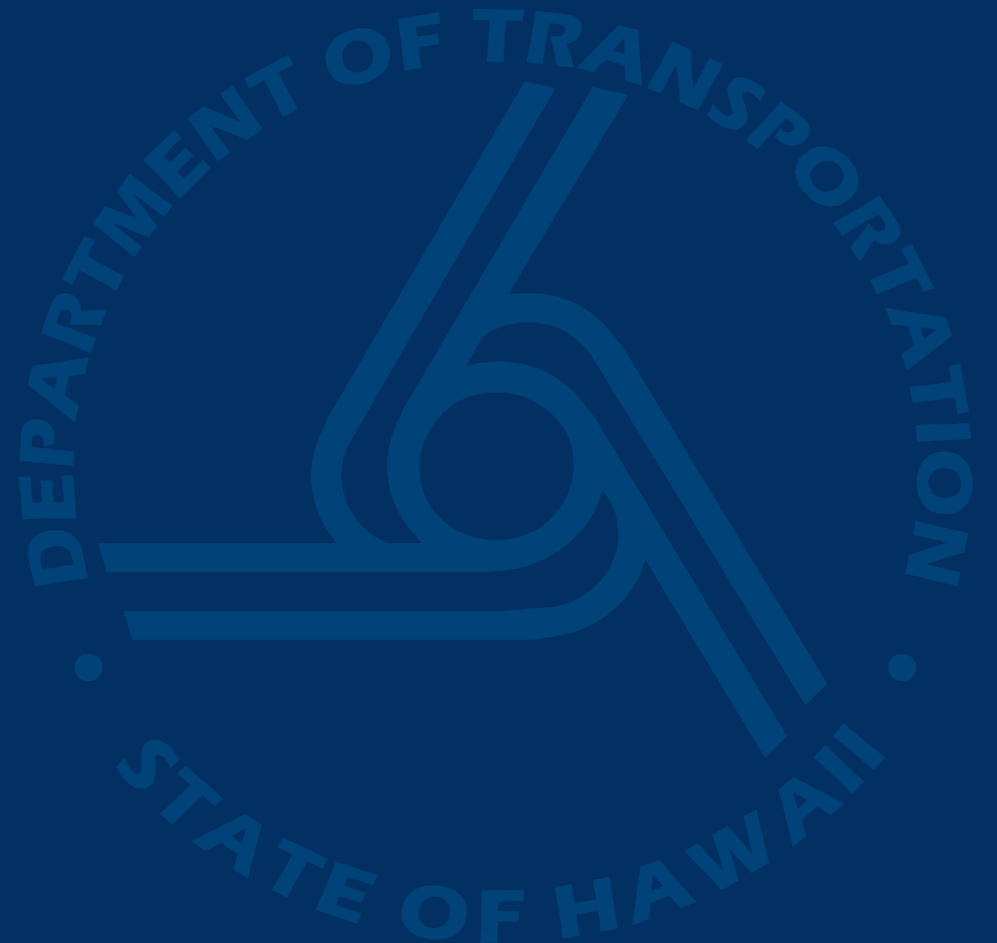


KA'A'AWA / HAU'ULA TOWN HALL MEETING #2 UPDATE

HAWAI'I DEPARTMENT OF
TRANSPORTATION
HIGHWAYS

09/29/2023



MEETING OBJECTIVES

Update the Community on:

- **Immediate Short-Term Projects**
 - Hau'ula
 - Kalae'ō'io Beach
 - Ka'a'awa Stream Outfall
- **Proposed Mid-Term Shoreline Erosion Mitigation Projects**
 - Ka'a'awa Beach Park
 - KKPH – (Ku'aloa, Ka'a'awa, Punalu'u, Hau'ula)
- **Alternative Projects**
 - Sandsaver Project
 - Dry Stack Wall

