

3.4 ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

This section analyzes and evaluates the potential impacts of the 2021 LRDP on known and unknown cultural resources in the LRDP area. Cultural resources include districts, sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include archaeological, historical, and tribal cultural resources.

Archaeological sites are locations where human activity has measurably altered the earth or left deposits of prehistoric or historic period physical remains (e.g., stone tools, bottles, former roads, house foundations). Historical (or built-environment) features include historic period standing buildings (e.g., houses, barns, outbuildings, cabins), intact structures (e.g., dams, bridges, and roads), and districts. Tribal cultural resources (as defined by Assembly Bill [AB] 52, Statutes of 2014, in Public Resources Code [PRC] Section 21074) are sites, features, places, cultural landscapes, sacred places, and objects, with cultural value to a California Native American tribe.

Six comment letters regarding cultural resources were received in response to the NOP (See Appendix B). The Native American Heritage Commission (NAHC) requested AB 52 and Senate Bill (SB) 18 compliance information. AB 52 compliance is described below. SB 18, which applies to city or county general plan amendments, is not applicable to the 2021 LRDP. The Santa Cruz City – County Task Force to Address UCSC Growth Plans, the League of Women Voters of Santa Cruz County, and the Coalition for Limiting University Expansion stated that the 2021 LRDP EIR should analyze the potential impact of on- and off-campus developments on on-campus archeological, historical, or tribal cultural resources. One individual was concerned over the preservation of the Cowell Lime Works Historic District; another requested that the EIR consider how permanent protection of the Campus Natural Reserve could protect important tribal cultural resources in perpetuity but did not identify the type or location of tribal cultural resources.

3.4.1 Regulatory Setting

FEDERAL

National Historic Preservation Act

Among those statutes enacted by Congress that affect historic properties, the National Historic Preservation Act of 1966 (NHPA) is the most significant law that addresses historic preservation. One of the most important provisions of the NHPA is the establishment of the National Register of Historic Places (NRHP), the official designation of historical resources. Districts, sites, buildings, structures, and objects are eligible for listing in the Register. Nominations are listed if they are significant in American history, architecture, archaeology, engineering, and culture. The NRHP is administered by the National Park Service. The NRHP is the nation's master inventory of known historic resources. It includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

The formal criteria (36 CFR 60.4) for determining NRHP eligibility are as follows:

1. The property is at least 50 years old (however, properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
2. It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
3. It possesses at least one of the following characteristics:
 - Criterion A Is associated with events that have made a significant contribution to the broad patterns of history (events).
 - Criterion B Is associated with the lives of persons significant in the past (persons).

Criterion C Embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic values; or represents a significant, distinguishable entity whose components may lack individual distinction (architecture).

Criterion D Has yielded, or may be likely to yield, information important in prehistory or history (information potential).

A project is considered to have a significant impact when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. These seven aspects of integrity are described as:

- ▶ **Location.** Integrity of location refers to whether a property remains where it was originally constructed or was relocated.
- ▶ **Design.** Integrity of design refers to whether a property has maintained its original configuration of elements and style that characterize its plan, massing, and structure. Changes made after original construction can acquire significance in their own right.
- ▶ **Setting.** Integrity of setting refers to the physical environment surrounding a property that informs the characterization of the place.
- ▶ **Materials.** Integrity of materials refers to the physical components of a property, their arrangement or pattern, and their authentic expression of a particular time period.
- ▶ **Workmanship.** Integrity of workmanship refers to whether the physical elements of a structure express the original craftsmanship, technology and aesthetic principles of a particular people, place, or culture at a particular time period.
- ▶ **Feeling.** Integrity of feeling refers to the property's ability to convey the historical sense of a particular time period.
- ▶ **Association.** Integrity of association refers to the property's significance defined by a connection to a particular important event, person, or design.

Listing in the NRHP does not entail specific protection or assistance for a property but it does guarantee recognition in planning for federal or federally assisted projects, eligibility for federal tax benefits, and qualification for federal historic preservation assistance. Additionally, project effects on properties listed in the NRHP must be evaluated under CEQA.

The National Register Bulletin also provides guidance in the evaluation of the significance of an archaeological site. If a heritage property cannot be placed within a particular theme or time period, and thereby lacks "focus," it is considered not eligible for listing in the NRHP. In further expanding on the generalized NRHP criteria, evaluation standards for linear features (such as roads, trails, fence lines, railroads, ditches, and flumes) are considered in terms of four related criteria that account for specific elements that define engineering and construction methods of linear features: (1) size and length, (2) presence of distinctive engineering features and associated properties, (3) structural integrity, and (4) setting. The highest probability for NRHP eligibility exists in the intact, longer segments, where multiple criteria coincide.

Section 106 of the National Historic Preservation Act

Federal protection of cultural resources is legislated by (a) the NHPA of 1966 as amended by 16 U.S. Code 470, (b) the Archaeological Resource Protection Act of 1979, and (c) the Advisory Council on Historical Preservation. Section 106 of the NHPA and accompanying regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the main federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed in, or may be eligible for listing in the NRHP. These laws and organizations maintain processes for determination of the effects on historical properties that are listed or determined to be eligible for listing in the NRHP. For UC Santa Cruz, listing on the NRHP and compliance with Section 106 is relevant to future projects requiring federal permitting.

Secretary of the Interior's Standards

The "Secretary of the Interior's Standards for the Treatment of Historic Properties" (Secretary's Standards), codified in 36 CFR 67, provide guidance for working with historic properties. The Secretary's Standards are used by lead agencies to evaluate proposed rehabilitative work on historic properties. The Secretary's Standards are a useful analytic tool for understanding and describing the potential impacts of proposed changes to historic resources. Projects that comply with the Secretary's Standards benefit from a regulatory presumption that they would not result in a significant impact to a historic resource. Projects that do not comply with the Secretary's Standards may or may not cause a substantial adverse change in the significance of a historic property.

In 1992 the Secretary's Standards were revised so they could be applied to all types of historic resources, including landscapes. They were reduced to four sets of treatments to guide work on historic properties: Preservation, Rehabilitation, Restoration, and Reconstruction. The four distinct treatments are defined as follows:

- ▶ **Preservation** focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time.
- ▶ **Rehabilitation** acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.
- ▶ **Restoration** depicts a property at a particular period of time in its history, while removing evidence of other periods.
- ▶ **Reconstruction** re-creates vanished or non-surviving portions of a property for interpretive purposes.

The Guidelines for the Treatment of Historic Properties

The "Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings" (Guidelines) illustrate how to apply the four treatments detailed above to historic properties in a way that meets the Secretary's Standards. The Guidelines are advisory, not regulatory. The purpose of the Guidelines is to provide guidance to historic building owners and building managers, preservation consultants, architects, contractors, and project reviewers prior to beginning work. They address both exterior and interior work on historic buildings. There are four sections in the Guidelines, each focusing on one of the four treatment Standards: Preservation, Rehabilitation, Restoration, and Reconstruction. Each section includes one set of Standards with accompanying Guidelines that are to be used throughout the course of a project.

Cultural Landscapes

Under the NRHP, historic properties may be defined as sites, buildings, structures (such as bridges or dams), objects, or districts, including cultural landscapes. A cultural landscape differs from a historic building or district in that it is understood through the spatial organization of the property, which is created by the landscape's cultural and natural features. Some features may create viewsheds or barriers (such as a fence), and others may create spaces or "rooms" (such as an arrangement of buildings and structures around a lawn area). Some features, such as grading and topography, underscore the site's development in relationship to the natural setting. To be listed in the NRHP, a cultural landscape must meet one of the four evaluation criteria and must retain its integrity.

Cultural landscapes include residential gardens and community parks, scenic highways, rural communities, institutional grounds, cemeteries, battlefields, zoological gardens, religious sacred sites and massive geological structures. They are composed of character-defining features that individually or collectively contribute to the landscape's physical appearance as they have evolved over time. In addition to vegetation and topography, cultural landscapes may include water features, such as ponds, streams, and fountains; circulation features, such as roads, paths, steps, and walls; buildings; and furnishings, including fences, benches, lights, and sculptural objects.

A cultural landscape is defined as "a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values" (Birnbaum 1994). There are four general types of cultural landscapes—historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes—and they are not mutually exclusive:

- ▶ A historic site is a landscape significant for its association with a historic event, activity, or person. Examples include battlefields and a president's house properties.
- ▶ A historic designed landscape is a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect, or horticulturist according to design principles or by an amateur gardener working in a recognized style or tradition. The landscape may be associated with a significant person, trend, or event in landscape architecture, or it may illustrate an important development in the theory and practice of landscape architecture. Aesthetic values play a significant role in designed landscapes. Examples include parks, campuses, and estates.
- ▶ A historic vernacular landscape is a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Such a landscape reflects the social and cultural attitudes of an individual, a family, or a community, as well as the physical, biological, and cultural character of everyday lives. Function plays a significant role in vernacular landscapes. They can be a single property, such as a farm, or a collection of properties, such as a district of historic farms along a river valley. Examples include rural villages, industrial complexes, and agricultural landscapes.
- ▶ An ethnographic landscape is a landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, religious sacred sites, and massive geological structures. Small plant communities, animals, subsistence, and ceremonial grounds are often components of such landscapes.

STATE

California Register of Historic Resources

All properties in California that are listed in or formally determined eligible for listing in the NRHP are eligible for listing in the California Register of Historical Resources (CRHR). The CRHR is a listing of State of California resources that are significant in the context of California's history. It is a Statewide program with a scope and with criteria for inclusion similar to those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR.

