DOCKETED	
Docket Number:	19-SPPE-01
Project Title:	Laurelwood Data Center (MECP Santa Clara , LLC)
TN #:	229473
Document Title:	Notice of Mitigation Measures Workshop for Laurelwood Data Center
Description:	Staff workshop notice and draft Biological Resources and Cultural and
2000.150.0	Tribal Cultural Resources sections - August 26, 2019; 10:00 a.m.
Filer:	Lisa Worrall
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	8/16/2019 2:30:29 PM
Docketed Date:	8/16/2019



IN THE MATTER OF:) Docket No. 19-SPPE-01
Laurelwood Data Center) WORKSHOP) RE: Mitigation Measures for LDC

NOTICE OF Mitigation Measures Workshop for Laurelwood Data Center

California Energy Commission (CEC) staff will conduct a workshop to discuss and potentially arrive at a consensus on the proposed mitigation measures necessary for a determination of Mitigated Negative Declaration (MND) for the proposed Laurelwood Data Center (LDC or project). Please note that if the applicant is in agreement with CEC staff's proposed mitigation measures (in the attached draft technical sections), a public workshop will no longer be necessary and therefore will be cancelled. All interested parties, agencies, and members of the public are invited to participate in the workshop, which will be held:

August 26, 2019 Beginning at 10:00 a.m.

Warren-Alquist State Energy Building
1516 Ninth Street
1st Floor, Arthur Rosenfeld Hearing Room Sacramento, California 95814
(Wheelchair Accessible)

Remote access is available by computer or phone via WebEx.™ (Instructions below.)

Agenda

The workshop will give CEC staff, the applicant, and the City of Santa Clara the opportunity to discuss staff's proposed mitigation measures necessary to reduce the LDC's potentially significant effects on the environment to less-than-significant levels, should the applicant disagree with staff's proposed mitigation. The goal of the workshop is for CEC staff and the applicant to come to a consensus on the necessary mitigation for CEC staff to determine an MND is appropriate for the proposed project. The public and other parties will be given an opportunity to comment.

Background

Before a proposed mitigated negative declaration can be released for public review, California Environmental Quality Act (CEQA) requires that "[r]evisions in the project plans or proposals [are] made by or *agreed* to by the applicant" which avoid or mitigate

all potentially significant effects (Cal. Code Regs., tit. 14, 15070(b)(1)). Once CEC staff and the applicant have found consensus on the proposed mitigation measures necessary for the determination of MND, staff will ensure that the agreed-upon mitigation measures are incorporated into the Initial Study. Staff will publish the MND and Initial Study and submit them to the State Clearinghouse for a 30 day public review period.

CEC staff proposes superseding three of the applicant's project design measures (which staff has termed, "Applicant Proposed Measures" or "APMs") and adding one measure that would be incorporated into the proposed project. The superseded APMs and new staff proposed measure would be identified as mitigation measures (MMs). The MMs are in the technical areas of biological resources and cultural and tribal cultural resources.

Biological Resources

CEC Staff concludes that the design measures APM BIO-1, APM BIO-2, and APM BIO-3, proposed by the applicant to avoid and reduce impacts to nesting birds, lack the specificity necessary to ensure project impacts would be reduced to less-than-significant levels. No concise protocol is proposed for pre-demolition/construction nest surveys, and proposed "no-work" buffers around active nests discovered prior to or during demolition/construction are not defined in accordance with established best practices to protect avian resources. Additionally, APM BIO-3 lacks accountability, because it stipulates a technical report of the bird surveys "may be submitted" to the city, rather than requiring it.

To ensure impacts to nesting birds are avoided and minimized to less than significant, staff is proposing MM BIO-1, which would replace nesting bird mitigation in APM BIO 1, provide details about nest buffers absent in APM BIO-2, and ensure the accountability in reporting that was lacking in APM BIO-3. With adherence to MM BIO-1 and APM PD-1 (Worker Environmental Awareness Program, proposed in the small power plant exemption application), project impacts to nesting birds covered by the Migratory Bird Treaty Act and other federal and state laws would be less than significant. MM BIO-1 would supersede APM BIO-1 through APM BIO-3.

APM BIO-1 and APM BIO-2 do not address the potential presence of Western burrowing owl and related best practices for avoidance and impact minimization recommended by the California Department of Fish and Wildlife. To ensure impacts to burrowing owls are avoided and minimized to less than significant levels, staff is proposing MM BIO-2, which would add specific measures for Western burrowing owl. MM BIO-2 would require pre-demolition/construction surveys for Western burrowing owl before any ground disturbance activities regardless of the time of year, within 300 feet of proposed demolition/construction activities on the project site and the transmission line extension. Where pre-demolition/construction surveys identify occupied burrows during the February 1 through August 31 breeding season, a no-disturbance buffer around the burrow would be required. Where pre-demolition/construction surveys identify occupied burrows outside the breeding season, the applicant may propose an

eviction and exclusion plan for passive relocation of the birds, subject to preparation and approval of a Burrowing Owl Exclusion Plan. MM BIO-2 would also include accountability in reporting that was lacking in APM BIO-3. With observance and implementation of MM BIO-2 and APM PD-1, demolition/construction impacts to Western burrowing owl that may occupy the project site would be avoided and minimized; reducing impacts to less than significant levels. MM BIO-2 would be an additional mitigation measure.

Cultural and Tribal Cultural Resources

Staff evaluated APM PD-1 and APM CUL-1 through APM CUL-3 in the context of the potential impacts and concludes that APM CUL-1 and APM CUL-3 are insufficient to reduce impacts to buried, as-yet-undiscovered historical resources to a less than significant level. APM CUL-1 proposes that the applicant retain a qualified archaeologist and Native American monitor to respond to inadvertent cultural resource discoveries should any occur during demolition/construction. In short, APM CUL-1 would place the responsibility of cultural resources management on construction workers instead of cultural resources professionals and Native Americans. A second problem with APM CUL-1 is its lack of qualification standards for Native American monitors. Staff proposes modifications to APM CUL-1 that would ensure the prompt identification and management of cultural and tribal cultural resource discoveries by requiring a professional archaeologist and qualified Native American monitor observe ground-disturbing activities associated with the proposed project. In addition, staff adds qualification criteria for Native American monitors. MM CUL-1 would supersede APM CUL-1.

APM CUL-3 lacks accountability because it stipulates that a technical report of the archaeological/Native American resource finds, recommendations, data recovery efforts, and other pertinent information "may be submitted" to the city, rather than requiring it. Staff proposes that submittal of the technical report to the city be compulsory. MM CUL-3 would supersede APM CUL-3.

Staff concludes that implementation of **MM CUL-1** and **MM-CUL-3** would reduce the impacts to buried historical resources to less than significant levels.

MM CUL-1 would supersede APM CUL-1 and MM CUL-3 would supersede APM CUL-3.

Public Comment

Oral comments: Staff will accept oral comments during the workshop. Any comments may become part of the public record for this proceeding.

Written comments: Staff request that any written comments be submitted to the Docket Unit by **5:00 p.m.** on **August 23, 2019**. Written comments will also be accepted at the workshop; however, the staff may not have time to review them before the conclusion of the meeting.

Written and oral comments, attachments, and associated contact information (e.g. address, phone number, email address) become part of the viewable public record. This information may also become available via any Internet search engine.

The Energy Commission encourages use of its electronic commenting system. Visit https://ww2.energy.ca.gov/sitingcases/laurelwood/, which links to the comment page for this docket. Select or enter a proceeding to be taken to the "Add Comment" page. Enter your contact information and a comment title describing the subject of your comment(s). Comments may be included in the "Comment Text" box or attached in a downloadable, searchable Microsoft® Word (.doc, .docx) or Adobe® Acrobat® (.pdf) file. Maximum file size is 10 MB.

Written comments may also be submitted by email. Include the docket number 19-SPPE-01 and Laurelwood Data Center in the subject line and send to docket@energy.ca.gov.

If preferred, a paper copy may be submitted to:

California Energy Commission Docket Unit, MS-4 Re: Docket No. 19-SPPE-01 1516 Ninth Street Sacramento, CA 95814-5512

Public Adviser and Other Commission Contacts

The Energy Commission's Public Adviser's Office provides the public assistance in participating in Energy Commission proceedings. For information on how to participate in this forum, please contact Acting Public Adviser Jennifer Martin-Gallardo, at PublicAdviser@energy.ca.gov, (916) 654-4489 or toll free at (800) 822-6228.

Please direct requests for reasonable accommodation to Yolanda Rushin at Yolanda.Rushin@energy.ca.gov or (916) 654-4310 at least five days in advance.

Media inquiries should be directed to the Media and Public Communications Office at MediaOffice@energy.ca.gov or (916) 654-4989.

Questions on the subject matter of this meeting should be directed to Lisa Worrall lisa.worrall@energy.ca.gov or (916) 654-4545.

Remote Attendance

WebEx is the Energy Commission's online meeting service. When attending remotely, presentations will appear on your computer/laptop/mobile device screen and audio may be heard via the device or telephone. Please be aware that the WebEx meeting may be recorded. WebEx technical support is available at 1-866-229-3239.

Via Computer: Go to

https://energy.webex.com/energy/j.php?MTID=m5d6c56282fb4412d9301de7a2f80a81f. If this event is listed, click "Join." If not, click the "Home" tab on the top left of your screen and enter Event Number 927 625 375. When prompted, enter your name and email address. No password is needed.

The "Join Conference" menu offers a choice of audio connections:

- 1. To call into the meeting, select "I will call in" and follow the on-screen directions.
- 2. International attendees, select "Global call-in number."
- 3. To have WebEx call you, enter your phone number and click "Call Me." This step will not work if your number has an extension.
- 4. For Internet audio: If you have a broadband connection, a headset, or a computer microphone and speakers, you may use VoIP (Internet audio). Go to the audio menu and click "Use Computer Headset," then "Call Using Computer."

Via Telephone: (no visual presentation): Call 1-866-469-3239 (toll free in the U.S. and Canada) and when prompted, enter the meeting number above. International callers may select a number from

https://energy.webex.com/energy/globalcallin.php?MTID=m1033b05083067d41fa810c6d11b4462d.

Via Mobile Device: Download the application from www.webex.com/products/web-conferencing/mobile.html.

Muting: We greatly appreciate your cooperation in reducing background noise on the audio connection by muting your line when you are not speaking. Mute your line rather than placing your phone on hold. Using WebEx, right click on your name in the panelists or attendees list and select "Mute." If you are using a telephone connection, press "*6" once to mute and again to unmute.

Availability of Documents

Documents and presentations for this meeting will be available at https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-01.

Dated: August 16, 2019 at Sacramento, California

Shawn Pittard

Deputy Director

Siting, Transmission, and Environmental Protection Division

Mail List:

Laurelwood Data Center listsery

5.4 Biological Resources

This section describes the environmental and regulatory setting and discusses impacts associated with the demolition/construction and operation of the Laurelwood Data Center (LDC or project) with respect to biological resources that occur in the project area.

BIOLOGICAL RESOURCES		Potentially Significant	Less than Significant With Mitigation	Less Than Significant	
VVO	uld the project:	Impact	Incorporated	Impact	No Impact
a. 	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
C.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		\boxtimes		
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			\boxtimes	
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?				\boxtimes
			-		

Environmental checklist established by CEQA Guidelines, Appendix G.

5.4.1 Setting

The 12-acre project site in the city of Santa Clara is within an established urbanized industrial zone, surrounded by commercial/industrial use buildings and bordered to the south by U.S. Highway 101. San Tomas Aquino Creek, with border trails defining the tops of bank, is located less than 500 feet west of the project site. The creek provides habitat for local wildlife and walking, running, and biking opportunities for local workers and residents. The Small Power Plant Exemption (SPPE) application states all land disturbance would avoid the San Tomas Aquino Creek and banks. Placement of the poles for the electric transmission line extension could occur within close proximity to the creek but would avoid the channel and banks.

The site was previously fully developed and the buildings located on the project property were used for electrical component manufacturing and office space. The former owner of the property obtained city permit(s) to demolish previously-existing site buildings and improvements. The majority of the vegetation on the property consists of non-native/non-native invasive trees and shrubs such as Eucalyptus (Eucalyptus sp.), Strawberry tree (Arbutus x 'Marina'), Green ash (Fraxinus pennsylvanica) and Trailing lantana (Lantana montevidensis) with the exception of native trees: one Toyon (Heteromeles arbutifolia),

two Western redbud (*Cercis occidentalis*), neighboring Coast redwoods (*Sequoia sempervirens*) and one neighboring Monterey pine (*Pinus radiata*). Twenty of the existing non-native/non-native invasive trees would be removed with development of the project.

Regulatory Background

Federal

Endangered Species Act (16 U.S.C. § 1531 et seq. and 50 C.F.R. part 17.1 et seq.). The Endangered Species Act (ESA) designates and provides for protection of threatened and endangered plant and animal species, and their critical habitat. "Take" of federally listed species as defined in the ESA is prohibited without incidental take authorization, which may be obtained through Section 7 consultation (between federal agencies) or a Section 10 Habitat Conservation Plan. The administering agencies are the United States Fish and Wildlife Service (USFWS), the National Oceanic Atmospheric Administration (NOAA), and National Marine Fisheries Service.

Migratory Bird Treaty Act (16 U.S.C. §§ 703–711). The Migratory Bird Treaty Act (MBTA) makes it unlawful to take or possess any migratory nongame bird (or any part of such migratory nongame bird including nests with viable eggs). The administering agency is the USFWS.

Clean Water Act Sections 401 and 404. The Clean Water Act (CWA) (33 U.S.C. §§ 1251–1376) requires the permitting and monitoring of all discharges to surface water bodies. Section 404 (33 U.S.C. § 1344) requires a permit from the United States Army Corps of Engineers (USACE) for a discharge from dredged or fill materials into a water of the United States, including wetlands. Section 401 (33 U.S.C. § 1341) requires a permit from the regional water quality control board for the discharge of pollutants.

Rivers and Harbors Act Section 10. Section 10 of the Rivers and Harbors Act of 1899 requires authorization from USACE for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, locations, or condition of the water body. This applies to any dredging or disposal of dredging materials, excavation, filing, rechannelization, or any other modification of a navigable water of the United States and applies to all structures.

State

California Endangered Species Act (Fish and G. Code, §§ 2050–2098). The California Endangered Species Act of 1984 protects California's rare, threatened, and endangered species. CESA allows California Department of Fish and Wildlife (CDFW) to issue an incidental take permit for a species listed as candidate, threatened, or endangered only if that take is incidental to otherwise lawful activities and specific criteria are met. These criteria are listed in Title 14, California Code of Regulations, section 783.4, subdivisions (a) and (b). For purposes of CESA, "take" means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill (Fish and G. Code, § 86).

California Fish and Game Code Section 3503. This section makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.

California Fish and Game Code Section 3513. This section protects California's migratory birds by making it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame birds. The administering agency is CDFW.

California Fish and Game Code Sections 3511, 4700, 5050, and 5515. These sections designate certain species as fully protected and prohibit the take of such species or their habitat unless for scientific purposes (see also Cal. Code Regs., tit. 14, § 670.7). Incidental take of fully protected species may also be authorized in a Natural Community Conservation Plan (NCCP) (Fish and G. Code, § 2835).

