
V. ENVIRONMENTAL IMPACT ANALYSIS

D. CULTURAL RESOURCES

INTRODUCTION

The information and analysis in this section is based primarily on the following reports, which are included in Volume II Appendix F of this DEIR:

- *Phase I Cultural Resources Study Review*, prepared by Tom Origer & Associates, January 27, 2006.
- *Phase I Cultural Resources Study for Haystack Landing, Petaluma, California*, prepared by Archaeor Archaeological Consultants, May 2004.

ENVIRONMENTAL SETTING

Prehistoric and Historic Overview

During prehistoric times, the project area was known to have been inhabited by the Coast Miwok group of Native Americans. The Coast Miwoks occupied an area along the California Coast from Duncan's Point in Marin County, south to Point Bonita, and east to the Sonoma River. The Coast Miwoks were hunter-gatherers who usually inhabited one or more permanent villages, although archaeological evidence suggests most sites were occupied seasonally in association with resource availability and climate patterns. Permanent villages tended to be located where fresh water, ample food resources and other key resources were most abundant year round, including areas adjacent to shores, lagoons, and sloughs. Permanent Coast Miwok village sites have been found along the Petaluma River and along the shores of the Tomales and San Francisco Bays, in areas that supported large populations of wild game and edible plant species. Areas with harsher climates and less available resources tended to support seasonal occupation with less population density. Many seasonally inhabited campsites were utilized to take advantage of a seasonally available resource. Geographic and ecological factors resulted in cultural contrasts based on the differences between the coastal, interior valley, and riverside habitats.

The Coast Miwok population suffered dislocation and cultural disintegration in association with the founding of the San Francisco Mission in 1776, and the subsequent missionization and colonization of the area in the 1800s including the settlement of Fort Ross. Colonization included the introduction of lumbering, dairying, and agriculture.

Due to its proximity to the Petaluma River, new settlers to the area used the site as a shipping center and stopping point for people and products going between Petaluma and San Francisco. In 1849 hunters' camps and trading posts were set up along the river banks to supply gold miners. The area supported waterborne commerce up until 1950. From 1968 to 1990, a portion of the project site was used for settling ponds from quarry operations. The settling ponds have since been abandoned. More recently, the project site has been used for heavy equipment storage and the stockpiling of grass, palettes, and straw wattles.

