County of Madera
California Environmental Quality Act (CEQA)
Initial Study

1. Project title: CUP #2022-016 – New Leaf Energy

2. Lead agency name and address: County of Madera
Community and Economic Development Department
200 West 4th Street, Suite 3100
Madera, California 93637

3. Contact person and phone number: Jacob Aragon, Planner II
559-675-7821

Jacob.Aragon@maderacounty.com

4. Project Location & APN: The subject property is located on the east side of Road 30 1/2, approximately 1/2 a mile southeast of its intersection with Avenue 12 (no situs), Madera 93636

APN #: 047-120-010

5. Project sponsor's name and address: New Leaf Energy
55 Technology Dr Suite 102
Lowell, MA 01851

6. General Plan Designation: A (Agricultural)

7. Zoning: ARE-40 (Agricultural, Rural, Exclusive)

8. Description of project:

The project is located on the east side of Road 30 ½, approximately less than half a mile south of Avenue 12. The project site is topographically flat and has an almond orchard consisting of immature trees. The applicant proposes installing a 200-megawatt Battery Energy Storage System (BESS), which will occupy approximately sixteen of the thirty-five acres. The BESS will initially comprise 2,400 storage containers with rows facing east to west and running north to south on the northside of the property. An additional 840 storage containers will be added throughout the project's life to maintain storage capacity. The project will also include a substation located on the northeast corner of the parcel. The parcel's project area will be enclosed with a seven-foot-high chain link fence (see figure 1). Once the project is complete, it will operate seven days a week, twenty-four hours a day. The BESS will require maintenance quarterly, which will include two personnel. Besides the quarterly maintenance, the BESS will operate unstaffed and be monitored remotely. Access to the project will be from a road easement off Avenue 12.


PRESALE LAYOUT - 30900 AVE 12 - MADERA - CA RA
GEN-TIE AT BORDEN SUBSTATION
20' ACCESS ROAD EASEMENT
7' HIGH CHAIN LINK PERIMETER FENCE
SUBSTATION AREA POCO
BATTERY ENCLOSURE
EQUIPMENT PAD, TYP
10' PROPERTY SETBACK
ENERGY STORAGE
CONTAINERS, TYP
34.5 kV BUS SUPPORT
34.5 kV CUSTOMER SWITCH
34.5 kV BREAKER
0
150'
300'
SCALE 1"=150'

Figure 1

9. Surrounding Land Uses and Setting:

Orchards surround the west and south of the project site; to the north is a PG&E Borden substation, with vacant land to the east. The project site and the parcel to the south have a land use designation of Agriculture (A), and the parcel to the west has a land use designation of Open Space (OS). The parcels located to the immediate north and east of the project site have a Heavy Industrial (HI) land use designation.

10. Other Public Agencies Whose Approval is Required:

None.

11. 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, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

In accordance with Public Resources Code Section 21080.3.1, notification letters were sent to tribal representatives of California Native American tribes that have requested to be notified of projects within the project area of Madera County. Tribal representatives were advised of the project and invited to request formal consultation with the County regarding the project within 30 days of receiving the notification letters. Eight notification letters were sent to representatives of the following tribes on September 28, 2022:

- Table Mountain Rancheria
- Picayune Rancheria of the Chukchansi Indians
- Dumna Wo Wah Tribal Government
- Chowchilla Yokuts Tribe

As of the preparation of this Initial Study, more than 30 days following the County's transmittal of notification letters, no requests for consultation have been received; however, a letter from Table Mountain Rancheria Cultural Resources Department expressing interest was received. Section XVIII of this Initial Study provides additional discussion of tribal cultural resources and outreach.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

☐ Aesthetics	☐ Agricultural/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

DETERMINATION (to be completed by Lead Agency)

On the basis of this initial evaluation:

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

Signed: Jacob Aragon Date: 7/12/2023

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS Except as provided in Public Resources Code Section 21099, would the project:				
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?	☐	☒	☐	☐

Responses:

(a) No Impact. The project site and components would not be visible from any designated areas or have substantial characteristics of a scenic vista.

(b) No Impact. The project site does not contain scenic resources and is not visible from a state scenic highway.

(c) Less Than Significant Impact. The project is zoned ARE-40, primarily occupied by almond trees. It is primarily surrounded by agricultural uses to the south and west of the site, with industrial uses located to the immediate north and east. The site is not considered to represent a unique or otherwise important visual resource. The project development may be visible to motorists on the segment of Avenue 12 and Road 30 ½ however, the view would be minimal. As a result, the project would not substantially alter the site's character and would not result in visually dominant or adverse qualities affecting a substantial number of viewers. Therefore, the project's change in the visual character of the site is considered less than significant.

(d) Less than Significant Impact With Mitigation. The contiguous parcels of the project site do not consist of existing development; however, to the east, several existing industrial buildings exist. Approximately half a mile northwest of the project site is the Madera Community College. There is potential for additional lighting resulting from the project; however, the additional lighting would be insignificant. With the implementation of AES MM-1, it would have a less than significant impact.

(AES MM-1) Lighting will be required to be hooded and directed down and away from

neighboring parcels to maintain the visual character and mitigate any light disbursement during the evenings.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
II. AGRICULTURAL AND FORESTRY RESOURCES In determining whether agricultural impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Responses:

(a) Less Than Significant Impact. The project is proposing to install a 200-megawatt BESS which will occupy approximately sixteen of the thirty-five acres which is designated as Unique Farmland by the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP), refer to figure 2. The definition of Unique Farmland is a

farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include no irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date. (Department of Conservation, 2016). In 2016 the County of Madera had approximately 180,294 acres of Unique Farmland. In 2018 the County had an increase of 3,397 acres of Unique Farmland bringing the total up to 183,691 acres of Unique Farmland (California Deartment of Conservation , 2022). As previously stated the project will use sixteen acres of prime farmland for the project resulting in 0.009%. The project would have a less than significant impact.

(b) No Impact. The project site is not subject to a Williamson Act contract refer to figure 3.

(c - d) No Impact. The project site does not contain forest land or forest resources and is not zoned for such uses.

(**e) Less Than Significant**. The project will involve converting agricultural land to non-agricultural use; however, the project accounts for the life of the project by adding and additional 840 storage BESS containers from the initial 2,400 BESS storage containers. As a result the project will not have to convert any further agricultural land for non-agricultural uses. The project will have a less than significant impact.

