Contents

3.6 Arch	aeological and Architectural Historic Properties	3.6-2
	REGULATORY CONTEXT	
	METHODOLOGY	
3.6.3	AFFECTED ENVIRONMENT	3.6-9
3.6.4	ENVIRONMENTAL CONSEQUENCES	. 3.6-19
3.6.5	CONSTRUCTION EFFECTS	. 3.6-21
	INDIRECT EFFECTS	
	MITIGATION	
3.6.8	BUILD ALTERNATIVES COMPARATIVE ASSESSMENT	. 3.6-23
TABLES		
TABLE 3.6-1.	Public Outreach and Section 106 Consultation	3.6-8
TABLE 3.6-2.	, , , , , , , , , , , , , , , , , , , ,	
TABLE 3.6-3.	, , ,	
TABLE 3.6-4.		
TABLE 3.6-5.	Previously Surveyed Architectural Properties in Olowalu	
TABLE 3.6-6. TABLE 3.6-7.		. 3.6-17
TABLE 3.6-7.	Archaeological Resources with Potential Effects by Build Alternative - Olowalu Segment (including Launiupoko)	2610
TABLE 3.6-8.		. 3.0-19
TABLE 5.0-6.	Segment	3 6-20
TABLE 3.6-9.		
TABLE 3.6-10		
FIGURES		
FIGURE 3.6-1	Area of Potential Effects	3.6-6
FIGURE 3.6-2	2. Architectural Properties: Olowalu	. 3.6-14
FIGURE 3.6-3	3. Architectural Properties: Ukumehame	. 3.6-15
FIGURE 3.6 /	Contributing Poscuroes to the Olewalu Sugar Plantation Historic District	2610

3.6 ARCHAEOLOGICAL AND ARCHITECTURAL HISTORIC PROPERTIES

This chapter describes the effects of the Honoapi'ilani Highway Improvements Project (the Project) on archaeological and architectural (built) historic properties, which include historic districts, sites, buildings, structures, and objects that are listed in or eligible for listing in the National Register of Historic Places (NRHP). The chapter summarizes the identification and evaluation efforts and provides an assessment of the No Build Alternative and the effects of the Build Alternatives on these historic properties.

The Draft Programmatic Agreement among the Federal Highway Administration (FHWA), the Hawai'i Department of Transportation (HDOT), and the Hawai'i State Historic Preservation Officer (SHPO) describes the avoidance, minimization, or mitigation HDOT would implement to eliminate or reduce adverse effects on archaeological or built historic properties. Appendix 3.6 provides a detailed background and more information regarding historic properties and includes reports completed to date, the Draft Programmatic Agreement, and consultation information.

3.6.1 Regulatory Context

The Project is an undertaking subject to review under Section 106 of the National Historic Preservation Act of 1966, as amended (54 United States Code 300101 et seq.) and its implementing regulations (36 Code of Federal Regulations [CFR] Part 800), *Protection of Historic Properties*. Section 106 requires federal agencies to consider the effects of their actions on historic properties.

In Hawai'i, the Project is also subject to compliance with Hawai'i Revised Statutes (HRS) § 6E and its administrative provisions at Hawai'i Administrative Rules (HAR) § 13-275, Rules Governing Procedures for Historic Preservation Review for Governmental Projects Covered Under Sections 6E-7 and 6E-8, HRS, and guidelines developed by the Hawai'i State Historic Preservation Division (SHPD 2018). Consultation for Section 106 and HRS § 6E compliance are being conducted concurrently to the extent possible. Archaeological research and field investigations will follow HAR § 13-276.

3.6.1.1 Section 106

Section 106 uses National Register Guidance to define historic properties, which are defined as prehistoric and historic sites, buildings, structures, districts, and objects listed in or eligible for listing in the NRHP, as well as artifacts, records, and remains related to such properties. Section 106 requires the lead federal agency, in consultation with the SHPO, to perform the following:

- Initiate the Section 106 process
- Identify historic properties in the Area of Potential Effects (APE)
- Assess the proposed project's effects on historic properties in the APE
- Resolve any adverse effects on the historic properties within the APE

Section 106 regulations require that the lead federal agency consult with the SHPO, Consulting Parties, and the public during planning and development of a proposed project. The Advisory Council on

3.6-2 December 2024

Historic Preservation is also invited to participate in the consultation (but has formally declined to participate in this Project as noted in their letter of February 16, 2024, found in Appendix 3.6). Section 106 is a process that is not required to result in any specific "preservation" outcome. Rather, it is a process where consultation among the parties results in the provision of information for the lead federal agency to consider in decision-making for the Project. These agencies, groups, and individuals may participate in developing a Memorandum of Agreement or Programmatic Agreement to avoid, minimize, or mitigate adverse effects as applicable. As mentioned, a Draft Programmatic Agreement for the Project between the FHWA, HDOT, and the SHPO is under development and included in Appendix 3.6.

As part of the Section 106 process, agency officials apply the NRHP Criteria for Evaluation. A property is eligible for the NRHP if it is significant under one or more of the following criteria defined in 36 CFR § 60.4 as:

"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 that:

A: Are associated with events that have made a significant contribution to the broad patterns of our history; or

B: Are associated with the lives of persons significant in our past; or

C: Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or

D: Have yielded, or are likely to yield, information important in prehistory or history."

Built resources are typically evaluated under Criteria A, B, and C; Criterion D applies primarily to archaeological resources. According to guidance in the NRHP bulletin, *How to Apply the National Register Criteria for Evaluation*, different aspects of integrity may be more or less relevant, depending on why a specific historic property was listed in or determined eligible for listing in the NRHP. Generally, only properties that are 50 years or older are identified and evaluated for NRHP eligibility.

Once historic properties have been identified, project effects are assessed by applying the criteria of adverse effect through the process described in 36 CFR § 800.5:

"An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative."