California Fish and Game Code Section 1602. This section stipulates that an entity shall not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

Local

City of Santa Clara 2010 – 2035 General Plan. Goals and policies specific to the City of Santa Clara General Plan to protect and preserve the city's natural habitat and wildlife are described in Chapter 5 Goals and Policies, Section 10 Environmental Quality. These goals and policies are important with respect to the proposed project:

- 5.3.1-P10 Provide opportunities for increased landscaping and trees in the community, including requirements for new development to provide street trees and a minimum 2:1 on- or off-site replacement for trees removed as part of the proposal to help increase the urban forest and minimize the heat island effect.
- 5.10.1-G1 The protection of fish, wildlife and their habitats, including rare and endangered species.
- 5.10.1-G2 Conservation and restoration of riparian vegetation and habitat.
- 5.10.1-P1 Require environmental review prior to approval of any development with the potential to degrade the habitat of any threatened or endangered species.
- 5.10.1-P2 Work with Santa Clara Valley Water District and require that new development follow the "Guidelines and Standards for Lands Near Streams" to protect streams and riparian habitats.
- 5.10.1-P3 Require preservation of all City-designated heritage trees listed in the Heritage Tree Appendix 8.10 of the General Plan.
- 5.10.1-P4 Protect all healthy cedars, redwoods, oaks, olives, bay laurel and pepper trees of any size, and all other trees over 36 inches in circumference measured from 48 inches above-grade on private and public property as well as in the public right-of-way.
- 5.10.1-P11 Require use of native plants and wildlife-compatible non-native plants, when feasible, for landscaping on City property.
- 5.10.1-P12 Encourage property owners and landscapers to use native plants and wildlife-compatible nonnative plants, when feasible.

Santa Clara City Code. Chapter 12.35: Trees and Shrubs, Sections .010, .020, .030, .040, .050. These sections of the Santa Clara City Code specify how to proceed with certain tree and shrub issues, such as

removal, alteration, misuse of trees and if trees become hazardous to public safety. Here is one section most applicable to proposed project:

12.35.020 Alteration or removal – Permit required. No tree, plant or shrub planted or growing in the
streets or public places of the City shall be altered or removed without obtaining a written permit
from the superintendent of streets. No person without such authorization shall trench around or
alongside of any such tree, plant or shrub with the intent of cutting the roots thereof or otherwise
damaging the same.

5.4.2 Environmental Impacts and Mitigation Measures

Applicant Proposed Measures. The applicant proposes to implement the following design measures (termed "Applicant Proposed Measures" or "APMs" in this analysis) as part of the project, that are intended to avoid and reduce potential impacts to biological resources. (Jacobs 2019a, Section 2.52, page 2-22 and 2-23). Also, **APM PD-1** includes the preparation of a Worker Environmental Awareness Training program (program) to instruct construction workers of the obligation to protect and preserve valuable resources, including biological resources. See **Section 4.0**, **Project Description**, **Table 4-5** for the full text of **APM PD-1**.

APM BIO-1: Preconstruction surveys will be performed for biological resources by a qualified biologist. The surveys will identify any active nests that could be disturbed during construction. Surveys will be completed no more than 7 days prior to the initiation of ground disturbance. During this survey, the biologist shall inspect vegetation along the perimeter of the project site.

APM BIO-2: A no-work buffer will be established around any active nests with an appropriate buffer for the nesting species. The buffer widths will be developed by a qualified biologist, based on species' sensitivity to disturbance, planned construction activities, and baseline level of human activity.

APM BIO-3: The biologist will draft a technical memorandum documenting the result of the survey and any designated buffer zones, which may be submitted to the Director of Community Development prior to the start of ground disturbance activities.

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Energy Commission staff conducted a California Natural Diversity Database (CNDDB) search for special-status species with a nine quad search and considered this with the applicant's search within a two-mile radius of the project site (CNDDB 2019). A discussion of special-status species with recorded occurrences on the CNDBB search is provided below.

Western burrowing owl (*Athene cunicularia*), a California species of special concern, are known to occur and breed within the two-mile radius of the proposed project site. Their presence has been consistent in the last decade and they have recently been spotted the last several years as recorded in the Santa Clara Valley Audubon Society (SCVAS) annual bird list count. The project site lacks the natual habitat, grasslands, and ruderal habitat with ground squirrel burrows that burrowing owls prefer, however they sometimes will burrow in man-made structures like pipe culverts. Although unlikely, since their presence is known in the area there is a potential for burrowing owl to occur on the site.

The yellow rail (*Coturnicops noveboracensis*), California black rail (*Laterallus jamaicensis coturniculus*) and tricolored blackbird (*Agelaius tricolor*) are listed birds that live within marshland, wet meadows, and the latter in wetland habitat. The yellow rail is a California species of special concern. Historical records indicate its presence in the City of Santa Clara and the SCVAS lists sighting them within the past several years. The California black rail, a state-listed threatened and fully protected species, was documented on CNDDB as having occurred in the area as recently as 2016. As recently as March 2019, three California black rail were also sighted just outside the two-mile radius from the project site (SCVAS). The most recent record of tricolored blackbird, a state-listed threatened bird, in the CNDDB in the project area was for 2015 and again the SCVAS has sighted this species in the last several years. However, none of these species are expected to occur on the project site due to its urbanized condition and lack of any surface water sources, so no impacts are anticipated.

Historically the Western pond turtle (*Emys marmorata*), a state species of special concern, has occurred within the two-mile radius of the project site but is presumed extant within this range in the City of Stanta Clara as of 2017. Western pond turtles are found in aquatic habitats in and near ponds, creeks, and rivers. During the breeding season, March–June, turtles may travel over 1500 feet away from their aquatic habitat to lay eggs and sometimes even further than this when they are overwintering (CDFW 2014). The project site is within 500 feet of San Thomas Aquino Creek where there is potential for Western pond turtles to be found as they could travel anywhere along this corridor. However, the project site is separated from the creek by a neighboring developed parking lot and this makes it less likely that the turtles would travel to the project site. Thus, Western pond turtles are not expected to occur on the project site and no impacts are anticipated.

The Central California Coast Distinct Population Segment (DPS) Steelhead population (*Oncorhynchus mykiss irideus pop.* 8), which is a federally threatened species, also currently is known to occur within the two-mile radius within the Guadalupe River. Steelhead are born in freshwater migrating to the ocean and returning, possibly multiple times, to spawn in freshwater again. In California, spawning typically occurs between December to April (Calfish 2019). There is potential for steelhead to occur in San Thomas Aquino Creek. However, lack of aquatic habitat on the project site means there are no expected impacts to this species.

The other special-status species in the region, Alameda song sparrow (*Melospiza melodia pusillula*), California tiger salamander (*Ambystoma californiense*), Hoover's button-celery (*Eryngium aristulatum var. hooveri*), Congdon's tarplant (*Centromadia parryi ssp. congdonii*), and Contra Costa goldfields (*Lasthenia conjugens*) are not expected on the project site or immediate area due to the lack of suitable habitat and the developed condition of the project site.

Demolition/Construction

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Special-Status Species- Nesting Birds

If demolition/construction occurs during the nesting bird season from February to August, it is possible for construction activities to affect nesting and migratory birds that are attracted to the nearby San Tomas Aquino Creek and other, urban vegetated areas on and near the project site. Construction activity near nesting birds is disruptive and sometimes can cause nest abandonment.

The design measures **APM BIO-1**, **APM BIO-2**, and **APM BIO-3**, proposed by the applicant to avoid and reduce impacts to nesting birds, lack the specificity necessary to ensure project impacts would be reduced to less than significant levels. No concise protocol is proposed for preconstruction nest surveys, and proposed "no-work" buffers around active nests discovered prior to or during construction are not defined in accordance with established best practices to protect avian resources. Additionally, **APM BIO-3** lacks accountability, because it stipulates a technical report of the bird surveys "may be submitted" to the city, rather than requiring it.

To ensure impacts to nesting birds are avoided and minimized to less than significant, staff is proposing MM BIO-1, which would replace nesting mitigation in APMs BIO-1, provide details about buffers absent in APM BIO-2, and ensure the accountability in reporting that is lacking in APM BIO-3. With adherence to MM BIO-1 and APM PD-1, project impacts to nesting birds covered by the MBTA and other federal and state laws would be less than significant.

Special Status Species- Western Burrowing Owl

As noted previously, there is the potential for Western burrowing owl, a California species of special concern, to occur on the project site. The project area falls within high potential breeding habitat and is about 1.5 miles between two known Western burrowing owl breeding areas; thus, there is the possiblility of burrowing owl presence on the project (SCVHA 201a). Should burrowing owl occupy the project site during construction, impacts to this special-status bird including take through disruption and destruction of active burrows would be considered significant unless mitigation is provided.

APM BIO-1 and APM BIO-2 do not address the potential presence of Western burrowing owl and related best practices for avoidance and impact minimization recommended by the CDFW (CDFW 2012). To ensure impacts to burrowing owls are avoided and minimized to less than significant levels, staff is proposing MM BIO-2, which would add specific measures for Western burrowning owl. MM BIO-2 would require pre-construction surveys for Western burrowing owl before any ground disturbance activities regardless of the time of year, within 300 feet of proposed construction activities on the project site and the transmission line extension. Where pre-construction surveys identify occupied burrows during the February 1 through August 31 breeding season, a nodisturbance buffer around the burrow would be required. Where pre-construction surveys identify occupied burrows outside the breeding season, the applicant may propose an eviction and exclusion plan for passive relocation of the birds, subject to preparation and approval of a Burrowing Owl Exclusion Plan (BOEP). MM BIO-2 would also include accountability in reporting that is lacking in APM BIO-3. With observance and implementation of the MM BIO-2 and APM PD-1, construction impacts to Western burrowing owl that may occupy the project site would be avoided and minimized; reducing impacts to less than significant levels.

MM BIO-1: Nesting bird avoidance and mitigation

1. If work is scheduled during the nesting season (February 1 through August 31), pre-construction nest detection surveys will be conducted by a qualified biologist, with a bachelor's degree or above in a biological science field and demonstrated field expertise in ornithology, in particular, nesting behavior. Surveys will be conducted within 300 feet of the proposed project construction including staging, grading, site excavation and improvements, and the transmission line extension. Surveys will occur at least 14 days prior and again 24 hours prior to initial ground disturbance activities. Nest surveys will be accomplished by ground surveys and will support phased construction, with surveys scheduled to be repeated if construction lapses in a work area

- for 15 days between March and July. Any habitat areas adjacent to the project site but not publicly accessible will be surveyed with binoculars.
- 2. If active nests containing eggs or young are found, the biologist will establish a species-appropriate nest buffer informed by the following Table 5.4-1. Where warranted, the qualified biologist may increase or decrease the standard buffers based on an assessment of the individual circumstances of the nest. Nesting pair acclimation to disturbance in areas with regularly occurring human activities will be considered when establishing nest buffers. The established buffers will remain in effect until the young have fledged or the nest is no longer active as confirmed by the qualified biologist. Active nests will be periodically monitored until the qualified biologist has determined that the young have fledged or once construction ends. Hand removal of vegetation within nest buffers may be done at the discretion of the qualified biologist. Inactive nests may be removed upon a written determination by the qualified biologist that the nest and any eggs present are no longer viable. The qualified biologist will have authority to order the cessation of nearby project activities if nesting pairs exhibit signs of disturbance.

TABLE 5.4-1 AVIAN NEST BUFFERS							
Avian Group	Species Potentially Nesting in the Project Vicinity	Buffer for Construction Activities (feet)					
Bitterns and herons	Black-crowned night heron, great blue heron, great egret, green heron, snowy egret	250					
Cormorants	Double-crested cormorant	100					
Doves	Mourning dove	25					
Geese and ducks	American widgeon, blue-winged teal, cinnamon						
Grebes	Clark's grebe, eared grebe, horned grebe, pied- billed grebe, western grebe	100					
Hummingbirds	Allen's hummingbird, Anna's hummingbird, black-chinned hummingbird	25					
Plovers	Killdeer	50					
Raptors (Category 1)	American kestrel, barn owl, red-tailed hawk	50					
Raptors (Category 2)	Cooper's hawk, red-shouldered hawk, sharp- shinned hawk	150					
Raptors (Category 3) Northern harrier, white-tailed kite, burrowing owl		Special-status species; buffer determined in consultation with permitting agency, CDFW and as specified in MM BIO-2 for burrowing owl.					
Stilts and Avocets	American avocet, black-necked stilt	150					
Terns	Elegant tern, Forster's tern, royal tern	100					
Passerines (cavity and crevice nesters)	House wren, Say's phoebe, western bluebird	25					
Passerines (bridge, culvert, and building nesters)	Black phoebe, cliff swallow, house finch, Say's phoebe	25					
Passerines (ground nesters, open habitats)	Horned lark	100					

TABLE 5.4-1 AVIAN NEST BUFFERS					
Avian Group	Species Potentially Nesting in the Project Vicinity	Buffer for Construction Activities (feet)			
Passerines (understory and thicket nesters)	American goldfinch, blue-gray gnatcatcher, bushtit, California towhee, common yellowthroat, red-winged blackbird, song sparrow, Swainson's thrush	25			
Passerines (scrub and tree nesters)	American crow, American goldfinch, American robin, blue-gray gnatcatcher, Bullock's oriole, bushtit, Cassin's kingbird, common raven, hooded oriole, house finch, lesser goldfinch, northern mockingbird	25			
Passerines (tower nesters)	Common raven, house finch	25			
Passerines (marsh nesters)	Common yellowthroat, red-winged blackbird	25			
Species not covered under MBTA	Domestic waterfowl, including domesticated mallards, feral (rock) pigeon, European starling, and house sparrow	N/A			

3. The qualified biologist shall prepare a technical memorandum documenting the result of the survey and any designated buffer areas, to be submitted to the local permitting agency prior to the start of ground disturbing activities.

MM BIO-2: Burrowing owl avoidance and mitigation. Surveys for burrowing owl shall be conducted by a qualified biologist, with a bachelor's degree or above in a biological science field and demonstrated field expertise in ornithology, and in particular, nesting behavior. Surveys shall be conducted within 300 feet of the proposed project construction including staging, grading, site excavation and improvements, and the transmission line extension. Surveys shall be conducted in accordance with the most recent California Department of Fish and Wildlife (CDFW) guidance (current guidance: CDFW 2012). Any habitat areas adjacent to the project site but not publicly accessible will be surveyed with binoculars. Surveys, avoidance and mitigation shall be conducted according to the parameters and limitations listed below, depending on the time of year:

- A. <u>Breeding Season (February 1 through August 31)</u>: Pre-construction surveys for burrowing owls shall be performed at least 14 days prior and again 24 hours prior to initial ground disturbance activities.
 - 1. Any occupied burrows shall not be disturbed and shall be provided with a 250-foot protective buffer until and unless modified by the local permitting agency (City of Santa Clara) in consultation with CDFW, or unless a qualified biologist approved by the local permitting agency verifies through non-invasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival.

Once the fledglings in an active burrow are capable of independent survival, a Burrowing Owl Exclusion Plan (BOEP) is developed and approved by the local permitting agency, and habitat is mitigated in accordance with the California Department of Fish and Wildlife (CDFW) staff report guidance (CDFW 2012), then the burrow may be destroyed. Pre-construction surveys following destruction of burrows and prior to initial construction activities are required (24 hours prior) to ensure owls do not re-colonize the project.