A historic resource must be significant at the local, State, or national level under one or more of the criteria defined in the California Code of Regulations Title 15, Chapter 11.5, Section 4850 to be included in the CRHR. The CRHR criteria are tied to CEQA because any resource that meets the criteria below is considered a significant historical resource under CEQA. As noted above, all resources listed in or formally determined eligible for listing in the NRHP are automatically listed in the CRHR.

The CRHR uses four evaluation criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. Is associated with the lives of persons important to local, California, or national history.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values.
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Similar to the NRHP, a resource must meet one of the above criteria and retain integrity to be listed in the CRHR. The CRHR uses the same seven aspects of integrity used by the NRHP.

California Environmental Quality Act

CEQA requires public agencies to consider the effects of their actions on both "historical resources" and "unique archaeological resources." Pursuant to Public Resources Code (PRC) Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." PRC Section 21083.2 requires agencies to determine whether proposed projects would have effects on unique archaeological resources.

Historical Resources

"Historical resource" is a term with a defined statutory meaning (PRC Section 21084.1; State CEQA Guidelines Sections 15064.5[a] and [b]). Under State CEQA Guidelines Section 15064.5(a), historical resources include the following:

- 1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR (PRC Section 5024.1).
- 2) A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g), will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3) Any object, building, structure, site, area, place, record, or manuscript that 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 may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the CRHR (PRC Section 5024.1).
- 4) The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC Section 5020.1[k]), or identified in a historical resources survey (meeting the criteria in PRC Section 5024.1[g]) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

Unique Archaeological Resources

CEQA also requires lead agencies to consider whether projects will affect unique archaeological resources. PRC Section 21083.2(g) states that "unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more 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.

Tribal Cultural Resources

CEQA also requires lead agencies to consider whether projects will affect tribal cultural resources. PRC Section 21074 states:

- a) "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 California Register of Historical Resources.
 - B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

- 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 subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- c) A historical resource described in PRC Section 21084.1, a unique archaeological resource as defined in subdivision (g) of PRC Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of PRC Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Health and Safety Code, Section 7050.5

Section 7050.5 of the Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If they are determined to be those of a Native American, the coroner must contact NAHC.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural and Sacred Sites Act applies to both State and private lands. The Act requires that upon discovery of human remains, construction or excavation activity should cease, and the county coroner should be notified. If the remains are of a Native American, the coroner must notify the NAHC. The NAHC then notifies those persons most likely to be descended (MLD) from the Native American's remains. The Act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods. The descendants may, with the permission of private landowners, inspect the site and recommend to the owner or the person responsible for the excavation for treating or disposing of the remains and associated grave goods. The descendants must complete their inspection and make recommendations within 24 hours of notification by the NAHC. The recommendation may include scientific removal and non-destructive analysis.

California Native American Historic Resource Protection Act

The California Native American Historic Resources Protection Act of 2002 imposes civil penalties, including imprisonment and fines up to \$50,000 per violation, for persons who unlawfully and maliciously excavate upon, removes, destroys, injures, or defaces a Native American historic, cultural, or sacred site that is listed or may be listed in the CRHR.

Public Resources Code, Section 5097

PRC Section 5097 specifies the procedures to be followed if human remains are unexpectedly discovered on nonfederal land. The disposition of Native American burial falls within the jurisdiction of NAHC. Section 5097.5 of the code states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

PRC Section 5097.98 (and reiterated in CEQA Guidelines Section 15064.59 [e]) identifies steps to follow in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery. PRC Section 5097.99, as amended, states that no person shall obtain or possess any Native American artifacts or human remains which are taken from a Native American grave or cairn. Any person who knowingly or willfully obtains or possesses any such artifacts or human remains is guilty of a felony which is punishable by imprisonment. Any person who removes, without authority of law, any such items with an intent to sell or dissect or with malice or wantonness is also guilty of a felony which is punishable by imprisonment.

Public Resources Code Section 21080.3

AB 52, signed by the California governor in September 2014, established a new class of resources under CEQA: "tribal cultural resources," defined in PRC Section 21074. Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation before the release of an EIR, negative declaration, or mitigated negative declaration.

UNIVERSITY OF CALIFORNIA

There are no UC regulations specifically related to archaeological, historical, or tribal cultural resources that apply to the 2021 LRDP.

LOCAL

As noted in Section 3.0.2, "University of California Autonomy," UC Santa Cruz, a constitutionally created State entity, is not subject to municipal regulations of surrounding local governments for uses on property owned or controlled by UC Santa Cruz that are in furtherance of the university's educational purposes. However, UC Santa Cruz may consider, for coordination purposes, aspects of local plans and policies of the communities surrounding the campus when it is appropriate and feasible, but it is not bound by those plans and policies in its planning efforts.

County of Santa Cruz General Plan

The County of Santa Cruz General Plan contains the following objectives and policies related to archaeological, historical, and tribal cultural resources in the county and that may be relevant to the 2021 LRDP:

Objective 5.19 Archaeological Resources. To protect and preserve archaeological resources for their scientific, educational, and cultural values, and for their value as local heritage.

- ▶ **Policy 5.19.3. Development Around Archaeological Resources.** Protect archaeological resources from development by restricting improvements and grading activities to portions of the property not containing these resources, where feasible, or by preservation of the site through project design and/or use restrictions, such as covering the site with earthfill to a depth that ensures the site will not be disturbed by development, as determined by a professional archaeologist.
- ▶ **Policy 5.19.5. Native American Cultural Sites.** Prohibit any disturbance of Native American Cultural Sites without an archaeological permit which requires, but is not limited to, the following:
 - (a) A statement of the goals, methods, and techniques to be employed in the excavation and analysis of the data, and the reasons why the excavation will be of value.
 - (b) A plan to ensure that artifacts and records will be properly preserved for scholarly research and public education.
 - (c) A plan for disposing of human remains in a manner satisfactory to local Native American Indian groups.

Objective 5.20 Historical Resources. To protect and where possible restore buildings, sites, and districts of historic significance to preserve the rich cultural heritage of the community.

- ▶ **Policy 5.20.5. Encourage Protection of Historic Structures.** Encourage and support public and private efforts to protect and restore historic structures and to continue their use as an integral part of the community.

City of Santa Cruz General Plan

The City of Santa Cruz General Plan contains the following policies related to archaeological, historical, and tribal cultural resources in the city and that may be relevant to the 2021 LRDP:

- ▶ **Policy HA1.1:** Preserve (or where not possible, responsibly manage) archaeological and paleontological sites important to the community's heritage.

- ▶ **Policy HA1.2:** Protect (or where not possible, responsibly manage) sensitive archaeological and paleontological resources as early in the land-use planning and development process as possible.
- ▶ **Policy HA1.3:** Seek and consider input of descendent community and historical organizations on the protection of archeological resources.
- ▶ **Policy HA1.4:** Manage the discovery of human remains and the protection of archaeological deposits in accordance with local, State, and federal requirements.
- ▶ **Policy HA1.6:** Provide opportunities for the interpretation of paleontology and prehistoric and historical archaeology in the city.
- ▶ **Policy HA1.7:** Encourage and facilitate the protection and preservation of traditional cultural properties.
- ▶ **Policy HA1.8:** Protect, encourage, and develop guidelines for restoring and rehabilitating historic or architecturally-significant buildings, sites, and landmarks.
- ▶ **Policy HA1.9:** Require compatible development within historic districts and on sites outside but immediately adjacent to those districts.

3.4.2 Environmental Setting

REGIONAL PREHISTORY

The earliest confirmed evidence of prehistoric occupation in the Santa Cruz region comes from an archaeological site located 4 miles northeast of the main residential campus in the Santa Cruz Mountains near Scotts Valley which may date to approximately 10,000 years before present (BP). This is supported by the California Central Coast Chronology, which posits prehistoric life in the region extending to 10,000 years BP or earlier. While few sites have been identified from the Paleoindian through the Early Archaic (8000 to 5000 BP) periods in the Santa Cruz area, numerous sites have been dated to the Middle Archaic (5000 BP to 3000 BP) and Late Archaic (3000 BP to 1000 AD [Anno Domini]) periods. The Late Prehistoric Period (1000 to about 1600 AD) has been identified from at least one site near Santa Cruz. Archaeological testing at several sites on the UC Santa Cruz campus in the 1960s resulted in the recovery of two human burials and nearly 1,300 artifacts. Artifact types and radiocarbon dates suggest campus lands were occupied by Native American inhabitants as early as 5,500 BP (3550 BC) to as recently as 200 BP (1750 AD).

Archaeological evidence indicates that Native American groups in the region participated in extensive trade networks. As throughout much of Central California, acorns were an important plant food staple. The Monterey Bay area provided a wide range of resources that were important to Native Americans. In addition to well-known plant and animal foods, important locally available resources included Monterey banded chert, which was used for the manufacture of chipped stone tools such as arrowheads. The bay was also an exceptional source of abalone (*Haliotis* sp.) and olive snail (*Olivella* sp.) shells. These served as raw material for the manufacture of shell ornaments and beads that were traded throughout California and much of the West, and they were important wealth items that were often deposited in graves.

