CITY OF GOLETA
DRAFT INITIAL STUDY AND
MITIGATED NEGATIVE DECLARATION

1. PROJECT TITLE: Goleta Energy Storage Project

Case Nos: 19-0201-DP; 19-0202-DPAM; 19-0202-CUP; 19-0001-SUB; TM 32,061

2. LEAD AGENCY NAME AND ADDRESS:

City of Goleta
Planning and Environmental Review
130 Cremona Drive, Suite B
Goleta, CA 93117

3. CONTACT PERSON AND PHONE NUMBER:

Kathy Allen, Supervising Senior Planner
(805) 961-7545
kallen@cityofgoleta.org

4. APPLICANT:

Goleta Energy Storage, LLC
c/o: Peter Ledig
8614 Westwood Center Drive, Suite 1800
Vienna, Virginia 22182

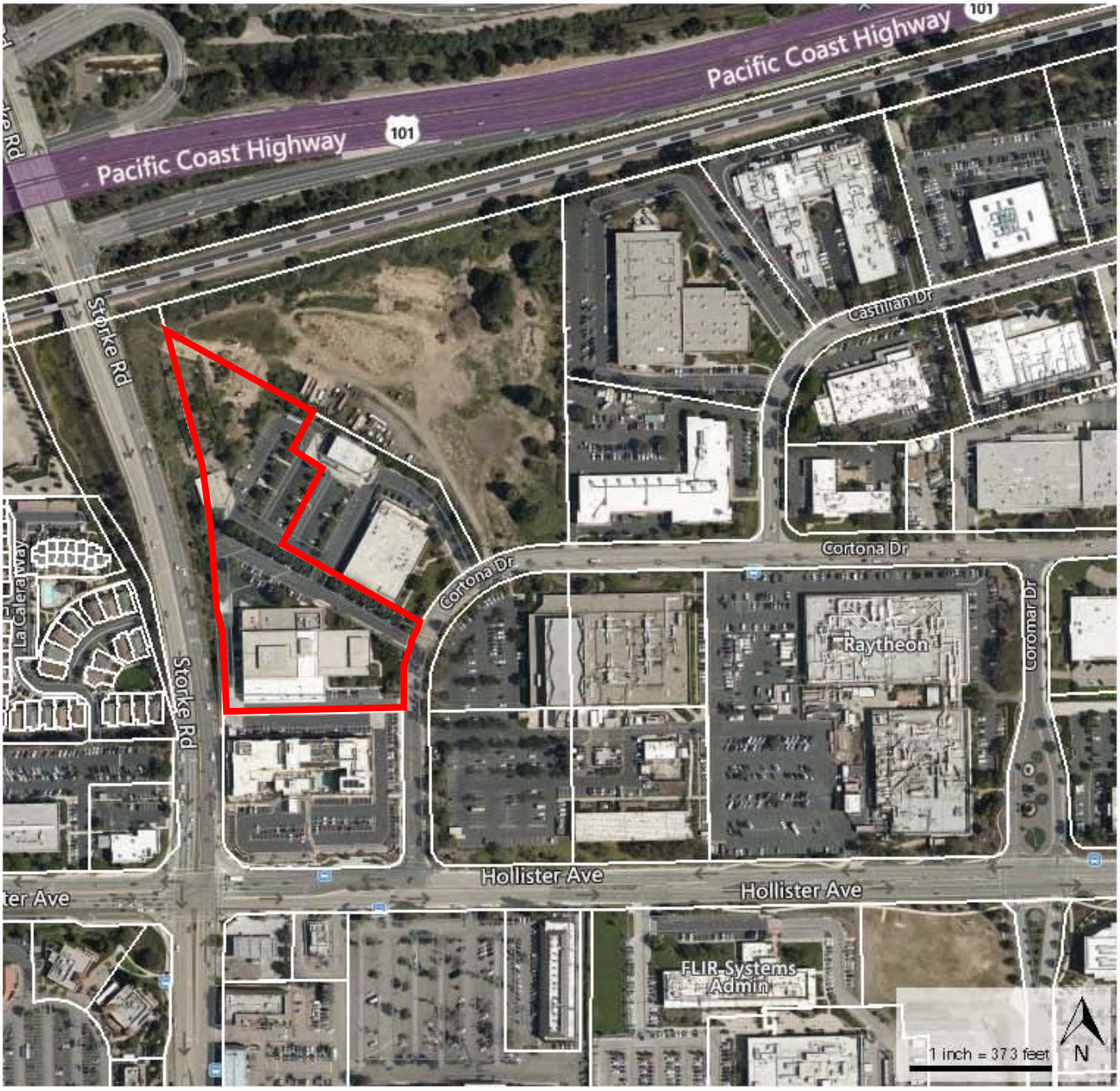
AGENT:

SEPPS
1625 State Street, Suite 1
Santa Barbara, CA 93101
(805) 966-2758
Attn: Laurel Fisher Perez

5. PROJECT LOCATION:

The project site is located at 6864 and 6868 Cortona Drive in the City of Goleta. The project parcel is 5.88 gross acres and is southeast of the intersection of the Storke Road/U.S. Highway 101 southbound on-ramp. The project site's Assessor Parcel Number (APN) is 073-140-027. Figure PL-1 shows the project site's location and surrounding areas.

Figure PL-1
Goleta Energy Storage Project Location



6. PROJECT DESCRIPTION:

The proposed Project is a request by Goleta Energy Storage, LLC, to construct and operate the Goleta Energy Storage Project (Project). The Project would result in the development of a 60-megawatt lithium-ion battery energy storage facility that would include energy storage cabinets manufactured by Tesla and other project-related equipment. The project also includes the construction of an underground tie-in line that would connect the Project to the existing Southern California Edison (SCE) Isla Vista electrical substation located west of and adjacent to Storke Road. The project site is at 6868 Cortona Drive, and is located east of and adjacent to Storke Road and south of and adjacent to U.S. 101 and the Union Pacific railroad tracks. The project site has a Business Park (I-BP) land use designation, and is zoned Business Park (BP).

The Project includes the following applications:

1. A Tentative Parcel Map (TPM) to divide the 5.88-acre (Gross Acreage) project site parcel (APN 073-140-027) into two lots.
2. A Major CUP pursuant to Zoning Ordinance Section 17.09.020
3. A Development Plan pursuant to Zoning Ordinance Section 17.59.020
4. A Development Plan Amendment for the proposed lot that includes an existing research and development building located at 6868 Cortona Drive. The Project also includes a request to adjust the landscape coverage development standard on this proposed lot pursuant to Zoning Ordinance Section 17.59.040.

6.1 Proposed Tentative Parcel Map

The proposed TPM would divide the existing 5.88-acre project site parcel into two lots. Proposed Lot 1 would be addressed as 6864 Cortona Drive and be 2.66 gross acres (1.89 net acres). Lot 1 would be located on the northern portion of the project site and used for the construction and operation of the Goleta Energy Storage Project. Access to Lot 1 would be from Cortona Drive along two proposed reciprocal access easements over proposed Lot 2. Proposed Lot 2 would be 3.22 gross acres (3.12 net acres). Lot 2 would be located on the southern portion of the project site and addressed as 6868 Cortona Drive. An existing 60,068 square foot research and development building on proposed Lot 2 would be retained. Access to Lot 2 would continue to be from two existing driveways that connect to Cortona Drive. The proposed TPM is shown on Figure PD-1, and all proposed project plans are provided in Attachment 1.

6.2 Goleta Energy Storage Project

The Goleta Energy Storage Project would supplement SCE's power supply by receiving electricity through the existing power grid system, including power generated from solar and wind sources, and storing the energy until it is needed during peak demand periods. The facility would also support electricity grid resiliency in the event of an emergency or disaster and would replace electricity generation capacity that will be lost when the Ellwood Natural Gas Peaking Facility is retired. The peaking plant is currently used to supplement the region's peak power demand requirements.

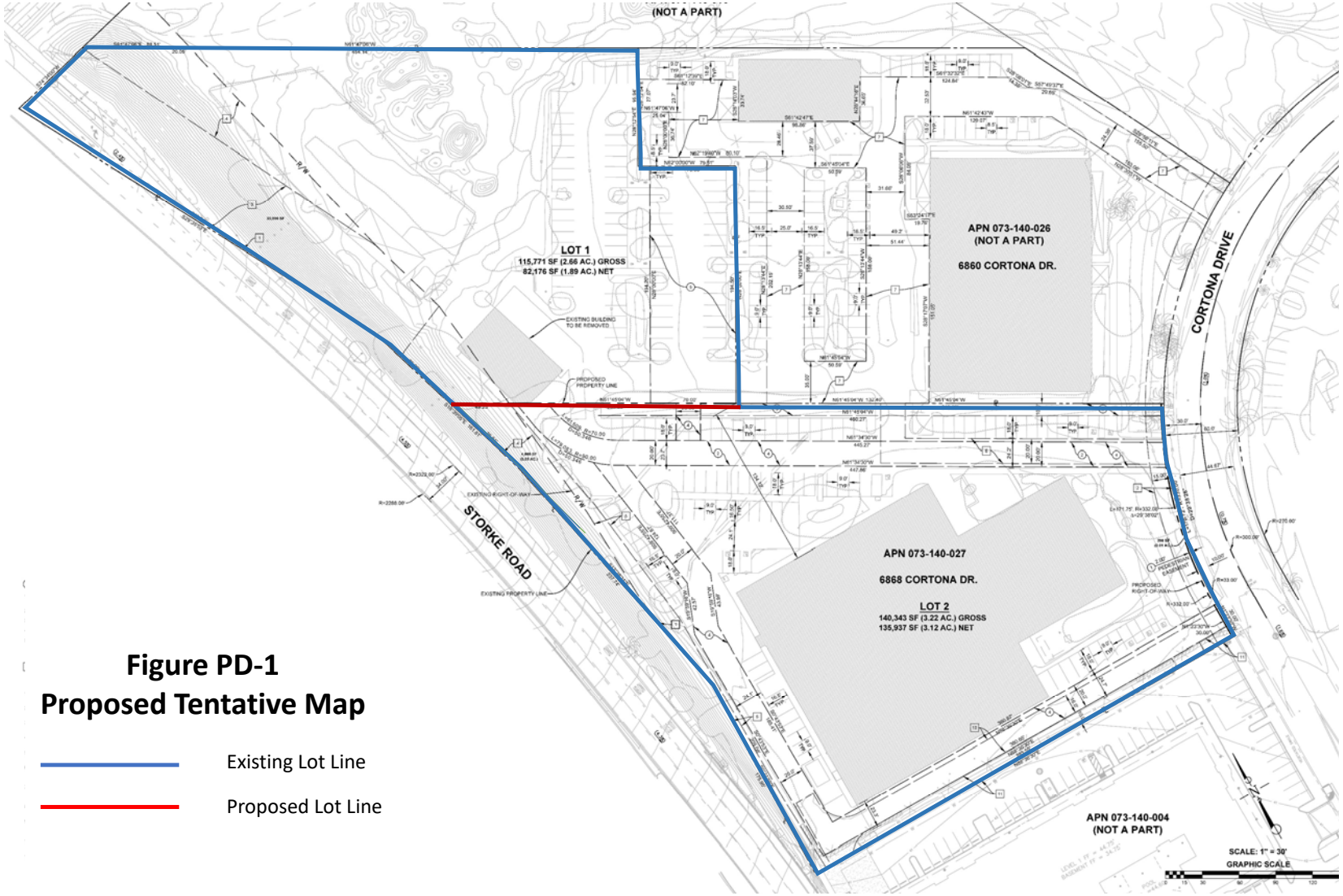


Figure PD-1
Proposed Tentative Map

Existing Lot Line

Proposed Lot Line

Proposed Project Equipment

Equipment that would be installed at the project site is described below and depicted on the site plan shown on Figure PD-2. A complete set of project plans is provided in Attachment 1.

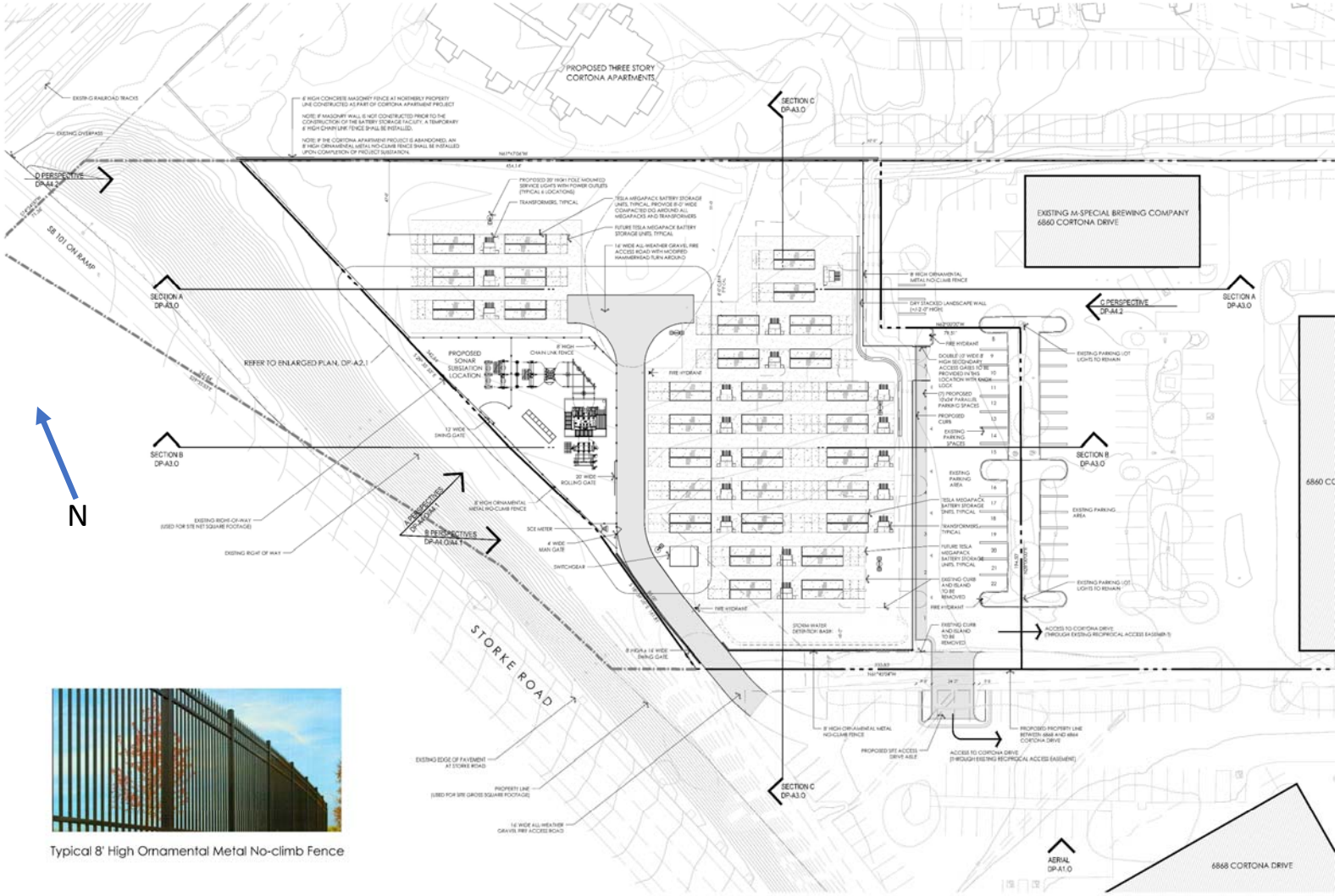
Proposed Energy Storage Batteries. The battery energy storage system would include pre-manufactured "cabinets" called Megapacks. Groups of Megapacks would be anchored onto a foundation that is surrounded by decomposed granite. Transformers that would serve the Megapacks would be mounted onto the foundation. Each pre-manufactured Megapack unit measures approximately 24 feet in length, 6 feet in depth, and 9 feet in height. The current project design assumes the installation of up to 62 Megapacks, however, the efficiency and energy density of the technology is rapidly improving and the number of proposed Megapacks installed at the site may change. If the number of Megapacks is revised, the 60-megawatt capacity of the project will not increase and the Megapack installation area footprint will remain the same. If the design of the Megapacks installed at the project site incorporate technological advances, the installed units will continue to comply with the California Fire Code, California Building Code, UL9540 certification, other applicable codes and regulations, and the requirements of the Santa Barbara County Fire Department.

Each Megapack comes with pre-installed components housed in a steel cabinet enclosure. Each Megapack houses several different system components, which are briefly described below.

- **Battery Modules.** Lithium ion battery cells would be used to store electrical energy. Each battery cell is individually fused, sealed, and liquid cooled.
- **Customer Interface Bay.** A user-accessible bay inside the Megapack is designed for unit operation and servicing.
- **Inverters.** SCE's electrical transmission grid operates in alternating current (AC). However, energy stored in the battery modules utilizes direct current (DC). Therefore, the Megapack includes inverter modules that convert the AC power received from the grid to DC power for storage into the batteries.
- **Thermal Management System.** The Megapack is designed to operate at temperatures between 22 to 122 degrees Fahrenheit. An active liquid thermal management system is incorporated into each Megapack for heating and cooling of the battery cells. The thermal system includes pumps, compressors, condenser, fans, and radiators.

Electrical Distribution. The Project would receive electricity through the existing SCE grid and store it in batteries until it is needed during peak demand periods. The transformers mounted on the Megapack foundations would be used to increase stored electricity from battery level (600 volts) to 34.5 kV. Each transformer would be approximately 10 feet wide, 11 feet long, and 7 feet tall. Other proposed electrical distribution equipment includes a Relay Control Cubicle (RCC), Supervisory Control and Data Acquisition (SCADA) Cabinet,

Figure PD-2 Proposed Site Plan



Typical 8' High Ornamental Metal No-climb Fence

and electrical switchgear. The RCC is a set of cabinets that allow the Project to communicate with SCE and the grid operator. The SCADA Cabinet manages and monitors communication to and from the RCC, and a wireless connection would provide communication between SCE, the Project Applicant, and the SCADA system. The switchgear would be used to connect all of the Megapacks to an on-site electrical substation to be located on the western portion of the project site.

The on-site substation would include a transformer and an underground tie line that would connect the Project to the existing SCE Isla Vista substation located west of and adjacent to Storke Road, approximately 300 feet west of the project site. The tie line infrastructure would remain for the life of the project. Equipment within the substation would have a maximum height of approximately 30 feet above proposed grade. The substation transformer will increase the voltage from the facility to the level necessary to serve the SCE grid (66kV). The underground tie line would be constructed using directional drilling beneath the Storke Road right-of-way.

Proposed Project Site Construction and Improvements

Project Construction and Grading. It is anticipated that it would take approximately four months to construct the proposed Project. Megapacks would be transported to the project site on flatbed trailers, and would be placed on foundations using a crane. Construction worker parking and building material staging would occur on-site. It is an objective of the Project to be operational by December, 2021.

The Project proposes the demolition and removal of a 3,218 square foot shed and existing parking lot paving. Site grading would require approximately 800 cubic yards of cut and 4,000 cubic yards of fill, with a net import of approximately 3,200 cubic yards of soil.

Parking. The proposed Project would result in the removal of 62 existing parking spaces from the Project site, including 55 spaces from proposed Lot 1 and seven (7) spaces from proposed Lot 2. The Project would replace seven (7) of the removed parking spaces on Lot 1. In total, 123 existing and new parking spaces would be located on the project site, with 22 spaces on proposed Lot 1 and 101 spaces located on proposed Lot 2. The Project's proposed parking plan is provided in Attachment 1 (Project Plans).

The Project proposes to implement a new shared parking agreement between 6864 Cortona (Lot 1) and 6868 Cortona (Lot 2). The agreement would dedicate one parking space on proposed Lot 1 for use by the Goleta Energy Storage Project, and would dedicate 21 spaces on Lot 1 for use by the research and development building that is to remain on proposed Lot 2. The Project's proposed parking requirements and parking supply are summarized on Table 1.

Table 1
Proposed Parking Requirements and Parking Supply

Land Use	Size	Title 17 Parking Standard	Parking Requirement	Parking Spaces Provided
Goleta Energy Storage Project (Proposed Lot 1)	1 Employee	1 space/ 4 employees	1 space	1 space on proposed Lot 1
6868 Cortona Drive R&D Building (Proposed Lot 2)	60,068 sq ft	1 space/500 sq ft	121 spaces	122 spaces *21 spaces on Lot 1* *101 spaces on Lot 2*

Project Site Access. Access to the Goleta Energy Storage facility would be from Cortona Drive along two proposed reciprocal access easements over proposed Lot 2. Access to the energy storage facility from Lot 2 would be along a proposed all-weather gravel access drive with a 16-foot wide swing gate that includes a Fire Department-approved hammerhead turnaround. The project site secondary access would be secured by a locked gate and a Knox Box for Fire Department access.

Fencing. An eight-foot tall ornamental metal no-climb fence would be installed around the eastern, western and southern perimeters of the project site (proposed Lot 1) upon the completion of Project construction. It is anticipated that a six-foot high concrete masonry wall will be installed along the project site's northern perimeter. This would be provided by the adjacent Cortona Apartment project, which is currently under construction. Should the masonry wall not be installed prior to the construction of the Goleta Energy Storage Project, a temporary six-foot tall chain link fence would be installed by the Project applicant along the project site's northern perimeter prior to the start of Project-construction. If the Cortona Apartment is not completed, the Project applicant would install an eight-foot no-climb fence along the project site's northern perimeter. A separate six-foot tall chain link fence would be installed around the perimeter of the proposed on-site electrical substation.

Landscaping. Construction of the Project would require the removal of 26 landscape trees located primarily within or adjacent to an existing parking area that is to be removed from proposed Lot 1. The Project's preliminary landscape plan shows that 30 24-inch box sized trees would be planted on the project site, along with a variety of drought-tolerant shrubs and groundcover. A planting area ranging in width from approximately 34 to 76 feet would be installed along the project site's northern perimeter, adjacent to the Cortona Apartments project site. Approximately 37,455 square feet of landscaping would be planted on proposed Lot 1, which is approximately 46 percent of the proposed net lot area. The Project's preliminary landscape plan is provided in Attachment 1.

Lighting. A total of eight (8) LED lighting fixtures would be installed at the project site on five (5) light poles; three (3) of the five (5) light poles contain two (2) LED light fixtures per pole. The lights would be shielded and oriented downward, and mounted on poles approximately 20 feet in height.

Drainage. Stormwater runoff from the project site would be directed to a proposed detention basin located along the southern perimeter of the project site (Lot 1). Water that is directed to the landscaped basin would have a maximum depth of approximately six inches. Any overflow water from the basin would discharge via existing and proposed storm drains and by surface flow toward an existing channel that conveys water to Cortona Drive and the public stormwater collection system.

Utilities. Electricity would be provided by SCE. Water for landscape irrigation and new fire hydrants would be provided by Goleta Water District. Telecom internet service for system processes and communication would be provided by Cox Communications. Other utilities such as gas and sewer would not be required for the operation and maintenance of the Project.

Off-Site Street Frontage Improvements. The Project includes the installation of off-site street frontage improvements along Cortona Drive between the two existing driveway entrances that serve the project parcel (APN 073-140-027). Specifically, off-site street frontage improvements include:

- A concrete sidewalk, ADA compliant driveways, and landscaping located between Cortona Drive and the sidewalk.
- A 6-inch curb and new asphalt concrete paving at both Cortona Drive driveway entrances.
- Parkway drains at both Cortona Drive driveway entrances.
- Relocation of the backflow preventers from the northern Cortona Drive driveway entrance to behind the right-of-way.
- Relocation of an existing sign for the business park behind the sidewalk.
- Installation of a new streetlight located approximately midway between two existing streetlights on Cortona Drive.
- A new water meter and connections to the water and fire water main system at the northern driveway entrance.

Proposed Project Operation and Maintenance

Site Operations and Employees. The proposed Project would operate 24 hours a day, seven days a week. The facility would be unmanned, therefore, it would generate a minimal amount of traffic. It is estimated that the Project would typically generate approximately one vehicle trip per month during the first year of facility operation for equipment maintenance purposes. Vehicle trips may be reduced to one trip every other month after the Project's first year of operation. Equipment maintenance activities at the project site would typically consist of inspections by a technician. If necessary, the technician would remove and replace batteries as needed. Any removed battery modules would be disposed of in accordance with applicable regulations. Other project-related trips would be for occasional site and landscape maintenance.

Fire Protection. Fire protection systems at the project site would include the use of infrared cameras for thermal detection, and continuous monitoring of individual battery cells. In the event of a battery fire, the Megapacks are designed to remove power from the affected battery cells so that fire does not spread from one section of the Megapack to another. The Project also includes the installation of two new fire hydrants, as requested by the Santa Barbara County Fire Department.

Project Decommissioning. Decommissioning of the Project at the end of its useful life would include the removal of Megapacks from the foundations, disconnection of wiring, and transport of the Megapacks to an approved recycling facility. It is conservatively assumed that Project decommissioning would occur in 2040.

6.3 Development Plan Amendment

A second Development Plan Amendment is required for the original Development Plan Case 04-035-DP, an As-Built DP and Case 04-035-DPAM01. The As-Built DP was approved in 2004 for the 60,068 square foot research and development building located on the project site at 6868 Cortona Drive, and in 2007, a Development Plan Amendment to allow parking in a side yard setback was processed and approved along with a Lot Line Adjustment (05-171-LLA). The second Development Plan Amendment is required because the existing building would be located on a new lot (proposed Lot 2) that would be created by the proposed TPM. The second Development Plan Amendment would apply only to proposed Lot 2 (6868 Cortona Drive) and would supersede the requirements of the existing Development Plan and the first Development Plan Amendment.

6.4 Proposed Landscape Coverage Adjustment

The proposed Tentative Parcel Map would divide the existing 5.88-acre project site into two separate lots. Proposed Lot 2 would have a net area of 3.12 acres (135,937 square feet), and would contain approximately 27,687 square feet of existing landscaping. Landscaping coverage on proposed Lot 2 would be 20 percent of the net lot area. The amount of landscaping on proposed Lot 2 would not comply with Zoning Ordinance development standards for the “BP” zone, which require that 30 percent of the net lot area be landscaped. The Project applicant has requested an adjustment of the landscape coverage requirement pursuant to Zoning Ordinance Section 17.59.040 (Development Plans: Adjustments to Development Standards).

7. BACKGROUND INFORMATION

The project-related parcels were created by Tract Map 10,212, which was recorded on April 13, 1962. The project includes Lots 6 (6868 Cortona Drive) and 7 (6864 and 6860 Cortona Drive). The configuration of the original Lots 6 and 7 were adjusted by Lot Line Adjustment 05-171-LLA, which was approved on March 8, 2007. The lot line adjustment included two associated Development Plan Amendments (03-073-DP AM02 and 04-035-DP AM01) to reflect the altered parcel configuration, parcel size, on-site development, and on-site parking requirements.

The existing research and development building at 6868 Cortona Drive was permitted largely through two Land Use Permits. In 1964, LUP 29551 allowed the creation of the original 20,000 square foot, two-story building, and in 1969 LUP 44063 allowed for the addition of 30,120 square feet to the first floor and 12,360 square feet to the second floor.

On July 19, 2004, as-built Development Plan 04-35-DP was approved for the building located at 6868 Cortona Drive. This Development Plan allowed a modification of the front yard setback facing Storke Road from 50 feet to 35 feet; a landscaping modification from 30 percent to 21 percent; and a parking modification from 126 (106 existing) to 105 spaces. The applicant also entered into a shared parking agreement with the property at 6860 Cortona Drive.

8. REQUIRED PERMITTING

The proposed project requires approval by the City of Goleta in the form of a discretionary Major Conditional Use Permit, Development Plan, Development Plan Amendment, Development Plan Adjustment, and Tentative Parcel Map. The project also requires administrative clearances (i.e., Zoning Clearance, building permit, grading permit, electrical permit, fire permit). No other permitting is required for the project.

9. SITE INFORMATION:

Site Information	
Existing General Plan Land Use Designation	Business Park (I-BP)
Zoning Ordinance, Zone District	Business Park (BP)
Site Size	5.88 acres (gross area) 5.01 acres (net area).
Present Use and Development	A 60,068 sq. ft. research and development building and associated parking and landscaping are located on the southern portion of the project site (6868 Cortona Drive). A plant nursery, 3,218 sq. ft. shed, and paved parking used by the existing research and development building are located in the northern portion of the project site (6864 Cortona Drive).
Surrounding Uses/Zoning	North: Future residences that are under construction/Residential - Medium Density (RM). South: Hotel/Office Industrial (OI) East: M-Special Brewing Company and Research and Development Building/ Business Park (BP) West: Storke Road. Uses east of and adjacent to Storke Road include: Isla Vista Electrical Substation/Public and Quasi-Public (PQ); and attached and detached residences/Residential-Medium Density (RM).
Access	Existing: Cortona Drive Proposed: Cortona Drive
Utilities and Public Services	Water Supply: Goleta Water District Sewage: Goleta West Sanitation District Power: Southern California Edison Natural Gas: Southern California Gas Cable: Cox Cable Telephone: Frontier Fire: Santa Barbara County Fire School Districts: Goleta Union Elementary and Santa Barbara High School District

10. ENVIRONMENTAL SETTING

The project site is located south of the Union Pacific Railroad tracks and U.S. 101; east of and adjacent to Storke Road; and west of Cortona Drive. The southern portion of the project site is adjacent to Cortona Drive. The southern portion of the project site (6868 Cortona Drive) is developed with a 60,068 square foot research and development building and associated parking and landscaping. The northern portion of the project site (6864 Cortona Drive) is predominately vacant, however, development on this portion of the site includes paved parking spaces used by the adjacent research and development building, a 3,218 square foot shed, and a small plant nursery.

Surrounding Land Uses

The parcel east of the project site (6860 Cortona Drive) is developed with a research and development building and the M Special Brewery. The parcel to the north is the site of the Cortona Apartments project, which is currently under construction and will have 176 residential units. A hotel is located south of and adjacent to the project site, and Hollister Avenue is approximately 350 feet to the south of the project parcel. Storke Road is located along the western perimeter of the project site. Land uses adjacent to the west side of Storke Road include the Southern California Edison Isla Vista electrical substation, medium-density residences, and a commercial building located at the northwest corner of Storke Road and Hollister Avenue.

Aesthetics

The project site is developed with a 60,068 square foot research and development building, and associated parking areas and landscaping. The portion of the project site that would be used for the development of the proposed energy storage facility is occupied by a small shed and a plant nursery. Undeveloped portions of the proposed energy storage project site have been modified by previous ground disturbing activities, however, the site does contain a variety of native and non-native plants. The proposed energy storage project site is not visible from Cortona Drive or Hollister Avenue due to the presence of intervening buildings and landscaping. The proposed development site is only marginally visible from small sections of the Storke Road overpass and U.S. 101 due to intervening topography and vegetation. The project site is visible from the existing commercial and business park uses located to the east, and would be visible from the apartments that are currently under construction to the north.

Cultural Resources

A portion of the proposed energy storage facility project site contains the remnants of what was once an extensive archaeological site known as SBA-54. The site was originally recorded in the 1920's as being located on a knoll north of the Goleta Slough. The majority of the site, however, was destroyed in 1961 when approximately 26 feet of soil from the knoll was removed. Despite the previous grading activities, potentially significant cultural resources may remain on the northern portion of the proposed energy storage facility project site.

Biological Resources and Surface Water Bodies

Six non-native and native vegetation communities have been identified on or adjacent to the project site. These communities include: developed, disturbed, non-native ornamental, native ornamental, quailbush scrub shrubland alliance, and coyote brush shrubland alliance. The majority of the project site is occupied by developed land, which includes areas such as parking lots, buildings, dirt roads, and storage areas. Areas on the northern portion of the project site that have been subject to mowing, disking or grading support disturbed vegetation, which generally consists of weedy, non-native vegetation. Non-native ornamental vegetation is also located in areas that have been planted for landscaping purposes, and is generally located in or adjacent to parking areas. Native ornamental vegetation, such as California sycamore trees and toyon shrubs, are also generally located in or adjacent to parking areas. The quailbush scrub shrubland alliance community is a native plant community that occupies approximately 0.1 acre located on the manufactured slope adjacent to Storke Road. The coyote brush shrubland alliance community is a native plant community that occupies approximately 0.1 acre located east of and adjacent to the proposed energy storage project site. A total of 16 plant species have been identified on or adjacent to the portion of the project site that would be used for the development of the proposed energy storage project. Most of the identified plants were ornamental or weedy, non-native species. The project site provides little suitable habitat for wildlife due to its developed condition. The only waterbody on the project site is a small engineered bioswale.

Topography and Soils

Most of the 5.88-acre project site is relatively level with elevations that range from approximately 50 feet above sea level in the northern portion of the site to approximately 38 feet in the southern portion. The slope along the western perimeter of the project site was constructed for the Storke Road overpass over U.S. 101, and ranges from approximately five (5) to 30 feet in height.

Most of the project site is covered by buildings and parking areas. The California Department of Conservation's Farmland Mapping and Monitoring Program designates the project site as Urban and Built-Up Land.

11. CALIFORNIA NATIVE AMERICAN TRIBES

The California Native American Heritage Commission (NAHC) was contacted on August 26, 2020, to request a search of the Sacred Lands File and to obtain a Native American contacts list. Responses from the NAHC stated that a search of the Sacred Lands File was completed for the project with positive results. The NAHC also provided a Tribal Consultation List with its responses. Letters were sent to the contact persons identified by the NAHC on August 28, 2020.

On May 15, 2020, the City sent letters inviting consultation to the tribal representatives identified on the list provided by the NAHC as having a traditional and cultural association with the geographic area of the proposed project pursuant to Public Resources Code Section 21080.3.1. On July 14, 2020 the Santa Ynez Band of Chumash Indians informed the City that the Tribal Elder's Council requested a formal consultation regarding the proposed project, and a copy of the cultural resources report prepared for the proposed project was provided to

the Tribe on February 26, 2021. On May 24, 2021, the Santa Ynez Band of Chumash Indians notified the City that they concluded the AB 52 consultation.

12. 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" or "Less Than Significant With Mitigation Incorporated" impact, as indicated by the checklist and analysis on the following pages.

☐ Aesthetics
☐ Agriculture and Forestry Resources
☐ Air Quality
■ Biological Resources
■ Cultural Resources
☐ Energy
☐ Geology/Soils
☐ Greenhouse Gas Emissions
☐ Hazards and 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

13. DETERMINATION

On the basis of this environmental checklist/initial study:

☐ 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 (a) has been adequately analyzed in an earlier document pursuant to applicable

legal standards, and (b) 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 environmental impact report or negative declaration/mitigated negative declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier environmental impact report or negative declaration/mitigated negative declaration document, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Current Planning Manager Date

14. EVALUATION OF ENVIRONMENTAL IMPACTS:

(a) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

(b) All answers must take into account the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

(c) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

(d) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as described in (e) below, may be cross-referenced).

(e) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D).

(f) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances).

(g) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

(h) Lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected. The explanation of each issue should identify:

1) the significance criteria or threshold, if any, used to evaluate each question; and
2) the mitigation measure identified, if any, to reduce the impact to a less than significant level.

15. ISSUE AREAS:

A. AESTHETICS.

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a. Have a substantial adverse effect on a scenic vista?			X		
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X		
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?			X		
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X		

i. Existing Setting

The southern portion of the project site is developed with a 60,068 square foot research and development building, along with associated parking areas and landscaping. This portion of the project site is prominently visible from Cortona Drive and Storke Road. The northern portion of the project site that would be used for the development of the proposed energy storage facility is currently occupied by paved parking areas, a small shed, and a plant nursery, and other areas that generally have a "vacant" appearance. Photos showing representative views of the project site are provided on Figure AES-1.

