



Notice of Preparation of a Draft Environmental Impact Report for the Compass Energy Storage Project (24-OPT-02)

Date: May 2, 2025
To: Reviewing Agencies and Other Interested Parties
From: California Energy Commission (CEC)
Project Title: Compass Energy Storage Project (project)
Project Applicant: Compass Energy Storage LLC
Docket Log: 24-OPT-02
NOP Review Period: May 3, 2025 to June 2, 2025

In accordance with California Code of Regulations, title 14, section 15082, California Energy Commission (CEC) staff has prepared this Notice of Preparation (NOP) to inform the Governor's Office of Land Use and Climate Innovation (LCI) (formerly known as the Office of Planning and Research), and each responsible and trustee agency that an Environmental Impact Report (EIR) will be prepared for the Compass Energy Storage Project (project) proposed by Compass Energy Storage, LLC (applicant) in San Juan Capistrano, in Orange County. A copy of this NOP will also be filed with the county clerk in the county in which the project would be located.

The CEC is the lead agency under the California Environmental Quality Act (CEQA) and, under Public Resources Code section 25545.7, must prepare an environmental impact report for this project. Upon receipt of an application, the CEC has the exclusive authority to certify the site and related facility. With certain exceptions, the issuance of a certificate by the CEC is in lieu of any permit, certificate, or similar document required by any state, local, or regional agency, or federal agency to the extent permitted by federal law, and supersedes any applicable statute, ordinance, or regulation of any state, local, or regional agency, or federal agency to the extent permitted by federal law. Further information about the Opt-In Certification Program can be found on the CEC website at: <https://www.energy.ca.gov/programs-and-topics/topics/power-plants/opt-certification-program>

Responsible and Trustee Agencies

Pursuant to the CEQA Guidelines (Cal. Code Regs, tit. 14, § 15082(b)), the CEC requests LCI and responsible and trustee agencies' views on the scope and

content of the environmental document relevant to each agency's area of statutory responsibility that must be included in the draft EIR. Responsible agencies for this project are State Water Resources Control Board and Regional Water Quality Control Board. The only trustee agency identified for this project is the California Department of Fish and Wildlife. At a minimum, the response shall identify:

- The significant environmental issues and reasonable alternatives and mitigation measures that the responsible or trustee agency, or the LCI will need to have explored in the draft EIR; and
- Whether the agency will be a responsible agency or trustee agency.

Due to the time limits mandated by State law, responses must be sent at the earliest possible date but not later than 30 days after receipt of this notice. Based on comments received by public agencies on the scope and content of the EIR, CEC staff may request additional information from the applicant to address such comments. If a responsible or trustee agency, or LCI, fails by the end of the 30-day period to provide the CEC with either a response to the notice or a well-justified request for additional time, CEC staff will presume that the entity does not have a response to make.

Document Availability

The CEC has a webpage for the Compass Energy Storage Project. The application and related project documents are viewable by clicking the "Docket Log (24-OPT-02)" link located near the upper right corner of the project webpage: <https://www.energy.ca.gov/powerplant/energy-storage-system/compass-energy-storage-project>.

The direct link to the project docket log is:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-OPT-02>

Interested parties may also subscribe via the project webpage (linked above) to receive electronic notices of all project-related activities and documents related to CEC's evaluation of the application—look for the box with the words "SUBSCRIBE COMPASS ENERGY STORAGE PROJECT" to add your subscription email. Alternatively, you can go to CEC's subscription page (<https://www.energy.ca.gov/subscriptions>) under "Power Plants Licensing and

Projects” and check the “Compass Energy Storage Project” box under “Projects Under Review Topics.”

Submitting Comments

Please submit comments electronically to the project docket. To use CEC's electronic commenting feature, go to CEC's webpage for this proceeding, (identified above), click on the "Submit eComment" link, and follow the instructions in the online form. If you have a file you would like to submit, use the "Submit e-filing" link. Be sure to include the project name in your comments. Once filed, you will receive an email with a link to them and the comments will be part of the proceeding's public record.