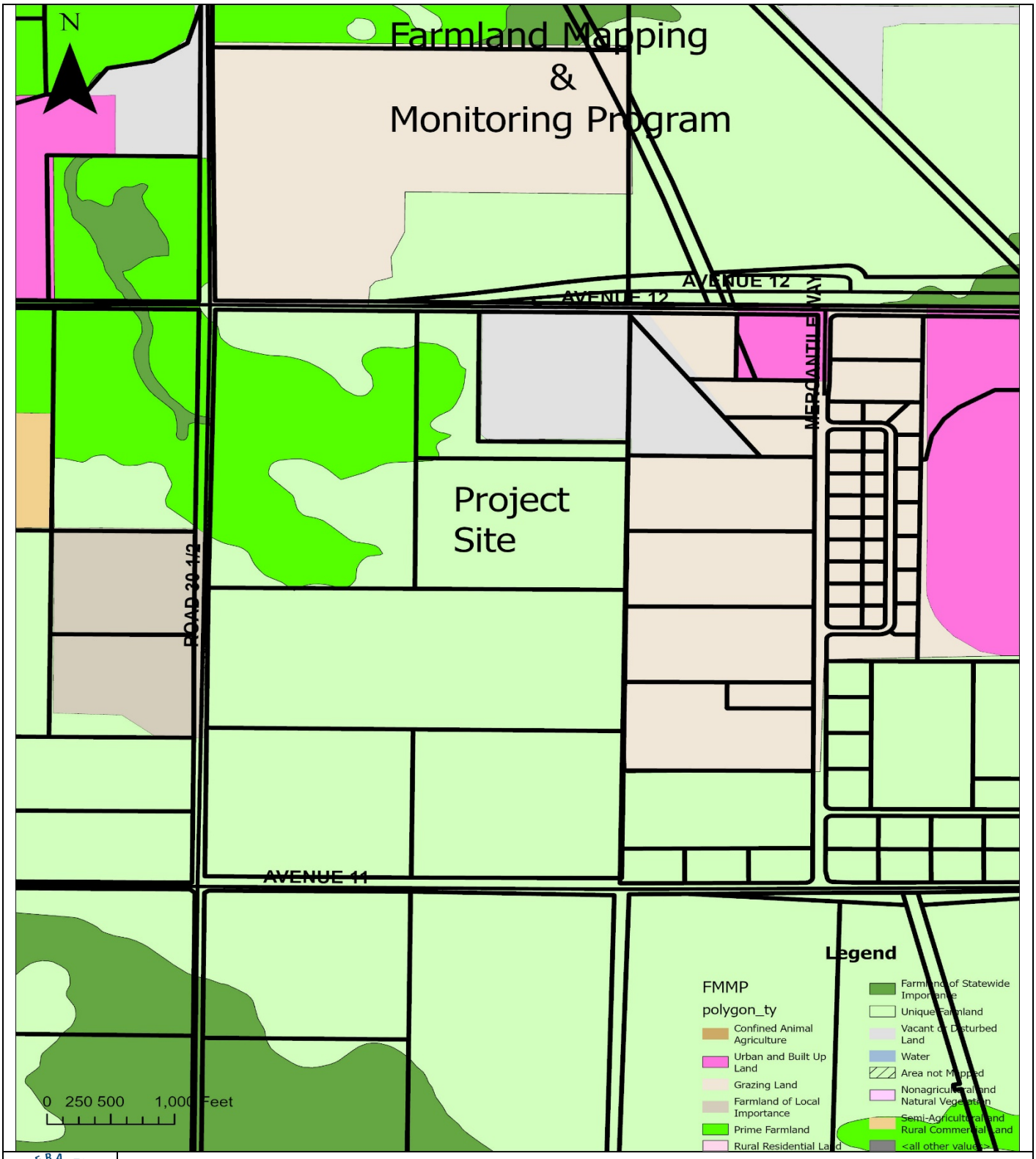
N
Farmland Mapping
&
Monitoring Program
AVENUE 12
AVENUE 12
MERCANTILE WAY
Project
Site
ROAD 30 1/2
AVENUE 11
0 250 500 1,000 Feet
Legend
FMMP
polygon_ty
Confined Animal Agriculture
Urban and Built Up Land
Grazing Land
Farmland of Local Importance
Prime Farmland
Rural Residential Land
Farmland of Statewide Importance
Unique Farmland
Vacant or Disturbed Land
Water
Area not Mapped
Nonagricultural and Natural Vegetation
Semi-Agricultural and Rural Commercial Land
<all other values>

Figure 2

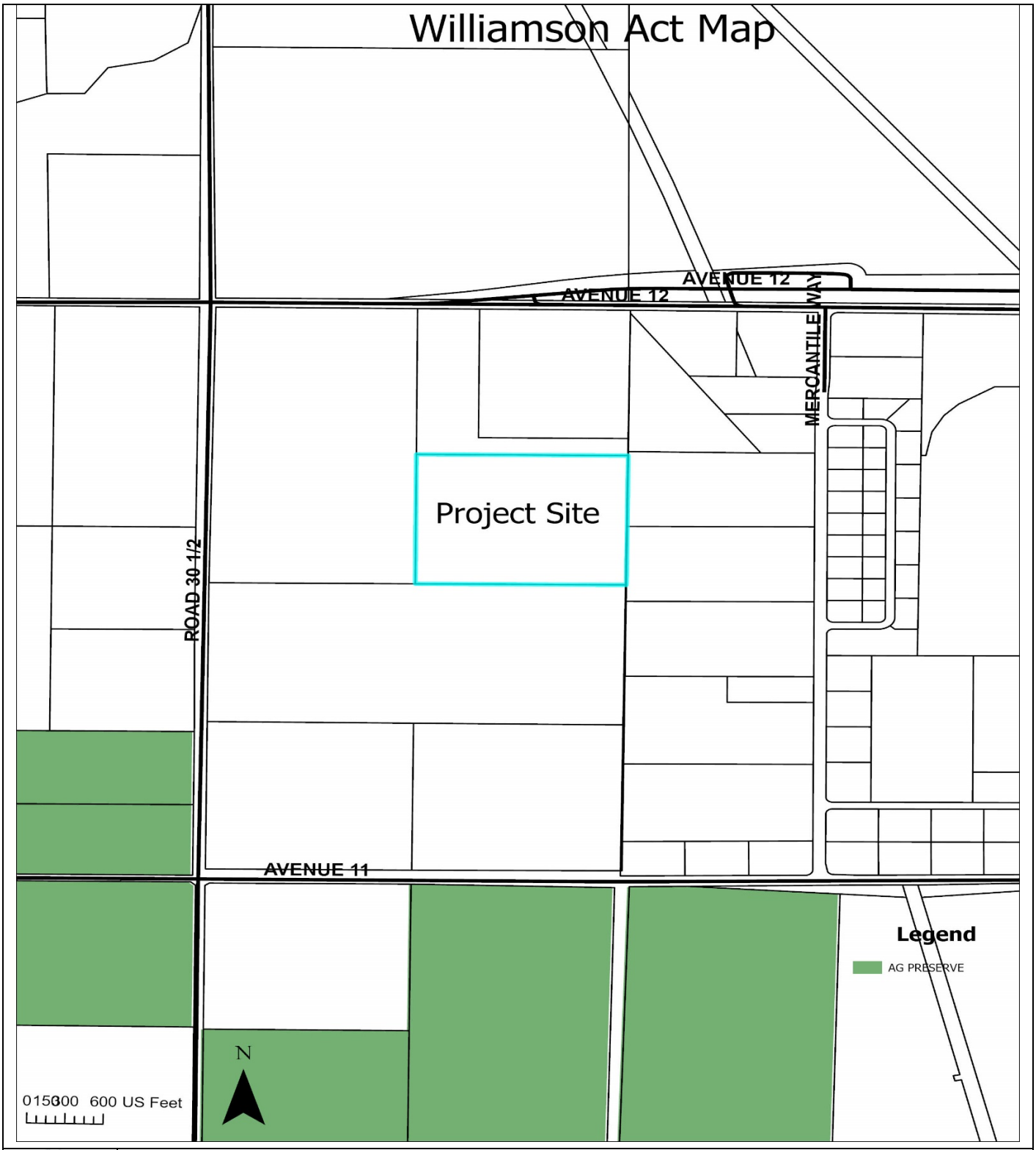
Williamson Act Map
AVENUE 12
AVENUE 12
MERCANTILE WAY
Project Site
ROAD 30 1/2
AVENUE 11
Legend
AG PRESERVE
N
0150300 600 US Feet

Figure 3

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
III. 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:				
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?	☐	☐	☒	☐

Responses:

(a) Less Than Significant Impact With Mitigation. Air Quality Plans (AQPs) are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. The proposed project site is located within the jurisdictional boundaries of the SJVAPCD. To show attainment of the standards, the SJVAPCD analyzes the growth projections in the Valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures. For projects that include stationary sources of emissions, the SJVAPCD relies on project compliance with Rule 2010 (Permits Required) and 2201 (New and Modified Stationary Source Review) to ensure that growth in stationary source emissions would not interfere with the applicable AQP.

Emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ associated with the proposed project would not exceed the SJVAPCD's significance thresholds. Therefore, the proposed project would not be considered to obstruct implementation of the applicable air quality plan or be in conflict with the applicable air quality plan.

The project's emissions would be less than significant for all criteria pollutants and would not result in inconsistency with the AQP for this criterion. The project activities would not obstruct the implementation of the region's air quality plans (Jacobs, 2023). Considering the project's less-than-significant contribution to air quality violations and the project's adherence to applicable rules and regulations, the project would not be considered inconsistent with the AQP; the impact would be less than significant.