IMMEDIATE SHORT- TERM PROJECTS



Hau'ula



Kalae'ō'io Beach

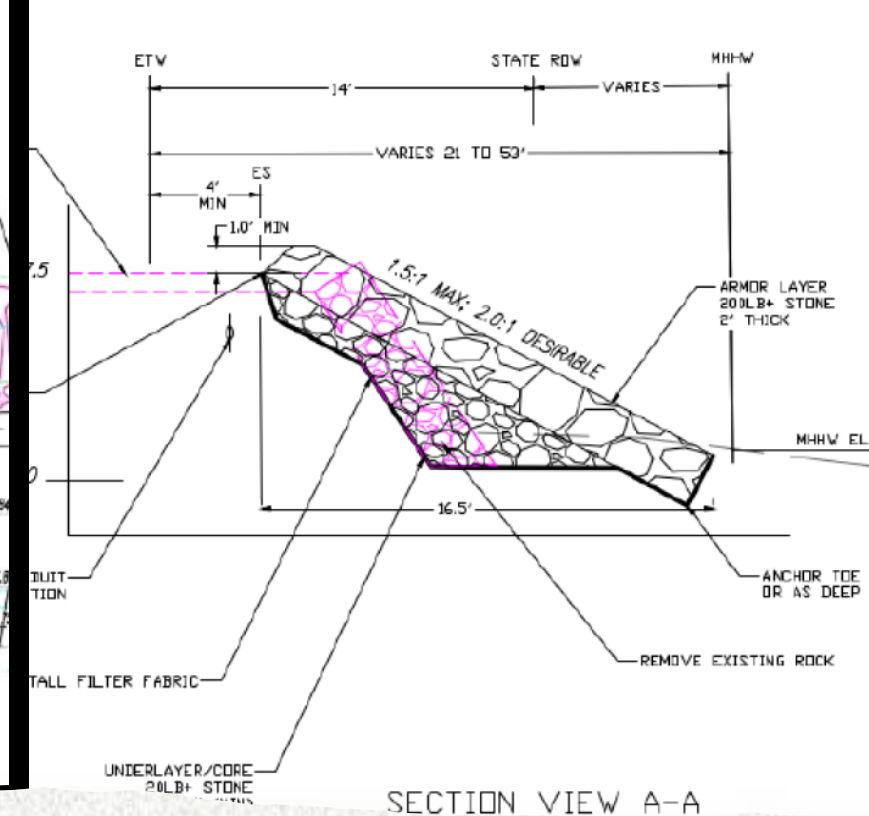
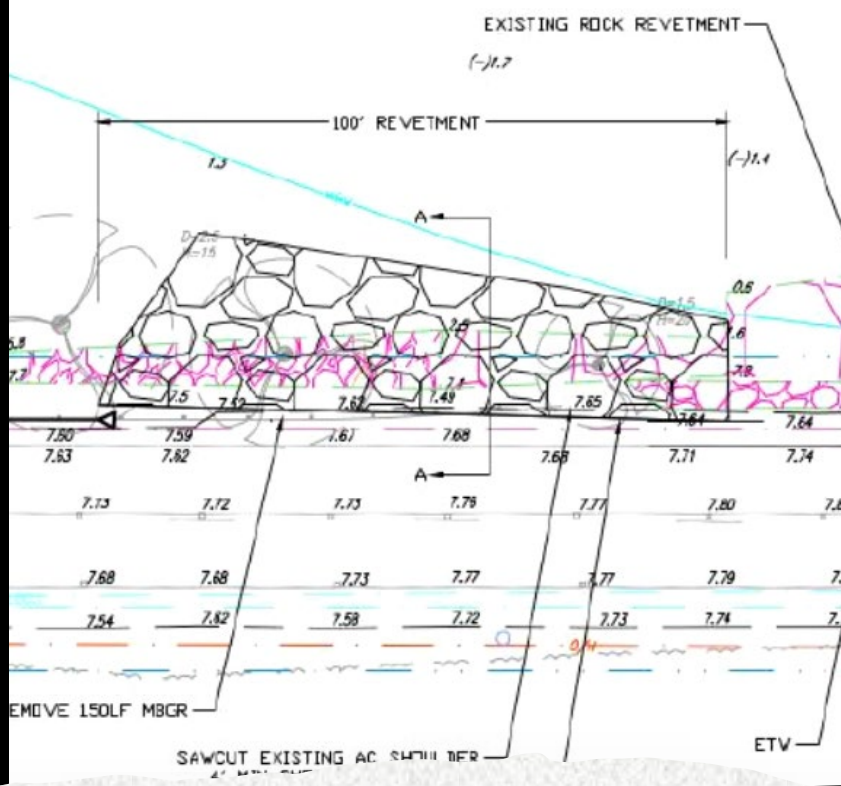