Project Location and Existing Conditions

The project site consists of approximately 12.4 acres of an approximately 40.8-acre parcel in San Juan Capistrano, California. The project also includes approximately 1.83 acres of offsite components (access road). The project site is located within the northern portion of the city, adjacent to Camino Capistrano with Interstate-5 located to the east. The project site is utilized by the current owner, Saddleback Church, for ancillary activities and is adjacent to the Saddleback Church Rancho Capistrano to the north, mostly open space to the south, Oso Creek to the south and east, Metrolink Railroad and Interstate-5 to the east, and open space and residences outside of the city limits to the west. The San Diego Gas & Electric (SDG&E) Trabuco to Capistrano 138 kilovolt (kV) transmission line is located approximately 500 feet to the east and runs alongside the Metrolink Railroad tracks.

Project Description

The project is a proposed battery energy storage system (BESS) that would be capable of storing up to 250 megawatts (MW) of electricity for four hours (up-to 1,000 MW hours). The project would be composed of lithium-iron phosphate batteries (Tesla Megapack 2XL is proposed), inverters, medium-voltage transformers, a switchyard, a collector substation, and other associated equipment to interconnect into the existing SDG&E Trabuco to Capistrano 138-kV transmission line located approximately 500 feet from the project site and approximately 90 feet from the project property. The project would connect to the SDG&E electric transmission system via a proposed "loop-in" transmission line that would be constructed to transfer power to and from the proposed project. The loop-in transmission line will be supported by up to 5 pole structures which will be sited to fully avoid Oso Creek. These poles consist of two poles on the Project site within the SDG&E switchyard, west of Oso Creek, and three pole

on the east side of Oso Creek (two of which will be replacing existing poles); only one pole on the east side of Oso Creek will be new).

Electric energy would be transferred from the existing power grid to the project batteries for storage and from the project batteries to the power grid when additional electricity is needed. No off-site transmission upgrades are required for the full capacity of this project, and an interconnection agreement with SDG&E and the California Independent System Operator has been implemented. Following construction of the switchyard by Compass Energy Storage LLC, ownership and operations of the switchyard would transfer to SDG&E.

Probable Environmental Effects

The CEC will prepare a Staff Assessment (SA). The SA will include a Draft EIR following the requirements of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) and the CEQA Guidelines (Cal. Code of Regs., tit. 14, div. 6, ch. 3). The purpose of the SA, which will include a Draft EIR, is to provide objective information regarding the project's significant effects on the environment, identify possible ways to minimize the significant effects, describe reasonable alternatives to the project, assess the project's conformance with applicable local, state, and federal laws, ordinances, regulations, and standards, and provide an evaluation of the extent to which the application complies with additional licensing requirements set forth in the Public Resources Code. This information will be considered by the CEC Commissioners in deciding whether to grant a certificate to build and operate the project. The SA will include an Engineering Evaluation, Environmental Impact Assessment, assessment of the Mandatory Opt-In Requirements, and evaluation of Other Key Topics as identified in **Table 1**.

Table 1: Staff Assessment Topic Outline

Proposed Section	Topics Included
Engineering Evaluation	• Facility Design • Facility Reliability • Transmission System Engineering • Worker Safety and Fire Protection
Environmental Impact Assessment	• Air Quality • Biological Resources • Climate Change/Greenhouse Gas Emissions • Cultural/Tribal Cultural Resources • Efficiency/Energy Resources • Geology/Paleontology/Minerals • Hazards/Hazardous Materials/Wildfire • Land Use/Agriculture/Forestry • Noise and Vibration • Public Health • Socioeconomics

	• Solid Waste • Transmission Line Safety and Nuisance • Transportation • Visual Resources • Water Resources • Alternatives Analysis
Mandatory Opt-In Requirements	• Workforce Requirements • Community Benefits Agreement • Net Positive Economic Benefit
Other Key Topics	• Environmental Justice • Compliance Conditions • Compliance Monitoring

Preliminary review of the application and other filed information indicates the following probable environmental effects:

Air Quality

The project site is located in Orange County, within the part of the South Coast Air Basin under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The project area is currently designated as a non-attainment area with respect to National Ambient Air Quality Standards and California Air Quality Standards for ozone and particulate matter of 2.5 micrometers and smaller in diameter (PM_{2.5}), and California Air Quality Standards for particulate matter of 10 micrometers or less (PM₁₀) (Cal. Code Regs., tit. 17, §§ 60200-60210).