To result in a less than significant impact, emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the SJVAPCD's in its GAMAQI. The SJVAB is in nonattainment for ozone, PM_{10} (State only), and $PM_{2.5}$. The SJVAPCD regional thresholds for NO_X, ROG/VOC, PM_{10}, or $PM_{2.5}$ are applied as cumulative contribution thresholds. Projects that exceed the regional thresholds would have a cumulatively considerable health impact.

The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO_X, ROG, SO_2, PM_{10}, and $PM_{2.5}$. Air pollutant emissions have both regional and localized effects. The table below represents the SJVAPCD threshold of significance applicable to the project.

Table 1. San Joaquin Valley Air Pollution Control District Air Quality Thresholds of Significance – Criteria Pollutants

	Emissions (Tons/Year)					
	NO_x	ROG	CO	SO_2	PM_{10}	$PM_{2.5}$
SJVAPCD Construction Emission Thresholds	10	10	100	27	15	15
Operation Emissions (Permitted Equipment and Activities)	10	10	100	27	15	15
Operations Emissions (Nonpermitted Equipment and Activities)	**10**	**10**	**100**	**27**	**15**	**15**

Construction Criteria Pollutants and Precursor Emissions

Construction emissions associated with the project are shown in Table 2. As shown in Table 2, the emissions are below the significance thresholds and, therefore, are less than significant on a project basis.

Table 2: Construction Emissions

	Emissions (Tons/Year)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction Year 2026	0.48	3.14	7.17	0.02	1.76	0.53
Construction Year 2027	0.14	0.53	2.55	0.00	0.04	0.03
SJVAPCD CEQA Construction Emission Thresholds	10	10	100	27	15	15
Exceed Threshold?	No	No	No	No	No	No

As demonstrated, annual project construction emissions would be lower than the SJVAPCD CEQA thresholds for all pollutants analyzed. Equipment to be used for project construction would meet applicable emission standards and be properly registered or permitted per state or local regulations. The project will comply with applicable requirements of SJVAPCD Regulation VIII for prevention, reduction, and mitigation of fugitive dust emissions. The area disturbed during project construction would be greater than 5 acres. Therefore, a dust-control plan will be prepared for the project construction.

The dust-control plan (**AIR MM-1**) will identify the fugitive dust sources at the construction site and describe the dust-control measures to be implemented before, during, and after any dust-generating activity for the duration of the project construction. Emission-control measures implemented as part of the project would include but would not be limited to the following:

- Apply water or dust suppressants to unpaved surfaces and disturbed areas.
- Limit or reduce vehicle speed on unpaved roads and in traffic areas.
- Maintain areas in a stabilized condition by restricting vehicle access.
- Install wind barriers if necessary.
- During high winds, cease outdoor activities that disturb the soil.
- Keep bulk materials sufficiently saturated when handling.
- When storing bulk materials, apply water to the surface or cover the storage pile with a tarp.
- Cover haul truck loads with a tarp or other suitable cover or wet the top of the load enough to limit visible dust emissions. Load all haul trucks with no less than 6 inches of freeboard when material is transported across any paved public roads.
- Clean the interior of cargo compartments on emptied haul trucks before leaving a site.
- Prevent track-out by installing a track-out control device.
- Clean up track-out at least once per day. If along a busy road or highway, clean up track-out immediately.
- Monitor dust-generating activities and implement appropriate measures to optimize dust control.

Estimated construction emissions from the project would exceed 2 tons per year for NOx and PM10. Therefore, the project will be subject to SJVAPCD Rule 9150 ISR requirements (**AIR MM-2**). The project will comply with Rule 9150 requirements to reduce the NOx and PM10 construction emissions by 20% and 45%, respectively. Emissions would be reduced through onsite emission reductions, offsite emission offsets, or a combination of the two (Jacobs, 2023).

(b) Less Than Significant Impact. EPA designates SJVAB as in nonattainment for O3 and PM2.5 under NAAQS. Under CAAQS, SJVAB is designated as in nonattainment for O3, PM10, and PM2.5. As the data in Table 2 demonstrate, the project construction and operation emissions of the nonattainment pollutants PM10 and PM2.5, and the ozone precursors, ROG and NOx, would not exceed the SJVAPCD CEQA emission thresholds.

The SJVAPCD has determined that any project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact (SJVAPCD 2015a). As Table 2 indicates, construction of the project will cause temporary emissions of criteria air pollutants; however, these short-term construction emissions will not exceed the applicable significance thresholds for any criteria pollutant for which the region is in nonattainment.

Emissions occurring at or near the project area have the potential to create a localized impact, also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions they would result in exceedance of air quality standard. In the GAMAQI, the SJVAPCD has provided guidance for screening localized impacts that establishes a threshold of 100 pounds per day of any criteria

pollutant. If a project exceeds this screening threshold, ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, it can be assumed that it would not cause a violation of an ambient air quality standard.

Onsite daily emissions from project construction were calculated by combining the emissions from construction activities that would potentially overlap during the same day. Onsite emissions include only those from the off-road construction equipment that would be operating at the construction site; emissions from worker commute, pickup trucks, and haul trucks are not included. Table 3 summarizes the estimated maximum daily emissions from the project construction site. As the table describes, the estimated maximum daily emissions from the construction site would be less than the 100 pounds per day screening level for each criteria pollutant.

Table 3: Onsite Daily Construction Emissions

	Onsite Daily Emissions (pounds per day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Worst-case Daily Emissions	5.64	29.63	93.32	0.17	13.62	7.86
SJVAPCD Air Quality Screening Thresholds	100	100	100	100	100	100

Localized construction impacts would be short term in nature and would last only for the duration of construction. The onsite construction emissions would be less than 100 pounds per day for each of the criteria pollutants from the construction site. Therefore, further analysis of localized air quality impacts using air dispersion modeling is not required. The project would not result in a cumulatively considerable net increase of any pollutant for which the region is in nonattainment under the NAAQS and CAAQS, and therefore would result in a less than significant impact (Jacobs, 2023).

(c) Less Than Significant Impact. Sensitive receptors for air quality include facilities or land uses that serve or house members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of sensitive receptors include schools, hospitals, and residential areas. The project site is surrounded by open space or agricultural land use, with sparsely located residences and industrial facilities.

As Table 3 indicates, the estimated onsite construction emissions from the project would be below 100 pounds per day threshold for localized impacts for each criteria pollutant. Therefore, the project emissions of criteria pollutants would not cause localized impacts or expose sensitive receptors to substantial pollutant concentrations.

Exhaust emissions from construction equipment would also contain TACs, such as diesel PM (DPM), with the potential to cause cancer and noncancer chronic health effects in exposed populations. However, health risks from DPM are associated with long-term exposure and are typically evaluated based on lifetime exposure. Very few sensitive receptors are located near the project construction site, and construction activities would be short term and would be limited to a relatively small area where only a few pieces of construction equipment would be operating at any time. Therefore, the project's construction emissions are not expected to result in long-term exposure of the nearby

sensitive receptors to substantial DPM concentrations.

As described, exposure to TAC emissions from construction activities would be short term in nature, with minimal effects on the nearby sensitive receptors; long-term exposure to DPM from construction would not occur. In addition, the project would implement best management practices (BMPs) during construction, including limits on idling times and maintaining equipment in good condition. These measures would minimize emissions and exposure of nearby sensitive receptors to construction-related pollutants. Emissions from project construction would not cause substantial exposure of sensitive receptors and the associated health risks would be well below the SJVAPCD health risk thresholds.

The project operation would be automated, with negligible emissions from the O&M activities. Therefore, the project operation would result in minimal emissions of air pollutants including TACs and would not expose sensitive receptors to substantial pollutant concentrations.