**Maintenance - Ka'a'awa
Stream Outfall**



HAU'ULA – IN CONSTRUCTION

RESUME WORK IN NOVEMBER



KALAE'Ō'IO BEACH

- Completed Design
- Construction – Fall 2023
- Cost \$100k



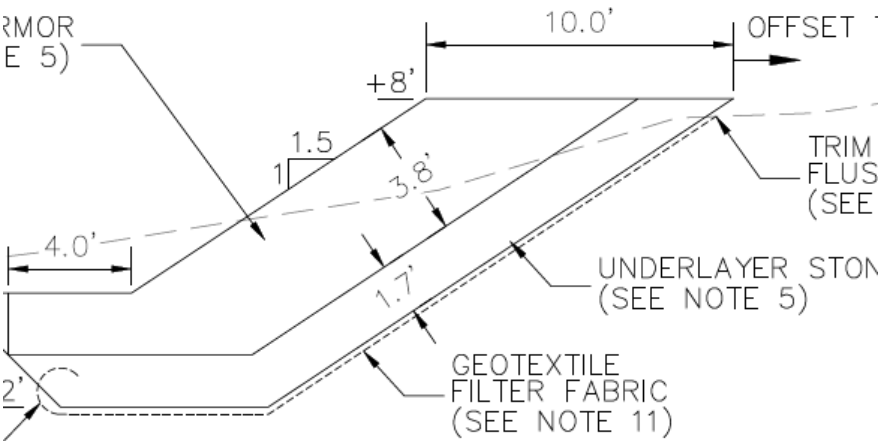
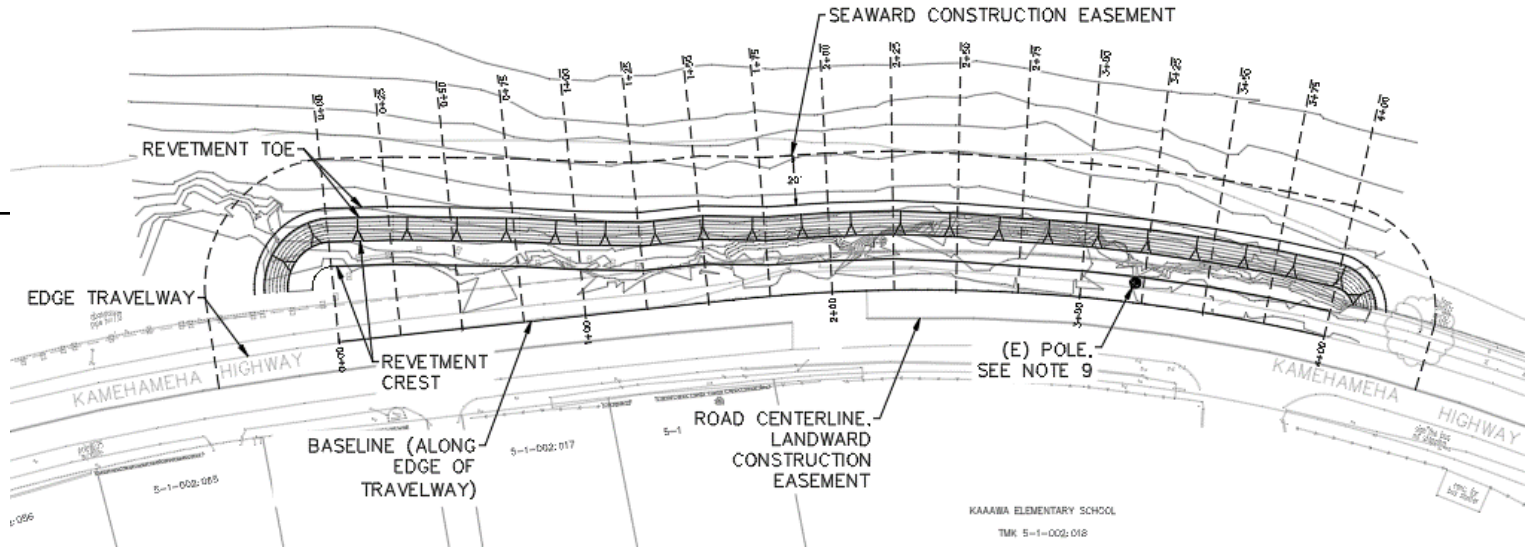
KA'A'AWA STREAM OUTFALL CLEANUP