Records Search

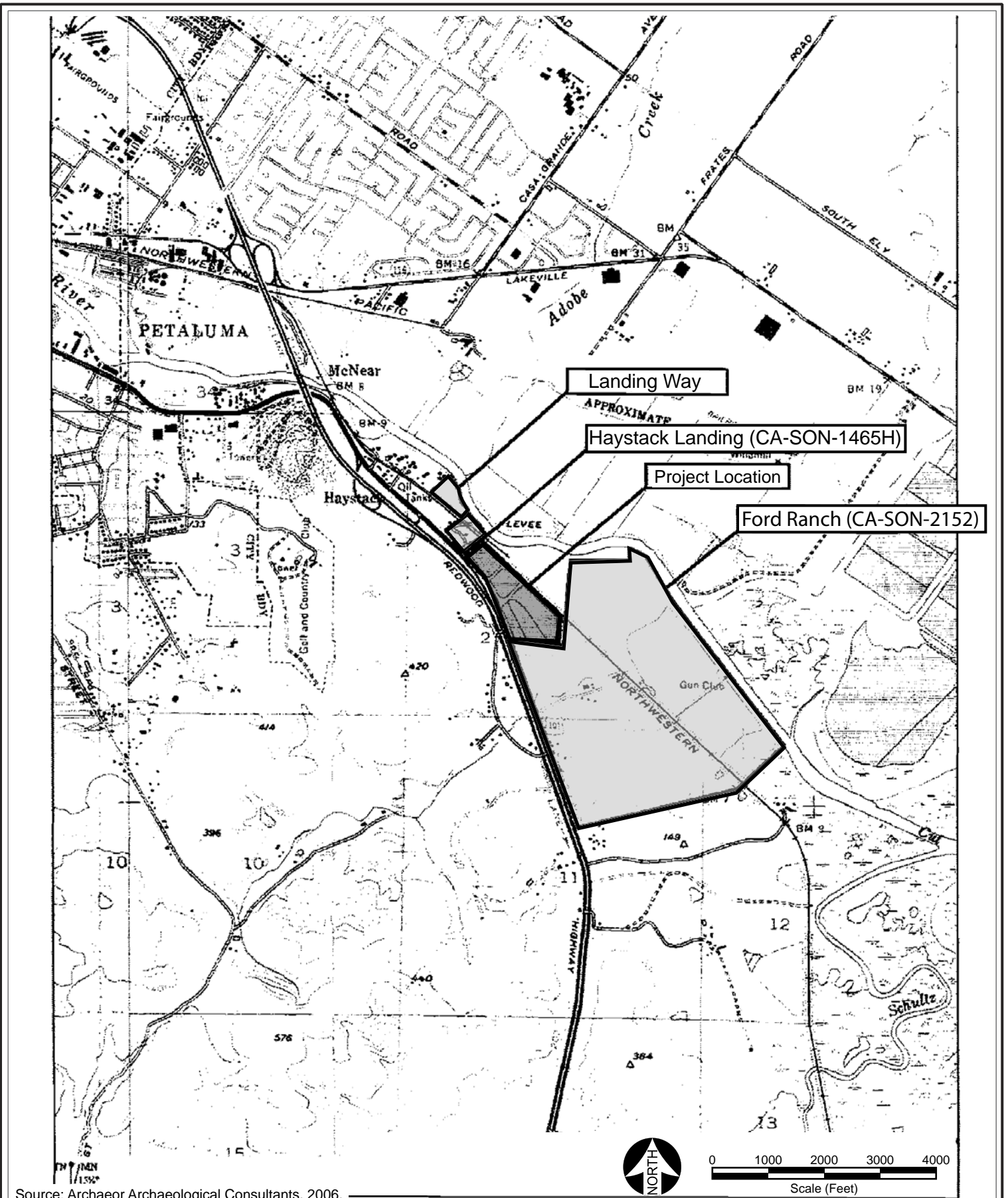
A records search of the California Historical Resources Information System (CHRIS) was conducted as part of the Phase I Cultural Resources Study (Cultural Study) for the project site at the Northwest Information Center at Sonoma State University. The search consisted of consulting the CHRIS records of previous studies and previously recorded cultural resource sites, as well as the National Register of Historic Places, the California Inventory of Historic Resources and historic maps. Additionally, a search of the Sacred Lands files maintained by the Native American Heritage Commission (NAHC) was completed and Native American individuals/organizations were contacted regarding unreported resources and areas of concern regarding the project area.

The records search indicated one prehistoric cultural resource, located approximately one-quarter mile from the project site, Ca-Son-2152, and one historic site, Ca-Son-1465H (Haystack Landing), was partially located within the project site (as Figure V.D-1 shows). Associated with these sites, three previous archaeological evaluations have been performed within one-quarter mile of the project site, as discussed below.

In April 1985, an archaeological investigation of a five-acre parcel located within the Haystack Landing project area at 3355 Petaluma Boulevard South in the City of Petaluma resulted in the identification and recordation of historic site Ca-Son-1465H. This investigation resulted in the identification of a nineteenth-century house (built before 1860) and two barns; two areas with glass and ceramic specimens; and a board-covered pit. It was recommended that if buried archaeological materials were discovered during ground-disturbing activities, work be halted in the areas of the find until a qualified archaeologist evaluated the find. A subsequent review of the Cultural Study and a field visit to the project site found that the house had burned down and the site had been impacted by fire suppression efforts, clean-up, and demolition of the two barns. The areas containing glass and ceramic artifacts were observed but the board-covered pit was not located.

In August 2003, a Phase I Cultural Resources Study of a six-acre parcel, located approximately one-quarter mile north of the project site on Landing Way in the City of Petaluma, did not identify any archaeological resources within the parcel. This study recommended that if any archaeological resources were encountered during ground-disturbing activities, work be halted in the areas of the find until a qualified archaeologist evaluated the find.

In March 1994, a reconnaissance survey of the 264.5-acre Ford Ranch, located directly south of the project site, resulted in the identification and recordation of prehistoric site Ca-Son-2152. The site consists of a high concentration of burnt rock fragments, obsidian flakes, shell fragments, and dark friable (readily crumbled; brittle) soil located on a small knoll about 30 feet in elevation. This prehistoric cultural resource site occupies an approximately 500-foot by 400-foot area.



Source: Archaeor Archaeological Consultants, 2006.