Construction of the project is estimated to require 15 months to complete. Construction and operational emissions are not anticipated to exceed the significance thresholds set by the SCAQMD. Staff will evaluate the significance of the ambient air quality impacts of the project based on an air quality impacts assessment.

The EIR will evaluate whether the project would result in potentially significant air quality impacts including compliance with the applicable air quality plan; result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under any ambient air quality standards; expose sensitive receptors to substantial pollutant concentrations from criteria pollutants; and/or result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Biological Resources

Staff anticipates that project construction and operation could have a potentially significant impact on biological resources. Specifically, impacts could affect various special-status wildlife species, including state and federally listed species.

Ground disturbance proposed as part of the project could have adverse impacts to sensitive herpetofauna such as southwestern pond turtle (*Actinemys pallida*), should they be present in upland areas or be moving through the project site to upland aestivation sites. Construction noise and fugitive dust could also adversely affect nesting birds under certain circumstances. The introduction or proliferation of weeds or other non-native wildlife to Oso Creek may also disrupt wildlife. Operational impacts from lighting and noise, or exposure to smoke from battery fires, could also occur.

The applicant has proposed various mitigation measures to reduce the severity of any such impacts, including implementation of pre-construction surveys, worker environmental awareness training and education program, the use of best management practices, inspections of pipes, culverts, and trenches, conducting surveys for nesting birds, and use of approved landscape vegetation. Staff will evaluate the adequacy and effectiveness of these measures and anticipates drafting additional measures based upon independent research and consultation with California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS).

Crotch's bumble bee (*Bombus crotchii*) and burrowing owl (*Athene cunicularia*) are both state candidates for listing and have some potential to occur at or near the project site. Neither of these species were detected during surveys conducted by the applicant in the summer of 2024 (TN 259155); however, their presence cannot be ruled out. Staff will coordinate with USFWS and CDFW to ensure appropriate measures are developed and incorporated for state- or federally listed species, as required.

Cultural Resources and Tribal Cultural Resources

The project may impact cultural resources based on preliminary review. The cultural resources inventory report prepared by the applicant identified one resource that meets the California Register of Historical Resources criteria, qualifying it as a historical resource subject to the requirements of CEQA. The inventory also determined there is a moderate potential to encounter buried archaeological deposits and that there is a potential for encountering unknown human remains in the project site.

Ground disturbance proposed as part of the project could encounter and damage buried resources that meet CEQA's criteria for historical resources, likely resulting in a significant impact under CEQA. The applicant has proposed various mitigation measures to reduce the severity of any such impacts, including archaeological monitoring, worker awareness training, and implementing a

discovery protocol. Staff will evaluate the adequacy and effectiveness of the applicant's proposed mitigation.

For tribal cultural resources, CEQA requires the lead agency to consult with tribes to identify such resources and assess potential impacts. On May 5, 2025, the CEC will send invitation letters offering to consult with all tribes traditionally and culturally affiliated with the project area. Impacts on tribal cultural resources have not been determined at this time.

Geology, Paleontology and Minerals

As described in California Geological Survey Note 36, the project is within the Peninsular Range geomorphic province of California, in the southeastern portion of the Los Angeles basin. The applicant conducted geotechnical and paleontological investigations of the project site. The project is in the Capistrano Embayment, a fault-bounded structural basin containing at least 3,000 feet of sediment. The oldest geologic units at, and near, the project are the Tertiary Niguel and Capistrano formations. The oldest geologic unit is the Capistrano Formation, which is comprised of poorly consolidated and fossiliferous marine siltstones and mudstones. Above the Capistrano Formation is the Niguel formation, which is comprised of fossiliferous marine sedimentary rocks. Quaternary geologic units include alluvium, colluvium, landslide deposits, old alluvium, and river terrace deposits.