- HDOT Coordination with City
- Work performed by City Division of Road Maintenance

MID-TERM PROJECTS

**Ka'a'awa Beach
Park**

KKPH



MID-TERM PROJECT: KA'A'AWA BEACH PARK

KA'A'AWA BEACH PARK - STATUS

- Scope of work:
 - To install approximately 500 LF of engineered rock revetment (25 years design life)
- Applied for a PROTECT Grant in August 2023 (\$3M)
- Status:
 - Roughly 50% design
 - Final EA-FONSI (Published June 16, 2022)
 - Pending Environmental Clearances
- Estimated Ready to Advertise: Spring 2024
- Estimated Cost: \$3M

KA'A'AWA BEACH PARK - STATUS

Completed/ Submitted

- Topographic Survey
- Archaeological Literature Review & Field Inspection
- Archaeological Inventory Survey
- Marine Assessment Report
- Environmental Assessment (EA)
- HRS Chapter 6E Determination

In Progress

- Section 106 Effect Determination
- Conservation District Use Application (CDUA)-
- Section 4(f) Permit
- NEPA Categorical Exemption
- Construction Plans

KA'A'WA ELEMENTARY STUDENT PROJECT

- Working with school to engage students
- Students can help to mitigate erosion
- Ideas to explore:
 - Erosion education – causes/types of, mitigation solutions, etc.
 - Plant native plants in Ka'a'awa
 - Community awareness