FIGURE AES-1: Goleta Energy Storage Project Site Photos

Photograph 1. Project site entrance from Corona Drive looking west.

Photograph 2. Center of project site looking north.

Photograph 3. Project site, looking northwest at existing shed on site to be demolished.

Photograph 4. Project site, looking east at location of approved apartment building (currently under construction).

Photo Source: Rincon, March, 2020

Photo Key

The proposed energy storage project site is not visible from Cortona Drive or Hollister Avenue due to the presence of intervening buildings and landscaping. The proposed development site is marginally visible from small sections of Storke Road and U.S. 101 that are adjacent to the site. Views of the project site from Storke Road are limited because the roadway is elevated above the project site as the road ascends/descends from the Storke Road/U.S. 101 overpass. Views of the project site from U.S. 101 and the Storke Road southbound on-ramp are limited due to topographic differences and landscaping. The energy storage project site is not visible from the residential area adjacent to the west side Storke Road due to the elevation of Storke Road. The project is visible from the adjacent parcel to the north where new residences are being constructed.

ii. Regulatory Setting

The project must comply with the City's *Outdoor Lighting Guidelines*, which have been adopted to achieve a high standard of quality and efficiency in lighting and obtaining "Dark Sky" standards. The Dark Sky standards are intended to reduce light and glare from impacting views of the night sky. The City's *Outdoor Lighting Guidelines* and the *Architectural and Design Standards for Commercial Projects* require Design Review Board (DRB) review of the project's proposed exterior lighting.

The DRB is also required to review the proposed project design. The purpose of Design Review is to encourage the highest quality of design, both visually and functionally, and to reduce or prevent the negative effects of development while also promoting the health, safety, and general welfare of the City's public. Aspects of the DRB review relevant to this project include proposed equipment height, bulk and scale; colors and types of building materials; physical relation to the immediately affected surrounding area; site layout; orientation and location of structures and relationship with open areas; architectural style; materials, colors, and variations in boundary walls, fences, or screen planting; location and type of landscaping, consideration of neighboring development, and on-site lighting. Section 17.58.080 of the Zoning Ordinance includes 11 findings related to the aspects described above that must be made by the DRB during Design Review to grant project approval. On June 9, 2020, the DRB conducted a Conceptual review of the project and generally provided positive comments. On August 11, 2020 the DRB conducted Preliminary Review of the project and recommended that the Planning Commission grant Preliminary Design approval.

iii. Thresholds of Significance

A significant impact would be expected to occur if the proposed project resulted in any of the impacts noted in the above environmental checklist or the *City of Goleta Environmental Thresholds and Guidelines Manual (2003)* aesthetics thresholds of significance (adopted by Resolution 08-40). The Guidelines Manual thresholds are listed below:

Threshold AES-1. Does the project site have significant visual resources by virtue of surface waters, vegetation, elevation, slope or other natural or man-made features which are publicly visible? If so, does the project have the potential to degrade or significantly interfere with the public's enjoyment of the site's existing visual resources?

Threshold AES-2. Does the project have the potential to impact visual resources of the Coastal Zone or other visually important area (i.e., mountainous area, public park, urban

fringe, or scenic travel corridor)? If so, does the project have the potential to conflict with the policies set forth in the Local Coastal Plan, the Comprehensive Plan or any applicable community plan to protect the identified views?

Threshold AES-3. Does the project have the potential to create a significantly adverse aesthetic impact through obstruction of public views, incompatibility with surrounding uses, structures, or intensity of development, removal of significant amounts of vegetation, loss of important open space, substantial alteration of natural character, lack of adequate landscaping, or extensive grading visible from public areas?

iv. Project-Specific Impacts

Checklist Items a and b and Thresholds AES-1, AES-2, and AES-3. Less than Significant Impact.

The proposed Parcel Map would divide the existing 5.88-acre (gross) project site parcel lot into two lots: proposed Lot 1 would be 2.66 acres, and proposed Lot 2 would be 3.22 acres. The proposed energy storage project would result in the removal existing parking lot area and associated landscaping, a small shed, and a plant nursery from the project site (proposed Lot 1). Vegetation removed from proposed Lot 1 would consist mostly or ornamental landscaping, and generally sparse non-native and weedy plant species. Proposed grading would only occur on proposed Lot 1, primarily to construct foundations for the proposed MegaPack battery storage units, and would consist of approximately 800 cubic yards of cut and 4,000 cubic yards of fill.

Figure 6-1 of the Visual and Historic Resource Element of the Comprehensive Plan/Coastal Land Use Plan shows that Hollister Avenue south of the project site, and U.S. 101 north of the project site are designated as a “Local Scenic Corridor.” Figure 6-1 also designates the Storke Road/U.S. 101 overpass intersection as a “Scenic View to be Protected” and that scenic views are provided to all directions from the intersection.

Construction of the project would not result in the removal of a substantial amount of vegetation or require a substantial amount of grading. As described in Section “i” above, the project site has limited visibility from locations that are generally accessible to the general public, such as Storke Road, Hollister Avenue, and U.S. 101. Therefore, the energy storage project would not result in significant impacts to existing natural features that are visible to the public or from a scenic highway.

Energy storage equipment that would be installed at the project site would include proposed Megapack battery storage units, which would be approximately eight (8) feet in height, and other related equipment that would have a height of less than 10 feet. The proposed electrical substation equipment would have a maximum height of approximately 30 feet, however, as shown on the project plans (Attachment 1), the structural elements of the substation would generally consist of support poles, electrical wires, and other similar elements that would not be prominently visible from off-site locations. Therefore, due the height and visual characteristics of the proposed energy storage equipment, the project would result in less than significant impacts to mountain views from viewpoints that are generally accessible to the public.

Existing land use near the project site are generally commercial and light industrial uses. Residences are located west of the project site on the west side of Storke Road, however,

due to the elevation of Storke Road the project site is not visible from that residential area. New apartment residences are currently under construction north of and adjacent to the energy storage. Views of the project site from the new residences would be minimized by proposed landscaping along the northern perimeter of the project site. The proposed landscape screen would include the installation of 24-inch box trees that upon maturity would substantially screen views of the project site from the adjacent residences. The proposed landscaping plan would also result in the installation of 24-inch box trees and one- to 15-gallon shrubs around the southern, eastern and western perimeters of the project site. Therefore, the proposed project would result in less than significant impacts related to the creation of views that would be incompatible with surrounding uses.

As described above, the proposed project site has been developed with buildings and related parking areas, and the proposed energy storage project site does not have any natural features that would be considered to be a scenic resource. The project would result in the removal of 26 landscape trees located primarily within or adjacent to existing parking areas, including four (4) sycamore trees that have trunk diameters ranging between 12 and 22 inches. The proposed project's preliminary landscape plan shows that 26 24-inch box sized trees would be planted on the project site, along with a variety of drought-tolerant shrubs and groundcover. Therefore, the project would result in a less than significant long-term impact resulting from the removal of on-site trees, landscaping, or other scenic resources. There are no historic buildings located on the project site.

The proposed Parcel Map would divide the existing 5.88-acre project parcel lot into two lots. Proposed Lot 2 would have a net area of 3.12 acres and would contain approximately 27,210 square feet of existing landscaping. Landscaping coverage on proposed Lot 2 would be 20 percent of the net lot area, which would not comply with regulations for the "BP" zone that require 30 percent of the net lot area to be landscaped. The Project applicant has requested an adjustment of the landscape coverage requirement. The proposed Parcel Map would not result in the removal of any landscaping from proposed Lot 2. Therefore, the proposed Parcel Map would not result in any changes to existing conditions on proposed Lot 2 related to landscape coverage, and the project would result in a less than significant environmental impacts related to landscaping.

Checklist Item c. Less than Significant Impact.

The proposed project is located in an urbanized area. Figure 6-1 of the Visual and Historic Resource Element of the Comprehensive Plan/Coastal Land Use Plan shows that Hollister Avenue south of the project site, and U.S. 101 north of the project site are designated as a "Local Scenic Corridor." Figure 6-1 also designates the Storke Road/U.S. 101 overpass intersection as a "Scenic View to be Protected" and that scenic views are provided to all directions from the intersection. The Visual and Historic Resource Element also includes policies to protect views of the Pacific Ocean and Channel Islands (Policy VH 1.3); to protect mountain and foothill views (Policy VH 1.4); to protect views of open space (Policy VH 1.5) and to protect natural landforms (Policy VH 1.6).

As described above, the proposed project site is not visible from Hollister Avenue and only marginal visible from U.S. 101 and the Storke Road southbound on-ramp. Due to the low height of the equipment to be installed and minimal grading that would occur on the project site, the project would not affect any ocean views, would result in less than significant line-of-sight impacts to mountain and foothill views from surrounding areas, and would not result in

significant impacts to natural landforms. The proposed battery storage project would be consistent with applicable zoning regulations related to scenic quality by complying with requirements related to landscape coverage, structure height, and obtaining design review approval from the City Design Review Board. In addition, the project would not result in the loss of an important open space area or degrade views of open space areas from locations accessible by the public. Therefore, the project would result in less than significant impacts resulting from a conflict with policies to protect scenic views or regulations governing scenic quality.

Checklist Item d. Less than Significant Impact.

The proposed energy storage project would install eight (8) LED light fixtures mounted on five (5) light poles. The proposed lighting is proposed for site security and safety. A photometric evaluation of proposed lighting conditions is provided in Attachment 1 (Project Plans). The photometric plan shows that lighting within the interior of the project site would range between 0 and 3.5 foot-candles, with an average lighting level of 0.7 foot-candles. Lighting levels along the perimeter of the project site would range between 0 and 0.3 foot-candles, with an average lighting level of 0.1 foot-candle. Therefore, proposed lighting at the energy storage project site would be low-level, and would be consistent with the intent of the City's *Outdoor Lighting Guidelines* (Attachment 13) to reduce potential light and glare conditions.

Design review requirements also ensure that proposed structures to be installed at the project site will have materials and colors that are non-reflective to avoid creating a new source of daytime glare. With mandatory design review required by the City's GP/CLUP and design regulations, the project would result in a less than significant light- and glare-related impacts.

v. Cumulative Impacts

As described above, the proposed project would result in less than significant impacts related to changes in existing conditions at the project site and impacts to views that are available from nearby viewpoints that are accessible to the general public. In addition, project-related design elements (i.e., structure size, design, colors, materials, landscaping, lighting, etc.) have been reviewed by the DRB and must comply with the City's *Architectural and Design Standards for Commercial Projects* and the City's *Outdoor Lighting Guidelines.* This review ensures that the proposed project, along with other cumulative development, will incorporate high quality design that will reduce or prevent the negative effects of development while also promoting the health, safety, and general welfare of the City's public. Therefore, the proposed project's potential aesthetic impacts would not be cumulatively considerable and less than significant.

vi. Mitigation Measures and Recommended Conditions of Approval

The proposed project would not result in significant aesthetic impacts and no mitigation measures are required to reduce project-related aesthetic impacts to a less than significant level.

The following standard conditions of approval regarding design review of the proposed structures, landscaping, lighting, etc. will be applied to the project to ensure compliance with City's aesthetic /design standards:

1. **Recommended Condition of Approval: Architectural Review.** Prior to the issuance of building permits, the Applicant/Permittee must secure Design Review Board (DRB) final approval of the site plan, architectural style, colors and materials of the project that ensure compatibility of massing, heights, landscaping, lighting, and architectural consistency with the existing neighborhood character.

   Timing: Before applying for building permits, the Applicant/Permittee must apply for design approval from the DRB and submit plans wherein the massing, height, landscaping, lighting, and architectural style of all proposed energy storage project equipment is consistent with neighborhood land uses and buildings and do not detract from existing neighborhood character.

   Monitoring/Reporting Party(ies): The Planning and Environmental Review Director, or designee, must conduct a final review of the final plans before the City issues a grading permit. If the final plans are not in substantial conformance with the approved plans, the Planning and Environmental Review Director may refer the matter back to the full DRB for a final determination. The Applicant/Permittee shall also demonstrate to PER compliance monitoring staff that the project has been built consistent with approved DRB design and landscape plans prior to Final Building Inspection Clearance.

2. **Recommended Condition of Approval: Lighting Specifications**. Any exterior lighting installed on the project site must be:
   a) low intensity;
   b) low glare design;
   c) be hooded to direct light downward onto the subject parcel and prevent spill-over onto adjacent parcels;
   d) otherwise meet dark sky requirements.

   Exterior lighting fixtures must be kept to the minimum lighting level and intensity needed to ensure public safety. These lights must be dimmed after 11 PM to the maximum extent practical without compromising public safety as determined by the Planning and Environmental Review Director. Lighting fixtures must be appropriate for the architectural style of the structure and surrounding area. The final lighting plan must be amended to include identification of all types, sizes, and intensities of wall mounted building lights and landscape accent lighting and a photometric map must be provided. “Moonlighting” type fixtures that illuminate entire tree canopies should also be avoided.

vii. <u>Residual Impact</u>

The proposed project would not result in significant residual aesthetic impacts.

B. AGRICULTURE AND FOREST RESOURCES

In determining whether 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 Department 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:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
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?				X	
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?				X	
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))?				X	
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X	
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?				X	

i. Existing Setting

The southern portion of the project site consists primarily land developed with an existing research and development building and associated parking areas. The northern portion of the project site is predominately vacant, however, development on this portion of the site includes paved parking spaces used by the adjacent research and development building, a 3,218 square foot shed, and a small plant nursery. The project site is located in an urbanized area that has no agricultural use, forest lands, or timberlands. The Farmland Mapping and Monitoring Program of the California Resources Agency, Department of Conservation identifies the project site and surrounding properties as Urban and Built-Up Lands.

ii. Thresholds of Significance

A significant impact to Agriculture and Forest Resources would occur if the proposed project resulted in any of the impacts noted in the above checklist. Additionally, according to the City of Goleta's *Environmental Thresholds and Guidelines Manual* a project may pose a significant environmental effect on agricultural resources if it converts prime agricultural land to non-agricultural use or impairs the agricultural productivity of prime agricultural land.

iii. Project-Specific Impacts

Checklist Item a. No Impact. The project site and surrounding areas are developed with a variety of industrial, commercial, and residential uses on land zoned Residential-Medium Density, Business Park, Public and Quasi-Public. There are no areas adjacent to the project site that have Prime Farmland, Farmland of Statewide Importance, or Unique Farmland designations. The project site does support a small plant nursery operation that would be removed by the proposed project, however, the removal of the plant nursery would not convert farmland to a non-agricultural use. Therefore, the project would have no impact on agricultural resources.

Checklist Items b and e. No Impact. There are no agricultural operations on the project site or properties adjacent to site. The project would not result in any environmental changes that would result in or contribute to the conversion of any farmland to non-agricultural uses. Furthermore, neither the project site nor surrounding properties are subject to Williamson Act contracts.

Checklist Items c and d. No Impact. The project site and surrounding areas do not contain or support forested land. Therefore, the project would not conflict with zoning for forest land or timberland. Additionally, the project would not result in any other environmental changes that would result in the conversion of forest lands to non-forest uses.

iv. Cumulative Impacts

The project site and nearby properties are predominately developed with urban uses and all nearby properties are zoned for urban uses. The proposed project would not result in or contribute to impacts to existing agricultural operations. Therefore, the project's impacts to agriculture and forest resources are not cumulatively considerable and the project's cumulative impacts would not be significant.

v. Mitigation Measures and Recommended Conditions of Approval

The project would not result in significant impacts to agriculture or forest resources. No mitigation measures are required.

vi. Residual Impact

The proposed project would not result in significant residual impacts to agriculture or forest resources.

C. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a. Conflict with or obstruct implementation of the applicable air quality plan?			X		
b. Result in 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.			X		
c. Expose sensitive receptors to substantial pollutant concentrations?			X		
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X		

i. Existing Setting

Meteorological Setting

The project site is located on the coastal plain in the City of Goleta. The City's climate is dominated by the strength and position of the semi-permanent high-pressure center over the Pacific Ocean near Hawaii. It creates cool summers, mild winters, and infrequent rainfall. It drives the cool daytime sea breeze, and it maintains a comfortable humidity range and ample sunshine after the frequent morning clouds dissipate. However, the same atmospheric processes that create the desirable living climate combine to restrict the ability of the atmosphere to disperse the air pollution.

Temperatures in the Goleta area average 59 degrees annually. Daily and seasonal oscillations of mean temperature are small because of the moderating effects of the ocean. In contrast to the steady temperature regime, rainfall is highly variable. Measurable precipitation occurs mainly from early November to mid-April, but total amounts are generally small. Goleta averages 18 inches of rain annually with January as the wettest month.

Based on typical wind patterns, locally generated air pollutant emissions are carried offshore at night, and toward inland Santa Barbara County by day. Dispersion of pollutants is restricted when the wind velocity of nighttime breezes is low. The lack of development in inland Santa Barbara County, however, causes few air quality problems during nocturnal air stagnation. Daytime ventilation is usually much more vigorous. Both summer and winter air quality in the project area is generally very good.

Air Pollutants

The U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) establish health-based ambient air quality standards to identify outdoor pollutant levels that are considered safe for the public - including those individuals most sensitive to the effects of air pollution, such as children and the elderly. U.S. EPA has set National Ambient Air Quality Standards (NAAQS) for six pollutants, including ozone (O_3), nitrogen oxides (NO_X), Carbon Monoxide (CO), Sulfur Oxides (SO_X) and particulate matter (PM_{10} and $PM_{2.5}$). These are referred to as the "criteria" pollutants. CARB has set California Ambient Air Quality Standards (CAAQS) for the same six pollutants, as well as for four additional pollutants.

CARB also identifies other air pollutants as toxic air contaminants (TACs) - pollutants that may cause serious, long-term effects, such as cancer, even at low levels. Most air toxics have no known safe levels, and some may accumulate in the body from repeated exposures. CARB has identified about 200 pollutants as air toxics, and measures continue to be adopted to reduce emissions of air toxics. Both criteria pollutants and toxic air contaminants are measured statewide to assess the adequacy of programs for cleaning the air. CARB works with local air pollution control districts to reduce air pollution from all sources.

Existing Air Quality

The project site is located in the South Central Coast Air Basin (SCCAB). The SCCAB encompasses San Luis Obispo, Santa Barbara, and Ventura Counties. The California Air Resources Board (CARB) and the Santa Barbara County Air Pollution Control District (APCD) operates ambient air monitoring stations that measure pollutant concentrations throughout the SCCAB. The nearest monitoring stations to the project site are: the Goleta monitoring station, located at 380 North Fairview Avenue, which monitors ozone (O_3), carbon monoxide (CO) and nitrogen oxides (NO_x); and the Santa Barbara station, located at 700 East Canon Perdido, which measures inhalable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). Data from the monitoring stations have been published for the last five years. The following conclusions can be drawn from this data:

1. Photochemical smog (ozone) levels infrequently exceed standards. The State 1-hour ozone standard has not been exceeded in seven years, and the State and Federal 8-hour standards were each exceeded once in 2009.
2. CO measurements in Goleta have remained at a low level since 2008. Federal and State CO standards have not been exceeded in the last five years. Maximum 1-hour CO levels at the closest air monitoring station are currently less than 25 percent of the most stringent standard because of continued vehicular improvements. This data suggests that baseline CO levels in the project area are generally healthful and can accommodate a reasonable level of additional traffic emissions before any adverse local air quality effects would be expected.
3. PM_{10} levels occasionally exceed the State standard, but the Federal standard is very rarely exceeded. Between 2008 and 2012, the State PM_{10} standard was exceeded on less than 4 percent of all days, while the more lenient Federal standard has not been exceeded in the past 5 years.

4. A substantial fraction of PM_{10} is comprised of ultra-small diameter particulates capable of being inhaled into deep lung tissue ($PM_{2.5}$). Even with the revision of the national 24-hour $PM_{2.5}$ standard from 65 micrograms per cubic meter ($\mu g/m^3$) to 35 $\mu g/m^3$, the frequency of days exceeding the standard is minimal. $PM_{2.5}$ measurements have only exceeded Federal standards once in the past 5 years.
5. More localized pollutants such as NO_x, lead, etc. are likely very low near the project site because background levels never exceed allowable levels based on APCD's monitoring of measured pollutants according to federal standards. There is substantial excess dispersive capacity to accommodate localized vehicular air pollutants such as NO_X without any threat of violating the applicable standards.

ii. Regulatory Framework

Ambient Air Quality Standards (AAQS)

Federal and state law regulates Ambient Air Quality Standards (AAQS) and emergency episode criteria for various pollutants. Generally, state regulations have stricter standards than those at the federal level. AAQS are set at concentrations that provide a sufficient margin of safety to protect public health and welfare. Air quality at a given location can be described by the concentration of various pollutants in the atmosphere. The significance of a pollutant concentration is determined by comparing the concentration to an appropriate federal and/or state ambient air quality standard.

Federal standards are established by the US Environmental Protection Agency (EPA) and are termed the National Ambient Air Quality Standards (NAAQS). The State standards are established by the California Air Resources Board (CARB) and are called the California Ambient Air Quality Standards (CAAQS). The region generally has good air quality, as it attains or is considered in maintenance status for most ambient air quality standards. The APCD is required to monitor air pollutant levels to assure that Federal and State air quality standards are being met.

Air Quality Planning

State and federal laws require jurisdictions that do not meet clean air standards to develop plans and programs that will bring those areas into compliance. These plans typically contain emission reduction measures and attainment schedules to meet specified deadlines. If and when attainment is reached, the attainment plan becomes a "maintenance plan."

In 2001, the CARB developed an attainment plan that was designed to meet both federal and state planning requirements. The federal attainment plan was combined with those from other statewide non-attainment areas to become the State Implementation Plan (SIP). The 2001 Clean Air Plan (CAP) was adopted as the County portion of the SIP, designed to meet and maintain clean air standards. The 2019 Ozone Plan is the ninth triennial Plan update, and similar to other Clean Air Plan updates, the 2019 Plan identifies and evaluates "every feasible measure" strategy to ensure continued progress towards attainment of the State ozone standards.

Consistency with the 2019 Ozone Plan means that direct and indirect emissions associated with the project are accounted for in the Plan's emissions growth assumptions and the project is consistent with policies adopted in the Plan. The Plan relies on "growth profiles" collected from sources such as the California Energy Commission and population data from the

Department of Finance. The baseline (2017) population for Santa Barbara County used in the 2019 Ozone Plan is 451,700. The projected County-wide population for 2025 is 477,700, and the projected 2035 population is 505,300.

The Santa Barbara County Air Pollution Control District (APCD) is required to monitor air pollutant levels to assure that federal and state air quality standards are being met. Santa Barbara County is designated unclassifiable/attainment for the federal 8-hour ozone standard, and is designated unclassifiable/attainment for the federal $PM_{2.5}$ standards. Effective July 1, 2020, Santa Barbara County is designated as attainment for the State ozone standards. The County's attainment status for criteria pollutants is depicted on Table AQ-1. To be designated attainment, an air district must show that the ozone standard is not violated for three consecutive years. The County violates the state standards for PM_{10} and is unclassified for the state $PM_{2.5}$ standard. The air basin is an attainment area for all other federal and state air quality standards.

Table AQ-1
Air Quality Standards and Attainment Status

Pollutant	Federal Standards	Attainment Status	California Standards	Attainment Status
Ozone	0.070 ppm (8-hr avg)	u/a	0.070 ppm (8-hr avg)	a
			0.09 ppm (1-hr avg)	a
Carbon Monoxide	9 ppm (8-hr avg)	a	9.0 ppm (8-hr avg)	a
	35 ppm (1-hr avg)	a	20 ppm (1-hr avg)	a
Nitrogen Dioxide	0.100 ppm (1-hr avg)	u/a	0.18 ppm (1-hr avg)	a
	0.053 ppm (annual avg)	u/a	0.030 ppm (annual avg)	
Sulfur Dioxide	0.075 ppb (1-hr avg)	*	0.25 ppm (1-hr avg)	a
			0.04 ppm (24-hr avg)	a
Lead	1.5 µg/m3 (calendar quarter)	a	1.5 µg/m3 (30-day avg)	a
	0.15 µg/m3 (3-month avg)	u		
Particulate Matter (PM10)	150 µg/m3 (24-hr avg)	a	50 µg/m3 (24-hr avg)	n
			20 µg/m3 (annual avg)	n
Particulate Matter (PM2.5)	12.0 µg/m3 (annual avg)	u/a	12 µg/m3 (annual avg)	u
	35 µg/m3 (24-hr avg)	u/a		

ppm= parts per million u = unclassified * = EPA has not yet made Source: SBCAPCD, 2021
µg/m3 = micrograms per cubic meter n = non-attainment made al designation
avg = average a= attainment

iii. Thresholds of Significance—Criteria Pollutants

A significant air quality impact could occur if the proposed project resulted in any of the impacts noted in the above checklist.

In addition, pursuant to the City's *Environmental Thresholds and Guidelines Manual*, a significant adverse air quality impact may occur when a project, individually or cumulatively, triggers either of the following:

Threshold AQ-1. Interfere with progress toward the attainment of the ozone standard by releasing emissions which equal or exceed the established long-term quantitative thresholds for NOX (nitrogen oxides) and ROC (reactive organic compounds; same as reactive organic gases [ROG]). Thresholds are 25 pounds/day of either NOX or ROC.

Threshold AQ-2. Equals or exceeds the state or federal ambient air quality standards for any criteria pollutant (as determined by modeling).

Threshold AQ-3. Results in toxic or hazardous pollutants in amounts which may increase cancer risks for the affected population.

Threshold AQ-4. Causes an odor nuisance problem impacting a considerable number of people.

The following significance thresholds have been established by the APCD (*Scope and Content of Air Quality Sections in Environmental Documents*, SPCAPCD, 2017). While the City of Goleta has not yet adopted any new threshold criteria, these APCD thresholds are considered appropriate for use as a guideline for the impact analysis.

APCD Operational Impacts Thresholds

Based on APCD Thresholds, a project would result in a significant impact, either individually or cumulatively, if it would:

a) Emit 240 pounds per day or more of ROG and NO_X from all sources;
b) Emit 25 pounds per day or more of unmitigated ROG from any motor vehicle trips only;
c) Emit 25 pounds per day or more of unmitigated NO_X from any motor vehicle trips only;
d) Emit 80 pounds per day or more of PM_{10};
e) Cause or contribute to a violation of any California or National Ambient Air Quality standard (except ozone);
f) Exceed the APCD health risk public notification thresholds adopted by the APCD Board (10 excess cancer cases in a million for cancer risk and a Hazard Index of more than 1.0 for non-cancer risk); or
g) Be inconsistent with Federal or State air quality plans for Santa Barbara County.

The cumulative contribution of project emissions to regional levels should be compared with existing programs and plans, including the most recent Ozone Plan (SBCAPCD 2019).

h) Due to the regional nature of ozone as a pollutant, if a project's emissions from traffic sources of either of the ozone precursors (NO_X or ROC), exceed the operational thresholds, then the project's cumulative impacts are considered significant.

i) For projects that do not have significant ozone precursor emissions or localized pollutant impacts, if emissions have been taken into account in the 2019 Ozone

Plan growth projections, regional cumulative impacts may be considered to be less than significant.

APCD Construction Impacts Thresholds

Quantitative thresholds of significance have not been adopted for short-term emissions. However, CEQA requires that the short-term impacts such as exhaust emissions from construction equipment and fugitive dust generation during grading must be analyzed. The APCD recommends that construction-related NO_X, ROC, PM_{10}, and $PM_{2.5}$ emissions, from diesel and gasoline powered equipment, paving, and other activities, be quantified.

j) APCD uses 25 tons per year for NO_X and ROG as a guideline for determining the significance of construction impacts.

Under APCD Rule 202 D.16, (APCD, Rule 202), if the combined emissions from all construction equipment used to construct a stationary source that requires an Authority to Construct permit, have the potential to exceed 25 tons of any pollutant, except carbon monoxide, in a 12-month period, the permittee shall provide offsets under the provisions of Rule 804 (APCD, Rule 804, 2012) and shall demonstrate that no ambient air quality standard will be violated.

iv. Project-Specific Impacts

The proposed project includes a request for the approval of a Parcel Map that would divide the existing 5.88-acre project site parcel lot into two lots. Proposed Lot 2 would have a net area of 3.22 acres and would continue to be occupied by an existing 60,068 square foot research and development building and associated parking and landscaping. The creation of proposed Lot 2 would not result in changes to operations associated with the existing research and development building. Therefore, the Parcel Map and the creation of proposed Lot 2 would not result in changes to existing environmental conditions that would have the potential to result in significant air quality impacts. The following evaluation of potential air quality impacts focuses on impacts that have the potential to result from the construction and operation of the proposed Goleta Energy Storage facility, which would be located on a proposed 2.66-acre lot located on the northern portion of the project site.

Checklist Item a and Threshold AQ-1. Less than Significant Impact.

The SBCAPCD's 2019 Ozone Plan relies on various growth profiles, including population growth projections. To be determined consistent with the 2019 Ozone Plan, the project's direct and indirect emissions must be accounted for in the Plan's growth assumptions, and the project must be consistent with the policies adopted in the Plan. Additionally, in determining consistency with the Plan, commercial and industrial projects must be tracked pursuant to the local Congestion Management Plan and are determined to be consistent with the Plan if such projects are consistent with SBCAPCD rules and regulations. (SBCAPCD, 2017).

The proposed project would not result in the in-migration of new employees to Santa Barbara County for project-related construction, operation, or maintenance due to the project's short construction period and minimal long-term workforce requirements. In addition, traffic generated by the project would be minimal and would not result in conflicts with the County's Congestion Management Plan. The proposed energy storage project would also to support

electricity grid resiliency in the Goleta area, and replace peak energy period capacity that will be lost when the Ellwood Natural Gas Peaking Facility located at 30 Las Armas Road in Goleta is removed from service. The project would also facilitate the use renewable sources, such as wind and solar facilities, that may not be able to produce energy during times of peak demand.

Therefore, the proposed project would be consistent with the 2019 Ozone Plan because it would not cause an exceedance of the growth projections that underlie its air pollutant emission forecasts, and the project would be consistent with objectives of the Plan to reduce air emissions. Therefore, the project's impacts related to the implementation of an applicable air quality plan would be less than significant.

Checklist Item b and Threshold AQ-1. Less than Significant Impact.

The proposed energy storage project would generate short-term emissions associated with project construction and project decommissioning (i.e., removal of project-related equipment at the end of the useful life of the project). Long-term emissions resulting from the operation of the project would result from activities such as the use of water for irrigation of landscaping, and mobile emissions from maintenance vehicle trips. The project's short- and long-term air emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 (Rincon Consultants, Inc., 2020; Attachment 2). CalEEMod was developed by the South Coast Air Quality Management District (SCAQMD) and is used by jurisdictions throughout the State to quantify criteria pollutant emissions.

Short-Term Impacts

Project-related construction and decommissioning emissions would result from sources such as soil disturbance, and combustion pollutants from construction equipment. Estimates of air emissions from proposed construction and decommissioning activities are summarized on Table AQ-2.

Table AQ-2
Maximum Annual Short-Term Emissions (Unmitigated)
(tons/year)

	ROC	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Project Construction (2021)	0.2	1.6	1.6	<0.1	0.2	0.1
Project Decommissioning (2040)	0.1	0.3	0.9	<0.1	<0.1	<0.1
SBAPCD Threshold	25	25	No threshold	25	25	25
Potential Impact?	No	No	No	No	No	No

Source: CalEEMod v. 2016.3.2 model; Rincon, 2020

Short-term emissions of ozone precursor pollutants (ROG and NO_x) would be substantially lower than the 25 tons per year emissions guideline the APCD uses to determine the significance of construction-related emission impacts. Therefore, short-term emissions from the project would be less than significant and no mitigation is required.

Although construction-related emissions would not exceed the suggested SBCAPCD thresholds, SBCAPCD requires implementation of the following standard dust control measures for all discretionary projects involving earth-moving activities:

a) During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 miles per hour. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
b) The amount of disturbed area shall be minimized, and on-site vehicle speeds shall be reduced to 15 miles per hour or less.
c) If import, export, and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
d) Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
e) After clearing, grading, earth moving, or excavation is completed, the disturbed area shall be treated by watering, revegetating, or spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.
f) The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SBCAPCD prior to grading/building permit issuance and/or map clearance.

With the implementation required dust control measures, less than significant short-term emissions of PM_{10} and $PM_{2.5}$ would be reduced to the extent feasible, and potential dust nuisance impacts to surrounding land uses would also be less than significant.

Long-Term Operation Impacts

Emissions of criteria air pollutants resulting from long-term project operations would result from routine project operations, primarily from maintenance vehicle trips. Table AQ-3 summarizes the total estimated emissions associated with project-related operations.

Long-term emissions resulting from the project would not exceed the City's significance thresholds of 25 pounds per day for mobile emissions; 55 pounds per day for total ozone precursor emissions; or 80 pounds per day for PM_{10} emissions. As shown on Table AQ-3, the project would result in a less than significant long-term air quality impact.

The proposed project would not violate any air quality standards or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment. Therefore, the project's long-term emission impacts would be less than significant.

Table AQ-3
Long-Term Project Operation Emission (Unmitigated)
(lbs/day)

	Emissions (lbs./day)					
	ROG	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Operation and Maintenance Trip Emissions	<0.1	<0.1	<0.1	0	<0.1	<0.1
SBAPCD Thresholds	*25 mobile 240 total*	*25 mobile 240 total*	*NA*	*NA*	*80*	*NA*
City Thresholds	*25 mobile 55 total*	*25 mobile 55 total*	*NA*	*NA*	*NA*	*NA*
Exceed Thresholds?	**No**	**No**	**N/A**	**N/A**	**No**	**N/A**

Source: CalEEMod v.2016.3.2 Model; Rincon, 2020

Checklist Item c and Threshold AQ-3. Less than Significant Impact.

Sensitive receptors are defined as population groups that are more susceptible to exposure to pollutants and include health care facilities, retirement homes, schools and playground facilities, and residential areas. The proposed project would be located adjacent to sensitive receptors (e.g., adjacent Cortona Apartments that are currently under construction). As described in the response to item "b" above, the project would not result in short- or long-term emissions that would exceed SBCAPCD or City of Goleta thresholds. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant. Please refer to Section I (Hazards and Hazardous Materials) below related to the potential for the project to result in hazardous air emission exposure impacts in the event of an accident at the project site.

Checklist Item d and Threshold AQ-4. Less than Significant Impact.

During construction activities on the project site, temporary odors from vehicle exhaust and construction equipment engines would occur. However, construction-related odors would disperse and dissipate quickly, and would be a temporary condition that would cease upon completion of construction. The operation of the project would not be a long-term source of odors. Therefore, the project would result in less than significant impacts related to the creation of odors that have the potential to adversely affect a substantial number of people.

v. Cumulative Impacts

Due to the regional nature of ozone as a pollutant, if a project's air pollutant emissions of either of the ozone precursors (NO_x or ROC) exceed the long-term significance thresholds, then the project's cumulative impacts will be considered significant. The project's operation emissions, as summarized in Table AQ-2, would not exceed the project-specific thresholds; therefore, the project's contribution to cumulative air quality impacts would also be less than significant.