Valley Fever

In some areas of California, construction activities that disturb soil have the potential to generate fugitive dust and suspend the fungal spores (Coccidioides immitis) that may be inhaled and cause Valley fever. The project is not expected to result in significant Valley fever-related impacts because fugitive dust-control measures, such as watering of exposed surfaces and disturbed areas, would be implemented to reduce dust and minimize the potential for the exposure of workers and other receptors to Coccidioides spores. Further, employers in California are required to equip workers who may be exposed to dust with National Institute for Occupational Safety and Health-approved respiratory protection with particulate filters rated as N95, N99, N100, P100, or high-efficiency particulate air. Therefore, project-related impacts related to Valley fever exposure would be less than significant.

(d) Less Than Significant Impact. The occurrence and severity of odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; distance from the odor source; and the sensitivity of the affected receptor. Offensive odors do not typically result in physical harm, but they can create a nuisance and may result in complaints from the affected public.

Construction could potentially result in odorous exhaust emissions from use of gasoline- and diesel-fueled vehicles and equipment. However, these emissions would be intermittent and temporary and would dissipate with an increase in distance from the construction location. Given the temporary and intermittent nature of odor-generating construction activities, and the dispersion of emissions compared to the limited proximity and low number of potential receptors, construction of the project would not expose people to objectionable odors for an extended period or lead to odorous emissions that would adversely affect substantial numbers of people. Impacts associated with odors during construction would be less than significant.

The project would be an energy storage facility, which is not expected to result in objectionable odors during operation. Therefore, operation of the project would not result in emissions leading to odors that would adversely affect substantial numbers of people, and the impact would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL 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 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 a native wildlife nursery site?	☐	☒	☐	☐
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?	☐	☐	☐	☒

Responses:

(a) Less Than Significant Impact With Mitigation. The Project could adversely affect, either directly or through habitat modifications, three special-status animals that could occur on or near the Project site. Construction activities such as excavating, trenching, or using other heavy equipment that disturbs or harms a special-status species or substantially modifies its habitat

could constitute a significant impact. We recommend that Mitigation Measures BIO1–BIO2 (below) be included in the conditions of approval to reduce the potential impacts to a less-than-significant level (Colibri Ecological Consulting, 2021).

BIO MM-1 Avoid impacts to California tiger salamander and western spadefoot. Install exclusion/silt fencing around all excavations and other areas of potentially ground disturbing activities to preclude California tiger salamander and western spadefoot from entering the active work area. The silt fence should be a minimum of 36 inches tall and toed-in six inches below ground. If the fence cannot be toed-in, the bottom of the fence should be weighted down with sandbags or similar weights such that there are no gaps under the fence where wildlife can enter.

To avoid impacts to California tiger salamander and western spadefoot, work should take place during the dry season (generally June—September). If work must occur during the wet season (generally October—May), a qualified biologist shall determine which construction activities may need to be halted within 24 hours of a predicted0.25-inch rain event to ensure any impacts to California tiger salamander or western spadefoot are avoided. If by 2 pm rain is forecasted for the remainder of the day or subsequent night with a 70% or greater probability of rain (based on the nearest National Weather Service forecast, available at http://forecast.weather.gov/), work may be postponed until 24 hours have passed between the last rain event and the start of work. If work cannot be postponed due to public or crew safety concerns, a qualified biological monitor must be present, and work may be continued until a safe working environment is reached, at which time work will be halted as described above. If work activities need to occur during rain events, the biological monitor in coordination with the construction contractor may be required to inspect access roads and work areas prior to use.

BIO MM-2 Protect nesting Swainson's hawks. To the extent practicable, construction shall be scheduled to avoid the Swainson's hawk nesting season, which extends from March through August.

If it is not possible to schedule construction between September and February, a qualified biologist shall conduct surveys for Swainson's hawk in accordance with the Swainson's Hawk Technical Advisory Committee's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (SWTAC 2000, Appendix D). These methods require six surveys, three in each of the two survey periods, prior to project initiation. Surveys shall be conducted within a minimum 0.5-mile radius around the Project site.

(b-c) No Impact. The project site does not contain a riparian habitat or a wetland (refer to figure 4) and therefore the project would not have an impact (U.S. Fish & Wildlife Service , 2022).

(d) Less Than Significant Impact With Mitigation. The Project could impede the use of nursery sites for native birds protected under the MBTA and CFGC. Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort can be considered take under the MBTA and CFGC. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region. Construction activities such as excavating, trenching, and grading that disturb a nesting bird on the Project site or immediately adjacent to the construction zone could constitute a significant

impact. It is recommended that Mitigation Measure BIO3 (below) be included in the conditions of approval to reduce the potential effect to a less-than significant level (Colibri Ecological Consulting, 2021).

BIO MM-3 Protect Nesting Birds. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.

If it is not possible to schedule construction between September and January, a pre-construction clearance survey for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during Project construction. A pre-construction clearance survey shall be conducted no more than 14 days prior to the start of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas, including within 250 feet in the case of raptor nests and within 100 feet for nests of all other birds. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has failed for non-construction related reasons.

(e-f) No Impact. This Project, which will result in temporary and permanent impacts to agricultural land cover, will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance as no trees or biologically sensitive areas will be impacted; or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan as no such plan has been adopted (Colibri Ecological Consulting, 2021).

General Info

Common Name	Federal Listing	State Listing	CDFW Listing	CNPS Listing
California tiger salamander - central California DPS	Threatened	Threatened	WL	-
western spadefoot	None	None	SSC	-
Swainsons hawk	None	Threatened	-	-
burrowing owl	None	None	SSC	-
vernal pool fairy shrimp	Threatened	None	-	-
midvalley fairy shrimp	None	None	-	-
California linderiella	None	None	-	-
American badger	None	None	SSC	-
Northern Hardpan Vernal Pool	None	None	-	-
Munzs tidy-tips	None	None	-	1B.2
succulent owls-clover	Threatened	Endangered	-	1B.2
hairy Orcutt grass	Endangered	Endangered	-	1B.1

Gregg Quadrangle

List 1A: Plants presumed extinct

List 1B: Plants Rare, Threatened, or Endangered in California and elsewhere.

List 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere

List 3 Plants which more information is needed – a review list

List 4: Plants of Limited Distributed - a watch list

Ranking

0.1 – Seriously threatened in California (high degree/immediacy of threat)

0.2 – Fairly threatened in California (moderate degree/immediacy of threat)

0.3 – Not very threatened in California (low degree/immediacy of threats or no current threats known)

SSC Species of Special Concern

WL Watch List

FP Fully Protected

Effective January 1, 2007, Senate Bill 1535 took effect that has changed de minimis findings procedures. The Senate Bill takes the de minimis findings capabilities out of the Lead Agency hands and puts the process into the hands of the California Department of Fish and Wildlife (formally the California Department of Fish and Game). A Notice of Determination filing fee is due each time a NOD is filed at the jurisdictions Clerk's Office. The authority comes under Senate Bill 1535 (SB 1535) and Department of Fish and Wildlife Code 711.4. Each year the fee is evaluated and has the potential of increasing. For the most up-to-date fees, please refer to: http://www.dfg.ca.gov/habcon/cega/cega_changes.html.