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Figure V.D-1
Previously Surveyed Properties
Within 1/4 Mile of the
Haystack Landing Project Area

Native American Consultation

On January 9, 2004, the State of California Native American Heritage Commission (NAHC) was contacted and a search of the Sacred Lands files maintained by the NAHC for the project site was requested. On January 14, 2004, the NAHC stated that a search of the Sacred Lands files had produced negative results, provided a list of five Native American individuals/organizations that may have knowledge of unreported resources or areas of concern regarding the project area, and recommended that these individuals/organizations be contacted.

On January 15, 2004, letters requesting information about any sites or areas of concern to Native American Indians within the project area were posted via U.S. Postal Service to the five individuals and/or organizations identified by the NAHC. As of January 27, 2004, no responses had been received from any of the recipients of the January 15, 2004 mailing. On January 28, 2004, follow-up telephone calls to all five individuals and/or organizations were made.

The follow-up telephone calls resulted in a response from a representative of the Coast Miwok, Pomo indicating that there is no knowledge of any traditional site specific to the project area. There were no responses from the four other individuals/organizations.

Baseline Conditions - Site Reconnaissance

On January 6, 2004 and January 7, 2004, a general archaeological field survey was conducted on parcel APN 019-320-022. On March 2, 2004, a general archaeological field survey was conducted on parcel APN 019-320-001 and APN 019-320-023. Methodology and detailed field survey results are described in Appendix F. A summary of the results is provided below.

APN 019-320-001

On March 2, 2004, structures observed on this parcel included modern, modular housing and associated outbuildings. Based upon an examination of the soil profile exhibited within the drainage channel, this parcel was comprised of imported fill material to a depth of at least four feet. No evidence of historic or prehistoric cultural indicators was observed during the archaeological field survey of this parcel.

APN 019-320-022

This parcel appears to have been subjected to extensive modifications within the past 100 years. No evidence of historic or prehistoric cultural indicators was observed during the archaeological field survey of this parcel.

APN 019-320-023

This parcel includes a portion of historic site Ca-Son-1465H, and therefore has the Historic District Zoning overlay. This parcel has been subjected to extensive modifications over the years including road cuts, grading, and historical and modern building construction. These modifications included the construction of a nineteenth-century house and barn, and several modern buildings that were located in the southern portion of the parcel. A mobile home was located at the eastern edge of the knoll, behind the nineteenth-century house. No evidence of prehistoric cultural indicators was observed during the archaeological field survey of this parcel. Historic features observed during the field survey included the nineteenth-century house and barn, and a scatter of mid- to late 1800s glass and ceramic shards located in a garden area approximately 30

feet northeast of the rear of the house. These features characterized the major physical elements of historic site Ca-Son-1465H, Haystack Landing.

Ca-Son-1465H, Haystack Landing

Historic site Ca-Son-1465H, Haystack Landing, was initially identified and recorded in April 1985 by John Hayes and Susan Alvarez of the Cultural Resources Facility of the Anthropological Studies Center, Sonoma State University, Rohnert Park, California. At that time, Ca-Son-1465H was described as consisting of a nineteenth-century house located within the project area and at least one barn of probable mid-to-late nineteenth-century construction located below the knoll on the south side of the project area. A board-covered pit was situated below the house on the northern down slope of the knoll (Alvarez and Hayes 1985). It was also noted that "the stone foundation of the house was altered on the south and west sides."

At the time of the field survey, the house was raised off the ground and perched on large, horizontal wooden beams supported in places by upright beams placed on concrete blocks. Most of the stone foundation was removed. A modern PVC sewer line and natural gas hookup were observed protruding from beneath the house along the south side. Construction materials (five square cut nails) and construction style (i.e. imported stone foundation and Italianate architectural features) indicated that the house was built in the mid- to late 1800s.

The mid-to-late nineteenth-century barn was located across the access road which runs east to west between Petaluma Boulevard South and the railroad tracks, approximately 200 feet south of the Haystack Landing house. The barn was of typical construction for this time period and features a low, gabled roof. Square cut nails were observed throughout the exterior of the building and the stone foundation, underlying a portion of the wooden plank floor, is of the same type as that of the Haystack Landing house suggesting that these structures were built at approximately the same time.

Existing Conditions

At some point in time between the spring and autumn of 2004, the historic home was destroyed in a fire and the barns and other buildings were removed or demolished, with approval of the Landmarks Commission. However in a subsequent site visit in January of 2006, archaeologists concurred that the site remains historically significant and that there is a high probability of buried archaeological deposits on-site.

REGULATORY SETTING

Federal, State, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), and the California Environmental Quality Act (CEQA) are the basic federal and state laws governing preservation of historic and archaeological resources of national, regional, State and local significance.