- 2. If project activities are delayed or suspended for more than 15 days during the breeding season, surveys shall be repeated.
- B. Non-breeding Season (September 1 through January 31): Pre-construction surveys following the staff report on burrowing owls (CDFW 2012) shall be performed prior (at least 14 days prior and again 24 hours prior) to initial ground disturbance activities. Burrowing owls may be evicted via passive exclusion after a BOEP is developed and approved by the local permitting agency, and habitat is mitigated in accordance with the CDFW staff report (CDFW 2012).

Pre-construction surveys following destruction of burrows are required 24 hours prior to initial construction activities to ensure owls do not re-colonize the project. If owls are found within 160 feet of the project, it is recommended that visual screens or other measures be implemented to limit disturbance of the owls without evicting them from the occupied burrows.

If no burrowing owls are detected, no further measures are required. If burrowing owls are detected, no construction activities will occur within 250 feet of occupied burrows during the breeding season or within 160 feet of occupied burrows during the non-breeding season. The size of any avoidance buffer may be increased or decreased as determined by the qualified biologist based on the planned construction activities and the sensitivity of the burrowing owls. Additionally, burrowing owls shall be monitored by a qualified biologist during construction to assess the sensitivity of the burrowing owls to the construction activities. During the non-breeding season passive relocation may be conducted in accord with an approved BOEP.

If a burrowing owl is observed at the project at any time during construction, then a buffer area shall be established in accord with the above seasonal criteria (consistent with CDFW 2012 guidance) until the animal can be passively relocated out of the construction area.

Operation and Maintenance

No IMPACT. Anticipated operation and maintenance activities associated with the project would not require ground disturbance on site or within the San Tomas Aquino creek corridor where the transmission line extension is proposed. Operation and maintenance activities are expected to be infrequent, benign and less disruptive compared to the current office and industrial activities in the surrounding business park and result in the same or lesser level of human presence and disturbance. Therefore, the project operation and maintenance activities would have no impact on special-status species.

Proposed Mitigation Measures: MM BIO-1 and MM BIO-2.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The project site and surrounding properties have been heavily developed and historically used for industrial electrical component manufacturing and offices. There are no sensitive habitats present on the project site or adjacent properties. However, San Tomas Aquino Creek, an open water riparian area, is located less than 500 feet west of the project site. As stipulated in the SPPE application and the applicant's response to staff's data requests, all of the project improvements and construction and staging activities would occur outside of the San Tomas Aquino creekbed and banks (Jacobs 2019a; Jacobs 2019c).

Demolition/Construction

LESS THAN SIGNIFICANT IMPACT. Demolition/onstruction activities would occur primarily on the project site, which has been previously developed and is surrounded by industrial and office park uses. As noted previously, construction of the transmission line extension over San Tomas Aquino Creek would avoid any surface disturbance of the creek corridor. Construction noise would be commensurate with existing ambient noise generated by surrounding sources including the adjacent U.S. Highway 101 and activities in the adjacent office and industrial buildings along Laurelwood Road and Juliette Drive. As such, project construction impacts to the riparian habitat associated with the creek would be less than significant.

Operation and Maintenance

LESS THAN SIGNIFICANT IMPACT. Operation of the 56 backup diesel generators would result in emissions of oxides of nitrogen. The accumulation of nitrogen in soils is known to adversely affect sensitive wetlands and other native habitats by facilitating growth of invasive non-native plants. Air Qulity staff's modeling of potential nitrogen emissions from the generators concluded that under expected testing and maintenance conditions, and the predominant atmospheric conditions and wind direction in the area, nitrogen emissions at the nearest point of the at San Tomas Aquino Creek would be negligible, at approximately 0.00 to 2.76 kilograms/hectare/year. As such, impacts would be less than significant (CEC 2019d).

Proposed Mitigation Measures: None.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

There are no federally protected wetlands as defined by Section 404 of the Clean Water Act on the project site. San Tomas Aquino Creek is the nearest body of water under the jurisdiction of the U.S. Army Corps of Engineers and is the main component of a larger watershed that flows north to Guadalupe Slough eventually draining to South San Francisco Bay. The creek has slow flowing water year round and is contained within a excavated channel with a natural bottom cover consisting of sand, mud, and gravel. A little over 1.25 miles north from the portion of San Tomas Aquino Creek that is closest to the project, the creek gradually turns into estuarine waters becoming more influenced by tides and higher ocean salt water content. The nearest estuarine and marine wetlands cover 21.5 acres within Baylands Park just over 2.20 miles north of the project site. These wetlands are adjacent to the deepwater lake and wetlands of Don Edwards San Francisco Bay National Wildlife Refuge.

Demoltion/Construction

LESS THAN SIGNIFICANT IMPACT. As noted previously, construction of the project site improvements, buildings, and transmission line extension would avoid any surface disturbance at the nearest water feature to the project site — the San Tomas Aquino Creek. On-site adherence to discharge requirements for the control of solids and pollutants leaving the construction area, as required in the local National Pollution Discharge Eleimination System (NPDES) authorization, would ensure that impacts to natural waterways are avoided.

Operation and Maintenance

LESS THAN SIGNIFICANT IMPACT. Impacts from operation and maintenance of the project would be similar to those anticipated during construction. The project would drain to the existing City of Santa Clara storm drain system and to the permanent site improvements including retention swales to prevent overflow of floodwaters onto adjacent properties, ditches, or waterways.

Proposed Mitigation Measures: None.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

The project is located in an established urbanized area characterized by office and industrial uses. The site and adjacent properties do not support wildlife species or provide natural areas that could serve as corridors for the movement of wildlife. As noted previously, San Tomas Aquino Creek is located 500 feet to the west, and supports a variety of wildlife and potentially hosts Central California Coast Distinct Population Segment (DPS) of Steelhead.

Demolition/Construction

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. As noted previously, the project would completely avoid any disturbance to San Tomas Aquino Creek and any steelhead that may use the creek for migration or spawing. MM BIO-1 and MM BIO-2 require the applicant to conduct pre-construction surveys for birds covered by the MBTA and the California Fish and Game Code and for Western burrowing owl on the site and vicinity before construction. If bird nests or owl burrows are discovered, appropriate non-disturbance buffers would be established and maintained during construction until such time as the burrow or nest is determined to not be active. With these measures and APM PD-1 incorporated in the project, impacts to avian species covered by the MBTA and Fish and Game Code would be avoided or mitigated to less than significant.

Operation and Maintenance

NO IMPACT. The operation and maintenance of the project would not interfere with the movement of any wildlife.

Proposed Mitigation Measures: MM BIO-1 and MM BIO-2.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The proposal entails development of an industrial data center on a Planned Industrial (MP)- zoned property. There is no naturally-occuring vegetation exisiting on the project site as trees surrounding the site are part of the existing ornamental landscape, along with a strip of grassland and trees lining the southern boundary that boarders U.S. Highway 101. There are no other resources on the site that would be subject to local ordinances protecting biological resources. Due to the lack of natural vegetation and habitats, the project would not conflict with any conservation land use goals or policies protecting natural habitats as mentioned in the City of Santa Clara General Plan. However, there are sections of the city's general plan that protect trees.

Demolition/Construction

LESS THAN SIGNIFICANT. A total of 98 trees are on the project site, three of which are native: one Toyon (Heteromeles arbutifolia) and two Western redbuds (Cercis occidentalis). Twenty of these trees are proposed for removal during construction including two olive trees (Oliva europa - Trees #1505 and #1506) according to the applicant's Tree Protection Report included in the SPPE application (Jacobs, 2019a). Although olive trees are non-native, the City of Santa Clara General Plan specifies (Policy 5.10.1-P4) that all olive trees must be protected whether on public or private land. Furthermore, new development should provide a minimum 2:1 tree replacement ratio on or off site for trees removed (Policy 5.3.1-P10) and private property owners should plant native or non-native wildlife friendly plants and trees (Policy 5.10.1-P12). The applicant's Tree Protection Report is consistent with city requirements, and would be a required element of the project as part of the city's Architectural Review process.

Operation and Maintenance

No IMPACT. Once constructed, there is no indication that operation and maintenance of the project would require the removal of additional trees. However, if removal of trees becomes necessary in the future, the site owner would be required to comply with local policies and ordinances regarding the protection/replacement of trees. Operating the data center and maintaining the buildings, on-site ornamental landscaping, and maintenance of the transmission line would involve levels of intrusion and disturbance similar to or less than that at office and industrial uses in the vicinity. Thus, operation of the project would not conflict with local policies and ordinances protecting biological resources.

Proposed Mitigation Measures: None.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project and surrounding area is influenced by the Santa Clara Valley Habitat Plan (SCVHP). The SCVHP is a conservation plan adopted in 2012 for the protection and recovery of resources over a 519,000-acre study area encompassing the majority of land in Santa Clara County. However, the City of Santa Clara is not a plan participant or permitee to the SCVHP. The project site falls outside of the study area of the SCVHP, but the project site is within a 48,464-acre extended study area for Western burrowing owl conservation that includes the northern edge of the county in portions of the cities of San José, Santa Clara, Mountain View, Milpitas, and Sunnyvale. The extended study area was created in recognition that in the 1990s nearly all of the burrowing owl population and breeding pairs in Santa Clara County were concentrated on urban open spaces (airfields, parks and golf courses) and preserves at the southern side of San Francisco Bay in the Don Edwards National Wildlife Refuge and Bayland Park areas. Recovery of the species in Santa Clara Valley depends on concentrating conservation efforts near existing breeding burrowing owl colonies, along with the typical dispersal distances of burrowing owl. It was predicted that burrowing owls would move north of the main study area within 7.5 miles between natal, breeding, and overwintering sites. Thus near-term efforts to stabilize, protect, and better manage established and potential burrowing owl habitat in the Don Edwards and Baylands area was assigned elevated priority in the SCVHP.

¹ It was estimated that 75 percent of the San Francisco Bay area population of burrowing owl occurred in Santa Clara County (SCVHA 2012, Appendix M, page M-1).

Since the project area falls within high potential breeding habitat and is about 1.5 miles between two known and established breeding colonies, there is the possibility of burrowing owl presence on the project site (SCVHA 2012). Other than its inclusion in the extended study area for the protection and revival of the burrowing owl population, the project would not conflict with the underlying land use assumptions and inherent goals and conservation strategies incorporated in the habitat plan.

Demolition/Construction

NO IMPACT. Although the project site is within the extended study area of the SCVHP for burrowing owl conservation, the land and surrounding properties have been fully urbanized, and do not support the open foraging or burrowing habitats that are listed as focus areas in the San Jose/ Baylands Region in the SCVHP's Burrowing Owl Conservation Strategy (SCVHA 2019, Appendix M, pp. 3-5).

Operation and Maintenance

NO IMPACT. The site is fully urbanized and in the unlikely event that burrowing owls were to establish on the site during operation, these birds would be covered by the MBTA and Fish and Game Code along with the obligate responsibilities of the site owner under these laws.

Proposed Mitigation Measures: None.

5.4.3 References

- CalFish 2019 CalFish A California Cooperative Anadromous Fish and Habitat Data Program, Steelhead (Oncorhynchus mykiss). Available online at: https://www.calfish.org/FisheriesManagement/SpeciesPages/SteelheadTrout.aspx. Accessed on: May 14, 2019.
- **Calflora 2019** Calflora. Search for Plants. Available online at: https://www.calflora.org/. Accessed on: April 4, 2019.
- CalHerps 2019 California Herps. Western Pond Turtle Actinemys Marmorata. Available online: http://www.californiaherps.com/turtles/pages/a.marmorata.html. Accessed on: May 14, 2019.
- Cal Fish & Gamea 2019 CaliforniaFish and Game Code (Cal Fish & Game). Available online at: http://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FGC&tocTitle=+Fish+and+Game+Code+-+FGC. Accessed on: May 15, 2019.
- CDFW 2014 California Department of Fish and Wildlife (CDFW). News, Michaels, Dana and Laura Patterson, "Recognizing California's Heroes in a Half-Shell: Our Resident Turtles and Tortoises," posted on May 23, 2014. Available online at: https://cdfgnews.wordpress.com/tag/western-pond-turtle/. Accessed on: May 14, 2019.
- **CDFW 2012** California Department of Fish and Wildlife (CDFW). Staff report on burrowing owl mitigation. State of California Natural Resources Agency. March 2012. Available online at: https://nrm.dfg.ca.gov/FileHandlre.ashx?DocumentID=83843CDFG.
- **CEC 2019d** California Energy Commission (CEC). Project communication and analysis Nitrogen Deposition for Laurelwood Data Center, Energy Commission staff Jon Hilliard and Wenjun Qian, Ph.D, P.E.
- CLO 2019 The Cornell Lab of Ornithology (CLO). All About Birds Search. Available online at: https://www.allaboutbirds.org/?__hstc=161696355.82e638173b73e9e2c33a86d99a3a6ce5.155

- $8048498474.1558048498474.1558048498474.1\&_hssc=161696355.2.1558048498475\&_hsfp=1353874564\#/_ga=2.251824393.1663171163.1558048476-2119268262.1558048475.$ Accessed on: May 10, 2019.
- CNDDB 2019 California Natural Diversity Database (CNDDB). 9Quad and 2mile Search. Available online: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data#43018408-cnddb-in-bios. Accessed on: April May, 2019.
- Gervais, J.A., D.K. Rosenberg, and L.A. Comrack 2008 Burrowing Owl (Athene cunicularia). Pages 218-226 in W.D. Shuford and T. Gardali, editors. California Bird Species of Special Concern: a ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California Studies of Western Birds. No. I. Western Field Ornithologists, Camarillo, California and California Department of Fish and Game, Sacramento, California.
- Horii 2019 San Francisco Bay Area Parks, Recreation and Travel, Ron Horii, "San Tomas Aquino/Saratoga Creek Trail," posted on August 2014. Available online at: http://www.rhorii.com/STACT/SanTomasTrl.html. Accessed on: April 4, 2019.
- Jacobs 2019a Jacobs (Jacobs). (TN 227273-1). Application for Small Power Plant Exemption: Laurelwood Data Center, dated March 5, 2019. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-01.
- Jacobs 2019c Jacobs (Jacobs). (TN 227626). LDC Responses to Formal and Informal Data Requests.

 Data Response Set 1A, dated April 11, 2019. Available online at:

 https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-01.
- NOAAF 2019 National Oceanic And Atmospheric Administration Fisheries West Coast Region, *Central California Coast Steelhead*. Available online at:

 https://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/salmon_and_steelhead_listings/steelhead/central_california_coast/Central%20California%20Coast%20Steelhead.html. Accessed on: May 10, 2019.
- Santa Clara 2019 City of Santa Clara (Santa Clara). Santa Clara City Code 2019. Available online at: https://www.codepublishing.com/CA/SantaClara/. Accessed on: April 29, 2019.
- Santa Clara 2010 City of Santa Clara (Santa Clara). 2010 2035 General Plan. Adopted November 16, 2010. Available online at: http://santaclaraca.gov/government/departments/community-development/planning-division/general-plan. Accessed on: April 29, 2019.
- **SCVHA 2012** Santa Clara Valley Habitat Agency (SCVHA). Final Santa Clara Valley Habitat Plan. August 2012. Available online at: https://scv-habitatagency.org/178/Santa-Clara-Valley-Habitat-Plan. Accessed on: March 13, 2019.
- **SCVURPPP 2019** Santa Clara Valley Urban Runoff Polution Prevention Program (SCVURPPP). San Tomas Aquino Creek Watershed. Available online at: http://www.scvurppp-w2k.com/ws_sta.shtml. Accessed on: April 4, 2019.

