

**ALA WAI CANAL PROJECT
O'AHU, HAWAII**

**FEASIBILITY STUDY REPORT WITH INTEGRATED
ENVIRONMENTAL IMPACT STATEMENT**

**APPENDIX F
CULTURAL RESOURCES**

F1 National Historic Preservation Act (NHPA) Section 106 Consultation Documentation

- Consultation Letter Distributing Technical Reports (dated February 20, 2014)
- Consultation Letter Initiating Consultation (dated August 21, 2014) and Comments from Office of Hawaiian Affairs [*Note: maps from this letter have been removed to protect the locations of cultural resources per 36 CFR 800.11(c)*]
- Consultation Letter Redefining the Area of Potential Effects (dated March 10, 2015), and Correspondence with Historic Hawaii Foundation [*Note: maps from this letter have been removed to protect the locations of cultural resources per 36 CFR 800.11(c)*]
- Consultation Letter Identifying Historic Properties, Providing Significance Evaluations, Presenting Determinations of Effect, and Proposing Conditions to Mitigate Adverse Effects (dated June 29, 2015), and correspondence with the Hawaii State Historic Preservation Officer, the Department of Hawaiian Home Lands, and Historic Hawaii Foundation [*Note: maps from this letter have been removed to protect the locations of cultural resources per 36 CFR 800.11(c)*]
- Programmatic Agreement

F2 List of Cultural Resource Reports

[Note: cultural resource reports are available upon request to qualified and appropriate parties or individuals]

**ALA WAI CANAL PROJECT
O'AHU, HAWAI'I**

**FEASIBILITY STUDY REPORT WITH INTEGRATED
ENVIRONMENTAL IMPACT STATEMENT**

**SECTION 209 OF FLOOD CONTROL ACT OF 1962
(PUBLIC LAW 87-874)**

APPENDIX F1

CULTURAL RESOURCES

**National Historic Preservation Act Section 106
Consultation Documentation**

February 20, 2014 Consultation Letter Distributing Technical Reports



DEPARTMENT OF THE ARMY
HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS
FORT SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF:

20 February 2014

Environmental Programs Branch
CEPOH-PP-E

Alan Downer
Administrator
State Historic Preservation Division
Kakuhihewa Building
601 Kamokila Blvd., Suite 555
Kapolei, HI 96707

SUBJECT: Submittal of Technical Reports for Ala Wai Watershed Feasibility Study

Dear Mr. Downer :

The Civil Works and Public Works Branch, Honolulu District, United States Army Corps of Engineers is submitting four technical reports for your review in advance of opening consultation with your office pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (16 USC 470f), for the Ala Wai Canal Feasibility Study project. The Ala Wai Canal (also known as the Ala Wai Watershed) project is a flood risk management project being investigated under Section 209 of the Flood Control Act of 1962 (Public Law 87-874). The project sponsor is the State Department of Land and Natural Resources (DLNR), Engineering Division. The study area consists of the Ala Wai watershed and its four sub-watersheds of Makiki, Manoa, Palolo, and Ala Wai. Multiple construction and TMK locations for detention basins/small dry reservoirs and in-stream debris catchments are identified in Alternative 3, the current preferred plan of eight alternatives evaluated, and includes conceptual engineering footprints and profiles that are 10% complete (Enclosure 1).

The reports are titled:

Cultural Resources and Ethnographic Study for the Ala Wai Watershed Project: Makiki, Mānoa and Pālolo Ahupua'a, Honolulu District, O'ahu Island, TMK: [1] 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, and 2-9; [1] 3-1, 3-2, 3-3 and 3-4, Volume I:
Cultural Resources of the Makiki, Mānoa and Pālolo Ahupua'a (Enclosure 2);

Cultural Resources and Ethnographic Study for the Ala Wai Watershed Project: Makiki, Mānoa and Pālolo Ahupua'a, Honolulu District, O'ahu Island, TMK: [1] 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, and 2-9; [1] 3-1, 3-2, 3-3 and 3-4, Volume II:
Cultural Resources of Kaka'ako and Waikīkī Ahupua'a (Enclosure 3);

Cultural Resources and Ethnographic Study for the Ala Wai Watershed Project, Honolulu, Makiki, Mānoa, Pālolo, and Waikīkī Ahupua'a, Honolulu District, O'ahu Island, TMK: [1] 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, and 2-9; [1] 3-1, 3-2, 3-3 and 3-4, Volume III:
Ethnographic Study (Enclosure 4); and

CEPOH-PP-E

SUBJECT: Submittal of Technical Reports for Ala Wai Watershed Feasibility Study

Historic Structures Inventory Survey of the Ala Wai Watershed (Enclosure 5).

Alternative 3 is still subject to revisions and approval by our local sponsor, DLNR. The Final Feasibility Study report, with the complementing Final Environmental Impact Statement is scheduled for submittal to, and approval by, the Chief of Engineers, United States Army Corps of Engineers by 30 October 2015.

Copies of these technical reports have also been provided to the federal Advisory Council on Historic Preservation, state Office of Hawaiian Affairs, and Oahu Council of Hawaiian Civic Clubs for their review and comments. Electronic copies on CD are also available by request.

The Corps, at your convenience, would like to meet with you during the week of March 17-21, 2014 to discuss measures to advance and ensure compliance with Section 106. Should you have any questions, please contact Mr. Farley Watanabe, Archaeologist and Technical Lead of my Environmental Programs Branch, by telephone at (808) 835-4305 or e-mail Farley.K.Watanabe@usace.army.mil.



DAN NAKAMURA
Chief, Environmental Programs Branch

5 Encls. as

List of Consulting Parties

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**August 21, 2014 Consultation Letter Initiating Consultation and Comments from Office of
Hawaiian Affairs**



DEPARTMENT OF THE ARMY
HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS
FORT SHAFTER, HAWAII 96858-5440

21 August 2014

Environmental Programs Branch
CEPOH-PP-E

Alan Downer
Administrator
State Historic Preservation Division
Kakuhihewa Building
601 Kamokila Blvd., Suite 555
Kapolei, HI 96707

SUBJECT: Coordination for Determination of Area of Potential Effect, Ala Wai Canal Project

Dear Mr. Downer,

The United States Army Corps of Engineers, Honolulu District (the Corps) has preliminarily determined the Area of Potential Effect (APE) for the Ala Wai Canal Project in accordance with 36 CFR 800.16(d). Based on an evaluation of the final array of alternatives (Alternatives 2A and 3A, as described in our previous correspondence), the Corps has tentatively selected Alternative 3A as the preferred alternative. Both alternatives will be evaluated in a draft combined Feasibility Report and Environmental Impact Statement, which is scheduled to be available for public review in early 2015.

A draft supplemental technical report reporting on additional interviews with Native Hawaiian Organizations, lineal descendants, and knowledgeable individuals of the watersheds is in preparation and will be made available to consulting parties upon request. Three technical reports were previously transmitted to the Advisory Council on Historic Preservation (ACHP), Administrator, State Historic Preservation Division (SHPD), Office of Hawaiian Affairs, and Oahu Council, Association of Hawaiian Civic Clubs and are also available upon request.

The following APE is proposed to delineate resources subject to Section 106 compliance (see Enclosure 1 for listing of Tax Map Keys (TMKs) potentially affected):

For Archaeological Resources, the APE is proposed to be the entire Tax Map Key parcel in which all areas of direct ground disturbance are proposed. These areas include stream debris catchment structures, detention basins, floodwalls, access roads, and storage yards for equipment and construction materials.

For Traditional Cultural Properties (TCPs) the APE is proposed to be the extension of a visual or aesthetic element extending outwards and/or upwards 500 feet from the Tax Map Key parcels in which all areas of direct ground disturbance are proposed and TCPs are reported to be present.

CEPOH-PP-E

SUBJECT: Coordination for Determination of Area of Potential Effect, Ala Wai Watershed Project

deep when a district or thematic element is listed on the State and National Register of Historic Places. For built structures in, along and over a stream segment where a ground disturbing measure is proposed, the APE is proposed to be the entire Tax Map Key parcel in which all areas of direct ground disturbance are proposed extending to a linear distance 500 feet downstream.

The Corps requests your review, comments and concurrence to the proposed APE within 31 days of your receipt of this letter. Maps depicting the proposed APE are included as Enclosure 2, and a list of parties to whom this letter has been sent is included as Enclosure 3.

The Corps, at your convenience, would like to meet with you during the weeks of September 15-26, 2014 to discuss measures to advance and ensure compliance with Section 106. Should you have any questions, please contact Mr. Farley Watanabe, Archaeologist and Technical Lead of my Environmental Programs Branch, by telephone at (808) 835-4305 or e-mail Farley.K.Watanabe@usace.army.mil.

Sincerely,



DAN NAKAMURA, P.E
Chief, Environmental Programs Branch
Programs and Project Management Division

3 Encls. as

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STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
560 N. NIMITZ HWY., SUITE 200
HONOLULU, HAWAII 96817

HRD147095

October 22, 2014

Dan Nakamura, P.E.
Chief, Environmental Programs Branch
Programs and Project Management Division
Honolulu District, U.S. Army Corps of Engineers
Fort Shafter, Hawaii 96858-5440

Re: Coordination for Determination of Area of Potential Effect, Ala Wai Canal Watershed Project Honolulu Ahupua'a Mānoa, Pālolo, and Makiki, Kona Moku, O'ahu Island

Aloha e Mr. Nakamura:

The Office of Hawaiian Affairs (OHA) is in receipt of your August 21, 2014 submission, with enclosures, requesting review, comments, and concurrence to the proposed area of potential effect (APE) for the Ala Wai Canal Watershed Project. The United States Army Corps of Engineers, Honolulu District (the Corps) has preliminarily determined the APE for the Ala Wai Canal Watershed Project in accordance with 36 § CFR Part 800.16(d). Based on your August 21st submission, the Corps has preliminarily selected Alternative 3A as the preferred alternative, however both Alternative 2A and 3A will be evaluated in a draft combined feasibility report and environmental impact statement (EIS), which will be produced in 2015. According to your submission, a draft supplemental technical report, which will include additional interviews with Native Hawaiian Organizations (NHO), lineal descendants, and knowledgeable individuals of the watersheds is being prepared and will be made available upon request.

For archaeological/cultural resources, the APE is described as the entire Tax Map Key (TMK) parcel in which all areas of ground disturbance are proposed. These areas include stream debris catchment structures, detention basins, floodwalls, access roads, and storage yards for equipment and construction materials. For Traditional Cultural Properties (TCPs), the APE is proposed to be an extension of a visual or aesthetic element extending outwards and/or upwards 500 feet from the TMK parcels in which the area of ground disturbance are proposed and TCPs are reported to be present.

Mr. Nakamura
October 22, 2014
Page 2

We request that once the draft supplemental report, containing interviews with NHO, lineal/cultural descendants, and knowledgeable individuals of the watershed, is completed that OHA be provided a copy for review and comments. At this time, we cannot preliminarily concur with your description and depiction of the proposed APE. While a large number of maps and associated engineering drawing were provided with your submission, a clear description of the proposed project and its desired outcomes was not provided. In addition, your cover letter submission appears to be incomplete with the Page 2 opening paragraph containing what appears to be a cut-off sentence and confusing information. We request that a complete description of the proposed project be provided to our office. If your staff would like to meet with OHA representatives to discuss the project, please contact our offices at the phone or email listed below and we can set up a mutually agreeable date for a meeting. Once a complete description of the proposed project is provided, we will be able to provide comments and recommendations on the project's potential effects. We also look forward to reviewing the draft EIS once it has been prepared.

Thank you for initiating consultation. Should you have any questions or concerns please contact Lauren Morawski of our Kia'i Kānāwai (Compliance Enforcement) division at (808) 594-1997 or laurenm@oha.org.

'O wau iho nō,



Kamana'opono M. Crabbe, Ph.D.
Ka Pouhana, Chief Executive Officer

KC;lm

March 10, 2015 Consultation Letter Redefining the Areas of Potential Effect and Correspondence with Historic Hawaii Foundation



DEPARTMENT OF THE ARMY
HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS
FORT SHAFTER, HAWAII 96858-5440

March 10, 2015

Environmental Programs Branch
Programs and Project Management

Alan S. Downer, Ph.D.
Administrator & Deputy State Historic Preservation Officer
State Historic Preservation Division
Kakuhihewa Building
601 Kamokila Blvd., Suite 555
Kapolei, HI 96707

Dear Mr. Downer:

We are writing to continue NHPA Section 106 consultation on the Ala Wai Canal Project. The intent of this letter is to redefine the Area of Potential Effect (APE), and clarify the scope of the project. The content of this consultation is also being used for notification and compliance under Chapter 6E of the Hawaii Revised Statutes.

In our letter dated August 21, 2014, we had identified the APE with separate definitions for the Archaeological Resources APE, the Historic Resources APE, and the Traditional Cultural Properties APE. As part of ongoing consultation for this project, we have met with the State Historic Preservation Division and redefined the APE, having now identified a Direct and Indirect APE for each planned construction activity (flood mitigation measure). The Direct APE is the area that will be directly affected by construction, and includes the footprint of the measure to be constructed, the construction footprint with construction buffer, staging area, and access road. The Indirect APE is defined as a one-half mile radius from the outer edge of the Direct APE. The new APEs are defined the same for Archaeological Resources, Historic Resources, and Traditional Cultural Properties.

Maps of both Direct and Indirect APEs, along with a description of each measure are attached (Enclosure 1). Acreages and TMKs are displayed on the maps. The APE maps also display cultural resources identified during cultural resource investigations in support of this project (reference *Cultural Resources and Ethnographic Study for the Ala Wai Watershed Project, Honolulu, Makiki, Mānoa, Pālolo, and Waikīkī Ahupua'a, Honolulu District, O'ahu Island, Volumes I, II, and III*; *Cultural Impact Assessment for the Ala Wai Canal Project, Waikīkī, Pālolo, Makiki, and Mānoa Ahupua'a, Honolulu (Kona) District, O'ahu*; and *Historic Structures Inventory Survey of the Ala Wai Watershed*). Additional details on historic properties identification and effects determinations will be provided in our next consultation letter.

The Tentatively Selected Plan (TSP) for the Ala Wai Canal Project will introduce 13 measures into the Ala Wai Watershed to mitigate potential flooding associated with large storm events. The thirteen measures to be constructed are:

Makiki

1. Makiki Debris and Detention Basin

Manoa Valley

2. Waihi Debris and Detention Basin
3. Waiakeakua Debris and Detention Basin
4. Woodlawn Ditch Detention Basin
5. Manoa In-Stream Debris Catchment
6. Kanewai Field Multi-Purpose Detention Basin

Palolo Valley

7. Pukele Debris and Detention Basin
8. Waiomao Debris and Detention Basin

Ala Wai

9. Hausten Ditch Detention Basin
10. Ala Wai Golf Course Multi-Purpose Detention Basin
11. Ala Wai Canal Floodwalls

Watershed

12. Flood Warning System
13. Aquatic Habitat Mitigation

To assist with clarifying the scope of the project, we are providing the following additional information about the nature of the work at each measure:

- a. A description of the measure
- b. Why this is the best location for the proposed measure
- c. What the area looks like now
- d. What will it look like with the measure in place (conceptual rendering)
- e. What is the area used for now
- f. What can it be used for after the measure is constructed
- g. Will the measure only be used in the event of a large storm event, or will it also be utilized for smaller, more frequent storm events
- h. Identify measures that have flexibility in their proposed location (can be moved upstream/downstream based on impacts to cultural resources) from those measures whose locations are fixed
- i. Provide Direct APE acreage and TMKs for each APE

The Honolulu District, U.S. Army Corps of Engineers (Corps) requests your review and comments on the APEs within 31 days of your receipt of this letter. Our next letter will identify historic properties and assess adverse effects. A list of parties to whom this letter has been sent is included (Enclosure 2). We have added the Historic Hawaii Foundation, Nā Ala Hele, Oahu Island Burial Council, Oahu Hawaiian Canoe Racing Association, and DLNR Division of Forestry and Wildlife (DOFAW) as consulting parties.

The Corps, at your convenience, is available to meet with you to discuss measures to advance consultation and ensure compliance with Section 106 and applicable Hawaii Revised Statutes and Administrative Rules. Should you have any questions, please contact Mr. Loren Zulick, Archaeologist, of my branch, at (808) 835-4305, or e-mail loren.a.zulick@usace.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dan Nakamura', with a long horizontal flourish extending to the right.

DAN NAKAMURA
Chief, Environmental Programs Branch

Enclosures

Enclosure 2

List of Consulting Parties

Chairman, DLNR
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List of Consulting Parties (continued)

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HISTORIC HAWAII FOUNDATION

April 8, 2015

Loren Zulick
Environmental Programs
Army Corps of Engineers
Fort Shafter, Hawai'i 96858-5440

**RE: National Historic Preservation Act (NHPA) Section 106 Consultation
Ala Wai Canal and Watershed Project**

Dear Mr. Zulick,

Thank you for including Historic Hawai'i Foundation in the NHPA Section 106 consultation initiation for the Ala Wai Canal Watershed Project. Since 1974, Historic Hawai'i Foundation has served as a statewide preservation organization encouraging the preservation of Hawai'i's significant historic properties.

The letter dated March 10, 2015 from Department of the Army, Army Corps of Engineers, redefines the Area of Potential Affect (APE) and clarifies the scope of the project. The letter serves as the Section 106 notification. Identification of historic properties and assessment of impacts will be provided in a future letter.

Scope of work includes construction of 13 flood management measures along the Ala Wai Canal in Makiki, Mānoa, Pālolo, Waikīkī, and the watershed. Specific information about each measure includes the location, draft design, and justification. Based on this correspondence, Historic Hawai'i Foundation has some clarification questions:

- What is the impetus for this large scale flood management project?
- Will the Section 106 process be completed as part of the NEPA process?
- As this letter is also addressing HRS 6E compliance, does this project also trigger HRS Chapter 343?
- Have neighborhood boards and neighborhood organizations such as Mālama Mānoa been notified of this project and provided the opportunity to participate in the Section 106 consultation?

Please continue to include Historic Hawai'i Foundation in this Section 106 consultation. Megan Borthwick, Preservation Program Manager will be the point of contact for this project. She can be reached at megan@historichawaii.org or by phone at (808) 523-2900.

Sincerely,



Kiersten Faulkner, AICP
Executive Director



DEPARTMENT OF THE ARMY
HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS
FORT SHAFTER, HAWAII 96858-5440

May 1, 2015

Environmental Programs Branch
Programs and Project Management

Ms. Megan Borthwick
Preservation Program Manager
Historic Hawai'i Foundation
680 Iwilei Road
Dole Office Building Tower, Suite 690
Honolulu, Hawaii 96817

Dear Ms. Borthwick:

We are in receipt of a letter from your organization, dated April 8, 2015, identifying you as the point of contact for this project. We appreciate your interest and participation in the Section 106 process. We offer the following responses to your clarification questions:

Q: What is the impetus for this large scale flood management project?

A: The primary impetus for this project is to improve life safety and reduce property damage associated with flooding events within the watershed. Hawaii streams are prone to flash flooding. With the sudden nature of the flood events and associated high velocities, floods within the watershed have resulted in recorded property damages, and risks to health and safety. Some of the secondary drivers include; reduced flood insurance rates to businesses and homeowners, large scale economic (negative) mitigation for the Waikiki tourist industry, initiation of the eco-restoration of the Ala Wai and connecting waterways, and promulgation of a watershed management program to be used for other Pacific islands.