Following the effects assessment, the federal agency would make one of the following findings of effect:

- No Historic Properties Affected. Per 36 CFR § 800.4(d)(1), an undertaking may have no effect to historic properties in the APE, and a finding of "No Historic Properties Affected" may be determined for an undertaking. This finding indicates that an undertaking would not alter any aspects of integrity for any historic properties.
- No Adverse Effect. Per 36 CFR § 800.5(b), an undertaking may be determined to have "No Adverse
 Effect" to historic properties if the undertaking's effects do not meet the criteria of adverse effect
 as described above. If project implementation would not alter a characteristic that qualifies the
 historic property for inclusion in the NRHP in a manner that diminishes the aspect(s) of integrity,
 then the finding is "No Adverse Effect."
- Adverse Effect. Per 36 CFR § 800.5(a)(1), an "Adverse Effect" is determined if the undertaking would alter a characteristic that qualifies the historic property for inclusion in the NRHP in a manner that diminishes the aspect(s) of integrity.

Consultation would continue with the SHPO and Consulting Parties to seek ways to avoid, minimize, or mitigate adverse effects. This may include developing a project-specific Memorandum of Agreement or, as developed for this Project, a Programmatic Agreement to memorialize these decisions and conclude the Section 106 process.

3.6.1.2 Hawaii Revised Statutes HRS § 6E

The Hawaii HRS § 6E requirements are an equivalent, but not identical, compliance process to Section 106. Under the statue's implementing regulations at HAR § 13-275, historic properties are defined as any building, structure, object, district, area, or site, including heiau and underwater site, which is over 50 years old. Significant historic properties are defined as any historic property that meets the criteria of the Hawaii Register of Historic Places (SRHP) or the criteria enumerated in subsections 13-275-6(b) or 13-284-6(b). The regulations require the State agency, in consultation with the SHPD, to perform the following:

- Notify the SHPD of the Project
- Identify significant historic properties within the project area
- Determine the Project's effects to significant historic properties
- Mitigate effects

Like Section 106, HRS § 6E requires the agency to consult with the SHPD, Consulting Parties, and the public throughout project planning and development.

To determine whether an identified historic property is a significant historic property, the agency evaluates significance according to the criteria described at HAR § 13-275-6. These criteria are equivalent to those found in federal law, are denoted using lowercase letters, and include one additional criterion (criterion "e") specific to Hawaii:

3.6-4 December 2024

"Have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group's history and cultural identity."

Once significant historic properties are identified, the agency determines effects to these properties and applies one of the following effect determinations:

No historic properties affected. Per HAR § 13-275-7(1), the Project would have no effect on significant historic properties.

Effect, with proposed mitigation commitments. Per HAR § 13-275-7(2), the Project would have potential effects on one or more significant historic properties. HAR § 13-275 allows for five types of mitigation: preservation, recordation, archaeological data recovery, historical data recovery, and ethnographic documentation.

The summary table below provides a comparison of the federal Section 106 and State HRS § 6E processes and terminology.

SECTION 106	6E
Consulting Parties: SHPD, Agencies, Native Hawaiian Organizations, Public	Participants: SHPD, Agency, Interested Parties. For Archaeology – Native Hawaiians
Initiate the Section 106 Process	Notify the SHPD of the Project
Determine the Area of Potential Effects	Propose a Project Area
Identify Historic Properties/Apply Criteria for Evaluation	Identify and Inventory Historic Properties/Evaluate Significance
Assess Effects	Determine Effects
Resolve Adverse Effects	Propose Mitigation

3.6.1.3 Area of Potential Effects

As defined at 36 CFR § 800.16(d), the APE is "the geographic area or areas which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." The lead federal agency is responsible for defining the APE.

The APE considers both direct and indirect effects that may occur as a result of project implementation and encompasses the No Build Alternative and the Build Alternatives. Direct project effects may include a physical impact in a particular area in addition to visual, noise, vibration, or other atmospheric effects. Indirect effects may include those that occur later or are farther away but are still reasonably foreseeable.

The APE extends inland up to three-quarters of a mile along the 6-mile highway corridor and from the base of the West Maui Mountains to the existing Honoapi'ilani Highway along the coastline (FIGURE 3.6-1). The APE is composed predominantly of a coastal plain, which includes the ahupua'a

of Launiupoko, Olowalu, and Ukumehame. The broad APE encompasses all Build Alternatives and considers potential visual changes, areas of anticipated ground-disturbing activities and construction staging, and indirect effects caused by relocating the highway mauka and away from the developed coastline areas.

The APE was developed in consultation with the SHPO prior to and at the onset of the Project's NEPA process, which included a Notice of Intent being published in November 2022 and three public scoping meetings. Two virtual meetings were held on December 14, 2022, and one in-person meeting was held on December 15, 2022. Consulting Parties were also given the opportunity to comment on the proposed APE, but no changes were requested. The APE was submitted to the SHPD on January 25, 2023, and the SHPD responded in a letter dated March 21, 2023, that it had no objections to the proposed APE as defined. However, the SHPD did request that the APE be refined based on the Preferred Alternative prior to any subsurface archaeological testing to decrease the area disturbed. To reduce redundancy, the HRS § 6E-8 project area would coincide with the APE once the Preferred Alternative is selected.

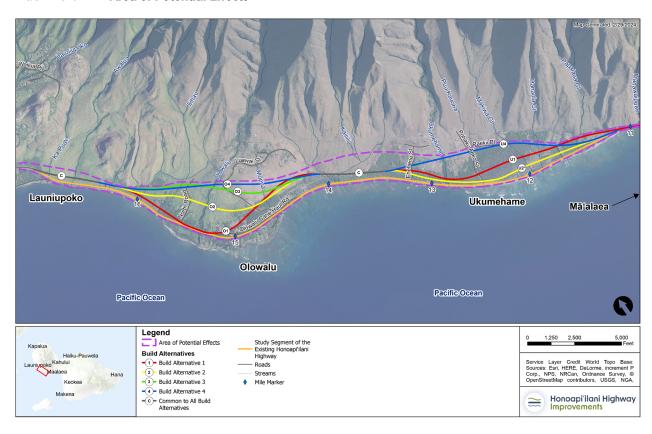


FIGURE 3.6-1. Area of Potential Effects

3.6.2 Methodology

The FHWA, in consultation with the SHPO, initiated the Section 106 process and determined it would not be possible to satisfy the Section 106 requirements prior to the Final EIS/ROD and the deadline to obligate funding for the Project. As a result, the FHWA proposed to enter into a Programmatic

