

D. CULTURAL AND PALEONTOLOGICAL RESOURCES

D.1 ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES

This section assesses the potential for the presence of archaeological and paleontological resources in the Redevelopment Plan Project Area, provides a context for evaluating the significance of archaeological resources that may be encountered, evaluates the potential impacts on archaeological resources, and provides mitigation measures that would avoid or minimize potential impacts on archaeological and paleontological resources.

An independent consultant has prepared an Archaeological Research Design and Treatment Plan (“ARDTP”) for the Treasure Island / Yerba Buena Island Redevelopment Plan Project Area.¹ The research and recommendations of the ARDTP are the basis for the information and conclusions of this EIR section with respect to archaeological resources.

SETTING

Context

In order to predict the archaeological property types that may exist within the Redevelopment Plan Project Area and provide a context for evaluating the significance of archaeological resources that may be encountered, the ARDTP provides a historic context for prehistoric era and historic era settlement in the vicinity of the Redevelopment Plan Project Area.

Geologic Setting

Yerba Buena Island and Treasure Island are part of a highly dynamic geologic landscape. About 200 million years ago, the Pacific Plate was subducted under the North American Plate, producing what is known as the Franciscan Complex of rocks. These constitute the basement rock for the Coast Ranges east of the modern San Andreas Fault, including the San Francisco Peninsula and the islands of the San Francisco Bay. The islands in the Bay (with the exception of the man-made Treasure Island) were formed generally from faulting, downwarping, and flooding. Fossils have been reported in Franciscan rocks, including planktonic marine organisms, mollusks, and plant microfossils (pollen and spores).

The Franciscan Complex on Yerba Buena Island is overlain in some areas by thin sand deposits of the sedimentary Colma Formation. The Colma Formation within San Francisco has the potential to contain paleontological resources. Fossilized remains of mammoth and bison were recovered from an excavation in the gravelly, sandy clay of the Colma Formation at the southeast

¹ Archeo-Tec, Archaeological Research Design and Treatment Plan, Treasure Island Redevelopment Plan Project, City and County of San Francisco, CA, March 2010.

base of Telegraph Hill. This find is the most abundant collection of Pleistocene vertebrates reported in San Francisco.²

Paleosols (buried soil that is relatively stable sediment that is more likely to contain cultural remains) usually overlay the Colma Formation. Several prehistoric sites attest to humans occupying the surface of the Colma Formation during the Middle Holocene (8,000 to 4,000 years before present [B.P.]). These remains were sometimes subsequently buried by erosion and deposition of sediments. Yerba Buena Island's history of deforestation and construction may have caused erosion and redeposition of soils. This process may have contributed to burial of prehistoric sites on the island, and prehistoric remains may still be present.

Treasure Island is composed entirely of fill placed over the Yerba Buena shoals, a submerged area in the middle of the Bay. The shoals varied in elevation from 2 feet to 26 feet below mean lower low water. The fill was derived from dredging in the Presidio, Alcatraz, and Knox shoals,³ and from other nearby dredging grounds. Today, the majority of Treasure Island is capped by asphalt, concrete, and landscaping.

Natural Setting

About 15,000 years B.P., the coastline was approximately 15 miles west of the current San Francisco coastline. At that time, the San Francisco Bay was a low-lying plain cut by the now-vanished California River. The valley supported riparian forests and oak savannahs and was home to tule elk, deer, and antelope, as well as megafauna before their extinction. A warming climate caused glacial melting, which in turn caused sea levels to rise. By 8,000 years B.P., rising sea levels caused inundation of the San Francisco Bay, burying the old shore under deep sediments. The flooding of the Franciscan Valley to form San Francisco Bay also led to the formation of Yerba Buena Shoals, immediately to the north of Yerba Buena Island and underlying Treasure Island.

Around 3,200 B.P., glacial advance caused cooler temperatures and increased precipitation in central California. Rainfall decreased after 1,375 B.P. and a warmer climate ensued. A long period of cool climate conditions, which is thought to be a worldwide phenomenon known as the Little Ice Age, occurred from 575–150 B.P. Human settlement over time was influenced by alternating abundance and decline of flora and fauna. Fluctuations in the Bay shoreline over time meant that the amount of Bay shoreline inhabited or otherwise exploited by humans also varied. Periods of increased precipitation would have increased erosion along rivers and, in turn, the deposition of sediments at the mouths of rivers. In addition, changes in rivers and siltation could have buried many sites of human occupation.

² Peter U. Rodda, "Late Pleistocene Vertebrates from Downtown San Francisco," *Journal of Paleontology* (Abstract), Volume 67, No. 6, November 1993.

³ Navy EIS, p. 3-126

Prehistoric Period

Current archaeological evidence suggests humans have occupied the San Francisco Bay Area for at least 11,000 years, although no sites older than 6,000 years B.P. have been recorded in the San Francisco Peninsula. The early human presence in California is described in three periods: the Early Holocene (11,000–8,000 years B.P.); the Middle Holocene (8,000–4,000 years B.P.); and the Late Holocene (4,000–230 years B.P.). These are characterized by major regional shifts in settlement patterns, technology, economy, and trade that are evident in the archaeological record.

Early Holocene (11,000–8,000 years B.P.)

Archaeological evidence gathered from Early Holocene sites indicates that a sparse population of semi-sedentary bands of hunter-gatherers arrived in the Northern and Central California region by 11,000 years B.P., or possibly even earlier. The earliest known prehistoric sites in Northern California (CA-LAK-36, CA-NAP-131, and CA-MER-215) date from before the Early Holocene period. These early Californians probably lived for the most part in open-air shelters, although they also built rock shelters in some areas. Deep refuse deposits dating to the Early Holocene are absent throughout California, suggesting that people used locations only temporarily before abandonment, or briefly for recurrent periods. Projectile points dating to this period are commonly found, indicating hunting and butchering subsistence activities, and were likely used for the taking of large mammals, although hunting of smaller mammals and waterfowl also took place. Shellfish were a staple, though their consumption was less predominant during the Early Holocene than it was in later times. Seeds were likely collected.

Although four Early Holocene sites have been documented in the San Francisco Bay Area (CA-CCO-637 and CCO-696, CA-SCL-178, and CA-SCR-177), no Early Holocene sites have been found in San Francisco. Early Holocene sites found in association with paleosols in the San Francisco Bay region contained handstones and milling slabs, minimally modified cutting and scraping tools, and other chipped stone tools, as well as marine shellfish and the remains of a variety of mammals.

Middle Holocene (8,000–4,000 years B.P.)

After about 8,000 B.P., a general shift in subsistence occurred with specialized technology and exploitation of new ecological niches. In the absence of big game food sources, people began to exploit more diversified animal species and shifted to an increased reliance on plants and seeds. This resource diversification required seasonal migrations in order to access different environments throughout the year. Consequently, the “tool kit” of prehistoric peoples became more specialized, growing to include varied methods of food processing. The diverse habitats and year-round availability of food in Central California also contributed to the shift to exploitation of resources other than big game. The increasingly prominent role of seed collecting is reflected in the archaeological record by large numbers of food grinding implements. As the

use of acorns became more predominant, heavy, deep-basined mills and handstones came into use.

Judging from archaeological evidence, the earliest traces of human habitation on the San Francisco peninsula dated to around 6,000 B.P., and that human habitation has been continuous since that time. The earliest site found in San Francisco was a fragmentary human skeleton dated at 6,270 to 4,880 B.P., confirming that early, deeply buried prehistoric sites may be present in San Francisco.

Late Holocene (4,000–230 B.P.)

Beginning around 5,000 B.P. the climate began to shift from warm and dry to cooler and wetter conditions, causing an adjustment to new environmental conditions. This period is characterized by further niche specialization, a refinement of various technologies, and specialized exploitation of plant and animal species. Many sites dating to the Late Holocene in the San Francisco Bay region are shellmounds, midden sites containing large quantities of mollusk shells. Sites dating to the Late Holocene have been found in San Francisco, primarily in the South of Market region. In the early 20th century, one investigator recorded over 400 shellmounds around the edge of San Francisco Bay.

A recorded site, CA-SFR-4/H, is located on the northeast side of Yerba Buena Island in a saddle at the northeastern corner of the island. Anecdotes from the mid-19th century report ruins of a native village that was visible on the surface. The site was studied as part of the 2002–2004 Bay Bridge East Span Project. Radiocarbon and obsidian hydration dates from CA-SFR-4/H have demonstrated occupation beginning around 3,400 B.P. and ending around 470 B.P. This site has yielded a wide array of worked bone and stone objects, tools, polished stone, and beads, indicating long and sustained occupation. The lowest stratum contains several burials from the early Late Holocene. The extent of the site, and the variety of resource exploitation and social development associated with the artifacts, suggests that other sites may be present on Yerba Buena Island.

Yerba Buena Island would have been attractive for permanent or semi-permanent settlement. It offered at least one freshwater spring, plentiful firewood, and access to fish and shellfish. Ethnohistorical inquiry suggests that Yerba Buena Island may have been used by the East Bay Ohlone *Huchiun* tribelet. At the time of the Spanish arrival in the 1700s, the Ohlone occupied the San Francisco peninsula, inland around the South and East Bay regions, the Alameda and western Contra Costa bay shores, and south San Pablo Bay. (Marin and southern Sonoma counties were populated by the Coast Miwok.) Ohlone people are known to have traveled throughout the Bay on boats made of tule reeds, and the island lies along one possible route between the San Francisco Peninsula and the East Bay.

Ohlone settlements were comprised of a series of bulrush- or grass-bundle-thatched structures that housed between 40 and 400 people. Women were responsible for processing acorns and plant items (important sources of carbohydrates), as well as basketry and multiple other tasks. Men gathered shellfish, fish, and game (especially sea mammals) using bows and arrows, weirs, nets, hooks and lines, and various other traps. Material culture featured twined basketry; tule boats; robes of rabbit, sea otter, or buckskin; obsidian (obtained through trade) and chert stone tools; greenstone or sandstone spools; and beads used as decoration or currency.

Historic Period

Spanish and Russian Period (1812–1835)

The first Spanish ship sailed through the Golden Gate in 1775. From that time until 1812, the Spanish were the only European presence in the Bay Area. The principal centers of Spanish activity were the Presidio and Mission Dolores until the beginnings of Yerba Buena village in 1835. Documentary evidence suggests that the Spanish made little effort to explore and exploit the economic potential of the region. For example, travel within the Bay Area was entirely by land; boats were rarely used to cross the Bay.

Colony Ross (Fort Ross), an outpost of the Russian-American Company in Sonoma County, was established in 1812. One purpose of the colony was to hunt for the valuable sea otters that inhabited the California coast. These hunters were sent as far south as San Francisco Bay and even the Channel Islands. Along with Colony Ross, the Russians kept a permanent camp on the Farallon Islands, 25 miles off shore from San Francisco. Hunting of otter in the Bay was restricted by the Spanish, and hunters were only allowed along the coast from Cape Mendocino to Drake's Bay, although clandestine hunting continued. After Mexican independence from Spain, the Russians entered into official contracts with the new government and were legally allowed to hunt for sea otters in waters previously off-limits.

Mexican and Early American Period (1835–1867)

The Mexican and Early American Period in San Francisco's history began in 1835 with the founding of Yerba Buena village, where today, San Francisco's Chinatown is constructed. On July 8, 1846, Yerba Buena (renamed San Francisco) passed from Mexican to American jurisdiction, when the sloop-of-war *Portsmouth* under Captain John B. Montgomery's command raised the Stars and Stripes and claimed California for the United States.

Several conflicting claims to ownership of Yerba Buena Island arose. In 1835, the Mexican government gave a certificate of ownership of Yerba Buena Island to Captain Gorham Nye, as a reward for transporting the body of Governor Jose Figueroa to Mexico. In 1842, John Fuller and Nathan Spear purchased some of the goats brought to San Francisco by Captain Nye and began grazing them on Yerba Buena Island, selling them for meat in San Francisco. In the late 1840s,

Spear claimed ownership of the island, using the Mexican method of granting ownership to anyone who maintained long, honest, and uninterrupted possession of, or use of, property. In 1849, Spear sold his ownership to Edward King.

In 1850, Elbert Jones claimed that he held title to the island, based on a copy of a grant given to Juan Jose Castro in 1838. The document provided by Castro was in doubt and the claim was never filed with the government. Jones' title was therefore suspect and a lawsuit ensued. Castro claimed that he had built a house and installed servants and livestock on the island, but witnesses in the case stated that there were no buildings on the island. The judge rejected the Castro claim.

Between 1849 and 1867, several other parties claimed ownership. In 1849, John C. Jennings and Thomas Dowling arrived on the island and established residence. Jennings had a barn and stable, a windmill, a carpenter's shop, other buildings, and a wharf and shipyard. Dowling had a comfortable dwelling where he lived with his family. He also built another residence for tenants, opened a quarry, and built three ship repair facilities.

Army Period

In 1867, the United States military asserted a claim to the island, and sent a small garrison of soldiers to establish a post on the island. This group lived there with Dowling and others until 1868 or 1869 when representatives of the Army arrived on the island, destroyed Dowling's residence and ejected the settlers. Dowling's main house was reused as a hospital and Jennings' wharf was retained, but other buildings were apparently demolished to make room for the Army's facilities. The Army population on the island numbered roughly 100 to 120. In 1875, the Army constructed the lighthouse keeper's residence and support buildings; these are still present at the southern end of the island.

In 1879, the Army abandoned the island. A caretaker and his family remained. In 1891, a fire destroyed most of the Army post. Also in 1891, another military facility, the Torpedo Station, was built on the northeastern point of the island. The station consisted of a Torpedo Assembly Building, wharf, officer's quarters, and other buildings and structures; today, only the Torpedo Assembly Building remains.⁴

In 1895, in deference to common usage, the name of the island was officially changed from Yerba Buena Island to Goat Island, recognizing the still-thriving goat population introduced by John Fuller.

⁴ Building 262 historically has been known as the Torpedo Storehouse, Torpedo (Mine) Assembly Building, and the Long Range Accuracy Storage Building. However, for this discussion it will be referred to as the Torpedo Assembly Building. The Draft *Design for Development* refers to this building as the Torpedo Storehouse.

Navy Period

In 1896, Congress called for the establishment of a United States Naval Training Station at Goat Island. The island was transferred to the Navy in 1898. The Army continued to operate the Torpedo Station, the Lighthouse Service operated the lighthouse, and the Navy assumed control over the rest of the island. In 1899, the Navy undertook major grading that flattened and enlarged the saddle of the island, the location of CA-SFR-4/H. The Navy also constructed a barracks for 500 men, which also included space for offices, library, schoolroom, dispensary, brig, mess hall, kitchen, pantry, storehouse, and petty officers' quarters. Subsequently, a Commandant's house and two officers' quarters were constructed. The station also maintained at least one training ship and a receiving ship (eventually replaced by an on-land facility) that served to house unassigned crews until they were assigned to a ship.

The outbreak of World War I led to a surge in construction and population at Goat Island. Dozens of structures ranging from communications towers to a receiving ship dispensary and yeoman school were constructed in 1917–1918. Recruits were crowded into enormous tent camps filling all usable space on the island. The result of this overcrowding was outbreaks of meningococcus and influenza in 1918 and 1919. By 1920, the Naval Training Station had been expanded and the population had grown to around 1,480 people. In 1922, the government decided to move all training activities to the much larger facility in San Diego, and in 1923 the training station was closed. The receiving ship function continued on Goat Island until World War II. In 1931, the name of the island was changed from Goat Island back to Yerba Buena Island.

Although all of the naval station functions had moved to other locations by 1946, many of the buildings on Yerba Buena Island saw periodic use for several decades. In particular, the officers' quarters continued to house officers from Treasure Island. In 1966, several residences were built on the north and west sides of the island for Coast Guard officers. In 1973, a large portion of the Training Station property was transferred to the Coast Guard. The Naval Station was officially closed in 1997.