5.5 Cultural and Tribal Cultural Resources

This section describes the environmental and regulatory setting and discusses the impacts associated with the demolition/construction and operation of the proposed Laurelwood Data Center (LDC or project) with respect to cultural and tribal cultural resources.

CULTURAL RESOURCES Would the project: a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?		\boxtimes		
c. Disturb any human remains, including those interred outside of dedicated cemeteries?				
significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as	Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
defined in Public Resources Code section 5020.1(k), or b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Environmental checklist established by CEQA Guidelines, Appendix G.

5.5.1 Setting

This section assesses the potential impacts of the proposed LDC (Jacobs 2019a, 2019c, 2019d) on cultural and tribal cultural resources. The section considers four broad classes of cultural resources: prehistoric, ethnographic, historic-period, and tribal cultural resources. The next four paragraphs briefly describe these classes of resources. Afterward, the Cultural and Tribal Cultural Resources section presents the environmental setting pertinent to these resources:

- *Prehistoric, ethnographic, and historic contexts*—generally describes who lived in the project vicinity, the timing of their occupation, and what uses they made of the area
- Methods of analysis—establishes what kinds of physical traces (cultural and tribal cultural resources)
 past peoples might have left in the project area, given the project vicinity's prehistoric, ethnographic,
 and historic contexts

- Results ensuing from those methods—identifies the specific resources present or expectable in the project area
- Regulatory setting—presents the criteria for identifying significant cultural and tribal cultural
 resources under the California Environmental Quality Act (CEQA) and other applicable authorities, as
 well as criteria for identifying significant impacts on these resources
- Impacts—identifies any impacts on cultural and tribal cultural resources, along with the severity of any such impacts
- Mitigation measures—proposes measures to avoid, minimize, rectify, reduce or eliminate, or compensate for identified impacts

Prehistoric archaeological resources are those materials relating to Native American occupation and use of a particular environment. These resources may include sites and deposits, structures, artifacts, rock art, trails, and other traces of Native American activity. In California, the prehistoric period began more than 12,000 years ago and extended through the eighteenth century until A.D. 1769, when Europeans first settled in California.

Ethnographic resources are those materials important to the heritage of a particular ethnic or cultural group, such as Native Americans or African, European, or Asian immigrants. They may include traditional resource collecting areas, ceremonial sites, topographic features, value-imbued landscapes, cemeteries, shrines, or neighborhoods and structures. Ethnographic resources are variations of natural resources and standard cultural resource types. They are subsistence and ceremonial locales and sites, structures, objects, and rural and urban landscapes assigned cultural significance by traditional users. The decision to call resources "ethnographic" depends on whether associated peoples perceive them as traditionally meaningful to their identity as a group and the survival of their lifeways.

Historic-period resources are those materials, archaeological and architectural, usually but not necessarily associated with Euro-American exploration and settlement of an area and the beginning of a written historical record. They may include archaeological deposits, sites, structures, trail and road corridors, artifacts, or other evidence of historic human activity. Under federal and state requirements, historic period cultural resources must be 50 years or older to be considered of potential historic importance. A resource less than 50 years of age may be historically significant if the resource is of exceptional importance. The Office of Historic Preservation (OHP 1995, page 2) endorses recording and evaluating resources 45 years or older to accommodate a five-year lag in the planning process.

Tribal cultural resources are a category of historical resources recently introduced into CEQA by Assembly Bill 52 (Stats. 2014). Tribal cultural resources are resources that are any of the following: sites, features, places, cultural landscapes, sacred places, or objects that are included in or determined eligible to the California Register of Historical Resources (CRHR), or are included on a local register of historical resources as defined in Public Resources Code, section 5020.1(k). Tribal cultural resources can be prehistoric, ethnographic, or historic.

Prehistoric Context

The archaeological record in the Santa Clara Valley began about 9,000 years before present (B.P.)³ with the Metcalf Creek Aspect, the local expression of the Millingstone cultural pattern. Archaeological deposits dating to this time period contain milling slabs and handstones, and large wide-stemmed and

³ The term "B.P." (Before Present) is an international dating convention that refers to the year 1950 as the present.

leaf-shaped projectile points. Native people during this period were mobile foragers and burials were typically flexed and placed beneath millingstone cairns. (Milliken et al. 2007, page 114.)

This Early Holocene culture extended until the beginning of the Early Period (circa 5500 B.P.), which exhibits developments in groundstone technology (i.e., replacing millingstones with the mortar and pestle), less movement of entire communities, regional symbolic integration between cultural groups, and increased trade. Also referred to locally as the Sandhill Bluff Aspect, this cultural pattern lasted until circa 2500 B.P., when the Lower Middle Period began with a "major disruption in symbolic integration systems." (Milliken et al. 2007, page 115.) Archaeological assemblages from the Lower Middle Period include more olive snail-shell saucer beads and circular abalone shell ornaments (and the disappearance of the rectangular shell beads), as well as bone tools and whistles.

The Upper Middle Period began ca. 1520 B.P. with a disruption of the olive snail-shell bead trade network, abandonment of some village sites, and changes in shell bead manufacture. Some South Bay burials from this period were extended inhumations rather than flexed burials, and grave goods were lacking. (Milliken et al. 2007, page 116.)

The Late Period began ca. 900 B.P., with groups increasing intensifying the creation of wealth objects, as seen in burials. Smaller projectile points for use in the bow and arrow emerged during this period and some of the mortuary evidence suggests the introduction of cremation, at least among the wealthiest of individuals. (Milliken et al. 2007, page 117.)

Archaeological research in the project vicinity reveals a rich and lengthy archaeological record. In particular, archaeologists have found numerous buried Native American sites throughout the lower Santa Clara Valley. Rapid development of the valley covered numerous archaeological sites in pavement or with structures (Busby et al. 1996a, pages 2–4; Hylkema 1994, page 252; Parsons and KEMCO 1983, pages 18 and 35). Below even the archaeological sites capped by the veneer of recent building, the Guadalupe River and smaller streams (Saratoga and San Tomas Aquino creeks) buried generations of Native American sites under layers of silt and clay. As a result, the surface archaeological record of Santa Clara Valley represents only the last 2,000 years of human occupation. The remaining 7,000 years of native history lay anywhere from near surface up to 30 feet below the modern ground surface. (Busby et al. 1996a, pages 2–4; Busby et al. 1996b, page 2; Jones et al. 2007, page 130; Parsons and KEMCO 1983, pages 16, 25–26, 33; Ruby et al. 1992:9, 12, 17–19.)

Ethnographic Context

The Costanoans are the Native Americans who inhabited the Bay Area since time immemorial. The Costanoan designation refers to those who spoke one of eight separate but related languages (Shipley 1978:84, 89). The Costanoan languages are similar to Miwok, and are part of the Yok-Utian language family of the Penutian stock (Golla 2007, pages 75–76). Tamyen (Santa Clara Costanoan) was spoken around the southern end of San Francisco Bay and the lower Santa Clara Valley (and was spoken by Costanoans in the project vicinity). (Milliken et al. 2007, Figure 8.1; Shipley 1978, pages 84 and 89.)

Each village was a separate and politically autonomous tribelet, with about 200 people living within each. Tribelets were the basic unit of political organization, with chiefs, either women or men, descended from their patrilineal relative. In the late 1700s, there were two tribelets in close proximity to the proposed project site, San José Cupertino and Santa Clara; both are presumably Tamyen speakers. (Levy 1978, Figure 1.) Kroeber (1976, Figure 42) indicates that two settlements were located within a few miles of the project site on the Guadalupe River, Tamie-n near Santa Clara, and Ulis-tak farther north near the Bay.

Like most other Native Americans in California, acorns were the staple food of the Costanoan people in the Santa Clara region. Other nuts such as buckeye, California laurel, and hazelnuts were also eaten. The Costanoans set controlled fires to promote the growth of the nuts and seeds upon which they relied. The primary mammals taken by the Costanoan included the black-tailed deer, elk, antelope, grizzly bear, mountain lion, sea lion, and whale. Waterfowl, salmon, steelhead, and lampreys were also important components of the Costanoan diet. (Levy 1978, page 491.)

Thatched, domed houses were the most common type of structure for the Costanoans. Sweathouses along the banks of rivers were also constructed, in addition to dance enclosures and assembly houses. (Levy 1978, page 492.)

Bodies were either buried or cremated on the day of death. The community either buried the deceased's property with the body or destroyed their property. (Kroeber 1976, page 469; Levy 1978, page 490.)

Trade was important for the Costanoan groups, and their primary partners in trade were the Plains Miwok, Sierra Miwok, and Yokuts. The Costanoan provided coastal resources such as mussels, abalone shell, dried abalone, and salt to the Yokuts in exchange for piñon pine nuts. The Miwok obtained olive snail shells from the Costanoans. Warfare occurred between Costanoan tribelets as well as the Costanoans and the Esselen, Salinan, and Northern Valley Yokuts. (Davis 1961, page 19; Levy 1978, page 488.)

A common archaeological manifestation of a Costanoan village site is the shell mound deposits (Kroeber 1976, page 466). Mussels are the primary shells that constitute these mounds, in addition to other household wastes.

The Spanish established seven missions in Costanoan territory between 1770 and 1797. By 1810, the mission system subsumed the last Costanoan village. Missions in the Bay Area mixed together various language and cultural groups including the Esselen, Foothill Yokuts, Plains Miwok, Saclan Miwok, Lake Miwok, Coast Miwok, and Patwin. The mission closest to the proposed project area was Santa Clara de Asís, built in 1777. The mission is no longer extant but the area is still rich in archaeological manifestations from the mission period and before. (Levy 1978, page 486.)

Historic Context

In order to inform understanding of the potential significance of built environment resources in the project vicinity, a review of the major historical timeline markers for the project area provides context. This subsection offers a brief look at those events and trends in the history of the Santa Clara Valley that provide that context, in particular for the project site:

- Spanish Mission Period
- Mexican Period
- American Period
 - o Transportation and Railroads
 - Agriculture and Fruit Industry
 - Silicon Valley
 - Project Site History
 - o San Tomas Aquino Creek

Spanish/Mission Period (1769 to 1821)

The Spanish Period was characterized by several developments: the establishment of Spanish Colonial military outposts (presidios), pueblos, and 21 missions throughout Alta California. Nearest to the location of the proposed project were the Santa Clara de Asís Mission (1777), El Pueblo de San José de Guadalupe (1777) and Mission (1797), and Santa Cruz Mission (1791). The Spanish government also awarded land grants to soldiers and others and thus began the tradition of large land grants used for agriculture and livestock. Little remains of the cultural landscape that existed during this time aside from some roads that follow early transportation routes (Santa Clara County 2012, pages 22–26).

Mexican Period (1821 to 1848)

Following Mexican independence from Spain in 1821, Mexican Governor Pío Pico granted lands to Mexican settlers, including the former lands of the missions, whose connection to the government was lost in the Decree of Secularization in 1834. Spanish and Mexican governors granted 43 ranchos in the Santa Clara Valley between 1802 and 1845. Local planning agencies lack detailed information on the location and integrity of these early California sites (Santa Clara County 2012 pages 30–32). The project site appears to be located within the boundaries of the Rancho Ulistác (USGS 1899). Governor Pío Pico granted the land in 1845 to two Santa Clara Mission Indians: Marcelo Pio and Cristóbal. After the Mexican-American War (1846–1848), Jacob D. Hoppe obtained title to the rancho. Following Hoppe's death, his heirs divided and sold the land (Oosterhous et al. 2002 page 6). The County of Santa Clara's historic context statement laments that most traces of original haciendas, adobes, and other rancho structures are not discernible in the landscape today and few records exist (Santa Clara County 2012, page 32).

American Period (1848 to Present)

California became the thirty-first state in the union in 1850. In 1851, Santa Clara College, now Santa Clara University, was founded on the site of the Santa Clara de Asís Mission. The incorporation of Santa Clara followed in 1852. In 1866, the city officially established a grid street system to accommodate anticipated growth. Today, this area is known as the Old Quad neighborhood. Early industries in the city included wheat production and flour milling, seed and fruit packing, and manufacturing. Leather tanning and wood products were two key industries of the city well into the twentieth century. Similarly, seed growing and fruit farming and packing (especially pears, cherries, apricots and prunes) were mainstays, contributing to the city's exports (Santa Clara 2010, page 2).

Transportation and Railroads. In 1869, the Western Pacific Railroad completed a rail line from San Jose to Niles, California, effectively connecting San Jose with the Transcontinental Railroad. This opened new markets for the agricultural and manufactured products of the entire Santa Clara Valley. In 1982, Western Pacific merged with Union Pacific Railroad (Santa Clara County 2012, page 44).

Senator James Fair, a multi-millionaire, envisioned a route from the east side of San Francisco Bay, south to San Jose, then on to Los Gatos and through the mountains to Felton, ultimately connecting to Santa Cruz. Senator Fair incorporated the South Pacific Coast Railroad in 1876 and immediately began building the segment from Dumbarton in the East Bay to Los Gatos, by way of Santa Clara and San Jose. Following that segment, the rail line extended through the Santa Cruz Mountains to connect with the narrow gauge railroad at Felton. The Southern Pacific acquired these rail lines in 1887 and eventually converted the narrow gauge lines to standard gauge (Lehmann 2000, pages 31–33).

The Santa Cruz Division of the Southern Pacific Railroad passed adjacent to the eastern edge of the downtown grid of Santa Clara and east of the current project site (Santa Clara 2017a; USGS 1899). A 1915

USGS topographic map shows the route of the entire Santa Cruz division from San Jose through the Santa Cruz Mountains to Santa Cruz (USGS 1915). The Southern Pacific Railroad (Monterey Division) is also on the 1899 USGS topographic map, approximately 1 mile south of the project site. None of the railroads appear to have connected to the area encompassing the project site as it remained in agricultural production beyond the end of WWII and as recently as 1968 to 1979 (EDR 2017a).

The first San Jose Airport was completed in 1949 on the remaining undeveloped Stockton Ranch acreage. Attracted by the increasing job market, the population of the Santa Clara Valley experienced phenomenal growth after 1950 (Santa Clara County 2012, page 46). A modern airport terminal, known as Terminal C, opened in 1965. Designed by a local architect, Hollis Logue Jr., the San Jose Mercury News described it as a "palace of glass, concrete and steel" (Docomomo 2019). It was certainly a design of its time, with Googie-inspired design elements at the cornice line, concrete columns, and glass walls. The San Jose Airport was demolished and replaced by the current Norman Y. Mineta San Jose International Airport in 2010, known as Terminal B.

Santa Clara Valley Agriculture and Fruit Industry. Fruit orchards and vegetable farms dominated the Santa Clara Valley from the 1890s to the 1940s. Wheat and flour milling were the first major agricultural activities. In support of the fruit and vegetable industry, canning operations flourished in the northeastern portion of the county. Fruit packing companies were common in Santa Clara Valley in the first third of the twentieth century. Nearly half of the world's supply of fresh, dried, and canned fruit through the end of World War II (WWII) originated from the valley. The agricultural base economy and its support operations were gradually displaced by expanding suburban development, light industrial and high-tech research and development operations by the 1970s (Fike 2016, page 2).