A chronological system that focused on the significant variability and stylistic/typological transitions seen in artifact assemblages across the region was developed as a model of culture change for the Central Coast and adjacent inland areas. The chronological system relied on six key periods (Paleo-Indian, pre-8000 BC; Millingstone, or Early Archaic, 8000 to 3500 BC; Early, 3500 to 600 BC; Middle, 600 BC to AD 1000; Middle/Late Transition, AD 1000 to 1250; and Late, AD 1250 to 1769). Three cultures (the Millingstone Culture, the Hunting Culture, and the Late Period) were used to describe broader social patterns.

The Millingstone Culture is the earliest well-established sequence and dates to the Millingstone or Early Archaic Period (8000 to 3500 BC). This period is defined by the presence of large numbers of handstones, millingslabs, expedient core tools, and lesser quantities of flaked stone tools and large side-notched projectile points. Contracting stemmed points, lanceolate points, and crescents have also been recovered from Millingstone levels. Artifactual and faunal evidence

indicates a wide variety of mammals, shellfish, birds, and to a lesser degree fish were collected. The Millingstone groundstone assemblage also suggests vegetal matter was processed on rock slabs rather than in shaped bowl mortars. Millingstone occupations have been located in a variety of settings from the coast to nearshore interior valleys.

The Hunting Culture spans the Early and Middle Periods (3500 to AD 1000) and is defined by an abundance of stemmed and notched projectile points and large bifaces. The Early Period is marked by the presence of contracting stemmed, Rossi square-stemmed, and large side-notched projectile points generally thought to indicate dart or spear hunting of large and small mammals. Groundstone assemblages include handstones, pitted stones, and portable mortars and pestles. Middle Period sites indicate stylistic changes in stone technology from the earlier square stemmed and large side-notched projectile points. Middle Period stone tools include contracting-stemmed and large-stemmed points, but no square-stemmed or large side-notched points. Groundstone artifacts consist of slabs, handstones, portable mortars, and pestles. Pitted stones and grooved stone net sinkers are common. Hunting Culture sites occur mainly in coastal areas but extend into nearby valleys as well. Faunal remains include deer, rabbits, sea otters, birds, and fish with preferences dependent on locale.

The Middle/Late Transition Period (AD 1000 to 1250) exhibits increasing numbers of arrow points and decreasing numbers of stemmed points indicating more reliance on the bow and arrow which was gradually replacing the use of spears for hunting. The Late Period (AD 1250 to 1769) is defined by the abundance of Desert side-notched and Cottonwood arrow points. Small, serrated points and contracting-stemmed points are present at some sites. Other artifacts include bedrock mortars, hopper mortars, several bead types, small bifacial bead drills, and circular fishhooks. Unlike earlier periods, Late Period sites are more common in the interior than on the coast.

The historic period began in earnest when early Spanish explorers made extensive forays up the Central Coast. Sebastián Vizcaíno landed in the area of Monterey in 1602. Long term contact with Native American inhabitants intensified with the Portolá overland expedition in 1769-1770, which camped along the San Lorenzo River, and the establishment of Mission Santa Cruz in 1771. The Spanish referred to the indigenous population in this region as Costano or "coast people." Historically, they have become known as Costanoan; in 1770, just before missionization, the Costanoan group was made up of approximately 50 politically autonomous nations and tribelets. At that time, the UC Santa Cruz area was occupied by a tribal group identified as the Uypi which occupied the mouth of the San Lorenzo River.

Mission life, non-Native diseases, and cultural disruption took a severe toll on the Costanoan population. One effect was that groups of mixed ethnicities congregated in a few Native communities. In many cases, these individuals are identified in records (such as those of the Indian Land Claims Act) only as "Mission Indian." Thus, it is now often difficult or impossible to trace descendants from a specific locale. Many descendants of the San Francisco Bay and Monterey Bay regions identify themselves as Ohlone.

ETHNOGRAPHY

The Costanoan language group comprises seven closely related languages. These languages were spoken throughout a large area extending from the San Francisco Bay southward along the coast to Point Sur and inland to the Diablo Range and portions of the northern San Joaquin Valley. The term "Costanoan" is misleading, however as it amalgamates the 10,000 or more people who lived in the region into a single ethnolinguistic unit. In reality, the term "Costanoan" subsumes as many as 40 or 50 politically independent groups, some of which spoke mutually unintelligible but genetically related languages. Many present-day Native descendants prefer the term Ohlone, which is said to have derived from the name of a coastal village in San Mateo County. Knowledge of Ohlone culture is largely based on information gathered from Spanish expeditions between 1769 and 1776, documents maintained at missions, the works of ethnographers and linguists, and from Ohlone descendants.

The 18th century Ohlone tribelet that lived the vicinity of Mission Santa Cruz was recorded in mission records as Uypi. UC Santa Cruz, as standard practice, acknowledges the traditional territory of the Uypi tribe as including the LRDP area and the need to restore/maintain traditional stewardship practices of the area. Other linguistic dialect groups of Ohlone peoples in the vicinity included the Cotoni (Davenport area), Achistaca (Boulder Creek area), Sayanta (Zayante area), and Aptos (Aptos area). The precise population of the contact period Uypi is uncertain, but around 500 to 700

Native Americans from the Santa Cruz County area were taken to Mission Santa Cruz between 1791 and 1797. Demographic studies in the 1980s estimated an Ohlone population in the Santa Cruz area at around 1,700 persons at the time of contact. Given what is known about population demographics in the area, this suggests that at least one pre-contact or contact period village was present in the UC Santa Cruz vicinity.

Spanish missionization, and the introduction of European diseases for which most Native American inhabitants had little natural resistance, resulted in rapid and dramatic Native American population declines. Subsequent persecution and suppression of Native cultural expressions by Spanish, Mexican, and American colonizers contributed to the transformation of traditional culture. Today, a number of Ohlone tribes remain active in Santa Cruz County, including the Amah Mutsun Tribal Band, the Costanoan Ohlone Rumsen-Mutsen Tribe, and the Indian Canyon Mutsun Band of Costanoan, among others.

REGIONAL HISTORY

Regional Overview

In 1769, the Portolá expedition was the first non-Native exploration party to visit the area between the San Lorenzo River and Wilder Creek. A mission, *La Misión de la Exaltación de la Santa Cruz*, was established in Santa Cruz near the San Lorenzo River in 1791 as part of Spanish colonization efforts in Alta California. Campus lands likely were used by the mission for grazing and/or agricultural fields. After Mexico won its independence from Spain in the 1820s, the Mexican government began the secularization of church lands. Starting in 1834, mission properties were distributed among Spanish and Mexican immigrants, though rarely among Native American citizens. The lands that became the UC Santa Cruz campus made up portions of three Mexican-era land grants: *Rancho de la Cañada del Rincon en el Rio San Lorenzo de Santa Cruz* (Rancho Rincon), *Rancho Zayante*, and *Rancho Rufugio*. By the 1850s, there were also two lime kilns producing quicklime on Rancho Rincon.

In 1848, Mexico ceded California to the US, and California quickly attained statehood in 1850. The major influx of settlers (fueled by the Gold Rush) resulted in a rapid increase in demand for goods and services, including house-building supplies. At that time, quicklime, a principal ingredient in mortar, plaster, and stucco, was shipped from the east around Cape Horn, making it very expensive. In 1851, entrepreneurs Isaac Davis and Albion Jordan discovered that high-quality limestone was available in Santa Cruz, and they bought a 160-acre parcel on the future campus site near High and Bay Streets. There they constructed three lime kilns for the production of quicklime. Davis and Jordan produced 21,000 barrels of lime in 1855, one third of Santa Cruz County's production in that year.

When Albion Jordan retired in 1863, Isaac Davis entered a partnership with Henry Cowell. The lime business flourished, and by 1865 the Cowell and Davis Lime Company was operating eight lime kilns, including the original kilns near the main campus entrance, the Upper Quarry Kiln on the Upper Quarry rim, the Bridge Kiln near McLaughlin Drive, and the Elfland Kiln near College Ten. By 1880, the company had become one of the three largest lime companies in California. The business included quarrying and lumbering operations, a wooden tramway for hauling limestone and lumber, a cooperage to manufacture barrels for shipping, a drayage operation to transport the barrels to the warehouse and wharf, and company schooners to transport the material to San Francisco for shipping. A ranch home, workmen's houses, a carriage house, and other facilities also were established on the campus site along with agricultural operations in support of the lime production business.

In 1906, the devastating San Francisco earthquake demonstrated that brick and mortar were not the best building materials for this region. The Cowell quicklime operations began a major decline, and the lime kiln complex near the main campus entrance was shut down during the early decades of the 20th century, though the Upper Quarry and other kilns on the campus site continued to operate until 1946. During the first decades of the 20th century, agricultural operations on the Cowell property became more important and the Cowells started leasing grazing land, though quarrying continued sporadically for several decades. The property became known as Cowell Ranch, and leases for agricultural operations and grazing persisted into the 1960s.

Another use of the ranch lands was community oriented. The City of Santa Cruz built a reservoir on the western side of Cowell Ranch in 1890 as part of its first public water system. The reservoir, which dammed off Moore Creek with

three earthen dams, leaked badly and was abandoned in 1948. Land ownership reverted to the Cowell Ranch at that time. The reservoir later became the site of the UC Santa Cruz Arboretum and Botanic Gardens in the mid-1960s.