Federal

Section 106 of the NHPA of 1966 governs federal regulations for cultural resources. Section 106 requires Federal agencies to consider the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations "Protection of Historic Properties" are found in 36 Code of Federal Regulations

(CFR) Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites, that are determined eligible for listing on the National Register of Historic Places. The criteria for determining National Register eligibility are found in 36 CFR Part 60. Amendments to the Act (1986 and 1992) and subsequent revisions to the implementing regulations have, among other things, strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not require this level of compliance. Federal regulations only come into play in the private sector if a project requires a federal permit or would use federal money.

State

State historic preservation regulations affecting this project include the statutes and guidelines contained in the CEQA (Public Resources Code Sections 20183.2 and 21084.1 and Section 15064.5 of the *CEQA Guidelines*). CEQA requires lead agencies to carefully consider the potential effects of a project on historical resources. (See the Historical Resources description below for criteria specifications.)

Several agency publications, such as the series produced by the Governor's Office of Planning and Research (OPR), provide advice on procedures to identify such resources, evaluate their importance, and estimate potential effects. OPR's technical advice series strongly recommends that agencies solicit the concerns of Native Americans and other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associates and societies as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of the antiquity, and provides for the sensitive treatment and disposition of those remains.

California Historic Register

The State Historic Preservation Office (SHPO) maintains the California State Register of Historic Resources (CRHR). Properties listed on the National Register of Historic Properties (NRHP) are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

Native American Consultation

Government Code §65352.3 (Senate Bill [SB] 18) requires local governments to consult with California Native American tribes identified by the California NAHC prior to the adoption or amendment of a general plan or specific plan. The purpose of this consultation is to preserve or mitigate impacts to cultural places.

Local

Parcel 019-320-022 has a Historical District Combining Zone, which is discussed in further detail in Section V.H. (Land Use). The applicable policies contained in the Archaeological and Historical Sites section of the County's Open Space Element are analyzed in the Sonoma County General Plan Policy Analysis, in Section V.H (Land Use), Table V.H-2. Additionally, the Petaluma Daily Belt Area Plan, of which the project site is a part, has several development policies related to Archaeological Sites and Historic Resources. These Area Plan policies are analyzed in further detail in Section V.H (Land Use), Table V.H-3.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

Based on Appendix G of the *CEQA Guidelines*, a project would have a significant impact on cultural resources if the project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

To determine whether cultural resources could be significantly affected, the significance of the resource itself must first be determined. Section 15065 of the *CEQA Guidelines* mandates a finding of significance if a project would eliminate important examples of major periods of California history or prehistory.

In addition, pursuant to Section 15064.5 of the *CEQA Guidelines*, a project could have a significant effect on the environment if it "may cause a substantial adverse change in the significance of an historical resource." A "substantial adverse change" means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource is impaired." Material impairment means altering "in an adverse manner those characteristics of an historical resource that convey its historical significance and its eligibility for inclusion in the California Register of Historical Resources." Impacts to those cultural resources not determined to be significant according to the significance criteria described above are not considered significant for the purposes of CEQA.

Historical Architectural Resources

Pursuant to Section 15064.5 of the *CEQA Guidelines*, a historical resource (including both built environment and prehistoric archaeological resources) is presumed significant if the structure is listed on the CRHR or has been determined to be eligible for listing by the State Historical Resources Commission. A historical resource may also be considered significant if the lead agency determines, based on substantial evidence, that the resource meets the criteria for inclusion in the CRHR. The criteria are as follows:

1. The resource is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. The resource is associated with lives of persons important in our past;
3. The resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. The resource has yielded, or may be likely to yield, information important in prehistory or history.

Archaeological Resources

Pursuant to Section 15064.5 of the *CEQA Guidelines*, archaeological resources, not otherwise determined to be historical resources, may be significant if they are unique. Pursuant to Public Resources Code Section 21083.2, a unique archaeological resource is defined as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets one of the following criteria:

1. The resource contains information needed to answer important scientific questions and there is a demonstrable public interest in that information;
2. The resource has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
3. The resource is directly associated with a scientifically recognized important prehistoric or historic event or person.

A non-unique archaeological resource means an archaeological artifact, object, or site that does not meet the above criteria. Non-unique archaeological resources receive no further consideration under CEQA.

Human Remains

According to Section 15064.5 of the *CEQA Guidelines*, all human remains are a significant resource. Section 15064.5 of the *CEQA Guidelines* also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are spelled out under Public Resources Code Section 5097.