The Santa Clara Valley's current commercial and industrial operations are indicative of the shift that took place after WWII from agricultural-based businesses to light industrial and ultimately high-tech research and development facilities. Less than a mile southeast of the project site is the Owens-Corning Fiberglass Corporation plant. The Owens-Corning plant was one of the first new industrial businesses to settle in the Santa Clara Valley and represents the shift toward industrial business in the valley after WWII. A 1949 aerial photograph shows the brand new plant along Lafayette Street with agricultural uses surrounding it (Draper 1949). The plant remains in that location today. Throughout the valley, residential home developments slowly replaced the orchards and agricultural fields. Due to the increased pressure from housing, the city of Santa Clara grew from 6,500 residents in 1940 to 86,000 by 1970 (Fike 2016, page 2). The landscape was forever transformed.

Silicon Valley. Industrial growth expanded significantly from 1960 to 1980, much of the growth in the electronics research and manufacturing sectors. The City of Santa Clara is home to Intel, Applied Materials, Sun Microsystems, Nvidia, National Semiconductor and other high technology companies (Santa Clara 2010, pages 3-3–3-6).

Project Site. The land at 2201 Laurelwood Road was in agricultural production until 1968. The site was developed and two buildings were constructed in 1968 by Siliconix. Siliconix's early products included analog switches and market analog multiplexers. Later products included transistors and circuits. Siliconix was acquired by Vishay in 2005 (Alonso and Castells 2019a, page 15). Dr. Felix Zandman established Vishay in 1962. Vishay manufactures and sells products for semiconductors and other passive electronic components (Vishay 2019). The two buildings which housed the Vishay facilities have been removed by the former owner as a condition of sale (Jacobs 2019d, page 21).

San Tomas Aquino Creek. San Tomas Aquino Creek's origin is located in the foothills of the coast ranges. Through the early nineteenth century, with the exception of San Francisquito Creek, not a single creek originating in the foothills maintained a defined channel from the hills to the bay, including San Tomas Aquino Creek. The creek had a more sinuous watercourse compared to today's channelized conveyance (SFEI 2010, pages 13–14). The creek appears to have been straightened and perhaps channelized by 1897. Originally appearing quite narrow and tree-lined in aerial imagery, the creek evolved after the construction of U.S. Highway 101 interchange at Montague Expressway (circa 1963) into a wider conveyance with distinct edges, likely consisting of raised sides or levees (EDR 2017a, 2017b). Today, a Class I bicycle trail traverses the west side of the channel on a levee and is accessed in the project vicinity from a commercial driveway and bridge approximately 900 feet to the north (Jacobs 2019a, page 3.17-5).

Methods

Project Area of Analysis

The project area of analysis (PAA) defines the geographic area in which the proposed project has the potential to affect cultural or tribal cultural resources. Effects may be immediate, further removed in time, or cumulative. They may be physical, visual, audible, or olfactory in character. The PAA may or may not be one uninterrupted expanse. It could include the site of the proposed project (project site), the routes of requisite transmission lines and water and natural gas pipelines, and other offsite ancillary facilities, in addition to one or several discontiguous areas where the project could arguably affect cultural or tribal cultural resources.

Staff defines the PAA as comprising (a) the proposed project site and all appurtenant, proposed improvements, including the transmission line interconnection to the Silicon Valley Power grid. This interconnection would cross over an adjacent parcel and San Tomas Aquino Creek. The PAA has archaeological, ethnographic, and historic built environment components, as described in the following paragraphs.

Staff defines the archaeological component of the PAA as all areas in which the applicant proposes ground disturbance to construct, operate, and decommission the proposed project. This includes the proposed building sites, below-grade demolition, areas slated for concrete and hardscape removal, areas to be graded, staging and laydown areas, subsurface drainage, and installation of transmission line poles. The applicant proposes demolition and excavation to variable depths. Excavation across much of the PAA would reach 2–6 feet below current grade (Jacobs 2019c, Figure SQ 10-1), whereas pipeline trenches, transmission line poles, and foundation piles would extend deeper into the underlying soil. The water supply pipeline would be buried in a trench 4 feet deep, 4 feet wide, and 80 feet long. The sanitary wastewater pipeline would be placed in a trench measuring 8 feet deep, 8 feet wide, and 60 feet long. (Alonso and Castells 2019b, Table 1-1.) Transmission line poles would be installed via truck-mounted auger to a depth of 20 feet. Foundation piles for generation yards, loading docks, and the substation would be vibrated into the ground to depths of approximately 25 feet. (Jacobs 2019c, page 32, Figure SQ 10-1.)

For ethnographic resources, the PAA takes into account sacred sites, tribal cultural resources, traditional cultural properties (places), and larger areas such as ethnographic landscapes that can be vast and encompassing, including view sheds that contribute to the historical significance of such resources. The Native American Heritage Commission (NAHC) assists project-specific cultural resources consultants and agency staff in identifying these resources, and consultation with Native Americans and other ethnic or community groups may contribute to defining the PAA. In the case of the proposed project, the immediate environs consist largely of office parks, industrial structures, a channelized creek, and a vacant lot. Staff

therefore treats the ethnographic component of the PAA as coterminous with the archaeological component.

The proposed project site consists primarily of pavement, hardscape, and modest landscape elements, much of which dates to the recent historic period. The historic built environment PAA for this project includes properties within a one-parcel boundary of the project site.

Literature Review

The literature review for this analysis consisted of a records search at the California Historical Resources Information System (CHRIS), review of the application for small power plant exemption, and examination of pertinent literature concerning cultural resources in the northern Santa Clara Valley.

The applicant conducted the records search on February 4, 2019, at the Northwest Information Center (NWIC) of the CHRIS. The NWIC is the State of California's official repository of all cultural resource records, previous cultural resources studies, and historical information concerning cultural resources for 16 counties, including Santa Clara County. The records search area included the PAA and a 1-mile buffer (Jacobs 2019a, page 3.5-5). In addition to the NWIC's maps of known cultural resources and previous cultural resources studies, the records search included perusal of the National Register of Historic Places (NRHP), OHP's Archaeological Determinations of Eligibility, and OHP's Directory of Properties in the Historic Property Data File (Alonso and Castells 2019a, page 16).

Staff also examined historic maps and aerial photographs of the PAA and vicinity to identify cultural resources (EDR 2017a⁴, 2017b⁵; Edward Denny & Co. 1913; GLO 1866; Oosterhous et al. 2002, page 6⁶; USGS 1897, 1899, 1961, 1980a, 1980b). These sources depict the historic appearance of the PAA each decade from 1857 through 1980 (excepting the 1880s, 1900s, and 1920s).

In addition, staff consulted:

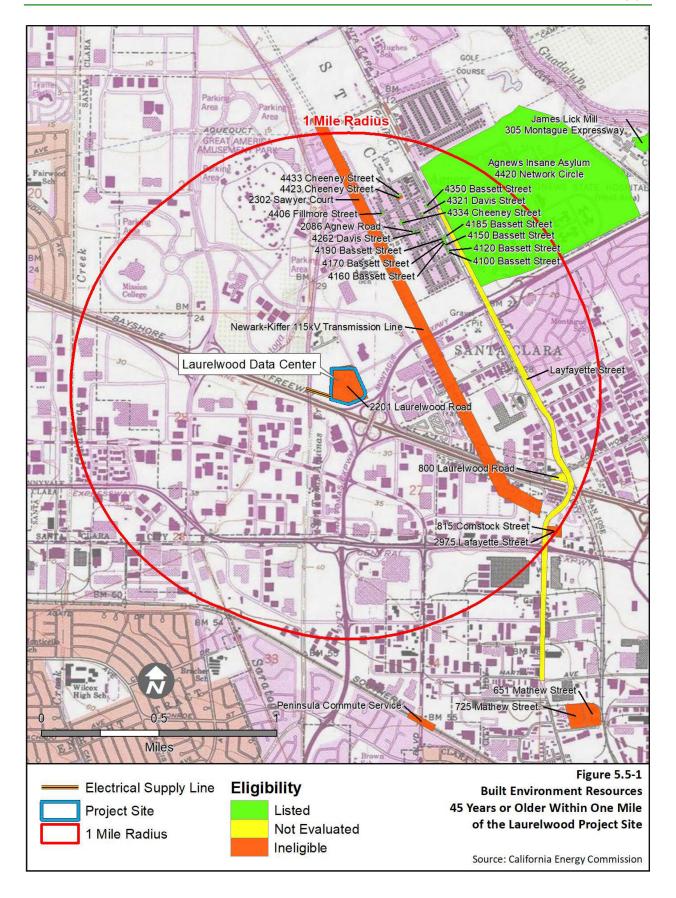
- the City of Santa Clara's General Plan 2010–2035, including its Historic Preservation and Resource Inventory (Santa Clara 2010)
- County of Santa Clara Historic Context Statement (Santa Clara County 2012)
- County of Santa Clara Heritage Resource Inventory (Santa Clara County 2015)

Staff also consulted the NRHP, CRHR, Historic American Building Survey, Historic American Engineering Record, Historic American Landscape Survey, and other repositories of documentation of historical resources. Staff identified 15 listed historical resources within approximately 1 mile of the PAA. **Figure 5.5-1** depicts listed historical built environment resources located within approximately 1 mile of the PAA. Most of the listed historical resources mapped in **Figure 5.5-1** are located north and east of the PAA.

⁴ This source contains historic topographic maps dated approximately 1895, 1953, 1961, 1968, 1973, 1980, and 2012.

⁵ This source contains aerial photographs dated 1939, 1948, 1950, 1956, 1963, 1968, 1974, 1979, 1982, 1993, 1998, 2005–2006, 2009–2010, and 2012.

⁶ This source contains a reproduction of a part of Thompson and West's 1876 map of Santa Clara County.



Tribal Consultation

PaleoWest Archaeology (PaleoWest), on behalf of the applicant, contacted the NAHC on February 1, 2019, to request a search of the Sacred Lands File and a list of tribes that might be interested in the proposed project. The NAHC responded on February 5, and provided a list of six California Native American tribes to contact:

- 1. Amah Mutsun Tribal Band
- 2. Amah Mutsun Tribal Band of Mission San Juan Bautista
- 3. Northern Valley Yokuts Tribe
- 4. Muwekma Ohlone Indian Tribe
- 5. The Ohlone Indian Tribe
- 6. Indian Canyon Mutsun Band of Costanoan

PaleoWest sent letters to these tribes on February 6, 2019, and placed follow-up phone calls on February 11, 2019. (Jacobs 2019a, page 3.18-4, Table 3.18-1.)

CEQA requires lead agencies to consult with all California Native American tribes that have traditional and cultural affiliation with the geographic area of a project, and that have previously requested consultation. To invoke an agency's requirement to consult under CEQA, a tribe must first send the lead agency a written request for formal notification of any projects within the geographic area with which they are traditionally and culturally affiliated. (Pub. Resources Code, § 21080.3.1(b).) The Energy Commission has not received any requests for formal notification from tribes that have traditional and cultural affiliation with the geographic area of the proposed project. Therefore, the Energy Commission has no obligations under CEQA's formal tribal notification or consultation requirements.

However, consistent with the Energy Commission's tribal consultation policy (CEC 2017), Energy Commission staff contacted the NAHC on March 6, 2019, to request a search of the Sacred Lands File and a list of California Native American tribes that might be interested in the proposed project (Bonitz 2019). The NAHC responded on March 7, 2019, and provided a list of six California Native American tribes to contact (Totton 2019); the listed tribes were the same six tribes listed above. Energy Commission staff mailed initial consultation letters to these six tribes on March 26, 2019 (CEC 2019a). See the following subsection, "Results," for tribal responses and lead agency follow-up.

Archaeological Survey

On February 11, 2019, an archaeologist surveyed unpaved ground surfaces in the archaeological PAA. The archaeological survey area included the project site and a 200-foot buffer surrounding the project site, as well as the proposed transmission line corridor and an area 50 feet to either side of the corridor. (Jacobs 2019c, page 22.) Less than 1 percent of the archaeological PAA consisted of unpaved ground surfaces. As such, the archaeologist had only relatively narrow, exposed strips of soil available for examination along the southern and western edges of the survey area. Much of the transmission line corridor contained unpaved ground surfaces. The archaeologist surveyed each of these areas by walking a single transect through them and making observations of the ground surface. (Alonso and Castells 2019b, pages 18–21, Figure 1-3.)

Historic Architectural Survey

The architectural history survey was conducted inclusive of the project site and a one-parcel buffer from the proposed project boundaries and along the routes of all linear facilities. Structures and/or districts 45 years or older, or considered significant, were identified as part of this survey. Any building or structure constructed before 1974 or potentially eligible for the CRHR or local register was evaluated on Department of Parks and Recreation 523 series forms (Alonso and Castells 2019b, page 18). This included the former buildings on the project site, which are no longer extant.

Results

Literature Review

The NWIC records search indicates that 135 previous cultural resources studies occurred within 1 mile of the PAA (Jacobs 2019a, page 3.5-5, 2019c, page 21). Of these, 54 covered all or part of the PAA (Alonso and Castells 2019b, page 16, Table A-1; Jacobs 2019a, page 3.5-5). The NWIC has no records of previously recorded cultural resources in the PAA, but documents three previously recorded cultural resources within the 1-mile records search buffer (P-43-001475, P-43-002978 and P-43-003529). All three are built environment resources. Staff identified an additional 18 built environment resources 45 years or older within 1 mile of the PAA. Fifteen of these resources are listed on the City of Santa Clara's Historic Preservation and Resource Inventory (Santa Clara 2010). These cultural resources are listed in **Table 5.5-1** and located on **Figure 5.5-1**.

TABLE 5.5-1 BUILT ENVIRONMENT RESOURCES 45 YEARS OR OLDER WITHIN ONE MILE OF THE LAURELWOOD PROJECT SITE

No.	Address	Resource Name/APN Description, Year		Eligibility Status
1.	2086 Agnew Road	Agnew School/10412028	School, 1890	Listed
2.	4100 Bassett Street	10412196	Colonial Revival Cottage, 1906	Listed
3.	4120 Bassett Street	10412127	Colonial Revival Cottage, 1906	Listed
4.	4150 Bassett Street	10412125	ca. 1910	Listed
5.	4160 Bassett Street	10412124	ca. 1920	Listed
6.	4170 Bassett Street	10412123	Italianate Cottage	Listed
7.	4185 Bassett Street	Agnew Railroad Station, 10412162	Vernacular, 1896	Listed
8.	4190 Bassett Street	10412194	ca. 1900	Listed
9.	4350 Bassett Street	Floyd Jamison House, 10411004	Spanish Eclectic, 1918	Listed
10.	4334 Cheeney Street	10411041	Colonial Revival Cottage	Listed
11.	4433 Cheeney Street	10410025	Colonial Revival	Listed
12.	4262 Davis Street	10412019	Modified Greek Revival	Listed
13.	4321 Davis Street	10411084		Listed
14.	4406 Fillmore Street	J. M. Williamson House, 10410068	Colonial Revival Cottage, 1925	Listed
15.	4420 Network Circle	Agnews State Hospital/Insane Mediterranean Revival, 1911 Asylum, 09708058		Listed
16.	815 Comstock Street (P-43-003529)	Santa Clara Public Works Building Maintenance Facility, 22436014	Vernacular Industrial Buildings	Ineligible

17.	4423 Cheeney Street (P-43-001475)	10410024	Folk Victorian Cottage, ca. 1880	Ineligible
18.	2302 Sawyer Court (P-43-002978)	PG&E Transmission Tower, 10446038	Steel Lattice Transmission Tower, 1954	Ineligible
19.	2201 Laurelwood Road	Siliconix Industrial Facility, 10439023	Spanish Revival Industrial Buildings, 1968	Ineligible; no longer extant
20.	Newark Kifer 115kV Transmission Line	PG&E Newark to San Jose Transmission Line	Transmission Line and Structures, 1920s	Ineligible
21.	Lafayette Street	Lafayette Street	Four-lane road, 1850s to present	Not evaluated

Notes: APN = Assessor's Parcel Number; kV = kilovolt(s); PG&E = Pacific Gas and Electric Company

Tribal Consultation

The NAHC's February 5 and March 7, 2019, searches of the Sacred Lands File did not identify Native American cultural resources in the search area (Jacobs 2019a, page 3.18-4; Totton 2019). Staff summarizes tribal responses to PaleoWest's letters and phone inquiries in **Table 5.5-2**. **Table 5.5-3** describes staff's consultation efforts.

