup alarms adjusted to the lowest allowable levels. Impacts would be less than significant.
 - 7.3. CONSTRUCTION NOISE

Construction noise shall be minimized to the greatest extent practical and feasible under State and local safety laws, consistent with construction noise levels permitted by the General Plan Community Character Element and the County Noise Ordinance. Construction equipment muffling and hours of operation shall be in compliance with the County Code. Equipment shall be shut down when not in use. Construction equipment shall normally be staged, loaded, and unloaded on the project site, if at all practicable. If project terrain or access road conditions require construction equipment to be staged, loaded, or unloaded off the project site (such as on a neighboring road or at the base of a hill), such activities shall only occur daily between the hours of 8 am to 5 pm.

- c/d. Once completed, the solar array project creates no noise, therefore no impacts would occur.
- e/f. The project site is not located within an airport land use plan or the vicinity of a private airstrip. No impact would occur.

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII.	POF	PULATION AND HOUSING. Would the project:				
	a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				\boxtimes

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				\boxtimes

a.,b.,c. This passive solar energy use would not induce population growth, displace a substantial volume of existing housing or a substantial number of people and would not necessitate the construction of replacement housing elsewhere. No impacts would occur.

Mitigation Measures: None required.

VIV	DU			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV.	a)	Sub phy gov env time	SERVICES. Would the project result in: stantial adverse physical impacts associated with the provision of new or sically altered governmental facilities, need for new or physically altered ernmental facilities, the construction of which could cause significant ironmental impacts, in order to maintain acceptable service ratios, response as or other performance objectives for any of the public services:				
		i)	Fire protection?				\boxtimes
		ii)	Police protection?				\boxtimes
		iii)	Schools?				\boxtimes
		iv)	Parks?				\boxtimes
		v)	Other public facilities?				\boxtimes

Discussion:

a. Public services are currently provided to the project area and the additional demand placed on existing services as a result of the proposed project would be minimal. The Fire Department and Engineering Services Division have reviewed the application and recommend approval, as conditioned. School impact fees, which assist local school districts with capacity building measures, would be levied pursuant to building permit submittal. The proposed project would have minimal impact on public parks as no residences are proposed. No impacts to public services occur.

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XV.	REC	CREATION. Would the project:				
	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?				\boxtimes

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	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?				\boxtimes

- a. The project would not significantly increase use of existing parks or recreational facilities based on its limited scope. No impacts would occur.
- b. No recreational facilities are proposed as part of the project. No impact would occur.

Mitigation Measures: None required.

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI.	TR/	ANSPORTATION/TRAFFIC. Would the project:				
	a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system and/or conflict with General Plan Policy CIR-16, which seeks to maintain an adequate Level of Service (LOS) at signalized and unsignalized intersections, or reduce the effectiveness of existing transit services or pedestrian/bicycle facilities?				\boxtimes
	D)	limited to level of service standards and travel demand measures, or other standards established by the Napa County Transportation and Planning Agency for designated roads or highways?				\boxtimes
	c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				\boxtimes
	d)	Substantially increase hazards due to a design feature, (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes
	e)	Result in inadequate emergency access?				\boxtimes
	f)	Conflict with General Plan Policy CIR-23, which requires new uses to meet their anticipated parking demand, but to avoid providing excess parking which could stimulate unnecessary vehicle trips or activity exceeding the site's capacity?				\boxtimes
	g)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				\boxtimes

Discussion:

- a. The passive nature of the solar field will result in no new traffic generated to the site. The removal of the single-family home (currently generating approximately 10-trips per day) and agricultural uses would result is a net reduction in trips assigned to this property. Periodic maintenance of the panels is expected to generate less trips per day than the existing single-family home. No impact would occur.
- b. The passive nature of the solar field will result in no new traffic generated to or from the site therefore there would be no conflict with a congestion management program. No impact would occur.
- c. No air traffic is proposed and there are no new structures proposed for this project that would interfere with or require alteration of air traffic patterns. No impact would occur.
- d. There are no new circulation or access improvements that would pose a hazard. No impact would occur.
- e. The project has been reviewed by California Fire and no significant concerns have been identified as a result of installation of the project. No impact would occur.
- f. There is no need for installation of parking for the project use. No impact would occur.
- g. The passive nature of the solar field will result in no new traffic generated to or from the site, therefore there would be no conflict with a adopted transit or other transportation plans. No impact would occur.