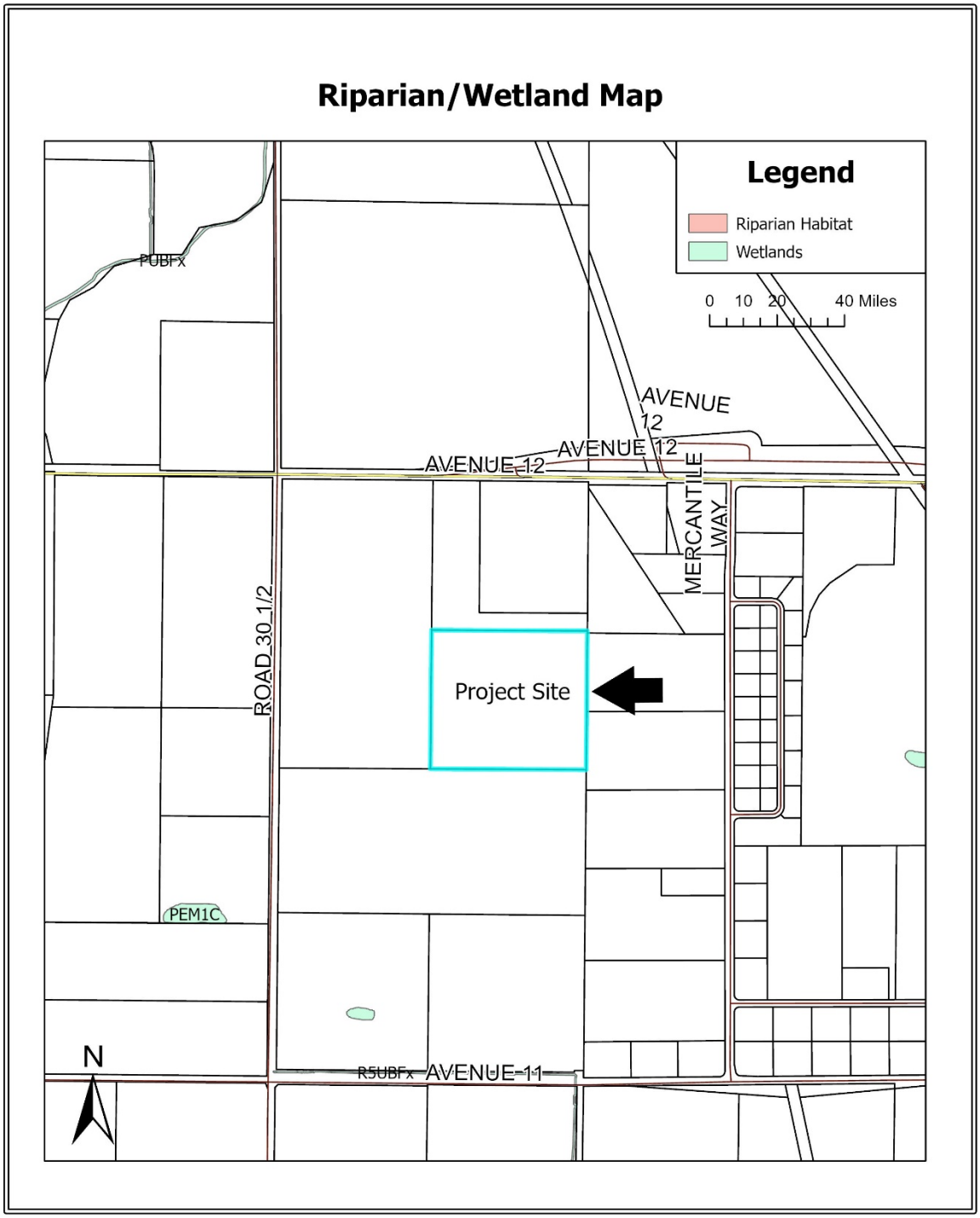
Riparian/Wetland Map
Legend
Riparian Habitat
Wetlands
0 10 20 40 Miles
PUBFx
AVENUE 12
AVENUE 12
AVENUE 12
MERCANTILE WAY
ROAD 30 1/2
Project Site
PEM1C
R5UBFx
AVENUE 11
N

Figure 4

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §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 formal cemeteries?	☐	☐	☒	☐

Responses:

(a-c) Less Than Significant Impact. No impacts have been identified as a result of this project. The area surrounding the project site has been developed for agricultural purposes for years with significant ground disturbances as a result (infrastructure, roadways, agricultural uses, etc.). This does not mean however that there are no archaeological or cultural resources on, in or around the subject property. There is still the potential of finding previously unknown resources during any phase of this project.

Most of the archaeological survey work in the County has taken place in the foothills and mountains. This does not mean, however, that no sites exist in the western part of the County, but rather that this area has not been as thoroughly studied. There are slightly more than 2,000 recorded archaeological sites in the County, most of which are located in the foothills and mountains. Recorded prehistoric artifacts include village sites, camp sites, and bedrock milling stations, pictographs, petroglyphs, rock rings, sacred sites, and resource gathering areas. Madera County also contains a significant number of potentially historic sites, including homesteads and ranches, mining and logging sites and associated features (such as small camps, railroad beds, logging chutes, and trash dumps).

Public Resource Code 5021.1(b) defines a historic resource as "any object building, structure, site, area or place which is historically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." These resources are of such import, that it is codified in CEQA (PRC §21000) which prohibits actions that "disrupt, or adversely affect a prehistoric or historic archaeological site or a property of historical or cultural significance to a community or ethnic or social groups; or a paleontological site except as part of a scientific study."
Archaeological importance is generally, although not exclusively, a measure of the archaeological research value of a site which meets one or more of the following criteria:

Is associated with an event or person of recognized significance in California or American history or of recognized scientific importance in prehistory.

Can provide information which is both of demonstrable public interest and useful in

addressing scientifically consequential and reasonable archaeological research questions.

Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind.

Is at least 100 years old and possesses substantial stratigraphic integrity (i.e., it is essentially undisturbed and intact).

Involves important research questions that historic research has shown can be answered only with archaeological methods.

As a result of AB 52, which requires jurisdictions to notify Tribal Governments that request such outreach, the County alerted Tribal Entities that requested initial review packets. Table Mountain Rancheria Cultural Resources Department sent a letter indicating they wished to coordinate a discussion and meeting date and provided a phone number and email address in how to contact them. On October 18th A phone call and email was sent from the Lead Agency to coordinate a date and time with the Table Mountain Rancheria Cultural Resources Department. Table Mountain Rancheria Cultural Resources Department never responded back.

If any of the tribes did respond and requested additional reviews, consultations or studies of the site prior to further processing of the project, the County would have coordinated contact with the applicant and tribal representatives.

If any resources were found on site, their exact nature and location would not be identified by the County for safety, confidentiality, and respect of the tribal resource. That said, mitigations would be incorporated in conjunction with tribal input as necessary.

———

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VI. ENERGY Would the project:				
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?	☐	☐	☒	☐

Responses:

(a - b) Less Than Significant Impact. California has implemented numerous energy efficiency and conservation programs that have resulted in substantial energy savings. The State has adopted comprehensive energy efficiency standards as part of its Building Standards Code, California Codes of Regulations, Title 24. In 2009, the California Building Standards Commission adopted a voluntary Green Building Standards Code, also known as CALGreen, which became mandatory in 2011. CALGreen sets forth mandatory measures applicable to new residential and non-residential structures and additions and alterations on water efficiency and conservation, building material conservation, interior environmental quality, and energy efficiency.

Additionally, California has adopted a Renewables Portfolio Standard, which requires electricity retailers in the state to generate 33 percent of the electricity they sell from renewable energy sources (i.e., solar, wind, geothermal, hydroelectric from small generators, etc.) by the end of 2020. In 2018, SB 100 was signed into law, which increases the electricity generation requirement from renewable sources to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045. The main sources of energy consumption would be construction activities and ongoing project operations. Project construction would involve fuel consumption and use of other nonrenewable resources. Construction equipment used for such improvements typically runs on diesel fuel or gasoline. The same fuels are typically used for vehicles transporting equipment and workers to and from a construction site. However, construction-related fuel consumption would be finite, short-term and consistent with construction activities of a similar character. This energy use would not be considered wasteful, inefficient or unnecessary. Equipment overtime would be more energy-efficient in order to assist with meeting State emissions reduction goals. Additionally, under California's Renewable Portfolio Standard, a greater share of electricity would be provided from renewable energy sources over time, so less fossil fuel consumption to generate electricity would occur. The project would be required to comply with the building energy efficiency standards of California Code of Regulations Title 24, Part 6, also known as the California Energy Code. Compliance with these standards would reduce energy consumption associated with project operations, although reductions from compliance cannot be readily quantified at this time. Overall, project construction and operations would not consume energy resources in a manner considered wasteful, inefficient, or unnecessary; the project would also not conflict or obstruct any state or local plans for renewable energy efficiency. project impacts related to energy consumption are considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS Would the project:				
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 Zone 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 geological 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 geologic feature?	☐	☐	☒	☐

Responses:

(a i - iv) Less than Significant Impact. According to the California Earthquake Hazards Zone Application (EQ Zapp) located on the Department of Conservation, the project is not within an Earthquake Fault Zone (Department of Conservation, 2022).