City of Santa Cruz

Mission Santa Cruz, founded in 1791, was the first permanent European settlement in the Santa Cruz area. The first site of the mission was flooded by the San Lorenzo River in the winter of 1791 and was rebuilt over the next several years on the hillside above it. Diego de Borcia, then the Governor of Alta California, selected the Santa Cruz area as the best location to fortify Spanish holdings against the colonial interests of Russia, France, and Great Britain and established *Pueblo de Branciforte* in 1797 on a bluff across the San Lorenzo River from the mission. Branciforte remained a separate settlement until 1905 when it was incorporated into the City of Santa Cruz. After Mexico became independent from Spain and secularized the missions (1833 to 1834), the site of Mission Santa Cruz (at the mission's second location, completed in 1794) became Holy Cross Church. The Mission Hill community surrounding it was a center of commercial, political, and religious activity during the Spanish and Mexican periods and transitioned into the American Period.

Santa Cruz County (first called Branciforte County) was established in 1850 as one of California's original 27 counties. The Gold Rush of 1848 caused a huge influx of settlers into northern California, and Santa Cruz County grew and enjoyed a prosperous economy based on logging, lime processing, agriculture, and commercial fishing. The City of Santa Cruz was granted a legislative charter in 1866 and was incorporated in 1876. The city soon became a prominent resort community in California. One of the first saltwater baths west of the Mississippi was established there by Mary Lidell in 1864, followed by the Neptune Baths in the 1890s. In 1904 to 1907, Fred Swanton developed his boardwalk at the same location, which included a casino, heated indoor pool, and 500 dressing rooms. In 1912, a carousel was added, and the Giant Dipper roller coaster was installed in 1924, which continues to draw summer crowds to this day.

University of California, Santa Cruz

In 1951, plans were begun for the construction of a new campus within the UC system in the southern Central Coast region. By 1961, The Board of Regents of the UC system had chosen Santa Cruz as the location of the new campus. The campus was planned by architect John Carl Warnecke and landscape architect Thomas Church, and the design was based on the Oxford and Cambridge University model of small, independent liberal arts colleges. The campus was conceived as a group of "scholarly villages," with each village representing a different academic discipline. The colleges were designed to be semi-autonomous in function and distinct in architectural and academic style. Each college and its associated libraries, walkways, and dormitories were all designed to appear and function as integral parts of the immediate natural landscape. Construction began in 1964 and the campus opened in 1965.

The Westside Research Park (2300 Delaware Avenue) parcel had a different focus. In the 19th to the early 20th century, this property was owned by the Woolf, Chace, and Leek families just north of the Hall dairy farm and east of Moore Creek. In 1908, the San Vicente Lumber Company sawmill dammed Moore Creek where it now passes into Natural Bridges State Beach and formed a log pond that the Ocean Shore Railroad also used as a trestle. The sawmill shipped its lumber using the Ocean Shore Railroad from 1909 to 1923, when the lumber company moved to Plumas County. The rails were removed, and the rail grade eventually became Delaware Avenue. The pond and the surrounding land then became the Antonelli Brothers' begonia gardens and farm during the ca. 1930s through ca. 1980. Between 1982 and 1994, the Land Trust of Santa Cruz County acquired the pond and land to the west. The land to the east of the pond, between Delaware Avenue and the Southern Pacific Railroad tracks, was acquired by UC Santa Cruz in 2004; the current building complex had been constructed by 1981. In 2019, the UC Santa Cruz Westside Research Park became the home of the UC Santa Cruz Genomics Institute, based in the Baskin School of Engineering.

KNOWN RESOURCES

Resources can be classified as buildings, structures, objects, sites, or districts (Office of Historic Preservation 1995):

- ▶ **Building:** A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.

- ▶ Structure: The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.
- ▶ Object: The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.
- ▶ Site: A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.
- ▶ District: A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Northwest Information Center Records Search

Background literature and document searches were conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information System at Sonoma State University, Rohnert Park, California on April 21, 2020 (NWIC File No. 19-1702). The records search revealed sixty-eight cultural resource studies within the LRDP area. In addition to the record review, the archival and records search included a review of the following:

- ▶ The Historic Properties Directory;
- ▶ The California Inventory of Historic Resources;
- ▶ California Historical Landmarks;
- ▶ California Points of Historical Interest listing May 1992; and
- ▶ The National Register of Historic Places (NRHP) (Directory of Determinations of Eligibility, California Office of Historic Preservation, Volumes I and II, 1990; Office of Historic Preservation Computer Listing 1990 and updates).

Prehistoric Archaeological Sites

Eight prehistoric archaeological sites and three prehistoric isolates (resources consisting of three or fewer artifacts) have been identified on the UC Santa Cruz main residential campus. Isolates are defined as one or two artifacts occurring by themselves and not associated with an archaeological site. Because they have no historical context, isolates are generally not eligible for listing in the CRHR or NRHP and, therefore, are not evaluated for significance and not discussed further in this Draft EIR.

Although five of the eight prehistoric sites were subject to test excavations in the 1960s and 1970s, none has been formally evaluated for listing in the CRHR. Two of the sites include habitation deposits (CA-SCR-3/P-44-000011 and CA-SCR-160/P-44-000163), and burials were reportedly recovered from a third possible habitation site (CA-SCR-4/P-44-00012). These three sites have the potential to yield important information and may be eligible for listing in the CRHR.

The remaining five sites are recorded as lithic scatters (scattered chipped stone tool manufacture debris), several with Monterey-banded chert: CA-SCR-94/P-44-00098, CA-SCR-142/P-44-000145, CA-SCR-143/P-44-000146, CA-SCR-180/P-44-000182, and CA-SCR-181/P-44-000183. The last site, CA-SCR-181/P-44-000183, was not relocated during a 2005 archaeological survey. In general, the boundaries of these sites are not well defined, it has been difficult to accurately relocate these sites in subsequent surveys, and it is unclear whether the deposits have subsurface components. These eight sites have been assumed eligible for listing in the CRHR for management and preservation purposes until their significance can be documented through archaeological testing.

Historic Period Archaeological Sites and Features

Two overlapping historic period districts, 11 historic period archaeological sites, and 19 historic period isolates have been identified on the UC Santa Cruz main residential campus; no sites or isolates have been identified on the Westside Research Park site. The two overlapping historic districts are located in the lower campus. The first is the Cowell Home Ranch District (P-44-000855), which includes standing ranch buildings, kilns, and quarries. It was originally nominated to the NRHP in 2003 but was not listed following review by the California Office of Historic

Preservation. The second is the Cowell Lime Works Historic District (CA-SCR-198H), which was listed in the NRHP and CRHR in 2007. Cowell Lime Works Historic District is considered a multi-component site, meaning that it contains both historic period archaeological features and historic period built-environment features. Therefore, it is both an archaeological resource and a historic resource.

The Cowell Lime Works Historic District is an extensive complex of extant 19th and 20th century buildings, structures, and associated archaeological features, as well as several other related archaeological sites (CA-SCR-182H, CA-SCR-183H, and CA-SCR-361H) that include railroad, quarrying, and lime kiln features associated with quicklime production at Cowell Ranch between about 1851 and 1946. During development of the 2005 LRDP, a NRHP nomination for the Cowell Lime Works Historic District was prepared. The District was determined to be eligible for listing in the NRHP under Criterion A and in the CRHR under Criterion 1 for its role in the development of lime mortar manufacturing in California between 1851 and 1906. While the integrity of many of the buildings and features had been diminished through deterioration, physical damage from development, or adaptive reuse and thus no longer contributed to its significance, the district and many of its features retained their historical significance. A draft historic district management plan was prepared in 2006 with the objective of maintaining the district's historical character. This plan is being refined to identify opportunities to further improve the Cowell Lime Works Historic District for use as a campus and community amenity including adaptive reuse and rehabilitation of existing structures that preserve the spatial and historic character relationships in the historic district. As noted above, the Cowell Lime Works Historic District was listed in the NRHP and CRHR in 2007 (NPS #07001220). In 2009, two archaeological features (P-44-000958 and UCSC-0906) within the district boundaries were discovered and tested. Both features were assumed eligible for listing in the CRHR and recommended as contributing elements to the district.

Most of the other historic period sites documented on the main campus also are presumed potentially eligible for listing in the CRHR for their potential to yield important historical data and for their association with important events, namely the economic development of Santa Cruz County, and particularly its quicklime industry. Several of the recorded sites may predate the Cowell Ranch period, such as the Elfland Kiln (CA-SCR-361H) and Upper Quarry Kiln, and may offer contrasting and comparative data on the economy in Santa Cruz prior to the lime industry boom. Other recorded sites (CA-SCR-184H, CA-SCR-185H, CA-SCR-186H, and CA-SCR-424H) include features likely associated with the agricultural activities at Cowell Ranch in the late 19th to early 20th century. Based on their locations, two sites may not be directly associated with Cowell Ranch; these include a habitation site (CA-SCR-262H) and domestic debris dump (CA-SCR-360H). Finally, one resource (CA-SCR-359H) served as the original City of Santa Cruz reservoir and is now occupied by the site of the UC Santa Cruz Arboretum and Botanic Gardens. One previously recorded site, SCR-277H (also known as CA-SCR-227H), does not appear to be eligible for listing in the CRHR. It consists of a historic period agricultural field and was recorded because it appeared on a 1931 aerial photo; today, it does not appear to retain any elements that suggest its historical character, and it has little potential to provide additional historical information beyond its recorded location.