TABLE 5.5-2. SUMMARY OF TRIBES' RESPONSES TO APPLICANT						
Tribe	Cultural Affiliation	Response to Date				
Amah Mutsun Tribal Band	Ohlone/Costanoan, Northern Valley Yokuts	The proposed project is outside of their traditional tribal territory; declined to comment.				
Amah Mutsun Tribal Band of Mission San Juan Bautista	Ohlone/Costanoan	The tribe requested that construction crews receive cultural resources awareness training, and if anything is found to have an archaeological monitor and a Native American monitor.				
Northern Valley Yokuts Tribe	Ohlone/Costanoan, Northern Valley Yokuts, Bay Miwok	No response.				
Muwekma Ohlone Indian Tribe of the San Francisco Bay Area	Ohlone/Costanoan	No response.				
The Ohlone Indian Tribe	Ohlone/Costanoan, Bay Miwok, Plains Miwok, Patwin	The tribe asked about the records search and pedestrian survey, and requested a copy of the Phase 1 report when completed. The applicant sent a copy of Alonso and Castells (2019b) on April 3, 2019.				
Indian Canyon Mutsun Band of Costanoan	Ohlone/Costanoan	The tribe requested copies of the results of the records search and the pedestrian survey. They will respond if there are any concerns. The Indian Canyon Mutsun Band of Costanoan tribe was sent a copy of Alonso and Castells (2019a) with survey results and record search summary on February 26, 2019.				

Sources: Alonso and Castells (2019a:17, Appendix B); Jacobs (2019a:Table 3.18-1, 2019c:25)

Name/Affiliation Contact Information	Type of Contact	Date	Tribal Response/Staff Notes
Amah Mutsun Tribal Band	Letter	03/26/2019	Staff's letter provided a brief description of the proposed project, two figures showing its location and invited consultation.
	Phone	05/17/2019	Staff reached the chairperson's voicemail and lef a message with return number.
	Email	04/22/2019	Staff's email served as a second notice and invitation to consult. Staff attached the March 26 letter and figures to the email.
Amah Mutsun Tribal Band of Mission San Juan Bautista	Letter	03/26/2019	Staff's letter provided a brief description of the proposed project, two figures showing its location and invited consultation.
	Phone		Staff reached the chairperson's voicemail and left a message with return number.
	Email	04/22/2019	Staff's email served as a second notice and invitation to consult. Staff attached the March 26 letter and figures to the email.
Indian Canyon Mutsun Band of Costanoan	Letter	03/26/2019	Staff's letter provided a brief description of the proposed project, two figures showing its location and invited consultation.
	Phone		Staff reached the chairperson's voicemail and lef a message with return number.
	Email	04/22/2019	Staff's email served as a second notice and invitation to consult. Staff attached the March 26 letter and figures to the email.
Muwekma Ohlone Tribe of the San Francisco Bay Area	Letter	03/26/2019	Staff's letter provided a brief description of the proposed project, two figures showing its location and invited consultation.
	Phone		Staff reached the chairperson's voicemail and lef a message with return number.
	Email	04/22/2019	Staff's email served as a second notice and invitation to consult. Staff attached the March 26 letter and figures to the email.
The Ohlone Indian Tribe	Letter	03/26/2019	Staff's letter provided a brief description of the proposed project, two figures showing its location and invited consultation.
	Email	04/22/2019	Staff's email served as a second notice and invitation to consult. Staff attached the March 26 letter and figures to the email.
	Email	04/23/2019	Mr. Galvan expressed his desire to consult on the project. He suggested that consultation proceed by email.
	Email	04/24/2019	Staff accepted Mr. Galvan's consultation request and provided an overview of the project and SPPE process. Staff also asked whether Mr. Galvan knows of cultural or tribal cultural resources in the project area.
	Email	04/25/2019	Mr. Galvan thanked staff for the information, asked to be kept informed, and requested any

TABLE 5.5-3 LAURELWOOD DATA CENTER TRIBAL CONTACT LOG					
Name/Affiliation Contact Information	Type of Contact	Date	Tribal Response/Staff Notes		
			additional cultural resources reports as they are completed.		
Northern Valley Yokuts Tribe	Letter	03/26/2019	Staff's letter provided a brief description of the proposed project, two figures showing its location, and invited consultation.		
	Phone		Staff reached the chairperson's voicemail and left a message with return number.		
	Email	04/22/2019	Staff's email served as a second notice and invitation to consult. Staff attached the March 26 letter and figures to the email.		

Note: SPPE = small power plant exemption

Archaeological Survey

The archaeological survey did not identify archaeological or ethnographic resources in the PAA (Jacobs 2019a, page 3.5-5).

Historic Architectural Survey

The only buildings or structures found to be 45 years or older in the PAA were the two buildings formerly on the project site (2201 Laurelwood Road). PaleoWest evaluated the buildings for their potential as historical resources by applying the criteria for the CRHR and the local register. The buildings were recommended not eligible under criteria 1–4 of the CRHR and criteria 1–17 of the local register (Alonso and Castells 2019b, pages 21–24) and have been removed by the current owner as a condition of sale. Jacobs 2019d, page 21).

San Tomas Aquino Creek is approximately 600 feet west of the project site and is a channelized water conveyance structure. San Tomas Aquino Creek does not follow its original watercourse and has been straightened and channelized since at least 1897 (EDR 2017a). While the water conveyance structure has not been formally surveyed or evaluated for this project, previous studies for the regional bicycle trail system, of which the creek is a segment, found no listed or eligible historical structures within the study area, including Reach 2 (the area closest to the project site). Southern Pacific Railroad structures were identified in Reach 1 and Reach 3; neither were recorded or evaluated for the study (Baker 1998, pages 6–9). Based on this previous study, San Tomas Aquino Creek is not considered a historical resource for the purposes of CEQA.

Archaeological Sensitivity

Staff's literature review indicates that the potential for buried archaeological resources to occur in the project vicinity mirrors the high frequency of buried archaeological deposits throughout the Santa Clara Valley (Byrd et al. 2017, page 4-2; Hylkema 1998, page 20). The NWIC records search documents 12 archaeological monitoring reports within 1 mile of the PAA. Of these, nine reports identified buried archaeological resources at depths ranging from 2.0 to 8.2 feet below ground surface. (**Table 5.5-4**.) Researchers have identified at least 16 buried prehistoric archaeological sites in the Santa Clara Valley (Rehor and Kubal 2014, page 4-1, Table 4-1).

TABLE 5.5-4 RESULTS OF ARCHAEOLOGICAL MONITORING IN THE PROJECT VICINITY							
Author/Year	NWIC #	Surface Sensitivity ¹	Buried Sensitivity ²	Discoveries			
Hylkema 1998	S-020327	Moderate	High	Historic Chinatown refuse, sewer standpipe, road bed; discoveries at 2.0–8.2 ft bgs			
Busby 1999a	S-023110	Moderate	Moderate	Undisclosed historic archaeological material			
Busby 1999b	S-023362	Moderate	Moderate	Undisclosed historic archaeological material			
Busby 1999c	S-019072b	Moderate and high	Moderate and high	FAR and baked clay; historic refuse, animal bones, structural material (roofing), and streetcar tracks			
Busby 2000	S-024980	Moderate and high	Moderate and high	Historic roofing tiles and four common bricks			
Busby 2002a	S-028015	Moderate	Moderate	Undisclosed historic archaeological material			
Busby 2002b	S-028016	Moderate	Moderate	Undisclosed historic archaeological material, 2–3 ft bgs			
Holson et al. 2002	S-025173	Moderate-highest	Low-highest	Native American habitation debris, artifacts and human remains; historic structural remnants, railroad remnants, and artifacts; finds made at up to 4 ft bgs			
SWCA 2006	S-033061	Moderate-highest	Moderate-highest	None			
Brady 2015	S-046801	Moderate	Moderate	None. Excavation went up to 5 ft bgs			
Hammerle 2015	S-047529a	Highest and high	Highest and high	None. Excavation was 4–5 ft bgs (native soils found below 33 inches)			
D'Oro 2017	S-049685	Moderate	Moderate	Milled redwood, whiteware ceramic sherd, shard of clear glass, metal, 12 roof tile fragments, two animal bone fragments. Surface to 5 ft bgs			

Notes: bgs = below ground surface; ft = foot, feet; FAR = fire-affected rock; NWIC = Northwest Information Center

Regulatory Background

Federal

No federal regulations related to cultural and tribal cultural resources apply to the project.

State

California Environmental Quality Act. Various laws apply to the evaluation and treatment of cultural resources. CEQA requires lead agencies to evaluate cultural resources by determining whether they meet several sets of specified criteria that make such resources eligible to the CRHR. Those cultural resources eligible to the CRHR are historical resources. The evaluation then influences the analysis of potential impacts to such historical resources and the mitigation that may be required to ameliorate any such impacts.

^{1.} Surface sensitivity per Byrd et al. (2017:Figure 26) and Whitaker (2016:Figure 5)

^{2.} Buried sensitivity per Byrd et al. (2017:Figure 27)

CEQA and the CEQA Guidelines define significant cultural resources under two regulatory definitions: historical resources and unique archaeological resources. A historical resource is defined as a "resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources", or "a resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code," or "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the agency's determination is supported by substantial evidence in light of the whole record." (Cal. Code Regs., tit. 14, § 15064.5(a).) Historical resources that are automatically listed in the CRHR include California historical resources listed in or formally determined eligible for the NRHP and California Registered Historical Landmarks from No. 770 onward (Pub. Resources Code, § 5024.1(d)).

Under CEQA, a resource is generally considered historically significant if it meets the criteria for listing in the CRHR. In addition to being at least 50 years old, a resource must meet one or more of the following four criteria (Pub. Resources Code, § 5024.1):

- Criterion 1, is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Criterion 2, is associated with the lives of persons important in our past;
- 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; or
- Criterion 4, has yielded, or may be likely to yield, information important in prehistory or history.

In addition, historical resources must also possess integrity of location, design, setting, materials, workmanship, feeling, and association (Cal. Code Regs., tit. 14, § 4852(c)).

Even if a resource is not listed or determined to be eligible for listing in the CRHR, CEQA requires the lead agency to make a determination as to whether the resource is a historical resource as defined in Public Resources Code, sections 5020.1(j) or 5024.1.

In addition to historical resources, archaeological artifacts, objects, or sites can meet CEQA's definition of a unique archaeological resource, even if the resource does not qualify as a historical resource (Cal. Code Regs., tit. 14, § 15064.5(c)(3)). Archaeological artifacts, objects, or sites are considered unique archaeological resources if it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that the resource meets any of the following criteria:

- 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person. (Pub. Resources Code, § 21083.2(g).)

To determine whether a proposed project may have a significant effect on the environment, staff analyzes the project's potential to cause a substantial adverse change in the significance of historical or unique archaeological resources. The magnitude of an impact depends on:

- the historical resource(s) affected;
- the specific historic significances of any potentially impacted historical resource(s);
- how the historical resource(s) significance is manifested physically and perceptually;
- appraisals of those aspects of any historical resource's integrity that figure importantly in the manifestation of the resource's historical significance; and
- how much the impact will change historical resource integrity appraisals.

Title 14, California Code of Regulations, section 15064.5(b) defines a "substantial adverse change" as the "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."

California Native American Tribes, Lead Agency Tribal Consultation Responsibilities, and Tribal Cultural Resources. CEQA provides definitions for California Native American tribes, lead agency responsibilities to consult with California Native American tribes, and tribal cultural resources. A "California Native American tribe" is a "Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission (NAHC) for the purposes of Chapter 905 of the Statutes of 2004" (Pub. Resources Code, § 21073). Lead agencies implementing CEQA are responsible for consultation with California Native American tribes about tribal cultural resources within specific timeframes, observant of tribal confidentiality, and if tribal cultural resources could be impacted by a CEQA project, are to exhaust the consultation to points of agreement or termination.

Tribal cultural resources are either of the following:

- 1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - a. Included or determined to be eligible for inclusion in the CRHR
 - b. Included in a local register of historical resources as defined in the Public Resources Code, section 5020.1(k).
- 2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in the Public Resources Code, section 5024.1(c). In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe. (Pub. Resources Code, § 21074(a).)

A cultural landscape that meets the criteria of Public Resources Code, section 21074(a), is a tribal cultural resource to the extent that the landscape is geographically defined in terms of its size and scope (Pub. Resources Code, § 21074(b)). Historical resources, unique archaeological resources, and non-unique archaeological resources, as defined at Public Resources Code, sections 21084.1, 21083.2(g), and 21083.2(h), may also be tribal cultural resources if they conform to the criteria of Public Resources Code, section 21074(a).

CEQA also states that a project with an impact that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (Pub. Resources Code, § 21084.2).

City of Santa Clara General Plan. Section 5.6.3 of the City of Santa Clara's General Plan outlines the goals and policies related to archaeological and cultural resources. The applicable goals in this section of the General Plan encourage the protection and preservation of cultural resources, including archaeological

and paleontological sites, and encourage appropriate mitigation in the event of discovery during construction.

Relevant policies require protecting historic resources through avoidance or reduction of potential impacts, using the Secretary of the Interior's Standards for the Treatment of Historic Properties, and using the city's established historic preservation program for ensuring resource evaluation, protection, and integrity (Santa Clara 2010).

Appendix 8.9 of the General Plan, the Historic Preservation and Resource Inventory, established criteria for local significance and included a list of recorded historic properties (Santa Clara 2010). In addition, the city has embedded in its Municipal Code a section on Historic Preservation (Title 18 Zoning, Chapter 18.106, Historic Preservation). The purpose of Chapter 18.106 is "to promote the identification, protection, enhancement and perpetuation of buildings, structures and properties within the City that reflect special elements of the City's social, economical, historical, architectural, engineering, archaeological, cultural, natural, or aesthetic heritage" (Santa Clara 2018a). The chapter requires maintenance of a Historic Resource Inventory.

Appendix 8.9 of the General Plan also identifies significance criteria for local listings. The City of Santa Clara's City Council adopted the Criteria for Local Significance on April 20, 2004 and incorporated the criteria into the General Plan Appendix 8.9. 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 archaeological significance is potentially eligible. The Criteria for Local Significance established in General Plan Appendix 8.9 (Santa Clara 2010) are as follows:

Criteria for Historic Cultural Significance - To be historically or culturally significant, a property must meet at least one of the following criteria:

- 1. The site, building or property has character, interest, integrity and reflects the heritage and cultural development of the city, region, state, or nation.
- 2. The property is associated with a historical event.
- 3. 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.
- 4. The property is associated with a significant industrial, institutional, commercial, agricultural, or transportation activity.
- 5. 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.
- 6. 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.