The Earthquake Shaking Potential for California Map located on the Department of Conservations website displays the Level of hazards regarding ground shaking for each county. According to the map, the project site is located in a region where only weaker,

masonry buildings would be damaged. However, very infrequent earthquakes could still cause strong shaking. The project does not consist of constructing masonry buildings and therefore the project would have a less than significant impact (Department of Conservation , 2016).

(b) Less Than Significant Impact With Mitigation. The parcel is subject to potential erosion due to rain events; however, with the implementation of HYDRO MM-1, construction project proponents will be required to submit a Notice of Intent and Storm Water Pollution Prevention Plan (SWPPP) to the Regional Water Quality Board to obtain a National Pollutant Discharge Elimination System (NPDES) General Construction Permit. The SWPPP will include Best Management Practices (BMPs) to control erosion and siltation on the site in order to prevent water quality degradation. Such measures may include, but are not limited to, covering the graded area with straw or straw matting, and using water for dust control. Implementation of HYDRO MM-2 will require all stabilized construction on and off-site access locations shall be constructed per the latest edition of the California Stormwater Quality Association (CASQA) details to effectively prevent tracking of sediment onto paved areas. If applicable, all BMPS to be inspected weekly and before and after each rain event. Repair or replace as necessary. The contractor shall abide all of the laws, ordinances, and regulations associated with the NPDES and the Clean Water Act. Due to the flat nature of the project site, and given that the site has been previously developed, future development within the project site would result in a less than significant soil erosion impact.

(c) Less Than Significant Impact. The project site is not located in an earthquake fault zone and is in an area with a low probability of seismic activity. Lateral spreading, subsidence, and collapse are uncommon in Madera County. Since the project site is not located on a geologic unit or soil that is unstable or would become unstable due to project activities, there is little to no potential for result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Impacts from these criteria are considered less than significant.

(d-e) Less Than Significant Impact. According to Table 18-1B of the Uniform Code (1994) soils meeting all four of the following provisions shall be considered expansive, except that tests to show compliance with Items 1, 2 and 3 shall not be required if the test prescribed in Item 4 is conducted (California Building Code , 2022) :

1. Plasticity index (PI) of 15 or greater, determined in accordance with ASTM D4318.
2. More than 10 percent of the soil particles pass a No. 200 sieve (75 μm), determined in accordance with ASTM D422.
3. More than 10 percent of the soil particles are less than 5 micrometers in size, determined in accordance with ASTM D422.
4. Expansion index greater than 20, determined in accordance with ASTM D4829.

According to the U.S. Department of Agriculture, Natural Resources Conservation Services Web Soil Survey, identified soil on the project site that primarily consists of Alamo clay (AsA) which has an plasticity of 14.2 and San Joaquin-Whitney Sandy loam (ScB) which has a plasticity of 7.3. The soil characteristics of the project site can be seen in Figure 5. And the project will not be generating wastewater and therefore the project would have a less than significant impact.

(f) Less Than Significant Impact. Refer to the discussion regarding Cultural Resources.

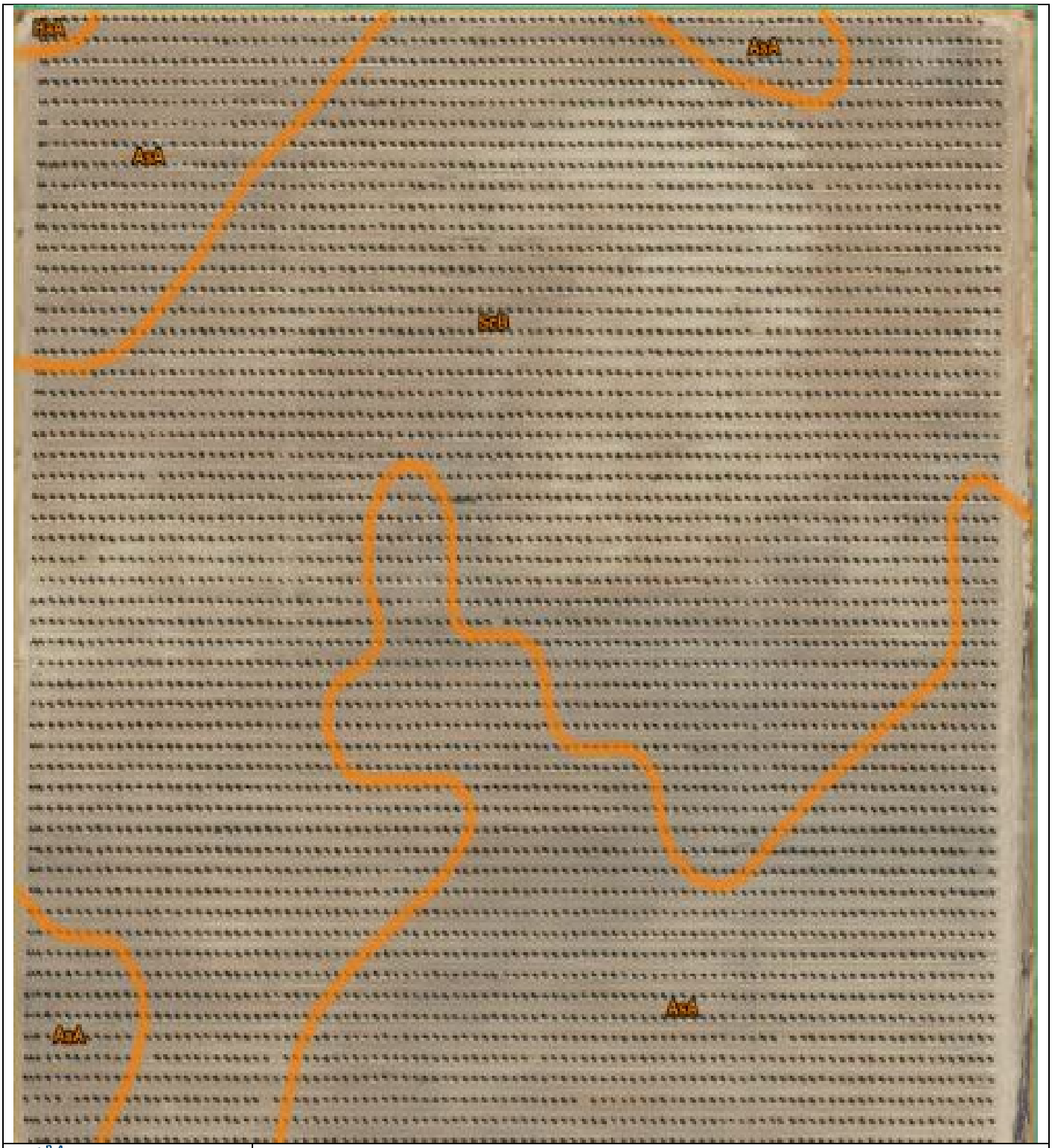

Figure 5

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS Would the project:				
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?	☐	☐	☒	☐

Responses:

(a) Less than Significant Impact With Mitigation. GHG emissions would occur during project construction and would include emissions from construction equipment, haul trucks, and worker commute vehicles. The project's temporary construction emissions of GHGs were estimated using CalEEMod.

Table 4: Construction Greenhouse Gas Emissions (CO_2e)

Construction GHG	MT/year
2026	1658.06
2027	503.58
Total Construction GHG Emissions	2161.64
Amortized Construction Emissions Over 30 Years	72.05

Direct emissions of GHG from project operation of vehicles or equipment would be negligible because the facility would be unstaffed and would require minimal vehicle or equipment for O&M. GHG emissions during operation would result primarily from energy consumption. The anticipated total GHG emissions of the amortized project construction emissions and operation emissions would be 654.79 MT per year, which is less than the CAPCOA interim GHG emission threshold of 900 MT per year.

The project would implement BMPs during construction, such as minimizing unnecessary construction vehicle trips and idling time, which would further reduce GHG emissions. Therefore, the project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. The project impact would be less than significant.