For projects that do not have significant ozone precursor emissions or localized pollutant impacts, if emissions have been taken into account in the most recent Ozone Plan growth projections, regional cumulative impacts may be considered to be insignificant. When a project's emissions exceed the thresholds and are clearly not accounted for in the most recent Ozone Plan growth projections, then the project is considered to have significant cumulative impacts. As described in response "a" above, the proposed project's emissions are accounted for in the 2019 Ozone Plan growth projections and the project would be consistent with the Ozone Plan. Therefore, the project's contribution to regional cumulative air quality impacts are considered less than significant.

vi. Mitigation Measures and Recommended Conditions of Approval

The project would not result in significant air quality impacts. No mitigation measures are required.

vii. Residual Impact

The proposed project would not result in significant residual air quality impacts.

D. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
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 U.S. Fish and Wildlife Service?		X			
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X	
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?			X		
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?				X	
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X		
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?				X	

The evaluation of potential impacts to biological resources is based on the analysis, conclusions, and recommendations included in a biological assessment of the proposed energy storage project site titled *Biological Resources Assessment for the Goleta Energy Storage Project, Goleta, California*, March 30, 2020, prepared by Rincon Consultants, Inc. Information provided by the Biological Resources Assessment is summarized below. The complete report is provided as Attachment 3.

i. Existing Setting

The project site is developed with a storage shed, a small plant nursery, and a paved parking lot. The Cortona apartments project is currently under construction north of and adjacent to the project site. Multi-family residential, commercial, and industrial uses are located on the west side of Storke Road near the project site; commercial and industrial uses are located to the south and southeast of the project site; and disturbed, undeveloped land, railroad tracks, and U.S. 101 are north and northeast of the project site.

Vegetation

Six vegetation communities occur within the biological study area: developed, disturbed, non-native ornamental, native ornamental, quailbush scrub shrubland alliance, and coyote brush shrubland alliance. A total of 16 plant species were identified in the biological study area, of which most were ornamental or weedy non-native species. The vegetation communities located on and adjacent to the energy storage project site are depicted on Figure BIO-1, and the complete list of observed plant species is included in Attachment 3.

Developed**.** Developed land includes areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. It is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation. The majority of the energy storage project site is occupied by developed land, including a paved parking lot, an existing building, dirt roads, and storage areas.

Disturbed**.** Disturbed habitats have been physically disturbed by previous human activity. Disturbed habitats are not recognizable as a native or naturalized vegetation association but continue to retain a soil substrate. Vegetation of disturbed areas, if present, is typically composed of ruderal exotics that take advantage of disturbance and inhibit the growth of native plants.

Disturbed vegetation is present on the energy storage project site and much of the surrounding biological study area, including the proposed generation tie-in locations that would traverse beneath Storke Road and into an existing electrical substation. Historical aerial imagery indicates that the vegetation and substrates in these areas have been regularly disturbed by mowing, disking, or grading. The plants observed in this habitat type were primarily weedy, non-native species, including black mustard (*Brassica nigra*), castor bean (*Ricinus communis*), and cheeseweed mallow (*Malva parviflora*).

Non-Native Ornamental**.** Ornamental areas have been planted on the energy storage project site for the purpose of landscaping, typically with non-native species that require regular irrigation or other maintenance. Ornamental vegetation is present within and at the margins of the paved parking lot that occupies the southern and eastern portions of the project site and biological study area. These areas include maintained lawns, olive trees (*Olea europaea*), and other predominantly non-native trees and shrubs.

Figure BIO-1
Vegetation Communities

Source: Rincon, 2020

Native Ornamental**.** Several native California sycamore (*Platanus racemosa*) trees and toyon (*Heteromeles arbutifolia*) shrubs are present near the center of the energy storage project site in two areas totaling approximately 0.2 acre. These areas are surrounded by paved parking lot and disturbed land. It appears that the native trees and shrubs were intentionally planted, and the understory vegetation surrounding them has evidently been maintained. Because these areas are small, isolated from other natural vegetation, subject to a high level of ongoing disturbance, and function as a landscaping feature, they cannot be characterized as a natural vegetation community. Although California sycamore is designated as a wetland indicator species, it has only a facultative association with wetlands and also occurs in non-wetland habitats.

Atriplex lentiformis (quailbush scrub) Shrubland Alliance**.** This is a native shrub community in which quailbush (*Atriplex lentiformis*; also known as big saltbush) makes up more than 50 percent of the canopy cover. A small area (less than 0.1 acre) dominated by quailbush is present in the biological study area on the road embankment between the western boundary of the project site and Storke Road. It is surrounded by disturbed vegetation and likely also has a history of disturbance. Although quailbush is designated as a wetland indicator species, it has only a facultative association with wetlands and commonly occurs in non-wetland habitats.

Baccharis pilularis (coyote brush) Shrubland Alliance**.** This is a native shrub community in which coyote brush (*Baccharis pilularis*) makes up more than 50 percent of the canopy cover. A small area (approximately 0.1 acre) dominated by coyote brush is present in the biological study area immediately outside the eastern boundary of the energy storage facility project site. It is surrounded by developed and disturbed areas.

Wildlife

The energy storage project site and surrounding area provides relatively little suitable habitat for wildlife species due to its developed condition and the lack of native vegetation. Avian species observed in the biological study area during the survey included common species and one raptor species (red-tailed hawk, *Buteo jamaicensis*). The complete list of birds observed on the project site is included in Attachment 3.

ii. Thresholds of Significance

A significant impact on Biological Resources would be expected to occur if the proposed project resulted in any of the impacts noted in the above checklist. In addition, the City of Goleta's Environmental Thresholds and Guidelines Manual defines the following thresholds of significance:

Threshold BIO-1. Disturbances to habitats or species may be significant, based on substantial evidence in the record, if they substantially impact significant resources in the following ways:

1. Substantially reduce or eliminate species diversity or abundance.
2. Substantially reduce or eliminate quantity or quality of nesting areas.
3. Substantially limit reproductive capacity through loss of individuals or habitat.
4. Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food resources.
5. Substantially limit or fragment range and movement (geographic distribution of animals

and/or seed dispersal routes).
6. Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

Threshold BIO-2. The *Environmental Thresholds and Guidelines Manual* provides examples of areas in the City of Goleta where impacts to habitat are presumed to be less than significant, including:

a. Small acreages of non-native grassland if wildlife values are low.
b. Individuals or stands of non-native trees if not used by important animal species such as raptors or monarch butterflies.
c. Areas of historical disturbance such as intensive agriculture.
d. Small pockets of habitats already significantly fragmented or isolated, and disturbed or degraded.
e. Areas of primarily ruderal species resulting from pre-existing man-made disturbance.

iii. Project-Specific Impacts

The proposed project includes a request for the approval of a Parcel Map that would divide the existing 5.88-acre project site parcel lot into two lots. Proposed Lot 2 would have a net area of 3.22 acres and would continue to be occupied by an existing 60,068 square foot research and development building and associated parking and landscaping. The Parcel Map would not result in changes to existing environmental conditions on proposed Lot 2 that would have the potential to result in significant impacts to biological resources. The following evaluation of potential biological resource impacts focuses on impacts that have the potential to result from the development of the proposed Goleta Energy Storage facility, which would be located on a proposed 2.66-acre lot (proposed Lot 1) located on the northern portion of the project site.

Checklist Item a and Threshold BIO-1. Less than Significant with Mitigation.

A list of special-status plant and animal species with potential to occur on the energy storage project site (i.e., the biological study area plus a 100-foot wide survey buffer) was developed based on a review of a five-mile search of the California Natural Diversity Database (CNDDB) (California Department of Fish and Wildlife [CDFW] 2020) and a nine-quad search of the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2020). The results of the searches are included as Attachment A of the Biological Resources Assessment prepared for the project.

The CNDDB and CNPS queries identified 42 special-status plant species, of which 14 were documented within five miles of the biological study area. Special-status plant species typically have specialized habitat requirements, including plant community types, soils, and elevational ranges. The biological study area is predominantly developed or disturbed, and contains no habitats identified as suitable for the species documented in the vicinity of the biological study area. Therefore, it was determined that no special-status plant species have potential to occur in the biological study area. No special-status plant species were observed during the survey. Accordingly, no impacts to special-status plants would occur.

The CNDDB query results identified 21 special-status wildlife species within five miles of the biological study area. The potential for special-status wildlife species to occur at the project

site was assessed based on their known distribution and habitat requirements and the existing conditions of the site. No special-status wildlife species were detected during the survey, and none were determined to have potential to occur due to the developed and disturbed condition of the biological study area; high levels of human disturbance; absence of native vegetation or aquatic habitat; and isolation from suitable habitat in the surrounding landscape. No critical habitat designated by the United States Fish and Wildlife Service (USFWS) is present in the biological study area. Accordingly, no impacts to special-status wildlife would occur.

Migratory or other common nesting birds, while not designated as special-status species, are protected by the California Fish and Game Code (CFGC) and the Migratory Bird Treaty Act (MBTA). Native and ornamental trees and shrubs and human-made structures in the biological study area could provide habitat for nesting birds. No nests or birds exhibiting nesting behaviors were observed during the site survey. However, if project construction activities occur during the nesting season (typically February 1 through August 31), impacts to nesting birds, including raptors, could potentially be significant. Potential impacts to nesting birds, including raptors, would be reduced to less than significant level through implementation of Mitigation Measure BIO-1, described below. The requirements of Mitigation Measure BIO-1 are proposed by the City and have been agreed to by the applicant.

Checklist Item b and Thresholds BIO-1 and BIO-2. No Impact.

Six vegetation communities occur within the biological study area: developed, disturbed, non-native ornamental, native ornamental, *Atriplex lentiformis* (quailbush scrub) shrubland alliance, and *Baccharis pilularis* (coyote brush) shrubland alliance.

No sensitive natural communities are present in the biological study area. Although California sycamore trees (*Platanus racemosa*) are present in the biological study area and California sycamore woodland is designated as sensitive by CDFW, the sycamore trees on the project site are ornamental parking lot landscaping and do not constitute a natural California sycamore woodland. Therefore, the proposed project would have no impact to sensitive natural communities.

Checklist Item c. Less than Significant Impact.

A formal jurisdictional delineation of the project site was not conducted. However, no wetlands or waters of the United States or the State that might meet the standards for federal protection under jurisdiction of the United States Army Corps of Engineers (USACE) were observed during the field survey. No waters or wetlands identified by the USFWS's National Wetlands Inventory (NWI) are mapped within the biological study area. The nearest is located approximately 500 feet north of the biological study area on the northern side of U.S. 101. No riparian vegetation that might be protected under jurisdiction of CDFW was observed in the biological study area. Two plant species designated as wetland indicator species (quailbush and California sycamore) were observed in the biological study area. However, both of these species have only a facultative association with wetlands and also occur in non-wetland habitats. Based on the vegetation and substrates observed during the survey, the areas where these species occur do not constitute wetlands as defined by the City of Goleta (City of Goleta 2006). Therefore, the proposed project would not result in direct (i.e., removal) impacts to jurisdictional waters or wetlands.

Proposed development activities at the project site would have the potential to impair the quality of downstream receiving waters (such as the Goleta Slough) due to discharges of sediment and other construction-related materials, such as solid waste and other debris, concrete and asphalt, paint, metals, fuel and other automotive products. However, as described in Section J (Hydrology and Water Quality) below, with the implementation of construction site regulatory requirements (including the preparation of a Storm Water Pollution Prevention Plan), there is a less than significant potential for a major release of construction-related pollutants at the project site that could adversely affect downstream surface waters and associated habitats.

As described in Section J (Hydrology and Water Quality) below, in the unlikely event of a Megapack fire at the project site, water used for fire suppression purposes would have the potential to contain pollutants released from the combustion of the Megapack structure and the lithium-ion batteries contained within the structure. Due the large volume of water that may be used to prevent the spread of a fire, it is also likely that the fire suppression water would leave the project site and enter the City storm drain system. After entering the system, the water would be discharged to Tecolotito Creek, which flows to the Goleta Slough.

Based on the results of previous large-scale fire testing, pollutants absorbed by fire suppression water used at the project site would generally be similar to fire suppression water quality impacts that could result from fires at other structures that result in the combustion of plastics and electronics. Based on the very low probability of a fire occurring at the project site that would require the use of fire suppression water, and that potential impacts to the quality of fire suppression would generally be similar to the impacts of fires at other buildings located in the Tecolotito Creek watershed, potential water quality-related impacts to downstream receiving waters are considered to be potentially adverse but less than significant.

Checklist Item d. No Impact.

Wildlife corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Examples of barriers or impediments to movement include housing and other urban development, roads, fencing, unsuitable habitat, or open areas with little vegetative cover. Regional and local wildlife movements are expected to be concentrated near topographic features that allow convenient passage, including roads, drainages, and ridgelines.

The proposed energy storage project site does not have characteristics that would allow it to be used as a wildlife corridor. The potential for movement of wildlife through the project site and surrounding areas is minimal given surrounding urban development, the adjacent railroad tracks, and U.S. 101. These conditions result in substantial barriers to wildlife movement. The proposed project would not impede wildlife movement, and no impact would occur.

Checklist Item e. Less than Significant Impact

Conservation Element Policy CE 1 of the City of Goleta General Plan/Coastal Land Use Plan (GP/CLUP), requires that all Environmentally Sensitive Habitat Areas (ESHA) identified in Figure 4-1 (Special Status Species and Environmentally Sensitive Habitat Areas) of the GP/CLUP shall be protected against significant degradation of habitat value (City of Goleta 2006). Conservation Element Figure 4-1 does not show any special status species or ESHA on or near the proposed project site. In addition, as described in item “b” above, no sensitive

natural communities are present on or adjacent to the project site. Therefore, the proposed project would be consistent with this policy.

Conservation Element Policy CE 9 pertains to the protection of native woodlands, and Policy CE 9.1 states that native sycamore trees are protected trees. The proposed project would result in the removal of four sycamore trees with trunk diameters of 12-, 12-, 14-, and 22-inches. As described in item "b" above, the sycamore trees to be removed are ornamental parking lot trees and do not constitute a sycamore woodland. Therefore, the removal of the ornamental parking lot trees would not be a significant impact because the landscape trees are fragmented or isolated from other habitat, such as riparian areas, where native sycamore trees are typically located; and the trees are located in a parking lot (i.e., a disturbed or degraded area) that does not provide habitat value. Furthermore, the energy storage project proposes to plant three (3) 24-inch box sycamore trees and nine 24-inch box oak trees on the project site, which would result in a long-term increase in the number of native trees located on the site. Therefore, the proposed project would be consistent with this policy.

Checklist Item f. No Impact.

The project site is not subject to any Habitat Conservation Plan, Natural Conservation Community Plan, or other local, regional, or state habitat conservation plan. Therefore, no impacts would occur.

iv. Cumulative Impacts

The proposed project's potential short-term impacts to nesting birds would be reduced to a less than significant level by proposed mitigation measure BIO-1, which requires pre-construction surveys and the implementation of specified avoidance measures if nesting birds are detected prior to the start of project-related construction activities. Therefore, the project's short-term cumulative impacts to nesting birds would not be cumulatively considerable. The proposed project would not result in other long-term impacts to biological resources that would be cumulatively considerable. Therefore, the project's cumulative biological resources would not be considerable or significant.

v. Mitigation Measures and Recommended Conditions of Approval

The following mitigation measure shall be required to ensure that potential impacts to nesting birds are reduced to less than significant.

Mitigation Measure-BIO-1: Nesting Birds. To avoid disturbance of nesting and special-status birds, including raptor species protected by the MBTA and California Fish and Game Code, project activities including vegetation removal, ground disturbance, construction, and demolition shall occur outside of the bird breeding season (February 1 through August 31), if feasible.

If project-related construction work must begin during the breeding season of nesting and special-status birds, including raptor species, at the permittee/applicant's expense a pre-construction nesting bird survey shall be conducted no more than seven days prior to initiation of project activities. The nesting bird survey shall be conducted inside the project footprint plus a 500-foot buffer for raptors and special-status species and a 300-foot buffer for all other birds. Inaccessible parts of the survey area shall be scanned using binoculars to

ensure 100 percent visual coverage. The survey shall be conducted by a biologist familiar with the identification of bird species known to occur in southern California communities.

If active nests (those containing eggs, nestlings, or associated with dependent fledglings) are found on-site, an avoidance buffer shall be implemented around each nest and demarcated with fencing or flagging. The size of the buffers shall be determined by the biologist based upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site. No project activity shall occur inside a nest buffer until the biologist determines that the nest is no longer active.

If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.

Timing: The survey must be conducted no more than seven (7) days prior to commencement of any demolition, grading, and/or construction activities. Survey conclusions must be reviewed and approved by the Planning and Environmental Review Director, or designee, prior to the issuance of Grading/Building permits.

Monitoring/Reporting Party(ies): The Planning and Environmental Review Director, or designee, will review any biological reports in consultation with any resource/trustee agency as needed, as well as conduct periodic site inspections to verify compliance with survey recommendations in the field.

vi. Residual Impact

With implementation of mitigation measure BIO-1, potential project-related impacts to nesting birds would be less than significant.

E. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a. Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?				X	
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X			
c. Disturb any human remains, including those interred outside of dedicated cemeteries?		X			

Multiple cultural resources assessment reports have been prepared by the project applicant to assess the proposed project's potential impacts to cultural resources. The first report was prepared by Dudek (2020) and was peer reviewed by Applied EarthWorks (July 3, 2020). The peer review comments were addressed in a revised report prepared by Rincon Consultants (November 6, 2020) and that report was also peer reviewed by Applied EarthWorks (December 3, 2020 and December 7, 2020). In response to those peer review comments, a revised report (Rincon, December 11, 2020) was submitted to the City and the report was reviewed by Applied EarthWorks (December 18, 2020). A revised report was prepared (Rincon, January 26, 2021), and following comments from Applied EarthWorks (February 17, 2021) a final cultural resources assessment report was prepared and submitted to the City (Rincon, February, 18, 2021). Each of the documents identified above are on file with the City of Goleta and may be reviewed by qualified persons with prior authorization by the City of Goleta Planning and Environmental Review Department.

The information and analysis included in this section is based and summarizes information included in Rincon Consultant's February 18, 2021, report titled *Cultural Resources Assessment of Effects for Cortona Drive Energy Storage Project, 6864 and 6868 Cortona Drive in Goleta, Santa Barbara County, California.*

i. Existing Setting

Ethnographic and Historic Setting

Historically, settlement in the vicinity of the project site was defined by three periods: the Mission Period (AD 1769 to 1830), the Rancho Period (AD 1830 to 1865), and the American Period (AD 1865 to 1915). The first European contact to the Santa Barbara coastal region was by Portuguese explores in 1542, followed by the Spanish in 1602. At the time of this first European contact in 1542, the Goleta area was occupied by a Native American group speaking a distinct dialect of the Chumash Language (GP FEIR). This group later became known as the Barbareno Chumash. The Chumash were hunters and gathers who lived in areas surrounding the much larger prehistoric Goleta Slough. The prevalent Chumash population at the time of Spanish contact, had at least 10 Chumash villages in the Goleta Area and immediate vicinity (GP FEIR).

As provided in the City's General Plan Final EIR (Section 3.5, Cultural Resources), the City is known to contain prehistoric, ethnographic and historical resources. The City's General Plan Final EIR (GP FEIR) (Figure 3.5-1, Historic Resources), shows areas containing sensitive historic/cultural resources, identifying 46 historic resource locations.

Previous Cultural Resource Investigations

A search of the California Historical Resources Information System (CHRIS) at the Central Coastal Information Center (CCIC) was completed on August 24, 2020. The search was performed to identify all previously recorded cultural resources, as well as previously conducted cultural resource studies, within the project site and a 0.5-mile area surrounding it. The CHRIS search included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, and the Archaeological Determinations of Eligibility list. The CCIC records search identified 79 previously conducted cultural resources studies within a 0.5-mile radius of the project site. Twenty (20) of these studies are located within 100 feet of the proposed project site. The CCIC records search identified 13 previously recorded cultural resources within a 0.5-mile of the project site. One of these cultural resources, CA-SBA-54, is located within the project site. This resource is a prehistoric site that was found eligible for listing in the CRHR. Two other cultural resources, CA-SBA-142 and P-42-041021, are located adjacent to but outside the project site. Each of these cultural resource sites are briefly described below.

CA-SBA-54. Since it was first recorded in the early 20th century, CA-SBA-54 has been subject to numerous investigations and archaeologists have recorded several different site boundaries and site deposit locations. In the 1920s, remnants of this village site were described as being located on the crest of a small, abrupt-sided mound with remnants of an ancient oak grove. In the 1950's, a dense mantle of occupation debris on the knoll crest was recorded as being at an elevation of approximately 62 to 71 feet above sea level. In 1956, an excavation of the site recovered flake and core tools, projectile points, manos and metates, pestles, a drill, asphaltum applicators, two charm stones, and one/two human burial(s). In the 1960s, numerous changes occurred to the site. In 1961, the area immediately west of the site was destroyed by the Storke Road overpass project. In 1962, much of the knoll was graded in anticipation of a housing construction project, which reduced the site's elevation from approximately 71 feet ASL to 37 feet ASL.

In 1982, archaeologists determined that although the top of the original knoll was removed, the lower slopes of the knoll could still contain relatively undisturbed archaeological deposits. This was confirmed in the 1980s and 1990s when other investigations explored the northern and western extents of the site. An investigation in 1992 identified a "northern midden remnant" immediately south of the railroad. A subsequent investigation of that area identified cultural material in much lower densities than previously reported and suggested previous disturbances of the archaeological deposit that were not previously recognized. Based on the results of these investigations, the "northern midden remnant" does not extend south toward the proposed project site.

Backhoe trench excavations in 1995 identified a roughly 1.5 x 1.5 meter "southern midden remnant" that extended west toward the Storke Road fill slope. Subsequent data recovery excavations in 2002 identified intact archaeological deposits of the "southern midden remnant," between 1.5 and six feet below the ground surface that existed at that time. As

part of a data recovery program, three trenches were excavated south the "southern midden remnant." No prehistoric materials were identified in the trenches.

These previous studies evaluated projects east and west of the proposed project site and found that although reduced in size and disturbed, CA-SBA-54 retained prehistoric cultural deposits.

In 2016, Dudek excavated 18 backhoe trenches to determine the presence of cultural materials at the project site. The backhoe trenches do not appear to have been located in areas previously excavated by earlier archaeologists. The excavations determined that two of the trenches contained the deepest and thickest deposit of cultural materials. Five trenches contained intact cultural materials within just a portion of the trench, which defined the boundary of the intact site deposit. Two of the trenches defined the site's western boundary, two trenches defined the southern boundary, and one trench defined the eastern boundary of the site. This boundary was confirmed by four trenches completely within the boundary that identified intact materials and nine trenches completely outside the boundary that did not identify intact materials.

The presence of intact cultural materials suggests the archaeological deposit has the potential to "yield information important in prehistory." Since the intact cultural materials are associated with peripheral CA-SBA-54 site deposits, not the main/primary site area on the knoll that was removed, the intact cultural materials have a limited potential to address prehistoric occupation at the project site (Rincon, 2021).

CA-SBA-142. This site was originally recorded in 1959 in the vicinity of the northwestern corner of the Glenn Annie Road/U.S. Highway 101 intersection, and has been the subject of multiple additional investigations. The core of the site, located north of U.S. Highway 101 and west of Glenn Annie Road, was described as black soil containing a high density of shellfish fragments, ground stone artifacts, such as manos and metates, and projectile points. When the site was originally recorded in 1959, approximately 66 percent of the site had been destroyed by construction of residences and roads north of U.S. Highway 101. Several burials exposed in a roadcut through the site were excavated, and in 1960 the entire site was removed to serve as fill for the highway.

The area of proposed off-site improvements west of Storke Road that would be affected by the construction of the proposed SCE substation tie-line was also surveyed in 1991. Three areas of sparse, remnant cultural materials associated with CA-SBA-142, but geographically distinct from the original CA-SBA-142 landform north of U.S. Highway 101, were identified. No archaeological excavations were undertaken to assess the integrity of the three areas.

Subsequent investigation indicated one of the identified areas (CA-SBA-142A) has been completely destroyed and did not represent an intact archaeological site deposit. One of the other areas (CA-SBA-142C), the area closest to the proposed off-site tie-line improvements west of Storke Road, is a small (60 X 5-meter) deposit of shell located north of the SCE substation. The vicinity of this area has been significantly impacted by construction of a 22-inch water main in the 1950s and the subsequent construction of a gas line. The construction of Storke Road and the Storke Road/Hollister Avenue interchange in 1960 and 1961 are assumed to have destroyed or severely disturbed any archaeological deposits associated with SBA-142C. In addition, this area is located approximately 65 feet from the closest proposed tie-line construction and it is unlikely to be impacted by ground disturbances associated with the proposed tie-line improvements.

P-42-041021. The original Southern Pacific Railroad cut was a remnant of the abandoned southern segment of the SPRR Coast Line that was in use between 1887 and 1902. The railroad cut was located approximately 175 feet west of the proposed off-site improvements at the Southern California Edison substation, and was removed during the construction of the Westar mixed use project. Therefore, this former historical resource would not be impacted by the proposed project.

ii. Thresholds of Significance

To be a significant historical resource pursuant to CEQA, it must meet one of the four significance criteria listed in CEQA Guidelines section 15064.5(a)(3)(A-D) and retain physical integrity. The four significance criteria for cultural and historical resources are:

1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. It is associated with the lives of persons important in our past;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. It has yielded, or may be likely to yield, information important in prehistory or history

A significant impact on cultural resources would occur if a proposed project resulted in any of the impacts noted in the above checklist. Additional thresholds are contained in the City's *Environmental Thresholds and Guidelines Manual*. The City's adopted thresholds indicate that a project would result in a significant impact on a cultural resource if it results in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings.

iii. Project-Specific Impacts

The proposed project includes a request for the approval of a Parcel Map that would divide the existing 5.88-acre project site parcel lot into two lots. Proposed Lot 2 would have a net area of 3.22 acres and would continue to be occupied by an existing 60,068 square foot research and development building and associated parking and landscaping. The Parcel Map would not result in changes to existing environmental conditions on proposed Lot 2 that would have the potential to result in significant impacts to cultural resources. The following evaluation of potential cultural resource impacts focuses on impacts that have the potential to result from the development of the proposed Goleta Energy Storage facility, which would be located on a proposed 2.66-acre lot (proposed Lot 1) located on the northern portion of the project site, and the construction of other project-related off-site improvements.

Checklist Item a. No Impact.

Figure 6-2 (Historic Resources) of the Visual and Historic Resources Element of the GP/CLUP does not identify any sensitive historic resources on or near the proposed project site. In addition, the draft Historic Resources Inventory prepared for the Historic Preservation Ordinance does not identify any historic resources eligible for historic designation as being located on or adjacent to the project site. The energy storage project would demolish a small

on-site shed, however, the shed has not been identified as being a sensitive historical resource. Therefore, the project would have no impact to historical resources.

Checklist Item b and c. Less than Significant with Mitigation.

Proposed Project Site Improvements. Proposed project site improvements that would occur within the portion of CA-SBA-54 that contains intact archaeological deposits include the on-site fire access road, and the installation of 24-inch box landscape trees. Ground disturbances associated with these proposed improvements would provide, at minimum, an eight-inch separation between the base of ground disturbances and the top of the intact archaeological site deposit. Fill would be placed in the eastern portion of the project site to provide a buffer between the landscape trees and the top of intact archaeological deposits. By maintaining the proposed separation distance, the project would avoid the intact on-site archaeological deposit.

The proposed stormwater retention basin would be located approximately 82 feet southeast of the southernmost cultural resource exploration trench that was excavated in 2002. As described above, that exploration did not identify prehistoric cultural resources. The retention basin would also be approximately 180 feet southeast of the "southern midden remnant," and approximately 295 feet south of the CA-SBA-54 site boundary defined by Dudek. Therefore, it is unlikely that excavation of the basin will impact cultural materials.

The "northern midden remnant" that has been identified near the project area is located north of and outside the proposed project site. Therefore, this remnant area would not be impacted by the project.

Proposed Bore Pit, Receiving Pit, and Tie Line. The proposed project includes the installation of an underground electrical line (i.e., a "tie line") to connect the project site to the existing SCE substation located on the west side of Storke Road. Installation of the tie line requires the excavation of a bore pit on the east of Storke Road, a receiving pit on the west side of Storke Road, the installation of a tie line beneath Storke Road, and trenching on the west side of Storke Road to extend the tie line from the receiving pit to the substation.

Based on a review of maps prepared for previous archaeological investigations at and in the vicinity of the project site, and a review of aerial photos, it appears that the "southern midden remnant" is west of the proposed project site under the current Storke Road fill slope. In addition, up to 30 feet of fill was placed on the top of the ground surface when Storke Road was realigned. It is likely that soil preparation associated with the placement of that fill would have disturbed the majority of the "southern midden remnant" and intact cultural material located north of the remnant, and left intact archaeological material remaining between five and six feet below the ground surface that existed at that time.

The bore pit to be located east of Storke Road would be north of the "southern midden remnant" and in an area that was previously investigated for cultural resources with negative results (i.e., the trench did not contain intact midden soil). The proposed tie line would also be located north of the "southern midden remnant" in an area where previous data recovery excavations identified intact cultural material. The bottom of the east bore pit and underground tie line would be located at or above the approximate ground surface that existed in the early 1990s when archaeological excavations identified the "southern midden remnant" and intact cultural material north of the "southern midden remnant" between 1.5 and

6.0 feet below that ground surface. Soil preparation associated with the Storke Road realignment is likely to have extended five feet below that ground surface. Therefore, the proposed bore pit and electrical line would avoid the "southern midden remnant" and the intact cultural material north of the "southern midden remnant" that remain between 5 and 6 feet below that ground surface.

The proposed receiving pit, vault, underground electrical line trench, on the west side of Storke Road would be located at least 65 feet from CA-SBA-142C. Ground disturbances associated with the proposed substation connection improvements west of Storke Road are unlikely to impact CA-SBA-142C.

The proposed off-site street frontage improvements along Cortona Drive consist predominantly of the removal of existing infrastructure (curbs, gutters, sidewalks, street lighting, drain pipes, etc) and replacement with new infrastructure at the same locations. Therefore, the proposed street improvements would be constructed in locations that have been previously disturbed. Subsurface archaeological testing for a separate and previously proposed project (the Joslyn Electronic Systems Division storage building located east of and adjacent to the proposed project site) identified prehistoric cultural materials at that site that were in redeposited, secondary deposits. The analysis of the adjacent project determined construction of the storage building would have "no direct or indirect impacts on the cultural resources" and recommended that construction "be allowed to proceed without restriction." In addition, the analysis of potential impacts to cultural resources conducted for the Hilton Garden Inn located at the northeast corner of Storke Road/Hollister Avenue determined that grading, soil compaction, foundation construction, and utility installation would not result in a significant impact on cultural resources even though very limited shellfish fragments were recovered during Extended Phase 1 backhoe trenching. Based on conclusions of the previous investigations for those projects, the proposed off-site improvements along Cortona Drive would occur in previously disturbed areas over 500 feet southwest of the intact CA-SBA-54 deposits. Therefore, the proposed off-site street frontage improvements would not have the potential to result in significant impacts to intact archaeological resources.

Potential Impact Determination. As described by the analysis presented above, it is unlikely that excavations and other ground disturbing activities that would occur at the proposed project site, and that are required for the installation of the proposed underground tie line, would result in impacts to previously identified cultural resources. However, the project would have the potential to result in significant impacts to cultural resources should on-site or tie line construction-related ground disturbing activities encounter previously undetected cultural resources. Although it is considered unlikely for the proposed project to encounter previously undetected cultural resources, there is also a potential for artifacts important to the Native American community and/or isolated, fragmentary human remains to be encountered during the construction of the project. Potential project-related impacts that may result from the unexpected discovery of cultural resources would be reduced to a less than significant level with the implementation of Mitigation Measures CR-1 through CR-5, described below. With the implementation of these mitigation measures, the project's potential to result in the physical demolition, destruction, relocation, or alteration of cultural resources would be reduced to less than significant.

The construction of proposed project would also result in the loss of access to significant archaeological materials located on the project site. This significant indirect impact of the project would be reduced to a less than significant level with the implementation of Mitigation Measure CR-3.

As described above, the construction of proposed street frontage improvements along Cortona Drive would not have the potential to result in significant impacts to cultural resources. Therefore, no mitigation measures are required for the proposed street improvements component of the project.

iv. Cumulative Impacts

The proposed project would implement measures (i.e., covering portions of the project site that are known to contain cultural resources with fill soil) to minimize the potential for significant impacts to cultural resources located on the project site. In addition, proposed mitigation measures identify specific requirements to reduce the potential for disturbing cultural resources and identify actions that must be implemented in the event that resources are detected. Since the potential for the project to impact intact cultural resources is low, and mitigation measures would be implemented to reduce unanticipated impacts to a less than significant level, the project would not result in cumulatively considerable impacts to cultural resources and its potential cumulative impacts would not be significant.

v. Mitigation Measures and Recommended Conditions of Approval

Potential project-related impacts to on-site cultural resources would be reduced to a less than significant level with the implementation of Mitigation Measures CR-1, CR-2, CR-3, CR-4, and CR-5. These required mitigation measures specify requirements related to: construction monitoring; the placement of proposed fill material over portions of the project site to protect cultural resources; conducting a data recovery program at the project site; conducting a pre-construction workshop for construction personnel; and the preparation and implementation of a Construction Monitoring and Treatment Plan.

The following mitigation measure shall be required to ensure that potential impacts to cultural resources are reduced to less than significant. The requirements of Mitigation Measures CR-1 through CR-5 are proposed by the applicant.

Mitigation Measure CR-1: Construction Monitoring. A City-approved archaeologist and local Chumash consultant shall monitor the initial grading and excavation for project construction, and off-site grading and excavation associated with the underground utility line between the project site and the SCE substation on the west side of Storke Road, until such a time as sufficient subsurface soil has been uncovered/excavated to ascertain that no prehistoric archaeological cultural resources are located in the improvement areas. The monitor(s) shall have the following authority:

a. The archaeological monitor(s) and Chumash monitor(s) shall be on-site during any earthmoving activities, including preparation of the area for capping, grading, trenching, vegetation removal, or other excavation activities. The monitors shall continue their duties until it is determined through consultation with the applicant, City Planning and Environmental Review Director or designee, archaeological consultant, and Chumash consultant that monitoring is no longer warranted. A written request which describes justification for the reduction or cessation of monitoring shall be submitted to the City Planning and Environmental Review Director or designee for review and approval.

b. The monitor(s) shall halt any activities impacting previously unidentified cultural resources and conduct an initial assessment of the resource(s).

c. If an artifact is identified as an isolated find, the monitor(s) shall recover the artifact(s) with the appropriate locational data and include the item in the overall inventory of the site.

d. If a feature or concentration of artifacts is identified, the monitor(s) shall halt activities in the vicinity of the find, notify the applicant and City staff and prepare a proposal for the assessment and treatment of the find(s). This treatment may range from additional study to avoidance, depending on the nature of the find(s).

e. The monitor(s) shall prepare an archaeological technical report documenting the results of the monitoring program and include an inventory of any recovered artifacts, features, etc.

f. If artifacts are identified and recovered, the monitor(s) shall prepare the artifact assemblage for curation with an appropriate curation facility (e.g., UCSB) and include an inventory with the transfer of the collection.

g. The monitor(s) shall file an updated archaeological site survey record with the UCSB Central Coast Information Center.

Timing: These requirements must be printed on all plans submitted for any land use, zoning clearance, building, grading, or demolition permits. Before the City issues permits for any ground disturbance, the Applicant/Permittee must provide the City Planning and Environmental Review Director the contact information of the Chumash consultant and the agreed upon procedures to be followed.