Criteria 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.

Criteria for Geographical 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.

Criteria for Archaeological Significance - For the purposes of CEQA, an "important archaeological resource" is one which:

- 1. Is associated with an event or person of
 - a. Recognized significance in California or American history, or
 - b. Recognized scientific importance in prehistory.
- 2. Can provide information, which is both of demonstrable public interest, and useful in addressing scientifically consequential and reasonable or archaeological research questions;
- 3. Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind;
- 4. Is at least 100 years old and possesses substantial stratigraphic integrity; or
- 5. Involves important research questions that historical research has shown can be answered only with archaeological methods.

5.5.2 Environmental Impacts and Mitigation Measures

Applicant Proposed Measures: The applicant proposes to implement the following project design measures (termed, Applicant Proposed Measures or APMs, in this analysis) as part of the project to avoid or reduce potential impacts to cultural resources (Jacobs 2019a, Section 2.5.3, page 2-23). Also, **APM PD-1** includes the preparation of a Worker Environmental Awareness Training program (program) to instruct construction workers of the obligation to protect and preserve valuable resources, including archaeological and Native American resources. See **Section 4.0, Project Description, Table 4-5** for the full text of **APM PD-1**.

APM CUL-1: The Applicant will secure the services of a Secretary of the Interior-qualified archaeologist and a Native American monitor to be on-call during construction in the event a historic or prehistoric resource is encountered. If prehistoric and/or historic resources are encountered during construction, all activity within a 50-foot radius of the find will be stopped and the archaeologist/Native American monitor

will examine the find and record the site, including field notes, measurements, and photography for a Department of Parks and Recreation 523 Primary Record form. The archaeologist will provide recommendations regarding eligibility for the California Register of Historical Resources, data recovery, curation, or other appropriate mitigation. Ground disturbance within the 50-foot radius can resume once these steps are taken and the City Director of Community Development has concurred with the recommendations.

APM CUL-2: If human remains are discovered during construction, a 50-foot radius exclusion zone will be established to protect the find and the Santa Clara County Coroner will be notified to make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission. All actions taken under this mitigation measure will comply with Health and Human Safety Code Section 7050.5(b).

APM CUL-3: Within 30 days of the completion of construction or archaeological/Native American monitoring is terminated, the Applicant will have the archaeologist/Native American monitor prepare a report of findings. The report will document the archaeological/Native American resource finds, if any, recommendations, data recovery efforts, and other pertinent information gleaned during construction. The report may be submitted to the City of Santa Clara's Director of Community Development for review and approval. The Applicant will submit the final report to the Northwest Information Center at Sonoma State University.

Cultural Resources CEQA Checklist Questions

a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Construction

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. No historic built environment resources meeting CEQA's criteria for historical resources are located in the PAA. No archaeological or ethnographic resources meeting CEQA's criteria for historical resources occupy the surface of the PAA. Previous studies and archaeological monitoring in the project vicinity, however, indicate that the PAA could harbor buried archaeological or ethnographic resources. The PAA is located between two waterways (San Tomas Aquino Creek and the Guadalupe River) on the former grounds of a historic farm (pear orchard). Previous studies have identified no fewer than 10 archaeological sites in the project vicinity and one ethnographic resource (Rancho Ulistac/site CA-SCL-000006) north of the PAA. Twelve archaeological monitoring studies occurred within 1 mile of the PAA and 75 percent of the studies identified historic and Native American archaeological sites from 2.0 to 8.2 feet below the modern ground surface (see **Table 5.5-4**). Archaeologists working independently of the present analysis have estimated the PAA's likelihood to contain buried archaeological resources as moderate to high (Byrd et al. 2017, Figures 26–27; Rehor and Kubal 2014, Figure 6-1; Whitaker 2016, Figure 5).

The ground disturbance required to build the proposed project would extend into native soils up to 25 feet below grade. A geotechnical study in the PAA found fill dirt from just below grade to 2.5 feet below grade in one out of eight borings (Cornerstone 2019, Appendix A). Therefore, the proposed project would involve excavation of native soils from about 2.5 to 25.0 feet below grade. Known

buried archaeological sites in Santa Clara Valley range in age from 295 to 5630 B.P.⁷ and are located at depths of 1.0–10.5 feet below grade (Rehor and Kubal 2014, Table 4-1). If such resources were to be damaged during construction, it would be considered a significant impact, particularly since virtually all archaeological sites 5,000 years or older occur only in buried contexts. In addition, the City of Santa Clara frequently requires presence/absence excavations or archaeological monitoring of construction projects in the project vicinity (Santa Clara 2015, page 29, 2016a, pages 48–49, 2016b, page 48, 2016c, page 163, 2016d, page 36, 2017b, page 38, 2018b, pages 51–52). Therefore, staff recommends that one or more qualified archaeologists and Native Americans monitor construction-related excavation in the PAA (see Proposed Mitigation Measures below).

Staff evaluated APM PD-1 and APM CUL-1 through APM CUL-3 in the context of the potential impacts and concludes that APM CUL-1 and APM CUL-3 are insufficient to reduce impacts to buried, as-yet-undiscovered historical resources to a less than significant level. APM CUL-1 proposes that the applicant retain a qualified archaeologist and Native American monitor to respond to inadvertent cultural resource discoveries should any occur during construction. In short, APM CUL-1 would place the responsibility of cultural resources management on construction workers instead of cultural resources professionals and Native Americans. A second problem with APM CUL-1 is its lack of qualification standards for Native American monitors. Staff proposes modifications to APM CUL-1 that would ensure the prompt identification and management of cultural and tribal cultural resource discoveries by requiring a professional archaeologist and qualified Native American monitor observe ground-disturbing activities associated with the proposed project. In addition, staff adds qualification criteria for Native American monitors. MM CUL-1 would supersede APM CUL-1.

APM CUL-3 lacks accountability because it stipulates that a technical report of the archaeological/Native American resource finds, recommendations, data recovery efforts, and other pertinent information "may be submitted" to the city, rather than requiring it. Staff proposes that submittal of the technical report to the city be compulsory. **MM CUL-3** would supersede **APM CUL-3**.

Staff concludes that implementation of **MM CUL-1** and **MM-CUL-3** would reduce the impacts to buried historical resources to a less than significant level.

MM CUL-1: The applicant will secure the services of a Secretary of the Interior-qualified archaeologist and a Native American monitor to observe grading of native soil once all pavement is removed from the project site. The applicant shall submit the name and qualifications of the selected archaeologist and Native American Monitor to the Director of Community Development prior to the issuance of a grading permit. Preference in selecting Native American monitors shall be given to Native Americans with:

- 1. Traditional ties to the area being monitored.
- 2. Knowledge of local historic and prehistoric Native American village sites.
- 3. Knowledge and understanding of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq.
- 4. Ability to effectively communicate the requirements of Health and Safety Code, section 7050.5, and Public Resources Code, section 5097.9 et seq.

⁷ The term "B.P." (Before Present) is an international dating convention that refers to the year 1950 as the present.

- 5. Ability to work with law enforcement officials and the Native American Heritage Commission to ensure the return of all associated grave goods taken from a Native American grave during excavation.
- 6. Ability to travel to project sites within traditional tribal territory.
- 7. Knowledge and understanding of Title 14, California Code of Regulations, section 15064.5.
- 8. Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding CEQA mitigation provisions.
- 9. Ability to read a topographical map and be able to locate site and reburial locations for future inclusions in the Native American Heritage Commission's Sacred Lands Inventory.
- 10. Knowledge and understanding of archaeological practices, including the phases of archaeological investigation.

After removal of pavement and prior to grading, the archaeologist shall conduct a pedestrian survey over the exposed soils to determine if any surface archaeological manifestations are present. The archaeologist will monitor full-time all grading and ground-disturbing activities in native soils associated with construction of the proposed project. If the archaeologist and Native American monitor believe that a reduction in monitoring activities is prudent, then a letter report detailing the rationale for making such a reduction and summarizing the monitoring results shall be provided to the Director of Community Development. Department of Parks and Recreation (DPR) 523 forms shall be submitted along with the report for any cultural resources encountered over 50 years old.

If prehistoric and/or historic resources are encountered during construction, all activity within a 50-foot radius of the find will be stopped and the archaeologist and Native American monitor will examine the find and record the site, including field notes, measurements, and photography for a DPR 523 Primary Record form. The archaeologist will provide recommendations regarding eligibility for the CRHR, data recovery, curation, or other appropriate mitigation. Ground disturbance within the 50-foot radius can resume once these steps are taken and the City Director of Community Development has concurred with the recommendations.

MM CUL-3: Within 30 days of the completion of construction or archaeological/Native American monitoring is terminated, the Applicant will have the archaeologist/Native American monitor prepare a report of findings. The report will document the archaeological/Native American resource finds, if any, recommendations, data recovery efforts, and other pertinent information gleaned during construction. The report shall be submitted to the City of Santa Clara's Director of Community Development for review and approval. The Applicant will submit the final report to the NWIC at Sonoma State University.

Operation and Maintenance

No IMPACT. Ground-disturbing activities are not part of the operational or maintenance profile of the proposed project. Impacts on historical resources are therefore not expectable during operation and maintenance.

Proposed Mitigation Measures: MM CUL-1 and MM CUL-3.

b. Would the project cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?

Construction

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. See the response to CEQA checklist question *a* above, which includes a discussion of historic, archaeological, and ethnographic resources. Implementation of **MM CUL-1** and **MM CUL-3** would reduce impacts on buried, unique archaeological resources to a less than significant level.

Operation and Maintenance

NO IMPACT. Ground-disturbing activities are not part of the operational or maintenance profile of the proposed project. Impacts on unique archaeological resources are therefore not expectable during operation and maintenance.

Proposed Mitigation Measures: MM CUL-1 and MM CUL-3.

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

Construction

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. See the response to CEQA checklist question a above, which includes a discussion of historic, archaeological, and ethnographic resources (all of which could include human remains). **MM CUL-1, APM CUL-2,** and **MM CUL-3** would reduce impacts on buried human remains to a less than significant level

Operation and Maintenance

NO IMPACT. Ground-disturbing activities are not part of the operational or maintenance profile of the proposed project. Impacts on human remains are therefore not expectable during operation and maintenance.

Proposed Mitigation Measures: MM-CUL-1 and MM-CUL-3.

Tribal Cultural Resources CEQA Checklist Questions

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Construction

NO IMPACT. There will not be any impacts to tribal cultural resources listed or eligible for listing in the CRHR or other state registers, National Register of Historic Places (NRHP), or local register of historical resources.

Operation and Maintenance

NO IMPACT. Ground-disturbing activities are not part of the operational or maintenance profile of the proposed project. Impacts on tribal cultural resources listed or eligible for listing in the CRHR or other state registers, NRHP, or local register of historical resources are therefore not expectable during operation and maintenance.

Proposed Mitigation Measures: None.

b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Construction

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. Although there are no known tribal cultural resources on or directly adjacent to the proposed site, ground disturbance associated with the proposed project could result in the exposure and destruction of buried, as-yet unknown prehistoric archaeological resources that could qualify as tribal cultural resources. If these resources were to be exposed or destroyed, it would be a significant impact. Implementation of MM CUL-1 and MM CUL-3 would reduce impacts on buried, tribal cultural resources to a less than significant level.

Operation and Maintenance

NO IMPACT. Ground-disturbing activities are not part of the operational or maintenance profile of the proposed project. Impacts on tribal cultural resources listed or eligible for listing in the CRHR or other state registers, NRHP, or local register of historical resources are therefore not expectable during operation and maintenance.

Proposed Mitigation Measures: MM-CUL-1 and MM-CUL-3.

5.5.3 References

Alonso and Castells 2019a – Christina Alonso and Justin Castells. *Cultural Resource Investigation in Support of the 2201 Laurelwood Road Project, Santa Clara County, California*. February 13.

Technical Report No. 19-37. PaleoWest Archaeology, Walnut Creek, CA. Prepared for Jacobs Engineering Group, Sacramento, CA. Appendix 3.5-A in *Small Power Plant Exemption Application for the Laurelwood Data Center Santa Clara, California*, by MECP1 Santa Clara 1, with Jacobs. February. Submitted to California Energy Commission, Sacramento. 19-SPPE-01.

Alonso and Castells 2019b – Christina Alonso and Justin Castells. *Cultural Resource Investigation in Support of the 2201 Laurelwood Road Project, Santa Clara County, California*. Revised. April 3. Technical Report No. 19-37. PaleoWest Archaeology, Walnut Creek, CA. Prepared for Jacobs Engineering Group, Sacramento, CA. Submitted to California Energy Commission, Sacramento. 19-SPPE-01.

- **Baker 1998** Susan Baker. *Archaeological Survey, San Tomas Aquino/Saratoga Creek Trail Project, Santa Clara County, California*. July. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-022570.
- **Bonitz 2019** Jessica Bonitz. Request for SLF Search and Contact List. March 6. Tribal Program/Cultural Resources Unit, California Energy Commission, Sacramento. Submitted to Native American Heritage Commission, West Sacramento, CA.
- **Brady 2015** Ryan Brady. Letter Regarding Cultural Resources Monitoring at 3303 Scott Boulevard, Santa Clara, California. June 18. Albion Environmental, Santa Cruz, CA. Prepared for Toeniskoetter Development, Santa Clara, CA. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-046801.
- Busby 1999a Colin I. Busby. Letter Regarding Residential Facility at 1501 Agnew Road (Agnews West Campus), City of Santa Clara, Santa Clara County, California: Archaeological Monitoring Closure Report. October 22. Basin Research Associates, San Leandro, CA. Prepared for Mid-Peninsula Housing Coalition, Redwood City, CA. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-023110.
- Busby 199b Colin I. Busby. Letter Regarding Estancia Apartments Project on Hope Drive (Agnews West Campus), City of Santa Clara, Santa Clara County: Archaeological Monitoring Closure Report. November 21. Basin Research Associates, San Leandro, CA. Prepared for Hope Drive Associates, San Francisco. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-023362.
- Busby 1999c Colin I. Busby. Letter Regarding South Bay Water Recycling Program Cultural Resources Program, Subcontract No. 728106.3024: Monitoring Closure Report Phase 1. May 7. Basin Research Associates, San Leandro, CA. Prepared for Parsons Engineering Science, Oakland, CA. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-019072b.
- Busby 2000 Colin I. Busby. Letter Regarding Sun Microsystems Santa Clara Campus Project, Agnews West Campus: Archaeological Monitoring Closure Report, Phase 1 (July 1998 to December 1999). November 22. Basin Research Associates, San Leandro, CA. Prepared for Jones Lang LaSalle, Santa Clara, CA. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-024980.
- Busby 2002a Colin I. Busby. Letter Regarding Agnews [West] Family Housing, Rivermark Master Plan Parcel 22, Sobrato Family Living Center Phase 2, 1451-1491 Agnew Road, City of Santa Clara, Santa Clara County: Archaeological Monitoring Closure Report. October 30. Basin Research Associates, San Leandro, CA. Prepared for Housing Authority of the County of Santa Clara, San Jose, CA. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-028015.
- Busby 2002b Colin I. Busby. Letter Regarding Agnews [West] Family Housing, Rivermark Master Plan Parcel 26, Currently Vacant Parcel, City of Santa Clara, Santa Clara County: Archaeological Monitoring Closure Report. October 30. Basin Research Associates, San Leandro, CA. Prepared for Housing Authority of the County of Santa Clara, San Jose, CA. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-028016.
- **Busby et al. 1996a** Colin I. Busby, Donna M. Garaventa, Melody E. Tannam, and Stuart A. Guedon (Busby et al.). *Historic Properties Treatment Plan, South Bay Water Recycling Program*. Revised. July. Basin Research Associates, San Leandro, CA. Prepared for Parsons Engineering Science,