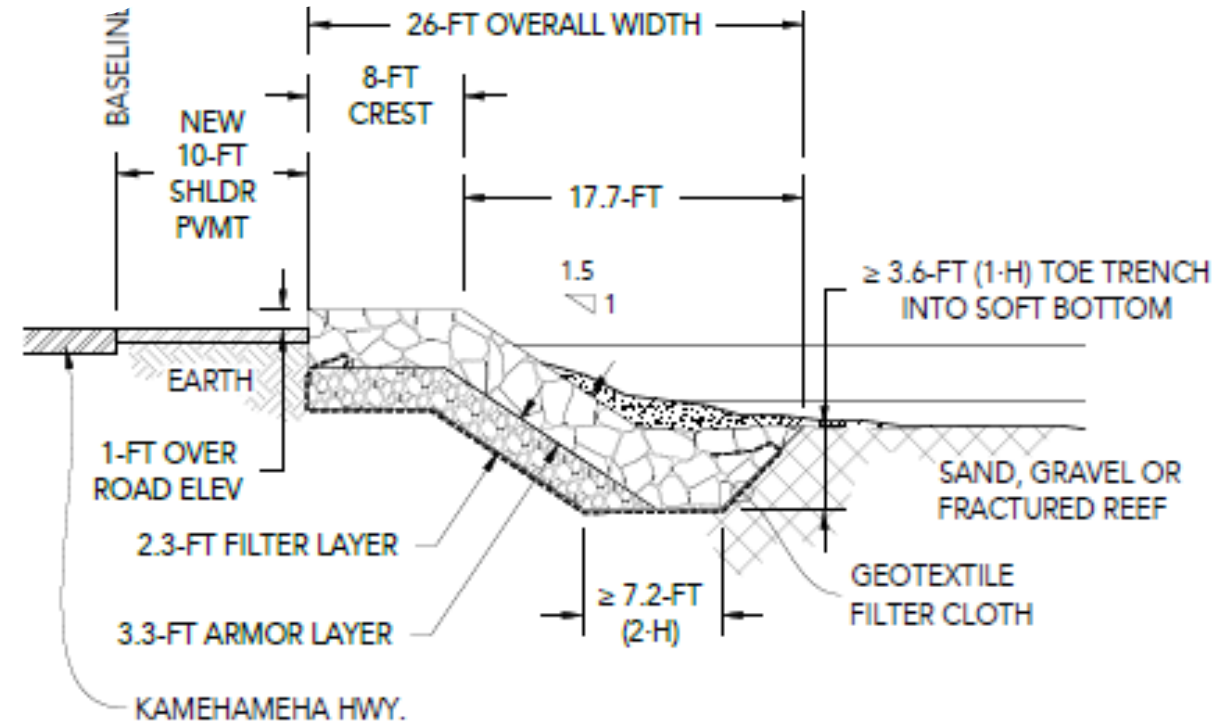


MID-TERM
PROJECT:
KKPH
(KUALOA,
KA'A'AWA,
PUNALU'U, &
HAU'ULA)



KKPH

- Revetment Alternative



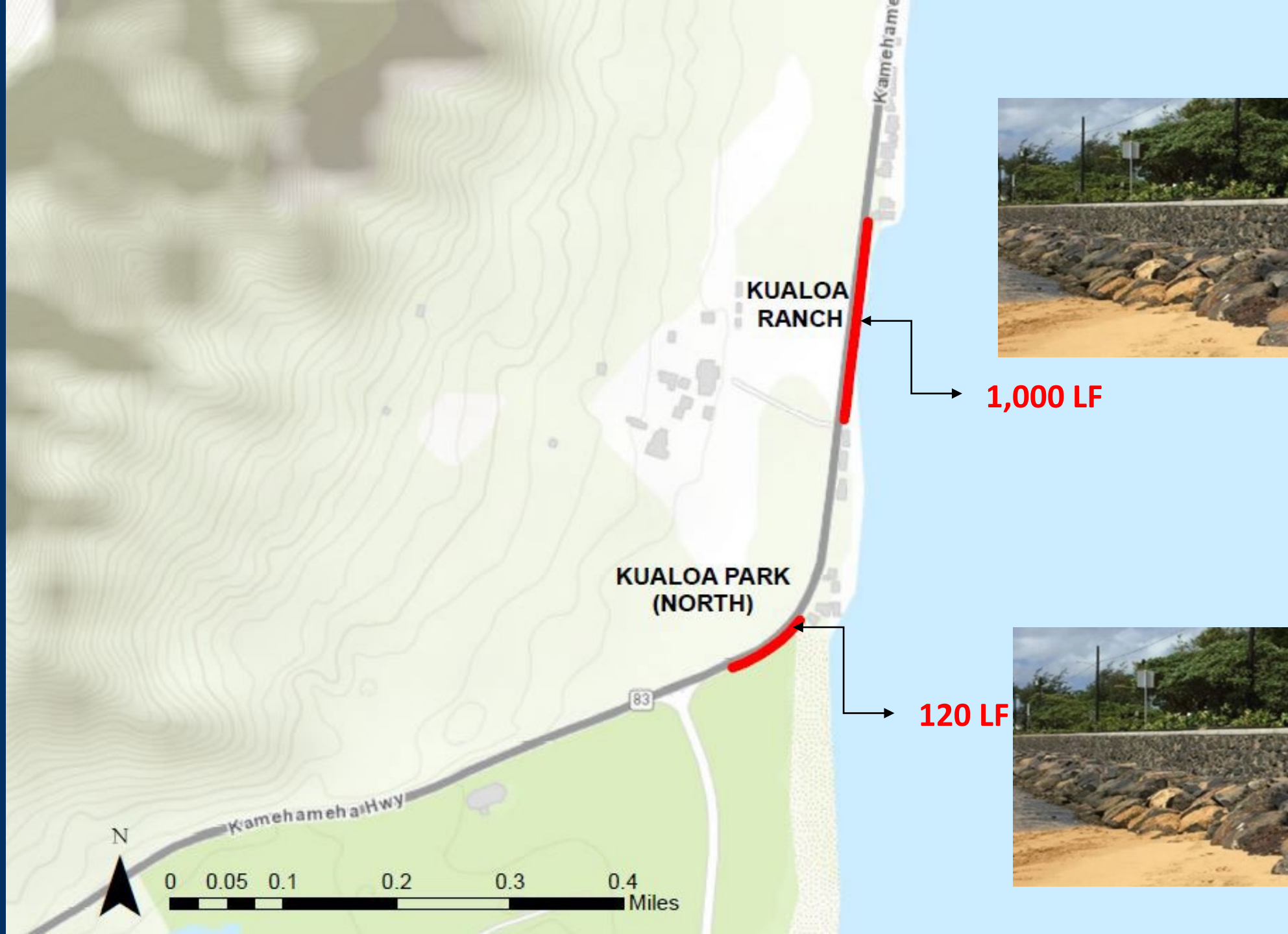
ALTERNATE TOE DETAIL FOR NON-HARD BOTTOM LOCATIONS