Monitoring/Reporting Party(ies): The Planning and Environmental Review Director, or designee, shall be notified of archaeological resources that are discovered during site construction operations. The Planning and Environmental Review Director, or designee, must confirm that the County Coroner is notified in the event human remains are found, and that the Native American Heritage Commission is contacted if the remains are of Native American Chumash origin.

Mitigation Measure CR-2: Culturally Sterile Fill Material Placement Requirements.

1. Placement of fill soils over CA-SBA-54 archaeological site soils within the Project area shall include the following surface preparation and fill soils placement measures:
   a. Removal of all organic material from the archaeological site surface and a 50-foot buffer shall be done by hand (including brushing, raking, or use of power blower). Use of motorized vehicles for vegetation removal shall be prohibited. All vegetation shall be removed at ground surface.

   b. Remaining root balls and masses in the ground after hand removal of vegetation stems/trunks shall be sprayed with topical pesticide per manufacturers specifications to ensure no further growth. The resulting dead subsurface vegetation masses shall be left in place.

c. Subsequent to revegetation removal, the archaeological site areas shall be professionally surveyed to create a precise topographic contour map representing the baseline, pre-fill condition.

d. Any grading activities within the delineated archaeologically sensitive area will be designed considering both the documented depth of identified cultural material and the precise topographic contour map. No grading will occur in a manner that creates less than a 20 cm (8 inch) buffer between proposed ground disturbances and the identified intact A Horizon.

e. A bioaxial geogrid (Tensar BX1200TX 160 or equivalent) shall be laid over the ground surface throughout the CA-SBA-54 site area and a 50-foot buffer on all side of the cultural resource. The geogrid shall be capable of preventing compaction and load impacts on underlying archaeological resources. The geogrid type and verification of its technological capability shall be provided by a qualified geotechnical engineer.

f. Placement of fill soils on top of the geotextile shall be done in no greater than 8-inch lifts with rubber-tired equipment.

g. The first six inches of fill shall be a construction sand with contrasting color and texture that signals to anyone engaged in any future activity (e.g., landscaping, utilities maintenance activity) that excavation shall not extend deeper than the protective upper soil layer. In the small area where placement of six inches of fill is not feasible due to the engineering design required to maintain the structural stability of the Fire Access Road with Modified Hammerhead Turnaround, the geogrid shall be sufficient to signal that excavation shall not extend deeper.

h. Fill soils shall be free (sterile) of archaeological resources.

i. Fill soils shall be spread from outside of the archaeological site deposit with small rubber-tired equipment, such that the equipment shall only be working on top of the fill soils. The fill soils shall be placed ahead of the equipment so that the equipment does not have contact with the archaeological site surface.

j. The fill soils shall be sufficiently moist so that they shall be cohesive under the weight of the equipment as the material is spread out over the archaeological site and buffer area.

k. Fill soils will be placed so that no less than a 20 cm (8 inch) buffer exists between the deepest extent of plantings and the identified intact cultural deposit. The depth of fill will depend on the extent of grading that occurs pursuant to mitigation measure 1.d.

2. All fill soils to be used within the proposed Project area shall be chemically compatible with the existing native soils within the area of CA-SBA-54 within the proposed Project site.

3. The transitional area of grading between the CA-SA-54 boundary, which shall be capped in place and filled to reach final elevations, and the areas outside the CA-SBA-54 boundary, which would undergo over-excavation, re-compaction, and fill, shall be conducted with methods to protect the integrity of the preserved archaeological boundary from adjacent subsurface grading activity. The permittee shall develop a grading plan that includes, but is not limited to:
    a. A qualified archaeologist shall be consulted on the appropriate delineation boundaries.
    b. A typical cross-section diagram that clearly illustrates the grading methods to be employed along these boundaries, temporary grading elevations, bottom of excavated area, and any slopes or shoring, and finished elevations.
    c. The top of the cut or slope shall be sufficiently outside the delineated archaeological boundary to prevent inadvertent disturbances to resources.

Timing: This requirement must be printed on all plans submitted for any land use, building, grading, or demolition permits. Before the City issues permits for any ground disturbance, the Applicant/Permittee must provide the City Planning and Environmental Review Director the contact information of the Chumash consultant and the agreed upon procedures to be followed.

Monitoring/Reporting Party(ies): The Planning and Environmental Review Director, or designee, shall site inspect to verify the placement of required fill soil.

Mitigation Measure CR-3. Data Recovery Program. Indirect impacts resulting from a project-related loss of access to significant archaeological materials associated with CA-SBA-54 can be reduced to a less than significant level by implementing a Limited Phase 3 Data Recovery Program.

1. The Limited Phase 3 Data Recovery program shall include the following:
    a. A Limited Phase 3 Data Recovery Program shall be prepared, peer reviewed, and approved by the City Planning and Environmental Review Director or designee prior to the beginning of any excavation. The Program shall include a research design and require description and interpretation of the excavation results.

    b. Soil excavated from an appropriately sized unit, based on the volume of the intact CA-SBA-54 deposit that is being capped with fill soil and in consultation with the Native American community, shall be excavated by hand, in 20-centimeter (8-inch) levels and water screened through 1/8-inch mesh. The unit shall be appropriately sized to allow hand excavation to be extended to the entire deposit.

    c. Standard archaeological techniques shall include a “column sample” at least 50 X 50 centimeters (19.5-inch square). The “column sample” shall be excavated such that it can be wet screened through 1/16-inch mesh.

    d. The faunal remains recovered from the “column sample” shall be sorted, cataloged, and analyzed by a specialist who can identify the specific shell and bone species that are represented.

e. Diagnostic, time-sensitive artifacts (i.e., projectile points, shell beads) shall be cataloged separately.

f. Chipped stone waste flakes shall be analyzed to characterize different activities that occurred within the site (e.g., patterns in artifact distribution).

g. Radiocarbon dates shall be analyzed to date the subsistence remains that are analyzed.

h. If appropriate obsidian artifacts are recovered, samples will be submitted for sourcing and hydration analysis.

i. All of the cultural materials shall be curated at either of the two professional curation facilities within Santa Barbara County: the Santa Barbara Museum of Natural History or the Repository for Archaeological and Ethnographic Collections at UCSB.

j. A report shall be prepared that documents the results of the excavations and laboratory activities. The report shall include all necessary artifact photographs, excavation unit profiles, tabulated data, and artifact catalog. The report shall also address research questions about coastal Chumash environments and interpret intra-site as well as inter-site patterning of artifacts and activities at CA-SBA-54. The report shall include an updated CA-SBA-54 site record detailing the results of the Extended Phase 1 Archaeological Investigation (Dudek 2018) and the Limited Phase 3 Data Recovery Program. The report shall be peer reviewed and approved by the City Planning and Environmental Review Director or designee.

Timing: A Limited Phase 3 Data Recovery Program research design report, including identification of the City-qualified archaeologist and Chumash Native American observer who would conduct the Program, shall be prepared in consultation with appropriate tribal leaders/representatives. The research design report shall be submitted to the City for review and approval prior to and as a condition precedent to issuance of any Zone Clearance for the project.

Monitoring/Reporting Party(ies): The completed and peer reviewed Limited Phase 3 Data Recovery Program report shall be submitted to and approved by the City Planning and Environmental Review Director or designee prior to building permit sign-off. The approved report shall also be submitted to the Central Coast Information Center.

Mitigation Measure CR-4. Pre-Construction Workshop. A pre-construction workshop shall be conducted by a City-qualified archaeologist and a Chumash Native American consultant. Attendees shall include the project applicant, City Planning and Environmental Director or designee, construction supervisors, and equipment operators to ensure that all parties understand the monitoring program and their respective roles and responsibilities. All construction personnel who would work during any phase of ground disturbance associated with on-site grading and excavation, and off-site grading and excavation associated the underground utility line between the project site and the SCE substation on the west side of Storke Road, shall be required to attend. The names of all personnel who attend the workshop shall be recorded. The workshop shall:

- Explain why monitoring is required and identify monitoring procedures.

- Describe what would temporarily stop construction and for how long.
- Describe a reasonable "worst case" new discovery scenario such as the discovery of intact human remains.
- Explain reporting requirements and responsibilities of the construction supervisor.
- Discuss prohibited activities including unauthorized collecting of artifacts.
- Identify the types of archeological materials that may be uncovered and provide examples of common artifacts to examine.

Timing: This requirement must be printed on all plans submitted for any land use, Zoning Clearance, building, grading, or demolition permits. The Applicant/Permittee must enter into a contract with a City-approved archaeologist and Applicant/Permittee- selected Chumash consultant and must fund the provision of on-site archaeological/cultural resource monitoring during initial grading and excavation activities before Zoning Clearance. Plan specifications for the monitoring must be printed on all plans submitted for grading and building permits. The contract should be executed at least two weeks prior to the LUP issuance or Zoning Clearance for grading.

Monitoring/Reporting Party(ies): Evidence that the training occurred and the names of the persons participating in the training shall be provided to the Planning and Environmental Review Director prior to the start of ground-disturbing activities.

Mitigation Measure CR-5. Construction Monitoring Treatment Plan. A Construction Monitoring Treatment Plan shall be developed and implemented to ensure that any new discoveries are adequately recorded, evaluated, and, if significant, mitigated. The Construction Monitoring Treatment Plan shall provide the following:

- All ground disturbances associated with on-site grading and excavation, and off-site grading and excavation associated the underground utility line between the project site and the SCE substation on the west side of Storke Road, shall be monitored by a City-qualified archaeologist and Chumash Native American observer.
- Procedures for notifying the City and other involved or interested parties in case of a new discovery. The qualified archaeologist and Chumash Native American consultant shall have the authority to temporarily halt or redirect construction in the vicinity of any potentially significant discovery to allow for adequate recordation and evaluation.
- Preparation and approval of a plan that identifies procedures that shall be used to record, evaluate, and mitigate unanticipated discoveries with a minimum of delay.

- Procedures that shall be followed in case of discovery of human remains. In the event that isolated human remains are encountered, consultation with the most likely Native American descendant, pursuant to Public Resources Code sections 5097.97 and 5097.98, shall apply.
- Results of the monitoring program shall be documented in a technical report after completion of all ground disturbances.

Timing: A completed Construction Monitoring Treatment Plan, including identification of the City-qualified archaeologist and Chumash Native American consultant, shall be submitted to the City for review and approval prior to and as a condition precedent to issuance of any

Zone Clearance for the project. The Construction Monitoring Treatment Plan shall be written in consultation with the tribal leaders/representatives and approved by the City of Goleta.

Monitoring/Reporting Party(ies): The Planning and Environmental Review Director, or designee, shall verify compliance before issuance of the Land Use Permit and shall periodically perform site inspections to verify compliance with the approved work program.

vi. Residual Impact

With the implementation of Mitigation Measures CR-1, CR-2, CR-3, CR-4, and CR-5, potential project-related impacts to cultural resources would be less than significant.

F. ENERGY

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

i. Existing Setting

Energy used in the City of Goleta is provided by the Southern California Gas Company and by Southern California Edison (SCE). Several SCE substations are located within the City, including the Hollister Avenue and Isla Vista substations. The proposed Goleta Energy Storage project would be connected to the Isla Vista Substation.

The only electricity generating facility in the City is the Ellwood "peaking station" located on Las Armas between Hollister Avenue and the railroad tracks. The station consists of two 27-megawatt natural gas-fired combustion turbines with a total generating capacity of 54 megawatts. The station is permitted to operate 24 hour per day and up to 400 hours per calendar year. The station is generally operated for short durations of time to address peak demand and stability needs of the local electric grid. In 2017, the California Public Utility Commission denied a proposal to refurbish the station and to extend its operation for an additional 30 years.

Existing structures on the proposed project site that require energy include the 60,068 square foot research and development building, which would remain on the project site. A small shed that is located on the proposed energy storage facility site and would be removed as part of the project. It is not expected that the shed results in a substantial demand for energy resources.

The City's General Plan Conservation Element Implementation Action 5 (CE-IA-5); 2014 Climate Action Plan (CAP); and 2012 Energy Efficiency Action Plan, each identify measures to effectively meet State of California established greenhouse gas (GHG) reduction targets and energy efficiency goals, as articulated in Assembly Bill 32 (AB 32) and the California Public Utilities Commission's (CPUC) Long-Term Energy Efficiency Strategic Plan and implemented in the California Building Code Titles 20 and 24.

In December 2017, the City of Goleta City Council adopted a goal of 100 percent renewable electricity supply for the City by 2030 with an interim goal of 50 percent renewable electricity for municipal facilities by 2025. The City of Goleta has partnered with the County of Santa Barbara and the City of Carpinteria to develop a Strategic Energy Plan (SEP) to meet these goals and improve the resiliency of the local electricity system by promoting local renewable energy development and energy efficiency deployment. The SEP was completed in June 2019, with the objective of meeting the City's 100 percent renewable electricity goals and

address resiliency concerns by promoting renewable energy development in Goleta in the following ways:

1. Identifying the gap in forecasted electricity demand and baseline growth in renewable energy and energy efficiency to determine the necessary scope of the City's actions.

2. Identifying a set of policy measures and strategies in diverse program areas ranging from drafting regulatory frameworks to creating new financing mechanisms.

3. Evaluating the ability of these policy measures and strategies towards closing this gap and meeting the City's 100% renewable electricity goals.

4. Identifying total resource potential for distributed solar development in Goleta on rooftops and parking lots.

5. Creating a list of priority sites for renewable energy development throughout Goleta.

In recent years, the City has taken several steps toward achieving these goals, including, but not limited to, initiation of the PV solar system to be located at Goleta City Hall, securing grant funding for the EAP, and approval of Santa Barbara County's first 100 percent off-grid solar-powered electric vehicle charger for installation at City Hall in the summer of 2021.

ii. Thresholds of Significance

Thresholds of significance for energy use have not been established in the City's Environmental Thresholds and Guidelines Manual. The project would be expected to have a significant impact on energy use if it demonstrably resulted in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation or conflict or obstruct a plan for renewable energy or energy efficiency as discussed in the CEQA Guidelines Appendix G Checklist above.

iii. Project-Specific Impacts

The proposed project includes a request for the approval of a Parcel Map that would divide the existing 5.88-acre project site parcel lot into two lots. Proposed Lot 2 would continue to be occupied by an existing 60,068 square foot research and development building and associated parking and landscaping. The Parcel Map would not result in changes to existing energy use conditions on proposed Lot 2. The following evaluation of potential energy impacts focuses on impacts that have the potential to result from the development of the proposed Goleta Energy Storage facility, which would be located on proposed Lot 1 on the northern portion of the project site.

Checklist Items a and b. Less than Significant Impact.

Energy used during construction of the energy storage project would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles and machinery. Grid power may also be temporarily used by construction trailers or electric construction equipment. Energy use during construction would be temporary, approximately four months in duration, and construction equipment used would be typical of construction projects in the region. Furthermore, in the interest of cost efficiency, construction contractors would not

utilize fuel in a manner which is wasteful or unnecessary. Therefore, construction of the project would not result in a potential impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and the project would result in less than significant short-term energy use impacts.

The proposed project would expand SCE's access to energy storage systems, which would increase the stability and reliability of the existing electrical grid, thereby reducing the need for additional electricity to be generated by fossil fuel power plants during peak energy demand hours. The energy storage capacity of the proposed project would also facilitate the use of renewable energy sources (such as solar energy). The implementation of the proposed project would also be consistent with the objectives of the City's SEP, as the project would facilitate the use of renewable solar power by storing energy generated during daytime hours for subsequent use during peak energy use periods and when solar power cannot be produced.

Operation of the proposed project would require the use of energy for equipment such as cooling fans, remote monitoring, on-site lighting, and vehicles used by employees for periodic inspections of the facility. Estimated energy use by the proposed MegaPacks is approximately 674 megawatt hours (MWhrs), which is equivalent to the annual energy use of approximately 102 homes in California. The annual energy provided by the MegaPacks is approximately 87,600 MWhs or the equivalent of supplying the annual energy demand of approximately 13,257 CA homes (SEPPS, 2020). Therefore, the proposed project would not use energy in a wasteful, inefficient, or unnecessary manner, and the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the project would have a less than significant long-term energy use impact.

iv. Cumulative Impacts

The proposed project would result in an increase in energy use when compared to the existing energy use of the small plant nursery located at the project site on proposed Lot 1. The amount of energy used by the battery storage project after it is operational would not be substantial and would not be cumulatively considerable. Further, the purpose of the proposed project is to store energy during times of low demand and release it back to the grid during peak periods, and the project's energy use would be substantially offset by the energy storage benefits of the project. Also, once the battery storage project is operational, there will be an effort to decommission the existing gas-fired "peaking station," which was denied a permit by the Public Utilities Commission to upgrade the station. Overall, the proposed project would promote the use of renewable solar energy, and the project's energy use impacts would not be substantial or significant. Therefore, the project's cumulative energy impacts would be less than significant.

v. Mitigation Measures and Recommended Conditions of Approval

The project would not result in significant energy use impacts. No mitigation measures are required.

vi. Residual Impact

No mitigation measures are required. The project would not result in significant residual energy use impacts.

G. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X		
ii. Strong seismic ground shaking?			X		
iii. Seismic-related ground failure, including liquefaction?			X		
iv. Landslides?			X		
b. Result in substantial soil erosion or the loss of topsoil?			X		
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?			X		
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?			X		
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?				X	
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X		

The evaluation of potential geology and soils is based, in part, on the analysis, conclusions, and recommendations included in the *Update of Geotechnical Engineering Report, Goleta Energy Storage, 6864 and 6868 Cortona Drive, Goleta, California,* prepared by Earth Systems Pacific (2019). Information provided by the report is summarized below. The complete report is provided as Attachment 4.

i. Existing Setting

The project site is underlain by Quaternary age older alluvium (GP/CLUP FEIR Figure 3.6-1, September 2006). The northern portion of the project site that would be used for the construction of the proposed energy storage project has soils designated as "cut and fill soils" by the USDA. (USDA, 1981). Most of the project site is relatively level with elevations that range from approximately 50 feet above sea level in the northern portion of the site to approximately 38 feet in the southern portion. An embankment along the western perimeter of the site was constructed for the Storke Road overpass over U.S. 101 and ranges from approximately five (5) to 30 feet in height.

The project site is located in a seismically active region of Southern California that has experienced ground motion in response to earthquakes in the past. All of the City of Goleta is located within Seismic Zone D as designated by the California Uniform Building Code.

ii. Thresholds of Significance

A significant impact on geology/soils would occur if the proposed project resulted in any of the impacts noted in the above checklist. The City's *Environmental Thresholds and Guidelines Manual* stipulates that a proposed project would result in a potentially significant impact on geological processes if:

Threshold GEO-1. the project, and/or implementation of required mitigation measures, could result in increased erosion, landslides, soil creep, mudslides, and/or unstable slopes.

In addition, impacts related to geology have the potential to be significant if the project involves any of the following characteristics:

Threshold GEO-2. The project site or any part of the project is located on land having substantial geologic constraints, as determined by the City of Goleta. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion.

Threshold GEO-3. The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to 1 vertical.

Threshold GEO-4. The project proposes construction of a cut slope over 15-feet in height as measured from the lowest finished grade.

Threshold GEO-5. The project is located on slopes exceeding 20% grade.

iii. Project-Specific Impacts

The proposed project includes a request for the approval of a Parcel Map that would divide the existing 5.88-acre project site parcel lot into two lots. Proposed Lot 2 would continue to be occupied by an existing 60,068 square foot research and development building and associated parking and landscaping. The Parcel Map would not result in changes to existing environmental conditions on proposed Lot 2 that would have the potential to result in significant geology- and soils-related impacts. The following evaluation of potential geology and soils impacts focuses on impacts that have the potential to result from the development

of the proposed Goleta Energy Storage facility, which would be located on proposed Lot 1 on the northern portion of the project site.

Checklist Items* a.i and ii, and Threshold GEO-2*. Less than Significant Impact

There are no designated Alquist-Priolo faults zones in the City of Goleta. The fault closest to the project site is an unnamed inactive fault located south of and adjacent to the project site that trends northwest to southwest (GP/CLUP Figure 5-1, Geologic Hazards Map dated Nov. 2009). An inactive fault is a fault that does not show evidence of movement in the past 2.5 million years. The north branch of the More Ranch Fault is approximately 3,700 feet south of the project site. Therefore, there is a low potential for the project site to be adversely affected by fault rupture hazards and potential impacts would be less than significant.

It is likely that the proposed project will experience strong ground shaking sometime during the life of the project. Potentially significant earthquake-related ground shaking may result from movement along a local fault or a major earthquake along a more distant fault. Similar to other development that has occurred in the City and in the project region, potential ground shaking-related impacts can be reduced to a less than significant level by conducting required project-specific geotechnical investigations, using foundation and building design measures included in the Earth Systems Pacific Geotechnical Report, and compliance with applicable regulations and design standards. The proposed structures would be required to implement the requirements of the most recent California Building Code, as adopted by the Goleta Municipal Code. Further, the project proposes no habitable structures and would not expose people to the potential risk of loss, injury, or death. Therefore, potential ground shaking impacts would be less than significant.

Checklist Items* a.iii and c, and Thresholds GEO-1 and GEO-2*. Less than Significant Impact

The geotechnical engineering report prepared for the project concluded that the potential for liquefaction at the project site is very low, and total and differential settlement attributed to seismically induced settlement of dry sand could reach 0.75 inches and 0.375 inches, respectively. Preliminary geotechnical recommendations included in the report for foundation construction would reduce potential effects of liquefaction and ground settlement to a less than significant level.

Checklist Items* a.iv, and Thresholds GEO-3 and GEO-4*. Less than Significant Impact

The proposed energy storage facility project site is relatively level and slopes gently to the south. The embankment along the western portion of the project site that was developed for the construction of the Storke Road/U.S. Highway 101 overpass is a 2 (vertical) :1 (high) slope (50 percent gradient) with a maximum height of approximately 30 feet. The proposed underground tie line that would connect the proposed energy storage project to the SCE Isla Vista Substation located on the west side of Storke Road would be constructed using directional drilling beneath the Storke Road right-of-way, which would not disturb the existing overpass slope. In addition, all work including the underground tie line in the Storke Road right-of-way would be required to comply with the SCE franchise agreement and SCE easement from the City. The proposed project would not result in the creation of cut or fill slopes on the project site that would have the potential to result in a significant landslide impact.

Checklist Item b, and Threshold GEO-2. Less than Significant Impact

The majority of proposed energy storage facility project site has been previously disturbed. The soils on the project site consist of layered sandy soils, except for a thin layer of clay soil that was observed between the sand soil layers in one on-site boring (Earth Systems Pacific, 2019). The project would involve approximately 800 cubic yards cut and approximately 4,000 cubic yards of fill. Grading would be primarily to create level foundations for proposed equipment and to construct a proposed on-site stormwater detention basin.

Construction activities involving soil disturbance, such as excavation, stockpiling, and grading, could result in erosion. However, soil erosion due to construction would be minimized by compliance with the City's grading ordinance and implementation of erosion-control best management practices (BMPs). In addition, the project site is approximately 2.6 acres in size, therefore, the project applicant would be required to file a Notice of Intent to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The Construction General Permit requires the development of a Stormwater Pollution Prevention Plan (SWPPP) to reduce erosion and topsoil loss from stormwater runoff. Compliance with the requirements set forth in these permits would require the proposed project to implement BMPs during construction and prevent substantial soil erosion or the loss of topsoil. The project-specific SWPPP would include additional erosion control BMPs, such as covering of stockpiles, use of desilting basins, limitations on work during high-wind events, and post-construction revegetation and drainage requirements. With implementation of construction BMPs and SWPPP, potential short-term erosion-related impacts would be reduced to a less than significant level.

Upon the completion of construction activities, the project site would be landscaped or covered with non-erosive surfaces. In addition, the proposed stormwater detention basin would also minimize the potential for off-site discharges of sediments. Therefore, the project would not be a significant long-term source of sediment discharges.

Checklist Item d and Threshold GEO-2. Less than Significant Impact

The geotechnical engineering report prepared for the project did not indicate that soils at the project site would have the potential to result in expansive soil-related impacts. It is expected that any expansive soil impacts at the project site would be reduced to a less than significant level by implementing the foundation design recommendations included in the report.

Checklist Item e. No Impact

The proposed project would not include the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

Checklist Item f. Less than Significant Impact

Table 3.5-1 (Geologic Formations with Potential Paleontological Resources) of the GP/CLUP FEIR shows that "scattered occurrences of terrestrial mammal fossils" have the potential to occur in the Quaternary age older alluvium that underlies the project site. The proposed project site has been extensively disturbed and the project would not require extensive grading. Therefore, the potential for the discovery of a unique fossil is considered to be low,

and the project would result in a less than significant impacts to paleontological resources. There are no unique geological features located on the project site.

iv. Cumulative Impacts

Cumulative development in the City would expose new residents and property to geologic and soil-related hazards. However, such impacts would be addressed on a project-by-project basis through preparation of required soils and geotechnical engineering studies and adherence to the recommendations therein, as well as adherence to existing City and state regulations including the California Building Code. Because the potential impacts associated with the proposed project would be less than significant, and impacts from future projects would be addressed on a case-by-case basis, the project's contribution to cumulative impacts would be less than significant.

v. Mitigation Measures and Recommended Conditions of Approval

The energy storage project would not result in significant geology- or soils-related impacts and no mitigation measures are required to reduce project-related impacts to a less than significant level.

The following recommended condition of approval includes requirements to ensure potential project-related impacts are reduced to a less than significant level.

1. **Recommended Condition of Approval: Geotechnical Recommendations.** All grading and earthwork recommendations from the project's geotechnical engineering report, including any updates, shall be incorporated into the final project design, including the final grading, foundation, utility, and infrastructure plans. All grading activities shall be supervised by a registered civil engineer or certified engineering geologist**.**

Plan Requirements and Timing: Final grading, foundation, utility, and infrastructure plans shall be reviewed and approved by City staff prior to approval of a grading permit.

Monitoring: The Planning and Environmental Review Director, or designee, shall verify compliance prior to any grading permit approval. Public Works staff shall periodically spot check in the field.

vi. Residual Impact

No mitigation measures are required. The project would not result in significant residual soils and geology impacts.

H. GREENHOUSE GAS EMISSIONS

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

i. Existing Setting

The project site is located south of the Union Pacific Railroad tracks and U.S. 101, east of and adjacent to Storke Road, and west of Cortona Drive. The southern portion of the project site is adjacent to Cortona Drive. The southern portion of the project site (6868 Cortona Drive) is developed with a 60,068 square foot research and development building and associated parking. The northern portion of the project site has been developed with a parking lot that serves the industrial and commercial uses located east of and adjacent to the project site.

Climate Change Background

Parts of the Earth's atmosphere act as an insulating "blanket" for the planet. This "blanket" of various gases traps solar energy, which keeps the global average temperature in a range suitable for life. The collection of atmospheric gases that comprise this blanket are called "greenhouse gases," based on the idea that these gases trap heat like the glass walls of a greenhouse. These gases, mainly water vapor, carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), ozone (O3), and chlorofluorocarbons (CFCs), all act as effective global insulators, reflecting visible light and infrared radiation back to earth. Most scientists agree that human activities, such as producing electricity and driving internal combustion vehicles, have contributed to the elevated concentration of these gases in the atmosphere. As a result, the Earth's overall temperature is rising.

Climate change could impact the natural environment in California by triggering, among other things:

- Rising sea levels along the California coastline;
- Extreme-heat conditions, such as heat waves and very high temperatures, which could last longer and become more frequent;
- Increase in heat-related human deaths, an increase in infectious diseases, and a higher risk of respiratory problems caused by deteriorating air quality;
- Reduced snow pack and stream flow in the Sierra Nevada mountains, affecting winter recreation and water supplies;
- Potential increase in the severity of winter storms, affecting peak stream flows and flooding;

- Changes in growing season conditions that could affect California agriculture, causing variations in crop quality and yield; and
- Changes in distribution of plant and wildlife species due to changes in temperature, competition from colonizing species, changes in hydrologic cycles, changes in sea levels, and other climate-related effects.

According to the US Environmental Protection Agency (EPA), a GHG is any gas that absorbs infrared radiation in the atmosphere. This absorption traps heat within the atmosphere creating a greenhouse effect that is slowly raising global temperatures. California law defines GHG to include the following: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6) (Health and Safety Code, § 38505(g)).

The effect each GHG has on climate change is measured as a combination of the volume of its emissions, and its global warming potential (GWP), and is expressed as a function of how much warming would be caused by the same mass of CO2. Thus, GHG emissions are typically measured in terms of pounds or tons of CO2 equivalents (CO2e), and are often expressed in metric tons of CO2 equivalents (MT CO2e) or millions of metric tons of CO2 equivalents (MMT CO2e).

Global climate change issues are addressed through the efforts of various federal, state, regional, and local government agencies as well as national and international scientific and governmental conventions and programs. These agencies work jointly and individually to understand and regulate the effects of greenhouse gas emissions and resulting climate change through legislation, regulations, planning, policy-making, education, and a variety of programs. The significant agencies, conventions, and programs focused on global climate change are listed below.

- Federal U.S. Environmental Protection Agency
- California Air Resources Board
- California Executive Order S-3-05
- California Executive Order S-13-08
- California Global Warming Solutions Action of 2006 (AB 32)
- Senate Bill (SB) 97. SB 97, enacted in 2007
- State of California Climate Change Proposed Scoping Plan
- Senate Bill (SB) 375. SB 375
- Santa Barbara County Air Pollution Control District (APCD)
- 2006 City of Goleta General Plan/Coastal Land Use Plan (GP/CLUP) Conservation Element
- 2014 City of Goleta Climate Action Plan
- City of Goleta Energy Efficiency Standards

The City's (GP/CLUP) Conservation Element Implementation Action 5 (CE-IA-5) and 2014 Climate Action Plan Energy Efficiency Action Plan (CAP) identifies measures to effectively meet State of California established greenhouse gas (GHG) reduction targets and energy efficiency goals, as articulated in Assembly Bill 32 (AB 32) and the California Public Utilities Commission's (CPUC) Long-Term Energy Efficiency Strategic Plan and implemented in the California Building Code Titles 20 and 24.

According to the CAP, energy consumption by the City's built environment will represent 43 percent community emissions in 2020. Implementation of measures reducing electricity usage and improving energy performance, therefore, are vital to the City's CAP. The CAP identifies 13 building energy measures (eight energy efficiency measures) with the goal of reducing GHG emissions through lower electricity and natural gas use. The measures include implementing the City's adopted "reach code" (November 2010) which requires new building efficiency 15 percent to "reach" beyond Title 24 building code energy efficiency measures, financing programs for both residential and commercial energy retrofits, urban forest management, programs for residential and commercial solar, and Community Choice Aggregation (CCA) to encourage use of renewable energy use and the resultant realization of a reduction in GHG.

ii. Thresholds of Significance

CEQA Guidelines section 15064.4 requires a lead agency to make a good-faith effort, based to the extent possible on scientific and factual data to describe, calculate, or estimate the amount of GHG emissions resulting from a project. The Guidelines give discretion to the lead agency to determine whether to:

1. Quantify GHG emissions resulting from a project, and/or
2. Rely on a qualitative analysis or performance-based standards.

The State Natural Resources Agency adopted amendments to the CEQA Guidelines for GHG emissions that became effective on December 28, 2019. Those CEQA Guidelines amendments provide regulatory guidance on the analysis of GHG emissions in CEQA documents.

The revisions to CEQA Guidelines section 15064.4(2)(b) clarify that in determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change.

A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. In addition, section 15064.4(2) (b) and (c), in summary, state that a lead agency should consider the following factors, among others, when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and

3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Neither the State of California nor the City of Goleta have established CEQA significance thresholds for GHG emissions. In June 2010, the Bay Area Air Quality Management District (BAAQMD) became the first regulatory agency in the nation to approve guidelines that establish thresholds of significance for GHG emissions. Since adoption, the BAAQMD thresholds have withstood.[1] These thresholds are summarized in Table GHG-1.

Table GHG-1
Bay Area Air Quality Management District GHG Thresholds of Significance

GHG Emission Source Category	Operational Emissions
Commercial and Residential (land use projects)	1,100 Metric Ton (MT) CO_2e/yr. or 4.6 MT CO_2e/SP/yr. [a]
Stationary Sources[b]	10,000 MT CO_2e /yr.
Source: Santa Barbara County Planning & Development Department, *Support for Use of Bay Area Air Quality Management District Greenhouse Gas Emissions Standards. Interim GHG Emissions – Evidentiary Support*, June 10, 2010. [a] SP = Service Population (residents + employees). [b] Stationary Sources include stationary combustion sources (industrial-type uses) regulated by the APCD.	

On June 10, 2010, the Santa Barbara County Planning & Development Department produced a memorandum "*Support for Use of Bay Area Air Quality Management District Greenhouse Gas Emissions Standards,"*[2] which states, "While Santa Barbara County land use patterns differ from those in the Bay Area as a whole, Santa Barbara County is similar to certain Bay Area counties (in particular, Sonoma, Solano, and Marin) in terms of population growth, land use patterns, General Plan/Coastal Land Use Plan policies, and average commute patterns and times. Because of these similarities, the methodology used by BAAQMD to develop its GHG emission significance thresholds, as well as the thresholds themselves, have applicability to Santa Barbara County and represent the best available interim standards for Santa Barbara County." In accordance with CEQA Guidelines §§15064.4(b)(2), and 15064.7(c), the City has consistently relied upon Santa Barbara County's "*Support for Use of Bay Area Air Quality Management District Greenhouse Gas Emissions Standards,"* as the expert recommended threshold for establishing greenhouse gas impacts of a project.

The City of Goleta is located in Santa Barbara County and shares meteorological attributes, as well as similar land use patterns and policies. As such, thresholds deemed applicable in Santa Barbara County would also reasonably apply to projects within the City of Goleta. Therefore, this analysis uses the BAAQMD/Santa Barbara County Interim Thresholds of Significance to determine the significance of GHG emissions related to this project, based on

[1] On December 17, 2015, the California Supreme Court reversed the Trial Court ruling on *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 and remanded the substantive question of whether the BAAQMD's 2010 Air Quality CEQA Guidelines were valid back to the Court of Appeals for a decision. The BAAQMD published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion. The GHG thresholds remained unchanged from the previous version.

2 Santa Barbara County Planning & Development Department, *Support for Use of Bay Area Air Quality Management District Greenhouse Gas Emissions Standards*. *Interim GHG Emissions – Evidentiary Support*, June10, 2010.

the 1,100 MT CO_2e/year or 4.6 MT CO_2e per service population per year threshold for commercial and residential land uses. There is no BAAQMD threshold of significance for construction emissions.

The Santa Barbara County Board of Supervisors adopted interim GHG emissions thresholds of significance on January 26, 2021. The interim thresholds apply to all non-exempt projects and plans, other than industrial stationary source projects, subject to discretionary approvals by the County. The interim thresholds for land use projects and plans are based on the County's 2030 GHG emissions target (i.e., 50 percent below 2007 levels by 2030). The thresholds framework consists of a numerical threshold (Screening Threshold) and, an efficiency threshold (Significance Threshold). The Screening Threshold is 300 metric tons of carbon dioxide equivalent (MTCO2e) per year. Land use projects and plans with GHG emissions below the Screening Threshold would have a less than significant impact from GHG emissions. The Significance Threshold is an "efficiency" threshold of 3.8 MTCO2e per year, per the service population of the project or plan.