- Alameda, CA. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-019072.
- Busby et al. 1996b Colin I. Busby, Donna M. Garaventa, Melody E. Tannam, and Stuart A. Guedon (Busby et al.). Supplemental Report: Historic Properties Affected or Potentially Affected by the South Bay Water Recycling Program. June. Prepared for Parsons Engineering Science, Alameda, CA. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-019072a.
- Byrd et al. 2017 Brian F. Byrd, Adrian R. Whitaker, Patricia J. Mikkelsen, and Jeffrey S. Rosenthal (Byrd et al.). San Francisco Bay-Delta Regional Context and Research Design for Native American Archaeological Resources, Caltrans District 4. June. Prepared for Office of Cultural Resources Studies, District 4, California Department of Transportation, Oakland. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-049780.
- **CEC 2017** California Energy Commission (CEC). *Tribal Consultation Policy*. Revised. December 2017. Sacramento, CA. CEC-700-2017-002-D.
- CEC 2019a California Energy Commission (CEC). (TN 227446). Initial Tribal Consultation Letters, dated March 28, 2019. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-01.
- Cornerstone 2019 Cornerstone Earth Group (Cornerstone). *Geotechnical Investigation, 2201 Laurelwood Road, Santa Clara, California*. March 18. Sunnyvale, CA. Project No. 1075-1-2. Prepared for EdgeCore Internet Real Estate, Denver, CO.
- **Davis 1961** James T. Davis (Davis). *Trade Routes and Economic Exchange among the Indians of California*. Report No. 54. March 31. Berkeley: University of California Archaeological Survey.
- **Docomomo 2019** Docomomo NOCA. Available online at: http://docomomo-noca.org/buildings/san-jose-airport/. Accessed on: May 20, 2019.
- **D'Oro 2017** Stella D'Oro. Letter Regarding Archaeological Monitoring at the Mission Park MarketPlace Project, Santa Clara, California. December 8. Albion Environmental, Santa Cruz, CA. Submitted to Washington Holdings, TynanGroup, Tempe, AZ. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-49685.
- Draper 1949 W. Marvin Draper. Owens-Corning Fiberglas Plant, Santa Clara, CA, 1949. May 5. Aerial photograph. W. Marvin Draper Collection, Santa Clara City Library. Electronic document. Available online at: https://oac.cdlib.org/ark:/13030/kt9s2024bv/?brand=oac4. Accessed on: June 18, 2019.
- EDR 2017a Environmental Data Resources (EDR). EDR Historical Topo Map Report with QuadMatch™.

 May 17. Shelton, CT. Inquiry Number 4940607.4. Prepared for Vishay Siliconix, Santa Clara, CA.

 Appendix C to Phase I Environmental Site Assessment, 2201 Laurelwood Road, Santa Clara,

 California, by Cornerstone Earth Group. November 26, 2018. Project No. 1075-1-1. Prepared for MECP1 Santa Clara 1, LLC.
- EDR 2017b Environmental Data Resources (EDR). The EDR Aerial Photo Decade Package. May 18. Shelton, CT. Inquiry Number 4940607.12. Prepared for Vishay Siliconix, Santa Clara, CA. Appendix C to *Phase I Environmental Site Assessment, 2201 Laurelwood Road, Santa Clara, California*, by Cornerstone Earth Group. November 26, 2018. Project No. 1075-1-1. Prepared for MECP1 Santa Clara 1, LLC.

- **Edward Denny & Co. 1913** Edward Denny & Co. Map Publishers (Edward Denny & Co.). *Denny's Pocket Map, Santa Clara County, California*.
- **Fike 2016** Aisha Fike. *651 Mathew Street*. California Department of Recreation Primary Record Form. October 25. ICF International. Prepared for the City of Santa Clara.
- **GLO 1866** General Land Office (GLO). Survey Plat of Township No. 6 South, Range No. 1 West, Mount Diablo Meridian. May 12. San Francisco, CA. Surveyed 1851, 1853, 1857–1862, 1865–1866.
- **Golla 2007** Victor Golla. Linguistic Prehistory. Chapter 6 in *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 71–82. Lanham, MD: Altamira.
- Hammerle 2015 Esme Hammerle. Memorandum Regarding Archaeological Monitoring Summary Report for 31099142 Gas Main Bowers & Kifer, Santa Clara City and County. July 6. Garcia and Associates, Oakland, CA. Prepared for Pacific Gas and Electric Company, San Francisco. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-047529a.
- Holson et al. 2002 John Holson, Cordelia Sutch, and Stephanie Pau (Holson et al.). *Cultural Resources Report for San Jose Local Loops, Level 3 Fiber Optics Project in Santa Clara and Alameda Counties, California*. May. Pacific Legacy, Albany, CA. 647-20. Prepared for Fluor Global Services, Aliso Viejo, CA. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-025173.
- **Hylkema 1994** Mark G. Hylkema. Tamien Station Archaeological Project. In *The Ohlone Past and Present: Native Americans of the San Francisco Bay Region*, compiled and edited by Lowell J. Bean, pp. 249–270. Anthropological Papers No. 42. Menlo Park, CA: Ballena.
- Hylkema 1998 Mark G. Hylkema. Extended Phase I Archaeological Survey Report: Subsurface Presence/Absence Testing at the Woolen Mills Chinatown Site (CA-SCL-807/H) and Three Storm Water Detention Basins, for the Route 87 Guadalupe Corridor Freeway Project, City of San Jose, Santa Clara County, California. May 8. Office of Environmental Planning, South, District 4, California Department of Transportation, Oakland. 04-SCL-87 PM 6.3/9.4, 04-SCL-101 PM 40.2/41.2. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-020327.
- Jacobs 2019a Jacobs (Jacobs). (TN 227273-1). Application for Small Power Plant Exemption: Laurelwood Data Center, dated March 5, 2019. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-01.
- Jacobs 2019c Jacobs (Jacobs). (TN 227626). LDC Responses to Formal and Informal Data Requests.

 Data Response Set 1A, dated April 11, 2019. Available online at:

 https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-01.
- Jacobs 2019d Jacobs (Jacobs). (TN228748). LDC Updated SPPE Project Description, dated June 13, 2019. Available online at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-SPPE-01.
- Jones et al. 2007 Terry L. Jones, Nathan E. Stevens, Deborah A. Jones, Richard T. Fitzgerald, and Mark G. Hylkema (Jones et al.). The Central Coast: A Midlatitude Milieu. Chapter 9 in *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 125–146. Lanham, MD: Altamira.

- **Kroeber 1976** A. L. Kroeber. *Handbook of the Indians of California*. Reprinted. New York, NY: Dover Publications. Originally published in 1925, Bulletin No. 78, Bureau of American Ethnology, Smithsonian Institution, Washington, D.C.
- **Lehmann 2000** Susan Lehmann. Economic Development of the City of Santa Cruz, 1850-1950. From: Fully Developed Context Statement for the City of Santa Cruz. Prepared for City of Santa Cruz Planning and Development Department. Chapter 3, Context I: Economic Development of the City of Santa Cruz 1850-1950, pp. 25-27. Electronic document, https://history.santacruzpl.org/omeka/items/show/134510#?c=0&m=0&s=0&cv=0. Accessed June 18, 2019.
- **Levy 1978** Richard Levy. Costanoan. In *California*, edited by Robert F. Heizer, pp. 485–495. Handbook of North American Indians, vol. 8, William C. Sturtevant, ed. Washington, D.C.: Smithsonian Institution.
- Milliken et al. 2007 Randall Milliken, Richard T. Fitzgerald, Mark G. Hylkema, Randy Groza, Tom Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottsfield, Donna Gillette, Viviana Bellifemine, Eric Strother, Robert Cartier, and David A. Fredrickson (Miliken et al.). Punctuated Culture Change in the San Francisco Bay Area. Chapter 8 in California Prehistory: Colonization, Culture, and Complexity, edited by Terry L. Jones and Kathryn A. Klar, pp. 99–123. Lanham, MD: Altamira.
- **OHP 1995** Office of Historic Preservation (OHP). *Instructions for Recording Historical Resources*. March. Sacramento, CA: Office of Historic Preservation.
- Oosterhous et al. 2002 Kara Oosterhous, Franklin Maggi, and Leslie A. G. Dill (Oosterhous et al.).

 Historical and Architectural Evaluation: 4423 Cheeney Street, Santa Clara, County of Santa Clara,
 California. September 17. Dill Design Group, Los Gatos, CA. Prepared for Lauson Fargher, Santa
 Clara, CA. On file, Northwest Information Center, California Historical Resources Information
 System, Rohnert Park. Study S-026095.
- Parsons and KEMCO 1983 Parsons Brinckerhoff Quade & Douglas and Kobori Environmental Management Corp (Parsons and KEMCO). Data Recovery Plan for the Guadalupe Corridor Transportation Project, Santa Clara County, California. February. Prepared for Santa Clara County Transportation Agency. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-006066.
- Rehor and Kubal 2014 Jay Rehor and Kathleen Kubal. *Extended Phase I Study: US 101 Express Lands Project, Santa Clara County, California*. April. URS Corporation, Oakland, CA. Prepared for District 4, Department of Transportation, State of California, Oakland, and Santa Clara Valley Transportation Authority, San Jose, CA. US PM 16.0/52.55, SR 85 PM 23.0/R24.1. Project No. 0412000459. EA 2G7100. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-045670c.
- Ruby et al. 1992 Allika Ruby, Jason Bass, and Mike Kelley (Ruby et al.). Evaluation of Archaeological Resources for the San Jose/Santa Clara Nonpotable Water Reclamation Project. May 11.

 Archaeological Resource Management, San Jose, CA. Prepared for Engineering Science, Alameda, CA. Project #60800-92-62. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-014230.
- Santa Clara 2010 City of Santa Clara (Santa Clara). City of Santa Clara General Plan 2010-2035. Adopted on: November 16, 2010. Available online at:

- http://santaclaraca.gov/government/departments/community-development/planning-division/general-plan.
- Santa Clara 2015 City of Santa Clara (Santa Clara). Initial Study: 3535 Garrett Drive Office Project. File Nos: PLN2015-11384/CEQ2015-01199.
- Santa Clara 2016a City of Santa Clara (Santa Clara). Initial Study: Building V5 Data Center Project. December. File Nos. PLN2016-12091/PLN2016-12097/CEQ2016-01018.
- Santa Clara 2016b City of Santa Clara (Santa Clara). Initial Study: 2895 Northwestern Parkway (Building V6) Data Center Project. August. File No. PLN2016-11966.
- Santa Clara 2016c City of Santa Clara (Santa Clara). Draft Environmental Impact Report: Great America Theme Park Master Plan. October. File Nos: PLN2014-10851/CEQ2016-01007. State Clearinghouse # 2016032036.
- Santa Clara 2016d City of Santa Clara (Santa Clara). Initial Study for the Mission Park MarketPlace Project. May. File Nos: PLN2016-11737/CEQ2016-01006.
- Santa Clara 2017a City of Santa Clara (Santa Clara). Initial Study: McLaren Data Center Project. February.
- Santa Clara 2017b City of Santa Clara (Santa Clara). Initial Study/Mitigated Negative Declaration: 3375 Scott Boulevard Office Project. March. File Nos: PLN2016-12232/CEQ2016-01021.
- Santa Clara 2018a City of Santa Clara (Santa Clara). City Code, Title 18 Zoning, Chapter 18.106 Historic Preservation. Available online at: http://www.codepublishing.com/CA/SantaClara/#!/santaclara18/SantaClara18106.html#18.106. 030. Accessed on: January 10, 2018.
- Santa Clara 2018b City of Santa Clara (Santa Clara). *Initial Study for the 2305 Mission College Boulevard Data Center Project*. March. File No. PLN2017-12535.
- Santa Clara County 2012 County of Santa Clara Department of Planning and Development, Planning Office (Santa Clara County). County of Santa Clara Historic Context Statement. December 2004, Revised February 2012.
- Santa Clara County 2015 County of Santa Clara (Santa Clara County). County of Santa Clara Heritage Resource Inventory. Electronic document. Available online at: https://www.sccgov.org/sites/dpd/Programs/HistoricPreservation/Pages/Inventory.aspx. Accessed on: May 23, 2019.
- SFEI 2010 San Francisco Estuary Institute (SFEI). Historical Vegetation and Drainage Patterns of Western Santa Clara Valley: A Technical Memorandum Describing Landscape Ecology in Lower Peninsula, West Valley, and Guadalupe Watershed Management Areas. Historical Ecology Program, Contribution No. 622.
- Shipley 1978 William F. Shipley. Native Languages of California. In *California*, edited by Robert F. Heizer, pp. 80–90. Handbook of North American Indians, vol. 8, William C. Sturtevant, ed. Washington, D.C.: Smithsonian Institution.
- SWCA 2006 SWCA Environmental Consultants (SWCA). Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California. December. Sacramento, CA. SWCA Project No. 10715-180. SWCA Cultural Resources Report Database No. 06-507. Prepared for Qwest Communications, Denver, CO. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-033061.

- **Totton 2019** Gayle Totton. Email Regarding Laurelwood Data Center Project, City of Santa Clara; Milpitas USGS Quadrangle, Santa Clara County, California. March 7. Cultural and Environmental Department, Native American Heritage Commission, West Sacramento, CA. Submitted to California Energy Commission, Sacramento.
- **USGS 1897** United States Geological Survey (USGS). San Jose, California, Sheet. 15-minute Topographic Series. September. Advanced proof. Surveyed 1895.
- **USGS 1899** United States Geological Survey (USGS). San Jose, California, Sheet. 15-minute Topographic Series. March. Surveyed 1895.
- **USGS 1915** United States Geological Survey (USGS). Geologic and Topographic Map of the Coast Route.
- **USGS 1961** United States Geological Survey (USGS). San Jose, California, Quadrangle. 15-minute Topographic Series. Denver, CO.
- **USGS 1980a** United States Geological Survey (USGS). Milpitas, California, Quadrangle. 7.5-minute Topographic Series. Photorevised version of 1961 edition. Aerial photographs taken 1948 and 1960. Denver, CO.
- USGS 1980b United States Geological Survey. San Jose West, California, Quadrangle. 7.5-minute Topographic Series. Photorevised version of 1961 edition. Aerial photographs taken 1948 and 1960. Denver, CO.
- **Vishay 2019** Vishay Corporate Website. Available online at: https://www.vishay.com/. Accessed on: April 8, 2019.
- Whitaker 2016 Adrian R. Whitaker (Whitaker). Cultural Resources Sensitivity Assessment for the 2016 Caltrain and Dumbarton Rail Fence Installation and Replacement Project. August. Far Western Anthropological Research Group, Davis, CA. Prepared for Peninsula Corridor Joint Powers Board, San Carlos, CA. On file, Northwest Information Center, California Historical Resources Information System, Rohnert Park. Study S-048931.