Tribal Cultural Resources

On February 22, 2020 UC Santa Cruz sent letters to the six Native American Tribes that had previously requested, in writing, to be informed by UC Santa Cruz of proposed projects per PRC Section 21080.3.1 (b)(1). These letters notified the tribes that the project was being addressed under CEQA, as required by PRC Section 21080.3.1. The specific details of the consultations are confidential pursuant to California law; however, a summary of events related to communication between the tribes and UC Santa Cruz is provided in Table 3.4-1.

Table 3.4-1 AB 52 Consultation

Native American Tribe and Contact	Date of Initial Response	Follow-up Response	Comment
Mr. Valentin Lopez, Chairperson of the Amah Mutsun Tribal Band	Chairman Lopez requested consultation via email on 4/21/2020.	Conference call meeting with UC Santa Cruz and Chairman Lopez on 5/20/20 that presented an overview of the 2021 LRDP. On 7/27/2020, UC Santa Cruz emailed a copy of the cultural resources investigation to Chairman Lopez and requested a follow-up meeting. On 10/6/2020, 11/17/2020, and 12/9/2020, UC Santa Cruz emailed Chairman Lopez to set up a meeting to discuss potential mitigation measures. On 12/14/2020, UC Santa Cruz had a conference call with Chairman Lopez regarding potential mitigation measures.	Consultation is ongoing.
Edward Ketchum of the Amah Mutsun Tribal Band	No response.	Not applicable.	Not applicable.
Mark Mondragon of the Amah Mutsun Tribal Band	No response.	Not applicable.	Not applicable.
Ms. Irenne Zwierein, Chairperson of the Amah Mutsun Tribal Band of Mission San Juan Bautista	No response.	Not applicable.	Not applicable.
Mr. Patrick Orozco, Chairman of the Costanoan Ohlone Rumsen-Mutsun Tribe	No response.	Not applicable.	Not applicable.
Ms. Ann Marie Sayers, Chairperson of the Indian Canyon Mutsun Band of Costanoan	No response.	Not applicable.	Not applicable.
Ms. Rosemary Cambra of the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area	No response.	Not applicable.	Not applicable.
Ramona Garibay of the Trina Marine Ruano Family	No response.	Not applicable.	Not applicable.

Source: Data compiled by Ascent Environmental in 2020

As shown in Table 3.4-1, only one Tribe requested consultation with UC Santa Cruz. The Amah Mutsun Tribal Band has identified the eight prehistoric archaeological sites on the UC Santa Cruz main residential campus as tribal cultural resources. This includes the three habitation sites (CA-SCR-3/P-44-000011; CA-SCR-160/P-44-000163; and CA-SCR-4/P-44-00012), five lithic scatter sites (CA-SCR-94/P-44-00098; CA-SCR-142/P-44-000145; CA-SCR-143/P-44-000146; CA-SCR-180/P-44-000182; and CA-SCR-181/P-44-000183).

A search of NAHC's Sacred Lands Files revealed that Native American cultural sites have been previously recorded within both the UC Santa Cruz main residential campus and the Westside Research Park site.

Historical Resources

As part of a Getty Campus Heritage Grant awarded to UC Santa Cruz, the campus core was surveyed and evaluated in 2005. The survey concluded that portions of the original UC Santa Cruz campus core, including the first six colleges and a number of other campus buildings (see Table 3.4-2 and Figure 3.4-1), could be significant at the national level as a potential historic district under NRHP/CRHR Criterion C/3, as an exceptional example of the Bay Region Modernism movement. As noted in the archival research conducted as part of the Getty Campus Heritage Grant, planning for the UC Santa Cruz campus began in 1961; the administrators urged diversity of design with the

avoidance of a “single hand (architect)” approach to architecture on the university campus. The Regents approved the UC Santa Cruz campus master plan in 1963 after years of thoughtful collaboration by a Campus Planning Committee comprised of school administrators and nationally renowned architects and landscape architects including, Ernest J. Kump, Robert Anshen, Theodore Bernardi, John Carl Warnecke, and Thomas Church. Driven by the philosophies of landscape architect Thomas Church, the Campus Planning Committee designed a campus of diverse building styles and characters that protected a naturally majestic site (Architectural Resources Group 2006).

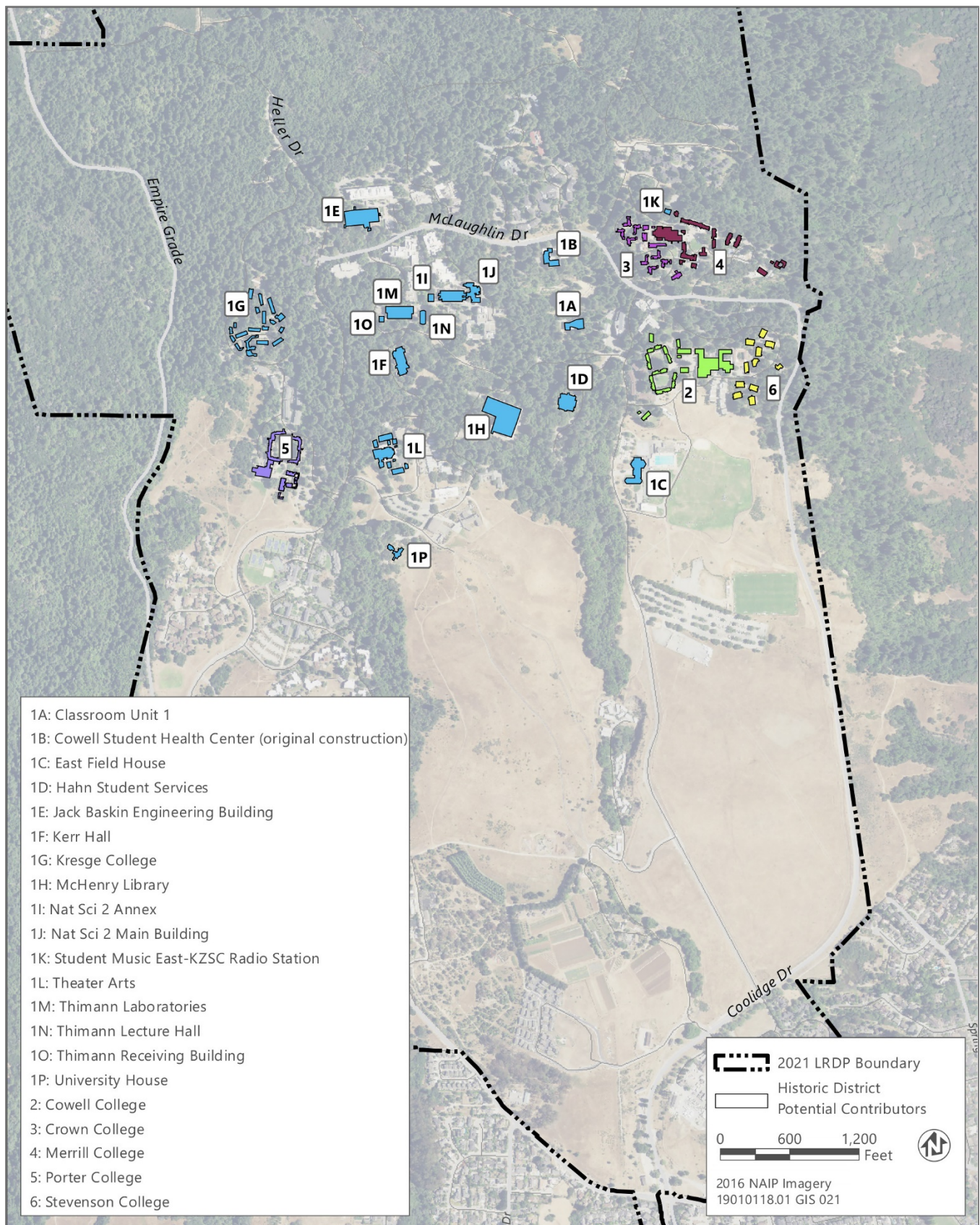
It is important to note that at the time of the 2005 survey, the earliest buildings on the UC Santa Cruz campus were only 40 years in age and did not meet the recommended 50-year threshold for buildings eligible for the NRHP. As such, the buildings in Table 3.4-2 were identified as having the potential to contribute to a UC Santa Cruz campus core historic district when they reached 50 years in age. Because these potentially contributing individual buildings and groups of buildings are spread throughout the campus core, interspersed with a mixture of newer buildings, this would be considered a discontinuous historic district. Consistent with the original 1963 master plan idea of avoiding a single architect design, newer buildings and structures with different architectural styles intermingle with the buildings listed in Table 3.4-2.

Table 3.4-2 UC Santa Cruz Campus Core Potential Historic District Contributors

Building Name	Construction Year
Classroom Unit 1	1972
Cowell College	1966
Cowell Student Health Center (original construction)	1970
Crown College	1967
East Field House	1965
Hahn Student Services	1965
Jack Baskin Engineering Building	1971
Kerr Hall	1973
Kresge College	1973
McHenry Library	1966
Merrill College	1968-1971
Nat Sci 2 Annex	1969
Nat Sci 2 Main Building	1969
Porter College	1971-1973
Stevenson College	1966-1968
Student Music East-KZSC Radio Station	1967
Theater Arts	1971
Thimann Laboratories	1965
Thimann Lecture Hall	1965
Thimann Receiving Building	1965
University House	1967

Source: architecture + history 2020.