Paleontological Resources

According to Appendix G of the *CEQA Guidelines*, a project could have a significant effect if it would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Project Impacts and Mitigation Measures

Impact CULT-1 Historical Resources

According to Section 15064.5(a)(3) of CEQA, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR as defined above. The literature review and field survey for the project site indicated that the Haystack Landing house, barn and artifact scatter described above should be considered "historically significant" by the lead agency according to the following criteria as specified in Section 15064.5(a)(3)(A)-(B) and (D) of CEQA:

Historic site Ca-Son-1465H, Haystack Landing, was "associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage." As has been indicated by historical maps, the house, and possibly the barn, had been situated within the study area prior to 1860 during which time Haystack Landing was a site of shipping and passenger travel activity. The landing was a terminus for steamboats from San Francisco, as well as stage travel north, as early as 1857. The first portion of the third railroad in California, from Haystack Landing to Petaluma, was built in the spring and summer of 1864. Haystack Landing represented the expansion of travel, commerce, and transportation from the city of San Francisco into the North Bay Area during the 1850s and 1860s.

Haystack Landing was also "associated with the lives of persons important in our past." Charles Minturn was known around the San Francisco Bay in the early 1860s as "The Ferryboat King." He first ventured on the north shore of San Francisco Bay via a steamboat that ran up Petaluma Creek to Lakeville, seven miles south of Petaluma. Minturn then had a channel dredged to Haystack Landing. In 1862, he chartered the Petaluma & Haystack Railroad. Charles Minturn was largely responsible for the expansion of travel, commerce, and transportation from the city of San Francisco into the North Bay Area during the 1850s and 1860s.

Additionally, the mid-to-late 1800s artifact scatter that was located behind the house (and the potential for other historic features such as trash dumps, privy-pits, etc. to be located within the site area) indicates that the site "has yielded, or may be likely to yield, information important in prehistory or history."

A portion of the historic Haystack Landing site is located within the project's boundaries. Though this site no longer contains any standing structures, it is nonetheless considered historically important for the reasons described above. Due to the high probability of archaeological deposits and other remaining features associated with the house, ground-disturbing activities associated with the project could result in the loss of integrity of cultural deposits, the loss of information, and the alteration of site setting to cultural resources that are eligible for listing on the CRHR. Therefore, project impacts would be *significant*.

Start-up Phase

During the start-up phase of the proposed project the barge off-loading facility and the conveyor over the railroad tracks would not be in place. Trucks would be used instead of barges to transfer all materials to the project site during this phase. The start-up phase of the project includes ground-disturbing activities at the project site and thus still has the potential to result in the loss of integrity of cultural deposits, the loss of information, and the alteration of site setting to cultural resources that are eligible for listing on the CRHR. The overall significance of impacts to historical resources associated with the start-up phase would not change from that described above for Impact CULT-1.

Mitigation Measure CULT-1a

Site documentation shall be updated and brought to the level of current professional standards.

Mitigation Measure CULT-1b

Preservation through historical documentation of the former house and barns shall be completed, following the Secretary of Interior's Standards for the Treatment of Historic Properties.

Impact CULT-2 Archaeological Resources

Although no known unique archaeological resources have been identified on the project site, other it is possible that underlying soils could contain undiscovered resources. Though the project site has been previously disturbed, without proper care during the grading and excavation phases of the proposed project, unknown resources could be damaged or destroyed. Therefore, project impacts to unknown unique archaeological resources would be *significant*.

Start-up Phase

The start-up phase of the project includes ground-disturbing activities to the project site and thus still has the potential to result in damage or destruction to unknown archaeological resources. The overall significance of impacts to archaeological resources associated with the start-up phase would not change from that described above for Impact CULT-2.

Mitigation Measure CULT-2a

Prior to earth disturbing activities, archaeological deposits and other features associated with the house shall be identified using techniques including remote sensing techniques and/or searching for features with a backhoe equipped with a smooth-edged blade under the direction of a professional archeologist.

Following the conclusion of the archaeological monitoring, a Final Report of Findings shall be prepared by the archaeologist which minimally describes the monitoring process, including the final disposition of impacts to archaeological site Ca-Son-1465H and descriptions and analysis of any formal or diagnostic artifacts recovered as a result of the project. This Final Report of Findings shall be completed to the satisfaction of Sonoma County PRMD, abiding by the guidelines specified in Archaeological Resource Management Reports (ARMR) Recommended Contents and Format, developed by the California Office of Historic Preservation (OHP), February 1990.