Treasure Island

Golden Gate International Exposition. Treasure Island was constructed in the shallow shoals north of Yerba Buena Island beginning in 1936. It contains almost 30 million cubic yards of fill. The island has a perimeter seawall composed of rock. A mixture of sand, gravel, and Bay water was poured into the newly created cavity. The Bay water was separated from the sand and gravel and pumped from the developing island through several wells. Desalinization of the fill was

accomplished by pumping millions of gallons of fresh water onto the surface of the island followed by the extraction of the saltwater, now diluted, from the land. At least a 6-foot layer of good topsoil, imported from the San Joaquin Valley, was used to surface the entire man-made island.

Upon the completion of the island, work began on buildings and grounds for the Golden Gate International Exposition. Construction began with the three permanent buildings that were intended to serve the municipal airport after the Exposition closed. The Administration Building was intended to be the terminal, traffic control, and ticket office. These three buildings still remain, identified as Building 1 (the Administration Building) and Buildings 2 and 3 (the hangars). The remainder of the island was filled with temporary buildings, exhibit halls, towers, art, and landscaping. The Golden Gate International Exposition closed on September 29, 1940.

Naval Station Treasure Island (1941–Present). Use of Treasure Island was granted to the Navy with the outset of World War II. A Naval Training and Distribution Center was established on Treasure Island to group servicemen into ship's crews, train them, and then assign the crew to a ship bound for war. Former exhibition palaces became barracks, offices, mess halls, classrooms, galleys, and athletic and entertainment facilities. A pre-embarkation camp was established on the northeast part of the island. Sailors who had been assigned to a ship were restricted to this camp until their ship departed. From June 1945 to March 1946, approximately 1,300 German POWs were held at Treasure Island. In the postwar years Treasure Island continued to operate as a training command. In 1993, Naval Station Treasure Island was selected for closure. The station was operationally closed in 1997.

Archaeological Property Types That May Be Present within the Redevelopment Plan Project Area

The ARDTP identifies archaeological property types that describe patterns of behavior that have taken place within the Redevelopment Plan Project Area. Property type predictions for the project site are based on a review of historic and archaeological research materials, including ethnographic research, research into historic land use patterns, and a review of archaeological property types encountered at nearby sites. While it is impossible to predict all cultural materials that may be present within the Redevelopment Plan Project Area, there is a substantial likelihood that these property types may be encountered during construction of the Proposed Project.

Prehistoric Property Types

Generally speaking, any intact prehistoric deposit found within the Redevelopment Plan Project Area is presumed to be of scientific significance and therefore eligible for the California Register of Historical Resources under Criterion 4 (Information Potential).

Multi-Activity, Year-Round Sites

A multi-activity year-round site is defined as containing more than one of these property types: midden, hearth and ash features, housepits, burials, village sites or shellmounds, as well as other types of habitation sites. Such sites are particularly significant for archaeological study as data derived from them may address a variety of research questions, notably those related to cultural patterns and social organization.

Seasonal Sites

Cultural materials typically present in a seasonal site include dense areas of shell midden containing mammal, bird, and fish bones, evidence of stone and bone tool making, and beads and other decorative objects. The analysis of such sites, if found, would contribute to the understanding of prehistoric land use in the area.

Lithic Scatters

Flaked stone tools and waste flakes from their manufacture are typically found in the form of a diffuse, scattered deposit. These sites are significant in that they can answer a variety of research questions about prehistoric technologies, as well as potentially supply temporal data for any deposits in which they are found. When lithic scatters are found on the ground surface they are generally assumed to have been subject to a greater degree of disturbance than those associated with buried deposits.

Isolated Artifacts

Isolated artifacts may be any of a wide range of materials not apparently associated with a discrete archaeological feature or site. When such items are found outside the context of a site or feature the ability of such artifacts to address research themes and yield important scientific and historical information is limited. However, an isolated artifact exhibiting unusual or formerly unknown characteristics may add new and significant data to our understanding of past lifeways, even in the absence of contextual details.

Isolated Burials and Features

Prehistoric human burials are presumed to be significant, due both to their importance to their descendants and because a great deal of information about past peoples' health and traditional culture can be gleaned from their analysis.

Historical Period Property Types

Refuse

Refuse features include hollow features and sheet refuse. Hollow features include pits, privies, and wells. During their use or upon abandonment, they become a receptacle for refuse. Sheet refuse accumulates in broad scatters on living surfaces over a period of time as people discard refuse in their yard, farms, and working areas, a common 19th-century practice. Refuse features provide evidence of the behaviors of the people who used the Redevelopment Plan Project Area. Refuse features can often be dated and connected to specific individuals who lived on the site.

Architecture

Architectural properties include structural remains such as foundations, wall footings, platforms, collapsed wood buildings, ovens, and stoves. In many cases, the remains correlate to structures depicted on historical maps and other documents. In these instances, the ability of those remains to contribute to important research domains may be limited unless accompanied by a diverse artifact assemblage. Many research questions are often better suited to other research methods such as analysis of primary documents.

Shipwrecks

This property type consists of submerged ships and ship fragments that may have become buried due to land filling for the construction of Treasure Island. At least three ships are recorded as having been lost in or near the Redevelopment Plan Project Area. The *Utica* was a three-masted square-rigged sailing ship measuring about 131 feet long. She was built by Christian Bergh & Co. of New York in 1833. While anchored at San Francisco in 1850, she caught fire and was set adrift to prevent the fire from spreading to other vessels. She drifted toward Yerba Buena Island and was scuttled. The *Crown Princess*, alternatively described as either “Hanoverian” or “Swedish,” reportedly sank north of Goat Island in 1850. One historical account indicates that another unnamed ship ran aground in the shoals north of Goat Island, a loaded barge with rock aboard which was caught at low tide.

Research Themes

An archaeological resource may be eligible for listing in the California Register of Historical Resources (“CRHR”) as a historical resource. As explained below, Public Resources Code Section 5024.1 contains criteria, any one of which, if present, may indicate a resource is historical. Criterion 4 (Information Potential) is the most relevant for archaeological resources and provides that the resource is an historical resource and eligible for listing in the CRHR if the resource shows the potential to yield important scientific or historical information. Integrity of an archaeological resource is the ability of the artifact assemblages, features, or stratigraphic

relationships associated with a resource to address significant research questions. The ARDTP identifies research issues that could potentially be addressed by archaeological features that may be present within the Redevelopment Plan Project Area. Determinations of relevance to research themes provides a context by which to assess the significance and integrity of archaeological features that may be encountered in the field. Examples of research themes identified in the ARDTP include the following:

Prehistoric Period

- Chronology and Cultural History: Unlike historical archaeological sites, for which written records may exist to contextualize archaeological finds, archaeologists must formulate a timeline for prehistoric sites almost exclusively through their cultural assemblages. The study of prehistoric archaeological assemblages, if encountered within the Redevelopment Plan Project Area, would allow such features to be placed within the particular time periods and cultural contexts within which they were created.
- Subsistence and Settlement Patterns: Study of prehistoric artifactual assemblages could provide information about where people lived from season to season, how they structured their communities, what resources were used at various times of the year, and what types of items/materials were important at different times.
- Succession of Prehistoric Populations: Changes in cultural behaviors are often linked to changes in the environment, technological innovation or evolution, and the growth or intrusion/migration of cultural groups. Study of habitation sites could address research questions regarding whether the Redevelopment Plan Project Area was continuously occupied by a prehistoric population, or if there are measurable gaps in time of human presence within the region.
- Trade, Transport, and Inter-Regional Contact: Evidence of trade can typically be documented by the presence or absence of items whose origin or source is exotic (nonlocal). Objects of value have been exchanged for other significant objects throughout prehistory and historical times, and are often tied to available resources and political issues such as cultural boundaries and control over various resources.
- Shell Mounds: Prehistoric shellmounds may have been intentionally constructed landscape features associated with pre-existing cemetery sites, and even after residential abandonment, associated with funeral and memorial feasting. This hypothesis expands on the more widely held belief that shell middens form as a result of discard associated with shellfish consumption at residential sites.

Historical Period

- Russian/Native Alaskan Hunting Settlements: Given the apparent prevalence of clandestine otter hunting, remains of hunting camps may be present on Yerba Buena Island. Such features (if present) would more likely be located on the east side of the island, where they would have been less visible to any observers on the San Francisco peninsula.
- Island Settlement and Homesteading: Between 1835 and 1867, numerous individuals claimed ownership of Yerba Buena Island, resulting in conflicting land grants and legal disputes. Regardless of the legality of these claims, the purported owners of the island

contributed to the building and development on it, adding features such as wharves and docks, houses, stores, wells, and other features.

- Economic and Commercial Development of Yerba Buena Island: A series of entrepreneurs have developed the island's various resources for commercial purposes, (e.g., lumber, quarrying, grazing). Architectural and refuse remains can show evidence of adaptation, innovation, and intercultural exchange.
- Shipwrecks: The study of shipwrecks could reveal scientific and historical information about shipbuilding and shipping industries in the mid-19th century, and about the shipwreck, abandonment, and salvage events.
- Military Institutions: Historical archaeology of military institutions holds the potential for multiple areas of inquiry. The dictates of the national government and military influenced how the military institutions on Yerba Buena Island were structured and managed, what resources were available, and the way that life for personnel and associated civilians was organized. Despite the highly regulated nature of institutional life, individual expression was still possible and is archaeologically recoverable in the form of personal goods or various uses of space and architecture.
- Burials: From 1852 to 1938, a fenced cemetery existed on the west end of the island. It was removed during the Bay Bridge construction in 1938. However, the task of removing bodies from poorly marked or unmarked graves was often imprecise, and the possibility exists that human remains from the cemetery may still be buried on the island. The study of burials could reveal information regarding the identity, health, social status, and cause of death of the deceased and the nature of military burials.

Regulatory Framework

CEQA considers archaeological resources to be an intrinsic part of the physical environment and, thus, requires for any project that the potential of the project to adversely affect archaeological resources be analyzed (CEQA Section 21083.2). For a project that may have an adverse effect on a significant archeological resource, CEQA requires preparation of an environmental impact report (CEQA Section 21083.2 and *CEQA Guidelines* Section 15065). CEQA recognizes two different categories of significant archeological resources: "unique" archeological resources (CEQA Section 21083.2) and archeological resources that qualify as "historical resources" under CEQA (CEQA Section 21084.1; *CEQA Guidelines* Section 15064.5).

Significance of Archeological Resources

An archeological resource can be significant as either a "unique" archeological resource or an "historical resource" or both, but the process by which the resource is identified under CEQA as one or the other is distinct (CEQA Section 21083.2(g); *CEQA Guidelines* 15064.5(a)(2)).

An archeological resource is an historical resource under CEQA if the resource is:

- Listed on or determined eligible for listing on the CRHR; this includes archeological properties listed or eligible for the National Register;

- Listed in a “local register of historical resources”,⁵ or
- Listed in an “historical resource survey.”

Generally, an archeological resource is determined to be an historical resource due to its eligibility for listing to the California Register of Historical Resources or the National Register of Historic Places because of the potential scientific value of the resource, that is, it “has yielded, or may be likely to yield, information important in prehistory or history” (*CEQA Guidelines* Section 15064.5(a)(3)). An archeological resource may be CRHR-eligible under other Evaluation Criteria, such as Criterion 1, association with events that have made a significant contribution to the broad patterns of history; Criterion 2, association with the lives of historically important persons; or Criterion 3, association with the distinctive characteristics of a type, period, region, or method of construction. Appropriate treatment for archeological properties that are CRHR-eligible under criteria other than Criterion 4 may be different than that for a resource that is significant exclusively for its scientific value.

Failure of an archeological resource to be listed in any of these historical inventories, is not sufficient to conclude that the archeological resource is not an historical resource. When the lead agency believes there may be grounds for a determination that an archeological resource is an historical resource, then the lead agency should evaluate the resource for eligibility for listing to the CRHR (*CEQA Guidelines* Section 15064.5(a)(4)).

“Unique archeological resource” is a category of archeological resources created by the CEQA statutes (CEQA Section 21083.2(g)). An archeological resource is a unique archeological resource if it meets any of one of three criteria:

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

Under CEQA, evaluation of an archeological resource as an historical resource is privileged over the evaluation of the resource as a unique archaeological resource in that CEQA requires that “when a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource” (*CEQA Guidelines* Section 15064.5(c)(l)).

⁵ A local register of historical resources is a list of historical or archeological properties officially adopted by ordinance or resolution by a local government (Public Resources Code 5020.1(k)).

Evaluation of an Archeological Resource as Scientifically Significant

In requiring that a potentially affected archeological resource be evaluated as an historical resource—that is, as an archeological site of sufficient scientific value to be CRHR-eligible—CEQA presupposes that the published guidance of the California Office of Historic Preservation (“OHP”) for CEQA providers will serve as the methodological standard by which the scientific, and thus the CRHR-eligibility, of an archeological resource is to be evaluated. As guidance for the evaluation of the scientific value of an archeological resource, the OHP has issued two guidelines: *Archeological Resource Management Reports* (1989) and the *Guidelines for Archeological Research Designs* (1991).

Integrity of Archeological Resource

Integrity is an essential criterion in determining if a potential resource, including an archeological resource, is an historical resource. In terms of CEQA, “integrity” can, in part, be expressed in the requirement that an historical resource must retain “the physical characteristics that convey its historical significance” (*CEQA Guidelines* Section 15064.5(b)).

For an archeological resource that is evaluated for CRHR-eligibility under Evaluation Criterion 4, “has yielded or may be likely to yield information important to prehistory or history,” the word “integrity” is has a different meaning from how it usually applies to the built environment. For an historic building, possessing integrity means that the building retains the defining characteristics from the period of significance of the building. In archeology, an archeological deposit or feature may have undergone substantial physical change from the time of its deposition, but it may yet have sufficient integrity to qualify as a historical resource. The integrity test for an archeological resource is whether the resource can yield sufficient data (in type, quantity, quality, diagnosticity) to address significant research questions. Thus, in archeology “integrity” is often closely associated with the development of a research design that identifies the types of physical characteristics (“data needs”) that must be present in the archeological resource and its physical context to adequately address research questions appropriate to the archeological resource.

Significant Adverse Effect on an Archeological Resource

The determination of whether an effect on an archeological resource is significant depends on the effect of the project on those characteristics of the archeological resource that make the archeological resource significant. For an archeological resource that is an historical resource because of its prehistoric or historical information value, that is, its scientific data, a significant effect is impairment of the potential information value of the resource.

The depositional context of an archeological resource, especially soils stratigraphy, can be informationally important to the resource in terms of datation and reconstructing characteristics of the resource at time of deposition and to interpreting the impacts of later deposition events on the resource. Thus, for an archeological resource eligible to the CRHR under Criterion 4, a significant adverse effect to its significance may not be limited to impacts on the artifactual material but may include effects on the soils matrix in which the artifactual matrix is situated.

Mitigation of Adverse Effect to All Archeological Resources

Preservation in place is the preferred treatment of an archeological resource (CEQA Section 21083.2(b); *CEQA Guidelines* Section 15126.4(b)(3)(a)). When preservation in place of an archeological resource is not feasible, data recovery, in accord with a data recovery plan prepared and adopted by the lead agency prior to any soils disturbance, is the appropriate mitigation (*CEQA Guidelines* Section 15126.4(b)(3)(C)). In addition to data recovery, under CEQA, the mitigation of effects to an archeological resource that is significant for its scientific value requires curation of the recovered scientifically significant data in an appropriate curation facility (*CEQA Guidelines* Section 15126.4(b)(3)(C)) that is compliant with the *Guidelines for the Curation of Archaeological Collections* (California Office of Historic Preservation, 1993). Final studies reporting the interpretation, results, and analysis of data recovered from the archeological site are to be deposited in the California Historical Resources Regional Information Center (*CEQA Guidelines* Section 15126.4(b)(3)(C)).

Effects on Human Remains

Under State law, human remains and associated burial items may be significant resources in two ways: They may be significant to descendent communities for patrimonial, cultural, lineage, and religious reasons. Human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific stake of some descendent groups in ancestral burials is a matter of law for some groups, such as Native Americans (*CEQA Guidelines* Section 15064.5(d); Public Resources Code Section 5097.98). In other cases, the concerns of the associated descendent group regarding appropriate treatment and disposition of discovered human burials may become known only through outreach. Beliefs concerning appropriate treatment study, and disposition of human remains and associated burial items may be inconsistent and even conflictual between descendent and scientific communities. CEQA and other State regulations concerning Native American human remains provide the following procedural requirements to assist in avoiding potential adverse effects to human remains within the contexts of their value to both descendent communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would impact Native American human remains, the lead agency is to contact and work with the

appropriate Native American representatives identified through the Native American Heritage Commission (“NAHC”) to develop an agreement for the treatment and disposal of the human remains and any associated burial items (*CEQA Guidelines* Section 15064.5(d); Public Resources Code Section 5097.98).

- If human remains are accidentally discovered, the county coroner must be contacted. If the county coroner determines that the human remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC must identify the most likely descendant (MLD) to provide for the opportunity to make recommendations for the treatment and disposal of the human remains and associated burial items. If the MLD fails to make recommendations within 24 hours of notification or the project applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (Public Resources Code Section 5097.98).
- If potentially affected human remains or a burial site may have scientific significance, whether or not it has significance to Native Americans or other descendent communities, then under CEQA, the appropriate mitigation of effect may require the recovery of the scientific information of the remains/burial through identification, evaluation, data recovery, analysis, and interpretation (*CEQA Guidelines* Section 15064.5(c)(2)).

Paleontological Resources

Paleontological resources, typically vertebrate or invertebrate fossilized remains, are afforded federal protection under 40 CFR 15-8.27 as a subset of scientific resources. California Public Resources Code Section 5097.5 provides for protection of paleontological sites and features on public lands. Paleontologic resources may exist with the Redevelopment Plan Project Area in sediments underlying San Francisco Bay. California Public Resources Code Section 5097.5 mandates that:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any...vertebrate paleontological site, including fossilized footprints...or any other paleontological...feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

IMPACTS

Significance Criteria

The City and County of San Francisco has not formally adopted significance thresholds for impacts related to cultural and paleontological resources. The Planning Department’s Initial Study Checklist Form provides a framework of topics to be considered in evaluating a project’s impacts under the California Environmental Quality Act. Implementation of a proposed project could have a potentially significant impact on cultural or paleontological resources if it were to:

- Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to [CEQA Guidelines Section] 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of formal cemeteries.

Project impacts on historic architectural resources are discussed in Section D.2, Historic Architectural Resources.

Project Impacts

Construction of the Proposed Project would involve a number of ground-disturbing activities.

On Treasure Island, the Project includes demolition of existing buildings and infrastructure features. Areas of Treasure Island proposed for development of buildings or roads would be densified by compaction and/or vibration, and new fill would be added to compensate for loss of ground surface elevation through that process, as well as an allowance to protect against future sea-level rise. Most low-rise and mid-rise buildings would be supported on shallow mat foundations. High-rise buildings would be pile-supported, deriving support from deeper competent soil or rock. Most buildings would also have one to two levels of basement below grade. Further infrastructure development on Treasure Island would include installation of new telecommunications systems and potable water, wastewater, and recycled water systems. Geotechnical work would stabilize and raise the island's perimeter berm. Dredging would be required to provide adequate depth for boats at the Ferry Terminal.

The proposed structures to be built on Yerba Buena Island would generally use a shallow foundation. Residential development on Yerba Buena Island will generally be limited to existing developed areas. Historic structures and landscapes would be retained and remodeled for public use. While the general street plan will be retained, the addition of new roads would require construction of retaining walls and earthwork activities.

Impact CP-1: Project construction activities could disturb significant archaeological resources, if such resources are present within the Redevelopment Plan Project Area. (*Less than Significant with Mitigation*)

There is a substantial probability that significant archaeological features are present on Yerba Buena Island. Although intact archaeological features are less likely to be encountered within the fill of Treasure Island, the remains of documented shipwrecks, as well as undocumented prehistoric sites, may be present beneath Treasure Island fill or submerged nearby.

Unless mitigated, ground-disturbing construction activity within the Redevelopment Plan Project Area could adversely affect the significance of archaeological resources under CRHR Criterion 4 (Information Potential) by impairing the ability of such resources to convey important scientific and historical information. This effect would be considered a substantial adverse change in the significance of an historical resource and would therefore be a potentially significant impact under CEQA.

Mitigation Measure M-CP-1, calls for a qualified archaeological consultant to prepare and submit a plan for pre-construction archaeological testing, construction monitoring, and data recovery, for approval by the San Francisco Environmental Review Officer (ERO). Implementation of the approved plan for testing, monitoring, and data recovery under Mitigation Measure M-CP-1 would ensure that the significance of any CRHR-eligible archaeological resource would be preserved and/or realized in place. With implementation of Mitigation Measure M-CP-1, implementation of the Redevelopment Plan would not cause a substantial adverse change to the significance of an archaeological resource.

Mitigation Measure M-CP-1: Archaeological Testing, Monitoring, Data Recovery and Reporting

Based on a reasonable presumption that archaeological resources may be present within the Redevelopment Plan Project Area, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of a qualified archaeological consultant having expertise in California prehistoric and urban historical archaeology. The archaeological consultant shall undertake an archaeological testing program as specified herein. In addition, a professionally qualified geo-archaeologist shall undertake a geo-archaeological assessment of the project area. The archaeological consultant shall be available to conduct an archaeological monitoring and/or data recovery program if required pursuant to this measure. The archaeological consultant's work shall be conducted in accordance with this measure and the requirements of the ARDTP (Archeo-Tec, Archaeological Research Design and Treatment Plan, Treasure Island Redevelopment Plan Project, City and County of San Francisco, CA, October 2009) at the direction of the Environmental Review Officer ("ERO"). In instances of inconsistency between the requirements of the project ARDTP and the requirements of this mitigation measure, the requirements of this archaeological mitigation measure shall prevail. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archaeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less-than-

significant level of potential effects on a significant archaeological resource as defined in *CEQA Guidelines* Section 15064.5 (a)(c).

Archaeological Testing Program

The archaeological consultant shall prepare and submit to the ERO for review and approval an archaeological testing plan (“ATP”). The archaeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archaeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archaeological testing program will be to determine, to the extent possible, the presence or absence of archaeological resources and to identify and to evaluate whether any archaeological resource encountered on the site constitutes an historical resource under CEQA.

At the completion of the archaeological testing program, the archaeological consultant shall submit a written report of the findings to the ERO. If based on the archaeological testing program the archaeological consultant finds that significant archaeological resources may be present, the ERO, in consultation with the archaeological consultant, shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archaeological testing, archaeological monitoring, and/or an archaeological data recovery program. If the ERO determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor, either:

- (A) The proposed project shall be re-designed so as to avoid any adverse effect on the significant archaeological resource; or
- (B) A data recovery program shall be implemented, unless the ERO determines that the archaeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archaeological Monitoring Program (AMP)

If the ERO in consultation with the archaeological consultant determines that an archaeological monitoring program shall be implemented, the archaeological monitoring program shall minimally include the following provisions:

- The archaeological consultant, project sponsor, and ERO shall meet and consult on the scope of the AMP reasonably prior to any project-related soils-disturbing activities commencing. The ERO in consultation with the archaeological consultant shall determine what project activities shall be archaeologically monitored. In most cases, any soils-disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), site remediation, etc., shall require archaeological monitoring because of the risk these activities pose to potential archaeological resources and to their depositional context;

- The archaeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archaeological resource;
- The archaeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archaeological consultant and the ERO until the ERO has, in consultation with the project archaeological consultant, determined that project construction activities could have no effects on significant archaeological deposits;
- The archaeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis;
- If an intact archaeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archaeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If in the case of pile-driving activity (foundation, shoring, etc.), the archaeological monitor has cause to believe that the pile-driving activity may affect an archaeological resource, the pile-driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archaeological consultant shall immediately notify the ERO of the encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit, and present the findings of this assessment to the ERO.

Whether or not significant archaeological resources are encountered, the archaeological consultant shall submit a written report of the findings of the monitoring program to the ERO.

Archaeological Data Recovery Program

The archaeological data recovery program shall be conducted in accord with an archaeological data recovery plan (“ADRP”). The archaeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archaeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archaeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if non-destructive methods are practical.

The scope of the ADRP shall include the following elements:

- Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations.

- Cataloguing and Laboratory Analysis. Description of selected cataloguing system and artifact analysis procedures.
- Discard and De-accession Policy. Description of and rationale for field and post-field discard and de-accession policies.
- Interpretive Program. Consideration of an on-site/off-site public interpretive program during the course of the archaeological data recovery program.
- Security Measures. Recommended security measures to protect the archaeological resource from vandalism, looting, and non-intentionally damaging activities.
- Final Report. Description of proposed report format and distribution of results.
- Curation. Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Human Remains and Associated or Unassociated Funerary Objects

The treatment of human remains and of associated or unassociated funerary objects discovered during any soils-disturbing activity shall comply with applicable State and Federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State NAHC who shall appoint a MLD (Pub. Res. Code Sec. 5097.98). The archaeological consultant, project sponsor, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.

Final Archaeological Resources Report

The archaeological consultant shall submit a Draft Final Archaeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archaeological resource and describes the archaeological and historical research methods employed in the archaeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archaeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Major Environmental Analysis division of the Planning Department shall receive two copies (bound and unbound) of the FARR, and one unlocked, searchable PDF copy on a compact disk. MEA shall

receive a copy of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.

Impact CP-2: Project construction activities could disturb human remains, if such resources are present within the Redevelopment Plan Project Area. (Less than Significant with Mitigation)

Mitigation Measure M-CP-1 calls for compliance with applicable state and federal laws regarding the treatment of human remains and of associated or unassociated funerary objects discovered during any soils-disturbing activity. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the NAHC, who shall appoint a Most Likely Descendant (Public Resources Code Section 5097.98). The archaeological consultant, project sponsors, and MLD shall make reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (*CEQA Guidelines* Section 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.

With implementation of Mitigation Measures M-CP-1, implementation of the Redevelopment Plan would not cause a substantial adverse change to the scientific significance of an archaeological resource.

Impact CP-3: Project construction activities could disturb paleontological resources. (Less than Significant with Mitigation)

Given that the Franciscan Formation and sedimentary Colma Formation have yielded significant vertebrate fossils within the San Francisco Bay Area, paleontological resources could exist in the Franciscan, and possibly the Colma, Formation that underlies the Project Area. Project construction activities under the Project Area could disturb significant paleontological resources, if such resources are present within the Project Area. Site disturbance could impair the ability of significant archaeological resources within the Project Area to yield important scientific information. Unless mitigated, implementation of the Redevelopment Plan could impair the significance of paleontological resources on the Project Area and would therefore be considered a potentially significant impact under CEQA.

Mitigation Measure M-CP-3 calls for a qualified paleontologist to implement an approved Paleontological Resources Monitoring and Mitigation Program ("PRMMP"). Implementation of the approved plan for monitoring, recovery, identification, and curation under Mitigation Measure

M-CP-3 would ensure that the scientific significance of the resource under CRHR Criterion 4 (Information Potential) would be preserved and/or realized. With implementation of Mitigation Measure M-CP-3, implementation of the Redevelopment Plan would not cause a substantial adverse change to the scientific significance of a paleontological resource.

Mitigation Measure M-CP-3: Paleontological Resources Monitoring and Mitigation Program

The project sponsor shall retain the services of a qualified paleontological consultant having expertise in California paleontology to design and implement a Paleontological Resources Monitoring and Mitigation Program. The PRMMP shall include a description of when and where construction monitoring would be required; emergency discovery procedures; sampling and data recovery procedures; procedure for the preparation, identification, analysis, and curation of fossil specimens and data recovered; preconstruction coordination procedures; and procedures for reporting the results of the monitoring program.

The PRMMP shall be consistent with the Society for Vertebrate Paleontology Standard Guidelines for the mitigation of construction-related adverse impacts to paleontological resources and the requirements of the designated repository for any fossils collected. During construction, earth-moving activities shall be monitored by a qualified paleontological consultant having expertise in California paleontology in the areas where these activities have the potential to disturb previously undisturbed native sediment or sedimentary rocks. Monitoring need not be conducted in areas where the ground has been previously disturbed, in areas of artificial fill, in areas underlain by nonsedimentary rocks, or in areas where exposed sediment would be buried, but otherwise undisturbed. This, by definition, would exclude all of Treasure Island; accordingly, this mitigation measure would apply only to work on Yerba Buena Island.

The consultant's work shall be conducted in accordance with this measure and at the direction of the City's ERO. Plans and reports prepared by the consultant shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Paleontological monitoring and/or data recovery programs required by this measure could suspend construction of the Proposed Project for as short a duration as reasonably possible and in no event for more than a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce potential effects on a significant paleontological resource as previously defined to a less-than-significant level.

Cumulative Impacts

Impact CP-4: Disturbance of archaeological and paleontological resources, if encountered during construction of the Proposed Project, could contribute to a cumulative loss of significant historic and scientific information. (*Less than Significant with Mitigation*)

When considered with other past and proposed development projects along and near the San Francisco Bay shoreline, the disturbance of archaeological and paleontological resources within Redevelopment Plan Project Area could contribute to a cumulative loss of significant historic and scientific information about California and Bay Area regional history and prehistory. As discussed above, implementation of an approved plan for testing, monitoring, and data recovery would preserve and realize the information potential of archaeological and paleontological resources. The recovery, documentation, and interpretation of information about archaeological and paleontological resources that may be encountered within the Redevelopment Plan Project Area would enhance knowledge of prehistory and history. This information would be available to future archaeological and paleontological studies, contributing to the body of scientific and historic knowledge. With implementation of Mitigation Measure M-CP-1 and Mitigation Measure M-CP-3, the Proposed Project's contribution to cumulative impacts would be less than cumulatively considerable.

D.2 HISTORIC ARCHITECTURAL RESOURCES

This section describes historic architectural resources in the Development Plan Area and its vicinity, and evaluates potential direct and indirect impacts to those resources due to implementation of the Proposed Project. For the purposes of this EIR, the term “historic architectural resource”⁶ is used to distinguish such resources from archaeological resources which may also be considered historical resources under CEQA. Archeological resources are studied separately in Section IV.D.1, Archaeological and Paleontological Resources, of this EIR.

The assessment of project impacts on “historical resources,” as defined by *CEQA Guidelines* Section 15064.5, is a two-step analysis: first, an analysis of whether a project may impact a resource that falls within the definition of “historical resource(s)” as defined under CEQA; and second, if the project is found to impact historical resources, an analysis of whether the project would cause a substantial adverse change to the resource. A project that may cause a substantial adverse change in the significance of an historical resource is one that may have significant effect on the environment (CEQA Section 21084.1).

Thus, this section has two component subsections. The Setting discussion examines the potential for the presence of historical resources within the Development Plan Area. The Impacts discussion evaluates the impacts of the Proposed Project on the historical resources identified in the Setting subsection.

This historic architectural resources EIR section is based on two technical studies: the *Historic Resource Evaluation Report, Treasure Island* (“HRE”) by an independent historic architectural resource consultant, Knapp Architects;⁷ and the Historic Resource Evaluation Response (“HRER”) by the San Francisco Planning Department.⁸ The Planning Department has reviewed the HRE and generally concurs with the HRE’s conclusions (except that, contrary to the HRE, the Planning Department finds that demolition of Building 111 would not result in a significant adverse impact on Building 3, as discussed under Impact CP-8 below).

⁶ The “historic architectural resources” evaluated in this EIR include not only buildings, but also structures, objects, landscapes, and historic districts.

⁷ Knapp Architects, *Historic Resource Evaluation Report, Treasure Island, San Francisco California: Buildings, Structures and Objects Built Between 1947 through 1959 and Landscape Features from 1939 Through 1940*, April 20, 2010. It is incorporated by reference and summarized in this section. A copy of this document is available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2007.0903E.

⁸ San Francisco Planning Department, *Historic Resource Evaluation Response, Treasure Island*, May 28, 2010. It is incorporated by reference and summarized in this section. A copy of this document is available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2007.0903E.

SETTING

Identifying Historical Resources under CEQA

“Historical Resource” Defined

CEQA Guidelines Section 15064.5(a) defines a “historical resource” as:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources.
- (2) A resource included in a local register of historical resources, as defined in ... the Public Resources Code ... or identified as significant in an historical resource survey meeting the requirements ... of the Public Resources Code, shall be presumed to be historically or culturally significant.
- (3) Any object, building, structure, ... site ... which a lead agency determines to be historically significant or significant in the ... annals of California ... provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources ..., or identified in an historical resources survey... does not preclude a lead agency from determining that the resource may be an historical resource...

Thus, under the *CEQA Guidelines*, even if a resource is not included on any local, State, or Federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is an historical resource for the purposes of CEQA if there is substantial evidence supporting such a determination. A lead agency must consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the California Register of Historical Resources (“CRHR”).

California Register of Historical Resources Criteria

A resource that meets at least one of the eligibility criteria for inclusion in the CRHR is considered an historical resource for the purposes of CEQA. A resource is eligible for listing in the CRHR if it:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage (Events);
- (2) Is associated with the lives of persons important in our past (Persons);

- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values (Design/Construction); or
- (4) Has yielded, or may be likely to yield, information important in prehistory or history (Information Potential).

Integrity

In addition to qualifying for listing under at least one of the CRHR criteria, a property must possess sufficient integrity to be considered eligible for the CRHR. National Park Service guidance on determining eligibility under the National Register of Historic Places informs the determination of eligibility for inclusion in the CRHR. According to the *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*, integrity is defined as “the authenticity of an historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance.” The National Register Bulletin defines seven characteristics of integrity as follows:

Location is the place where the historic property was constructed.

Design is the combination of elements that create the form, plans, space, structure and style of the property.

Setting addresses the physical environment of the historic property inclusive of the landscape and spatial relationships of the buildings.

Materials refer to the physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the historic property.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history.

Feeling is the property’s expression of the aesthetic or historic sense of a particular period of time.

Association is the direct link between an important historic event or person and an historic property.

Historic Background

Although the Navy has managed Yerba Buena Island and Treasure Island (collectively, Naval Station Treasure Island, or “NSTI”) as a single facility since 1940, the two islands have different histories. Yerba Buena Island is a natural island that has been used by private parties and by the Army and Navy since the 1840s. Treasure Island is an artificial island, constructed in 1936-1937 in the rocky shoals north of Yerba Buena Island.

Yerba Buena Island

The context for historic architectural resources on Yerba Buena Island begins with the Army's occupation of the island in 1867, when the Army asserted a claim and took possession of the island. Troops were stationed on the southeastern part of the island, above a cove near the modern Coast Guard Station. In 1875 the Army constructed the lighthouse and lighthouse keeper's residence at the southern end of the island (these buildings still stand, but they are outside of the Development Plan Area). In 1879, the Army reassigned artillery units to the Presidio of San Francisco and abandoned the Yerba Buena Island garrison for a time. In 1891, the Army Coast Artillery Corps took control of the island and erected a torpedo (i.e., underwater mine) depot at the eastern tip of the island (the Torpedo Assembly Building, also known as Building 262). The Army retained control of the eastern tip of the island until 1960.

In 1898, the Navy established a Naval Training Station at the location of the Army base. The Navy undertook extensive grading on the east cove part of the island to create a level parade ground flanked by officers' quarters and other military facilities (including Senior Officers' Quarters, barracks, offices, a mess hall, and classrooms). Only the Senior Officers' Quarters (including the Nimitz house, other officers' quarters, associated garages and landscaping) remain from this era. The Naval Training Station was active until 1923 when, due to overcrowding at the facility, the Navy relocated it to the Naval Training Center in San Diego. The Navy facility on Yerba Buena Island became a receiving station, housing crews awaiting assignment. In the mid-1930s the San Francisco-Oakland Bay Bridge was constructed through the island. The officers' quarters continued to house officers from Treasure Island. In 1966, residences were built on the north and west sides of the islands for Coast Guard officers. In 1997, NSTI was closed under the Base Closure and Realignment Act. Since that time, the Treasure Island Development Authority ("TIDA") has served as caretaker of NSTI under the terms of a Cooperative Agreement with the Navy.

Treasure Island

Treasure Island has evolved through three distinct periods, described below.

Golden Gate International Exposition (1936-1940)

The U.S. Army Corps of Engineers constructed the 404-acre Treasure Island during 1936 - 1937 to provide a short-term site for the Golden Gate International Exposition of 1939 ("GGIE"). Treasure Island is an entirely man-made island constructed of rock and mud fill placed over shallow areas at the northern shore of Yerba Buena Island. After completion, the new island was connected to Yerba Buena Island by a narrow causeway at the island's southwest corner. The GGIE was conceived to celebrate construction of both the Golden Gate Bridge and the San Francisco-Oakland Bay Bridge. Many of the buildings constructed for the Exposition were

monumental in scale. Most buildings were built to be temporary, with the intent to convert the site into a permanent airport for San Francisco when the exposition closed. Only three buildings from the GGIE were planned to be permanent, serving both GGIE and airport functions, and these buildings remain today: Building 1, the Terminal or Administration Building; Building 2, the Hall of Transportation; and Building 3, the Palace of Fine and Decorative Arts (Building 111 is an addition to Building 3). The idea of converting Treasure Island into an airport was abandoned with the advent of World War II.

The foundation of the GGIE plan was its formal and axial spatial organization. Two central axes intersected at the Court of Honor. The primary axis was oriented north-to-south and the secondary axis was oriented east-to-west. The arrangement of the Exposition's primary buildings along these axes were the basic components of this organization. The secondary buildings and the circulation arteries were arranged in a grid system in relation to these axes. The use and location of vegetation supported this organization (e.g., through the use of uniform street tree plantings, the use of trees around the edges of courtyards, and the use of plants to frame entries to buildings). The purpose of the planting design was to provide "decorative enhancement and to frame the buildings and sculptural features and to provide a counterpoint to the architectural framework of the site."⁹

World War II Period (1941-1946)

In February 1941, the Navy took possession of Treasure Island from San Francisco in exchange for land south of San Francisco on the Peninsula that would become the site of Mills Field, now San Francisco International Airport. This action combined the military holdings of Yerba Buena Island and Treasure Island into one. Following the bombing of Pearl Harbor in December 1941, the Navy built several hundred additional temporary buildings on Treasure Island during the period between 1942 and 1945. Many of the GGIE's temporary structures were used by the Navy during the war, and additional structures were constructed. The island was used as a combined Receiving Station/Distribution and Training Center.

Post World War II Period (1946-Present)

Following World War II, the Navy transformed Treasure Island into a training facility, where it unified various specialized technical schools from throughout the Bay Area into a consolidated facility. The Navy demolished dozens of GGIE and World War II-era temporary structures during the 1960s and 1970s to allow new construction, filling the need for modern residential and classroom buildings suited to training and instruction.

⁹ HRE, quoting Eugen Neuhaus, p. 23.

As discussed above for Yerba Buena Island, the Navy closed NSTI in 1997, and Treasure Island Development Authority has served as the caretaker of NSTI. During this interim period, NSTI has served many purposes. Many of the buildings are vacant, but most of the former Navy family living quarters have been leased, and there is a program in place to house the City's homeless. The Casa de la Vista, on the Avenue of the Palms, serves as a rental venue for gatherings. The lobby of Building 1 is open to the public, and the building houses TIDA's offices. Building 2 is used by Island Creative, which builds sets for theater, film and corporate industrial shows. Building 3 is home to studios and is currently used as a TV film studio. The United States Department of Labor maintains ownership and jurisdiction over the site of the Job Corps campus, which consists of 37 acres near the center of Treasure Island. The Job Corps campus is not part of the Development Plan Area and will continue to occupy that site.

Historic Architectural Resources on Treasure Island and Yerba Buena Islands

No historic architectural resource on Yerba Buena Island or Treasure Island has been designated at the local level under Article 10 or Article 11 of the San Francisco Planning Code. No historic architectural resource has been included in any local survey of historic architectural resources.

Treasure Island was designated as State Historic Landmark No. 987 in 1989, and is therefore included in the California Register of Historical Resources. The basis for the island's designation as a State Historic Landmark is its association with GGIE, so only features associated with GGIE would be part of the State Historic Landmark designation.

Historic architectural resources on Yerba Buena Island and Treasure Island have been comprehensively studied as part of Section 106 compliance for Navy actions, including the transfer of Navy property out of Federal ownership. In 1992, Building 1 (the Administration Building), Building 2 (the Hall of Transportation), and Building 3 (the former Palace of Fine and Decorative Arts, including Building 111 as an addition to Building 3) were each found eligible for individual listing on the National Register of Historic Places. In 1997, the Department of the Navy undertook a comprehensive survey of all buildings and structures on Treasure Island and Yerba Buena Island (the "1997 Inventory and Evaluation").¹⁰ The 1997 Inventory and Evaluation included preparation of an historic context as well as a survey of all buildings on both islands. The 1997 Inventory and Evaluation studied and evaluated each building that was 50 years or older at that time for its eligibility for listing in the National Register of Historic Places. The 1997 Inventory and Evaluation identified as eligible for listing a Senior Officers' Quarters Historic District (also known as the "Great Whites"), consisting of The Nimitz House (Quarters 1), six other senior officers' quarters (Quarters 2-7), associated garages (Building 205, Building 230), family quarters (Building 83), and certain associated formal landscaping elements within

¹⁰ United States Department of the Navy, *Cultural Resources Inventory and Evaluation Investigations*, prepared by JRP Historical Consulting Services, January 1997.

the district boundaries. The study also identified two other individually eligible structures within the Development Plan Area that are not associated with the historic district: Quarters 10 and its contributing garage (Building 267) and the Torpedo Assembly Building (Building 262).

Pursuant to the Memorandum of Agreement for the transfer of Navy property out of Federal ownership, all buildings or contributing elements to districts on Yerba Buena Island and Treasure Island that have been determined eligible for listing in the National Register of Historic Places (“NRHP”), have been formally nominated to, and listed in, the NRHR. Table IV.D.1 lists these buildings.

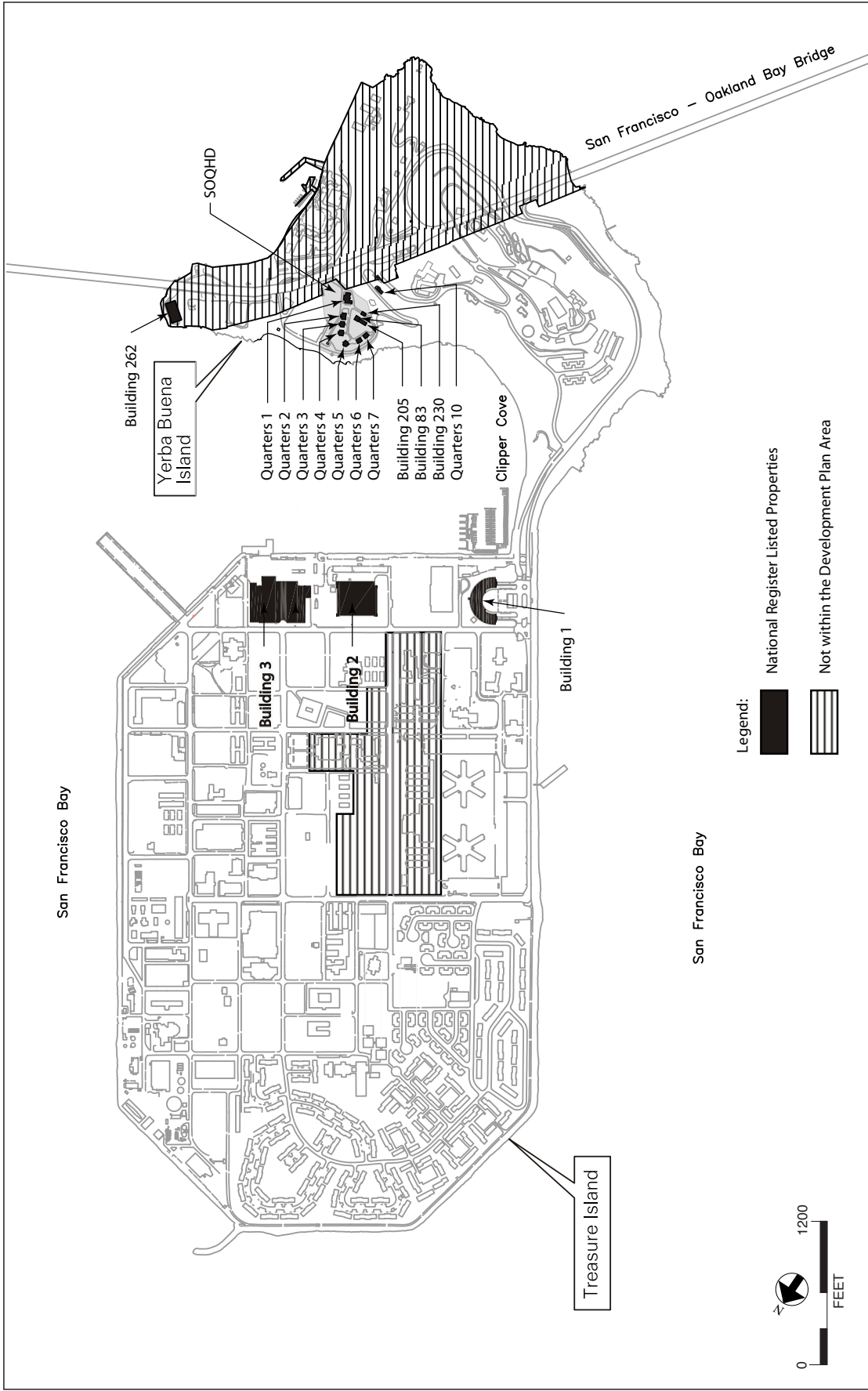
Table IV.D.1: NRHP Listed Properties in the Development Plan Area

Resource Number	Resource Name	Year Constructed
<u>Yerba Buena Island</u>		
1, 2-7, 83, 205, 230	Senior Officers’ Quarters Historic District: The Nimitz House (Quarters 1); six other senior officers’ quarters (Quarters 2-7), associated garages (Building 205, Building 230), family quarters (Building 83), and formal landscaping elements of the area.	1900 - 1905
1	Nimitz House (individually listed and a contributor to district)	1900
10/267	Quarters 10 and its contributing garage (individually listed)	1948
262	Torpedo Assembly Building (individually listed)	1891
<u>Treasure Island</u>		
1	Administration Building, Building 1 (individually listed)	1939
2	Hall of Transportation, Building 2 (individually listed)	1939
3	Palace of Fine and Decorative Arts, Building 3 (individually listed, Building 111 is identified as a component of Building 3)	1939

Note: This table excludes Yerba Buena Island buildings that are south of the Bay Bridge. They are currently located on the U.S. Coast Guard Station. They are not within the Development Plan Area and are not subject to study in this EIR Section.

Source: San Francisco Planning Department, 2005 EIR.

Figure IV.D.1: Location of NRHP Listed Properties, shows the location of resources listed on the NRHP in the Development Plan Area. As resources listed in the NRHP, they are considered to be included in the CRHR, and as such, are also considered historical resources for the purposes of CEQA.



SOURCE: U.S. Navy

TREASURE ISLAND AND YERBA BUENA ISLAND REDEVELOPMENT PROJECT EIR

FIGURE IV.D.1: LOCATION OF NRHP LISTED PROPERTIES

Supplemental Study of Historic Architectural Resources on Treasure Island

As part of the environmental review of the Proposed Project, the HRE includes supplemental study of potential historical resources that may be affected by the current Proposed Project. The HRE covers gaps in analysis due to the passage of time since the earlier studies of historic resources on Treasure Island and Yerba Buena Island were undertaken. The HRE evaluates the significance of those buildings and structures on Treasure Island, that have reached 50 years in age since the 1997 Inventory and Evaluation was completed (i.e., built between 1947 and 1959). In addition, the HRE evaluates the potential for a NSTI historic district, consisting of all buildings on the island dating from the Navy's tenure regardless of age.

The HRE did not evaluate any new resources on Yerba Buena Island because the nature and scope of alteration and demolition work on Yerba Buena Island under the Proposed Project would not affect any building that is now 50 years in age or older that was not already studied in the 1997 Inventory and Evaluation. No study of buildings on the Job Corps campus on Treasure Island was undertaken because these buildings are not within the proposed Development Plan Area and would not be directly affected by the Proposed Project.

The HRE also reflects an increased emphasis on cultural landscape, setting, and context within the discipline of Historic Preservation generally, since earlier studies that were undertaken did not place as much emphasis on these areas. The HRE studies and evaluates the individual significance of landscape features that survive from the GGIE. It also evaluates the collective significance of these remaining landscape features, together with Buildings 1, 2, and 3 (these buildings have already been studied and determined to be individual historic resources) as a potential historic district.

See Table IV.D.2 and Figure IV.D.2: Location of Treasure Island Resources Studied in the HRE.

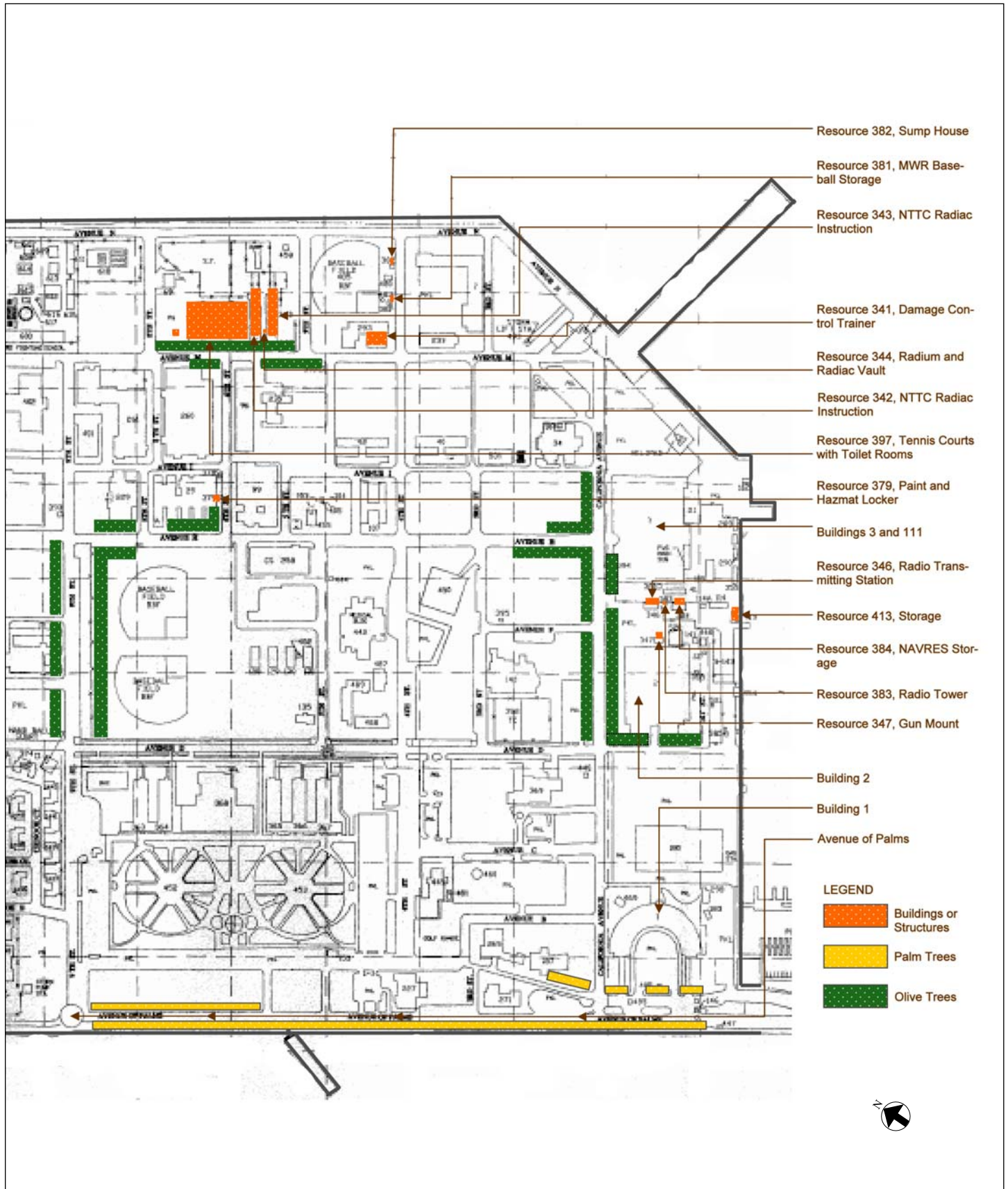
NSTI Resources on Treasure Island (1947-1959)

The HRE summarizes the historic context for Naval Station buildings on Treasure Island. It studies each of the 13 individual extant buildings and structures (including any objects located within those buildings and structures) that have reached 50 years in age since the 1997 Inventory and Evaluation was completed. The HRE also studies all remaining Naval Station buildings, structures, objects, and landscapes on Treasure Island for their potential collective eligibility for inclusion in the CRHR as an historic district.

Table IV.D.2: Treasure Island Resources Studied in the HRE

Resource Number	Resource Name	Year Constructed
NSTI Resources (1947-1959)		
341	Damage Control Trainer with <i>U.S.S. Buttercup</i>	1951
342	Naval Technical Training Center (NTTC) RADIAC Instruction	1951
343	Naval Technical Training Center (NTTC) RADIAC Instruction	1951
344	Radium and Radiac Vault	1951
346	Radio Transmitting Station	1950
347	Gun Mount	1951
379	Paint and Hazmat Locker	1956
381	MWR Baseball Storage	1957
382	Sump House	1959
383	Radio Tower	1948
384	NAVRES Storage	1958
397	Tennis Courts	1950
413	Storage	1950
NA	Potential Naval Station Historic District	1942-1959
GGIE Landscape Resources		
NA	Potential GGIE Landscape Historic District	1939
NA	Avenue of the Palms	1939
NA	Olive Trees (various locations)	1939
NA	Landscape as contributing feature to Building 1	1939
NA	Landscape as contributing feature to Building 2	1939
NA	Landscape as contributing feature to Building 3	1939
NA	Potential GGIE Historic District, consisting of remaining GGIE landscape features and remaining GGIE structures (Building 1, Building 2, and Building 3)	1939

Source: Knapp Architects



SOURCE: Knapp Architects

TREASURE ISLAND AND YERBA BUENA ISLAND REDEVELOPMENT PROJECT EIR

FIGURE IV.D.2: LOCATION OF TREASURE ISLAND RESOURCES STUDIED IN THE HRE

Potential Individual NSTI Historical Resources

For each of these individual resources, the HRE presents research into its history, provides a physical description of the resource, and describes its current condition. The HRE evaluates each resource's significance under the relevant CRHR eligibility criteria: Criterion 1 (Events); Criterion 2 (Persons); and Criterion 3 (Design/Construction).¹¹ Based on the research and analysis presented in the HRE for each individual resource, of the 13 individual resources studied, the HRE concludes that 12 of these do not meet the criteria for inclusion in the CRHR. These conclusions are based on a lack of substantial evidence that indicates that these resources possess sufficient association with important historical events or persons, or possess distinctive characteristics of design or construction, such that they would be eligible for inclusion in the CRHR. For these reasons, resources 342, 343, 344, 346, 347, 379, 381, 382, 383, 384, 397, and 413 are not considered Historical Resources for the purposes of CEQA.

The HRE concludes that one individual resource, the Damage Control Trainer (housed in Building 341) meets the criteria for inclusion in the CRHR, discussed in further detail below. (Building 341 itself was not considered to meet the criteria for inclusion, and is not considered an historical resource.)

Individual Historical Resource Identified by the HRE: The Damage Control Trainer

The Damage Control Trainer was constructed around 1951.¹² It consists of two distinct properties: the building that houses the Damage Control Trainer and the Damage Control Trainer object contained within the building. The Damage Control Trainer is a battleship simulator known as the *U.S.S. Buttercup*. The simulator duplicated a portion of a ship's exterior deck and below deck interior compartments and was capable of being flooded with water and blown with wind to simulate the effects of battle damage on the high seas. As part of their practical training, sailors were required to save the flooding ship by controlling all leaks. The students also learned the skills to repair structural damage to the ship's overhead piping and decks with the use of shoring, patching, and dewatering methods.

The building housing the Damage Control Trainer is likely a prefabricated building constructed by the Butler Manufacturing Company, as the construction is identical to other known Butler

¹¹ California Register of Historical Resources Criterion 4 (Information Potential) is commonly understood to apply primarily to archaeological resources. Such resources may lack sufficient historical documentation, physical integrity, or physical accessibility (they may be buried or submerged) to describe their character and evaluate their significance. Archaeological research and investigative methods are necessary to realize the information potential of such resources. The architectural resources date from the Navy's occupation of Treasure Island, a relatively recent historic era that is well documented in the historic record. These resources are therefore not likely to yield important scientific or historical information under CRHR Criterion 4 that is not already documented in the historic record.

¹² The construction dates were not established from permits but rather by the study of dated maps and/or photographs. Maps were not available for every year, so the dates are broad and to be considered as circa.

buildings cited in the HRE study. On its interior, a concrete floor has a narrow pathway of varying widths around the perimeter of the building. This surrounds a pool which contains a portion of a battleship hull. The hull pivots within the tank on axis points that simulate the action of an ocean-going ship. The hull has a flat deck surrounded by stanchions with chains between them. The deck is accessed by an angled ladder on the east. A small deck house sits on the south end of the deck. The area below deck is accessed by a hatch. An angled metal ladder goes below deck, where there is a single large room. Skylights illuminate the interior during daylight hours.

The HRE concludes that while the building housing the Damage Control Trainer does not meet the criteria for inclusion in the CRHR, the Damage Control Trainer itself does meet the criteria for inclusion in the CRHR under Criterion 3 (Design Construction). Although the building housing the Damage Control Trainer is not a unique or rare building type, the *U.S.S. Buttercup*, as an object, is a rare device. All damage control trainers used by the Navy have this affectionate name, and two others are known to still be functioning. One is located at Naval Station Norfolk in Virginia and the other at Naval Station Newport, in Rhode Island. A new facility was recently built for the Navy in Great Lakes, Illinois, which has a trainer. The *U.S.S. Buttercup* is a rare and distinctive object, exhibiting specialized design and construction for military training, which is an important aspect of military history. Because this object is one of a handful in the United States, and the only such object on the West Coast, it is significant at the State level under CRHR Criterion 3.

As a resource eligible under the CRHR, the Damage Control Trainer is considered an historical resource for the purposes of CEQA.

Potential NSTI Historic District

Although individual Navy resources (with the exception of the Damage Control Trainer) do not appear to be individually significant, the HRE considers whether the remaining NSTI resources on Treasure Island are collectively eligible for listing in the CRHR as a potential historic district. An historic district is defined in the *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*, which states that the proposed district must contain “a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.”¹³

The HRE concludes that the remaining NSTI resources do not meet CRHR criteria for an historic district due to lack of integrity. The collection of buildings, structures, objects, and landscape features does not retain integrity because of the extent of demolition and new construction within the past 50 years. The remaining Navy resources lack sufficient spatial, historic, and aesthetic

¹³ National Register Bulletin, *How to Apply the National Register Criteria for Evaluation*, U.S. Department of the Interior, National Park Service, 1995.
<http://www.nps.gov/history/nr/publications/bulletins/pdfs/nrb15.pdf>.

cohesiveness within the collection of NSTI properties to classify them as an historic district. Research has not uncovered evidence that the Naval Station possesses a sufficiently close association with important historic events or persons to merit inclusion in the CRHR under Criterion 1 (Event) or Criterion 2 (Persons). The remaining NSTI resources on Treasure Island do not represent a significant example of military base design. As a group, these properties do not collectively exhibit important design principles, methods of construction, or urban design characteristics under CRHR Criterion 3 (Design/Construction).

For these reasons, the remaining buildings, structures, and objects of NSTI are not collectively considered an historical resource under CEQA

GGIE Landscape Resources

The HRE studies landscape features that remain from the GGIE as contributing features to individual resources Buildings 1, 2, and 3, and collectively as historic districts.¹⁴ These resources are listed in Table IV.D.2, p.IV.D.34. For each of these landscape features, the HRE presents research on its history, provides a physical description of the resource, and describes its current condition. The HRE evaluates each landscape feature's significance under the relevant CRHR eligibility criteria: Criterion 1 (Events), Criterion 2 (Persons), and Criterion 3 (Design/Construction).

Potential GGIE Landscape Historic District

Based on the research and analysis presented in the HRE, a potential historic district consisting of the remaining landscape features from the GGIE does not meet the criteria for inclusion in the CRHR due to a lack of integrity. The designed landscape on Treasure Island was a component of the overall plan for the GGIE and its significance would be as a contributing component supporting the overall plan. The spatial organization that resulted from the formal arrangement of the GGIE's buildings, circulation system, and vegetation is no longer evident on the island. The overwhelming majority of the original buildings have been removed from the island, and the street system has been altered. The majority of the vegetation materials are no longer extant, and the feeling created through the use of plant materials, color, water, and lighting that characterized the landscape during the fair is missing. As a result of these losses, there is no integrity of design, materials, workmanship, setting, feeling, or association related to the GGIE landscape. The significance of this resource is derived from its contribution to the overall spatial organization of

¹⁴ The evaluation of historic designed landscapes is slightly different than that of historic buildings. The National Register Bulletin, *How to Evaluate and Nominate Historic Designed Landscapes*, provides guidance regarding the evaluation of landscapes. The National Register guidelines suggest that evaluators consider aspects such as spatial relationships, vegetation, original property boundary, topography/grading, site furnishings, design intent, architectural features, and circulation system. National Register Bulletin, *How to Evaluate and Nominate Historic Designed Landscapes*, <http://www.nps.gov/nr/publications/bulletins/nrb18/iNDEX.htm>.

the GGIE. Because the spatial organization of the GGIE is no longer evident, the remaining landscape resources of the GGIE are unable to convey that significance.

For these reasons, a potential GGIE landscape historic district is not considered an historical resource for the purposes of CEQA.

Individual Landscape Features: Avenue of the Palms and Olive Trees

Based on the research and analysis presented in the HRE, the Avenue of the Palms and the remaining olive trees do not meet the criteria for inclusion in the CRHR due to a lack of integrity. Neither resource is considered individually eligible; rather, its significance, if any, would be as a contributor to an overall GGIE landscape district. However, the spatial organization that resulted from the formal arrangement of the GGIE's buildings, circulation system, and vegetation is no longer evident on the island. The overwhelming majority of the original buildings have been removed from the island, and the street system has been altered. The majority of the vegetation materials are no longer extant, and the feeling created through the use of plant materials, color, water, and lighting that characterized the landscape during the fair is missing. As a result of these losses, there is no integrity of design, materials, workmanship, setting, feeling, or association related to the GGIE landscape. The significance of each of these resources is derived from their contribution to the overall spatial organization of the GGIE. Because the spatial organization of the GGIE is no longer evident, these individual landscape features are unable to convey that significance.

For these reasons, the Avenue of the Palms and the remaining olive trees are not considered Historical Resources for the purposes of CEQA.

Potential Historic District Consisting of Remaining GGIE Landscape Features and Buildings

The National Park Service defines an historic district as “a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.”¹⁵ An historic district derives its significance as a single unified entity. A surviving fragment of a much larger original collection of resources may continue to possess sufficient integrity as an historic district if those buildings and features that remain have sufficient spatial, functional, and aesthetic coherence among themselves to qualify as an historic district. For this reason, the HRE evaluates the potential collective CRHR eligibility of all remaining GGIE landscape features and buildings as a potential historic district.

The remaining GGIE buildings and landscapes do not constitute a coherent historic district under CRHR Criteria. Buildings 1, 2, and 3 and the remaining portions of their individual landscape settings are tangible reminders of the GGIE and are artifacts of this event. They are generally

¹⁵ National Register Bulletin Number 15, p. 5.

compatible in style and scale, and are aligned from east to west along the southern edge of Treasure Island. However, they were not designed to relate to one another. Rather, they relate to the major north-south axis of the larger original GGIE plan. No ceremonial east-west progression or circulation axis connected these three buildings to each other within the original GGIE plan. Within the original GGIE plan, a building (the Yerba Buena Club) intervened between Buildings 1 and 2 at the eastern edge of the formal landscaped plaza that originally existed east of Building 1 (the Enchanted Garden). The main entrance to Building 3 is on the north side of that building. That entrance aligned with and served as the terminus for the Pacific Promenade, a major north-south axis under the original GGIE plan.

Any potential significance of Buildings 1, 2, and 3 and the remaining landscape features would be as contributing features within the overall GGIE plan. However, the remaining collection of buildings and landscape features from the original GGIE plan is not sufficient to convey the design, setting, feeling of, and association with the GGIE. Therefore, the HRE concludes that the remaining buildings and landscape features from the GGIE do not retain sufficient integrity to qualify as an historic district meeting CRHR criteria, and as such, are not collectively considered an historical resource under CEQA.

Landscapes as Contributing Features to Individual Buildings 1, 2, and 3

Building 1 is individually listed on the National Register of Historic Places under Criterion A (Events) in association with the GGIE and under Criterion C (Design/Construction) as an example of the Art Moderne style of commercial architecture from the late 1930s.¹⁶ The boundary for this listing only included the “area immediately adjacent to the Administration Building.” This is shown on the boundary map in the NRHP nomination form as including the landscape area in front of the building (to California Avenue, to the Avenue of Palms, and to the edge of a line extending from the south edge of the building). The boundary map in the NRHP nomination excluded the landscape area and hardscape on the building’s east side (facing the now non-extant Enchanted Garden) and the landscape area on the building’s south side that extended from the building to the Esplanade. The boundary justification in the NRHP nomination stated that these areas were excluded because they lacked integrity to the period of significance (1938-1940).

Building 2 is individually listed in the National Register of Historic Places under Criterion A in association with the GGIE and under Criterion C as an example of the Art Moderne style of commercial architecture from the late 1930s. The boundary for the NRHP listing only included the “area immediately adjacent to the Hall of Transportation.” The boundary map in the NRHP nomination excluded the landscape area and hardscape adjacent to Building 2, and the boundary

¹⁶ JRP Historical Consulting, *Administration Building (Building 1), Treasure Island National Register Nomination Form* (no date).

justification stated that these areas were excluded from the boundary because they lacked integrity to the period of significance.

Building 3 is individually listed in the National Register of Historic Places under Criterion A in association with the GGIE and under Criterion C as an example of the Art Moderne style of commercial architecture from the late 1930s. The boundary for the NRHP listing included only the “area immediately adjacent to the Palace of Fine and Decorative Arts.” The boundary map in the NRHP nomination included the landscape area along the California Avenue side of the building but did not extend past the building on its east, south, and west sides. The boundary justification stated that the original landscape setting on these sides of the building was excluded from the boundary because it lacked integrity to the period of significance.

As part of, and for the purposes of, this EIR, the HRE studies each of the landscapes associated with Buildings 1, 2, and 3. Information on the landscapes associated with each building is based on a review of plans from the Exposition that show the landscape features at a schematic level, historical photographs, and historical aerial photographs. The HRE identifies, describes, and evaluates their significance and integrity. Based on closer study of these features than has been conducted in previous studies, the HRE identifies the particular landscape features that contribute, or do not contribute, to the significance of each building under CRHR criteria, and delineates a boundary for the contributing landscape features associated with each building. This boundary does not modify the existing NRHP site boundary for each building. Rather, it supplements those boundaries for the purposes of this EIR. Contributing landscape areas identified in the HRE for the purposes of this EIR are each discussed separately below for Buildings 1, 2, and 3.

Contributing Landscape Associated with Building 1

Building 1, the “Administration Building” during the GGIE, was located along the outer row of the Exposition’s exhibits and features on the island’s southern edge, between California Avenue and the Esplanade. The building was located immediately adjacent to the vehicular entrance to the Exposition, and its primary entrance faced the Avenue of Palms. There were distinctly delineated landscape areas around the building’s west, north, east, and south sides that created a landscape setting for the building, defined the space associated with it, and provided a separation between the building and the adjacent circulation features (the Avenue of Palms, California Avenue, Marguerite Path, and the Esplanade). In general, the planting around the building was less elaborate than in the various Courtyards (which were key outdoor gathering spaces for the Exposition). However, due to its highly visible location at the vehicular entrance to the GGIE, the landscape treatment for the front of the building was an integral part of its design.

The original GGIE landscape setting for Building 1 did not include the Esplanade and the area along the waterfront south of the building, since these were related to the overall function of the island during the Exposition and not to that of Building 1. Neither the design of the building nor

its associated landscape setting was oriented toward the waterside. The significance and integrity of Building 1 under CRHR Criterion 1 (its association with the GGIE) and Criterion 3 (as an example of the Art Moderne style of commercial architecture from the late 1930s) do not depend on this waterside setting.

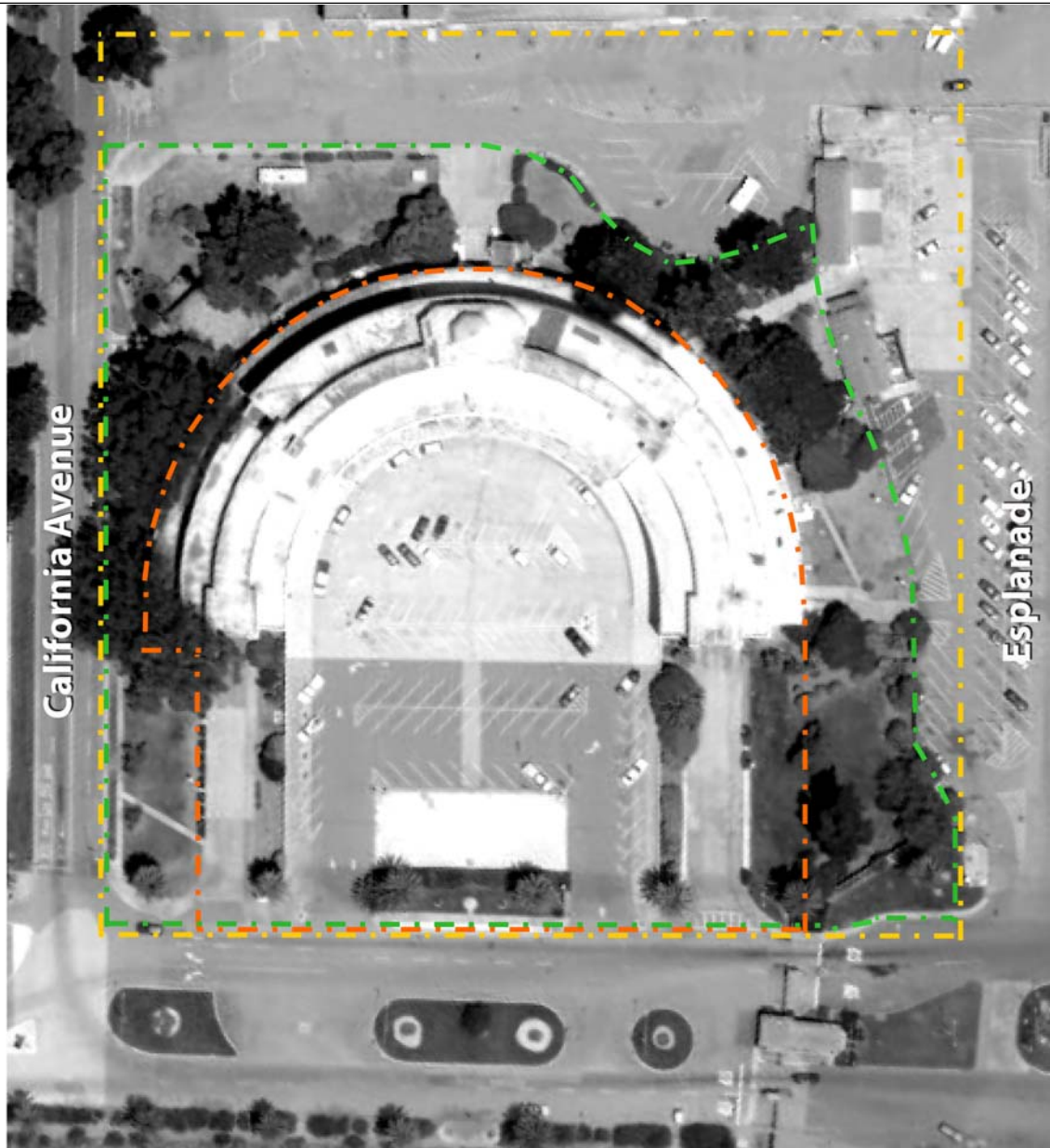
Today, the landscape zone for Building 1 remains largely intact. Remaining features associated with the GGIE landscape design to the west of the building include the entrance drive and walkways that follow the U-shape of the building plan, retaining walls flanking the building, and the location of a landscape bed across from the front entrance. To the north, east, and south of Building 1, landscape zones continue to contribute to the ability of Building 1 to convey its association with the GGIE and its original design intent. The HRE identifies contributing landscape areas associated with Building 1. See Figure IV.D.3: Building 1 Contributing Landscape Areas.

The landscape setting around the Building 1's east, north, west, and south sides retains sufficient integrity to contribute to the significance of the building under CRHR Criterion 1 (in association with the GGIE). These landscape areas still convey the general spatial organization of the building and the GGIE under CRHR Criterion 3 (Design/Construction). For these reasons, and for the purposes of this EIR, these landscape areas are considered contributing features to the significance of the Building 1 historical resource under CEQA. Note, however, that not all landscape features within these areas contribute to the significance of Building 1, and the HRE identifies only particular features as contributing, while other features are identified as noncontributing.¹⁷


Contributing Landscape Associated with Building 2

Building 2, the "Hall of Transportation" during the GGIE, was located along the outer row of the Exposition exhibits and features on the island's southern edge between California Avenue and the Esplanade. The primary entrance to Building 2 was on its west side, facing what is now Avenue D. There were distinctly delineated lawn areas on the building's west, north, and south sides that created a landscape setting for the building, defined the space associated with it, and provided a separation between the building and the adjacent circulation features (Avenue D, California Avenue, and the Esplanade). In general, the planting around the building was less elaborate than in the various Courtyards (which were the key outdoor gathering spaces for the Exposition) and the focus was on the exhibits within Building 2, not on the outdoor spaces that surrounded the building.


¹⁷ HRE, pp. 83-84.



LEGEND

 General footprint of landscape setting for building during Golden Gate International Exposition

 National Register Listing boundary

 Location of remaining Golden Gate International Exposition landscape setting that contributes to CRHR significance of building



SOURCE: Knapp Architects

As with Building 1, the original GGIE landscape setting for Building 2 did not extend to include the Esplanade and the area along the waterfront south of the building, since these were related to the overall function of the island during the Exposition and not to that of Building 2. Neither the design of Building 2, which served as an exhibition hall during the Exposition, nor its associated landscape setting focused on the waterside, and the significance and integrity of Building 2 under the CRHR Criterion 1 (in association with the GGIE) and Criterion 3 (as an example of the Art Moderne style of commercial architecture from the late 1930s)¹⁸ do not depend on this waterside setting.

Today, the landscape setting for Building 2 is still evident, but there have been a number of changes. Key components of the landscape setting along the west side of the building remain in place (the lawn, the paved connection to the building's primary entrance that divides the lawn area into two sections, and about 9 of the original 12 olive trees, enough to provide a sense of the original row). Key components of the landscape setting along the north side of the building also remain (lawn, sidewalk leading to the entry in the middle of the building, row of olives along California Avenue). The east side of the building remains paved. However, the GGIE design for this area has been altered with the repaving of the area and the addition of structures. The plant materials and original pavement from the Exposition have been removed along the south side. The HRE identifies contributing landscape areas associated with Building 2. See Figure IV.D.4: Building 2 Contributing Landscape Areas.

The landscape setting around Building 2's west and north sides retains sufficient integrity to contribute to the significance of the building under CRHR Criterion 1 (in association with the GGIE). These landscape areas still convey the spatial organization of the building and the GGIE under CRHR Criterion 3 (Design/Construction). For these reasons, and for the purposes of this EIR, these landscape areas are considered contributing features to the significance of the Building 2 historical resource under CEQA. Note, however, that not all landscape features within these areas contribute to the significance of Building 2, and the HRE identifies only particular features as contributing, while other features are identified as noncontributing.¹⁹

Contributing Landscape Associated with Building 3




Building 3, the "Palace of Fine and Decorative Arts" during the GGIE, was located along the outer row of the Exposition exhibits and features on the island's southern edge between California Avenue and the Esplanade. Its primary entrance was on California Avenue and aligned with

¹⁸ JRP Historical Consulting, *Hall of Transportation (Building 2), Treasure Island National Register Nomination Form* (no date).

¹⁹ HRE, pp. 91-92.



LEGEND

- 
 General footprint of landscape setting for building during Golden Gate International Exposition
- 
 National Register Listing boundary
- 
 Location of remaining Golden Gate International Exposition landscape setting that contributes to CRHR significance of building



SOURCE: Knapp Architects

Avenue H, one of the main north-to-south oriented circulation corridors for the Exposition. There were distinctly delineated landscape areas around Building 3 that created a landscape setting for the building, defined the space associated with it, and provided a separation between the building and the adjacent circulation features (the unnamed street between Buildings 2 and 3, California Avenue, Argonaut Place, and the Esplanade). In general, the planting around the building was less elaborate than in the various Courtyards (which were the key outdoor gathering spaces at the Exposition) because the focus was on the exhibits within Building 3 and not on the outdoor spaces that surrounded the building.

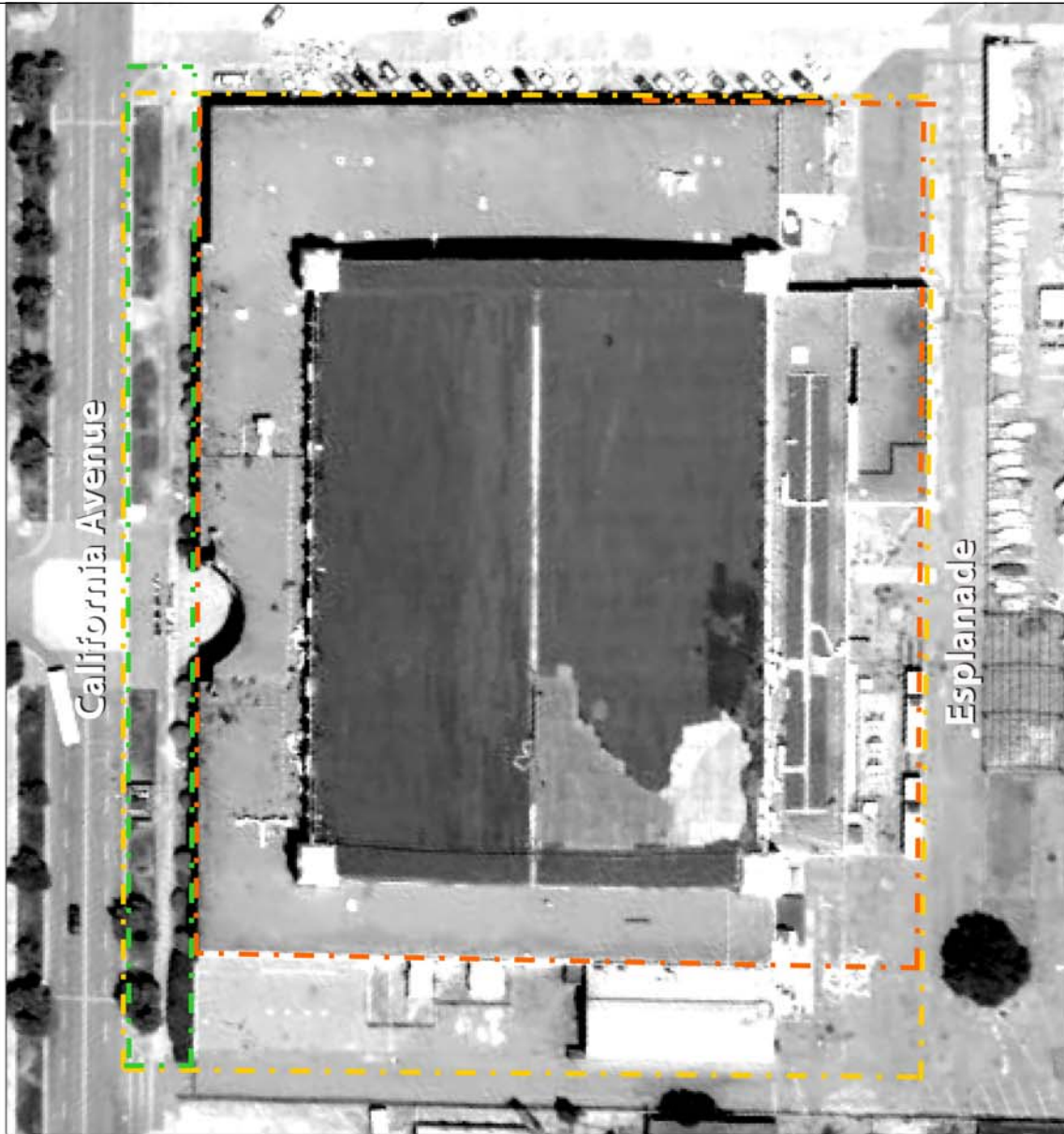
As with Buildings 1 and 2, the original GGIE landscape setting for Building 3 did not extend to include the Esplanade and the area along the waterfront south of the building, since these were related to the overall function of the island during the Exposition and not to that of Building 3. Neither the design of Building 3, which served as an exhibition hall during the Exposition, nor its associated landscape setting focused on the waterside, and the significance and integrity of Building 3 under the CRHR Criterion 1 (Events, in association with the GGIE) and Criterion 3 (Design/Construction) as an example of the Art Moderne style of commercial architecture from the late 1930s²⁰ do not depend on this waterside setting.

Today, only the narrow strip of lawn north of Building 3, located between the building and California Avenue, remains. The two olive trees on the north side are the remains of a once longer row of about 12 trees immediately in front of Building 3 during the GGIE. These two remaining olive trees lack sufficient integrity to represent the original row of trees in front of Building 3. The landscape setting on the building's east, south, and west sides no longer retains integrity due to the removal of the lawns and other vegetation and the loss of any distinction between these areas and the surrounding pavement. The HRE identifies contributing landscape areas associated with Building 3. See Figure IV.D.5: Building 3 Contributing Landscape Areas.




The area of lawn along Building 3's north side retains sufficient integrity to contribute to the significance of the building under CRHR Criterion 1 (in association with the GGIE). This landscape area still conveys the general spatial organization of the building and the GGIE under CRHR Criterion 3 (Design/Construction). For these reasons, and for the purposes of this EIR, this landscape area is considered a contributing feature to the significance of the Building 3 historical resource under CEQA. Note however, that not all landscape features within these areas contribute to the significance of Building 3, and the HRE identifies only particular features as contributing, while other features are identified as noncontributing.²¹

²⁰ JRP Historical Consulting, *Palace of Fine and Decorative Arts (Building 3), Treasure Island National Register Nomination Form* (no date).




²¹ HRE, p. 97.



LEGEND

   General footprint of landscape setting for building during Golden Gate International Exposition

   National Register Listing boundary

   Location of remaining Golden Gate International Exposition landscape setting that contributes to CRHR significance of building



SOURCE: Knapp Architects

Regulatory Framework

Federal, state, and local government laws and regulations may apply to significant historical resources. As discussed below, the CEQA statute and *CEQA Guidelines* include procedures for identifying, analyzing, and addressing potential impacts on historic resources. CEQA takes into account federal laws and regulations that pertain to historic resources, as well as the laws and procedures of local California jurisdictions, such as the City and County of San Francisco, that pertain to historic resources.

Federal

National Historic Preservation Act as Amended (1966)

The National Historic Preservation Act (“NHPA”) requires Federal agencies to consider the effects of their undertakings (such as issuing permits) on historic properties and to give the Advisory Council on Historic Preservation a reasonable opportunity to comment on those undertakings. Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties, afford the Advisory Council on Historic Preservation a reasonable opportunity to comment and consult with the applicable state historic preservation office (SHPO). If an adverse effect is identified, consultation with the SHPO usually results in a Memorandum of Agreement (MOA), which outlines agreed-upon measures that the agency will take to avoid, minimize, or mitigate the adverse effects. The permitting Federal agency is responsible for project compliance with Section 106 of the NHPA and its implementing regulations.

In accordance with the Section 106 process and the proposed federal conveyance action from the Navy to TIDA, the Navy notified the Advisory Council on Historic Preservation and received notification that the Council declined to participate in the consultation. The Navy also consulted with the California SHPO and as a result, entered into a MOA. Under the MOA, the Navy agreed to nominate to the NRHP a number of historic properties identified during the consultation process, as more particularly discussed above. The MOA also requires the Navy to submit a Research Design/Discovery Plan to the SHPO that delineates specific procedures to be taken under various scenarios to minimize impacts on potential archeological resources and to take certain precautions during interim leasing. The term of the MOA expires upon conveyance of NSTI to TIDA.

National Register of Historic Places

The National Register of Historic Places is the nation’s master inventory of cultural resources worthy of preservation. It is administered by the National Park Service, which is represented at the state level by the State Historic Preservation Officer. The National Register includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural,

engineering, archaeological, or cultural significance at the Federal, state, or local level. Resources that are listed on or have been found by State Historic Preservation Officer to be eligible to the National Register are called historic properties. The National Register includes four evaluative criteria to determine eligibility of a resource:

The quality of significance in American history, architecture, archaeology and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- a. that are associated with events that have made a significant contribution to the broad patterns of history; or
- b. that are associated with the lives of persons significant in our past; or
- c. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d. that have yielded or may likely yield information important in prehistory or history.

Although there are exceptions, certain kinds of resources are not usually considered for listing in the National Register: religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

The eligibility criteria for inclusion in the California Register of Historical Resources are closely based on the NRHP eligibility criteria.

The Secretary of the Interior's Standards for Rehabilitation

The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (the "Secretary's Standards") were published in 1995 and codified as 36 CFR 67.²² Neither technical nor prescriptive, these standards are intended to promote responsible preservation practices that help protect irreplaceable cultural resources.²³ The Secretary's Standards consist of ten basic

²² Treatments are defined as follows: "Preservation" acknowledges a resource as a document of its history over time and emphasizes stabilization, maintenance, and repair of existing historic fabric.

"Rehabilitation," while also incorporating the retention of features that convey historic character, also accommodates alterations and additions to facilitate continuing or new uses. "Restoration" involves the retention and replacement of features from a specific period of significance. "Reconstruction," the least-used treatment, provides a basis for recreating a missing resource.

²³ Weeks, Kay D. and Anne E. Grimmer. 1995. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstruction Historic Buildings*. Washington D.C.: U.S. Department of the Interior, National Park Service.

principles created to help preserve the distinctive character of an historic building and its site while allowing for reasonable changes to meet new needs. The preamble to the Secretary's Standards states that they "are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility."

State

California Register of Historical Resources

The California Register of Historical Resources is the authoritative guide to historical and archaeological resources that are significant within the context of California's history. Criteria for eligibility for inclusion in the CRHR are based on, and therefore correspond to, National Register of Historic Places criteria for listing. The CRHR eligibility criteria are presented above, on pp. IV.D.26 – IV.D.27.

Local

Local Registers

The City and County of San Francisco reviews the historic resources described under Articles 10 and 11 of the San Francisco Planning Code when it evaluates impacts on historic resources (see "Significance Criteria" below). Article 10 describes procedures regarding the preservation of sites and areas of special character or special historical, architectural, or aesthetic interest or value, such as officially designated city landmarks and buildings included within locally designated historic districts. Article 11 of the Planning Code rates buildings in the downtown C-3 district in accordance with their historic significance, designates six downtown conservation districts, and further sets forth regulations governing permits pertaining to such structures or districts. Treasure Island and Yerba Buena Island are outside of the areas that have been surveyed by adopted San Francisco registers (Planning Code Article 10 and Planning Code Article 11 and *Here Today*) and other local surveys of historical resources (including the *1976 Architectural Survey* and the *Heritage Survey*).

San Francisco Planning Code Section 101.1: Master Plan Priority Policies

Planning Code Section 101.1 is generally applicable to the Proposed Project. It requires that the City find that the proposed project is consistent, on balance, with eight *Master Plan Priority Policies*. Priority Policy 7 is relevant to historic resources and establishes a priority policy "that landmarks and historic buildings be preserved."

San Francisco General Plan

The *San Francisco General Plan* currently does not contain a preservation element. In 2007, the Planning Department published a Draft Preservation Element. The Draft Preservation Element

contains objectives and policies that promote the protection and preservation of historic architectural resources.

Planning Department, CEQA Review Procedures for Historic Resources

The San Francisco Planning Department prepared the *CEQA Review Procedures for Historic Resources* (Draft, March 31, 2008, subject to change, also referred to as San Francisco Preservation Bulletin No. 16) to determine whether a potential property or structure fits the definition of an historical resource as defined in the CEQA statute and *CEQA Guidelines*. Three categories of properties are defined.

- Category A. Category A has two subcategories:
 - *Category A.1*. Resources listed in or formally determined to be eligible for the CRHR.
 - *Category A.2*. Resources listed in adopted local registers, or properties that appear eligible, or may become eligible, for the CRHR.
- Category B. Properties requiring further consultation and review.
- Category C. Properties determined not to be historical resources, or properties for which the city has no information indicating that the property is an historical resource.

IMPACTS

Significance Criteria

The City and County of San Francisco has not formally adopted significance thresholds for impacts related to land use and land use planning. The Planning Department Initial Study Checklist form provides a framework of topics to be considered in evaluating potential impacts under CEQA. Implementation of a project could have a potentially significant impact related to land use and land use planning if it were to:

- Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the *San Francisco Planning Code*.

CEQA Guidelines (Section 15064.5(b)) establish the criteria for assessing a significant environmental impact on historical resources. They state, “[a] project with an effect 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.” The *CEQA Guidelines* define “substantial adverse change in the significance of an historical resource” as a “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired” (Section 15064.5(b)(1)). The significance of an historic architectural resource is considered to be “materially impaired” when a

project demolishes or materially alters the physical characteristics that justify the inclusion of the resource in the CRHR, or that justify the inclusion of the resource in a local register, or that justify its eligibility for inclusion in the CRHR as determined by the lead agency for the purposes of CEQA (Section 15064.5(b)(2)).

CEQA Guidelines include a presumption that a project that conforms to the Secretary's Standards would generally have a less-than-significant impact on an historical resource. Section 15064.5(b)(3) of the *CEQA Guidelines* states, "Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings...shall be considered as mitigated to a level of less than a significant impact on the historic resource."²⁴

Project Impacts

Impact CP-5: Reuse and rehabilitation of historical resources under the proposed *Redevelopment Plan* could impair the significance of those historical resources. (*Less than Significant*)

Buildings within the Senior Officers' Quarters Historic District and the Torpedo Assembly Building on Yerba Buena Island, and Buildings 1, 2, and 3 on Treasure Island would be retained, rehabilitated, and reused. It is anticipated that reuse of each of these district and individual historic resources would require interior and exterior alterations to adapt these resources to new uses and to modern standards for safety and energy efficiency. The specific nature and scope of such alterations have not been determined at this time but may include rehabilitation of the interior, rehabilitation of the exterior, and the addition of features (such as photovoltaic panels on Buildings 1, 2, and/or 3).

Rehabilitation of Buildings 1, 2, and 3 on Treasure Island may also include building additions. The draft *Design for Development* provides for the possibility of future additions to Buildings 1, 2, and 3. It establishes zones in which additions could occur and the maximum height for the potential additions.

As discussed above, Section 15065.5 of the *CEQA Guidelines* states that a project that conforms to the Secretary's Standards "shall be considered as mitigated to a level of less than a significant impact on the historical resource." The draft *Design for Development* requires that rehabilitation

²⁴ Note however, that Secretary's Standards are not to be construed as CEQA significance criteria. Although compliance with the Secretary's Standards may indicate that a project would have a less-than-significant impact on an historical resource, a project that does not comply with the Secretary's Standards does not, by definition, result in a significant impact under CEQA. Alterations that are not consistent with the Secretary's Standards may, or may not, result in a significant impact under the "material impairment" significance standard of *CEQA Guidelines* Section 15064.5(b)(1).

of all historic resources on Yerba Buena Island, including those within the Senior Officers' Quarters Historic District and the Torpedo Assembly Building (Standard Y5.7.15), and Buildings 1, 2, and 3 on Treasure Island (Standard T.5.10.1) comply with the Secretary's Standards. When specific proposals for rehabilitation of these historic buildings on Yerba Buena Island and Buildings 1, 2, and 3 are developed in the future, they will be subject to review by the Treasure Island Development Authority, the public body with jurisdiction over design review of proposed treatment of historic resources within the Development Plan Area. In order to approve an alteration or addition to buildings within the Senior Officers' Quarters Historic District, Torpedo Assembly Building, and Historic Buildings 1, 2, and 3, TIDA must find that the work conforms to Secretary's Standards. This requirement limits this potential impact to a less-than-significant level. No mitigation is required.

Impact CP-6: Alterations to the contributing landscape areas of Buildings 1, 2, and 3 could impair the significance of those historical resources. (*Less than Significant with Mitigation*)

The HRE identifies landscape areas associated with Buildings 1, 2, and 3 that were not included within the individual NRHR nominations for these buildings but contribute to the individual significance of each of those historical resources under CRHR criteria. For the purposes of environmental review under CEQA, these additional areas are each considered contributing features of Buildings 1, 2 and 3 when evaluating impacts of the Proposed Project on these individual historical resources. Alterations to and within the contributing landscapes of Buildings 1, 2, and 3 would take place either as a component of the larger scope of interior and exterior alterations for rehabilitation and reuse of these historical resources under the proposed *Redevelopment Plan*, or for portions of contributing landscapes that are adjacent to California Avenue, as part of proposed street network improvements.

The draft *Design for Development* includes planning-level land use and site design for Treasure Island as a whole and concept design for some landscapes, including that of Building 1. The draft *Design for Development* illustrates concepts for the landscapes around Building 1, including a new circulation pattern and palm grove on the west side of the building and a plaza east of the building that would include part of the contributing site of Building 1. Removal of the character-defining retaining walls and alteration of the driveways west of Building 1 could cause a substantial adverse change in the significance of an historic resource, although it is not possible to foresee the ultimate impact from the current concept-level design for the landscape. The landscape design has not reached the stage at which it can be determined whether there would be a significant impact on the landscape features that contribute to Building 1. Alterations to the contributing landscapes could result in a significant adverse impact on the individual historic significance of Building 1. Mitigation Measure M-CP-6 would reduce this impact to a less-than-significant level.

Based on a review of information provided by the project sponsors that is proposed to be included in the project's *Design for Development*, the proposed alterations to the contributing landscapes for Buildings 2 and 3 would not alter the contributing landscape areas of Buildings 2 and 3 in an adverse manner. They would preserve the essential spatial relationships of these spaces, allowing them to continue to contribute to the significance of the properties to which they are associated. For these reasons, the proposed alterations to the contributing landscapes of Buildings 2 and 3 would not result in a material impairment of the significance of the Buildings 2 and 3 historical resources under CEQA. No mitigation is required.

Mitigation Measure M-CP-6: Review of Alterations to the Contributing Landscape of Building 1

During the design review process, TIDA is required, according to draft *Design for Development* Standard T5.10.1, to find that Building 1's rehabilitation is consistent with the Secretary's Standards. In making that finding, TIDA shall also consider any proposed alterations to and within the contributing landscape areas identified by the HRE as contributing to the CRHR eligibility of Building 1. TIDA shall not approve a design proposal for Building 1 unless it makes a finding that any such alterations, when taken together with the alterations and additions to Building 1 itself, comply with the Secretary's Standards.

Impact CP-7: New construction within the contributing landscapes of Buildings 1, 2, and 3 could impair the significance of those historical resources. (*Less than Significant with Mitigation*)

Implementation of the proposed *Redevelopment Plan* calls for new construction within the contributing landscapes of Buildings 1, 2, and 3. Removal of character-defining features and introduction of new incompatible features within these areas could materially impair the physical characteristics that convey the historical significance of Buildings 1, 2, and 3 and that justify their inclusion in the CRHR.

New free-standing construction that would be allowable within the contributing landscape of Building 1 to its east and within the contributing landscapes of Buildings 1 and 2 would not result in a material impairment in the significance of these individual resources. Proposed new construction within Block B1 would intrude only slightly on the northeast corner of the contributing landscape of Building 1, and would be 75 feet from that building. The contributing landscape setting of Building 1 would be altered to a small degree by this intrusion. Potential new free-standing construction that would be allowable within the contributing landscapes of Buildings 2 and 3 would be limited in height to 25 feet and are required to maintain a separation of at least 20 feet from these buildings (Standard T5.10.8). These limitations would result in new construction that is visually subordinate to, and differentiated from, the Building 2 and Building 3 resources. For these reasons new free-standing construction to the east of Building 1 and within

the contributing landscapes of Buildings 2 and 3 would not result in a significant adverse impact on an historical resource. No mitigation is required for the impacts described above.

The draft *Design for Development* provides for construction of new free-standing buildings, up to 20 feet tall, within the contributing landscape site west of Building 1. The specific design of these proposed new features has not been developed enough at this time to assess their impact. Given the prominent location of these proposed free-standing buildings in relation to Building 1, they could potentially materially impair the integrity of Building 1, if not designed to be subsidiary to, and differentiated from, Building 1. Implementation of Mitigation Measure M-CP-7 would ensure that the potential impact of this new construction on Building 1 would be less than significant.

Mitigation Measure M-CP-7: Review of New Construction within the Contributing Landscape West of Building 1

During the design review process, TIDA is required, according to the draft *Design for Development* (Standard T5.10.1), to find that Building 1's rehabilitation is consistent with the Secretary's Standards. In making that finding, TIDA shall also consider proposed new construction west of Building 1 within its associated contributing landscape areas. TIDA shall not approve a design proposal for Building 1 unless it makes a finding that any such new construction, when taken together with the alterations and additions to Building 1 itself, comply with the Secretary's Standards.

Impact CP-8: Demolition of Building 111, a component of Building 3, would not impair the significance of the Building 3 historical resource. (*Less than Significant*)

As part of the rehabilitation and reuse of Building 3, Building 111, an addition to Building 3, would be demolished.

The HRE notes that Building 111 is included in the NRHP nomination for Building 3 as a part of Building 3. It was constructed to serve as a firehouse and was complete by the time the GGIE opened. The HRE reasons that that demolition of Building 111 would remove a characteristic of Building 3 that conveys the development of the site and its association with the GGIE and that justifies the eligibility of Building 3 for inclusion in the CRHR. On this basis, the HRE concludes that the demolition of Building 111 would result in a significant adverse impact on the significance of the Building 3 historical resource.²⁵

The Planning Department has received additional information about Building 111 and its relationship to Building 3, provided in a memo to the project sponsors by historic architectural

²⁵ HRE, pp. 102-104.

resource consultants Page & Turnbull.²⁶ This additional information was not considered by the preparers of the NRHP nomination for Building 3. The Page & Turnbull memo presents supplemental evidence in support its conclusion that Building 111 does not significantly contribute to the historic character of Building 3, and may therefore be removed without affecting the historic significance of the Building 3 resource. Building 111 was included in the NRHP nomination because of its age, not because it was considered an integral feature of Building 3. Constructed with less-refined materials, this feature was an addition intended to serve a temporary function as a firehouse during the GGIE.

After a review of the information submitted in the HRE as well as the additional information provided by Page & Turnbull, the Planning Department has determined (contrary to the conclusion in the HRE for this impact) that substantial evidence in light of the whole record supports the conclusion that the removal of Building 111 in the manner proposed would be consistent with the Secretary's Standards, and would not result in a substantial adverse change in the historic significance of the Building 3 historical resource.²⁷ In view of this finding, this impact would be considered less than significant. No mitigation is required.

Impact CP-9: Demolition of the Damage Control Trainer would impair the significance of an historical resource. (*Significant and Unavoidable*)

The Damage Control Trainer (housed in Building 341) would be demolished as part of the Proposed Project. The HRE concludes that the object (but not the building housing it) meets the criteria for inclusion in the CRHR and is therefore an historical resource for the purposes of CEQA. Demolition of this historical resource would result in a significant adverse impact on an historical resource.

Mitigation Measure M-CP-9 calls for documentation and interpretation of the Damage Control Trainer. Implementation of this mitigation measure would lessen the impact of demolition of this historical resource, but would not reduce this impact to a less-than-significant level. Alternative mitigations, such as moving the object, are not feasible because the Damage Control Trainer includes a large concrete sump, much like a swimming pool, which is partially built into the grade. Avoiding removal of the object is not possible as part of the Proposed Project, since its location overlaps two development blocks and eliminating those development blocks would substantially change the Proposed Project.

²⁶ Page and Turnbull, "Information on the Landscape Treatment of Building 2; Description, Character-Defining Features and Proposed Design Criteria for Building 3," Memo to Alexandra Galovich, April 7, 2010. It is incorporated by reference and summarized in this section. A copy of this document is available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2007.0903E.

²⁷ HRER, pp. 7-9.

Chapter VII, Alternatives, presents an alternative (Alternative C, No Ferry Service Alternative) that would retain the Damage Control Trainer in place.

Mitigation Measure M-CP-9: Documentation and Interpretation

Documentation

The project sponsors shall retain a professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History to prepare written and photographic documentation of the historical resource.

The documentation for the property shall be prepared based on the National Park Service's Historic American Building Survey ("HABS") / Historic American Engineering Record ("HAER") Historical Report Guidelines. This type of documentation is based on a combination of both HABS/HAER standards (Levels II and III) and the National Park Service's policy for photographic documentation as outlined in the National Register of Historic Places and National Historic Landmarks ("NHL") Survey Photo Policy Expansion.

The written historical data for this documentation shall follow HABS/HAER Level I standards. The written data shall be accompanied by a sketch plan of the property. Efforts should also be made to locate original construction drawings or plans of the property during the period of significance. If located, these drawings should be photographed, reproduced, and included in the dataset. If construction drawings or plans cannot be located, as-built drawings shall be produced.

Either HABS/HAER standard large format or digital photography shall be used. If digital photography is used, the ink and paper combinations for printing photographs must be in compliance with NRHP-NHL Photo Policy Expansion and have a permanency rating of approximately 115 years. Digital photographs will be taken as uncompressed, TIF file format. The size of each image will be 1600x1200 pixels at 330 pixels per inch or larger, color format, and printed in black and white. The file name for each electronic image shall correspond with the index of photographs and photograph label.

Photograph views for the dataset shall include (1) contextual views; (2) views of each side of each building and interior views, where possible; (3) oblique views of buildings; and (4) detail views of character-defining features, including features of the interiors of some buildings. All views shall be referenced on a photographic key. This photographic key shall be on a map of the property and shall show the photograph number with an arrow to indicate the direction of the view. Historic photographs shall also be collected, reproduced, and included in the dataset.

All written and photographic documentation of the historical resource shall be approved by TIDA prior to any demolition and removal activities. The project sponsors shall transmit such

documentation to the San Francisco History Center of the San Francisco Public Library, and to the Northwest Information Center of the California Historical Information Resource System.

Interpretation

The project sponsor shall provide a permanent display of interpretive materials concerning the history and architectural features of the historical resource within public spaces of Treasure Island. The specific location, media, and other characteristics of such interpretive display shall be approved by TIDA prior to any demolition or removal activities.

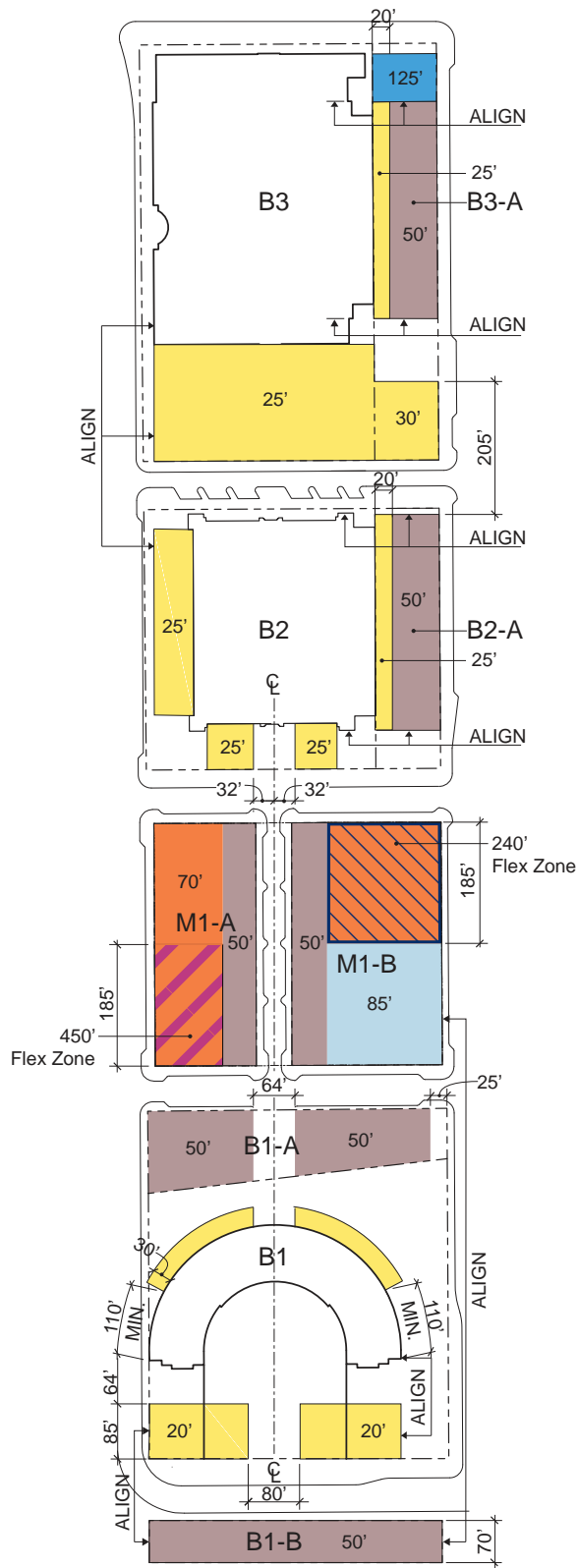
Impact CP-10: Demolition of NSTI resources on Treasure Island and Yerba Buena Island could impair the significance of historical resources. (*Less than Significant*)

All of the buildings and structures within the Development Plan Area on Treasure Island and Yerba Buena Island that are over 50 years in age have been comprehensively surveyed, studied, and evaluated. As discussed above, Buildings 1, 2, and 3 on Treasure Island; the Senior Officers' Quarters Historic District (and its contributing buildings and features) and the Torpedo Assembly Building on Yerba Buena Island would be retained and rehabilitated. The Damage Control Trainer would be demolished, resulting in a significant, unavoidable impact on an historical resource as discussed separately above under Impact CP-9.

All other NSTI buildings, structures, and objects within the Development Plan Area that would be demolished as part of the Proposed Project have been found by the comprehensive 1997 Inventory and Evaluation and by supplemental study in the HRE not to meet the criteria for inclusion in the CRHR. They are therefore not considered historical resources for the purposes of CEQA. For these reasons, demolition of these buildings and structures would have a less-than-significant impact historical resources. No mitigation is required.

Impact CP-11: Proposed new construction outside of the contributing sites of Buildings 1, 2, and 3 could impair the significance of those historical resources. (*Less than Significant*)

New buildings are proposed in the vicinity of, but outside of, the contributing landscape sites of Buildings 1, 2, and 3. The draft *Design for Development* specifies height limitations for the blocks in the vicinity of Buildings 1, 2, and 3 (see Figure IV.D.6: Height Plan Near Buildings 1, 2, and 3): on block B1: 20 feet (west of Building 1) and below the finish floor (east of Building 1); on block B1-A: 50 feet (east of Building 1); on block M1-A: 50, 70, and 450 feet (between Buildings 1 and 2); on block M1-B: 50, 85, and 240 feet (between Buildings 1 and 2); on block B2: 25 feet (north, west, and south of Building 2); on block B2-A: 25 and 50 feet (south of Building 2); on block B3: 25 feet (west of Building 3); and on block B3-A: 25, 30, 50, and 125 feet (south of Building 3). The draft *Design for Development* requires a minimum 20-foot separation between new buildings and the historic buildings. The draft *Design for Development*



SOURCE: TIDA

also allows new construction, including high-rise towers in the zones to the north of Buildings 1, 2, and 3 (north of California Avenue).

Buildings 1, 2, and 3 are individual resources, rather than part of an historic district. This proposed new construction would not be within the contributing sites of Buildings 1, 2, and 3, and would not have a physical effect on those historical resources. It would not alter, damage, or demolish them. The Secretary's Standards apply to work carried out on historic properties; they are not applicable to properties that are not historic and are not within the site of an historic resource or within a historic district. The new construction described in the draft *Design for Development* would have the potential to alter the integrity of setting, feeling, and association of Buildings 1, 2, and 3, but it would not change their integrity of design, materials, workmanship, or location. The proposed new buildings in the vicinity of Buildings 1, 2, and 3 would not impair the physical characteristics that justify their eligibility for inclusion in the California Register. Although new buildings would alter the existing visual, urban, and architectural context of Buildings 1, 2, and 3, the historic character of this surrounding context has already been altered, first with the Navy's occupation of the former GGIE site, and later with the Navy's own demolition and new construction.

For these reasons, new construction outside of the contributing sites of Buildings 1, 2, and 3 would not have a significant adverse impact on the historic and architectural significance of Buildings 1, 2, and 3. No mitigation is required.

Impact CP-12: Proposed new construction within and adjacent to the Senior Officers' Quarters Historic District could impair the significance of historical resources. (*Less than Significant*)

New construction is allowable within the Senior Officers' Quarters Historic District. As discussed above, Section 15065.5 of the *CEQA Guidelines* states that a project that conforms to the Secretary's Standards "shall be considered as mitigated to a level of less than a significant impact on the historical resource." The draft *Design for Development* requires that all new construction within the Senior Officers' Quarters Historic District (Standard Y5.7.15) comply with the Secretary's Standards. When specific proposals for new construction within the historic district are developed in the future, they would be subject to review by TIDA, the public body with jurisdiction over design review of proposed treatment of historic resources within the Development Plan Area. In order to approve any new construction within the Senior Officers' Quarters Historic District, TIDA must find that the work complies with the Secretary's Standards. This requirement limits this potential impact to a less-than-significant level. No mitigation is required.

The draft *Design for Development* also anticipates new construction outside of, and adjacent to, the Senior Officers' Quarters Historic District. The potential development is planned to serve as

a parking lot and a potential fire station if needed (Guideline Y.5.7.20). It would continue to be separated from the buildings of the district by the greensward located within the district at its easternmost end. For these reasons, new construction outside of the Senior Officers' Quarters Historic District would not have a significant adverse impact on the historic and architectural significance of that district or its component resources. No mitigation is required.

Cumulative Impacts

Impact CP-13: The Proposed Project would not contribute cumulatively to impacts on historic architectural resources when considered with nearby projects. (*Less than Significant*)

The Proposed Project would have a significant adverse impact on the Damage Control Trainer, diminishing the association of Treasure Island with the Navy. However, this project impact would not contribute to any cumulative impact on historical resources when considered with nearby projects such as the Bay Bridge East Span project and the Yerba Buena Island Ramps Improvement Project. Those projects would cause adverse effects on the Senior Officers' Quarters Historic District and Quarters 10. The proposed project would not cause any adverse impacts to these resources and therefore would not contribute to the adverse impacts caused by these projects. Under the Proposed Project, historic architectural resources on Yerba Buena Island would be retained, rehabilitated, and reused consistent with the Secretary's Standards to ensure that their historic and architectural character would be preserved. The Clipper Cove Marina Project would not result in any adverse impact on historic architectural resources that could compound, or be compounded by, any adverse impacts of the proposed project on historical resources.

For these reasons, the Proposed Project would not contribute to a significant cumulative impact related to historical resources.