Q: Will the Section 106 process be completed as part of the National Environmental Policy Act (NEPA) process?

A: We are not substituting the NEPA process for the Section 106 process, as allowed by 36 Code of Federal Regulations (CFR) 800.8(c). We are coordinating and integrating the two processes as specified in the Council on Environmental Quality NEPA regulations at 40 CFR 1502.25.

Q: As this letter is also addressing Hawaii Revised Statutes (HRS) 6E compliance, does this project also trigger HRS Chapter 343?

A: The project is being undertaken in partnership with the State of Hawaii, Department of Land and Natural Resources (DLNR). As the non-federal sponsor, the DLNR is required to comply with all applicable state laws, including HRS Chapter 343.

Q: Have neighborhood boards and neighborhood organizations such as Mālama Mānoa been notified of this project and provided the opportunity to participate in the Section 106 consultation?

A: This project has generated quite a bit of community outreach over the years, including outreach to the neighborhood boards and organizations. This includes multiple scoping meetings and other briefings/updates dating back to 2004. There were a series of open house meetings in May 2014. Invitations to the open house meetings were sent to all of the neighborhood board members that have posted e-mail addresses online, as well as other individuals/organizations identified as project stakeholders. Multiple people (approximately seven) who are affiliated specifically with Mālama Mānoa (as directors or advisors) were invited to the open house meetings.

We appreciate your contributions to the historic preservation process. Please continue to contact Mr. Loren Zulick, Archaeologist of my branch, at (808) 835-4305 or e-mail loren.a.zulick@usace.army.mil with any questions or concerns you may have regarding this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan A. Nakamura". The signature is fluid and cursive, with a long horizontal stroke at the end.

Dan A. Nakamura, P.E.
Chief, Environmental Programs Branch

June 29, 2015 Consultation Letter Identifying Historic Properties, Providing Significance Evaluations, Presenting Determinations of Effect, and Proposing Conditions to Mitigation Adverse Effects



DEPARTMENT OF THE ARMY
HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS
FORT SHAFTER, HAWAII 96858-5440

June 29, 2015

Environmental Programs Branch
Programs and Project Management

Mr. Alan S. Downer, PhD
Administrator
State Historic Preservation Office
Department of Land and Natural Resources
State of Hawaii
601 Kamokila Boulevard, Suite 555
Kapolei, Hawaii 96707

Dear Dr. Downer:

We are writing to continue NHPA Section 106 consultation on the Ala Wai Canal Project. As mentioned in previous correspondence, the content of this consultation is also being used for notification and compliance under Chapter 6E of the Hawaii Revised Statutes on behalf of the State of Hawaii, Department of Land and Natural Resources. The intent of this letter is to identify historic properties within the Area of Potential Effect (APE), provide significance evaluations, present determinations of effect on historic properties, and propose conditions to mitigate adverse effects.

Through a reasonable and good faith effort utilizing archival research, field investigations, and interviews that have been documented in the following reports; *Cultural Resources and Ethnographic Study for the Ala Wai Watershed Project, Honolulu, Makiki, Mānoa, Pālolo, and Waikīkī Ahupua'a, Honolulu District, O'ahu Island, Volumes I, II, and III*; *Cultural Impact Assessment for the Ala Wai Canal Project, Waikīkī, Pālolo, Makiki, and Mānoa Ahupua'a, Honolulu (Kona) District, O'ahu*; and *Historic Structures Inventory Survey of the Ala Wai Watershed, the Honolulu District, U.S. Army Corps of Engineers (Corps)* has identified forty six historic properties within 100m of the Direct APE that are either listed, or eligible for listing on the National or Hawaii Register of Historic Places (Enclosures 1 and 2). The Direct APE is defined as the area that could be directly affected by construction, and includes the footprint of each proposed measure to be constructed, and the construction footprints with construction buffers, staging areas, and access roads. The resources identified within 100m of the Direct APE include historic buildings and structures, archaeological sites/features, and historic and traditional cultural practices and places.

Historic properties were evaluated for significance in the above mentioned research documentation by applying eligibility criteria from the National Register of Historic Places (36 Code of Federal Regulations (CFR) 60.4), the Hawaii Register of Historic

Places (Hawaii Administrative Rules (HAR) §13-198-8), and site significance under HAR §13-275-6. National/Hawaii Register of Historic Places and site significance determinations are presented in Table 1 (Enclosure 1).

In conducting effects determinations, of those 46 resources within 100m of the Direct APE, 19 will not be directly or indirectly affected by the proposed measures and their cumulative impacts. They are listed with "no effect" determinations in Table 1 (Enclosure 1). We have concluded there will be "no adverse effect" to 7 historic properties, and potential adverse effects on 20 historic resources, all of which are identified in Table 1 (Enclosure 1). For those properties where an adverse effect is projected, conditions have been proposed (Enclosure 2) that would mitigate the adverse effect to "conditional no adverse effect." In accordance with 36 CFR 800.5, we seek your comments and considerations on our assessment of adverse effect.

Treatment recommendations are made for historic properties with an adverse effect determination. The intent is to identify conditions that can be placed on the design and construction that will mitigate impacts to the resource. Investigations and research previously referenced made recommendations for treatment of historic properties. Our first mitigation alternative will be to comply with recommendations made in the reports referenced. Treatment recommendations are attached (Enclosure 2).

Considering that we are at the Feasibility Stage of this project, there are still a number of unknown variables that may result in adverse effects through the remaining planning, design, and construction phases. We are inviting you to assist with the development of a Programmatic Agreement (PA) to establish the process of resolving adverse effects for the proposed undertaking. Our PA will expand upon the proposed treatments of historic properties identified in this letter. We are notifying the Advisory Council on Historic Preservation of the likelihood that the proposed undertaking will have an adverse affect on historic properties consistent with 36 CFR 800.6(a)(1).

We also want to take this opportunity to seek your concurrence on our initial decision under 36 CFR 800.11(c) to withhold from public disclosure information about the location, character, or ownership of the 46 historic properties. Withholding this information will reduce the risk of harm to the resources and reduce the risk of a significant invasion of privacy with respect to others. The information is being provided to you as a consulting party by way of its inclusion in Figures 3 through 19, and 22 through 25 (Enclosure 2) of this letter. However, before those figures are released to the public as part of our compliance with the National Environmental Policy Act, the symbols on maps disclosing information about the specific location, character, or ownership of the 46 historic properties would be removed.

The Corps requests your review, comment, and concurrence with;

1. The Direct and Indirect APEs identified in our consultation letter dated March 10, 2015.
2. Historic Properties identified within the APE.
3. Determinations of eligibility for the National Register and Hawaii Register of Historic Places, and site significance under HAR §13-275-6.
4. Determinations of effect on historic properties.
5. Proposed treatments to mitigate adverse effects on historic properties.
6. Determination under 36 CFR 800.11(c) to withhold from public disclosure, information about the location, character, or ownership of the 46 historic properties.

We ask for your concurrence on the items above within 30 days of your receipt of this letter, and will use that to forge the PA. A list of consulting parties to whom this letter has been sent is included (Enclosure 3).

The Corps is looking forward to continuing our consultation as we work to resolve adverse effects to historic properties. Should you have any questions, please contact Mr. Loren Zulick, Archaeologist of my Environmental Programs Branch, at (808) 835-4305 or e-mail loren.a.zulick@usace.army.mil.

Sincerely,



Christopher W. Crary
Lieutenant Colonel, U.S. Army
District Engineer

Enclosures

Enclosure 1

Historic Property Table

Table 1: Historic Properties

	DESCRIPTION	SITE ID	CRITERIA	TREATMENT RECOMMENDATION	EFFECTS DETERMINATION
	1) Makiki: <u>Makiki D&D Basin</u>				
1	Archie Baker Park	Inventory No. 92	A,C	temporary impacts-no adverse effect	temporary impacts: no adverse effect
2	Makiki Stream	No SIHP Assigned	e	reuse rocks from streambed	conditional no adverse effect
3	Makiki Stream Channel	Inventory No. 11	C	no direct impact	no effect
4	Makiki Street Bridge	Inventory No. 17	C	no direct impact	no effect
5	Oneele Place Bridge	Inventory No. 18	A,C	no direct impact	no effect
6	Terrace	50-80-14-6717	D	avoidance during construction	no adverse effect
	2) Manoa: <u>Waihi D&D Basin</u>				
7	Mounds/Platforms/Walls	50-80-14-6734	D,e	avoidance/reuse rocks/community assistance	conditional no adverse effect
8	Waihi Stream	No SIHP Assigned	e	reuse rocks from streambed	conditional no adverse effect
9	Aihualama Loi	No SIHP Assigned	A,C	avoidance during construction	no adverse effect
	3) Manoa: <u>Waiakeakua D&D Basin</u>				
10	Waaloa Way Bridge 2	Inventory No. 51	C	historic documentation	conditional no adverse effect
11	Waaloa Way Bridge 1	no inventory number	none	historic documentation	conditional no adverse effect
12	Terraces	50-80-14-6735	D	no direct impact	no effect
13	Waihi Stream Stone/Mortar Dam	50-80-14-6736/No. 54	A	reuse rocks/improve appearance	conditional no adverse effect
14	Historic House	50-80-14-6737	C,D	no direct impact	no effect
15	Historic House	50-80-14-6738	C,D	no direct impact	no effect
16	Waihi Gaging Station	Inventory No. 53	A,C	no direct impact	no effect
17	Waiakeakua Stream	No SIHP Assigned	E	reuse rocks from streambed	conditional no adverse effect

Table 1: Historic Properties

	DESCRIPTION	SITE ID	CRITERIA	TREATMENT RECOMMENDATION	EFFECTS DETERMINATION
18	Waiakeakua Gaging Station	Inventory No. 55	A,C	reuse rocks/improve appearance	conditional no adverse effect
19	Bridge Foundation	50-80-14-6744	C,D	no direct impact	no effect
	4) Manoa: <u>Woodlawn Ditch</u>				
*	Open Space at Park	No SIHP Assigned	none	not historic	not historic
20	Woodlawn Ditch	Inventory No. 42	A,C	no direct impact	no effect
21	East Manoa Road Manoa Park Ditch Bridge	Inventory No. 47	C	no direct impact	no effect
22	East Manoa Road Culvert	Inventory No. 48	C	no direct impact	no effect
23	Kaamamilo Drive Driveway Bridge	Inventory No. 49	C	no direct impact	no effect
	5) Manoa: <u>Manoa In-Stream Debris Catchment</u>				
24	Manoa Stream Channel	Inventory No. 41	A,C	historic documentation	conditional no adverse effect
25	Lowrey Avenue Bridge	Inventory No. 45	C	no direct impact	no effect
26	Kahaloa Drive Bridge	Inventory No. 46	C	no direct impact	no effect
	6) Manoa: <u>Kanewai Field Detention Basin</u>				
27	Kanewai Field	Inventory No. 94	C	avoid architecture/trees/seed berm	conditional no adverse effect
28	Manoa-Palolo Canal	Inventory No. 36	A,C	no direct impact	no effect
29	Old Waialae Road Bridge	Inventory No. 40	C	no direct impact	no effect
30	Palolo Stream Channel	Inventory No. 63	A,C	no direct impact	no effect
31	Kanewai Loi	50-80-14-4498	A,C	avoidance during construction	no adverse effect
	7) Palolo: <u>Pukele Debris/Detention Basin</u>				
32	Pukele Stream	No SIHP Assigned	E	reuse rocks from streambed	conditional no adverse effect

* not identified as an Historic Property

Table 1: Historic Properties

	DESCRIPTION	SITE ID	CRITERIA	TREATMENT RECOMMENDATION	EFFECTS DETERMINATION
	8) Palolo: <u>Waiomao Debris/Detention Basin</u>				
33	Waiomao Stream	No SIHP Assigned	E	reuse rocks from streambed	conditional no adverse effect
*	Waiomao USGS Gaging Station	No SIHP Assigned	None	not historic	not historic
	9) Ala Wai: <u>Hausten Ditch Detention Basin</u>				
*	Ala Wai Park	No SIHP Assigned	None	not historic	not historic
34	Alanaio Stream Channel (Hausten Ditch)	Inventory No. 82	A,C	historic documentation	conditional no adverse effect
35	Ala Wai Canal	50-80-14-9757	A	historic documentation	conditional no adverse effect
36	box culvert at Date Street	Inventory No. 84	C	no direct impact	no effect
37	box culvert at Kapiolani Blvd	Inventory No. 85	C	no direct impact	no effect
	10) Ala Wai: <u>Ala Wai Golf Course MPDB</u>				
38	Ala Wai Golf Course	No SIHP Assigned	none	monitoring during construction	conditional no adverse effect
**	Manoa-Palolo Canal	Inventory No. 36	A,C	historic documentation	conditional no adverse effect
*	Kapahulu Drainage	No SIHP Assigned	none	not historic	not historic
39	Date Street Bridge	Inventory No. 37	A,C	no direct impact	no effect
	11) Ala Wai: <u>Ala Wai Canal Floodwalls/Pump Stations</u>				
**	Ala Wai Canal	50-80-14-9757	A	historic documentation/SHPD design input	conditional no adverse effect
40	Ala Wai Clubhouse (C&C Art Deco Parks)	50-80-14-1388/ No. 90	C	historic documentation/SHPD design input	conditional no adverse effect

* not identified as an Historic Property

** previously identified as part of another Measure

Table 1: Historic Properties

DESCRIPTION	SITE ID	CRITERIA	TREATMENT RECOMMENDATION	EFFECTS DETERMINATION
41 Paddling Outrigger Canoe	No SIHP Assigned	e	coordination on design with consulting parties	no adverse effect
42 Kalakaua Ave Bridge	Inventory No. 02	A,C	match design with existing walls	no adverse effect
43 McCully St. Bridge	Inventory No. 03	A,C	match design with existing walls	no adverse effect
* Kapahulu Drainage	No SIHP Assigned	none	not historic	not historic
12) Watershed: Flood Warning System				
44 Manoa Stream	No SIHP Assigned	e	reuse rocks from streambed	conditional no adverse effect
45 Makiki Stream	No SIHP Assigned	e	reuse rocks from streambed	conditional no adverse effect
46 Palolo Stream	No SIHP Assigned	e	reuse rocks from streambed	conditional no adverse effect
** Ala Wai Canal	50-80-14-9757	A	historic documentation/SHPD design input	conditional no adverse effect
13) Watershed: Aquatic Habitat Mitigation				
** Manoa Stream	No SIHP Assigned	e	reuse rocks from streambed	conditional no adverse effect
** Waihi Stream Stone/Mortar Dam	50-80-14-6736/No. 54	A	reuse rocks/improve appearance	conditional no adverse effect
** Waihi Gaging Station	Inventory No. 53	A,C	no direct impact	no effect
** Waiakeakua Gaging Station	Inventory No. 55	A,C	reuse rocks/improve appearance	conditional no adverse effect
** Manoa Stream Channel	Inventory No. 41	A,C	historic documentation/SHPD design input	conditional no adverse effect

* not identified as an Historic Property
 ** previously identified as part of another Measure

Enclosure 3

List of Consulting Parties

List of Consulting Parties

Chairman, DLNR
Kakuhihewa Building
601 Kamokila Blvd., Suite 555
Kapolei, HI 96707

Kamana'opono M. Crabbe, Ph.D.
Ka Pouhana
Office of Hawaiian Affairs
State of Hawaii
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Honolulu, HI 96817

Mr. Brian Lusher
Advisory Council on Historic Preservation
401 F Street NW, Suite 308
Washington, DC 20001-2637

Robin Puanani Danner
President
Council on Native Hawaiian Advancement
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Waialua, HI 96791

Hinaleimoana K.K. Wong-Kalu
Chair, Oahu Island Burial Council
601 Kamokila Blvd., Suite 555
Kapolei, HI 96707

Office Manager
Native Hawaiian Culture & Arts Program
Bernice Pauahi Bishop Museum
P.O. Box 19000-A
Honolulu, HI 96817-0916

Linda Kaleo Paik
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State Historic Preservation Division
Kakuhihewa Building
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Na Daniel Naho`opii
Pelekikena, Oahu Council
Association of Hawaiian Civic Clubs
PO Box 1135
Honolulu, HI 96807

Edward Kealoha Ayau
Hui Malama I Na Kupuna `O Hawaii Ne
P. O. Box 365
Ho'olehua, HI 96729

Dawn N.S. Chang
Executive Director
Ku`iwalu
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Maile Alau
Executive Director
Hawaii Maoli
P.O. Box 1135
Honolulu, HI 96807

Stephen Tam Loo
Healani Canoe Club
748 Ahuwale Street
Honolulu, HI 96821

Kiersten Faulkner
Executive Director
Historic Hawaii Foundation
680 Iwilei Road Dole Office Building Tower,
Suite 690
Honolulu, HI 96817

List of Consulting Parties (Continued)

Pelekikena
Waikiki Hawaiian Civic Club
4360 Puu Panini Avenue
Honolulu, HI 96816

Glenell Choy
Waikiki Surf Club
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Lisa Hadway
Administrator
Division of Forestry and Wildlife
Kalanimoku Building
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Honolulu, HI 96813

Dana Gorecki
Waikiki Beach Boys Hu`i Waa
gorecki@hawaii.edu

Pelekikena
Papa Ola Lokahi
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Honolulu, HI 96813

Moana Rowland
Na Ala Hele Abstractor
Division of Forestry and Wildlife
Department of Land and Natural Resources
1151 Punchbowl Street
Room 325, Kalanimoku Building
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(808) 587-0057

Pauline Navales
President
Kumuola Foundation
1519 Nuuanu Ave., Unit 49
Honolulu, HI 96817-3737

Luana Froiseth
President, Oahu Hawaiian Canoe Racing
Association
P.O. Box 2498
Honolulu, HI 96804

DAVID Y. IGE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
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601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

February 11, 2016

Christopher W. Crary
Lieutenant Colonel, U.S. Army
District Engineer
Department of the Army
Honolulu, District, US Army Corps of Engineers
Fort Shafter, Hawaii 96858-5440

IN REPLY REFER TO: 7 APR 2016

LOG: 2015.02596
DOC: 1602JLP14
"adverse effect"

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DX	JP
PP-C	
PP-E	CP

Rec'd
4/8/16

LZ [Signature]

RE: Section: Section 106 Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: United States Army Corps of Engineers (USACE)
Project Name: Ala Wai Canal Project
Location: Honolulu, Palolo, Makiki, and Manoa Ahupuaa, Honolulu (Kona) District, Oahu
TMK: N/A

Dear Lieutenant Colonel Crary:

On July 6, 2015, the State Historic Preservation Division (SHPD) received a submittal from The United States Army Corps of Engineers (USACE) for the Ala Wai Canal Project at multiple locations throughout the Ala Wai watershed on Oahu. The proposed project includes the construction of watershed improvement measures throughout the Honolulu, Palolo, Makiki, and Manoa Ahupuaa, in preparation for a 100 year storm event.

Per Section 106 of the National Historic Preservation Act of 1966, as amended, SHPD has reviewed the undertaking and the State Historic Preservation Officer (SHPO) concurs with the determination of USACE that the proposed undertaking will have an **adverse effect** on historic properties within the area of potential effects for the above-cited undertaking. Additionally, the SHPO concurs with the direct and indirect Areas of Potential Effect (APEs) identified by USACE; the identification of historic properties within the APEs; the determinations of eligibility for the National Register and Hawaii Register of Historic Places, as well as the site significance determinations under HAR §13-275-6. The SHPO also concurs with USACE's determination under 36 CFR § 800.11(c) to withhold from public disclosure, information about the location, character, or ownership of the 46 historic properties identified within the APEs.

USACE is the office of record for this undertaking. Please maintain a copy of this letter with your environmental review record for this undertaking. If you have any questions about this undertaking or if there is a change to the scope of work, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan S. Downer
Deputy State Historic Preservation Officer

In the event that historic resources, including human skeletal remains, cultural layers, cultural deposits, features, artifacts, or sinkholes, lava tubes or lava blisters/bubbles are identified during construction activities, all work should cease in the immediate vicinity of the find, the find should be protected from additional disturbance, and the State Historic Preservation Division should be contacted immediately at (808) 692-8015.

CC: Kiersten Faulkner (HHF), kiersten@historichawaii.org

DAVID Y. IGE
GOVERNOR
STATE OF HAWAII



JOBIE M. K. MASAGATANI
CHAIRMAN
HAWAIIAN HOME LANDS COMMISSION

SHAN S. TSUTSUI
LT. GOVERNOR
STATE OF HAWAII

WILLIAM J. AHA, JR.
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

P. O. BOX 1879
HONOLULU, HAWAII 96805

September 29, 2015

Honolulu District, USACE
ATTN: Ala Wai Canal Project
Building 230, CEPOH-PP-C
Fort Shafter, HI 96858

SUBJECT: Review and Comments on Draft Feasibility
Report/Environmental Impact Statement, Ala Wai Canal
Project, Ala Wai Watershed (multiple TMK's), Kona,
Island of O'ahu

Dear Sir and/or Madam:

Mahalo for providing the Department of Hawaiian Home Lands (DHHL) with the opportunity to provide comments on the Draft Feasibility Report/Environmental Impact Statement for the Ala Wai Canal Project. DHHL understands that the purpose of the project is to reduce flood risk within the Ala Wai Watershed. The Tentatively Selected Plan proposes nine (9) detention basins, a debris catchment feature, floodwalls, flood warning system improvements and in-stream improvements to restore passage for native aquatic species.

As landowners engaged in our own planning processes, it is our responsibility to engage with other agencies and plan appropriately for the larger region, and it is our priority to ensure that DHHL's plans are as consistent as possible with other plans for the island of O'ahu. In addition, DHHL is the land owner of two parcels potentially impacted by the "one percent ACE flood event" and within 1,500 feet of the proposed Hausten Ditch Detention Basin, TMK's (1)2-7-008:018 (0.92 acres) and (1)2-7-008:020 (0.97 acres). See Exhibits "A" and "B".

Please consider the following general comments:

1. DHHL supports the U.S. Army Corps of Engineers' and the State of Hawai'i Department of Land and Natural Resources' efforts to better manage stormwater and reduce flooding from

heavy rain events, which may occur more frequently in the future. Reducing the flood risk in the Ala Wai Watershed will benefit the Hawaiian Home Lands Trust by protecting critical infrastructure and enhancing DHHL's future ability to use our lands in Mō'ili'ili.

2. DHHL also appreciates the measures developed to minimize and mitigate negative impacts to cultural and natural resources important to native Hawaiians due to construction of project components. Streams and stream life in their natural state are culturally significant to our beneficiaries, therefore DHHL supports successful completion of the NHPA Section 106 consultation process and finalization of a Programmatic Agreement to mitigate potential impacts to cultural, natural and scenic resources from implementation of the Tentatively Selected Plan.

We appreciate the opportunity to provide comments on the Draft Feasibility Report/Environmental Impact Statement for the Ala Wai Canal Project. If there are any questions, please contact Nancy McPherson at our Planning Office via email at nancy.m.mcpherson@hawaii.gov or by phone at 808.620.9519.

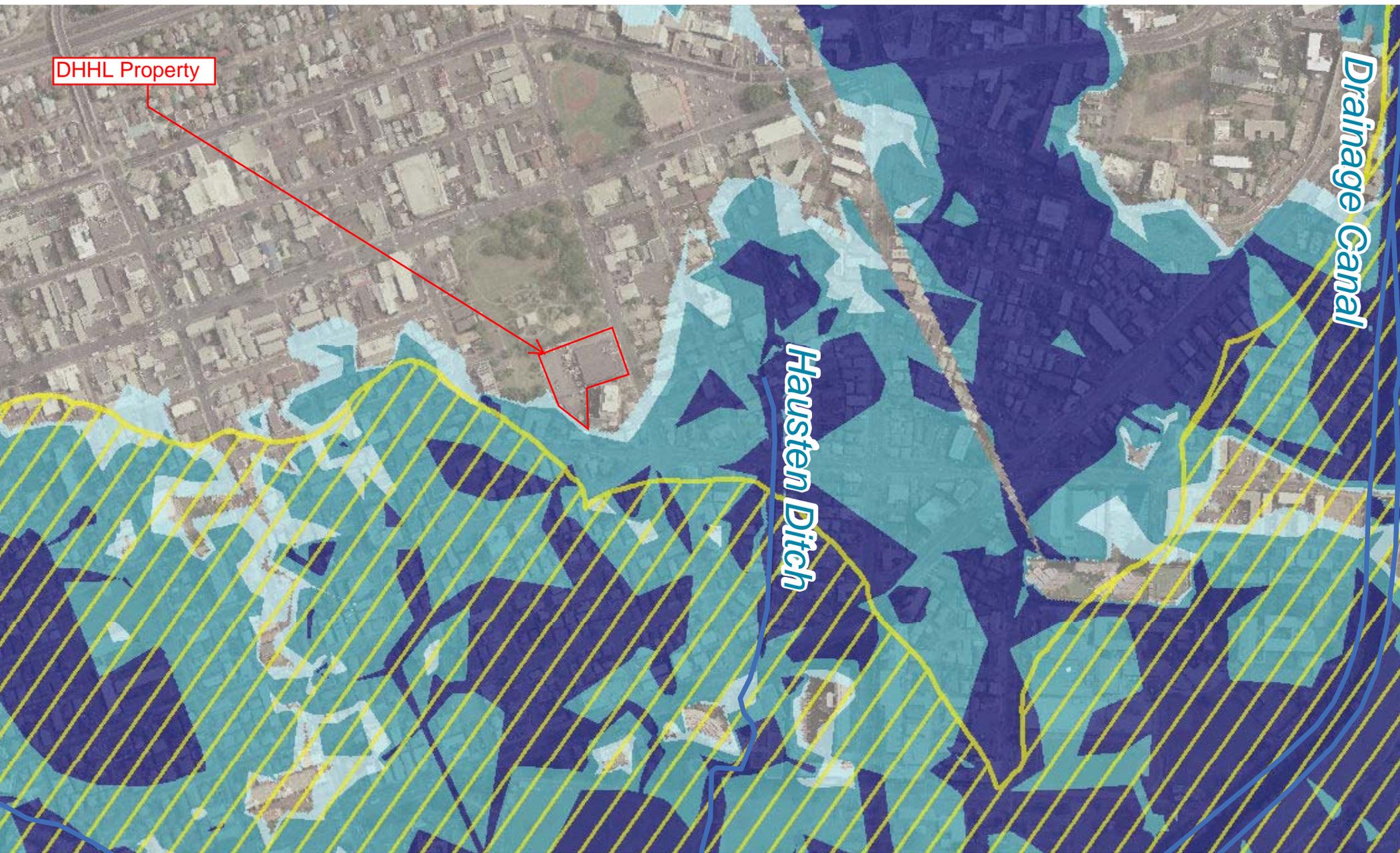
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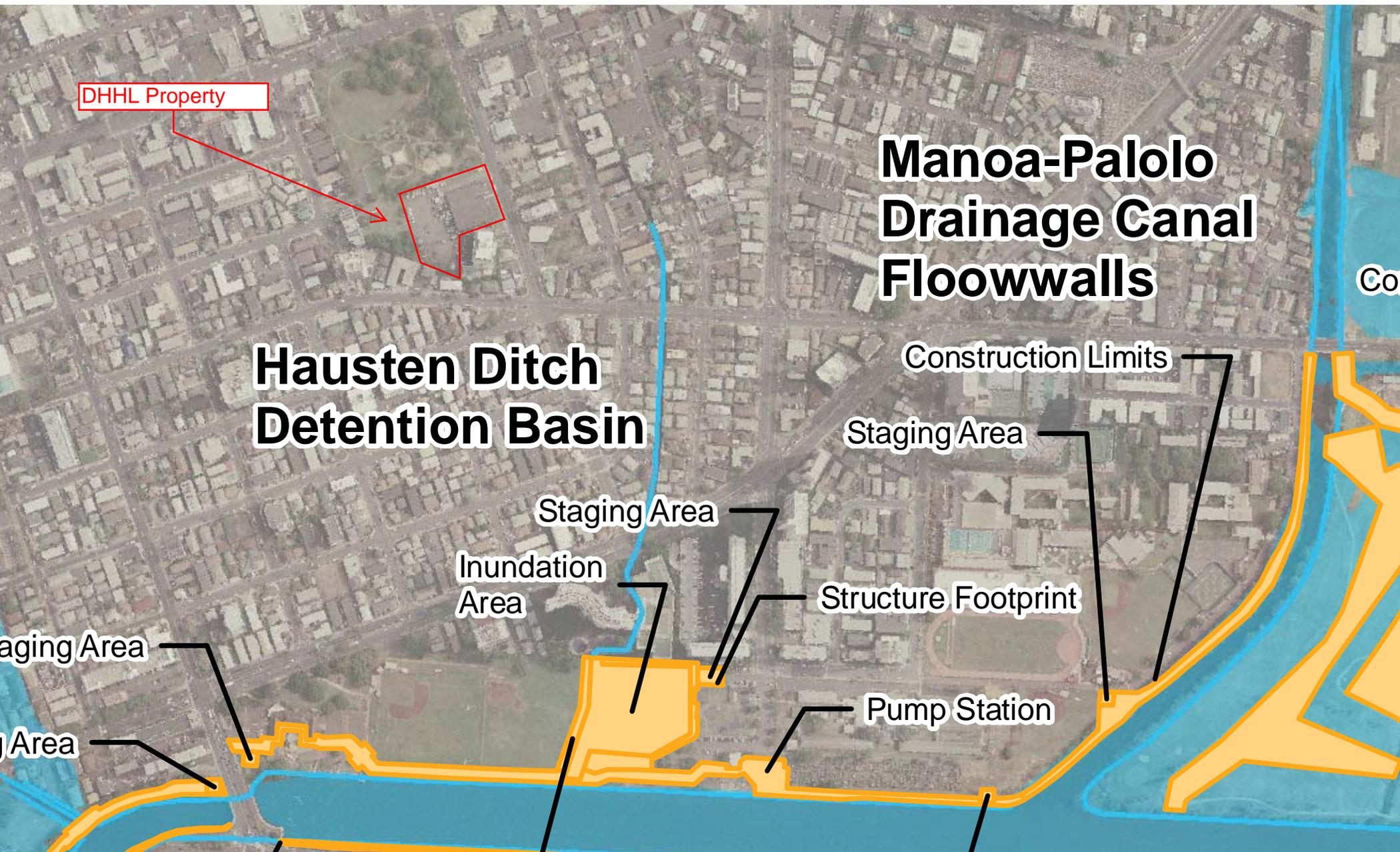


Jobie M.K. Masagatani, Chairman
Hawaiian Homes Commission

Enclosures

CC: State of Hawai'i,
DLNR Engineering Div.
ATTN: Gayson Ching





HISTORIC HAWAII FOUNDATION

November 1, 2015

Christopher W. Crary
Lieutenant Colonel, U.S. Army
District Engineer, Honolulu District
U.S. Army Corps of Engineers
Building 230, CEPOH-PP-C
Fort Shafter, HI 96858-5440

Carty Chang
Chief Engineer
Department of Land and Natural Resources
State of Hawai'i
P.O. Box 373
Honolulu, HI 96809

RE: Ala Wai Canal Project, O'ahu, Hawai'i

Dear. Lt. Col. Crary and Mr. Chang:

Historic Hawai'i Foundation is providing these comments on the Draft Feasibility Study Report with an Integrated Environmental Impact Statement (EIS) for the Ala Wai Canal Project on O'ahu, Hawai'i. The EIS is being developed in accordance with the National Environmental Policy Act (NEPA) and Hawai'i Revised Statutes (HRS) Chapter 343 for environmental issues, including potential effects on historic properties and other cultural resources.

Historic Hawai'i Foundation (HHF) is also a consulting party to the Army Corps of Engineers (ACOE) for compliance with the National Historic Preservation Act (NHPA), per 36 CFR 800.2(c)(5) as an organization with a demonstrated interest and concern with the undertaking's effect on historic properties. These comments are also submitted as part of the Section 106 consultation for the undertaking. ACOE has noted that they are coordinating and integrating the two processes as specified in the Council on Environmental Quality NEPA regulations at 40 CFR 1502.25.

ACOE has proposed a determination of "no adverse effect" for the undertaking. Historic Hawai'i Foundation strongly disagrees with this determination.

The ACOE proposed determination of effects confuses the difference between avoiding an effect and mitigating an effect. ACOE has proposed findings of "conditional no adverse effect" based on future conditions to be determined with the input of the State Historic Preservation Division (SHPD) to mitigate the impacts.

Historic Hawai'i Foundation Comments
Ala Wai Canal Project
November 1, 2015
Page 1 of 14

However, a finding of “no adverse effect” may only be used when the conditions completely avoid the adverse circumstance. In this case, the conditions do nothing to avoid the demolition, destruction, alteration, change of character, use of physical features, and introduction of elements that diminish the integrity of historic properties.

NHPA Section 106 requires that adverse effects be resolved prior to the approval of the undertaking and any expenditure of federal funds. Resolution of any adverse effects is to be completed before the agencies’ final decisions.

Therefore, the stated intention to develop mitigation measures and work out the details with the State Historic Preservation Division at a future date is insufficient to satisfy the requirements of 36 CFR Part 800. Historic Hawai‘i Foundation strongly recommends that ACOE and its state and local partners develop a Project Programmatic Agreement (PA) to resolve adverse effects from the undertaking. Historic Hawai‘i Foundation will continue in its role as a consulting party to develop the PA.

Project Summary

The proposed undertaking is a project to reduce flood risk within the Ala Wai Watershed, including the Makiki, Mānoa and Pālolo Streams, all of which drain to the Ala Wai Canal. The watershed is comprised of approximately 1,358 acres and includes both undeveloped and urbanized areas. The tentatively selected plan includes:

- 6 in-stream debris and detention basins in the Makiki, Mānoa and Pālolo streams;
- 1 debris catchment feature in Mānoa stream;
- 3 detention basins in the urban area;
- Floodwalls and pump stations along the Ala Wai Canal;
- Improvements to the flood warning system; and
- In-stream measures for aquatic species passage to mitigate impacts to habitat.

Information Provided and Additional Information Needed

Reference materials for this undertaking have included:

1. Letter from ACOE to HHF, March 10, 2015; including information on areas of potential effect, historic properties present, and the tentatively selected plan with 13 measures to be introduced to the Ala Wai Watershed. Attachments included maps and photographs of the Direct and Indirect Areas of Potential Effect (APE) and historic properties with identification numbers.
2. Letter from HHF to ACOE, April 8, 2015; with questions about the purpose and need for the project and the process to address effects on historic properties.
3. Letter from ACOE to HHF, May 1, 2015; with responses to HHF’s questions.
4. Letter from ACOE to HHF, June 30, 2015; to identify historic properties within the Direct APE, provide significance evaluations of historic properties, present determinations of effect to historic properties, and propose conditions to mitigate adverse effects. The attachments

to the letter include the Historic Property Table (Encl #1), Historic Maps and Descriptions (Encl #2), and the list of Consulting Parties (Encl #3).

5. Draft Feasibility Report with Integrated Environmental Impact Statement, August 2015; including conceptual engineering plans for each of the proposed flood control measures and an appendix on cultural resources.

The proposed project is complex, wide-ranging in scope and effect, and has many components that are both interrelated and independent. To understand the potential effects on historic properties, we found it necessary to cross-reference the materials listed above, as relevant information was presented in various places and formats.

We note that reference is made to the “Historic Structures Inventory Survey of the Ala Wai Watershed” (Mason Architects, 2010), a copy of which is not included in the letters or the Draft EIS (Section 5.8.1.2). We are hereby requesting a copy of this Survey, which we assume corresponds to the historic properties.

Areas of Potential Effect

“*Area of potential effects* means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties” (36 CFR 800.16(d)).

The project has delineated two Areas of Potential Effect (APE): one for direct effects and one for indirect effects. The Direct APE is the area that will be directly affected by construction and includes the flood mitigation measure, the construction buffer, staging area and access road. The Indirect APE is a one-half mile radius form the outer edge of the Direct APE.

Historic Hawai‘i Foundation agrees with the Direct and Indirect APEs as described.

Identification of Historic Properties

The identification of historic properties was provided within the Direct APE for each of the flood mitigation measures, including 46 distinct historic properties. These include sites, buildings, structures and objects that are determined eligible for listing on the National and/or Hawai‘i Registers of Historic Places.

The identification of historic properties within the Indirect APE was partially included via maps, but was not included in tabular form. We agree that some traditional cultural properties may be vulnerable and location information should be held in confidence. However, other historic properties do not have the same sensitivity and should be clearly identified and addressed.

Several historic properties that are located in the Indirect APE should be noted and any cumulative, indirect and/ or reasonably foreseeable effects should be evaluated. The historic properties include:

1. Kapi‘olani Park
2. Diamond Head Crater
3. Puawaina/Punchbowl Crater
4. Mānoa Chinese Cemetery

HHF preliminarily agrees with the determinations of eligibility and the identification of historic properties provided by ACOE, subject to receipt and confirmation using the Historic Structures Inventory Survey. We note that there may be additional historic properties in the Indirect APE. The identified historic properties are:

Flood Mitigation Measure 1: Makiki D&D Basin

1. Archie Baker Park
2. Makiki Stream
3. Maikiki Stream Chanel
4. Makiki Street Bridge
5. Oneele Place Bridge
6. Terrace

Flood Mitigation Measure 2: Mānoa Waihi D&D Basin

7. Mounds/Platforms/Walls
8. Waihi Stream
9. Aihualama Lo'i

Flood Mitigation Measure 3: Mānoa Waiakeakua D&D Basin

10. Waaloa Way Bridge 2
11. Waaloa Way Bridge 1
12. Terraces
13. Waihi Stream Stone/Mortar Dam
14. Historic House
15. Historic House
16. Waihi Gaging Station
17. Waiakeakua Stream
18. Waiakeakua Gaging Station
19. Bridge Foundation

Flood Mitigation Measure 4: Mānoa Woodlawn Ditch

20. Woodlawn Ditch
21. East Mānoa Road Mānoa Park Ditch Bridge
22. East Mānoa Road Culvert
23. Kaamamilo Drive Driveway Bridge

Flood Mitigation Measure 5: Mānoa In-Stream Debris Catchment

24. Mānoa Stream Channel
25. Lowrey Avenue Bridge
26. Kahaloa Drive Bridge

Flood Mitigation Measure 6: Kanewai Field Detention Basin

27. Kanewai Field
28. Mānoa-Pālolo Canal
29. Old Wai'alaie Road Bridge

30. Pālolo Stream Channel
31. Kanewai Loʻi

Flood Mitigation Measure 7: Pālolo Pukele D&D Basin

32. Pukele Stream

Flood Mitigation Measure 8: Pālolo Waiʻōmaʻo D&D Basin

33. Waiʻōmaʻo Stream

Flood Mitigation Measure 9: Ala Wai Hausten Ditch Detention Basin

34. Alanaio Stream Channel(Hausten Ditch)
35. Ala Wai Canal
36. Date Street Box Culvert
37. Kapiʻolani Blvd. Box Culvert

Flood Mitigation Measure 10: Ala Wai Golf Course MPDB

38. Ala Wai Golf Course
39. Mānoa-Pālolo Canal (previously listed at #28)
40. Date Street Bridge

Flood Mitigation Measure 11: Ala Wai Canal Floodwalls/Pump Stations

41. Ala Wai Canal (previously listed at #35)
42. Ala Wai Clubhouse
43. Paddling Outrigger Canoe
44. Kalākaua Avenue Bridge
45. McCully Street Bridge

Flood Warning System 12: Ala Wai Watershed

46. Mānoa Stream
47. Makiki Stream (previously listed at #2)
48. Pālolo Stream
49. Ala Wai Canal (previously listed at #35)

Aquatic Habitat Mitigation 13: Ala Wai Watershed

50. Mānoa Stream (previously listed at #46)
51. Waihi Stream Stone/Mortar Dam (previously listed at #13)
52. Waihi Gaging Station (previously listed at #16)
53. Waiakeakua Gaging Station (previously listed at #18)
54. Mānoa Stream Chanel (previously listed at #24)

Determinations of Effect

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 of Historic Places in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. Adverse effects include reasonably

foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative. See 36 CFR 800.5(a)(1).

ACOE has proposed a determination of “no adverse effect” for the undertaking. Historic Hawai‘i Foundation strongly disagrees with this determination.

Direct effects from the project will include:

1. Physical destruction of or damage to all of part of the property;
2. Alteration of a property that is not consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties;
3. Change of character of the property’s use or physical features within the property’s setting;
4. Introduction of visual, atmospheric or audible elements that diminish the integrity of the property’s significant historic features.

Properties that will be adversely affected include:

- Ala Wai Canal
- Ala Wai Clubhouse
- Ala Wai Golf Course
- Alanaio Stream Channel/Hausten Ditch
- Archie Baker Park;
- Kalākaua Avenue Bridge
- Kanewai Field
- Makiki Stream;
- Mānoa Stream Channel
- Mānoa, Makiki and Pālolo Streams
- McCully Street Bridge
- Pukele Stream
- Waaloa Way Bridge 1
- Waaloa Way Bridge 2
- Wai‘ōma‘o Stream
- Waiakeakua Stream
- Waiakeakua Stream Gaging Station
- Waihi Mounds/Platforms/Walls;
- Waihi Stream
- Waihi Stream Dam
- Waihi Stream Stone/Mortar Dam

The ACOE determination of effects confuses the difference between avoiding an effect and mitigating an effect. ACOE has proposed findings of “conditional no adverse effect” based on future conditions to be determined with the input of the State Historic Preservation Division to mitigate the impacts.

However, a finding of “no adverse effect” may only be used when the conditions completely avoid the adverse condition. In this case, the conditions do nothing to avoid the demolition, destruction, alteration, change of character, use of physical features, and introduction of elements that diminish the integrity of the historic properties.

NHPA Section 106 requires that adverse effects be resolved prior to the approval of the undertaking and any expenditure of federal funds. Resolution of any adverse effects is to be completed before the agency’s final decision.

Therefore, an intention to work out the details with the State Historic Preservation Division at a future date is insufficient to satisfy the requirements of 36 CFR Part 800. Historic Hawai’i Foundation strongly recommends that ACOE and its state and local partners develop a Project Programmatic Agreement (PA) to resolve adverse effects from the undertaking. Historic Hawai’i Foundation will continue in its role as a consulting party to develop the PA.

Specific Comments and Questions by Project Component

Flood Mitigation Measure 1: Makiki Debris and Detention Basin

- Direct APE is too narrowly defined as the construction area. A portion of the construction and staging area is contained within the historic Archie Baker Park and thus will have an adverse effect, even though temporary.
- The indirect APE does not appear in the Draft EIS documents. The map of the indirect area for this undertaking appears to identify more than six historic sites. Are the other numbered bridges non-historic?
- It is not clear if the access road will be removed at the end of construction. Leaving it in place in the historic park would be an adverse effect
- The plans and sections in the Draft EIS (Appendix F) do not indicate the rock covering (riprap) across the face of the berm.
- The conceptual sketch implies that the top of the berm/dam will be well below the road and shoulder. Please confirm.
- Does the top of the dam/spillway need to be exposed concrete? Can it also be rock-covered or groundcover?
- *“A 20-foot-wide area around the perimeter of the berm will be cleared and maintained.”* How will this cleared area be treated visually and from an erosion standpoint?

- Makiki Stream is described as eligible for consideration as a Traditional Cultural Property. What is its current condition and will restoration/rehabilitation of the stream banks be required prior to construction?
- Determination of effect:
 - HHF disagrees that there is no adverse effect to Archie Baker Park and the Makiki Stream, or that the ‘conditions’ have been identified that would avoid an adverse effect from this construction activity
 - What about potential indirect effects on sites outside the ‘footprint’? What about indirect effects for sites 19-23?

Flood Mitigation Measure 2: Mānoa Waihi D&D Basin

- Direct APE is too narrowly defined as the construction area. A portion of the construction and staging area is contained within steep sloped and wooded landscape. Assume that the construction of the access road will involve grading and other destructive measures resulting in an adverse effect to the landscape.
- The footprint of this large berm appears to have an adverse effect on site 50-80-14-6734 which consists of several archaeological platforms. Is there another dam type (vertical) with a smaller footprint which could avoid these historic sites?
- Alternatively, could two smaller structures be built above the convergence of Waihi and Aihualama Streams, thus avoiding the identified historic sites?
- Not clear on what view planes from and along Mānoa Road would be visually impacted. Also views from the historic homes shown on the indirect APE.
- Does the top of the dam/spillway need to be exposed concrete? Can it also be rock-covered or groundcover?
- “A 20-foot-wide area around the perimeter of the berm will be cleared and maintained.” How will this cleared area be treated visually and from an erosion standpoint?
- Waihi Stream is described as eligible for consideration as a Traditional Cultural Property. What is its current condition and will restoration/rehabilitation of the stream banks be required prior to construction?
- Determination of effect(s):
 - HHF disagrees with the determination of ‘no adverse effect with conditions’ to the archaeological site #50-80-14-6734 unless the project can be relocated.
 - The “*temporary loss of access to cultural sites and areas of cultural practices during construction*” is an adverse effect.

Flood Mitigation Measure 3: Mānoa Waiakeakua D&D Basin

- Construction footprint of new access and raised roadway is significant. Assume that the construction of the access road will involve grading and other destructive measures resulting in an adverse effect to the landscape.
- It also appears as if the stream bed is diverted. Please confirm.
- Determination of effect(s):
 - Impact to historic Bridges is adverse if reinforcing will be necessary. How will the reinforcing impact the affected streambed?
 - Alteration of the Waihi Stream Mortar Dam will be an adverse effect

Flood Mitigation Measure 4: Mānoa Woodlawn Ditch

- Woodlawn Ditch is described as eligible for the Hawai‘i and National Registers. What is its current condition and will restoration/rehabilitation of the topography be required prior to construction?
- Does the top of the dam/spillway need to be exposed concrete? Can it also be rock-covered or groundcover?
- *“A 20-foot-wide area around the perimeter of the berm will be cleared and maintained.”* How will this cleared area be treated visually and from an erosion standpoint?
- Access will be via the existing cemetery road. What is the impact to the cemetery?
- Determination of effect(s):
 - Impact to historic Bridges may be adverse if traffic patterns are altered
 - Alteration of the Woodlawn Ditch may be an adverse effect which has not been adequately described

Flood Mitigation Measure 5: Mānoa In-Stream Debris Catchment

- Mānoa Stream Channel is described as eligible for the Hawai‘i and National Registers. What is its current condition and will restoration/rehabilitation of the topography be required prior to construction?
- Does the exposed portion of the pad need to be concrete or can it be rock faced to look more natural?
- Will access to the site for construction impact the adjacent neighborhood, roadway and bridges?
- Determination of effect(s):
 - Impact to historic Bridges may be adverse if traffic patterns are altered

Flood Mitigation Measure 7: Pālolo Pukele D&D Basin

- Does the top of the dam/spillway need to be exposed concrete? Can it also be rock-covered or groundcover?

- “A 20-foot-wide area around the perimeter of the berm will be cleared and maintained.” How will this cleared area be treated visually and from an erosion standpoint?
- Access to the site appears to be through private property. Has that parcel been evaluated for eligibility as an historic property?
- Pukele Stream is described as eligible for consideration as a Traditional Cultural Property. What is its current condition and will restoration/rehabilitation of the stream banks be required prior to construction?

Flood Mitigation Measure 8: Pālolo Wai‘ōma‘o D&D Basin

- Access to the site appears to be through private property. Has that parcel been evaluated for eligibility as an historic property?
- The access road will require significant grading. How will that affect the adjacent properties and view planes?
- Does the top of the dam/spillway need to be exposed concrete? Can it also be rock-covered or groundcover?
- “A 20-foot-wide area around the perimeter of the berm will be cleared and maintained.” How will this cleared area be treated visually and from an erosion standpoint?
- Significant excavation of the streambed for the detention basin has the potential for disruption to the stream environment. What is its current condition and will restoration/rehabilitation of the topography be required prior to construction?
- Waiomao Stream is described as eligible for consideration as a Traditional Cultural Property. What is its current condition and will restoration/rehabilitation of the stream banks be required prior to construction?

Flood Mitigation Measure 9: Ala Wai Hausten Ditch Detention Basin

- The Ala Wai Canal is a listed Site on the State and National Registers of Historic Places. Any destruction of those qualities that make the site eligible (i.e. the rock walls) is an adverse effect (36 CFR 800.5 (a) 2 (i)).
- Will access to the park will be channeled through one entrance?
- The floodwalls and berm will enclose an otherwise open space and create potential crime setting due to lack of visibility
- What other more ‘naturalistic’ solutions have been considered?
- Determination of effect(s):
 - Historic Hawai‘i Foundation disagrees with the determination of no adverse effect to the Ala Wai Canal.

Flood Mitigation Measure 10: Ala Wai Golf Course Multi-Purpose Detention Basin

- Scope and construction difficult to understand. More analysis is needed to determine effect on the historic property.

Flood Mitigation Measure 11: Ala Wai Canal Floodwalls/Pump Stations

- Construction of flood walls and pump stations on both sides of the Ala Wai Canal would adversely affect its historic characteristics, including design, materials, workmanship, setting, feeling and association.
- Pump Station size, location, bulk, massing and detailing has the potential to adversely affect the setting.
- Floodwalls and flood gate attached to the Ala Wai Clubhouse would adversely affect its historic characteristics, including design, materials, workmanship, setting, feeling and association.
- Alterations to the Kalākaua Bridge would adversely affect its historic characteristics, including design, materials, workmanship, setting, feeling and association.
- Alterations to the McCully Bridge would adversely affect its historic characteristics, including design, materials, workmanship, setting, feeling and association.
- Determination of effect(s):
 - Historic Hawai'i Foundation disagrees with the determination of no adverse effect to the Ala Wai Canal.

Flood Warning System 12: Ala Wai Watershed

- Streamflow gauges are not designed or located, so there is a potential effect on Mānoa, Makiki and Pālolo Streams, as well as the Ala Wai Canal.

Aquatic Habitat Mitigation 13: Ala Wai Watershed

- Biological mitigation measures would demolish or remove historic properties, including the Waihi Stream Dam and the Waiakeakua Stream Gaging Station.

Conclusions

Historic Hawai'i Foundation agrees with the determination of the Direct APE and the identification of historic properties within the Direct APE.

Historic Hawai'i Foundation requests additional information on other historic properties within the Indirect APE and a copy of the "Historic Structures Inventory Survey of the Ala Wai Watershed" (Mason Architects, 2010).

Historic Hawai'i Foundation disagrees with the determination of no adverse effect to historic properties.

Historic Hawai'i Foundation requests to continue as a consulting party to resolve adverse effects from the undertaking prior to the agencies' final determination on the course of action.

We look forward to continuing to work with ACOE and DLNR to address these issues.

Very truly yours,

A handwritten signature in black ink, appearing to read "Kiersten Faulkner". The signature is written in a cursive, flowing style.

Kiersten Faulkner
Executive Director

Copies via email:

Derek Chow & Loren Zulick, USACE

Gayson Ching, DLNR Engineering Division, State of Hawai'i

Alan Downer & Jessica Puff, Hawai'i State Historic Preservation Division

Brian Lusher, Advisory Council on Historic Preservation



US Army Corps of Engineers
BUILDING STRONG

Ala Wai Canal Flood Risk Management Study
Response to Public Comments Received from Review
of the Draft Feasibility Report
01 August 2016



ATTN: Historic Hawaii Foundation
Historic Hawaii Foundation
680 Iwilei Road, Suite 690
Honolulu, Hawaii 96817

This letter is written in response to the receipt of your comments submitted to the U.S. Army Corps of Engineers (USACE) and/or the State of Hawaii Department of Lands and Natural Resources (DLNR) during the public review of the Ala Wai Canal Flood Risk Management Feasibility Study and Integrated Environmental Impact Statement (FEIS) which occurred from 20 AUG 2015-09 NOV 2015. Thank you for taking the time to review the draft FEIS and submit comments. After additional consultation, USACE agrees that this undertaking has the potential for adverse effects to historic properties. USACE has initiated consultation to resolve adverse effects through the development of a Programmatic Agreement (PA). Once executed, historic property treatment decisions developed through the PA will be documented in the FEIS and implemented into the undertaking. As a consulting party to the National Historic Preservation Act (NHPA) Section 106 Programmatic Agreement between USACE and the State of Hawaii, it is our understanding that your concerns are being taken into account as a part of the development of the agreement. It is also noted that your organization will be offered an invited signatory role to this agreement. Should you have further concerns, please contact USACE.

Thank you for your interest in the study. Your written comments and this response will be included as an appendix to the final FEIS. USACE is currently in the process of completing a final version of the report and anticipates completion by January 2017. Once the final FEIS is completed, an electronic copy will be made available to the public at the following location:

<http://www.poh.usace.army.mil/Missions/CivilWorks/CivilWorksProjects/AlaWaiCanal.aspx>

August 23, 2016 Programmatic Agreement

**PROGRAMMATIC AGREEMENT
AMONG
THE U. S. ARMY CORPS OF ENGINEERS
AND
THE HAWAII STATE HISTORIC PRESERVATION OFFICER
AND
THE STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION
REGARDING THE
ALA WAI CANAL PROJECT
HONOLULU, HAWAII**

9 November 2016

WHEREAS, under Section 209 of the Flood Control Act of 1962, the U.S. Army Corps of Engineers (Corps) is conducting a feasibility study of measures to manage flood risk in the Ala Wai watershed; and

WHEREAS, the Corps is considering the following flood risk management measures for the Ala Wai watershed: in-stream detention basins in the upper reaches of Makiki, Manoa and Palolo streams; off-stream detention basins in the middle and lower portions of the watershed; debris catchment features; floodwalls along the Ala Wai Canal; improvements to the flood warning system; and as compensatory mitigation for anticipated impacts to waters of the U.S., in-stream measures to improve passage for native aquatic species (the Undertaking) (Appendix A); and

WHEREAS, the Corps cannot complete the cultural resources investigations, evaluations, and coordination necessary for compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. § 306108), as amended, prior to the design phase of the Undertaking; and

WHEREAS, the Corps has defined the Area of Potential Effect (APE) for direct and indirect impacts in coordination with the Hawaii State Historic Preservation Officer (SHPO) (Appendix B). The Direct APE is the area that will be directly affected by construction, and includes the footprint of each measure to be constructed and its construction buffer, staging areas, access roads and aquatic habitat mitigation measures. The specific locations for some project features have yet to be determined. The Indirect APE is defined as a one-half mile radius from the outer edge of the Direct APE. The APEs are defined the same for archaeological resources, historic architectural resources, and Traditional Cultural Properties (TCP); and

WHEREAS, the Corps has applied the National Register of Historic Places (NRHP) Criteria (Criteria) to properties identified within the Direct and Indirect APEs, and to date has completed substantial surveys within the Direct and Indirect APEs (Appendix C) with the recognition that additional identifications and evaluations may be required; and

WHEREAS, the Corps and the SHPO have determined there is only one archaeological resource eligible for the NRHP within the Direct APE; State Site Number 50-80-14-6734, mounds platforms, and wall at the juncture of Aihualama and Waihi Streams; and

WHEREAS, the Corps and the SHPO have determined archaeological resources in the Indirect APE, identified in Appendix D, are eligible for the NRHP; and

WHEREAS, the Corps and the SHPO have determined historic architectural resources in the Direct APE, identified in Appendix E, are eligible for the NRHP; and

WHEREAS, the Corps and the SHPO have determined historic architectural resources in the Indirect APE, identified in Appendix F, are eligible for the NRHP; and

WHEREAS, the Corps, SHPO and consulting parties have agreed that portions of the following TCPs are within the Direct APE: Makiki Stream, Waihi Stream, Waiakeakua Stream, Pukele Stream, Waiomao Stream, Manoa Stream, Palolo Stream; and

WHEREAS, the Corps, SHPO and consulting parties have agreed that the following TCPs are within the Indirect APE: Makiki Stream, Waihi Stream, Aihualama Loi, Waiakeakua Stream, Kanewai Loi, Pukele Stream, Waiomao Stream, Manoa Stream, Palolo Stream; and

WHEREAS, the Corps has determined that the Undertaking, as proposed, may have an adverse effect on archaeological sites, historic structures and TCPs identified in Appendices D, E, and F, as well as Makiki Stream, Waihi Stream, Waiakeakua Stream, Pukele Stream, Waiomao Stream, Manoa Stream, Palolo Stream; and

WHEREAS, the Corps along with consulting parties have developed potential treatment recommendations as mitigation for impacts to archaeological sites, historic structures and TCPs, (Appendices D, E, and F) these treatments will be finalized in a mitigation plan to be developed by the Corps, SHPO, and consulting parties during the planning and design phase of the Undertaking; and

WHEREAS, the Corps has invited agencies, organizations, and other interested parties listed in Appendix G to participate in the Section 106 consultation process; and

WHEREAS, the Advisory Council on Historic Preservation (ACHP) has been notified by the Corps of the finding of adverse effect and has chosen not to participate in consultation; and

WHEREAS, the Corps made the historic resources, effects determinations and proposed mitigations available for public review in the Draft Environmental Impact Statement prepared under the National Environmental Policy Act which will serve as the District's Section 106 public coordination for the Undertaking; and

WHEREAS, this PA was developed pursuant to Section 106 of the NHPA and in accordance with 36 CFR Part 800.14, the Corps and the SHPO have determined that execution of this PA will establish alternative procedures to streamline the coordination of the Undertaking; and

WHEREAS, the Corps will implement the provisions of this PA during the appropriate phase (e.g. planning, design, construction) as funding for various phases of the project is appropriated in future years; and

NOW, THEREFORE, the Corps and the SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on historic properties.

STIPULATIONS

The Corps shall ensure that the following measures are carried out:

I. APPLICABILITY

This PA applies to all Undertakings associated with the Ala Wai Canal Project, regardless of whether they are carried out by the Corps or another governmental entity. In the event that another federal agency not initially a party to or subject to this PA receives an application for funding/license/permit for the Undertaking as described in this PA, that agency may fulfill its Section 106 responsibilities by stating in writing it concurs with the terms of this PA and notifying the Corps, SHPO, and consulting parties that it intends to do so. Such agreement shall be evidenced by filing the written statement with the ACHP, and implementation of the terms of this PA.

II. IDENTIFICATION

A. The Corps has consulted with the SHPO, and the SHPO has concurred with the surveyed areas and identification of historic properties effort completed thus far. The Corps, in consultation with the SHPO, shall identify areas that require additional investigation to document previously unidentified historic properties eligible for inclusion in the NRHP. Identification of such properties shall occur in the event there are changes to the APE and/or other unforeseen modifications to the scope of work that may affect NRHP eligible historic properties.

B. The Corps shall consult with the SHPO to develop plans to complete the identification of historic properties in locations specified through Stipulation II(A). Plans may include survey prior to construction and archeological monitoring during construction. The level of effort for these activities shall be determined in consultation with the SHPO. See Stipulation IV(C)(2)(c) for archaeological monitoring protocols. Proposed additional Identification efforts shall be submitted by the Corps to the SHPO and consulting parties for review and comment within 30 days of receipt. If the Corps has not received comments from the SHPO and consulting parties within 30 days, the

Corps may assume concurrence with the additional identification efforts and will notify the SHPO and consulting parties in writing, in accordance with Stipulation X.A.

C. The Corps and the SHPO shall take into consideration the views of Native Hawaiian Organizations (NHOs), individuals, the Oahu Island Burial Council (OIBC), and other interested parties in completing its identification responsibilities. When an interested party recommends additional identification efforts, they must do so by letter or e-mail to the Corps, and the Corps will review the request with the SHPO, and respond to the request in writing within 60 days with the Corps' position.

D. The Corps shall ensure that qualified professionals meeting the NPS professional qualifications for the appropriate discipline [National Park Service Professional Qualification Standards, Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44738-39)] are used to complete all identification, evaluation, and mitigation research proposals related to this undertaking.

E. When additional survey is needed prior to the initiation of construction related activities, or during project construction for actions which may affect historic properties, the Corps, in consultation with the SHPO, shall identify:

1. Archaeological Sites

a.) The Corps shall ensure that archaeological surveys and any necessary archaeological testing within areas requiring surveys as per Stipulation II(A) are conducted in a manner consistent with the Secretary of the Interior's Standards and Guidelines for Identification (48 FR 44720-23) and "Archeological Inventory Survey Standards and Cost Estimation Guidelines for the Department of Defense (Zeidler, 1995).

b.) In the event that an interested party contacts the Corps in accordance with Stipulation II(C) regarding its recognition of an archaeological site located within the Direct or Indirect APE and previously unidentified by the Corps, the Corps shall notify the SHPO, to initiate discussions with all parties to evaluate whether the resource meets the NRHP criteria set forth in 36 CFR Part 60.4, and the effect on the resource by the Undertaking.

c.) The surveys and any testing shall be conducted following consultation with the SHPO, and a report of the findings shall be submitted to the SHPO and consulting parties for review. The SHPO and consulting parties shall complete their review within 30 days of receipt of the report. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume concurrence with the survey's findings and acceptance of the survey as the final draft and will notify the SHPO and consulting parties in writing, in accordance with Stipulation X.A. Interested parties can request findings, and the Corps, in conjunction with the SHPO, will evaluate their request.

2. Traditional Cultural Properties

a.) The Corps shall ensure that surveys within areas requiring surveys as per Stipulation II(A) includes procedures to identify TCPs and to consult with Native Hawaiian Organization and other affected parties in accordance with the guidelines provided by National Park Service Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties.

b.) In the event that a Native Hawaiian Organization or affected group contacts the Corps in accordance with Stipulation II(C) regarding its recognition of a TCP located within the Direct or Indirect APE and previously unidentified by the Corps, the Corps shall notify the SHPO, to initiate discussions with all parties to evaluate whether the property is a Traditional Cultural Property that meets the NRHP criteria set forth in 36 CFR Part 60.4, and the effect on the resource by the Undertaking.

c.) The TCP evaluation shall be conducted in consultation with the SHPO and consulting parties, and a report of the findings shall be submitted to the SHPO and consulting parties for review. The SHPO and consulting parties shall complete their review within 30 days of receipt of the report. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume concurrence with the survey's findings and acceptance of the survey as the final draft and will notify the SHPO and consulting parties in writing, in accordance with Stipulation X.A.

3. Buildings and Structures

a.) The Corps shall ensure that surveys for buildings and structures within areas requiring surveys as per Stipulation II(A) are conducted in a manner appropriate for the resource and consistent with other reports completed for the Island of Oahu, and the Secretary of the Interior's Standards and Guidelines for Identification (48 FR 44720-23).

b.) In the event that an interested party contacts the Corps in accordance with Stipulation II(C) regarding its recognition of a building or structure located within the Direct or Indirect APE and previously unidentified by the Corps, the Corps shall notify the SHPO, to initiate discussions with all parties to evaluate whether the resource meets the NRHP criteria set forth in 36 CFR Part 60.4, and the effect on the resource by the Undertaking.

c.) The survey shall be conducted following consultation with the SHPO, and a report of the survey, shall be submitted to the SHPO and consulting parties for review and comment within 30 days. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume concurrence with the survey's findings and acceptance of the survey as the final draft and will notify the SHPO and consulting parties in writing, in accordance with Stipulation X.A.

4. Cultural Landscapes

a.) In the event that an interested party contacts the Corps in accordance with Stipulation II(C) regarding its recognition of a cultural landscape located within the Direct or Indirect APE and previously unidentified by the Corps, the Corps shall notify the SHPO, to initiate discussions with all parties to evaluate whether the resource meets the NRHP criteria set forth in 36 CFR Part 60.4, and the effect on the resource by the Undertaking.

b.) Cultural landscapes are defined in the National Park Service Preservation Brief 36, Protecting Cultural Landscapes, as “a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.” The four general types of cultural landscapes include: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes.

c.) The Corps shall consult National Park Service Bulletins 18, How to Evaluate and Nominate Designed Historic Landscapes, and 30 Guidelines for Evaluating and Documenting Rural Historic Landscapes, National Park Service Preservation Brief 36, Protecting Cultural Landscapes, and other publications and materials made available by the SHPO to assist in defining the criteria that should be applied to such properties.

d.) The objective in conducting the surveys is to identify NRHP listed or potentially eligible historic landscapes not previously identified within the project area that may be adversely affected by the Undertaking implementation, and to determine whether they meet the NRHP criteria set forth in 36 CFR Part 60.4.

e.) The survey shall be conducted following consultation with the SHPO, and a report of the survey shall be submitted to the SHPO and consulting parties for review and comment. The SHPO and consulting parties shall complete their review within 30 days of receipt of the report. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume concurrence with the survey’s findings and acceptance of the survey as the final draft and will notify the SHPO and consulting parties in writing, in accordance with Stipulation X.A.

III. DETERMINATION OF ELIGIBILITY

A. Eligibility

1. The Corps has completed numerous surveys to identify National Register eligible properties within the Direct and Indirect APEs of the Undertaking. The Corps has consulted with the SHPO, and the SHPO has concurred with the determinations of eligibility of historic properties identified within the APEs (Appendices D, E, and F).

2. The Corps shall consult with the SHPO and consulting parties to evaluate historic properties using the Criteria established for the NRHP [36 CFR Part 60] when previously unidentified historic properties within the Direct APE are identified.

a.) If the Corps and the SHPO agree that the Criteria apply in evaluating the NRHP eligibility of a property, the property shall be treated accordingly as a historic property eligible for the NRHP.

b.) If the Corps determines, and the SHPO concurs that the property does not meet the Criteria for listing on the NRHP, then the property is not a historic property as defined by statute and regulation and thus shall be treated accordingly.

c.) If the Corps and the SHPO disagree regarding NRHP eligibility, or if the ACHP so requests, prior to the start of any project-related work at the site or in the vicinity of the property, the Corps shall obtain a formal Determination of Eligibility (DOE) from the Keeper of the National Register (Keeper), National Park Service, whose determination shall be final.

d.) Notification of historic property evaluation will be provided by the Corps to all consulting parties within 90 days of identification.

B. Effect Determinations

1. Undertakings Requiring No Further Review

a.) For projects involving historic buildings and structures, archaeological sites, and/or traditional cultural properties, determined by the Corps as having No Adverse Effect, or No Historic Properties Affected and concurred with by the SHPO, as documented in Appendices D, E, and F, no further review under this PA and the NHPA is required.

2. Undertakings Requiring Further Review

a.) The Corps has consulted with the SHPO, and found that the proposed Undertaking may have adverse effects to historic properties. As necessary, the Corps shall consult with the SHPO and consulting parties to determine whether there are additional effects to previously identified, or unidentified historic properties by the proposed Undertaking on eligible resources as per 36 CFR 800.5.

b.) If a change in the scope of work or APE for an Undertaking previously determined to have No Adverse Effect, or No Historic Properties Affected occurs, then the Corps shall follow the process identified in Stipulation VI below.

c.) If a previously unidentified historic property is discovered within the APE of the Undertaking previously determined to have No Adverse Effect, or No Historic Properties Affected, then the Corps shall follow the process identified in Stipulation VI.

d.) If an inadvertent adverse effect occurs to an historic property within the APE of the Undertaking previously determined to have No Adverse Effect, or No Historic Properties Affected, then the Corps shall follow the process identified in Stipulation VII and/or Stipulation VIII.

3. The Corps shall maintain records of all decisions it makes related to the NRHP eligibility of properties and determinations of effect subsequent to the signing of this Programmatic Agreement, and distribute to consulting parties.

4. For effects on historic properties that have not been resolved through mitigations in this PA (identified in Appendices D, E, and F), the Corps shall resolve adverse effects to historic properties in consultation with the SHPO and consulting parties per Stipulation IV, below.

5. Disagreements on effect determinations. Should the Corps and SHPO disagree as to whether the criteria of adverse effect apply to the effects of the Undertaking on particular historic properties, the Corps will request the ACHP to review the finding and request their written opinion, in accordance with 36 CFR 800.5(c). The Corps will take the ACHP's opinion into account when reaching a final decision.

C. Treatment. The Corps will make a treatment recommendation for adverse effects to NRHP eligible historic properties based on Stipulation IV, below.

IV. TREATMENT OF HISTORIC PROPERTIES

The Corps will incorporate mitigation measures identified in Appendices D, E, and F for adverse effects to all NRHP eligible historic properties. For those resources not previously identified or mitigated, the Corps, in consultation with SHPO and consulting parties shall adhere to the following treatment strategies to avoid, minimize, or mitigate adverse effects to historic properties. The Corps shall notify the ACHP of adverse effect findings. The analysis of alternatives shall consider appropriate treatment of historic properties, program needs, cost, public benefit and values, and design feasibility. The Corps will present their preferred alternative (Avoidance, Minimize, and/or Mitigation) to consulting parties. For any treatment of a historic property under this Stipulation, the Corps shall make information, including documentation specified, available to the public and allow the public to express their views on adverse effects of the undertaking. To engage the public, the Corps, along with the Hawaii Department of Land and Natural Resources will post information for public comment on the DLNR State website and allow 30 days to receive written comment.

A. Avoidance. The preferred treatment is avoidance of adverse effects to historic properties. The Corps shall, to the extent feasible, avoid historic properties either through project design changes, use of temporary fencing or barricades, realignments, or other measures that will protect historic properties. The Corps, the SHPO, and consulting parties shall consult to assist the Corps with developing plans for avoiding effects to known and previously unidentified historic properties. The Corps shall incorporate feasible avoidance measures into project activities as part of the implementation of the Undertaking. If, in consultation with the SHPO and consulting

parties, avoidance is determined to be infeasible, the Corps shall implement Stipulation IV(B) and/or (C).

B. Minimize. When the Corps, in consultation with the SHPO and consulting parties, determines that complete avoidance of historic properties is infeasible, consulting parties shall explore the practicalities of preservation in place and design compatibility.

1. **Preservation in Place.** Could entail complete avoidance, or may entail partial avoidance or protection of historic properties against project-related activities in proximity to the property.

2. **Design Compatibility.** Where appropriate, the Corps shall minimize impacts through project design, i.e. incorporating color, texture, scale, and/or materials which are compatible with the architectural or historic character of the historic property; and/or preservation of vegetation including mature trees, landscaping and planting which screen the property. Such design compatibility will comply with the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties (SOI Standards). If the Corps, in consultation with the SHPO and consulting parties, determines that avoidance of the resource is feasible, then the Corps will implement avoidance measures in accordance with Stipulation IV (A). If the Corps, in consultation with the SHPO and consulting parties, determines that efforts to minimize impacts are infeasible, the Corps shall develop and implement treatment/mitigation measures consistent with Stipulation IV(C), below.

C. Mitigation. If the Corps, in consultation with the SHPO and consulting parties, determines a way to avoid or minimize impacts to historic properties, then the Corps will implement the appropriate protective measures in accordance with Stipulation IV(A) or (B). When the Corps, in consultation with the SHPO and consulting parties, determines that complete avoidance, or minimizing impacts to historic properties is infeasible, the Corps shall consult with the SHPO and consulting parties to determine the appropriate mitigation, and implement the appropriate mitigation measure(s) before the initiation of construction activities that will cause the adverse impact(s). Appropriate mitigation measures identified by the consulting parties must be documented in a Mitigation Plan. The Mitigation Plan must include:

- 1) Identification of the Undertaking and associated PA
- 2) Location and identification of the historic property adversely effected
- 3) Explanation of adverse effect
- 4) Summary of mitigation consultation with SHPO and consulting parties
- 5) Mitigation measure(s) to be completed
- 6) Timeline of mitigation measure implementation
- 7) Review process of mitigation measure(s)
- 8) Reporting requirements

The Corps will provide a copy of a draft Final Mitigation Plan to the SHPO and consulting parties for concurrence for each historic property adversely affected. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume concurrence with the proposed Mitigation Plan and acceptance of the proposed Mitigation Plan

as the final draft and will notify the SHPO and consulting parties in writing, in accordance with Stipulation X.A.

After the Corps has received concurrence on the Mitigation Plan, implementation may begin. Once all Mitigation Measures are completed the Corps will notify the SHPO and consulting parties and submit all final reporting requirements for concurrence. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume concurrence with the completed Mitigation Plan and will notify the SHPO and consulting parties in writing, in accordance with Stipulation X.A.

1. Buildings and Structures

a. Recordation. The Corps shall consult with the SHPO and consulting parties to determine the appropriate level and type of recordation for affected resources, to include Historic American Building Survey/Historic American Engineering Record (HABS/HAER), or Historic American Landscapes Survey (HALS) where appropriate. For NRHP eligible historic properties, recordation shall be consistent with the requirements and standards of the Department of the Interior (April 2003), and the Corps shall consult with the NPS Pacific West Regional Office for any HABS/HAER/HALS requirements. All HABS/HAER/HALS documentation must be submitted to NPS for review, prior to construction affecting the resource, unless otherwise agreed to by either the SHPO or NPS.

b. Treatment of Buildings and Structures. Prior to alteration of historic properties, the Corps, in consultation with the SHPO and other consulting parties, shall develop treatment guidelines and design standards in keeping with the Secretary's Standards or other approved standards. If relocation of historic architectural properties is not feasible prior to demolition, partial demolition, or substantial alteration, the Corps, in consultation with the SHPO and consulting parties, shall develop a salvage and donation plan to identify appropriate parties willing and capable of receiving and preserving the salvaged significant elements from buildings/structures. The Corps shall submit the plans to the SHPO for review and comment.

c. Design Review. SHPO and appropriate consulting parties will be afforded the opportunity to review design plans and specifications (in electronic format) to ensure design elements agreed upon during consultation are implemented. The Corps will provide plans and specs to appropriate consulting parties at every design submittal with a minimum two week review period. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume concurrence with the proposed plans and acceptance of the proposed plans as the final draft and will notify the SHPO and consulting parties in writing, in accordance with Stipulation X.A.

d. Interpretation. The Corps will consult with the SHPO and consulting parties to develop an interpretation plan for historic properties affected by the Undertaking to ensure preservation of the historic context of the resource. The Corps will provide interpretation documentation to appropriate consulting parties with a minimum two week review period. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume

concurrence with the proposed plans and acceptance of the proposed plans as the final draft and will notify the SHPO and consulting parties in writing, in accordance with Stipulation X.A.