Mitigation Measure CULT-2b

All employees shall undergo a cultural resources orientation and awareness training prior to commencing work activities on the site. Such training shall include familiarization with the stop-work restrictions, noticing, and handling procedures, and ultimate disposition of artifacts as described below. The operator shall provide PRMD with a verification list of the employees completing the orientation.

If archaeological materials are discovered any time during project implementation, activities shall cease in the immediate vicinity of the find. The shift foreman or manager at the project site shall be notified, and shall notify Sonoma County PRMD of the discovery. PRMD shall notify the Northwest Information Center and the Native American Heritage Commission. Work shall not commence until a qualified archaeologist is consulted to determine the significance of the find, and has recommended appropriate measures to protect the resource in accordance with the following standards:

- A qualified archaeologist shall prepare for the County an Assessment and Mitigation Plan, in consultation with the Native American Heritage Commission and local tribes, if appropriate;
- The Assessment shall define the extent and steps necessary to mitigate the project impacts on the find. Discovered cultural resources shall be stored in a protected environment to prevent vandalism, damage, or theft; until such time as they are examined by an archaeologist and/or Native American consultant, as appropriate. Actions may then include removing and relocating the materials to an appropriate repository based on consultation with the Native American Heritage Commission and local tribes. Any Native American artifacts discovered shall be returned to the local Native American Community, which shall be responsible for the disposition of these materials.

Further disturbance of the resource shall not be allowed until those recommendations deemed appropriate by the County have been implemented.

Impact CULT-3 Human Remains

No known human burials have been identified on the project site or vicinity. In addition, a search of the Sacred Lands file identified no culturally important areas on the project site. However, it is possible that unknown human remains could occur on the project site, and if proper care is not taken during the project's grading and excavating phases, damage to or destruction of these unknown remains could occur. Therefore, project impacts on human remains would be *significant*.

Start-up Phase

As previously discussed, the start-up phase of the project includes ground-disturbing activities to the project site. Because there is the possibility that unknown human remains could occur on the site, if proper care is not taken during the project's grading and excavation during the start-up phase, damage to or destruction of these unknown remains could occur. The overall significance of impacts to human remains associated with the start-up phase would not change from that described above for Impact CULT-3.

Mitigation Measure CULT-3

In the event that human remains are discovered, there shall be no disposition of such human remains, other than in accordance with the procedures and requirements set forth in the California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. These code provisions require notification of the County Coroner and the NAHC, who in turn must notify those persons believed to be most likely descended from the deceased Native American for appropriate disposition of the remains. Excavation or disturbance may continue in other areas of the project site outside the area affected by such discovery.

Impact CULT-4 Paleontological Resources

Much of the project site has been previously disturbed and upper soils layers consist largely of fill materials. Although no known paleontological resources have been identified on the project site, it is possible that deeper underlying soils could contain undiscovered resources. In addition, without proper care during the grading and excavation phases of the proposed project, unknown resources could be damaged or destroyed. Therefore, project impacts to unknown paleontological resources would be *significant*.

Start-up Phase

Although no known paleontological resources have been identified on the project site, it is possible that deeper underlying soils could contain undiscovered resources. Ground-disturbing activities during the start-up phase of the project could result in damage or destruction to paleontological resources if proper care during grading and excavation is not taken. The overall significance of impacts to paleontological resources associated with the start-up phase would not change from that described above for Impact CULT-4.

Mitigation Measure CULT-4

If paleontological resources are encountered during the course of site development activities, work in that area shall be halted and the project paleontologist shall be notified of the find. The project paleontologist shall have the authority to temporarily divert or redirect grading to allow time to evaluate any exposed fossil material.

CUMULATIVE IMPACTS

Impacts to cultural resources tend to be site-specific and are assessed on a site-by-site basis. The extent of the cultural resources (if any) that occur at the sites of the related projects is unknown, and thus, it is not known whether any related projects would result in significant impacts to cultural resources. However, similar to the proposed project, such determinations would be made on a case-by-case basis and, if necessary, the applicants of related projects would be required to implement appropriate mitigation measures.

In addition, the applicant of the proposed project would be required to implement mitigation measures prescribed in this EIR, thereby reducing the project's impact on cultural resources to a less-than-significant level. As such, the proposed project would not contribute to any cumulative impacts on cultural resources, if any would occur. Therefore, cumulative impacts would be *less than significant*.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-specific impacts related to cultural resources would be *less than significant* with implementation of the mitigation measures listed above.