It should be noted that the use of the BAAQMD thresholds and/or the County of Santa Barbara thresholds do not imply that they are a threshold that the City has formally adopted or should adopt as a GHG emissions significance threshold.

iii. Project-Specific Impacts

Given the global character of climate change resulting from GHG emissions, GHG emission impacts are inherently a cumulative impact. Accordingly, the determination of whether a project's GHG emissions impacts are significant depends on whether those emissions would make a cumulatively considerable contribution to a significant cumulative impact. This is assessed in the Cumulative Impacts section below.

iv. Cumulative Impacts

The proposed project includes a request for the approval of a Parcel Map that would divide the existing 5.88-acre project site parcel lot into two lots. Proposed Lot 2 would continue to be occupied by an existing 60,068 square foot research and development building and associated parking and landscaping. The Parcel Map would not result in changes to existing environmental conditions on proposed Lot 2 that would have the potential to result in significant greenhouse gas emission impacts. The following evaluation of potential greenhouse gas emission impacts focuses on impacts that have the potential to result from the development of the proposed Goleta Energy Storage facility, which would be located on proposed Lot 1 on the northern portion of the project site.

The project's unmitigated short- and long-term GHG emissions were estimated using the CalEEMod 2016.3.2 computer model (Rincon Consultants, Inc, January 22, 2020) and a memo titled *Supplemental Air Quality and Greenhouse Gas Modeling Results for the Goleta Energy Storage, LLC Project, 6864 and 6868 Cortona Drive, Goleta, California;* Rincon Consultants, Inc, 2020 (Attachments 2 and 5).

Checklist Item a. Less than Significant Impact

The estimated emissions include direct and indirect emissions resulting from the operation of the project, as well as the GHG emissions from project construction and decommissioning. Table GHG-2 presents the estimated carbon dioxide equivalents (CO_2, N_2O, and CH_4 emissions) emission impacts of the project.

Construction and Decommissioning

It is estimated that project-related construction activities would generate approximately 251 MT CO2e. Construction GHG emissions are typically summed and amortized over the life of the project, which for the energy storage facility is assumed to be approximately a 20-year period, then added to the operational emissions. Amortized construction emissions would be approximately 12.5 MT CO2e/yr.

It is estimated that project-related decommissioning activities (i.e., removal of the proposed Megapacks and related site improvements in 2040) would generate approximately 155 MT CO2e. Amortized decommissioning emissions would be approximately 7.8 MT CO2e/yr.

Mobile Sources

Mobile emission associated with the project would result primarily from vehicle trips resulting from occasional site inspection and maintenance operations. GHG emissions from project-related mobile sources are estimated to be approximately 0.1 MT CO2e/yr.

Energy Consumption

The project's energy use would result primarily from the operation of on-site equipment. Electricity would be provided to the project site by Southern California Edison. GHG emissions from the project's energy use are estimated to be approximately 181.3 MT CO2e/yr.

Water Demand

The project's water use would be primarily for site maintenance and landscape irrigation. GHG emissions associated with project-related water use are estimated to be less than 0.1 MT CO2e/yr.

The project would not result in substantial emissions of GHG resulting from waste generation or area sources.

As shown in Table GHG-2, the total amount of project-related unmitigated GHG emissions from all sources combined would total approximately 202.6 MT CO2e/year. Therefore, the project's GHG emissions would not exceed the BAAMQD 1,100 MT CO2e/year threshold that has been utilized by the City, or the recently adopted County of Santa Barbara threshold of 300 MT CO2e/year. Therefore, the project would result in a less than significant greenhouse gas emissions impact.

Table GHG-2
Unmitigated Greenhouse Gas Emissions

Source	Estimated Metric Tons of CO_2e
Construction (amortized over 20 years)	12.5
Decommissioning (amortized over 20 years)	7.8
Mobile Sources CO_2 and CH_4 N_2O	 1.0 <0.1
Electricity Usage	181.3
Water Demand	<0.1
Total Estimated GHG Emissions	**202.6 MT CO_2e**
BAAQMD GHG Emission Significance Threshold	**1,100.0 MT CO_2e**
County of Santa Barbara Screening Threshold	**300 MT CO_2e**
Thresholds Exceeded?	***No***

Source: CalEEMod 2016.3.2, and Rincon, 2020

Checklist Item b. Less than Significant Impact

The City's CAP is a framework to reduce GHG emissions in the community. To achieve this, the Plan identifies a range of measures to improve energy efficiency, increase the use of renewable energy, reduce vehicle miles traveled, reduce water consumption, increase the use of alternative fuels, and to reduce solid waste disposal. The proposed project would expand SCE's access to energy storage systems, which would increase the stability and reliability of the existing electrical grid and reduce the need for additional electricity to be generated by fossil fuel power plants during peak hours. The energy conservation achieved by the project would reduce fossil fuel consumption, thereby reducing GHG emissions from the electricity sector. Therefore, the project would be consistent with the intent of the CAP to increase the use of renewable energy and the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

v. Mitigation Measures and Recommended Conditions of Approval

The project would not result in significant project-specific or cumulative greenhouse gas emission impacts. No mitigation measures are required.

vi. Residual Impact

No mitigation measures are required. The project would not result in significant residual greenhouse gas emission impacts.

I. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X		
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?			X		
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X	
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?			X		
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?			X		
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X		
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X		

i. Existing Setting

A records search through the Regional Water Quality Control Board (RWQCB) GeoTracker data base (http://geotracker.waterboards.ca.gov, accessed May 8, 2020) showed that the existing building on the southern portion of the project site (6868 Cortona Drive) was used by a previous building occupant (Joslyn) for research and development, manufacturing, and other related uses from 1964 to 2002. Since 1992 numerous subsurface investigations at the project site identified the presence of chlorinated volatile organic compounds in soil and groundwater. Since 2000, various contamination remediation programs have been

implemented at the site, including groundwater extraction and treatment to control off-site contamination migration. In 2004 a soil vapor extraction system was installed, and in 2014 an in-situ bioremediation program was initiated. The RWQCB reports that the project site contamination remediation case remains open and is eligible for closure.

Potential environmental hazards associated with the proposed project site are evaluated in a report titled *Phase 1 Environmental Site Assessment, 6868 Cortona Drive, Goleta, Santa Barbara County, California (*Dudek, 2019). The Assessment describes the history of the project site, efforts to remediate groundwater and soil contamination at the project site that resulted from previous operations conducted by the Joslyn Corporation, other reported contamination sites in the project area, and potential environmental hazards located on and near the project site. The Assessment did not reveal evidence of recognized environmental concerns associated with the proposed energy storage project site. The complete Phase 1 Environmental Site Assessment is provided as Attachment 6.

The project site is located northwest of the Santa Barbara Municipal Airport. The airport runway approach zone nearest the project site extends to the west from the western end of the airport's main runway. In the vicinity of the project site, the approach zone boundary is located along Hollister Avenue, approximately 340 feet south of the project site and approximately 780 feet south of the proposed energy storage facility (GP/CLUP Figure 5-3, November 2009).

ii. Thresholds of Significance

A significant impact with regards to hazards and hazardous materials would be expected to occur if the project resulted in any of the impacts noted in the above checklist. In addition, the City's *Environmental Thresholds and Guidelines Manual* addresses public safety impacts resulting from involuntary exposures to hazardous materials. These thresholds focus on activities that include the installation or modification of facilities that handle hazardous materials, transportation of hazardous materials, or non-hazardous land uses in proximity to hazardous facilities.

The City has adopted CEQA thresholds that are used to assist in classifying the significance of impacts to public safety. The thresholds are based on quantitative measures of risk. If a proposed project has the potential to expose the public to toxic or flammable pollutants, then a risk assessment must be undertaken. The thresholds are applicable to a number of industry types including the "use" of specified quantities of regulated substances pursuant to Title 19 of the California Code of Regulations (the CalARP regulations), or materials that could vaporize or evaporate quickly upon release and could cause risk to the public. Although the proposed project does not "use" any of the substances on the Title 19 list, a number of toxic and flammable substances on the Title 19 list could be emitted if the proposed energy storage batteries were to experience a malfunction. Therefore, if a battery malfunction could cause the release of specified pollutants and the release could impact the public, a detailed risk analysis is required.

iii. Project-Specific Impacts

The proposed project includes a request for the approval of a Parcel Map that would divide the existing 5.88-acre project site parcel lot into two lots. Proposed Lot 2 would continue to be occupied by an existing 60,068 square foot research and development building and associated parking and landscaping. The Parcel Map would not result in changes to existing environmental conditions on proposed Lot 2 that would have the potential to result in significant hazard-related impacts. The following evaluation of hazard impacts focuses on impacts that have the potential to result from the development of the proposed Goleta Energy Storage facility, which would be located on proposed Lot 1 on the northern portion of the project site.

Checklist Items a and b. Less than Significant Impact

Potential Short-Term Building Demolition Impacts

The proposed project would result in the demolition of a small structure that is used as a pottery studio. Demolition of the structure would have the potential to result in the release of asbestos fibers if asbestos-containing materials are present. Exposure to asbestos-containing materials has the potential to result in significant short-term impacts to construction workers and other persons at or near the project site. The management of asbestos-containing waste is regulated by a number of local, state and federal agencies. The Santa Barbara County Air Pollution Control District (APCD) issues permits for building renovation/demolition projects that involve the removal of asbestos-containing materials. APCD Rule 1001 – National Emission Standards for Hazardous Air Pollutants – Asbestos provides notification and reporting requirements related to potential emissions of asbestos fibers. A required APCD demolition notification must be submitted at least 10 days prior to any structure demolition operations. Any asbestos-containing material removed from the building must be transported from the project site in accordance with regulations adopted by the U.S. Department of Transportation, and the material must be disposed in a manner consistent with requirements of the California Department of Toxic Substance Control. Compliance with existing regulations regarding the removal, handling, transportation, and disposal of asbestos-containing waste would be adequate to reduce potential project-related health and safety impacts resulting from potential exposure to asbestos emissions to a less than significant level.

Potential Project-Related Health and Safety Impacts

The potential for the proposed project to result impacts to public health and safety are evaluated in a report titled *Hazards Analysis and Risk Assessment Final Report, Goleta Cortona Drive Energy Storage Project* (MRS Environmental, May 17, 2021). This report evaluates the potential for a "reasonable worst case" incident to occur at the project site, and also evaluates potential health- and safety-related consequences of such an event.

Several versions of the Hazards Analysis and Risk Assessment Report were prepared and peer reviewed by PTrutner Fire Protection Engineering. The original Report was dated October 18, 2019. A revised report dated January 27, 2020 was submitted, and peer review comments were provided in a letter dated June 5, 2020. In response to the peer review comments a revised report dated June 24, 2020, was submitted and peer review comments on that report were provided in an email sent to the City on July 15, 2020. A fourth version of

the Risk Assessment dated September 21, 2020 was submitted to the City and additional peer review comments were provided in a letter dated December 16, 2020. In response to those comments an updated Risk Assessment Report dated January 21, 2021, was submitted and peer review comments on that report were provided in a letter dated March 3, 2021. Responses to the peer review comments were accepted by PTrutner Fire Protection Engineering on April 14, 2021. The final version of the *Hazards Analysis and Risk Assessment Report* is dated May 17, 2021, and is included in this Initial Study/Mitigated Negative Declaration as Attachment 7. Peer review comments on the Report are included as Attachment 8.

Background Information

The lithium nickel cobalt aluminum batteries that would be used by the proposed project are subject to numerous codes and standards established or adopted by the State, Underwriters Laboratories (UL), National Fire Protection Association (NFPA), and the Institute of Electrical and Electronics Engineers (IEEE). Some of the applicable codes and standards are identified and briefly described below. Additional information regarding these regulations is provided in Attachment 7.

UL9540: Safety for Energy Storage Systems. This requirement addresses the inherent design and performance.

UL9540A: Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems. This test methodology evaluates the fire characteristics of a battery energy storage system that undergoes thermal runaway.

UL1973: Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail Applications. This standard evaluates the battery system's ability to safely withstand simulated abuse conditions.

IEEE C2: This Code covers basic provisions for safeguarding of persons from hazards arising from the installation, operation, or maintenance of (1) conductors and equipment in electric supply stations, and (2) overhead and underground electric supply and communication lines.

California Fire Code 608 and International Fire Code: Specifies maximum limits on sizing for battery systems, seismic and structural design, spacing, vehicle impact protection, testing, maintenance and repairs, and other items.

NFPA 1: The General NFPA Fire Code addressing extracts from other NFPA codes.

NFPA 13: Standard for the Installation of Sprinkler Systems.

NFPA 70: National Electrical Code, addresses electrical design, installation, and inspection.

NFPA 550: Guide to Fire Safety Concepts Tree for Protecting Energy Systems.

NFPA 855: Standard for the Installation of stationary Energy Storage systems.

OSHA NRTL. The Occupational Safety and Health Administration Nationally Recognized Testing Laboratory program recognizes private sector organization to perform certification for certain products to ensure they meet applicable standards.

Nearby Land Uses

Land uses located in the vicinity of the proposed Goleta Energy Storage facility are identified below on Table HHM-1.

Table HHM-1
Land Uses in the Project Vicinity

Land Use	Direction	Approximate Closest Distance to Proposed Battery Storage Cabinets (feet)
Parking Area / Ornamental Fence	south	18
Property Line	east	28
Apartments under construction	north	67
M-Special Brewery building	east	100
Storke Road	west	100
6868 Cortona (R&D building)	south	210
6860 Cortona (R&D building)	east	240
Residences west of Storke Road	west	270
Hotel	south	500

Source: MRS Environmental, 2021

Assessment Methodology

A brief summary describing how the risk assessment of the proposed energy storage project was prepared is provided below. Please refer to Attachment 7 for additional information regarding the risk assessment methodology.

The proposed battery energy storage project would not result in air emissions during normal operation. However, in the event of a battery cell malfunction, such as a thermal runaway reaction or external impact event, the project could emit pollutants to the atmosphere. In the event of a battery cell malfunction, emissions could be generated due to elevated temperatures within a single battery storage cell or group of storage cells caused by a runaway reaction. When lithium-ion batteries experience high over-temperature, strong overcharge, or suffer damage, they can transit into a so-called “thermal runaway.” During the thermal runaway, the battery temperature increases due to exothermic (heat releasing) reactions. In turn, the increased temperature accelerates and the system destabilizes. At the end of the thermal runaway, battery temperatures higher than 1,000 C can be reached and flammable and toxic gases can be released.

The risk assessment evaluated a reasonable “worst-case” event at the project site, defined as a control system failure or a puncture of a module, similar to that conducted as part of the UL 1973 testing, which could cause a runaway reaction in a group of battery cells. The proposed battery storage system would be equipped with monitoring and control systems that would prevent and/or control battery cell malfunctions. However, to determine an unlikely, but reasonable worst-case public health impacts for this analysis, it is assumed that these control systems fail and do not control the battery cell malfunction.

Different battery cell malfunctions could produce emissions. Potential malfunctions would include: (1) an elevated temperature situation due to a runaway reaction with no combustion (venting with no combustion); (2) combustion of the battery due to an elevated temperature situation from a runaway reaction. Studies have shown that a localized runaway reaction with combustion produces the greatest emissions. Emissions would occur both during the pre-combustion phase and during the combustion phase. During the pre-combustion phase, the off gassed materials would contain flammable and toxic materials. During the combustion phase, most of the off gassed materials would be combusted and would contain only low levels of flammable gasses. The off gassed toxics would also be combusted, but a different array of toxic combustion products, mostly from the combustion of the plastics used in the MegaPacks, would be produced. In addition, during combustion, the heat of combustion would produce substantial plume buoyancy, thereby causing the materials to rise into the air.

Two reasonable worst-case battery failure scenarios are addressed by the Risk Assessment Report: the loss of 10 percent of the cells within a MegaPack module (multicell event), and the loss of an entire MegaPack. For the multi-cell event malfunction scenario, it is assumed that the release of pollutants to the atmosphere would occur all within one hour as a reasonable worst case. While emissions could occur over a longer period of time, a worst-case analysis is produced if the same quantity of pollutants are released over a shorter period of time, thereby increasing the emission rates and increasing the downwind distance and potential impacts. For the MegaPack event, it is assumed that the pollutants are released over a 3.5-hour duration, which is the duration of the UL9540A large-scale fire test.

In addition, as part of the UL 1973 requirements, battery malfunctions and punctures are required to have limited cascading capabilities. Therefore, it is unlikely that an entire battery module or groups of modules would be involved in a single event. Therefore, as a reasonable worst-case, it is assumed that only 10 percent of the cells in a single module would be involved in the battery malfunction.

Battery malfunctions can result in the release of toxic materials and/or the release of a flammable gas mixture and subsequent flammable gas vapor cloud with subsequent fire or explosion. For lithium-ion batteries, the primary toxic pollutants and flammable components that could be released due to a battery malfunction are shown on Table HHM-2. Please refer to Section 4.0 (Assessment Methodology) of the project's Risk Assessment Report (Attachment 7) for additional information regarding toxic pollutant exposure guidelines, emission characteristics from lithium-ion battery malfunctions, and emission flammability characteristics.

Table HHM-2
Potential Battery Malfunction Pollutants and Components

Potential Toxic Pollutants from Battery Malfunctions		Potential Flammable Components from Battery Off Gassing	
• Carbon Monoxide	• Phosphine	• Acetylene	• Pentanes
• Hydrogen Chloride	• Phosphorous Pentafluoride	• Butane	• Propane
• Hydrogen Cyanide	• Phosphoryl Fluoride	• Ethane	• Propene
• Hydrogen Fluoride	• Styrene	• Ethylene	
• Methanol	• Sulfur Dioxide	• Hydrogen	
• Nitrogen Oxides	• Toluene	• Methane	

Source: MRS, 2021

Risk Assessment Evaluation

Potential project-related health and safety impacts resulting from a reasonable worst-case battery malfunction were evaluated using both health risk screening and modeling approaches. The Santa Barbara County APCD screening approach was used to evaluate the potential for acute (i.e., effects caused by the initial exposure to hazardous substances) health risks. For this analysis, a total score of below 1.0 is considered to be a less than significant impact, and a total score above 1.0 requires additional analysis to determine if a significant impact may occur. Additional health risk screening was conducted using models to assess potential impacts at off-site locations.

To evaluate potential project-related fire impacts, modeling was conducted to determine distances that flammable vapor clouds could travel resulting from a battery malfunction under different meteorological conditions. Flammable impacts would be less than significant if vapor cloud fires or explosions do not impact adjacent receptors. Additional analysis is required if flammable vapors could impact adjacent receptors.

Potential Toxic Impacts. Potential human health impacts associated with the project could result from exposure to air emissions from a battery cell malfunction. The reasonable worst-case scenario would involve the battery malfunctions associated with off gassing and combustion. A summary of the evaluation included in the project's May 17, 2021 Hazards Analysis and Risk Assessment is provided below, and the detailed evaluation calculations are provided in Attachment 7.

As shown by testing done in accordance with the requirements of UL1973, in the event of a single battery cell undergoing thermal runaway there was no propagation (i.e., spread) to surrounding battery cells. In addition, the tests showed that when an entire battery module was force-ignited, there was no propagation to surrounding modules. The proposed project would contain many battery modules and the malfunction events are unlikely to occur. However, if a failure event were to occur, it would likely occur within a single or limited

number of battery cells as demonstrated by UL1973 testing. Therefore, the Risk Assessment Report analysis conservatively assumed that only 10 percent of the cells within a module would be affected as a reasonable worst-case analysis (i.e., a multicell malfunction). A less likely to occur worst-case scenario that was also evaluated consisted of a condition where thermal off gassing of all cells in a MegaPack occurred. The risk screening scores for the reasonable worst-case battery cell malfunction scenarios are shown on Table HHM-3.

The single-cell and multi-cell scenario risk screening results are below of a score of 1, indicating that those release scenarios would be less than significant. The MegaPack scenario score is above 1, indicating that additional analysis is required. Detailed risk screening calculations are provided in Attachment 7.

Table HHM-3
SBAPCD Criteria Health Risk Screening Results

Scenario	SBAPCD Guidelines Total Score
Single Battery Cell malfunction	0.0005
Multiple Battery Cell Malfunction (10% of cells)	0.69
Full MegaPack malfunction	33.5

Source: MRS, 2021

In addition to the SPAPCD health risk screening results, health risk modeling was conducted to evaluate potential impacts at nearby off-site locations. That modeling showed that potential public health impacts from toxic pollutants associated with the reasonable worst-case battery cell malfunction would be less than significant at nearby receptors that are not elevated above the project site, such as the M-Special Brewery that is adjacent to the project site to the east. However, the additional modeling showed that carbon monoxide levels could have the potential to result in health impacts at receptors that are elevated above the project site, such as the future Cortona Apartments adjacent to the project site to the north, or vehicles along Storke Road to the west of the project site. Therefore, a detailed quantitative risk analysis was conducted.

Flammable Vapor Impacts. Off gassed materials from a battery malfunction could generate a flammable vapor cloud and may produce a flammable gas mixture. The Lower Flammable Limit (LFL) and the ½ LFL were used as an estimate of the potential from flammable vapors. The Lower Flammable Limit is the lower end of the concentration range of a flammable gas, normally expressed in percentage by volume in air, that can ignite with air at normal temperature and pressure.

Distances for the LFL and the ½ LFL are estimated to be 9 and 15 feet, respectively, with a MegaPack event extending to 15-25 feet. Explosion distances to a 1 psi overpressure level, at which building glass would shatter or light injuries occur due to fragments are estimated to be less than the ½ LFL distance. Potential flammable vapor impacts of the project were further evaluated by a Quantitative Risk Assessment because flammable vapors resulting from a battery failure could extend beyond the project site boundaries.

Thermal Impacts. Impacts from a fire could produce thermal radiation (heat) that has the potential to affect areas near the fire and areas off-site. During the UL9540A testing, thermal radiation impacts were measured at both 20 and 30 feet from the MegaPack. During the test, the MegaPack produced a fire for a peak period of about 10 minutes (from minutes 38-43 and minutes 53-58 of the test). Peak heat levels at 20 feet during that period were 28.8

kW/m2 and averaged 19.1 kW/m2. Peak levels at 30 feet during that period were 9.8 kW/m2 and averaged 4.9 kW/m2. For reference purposes, Table HHM-4 shows different heat flux levels and associated impacts on humans and materials.

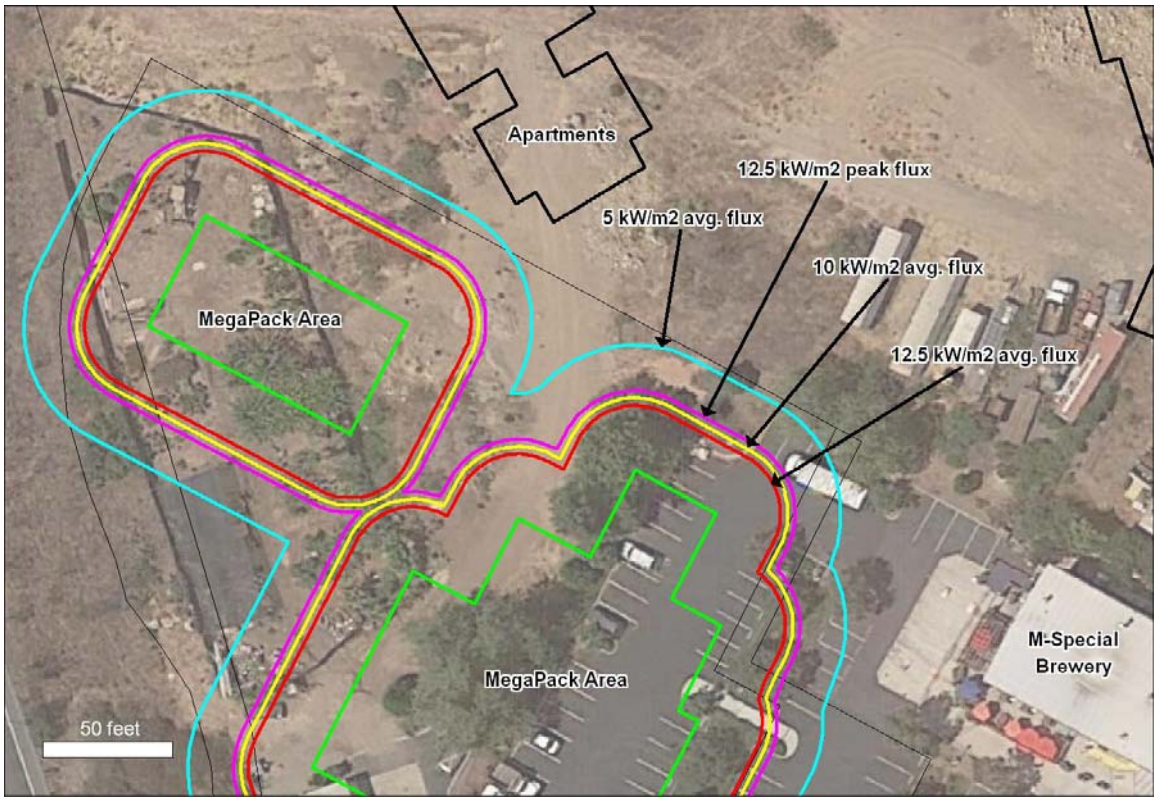
Table HHM-4
Thermal Flux Contour Estimates

Incident Flux (kW/m2	Duration	Impact
Impacts on Humans		
4.7	Multiple minutes	Emergency actions lasting several minutes can be performed without shielding
6.3	1 minute	Emergency actions lasting several minutes can be performed without shielding
10.0	20 seconds	Time to threshold of pain for bare skin Threshold for thermal Class IV
12.5	1 minute 10 seconds	1% fatalities First degree burns
15.8	1 minute 10 seconds	100% fatalities Significant injury from burns
25.0	10 seconds	1% fatality
Impacts on Materials		
12.5	Long exposure	Threshold for ignition of combustible materials (plastics and wood)
12.5 - 25	Long exposure	Wood ignites
20	< 30 seconds	Paper spontaneously ignites
20	250 seconds	Wood particle board ignites
27	Long exposure	Threshold for damage to non-combustible materials
35.0	1 minute	Cellulosic material will spontaneously ignite
35.0	< 30 seconds	Cloth spontaneously ignites
37.5	13 minutes	7mm steel plate failure
40.0	< 30 seconds	Wood spontaneously ignites

Source: MRS Environmental, 2021

Based on measurements during MegaPack testing, heat flux levels that could result from a thermal event could extend beyond the project site boundaries if the heat source was from a MegaPack located near the site boundary. Figure HHM-1 shows contours of average heat flux values at the project site that are representative of the potential for heat-related impacts. Figure HHM-1 also shows contours for a peak heat flux value of 12.5 kW/m2, which represents a threshold for material damage (i.e., a long exposure to this heat flux value may result in the combustion of plastic or wood). Thermal effects on the apartments to the north would range from 2.0 to 2.6 kW/m2 as a peak value, with the average ranging from 1.0 – 1.7 kW/m2. In addition, based on testing results, peak heat levels resulting from a battery malfunction would not occur until after approximately 38 minutes after fire ignition, which would provide first responders time to evacuate affected areas adjacent to the project site. Potential heat-related impacts to vegetation on and adjacent to the project site could be minimized by the application of water by responding fire trucks. Although heat-related impacts to off-site locations are not expected to be significant, battery malfunction heat-related impacts could have the potential to extend beyond the project site boundaries, therefore, potential heat-related impacts were also evaluated in a Quantitative Risk Assessment.

Figure HHM-1
Thermal Flux Contour Estimates



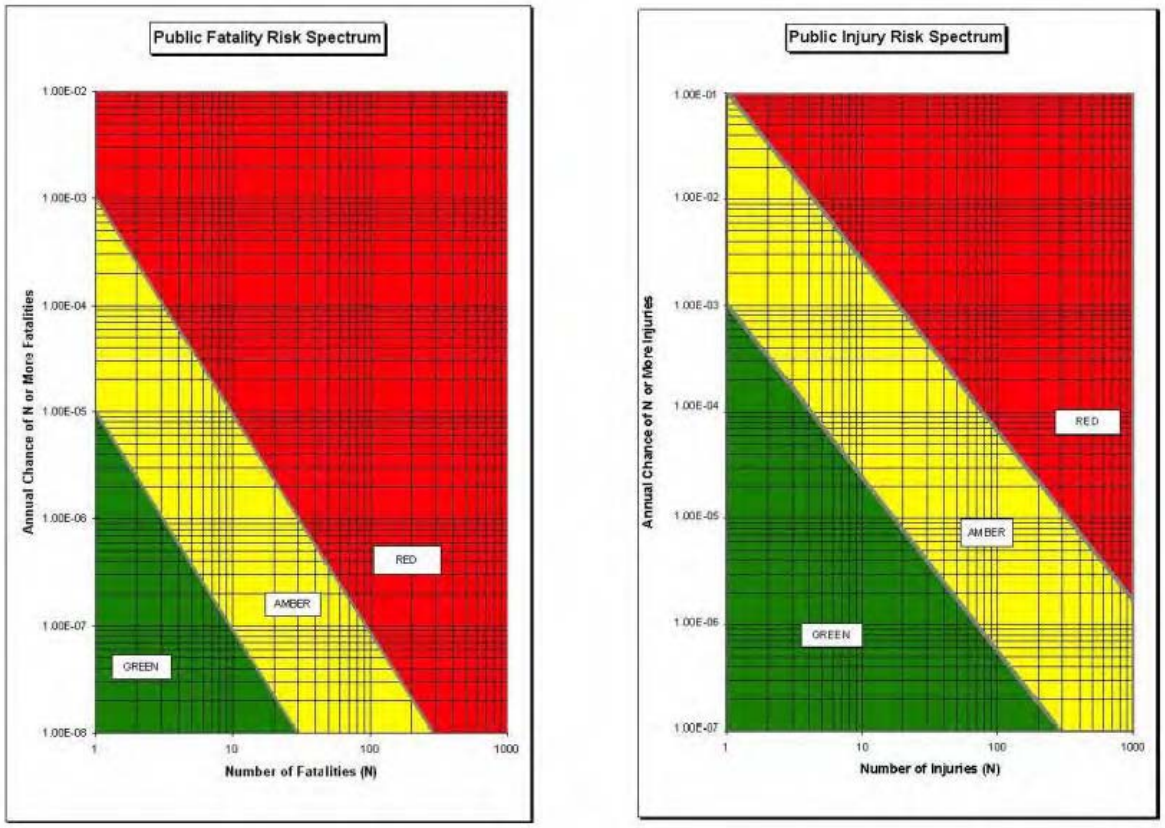
Source: MRS, 2021

In the unlikely event of a Megapack fire at the project site, water used for fire suppression purposes would have the potential to contain pollutants released from the combustion of the Megapack structure and the lithium-ion batteries contained within the structure. Additional analysis of potential fire suppression water quality impacts is included in Section J (Hydrology and Water Quality) below.

Quantitative Risk Assessment

A quantitative risk analysis involves assessing the potential impacts of exposing the public to flammable and toxic materials, in terms of fatalities and serious injuries, and then assessing the frequency that those scenarios could occur. The results are plotted on a frequency-cumulative number of occurrences plot (an FN curve). The City's thresholds of significance define areas on the FN curve that are considered acceptable and those areas that are considered unacceptable. Any areas in the "Green" region are considered acceptable and less than significant. The City thresholds FN curves are shown on Figure HHM-2.

Figure HHM-2
FN Curve Thresholds



Source: City of Goleta, *Environmental Thresholds and Guidelines Manual, 2003*

The hazards assessment involves the following four major tasks:

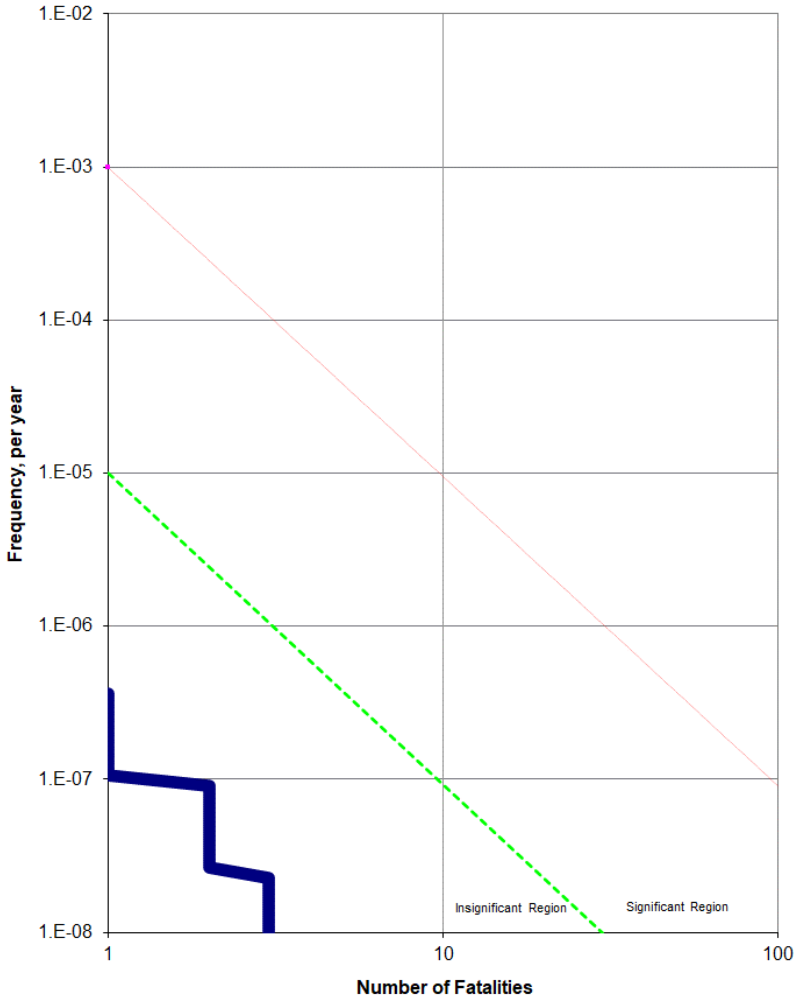
- Identification of release scenarios
- Determine the consequences of each release scenario
- Development of probabilities of occurrence for each release scenario that could impact the public, and
- Development of risk estimates (risk profiles, risk contours, risk matrix, etc.).

Modeling was performed to estimate the distances at which impacts would be experienced. For flammable impacts, exposure to vapor clouds and flash fires above the LFL are assumed to result in 100 percent fatalities if the cloud ignites, with a 10 percent rate of serious injury within the ½ LFL if the cloud ignites. For thermal impacts from fires, the assessment assumes 10 percent fatalities with heat levels above 10kw/m2 and 10 percent injuries the heat level exposure above 5kw/m2. Populations that could be exposed include areas at the M-Special Brewing Company, the parking lot areas to the south of the project site, Cortana Apartments that are currently under construction, and vehicles along Storke Road. Meteorological (i.e., wind direction) data used in the assessment are from the APCD Goleta

monitoring station for the years 2012 through 2016. Accident scenario frequencies were based on historical nation-wide data for similar battery installations, such as Tesla PowerPacks, which are smaller than the proposed MegaPacks but have similar design and operation characteristics.

