| **DOCKETED** |
|-----------------|-----------------|
| **Docket Number:** | 21-SPPE-01 |
| **Project Title:** | CA3 Backup Generating Facility-Vantage |
| **TN #:** | 239260 |
| **Document Title:** | Supplemental Response to DR Set 1 DR 7 - Historic Evaluation - CA3BGF |
| **Description:** | N/A |
| **Filer:** | Scott Galati |
| **Organization:** | DayZenLLC |
| **Submitter Role:** | Applicant Representative |
| **Submission Date:** | 8/11/2021 2:30:26 PM |
| **Docketed Date:** | 8/11/2021 |
August 2, 2021

Dr. Dana Douglas DePietro
Director of Cultural Resources
FirstCarbon Solutions
Email: ddepietro@fcs-intl.com

RE: Historic Built Environment Assessment for the CA3-2590 Walsh Avenue Project, Santa Clara, California

Dear Dr. DePietro:

South Environmental was retained by FirstCarbon Solutions (FCS) to prepare a historic built environment assessment report in support of the CA3-2590 Walsh Avenue Project (project) in the City of Santa Clara, California. The purpose of this report is to determine if the proposed project will result in impacts to historic built environment resources located within the project study area. This report was prepared in conformance of the requirements of the California Environmental Quality Act (CEQA) § 15064.5 for historical resources.

Two built environment resources over 45 years old were identified with the project study area: the Peninsula Commute Service line (P-43-000928) and the Uranium Substation. These resources were recorded and evaluated for historical significance on the appropriate set of State of California Department of Parks and Recreation Series 523 Forms (DPR Forms, Attachment A).

This evaluation and associated impacts assessment were prepared by Principal Architectural Historian Samantha Murray, MA who meets the Secretary of the Interior’s Standards for architectural history and history. A resume for Ms. Murray has been provided in Attachment B.

Introduction

Project Description

The project applicant proposes to construct an emergency backup generating facility (CA3BGF) with a generation capacity of up to 96 megawatts to support the need for the CA3DC to provide an uninterruptible power supply for the tenant’s servers. The CA3BGF would consist of 44 diesel-fired backup generators arranged in a generation yard located on the north side of the CA3DC. Forty of the generators would be dedicated to supporting the electricity needs of the data center in case of a loss of utility power, and four of the generators would be used to support redundant critical cooling equipment and other general building and life safety services (house generators).
would also include switchgear and distribution cabling to interconnect the generators to their respective portion of the building.

The existing single-story office building at 2590 Walsh Avenue (the project site) would be demolished. The proposed project would remove the existing shrubs and groundcovers on the site, while protecting in-place trees that are not in conflict with proposed utilities, grading, stormwater treatment facilities, and architectural improvements.

Project Location

The proposed project site encompasses approximately 6.69 acres and is located at 2590 Walsh Avenue in the City of Santa Clara, California on Assessor’s Parcel Number (APN) 216-28-112. The project site is bound by Walsh Avenue to the northeast, parking lots to the northwest and east, the Caltrain right-of-way to the south, and the Uranium substation to the west (Figures 1 and 2).

Project Study Area

All parcels adjacent to the project site were included in the project study area (Figure 2) to capture all potential effects to built environment resources. Table 1 provides information for each parcel within the project study area, including the project site (highlighted in green), and provides each property’s built date and whether recordation and evaluation is required in consideration of CEQA Guidelines § 15064.5 for historical resources.

### Table 1. Overview of Properties within the Project Study Area

<table>
<thead>
<tr>
<th>APN</th>
<th>Address</th>
<th>Year Built</th>
<th>Evaluation Needed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>216-28-062</td>
<td>2705 Bowers Avenue (Uranium Substation)</td>
<td>1976^</td>
<td>Yes</td>
</tr>
<tr>
<td>216-28-106</td>
<td>2630 Walsh Avenue</td>
<td>1977*</td>
<td>No</td>
</tr>
<tr>
<td>216-28-112</td>
<td>2590 Walsh Avenue</td>
<td>1981*</td>
<td>No</td>
</tr>
<tr>
<td>216-28-113</td>
<td>2550 Walsh Avenue</td>
<td>1981*</td>
<td>No</td>
</tr>
<tr>
<td>216-28-121</td>
<td>n/a (railroad segment)</td>
<td>c. 1864†</td>
<td>Yes</td>
</tr>
<tr>
<td>216-28-132</td>
<td>2820 Northwestern Parkway</td>
<td>1977*</td>
<td>No</td>
</tr>
</tbody>
</table>

^ date provided by the Santa Clara County Assessor via ParcelQuest.  
^ date provided by City of Santa Clara Smart Permit.  
† date provided by JRP 2002 and SP 1964.

As shown in Table 1, the project study area includes six parcels, four of which contain buildings constructed less than 45 years ago and do not appear to warrant eligibility consideration. Two parcels contain built environment resources constructed more than 45 years ago: the Silicon Valley Power (SVP) Uranium Substation on APN 216-28-062 (built 1976) and the Peninsula Commute Service line (P-43-000928) segment within APN 216-28-121 (built c. 1864). The project study area may be characterized as primarily office and industrial manufacturing uses.
Figure 1. Project Location Map

Project Site (2590 Walsh Avenue)

Project Site is within the City of Santa Clara, California, in Santa Clara County on the USGS San Jose West 7.5-minute quadrangle map in Section 33 of Township 6 South (T06S) and Range 1 West (R01W)

Center Coordinate (Decimal Degrees):
Latitude: 37.370763N Longitude: -121.974631W
Figure 2. Project Study Area

- **Project Site (2590 Walsh Avenue)**
- **Project Study Area (APNs: 21628062, 21628106, 21628112, 21628113, 21628121, and 21628131)**
Regulatory Setting

**California Register of Historical Resources**

In California, the term “historical resource” includes but is not limited to “any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California” (California Public Resources Code Section 5020.1(j)).

In 1992, the California legislature established the CRHR “to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (California Public Resources Code Section 5024.1(a)). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below. According to California Public Resources Code Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains “substantial integrity,” and (ii) meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. 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.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

**California Environmental Quality Act**

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the CRHR, a resource included in a local register of historical
resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

Under CEQA, a project may have a significant effect on the environment if it may cause “a substantial adverse change in the significance of an historical resource” (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(b).) If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code Section 5024.1(q)), it is a “historical resource” and is presumed to be historically or culturally significant for purposes of CEQA (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5(a)).

A “substantial adverse change in the significance of an historical resource” reflecting a significant effect under CEQA means “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired” (CEQA Guidelines Section 15064.5(b)(1); California Public Resources Code Section 5020.1(q)). In turn, CEQA Guidelines section 15064.5(b)(2) states the significance of an historical resource is materially impaired when a project:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any “historical resources,” then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource’s historical significance is materially impaired.
City of Santa Clara (Municipal Code Chapter 18.106 – Historic Preservation)

18.106.040 HRI property designation.

(a) Designation Criteria. For purposes of this chapter, a building, structure, object or site is eligible for inclusion in the Historic Resource Inventory if it meets all of the following designation criteria:

(1) Age. A building, structure, object, site or district that is fifty (50) years of age or older may qualify as an HRI property if it meets other designation criteria. If a property proposed for inclusion is less than fifty (50) years of age, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the property, and/or the property proposed for inclusion is a distinctive or important example of its type or style; and

(2) Retains Historic Integrity. A building, structure, object, site or district must maintain integrity to be considered eligible for listing on the City’s inventory as an HRI property. Integrity refers to a resource’s ability to convey its significance by the retention of a property’s visual and physical characteristics and its surroundings. If a property proposed for inclusion was moved to prevent demolition at its former location, it may still be considered eligible for listing as an HRI property if the new location is compatible with the original character of the property; and

(3) The property proposed for inclusion falls within one or more of the following categories, as these terms are defined in Section 8.9.2 of Appendix 8.9 of the General Plan, Criteria for Local Significance:

(A) Historical or cultural significance;
(B) Architectural significance;
(C) Geographic significance;
(D) Archaeological significance.

City of Santa Clara General Plan Chapter 8.9 (Historic Preservation and Resource Inventory)

8.9.2 Criteria for Local Significance

The Criteria for Local Significance were adopted on April 20, 2004, by the City of Santa Clara City Council.

Qualified Historic Resource

Any building, site, or property in the City that is 50 years old or older and meets certain criteria of architectural, cultural, historical, geographical or archeological significance is potentially eligible.
**Criterion for Historical or Cultural Significance**

To be historically or culturally significant, a property must meet at least one of the following criteria:

- The site, building or property has character, interest, integrity and reflects the heritage and cultural development of the city, region, state, or nation.
- The property is associated with a historical event.
- The property is associated with an important individual or group who contributed in a significant way to the political, social and/or cultural life of the community.
- The property is associated with a significant industrial, institutional, commercial, agricultural, or transportation activity.
- A building’s direct association with broad patterns of local area history, including development and settlement patterns, early or important transportation routes or social, political, or economic trends and activities. Included is the recognition of urban street pattern and infrastructure.
- A notable historical relationship between a site, building, or property’s site and its immediate environment, including original native trees, topographical features, outbuildings or agricultural setting.

**Criterion for Architectural Significance**

To be architecturally significant, a property must meet at least one of the following criteria:

1. The property characterizes an architectural style associated with a particular era and/or ethnic group.
2. The property is identified with a particular architect, master builder or craftsman.
3. The property is architecturally unique or innovative.
4. The property has a strong or unique relationship to other areas potentially eligible for preservation because of architectural significance.
5. The property has a visual symbolic meaning or appeal for the community.
6. A building’s unique or uncommon building materials, or its historically early or innovative method of construction or assembly.
7. A building’s notable or special attributes of an aesthetic or functional nature. These may include massing, proportion, materials, details, fenestration, ornamentation, artwork or functional layout.
**Criterion for Geographic Significance**

To be geographically significant, a property must meet at least one of the following criteria:

1. A neighborhood, group or unique area directly associated with broad patterns of local area history.
2. A building’s continuity and compatibility with adjacent buildings and/or visual contribution to a group of similar buildings.
3. An intact, historical landscape or landscape features associated with an existing building.
4. A notable use of landscaping design in conjunction with an existing building.