The geotechnical investigation of the project site identified seismic shaking, seismically induced ground failure, including liquefaction, landslides, compressible and expansive soils, and soil erosion as potentially significant geologic hazards that require mitigation. The geotechnical evaluation did not identify any active faults at the project site. The project is not in an Alquist-Priolo Earthquake Fault Zone. There are numerous major active faults nearby and in Southern California. The closest major active fault is the Newport-Inglewood Fault Zone. There are also blind thrust faults in the region, such as the San Joaquin Hills Blind Thrust Fault. Earthquakes on nearby faults may cause the project to experience seismic shaking and related geologic hazards.

The geotechnical investigation also identified the following geologic hazards. The project site is in a State of California Seismic Hazard Zone Map for liquefaction potential. The western portion of the project site underlies a large ancient landslide complex. Compressible and expansive soils underlie the project site. A stream channel adjacent to the project site is migrating and eroding into the project site. The applicant proposes mitigation, through design, grading, and construction, to reduce potentially significant direct and indirect impacts associated with geologic hazards.

The applicant's paleontological investigation concludes the Niguel and Capistrano formations have high paleontological sensitivity because these formations have produced many significant paleontological resources. Paleontological resources could be encountered during construction activities where native soil and rock formations would be disturbed, such as grading, trenching for utilities, excavation for foundations, and installation of support structures. The applicant proposes mitigation through planning, training, and monitoring to reduce potentially significant impacts on unique paleontological resources from construction.

Hazards, Hazardous Materials, and Wildfire

The project would use standard construction hazardous materials and small quantities of hazardous materials during project operations that could pose a risk to workers and the public.

The project site is located within the City of San Juan Capistrano that is subject to urban and wildland fires. The use of mitigation measures that include engineering controls, fire detection measures, and rapid fire-response to control fires are anticipated to be used to reduce impacts. Mitigation measures proposed by the applicant will be evaluated by staff for adequacy and effectiveness and staff will identify additional measures as necessary. A hazardous condition may exist due to the potential for a BESS fire to occur. Staff will assess this potential and propose engineering and administrative controls, as well as enhanced emergency response, to reduce this risk.

Land Use

The City's Zoning Regulations do not contain regulations or criteria specifically addressing commercial BESS facilities. The City's Development Services Director determined that the project was not an allowable use under current zoning and would need a Comprehensive Development Plan to be prepared for consideration by the City Council.

In April 2024, the City Council adopted an interim ordinance prohibiting any permit or entitlement from being approved or issued for a commercial BESS facility within the City's boundaries ("Urgency Ordinance No. 1116"). Under Government Code Section 65868 such an urgency measure expires forty-five days following adoption but may be extended for an additional ten months and fifteen days, and subsequently for an additional twelve months. In May 2024, the City Council adopted a ten month and fifteen-day extension of the interim ordinance and on March 18, 2025, the City Council extended for a second time Urgency Ordinance No. 1116 for one year.

The EIR will evaluate land use impacts including any due to potential conflicts with local plans and ordinances.

Noise and Vibration

The noise levels associated with temporary project construction activities may be potentially significant but could be reduced through the implementation of a construction noise plan that will be identified and evaluated as appropriate. No significant noise and vibration impacts associated with project operation are anticipated.

Public Health

The proposed project would be located in Orange County, which is the part of the South Coast Air Basin under the jurisdiction of the South Coast Air Quality Management District.

Construction of the proposed project is estimated to require 15 months to complete. Toxic air contaminants (TACs) from diesel equipment used during construction have the potential to result in significant impacts. CEC staff will evaluate the impacts of TACs by performing a health risk assessment. Regular on-site emissions during normal operation are not expected.

CEC staff has not completed its analysis of the significance of the project's potential construction or operational impacts and is yet to reach a definitive conclusion. The EIR will discuss whether the project would expose sensitive receptors to substantial pollutant concentrations of toxic air contaminants during construction and during a potential BESS fire and propose mitigation measures when necessary to reduce any health risks.

