

INTRODUCTION & BACKGROUND

Resource Management and Planning (RMP) is requesting site endorsement for a 12kV electrical switch station to be located north of Voigt Drive in the P510 surface parking lot near the Campus Services Complex (Figure 1). The project would provide more electrical system reliability in support of the campus Long Range Development Plan implementation.

Located on the west side of I-5, the new switch station would be served from both the Central Utility Plant cogeneration system via the existing Revelle Switch Station and from San Diego Gas & Electric Company (SDG&E) via the East Campus 69/12.47 kV Main Substation.

The construction budget is estimated to be \$12M.

PROGRAM & PROJECT DESCRIPTION

The project would include electrical switch equipment with a building enclosure and associated utility work. The equipment would be contained within a building of approximately 3,800 square feet (100 feet by 38 feet).

The new 12KV Electrical Switch Station will supply power to the existing North Campus Switch Station and from time to time to the existing Revelle Switch Station depending on existing system operations. The North Campus Switch Station is currently fed by the East Campus 69/12.47KV Main Substation. The Revelle Switch Station is currently fed by both UCSD co-generator system and East Campus 69/12.47KV Main Substation. This project would also include all associated modification to existing equipment, if required, and underground medium voltage distribution system.

PROJECT SITE

The switch station is required to be located on the west side of the I-5 in order to isolate power in case of damage to the underground utility tunnel beneath the freeway. Proximity to existing utility manholes reduces the amount of conduit and cable that must be run from the station.

Three sites were evaluated near the manholes: the planted area near the I-5 freeway right-of-way, Warren Field, and P510 surface parking lot. The planted area was removed from available sites due to the right-of-way required for the future expansion of Gilman Drive. The area on the eastern edge of Warren Field is required for recreation field runoff and player staging space requirements. Though further from the manhole, the remaining location in P510 was deemed the best site and was further studied to determine the best orientation for access, to reduce the impact to parking, and to prevent any encroachment into the ecological reserve.

The proposed site (Figure 2) is approximately 5,000 square feet on the northeast side of the P510 surface parking lot. It is currently occupied by a planted area of shrubs that slopes down to a sidewalk along Greenhouse Lane. The building containing the equipment would be built into this slope to reduce visibility from Voigt Drive and to leverage access from both the parking lot and Greenhouse Lane.

The total area potentially impacted by the project is an approximately 2.4 acres of relatively flat surface parking lot characterized by planted areas with large shrubs and ornamental Torrey Pines. This surface parking lot would likely require some regrading and restriping to accommodate the new switch station building and access.

PLANNING PARAMETERS

Relationship to Long Range Development Plan (LRDP)

The project site is within the “General Services” predominant land use (on both the 2004 and 2018 LRDPs), congruent to the support use associated with the Campus Services Complex. This land use is intended to house campus support services such as utility infrastructure.

Relationship to 1989 UCSD Master Plan Study (MPS)

The project site is located along Voigt Drive, which is part of the Campus Loop Road. The project will not substantially detract from the elements that help define the Campus Loop Road, such as the rustic planting and defined setbacks.

Building Form & Massing

The switch station would be approximately 15 to 20-feet in height with an 8-foot underground utility vault. The building would be designed to minimize apparent massing from Voigt Drive and would be of similar one-story massing to nearby structures in the Campus Services Complex.

A setback of 7-10 feet from Greenhouse Lane should be held in order to provide adequate space for sidewalk and planted area for stormwater runoff.

Displacement

Up to 15 parking spaces in P510 would be permanently displaced. The project is evaluating the potential to regrade and restripe a portion or all of P510 as part of this project to make the parking lot more efficient and reduce the total number of parking spaces displaced.

Utility & Infrastructure

The utility connections for this site would include electrical and telecom that can be extended from nearby manholes on Voigt Drive. Some adjustment to the utility access may be necessary.

Environmental Considerations

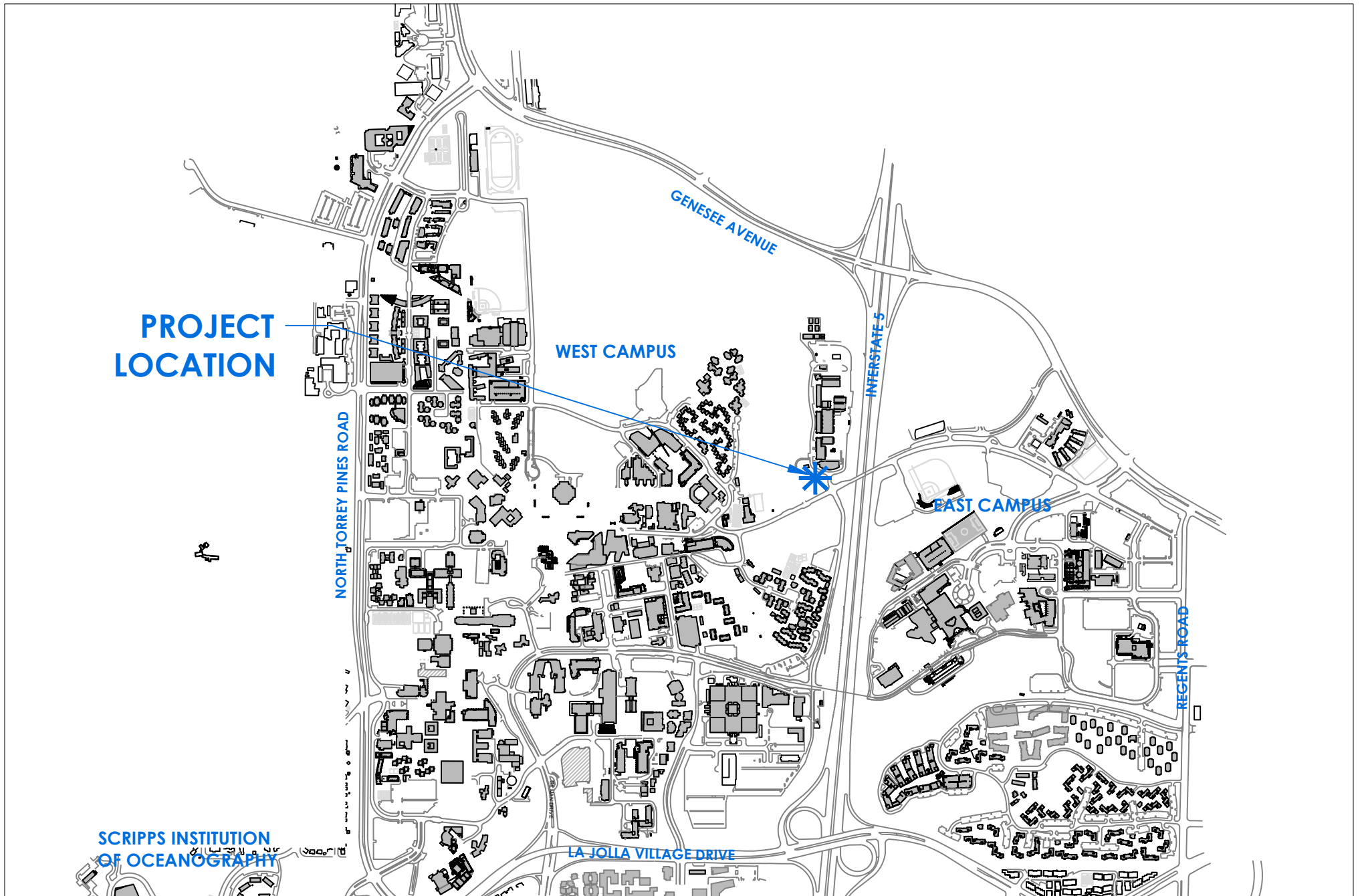
The proposed project would be subject to the California Environmental Quality Act (CEQA). It is anticipated that a categorical exemption would be submitted for the proposed project as it constitutes an addition to an existing facility. Additional environmental considerations would include less-than-significant impacts to aesthetics/visual resources, biological resources, air quality, noise, water quality, and hydrology that would be addressed with special conditions provided with the project's Environmental Impact Classification form. The project lies within the Coastal Zone and it's anticipated that it would require a Coastal Development Permit (CDP).

Sustainability

The project would comply with UC Sustainability Policy and seek to improve hydrology on the site.

RECOMMENDATION & PROCESS

The site evaluation will be presented for information and potential endorsement at the June 21st, 2018 meeting. The project will return to C/CPC at Concept for Comment to the Design Review Board.