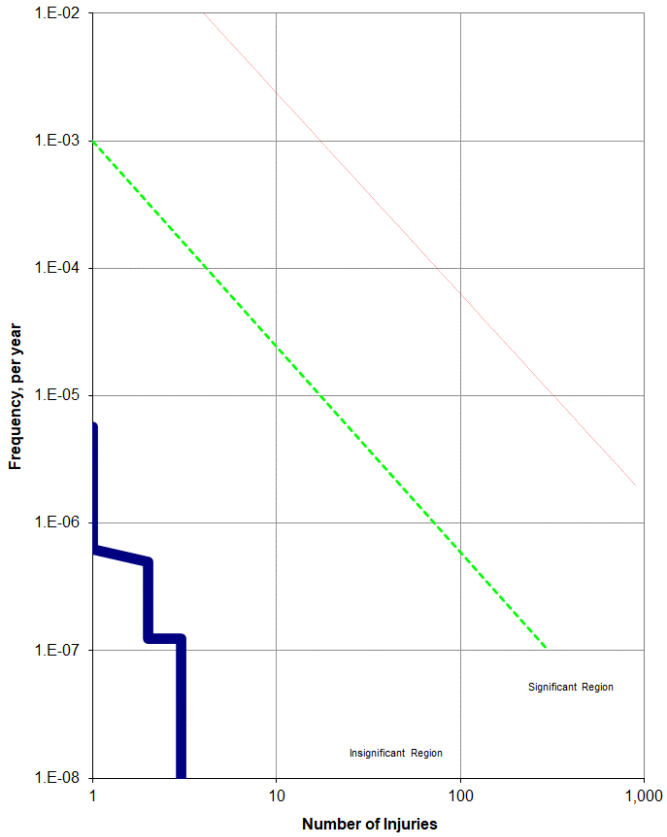
The results of the quantitative risk assessment are shown on Figures HHM-3 and HHM-4. Those Figures indicate that potential fatality and injury risk levels would be in the green "acceptable" region. In addition, the Risk Assessment report states that battery failures at the project site that produce out-gassing and would likely be addressed with the application of water by the Fire Department are estimated to have a probability of occurring once every 10,989 years. Therefore, the project's potential safety risk impacts would be less than significant

Figure HHM-3
Risk Assessment FN Curves – Number of Fatalities



Source: MRS, 2021

Figure HHM-4
Risk Assessment FN Curves – Number of Injuries



Source: MRS, 2021

Checklist Item c. No Impact

The project site is not located within 0.25 miles of a school. The nearest school is Dos Pueblos High School, located approximately 0.5-mile northwest of the project site. Additionally, project construction and normal operations would not result in hazardous emissions that would affect nearby schools. Therefore, the project would have no impact related to hazardous material emissions near a school.

Checklist Item d. Less than Significant Impact

Review of the State Water Resources Control Board GeoTracker database (SWRCB 2020) identified potential contamination sites located within 0.25 mile of the proposed energy storage project site. The reported contamination sites, which are summarized in Table HHM-5.

As described in the Setting subsection above, the southern portion of the project site (6868 Cortona Drive) has been impacted by a release of chlorinated volatile organic compounds (trichloroethylene). Remediation efforts that have been ongoing since 2000 have

substantially reduced contamination levels at the site. The proposed project would not result in new development on the southern portion of the site that may be affected by previous contamination issues, and the proposed energy storage project would not interfere with the operation of any existing or future remediation activities that may be required before the case is closed by the RWQCB. Therefore, potential impacts associated with the previous hazardous material release on the project site would be less than significant.

Table HHM-5
Potential Contamination Sites within 0.25 Mile of the Energy Storage Project Site

Site Name	Address	Type	Status
Joslyn Electronic Systems Corporation	6868 Cortona Drive	Cleanup Program Site (trichloroethylene)	Open – Eligible for Closure
Chevron SS #9-2580	6895 Hollister Avenue	LUST Cleanup Site	Completed – Case Closed
Chevron SS #9-2580	6895 Hollister Avenue	LUST Cleanup Site	Open – Site Assessment
Private Residence	Residential neighborhood east of Storke Road and north of Hollister Avenue	LUST Cleanup Site	Completed – Case Closed
Raytheon B-2 Facility	75 Coromar Drive	Cleanup Program Site (1,1,1-trichloroethane, dichloroethane, freon, lead, tetrachloroethylene, trichloroethylene)	Open – Remediation
Tosco – 76 SS#5241	6930 Hollister Avenue	LUST Cleanup Site	Completed – Case Closed
Unocal – SS#5241	6930 Hollister Avenue	LUST Cleanup Site	Completed – Case Closed

LUST = leaking underground storage tank

Source: California State Water Resources Control Board GeoTracker (https://geotracker.waterboards.ca.gov/)

Checklist Item e. Less than Significant Impact

As described in the Setting subsection above, the project site is located north of the Santa Barbara Municipal Airport Approach Zone. Project-related equipment would have a maximum height of approximately 30 feet, and as described in Section A (Aesthetics) above, the project would not result in significant lighting or glare impacts that would have the potential to interfere with aircraft operations. The proposed project would not provide habitable structures that would be affected by potential airport noise impacts. Therefore, the project would result in less than significant airport compatibility impacts.

Checklist Item f. Less than Significant Impact

Primary and secondary access to the energy storage project site would continue to be provided by two separate driveway connections to Cortona Drive. The project would not impede emergency access to the project site or other adjacent areas. As described in Section Q below (Transportation), the project would not generate a substantial amount of construction-related traffic or operation-related traffic. Therefore, the project would not substantially change the existing operation characteristics of the roads and intersection in the vicinity of the project site and would not interfere with access by emergency personnel.

Checklist Item g. Less than Significant Impact

The proposed energy storage project site and adjacent areas are located approximately two miles south of the nearest designated Very High Fire Hazard Severity Zone, as mapped by the California Department of Forestry and Fire Protection (CAL FIRE, 2007). The proposed project does not include structures that would accommodate permanent occupants such as residents or full-time employees. Therefore, the project would result in less than significant impacts related to wildland fires.

iv. Cumulative Impacts

Cumulative development from buildout under the Goleta GP/CLUP could result in the exposure of additional residents to hazardous substances, emissions, and risk of wildfire-related impacts. The hazards and hazardous material impacts of the proposed project would be minimized through compliance with existing standards related to the use of lithium ion batteries, and other regulatory programs. Future development in the project region would also be required to comply with applicable standards and regulations that minimize the potential for environmental impacts related to exposure to hazards and hazardous materials. By complying with existing development standards and regulations, the project's potential hazard-related impacts would not be cumulatively considerable and the project would result in less than significant cumulative impacts.

v. Mitigation Measures and Recommended Conditions of Approval

The energy storage project would not result in significant hazard-related impacts and no mitigation measures are required to reduce project-related hazards and hazardous materials impacts to a less than significant level.

The following recommended conditions of approval include measures recommended by the *Hazards Analysis and Risk Assessment Final Report* (MRS, May 17, 2021) prepared for the proposed project to further minimize potential project-related impacts.

Studies have shown that the potential for thermal runaway is a strong function of the level of charge of the batteries, with batteries that are charged below 50% exhibiting a lower potential for runaway and lower levels of off gassed volume given an external accident scenario. Therefore, when construction equipment is operating onsite, batteries that could be affected should be discharged to less than 30% state of charge in order to reduce the potential for thermal-runaway accidents. In addition, ensuring all batteries are protected from vehicle impacts would reduce the potential for accident scenarios associated with vehicle impacts.

Detection systems allow for efficient response coordination and rapid detection of potential issues of concern. Both flame detection and gas detection are recommended to ensure detection of a range of scenarios, with local and remote notifications.

An Emergency Operations Plan ensures procedures are in place to respond to emergency scenarios including notification to the local responders.

A Site Safety plan and associated audit would ensure that descriptions of detection systems and testing as well as training and a range of other issues are addressed and to ensure compliance with existing codes and standards.

1. **Recommended Condition of Approval: MegaPack Installation.** Proposed project plans must include the following project design and operation requirements:

    1. All batteries shall be discharged to below 30% state of charge (SOC) during the project's construction/installation phases.

    2. Any replacement or maintenance of batteries requiring the use of heavy construction equipment, such as cranes or forklifts, shall be conducted only on batteries discharged to below 30% SOC and nearby batteries that could be affected shall also be discharged to below 30% SOC.

    3. Vehicle impact bollards or equivalent shall be installed to reduce the potential for vehicle impacts (as per NFPA 855 section 4.3.7).

    4. Install detection systems for both flame and gas detection, being equal to or similar to the Det-Tronics x3302 flame and the Det-Tronic CGS gas detectors.

    5. Monitoring and detection systems shall alarm locally and both visually and audibly, shall be monitored by a 24-hour system and shall notify the local Fire Department. Indication shall be provided to responders indicating which Megapack is experiencing issues.

    Timing: These conditions must be printed on all project plans submitted for any land use, zoning clearance, building, grading, or demolition permits. Vehicle impact bollards installed on the project site must be depicted on the project site plan.

    Monitoring/Reporting Party(ies): The Planning and Environmental Review Director, or designee, must receive written confirmation that batteries transported to the project site comply with the specified battery state of charge requirements. The Planning and Environmental Review Director, or designee, shall confirm with the Fire Department that proposed bollard placement complies with the requirements of NFPA 855.

2. **Recommended Condition of Approval: MegaPack Operation and Safety Planning.** The following site safety plans and regulatory compliance documentation shall be prepared, submitted to the City for review and approval, and implemented at the project site throughout the life of the project.

    1. Develop an Emergency Operations Plan in compliance with sections of NFPA 855, including:

        a. procedures for safe shutdown, de-energizing and isolation of equipment under emergency situations;

        b. procedures for inspection and testing of alarms, interlocks, detection systems and controls including recordkeeping;

c. procedures to be followed in response to notification from the storage systems that could signify dangerous situations, including shutting down equipment and notification to the local fire department; and

d. procedures and schedules for conducting drills of the procedures.

2. Develop a Site Safety Plan prior to startup, that identifies and summarizes the design safety features identified in the Project description and measures required pursuant to the measures above. Measures required by the Fire Department shall be included in the Site Safety Plan. The Plan shall include a graphic depiction of Project safety features and equipment onsite, including but not limited to, the following:

   a. Fire prevention, detection, and suppression features, including:

      i. a description of the Battery Management System and the monitoring of alarms and battery cell conditions and thresholds for alarms;

      ii. flame and gas detection systems, including the location of detection, type of detection and the monitoring of alarms (NFPA 855 Section 4.10);

      iii. availability of water for fire fighting and compliance with Fire Department requirements for flow and availability (NFPA 855 Section 4.13);

   b. Emergency response procedures, including notification of local responders;

   c. Personnel safety training;

   d. Fire suppression and other safety features/equipment located at the site;

   e. Type and placement of warning signs;

   f. Emergency ingress and egress routes;

   g. Special safety measures to be implemented for battery installation and replacement, including disposal of replaced (discarded) equipment;

   h. Provisions and timing for updating the Plan to incorporate new or changed requirements;

   i. Control of vegetation (NFPA 855 Section 4.4.3.6);

   j. Security of installations (NFPA 855 Section 4.3.8);

   k. Access roads design (NFPA Section 4.3.8);

   l. Signage (NFPA Section 4.3.5); and m. Remediation measures (NFPA 855 Section 4.16) including authorized service personnel and fire mitigation personnel.

3. Provide a copy of an NFPA 855 compliance audit report to verify that the system is designed and built to comply with the NFPA 855 requirements prior to system startup.

4. Provide documentation indicating that batteries are listed in accordance with UL 1973 and listed in accordance with UL 9540.

5. Provide documentation that MegaPack batteries are located at least 10 feet from lot lines as per NFPA 855.

Timing: Each of the above requirements shall be completed prior to the start of project operation.

Monitoring/Reporting Party(ies): The Emergency Operations Plan, Site Safety Plan, NFPA 855 compliance audit, and evidence that the batteries installed at the project site are listed under UL 1973 and UL 9540, shall be submitted to the Planning and Environmental Review Director, or designee, and County Fire Department for review and approval.

vi. Residual Impact

No mitigation measures are required. The project would not result in significant residual hazards and hazardous material impacts.

J. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X		
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X		
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:			X		
i. result in substantial erosion or siltation on- or off-site;			X		
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X		
iii. create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or			X		
iv. impede or redirect flood flows?			X		
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X		

The evaluation of potential hydrology and water quality impacts is based on the analyses, conclusions, and recommendations included in reports titled *Drainage Analysis, 6868 Cortona Drive, City of Goleta, CA* (February 18, 2021); and *Stormwater Control Plan for 6868 Cortona Drive, Goleta, CA* (February 18, 2021). Both reports were prepared by Flowers & Associates, Inc., and are provided as Attachments 9 and 10. Potential project-related impacts to the quality of fire suppression water are based on information included in a report titled *Hazards Analysis and Risk Assessment Final Report, Goleta Cortona Drive Energy Storage Project* (MRS Environmental, May 17, 2021). This report is included as Attachment 7.

i. Existing Setting

The federal Clean Water Act and the California Water Code mandate controls on discharges from municipal separate storm sewer systems (MS4s). The California Water Resources Control Boards issue National Pollutant Discharge Elimination System (NPDES) permits that require cities, towns, and counties to regulate activities which can result in pollutants entering their storm drains or waterways. Municipalities implement comprehensive stormwater pollution-prevention programs. Municipal staff uses Best Management Practices (BMPs) when maintaining their own streets, storm drains, and municipal buildings.

The project site has an average slope of 1.9% and drains in a predominantly southeasterly direction. The majority of stormwater runoff flows southeasterly until draining onto an existing concrete gutter on proposed Lot 2 (6868 Cortona Drive), which then flows easterly and eventually discharges through the curb face onto Cortona Drive.

Proposed Lot 1 (6864 Cortona Drive) would be approximately 1.89 acres (net) in size. Existing development includes a 3,218 square foot shed, a concrete area adjacent to the shed, and paved parking lot area that would be removed as part of the proposed project. Existing impervious surfaces on proposed Lot 1 cover approximately 32,485 square feet, or 40 percent of the net lot area.

Proposed Lot 2 (6868 Cortona Drive) would be approximately 3.12 acres (net) in size. Existing development includes a research and development building with a 46,107 square foot footprint area, and 62,143 square feet of paved parking lot area. Existing impervious surfaces on proposed Lot 2 cover approximately 108,250 square feet, or 80 percent of the net lot area.

The project site is not located within a designated 100-year floodplain. The nearest floodplain area is associated with Glen Annie Creek and located north of U.S. 101 and approximately 1,000 feet east of the project site. Figure 5-2 of the City of Goleta General Plan also indicates that the project site is not within a potential tsunami runup area.

ii. Thresholds of Significance

A significant impact on Hydrology & Water Quality would be expected to occur if the proposed project resulted in any of the impacts noted in the above checklist. In addition, the City's *Environmental Thresholds & Guidelines Manual* assume that a significant impact on hydrology and water resources would occur if a project would:

Threshold HYD-1: Result in a substantial alteration of existing drainage patterns.

Threshold HYD-2: Alter the course of a stream or river.

Threshold HYD-3: Increase the rate of surface runoff to the extent that flooding, including increased erosion or sedimentation, occurs.

Threshold HYD-4: Create or contribute to runoff volumes exceed existing or planned stormwater runoff facilities, or substantially degrade water quality.

iii. Project-Specific Impacts

The proposed project includes a request for the approval of a Parcel Map that would divide the existing 5.88-acre project site parcel lot into two lots. Proposed Lot 2 would continue to be occupied by an existing 60,068 square foot research and development building and associated parking and landscaping. The Parcel Map would not result in changes to existing environmental conditions on proposed Lot 2 that would have the potential to result in significant hydrology or water quality impacts. The following evaluation of potential drainage and water quality impacts focuses on impacts that have the potential to result from the development of the proposed Goleta Energy Storage facility, which would be located on proposed Lot 1 on the northern portion of the project site.

Checklist Item a and Threshold HYD-3. Less than Significant Impact.

Short-Term Impacts. Project-related excavation, grading, and construction activities would result in soil disturbance. Stormwater flowing through a construction site can collect sediment, debris, and chemicals, and transport them to downstream receiving waters. As described in Section G (Geology and Soils) above, short-term water quality impacts would be minimized during all phases of construction through compliance with the Construction General Permit and the City's grading regulations. The Construction General Permit requires preparation and implementation of a project-specific SWPPP, which requires operators to implement pollution prevention controls to minimize the discharge of pollutants from stormwater and spilled or leaked materials. Such controls may include installation of silt fencing and sandbag barriers, covering of stockpiles, use of desilting basins, and post-construction revegetation and drainage requirements. The development and implementation of a SWPPP would be required as a part of the Construction General Permit. Therefore, proposed short-term construction operations would not violate any water quality standards or waste discharge requirements, and would minimize potential construction-related water quality impacts to less than significant.

Long-Term Impacts. A Stormwater Control Plan (Flowers & Associates, 2021) has been prepared for the proposed project consistent with the requirements of the Central Coast Regional Water Quality Control Boards Post-Construction Stormwater Management Requirements. Proposed stormwater facilities on the energy storage project site would convey all site stormwater easterly and southerly where it would discharge to a new bioretention basin located along the southern boundary of the project site. The proposed basin would be approximately 1,300 square feet in area, would have a volume of approximately 1,997 cubic feet, and would be designed to allow for six inches of ponded water. The proposed bioretention basin would treat and detain peak stormwater flows and maximize stormwater infiltration. Additional source control measures would be implemented to minimize discharges of pollutants, including: maintaining landscaping; using minimal or no pesticides; not allowing vehicle repair or maintenance outdoors; and maintaining the project site to prevent accumulations of litter and debris, (Flowers & Associates, Inc. 2021b). Therefore, proposed long-term site operations would not violate any water quality standards or waste discharge requirements, and would minimize potential water quality impacts from typical site operations to less than significant.

Potential Water Quality Impacts to Fire Suppression Water

Fire prevention systems to be provided at the project would include the use of energy storage battery cabinets that are designed to minimize the spread of a fire caused by a lithium-ion battery failure. However, on-site fire hydrants would be located on-site for fire suppression purposes. In the event that water is used at the project site to suppress a battery fire, the water could have the potential to contain contaminants from the damaged energy storage batteries. Potential impact to the quality of fire suppression water that may be used at the project site is provided below.

In the event of a Megapack fire and/or off gassing event at the project site, the Fire Department would likely apply water to the Megapacks to "knock down" smoke and/or off-gassed materials, and to also cool the surrounding Megapacks to reduce the potential for the fire to spread. The fire suppression water requirements could be substantial, and the water could become contaminated from off-gassed materials. In general, and based on the results of previous studies, the fire suppression water should be expected to pick up some contaminants and have some changes in pH. However, those changes would generally be expected to be similar to other industrial or building fires where plastics may be combusting.

Based on the results of previous large-scale fire testing, water may be applied to a Megapack fire for a duration as long as four (4) hours. With a Fire Department water application rate of approximately 1,500 gallons per minute, total water application over a four-hour period could be approximately 360,000 gallons. Fire suppression water runoff would be directed to the project's proposed stormwater bioretention basin, which would have a storage capacity of approximately 28,000 gallons. Therefore, the application of fire suppression water for a four-hour period would exceed the capacity of the bioretention basin and water would overflow into the storm drain system.

Studies on fire suppression water contamination associated with battery fires are limited. One study (DNVGL, 2017) conducted tests on batteries examining the most effective firefighting measures, and concluded that:

> *"for most tests the water runoff was slightly acidic measuring pH 6 - 7. In one case, however, the water became alkaline climbing to pH 10-11 after a few hours of submersion. This case was observed for a battery that was highly consumed in the fire".*

The application of water directly on the Megapack would not allow for direct contact of the water with the lithium-ion battery cells, as the batteries would be protected by the Megapack enclosure and their module shells. This protection effectively limits the extent to which water could become contaminated with battery elements. Changes to water quality or pH would, therefore, be limited under the scenarios associated with Megapack fire response activities. Although the DNVGL testing indicates high pH levels for one case, that one case was for a submerged battery in a static tub of water and is not representative of firefighting measures that would be employed at the project site.

Another study (NFPA 855 Annex C.7) indicated that:

> "*Though trace amounts of heavy metals such as nickel and cobalt [depending on battery type] can be deposited from combustion of the batteries, these elements are not expected to be present in large quantities or in quantities larger than any other*

similar fire. In most instances, water exposed to the batteries shows very mild acidity, with an approximate pH of 6".

Therefore, water pH would not be expected to exceed a range of 6 – 7 and trace levels of contaminants are expected to be similar to fires that may occur at other industrial and commercial facilities.

A Megapack fire at the project site would generate pollutants in the off-gassed materials due to both the battery cells and from materials used to construct the Megapack structure such as plastics and electrical components. Potential effects on fire water suppression quality that may be associated with the combustion of the batteries and the Megapack structures are described below.

Battery Cell Pollutants. Tesla has conducted toxic material off-gassing sampling associated with both battery cell level tests and with the entire module or Megapack tests. Table HYD-1 lists pollutants identified from only the battery cell level tests. Table HYD-1 also includes the estimated pollutant concentration in fire suppression water given a 1,500 gpm water flowrate and assuming 100% of the off gassed pollutant is absorbed by the water for a Megapack off gassing event (a very conservative assumption).

National Pollutant Discharge Elimination System (NPDES) standards have been established for various industrial and construction operations under the requirements of the Clean Water Act. Although the NPDES standards do not apply to the battery storage project since it is not a discharge facility, Table HYD-1 identifies NPDES standards for a range of discharge facility permit types. The Table shows that the battery storage fire suppression water potential contamination levels would be below the levels of the identified NPDES discharge standards.

Table HYD-1
Potential Fire Water Contaminants from Battery Cell-Level Testing

Pollutant	Potential Fire Suppression Water Contaminant Level	NPDES Allowable Concentrations: WWTP Discharge Levels	NPDES Allowable Concentrations: Industrial Stormwater	NPDES Allowable Concentrations: Low Threat Facilities
Toluene	103 ug/l [3]	10 million ug/l [2]	*	150 ug/l [5]
Styrene	5.1 ug/l [3]	***	*	**
Methanol	278 ug/l [3]	75,000 ug/l [1]	15,000 ug/l [4]	**
pH	6 – 7 [6]	6 – 9 [7]	6 - 9 [7]	6 - 9 [7]

Notes: 1) instantaneous maximum from GWWTP NPDES permit. Methanol based on oil/grease levels. 2) Goleta Wastewater Treatment Plant (NPDES NO. CA0048160) permit average monthly. Instantaneous not available. 3) Peak levels identified in cell battery fire studies by Tesla. 4) General Permit For Storm Water Discharges Associated With Industrial Activities order NPDES no. cas000001, average annual (no instantaneous value listed) Table 2. Methanol based on oil/grease levels. 5) National Pollutant Discharge Elimination System (NPDES) General Permit For Discharges with Low Threat To Water Quality ORDER NO. R3-2017-0042 NPDES NO. CAG993001, effluent to inland surface waters, bays and estuaries Table 4. 6) estimates of pH range based on DNVGL 2017 and NFPA 855. 7) NPDES pH allowable limits.
* Industrial stormwater NPDES permit only addresses metals and not volatile organics. ** Not addressed in low threat listing Table 4. *** not addressed in WWTP NPDES permit.
Does not include volatile hydrocarbons (methane, propane, acetylene) which can also be produced by combustion of cells but are not NPDES pollutants.
Source: Tesla cell level testing indicates NPDES pollutants/conditions (toluene, styrene, methanol, pH) as well as non-NPDES pollutants (methane, propane, acetylene, CO, CO2).

Source: MRS, 2021

Megapack Structure Pollutants. During a residential, commercial, or industrial fire, there could be a number of pollutants released that could adversely affect the quality of fire suppression water. For the proposed project, such pollutants would generally be similar to pollutants that could result from fires at other structures located in the City. During the high heat of the combustion process, the plastics, electronics, and other materials used in the Megapacks would combust, thereby producing pollutants. As indicated by the results of NFPA 855 Annex C.7 testing described above for lithium-ion batteries in fire water, "*elements are not expected to be present in large quantities or in quantities larger than any other similar fire*" and DNVGL (DNVGL, 2017) indicates that "*many of the same contaminants found from plastics fires were common to those found from battery fires."*

The proposed Megapacks have design features that would substantially reduce the potential for fires, including redundant safety controls; venting systems; a battery management system; remote monitoring of the battery operations; design and testing as per UL standards to ensure minimal potential for fire propagation to nearby cells; and monitoring through the use of fire detection. All of these measures would substantially reduce the potential for a fire to occur that would require the application of water. As described in Section "I" (Hazards and Hazardous Materials) above, the potential failure rate of the proposed battery systems is expected to be very low. Failures that produce out-gassing that would likely be addressed with the application of fire suppression water by the Fire Department are estimated to have the probability of occurring once every 10,989 years. Pollutants in the water used for fire suppression are not expected to be present in large quantities or in quantities larger than fires that may occur at other locations in the City. Based on the very low probability of a fire occurring at the project site that would require the use of fire suppression water; that potential fire suppression water quality impacts unique to the use lithium-ion batteries at the project site would not exceed various NPDES discharge standards; and since potential impacts to the quality of fire suppression would generally be similar to the impacts of fires at other buildings in the City, the potential project-related impacts to the quality of fire suppression water are considered to be potentially adverse but less than significant.

Checklist Item b. Less than Significant Impact.

The proposed project overlies the Goleta Groundwater Basin. During geological testing at the project site (Earth Systems Pacific, 2019) groundwater was encountered at 48 feet below ground surface; however, after removal of the drill auger, the groundwater level rose to an approximate depth of 40 feet below ground surface. As described in response "c" below, the energy storage project would result in a net decrease in existing impervious surface. In addition, as described in Section S (Utilities and Service Systems) below, the project would have a minimal water use demand. As a result, impacts related to depletion of groundwater supplies and groundwater recharge would be less than significant. Therefore, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge, and project-related groundwater supply impacts would be less than significant.

Checklist Item c, Thresholds HYD-1, HYD-2, HYD-3 and HYD-4. Less than Significant Impact.

As shown on Table HYD-2, development of the proposed energy storage project would result in an increase in the amount of permeable surface area on the energy storage project site (proposed Lot 1). The increase in permeable area results primarily from the removal of existing paved parking area from the project site. Table HYD-2 also shows that the amount

of pervious and impervious surface area on proposed Lot 2 would not be changed substantially.

Table HYD-2
Project Site Existing and Proposed Pervious and Impervious Surface Areas

	Permeable Surfaces		Impervious Surfaces	
	Sq. Ft. (net)	Percent of Net Lot Area	Sq. Ft. (net)	Percent of Net Lot Area
Proposed Lot 1				
Existing	49,691	60	32,485	40
Proposed	56,972	69	25,204	31
Proposed Lot 2				
Existing	27,687	20	108,250	80
Proposed	27,670	20	108,267	80

Source: Flowers & Associates, 2021

Due to the proposed removal of existing paved parking area from the energy storage project site, and the use of permeable surfaces throughout the site, the proposed project would result in a decrease in the total impervious area by approximately 7,281 square feet (from 40 percent impervious surface coverage to 31 percent coverage). Therefore, detention facilities for peak stormwater flow attenuation are not required. However, a proposed bioretenton basin would be constructed on the project site to accommodate water quality requirements. The water quality basin would have an indirect effect of attenuating peak flow discharges from the project site. Post-project development stormwater flows from the energy storage project site (proposed Lot 1) are summarized on Table HYD-3. As shown, stormwater flows after the construction of the proposed project on Lot 1 would be reduced when compared to existing conditions.

Table HYD-3
Proposed Lot 1
Existing and Post-Project Stormwater Flows

Storm Frequency	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
Existing Flow (cfs)	2.06	3.35	4.23	5.32	6.16	6.90
Post-Project (cfs)	1.85	3.10	3.97	5.06	5.87	6.65

Source: Flowers & Associates, 2021a

As shown on Table HYD-2, the proposed project would not result in a substantial increase in impervious surface area on proposed Lot 2. As a result, stormwater discharges from proposed Lot 2 would not be substantially changed when compared to existing conditions. Therefore, the proposed project would not increase runoff flows from the project site that would result in flooding, and would not result in additional stormwater runoff that exceed the capacity of existing stormwater drainage systems. As described in response “a” above, with the implementation of existing regulatory programs the proposed project would not be a substantial additional source of polluted runoff. Therefore, the project would have less than significant drainage-related impacts.

Checklist Item d. No Impact.

The project site is not located in a designated 100-year flood plain or tsunami runup zone. There are no bodies of water near the project site that have the potential to result in significant seiche-related impacts. Therefore, the project would have no impact related to the release of pollutants in a flood hazard, tsunami, or seiche zone due to inundation of the project site.

Checklist Item e and Threshold HYD-4. Less than Significant Impact.

The project site is under the jurisdiction of RWQCB Region 3. The RWQCB provides permits for projects potentially affecting surface waters and groundwater and is responsible for preparing the Water Quality Control Plan for the Central Coast Basin (Basin Plan). Basin Plans designate beneficial uses of water in the regions and establish narrative and numerical water quality objectives. The State has developed total maximum daily loads (also called TMDLs), which are a calculation of the maximum amount of a pollutant a water body can have and still meet water quality objectives established for the region. As evaluated in item "a" above, project-related construction activities would have the potential to degrade surface water quality in receiving waterbodies, however, the implementation of erosion and sediment control BMPs, as required pursuant to the NPDES Construction General Permit, would reduce the potential for construction activities to exacerbate existing surface water quality impairments. In addition, operation of the project would not result in discharges of contaminants that have the potential to exacerbate existing surface water quality impairments. Therefore, the project would not conflict with or obstruct implementation of applicable water quality control plans, and impacts would be less than significant.

The proposed project site overlies the Goleta Groundwater Basin, which is a "medium-priority" basin related to the preparation of a Groundwater Sustainability Plan in compliance with the Sustainable Groundwater Management Act. A Groundwater Sustainability Plan has not been prepared for the basin. As described in Section S (Utilities and Service Systems) below, the energy storage project would have a minimal water use demand, and as described in response "a" above, the project would not result in potentially significant impacts to the quality of surface or ground water resources. Therefore, the project would not result in water supply or quality impacts that would conflict with applicable groundwater basin management plans or requirements.

iv. Cumulative Impacts

Cumulative development projects in Goleta over one acre in size would be required to comply with the NPDES General Construction Permit and prepare a SWPPP to control erosion and runoff water quality impacts during construction. Cumulative development projects less than one acre in size would be required to comply with City of Goleta Municipal Code, Section 15.09.290, which requires the preparation and implementation of an Erosion and Sediment Control Plan. In addition, the RWQCB's post-development runoff requirements apply to the proposed project and cumulative development, which would reduce the potential for long-term cumulative stormwater runoff and quality impacts. Therefore, the project's cumulative hydrology and water quality impacts are not cumulatively considerable and potential cumulative impacts would be less than significant.

v. Mitigation Measures and Recommended Conditions of Approval

The proposed project would not result in significant hydrology or water quality impacts and no mitigation measures are required to reduce project-related impacts to a less than significant level.

vi. Residual Impact

No mitigation measures are required. The project would not result in significant residual hydrology or water quality impacts.

K. LAND USE AND PLANNING

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

i. Existing Setting

The project site has a Business Park (I-BP) land use designation, which is intended to identify lands for attractive, well-designed business parks that provide employment opportunities to the community and surrounding area. Uses in the I-BP designation may include a wide variety of research and development, light industrial, and office uses, as well as small-scale commercial uses that serve the needs of business park employees.

The project site is zoned Business Park (BP) as identified by Title 17 - Zoning Regulations. This zone district is intended to provide for attractive, well-designed business parks that provide employment opportunities to the community and surrounding area through implementation of the Business Park (I-BP) land use designation of the General Plan. "Major Utilities" may be allowed in the BP zone with the approval of a Conditional Use Permit.

A 60,068 sq. ft. research and development building is located on the southern portion of the project site (6868 Cortona Drive; proposed Lot 2). A plant nursery, and 3,218 sq. ft. shed are located in the northern portion of the project site (6864 Cortona Drive; proposed Lot 1). Land uses near the project site include residential property to the north that is currently being developed with residences; a hotel to the south; a brewery and research and industrial uses to the east; and Storke Road and residential uses beyond to the west.

ii. Thresholds of Significance

A significant land use and planning impact would be expected to occur if the proposed project resulted in any of the impacts noted in the above checklist.

iii. Project-Specific Impacts

Checklist Item a. No Impact. The proposed energy storage project would be located at an "in-fill" site and would be adjacent to existing development to the east, west, and south, and the Cortona Apartments residential project that is currently under construction on property to the north. The proposed project would not result in new construction, utility extensions, or road improvements that would physically divide an established community.

Checklist Item b. Less than Significant Impact. The proposed project would divide a 5.88-acre parcel into two lots. No changes to existing land uses that currently exist on proposed Lot 2 are proposed. The proposed energy storage project is "major utility" project that is allowed in the BP zone with the approval of a Conditional Use Permit.

General Plan Policy LU 4 provides standards applicable to office and industrial uses, including uses allowed in the BP zone. Policy LU 4.2 includes performance standards for proposed uses in the Business Park zone to ensure that:

a. The scale and design of these uses are compatible with each other and with the existing character of the park and surrounding neighborhoods.
b. Lighting from these uses will not interfere or conflict with adjacent nonindustrial properties.
c. Signage will be controlled.
d. Curb cuts will be minimized and sharing of access encouraged.

As described in Section A (Aesthetics) above, the proposed energy storage facility would not result in significant visual or lighting impacts, and approval of the project's design by the DRB would ensure that its scale and design are compatible with surrounding neighborhoods. The project would take access from existing driveways that connect to Cortona Drive, therefore, no additional curb cuts will be required. The project's current application does not include a request for a new sign. Therefore, the project would comply with General Plan performance standards applicable to the project site's I-BP land use designation.

iv. Cumulative Impacts

The Goleta GP/CLUP Final EIR found that cumulative development under buildout of the GP/CLUP would have less than significant impacts related to land use consistency because such development would be reviewed for consistency with: adopted and applicable land use plans and policies; the requirements of CEQA; the state's Zoning and Planning Law, and the state Subdivision Map Act, all of which require findings of plan and policy consistency prior to approval of entitlements for development. Therefore, the project's cumulative land use impacts are not cumulatively considerable and potential cumulative impacts would be less than significant.

v. Mitigation Measures and Recommended Conditions of Approval

The project would not result in significant land use impacts. No mitigation measures are required.

vi. Residual Impact

No mitigation measures are required. The project would not result in significant residual land use impacts.

L. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
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?				X	
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?				X	

i. Existing Setting

No known mineral resources have been identified on or near the project site.

ii. Thresholds of Significance

A significant impact on mineral resources would be expected to occur if the proposed project resulted in any of the impacts in the checklist above.

iii. Project-Specific Impacts

Checklist Items a and b. No Impact. The proposed project would not result in the loss of mineral resources that are of value to the region or the state and would not otherwise interfere with or preclude access to mineral resources as no mining operations have been conducted on the project site, and are unlikely to occur on or near the project site in the future. Therefore, the project would result in no impact to mineral resources.

iv. Cumulative Impacts

The project would have no impact on mineral resources. Therefore, the project's cumulative impacts would be less than significant.

v. Mitigation Measures and Recommended Conditions of Approval

No mitigation measures are required.

vi. Residual Impact

The project would not result in significant residual impacts on mineral resources.

M. NOISE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X		
b. Generation of excessive groundborne vibration or groundborne noise levels?			X		
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 use airport, would the project expose people residing or working in the project area to excessive noise levels?			X		

The evaluation of the proposed project's potential noise impacts is based on the analysis, conclusions, and recommendations included in a report titled *Noise Memorandum for the Cortona Drive Battery Energy Storage System, 6864 and 6868 Cortona Drive, Goleta, California* (Rincon Consultants, Inc., January 22, 2021). This evaluation of potential noise impacts also addresses peer review comments included in a report titled *Acoustical Analysis Peer Review for Cortona Drive Battery Energy Storage System* (Bruce Walker, PhD, July 16, 2020). The Noise Memorandum and peer review reports are included in this IS/MND as Attachments 11 and 12.