(b) Less than Significant Impact. Under the SJVAPCD's CEQA guidance for GHGs, a project would not have a significant GHG impact if it is consistent with an applicable plan to reduce GHG emissions. The project involves the construction, operation, and maintenance of a BESS facility that would add reliability to the California's electric grid and help meet the November 2019 CPUC decision requiring capacity additions to the California Independent System Operator system. Project consistency with the CARB 2022 Scoping Plan for Achieving Carbon Neutrality, and the Madera County Transportation Commission's (MCTC's) Sustainable Communities Strategy (SCS) in its Regional Transportation Plan (RTP) was evaluated to demonstrate that the project would not conflict with applicable GHG reduction plans or regulations.

Executive Order S-3-05 and AB 32 set the goals of reducing GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and 80% below 1990 levels by 2050. To meet these GHG reduction goals, CARB prepared the AB 32 scoping plan and provided updates to the plan in 2022 to provide guidelines on statewide GHG reduction strategies. The 2022 Scoping Plan (CARB 2022) represents the primary plan to reduce GHG emissions throughout California. This plan is designed to reduce statewide GHG emissions in California by 40% as compared to the 1990 levels by 2030, and the goals of carbon neutrality and reduce anthropogenic greenhouse gas emissions by 85% below 1990 levels no later than 2045. The proposed battery energy storage project is designed to optimize the capture, storage, distribution, and use of energy. Through more efficient energy storage, the project would help to provide safe and reliable electric service and support the electricity generation sector in achieving its statewide GHG emission reduction goals. In addition, the estimated project GHG emissions would be below the CAPCOA interim screening level developed to achieve the AB 32 and SB 32 GHG reduction goals. Therefore, the project would not hinder or otherwise conflict with AB 32 or the AB 32 scoping plan or plan updates for reducing GHG emissions.

SB 375 requires metropolitan planning organizations to prepare an SCS in their RTPs. The MCTC 2022 RTP/SCS (MCTC 2022) address requirements set forth with the passage of SB 375, with the goal of ensuring that the MCTC region can meet its regional GHG reduction targets set by CARB. The MCTC's state-mandated target is (1) a 10% reduction in per capita GHG emissions from cars and light-duty trucks, compared with 2005, by 2020 and (2) a 16% reduction by 2035. MCTC is on track to meet the targets through its 2022 RTP/SCS. The project would not result in population growth and employment growth because there would be no full-time employees onsite. The proposed project would be unstaffed, and operational control would be from an offsite control room. Operational staff would perform periodic inspections and maintenance as necessary; therefore, the project would not affect the transportation and land-use patterns analyzed or assumed in long-range planning in the MCTC's RTP/SCS. The project would not conflict with applicable plans, policies, or regulations related to GHG emission reductions, and the impact would be less than significant.

IX. 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Responses:

(a – d) No Impact. The project is installing a 200-megawatt Battery Energy Storage System (BESS), which will occupy approximately sixteen of the thirty-five acres. The primary objective of this project is to provide reliability to the California electric grid. The project is will not produce any hazardous material or waste and is not located on a hazardous materials site.

(e) Less Than Significant Impact. There are no airports within the project site's two-mile

radius. The closest airport is the Madera Municipal Airport which is located approximately eight miles northwest of the project site. Therefore, the project would not expose people to a safety risk or excessive noise and would have a less than significant impact.

(f) No Impact. The project would not interfere with and adopted emergency response plan or emergency evacuation plan.

(g) No Impact. According to the Madera County General Plan, a Wildland is a nonurban, natural area that contains uncultivated land, timber, range, watershed, brush, or grasslands. Although there are areas of grassland, the project area is located in a heavily agricultural area where the ground has been disturbed and cultivated. The project will not expose people or structures, directly or indirectly, to a significant risk of loss, injury, or death involving wildfires (County of Madera , 1995).

X. HYDROLOGY AND WATER QUALITY Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater 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?	☐	☐	☐	☒

Responses:

(a) Less Than Significant Impact With Mitigation. The project site is relatively flat. Site preparation of the project would require the disturbance of approximately sixteen acres of the parcel, which could result in erosion and siltation with the potential to violate water quality standards. Additionally, accidental spills or disposal of potentially harmful materials used during construction or operation of the project could possibly wash into and pollute

surface water runoff. A Storm Water Pollution Prevention Plan for construction-related activities would include, but not be limited to, the following types of Best Management Practices (BMPs) to minimize the potential for pollution related to material spills:

- Vehicles and equipment will be cleaned;
- Vehicle and equipment fueling and maintenance requirements will be established;
- And A spill containment and clean-up plan will be in place prior to and during construction activities.

In order to reduce potential impacts to water quality during construction activities, Mitigation Measure MM HYD-1 and MM HYD-1 will be required. As a result the project will have a less than significant impact with mitigations.

HYDRO MM-1 Prior to construction, the Applicant shall submit a copy of: (1) the approved Storm Water Pollution Prevention Plan (SWPPP) and (2) the Notice of Intent (NOI) to comply with the General National Pollutant Discharge Elimination System (NPDES) from the Central Valley Regional Water Quality Control Board. The requirements of the SWPPP and NPDES shall be incorporated into design specifications and construction contracts. The Applicant or person responsible shall meet County of Madera construction site requirements regarding the control of surface water, and runoff. Runoff created at the project site shall meet the following minimum requirements:

- Sediments generated on the project site shall be retained using adequate treatment control or structural Best Management Practices (BMPs)
- Construction-related materials, wastes, spill or residues shall be retained at the project site to avoid discharge to streets, drainage facilities, receiving waters or adjacent properties by wind or run-off.

HYDRO MM-2 All stabilized construction on and off-site access locations shall be constructed per the latest edition of the California Stormwater Quality Association (CASQA) details to effectively prevent tracking of sediment onto paved areas. If applicable, all BMPS to be inspected weekly and before and after each rain event. Repair or replace as necessary. The contractor shall abide all of the laws, ordinances, and regulations associated with the NPDES and the Clean Water Act.

(b) No Impact. Once the project is completed groundwater will not be utilized in continuation support of the project and as a result will not have an impact.

(c i - iv) Less Than Significant Impact With Mitigation. Extensive grading or other soil disturbing activities often leave the soils of construction zones barren of vegetation and, therefore, vulnerable to erosion. Eroded soil can be carried as sediment and deposited in local creek beds and adjacent wetlands. All disturbed areas will be vulnerable to erosion during the winter rainy season. The possible deposition of silt in off-site drainages would constitute a potentially significant adverse effect of the project site. With the implementation of Hydro MM-1 and Hydro MM-2 the project will have a less than significant impact.

(d) Less Than Significant Impact. The project is not located in a flood hazard, tsunami, or seiche zone, and would not have the potential to release pollutants from flooding with the implementation of HYDRO MM-1 and HYDRO MM-2.

(e) No Impact. The project would not increase groundwater use beyond the sustainable yield and would not have the potential to obstruct implementation of a water quality control plan.

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

Responses:

(a) No Impact. The project would not divide an established community

(b) No Impact. The project would not conflict with the County General Plan or other land use plan policies or regulations adopted to avoid or mitigate an environmental effect.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Responses:

(a - b) No Impact. The project site is not within an area identified as having a known mineral resource of value to the state or region. The site is not in an area delineated in the Madera County General Plan or other land use plan as a locally important mineral resource recovery site.

XIII. NOISE Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 ordinances, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Responses:

(a) Less Than Significant Impact With Mitigation. Operation of the proposed project would generate levels of noise typical of a RV Resort; however, the project site is located in an agricultural area with winery operations to the east and an agricultural facility to the north of the project site. During project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would increase ambient noise levels when in use and could potentially have an impact however with the implementation of of NOISE MM-1 the project would have a less than significant impact.