**Definition of Integrity**

Integrity refers to a property’s ability to convey its significance. Significance is conveyed by the retention of a resource’s visual and physical characteristics and its surroundings. The NRHP criteria recognize seven aspects to integrity. The seven aspects of integrity are location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity, a property will always possess several, and usually most, of these aspects.

Properties must have sufficient integrity in addition to meeting the criterion for significance to be considered a qualified historic resource.

Note that application of the adopted criteria is required for all CEQA documents evaluating potential or listed historic resources and required for preparation of historic resource inventory forms (surveys).

**Methods**

**Background Research**

**NWIC Records Search**

A records search completed by the Northwest Information Center (NWIC) on May 5, 2021, indicates that no previously recorded resources are located within the project site or the 0.5-mile search radius (Ngo and DePietro 2021). Six previously conducted studies address small portions of the project site, none concerning built environment resources. However, as part of the extensive environmental documentation prepared for the Caltrain Electrification Program Environmental Impact Report, JRP Historical Consulting Services (JRP) prepared several studies concerning the historical significance of the Caltrain railroad corridor. While these studies address nearly all infrastructure associated with the railroad, including depots, stations, bridges, tunnels, culverts, grade-separations, etc., there are no specific findings of eligibility/ineligibility for the railroad itself. However, the railroad is continuously identified by JRP and others (P-43-000928) as being heavily altered and lacking integrity from its period of significance. All available JRP Caltrain studies were reviewed and are summarized below.
The history of the railroad between San Francisco and San Jose was detailed in a historic context prepared by JRP in Draft Inventory and Evaluation of Historic Resources Caltrain Electrification Program, San Francisco to Gilroy (MP 0.0 to 77.4). Both general and property-specific research was conducted to obtain historical documentation on individual resources and in preparation of a larger historic context statement in which to evaluate the resources. JRP identified several historic properties that had been previously found eligible for the NRHP; identified properties that appear to be eligible for the NRHP; and noted properties that do not appear eligible/are not of age, completing a total of 63 DPR forms (JRP 2002a).

In 2002, JRP prepared Finding of No Adverse Effect, Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties. At this time the project was still analyzing the line all the way to Gilroy and a Finding of Effect was prepared to analyze potential adverse effects resulting from the project’s conversion of diesel-hauled to electric-hauled trains and installation of 180-200 single-track miles of overhead contact system. The study assessed effects for each of the 24 historic resources identified as a part of the project and concluded that the project would have no adverse effect on historic properties (JRP 2002b).

In 2003, JRP prepared a Final Finding of Effect Amendment, Caltrain Electrification Project, San Francisco, San Mateo, and Santa Clara Counties, California. This document analyzed potential adverse effects resulting from the project’s electrification of a 77-mile commuter line from Gilroy in the south to San Francisco in the north and installation of approximately 200 single track miles of overhead contract system. The study assessed effects for each of the 24 historic resources identified as a part of the project and concluded that the project would have no adverse effect on historic properties (JRP 2003).

In 2008, JRP prepared a Finding of No Effect and No Adverse Effect, Caltrain Electrification Project, San Francisco, San Mateo, and Santa Clara Counties, California. This document analyzed potential adverse effects resulting from the project’s conversion of Caltrain’s current diesel-powered fleet of engines to electric motive power by providing a system of overhead catenary lines. The study assessed effects for each of the 24 historic resources identified as a part of the project and concluded that the project would have no adverse effect on historic properties (JRP 2008a).
JRP then produced Addendum Finding of Effect, Caltrain Certification Program, San Francisco to San Jose (MP 0.0 to 52.0), San Francisco, San Mateo, and Santa Clara Counties. This addendum was prepared to address project refinements and changes since the previous finding of effect analysis for historic architectural resources was prepared in 2002 and amended in 2003 and addressed the historic properties identified in the addendum survey report prepared for the project in July 2008 (JRP 2008b).

Property Research

Background research was conducted for both the Uranium Substation and Peninsula Commute Service line (P-43-000928) to establish a thorough and accurate historic context, and to confirm the development history of each property (see DPR Forms in Attachment A). This included a review of all available building permits on file with the City of Santa Clara; historical newspapers covering the Santa Clara Valley via newspapers.com; historic aerial photographs of the project study area via National Environmental Title Reference and the University of Santa Barbara FrameFinder Maps; and applicable primary and secondary sources on file with local libraries.

Survey

FCS Senior Archaeologist, Dr. Dana DePietro completed a pedestrian survey of relevant portions of the project study area on July 29, 2021. The survey included the two built environment resources in the project study area over 45 years old, the Uranium Substation and a segment of the Peninsula Commute Service line (P-43-000928) directly south of the project site. Buildings and structures were documented using digital photographs and field notes. Access to the primary (east) elevation of the Uranium Substation building was not permitted for safety reasons.

Findings

Two built environment resources over 45 years old were identified within the project study area: the Uranium Substation and an unrecorded segment of the larger Southern Pacific Commute Service Line (P-43-000928). These resources were recorded and evaluated for historical significance on the appropriate set of DPR Forms in consideration of CRHR and City HRI designation criteria and integrity requirements (Attachment A). Both resources were found not eligible under all designation criteria. The Uranium Substation has no significant historical or architectural associations, and the Peninsula Commute Service Line (P-43-000928) segment suffers from a lack of physical integrity such that the track can no longer convey its important associations in California's railroad history.

No historical resources were identified within the project site or project study area as a result of this study. Therefore, with respect to built environment resources, the proposed project will have a less than significant impact on historical resources under CEQA.
Should you have any questions regarding this report or its findings, please do not hesitate to contact me at smurray@southenvironmental.com or (818) 458-1162.

Sincerely,

Samantha Murray, MA
Principal Architectural Historian

Attachments

A. DPR Form Sets for the Uranium Substation and Peninsula Commute Service

B. Resume

References

JRP

2002a. Draft Inventory and Evaluation of Historic Resources, Caltrain Electrification Program, San Francisco to Gilroy (MP 0.0 to 77.4). On file with the Northwest Information Center (Report No. S-043525).


2008b. Addendum Finding of Effect, Caltrain Electrification Program, San Francisco to San Jose (MP 0.0 to 52.0); San Francisco, San Mateo, and Santa Clara Counties, California. On file with the Northwest Information Center (Report No. S-029657g).

Ngo, Ti and Dana DePietro. 2021. Phase I Cultural Resources Assessment CA3-2590 Walsh Avenue City of Santa Clara, Santa Clara County, California. On file with FirstCarbon Solutions.

P-43-000928. DPR Form Set for the Southern Pacific Railroad (multiple authors with some unidentified). On file with the Northwest Information Center.

ATTACHMENT A.
DPR FORM SETS FOR THE URANIUM SUBSTATION AND PENINSULA COMMUTE SERVICE
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

<table>
<thead>
<tr>
<th>Other Listings</th>
<th>Review Code</th>
<th>Reviewer</th>
<th>Date</th>
</tr>
</thead>
</table>

*Resource Name or #: (Assigned by recorder) | Uranium Substation

P1. Other Identifier: 2705 Bowers Avenue

*P2. Location: □ Not for Publication ■ Unrestricted
   a. County Santa Clara and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
   b. USGS 7.5’ Quad San Jose West Date 2021 T 6S ; R 1W ; □ of □ of Sec 33 ; MD B.M.
   c. Address 2705 Bowers Avenue City Santa Clara Zip 95051
   d. UTM: (Give more than one for large and/or linear resources) Zone __, ______mE/_________mN
   e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

APN 216-28-062. The subject property is bound by the Caltrain right-of-way to the south, Bowers Avenue to the west, and parking lots to the north and east.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property is known as the Uranium Substation, a Silicon Valley Power (SVP) general distribution station “for customers connected at 12 kilovolts (kV) and with loads less than 13.5 Megawatts (MW)” (DayZen 2021). The substation includes a small, rectangular plan, single-story utility building located at the westernmost boundary of the property. The building has a slant, shed roof with a pronounced vertical wood-panel band/fascia that runs around the entire roofline; concrete block walls; and exhibits minimal fenestration. (Photograph 1) (see Continuation Sheet).


*P4. Resources Present: ■ Building ■ Structure □ Object □ Site □ District □ Element of District □ Other (Isolates, etc.)

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*P5b. Description of Photo: (view, date, accession #) Photograph 1.

Main (east) elevation, view to west (Bing Maps 2021).