As described above, the Cowell Lime Works Historic District is a collection of industrial and ranch-related buildings, structures, and objects constructed of wood and limestone masonry that are scattered over an area of about 30 acres just inside the UC Santa Cruz main residential campus entrance. The Cowell Lime Works Historic District was listed at the local level of significance under NRHP Criterion A and CRHR Criterion 1 in the area of industry. While many of the resources have been altered or have deteriorated, they still create a cohesive historic district conveying both the process and physical characteristics of the historic Cowell Lime Works. Table 3.4-3 shows the buildings that are listed in the NRHP as contributors to the historic district.



Source: Data downloaded from USFWS in March 2020

Figure 3.4-1 Contributors to a Potential Discontiguous Historic District

Table 3.4-3 Cowell Lime Works Historic District Contributors

Building Name	Address	Construction Year
Blacksmith Shop #1	93 Ranch View Road	1850s, circa
Blacksmith Shop #2	93 Ranch View Road	1850s, circa
Cardiff House Women's Center (Ranch House)	117 Carriage House Road	1850s, circa; expanded 1864
Cook House	109 Coolidge Drive	1850s, circa
Cooperage	113 Coolidge Drive	1854
Granary	102 Coolidge Drive	1860s, circa
Hay Barn	94 Ranch View Road	1850s, circa
Powder House	90 Ranch View Road	1850s, circa
Stone House (Paymaster's House)	100 Coolidge Drive	1860s, circa
Barn Theater	101 Coolidge Drive	1850s, circa

Source: architecture + history 2020

3.4.3 Environmental Impacts and Mitigation Measures

SIGNIFICANCE CRITERIA

Thresholds of significance used in this EIR are based on Appendix G of the State CEQA Guidelines. 2021 LRDP implementation would result in a significant impact on cultural resources if it would:

- ▶ cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5 of the State CEQA Guidelines;
- ▶ cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5 of the State CEQA Guidelines;
- ▶ disturb any human remains, including those interred outside of dedicated cemeteries; or
- ▶ cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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:
 - i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
 - ii) 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

ANALYSIS METHODOLOGY

The impact analysis for archaeological resources is based on the findings of the *Technical Memo for Cultural Resource Studies, UC Santa Cruz, Long Range Development Plan* (Pacific Legacy 2020), which is included as Appendix E1. The impact analysis for historical resources is based on the findings and recommendations of the *UC Santa Cruz 2020 Long Range Development Plan Historic Resources Technical Memorandum* (architecture + history 2020), which is included as Appendix E2. The analysis is also informed by the provisions and requirements of federal, state, and local laws and regulations that apply to cultural resources.

For the purposes of the impact discussion, "historical resource" is used to describe built-environment historic period resources. Archaeological resources (both prehistoric and historic period), which may qualify as "historical resources"

pursuant to CEQA, are analyzed separately from built-environment historical resources. Section 15064.5 of the State CEQA Guidelines defines “substantial adverse change” as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. Material impairment includes changes to the physical characteristics that make a historical resource eligible for listing in the CRHR such that the resource would no longer be eligible for the NRHP, CRHR, or local historical registers (State CEQA Guidelines, Title 14, Section 15064.5(b)(2)).

PCR Section 21083.2 defines “unique archaeological resource” as an archeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following CRHR-related criteria: (1) that it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) that it has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) that it is directly associated with a scientifically recognized important prehistoric or historic event or person. An impact on a “nonunique resource” is not a significant environmental impact under CEQA (State CEQA Guidelines Section 15064.5[c][4]). If an archaeological resource qualifies as a resource under CRHR criteria, then the resource is treated as a unique archaeological resource for the purposes of CEQA.

PRC Section 21074 defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe” that are listed or determined eligible for CRHR listing, listed in a local register of historical resources, or otherwise determined by the lead agency to be a tribal cultural resource.

In addition, according to State CEQA Guidelines Section 15126.4(b)(1), if a project adheres to the “Secretary of the Interior’s Standards for the Treatment of Historic Properties,” the project’s impact “will generally be considered mitigated below the level of a significance and thus is not significant.”

ISSUES NOT EVALUATED FURTHER

All issues applicable to archaeological, historical, and tribal cultural resources listed under the significance criteria above are addressed in this section.

IMPACTS AND MITIGATION MEASURES

Impact 3.4-1: Impacts to Unique Archaeological Resources

Future development associated with the 2021 LRDP could be located on properties that contain known or unknown archaeological resources and ground-disturbing activities could result in discovery of or damage to yet undiscovered archaeological resources as defined in CEQA Guidelines Section 15064.5. This would be a **potentially significant** impact.

Archaeological testing at several sites on the UC Santa Cruz campus in the 1960s resulted in the recovery of nearly 1,300 artifacts. Artifact types and radiocarbon dates suggest campus lands were occupied by Native inhabitants as early as 5,500 BP (3550 BC) to as recently as 200 BP (1750 AD).

Eight prehistoric archaeological sites have been recorded on the main campus. None has been formally evaluated for listing in the CRHR. Three habitation sites have the potential to yield important information and may be eligible for listing in the CRHR. The remaining five sites are recorded as lithic scatters. These eight sites have been assumed eligible for listing in the CRHR, however for management and preservation purposes until their significance can be documented through archaeological testing.

Eleven historic period archaeological sites and two historic period archaeological districts have been identified on the UC Santa Cruz main campus. The Cowell Home Ranch District was determined not eligible for listing in the NRHP in 2003; however, the district may still be eligible for listing in the CRHR. The Cowell Lime Works Historic District has been evaluated as eligible for the NRHP/CRHR; the district was listed in 2007. The remaining sites have not been formally evaluated but are assumed eligible for management and preservation.

The 2021 LRDP proposes general types of campus development and land uses to support projected campus population growth and to enable expanded and new program initiatives. This development would be related to academic, residential, and infrastructural space and would include various levels of ground disturbance. As currently envisioned, development under the 2021 LRDP would occur primarily within the central and lower campus subareas as infill or expansion of already developed areas, although new development would also occur on the north campus. Additionally, the 2021 LRDP plans for the Westside Research Park to be developed with mixed-use academic, research, and housing.

While new development under the 2021 LRDP would generally avoid disturbance in the areas of the recorded archaeological sites on the campus, some development could encroach into the vicinity of known archaeological sites. Further, development or improvements in locations of sensitivity, where highly important sites are most likely to be located, could encounter previously undiscovered or unrecorded archaeological sites and materials. Ground disturbance could damage or destroy previously unknown or known archaeological resources, which would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.4-1: Identify and Protect Unknown Archaeological Resources

As early as possible in the project planning process for individual projects under the 2021 LRDP, UC Santa Cruz shall define the project's area of effect for archaeological resources. UC Santa Cruz shall determine the potential for the proposed project to result in cultural resource impacts, based on the extent of ground disturbance and site modifications anticipated for the proposed project. UC Santa Cruz shall also review confidential resource records to determine whether complete intensive archaeological survey utilizing current techniques and practices, including consultation with a culturally-affiliated Native American tribe has been performed on the site and whether any previously recorded cultural resources are present. UC Santa Cruz shall implement the following steps to identify and protect archaeological resources that may be present in the project's area of effects:

- 1) For project sites that have not been subject to a prior complete intensive archaeological survey, UC Santa Cruz shall ensure that a complete intensive surface survey is conducted by a qualified archaeologist, who meets the Secretary of the Interior's Professional Qualification Standards in Archaeology, once the area of ground disturbance has been identified and prior to soil disturbing activities. Additionally, UC Santa Cruz shall notify the Amah Mutsun Tribal Band of the area not subject to an intensive survey and a tribal representative shall be invited to participate. If an archaeological deposit is discovered, the archaeologist will prepare a site record and file it with the California Historical Resource Information System. In the event of a find within the area of potential effects, UC Santa Cruz shall consult with a qualified archaeologist to design and conduct an archaeological subsurface investigation and/or a construction monitoring plan of the project site to ascertain the extent of the deposit relative to the project's area of potential effects, to ensure that impacts to potential buried resources are avoided. If the qualified archaeologist determines that the archaeological material is Native American in origin and the qualified archaeologist assigned to the surveying and monitoring process is not an authorized representative of the Amah Mutsun Tribal Band, UC Santa Cruz and/or archaeologist shall consult with the Amah Mutsun Tribal Band in the process of designing a survey and monitoring program.
- 2) Where native soils will be disturbed, UC Santa Cruz shall require contractor crews to attend an informal training session provided by UC Santa Cruz prior to the start of earth moving, regarding how to recognize archaeological sites and artifacts. In addition, campus employees whose work routinely involves disturbing the soil shall be informed how to recognize evidence of potential archaeological sites and artifacts. Prior to disturbing the soil, contractors shall be notified that they are required to watch for potential archaeological sites and artifacts and to notify UC Santa Cruz if any are found. In the event of a discovery, UC Santa Cruz shall implement item (4), below.
- 3) If it is determined that a known archaeological site extends into the project's area of potential effects, UC Santa Cruz shall ensure that the resource is evaluated by a qualified archaeologist, who will determine whether it qualifies as a historical resource or a unique archaeological resource under the criteria of CEQA Guidelines Section 15064.4. This evaluation may require additional research, including subsurface testing, or avoidance measures, as described in item (5) below. If the archaeological resources is determined to be Native American in origin, and the qualified

archaeologist performing the evaluation is not an authorized representative of the Amah Mutsun Tribal Band, the archaeologist shall consult and partner with the Amah Mutsun Tribal Band in the process of evaluating the significance and eligibility of the resource. If the resource does not qualify, or if no resource is present within the project's area of effect, this will be reported in the environmental document and no further mitigation will be required unless there is a discovery during construction.