Transportation

During project construction, there may be transportation impacts. There may be impacts to the local road system, particularly at intersections adjacent to the nearby high school during construction. It is anticipated these could be mitigated by controlling the timing of construction-related trips, to avoid the peak traffic periods of the school, through implementation of a Transportation Management Plan.

During construction, it is anticipated that flag-persons and other temporary treatments would be needed at the primary access point to the project site to safely allow ingress/egress of large trucks. This primary intersection (Camino Capistrano/Rancho Capistrano) is also adjacent to an active passenger rail line and creek, which justifies additional precautions with respect to large vehicles and hazardous materials.

Visual Resources

Operation of the project including battery enclosures, substation, switchyard, and loop-in gen-tie line could have potentially significant impacts on visual resources. The aesthetic effects of the project would be assessed from four key observation points, evaluating the project from several locations and viewing distances to provide a representative cross-section of affected landscapes. The locations were selected based on the project's viewshed, visual exposure, and potential viewers. The applicant has proposed various mitigation measures to reduce the severity of any such impacts, including implementation of Conceptual Lighting Plans for the BESS yard, access roads, substation, and switchyard; installation of a 10-foot-tall perimeter wall; and implementation of a Conceptual Landscape Plan for the purposes of facility screening and aesthetic enhancement. Staff will evaluate the adequacy and effectiveness of the applicant's proposed mitigation. The EIR may include additional mitigation pertaining to night lighting management and facility screening.

Water Resources

Project construction would disturb more than one acre of land and be subject to construction-related stormwater permit requirements of California's National Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) administered by the State Water Resources Control Board. During operations, stormwater collected within the BESS area would accumulate into an underground storage chamber to be pumped uphill into the Orange County Flood Control District storm drain and outfall into Oso Creek northeast of the site. Since the stormwater volume would not be expected to change, the project is not anticipated to increase the burden of flooding. Based on Federal Emergency Management Agency flood insurance maps, the project lies outside of the 100-year flood plain. Project control of erosion is anticipated to result in beneficial impacts when compared with existing conditions. Water for the project would be supplied by a local purveyor, the Moulton Niguel Water District. Water demand for dust suppression, soil compaction and grading during project construction would total approximately 35 acre-feet. Since the BESS facility would be run remotely, water demand during project operation would be limited to supporting landscaping.

During construction, sanitary facilities consisting of portable toilets would be supplied and maintained by a third-party vendor. No sanitary facilities would be needed during project operations since the BESS facility would be run remotely.

CEC staff will evaluate project impacts on water resources and identify mitigation measures if necessary.

Worker Safety and Fire Protection

Industrial environments pose inherent safety and health risks to workers during construction and operations. Fire risks are also present, especially at a BESS facility. Worker safety and fire protection are regulated through laws, ordinances, regulations, and standards, at the federal, state, and local levels. Workers at an energy facility operate equipment and handle hazardous materials and may face hazards that could result in accidents or serious injury. Protective measures are employed to eliminate or reduce these hazards or to minimize the risk through special training, protective equipment, and procedural controls. The project would use standard construction hazardous materials and small quantities of hazardous materials during project operations that could pose a risk to workers. The project consists of the installation and use of a BESS, which could pose a risk of fire if a thermal runaway in a battery cell, module, or unit should occur. The use of mitigation measures that include use of a safer battery cathode (Lithium Iron Phosphate), engineering controls such as "sparkers" and deflagration panels, fire detection measures, and administrative controls such as rapid emergency-response to control fires are anticipated to be used to reduce impacts to workers as well as the off-site public. Mitigation measures proposed by the applicant will be evaluated by staff for adequacy and effectiveness and staff will identify additional measures as necessary.

Public Scoping Meeting

The Opt-In Certification process requires a public informational and scoping meeting to be held as near to the project site as practicable, and within 30 days of CEC's determination of a complete application on April 30, 2025 (TN 262874). The CEC expects this event will occur at the end of May pending confirmation of the venue and the availability of key participants. The informational/scoping meeting will be noticed via the project docket (weblink provided above) at least 10 days prior to its occurrence and will contain information specific to the public meeting and how to participate.