3.6-6 December 2024

Agreement in accordance with 36 CFR § 800.14(b)(1)(ii), which allows the project team to conduct archival research and fieldwork sufficient to identify and evaluate historic properties to make decisions for this EIS. Complete inventory, evaluation, assessment, and resolution of adverse effects on historic properties would be deferred to a time prior to the initiation of construction. As the project sponsor, HDOT participates in project consultation, would be a signatory to the Programmatic Agreement, and would be responsible for implementing its stipulations. The FHWA, in coordination with HDOT, has consulted and would continue to consult with interested parties, members of the public, and Native Hawaiian Organizations (NHOs) and recognized descendants to whom the ahupua'a of Launiupoko, Olowalu, and/or Ukumehame have religious and/or cultural significance, and would invite them to become concurring parties to the Programmatic Agreement.

Project team members who meet Secretary of the Interior (SOI) Professional Qualifications Standards (36 CFR Part 61, Appendix A) undertook both archaeological and architectural literature reviews and field inspections for the Project. These studies support a historic preservation review and compliance with both Section 106 of the National Historic Preservation Act of 1966, as amended, and the Hawai'i Revised Statutes Chapter 6E. Consultation with NHOs, as well as other parties and individuals identified as having a demonstrated interest in the Project's historic and/or cultural issues (Appendix 3.6 includes the full list), assisted in identifying historic properties and further clarifying the history of the project area.

An aboveground archaeological survey was completed, which included pedestrian inspections of the Build Alternatives (with a 300-foot buffer along the centerline of each alternative). Global positioning system (GPS) data for sites and features were also collected within the overall APE. A 300-foot corridor width was selected to allow for the new highway, leaving room to avoid sites or include grading needed beyond the highway itself. Surveys and analysis would be updated as needed in the Final EIS for any design refinements made for the Preferred Alternative.

In addition to standard background research as required by HAR § 13-276-5, the project team met with consulting parties during scoping to get information on the project area (Appendix 3.6). The team was asked to incorporate kuleana properties into project maps. This was done and adjustments were made to avoid or minimize project effects on kuleana properties.

The Build Alternatives were evaluated to determine their effects on architectural and archaeological historic properties, and opportunities to avoid potential adverse effects were identified where possible. Where it is not possible to entirely avoid a historic property, opportunities to minimize effects were studied. In those cases where an adverse effect cannot be avoided, the process for determining appropriate mitigation would be addressed in the Programmatic Agreement. The ability to avoid potential adverse effects is one of the criteria used to select a Preferred Alternative as described in Chapter 5, Preferred Alternative.

As described in the Draft Programmatic Agreement (included in Appendix 3.6), an archaeological inventory survey with subsurface testing would be conducted after the completion of the Final EIS/ROD for the Preferred Alternative as described in Chapter 5, Preferred Alternative.

The Draft Programmatic Agreement also specifies the procedures that would be implemented to mitigate potential adverse effects to known aboveground resources as well as any sites or properties

identified during the subsurface archaeological testing. The Programmatic Agreement would be executed before the Final EIS/ROD.

3.6.2.1 Literature Review and Research

After developing the APE, SOI-qualified professionals completed a review of environmental, cultural, historic, archaeological, and other background information to identify potential historic properties that are present within the APE (Appendix 3.6). As part of these investigations, the professionals obtained information from the SHPD and other Consulting Parties of known historic properties within the APE as well as information on previously surveyed properties within the APE, including those previously determined NRHP-eligible (TABLE 3.6-1). In addition to the literature review, detailed archival research was conducted. Archival research, which included local histories, historic maps, aerial photographs, property assessor records, and other pertinent information, identified specifications of existing buildings, structures, and landscape features and provided a better understanding of the history and development within the APE.

3.6.2.2 Public Outreach and Consultation

Public outreach and consultation have occurred since a pre-NEPA/HEPA early scoping period began in December 2021. Outreach included news releases, meetings, letters, and the project website.¹ Early scoping meetings were specifically conducted to provide information to interested area NHOs and individuals, as well as other interested individuals or organizations. The meetings also helped in gathering information about area historic and cultural properties.

A public scoping period beginning in November 2022 followed publication of the Project's Notice of Intent to prepare an EIS in the *Federal Register* and a Hawai'i EIS Preparation Notice in the State's *The Environmental Notice* on November 23, 2022.

As a part of the NEPA scoping process and in accordance with 36 CFR § 800.2, HDOT identified potential Consulting Parties and held Section 106 Consulting Party meetings beginning on March 28 and 29, 2023. Attendees included NHOs, agency representatives, property owners, and other parties and individuals identified as having a demonstrated interest in the project's historic and/or cultural resources (Appendix 3.6 contains the full list). Comments were gathered on the project area, the No Build Alternative and the Build Alternatives, and the use of a Section 106 Programmatic Agreement. Since that time, additional meetings and field visits have occurred to address specific concerns raised by Consulting Parties. These meetings are listed in TABLE 3.6-1.

TABLE 3.6-1. **Public Outreach and Section 106 Consultation**

DATE	LOCATION		
EARLY PROJECT SCOPING PERIOD MEETINGS			
April 7 and 8, 2022 In-person			
PUBLIC SCOPING PERIOD MEETINGS			
December 14 and 15, 2022 Virtual and In-person			
SECTION 106 CONSULTING PARTIES MEETINGS			

¹ https://www.honoapiilanihwyimprovements.com/.