*P6. Date Constructed/Age and Source: ■ Historic □ Prehistoric □ Both 1976 (City building permit)

*P7. Owner and Address:

City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050

*P8. Recorded by:

Samantha Murray,
South Environmental
Pasadena, CA 91104

*P9. Date Recorded: 7/23/2021

*P10. Survey Type: Pedestrian

---

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Historic Built Environment Assessment for the CA3-2590 Walsh Avenue Project, Santa Clara, California (South Environmental 2021)

*Attachments: □ NONE ■ Location Map ■ Continuation Sheet ■ Building, Structure, and Object Record

□ Archaeological Record □ District Record □ Linear Feature Record □ Milling Station Record □ Rock Art Record

□ Artifact Record □ Photograph Record □ Other (List):
**Overview of Municipal Power in Santa Clara (1896–present)**

The Santa Clara Board of Trustees authorized the formation of a municipal electric utility in 1896 and moved forward with construction of an electric plant (SVP 2021a). The original system consisted of just 46 direct-current streetlamps and a generator (SVP 2021b). In 1902, Santa Clara watched as nearly all other neighboring towns received electricity via the United Gas and Electric Company, a newly formed corporation from San Francisco which acquired the interests of the Consolidated Light and Power Company, the San Jose Light and Power Company, and the Electric Improvement Company of San Francisco and San Jose, giving the company “complete control of all lighting and power business in San Mateo and Santa Clara counties.” San Jose was selected as the distributing center for electric power for all adjacent counties (San Francisco Call 1902a and 1902b). By 1903, Santa Clara had already outgrown its original power system and “invested $5,000 to convert the system to alternating current, abandoned the small generating plant and began purchasing wholesale power” (SVP 2021b). The old lighting plant was abandoned and instead, power was purchased from the privately held United Gas and Electric Company starting in 1904 and continuing for the next half-a-century (see Continuation Sheet).

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### DPR 523B (9/2013)
*P3a. Description (Continued): The east elevation (see Photograph 1 – this elevation was not visible during survey for safety reasons) faces out into the equipment yard and features what appear to be three central floor-to-ceiling tinted ribbon windows with metal frames. The north elevation (Photograph 2) has a simple, central metal double-door and transom. The west elevation (Photograph 3) has no fenestration but for a small louvered vent. The south elevation (Photograph 4) has a single metal entry door and transom. The substation yard is comprised of various pieces of equipment including boxes and transformers (Photographs 5 and 6). The entire substation yard is enclosed with temporary chain-link fencing but for the north elevation, which has a zig-zag concrete block wall bearing the substation’s name in metal lettering (Photograph 7).
Photograph 3. Substation building west elevation; facing east.

Photograph 4. Substation building south elevation; facing north.
Photograph 5. Overview of substation, yard, equipment, and building; facing south.

Photograph 6. Overview of substation transformers; facing east.
By 1906, the City's growing population had reached nearly 5,000 and would remain fairly stable prior to the post World War II development boom that was felt across much of the United States. During the postwar years, Santa Clara expanded its boundaries north and west of the original city limits, replacing rural open space with housing developments and industrial buildings to support the City’s new role in the manufacturing industry, which had replaced the once dominant agricultural industry. With the advent of the semiconductor in the 1950s, the electronics industry boomed around the silicon chip and overtook the last of the City’s farmland (Lichtenstein 2004).

In 1965, the City received an allocation of power from the Federal Central Valley Project and took the first step towards diversifying its utility portfolio (SVP 2021b), which included hydro power by 1967 (SVP 2021a). In 1968, the City of Santa Clara became a member of the newly formed Northern California Power Agency (NCPA), a group of publicly-owned utilities that included Santa Clara, Healdsburg, Biggs, Palo Alto, Redding, Roseville, Lodi, Ukiah, Gridley, and Lompc (Healdsburg Tribune 1968).

"Throughout the following years, Santa Clara and the NCPA worked on behalf of several municipal electric utilities in Northern California. Together they gained access to wholesale transmission markets and jointly developed cost-effective electric generation resources to meet the growing demand for electricity” (SVP 2021a).

By the 1970s, first generation electronic companies like Intel, National Semiconductor, Applied Materials, LSI Logic, and Siliconix had moved into the area (Lichtenstein 2004), and the region had gained international notoriety as Silicon Valley, “the capital of the semiconductor industry and the densest concentration of ‘high technology’ enterprises in the world” (Saxenian 1983). By 1990, the City had nearly 500 electronics manufacturing plants “producing everything from integrated circuits to mini-computers” (Lichtenstein...
2004:8).

Having more demand for power, in 1980 the City opened its 6 MW Cogen No. 1 power plant, allowing the City to generate its own electricity for the first time in 73 years. This was followed by the 110 MW Geothermal Project in 1983. “Santa Clara, through NCPA, was among the first municipalities in the United States to own and operate a plant of this nature.” In 1998, the utility began operating under the new name Silicon Valley Power in recognition of its role in powering the tech industry (SVP 2021a).

Today SVP operates an 18.4 square-mile services area and owns and operates seven generating plants and 30 substations, including 57.8 miles of transmission lines and hundreds of miles of distribution lines both above and below ground, with the vast majority of its service going to residential customers (SVP 2018 and 2021a). July 23, 2021 marked the 125th anniversary of the City’s municipal electric utility now known as SVP (SVP 2021b).

Property History
Permit records indicate that the Uranium Substation was constructed in 1976. No permits for subsequent alterations were identified.

Historic aerial photographs and maps indicate that the land on which the subject property was constructed served as farmland from at least 1897 until the early 1970s, when the City expanded its boundaries and started to develop areas to the north and west with residential and industrial properties. Situated north of the City of Santa Clara, the subject property maintained its agricultural setting right up until the time the area was developed starting in the early 1970s. By 1956, the effects of the postwar boom can be seen in areas to the southwest and east with some farmland taken by residential development. Within just four years, significantly more residential development can be seen to the southwest. By 1968, agricultural land is rapidly disappearing in all directions and for the first time, development has started to occur north of the railroad. By the 1980 aerial, not a single agricultural property remains in the vicinity, with nearly all land being converted for commercial and industrial development. In the 1980 aerial photograph, the small rectangular substation building is clearly visible as is some equipment. Overtime, equipment continues to be added to the substation yard in various configurations. Between 2010 and 2012, the footprint of the substation becomes much more defined with the construction of a curb/lip all the way around the property. Additional equipment also appears in the yard at this time. This appears to be part of a substation upgrade that occurred c. 2010 and included the installation of 12 kV open bus bays (City of Santa Clara 2010). From this point forward, the substation looks much the same way it does today.

The Uranium Substation connects to two Pacific Gas & Electric (PG&E) 60 kV overhead transmission lines: 1) the line running southeast of the Uranium substation along the north side of the Caltrain right-of-way until heading north on Scott Boulevard and then east to the Walsh Substation at 1600 Walsh Avenue; 2) the line running northwest of the Uranium Substation following Bowers Avenue north to Kifer Road where it heads west and then further north to the Central Expressway where it connects with the Zeno Substation(CEC 2021). These substations, and others like them in the northern part of Santa Clara north of the railroad, are part of the more recently developed portions of the City that were reactive to the Silicon Valley tech boom of the 1970s.
Significance Evaluation:
The following presents an evaluation of the subject property in consideration of both CRHR and City Criteria for Local Significance. Because of the similarities in the requirements of State and local designation programs, CRHR and local criteria have been addressed together to avoid duplicative text.

CRHR Criterion 1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.

City Criterion for Historical or Cultural Significance.

City Criterion for Geographic Significance.

The subject property was constructed in 1976 at a time when the City of Santa Clara was rapidly expanding to meet the demand of the tech industry, which brought a population and development boom that forever changed the northern portion of the City from rural agricultural fields to residential and industrial/manufacturing uses. While the Silicon Valley tech boom is a significant pattern of development that altered the landscape of Santa Clara, the subject property is not strongly associated with this pattern of development, nor is it directly associated with any significant events in the development of the City's electrical infrastructure. Although substations can and do play an important role in providing power to the communities and businesses they serve, this substation and its related infrastructure came late in the development of the City and its utility history and was constructed to support ongoing population and industry growth within the context of a larger electrical system. Therefore, the subject property is not individually eligible under CRHR Criterion 1 or the City’s Criterion for Historical or Cultural Significance. Further, there is no evidence that the larger SVP electrical system of which this substation is a part is eligible for its association with important events or patterns of development, as nearly all of the SVP electrical infrastructure north of the Caltrain right-of-way was primarily developed in the 1970s and 1980s to support ongoing residential and manufacturing development.

CRHR Criterion 2. Is associated with the lives of persons important in our past.

City Criterion for Historical or Cultural Significance.

The subject property is a public utility building that is not associated with any specific occupants. Its only owners have been the City/SVP. Review of local publications and newspaper articles failed to indicate that the subject property has any important associations with significant persons in the history of the City. Therefore, the subject property is not eligible under CRHR Criterion 2 or the City’s Criterion for Historical or Cultural Significance.

CRHR Criterion 3. 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.

City Criterion for Architectural Significance.

City Criterion for Geographic Significance.

The subject property is a simple, utilitarian-style building that is largely devoid of architectural style but for the wide wood-panel band that wraps around the roofline and
provides a nod to the Shed style of architecture that was popular during the 1970s and 1980s. However, the building itself cannot be identified as having distinctive characteristics of the Shed style. The building is very simple in plan, design, materials, and construction methods, and is not known to be the work of a notable architect or builder. The subject property represents a very common property type seen throughout the United States, an electric substation, and lacks any unique architectural features/details, construction techniques, or technology that would distinguish it from others in its property type. Therefore, the subject property is not eligible under CRHR Criterion 3 or the City’s Criterion for Architectural Significance. Finally, the subject property has no potential to contribute to an historic district of power infrastructure in the region and is not eligible for its geographic significance.

CRHR Criterion 4. Has yielded, or may be likely to yield, information important in prehistory or history.

The subject property is not significant as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies. Therefore, the property is not eligible under CRHR Criterion 4.

Integrity

Location: The subject property retains integrity of location. The property is sited on the original location it was constructed in its original orientation.

Design: The subject property retains integrity of design. While the electrical equipment in the yard has changed over time, the property can still be identified as an electrical substation from the 1970s.

Setting: The subject property retains integrity of setting. Most of the surrounding properties were constructed in the 1970s and 1980s around the same time as the subject property.

Materials: The subject retains integrity of materials. The property’s original materials including the concrete block walls and wood panel roof remain intact.

Workmanship: The subject property retains integrity of workmanship. Evidence of the original craftsmanship is still present, although simplistic/utilitarian.