Significant Potentially With Significant Impact Mitigation

Less Than Less Than Significant Incorporation

Impact

No Impact

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact	
XVII.	TRI cha Coc geo or o	BAL CULTURAL RESOURCES. Would the project cause a substantial adverse nge in the significance of a tribal cultural resource, defined in Public Resources le section 21074 as either a site, feature, place, cultural landscape that is graphically defined in terms of the size and scope of the landscape, sacred place, bject with cultural value to a California Native American tribe, and that is:					
	a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			\boxtimes		
	b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.					

Discussion:

a-b. According to the Napa County Environmental Resource Maps (based on the following layers - Historical sites points & lines, Archaeology surveys, sites, sensitive areas, and flags) no historic sites or tribal resources have been identified on the property. Invitation for tribal consultation was completed in accordance with Public Resources Code Section 21080.3.1. On August 8, 2018, County Staff sent invitations to consult on the proposed project to Native American tribes who had a cultural interest in the area and who as of that date had requested to be invited to consult on projects, in accordance with the requirements of Public Resources Code section 21080.3.1. One response was received on September 4, 2018 from the Yocha Dehe Wintun Nation requesting a copy of the cultural resource study and historical resources study which was sent on September 5, 2018. Staff did not receive a response. As discussed in Section V of this initial study, no significant cultural resources were found on the site, and if any resources not previously uncovered during this prior disturbance are found during any earth disturbing activities associated with the proposed project, construction of the project is required to cease, and a qualified archaeologist must be retained to investigate the site in accordance with the standard county conditions of approval.

YVIII		ITIES AND SEDVICE SYSTEMS Would the project	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
AV III.	011	LITIES AND SERVICE STSTEMS. Would the project.				
	a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
	b)	Require or result in the construction of a new water or wastewater treatment facility or expansion of existing facilities, the construction of which could cause significant environmental effects?				\boxtimes
	c)	Require or result in the construction of a new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			\boxtimes	
	d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				\boxtimes
g)	Comply with federal, state, and local statutes and regulations related to solid waste?				\boxtimes

- a/b/e. Given that no wastewater will be generated by the proposed passive solar project, the project would not exceed wastewater treatment requirements of the Regional Water Quality Control Board and would not result in a significant impact on the environment relative to wastewater discharge.
- c. The preliminary grading and drainage plan has been reviewed by the Engineering Division. As conditioned, impacts would be less than significant.
- d. The passive nature of the solar field will result in no new or increased water for the site. No impact would occur.
- f. The project would be served by Keller Canyon Landfill which has a capacity which exceeds current demand. As of January 2004, the Keller Canyon Landfill had 64.8 million cubic yards of remaining capacity and has enough permitted capacity to receive solid waste though 2030. No impacts will occur.
- g. The project would comply with federal, state, and local statutes and regulations related to solid waste. Therefore, no impacts would occur.

Mitigation Measures: None required.

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

Discussion:

- a. As discussed in Section IV above, all potential biological related impacts would be less than significant with implementation of the biological resources mitigation measures. As identified in Section V above, no known historically sensitive sites or structures, archaeological or paleontological resources, sites or unique geological features have been identified within the project site. In the event archaeological artifacts are found, a standard condition of approval would be incorporated into the project. Impacts would be less than significant with the incorporation of the biological resources and standard condition of approval related to cultural resources.
- b. The project does not have impacts that are individually limited, but cumulatively considerable. Potential air quality, greenhouse gas emissions, hydrology, and traffic impacts are discussed in the respective sections above. The project would not increase the demands for public services, increase traffic and air pollutions, or contribute to cumulative effects when future development in Napa Valley is considered.
- c. All impacts identified in this MND are either less than significant after mitigation, less than significant and do not require mitigation or no impacts. Therefore, the proposed project would not result in environmental effects that cause substantial adverse effects on human being either directly or indirectly. Impacts would be less than significant.

Potentially Significant Impact

Less Than Significant Less Than With Significant Mitigation Impact Incorporation

No Impact