3.6-8 December 2024

DATE	LOCATION	
March 29 and 30, 2023	Virtual	
May 31, 2023	NHO, FHWA Field Visit	
June 1, 2023	Presentation to Maui Cultural Resources Commission	
July 27, 2023	Virtual: Archaeology/Cultural	
August 2, 2023	Virtual: Architectural	
November 2, 2023	Virtual: FHWA, SHPD, HDOT (Programmatic Agreement)	
November 18, 2023	ovember 18, 2023 NHO Field Visit	
November 20, 2023 Virtual: Archaeology/Cultural		
March 28, 2024	SHPD Field Visit	
September 22, 2024	Presentation to Na Kupuna o Lahaina Advisory Board, NHOs and other Consulting Parties (Archaeology and Programmatic Agreement)	
September 26, 2024	Virtual: NHOs and other Consulting Parties (Archaeology and Programmatic Agreement)	

3.6.3 Affected Environment

3.6.3.1 Archaeology

This Draft EIS summarizes the review and assessment of archaeological resources in the APE. This includes previously identified sites as well as new sites and locations as developed through research and field reconnaissance. These sites are summarized, and for the newly identified resources, there is an evaluation to determine NRHP and Hawai'i Register of Historic Places (HRHP or SRHP) eligibility.

Previously Surveyed Archaeological Properties within Area of Potential Effects

The SHPD provided information on February 24, 2023, identifying previously surveyed properties that are within the APE, including four properties within the ahupua'a of Olowalu and two within the ahupua'a of Launiupoko. These properties are summarized in TABLE 3.6-2. If located within the archaeological survey corridors developed for the Project, the property was field verified, surveyed, and reevaluated before NRHP eligibility. TABLE 3.6-3 and TABLE 3.6-4 provide a summary of potential archaeological historic properties identified within the archaeological survey corridors.

TABLE 3.6-2. Previously Surveyed Archaeological Properties within Area of Potential Effects

AHUPUA'A	SIHP NO. 50-50-08-	AGE RANGE	FORMAL TYPE	NRHP STATUS
Olowalu	04699	Precontact	Rock Shelters, Modified Outcrop, Wall	Eligible
Olowalu	04700	Precontact	Rock Shelters, C- shape, Wall	Eligible
Olowalu	04701	Precontact	Modified Outcrop and Platform	Eligible
Olowalu	04718	Precontact	Heiau	Eligible
Launiupoko	05954	19th-20th Century Ranching	Wall	Eligible

AHUPUA'A	SIHP NO. 50-50-08-	AGE RANGE	FORMAL TYPE	NRHP STATUS
Launiupoko	05955	Precontact	Terraces, Circular Alignment, Enclosures, Alignments, Mound, Modified Outcrops	Eligible

Source: SHPD

Field Investigations and Evaluations

To fulfill the requirements for identifying aboveground archaeological sites and features that could be impacted by The Project, a systematic survey was completed in 2022 and throughout 2023.

To allow for adjustments to avoid potentially significant archaeological sites and/or account for possible grading needs beyond the highway itself (for example, slope easements), the archaeological survey area was defined by a 300-foot-wide corridor along the centerline of each proposed alternative. This survey area encompassed a total approximate area of 464 acres, the coverage of which included both a pedestrian survey and targeted drone flyovers. The pedestrian survey for this study was accomplished through systematic sweeps along survey transects that were spaced 10 m apart in areas of open vegetation and narrowed to 5 m or less in areas of dense vegetation and low visibility.

Archaeological sites and features encountered during this initial survey were documented at a reconnaissance level. This included a summary description of site and feature formal types, initial interpretations of function and interrelationships, and ground-level high-resolution digital photographs of representative formal types and construction styles within each site and site complex along with site and/or feature overviews and viewsheds where relevant.

Geographic location information for identified archaeological sites and features was acquired using either a GPS or the Trimble Connect Application on an Apple device Antenna and post processed for ArcGIS. Where necessary, site extents for large, multicomponent archaeological complexes were further determined via high-resolution drone survey. Ground Control Points were placed within high-density site and feature areas and located utilizing the above noted GPS methods for incorporation during processing of the imagery to maximize accuracy of orthomosaic imagery when pulled into ArcGIS for delineation of the approximate site extents.

Identified Potential Archaeological Historic Properties within Field Survey Corridors

From the collection and evaluation of this information, TABLE 3.6-3 and TABLE 3.6-4 summarize the identification of preliminarily eligible resources for Launiupoko, Olowalu, and Ukumehame, respectively. In total, there are 10 locations identified in Olowalu and Launiupoko as part of this Draft EIS research, including five previously identified resources. In Ukumehame, there were no previously identified sites and 28 sites identified from the current evaluation. In a letter dated October 11, 2024, the SHPD concurred with the FHWA determinations of eligibility for 11 archaeological resources, denoted below with an asterisk (*).

TABLE 3.6-3. Field Identified Preliminary Eligible Archaeological Resources in Olowalu

AHUPUA'A	SURVEY NO.	POSSIBLE AGE RANGE	FORMAL TYPE
Olowalu	AA2216-028*	Early 20th Century Ranch	Wall, Fenceline

3.6-10 December 2024

AHUPUA'A	SURVEY NO.	POSSIBLE AGE RANGE	FORMAL TYPE
Olowalu	AA2216-036	Precontact	Surface Scatter
Olowalu	AA2216-106*	Precontact	Terraces, Circular Alignments, Small Semi-Circular Terraces, Enclosures
Olowalu	AA2216-107*	Precontact to Early Historic	Alignment, C- Shape, Enclosure, Modified Outcrop, Terrace
Olowalu	SIHP -04700*	Precontact	Rock Shelters, C-shape, Wall
Olowalu	SIHP -04701	Precontact	Modified Outcrop and Platform
Olowalu	SIHP -04718	Precontact	Heiau
Launiupoko	AA2216-023*	Precontact and Possible Historic Military	Alignment, C-shape, Enclosure, Mound, Terrace
Launiupoko	SIHP -05954	Early 20th Century Ranch	Wall
Launiupoko	SIHP -05955	Precontact	Terraces, Circular Alignment, Enclosures, Alignments, Mound, Modified Outcrops

Note: Previously identified SIHP-04699 is located within the APE but outside of the field survey corridors.