- 4) If an archaeological resource is discovered during construction (whether or not an archaeologist is present), all soil disturbing work within 100 feet of the find shall cease. UC Santa Cruz shall contact a qualified archaeologist to provide and implement a plan for survey, subsurface investigation as needed to define the deposit, and assessment of the remainder of the site within the project area to determine whether the resource is significant and would be affected by the project. If the archeological resource is determined to be Native American in origin, and the qualified archaeologist performing the evaluation is not an authorized representative of the Amah Mutsun Tribal Band, the archaeologist shall consult and partner with the Amah Mutsun Tribal Band in the process of planning a survey program and evaluating the significance and eligibility of the resource. Mitigation Measure 3.4-1(2) and (3) shall also be implemented.
- 5) If archaeological material within the project's area of effects is determined to qualify as a historical resource or a unique archaeological resource (as defined by CEQA), UC Santa Cruz shall consult with the qualified archaeologist to consider means of avoiding or reducing ground disturbance within the site boundaries, including minor modifications of building footprint, landscape modification, the placement of protective fill, the establishment of a preservation easement, or more substantial modifications where feasible that will permit avoidance or substantial preservation in place of the resource. If the archeological resource is determined to be Native American in origin, and the qualified archaeologist performing the evaluation is not an authorized representative of the Amah Mutsun Tribal Band, the archaeologist shall consult and partner with the Amah Mutsun Tribal Band in the process of planning a survey program and evaluating the significance and eligibility of the resource. If avoidance or substantial preservation in place is not possible, UC Santa Cruz shall implement Mitigation Measure 3.4-1(6).
- 6) If avoidance or preservation in place is not possible for an archaeological site that has been determined to meet CEQA significance criteria, before the property is excavated, damaged, or destroyed, UC Santa Cruz shall retain a qualified archaeologist who meets the Secretary of the Interior's Professional Qualification Standards in Archaeology. UC Santa Cruz is aware that the Amah Mutsun Tribal Band (AMTB) maintains a staff of registered professional archaeologists and tribal monitors who engage in cultural resource management through the tribe's nonprofit organization, the Amah Mutsun Land Trust (AMLT). When selecting a qualified archaeologist for work that relates to archaeological resources on campus lands that are determined to be Native American in origin, UC Santa Cruz will include AMTB/AMLT in notifications regarding forthcoming opportunities and contracts. The qualified archaeologist, in consultation with UC Santa Cruz and Native American tribes as applicable, shall prepare a research design, and plan and conduct archaeological data recovery and monitoring that will capture those categories of data for which the site is significant. UC Santa Cruz shall also ensure that appropriate technical analyses are performed, and a full written report prepared and filed with the California Historical Resources Information System; UC Santa Cruz shall also provide for the permanent curation of recovered materials.

Significance after Mitigation

Implementation of Mitigation Measure 3.4-1 would reduce potentially significant impacts to unique archaeological resources to less than significant because mitigation would be developed in coordination with the appropriate federal, state, and/or local agency(ies) and tribes to avoid, move, record, or otherwise treat the archaeological resource appropriately, in accordance with pertinent laws and regulations. Therefore, the project's impacts would be **less than significant**.

Impact 3.4-2: Substantial Adverse Change in the Significance of a Tribal Cultural Resource

Future development associated with the 2021 LRDP would involve land development activities that could cause a substantial adverse change in the significance of a tribal cultural resource. The eight prehistoric archaeological sites that currently exist on the main residential campus have been identified as tribal cultural resources, and ground-disturbing construction activities could unearth previously unrecorded resources. This impact would be **potentially significant**.

As described previously, UC Santa Cruz sent notification letters to six tribes February 22, 2020 per PRC 21080.3.1 (b)(1). UC Santa Cruz had a verbal communication with Mr. Valentin Lopez, Chairperson of the Amah Mutsun Tribal Band. The Amah Mutsun Tribal Band identified the eight prehistoric archaeological sites on the UC Santa Cruz main residential campus as tribal cultural resources.

Additionally, the campus is located in a region where significant resources have been documented. The NAHC Sacred Lands database search revealed that Native American cultural sites (i.e., sites that have either not been evaluated or do not meet the definition of a tribal cultural resource under PRC Section 21074) have been previously documented within both the UC Santa Cruz main residential campus and the Westside Research Park site. While none of the envisioned development areas are located on sites of known prehistoric archaeological materials, there remains a potential that unrecorded prehistoric archaeological resources that may meet the definition of tribal cultural resources could be unearthed or otherwise discovered during ground-disturbing construction activities. Therefore, this impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-2: Protect Tribal Cultural Resources

No less than 2 weeks prior to ground disturbance within 400 feet of a known prehistoric archaeological deposit (eight prehistoric archaeological sites are currently known to exist on the main residential campus), UC Santa Cruz shall notify the Amah Mutsun Tribal Band of the potential ground disturbance. As part of the notification, a Native American monitor of the Amah Mutsun Tribal Band will be provided an opportunity to monitor during ground disturbance for potential archaeological materials and human remains within 400 feet of a known prehistoric archaeological deposit. In addition, as described in Mitigation Measure 3.4-1(1), if a previously unknown prehistoric archaeological deposit is uncovered during construction, a Native American monitor of the Amah Mutsun Tribal Band will be provided the opportunity to monitor grading within 400 feet of the find. If the find is Native American in origin, the Amah Mutsun Tribal Band shall coordinate with UC Santa Cruz regarding appropriate treatment, including preparation and implementation of a formal treatment plan. As described in Mitigation Measure 3.4-1(5), the preferred method of treatment is avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria. If avoidance or preservation is not possible, potential curation or reinterment (either on-site or at an appropriate off-site location, as designated and previously approved by the tribe), of the encountered tribal cultural resources would be coordinated and approved by the tribe.

Significance after Mitigation

Implementation of Mitigation Measure 3.4-2 would reduce the potentially significant impact on tribal cultural resources to **less than significant** because the culturally affiliated tribe would be provided the opportunity to monitor construction and by requiring appropriate and respectful treatment (i.e., proper care as determined through preparation and implementation of a treatment plan that is approved by the tribe) of artifacts if they are recovered.

Impact 3.4-3: Impacts to Human Remains

Although unlikely, construction and excavation activities associated with project development could unearth previously undiscovered or unrecorded human remains, if they are present. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097 would make this impact **less than significant**.

No historic period burials or cemeteries are known within the UC Santa Cruz main residential campus or on the Westside Research Park parcel. However, two prehistoric burials were reportedly recovered from an archaeological site in the 1960s. Grave sites and Native American remains can occur outside of dedicated cemeteries or burial sites. Ground-disturbing construction activities could uncover previously unknown human remains, which could be archaeologically or culturally significant. The 2021 LRDP proposes new development and building improvements involving construction activities that would disturb native terrain, including excavation, grading, and soil removal; therefore, the potential exists for previously undiscovered human remains to be discovered.

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Sections 7050.5 and 7052 and California PRC Section 5097.

If human remains are discovered during any construction activities, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and UC Santa Cruz shall notify the Santa Cruz County coroner and the NAHC immediately, according to PRC Section 5097.98 and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the NAHC to be Native American, the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Following the coroner's findings, UC Santa Cruz and the NAHC-designated most likely descendant shall recommend the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.94.

Compliance with California Health and Safety Code Sections 7050.5 and 7052 and California PRC Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.4-4: Impacts to Historical Resources

The 2021 LRDP proposes general types of campus development to support projected campus population growth and to enable expanded and new program initiatives, including the renovation of some existing buildings. This could result in damage, destruction, or loss of integrity to a historic building, structure, or district, thereby resulting in a substantial adverse change in the significance of a historical resource as defined in Section 15064.5. This would be a **potentially significant** impact.

Historical (or built-environment) resources include standing buildings (e.g., houses, barns, cabins) and intact structures (e.g., dams, bridges). Over the years, historical resources on campus have been identified through historic building surveys and cultural resource studies. These surveys and studies have led to the identification of the NRHP-listed Cowell Lime Works Historic District and a potential discontinuous Campus Core historic district. Additionally, buildings that currently are, or will become, 50 years old during the planning period for this 2021 LRDP could be evaluated as eligible for listing in the CRHR or NRHP.

The 2021 LRDP proposes general types of campus development and land uses to support projected campus population growth and to enable expanded and new program initiatives. This development would be related to academic, residential, and infrastructural space. As currently envisioned, development under the 2021 LRDP would occur primarily within the central and lower campus subareas as infill or as expansion of already developed areas, although some development would extend north from the Campus Core. Within the Cowell Lime Works Historic District, some limited development could occur, in addition to rehabilitation of historic buildings, for academic & support facilities, community-facing programs, and visitor resources as described in the land use designation for the Historic District in Chapter 2, "Project Description." As discussed in Section 3.1, "Aesthetics," a Management Plan for the Cowell Lime Works Historic District is being refined to identify opportunities to further improve the historic district for use as a campus

and community amenity including adaptive reuse and rehabilitation of existing structures that preserve the spatial and historic character relationships in the Cowell Lime Works Historic District.