Description of Noise Metrics

Sound is described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. Noise is defined as unwanted sound. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit which expresses the ratio of the sound pressure level being measured to a standard reference level. Sound is composed of various frequencies, but the human ear does not respond to all frequencies. The standard unit of measurement of the loudness of sound is the decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by differentiating among frequencies in a manner approximating the sensitivity of the human ear.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is perceived to be twice as loud and 20 dBA higher is perceived to be four times as loud, and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud).

Various methods have been developed for evaluating community noise to account for, among other things:

- The variation of noise levels over time
- The influence of periodic individual loud events
- The community response to changes in the community noise environment

Noise is defined as unwanted or objectionable sound. The measurement of sound takes into account three variables: 1) magnitude, 2) frequency, and 3) duration.

Magnitude is the measure of a sound's "loudness" and is expressed in decibels (dB) on a logarithmic scale. Decibel levels diminish (attenuate) as the distance from the noise source increases. For instance, the attenuation rate for a point noise source is 6dB every time the distance from the source is doubled. For linear sources such as Highway 101 or the railroad tracks, the attenuation is 3 dB for each doubling of distance from the source.

The frequency of a sound relates to the number of times per second the sound vibrates. One vibration/second equals one hertz (Hz). Normal human hearing can detect sounds ranging from 20 Hz to 20,000 Hz.

Duration is a measure of the time to which the noise receptor is exposed to the noise. Because noise levels in any given location fluctuate during the day, it is necessary to quantify the level of variation to accurately describe the noise environment. One of the best measures to describe the noise environment is the Community Noise Equivalent Level (CNEL). CNEL is a noise measurement that attempts to take into account differences in the intrusiveness of noise between daytime hours and nighttime hours. Specifically, CNEL weights average noise levels at different times of the day as follows:

Daytime—7 am to 7 pm	Weighting Factor = 1 dB
Evening—7 pm to 10 pm	Weighting Factor = 5 dB
Nighttime—10 pm to 7 am	Weighting Factor = 10 dB

Regulatory Setting

Long-Term. Section 17.39.070 of the Zoning Ordinance sets noise performance standards, i.e., noise level limits, for various land uses throughout the City, and Section 17.39.070(A) establishes noise compatibility standards that apply to all new development. The noise compatibility standards applicable to the proposed project are included in Table NOI-1. Section 17.39.070(A)1, states that "proposals for new development that would cause standards to exceed the Normally Acceptable noise exposure for any use may only be approved if the project would provide a substantial benefit to the City." Section 17.39.070(A)2, states that "these compatibility standards also may justify denial of an application if a proposed use or adjacent use would be exposed to Clearly Unacceptable" noise exposure.

Table NOI-1
Noise and Land Use Compatibility Criteria

Land Use	Noise Exposure (Ldn or CNEL, dBA)			
	Normally Acceptable	**Conditionally Acceptable**	**Normally Unacceptable**	**Clearly Unacceptable**
Residential-Multiple Family	50 - 60	60 - 65	65 - 75	75+
Office Buildings, Business, Commercial, and Professional	50 - 67.5	67.5 - 75	75 - 85+	n/a

The compatibility criteria identified above are defined as follows:

- Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

- Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

- Normally Unacceptable: New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements shall be made and needed noise insulation features shall be included in the design.

Section 17.39.070(B) states that the maximum "Normally Unacceptable" or "Clearly Unacceptable" noise levels may be adjusted according to the following provisions. No more than one increase in the maximum permissible noise level will be applied to the noise generated on each property.

1. Nuisance Noise. If a noise contains a steady audible tone (i.e., hum or buzz), rises or falls in pitch or volume (i.e., whine or screech), or is a repetitive noise (i.e., hammering or riveting) or contains music or speech conveying informational content, the maximum noise levels will be reduced by five dBA."

Short-Term. Construction projects can result in elevated noise conditions at and near the project site. The sensitivity to noise from construction operations is increased when it occurs in or near residential areas or other sensitive receptors. Earth moving equipment and some power tools are capable of producing noise levels in the range of 75 to 95 dBA at 50 feet from the source.

i. Existing Setting

Existing Noise Conditions

The northern portion and western perimeter of the project site is located within the existing and future 65 dB Community Noise Equivalent Level (CNEL) noise contour for roadway noise (GP/CLUP Noise Element Figures 9-1 and 9-3). The primary sources of vehicle noise at the project site are traffic on U.S. 101 and Storke Road. Other noise sources affecting the project site include operations at the Santa Barbara Municipal Airport and the Union Pacific Railroad.

To characterize ambient sound levels at the project site, two short-term (15 minute) daytime measurements, and a 24-hour sound level measurement were conducted (Rincon, 2021). The short-term measurements showed noise levels of 57 dBA Leq at the project site. The 24-hour measurements determined that from 9 pm to 6 am, the noise Leq is 54-64 dB, while the Leq from 7 am to 8 pm is 56-62 dB.

Sensitive Receptors

The General Plan Noise Element defines sensitive receptors as users or types of uses that are interrupted (rather than merely annoyed) by relatively low levels of noise. These include: residential neighborhoods, schools, libraries, hospitals and rest homes, auditoriums, certain open space areas, and public assembly places. The noise-sensitive land uses nearest the project site include a three-story apartment project that is adjacent to the project site's northern boundary and that is currently under construction, a hotel that is approximately 350 feet south of the project site, and a residential neighborhood located approximately 240 feet west of the project site on the west side of Storke Road. Intervening topography (i.e., the Storke Road/U.S. 101 overpass embankment) blocks the line-of-sight between the neighborhood to the west and the project site, which will reduce project-related noises that emanate from the project site.

ii. Thresholds of Significance

Based on the City of Goleta's *Environmental Thresholds and Guidelines Manual*, Section 12 Noise Thresholds, the following thresholds are used to determine whether significant noise impacts would occur:

1. **Threshold NOI-1.** A development that would generate noise levels in excess of 65 dBA CNEL and could affect sensitive receptors would generally be presumed to have a significant impact.

2. **Threshold NOI-2.** Outdoor living areas of noise sensitive uses that are subject to noise levels in excess of 65 dBA CNEL would generally be presumed to be significantly impacted by ambient noise. A significant impact would also generally occur where interior noise levels cannot be reduced to 45 dBA CNEL or less.

3. **Threshold NOI-3.** A project would generally have a significant effect on the environment if it would increase substantially the ambient noise levels for noise sensitive receptors in adjoining areas. Per Threshold 1 above, this may generally be presumed to occur when ambient noise levels affecting sensitive receptors are

increased to 65 dBA CNEL or more. However, a significant affect may also occur when ambient noise levels affecting sensitive receptors increase substantially but remain less than 65 dBA CNEL, as determined on a case-by-case level.

4. **Threshold NOI-4.** Noise from grading and construction activity proposed within 1,600 feet of sensitive receptors, including schools, residential development, commercial lodging facilities, hospitals or care facilities, would generally result in a potentially significant impact. According to the US EPA guidelines, the average construction noise is 95 dBA at a 50-foot distance from the source. A 6 dB drop occurs with a doubling of the distance from the source. Therefore, locations within 1,600 feet of the construction site would be affected by noise levels over 65 dBA. Construction within 1,600 feet of sensitive receptors on weekdays outside of the hours of 8:00AM to 5:00PM and on weekends would generally be presumed to have a significant effect. Noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dBA may require additional mitigation.

With regard to Threshold 3, the term "substantial increase" is not defined within the Thresholds Manual. The limits of sound perception by humans in a laboratory environment is around 1.5 dB. Under ambient conditions, people generally do not perceive that noise has clearly changed until there is a 3 dB difference. A threshold of 3 dB is commonly used to define "substantial increase." Therefore, for purposes of this analysis, an increase of 3 dBA CNEL would be a significant impact. Increases of 3.0 dB require a doubling sound energy. For example, for impacts related to traffic noise, existing traffic volumes along a roadway would need to be doubled Projects usually do not, by themselves, cause traffic volumes to double. Therefore, traffic noise impacts are generally a cumulative impact rather than a project-specific impact.

iii. Project-Specific Impacts

The proposed project includes a request for the approval of a Parcel Map that would divide the existing 5.88-acre project site parcel lot into two lots. Proposed Lot 2 would continue to be occupied by an existing 60,068 square foot research and development building and associated parking and landscaping. The Parcel Map would not result in changes to existing environmental conditions on proposed Lot 2 that would have the potential to result in significant noise impacts. The following evaluation of potential noise impacts focuses on impacts that have the potential to result from the development of the proposed Goleta Energy Storage facility, which would be located on proposed Lot 1 on the northern portion of the project site.

Checklist Item a and Thresholds NOI-1, NOI-2, NOI-3, and NOI-4. Less than Significant with Mitigation.

Short-Term Construction Impacts

Construction of the proposed project would result in temporary increase in existing noise conditions. As described by Noise Threshold No. 4, construction activities that occur within 1,600 feet of a sensitive receptor will generally result in a significant short-term noise impact. Existing residential sensitive noise receptors are located a minimum of approximately 240 feet to the west of the project site on the west side of Storke Road, and a hotel is located

approximately 350 feet south of the project site. In addition, residences that are under construction are located north of and adjacent to the project site.

Although the road embankment along the western edge of the project site would minimize the potential for construction-related impacts to the residential neighborhood to the west, the project also includes short-term construction operations on the west side of the embankment to construct the proposed electrical tie line connection between the project site and the Southern California Edison Isla Vista electrical substation. Construction noise impacts could also impact the residences that are under construction adjacent to the project site to the north if those residences are occupied when project-related construction activities occur. The proposed project's short-term construction noise impacts would not be significant because construction projects in the City are required to comply with the conditions included in recommended condition of approval N-1, which is a standard City requirement that establishes day and time limits on proposed construction operations.

Long-Term Operation Impacts

Noise Receptors. The evaluation of project-related long-term noise impacts on sensitive noise receptors focused on the Cortona Apartments that are located north of and adjacent to the project site and that are currently under construction. To evaluate impacts to the future occupants of these residences, noise modeling was conducted to estimate project-related noise conditions at the project site property lines and at the locations of the first, second, and third floor balconies of the apartment units closes to the project site (apartment buildings 6 and 7). The noise modeling analysis was conducted to determine if the project would result in noise exposures to apartment residents in excess of City standards.

Noise receptors 1 through 6 (as depicted on Figures NOI-1, -2 and -3) are located along the project site property lines and were modeled at a height of five feet above ground level. Noise receptors associated with the Cortona Apartments (receptors 7 through 11) were modeled at heights of 5, 16, and 27 feet above ground level, for the first, second, and third floors, respectively.

Noise Sources. Long-term noise sources associated with the proposed project would primarily consist of the following equipment:

- Cooling fans for the proposed MegaPack battery storage units. The evaluation of noise generated by the cooling fans incorporated information provided by the MegaPack manufacturer (Tesla), including information regarding measured sound power levels resulting from fan operations at various power levels; the height of the fans above ground level; fan operation characteristics under typical conditions and during the hottest 10 days of the year; and times of day the fans would typically operate.

  Based on the noise characteristic data for the cooling fans provided by Tesla, the sound power level that may result from the simultaneous operation of two fans operating at 40 percent power may have the potential to produce an audible tone considered to be a "hum or buzz" as described by Zoning Ordinance Section 17.39.070(B).

- Transformers that would be located adjacent to the MegaPacks. It was assumed that the transformers would have a 100 percent duty cycle.

- The proposed electrical substation transformer. It was assumed that the substation would have a 100 percent duty cycle.

Please refer to Attachments 11 and 12 for additional information regarding the sound characteristics of the MegaPack cooling fans and project site transformers.

Project Operation Impacts. As described in the Noise Receptors subsection above, CNEL noise levels resulting from proposed project operations were modeled at various receptor locations. The noise receptor locations and project operation noise contours at 5, 16, and 27 feet above ground level are depicted on Figures NOI-1, -2 and -3. Modeled CNEL noise levels from proposed project operations at sensitive receptor locations are also presented in Table NOI-2, which presents existing, project-generated, and existing-plus-project noise levels at the identified receptor locations.

As shown on Table NOI-2, the existing ambient noise conditions on the project site and at the Cortona Apartments at ground level is 65 to 66 CNEL. Existing noise levels at the upper floors of the Cortona Apartments reaches up to 69 CNEL before implementation of any sound attenuation measures, primarily due to noise from U.S. 101 and the Union Pacific Railroad. As shown on Table NOI-2, the reported noise levels range from the City's "Conditionally Acceptable" to "Normally Unacceptable" range for multi-family residential land uses. Therefore, the Cortona Apartments without the implementation of sound attenuation measures, would be exposed to noise levels in excess of the normally acceptable levels. However, the apartment project was required to implement noise reduction mitigation measures, such as the use of balcony noise attenuation barriers, and windows and doors with higher sound transmission class ratings than required by the building code to meet city standards and minimize noise impacts on residents.

As shown on Table NOI-2 and Figures NOI-1, -2 and -3, project-generated noise levels would not exceed 57 CNEL at the Cortona Apartments at any patio or balcony (Thresholds NOI-1 and NOI-2). Additionally, the project plus existing noise conditions would not result in noise levels that exceed the maximum adjusted "Normally Unacceptable" or "Clearly Unacceptable" noise level of 70 CNEL at the Cortona Apartments. The "Normally Unacceptable" and "Clearly Unacceptable" noise levels shown on Table NOI-1 (75 dB) would be adjusted (reduced) by 5 dB (to 70 dB) based on the requirements of Zoning Ordinance Section 17.39.070(B) because the operation of proposed MegaPack cooling fans could have the potential to result in an audible tone considered to be a "hum or buzz."

The noise analysis prepared for the project (Attachment 11) and the peer review of the noise analysis (Attachment 12) evaluated numerous factors related to potential impacts that may be associated with the MegaPack cooling fans. Factors that were considered included fan operation characteristics during various times of day, available sound power data for the fans, sound tone levels from fan operations, and fan-related sounds that may result from multiple fans operating at the same speed but at different phases. The noise analysis concluded and the peer review concurred that while the noise level increase from fan operation would generally not be considered perceivable and the noise levels would not exceed the appliable noise level limits, there is a potential that the noise generated by the fan sets could be distinctive and may be noticeable as a hum or buzz that may be audible to future residents of the Cortona Apartments.

Table NOI-2
Project-Related 24-Hour Project Noise Levels

Receptor	Location	Existing or Proposed Land Use	Existing Ambient Noise Level (CNEL)	Project-Generated Noise Level (CNEL)	Existing plus Project Noise Level (CNEL)	Change in Noise Levels (dBA)
R1	Northern property line	Multi-family Residential	65	54	65	<1
R2	Northern property line	Multi-family Residential	65	54	65	<1
R3	Eastern property line	Commercial	65	53	65	<1
R4	Eastern property line	Commercial	65	51	65	<1
R5	Southern property line	Industrial	65	53	65	<1
R6	Western property line	Storke Road	65	72	72	7
R7	1st floor bldg. 7	Multi-family Residential	65	48	65	<1
R7	2nd floor bldg. 7	Multi-family Residential	65	48	65	<1
R7	3rd floor bldg. 7	Multi-family Residential	65	49	65	<1
R8	1st floor bldg. 7	Multi-family Residential	65	48	65	<1
R8	2nd floor bldg. 7	Multi-family Residential	65	48	65	<1
R8	3rd floor bldg. 7	Multi-family Residential	65	49	65	<1
R9	1st floor bldg. 6	Multi-family Residential	66	55	66	<1
R9	2nd floor bldg. 6	Multi-family Residential	69	56	69	<1
R9	3rd floor bldg. 6	Multi-family Residential	69	57	69	<1
R10	1st floor bldg. 6	Multi-family Residential	66	54	66	<1
R10	2nd floor bldg. 6	Multi-family Residential	69	55	69	<1
R10	3rd floor bldg. 6	Multi-family Residential	69	56	69	<1
R11	1st floor bldg. 6	Multi-family Residential	66	51`	66	<1
R11	2nd floor bldg. 6	Multi-family Residential	69	51	69	<1
R11	3rd floor bldg. 6	Multi-family Residential	69	53	69	<1

(1) See Figures NOI-1 through NOI-3 for receiver locations. Source: Rincon, 2021

CNEL = Community Noise Level Equivalent; dBA = A-weighted decibels

Operation of the project would not result in a perceivable change (i.e., an increase of 3 dB or more in ambient noise levels) at the Cortona Apartments or at existing commercial/industrial uses to the east and south (Threshold NOI-3). The project would result in an approximately 7 CNEL increase at the western property line. However, the City's noise criteria are not applicable to this property line because it is the public right-of-way for Storke Road.

Also as shown on Figures NOI-1, -2 and -3, residences west of Storke Road and the hotel south of the project site would be outside the project's 50 CNEL noise level contour. Therefore, project-related noise would not result in a measurable change in ambient noise levels at those receptors (Thresholds NOI-1, NOI-2, and NOI-3).

As described in Section Q (Transportation) below, the proposed project would not generate a substantial amount of traffic on streets near the project site. Therefore, the project would result in a less than significant long-term traffic noise impact (Thresholds NOI-1, NOI-2, and NOI-3).

In summary, although ambient noise levels at the Cortona Apartments to the north are in excess of the City's "Normally Acceptable" and "Conditionally Acceptable" noise level range of 50-60 and 60-65 CNEL, respectively, the project-plus-ambient noise levels would not result in noise levels that exceed the adjusted maximum "Normally Unacceptable" or "Clearly Unacceptable" noise level of 70 CNEL at the Cortona Apartments as required by Section 17.39.070 of the Zoning Ordinance. The battery energy project would not result in a perceivable increase in existing ambient noise levels at any sensitive receptor, and the project would not generate noise levels in excess of 65 dBA CNEL at the Cortona Apartments or other nearby sensitive noise receptor. Therefore, based on the requirements of Noise Thresholds NOI-1, NOI-2, and NOI-3, the proposed project's long-term noise impacts would be less than significant.

Zoning Ordinance Compliance

While project-related noise would generally not be considered perceivable by nearby sensitive receptors, and the noise levels would not exceed the applicable noise level thresholds or standards, there is a potential that the noise generated by the MegaPack unit fans may under certain circumstances be distinctive and noticeable (i.e., the fans may create a detectable buzz or hum sound that results in a nuisance) to future residents of the Cortona Apartments. If necessary, this potential conflict with Zoning Ordinance Section 17.39.070(B) can be addressed should noise complaints regarding the project be received by the City.

If a verified noise complaint is received by the City, the City may initiate steps to evaluate, and if necessary, resolve the complaint. These steps may include requiring the project operator to conduct a noise survey of the project site; prepare a report of the primary noise sources identified during the survey; evaluate the broadband noise level and octave band data obtained by the survey; and determine if there is an audible tone or set of tones or an exceedance of the noise requirements of Zoning Ordinance Section 17.39.070. If an exceedance or audible tones are identified, additional noise measurements may be required to identify the noise source of concern and develop measures to reduce noise levels generated by the fans. This can include, among many possible solutions, the use of alternate fan settings, fan speeds, fan blade angle, or even passive barriers. Passive barriers can provide 5 to 15 dBA reduction depending on the height of the barrier as compared to the source and the receiver. Barriers can be located at ground level and surround the site or be located along a property line. If specific equipment is the primary source, then the barriers

can be located adjacent to the equipment, or placed on the equipment, such as on top of the MegaPack. The primary requirements to minimize the nuisance noise is to block the line of sight from the source to the receiver, and the material of the barrier must have a weight of two pounds per square foot or greater, this can include, but is not limited to 18-gauge steel sheet, 5/32 glass panels, and 5/8-inch-thick plywood. In addition, the barrier must be solid with no holes, gaps, or perforations and well-sealed to the surface to which it is attached.

A recommended condition of approval included in subsection "v" below includes the noise complaint investigation and resolution actions described above

Checklist Item b. Less than Significant Impact. Heavy construction equipment that may be used at the project could include vehicles such as earthmoving equipment, loaded trucks, cranes, a drill rig, etc. Heavy construction equipment operated on the project site would have the potential to occur a minimum of approximately 25 feet from an apartment building that is currently under construction, although most of the new apartments would be located substantially farther away. The operation of equipment such as a loaded truck has the potential to result in vibration levels of 87 VdB at a distance of 25 feet. A vibration level of 94 VdB is the general threshold where minor damage can occur in buildings (Federal Transit Administration, May 2006). Residents in adjacent apartments may also be disturbed by vibrations, particularly during nighttime hours when people sleep. However, project-related construction operations would take place during daytime hours and must also be consistent with the timing requirements of recommended condition of the approval N-1 (Construction Timing). In addition, the amount of project-related grading would not be extensive 800 cubic yards of cut and 4,000 cubic yards of fill), and construction-related equipment use would be limited in duration (approximately four months). Therefore, the project would result in less than significant vibration-related impacts.

Checklist Item c. Less than Significant Impact. The project site is located north of but near an aircraft approach zone for the Santa Barbara Municipal Airport. GP/CLUP Noise Element Figures 9-2 and 9-4 display existing and future (2025) noise level contours resulting from aircraft operations at the airport. As shown, the project site is located beyond the 60 dBA noise contour for both existing and future airport-related noise conditions. Therefore, airport-related noise at the project site would be less than significant.

iv. Cumulative Impacts

The proposed project would not be a substantial long-term source of noise and would not generate a substantial amount of traffic. Therefore, the project's noise impacts would not be cumulatively considerable and potential cumulative noise impacts would be less than significant.

v. Mitigation Measures and Recommended Conditions of Approval

Mitigation Measures

No mitigation measures are required. The project would not result in significant noise impacts.

Recommended Conditions of Approval

N-1. Recommended Condition of Approval: Construction Timing. Construction activity and equipment maintenance is limited to the hours between 8 AM and 5 PM Monday through Friday. Exceptions to these restrictions may be made for onsite work for good cause at the sole discretion of the Planning and Environmental Review Director. Exceptions to these restrictions for work in the City Right-of-Way may be made for good cause at the sole discretion of the Public Works Director or designee. Any subsequent amendment to the General Plan noise standard upon which these construction hours are based shall supersede the hours stated herein. No construction can occur on State holidays (e.g., Thanksgiving, Labor Day). Non-noise generating construction activities such as interior plumbing, electrical, drywall and painting (depending on compressor noise levels), are not subject to these restrictions.

Timing: At least one sign near each project site entrance stating these restrictions must be posted on the site. Signs must be a minimum size of 24" x 48." Signs must be in place before the beginning of and throughout grading and construction activities. Violations may result in suspension of permits.

Monitoring/Reporting Party(ies): The Planning and Environmental Review Director must monitor compliance with restrictions on construction hours and must promptly investigate and respond to all complaints.

2. Recommended Condition of Approval: Noise Complaints. Upon receipt of a verified noise complaint regarding nuisance noise from the project site, the City will require the following:

a. The project operator shall conduct a noise survey of the project site conducted by a City-approved noise consultant.
b. The project operator shall have a report prepared by a City-approved noise consultant that describes the primary noise sources identified during the survey.
c. The noise report shall evaluate the broadband noise level and octave band data obtained by the survey; and determine if there is an audible tone or set of tones or an exceedance of the noise requirements of Zoning Ordinance Section 17.39.070.
d. If an exceedance or audible tones are identified, additional noise measurements shall be required to identify the noise source of concern and develop measures to reduce noise levels generated by the fans.
e. Noise reduction measures may include, but are not limited to: the use of alternate fan settings, fan speeds, fan blade angle, or even passive barriers. Barriers can be located at ground level and surround the site, or be located along a property line. If specific equipment is the primary source, then the barriers can be located adjacent to the equipment, or placed on the equipment, such as on top of the MegaPack. At minimum, the noise attenuation barriers must have a weight of two pounds per square foot or greater. This can include, but is not limited to 18-gauge steel sheet, 5/32 glass panels, and 5/8-inch-thick plywood. In addition, the barrier must be solid with no holes, gaps, or perforations and well-sealed to the surface to which it is attached.

Monitoring/Reporting Party(ies): The Planning and Environmental Review Director must promptly respond to all project-related nuisance noise complaints, require the

project operator to implement the required noise surveys described above, and monitor compliance with noise complaint resolution measures.

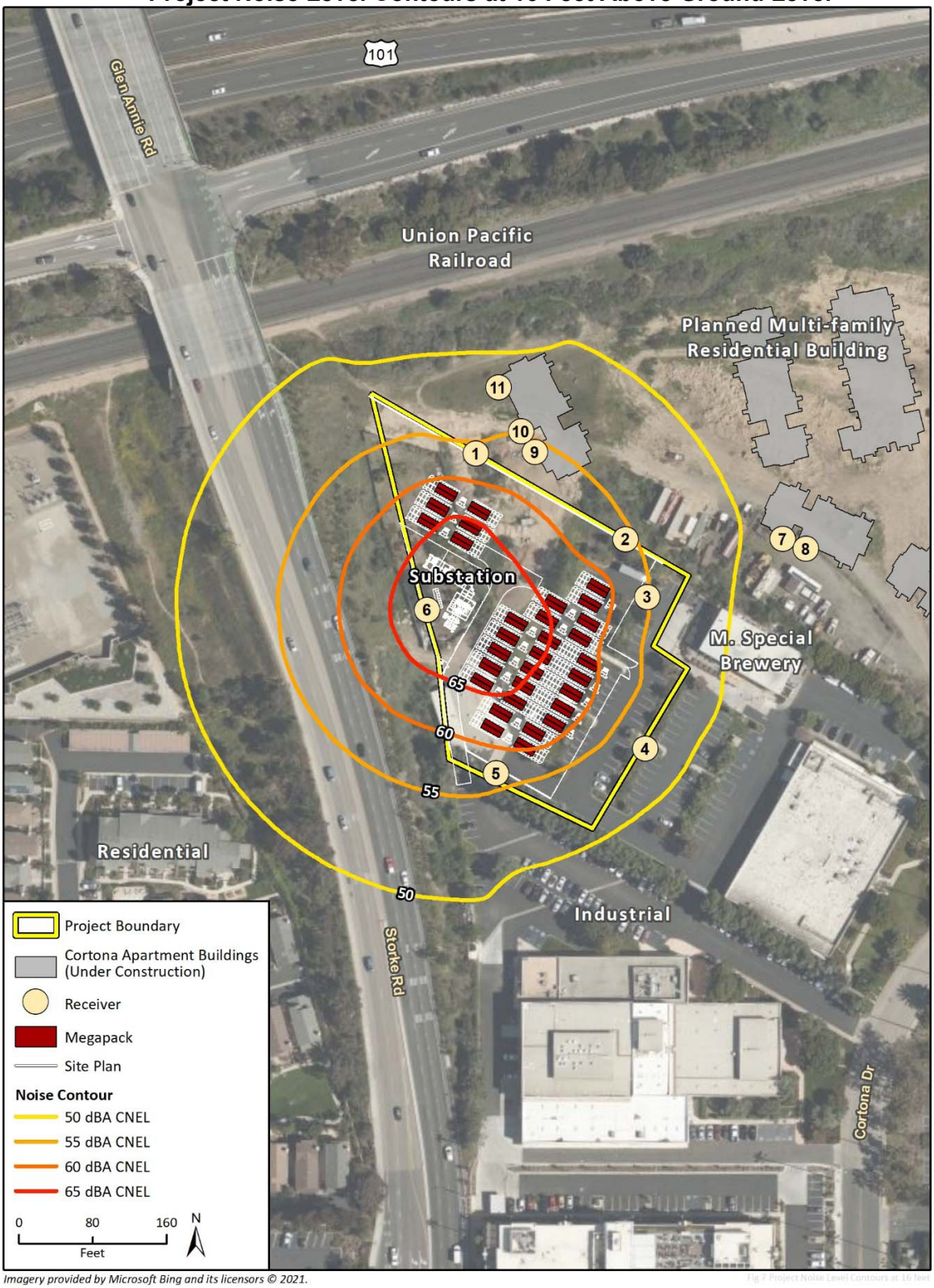
vi. Residual Impact

No mitigation measures are required. The project would not result in significant residual noise impacts.

Figure NOI-1
Project Noise Level Contours at 5 Feet Above Ground Level

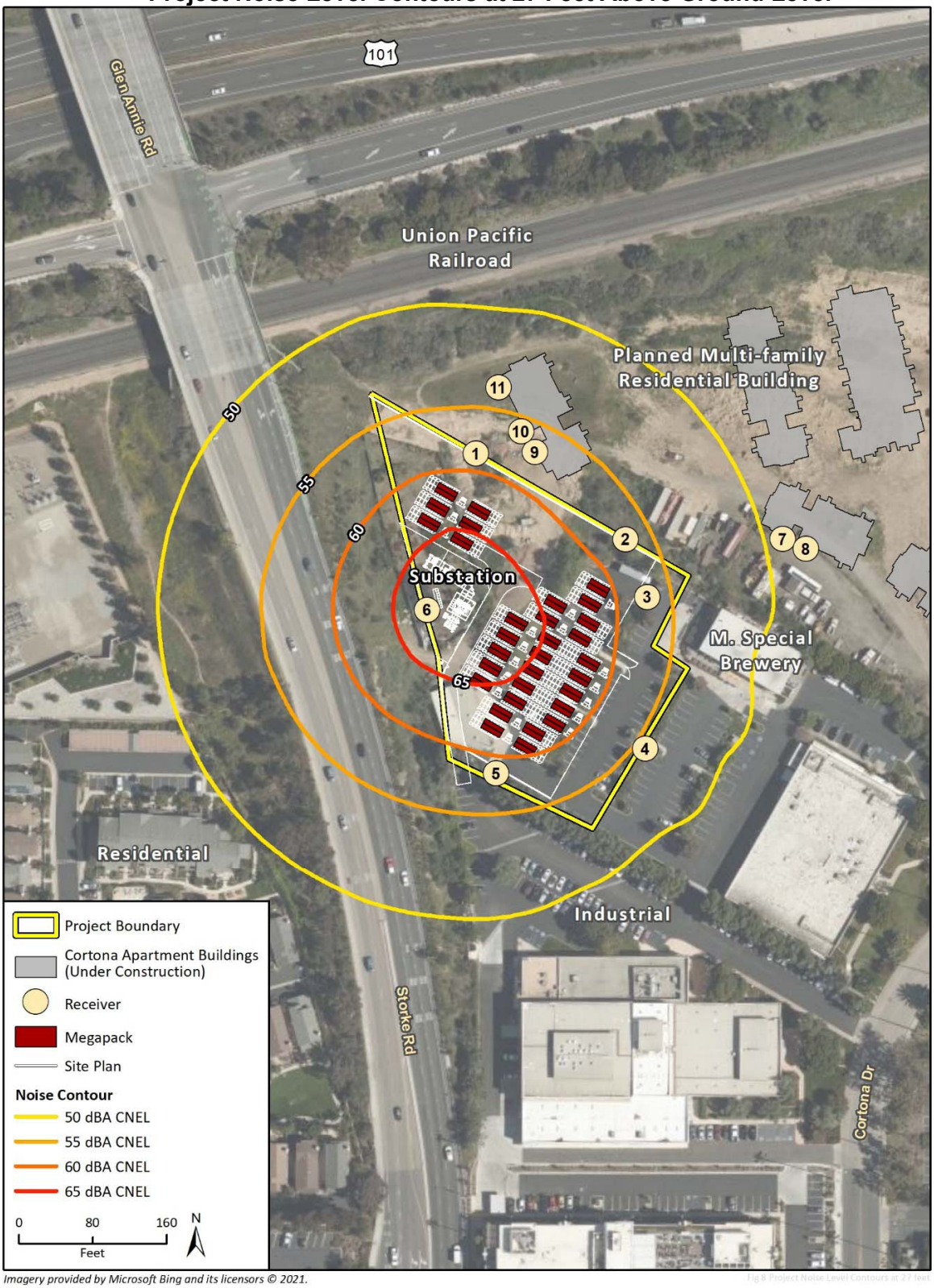
Source: Rincon, 2021

Figure NOI-2
Project Noise Level Contours at 16 Feet Above Ground Level



Source: Rincon, 2021

Figure NOI-3
Project Noise Level Contours at 27 Feet Above Ground Level



Source: Rincon, 2021

POPULATION AND HOUSING

Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorpo-rated**	**Less Than Significant Impact**	**No Impact**	**See Prior Doc-ument**
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X		
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X	

i. Existing Setting

There are no residences located on the project site. Existing uses on the northern portion of the project site include paved parking areas, a small shed, and a plant nursery. Existing uses on the southern portion of the project site include a research and development building and associated landscaping and parking.

According to the population estimates published on May 1, 2019, as of January 1, 2019, the California Department of Finance (DOF) estimates that City has a population of 32,759 people, has approximately 12,381 housing units, and has an average household size of 2.76 people per household. Upon build out of the City of Goleta General Plan/Coastal Land Use Plan (GP/CLUP) (anticipated to occur by the year 2030), the City's population is expected to reach 38,100.

ii. Thresholds of Significance

A significant impact on population and housing would be expected to occur if the proposed project resulted in any of the impacts noted in the above checklist.

iii. Project-Specific Impacts

Checklist Item a. Less than Significant Impact.

The proposed project would not result in the development of housing or businesses that would result in additional population growth in the City. The project would provide energy storage capabilities but would not increase the amount of energy currently being provided to existing customers, nor would the project provide energy to areas not already serviced by local providers. Further, the project would not facilitate the development of land that previously could not be developed due to electricity service constraints. Therefore, the project would not result in significant growth inducing impacts.

Checklist Item b. No Impact.

The proposed project site does not contain housing and is not zoned for residential uses. The project would not result in the removal of housing from the City. Therefore, the project would have no impact related to the displacement of people or housing.

iv. Cumulative Impacts

The proposed project would not result in substantial job or population growth or result in the loss of existing housing. Therefore, when combined with other similar projects, the proposed project would not result in cumulatively considerable population or housing impacts and cumulative population and housing impacts would be less than significant.

v. Mitigation Measures and Recommended Conditions of Approval

The proposed project would not result in significant population or housing impacts and no mitigation measures are required.

vi. Residual Impact

No mitigation measures are required. The project would not result in significant residual population or housing impacts.

N. PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of these public services:					
1. Fire protection?			X		
2. Police protection?			X		
3.Schools?			X		
4. Parks?			X		
5. Other public facilities?			X		

i. Existing Setting

Fire Protection

The project site is located within the urban area, in a central portion of the City of Goleta. Fire services would be provided by Santa Barbara County Fire Department (SBCFD) under contract to the City. The closest fire station to the project site is Station #11 located on 6901 Frey Way (approximately one mile to the south). The National Fire Protection Association (NFPA) and SBCFD identify the following three guidelines regarding the provision of fire protection services:

1. A firefighter-to-population ratio of one firefighter on duty 24 hours a day for every 2,000 persons is the ideal goal. However, one firefighter for every 4,000 persons is the absolute maximum population that should be served.
2. A ratio of one engine company per 12,000 persons, assuming three firefighters per station (or 16,000 persons assuming four firefighters per station), represents the maximum population that should be served by a three-person crew.
3. A five-minute response time in urban areas.

The mandated California Division of Occupational Safety and Health (Cal-OSHA) requirement for firefighter safety, known as the “two-in-two-out rule”, is also applicable. This rule requires a minimum of two personnel to be available outside a structure prior to entry by firefighters to provide an immediate rescue for trapped or fallen firefighters, as well as immediate assistance in rescue operations.

The SBCFD has implemented a dynamic deployment system, for its fire engines, in addition to the traditional static deployment system from fire stations when the station’s engine is “in house”. Dynamic deployment allows for the dispatching of engines already on the road for

emergency calls rather than dispatching by a station's "first in area", as has been the previous practice. Basically, dynamic deployment uses a Global Positioning System (GPS) to monitor the exact location of each engine in real time. Previously, when an engine was out on routine (non-emergency) activities, such as inspections or training, the engine company was considered "in-service" and its exact location at any given moment in time was not known to County Dispatch. However, with dynamic deployment using the County's GPS, County dispatch has real time information on the exact location of each engine at all times and can dispatch the closest, un-engaged engine to an emergency incident, regardless of which fire station's service area the call originates from. This precludes the need for an in-service engine to have extended run times when another fire engine would be closer. The Fire Department has also added a battalion chief as the fourth fire fighter on scene, in order to meet the "two-in-two-out."