TABLE 3.6-4. Field Identified Preliminary Eligible Archaeological Resources in Ukumehame

AHUPUA'A	SURVEY NO.	POSSIBLE AGE RANGE	FORMAL TYPE
Ukumehame	AA2216-009	Precontact	Surface Scatter
Ukumehame	AA2216-015	Late Precontact – Early Historic	Surface Scatter
Ukumehame	AA2216-017*	Precontact	Surface Scatter
Ukumehame	AA2216-018*	Late Precontact – Early Historic	Surface Scatter
Ukumehame	AA2216-020	Precontact to Early Historic	Surface Scatter
Ukumehame	AA2216-022*	Historic	Stone Well
Ukumehame	AA2216-046	Precontact	Habitation Complex
Ukumehame	AA2216-050	Precontact	Agricultural and Ceremonial Complex
Ukumehame	AA2216-068	Precontact	C-Shape, Mound, Platform, Surface Scatter, Terrace
Ukumehame	AA2216-070	Precontact	C-Shape, Mound, Terrace
Ukumehame	AA2216-072*	Precontact	Enclosure, Mound, Wall
Ukumehame	AA2216-073	Precontact	Enclosure and Ahu
Ukumehame	AA2216-075	Precontact	Surface Scatter
Ukumehame	AA2216-088	Precontact	Terrace, Ahu, Modified Outcrop
Ukumehame	AA2216-089	Precontact	Enclosure, Modified Outcrop, Terrace
Ukumehame	AA2216-090	Precontact	Surface Scatter
Ukumehame	AA2216-091*	Precontact to 19th-20th Century	Surface Scatter
Ukumehame	AA2216-092	Precontact to 19th-20th Century	Surface Scatter

AHUPUA'A	SURVEY NO.	POSSIBLE AGE RANGE	FORMAL TYPE
Ukumehame	AA2216-095	Precontact	Modified Outcrop, Mound, Surface Scatter, Terrace
Ukumehame	AA2216-096	Precontact	Modified Outcrop, Pavement, Petroglyph, Surface Scatter, Terrace
Ukumehame	AA2216-097	Historic	Wall
Ukumehame	AA2216-098	Continuous Occupation	Rock Shelter
Ukumehame	AA2216-099	Precontact	Modified Outcrop and Surface Scatter
Ukumehame	AA2216-100*	19th-20th Century	Rock Shelter
Ukumehame	AA2216-101	Precontact to Early Historic	Rock Shelter
Ukumehame	AA2216-103	Precontact	Surface Scatter
Ukumehame	AA2216-105	Precontact	Temporary Habitation and Ceremony
Ukumehame	AA2216-108	Precontact	Heiau

3.6.3.2 Architecture

FIGURE 3.6-2 and FIGURE 3.6-3 present the identified architectural properties evaluated as part of this Draft EIS for Olowalu (including Launiupoko) and Ukumehame, respectively. This includes previously identified properties as well as new properties and locations as developed through research and field reconnaissance. These architectural properties are described in greater detail in Chapter 4 of the Reconnaissance level Architectural Historic Resource Survey included in Appendix 3.6.

Previously Surveyed Architectural Properties

The SHPD provided information on February 24, 2023, including known and listed resources, as well as previously surveyed properties that are within the APE of which seven were determined NRHP-eligible as part of prior surveys (TABLE 3.6-5). These are all in the Olowalu area of the APE. As shown in TABLE 3.6-5, nine previously surveyed and evaluated (and reevaluated as part of the Project) architectural properties were identified, including a cemetery, a church and cemetery complex, stone walls, a road, a water reservoir, and the ruins of a sugar mill. Notably, a reservoir (CSH 4) was documented but not evaluated in 2012 by Cultural Surveys Hawai'i, Inc. (CSH); however, it has not received a State Inventory of Historic Places designation number and was designated only by a field site number.

3.6-12 December 2024

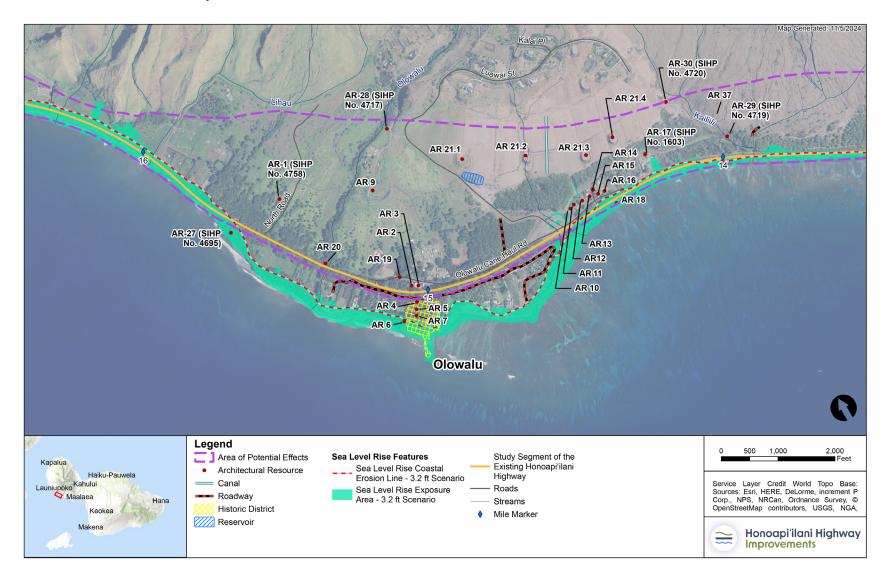
TABLE 3.6-5. Previously Surveyed Architectural Properties in Olowalu

SIHP NO.	NAME/ADDRESS	STYLE/FORM/TYPE	NRHP STATUS
01602	Olowalu Company Sugar Mill Complex (Olowalu Landing, houses, and Wharf)/810 Olowalu Road	Agricultural Processing/ Industrial Facility	Eligible
01603	Lanakila Historic Church (Olowalu Church and Cemetery)/801 Olowalu Village Road	Church and Cemetery	Eligible
04695	Retaining Wall	Erosion Control	Eligible
04696	Road/Old Government Road	19th-20th Century Road	Not Eligible
04717	Rock Wall	Boundary Demarcations	Eligible
04719	Rock Wall	Boundary Demarcations	Eligible
04720	Rock Wall	Boundary Demarcations	Eligible
04758	Awalua Cemetery	Cemetery	Eligible
CSH 4	Reservoir	Water Control	Unassessed