NOISE MM-1 The following measures shall be incorporated into the project on-site construction operations:

- Pursuant to Section 9.58.020(G) of the Madera County Municipal Code, construction activities are limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday, and from 9:00 a.m. to 5:00 p.m. on Saturdays. Construction activities are prohibited on Sundays.
- All equipment and vehicles should be powered off when not in use. Unnecessary idling of internal combustion engines should be prohibited.
- All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.
- Select quiet equipment, particularly air compressors, whenever possible. All noise producing project equipment and vehicles using internal combustion engines should be equipped with manufacturer-recommended mufflers and be maintained in good working condition. Electrically powered equipment should be used instead of pneumatic or internal combustion powered equipment, where feasible.

- Project area and site access road speed limits shall be established and enforced during the construction period.

b) Less Than Significant Impact. During project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction.

c) No Impact. This project is not located near either of the municipal airports (Chowchilla and Madera) and is outside of the two-mile analysis requirement and, therefore would not have an impact.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and business) 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?	☐	☐	☐	☒

Responses:

(a) No Impact. The project is to assist is assist in providing reliability to the California electric grid, this type of project would not induce unplanned population growth either directly or indirectly.

(b) No Impact. The project is located on a vacant site and would not displace housing or people.

———

XV. PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Responses:

(a – i-ii) Less Than Significant Impact. As previously stated, the project will be providing reliability to the California electric grid. The project could increase the risk of emergency services being provided to the project site; however, the increase would be minimal and would not require new or physically altered governmental facilities. Therefore, the project would have a less than significant impact.

(a – iii through v) No Impact. The project would not result in new or physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives for any public services. And therefore, the project will have no impact.

_____

XVI. RECREATION	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) 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?	☐	☐	☐	☒

Responses:

(a – b) No Impact. The project would not result in the need for new or physically altered governmental or recreational facilities. The project is for commercial use and would not result in an increase in population or the need for parks or recreational facilities and, as a result, would have no impact.

———

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

Responses:

(a-b) Less Than Significant Impact. The project is located on the south side of Avenue 12 and the east side of Road 30 ½. The project is subject to the 1995 Madera County General Plan. Section two of the 1995 Madera County General Plan provides policies relevant to Transportation and Circulation.

The project is a battery 200 MW battery energy storage system. The traffic generated as a result of the project will be two maintenance vehicles that will visit the site four times a year to include a service vehicle that will visit the site four times a year resulting in approximately twenty-four vehicle trips a year. as a result of the project will have a less than significant impact.

(c) No Impact. The project will not result in a geometric design feature that will result in sharp curves or dangerous intersections. As previously stated, the trip generation as a result of the project will approximately twenty-four vehicle tris a year and as a result the project will not have an impact.

(d) No Impact. The project will not result in inadequate emergency response and therefore have no impact.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the project:				
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 a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☐	☒
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public 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.	☐	☐	☐	☒

Responses:

(a – i, ii) No Impact. In accordance with Public Resources Code Section 21080.3.1, notification letters were sent to tribal representatives of California Native American tribes that have requested to be notified of projects within the project area of Madera County. Tribal representatives were advised of the Project and invited to request formal consultation with the County regarding the Project within 30 days of receiving the notification letters. Eight notification letters were sent to representatives of the following tribes on September 28, 2022:

- Table Mountain Rancheria
- Picayune Rancheria of the Chukchansi Indians
- Dumna Wo Wah Tribal Government
- Chowchilla Yokuts Tribe

As of the preparation of this Initial Study, more than 30 days following the County's transmittal of notification letters, no tribal representatives requested consultation except Table Mountain Rancheria. ON 10/18/2022 an email and a phone call was made to the contact information provided by Table Mountain Rancheria. However, Table Mountain Rancheria has not responded. No tribal cultural resources have been identified associated with the site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it had 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?	☐	☐	☐	☒

Responses:

(a–e) Less Than Significant Impact. The project will not use any water once construction is completed nor will it produce wastewater or solid waste. As a result the project will have no impact.

_____

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XX. WILDFIRE 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?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Responses:

(a - d) No Impact. The project site is located in a Local Responsibility Area (LRA) and is not in a fire hazard severity zone. The impacts would be no impact. The types of activities occurring on the project site typically do not contribute to or exacerbate wildfire risks. The project does not propose any habitable structures for long term use. Further analysis of the project's potential impacts on wildfire is not warranted.

Madera County developed an Operational Area Emergency Operations Plan which, was updated in January of 2010 and a Multi-Hazard Functional Plan which, is responsible for establishing emergency management organization required to mitigate any emergency or disaster affecting Madera County. Both documents Identify policies, responsibilities and procedures required to protect the health and safety of Madera County communities, public and private property and the environmental effects of natural and technological emergencies and disasters. And establish the operational concepts and procedures associated with Initial Response Operations (field response) to emergencies, the Extended Response Operations County Emergency Operations Center (EOC) activities and the recovery process. Madera County also developed a Local Hazard Mitigation Plan (LHMP) which is responsible for evacuation procedures. The LHMP states the Sheriff's Department uses a system know as "MCALERT". There is nothing in both documents That indicate the project would impact a response plan or emergency evacuation plan. The project does not propose any actions or structures that expose people or structures to significant risks. Furthermore, the project would not generate runoff, post-fire slope instability, or negatively impact drainage.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Responses:

(a) Less Than Significant Impact. The analysis conducted in this Initial Study/Mitigated Negative Declaration results in a determination that the project, with the incorporation of mitigation measures, would have a less than significant impact on the environment. As a result, the project would not have the potential to substantially degrade the quality of the environment and, therefore will have a less than significant impact

(b) Less Than Significant Impact. Implementation of the project would not result in significant cumulative impacts and all potential impacts would be reduced to less than significant.

(c) Less Than Significant Impact. For the reasons discussed in Sections I through XX, above, the Project would not have the potential to result in environmental effects that would cause substantial adverse direct or indirect effects on human beings.

_____

Works Cited

AEI Consultants. (2021). *Phase I Environmental Site Assessment.*

California Building Code . (2022, November 2). *Chapter 18 Soils and Foundations* . Retrieved from Upcosed: https://up.codes/viewer/california/ca-building-code-2016/chapter/18/soils-and-foundations#18

California Deartment of Conservation . (2022, October 18). *Madera County Farmland Data Availability.* Retrieved from Californa Department of Conservation : https://www.conservation.ca.gov/dlrp/fmmp/Documents/fmmp/pubs/2016-2018/alternate_conversion/Alternate_Madera_County_2016-2018_Land_Use_and_Rural_Conversion.pdf

California Department of Fish and Wildlife . (2022, August 10). *BIOS*. Retrieved from https://apps.wildlife.ca.gov/bios/?bookmark=326

Colibri Ecological Consulting, L. (2021). *Biological Resource Evaluation.* Madera.

County of Madera . (1995, October 24). General Plan. Madera , County , United States of America .

Department of Conservation . (2016). *Earthquake Shaking Potential for California* . Retrieved from Department of Conservation: https://www.conservation.ca.gov/cgs/Documents/Publications/Map-Sheets/MS_048.pdf

Department of Conservation. (2016). *Departmetn of Conservatoin*. Retrieved from DOC Maps: Agriculture: https://maps.conservation.ca.gov/agriculture/

Department of Conservation. (2022, October 31). *Earthquake Zones of Required Investigation.* Retrieved from maps.conservation: https://maps.conservation.ca.gov/cgs/EQZApp/app/

Jacobs. (2023). *Stallion Energy Storage 1, LLC, Energy Storage Project - Air Quality and Greenhouse Gas Impact Analysis.*

Office of the State Fire Marshal . (n.d.). *FHSZ Viewer* . Retrieved from Fire Hazard Severity Zones Maps : https://egis.fire.ca.gov/FHSZ/

San Joaquin Valley Air Pollution Control District . (2022, February 16). *San Joaquin Valley Air Pollution Control District Reference No. 20220128*. California , United States .

U.S. Fish & Wildlife Service . (2022, August 10). *National Wetlands Inventory* . Retrieved from https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

United States Department of Agriculture . (2019, July 31). *Web Soil Survey* . Retrieved from Natural Resources Conservatoin Service : https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx