

DESIGN REVIEW COMMITTEE MEMORANDUM

DATE: October 19, 2022
ITEM: No. 1 - 1:35 p.m.
FROM: Joshua Miranda & Hannah Spencer, Project Planners

SUBJECT: **File No.:** PLP22-0005; Frates Subdivision & Battery Energy Storage System Facility
Applicant: Collin Ramsey / Richard Coombs
Address: 1901 Frates Rd., Petaluma
APN(s): 017-050-006, 017-140-011, 017-140-012

Request

Preliminary design review limited to the proposed Battery Energy Storage System Facility Use Permit component of the project.

Project Description

The project File No. PLP22-0005 includes a combined request to 1) subdivide the existing 115.12 acre property (encumbered by an Open Space Easement, and formerly known as Adobe Creek Golf Club), to create three parcels of 52.69 acres (proposed Parcel 1), 47.05 acres (proposed Parcel 2), and 15.61 acres (proposed Parcel 3); and 2) a Use Permit to construct a Battery Energy Storage System (BESS) Facility on proposed "Parcel 3" of the subdivision.

The BESS Facility will have capacity of delivering 275 MW and 1,000 MWh of on-demand energy to the electrical grid. Equipment onsite consists of approximately 2,392 lithium-ion batteries housed within approximately 127 standardized, all-weather outdoor enclosures. The enclosures will be paired with appurtenant systems and equipment. Security fencing and lighting is proposed, as well as a new landscaped berm to screen the approximate 10-foot-tall facility enclosures. Two to four employees will visit the facility twice a month and as needed for maintenance and monitoring. In addition to regularly scheduled maintenance, augmentation of the batteries will be required over the 20-year facility lifespan. Augmentation could include replacement of batteries within enclosures and/or the phased installation of new BESS enclosures. See Attachment 1 for a full project description for PLP22-0005.

Background

The project site is located at 1901 Frates Road, Petaluma, previously known as the Adobe Creek Golf Course. The subject parcel has a base zoning of Visitor Serving Recreation (K) with a combining district of Valley Oak Habitat (VOH) and a General Plan Land Use of Visitor Serving Recreation (K). The project site is also subject to the Sonoma Mountain Area Plan.

Surrounding uses include the City of Petaluma and a residential development containing single family dwellings and a portion of the former golf course. The project site shares its northeastern boundary with the PGE substation station, which the BESS Facility intends to connect to. Surrounding agricultural lands include vineyard and pasture and are designated as a Community Separator. The project will use an existing and improved driveway located on Frates Road.

Key Considerations

- **Building Design and Site Layout**

The BESS Facility equipment is comprised of lithium-ion battery racks housed within standardized, purpose-built, all-weather outdoor enclosures. The enclosures will be paired with cooling systems, safety systems, inverters, controls, metering/telemetry and interconnection equipment. The enclosures can be painted in beige, tan, or a cream color to soften visual impacts and blend the facility in with surrounding vegetation.

A typical BESS enclosure is about the same size as a standard shipping container; however, the number, size, layout and capabilities of each enclosure varies depending on the final system manufacturer selected for the BESS Facility. On average, the enclosure will be approximately 10 feet in height and approximately 8 feet in width. The lengths of the enclosures vary due to the modular nature of these units.

The BESS enclosures will be arranged in rows on Future Parcel 3 on top of Class II Base gravel surface including an approximately 24-foot-wide central drive aisle bisecting the BESS Facility to provide internal access to both maintenance and emergency vehicles. In addition to this central drive aisles, a 16-foot-wide drive aisle will be provided around the perimeter of the enclosures for maintenance vehicles and secondary emergency access. Development of the site will result in removing 52-56 existing mature trees and approximately 11.7 acres of disturbance.

- **Landscaping and Lighting**

The BESS Facility proposes a landscape buffer and berm to substantially screen the facility from public views. The landscape buffer will be comprised of native, drought-tolerant and wildland fire-resistant plantings. Additionally, an approximate 7-foot-high earthen berm surrounding the site will be constructed and vegetated accordingly. The plantings selected for landscaping will consist of approximately 100 mature trees plus shrubs, flowering perennials and groundcover to blend and compliment with existing native vegetation.

A limited number of new lighting fixtures will be installed on the BESS site. The lighting will be used to illuminate the substation and the BESS equipment for security, emergency ingress and egress, and maintenance. The luminaires will be fully shielded and directed downward to avoid light trespass beyond the facility's boundary. The facility will not be

illuminated during normal daytime and nighttime operations. Although not anticipated, in the off chance that nighttime maintenance work is ever required, operations and maintenance staff would bring temporary portable lighting onto the site as needed.

Environmental Review

Under review; initial study in process.

Recommendation

Staff recommends the Design Review Committee provide preliminary feedback on the following project elements:

- Overall site design
- Exterior colors
- Landscaping
- Exterior lighting
- Perimeter fencing

Next Steps

An environmental will be prepared for the project and circulated and noticed for public comment at a later date. A decision on the project will be made by the Sonoma County Board of Supervisors during a public hearing at a later date, which will be publicly noticed at that time.

Attachments

1. PLP22-0005 Applicant Proposal Statement
2. PLP22-0005 Site Plan
3. PLP22-0005 Landscaping Plan
4. PLP22-0005 Preliminary Grading, Drainage, and Utility Plans
5. PLP22-0005 Berm Sections
6. PLP22-0005 Lighting Plan
7. PLP22-0005 Tree Removal Plan