2. Archaeological Sites

a. Archaeological Data Recovery. The Corps shall develop a data recovery plan for archaeological sites which the Corps determines, in consultation with the SHPO and consulting parties, cannot be avoided or appropriately preserved in place. The data recovery plan to retrieve significant archaeological information will be developed and implemented by the Corps or its representative(s), in consultation with the SHPO and consulting parties, and prior to the implementation of project-related activities within or in the vicinity of the archaeological sites.

i.) The Corps shall ensure that the data recovery plan for each NRHP eligible site addresses substantive research questions developed in consultation with the SHPO and consulting parties. The plan shall be consistent with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation (48 FR 44734-37) and the ACHP's publication, Treatment of Archaeological Properties.

ii.) The Corps shall submit data recovery plans to the SHPO and consulting parties for review and comment within 30 days of receipt. The Corps and SHPO shall consult to resolve any objections to the data recovery plan as proposed. The data recovery plan shall then be implemented by the Corps. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume concurrence with the proposed data recovery plan and acceptance of the proposed data recovery plan as the final draft and will notify the SHPO and consulting parties in writing, in accordance with Stipulation X.A.

b. Archaeological Documentation. Where appropriate, the Corps shall conduct documentation of archaeological sites in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation (48 FR 44734-37).

c. Archaeological Monitoring. For locations or actions agreed to by all signatories that archaeological monitoring may be undertaken during construction, the Corps shall develop an Archaeological Monitoring Plan in consultation with the SHPO and consulting parties. The Archaeological Monitoring Plan shall clearly state:

i.) Whether monitor will be on site full-time, part-time or on an on-call basis and rationale for this selection.

ii.) Timing of monitoring (both in the overall construction schedule and time allotted in the field). Ideally work on areas to be monitored shall be conducted at the initiation of construction to allow for consultation and further work, as needed, should significant resources be encountered. See Stipulation IX for protocols should burials be encountered.

iii.) Authority and role of the archaeologist

iv.) Location of monitoring

v.) The nature of the work to be undertaken by the archaeologist (extent of excavation, types of recording, screening, artifact sampling, etc.)

vi.) The type(s) of resource(s) anticipated

vii.) The protocol for actions should a resource be encountered

viii.) Artifact analysis and reporting requirements

ix.) Archaeological monitoring shall be included in the construction specifications and drawings demarcating where archaeological monitors are to be used. The archaeologist does not have to be hired under the construction contract, and could be hired under a master contract through the Corps. Protocols shall be in the contract specifications regarding responsibilities of all parties and timing for monitoring. The nature of archaeological monitoring (e.g. on-site monitoring to on-call monitoring) can be changed through a written request by either the Agency (Corps), or the SHPO, and with concurrence by the other. The Corps will share changes to archaeological monitoring with consulting parties.

d. Cultural Monitoring. For locations or actions agreed to by all signatories that cultural monitoring may be undertaken during construction, the Corps shall develop a Cultural Monitoring Plan in consultation with the SHPO and consulting parties. The Cultural Monitoring Plan shall clearly state:

- i.) Definition of a cultural monitor
- ii.) Whether monitor will be on site full-time, part-time or on an on-call basis and rationale for this selection.
- iii.) Timing of monitoring (both in the overall construction schedule and time allotted in the field). Ideally work on areas to be monitored shall be conducted at the initiation of construction to allow for consultation and further work, as needed, should significant resources be encountered. See Stipulation IX for protocols should burials be encountered.
- iv.) Authority and role of the cultural monitor (including briefings and education of construction personnel)
- v.) Location of monitoring
- vi.) The nature of the work to be undertaken by the cultural monitor
- vii.) The types of resources anticipated
- viii.) The protocol for actions should a resource be encountered
- ix.) Reporting requirements
- x.) Cultural monitoring shall be included in the construction specifications and drawings demarcating where cultural monitors are to be used. The cultural monitor does not have to be hired under the construction contract, and could be hired under a master contract through the Corps. Protocols shall be in the contract specifications regarding responsibilities of all parties and timing for monitoring. The nature of cultural monitoring (e.g. on-site monitoring to on-call monitoring) can be changed through a written request by either the Agency (Corps), or the SHPO, and with concurrence by the other. The Corps will share changes to cultural monitoring with consulting parties.

3. Traditional Cultural Properties (TCPs)

TCPs will be evaluated for NRHP eligibility using the Criteria established for the NRHP [36 CFR Part 60] per Stipulation III(A), above. If the Corps and the SHPO agree that the Criteria apply in evaluating the NRHP eligibility of a property, the property shall be treated accordingly, which may include the following mitigation measures:

- a. The Corps, in consultation with the SHPO and Native Hawaiian Organizations, shall identify and evaluate design alternatives and treatment measures which will avoid, minimize, or mitigate impacts when it is determined that a TCP will be affected by the Undertaking.

b. Treatment ideas may be generated from the guidelines provided by National Park Service Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties, and through ideas proposed by interested parties that are not standard treatment mitigations (creative mitigations).

4. Cultural Landscapes

a. The Corps, in consultation with the SHPO and other consulting parties, shall identify and evaluate design alternatives which will avoid or minimize impacts when it is determined that an NRHP eligible cultural landscape will be affected by Undertaking activities.

b. Treatment measures for historic landscapes shall consider recordation, preservation, rehabilitation, restoration, reconstruction, and additions in accordance with The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes (1996) and Protecting Cultural Landscapes, National Park Service Preservation Brief Number 36.

c. Where recordation is required, the Corps shall consult with the SHPO and other consulting parties to determine the appropriate level and type of recordation for affected resources, including Historic American Landscapes Survey (HALS), as appropriate. For NRHP eligible historic properties, recordation shall be consistent with the requirements and standards of the Department of the Interior (April 2003), and the Corps shall consult with the NPS Pacific West Regional Office for any HABS/HAER/HALS requirements. All HABS/HAER/HALS documentation must be submitted to NPS for review, prior to construction affecting the resource, unless otherwise agreed to by either the SHPO or NPS.

D. Verification. For all records and reports generated by the Corps that document compliance with this PA, submittals to the SHPO will be provided under Memorandum for Record (MFR) cover letter, and reference the appropriate section of the PA. For protection measures developed under Stipulations IV(B) and (C) above, the Corps shall ensure that the measures were implemented by providing photos of the measure during construction along with a brief write up documented as an MFR. The MFR(s) will be submitted to the SHPO, and made available to consulting parties upon request within 30 days of completion of the implemented protection measure. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume concurrence with the verification and acceptance of the verification as the final draft and will notify the SHPO and consulting parties in writing that the applicable PA stipulation has been met, in accordance with Stipulation X.A.

V. CURATION AND DISSEMINATION OF INFORMATION

A. The Corps shall maintain all decision records on identification, evaluation, effects determination and mitigation of historic properties for this Undertaking.

B. The Corps, in consultation with the SHPO shall ensure that all materials and records resulting from the survey, evaluation, and data recovery or mitigation conducted for the Undertaking, or recovered during construction of the Undertaking, will be curated in accordance with 36 CFR Part 79 Curation of Federally-Owned and Administered Archaeological Collections, unless a private property owner wishes to retain ownership of artifacts recovered from his or her land. For project components that will occur on private land, DLNR will incorporate provisions in the real estate agreement prior to commencement of construction activities that explicitly address the disposition of artifacts that may be found on the subject parcel, including whether the owner or DLNR will retain ownership. Certain materials may not be curated where state law and regulations require different treatment.

C. The parties to this PA acknowledge that historic properties covered by this PA are subject to the provisions of Section 304 of the NHPA (54 U.S.C. § 307103) relating to the disclosure of certain information about historic properties and, having so acknowledged, will ensure that all actions and documentation prescribed by this PA maintain the confidentiality required by law.

VI. ADDITIONS OR CHANGES TO THE UNDERTAKING'S SCOPE OF WORK AND AREA OF POTENTIAL EFFECT

A. In the event of any changes to the Undertaking's scope work that would require a change in the Direct or Indirect APE, the following measure shall be implemented in consultation with the signatories:

1. The Corps shall assess and revise the Undertaking's Direct and Indirect APE as needed to incorporate any additional areas that have the potential to affect historic properties.
2. The Corps shall carry out additional investigations, in accordance with Stipulation II, to identify historic architectural, archaeological, or cultural properties that may be affected.
3. The Corps shall assess the Undertaking's effect on any new historic properties, in accordance with Stipulation III.B, and explore measures to avoid, minimize or mitigate effects on these properties, in accordance with Stipulation IV.
4. The Corps shall ensure the preparation of appropriate reports and documents, notify Section 106 consulting parties, including Native Hawaiian Organizations, of any changes in the Undertaking's effect on historic properties, and provide the SHPO, NHOs, and consulting parties 30 days to review the Corps' findings. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume concurrence with the new findings and will notify the SHPO and consulting parties in writing that the applicable PA stipulation(s) has been met in accordance with Stipulation X.A.
5. If a change in project scope results in additional adverse effects to historic properties the Corps shall consult with all consulting parties to identify appropriate mitigation in accordance with Stipulation IV.C.

VII. UNANTICIPATED DISCOVERY

- A. If previously unidentified cultural resources are discovered during Undertaking implementation, the Corps shall cease all work in the vicinity of the discovered resource until it can be evaluated pursuant to the guidelines in Stipulation III of this PA.
- B. If the cultural resource is determined to be eligible for listing on the NRHP, the Corps shall consult with the SHPO to develop treatment in accordance with Stipulation IV of this PA.
- C. The Corps shall implement the treatment for non-burial discoveries in accordance with Stipulation IV. For burials, treatment will be in accordance with Stipulation IX, below.

VIII. INADVERTENT ADVERSE EFFECTS

- A. If previously identified or unidentified historic properties are inadvertently adversely affected during the Undertaking implementation, the Corps shall cease all work in the vicinity of the inadvertent adverse effect until it can be evaluated pursuant to the guidelines in Stipulation III of this PA.
- B. If the historic property is determination to be NRHP eligible; the Corps shall consult with the SHPO to develop treatment in accordance with Stipulation IV of this PA.
- C. The Corps shall implement the treatment for non-burial discoveries in accordance with Stipulation IV. For burials, treatment will be in accordance with Stipulation IX, below

IX. TREATMENT OF HUMAN REMAINS

- A. Human remains must be treated with the utmost respect and dignity. Historic and prehistoric human remains from non-federal, non-tribal lands are subject to protection under the state's burial law(s) (Hawaiian Administrative Rules §13-300, Rules of Practice and Procedure Relating to Burial Sites and Human Remains, and Hawaii Revised Statutes 6E-43.6, Inadvertent Discovery of Burial Sites). As such, if human remains are discovered during construction, work on that portion of the project shall stop immediately. The remains shall be covered and/or protected in place in such a way that minimizes further exposure of, and damage to the remains, and the Corps shall immediately consult with the SHPO and Oahu Island Burial Council. A treatment plan shall be developed by the Corps in accordance with Hawaiian Administrative Rules §13-300-1. The Corps shall ensure that any approved treatment and reburial plan is fully implemented.

X. ADMINISTRATIVE TERMS

A. REVIEW PERIODS

Unless indicated otherwise within this document, the SHPO, ACHP, Native Hawaiian Organizations, consulting parties, and any other interested party shall have thirty (30) days to review and comment on determinations, evaluations, plans, reports, and other documents submitted to them by the Corps. If the Corps has not received comments from the SHPO and consulting parties within 30 days the Corps may assume concurrence with determinations, evaluations, plans, reports, and other documents and will notify the SHPO and consulting parties in writing that the applicable PA stipulation(s) has been met.

B. DISPUTE RESOLUTION

1. Should a signatory, invited signatory, or consulting party to this PA object to the manner in which the terms of this PA are being implemented, they shall notify the Corps in writing of the objection. The Corps shall consult with such party to resolve the objection. If the Corps determines that such objection cannot be resolved then Stipulations X(B)(2) and (3) below will be implemented.

2. The Corps and the signatories shall attempt to resolve any disagreement arising from implementation of this PA. If there is a determination that the disagreement cannot be resolved, the Corps shall request the ACHP's recommendations or request the comments of the ACHP in accordance with 36 CFR Part 800.7.

3. Any ACHP recommendations or comments provided in response will be considered in accordance with 36 CFR Part 800.7, with reference only to the subject of the dispute. The Corps shall respond to ACHP recommendations or comments indicating how the Corps has taken the ACHP's recommendations or comments into account and complied with same prior to proceeding with Undertaking's activities that are subject to dispute. Responsibility to carry out all other actions under this PA that are not the subject of the dispute will remain unchanged.

C. SUNSET CLAUSE

This PA will continue in full force and effect until the construction of the Undertaking is complete and all terms of this PA are met, unless the Project is terminated or authorization is rescinded or a period of seven (7) years from execution of the PA has passed. Prior to such time, the Corps may consult with other signatories to reconsider the terms of the PA, and the agreement may be extended as written, or amended, in accordance with Stipulation X(D) below, provided all signatories concur.

D. AMENDMENT

This PA may be amended upon agreement in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

E. TERMINATION

Any signatory to this PA may terminate it by providing thirty (30) days notice to the signatories by certified mail, provided that the signatories will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, the Corps will comply with 36 CFR Parts 800.4 through 800.6 with regard to individual Undertaking actions covered by this Agreement.

F. ANTI-DEFICIENCY ACT

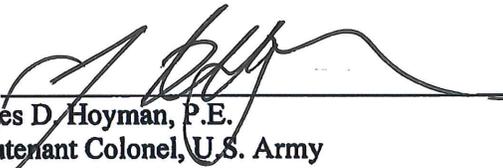
All requirements set forth in this PA requiring expenditure of funds by the Corps are expressly subject to the availability of appropriations and the requirements of the Anti-Deficiency Act (31 U.S.C. 1341). No obligation undertaken by the Corps under the terms of this PA shall require or be interpreted to require a commitment to expend funds not appropriated for a particular purpose. If the Corps cannot perform any obligation set forth in this PA because of the unavailability of funds, that obligation must be renegotiated among the Corps and the signatories as necessary.

Execution and implementation of this PA evidences that the Corps has satisfied its Section 106 responsibilities for all individual Undertakings of the Project, and that the Corps has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties.

Programmatic Agreement, Ala Wai Canal Project

SIGNATORIES:

U.S. ARMY CORPS OF ENGINEERS

By:  _____ Date: 11.25.16
James D. Hoyman, P.E.
Lieutenant Colonel, U.S. Army
District Engineer

HAWAII STATE HISTORIC PRESERVATION OFFICER

By:  _____ Date: 11.21.16
Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

STATE OF HAWAII, DEPARTMENT OF LAND AND NATURAL RESOURCES

By:  _____ Date: 11/21/16
Suzanne D. Case
Chairperson

INVITED SIGNATORIES:

OAHU ISLAND BURIAL COUNCIL

By: Charles A Ehrhorn Date: Nov 16, 2016
Charles Ehrhorn
Chair, Oahu Island Burial Council

OFFICE OF HAWAIIAN AFFAIRS

By: Kamano M. Crabbe Date: 11/21/16
Kamana'opono M. Crabbe, PhD
Ka Pouhana, Office of Hawaiian Affairs

CONCURRING PARTIES:

HISTORIC HAWAII FOUNDATION

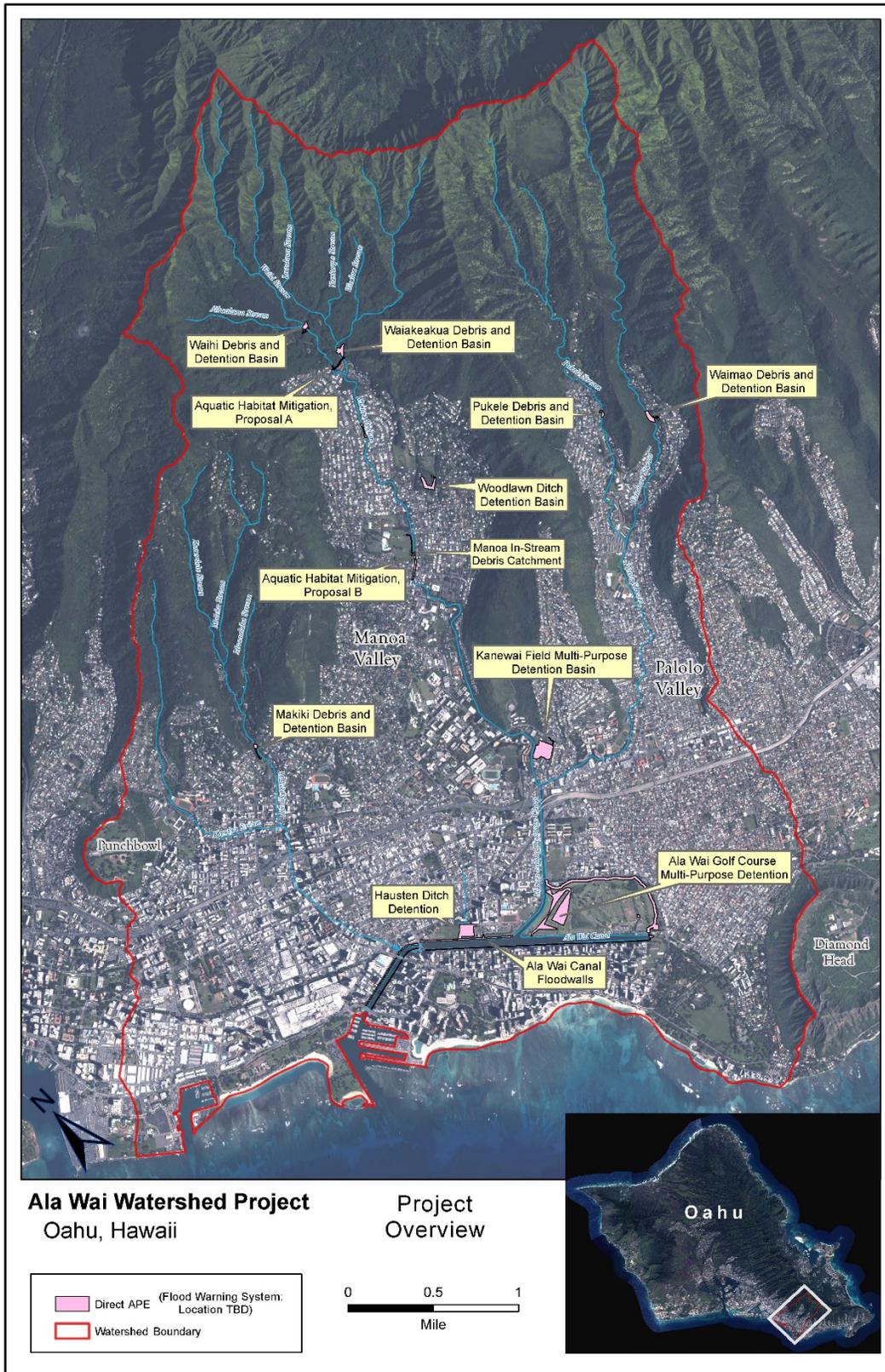
By: Kiersten Faulkner Date: Dec. 5, 2016
Kiersten Faulkner
Executive Director, Historic Hawaii Foundation

LIST OF APPENDICES

- A. Location Map for the Undertaking
- B. Direct and Indirect Areas of Potential Effect
- C. Map of Surveyed Areas and List of Survey Reports
- D. NRHP Eligible Archaeological Resources within the Indirect APE
- E. NRHP Eligible Historic Architectural Resources within the Direct APE
- F. NRHP Eligible Historic Architectural Resources within the Indirect APE
- G. List of Consulting Parties