Police Protection

Police services are provided by the Santa Barbara County Sheriff's Department under contract with the City of Goleta (City). The City is divided into 3 patrol units, with 1 police car assigned to each unit. Additional police services are available from Santa Barbara County to supplement City police in an emergency. City police operate from three locations: the City offices at 130 Cremona Drive, an office located in Old Town on Hollister Avenue, and a third location at the Camino Real Marketplace.

Schools

Public education services are provided by the Goleta Union School District (GUSD) and the Santa Barbara Unified School District (SBUSD). In general, enrollments in the area school system have been declining for the past several years and area schools serving the project vicinity are operating below capacity.

Parks

A detailed discussion of parks is provided below in Section P. Recreation. The City currently contains 19 parks (including 3 privately-owned and publicly accessible parks), 21 open spaces (also including 3 privately-owned and publicly accessible open spaces), and the Goleta Valley Community Center. City parks are considered in combination with open space to provide recreational opportunities and currently encompass approximately 554 acres for a ratio of approximately 17.8 acres per 1,000 residents (City of Goleta, 2019).

Libraries

Services at the Goleta Public Library is owned by the City and is located at 500 North Fairview Avenue. The 2-acre library site includes a 15,437 square foot (SF) building and parking areas. The facility provides services to the City and nearby unincorporated areas including Isla Vista, Hope Ranch, and the Gaviota Coast with a population of approximately 95,202. In the FY 2017/2018, the library had approximately 264,242 visitors and circulated 648,697 items, not counting the items that were downloaded electronically. Services were provided by 6 full-time and 15 part-time employees.

ii. Thresholds of Significance

A significant impact on public services would be expected to occur if the proposed project resulted in any of the impacts noted in the above checklist. In addition, the City's Environmental Thresholds and Guidelines Manual include thresholds of significance for potential impacts on area schools. Specifically, under these thresholds, any project that would result in enough students to generate the need for an additional classroom using current State standards would be considered to result in a significant impact on area schools. The City's adopted Environmental Thresholds and Guidelines Manual notes current State standards are: Grades K-2, 20 students per classroom; Grades 3 -8, 29 students per classroom; and Grades 9 – 12, 28 students per classroom. However, the State of California classroom size standards are as follows: average class sizes of 31 (not to exceed 33) for kindergarten, 30 (not to exceed 32) for Grades 1 – 3), and 29.9 (or the district's average number of students per teacher in 1964, whichever is greater) for Grades 4 – 8 (California Department of Education 2018).

iii. Project-Specific Impacts

Checklist Items a.1 and a.2. Less than Significant Impact.

The proposed project would have a construction period of approximately four months, and operation of the energy storage facility would require minimal on-site personnel presence. The project site would be enclosed by security fencing to minimize potential trespassing. Therefore, the proposed project would have a minimal demand for fire and police services on a daily basis and would not result in the need for new or physically altered fire or police facilities to maintain acceptable service ratios, response times, or other performance objectives.

The *Hazards Analysis and Risk Assessment Risk Assessment Final Report* (MRS, May 17, 2021) states that battery failures at the project site that produce out-gassing and would likely be addressed with the application of water by the Fire Department are estimated to have a probability of occurring once every 10,989 years. Due to the very low potential for a large magnitude fire event at the project site, potential fire protection service impacts would be less than significant. Therefore, the project would have less than significant fire and police protection impacts.

Checklist Items a.3, a.4 and a.5. Less than Significant Impact.

As described in Section N, *Population and Housing,* the proposed project would not directly or indirectly result in additional population growth in the City. As a result, the project would not cause an increased demand for services provided by existing schools, parks, or other public facilities. Therefore, the project would not result in the need for new or physically altered schools, parks, or other public facilities, and would result in a less than significant public service impact.

iv. Cumulative Impacts

The proposed project would not have a substantial demand for additional public services. Therefore, the project's public service impacts would not be cumulatively considerable and potential cumulative impacts would be less than significant.

v. Mitigation Measures and Recommended Conditions of Approval

The project would not result in significant public service impacts and no mitigation measures are required.

vi. Residual Impact

The project would not result in any significant residual impacts on public services.

O. RECREATION

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
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?				X	
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?				X	

i. Existing Setting

The City of Goleta has 19 parks and 21 open spaces (including 3 parks and 3 open spaces that are privately-owned and publicly accessible), and 1 community center (the Goleta Valley Community Center), comprising a total of approximately 554 acres. This is approximately 17.8 acres per one thousand residents. The City has adopted a goal of providing 4.7 acres of parkland (open space lands whose primary purpose is recreation) per thousand residents.

ii. Thresholds of Significance

A significant impact on recreation would be expected to occur if the proposed project resulted in any of the impacts noted in the above checklist.

iii. Project-Specific Impacts

Checklist Items a and b. No Impact.

As described in Section N, *Population and Housing,* the proposed project would not directly or indirectly result in additional population growth in the City. As a result, the project would not cause an increased demand for the use of existing parks or other recreational facilities, nor would the project require the construction or expansion of such facilities. Therefore, no impact to parks or other recreation facilities would occur.

iv. Cumulative Impacts

The proposed project would not result in or contribute to impacts to existing recreation facilities. Therefore, the project's recreation impacts to existing facilities are not cumulatively considerable and the project's cumulative impacts would not be significant.

v. Mitigation Measures and Recommended Conditions of Approval

The project would not result in significant impacts to recreation facilities. No mitigation measures are required.

vi. Residual Impact

The proposed project would not result in significant residual impacts to recreation facilities.

P. TRANSPORTATION

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

i. Existing Setting

Regional access to the proposed project site is provided by U.S. 101. Access to the site is provided by Storke Road, Hollister Avenue, and Cortona Drive. Cortona Drive is a two-lane 44-foot wide street with on-street parking. Access from Cortona Drive to the project site is provided by two existing shared driveways: the southerly driveway provides access to the building located at 6868 Cortona Drive, and the northerly driveway provides access to the buildings located at 6860 Cortona Drive.

The southern portion of the project site (proposed Lot 2) is developed with a 60,068 square foot research and development building, along with associated parking areas and landscaping. The northern portion of the project site (proposed Lot 1) would be used for the development of the proposed energy storage facility and is occupied by paved parking areas, a small shed, and a plant nursery. The existing shed, nursery, and storage uses do not generate a substantial amount of traffic.

ii. Thresholds of Significance

Senate Bill 743 (Steinberg, 2013) required changes to the CEQA Guidelines regarding the analysis of transportation impacts. The California Office of Planning and Research proposed changes to the CEQA Guidelines that identify vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project's transportation impacts. The California Natural Resources Agency adopted the recommended changes to the CEQA Guidelines and they became effective on December 28, 2018. With the adopted changes, automobile delay as measured by "level of service" and other similar metrics, will generally no longer constitute a significant environmental effect under CEQA. The changes to the way that CEQA evaluations of a project's traffic-related impacts are conducted become mandatory on July 1, 2020.

In December, 2018, the California Office of Planning and Research published a *Technical Advisory on Evaluating Transportation Impacts in CEQA*. The Technical Advisory contains

recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. The Technical Advisory suggests that lead agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing. In regard to screening thresholds for small projects, the Advisory states:

> *"Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact."*

On July 7, 2020, pursuant to the requirements of SB 743, the City adopted *Guidelines for the Implementation of Vehicle Miles Traveled, including Vehicle Miles Traveled Thresholds of Significance* (Resolution 20-44). Consistent with SB 743 and OPR guidance, the City adopted the following standards and VMT Criteria:

VMT Baseline

Project impacts related to VMT shall be measured against the following criteria:

- Residential Projects: City Average VMT Per Capita
- Work Projects: City Average VMT Per Employee
- Other Projects: Net City VMT

Thresholds of Significance

The level of VMT which is considered a potentially significant impact is as follows:

- Residential and Work Projects: 15% Below City Average
- Other Projects: Net Increase in City VMT

The screening process outlined in the City's VMT guidelines was applied to analyze impacts related to VMT. The City screening criteria includes conditions for which projects, at the City's discretion, may not be required to conduct a VMT analysis and may be presumed to have a less than significant impact. The screening criteria include:

1. Small Project: Projects that generate less than 110 daily trips.
2. Map Based: High efficiency VMT zones for Residential and Work Base Projects.
3. Transit Proximity: Projects within ½ mile of transit stops with 15 minutes service, excluding areas within that ½ mile distance that cross Highway 101.
4. Affordable Housing: Housing projects with a minimum of 20% "low" or "very low" affordable housing unit proportion.
5. Locally Serving Retail: Retail projects of less than 10,000 square feet, where there is substantial evidence to support that the retail project is locally serving.

iii. Project-Specific Impacts

The proposed project includes a request for the approval of a Parcel Map that would divide the existing 5.88-acre project site parcel lot into two lots. Proposed Lot 2 would continue to be occupied by an existing 60,068 square foot research and development building and

associated parking and landscaping. The Parcel Map would not result in changes to existing environmental conditions on proposed Lot 2 that would have the potential to result in significant traffic impacts. The following evaluation of potential traffic impacts focuses on impacts that have the potential to result from the development of the proposed Goleta Energy Storage facility, which would be located on proposed Lot 1 on the northern portion of the project site.

Checklist Items a and b. Less than Significant Impact.

Construction Traffic

Construction vehicles and trucks would be routed to the project site from U.S. 101 at the Storke Road interchange. Construction vehicles would proceed south on Storke Road and turn left at Hollister Avenue; and then left on Cortona Drive. Construction vehicles exiting the site would return to U.S. 101 using the same route. The Hollister Avenue/Cortona Drive intersection is fully improved with curb gutter and sidewalk and an eastbound left-turn lane is provided on Hollister Avenue at the intersection. Cortona Drive has southbound left- and right-turn lanes at the intersection to accommodate turning movements onto Hollister Avenue. The design of the Hollister Avenue/Cortona Drive intersection would accommodate the construction traffic generated by the project (Traffic and Parking Assessment for the Goleta Energy Storage Project – City of Goleta, ATE, 2019, Attachment 14). Temporary construction traffic would generally consist of trips by workers, equipment deliveries, and construction equipment. The amount of traffic generated would not be substantial and would occur over a period of approximately four months. Therefore, the project would result in less than significant short-term construction traffic impacts.

Operation Traffic

The proposed energy storage facility would be unoccupied and would not result in day-to-day employees or visitors. During the first year after installation, operations and maintenance personnel would visit the site twice per month. The site visits would consist of one regular size vehicle (car or pick-up truck) travelling to and from the site. After the first year, the operations and maintenance trips would be reduced to one visit consisting of one regular size vehicle every other month. Other infrequent project-related trips would be required for landscape and other general site maintenance. Given the infrequent amount of traffic to and from the project site (likely fewer than 10 trips per month), the project's VMT impacts would be less than the City's adopted screening criteria for small projects (110 daily trips). Therefore, the project would result in a less than significant VMT impact. In addition, given the very low amount of long-term traffic that would be generated by the project, it would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Checklist Item c. Less than Significant Impact.

As described in the Setting section above, the roadways that would be used by project-related construction and operation traffic (U.S. 101, Storke Road, Hollister Avenue, and Cortona Drive) do not present traffic hazards that would have the potential to result in a significant traffic safety impact. Therefore, potential traffic safety impacts would be less than significant.

Checklist Item d. Less than Significant Impact

Access to the energy storage facility project site would be from Cortona Drive and would be provided from two existing driveway connections to Cortona Drive. Therefore, primary and secondary access to the project site is available for emergency vehicles. The long-term operation of the project would generate a minimal amount of traffic, likely less than 10 vehicle trips per month. Therefore, the project would not substantially increase traffic on local roadways, and project-related traffic would not interfere with emergency access to the site. Potential project-related access impacts would be less than significant.

iv. Cumulative Impacts

The proposed energy storage project would not generate a substantial amount of vehicle traffic. Therefore, the project's traffic-related impacts would not be cumulatively considerable and the project's cumulative impacts would be less than significant.

v. Mitigation Measures and Recommended Conditions of Approval

The project would not result in significant traffic-related impacts. No mitigation measures are required.

vi. Residual Impact

The proposed project would not result in significant residual traffic impacts.

Q. TRIBAL CULTURAL RESOURCES

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

The information and analysis included in this section is based on and summarizes information included in Rincon Consultant's February 18, 2021, report titled *Cultural Resources Assessment of Effects for Cortona Drive Energy Storage Project, 6864 and 6868 Cortona Drive in Goleta, Santa Barbara County, California.* Please refer to Section E (Cultural Resources) above for additional information regarding the preparation and peer review of this cultural resources assessment.

i. Existing Setting

Prehistoric Setting

Evidence exists for the presence of humans in the Santa Barbara coastal area for thousands of years. While some researchers have proposed that the Santa Barbara Channel area may have been settled as early as 40,000 years ago, only limited evidence for occupation much earlier than 9,500 years has been discovered. Even so, human prehistory along the Santa Barbara channel area coast may extend back as much as 12,000 years. Beginning approximately 7,500 years ago, prehistoric human settlement in the local area apparently increased rapidly with a number of sites dating to approximately this time, and many more dating subsequent to it (General Plan Final EIR

[GP FEIR]).

Ethnographic and Historic Setting

Historically, settlement in the vicinity of the project site was defined by three periods: the Mission Period (AD 1769 to 1830), the Rancho Period (AD 1830 to 1865), and the American Period (AD 1865 to 1915). The first European contact to the Santa Barbara coastal region was by Portuguese explorers in 1542, followed by the Spanish in 1602. At the time of this first European contact in 1542, the Goleta area was occupied by a Native American group speaking a distinct dialect of the Chumash Language (General Plan Final EIR [GP FEIR]). This group later became known as the Barbareno Chumash. The Chumash were hunters and gatherers who lived in areas surrounding the much larger prehistoric Goleta Slough. At the time of Spanish contact, the prevalent Chumash population had at least 10 Chumash villages in the Goleta Area and immediate vicinity (GP FEIR).

A search of the California Historical Resources Information System (CHRIS) at the Central Coastal Information Center (CCIC) was performed to identify all previously recorded cultural resources, as well as previously conducted cultural resource studies, within the project site and a 0.5-mile buffer surrounding it. The CHRIS search included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, and the Archaeological Determinations of Eligibility list. The CCIC records search identified 79 previously conducted cultural resources studies within a 0.5-mile radius of the project site. Twenty (20) of these studies are located within 100 feet of the proposed project site. One of the sites, recorded as CA-SBA-54, is located on the project site.

Archaeological investigations conducted in the project area in the 1920's detected archaeological resources associated with CA-SBA-54 located on a knoll north of the Goleta Slough. The majority of the site was destroyed in 1961 when most of the knoll was removed in anticipation of a housing development that was not constructed. The landform was completely leveled during construction of the Storke Road/U.S. 101 overpass, leaving only the periphery of the archaeological site intact.

An Extended Phase 1 Archaeological Investigation was conducted in 2016 to determine the presence or absence of potentially significant subsurface prehistoric archaeological materials on the project site associated with CA SBA-54. The investigation included the excavation of eighteen backhoe trenches that were observed by a Native American monitor. The excavations identified subsurface prehistoric materials associated with the periphery of the CA-SBA-54 site on a small portion of the project site. Based on the results of the Extended Phase 1 investigation, the boundary of the archaeological site was confirmed and it was determined that intact cultural materials remain on a portion of the proposed energy storage project site. This resource is a prehistoric site that has been found eligible for listing in the California Register of Historical Resources. Please refer to Section E (Cultural Resources) above for additional information regarding the archaeologic investigations that have been conducted on and near the proposed project site.

The presence of intact cultural materials suggests the archaeological deposit has the potential to "yield information important in prehistory." Since the intact cultural materials are associated with peripheral CA-SBA-54 site deposits, not the main/primary site area on the

knoll that was removed, the intact cultural materials have a limited potential to address prehistoric occupation at the project site (Rincon, 2021).

AB 52

Assembly Bill (AB) 52 was adopted in 2014 and established a formal consultation process for California tribes in the CEQA process. The bill specifies that a project that may affect or cause a substantial adverse change to the significance of a tribal cultural resource would require a lead agency to begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project. CEQA Section 21074 defines "tribal cultural resources" as:

(a) "Tribal cultural resources" are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) 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 Section 5024.1.

In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

ii. Thresholds of Significance

The project would be considered to have a significant impact on tribal cultural resources if it were to cause a substantial adverse change in the significance of a tribal cultural resource as defined in the checklist above.

iii. Project-Specific Impacts

Checklist Items a and b. Less than Significant with Mitigation.

On May 15, 2020 the City of Goleta sent by certified mail notification of the proposed project to seven Chumash tribal representatives. On July 14, 2020, the Santa Ynez Band of Chumash Indians (SYBCI) requested formal consultation regarding the project. Formal consultation was initiated on February 26, 2021. On May 24, 2021, the Santa Ynez Band of Chumash Indians notified the City that they concluded the AB 52 consultation.

In addition to the notification letters sent by the City of Goleta, the California Native American Heritage Commission (NC) was contacted on August 26, 2020, to request a search of the Sacred Lands File (SLF) and a contact list of Native Americans culturally affiliated with the project area. The NAHC emailed a response on August 27, 2020, stating that the SLF search was "positive". Rincon Consultants sent letters to the NAHC-listed contacts on August 28, 2020, inquiring about potential cultural resources within the project's vicinity that may be impacted by the project.

As described by the analysis presented in Section E (Cultural Resources) above, it is unlikely that excavations and other ground disturbing activities that would occur at the proposed project site, and that are required for the installation of the proposed underground tie line, would result in impacts to previously identified cultural resources. However, the project would have the potential to result in significant impacts to cultural resources should on-site or tie line construction-related ground disturbing activities encounter previously undetected cultural resources. Although it is considered unlikely for the proposed project to encounter previously undetected cultural resources, there is also a potential for artifacts important to the Native American community and/or isolated, fragmentary human remains to be encountered during the construction of the project.

Potential project-related impacts that may result from the unexpected discovery of cultural resources would be reduced to a less than significant level with the implementation of Mitigation Measures CR-1 through CR-5. These required mitigation measures specify requirements related to construction monitoring (CR-1); the placement of proposed fill material over portions of the project site to protect cultural resources (CR-2); conducting a data recovery program at the project site (CR-3); conducting a pre-construction workshop for construction personnel (CR-4); and the preparation and implementation of a Construction Monitoring and Treatment Plan (CR-5). Implementation of the proposed mitigation measures would reduce potential impacts to tribal cultural resources to less than significant.

iv. Cumulative Impacts

Similar to all development projects in the City, the proposed project would be subject to applicable Goleta General Plan/Coastal Land Use Plan policies, including Open Space Element Policies 8.1 through 8.6, which were adopted to help meet the City's objective of "identify[ing] and protect[ing] prehistoric and historic cultural sites and resources from destruction or harmful alteration." Specifically, Open Space Element Policy 8.6 requires on-site monitoring by a qualified archaeologist and appropriate Native American observer for all grading, excavation, and site preparation that involves earth-moving operations on sites identified as archaeologically sensitive.

Consistent with policies of the City's General Plan, potential project-related impacts to known or undiscovered tribal cultural resources would be reduced to less than significant by implementation of Mitigation Measures CR-1 through CR-5. Therefore, the proposed project's impacts to tribal cultural resources would not be cumulatively considerable and its cumulative impacts would be less than significant.

v. Mitigation Measures and Recommended Conditions of Approval

The requirements of proposed Mitigation Measures CR-1 through CR-5 are described in Section E (Cultural Resources) above. These mitigation measures would reduce potentially significant impacts to tribal cultural resources to less than significant.

vi. Residual Impact

With implementation of mitigation measures CR-1 through CR-5, potential project-related impacts to tribal cultural resources would be less than significant.

R. UTILITIES AND SERVICE SYSTEMS

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

i. Existing Setting

Wastewater Treatment

Wastewater in the project area is collected by the Goleta West Sanitary District (GWSD) and treated at the Goleta Wastewater Treatment Plant (GWWTP). The GWWTP has a design capacity of 9.7 million gallons per day (mgd), based on an average daily flow rate. However, the discharge is restricted under the facility's National Pollution Discharge Elimination System (NPDES) permit (Permit No. CA0048160) (a Clean Water Act Requirement by the U.S. EPA), to a daily dry weather discharge of 7.64 mgd (RWQCB, 2010). GWSD owns 40.8 percent of the capacity rights at the GWWTP, which gives GWSD an allotment of 3.12 mgd of treatment capacity. GWSD currently contributes approximately 2.1 mgd in flow to the GWWTP, leaving GWSD approximately 1 mgd of remaining capacity.

The plant's treatment system consists of primary settling, biofiltration, aeration, secondary clarification, chlorine disinfection, and de-chlorination. Wastewater flows greater than 4.38 million gallons per day (MGD), receive primary treatment only and are blended with treated secondary wastewater prior to disinfection and discharge to the ocean. Treated wastewater is discharged to the Pacific Ocean through a diffuser 5,912 feet offshore at a depth of approximately 87 feet. In May, 2013, the GSD treatment facilities were upgraded from the partial secondary blended process. With the plant upgrades completed, the plant is able to

discharge effluent that has been treated to full secondary standards as well treat some wastewater to the tertiary standards required for recycled water use (Goleta Sanitary District 2018).

Water Sources, Supply, and Demand

The Goleta Water District (GWD) is the water purveyor for the City of Goleta and surrounding areas. The GWD service area is located in the southern portion of Santa Barbara County with its western border adjacent to the El Capitan State Park, its northern border along the foothills of the Santa Ynez Mountains and the Los Padres National Forest, the City of Santa Barbara to the east, and the Pacific Ocean to the south. The service area encompasses approximately 29,000 acres and includes the City of Goleta, University of California, and Santa Barbara Airport (City of Santa Barbara property); the remainder of the service area is located in the unincorporated County of Santa Barbara. GWD provides water service to approximately 87,000 people through a distribution system that includes over 270 miles of pipeline, as well as nine ground water wells and nine reservoirs (Goleta Water District 2019).

Drainage Facilities

The project site drains in a predominantly southeasterly direction. The majority of stormwater runoff flows southeasterly until draining onto an existing concrete gutter on proposed Lot 2 (6868 Cortona Drive) which then flows easterly and eventually discharges through the curb face onto Cortona Drive.

Landfill Capacity and Solid Waste

The County of Santa Barbara County owns and, through its Public Works Department (Department), operates the Tajiguas Landfill as well as the South Coast Recycling and Transfer Station. The management of solid waste by the Department includes collection, recycling, disposal, and mitigation for illegal dumping. Within the City of Goleta, collection services are provided by Marborg Industries. Waste generated in the City is handled at the South Coast Recycling and Transfer Station where recyclable and organic materials are sorted. The remaining solid waste is disposed of at the Tajiguas Landfill.

The landfill encompasses 497 acres, with a permitted operational area of 357 acres. Of this, the total permitted waste footprint is 118 acres for a capacity of 23.3 million cubic yards. The Tajiguas landfill is permitted to accept up to 1,500 tons of municipal solid waste and yard waste per day (County of Santa Barbara, 2015). Based on current waste disposal rates, the landfill will reach permitted capacity in approximately 2036, based on current projections of materials delivery to the landfill and assuming timely completion and expected performance of the Tajiguas Resource Recovery Project that would increase waste diversion (e.g., compost and recycling) rates.

ii. Thresholds of Significance

A significant impact would be expected to occur if the proposed project resulted in any of the impacts noted in the above checklist. In addition, the City of Goleta's *Environmental Thresholds and Guidelines Manual* (Section 17, *Solid Waste Thresholds*) provides the following applicable thresholds to determine whether significant utility impacts would occur:

Threshold USM-1. A project would result in a significant impact on the City's landfill capacity if it would generate more than 196 tons of solid waste per year, after a 50% reduction credit is given due to recycling efforts.

Threshold USM-2. Projects with a project-specific impact as identified above (196 tons/year or more) are also considered to have a cumulatively significant impact. Additionally, projects that would generate more than 40 tons or more tons per year (but less than 196 tons per year) of solid waste are considered to have a less than significant but adverse (i.e., a Class III) impact to regional solid waste and mitigation should be recommended.

iii. Project-Specific Impacts

The proposed project includes a request for the approval of a Parcel Map that would divide the existing 5.88-acre project site parcel lot into two lots. Proposed Lot 2 would continue to be occupied by an existing 60,068 square foot research and development building and associated parking and landscaping. The Parcel Map would not result in changes to existing environmental conditions on proposed Lot 2 that would have the potential to result in significant utilities or service system impacts. The following evaluation of potential utility and service system impacts focuses on impacts that have the potential to result from the development of the proposed Goleta Energy Storage facility, which would be located on proposed Lot 1 on the northern portion of the project site.

Checklist Items a, b and c. Less than Significant with Mitigation

The GWD has issued a Preliminary Water Service Determination Letter for the project (GWD, November 5, 2019). The proposed project would not require the use of water for domestic purposes, and project-related water use would be required primarily for uses such as landscape maintenance, occasional rinsing of the MegaPacks, and for fire suppression. To meet the County fire requirements the project includes installation of two fire hydrants on-site as well as connection to the main fire system at Cortona Drive. Therefore, the project would not require the construction of new water facilities that would have the potential to result in significant environmental impacts, and adequate water supplies are available to serve the project.

The proposed project would not generate any wastewater that requires sewer system disposal, and would not require a connection to the GSD wastewater collection system. Therefore, the project would have no impact related to the construction of new waste water collection systems and would have no impact on existing waste water treatment capacity.

The proposed project would include drainage features to accommodate the needs of the project. Stormwater run-off from the energy storage project site would be directed to a proposed detention basin along the southern portion of the site. As shown on Table HYD-2, stormwater flows from the project site after the construction of the project on Lot 1 would be reduced when compared to existing conditions. Therefore, the project would not require the construction of additional stormwater facilities that would have the potential to result in significant environmental impacts.

The proposed project includes the construction of an underground tie line that would connect the on-site substation transformer to the existing SCE Isla Vista substation located west of and adjacent to Storke Road, approximately 300 feet west of the project site. The underground tie line would be constructed using directional drilling and a "jack-and-bore"

method to install the tie line beneath the Storke Road. Construction equipment for the directional drilling may include: a bucket excavator to make bore pit(s), bore rig, a small crane to maneuver bore rig, and a small dump truck to haul the material removed from the bore. Construction equipment on the Isla Vista Substation site may include: bore pit(s), an excavator (backhoe or similar) for trenching, a pulling trailer for pulling cable, and man-lifts as needed to assist with termination of the cable. The drilling operation is anticipated to take approximately one week to complete depending on the subsurface conditions. As described in the impact analysis above, potential project-related construction impacts on cultural resources, biological resources, and from construction equipment noise would be reduced to a less than significant level with the implementation of mitigation measures CR-1 through CR-5, BIO-1, and N-1, respectively. Therefore, short-term electrical line construction impacts would be reduced to less than significant and no additional mitigation measures are required.

Checklist Items d and e and Thresholds USM-1 and USM-2. Less than Significant Impact

Construction of the proposed project would include the removal of the existing on-site plant nursery and shed, and parking lot pavement. The California Green Building Code requires the demolition of any structure requiring a permit to divert 65% of the construction materials generated during construction. Therefore, the City has implemented a mandatory Construction and Demolition (C&D) Debris Recycling Program to divert at least 65% of C&D waste from landfill disposal in accordance with state law. In addition, diversion reporting is required after construction in accordance with the City of Goleta's Construction and Demolition Debris Recycling Program Waste Reduction and Recycling Guidance Document. The applicant will be required to substantiate how a 65% diversion factor was achieved during construction. Compliance with adopted Green Building Code requirements will reduce the project's short-term waste generation impacts to a less than significant level.

Operation of the proposed project would not generate solid waste that requires landfill disposal. Occasionally individual batteries may need to be replaced. Removed batteries would be disposed of off-site in accordance with local, state, and federal regulations.

Therefore, the construction and operation of the proposed project would not generate a substantial amount solid waste and would not exceed adopted numeric waste disposal thresholds. The limited amount of solid waste generated by the project the project would not exceed state or local standards, exceed the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, the project's solid waste impacts would be less than significant.

iv. Cumulative Impacts

Based on the above analysis, the proposed project would not result in a substantial increase in the use of available utility capacity, including the GWD's water supply, GSD's sewage treatment capacity, the City storm drain system, or solid waste disposal capacity. Therefore, the project's public utility impacts would not be cumulatively considerable or significant.

v. Mitigation Measures and Recommended Conditions of Approval

The project would not result in significant utility and service systems impacts. No mitigation measures are required.

vi. Residual Impact

The project would not result in significant utility and service system impacts. No mitigation measures are required.

S. WILDFIRE

If located in or near a state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?			X		
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 wildfire?			X		
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?			X		
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?			X		

i. Existing Setting

The project site is located in a Local Responsibility Area. The site is approximately 3,000 feet south of the nearest Very High Fire Hazard Severity Zone located in a State Responsibility Area. (California Department of Forestry and Fire Protection 2007).

The Santa Barbara County Fire Department provides primary fire suppression and fire prevention services to the City of Goleta (City) and has established standards for building and development review to minimize fire hazards and provide for adequate fire suppression. In reviewing proposed developments, the Santa Barbara County Fire Department adheres to standards for fire hydrant spacing, fire flow, and need for sprinkler systems. Standards for peak-load water supply require that adequate water flow is available for effective fire suppression. The minimum required fire flow depends on the type of building construction, the proximity of adjacent structures, and the presence or absence of fire walls and other fire protection devices. Minimum required fire flow standards are specified in the California Uniform Fire Code, and the Fire Department reviews new developments and redevelopments to ensure compliance with these minimum requirements.

ii. Thresholds of Significance

The project would have a significant impact if it is near a state responsibility areas or lands classified as very high fire hazard severity zones, if the project were found to cause an impact defined in the above checklist.

iii. Project-Specific Impacts

Checklist Item a. Less than Significant Impact.

The project site is located in an urbanized area, approximately 3,000 feet or 0.6 mile from the closest wildland area and receives fire protection from the County of Santa Barbara Fire Department. The project would consist primarily of MegaPack battery storage structures, other related equipment, and on-site irrigated landscaping. The project would not result in an increase in population on or near the project site or in wildland area. Access to the energy storage facility would be from two existing driveway connections to Cortona Drive, which would provide primary and secondary access to the project site for emergency vehicles. The long-term operation of the project would generate a minimal amount of traffic, likely less than 10 vehicle trips per month. Given the distance to the nearest wildland area and that the project would not substantially increase the population of the project area or traffic on local roadways, it would result in less than significant emergency response and evacuation impacts in wildland areas.

Checklist Item b, c and d. Less than Significant Impact. The project is not located on moderate or steep slopes, in an area with highly flammable vegetation, in an area without adequate water supplies, or an area with difficult or constrained access. In addition, the project would not result in the installation of, or require increased maintenance of, roads, fuel breaks, or power lines in an area that has an existing high wildfire risk. The project is in an area where prevailing winds could carry wildfire smoke and ash to the project site. This is a condition that has the potential to affect the entire City and is not unique to the project site. There are no water courses or steep slopes near the project site that would have the potential to result in significant post-fire slope stability or drainage changes. Therefore, the project would have less than significant impacts related to increase existing wildfire risk impacts.

iv. Cumulative Impacts

The project is located approximately 3,000 feet south of the nearest designated High Fire Hazard Area in a State Responsibility Area. The project site is located in an urban area that receives fire protection from the County of Santa Barbara Fire Department. In addition, the project would not substantially increase existing wildfire-related risk impacts on or near the project site. Therefore, the project's cumulative wildfire-related impacts would not be cumulatively considerable and would not be significant.

v. Mitigation Measures and Recommended Conditions of Approval

The project would not result in significant wildfire-related impacts. No mitigation measures are required.

vi. Residual Impact

The proposed project would not result in significant residual wildfire impacts.

T. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	See Prior Document
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?			X		
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)?			X		
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X		
d. Would the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?			X		

Checklist Item a. Less than Significant Impact with Mitigation

The proposed project is located within an urbanized area on a site that currently has been extensively disturbed and contains a limited development. Section D, Biological Resources, above, evaluates the project's potential direct and indirect impacts on biological resources, and determined that the project has the potential to result in significant impacts on nesting birds during construction activities. This potential impact would be reduced to a less than significant impact with the implementation of proposed Mitigation Measures BIO-1, which requires a pre-construction survey if construction would occur during the nesting season, and the implementation of specified measures if occupied nests are detected. With the implementation of this mitigation measure, potential impacts to biological resources would be less than significant.

The Cultural (Section E) and Tribal Resources (Section R) sections above identify potentially significant project-related effects on cultural and tribal resources. Proposed mitigation measures CR-1 through CR-5 require monitoring during initial ground disturbing operations and specify actions to be implemented in the unlikely event that resources are encountered during construction activities. The implementation of the identified mitigation measures would reduce potential impacts to Cultural and Tribal Cultural Resources to less than significant.

Checklist Item b. Less than Significant Impact

This project is consistent with the project site's Business Park land use designation of the City of Goleta General Plan and Coastal Plan. This Initial Study has identified potential impacts in the areas of biological resources, cultural/tribal cultural resources, and short-term construction noise that require mitigation to reduce project-specific impacts to a less than significant level. The project's approval is conditioned upon implementation of the identified mitigation measures. The identified mitigation measures also reduce the identified project-specific effects to levels that are not cumulatively considerable. Therefore, the project would not result in significant cumulative impacts.

Checklist Item c. Less than Significant Impact

Project-related effects on human beings related to environmental effects such as air quality, noise, hazards, hydrology and water quality, have been analyzed in this Initial Study. Impacts on human beings would either be less than significant or reduced to a less than significant level with the implementation of identified mitigation measures.

Checklist Item d. Less than Significant Impact

The long-term environmental goal of the project is to facilitate the use of renewable energy sources and to enhance energy resiliency by providing additional electricity storage capabilities in the City of Goleta. Each of the project's significant and potentially significant impacts can be reduced to a less than significant level with the implementation of proposed mitigation measures. Therefore, the project would not result in near-term impacts or other conditions that would be inconsistent with long-term environmental goals.

16. PREPARERS OF THE INITIAL STUDY, CONTACTS, AND REFERENCES

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17. ATTACHMENTS:

Each of the following documents is available for review at: www.cityofgoleta.org/city-hall/planning-and-environmental-review/ceqa-review

1. Project Plans dated January 22, 2021.
2. CalEEMod Model Results, Rincon Consultants, Inc., January 22, 2020.
3. Biological Resources Assessment, Rincon Consultants, Inc., March 30, 2020.
4. Geotechnical Engineering Report, Earth Systems Pacific, 2019.
5. Supplemental Air Quality and Greenhouse Gas Modeling, Rincon Consultants, Inc., May 8, 2020.
6. Phase 1 Site Assessment, Dudek, 2019.
7. Risk Assessment Final Report, MRS Environmental, March 16, 2021.
8. Risk Assessment Peer Review Comments
9. Drainage Analysis, Flowers & Associates, Inc. February 18, 2021.
10. Stormwater Control Plan, Flowers & Associates, Inc. February 18, 2021.
11. Noise Assessment, Rincon Consultants, Inc. January 22, 2021.
12. Noise Assessment Peer Review Comments
13. City of Goleta Outdoor Lighting Guidelines
14. Traffic and Parking Assessment, Associated Transportation Engineers, 2019