Feeling: The subject retains integrity of feeling. Property still feels like an electrical substation constructed in the 1970s.

Association: The subject property lacks integrity of association. The property has no important associations with events, people, or important patterns of development in the City.

For all of the reasons provided above, the Uranium Substation is not eligible for designation in the CRHR or City HRI.
References:
California Energy Commission (CEC)  

City of Santa Clara.  

DayZen  

Healdsburg Tribune  

Lichtenstein, Bea  

San Francisco Call  

Saxenian, Annalee  

Silicon Valley Power (SVP)  

State of California – The Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
PRIMARY RECORD

Other Listings  
Review Code  
Reviewer  
Date

*Resource Name or #: (Assigned by recorder) Peninsula Commute Service

P1. Other Identifier: Southern Pacific Peninsula Commute; Monterey Line; San Francisco & San Jose Railroad

DPR 523A (9/2013)

Page 1 of 9

*Required information

Santa Clara, California (South Environmental 2021)

Santa Clara, California (South Environmental 2021)
### BUILDING, STRUCTURE, AND OBJECT RECORD

**Resource Name or #** Peninsula Commute Service  
**NRHP Status Code** 6Z

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<td>Railroad</td>
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**B5. Architectural Style** n/a

**B6. Construction History**

Constructed in 1864; addition of a second track in the early 1900s; replacement of the original rails in the late 1950s; the grade separation at Bowers Avenue in the 1970s; and the addition of Caltrans electrification equipment to the right-of-way within the last decade (SP 1964, JRP 2002, P-43-000928).

**B7. Moved?**  ■No  □Yes  □Unknown

**B8. Related Features**

**B9a. Architect:**

**B9b. Builder:**

**B10. Significance**

<table>
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<tr>
<th>Theme</th>
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**Period of Significance** n/a  
**Property Type** n/a  
**Applicable Criteria** n/a

(Comment: Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The subject property is a small segment of what is known today as the Caltrain Commuter rail service. The history of the railroad between San Francisco and San Jose was detailed in a historic context prepared by JRP Historical Consulting Services (JRP) as part of the report *Inventory and Evaluation of Historic Resources Caltrain Electrification Program, San Francisco to Gilroy (MP 0.0 to 77.4)* (JRP 2002). The following presents a summary of applicable portions of that historic context, except where otherwise noted: (see Continuation Sheet).

**B11. Additional Resource Attributes**

**B12. References** See Continuation Sheet

**B13. Remarks**

**B14. Evaluator** Samantha Murray, South Environmental  
**Date of Evaluation** 7/23/2021

(Sketch Map with north arrow required.)

(This space reserved for official comments.)
*P3a.  Description (Continued):  Immediately adjacent to the tracks, at regular intervals, is Caltrain electrification equipment including poles and wires. Both sets of tracks exhibit metal rails with wood ties and all-metal hardware including spikes and tie plates (Photographs 2, 3, 4). The right-of-way itself varies in width between approximately 145 and 165 feet.

Alterations to the segment since the date of its initial construction in 1864 include the addition of a second track in the early 1900s; replacement of the original rails in the late 1950s; the grade separation at Bowers Avenue in the 1970s; and the addition of Caltrans electrification equipment to the right-of-way within the last decade (SP 1964, JRP 2002, P-43-000928).

Photograph 2. Overview of rail alignment; facing east.
Photograph 3. Detail of track materials and construction.

Photograph 4. Detail view Caltrain electrified towers and wires; facing southeast.
The first three attempts to connect San Jose and San Francisco by rail in the 1850s failed before construction could even begin. In 1860, one of those failed companies, the San Francisco - San Jose Railroad Company (SF-SJRR), was brought back to life with support from Congressman Timothy Phelps and the San Francisco business community. The company was able to move forward with construction of the railroad without the financial hurdles experienced by their predecessors. By 1864, the entire SF-SJRR route between San Francisco and San Jose was in service.

The SF-SJRR was acquired by the Southern Pacific Railroad (SPRR) in 1869 which quickly decided to improve the southern end of railroad at San Jose by connecting it to Gilroy further south, a connection that was completed in 1869. Between 1870 and 1900, the SPRR peninsular route was the only freight and long-distance passenger line directly into San Francisco. The new connection fueled suburban development and allowed people to commute to work for the first time.

The section of the line between San Francisco and Pacific Grove was referred to as the “Monterey Line - Broad Gauge,” not be confused with the Monterey Branch Line which provided service between Pebble Beach and Castroville. The term “Monterey Line” appears to fizzle out by the mid-century.

In 1903, the SPRR undertook modernization and improvement projects which included installation of a second track along a 39-mile-stretch between San Jose and San Bruno, carried out in preparation for construction of the Bayshore Cutoff which began in 1904 and concluded in 1907.

After years of recognizing the hazards of at-grade crossings across the state where multiple fatalities had occurred, over 65 grade separations were built or upgraded in California through federal funding between 1935 and 1941. Five of these were located along the Peninsula line between San Francisco and San Jose, including the Lafayette Street underpass in Santa Clara where at least 10 people had lost their lives. The Lafayette Street grade separation which was completed by the highway department and the SPRR in 1936.

Postwar modernizations including the phasing out of steam engines on all SPRR freight and passenger routes, replacing them with diesel locomotives. The Peninsula’s commuter steam trains were the last to go in 1957. Other modernizations beginning throughout the line in the mid-century included yet more railroad grade separation projects, with approximately 60 percent of postwar grade separations occurring between the late 1950s and early 1970s.

With the popularity of the automobile booming and highway projects taking center stage, ridership on the Peninsula line dropped to approximately 16,000 commuters per day. By 1964, the SPRR’s Peninsular commuter service was down to approximately 11,500 riders per day and losing $650,000 per year.

During the 1970s and 1980s the SPRR underwent major organizational changes, with relatively few changes in physical infrastructure. Commuters on the Peninsula, now down to less than 8,000 riders per day, saw five rate increases during this time. When a report revealed that the SPRR was trying to intentionally drive riders away through rate increases, the SPRR decided to abandon the Peninsula commuter trains. When the State stepped in to manage commuter operations, the California Department of Transportation (Caltrans) was selected to oversee management of the former Peninsula line and the new commuter service was dubbed
In 1987 the counties of San Francisco, San Mateo, and Santa Clara formed the Peninsula Corridor Joint Powers Board (JPB) with the intention of taking over the contract when it expired with Caltrain. JPB purchased the right-of-way from San Francisco to San Jose as well as the trackage rights from San Jose to Gilroy in 1991. Commute operations have since been contracted with Amtrak (JRP 2002).

**Significance Evaluation:**
The following presents an evaluation of the subject property in consideration of both CRHR and City Criteria for Local Significance. Because of the similarities in the requirements of State and local designation programs, CRHR and local criteria have been addressed together to avoid duplicative text.

**CRHR Criterion 1.** Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.

**City Criterion for Historical or Cultural Significance.**

Completed in 1864, the Peninsula Commute Service was the only freight and long-distance passenger line directly into San Francisco from San Jose, allowing people to commute to work for the first time. Following the alignment of the SF-SJRR, the line is one of oldest in California and is an important piece of California’s railroad history, with towns like Santa Clara, San Bruno, Millbrae, Burlingame, Belmont, Atherton, and Sunnyvale growing up along the railroad. The Caltrain right-of-way has been studied extensively in recent years, with features such as railroad depots, buildings, underpasses, bridges, tunnels, grade separations and other railroad infrastructure providing a better representation of the railroad’s significant historical associations. The track itself is also notably altered, no longer resembling its original appearance or setting from its SF-SJRR and early SPRR days. Therefore, the subject property is not eligible under CRHR Criterion 1 or the City’s Criterion for Historical or Cultural Significance as an individual segment. Further, while not surveyed/evaluated here, the larger line is unlikely to be eligible as indicated by previous studies along the Peninsula Commute Service which identified an overall lack of integrity with respect to trackage (JRP 2002, P-43-000928).

**CRHR Criterion 2.** Is associated with the lives of persons important in our past.

**City Criterion for Historical or Cultural Significance.**

The subject property is a modified railroad segment that is not associated with any specific owners/people of significance. Therefore, the subject property is not eligible under CRHR Criterion 2.
CRHR Criterion 3. 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.

City Criterion for Architectural Significance.

City Criterion for Geographic Significance.

The subject property is a ubiquitous segment of the Caltrain railway represented by two parallel tracks with wood ties and metal hardware. Alterations to the segment since the date of its initial construction include the addition of a second track in the early 1900s, replacement of the original rails in the late 1950s when the SPRR rehabilitated much of its lines to accommodate heavier diesel engines, the grade separation at Bowers Avenue in the 1970s, and the addition of Caltrans electrification equipment to the right-of-way within the last decade. Finally, the Caltrain right-of-way has been studied extensively in recent years, with other features such as railroad depots, buildings, underpasses, bridges, tunnels, grade separations and other railroad infrastructure providing a better representation of the railroad’s significant architectural and engineering associations. Therefore, the subject property is not eligible under CRHR Criterion 3 as an individual segment. Further, while not surveyed/evaluated here, the larger line is unlikely to be eligible as indicated by previous studies along the Peninsula Commute Service which identified an overall lack of integrity with respect to trackage (JRP 2002, P-43-000928) and is not eligible for its geographic significance.

CRHR Criterion 4. Has yielded, or may be likely to yield, information important in prehistory or history.

The subject property is not significant as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies. Therefore, the property is not eligible under CRHR Criterion 4.

Integrity

Location: The subject property generally retains integrity of location. This segment of the railroad is roughly sited in its original location, although modifications to the original alignment have been made.

Design: The subject property lacks integrity of design. The original materials have been replaced, the line made into a double-track, and modifications have been made to the alignment over time.