Appendix A: Location Map for the Undertaking

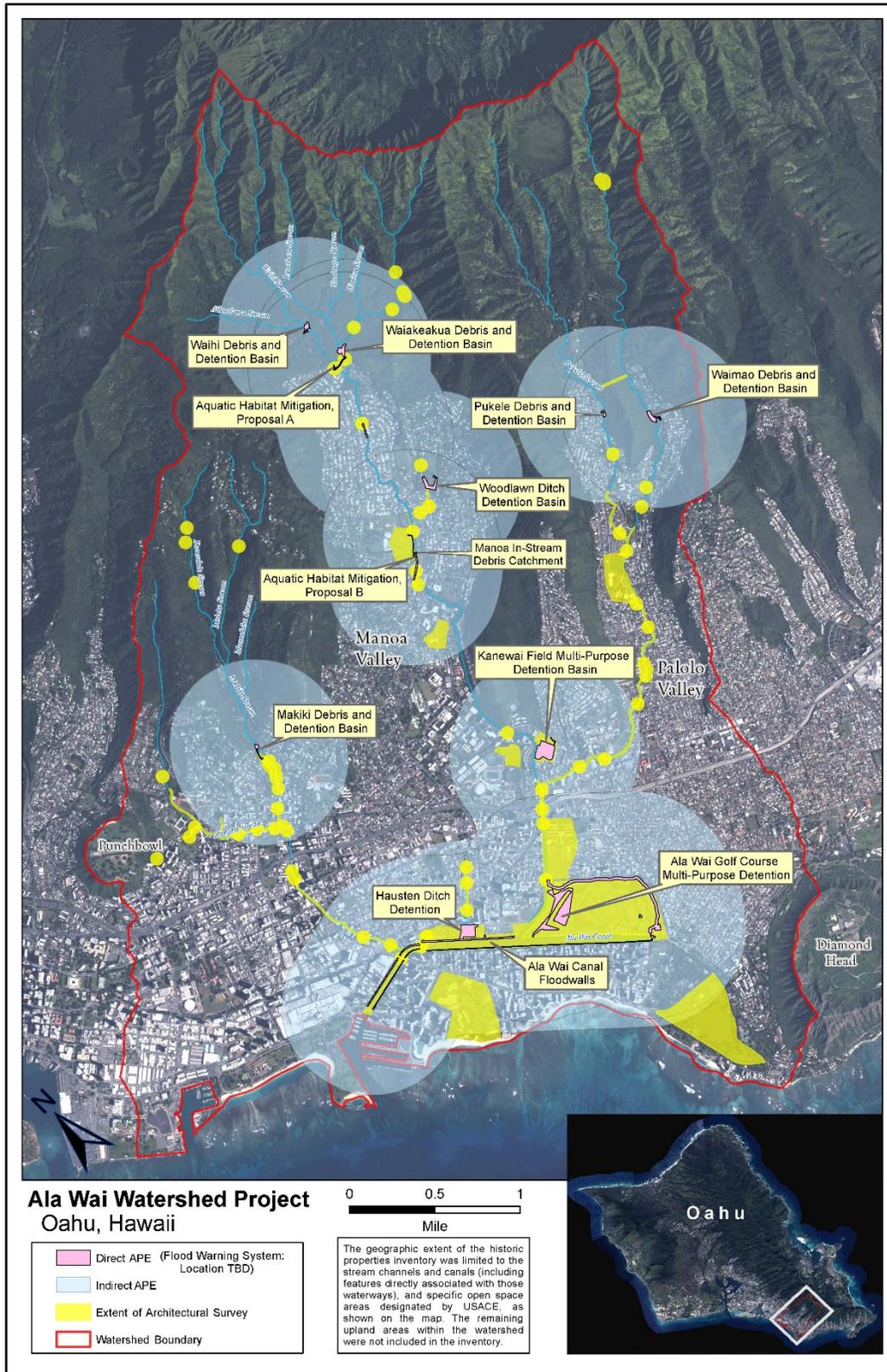
Programmatic Agreement, Ala Wai Canal Project



Appendix B: Direct and Indirect Areas of Potential Effect

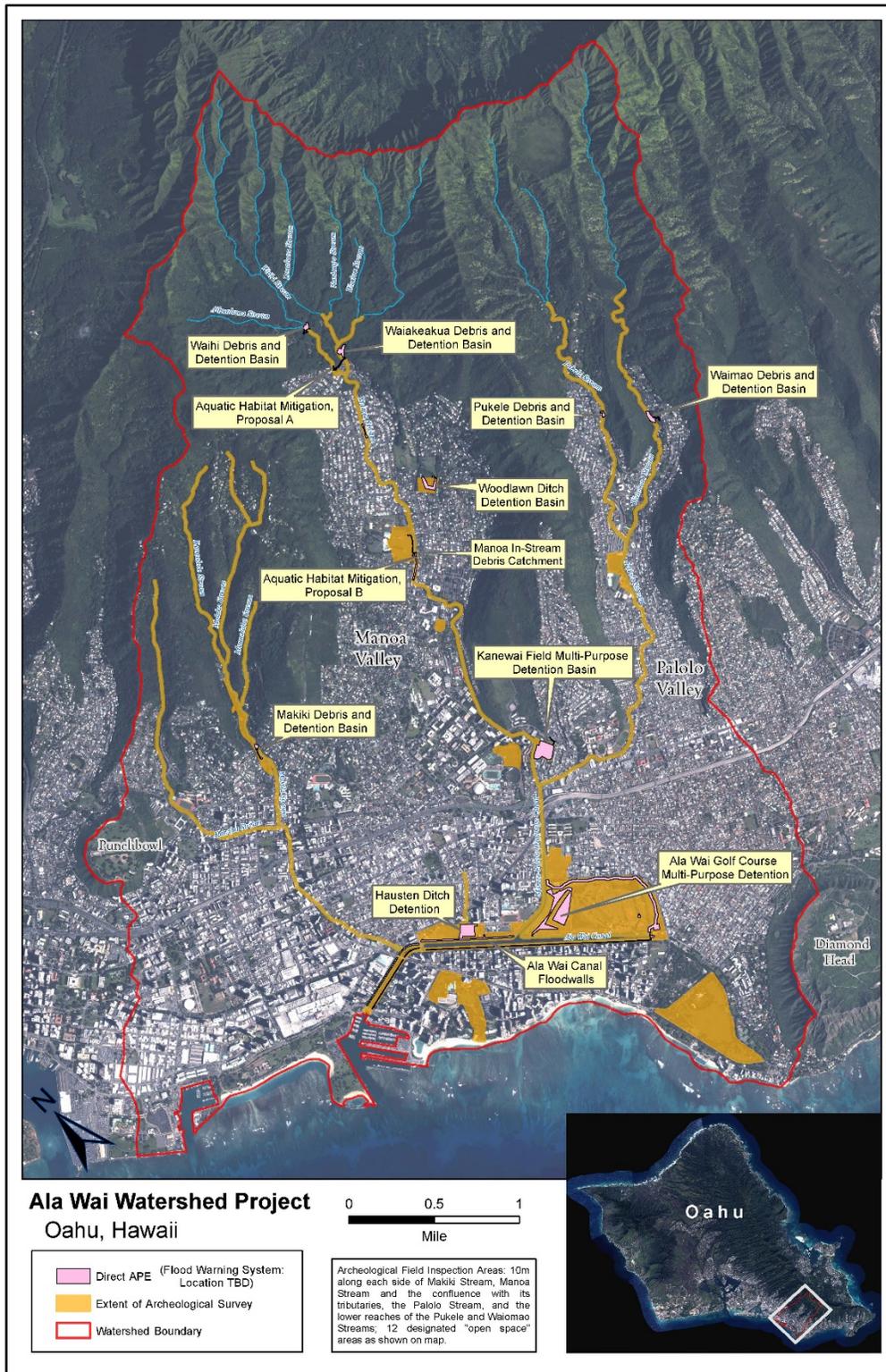
[Note: maps have been removed to protect the locations of cultural resources per 36 CFR 800.11(c)]

Watershed Overview Showing Indirect APEs with Historic Buildings/Structures Survey Area

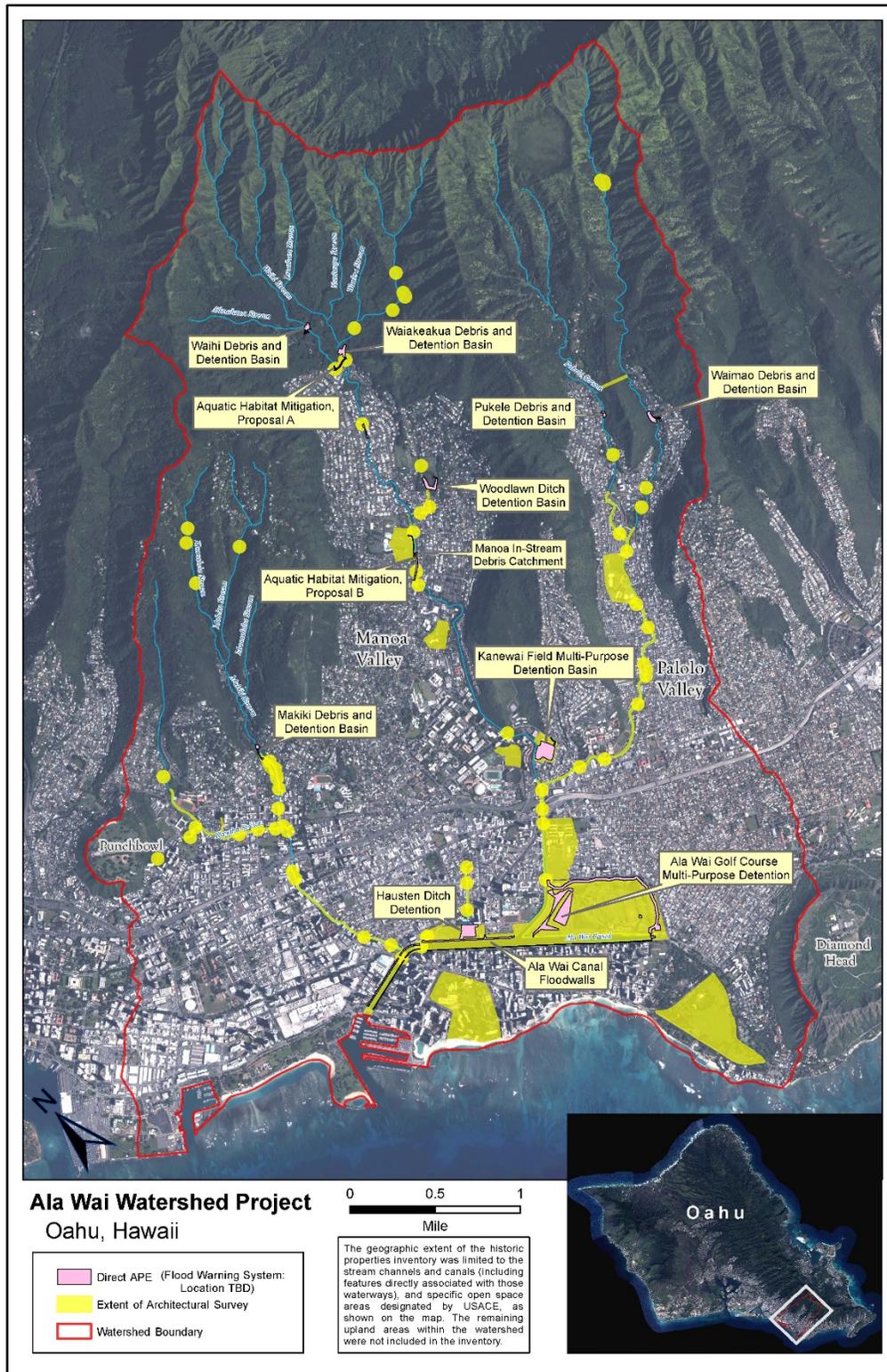


Appendix C: Maps of Surveyed Areas and List of Survey Reports

Archaeological Survey



Historic Property (Building and Structure) Survey



List of Survey Reports

Cultural Resources and Ethnographic Study for the Ala Wai Watershed Project: Makiki, Mānoa and Pālolo Ahupua‘a, Honolulu District, O‘ahu Island, TMK: [1] 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, and 2-9; [1] 3-1, 3-2, 3-3, and 3-4, Volume I: Cultural Resources of the Makiki, Mānoa and Pālolo Ahupua‘a, prepared for CH2M Hill, prepared by Cultural Surveys Hawai‘i, Inc., April 2010.

Cultural Resources and Ethnographic Study for the Ala Wai Watershed Project: Makiki, Mānoa and Pālolo Ahupua‘a, Honolulu District, O‘ahu Island, TMK: [1] 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, and 2-9; [1] 3-1, 3-2, 3-3, and 3-4, Volume II: Cultural Resources of Kaka‘ako and Waikīkī Ahupua‘a, prepared for CH2M Hill, prepared by Cultural Surveys Hawai‘i, Inc., April 2010.

Cultural Resources and Ethnographic Study for the Ala Wai Watershed Project, Honolulu, Makiki, Mānoa, Pālolo, and Waikīkī Ahupua‘a, Honolulu District, O‘ahu Island, TMK: [1] 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, and 2-9; [1] 3-1, 3-2, 3-3, and 3-4, Volume III: Ethnographic Study, prepared for CH2M Hill, prepared by Cultural Surveys Hawai‘i, Inc., April 2010.

Cultural Impact Assessment for the Ala Wai Canal Project, Waikīkī, Pālolo, Makiki, and Mānoa Ahupua‘a, Honolulu (Kona) District, O‘ahu, TMKs: [1] 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, and 2-9; [1] 3-1, 3-2, 3-3, and 3-4, prepared for CH2M Hill, prepared by Cultural Surveys Hawai‘i, Inc., July 2014.

Historic Structures Inventory Survey of the Ala Wai Watershed, prepared for CH2M Hill, prepared by Mason Architects, Inc., March 2010

Appendix D: NRHP Eligible Archaeological Resources within the Indirect APE

Appendix D: Archaeological Sites in Indirect APE

	DESCRIPTION	SITE ID	CRITERIA	EFFECTS DETERMINATION	TREATMENT RECOMMENDATION
	1) Makiki: <u>Makiki D&D Basin</u>				
	Makiki Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Terrace	50-80-14-6712	*	no effect	avoidance
	Terrace	50-80-14-6717	D	no effect	avoidance
	Bottle Dump	50-80-14-6726	*	no effect	avoidance
	Overhang Shelter	No SIHP Assigned	none	no effect	avoidance
	2) Manoa: <u>Waihi D&D Basin</u>				
	Waihi Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Platform	50-80-14-3726	*	no effect	avoidance
	Historic House	50-80-14-6727	*	no effect	avoidance
	Mounds/Platforms/Walls	50-80-14-6734	D,e	adverse effect	follow PA
	Terraces	50-80-14-6735	D	no effect	avoidance
	Waihi Stream Stone/Mortar Dam	50-80-14-6736/ No.54	A	adverse effect	create more natural stream bed appearance
	Historic House	50-80-14-6737	C,D	no effect	avoidance
	Historic House	50-80-14-6738	C,D	no effect	avoidance
	Wall/Historic Dump	50-80-14-6739	*	no effect	avoidance
	Terrace	50-80-14-6740	*	no effect	avoidance
	Historic Houses	50-80-14-6741	*	no effect	avoidance
	Historic House	50-80-14-6742	*	no effect	avoidance
	Cave/Terrace Complex	50-80-14-6743	*	no effect	avoidance
	Bridge Foundation	50-80-14-6744	C,D	no effect	avoidance
	Bridge Foundation	50-80-14-6745	*	no effect	avoidance
	Historic House	50-80-14-6746	*	no effect	avoidance
	Aihualama Loi	No SIHP Assigned	A,C	no adverse effect	avoidance

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	DESCRIPTION	SITE ID	CRITERIA	EFFECTS DETERMINATION	TREATMENT RECOMMENDATION
	3) Manoa: <u>Waiakeakua D&D Basin</u>				
	Waiakeakua Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Mounds	50-80-14-1170	*	no effect	avoidance
	Platform	50-80-14-3726	*	no effect	avoidance
	Historic House	50-80-14-6727	*	no effect	avoidance
	Mounds/Platforms/Walls	50-80-14-6734	D,e	adverse effect	follow PA
	Terraces	50-80-14-6735	D	no effect	avoidance
	Waihi Stream Stone/Mortar Dam	50-80-14-6736/ No.54	A	adverse effect	create more natural stream bed appearance
	Historic House	50-80-14-6737	C,D	no effect	avoidance
	Historic House	50-80-14-6738	C,D	no effect	avoidance
	Wall/Historic Dump	50-80-14-6739	*	no effect	avoidance
	Terrace	50-80-14-6740	*	no effect	avoidance
	Historic Houses	50-80-14-6741	*	no effect	avoidance
	Historic House	50-80-14-6742	*	no effect	avoidance
	Cave/Terrace Complex	50-80-14-6743	*	no effect	avoidance
	Bridge Foundation	50-80-14-6744	C,D	no effect	avoidance
	Bridge Foundation	50-80-14-6745	*	no effect	avoidance
	Historic House	50-80-14-6746	*	no effect	avoidance
	Aihualama Loi	No SIHP Assigned	A,C	no adverse effect	avoidance
	4) Manoa: <u>Woodlawn Ditch</u>				
	Historic Bottle Cache	50-80-14-4659	*	no effect	avoidance
	Retaining Wall	50-80-14-6733	*	no effect	avoidance
	5) Manoa: <u>Manoa In-Stream Debris Catchment</u>				
	Terrace/Wall	50-80-14-6728	*	no effect	avoidance
	6) Manoa: <u>Kanewai Field Multi-Purpose Detention Basin</u>				
	UH Agricultural Complex - Kanewai Loi	50-80-14-4498	A,C	no adverse effect	avoidance
	Terrace	50-80-14-6729	*	no effect	avoidance
	Stone/Mortar Dam	50-80-14-6730	*	no effect	avoidance
	Historic Building Foundation	50-80-14-7078	*	no effect	avoidance
	Morgue Egress	50-80-14-7078 2	*	no effect	avoidance
	Koana Cave	No SIHP Assigned		no effect	avoidance

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	DESCRIPTION	SITE ID	CRITERIA	EFFECTS DETERMINATION	TREATMENT RECOMMENDATION
	7) Palolo: <u>Pukele D&D Basin</u>				
	Pukele Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Old Kawao Community Park	50-80-14-1726	*	no effect	avoidance
	Terrace Complex	50-80-14-6749	*	no effect	avoidance
	Terrace Complex	50-80-14-6750	*	no effect	avoidance
	8) Palolo: <u>Waiomao D&D Basin</u>				
	Waiomao Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Old Kawao Community Park	50-80-14-1726	*	no effect	avoidance
	Terrace Complex	50-80-14-6749	*	no effect	avoidance
	Terrace Complex	50-80-14-6750	*	no effect	avoidance
	9) Ala Wai: <u>Hausten Ditch Detention Basin</u>				
	Subsurface Cultural Deposit	50-80-14-6848	*	no effect	avoidance
	Hawaiian Canoe Malia	50-80-14-9762	*	no effect	avoidance
	Trash Pit	No SIHP Assigned		no effect	avoidance
	10) Ala Wai: <u>Ala Wai Golf Course MPDB</u>				
	Historic Trash Pit	50-80-14-4224	*	no effect	avoidance
	Buried A-Horizon	50-80-14-5883	*	no effect	avoidance
	Cultural Deposit	50-80-14-5940 A	*	no effect	avoidance
	Cultural Deposit	50-80-14-5940 B	*	no effect	avoidance
	Fire Pit	50-80-14-5940 C	*	no effect	avoidance
	Historic Trash Pit	50-80-14-5941	*	no effect	avoidance
	from Honolulu Rapid Transit Rail Study	50-80-14-5942	*	no effect	avoidance
	Muliwai Kukaunahi	50-80-14-5943	*	no effect	avoidance
	Historic Trash Pit	50-80-14-6372	*	no effect	avoidance
	Historic Trash Pit	50-80-14-6398	*	no effect	avoidance
	Historic Trash Pit	50-80-14-7069	*	no effect	avoidance
	Subsurface Cultural Deposit	50-80-14-7208 1-12	*	no effect	avoidance
	Subsurface Cultural Deposit	50-80-14-7208 13	*	no effect	avoidance
	Trash Pit	No SIHP Assigned		no effect	avoidance
	Imu	No SIHP Assigned		no effect	avoidance
	Subsurface Cultural Deposit	No SIHP Assigned		no effect	avoidance