Attachments:

1. Figure 1-1, Project Vicinity (From application TN 255535-1)
2. Figure 2-1, Site Plan (From application TN 262697)

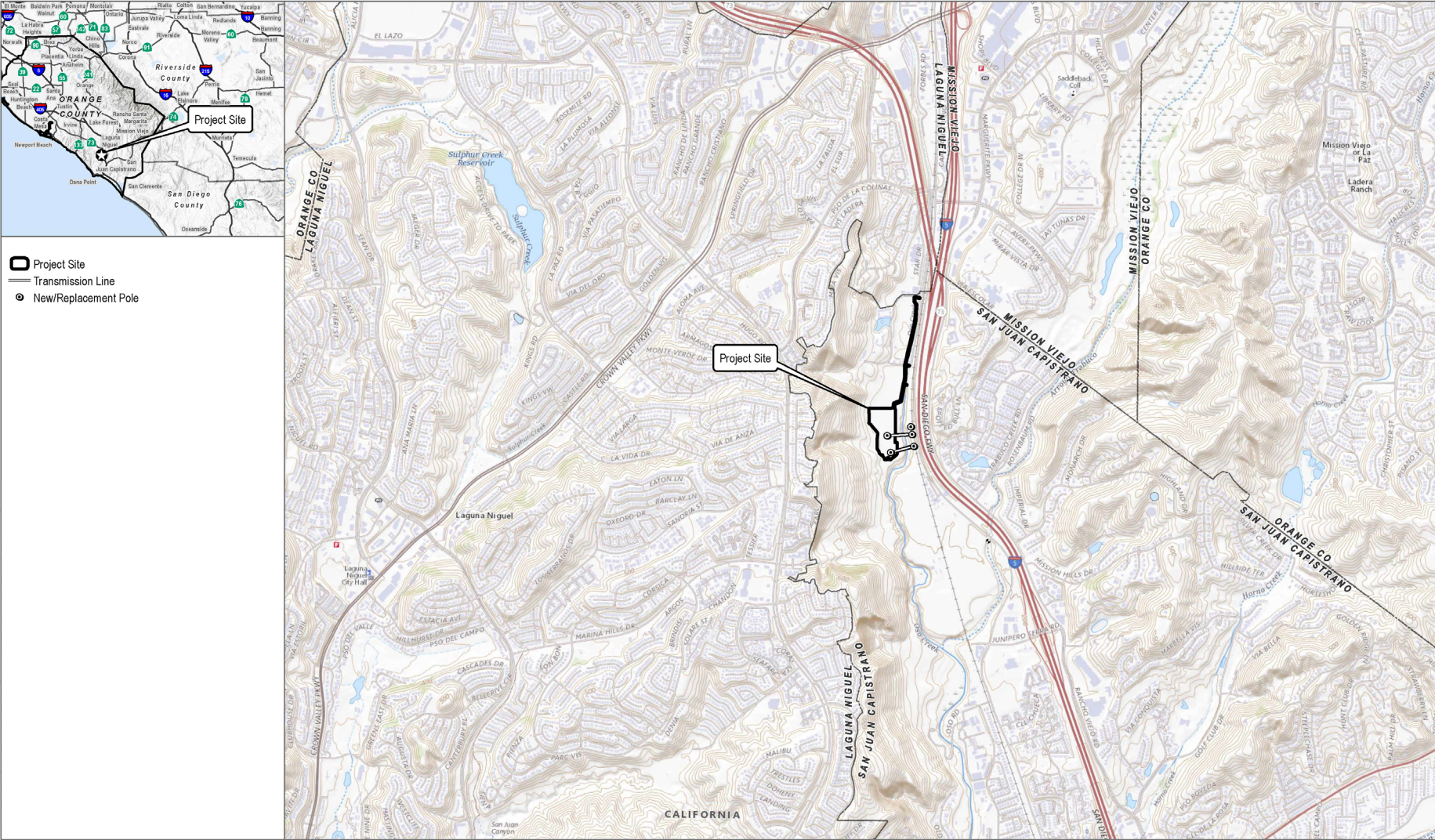