Setting: The subject property lacks integrity of setting. The setting no longer reflects the rural/agricultural landscape that this segment of line was once a part of. Intensive development in the 1970s and 1980s has long since erased the line’s original setting.

Materials: The subject property lacks integrity of materials. It appears that none of the original materials are present, although the wood ties could date to the early 1900s.

Workmanship: The subject property lacks integrity of workmanship. Evidence of the original craftsmanship is no longer present.

Feeling: The subject lacks integrity of feeling. Although it still functions as a commuter...
rail line, changes in setting, original materials, alignment, and technology do not reflect early railroad development.

Association: Although the Peninsula Commute Service is associated with important events in the history of railroad development in California, these associations are not well conveyed through the track itself. Rather, it is the previously identified depots, bridges, underpasses, and other infrastructure that better reflects these important associations.

For all of the reasons provided above, this segment of the Peninsula Commute Service is not eligible for designation in the CRHR or City HRI.

References:

JRP Historical Consulting Services (JRP). 2002. Inventory and Evaluation of Historic Resources, Caltrain Electrification Program, San Francisco to Gilroy (MP 0.0 to 77.4). Prepared for Parsons, San Francisco, California.


P-43-000928. DPR Form Set for the Southern Pacific Railroad (multiple authors with some unidentified). Provided by the Northwest Information Center.
ATTACHMENT B.
RESUME
Samantha Murray, MA
PRINCIPAL ARCHITECTURAL HISTORIAN

Samantha Murray is the cultural resources director at South Environmental and a senior architectural historian with over 15 years’ experience in all elements of cultural resources management, including project management, architectural history studies, and historical significance evaluations in consideration of the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and local-level designation criteria. Ms. Murray has conducted hundreds of historical resource evaluations and developed detailed historic context statements for a multitude of property types and architectural styles. She has also provided expertise on numerous projects requiring conformance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties.

Ms. Murray meets the Secretary of the Interior’s Professional Qualification Standards for both Architectural History and Archaeology. She is experienced managing multidisciplinary projects in the lines of private development, transportation, transmission and generation, federal land management, land development, and state and local government. She is an expert in preparation of cultural resources compliance documentation for projects that fall under the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA). Ms. Murray has also served as an expert witness in legal proceedings concerning historical resources under CEQA and local ordinance protection.

EXPERTISE

- CEQA, NEPA, and Section 106 of the NHPA compliance documentation in consideration of impacts to historical, archaeological, and tribal cultural resources, and historic properties
- Historic resource significance evaluations in consideration of NRHP, CRHR, and local designation criteria.
- Project design review for conformance with the Secretary of the Interior’s Standards.
- Preparation of archival documentation for HABS/HAER/HALS.
- Assistance with complex mitigation including salvage and interpretive displays.
- Peer review.
SELECT PROJECT EXPERIENCE

Hope Gardens Sequoia Building Project, Los Angeles County, California (2021). South Environmental was retained by Union Rescue Mission to complete a cultural resources technical report for the Hope Gardens Sequoia Building Project located at 12249 Lopez Canyon Drive in unincorporated Los Angeles County, California (AIN: 2846-001-017), which proposes demolition of the existing building on the site and construction of a new facility. Ms. Murray authored the cultural resources technical report, serving as principal architectural historian. This study included an intensive pedestrian survey of the project site by a qualified architectural historian; building development and archival research; and recordation and evaluation of the Hope Gardens property for historical significance and integrity in consideration of CRHR and Los Angeles County designation criteria. As a result of the property significance evaluation, eight buildings on the property were found eligible as contributing resources to the newly identified Forester Haven Historic District under CRHR and County Criterion 3.

Gilroy Citywide Historic Resource Inventory, City of Gilroy, Santa Clara County, California (2020). While working for her previous firm, Ms. Murray served as Project Manager, Principal Architectural Historian, co-author of the historic context statement, public outreach, and presented at all public hearings. The City of Gilroy Historic Context Statement and Historic Resources Inventory (HRI) update project was undertaken by the City’s Community Development Department to enhance and streamline the City’s historic preservation program by bringing consistency to preservation planning efforts. This document presents the history of the City of Gilroy’s built environment from pre-history to present, identifies important themes, events, patterns of development, and describes the different property types, styles, builders, and architects associated with these important periods and themes; and also develops registration requirements for resource evaluation that is specific to the City of Gilroy, in consideration of both historical significance and integrity requirements. The project included pedestrian survey of 3,374 properties within the City of Gilroy built in 1974 or earlier. The historical significance and integrity of properties within the survey area was evaluated in consideration of NRHP, CRHR, and City designation criteria, as well as the seven aspects of integrity.

Addendum to the University of California, Berkeley 2020 Long Range Development Plan Environmental Impact Report for the Levine-Fricke Softball Field Improvements Project, California (2020). While working for her previous firm, Ms. Murray served as Principal Architectural Historian and author of memorandum. The project would replace existing facilities at Levine-Fricke Field, east of the U.C. Berkeley campus, including seating bleachers, access ramps, stairs, fences, and restroom facilities, and the majority of the existing surface parking. The Project would then result in construction of an upgraded NCAA-compliant softball field and a two-story structure including the concourse, fixed seating capacity for 1,500 spectators, and the press box. Ms. Murray prepared a detailed memorandum that presents an historical resources impacts analysis for the project that specifically addresses potential impacts to the adjacent NRHP-listed Panoramic Hill Historic District.

Historic Resource Evaluation Report for 201 Georgia Street, City of Vallejo, Solano County, California (2020). While working for her previous firm, Ms. Murray served as Principal Architectural Historian, co-author, and QA/QC of work products. California State University Maritime Academy (Cal Maritime) required a historical resources evaluation report for a two-story, commercial building located at 201 Georgia Street, in the City of Vallejo, California, prior to purchasing the building. The report included conducting a BERD record search, fieldwork, archival research, historical context development, developing building descriptions, and evaluation of a vacant commercial office building. The building was found ineligible for listing in the NRHP, CRHR, or as a locally significant resource, due to a lack of significant historical associations or architectural merit.
California State University (CSU), Chico Master Plan EIR, City of Chico, Butte County, California (2020). While working for her previous firm, Ms. Murray served as Principal Architectural Historian and QA/QC of the final cultural report. The CSU Chico Master Plan is intended to update the most recent master planning document for CSU Chico from 2005, by planning for student enrollment, faculty and staff expansions, update campus facilities, emphasize open spaces, landscapes, and walkability, and promote student life experience. Additionally the new master plan will provide for the CSU Chico College of Agriculture to provide leadership, basic and applied research opportunities, and a positive work environment for employees and students. The cultural resources study included a records search of the proposed project site plus a 0.5-mile radius; a pedestrian survey of the project site; archival and building development research for buildings located within the project site; evaluation of buildings for the NRHP, CRHR, California Historical Landmark (CHL), and local eligibility criteria and integrity requirements; and an assessment of impacts to historical resources in compliance with CEQA and PRC Sections 5024 and 5024.5 for state-owned resources.

San Francisco State University Master Plan EIR, California (2019). While working for her previous firm, Ms. Murray served as Principal Architectural Historian and provided QA/QC of the final technical report. San Francisco State University (SFSU) Capital Planning, Design, and Construction required a historic built environment study for the proposed SFSU Master Plan Update (project) environmental impact report (EIR). Only buildings more than 45 years of age and proposed for renovation or demolition were included in this historic built environment study for the proposed project. The historic built environment resources study includes the following components: (1) a CHRIS records search covering the proposed project site plus a 0.5-mile radius; (2) a pedestrian survey of the project site for built environment resource; (3) archival and building development research for buildings located within the project site; (4) the evaluation of buildings for the NRHP; CRHR, CHL, and local eligibility criteria and integrity requirements; and (5) consideration of impacts to historical resources in compliance with the CEQA and PRC Sections 5024 and 5024.5 for state-owned resources.

Trail to Crane Creek Project, City of Rohnert Park, Sonoma County, California (2019). While working for her previous firm, Ms. Murray served as Principal Architectural Historian, co-author, and QA/QC of final work products. The City of Rohnert Park required an historical resources evaluation for the proposed Trail to Crane Creek Regional Park Project, Rohnert Park, California. The Himebauch Wall (P-49-004917) was recommended eligible for listing under NRHP and CRHR Criteria A/1 and C/3, and County of Sonoma Designation Criteria A and C. In addition, the Himebauch Ranch site (P-49-003055) was previously found eligible under NRHP/CRHR Criterion A/1. To ensure that these resources will not be inadvertently damaged or impaired as part of the proposed project, Ms. Murray completed a review of all applicable project elements for conformance with the Secretary of the Interior’s Standards for Rehabilitation. As a result of this conformance review, all elements of the proposed project were found to be in conformance with the Rehabilitation Standards and Guidelines, and all potential project-related impacts to historical resources were found to be less than significant.

San Francisco State University (SFSU) Romberg Tiburon Center (RTC) Campus Buildings, California (2018). While working for her previous firm, Ms. Murray served as Principal Architectural Historian and primary author. SFSU required a review of proposed design plans for new construction on Buildings 49 & 50 of the RTC, located at 3150-3152 Paradise Drive on the Tiburon Peninsula in Marin County, California. Because these buildings were identified as contributors to a cultural landscape and as individually eligible buildings, they required design review for conformance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties, specifically the Standards for Rehabilitation, in order to minimize impacts to historical resources under CEQA. The entire 36-acre RTC property was found eligible for the NRHP and CRHR as a cultural landscape known as the U.S. Navy Fuel Depot and
Historical Evaluation of 3877 El Camino Real, City of Palo Alto, Santa Clara County, California (2017). While working for her previous firm, Ms. Murray served as Principal Architectural Historian, author or report. After providing a peer review of another consultant’s evaluation, the City asked Ms. Murray to re-do the original evaluation report. As part of this work she conducted additional archival research on the property and evaluated the building for historical significance in consideration of local, state, and national designation criteria and integrity requirements. The project proposed to demolish the existing building and develop new housing.