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	DESCRIPTION	SITE ID	CRITERIA	EFFECTS DETERMINATION	TREATMENT RECOMMENDATION
	11) Ala Wai: Ala Wai Canal Floodwalls/Pump Stations				
	Wood-Lined Subsurface Feature	50-80-14-6847	*	no effect	avoidance
	Subsurface Privy Remnant	50-80-14-7430	*	no effect	avoidance
	Subsurface Historic Structure Remnants	50-80-14-7431	*	no effect	avoidance
	12) Watershed: Flood Warning System (Locations To Be Determined)				
	Manoa Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Makiki Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Palolo Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Waiomao Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Ala Wai Canal	50-80-14-9757	A	adverse effect	mitigation plan/ historic documentation/ consulting party design input & review
	13a) Aquatic Habitat Mitigation, Proposal A (Falls Repair)				
	Waihi Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Waiakeakua Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Manoa Stream	No SIHP Assigned	e	adverse effect	micrositing to avoid significant resources
	Mounds	50-80-14-1170 2	*	no effect	avoidance
	Platform	50-80-14-3726	*	no effect	avoidance
	Historic House	50-80-14-6727	*	no effect	avoidance
	Retaining Wall	50-80-14-6733	*	no effect	avoidance
	Mounds/Platforms/Walls	50-80-14-6734	D,e	adverse effect	follow PA
	Terraces	50-80-14-6735	D	no effect	avoidance
	Waihi Stream Stone/Mortar Dam	50-80-14-6736/ No.54	A	adverse effect	create more natural stream bed appearance
	Historic House	50-80-14-6737	C,D	no effect	avoidance
	Historic House	50-80-14-6738	C,D	no effect	avoidance

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	DESCRIPTION	SITE ID	CRITERIA	EFFECTS DETERMINATION	TREATMENT RECOMMENDATION
	Wall/Historic Dump	50-80-14-6739	*	no effect	avoidance
	Terrace	50-80-14-6740	*	no effect	avoidance
	Historic Houses	50-80-14-6741	*	no effect	avoidance
	Historic House	50-80-14-6742	*	no effect	avoidance
	Cave/Terrace Complex	50-80-14-6743	*	no effect	avoidance
	Bridge Foundation	50-80-14-6744	C,D	no effect	avoidance
	Bridge Foundation	50-80-14-6745	*		
	Historic House	50-80-14-6746	*	no effect	avoidance
	Aihualama Loi	No SIHP Assigned	A,C	no adverse effect	avoidance
	<u>13b) Aquatic Habitat Mitigation, Proposal B (Manoa Stream)</u>				
	Heiau	50-80-14-3986	*	no effect	avoidance
	Terrace/Wall	50-80-14-6728	*	no effect	avoidance
	Stone/Mortar Dam	50-80-14-6731	*	no effect	avoidance
	Bridge Foundation	50-80-14-6732	*	no effect	avoidance

* Archaeological sites previously assigned a Hawaii Statewide Inventory of Historic Properties number meet NRHP eligibility

Appendix E: NRHP Eligible Historic Architectural Resources within the Direct APE

Appendix E: Architectural Historic Properties in Direct APE

	DESCRIPTION	SITE ID	CRITERIA	EFFECTS DETERMINATION	TREATMENT RECOMMENDATION
	1) Makiki: <u>Makiki D&D Basin</u>				
	Archie Baker Park	Inventory No. 92	A,C	no adverse effect	minimize temporary impacts
	2) Manoa: <u>Waihi D&D Basin</u>				
	None				
	3) Manoa: <u>Waiakeakua D&D Basin</u>				
	Waaloo Way Bridge 2	Inventory No. 51	C	adverse effect	historic documentation / mitigation plan as needed
	Waaloo Way Bridge 1	no inventory number	none	adverse effect	historic documentation
	4) Manoa: <u>Woodlawn Ditch</u>				
	Open Space at Park	No SIHP Assigned	none	not historic	not historic
	5) Manoa: <u>Manoa In-Stream Debris Catchment</u>				
	Manoa Stream Channel	Inventory No. 41	A,C	adverse effect	historic documentation
	6) Manoa: <u>Kanewai Field Multi-Purpose Detention Basin</u>				
	Kanewai Field	Inventory No. 94	C	no adverse effect	avoid architecture & trees, seed the new berm
	7) Palolo: <u>Pukele D&D Basin</u>				
	None				
	8) Palolo: <u>Waiomao D&D Basin</u>				
	Waiomao USGS Gaging Station	No SIHP Assigned	none	not historic	not historic
	9) Ala Wai: <u>Hausten Ditch Detention Basin</u>				
	Ala Wai Canal	50-80-14-9757	A	adverse effect	mitigation plan/ historic documentation/ consulting party design input & review
	Alanaio Stream Channel (Hausten Ditch)	Inventory No. 82	A,C	this section not historic	none
	Ala Wai Park	No SIHP Assigned	none	not historic	not historic
	10) Ala Wai: <u>Ala Wai Golf Course MPDB</u>				
	Ala Wai Golf Course	No SIHP Assigned	none	not historic	monitoring during construction
	Manoa-Palolo Canal	Inventory No. 36	A,C	adverse effect	historic documentation

Programmatic Agreement, Ala Wai Canal Project

	DESCRIPTION	SITE ID	CRITERIA	EFFECTS DETERMINATION	TREATMENT RECOMMENDATION
	11) Ala Wai: Ala Wai Canal Floodwalls/Pump Stations				
	Kalakaua Ave Bridge	Inventory No. 02	A,C	adverse effect	match design with existing walls
	McCully Street Bridge	Inventory No. 03	A,C	adverse effect	match design with existing walls
	Kapahulu (Ala Wai Golf course) Drainage	No SIHP Assigned	none	not historic	not historic
	Ala Wai Canal	50-80-14-9757	A	adverse effect	mitigation plan/ historic documentation/ consulting party design input & review
	Ala Wai Clubhouse (C&C Art Deco Parks)	50-80-14-1388/ No.90	C	adverse effect	historic documentation / consulting party design input
	12) Watershed: Flood Warning System				
	Ala Wai Canal	50-80-14-9757	A	adverse effect	mitigation plan/ historic documentation/ consulting party design input & review
	Other Locations To Be Determined				follow PA
	13a) Aquatic Habitat Mitigation, Proposal A (Falls Repair)				
	Waaloo Way Bridge 1	no inventory number	none	no adverse effect	historic documentation
	Waaloo Way Bridge 2	Inventory No. 51	C	adverse effect	historic documentation / mitigation plan as needed
	Waihi Gaging Station	Inventory No. 53	A,C	no effect	avoidance
	Waihi Stream Stone/Mortar Dam	50-80-14-6736/ No.54	A	adverse effect	create more natural stream bed appearance
	Waiakeakua Gaging Station	Inventory No. 55	A,C	adverse effect	create more natural stream bed appearance
	13b) Aquatic Habitat Mitigation, Proposal B (Manoa Stream)				
	Manoa Stream Channel	Inventory No. 41	A,C	adverse effect	historic documentation
	Lowrey Avenue Bridge	Inventory No. 45	C	no effect	avoidance

Appendix F: NRHP Eligible Historic Architectural Resources within the Indirect APE

Appendix F: Architectural Historic Properties in Indirect APE

	DESCRIPTION	SITE ID	CRITERIA	EFFECTS DETERMINATION	TREATMENT RECOMMENDATION
	1) Makiki: <u>Makiki D&D Basin</u>				
	Makiki Stream Channel	Inventory No. 11	C	no effect	avoidance
	Makiki Street Bridge	Inventory No. 17	C	no effect	avoidance
	Oneele Place Bridge	Inventory No. 18	A, C	no effect	avoidance
	Shingle Pedestrian Bridge	Inventory No. 19	A, C		avoidance
	Shingle Driveway Bridge	Inventory No. 20	A, C		avoidance
	Anapuni Street Bridge	Inventory No. 22	C		avoidance
	1727 Makiki Street	Inventory No. 23	C	no effect	avoidance
	Kewalo Street Sulvert	Inventory No. 26	C		avoidance
	Keeaumoku Street Culvert	Inventory No. 27	C		avoidance
	Makiki Street Ext. Culvert	Inventory No. 28	C		avoidance
	Wilder Street Culvert	Inventory No. 29	C		avoidance
	2) Manoa: <u>Waihi D&D Basin</u>				
	Waaloo Way Bridge 2	Inventory No. 51	C	adverse effect	historic documentation / mitigation plan as needed
	Waaloo Way Bridge 4	Inventory No. 52	C	no effect	avoidance
	Waihi Gaging Station	Inventory No. 53	A,C	no effect	avoidance
	Waihi Stream Stone/Mortar Dam	50-80-14-6736/ No.54	A	adverse effect	create more natural stream bed appearance
	Waiakeakua Gaging Station	Inventory No. 55	A,C	adverse effect	create more natural stream bed appearance
	Manoa Tunnel Trail Steps No. 1	Inventory No. 56	C	no effect	avoidance
	3) Manoa: <u>Waiakeakua D&D Basin</u>				
	Waaloo Way Bridge 4	Inventory No. 52	C	no effect	avoidance
	Waihi Gaging Station	Inventory No. 53	A,C	no effect	avoidance
	Waihi Stream Stone/Mortar Dam	50-80-14-6736/ No.54	A	adverse effect	create more natural stream bed appearance
	Waiakeakua Gaging Station	Inventory No. 55	A,C	adverse effect	create more natural stream bed appearance
	Manoa Tunnel Trail Steps No. 1	Inventory No. 56	C	no effect	avoidance

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	DESCRIPTION	SITE ID	CRITERIA	EFFECTS DETERMINATION	TREATMENT RECOMMENDATION
	Manoa Tunnel No. 1	Inventory No. 57	A	no effect	avoidance
	Manoa Tunnel No. 2	Inventory No. 58	A	no effect	avoidance
	Manoa Tunnel Pipe Crossing	Inventory No. 59	C	no effect	avoidance
	Manoa Tunnel Trail Steps No. 2	Inventory No. 60	C	no effect	avoidance
	Manoa Rain Gauge	Inventory No. 61	A	no effect	avoidance
	4) Manoa: <u>Woodlawn Ditch</u>				
	Woodlawn Ditch	Inventory No. 42	A,C	no effect	avoidance
	East Manoa Road Manoa Park Ditch Bridge	Inventory No. 47	C	no effect	avoidance
	East Manoa Road Culvert	Inventory No. 48	C	no effect	avoidance
	Kaamamilo Drive Driveway Bridge	Inventory No. 49	C	no effect	avoidance
	5) Manoa: <u>Manoa In-Stream Debris Catchment</u>				
	East Manoa Road Bridge	Inventory No. 44	C	no effect	avoidance
	Lowrey Avenue Bridge	Inventory No. 45	C	no effect	avoidance
	Kahaloa Drive Bridge	Inventory No. 46	C	no effect	avoidance
	6) Manoa: <u>Kanewai Field Multi-Purpose Detention Basin</u>				
	Manoa-Palolo Canal	Inventory No. 36	A,C	no effect	avoidance
	Old Waialae Rd Bridge	Inventory No. 40	C	no effect	avoidance
	Dole Street Bridge	Inventory No. 43	C	no effect	avoidance
	Palolo Stream Channel	Inventory No. 63	A,C	no effect	avoidance
	St. Louis High School Bridge	Inventory No. 64	A, C	no effect	avoidance
	St. Louis Drive Bridge	Inventory No. 65	A, C	no effect	avoidance
	7) Palolo: <u>Pukele D&D Basin</u>				
	10th Avenue Place Bridge	Inventory No. 74	C	no effect	avoidance
	Palolo Avenue Bridge	Inventory No. 77	C	no effect	avoidance
	Palolo Pipeline Tunnel	Inventory No. 78	A,C	no effect	avoidance
	8) Palolo: <u>Waiomao D&D Basin</u>				
	10th Avenue Place Bridge	Inventory No. 74	C	no effect	avoidance
	10th Avenue Bridge	Inventory No. 75	C	no effect	avoidance
	Palolo Avenue Bridge	Inventory No. 77	C	no effect	avoidance
	Palolo Pipeline Tunnel	Inventory No. 78	A,C	no effect	avoidance

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	DESCRIPTION	SITE ID	CRITERIA	EFFECTS DETERMINATION	TREATMENT RECOMMENDATION
	9) Ala Wai: <u>Hausten Ditch Detention Basin</u>				
	Ala Wai Clubhouse (C&C Art Deco Parks)	50-80-14-1388/ No. 90	C	adverse effect	follow PA
	Kalakaua Ave Bridge	Inventory No. 02	A,C	adverse effect	match design with existing walls
	McCully Street Bridge	Inventory No. 03	A,C	adverse effect	match design with existing walls
	Alanaio Channel	Inventory No. 82	A,C	no effect	avoidance
	Hausten Street Culvert	Inventory No. 83	C	no effect	avoidance
	Box culvert at Date Street	Inventory No. 84	C	no effect	avoidance
	Box culvert at Kapiolani Blvd	Inventory No. 85	C	no effect	avoidance
	10) Ala Wai: <u>Ala Wai Golf Course MPDB</u>				
	Kapahulu (Ala Wai Golf Course) Drainage	No SIHP Assigned	none	not historic	not historic
	Date Street Bridge	Inventory No. 37	A,C	no effect	avoidance
	Kapiolani Blvd Bridge	Inventory No. 38	C	no effect	avoidance
	King Street Bridge	Inventory No. 39	C	no effect	avoidance
	Alanaio Channel	Inventory No. 82	A,C	no effect	avoidance
	Hausten St Culvert	Inventory No. 83	C	no effect	avoidance
	Box culvert at Date Street	Inventory No. 84	C	no effect	avoidance
	Box culvert at Kapiolani Blvd	Inventory No. 85	C	no effect	avoidance
	Kaimuki High School	Inventory No. 95	C	no effect	avoidance
	11) Ala Wai: <u>Ala Wai Canal Floodwalls/Pump Stations</u>				
	Makiki Stream Flood Control Project	Inventory No. 04	C	no effect	avoidance
	Kapiolani Blvd Bridge #1	Inventory No. 05	C	no effect	avoidance
	Fern Street Bridge	Inventory No. 06	C	no effect	avoidance
	Manoa-Palolo Canal	Inventory No. 36	A,C	adverse effect	historic documentation
	Date Street Bridge	Inventory No. 37	A,C	no effect	avoidance
	Alanaio Channel	Inventory No. 82	A,C	no effect	avoidance
	Hausten Street Culvert	Inventory No. 83	C	no effect	avoidance
	Box culvert at Date Street	Inventory No. 84	C	no effect	avoidance
	Box culvert at Kapiolani Blvd	Inventory No. 85	C	no effect	avoidance

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	DESCRIPTION	SITE ID	CRITERIA	EFFECTS DETERMINATION	TREATMENT RECOMMENDATION
	12) Watershed: Flood Warning System				
	Ala Wai Canal	50-80-14-9757	A	adverse effect	mitigation plan/ historic documentation/ consulting party design input & review
	Other Locations To Be Determined				follow PA
	13a) Aquatic Habitat Mitigation, Proposal A (Falls Repair)				
	East Manoa Rd Culvert	Inventory No. 48	C	no effect	avoidance
	Pawaina Street Bridge	Inventory No. 50	C	no effect	avoidance
	Waaloo Way Bridge 2	Inventory No. 51	C	adverse effect	historic documentation / mitigation plan as needed
	Waaloo Way Bridge 1	no inventory number	none	no adverse effect	historic documentation
	Waaloo Way Bridge 4	Inventory No. 52	C	no effect	avoidance
	Waihi Gaging Station	Inventory No. 53	A,C	no effect	avoidance
	Waihi Stream Stone/Mortar Dam	50-80-14-6736/ No.54	A	adverse effect	create more natural stream bed appearance
	Waiakeakua Gaging Station	Inventory No. 55	A,C	adverse effect	create more natural stream bed appearance
	Manoa Tunnel Trail Steps No. 1	Inventory No. 56	C	no effect	avoidance
	13b) Aquatic Habitat Mitigation, Proposal B (Manoa Stream)				
	Manoa Stream Channel	Inventory No. 41	A,C	adverse effect	historic documentation
	Woodlawn Ditch	Inventory No. 42	A,C	no effect	avoidance
	East Manoa Road Bridge	Inventory No. 44	C	no effect	avoidance
	Lowrey Avenue Bridge	Inventory No. 45	C	no effect	avoidance
	Kahaloo Drive Bridge	Inventory No. 46	C	no effect	avoidance
	East Manoa Road Manoa Park Ditch Bridge	Inventory No. 47	C	no effect	avoidance
	East Manoa Road Culvert	Inventory No. 48	C	no effect	avoidance
	Kaamamilo Drive Driveway Bridge	Inventory No. 49	C	no effect	avoidance

Appendix G: List of Consulting Parties

Programmatic Agreement, Ala Wai Canal Project

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Programmatic Agreement, Ala Wai Canal Project

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**ALA WAI CANAL PROJECT
O'AHU, HAWAI'I**

**FEASIBILITY STUDY REPORT WITH INTEGRATED
ENVIRONMENTAL IMPACT STATEMENT**

**SECTION 209 OF FLOOD CONTROL ACT OF 1962
(PUBLIC LAW 87-874)**

APPENDIX F2

CULTURAL RESOURCES

List of Cultural Resource Reports

List of Survey Reports

Cultural Resources and Ethnographic Study for the Ala Wai Watershed Project: Makiki, Mānoa and Pālolo Ahupua‘a, Honolulu District, O‘ahu Island, TMK: [1] 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, and 2-9; [1] 3-1, 3-2, 3-3, and 3-4, Volume I: Cultural Resources of the Makiki, Mānoa and Pālolo Ahupua‘a, prepared for CH2M Hill, prepared by Cultural Surveys Hawai‘i, Inc., April 2010.

Cultural Resources and Ethnographic Study for the Ala Wai Watershed Project: Makiki, Mānoa and Pālolo Ahupua‘a, Honolulu District, O‘ahu Island, TMK: [1] 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, and 2-9; [1] 3-1, 3-2, 3-3, and 3-4, Volume II: Cultural Resources of Kaka‘ako and Waikīkī Ahupua‘a, prepared for CH2M Hill, prepared by Cultural Surveys Hawai‘i, Inc., April 2010.

Cultural Resources and Ethnographic Study for the Ala Wai Watershed Project, Honolulu, Makiki, Mānoa, Pālolo, and Waikīkī Ahupua‘a, Honolulu District, O‘ahu Island, TMK: [1] 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, and 2-9; [1] 3-1, 3-2, 3-3, and 3-4, Volume III: Ethnographic Study, prepared for CH2M Hill, prepared by Cultural Surveys Hawai‘i, Inc., April 2010.

Cultural Impact Assessment for the Ala Wai Canal Project, Waikīkī, Pālolo, Makiki, and Mānoa Ahupua‘a, Honolulu (Kona) District, O‘ahu, TMKs: [1] 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, and 2-9; [1] 3-1, 3-2, 3-3, and 3-4, prepared for CH2M Hill, prepared by Cultural Surveys Hawai‘i, Inc., July 2014.

Historic Structures Inventory Survey of the Ala Wai Watershed, prepared for CH2M Hill, prepared by Mason Architects, Inc., March 2010

Note: cultural resource reports are available upon request to qualified and appropriate parties or individuals