Source: State Historic Preservation Division

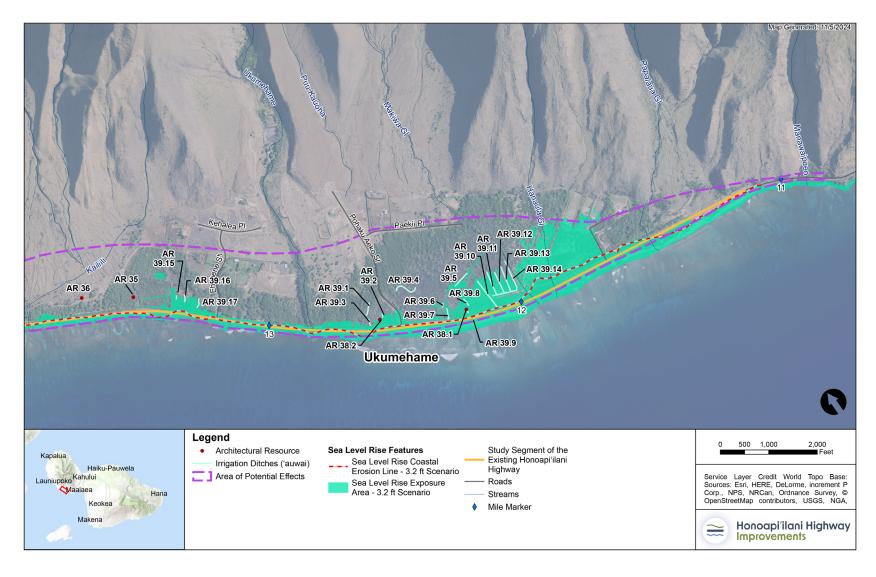
SIHP = State Inventory of Historic Places; NRHP = National Register of Historic Places; CSH = Cultural Surveys Hawai'i, Inc Field site number

FIGURE 3.6-2. Architectural Properties: Olowalu



3.6-14 December 2024

FIGURE 3.6-3. Architectural Properties: Ukumehame



Field Investigations and Evaluations

A qualified architectural historian conducted survey fieldwork April 3 through 7, 2023, in coordination with project archaeologists. As summarized in Appendix 3.6, 40 architectural resources (AR) 35 years or older were identified within the APE. Of these resources, nine were previously surveyed and 31 were newly identified. These 40 resources comprise 13 residential and commercial buildings, one cemetery, one religious building/cemetery complex, two landings/wharfs, one bridge, two roadways, six boundary wall structures, two freight corridors, one water tower, one well, one series of agricultural clearing push piles, and nine water control structures or series of structures.

As a result of evaluations, three of the 40 surveyed architectural properties were determined individually eligible for listing in the NRHP. On March 25, 2024, the FHWA provided the Reconnaissance Level Architectural Inventory Survey for the Honoapi'ilani Highway Improvements, West Maui, from Launiupoko to Ukumehame (RLS) to the SHPD, which included the results of efforts to identify and evaluate architectural historic properties within the APE. In a letter dated July 9, 2024, the SHPD concurred with the FHWA determinations of eligibility described in the Reconnaissance Level Survey.

Identified Historic Properties

As described in the Reconnaissance Level Survey, and following survey and evaluation, three individually eligible or contributing architectural historic properties were identified within the Olowalu segement of the APE (TABLE 3.6-6) out of the 40 properties evaluated. In addition, field survey affirmed that one of the previously identified resources (CSH 4 Reservoir) that had not been assessed should be included as a contributing resource. Field assessment also confirmed the prior determination that Old Government Road (SIHP 04696) is not eligible, and the previously surveyed retaining wall and rock walls are not individually eligible or contributing resources.

Although architectural historic properties related to the plantation era were identified within Ukumehame and Launiupoko, the landscape no longer reflects the influence of the local sugar industry in the way the interconnected resources do in Olowalu. Many of the buildings and structures related to the period are no longer extant, and the remaining landscape features hold less historical and architectural significance and have lost integrity of materials, workmanship, design, setting, feeling, and/or association. Therefore, a historic district was not recommended for Launiupoko or Ukumehame under the architectural property assessment (nor were any eligible resources identified).

Olowalu Sugar Plantation Historic District

Based on the existing Olowalu Sugar Mill Complex (SIHP 01602), including the wharf, landing, and plantation manager house (as previously determined NRHP-eligible as a small historic district), and as shown in FIGURE 3.6-4, this complex has been expanded into a larger Olowalu Sugar Plantation Historic District. The district encompasses both the Olowalu Sugar Company (1880-1931) resources comprising SIHP 01602 and those of the later Pioneer Mill Company (1931-1951). Olowalu Sugar Plantation Historic District is eligible for listing in the NRHP/SRHP as a historic district under Criterion A/a and Criterion D/d. The areas of significance represented in the historic district include agriculture, architecture, archaeology, engineering, and industry. Moreover, 10 contributing resources comprising the Olowalu Sugar Plantation Historic District retain sufficient integrity of setting, location, materials,

3.6-16 December 2024

feeling, and association to accurately convey the significance of the historic Olowalu sugar plantation era.