Damage to or destruction of a building or structure that is a designated historic resource, eligible for listing as a historic resource, or a potential historic resource that has not yet been evaluated, could result in the change in its historical significance. Similarly, the integrity of a historic district could be adversely affected by either (1) the direct demolition or substantial modification of contributing buildings or (2) the construction of noncontributing buildings within colleges deemed to be contributing. This must be examined on a case-by-case basis as specific development is proposed/designed under the 2021 LRDP to determine whether sufficient modifications within a historic district could result in a loss of integrity and therefore a change in its historical significance. However, as the 2021 LRDP does not include specific sites for development or building designs and definitive footprints for the envisioned development, potential modifications and adverse changes to historic resources cannot be precluded at this time. Therefore, the impact to historical resources would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-4a: Protect Cowell Lime Works Historic District

During project-specific environmental review of development under the 2021 LRDP, UC Santa Cruz shall define the project's area of effect for historic buildings and structures as early as possible. If the project is located within or adjacent to the Cowell Lime Works Historic District, UC Santa Cruz shall take the following measures into account in project design to preserve the historic visual quality of the historic district:

- ▶ To the greatest extent feasible, a buffer of at least 200 feet shall be maintained between the boundaries of the Cowell Lime Works Historic District and new building development that would be visible against the backdrop of historic buildings from significant campus viewpoints.
- ▶ Any development, including new buildings, structures, access improvements, within a 500-foot buffer or within the district boundaries shall be evaluated by an architectural historian prior to implementation and conducted in compliance with the "Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings" (Weeks and Grimmer 1995).
- ▶ New buildings or structures within 500 feet of the district boundaries shall be subject to design review by the Design Advisory Board, to ensure that design does not interfere with the historic aspect of the district and its buildings with respect to scale, massing, and materials, such that the rural historic visual character of the district is maintained.

Mitigation Measure 3.4-4b: Protect the Potential Campus Core Discontiguous Historic District

During project-specific environmental review of development under the 2021 LRDP, UC Santa Cruz shall define the project's area of effect for historic buildings and structures as early as possible. For projects affecting any building identified as a potential contributor to the potential Campus Core discontiguous historic district, UC Santa Cruz shall implement the following procedures:

- ▶ For all buildings located within the potential Campus Core discontiguous historic district, projects involving interior alterations or routine maintenance work do not need review by an architectural historian.
- ▶ For minor exterior repairs that do not alter the visual appearance of the building—such as caused by water damage—to buildings that could be contributors to the potential Campus Core discontiguous historic district, if the repairs meet the "Secretary of the Interior's Standards for the Treatment of Historic Properties," then review by an architectural historian is not required. Buildings that contribute to the potential Campus Core discontiguous historic district are Classroom Unit 1, Cowell College, Cowell Student Health Center (original construction), Crown College, East Field House, Hahn Student Services, Jack Baskin Engineering Building, Kerr Hall, Kresge College, McHenry Library, Merrill College, Nat Sci 2 Annex, Nat Sci 2 Main Building, Porter College, Stevenson College, Student Music East-KZSC Radio Station, Theater Arts, Thimann Laboratories, Thimann Lecture Hall, Thimann Receiving Building, and the University House.

- ▶ For larger exterior repairs, building additions, or demolition of buildings that could be contributors to the potential Campus Core discontinuous historic district, UC Santa Cruz shall retain a qualified architectural historian to determine if the building, or group of buildings, could be contributors. If large repairs, alterations, or demolitions are proposed at Cowell, Crown, Merrill, Porter, or Stevenson colleges, those groups of buildings shall be evaluated for their potential to comprise separate, individual sub-districts. (Note: Kresge College is not included in this group because Kresge College has been previously been evaluated at a district level; due to lack of integrity, the college is not eligible for listing on the NRHP or CRHR.)

The qualified architectural historian shall record the buildings on the appropriate California Department of Parks and Recreation DPR 523 forms and evaluate the buildings against NRHP and CRHR significance criteria. If the building or group of buildings does not meet the CEQA criteria for a historical resource, no further mitigation is required. If the buildings qualify as a historic resource, the architectural historian and UC Santa Cruz shall consult to consider measures that would enable the project to avoid direct or indirect impacts to the potential Campus Core discontinuous historic district or contributing building.

If the project cannot avoid modifications to the building, UC Santa Cruz shall ensure that documentation and treatment shall be carried out by a qualified architectural historian, as follows:

- a) If the building or structure can be preserved on-site, but remodeling, renovation or other alterations are required, this work shall be conducted in compliance with the “Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings” (Weeks and Grimmer 1995).
 - b) If a significant historic building or structure is proposed for major alteration or renovation, or to be moved and/or demolished, UC Santa Cruz shall ensure that a qualified architectural historian thoroughly documents the building and associated landscaping and setting. Documentation shall include still and video photography and a written documentary record of the building to the standards of the Historic American Building Survey (HABS) or Historic American Engineering Record (HAER), including accurate scaled mapping, architectural descriptions, and scaled architectural plans, if available. A copy of the record shall be deposited in the McHenry Library Special Collections, and with the California Historical Resources Information System. The record shall be accompanied by a report containing site-specific history and appropriate contextual information. This information shall be gathered through site-specific and comparative archival research, and oral history collection as appropriate.
 - c) If preservation and reuse at the site are not feasible, the historical building shall be documented as described in item (b) and, when it is physically and financially feasible, it shall be moved and preserved or reused.
 - d) If, in the opinion of the qualified architectural historian, the nature and significance of the building is such that its demolition or destruction cannot be fully mitigated through documentation, UC Santa Cruz shall reconsider project plans in light of the high value of the resource, and implement more substantial modifications, where feasible, to the proposed project that would limit the degree of modification or allow the structure to be preserved intact. These could include project redesign, relocation, or abandonment. If no such measures are feasible, the historical building shall be documented as described in item (b).
- ▶ For new infill construction within the potential historic district that does not involve building demolition:
 - a) Infill projects outside Cowell, Crown, Merrill, Porter, or Stevenson colleges would not affect the potential college sub-districts or the potential Campus Core discontinuous historic district, and do not need review by an architectural historian; and
 - b) Infill projects within Cowell, Crown, Merrill, Porter, or Stevenson College will require review by an architectural historian for elements such as form, massing, and scale, to ensure visual compatibility with the college, and the review shall be conducted in compliance with the “Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings” (Weeks and Grimmer 1995).

Mitigation Measure 3.4-4c: Conduct Project-Specific Surveys and Implement Measures to Protect Previously Unidentified Historic Resources

For areas outside the Cowell Lime Works Historic District and the potential Campus Core discontinuous historic district, as early as possible in the project planning process, UC Santa Cruz shall define the project's area of potential effect for historic structures. UC Santa Cruz shall determine the potential for the project to result in impacts to or alteration of historic structures, based on the extent of site and building modifications anticipated for the proposed project.

Before altering or otherwise affecting a building or structure 50 years old or older that has not been evaluated previously, UC Santa Cruz shall retain a qualified architectural historian to record it at professional standards and assess its significance under CEQA Guidelines Section 15064.4. The evaluation process shall include the development of appropriate historical background research as context for the assessment of the significance of the structure in the history of the UC system, the campus, and the region. For historic buildings, structures or features that do not meet the CEQA criteria for historical resource, no further mitigation is required, and the impact would be less than significant.

For a building or structure that qualifies for listing on the CRHR, UC Santa Cruz shall consult with the architectural historian to consider measures that would enable the project to avoid direct or indirect impacts to the building or structure. These could include preserving a building on the margin of the project site, using it "as is," or other measures that would not alter the building.

If the project cannot avoid modifications to a significant building or structure, UC Santa Cruz shall ensure that documentation and treatment shall be carried out by a qualified architectural historian, as described below:

- a) If the building or structure can be preserved on site, but remodeling, renovation or other alterations are required, this work shall be conducted in compliance with the "Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings" (Weeks and Grimmer 1995).
- b) If a significant historic building or structure is proposed for major alteration or renovation, or to be moved and/or demolished, UC Santa Cruz shall ensure that a qualified architectural historian thoroughly documents the building and associated landscaping and setting. Documentation shall include still and video photography and a written documentary record of the building to the standards of the Historic American Building Survey (HABS) or Historic American Engineering Record (HAER), including accurate scaled mapping, architectural descriptions, and scaled architectural plans, if available. A copy of the record shall be deposited in the McHenry Library Special Collections, and with the California Historical Resources Information System. The record shall be accompanied by a report containing site-specific history and appropriate contextual information. This information shall be gathered through site specific and comparative archival research, and oral history collection as appropriate.
- c) If preservation and reuse at the site are not feasible, the historical building shall be documented as described in item (b) and, when it is physically and financially feasible, it shall be moved and preserved or reused.
- d) If, in the opinion of the qualified architectural historian, the nature and significance of the building is such that its demolition or destruction cannot be fully mitigated through documentation, UC Santa Cruz shall reconsider project plans in light of the high value of the resource, and implement more substantial modifications to the proposed project that would limit the degree of modification or allow the structure to be preserved intact. These could include project redesign, relocation, or abandonment. If no such measures are feasible, the historical building shall be documented as described in item (b).

Significance after Mitigation

Implementation of Mitigation Measures 3.4-4a, 3.4-4b, and 3.4-4c would reduce potentially significant impacts to historic resources because actions would be taken to record, evaluate, avoid, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. However, if demolition or other substantial modifications occur, CEQA Guidelines [Section 15126.4(b)(2)] note that in some circumstances, documentation of a historical resource will not mitigate the effects to a less-than-significant level because the historic resources would no longer exist or would lose its integrity. Therefore, because the potential for permanent loss of a historic resource or its integrity cannot be precluded, the project's impacts would remain **significant and unavoidable**.

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