The 1431 El Camino Real Project, City of Burlingame, San Mateo County, California (2017). While working for her previous firm, Ms. Murray served as co-authored the HRCR, provided QA/QC of the final cultural resources report, and prepared the SOIS and ESA Action Plans required by Caltrans as mitigation for the NRHP-listed resource. The City of Burlingame proposes to demolish an existing four-unit (two-story) apartment building along with the detached five-car garage structure at the rear and construct a new six-unit (three-story) townhouse complex, totaling 3,858 square feet and a proposed height of 35 feet. The property at 1431-1433 El Camino Real was constructed in 1947 and required evaluation for historical significance. Further, because the property requires a Caltrans encroachment permit, a Caltrans-compliant Historical Resources Compliance Report (HRCR) was prepared. In addition to evaluating the building at 1431 El Camino, impacts to an NRHP-listed tree row within the project area were addressed with clear mitigation.

PROFESSIONAL PRESENTATIONS

Historical Resources and CEQA: An Overview of Identification, Evaluation, Impacts Assessment, and Mitigation. Prepared for the Gilroy Historic Heritage Committee. Presented by Samantha Murray, Dudek. May 15, 2019. Delivered a 1.5-hour PowerPoint presentation to the City of Gilroy’s Historic Heritage Committee during one of their monthly public hearings. The presentation provided an overview of the CEQA process, how historical resources are treated under CEQA, as well as the process for identification, evaluation, impacts assessment, and options to consider for mitigation. The presentation also included examples from CEQA Case Law and included an extensive question and answer session with the audience.

Historical Resources under CEQA. Prepared for the Orange County Historic Preservation Planner Working Group. Presented by Samantha Murray, Dudek. December 1, 2016. Delivered a 1-hour PowerPoint presentation to the Orange County Historic Preservation Planner Working Group, which included planners from different municipalities in Orange County, regarding the treatment of historical resources under CEQA. Topics of discussion included identification of historical resources, assessing impacts, avoiding or mitigating impacts, overcoming the challenges associated with impacts to historical resources, and developing effective preservation alternatives.

Knowing What You’re Asking For: Evaluation of Historic Resources. Prepared for Lorman Education Services. Presented by Samantha Murray and Stephanie Standerfer, Dudek. September 19, 2014. With Ms. Standerfer, delivered a one-hour PowerPoint presentation to paying workshop attendees from various cities and counties in Southern California. The workshop focused on outlining the basics of historical resources under CEQA and delved into issues/challenges frequently encountered on preservation projects.
**Resource Name or #:** Peninsula Commute Service  
**Other Identifier:** Southern Pacific Peninsula Commute; Monterey Line; San Francisco & San Jose Railroad  

**P1.** Other Identifier: Southern Pacific Peninsula Commute; Monterey Line; San Francisco & San Jose Railroad  

**P2.** Location:  
- **a.** County: Santa Clara and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)  
- **b.** USGS 7.5' Quad: San Jose West  
- **c.** Address:  
- **d.** UTM: (Give more than one for large and/or linear resources)  
- **e.** Other Locational Data:  

Includes APN 21628121. The subject property is a linear stretch of approximately 2,526 feet of Caltrain right-of-way between Bowers Avenue at Bridge 37C0066 to the San Tomas Aquino Creek to the southeast.  

**P3a.** Description:  
The subject property is a double-track segment of the existing Caltrain Commuter rail service along the San Francisco Peninsula, through the South Bay to San Jose and Gilroy (Photograph 1). The subject right-of-way segment is approximately 2,526 feet long, comprising two sets of track set atop a central bed of ballast, flanked by unpaved right-of-way on either side of the tracks (see Continuation Sheet).  

**P3b.** Resource Attributes:  
HP11. Engineering Structure  

**P4. Resources Present:**  
- **Building**  
- **Structure**  
- **Object**  
- **Site**  
- **District**  
- **Element of District**  
- **Other (Isolates, etc.)**  

**P5b.** Description of Photo:  
Photograph 1. Overview of alignment, view to west  

**P6.** Date Constructed/Age and Source:  
- **Historic**  
- **Prehistoric**  
- **Both**  
1864 (JRP 2002, SP 1964)  

**P7.** Owner and Address:  
Peninsula Corridor Joint Powers Board  
1250 San Carlos Ave  
San Carlos, CA 94070  

**P8.** Recorded by:  
Samantha Murray, South Environmental  
Pasadena, California  

**P9.** Date Recorded:  
7/23/2021  

**P10.** Survey Type: Pedestrian  

**P11.** Report Citation:  
(Cite survey report and other sources, or enter "none.")  
Historic Built Environment Assessment for the CA3-2590 Walsh Avenue Project, Santa Clara, California (South Environmental 2021)  

**Attachments:**  
- NONE  
- Location Map  
- Continuation Sheet  
- Building, Structure, and Object Record  
- Architectural Record  
- District Record  
- Linear Feature Record  
- Milling Station Record  
- Rock Art Record  
- Artifact Record  
- Photograph Record  
- Other (List):  

*Required information*
**Resource Name or #** (Assigned by recorder) Peninsula Commute Service *NRHP Status Code 6Z*

Page 3 of 9

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*B5. Architectural Style:* n/a

*B6. Construction History:* (Construction date, alterations, and date of alterations)

Constructed in 1864; addition of a second track in the early 1900s; replacement of the original rails in the late 1950s; the grade separation at Bowers Avenue in the 1970s; and the addition of Caltrans electrification equipment to the right-of-way within the last decade (SP 1964, JRP 2002, P-43-000928).

*B7. Moved?* □No □Yes □Unknown  Date: __________________________  Original Location: __________________________

*B8. Related Features:*

B9a. Architect: __________________________  b. Builder: __________________________  Area n/a

*B10. Significance:*

<table>
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<th>Property Type</th>
<th>Applicable Criteria</th>
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(The Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The subject property is small segment of what is known today as the Caltrain Commuter rail service. The history of the railroad between San Francisco and San Jose was detailed in a historic context prepared by JRP Historical Consulting Services (JRP) as part of the report **Inventory and Evaluation of Historic Resources Caltrain Electrification Program, San Francisco to Gilroy (MP 0.0 to 77.4)** (JRP 2002). The following presents a summary of applicable portions of that historic context, except where otherwise noted: (see Continuation Sheet).

B11. Additional Resource Attributes: (List attributes and codes) __________________________

*B12. References:See Continuation Sheet*

B13. Remarks: __________________________

*B14. Evaluator: Samantha Murray, South Environmental*

*Date of Evaluation: 7/23/2021*
*P3a. Description (Continued):* Immediately adjacent to the tracks, at regular intervals, is Caltrain electrification equipment including poles and wires. Both sets of tracks exhibit metal rails with wood ties and all-metal hardware including spikes and tie plates (Photographs 2, 3, 4). The right-of-way itself varies in width between approximately 145 and 165 feet.

Alterations to the segment since the date of its initial construction in 1864 include the addition of a second track in the early 1900s; replacement of the original rails in the late 1950s; the grade separation at Bowers Avenue in the 1970s; and the addition of Caltrans electrification equipment to the right-of-way within the last decade (SP 1964, JRP 2002, P-43-000928).

Photograph 2. Overview of rail alignment; facing east.
Photograph 3. Detail of track materials and construction.

Photograph 4. Detail view Caltrain electrified towers and wires; facing southeast.
The first three attempts to connect San Jose and San Francisco by rail in the 1850s failed before construction could even begin. In 1860, one of those failed companies, the San Francisco - San Jose Railroad Company (SF-SJRR), was brought back to life with support from Congressman Timothy Phelps and the San Francisco business community. The company was able to move forward with construction of the railroad without the financial hurdles experienced by their predecessors. By 1864, the entire SF-SJRR route between San Francisco and San Jose was in service.

The SF-SJRR was acquired by the Southern Pacific Railroad (SPRR) in 1869 which quickly decided to improve the southern end of railroad at San Jose by connecting it to Gilroy further south, a connection that was completed in 1869. Between 1870 and 1900, the SPRR peninsular route was the only freight and long-distance passenger line directly into San Francisco. The new connection fueled suburban development and allowed people to commute to work for the first time.

The section of the line between San Francisco and Pacific Grove was referred to as the "Monterey Line - Broad Gauge," not be confused with the Monterey Branch Line which provided service between Pebble Beach and Castroville. The term “Monterey Line” appears to fizzle out by the mid-century.

In 1903, the SPRR undertook modernization and improvement projects which included installation of a second track along a 39-mile stretch between San Jose and San Bruno, carried out in preparation for construction of the Bayshore Cutoff which began in 1904 and concluded in 1907.

After years of recognizing the hazards of at-grade crossings across the state where multiple fatalities had occurred, over 65 grade separations were built or upgraded in California through federal funding between 1935 and 1941. Five of these were located along the Peninsula line between San Francisco and San Jose, including the Lafayette Street underpass in Santa Clara where at least 10 people had lost their lives. The Lafayette Street grade separation which was completed by the highway department and the SPRR in 1936.

Postwar modernizations including the phasing out of steam engines on all SPRR freight and passenger routes, replacing them with diesel locomotives. The Peninsula’s commuter steam trains were the last to go in 1957. Other modernizations beginning throughout the line in the mid-century included yet more railroad grade separation projects, with approximately 60 percent of postwar grade separations occurring between the late 1950s and early 1970s.