TABLE 3.6-6. Field Identified Eligible or Contributing Architectural Resources in Olowalu

SURVEY NO.	ADDRESS/NAME	STYLE/FORM/TYPE
AR 1 SIHP -04758	Awalua Cemetery	Cemetery
AR 4 SIHP -01602	807 Olowalu Road	Plantation/Bungalow
AR 5 SIHP -01602	808 Olowalu Road	Plantation/Bungalow
AR 6 SIHP -01602	810 Olowalu Road (Olowalu Plantation House)	Plantation/Bungalow
AR 7 SIHP -01602	810 Olowalu Road	Plantation/Bungalow
AR 8 SIHP -01602	Olowalu Company Sugar Mill Complex (Olowalu Landing and Wharf)	Agricultural Processing/Industrial Facility
AR 16	802 Olowalu Village Road	Plantation/Bungalow
AR 17 SIHP -01603	Lanakila Historic Church (Olowalu Church and Cemetery)	Church and Cemetery
AR 19	Water Tower	Late 19th-century water storage structure
AR 20	Bridge	Early 20th-century-steel-stringer/multibeam bridge
AR 31 CSH-4	Reservoir	Water Control

Note: AR 17 is individually eligible and is not a contributing resource to the Olowalu Sugar Plantation Historic District. AR 1 and AR16 are individually eligible as well as contributing to the Olowalu Sugar Plantation Historic District.



FIGURE 3.6-4. Contributing Resources to the Olowalu Sugar Plantation Historic District



3.6-18 December 2024

3.6.4 Environmental Consequences

3.6.4.1 No Build Alternative

The No Build Alternative would continue use of the existing Honoapi'ilani Highway. Because no project activities would occur within the APE under this alternative, there would be no effect on archaeological or architectural historic properties.

3.6.4.2 Build Alternatives

<u>Archaeology</u>

As shown in TABLE 3.6-7, one or more of the Build Alternatives in Olowalu could directly, physically affect the preliminarily eligible archaeological resources previously identified or as identified through field assessment in this Draft EIS. As shown in TABLE 3.6-8, one or more of the Build Alternatives in Ukumehame could physically affect the preliminarily eligible resources previously identified or as identified through field assessment in this Draft EIS. Effects on archaeological historic properties have not been presented to the SHPD at this time.

TABLE 3.6-7. Archaeological Resources with Potential Effects by Build Alternative - Olowalu Segment (including Launiupoko)

AHUPUA'A	BUILD ALTERNATIVES WITH POTENTIAL EFFECTS	SURVEY NO.	FORMAL TYPE	
Olowalu	All	AA2216-028	Wall, Fenceline	
Olowalu	1, 2	AA2216-036	Surface Scatter	
Olowalu	All	AA2216-106	Terraces, Circular Alignments, Small Semi-Circular Terraces, Enclosures	
Olowalu	All	AA2216-107	Alignment, C- Shape, Enclosure, Modified Outcrop, Terrace	
Olowalu	All	SIHP -04700	Rock Shelters, C-shape, Wall	
Olowalu	All	SIHP -04701	Modified Outcrop and Platform	
Olowalu	3	SIHP -04718	Heiau	
Launiupoko	All	AA2216-023	Precontact and Possible Historic Military	
Launiupoko	All	SIHP-05954	Early 20th Century Ranch	
Launiupoko	All	SIHP- 05955	Precontact	



TABLE 3.6-8. Archaeological Resources with Potential Effects by Build Alternative – Ukumehame Segment

AHUPUA'A	BUILD ALTERNATIVES WITH POTENTIAL EFFECTS	SURVEY NO.	FORMAL TYPE	
Ukumehame	2/3	AA2216-009	Surface Scatter	
Ukumehame	2/3	AA2216-015	Surface Scatter	
Ukumehame	All	AA2216-017	Surface Scatter	
Ukumehame	All	AA2216-018	Surface Scatter	
Ukumehame	All	AA2216-020	Surface Scatter	
Ukumehame	All	AA2216-022	Stone Well	
Ukumehame	All	AA2216-046	Habitation Complex	
Ukumehame	All	AA2216-050	Agricultural and Ceremonial Complex	
Ukumehame	1, 2/3	AA2216-068	C-Shape, Mound, Platform, Surface Scatter, Terrace	
Ukumehame	1, 2/3	AA2216-070	C-Shape, Mound, Terrace	
Ukumehame	All	AA2216-072	Enclosure, Mound, Wall	
Ukumehame	All	AA2216-073	Enclosure and Ahu	
Ukumehame	2/3, 4	AA2216-075	Surface Scatter	
Ukumehame	1, 2/3	AA2216-088	Terrace, Ahu, Modified Outcrop	
Ukumehame	All	AA2216-089	Enclosure, Modified Outcrop, Terrace	
Ukumehame	1	AA2216-090	Surface Scatter	
Ukumehame	1, 2/3	AA2216-091	Surface Scatter	
Ukumehame	2/3	AA2216-092	Surface Scatter	
Ukumehame	1, 2/3	AA2216-095	Modified Outcrop, Mound, Surface Scatter, Terrace	
Ukumehame	1, 2/3	AA2216-096	Modified Outcrop, Pavement, Petroglyph, Surface Scatter, Terrace	
Ukumehame	All	AA2216-097	Wall	
Ukumehame	1, 2/3	AA2216-098	Rock Shelter	
Ukumehame	2/3	AA2216-099	Modified Outcrop and Surface Scatter	
Ukumehame	1, 2/3	AA2216-100	Rock shelter	
Ukumehame	1, 2/3	AA2216-101	Rock shelter	
Ukumehame	1, 2/3	AA2216-103	Surface Scatter	
Ukumehame	AII	AA2216-105	Temporary Habitation and Ceremony	
Ukumehame	All	AA2216-108	Heiau	

3.6-20 December 2024

3.6.4.3 Architecture

Portions of Build Alternatives 1 and 2 would be within the mauka boundary of the Olowalu Sugar Plantation Historic District but would not directly, physically affect any contributing resources within the district. Additionally, the district's integrity of setting has been previously diminished through nearby development during the 20th century. As summarized in TABLE 3.6-9, effects on individual architectural historic properties are not anticipated, and effects on the Olowalu Sugar Plantation Historic District are not anticipated to be adverse. Effects on architectural historic properties have not been presented to the SHPD at this time.