**PROJECT
LOCATION**

WEST CAMPUS

EAST CAMPUS

**SCRIPPS INSTITUTION
OF OCEANOGRAPHY**

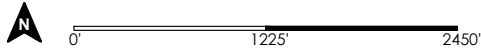
NORTH TORREY PINES ROAD

GENESEEE AVENUE

INTERSTATE 5

LA JOLLA VILLAGE DRIVE

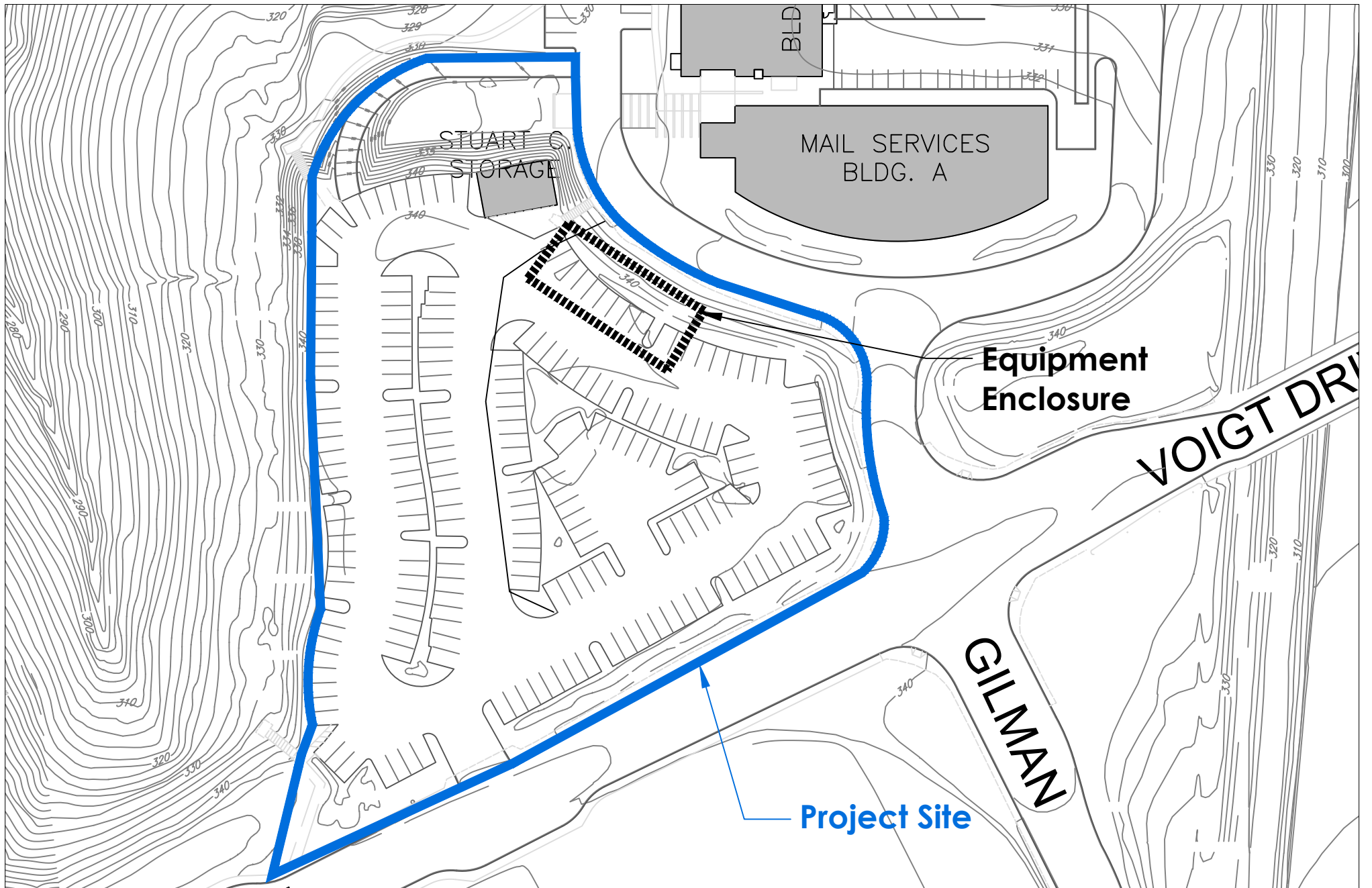
REGENT'S ROAD



I-5 Switch Station Utility Infrastructure

Figure 1 - Project Location

6/16/2018



I-5 Switch Station Utility Infrastructure

Figure 2 - Project Site

6/16/2018