With the popularity of the automobile booming and highway projects taking center stage, ridership on the Peninsula line dropped to approximately 16,000 commuters per day. By 1964, the SPRR’s Peninsular commuter service was down to approximately 11,500 riders per day and losing $650,000 per year.

During the 1970s and 1980s the SPRR underwent major organizational changes, with relatively few changes in physical infrastructure. Commuters on the Peninsula, now down to less than 8,000 riders per day, saw five rate increases during this time. When a report revealed that the SPRR was trying to intentionally drive riders away through rate increases, the SPRR decided to abandon the Peninsula commuter trains. When the State stepped in to manage commuter operations, the California Department of Transportation (Caltrans) was selected to oversee management of the former Peninsula line and the new commuter service was dubbed
“Caltrain”.

In 1987 the counties of San Francisco, San Mateo, and Santa Clara formed the Peninsula Corridor Joint Powers Board (JPB) with the intention of taking over the contract when it expired with Caltrain. JPB purchased the right-of-way from San Francisco to San Jose as well as the trackage rights from San Jose to Gilroy in 1991. Commute operations have since been contracted with Amtrak (JRP 2002).

Significance Evaluation:
The following presents an evaluation of the subject property in consideration of both CRHR and City Criteria for Local Significance. Because of the similarities in the requirements of State and local designation programs, CRHR and local criteria have been addressed together to avoid duplicative text.

CRHR Criterion 1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.

City Criterion for Historical or Cultural Significance.

Completed in 1864, the Peninsula Commute Service was the only freight and long-distance passenger line directly into San Francisco from San Jose, allowing people to commute to work for the first time. Following the alignment of the SF-SJRR, the line is one of oldest in California and is an important piece of California’s railroad history, with towns like Santa Clara, San Bruno, Millbrae, Burlingame, Belmont, Atherton, and Sunnyvale growing up along the railroad. The Caltrain right-of-way has been studied extensively in recent years, with features such as railroad depots, buildings, underpasses, bridges, tunnels, grade separations and other railroad infrastructure providing a better representation of the railroad’s significant historical associations. The track itself is also notably altered, no longer resembling its original appearance or setting from its SF-SJRR and early SPRR days. Therefore, the subject property is not eligible under CRHR Criterion 1 or the City’s Criterion for Historical or Cultural Significance as an individual segment. Further, while not surveyed/evaluated here, the larger line is unlikely to be eligible as indicated by previous studies along the Peninsula Commute Service which identified an overall lack of integrity with respect to trackage (JRP 2002, P-43-000928).

CRHR Criterion 2. Is associated with the lives of persons important in our past.

City Criterion for Historical or Cultural Significance.

The subject property is a modified railroad segment that is not associated with any specific owners/people of significance. Therefore, the subject property is not eligible under CRHR Criterion 2.
CRHR Criterion 3. 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.

City Criterion for Architectural Significance.

City Criterion for Geographic Significance.

The subject property is a ubiquitous segment of the Caltrain railway represented by two parallel tracks with wood ties and metal hardware. Alterations to the segment since the date of its initial construction include the addition of a second track in the early 1900s, replacement of the original rails in the late 1950s when the SPRR rehabilitated much of its lines to accommodate heavier diesel engines, the grade separation at Bowers Avenue in the 1970s, and the addition of Caltrans electrification equipment to the right-of-way within the last decade. Finally, the Caltrain right-of-way has been studied extensively in recent years, with other features such as railroad depots, buildings, underpasses, bridges, tunnels, grade separations and other railroad infrastructure providing a better representation of the railroad’s significant architectural and engineering associations. Therefore, the subject property is not eligible under CRHR Criterion 3 as an individual segment. Further, while not surveyed/evaluated here, the larger line is unlikely to be eligible as indicated by previous studies along the Peninsula Commute Service which identified an overall lack of integrity with respect to trackage (JRP 2002, P-43-000928) and is not eligible for its geographic significance.

CRHR Criterion 4. Has yielded, or may be likely to yield, information important in prehistory or history.

The subject property is not significant as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies. Therefore, the property is not eligible under CRHR Criterion 4.

Integrity

Location: The subject property generally retains integrity of location. This segment of the railroad is roughly sited in its original location, although modifications to the original alignment have been made.

Design: The subject property lacks integrity of design. The original materials have been replaced, the line made into a double-track, and modifications have been made to the alignment over time.

Setting: The subject property lacks integrity of setting. The setting no longer reflects the rural/agricultural landscape that this segment of line was once a part of. Intensive development in the 1970s and 1980s has long since erased the line’s original setting.

Materials: The subject property lacks integrity of materials. It appears that none of the original materials are present, although the wood ties could date to the early 1900s.

Workmanship: The subject property lacks integrity of workmanship. Evidence of the original craftsmanship is no longer present.

Feeling: The subject lacks integrity of feeling. Although it still functions as a commuter
rail line, changes in setting, original materials, alignment, and technology do not reflect early railroad development.

Association: Although the Peninsula Commute Service is associated with important events in the history of railroad development in California, these associations are not well conveyed through the track itself. Rather, it is the previously identified depots, bridges, underpasses, and other infrastructure that better reflects these important associations.

For all of the reasons provided above, this segment of the Peninsula Commute Service is not eligible for designation in the CRHR or City HRI.

References:

JRP Historical Consulting Services (JRP). 2002. Inventory and Evaluation of Historic Resources, Caltrain Electrification Program, San Francisco to Gilroy (MP 0.0 to 77.4). Prepared for Parsons, San Francisco, California.


P-43-000928. DPR Form Set for the Southern Pacific Railroad (multiple authors with some unidentified). Provided by the Northwest Information Center.
**Primary #**

**HRI #**

**Trinomial**

**NRHP Status Code 6Z**

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<th>Other Listings</th>
<th>Review Code</th>
<th>Reviewer</th>
<th>Date</th>
</tr>
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</table>

**Resource Name or #:** (Assigned by recorder) Uranium Substation

**P1. Other Identifier:** 2705 Bowers Avenue

**P2. Location:**
- □ Not for Publication
- ■ Unrestricted
  - a. County Santa Clara
  - b. USGS 7.5' Quad San Jose West
  - c. Address 2705 Bowers Avenue
  - d. UTM: (Give more than one for large and/or linear resources) Zone __, __ mE/ __ mN
  - e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

APN 216-28-062. The subject property is bound by the Caltrain right-of-way to the south, Bowers Avenue to the west, and parking lots to the north and east.

**P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The subject property is known as the Uranium Substation, a Silicon Valley Power (SVP) general distribution station “for customers connected at 12 kilovolts (kV) and with loads less than 13.5 Megawatts (MW)” (DayZen 2021). The substation includes a small, rectangular plan, single-story utility building located at the westernmost boundary of the property. The building has a slant, shed roof with a pronounced vertical wood-panel band/fascia that runs around the entire roofline; concrete block walls; and exhibits minimal fenestration.

(Photograph 1) (see Continuation Sheet).

**P3b. Resource Attributes:** (List attributes and codes) HP9. Public Utility Building; HP11. Engineering Structure

**P4. Resources Present:** ■ Building ■ Structure ■ Object ■ Site ■ District ■ Element of District ■ Other (Isolates, etc.)

**P5b. Description of Photo:** (view, date, accession #)

Photograph 1. Main (east) elevation, view to west (Bing Maps 2021)

**P6. Date Constructed/Age and Source:**

- ■ Historic □ Prehistoric □ Both
- 1976 (City building permit)

**P7. Owner and Address:**

City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050

**P8. Recorded by:**

Samantha Murray,
South Environmental
Pasadena, CA 91104

**P9. Date Recorded:** 7/23/2021

**P10. Survey Type:** Pedestrian

---

**P11. Report Citation:** (Cite survey report and other sources, or enter “none.”)

Historic Built Environment Assessment for the CA3-2590 Walsh Avenue Project, Santa Clara, California (South Environmental 2021)

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**Attachments:** NONE ■ Location Map ■ Continuation Sheet ■ Building, Structure, and Object Record

- Archaeological Record ■ District Record ■ Linear Feature Record ■ Milling Station Record ■ Rock Art Record

- Artifact Record ■ Photograph Record ■ Other (List):
Uranium Substation

*Map Name: San Jose West, California  
*Scale: 1:24,000  
*Date of map: 2013
Uranium Substation

*NRHP Status Code: 62

B1. Historic Name: ____________________________
B2. Common Name: __________________________
B3. Original Use: Electric Substation
B4. Present Use: Electric Substation
B5. Architectural Style: n/a (utilitarian)
B6. Construction History: (Construction date, alterations, and date of alterations)
   Constructed in 1976 (City of Santa Clara building permit).

B7. Moved? ■ No □ Yes □ Unknown Date: ________________ Original Location: ________________
B8. Related Features:
B9a. Architect: unknown
B9b. Builder: unknown
B10. Significance: Theme n/a Area n/a
   Period of Significance n/a Property Type n/a Applicable Criteria n/a
   (Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Overview of Municipal Power in Santa Clara (1896–present)
The Santa Clara Board of Trustees authorized the formation of a municipal electric utility in 1896 and moved forward with construction of an electric plant (SVP 2021a). The original system consisted of just 46 direct-current streetlamps and a generator (SVP 2021b). In 1902, Santa Clara watched as nearly all other neighboring towns received electricity via the United Gas and Electric Company, a newly formed corporation from San Francisco which acquired the interests of the Consolidated Light and Power Company, the San Jose Light and Power Company, and the Electric Improvement Company of San Francisco and San Jose, giving the company “complete control of all lighting and power business in San Mateo and Santa Clara counties.” San Jose was selected as the distributing center for electric power for all adjacent counties (San Francisco Call 1902a and 1902b). By 1903, Santa Clara had already outgrown its original power system and “invested $5,000 to convert the system to alternating current, abandoned the small generating plant and began purchasing wholesale power” (SVP 2021b). The old lighting plant was abandoned and instead, power was purchased from the privately held United Gas and Electric Company starting in 1904 and continuing for the next half-century (see Continuation Sheet).