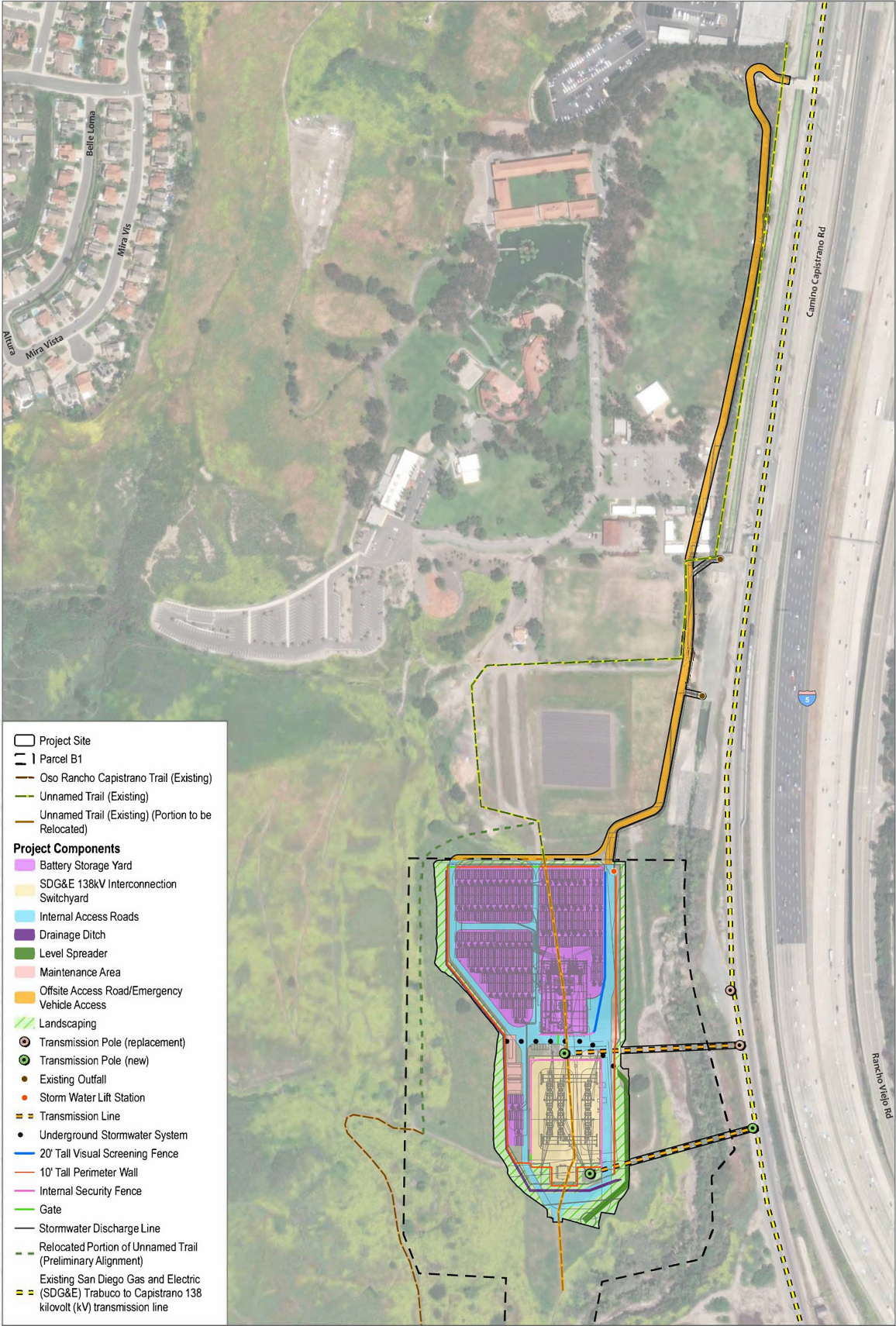


FIGURE 1-1
Project Vicinity
Compass Energy Storage Project



SOURCE: Maxar 2024; ECI 2025

FIGURE 2-1
Site Plan