TABLE 3.6-9. Potential Adverse Effects on Architectural Resources by Build Alternative - Olowalu

AHUPUA'A	ALTERNATIVES WITH POTENTIAL EFFECTS	SURVEY NO.	ADDRESS/NAME	
Olowalu	None	AR 1 SIHP -04758	Awalua Cemetery	
Olowalu	None	AR 4 SIHP -01602	807 Olowalu Road	
Olowalu	None	AR 5 SIHP -01602	808 Olowalu Road	
Olowalu	None	AR 6 SIHP -01602	810 Olowalu Road (Olowalu Plantation House)	
Olowalu	None	AR 7 SIHP -01602	810 Olowalu Road	
Olowalu	None	AR 8 SIHP -01602	Olowalu Company Sugar Mill Complex (Olowalu Landing and Wharf)	
Olowalu	None	AR 16	802 Olowalu Village Road	
Olowalu	None	AR 17 SIHP -01603	Lanakila Historic Church (Olowalu Church and Cemetery)	
Olowalu	None	AR 19	Water Tower	
Olowalu	None	AR 20	Bridge	
Olowalu	None	AR 31 (CSH-4)	Reservoir	

Note: AR 17 is individually eligible and is not a contributing resource to the Olowalu Sugar Plantation Historic District. AR 1 and AR16 are individually eligible as well as contributing to the Olowalu Sugar Plantation Historic District.

3.6.5 Construction Effects

Only the No Build Alternative avoids construction effects to identified archaeological historic properties. Construction-related activities related to the Build Alternatives could result in adverse effects to archaeological historic properties. Construction of the Build Alternatives includes several pinch points or merges where the Build Alternatives overlap and intersect; these areas may require partial removal of some archaeological historic properties (see the Draft Programmatic Agreement for additional description of treatment measures). The Build Alternatives would not adversely affect any architectural historic property as they all avoid the individually eligible properties and all contributing

Draft Environmental Impact Statement



resources within the proposed Olowalu Sugar Plantation Historic District. Refinements to the Preferred Alternative would be made during the Final EIS and effects from refined Preferred Alternative would be documented in the Final EIS/ROD. The refined Preferred Alternative would continue to be studied under the Programmatic Agreement.

3.6.6 Indirect Effects

Based on the localized potential adverse effects of the Project on archaeological resources combined with the understanding that the Project would not result in any zoning or other land use changes, there would be no indirect effects on archaeological and architectural resources.

3.6.7 Mitigation

In accordance with 36 CFR § 800.14(b), the FHWA, the SHPD, the Advisory Council on Historic Preservation, and HDOT would consult with other parties and enter into a Programmatic Agreement to govern Section 106 compliance for the Project, including identification of archaeological historic properties within the limits of disturbance for the Preferred Alternative. The Programmatic Agreement would provide treatment measures to avoid, minimize, and mitigate adverse effects to historic properties; provide protocols for continued consultation during project implementation; and describe processes for project changes and unanticipated discoveries.

3.6.7.1 Archaeology

The Draft Programmatic Agreement includes protocols to avoid, minimize, or mitigate adverse effects on archaeological historic properties and burials. There would be continued consultation with the SHPO, the Maui/Lāna'i Island Burial Council, recognized Descendants, and NHOs during investigations and analysis.

According to the Draft Programmatic Agreement, if the Project results in an adverse effect on an archaeological historic property, HDOT and the FHWA would consult to develop and implement any modifications or conditions to avoid or minimize the adverse effects, as agreed upon and as feasible. Chapter 5, Preferred Alternative, summarizes avoidance opportunities evaluated as part of this Draft EIS.

If adverse effects cannot be avoided, data recovery excavations may be considered following consultation. This would include development of a data recovery plan for each affected archaeological historic property or burial consistent with State of Hawai'i and federal laws.

If adverse effects cannot be fully avoided and data recovery is determined not appropriate through consultation, the FHWA and HDOT would continue to consult and would prepare a treatment plan for each affected archaeological historic property. With respect to unmarked Native Hawaiian burials, burial treatment plans would be consistent with State of Hawai'i law and would be developed in consultation with the Maui/Lāna'i Island Burial Council.

HDOT, in coordination with the SHPO, would curate recovered materials in accordance with applicable State of Hawai'i and federal laws.

3.6-22 December 2024

3.6.7.2 Architecture

While the preliminary analysis supports a recommendation of no adverse effect on architectural historic properties, the Draft Programmatic Agreement includes treatments to avoid, minimize, or resolve potential adverse effects. HDOT and the FHWA would engage the SHPO and Consulting Parties to develop and implement modifications or conditions to avoid, minimize, or, if necessary, resolve an adverse effect. Should an adverse effect result, the following treatment measures may be applied to resolve adverse effects:

- Educational Interpretation. HDOT, in coordination with the FHWA, may develop educational interpretation elements on one or more historic properties within the APE. These elements may include displays, markers, educational pamphlets, brochures or booklets, posters, websites, or other accessible information.
- Photogrammetry. HDOT may hire a consultant to conduct historic property documentation through
 photogrammetry, which would allow construction of a 3D model using high-resolution photographs
 and details of historic materials.
- Recordation. Prior to alterations or demolition of an architectural historic property, HDOT and the FHWA, in consultation with the SHPO and Consulting Parties, may record the adversely affected property through a digital photography package or Historic American Buildings Survey (HABS)/Historic American Engineering Record/Historic American Landscapes Survey Level III recordation (68 Federal Register 43159), as appropriate.

3.6.8 Build Alternatives Comparative Assessment

The Build Alternatives could potentially result in direct, physical effects on archaeological resources: between 8 and 9 in Olwalu and between 13 and 27 in Ukumehame (TABLE 3.6-10) Effects to individual architectural resources in Olowalu (including Launiupoko) and Ukumehame, as well as to the Olowalu Sugar Plantation Historic District, are not anticipated to be adverse.

TABLE 3.6-10. Summary of Potential Adverse Effects on Archaeological Resources

SEGMENT	BUILD ALTERNATIVE 1	BUILD ALTERNATIVE 2	BUILD ALTERNATIVE 3	BUILD ALTERNATIVE 4
Olowalu (including Launiupoko)	9	9	9	8
Ukumehame	23	27	27	13