B11. Additional Resource Attributes: (List attributes and codes)
B12. References: See Continuation Sheet
B13. Remarks:
B14. Evaluator: Samantha Murray, South Environmental
   *Date of Evaluation: 7/23/2021

(Sketch Map with north arrow required.)

(This space reserved for official comments.)
*P3a. Description (Continued): The east elevation (see Photograph 1 – this elevation was not visible during survey for safety reasons) faces out into the equipment yard and features what appear to be three central floor-to-ceiling tinted ribbon windows with metal frames. The north elevation (Photograph 2) has a simple, central metal double-door and transom. The west elevation (Photograph 3) has no fenestration but for a small louvered vent. The south elevation (Photograph 4) has a single metal entry door and transom. The substation yard is comprised of various pieces of equipment including boxes and transformers (Photographs 5 and 6). The entire substation yard is enclosed with temporary chain-link fencing but for the north elevation, which has a zig-zag concrete block wall bearing the substation’s name in metal lettering (Photograph 7).

Photograph 2. Substation building north elevation; facing south.
Photograph 3. Substation building west elevation; facing east.

Photograph 4. Substation building south elevation; facing north.
Photograph 5. Overview of substation, yard, equipment, and building; facing south.

Photograph 6. Overview of substation transformers; facing east.
By 1906, the City's growing population had reached nearly 5,000 and would remain fairly stable prior to the post World War II development boom that was felt across much of the United States. During the postwar years, Santa Clara expanded its boundaries north and west of the original city limits, replacing rural open space with housing developments and industrial buildings to support the City’s new role in the manufacturing industry, which had replaced the once dominant agricultural industry. With the advent of the semiconductor in the 1950s, the electronics industry boomed around the silicon chip and overtook the last of the City’s farmland (Lichtenstein 2004).

In 1965, the City received an allocation of power from the Federal Central Valley Project and took the first step towards diversifying its utility portfolio (SVP 2021b), which included hydro power by 1967 (SVP 2021a). In 1968, the City of Santa Clara became a member of the newly formed Northern California Power Agency (NCPA), a group of publicly-owned utilities that included Santa Clara, Healdsburg, Biggs, Palo Alto, Redding, Roseville, Lodi, Ukiah, Gridley, and Lompoc (Healdsburg Tribune 1968). Throughout the following years, Santa Clara and the NCPA worked on behalf of several municipal electric utilities in Northern California. Together they gained access to wholesale transmission markets and jointly developed cost-effective electric generation resources to meet the growing demand for electricity” (SVP 2021a).

By the 1970s, first generation electronic companies like Intel, National Semiconductor, Applied Materials, LSI Logic, and Siliconix had moved into the area (Lichtenstein 2004), and the region had gained international notoriety as Silicon Valley, “the capital of the semiconductor industry and the densest concentration of ‘high technology’ enterprises in the world” (Saxenian 1983). By 1990, the City had nearly 500 electronics manufacturing plants “producing everything from integrated circuits to mini-computers” (Lichtenstein...
Having more demand for power, in 1980 the City opened its 6 MW Cogen No. 1 power plant, allowing the City to generate its own electricity for the first time in 73 years. This was followed by the 110 MW Geothermal Project in 1983. “Santa Clara, through NCPA, was among the first municipalities in the United States to own and operate a plant of this nature.” In 1998, the utility began operating under the new name Silicon Valley Power in recognition of its role in powering the tech industry (SVP 2021a).

Today SVP operates an 18.4 square-mile services area and owns and operates seven generating plants and 30 substations, including 57.8 miles of transmission lines and hundreds of miles of distribution lines both above and below ground, with the vast majority of its service going to residential customers (SVP 2018 and 2021a). July 23, 2021 marked the 125th anniversary of the City’s municipal electric utility now known as SVP (SVP 2021b).

**Property History**

Permit records indicate that the Uranium Substation was constructed in 1976. No permits for subsequent alterations were identified.

Historic aerial photographs and maps indicate that the land on which the subject property was constructed served as farmland from at least 1897 until the early 1970s, when the City expanded its boundaries and started to develop areas to the north and west with residential and industrial properties. Situated north of the City of Santa Clara, the subject property maintained its agricultural setting right up until the time the area was developed starting in the early 1970s. By 1956, the effects of the postwar boom can be seen in areas to the southwest and east with some farmland taken by residential development. Within just four years, significantly more residential development can be seen to the southwest. By 1968, agricultural land is rapidly disappearing in all directions and for the first time, development has started to occur north of the railroad. By the 1980 aerial, not a single agricultural property remains in the vicinity, with nearly all land being converted for commercial and industrial development. In the 1980 aerial photograph, the small rectangular substation building is clearly visible as is some equipment. Overtime, equipment continues to be added to the substation yard in various configurations. Between 2010 and 2012, the footprint of the substation becomes much more defined with the construction of a curb/lip all the way around the property. Additional equipment also appears in the yard at this time. This appears to be part of a substation upgrade that occurred c. 2010 and included the installation of 12 kV open bus bays (City of Santa Clara 2010). From this point forward, the substation looks much the same way it does today.

The Uranium Substation connects to two Pacific Gas & Electric (PG&E) 60 kV overhead transmission lines: 1) the line running southeast of the Uranium substation along the north side of the Caltrain right-of-way until heading north on Scott Boulevard and then east to the Walsh Substation at 1600 Walsh Avenue; 2) the line running northwest of the Uranium Substation following Bowers Avenue north to Kifer Road where it heads west and then further north to the Central Expressway where it connects with the Zeno Substation (CEC 2021). These substations, and others like them in the northern part of Santa Clara north of the railroad, are part of the more recently developed portions of the City that were reactive to the Silicon Valley tech boom of the 1970s.
Significance Evaluation:
The following presents an evaluation of the subject property in consideration of both CRHR and City Criteria for Local Significance. Because of the similarities in the requirements of State and local designation programs, CRHR and local criteria have been addressed together to avoid duplicative text.

**CRHR Criterion 1.** Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.

**City Criterion for Historical or Cultural Significance.**

The subject property was constructed in 1976 at a time when the City of Santa Clara was rapidly expanding to meet the demand of the tech industry, which brought a population and development boom that forever changed the northern portion of the City from rural agricultural fields to residential and industrial/manufacturing uses. While the Silicon Valley tech boom is a significant pattern of development that altered the landscape of Santa Clara, the subject property is not strongly associated with this pattern of development, nor is it directly associated with any significant events in the development of the City's electrical infrastructure. Although substations can and do play an important role in providing power to the communities and businesses they serve, this substation and its related infrastructure came late in the development of the City and its utility history and was constructed to support ongoing population and industry growth within the context of a larger electrical system. Therefore, the subject property is not individually eligible under CRHR Criterion 1 or the City’s Criterion for Historical or Cultural Significance. Further, there is no evidence that the larger SVP electrical system of which this substation is a part is eligible for its association with important events or patterns of development, as nearly all of the SVP electrical infrastructure north of the Caltrain right-of-way was primarily developed in the 1970s and 1980s to support ongoing residential and manufacturing development.

**CRHR Criterion 2.** Is associated with the lives of persons important in our past.

**City Criterion for Historical or Cultural Significance.**

The subject property is a public utility building that is not associated with any specific occupants. Its only owners have been the City/SVP. Review of local publications and newspaper articles failed to indicate that the subject property has any important associations with significant persons in the history of the City. Therefore, the subject property is not eligible under CRHR Criterion 2 or the City’s Criterion for Historical or Cultural Significance.

**CRHR Criterion 3.** 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.

**City Criterion for Architectural Significance.**

The subject property is a simple, utilitarian-style building that is largely devoid of architectural style but for the wide wood-panel band that wraps around the roofline and...
provides a nod to the Shed style of architecture that was popular during the 1970s and 1980s. However, the building itself cannot be identified as having distinctive characteristics of the Shed style. The building is very simple in plan, design, materials, and construction methods, and is not known to be the work of a notable architect or builder. The subject property represents a very common property type seen throughout the United States, an electric substation, and lacks any unique architectural features/details, construction techniques, or technology that would distinguish it from others in its property type. Therefore, the subject property is not eligible under CRHR Criterion 3 or the City’s Criterion for Architectural Significance. Finally, the subject property has no potential to contribute to an historic district of power infrastructure in the region and is not eligible for its geographic significance.

CRHR Criterion 4. Has yielded, or may be likely to yield, information important in prehistory or history.

The subject property is not significant as a source, or likely source, of important historical information nor does it appear likely to yield important information about historic construction methods, materials or technologies. Therefore, the property is not eligible under CRHR Criterion 4.

Integrity

Location: The subject property retains integrity of location. The property is sited on the original location it was constructed in its original orientation.

Design: The subject property retains integrity of design. While the electrical equipment in the yard has changed over time, the property can still be identified as an electrical substation from the 1970s.

Setting: The subject property retains integrity of setting. Most of the surrounding properties were constructed in the 1970s and 1980s around the same time as the subject property.

Materials: The subject retains integrity of materials. The property’s original materials including the concrete block walls and wood panel roof remain intact.

Workmanship: The subject property retains integrity of workmanship. Evidence of the original craftsmanship is still present, although simplistic/utilitarian.

Feeling: The subject retains integrity of feeling. Property still feels like an electrical substation constructed in the 1970s.

Association: The subject property lacks integrity of association. The property has no important associations with events, people, or important patterns of development in the City.

For all of the reasons provided above, the Uranium Substation is not eligible for designation in the CRHR or City HRI.
References:

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