KKPH PREFERRED ALTERNATIVES

Project Site	Preferred Alternative	Approx. Length (feet)
Kualoa Park	Hybrid Seawall with Stone Apron	120
Kualoa Ranch	Hybrid Seawall with Stone Apron	1,000
Kaoio Point to Ka'a'awa Stream	Rock Revetment	4,600
Ka'a'awa Stream to Ka'a'awa Beach Park	Rock Revetment	1,450
Ka'a'awa in the Vicinity of Puakenikeni Road	Rock Revetment	1,700
Ka'a'awa in the Vicinity of Crouching Lion	Rock Revetment (North End)	3,000
	Hybrid Seawall with Stone Apron (South End)	
Punalu'u South	Rock Revetment	600
Punalu'u North	Rock Revetment	400
Hau'ula	Rock Revetment	2,500

Total = 15,370 feet ~ 3 miles

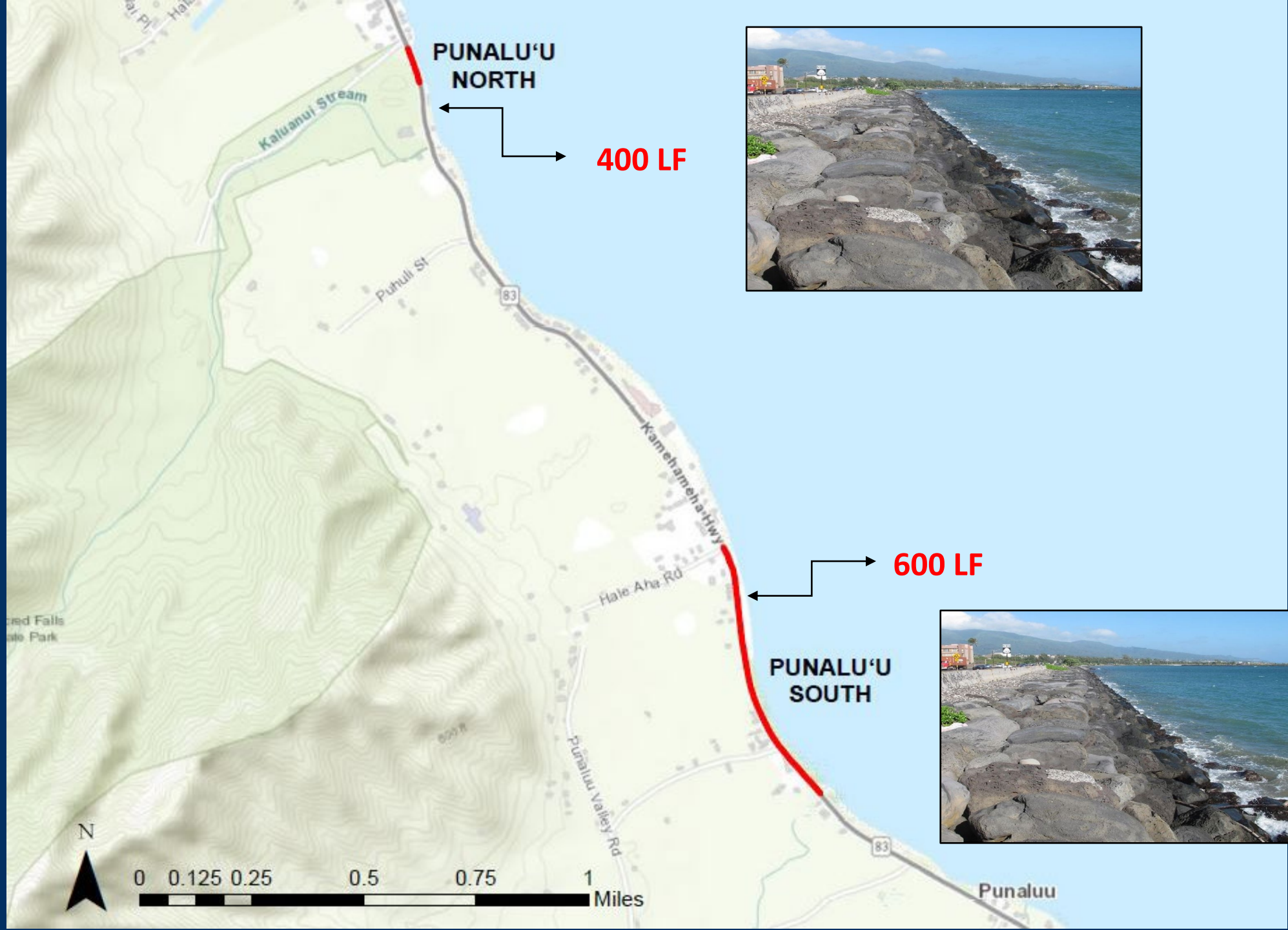
KUALOA PROJECT SITES



KA'A'AWA PROJECT SITES



PUNALU'U PROJECT SITES



HAU'ULA PROJECT SITE



KKPH – TIMELINE & COST

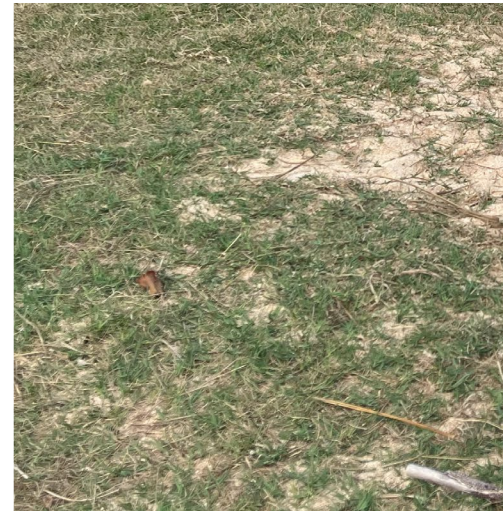
Draft EA	Late 2023
Final EA-FONSI	Summer 2024
Environmental Permits & Federal Environmental Clearance	Fall 2025
Final Construction Plans	Spring 2026
Advertisement	Summer 2026
Phase Construction Duration	Fall 2026 - 2029
<ul style="list-style-type: none">• To minimize traffic disruption to the public	
Preliminary Cost Estimate for Revetments	\$120M

KKPH - STATUS

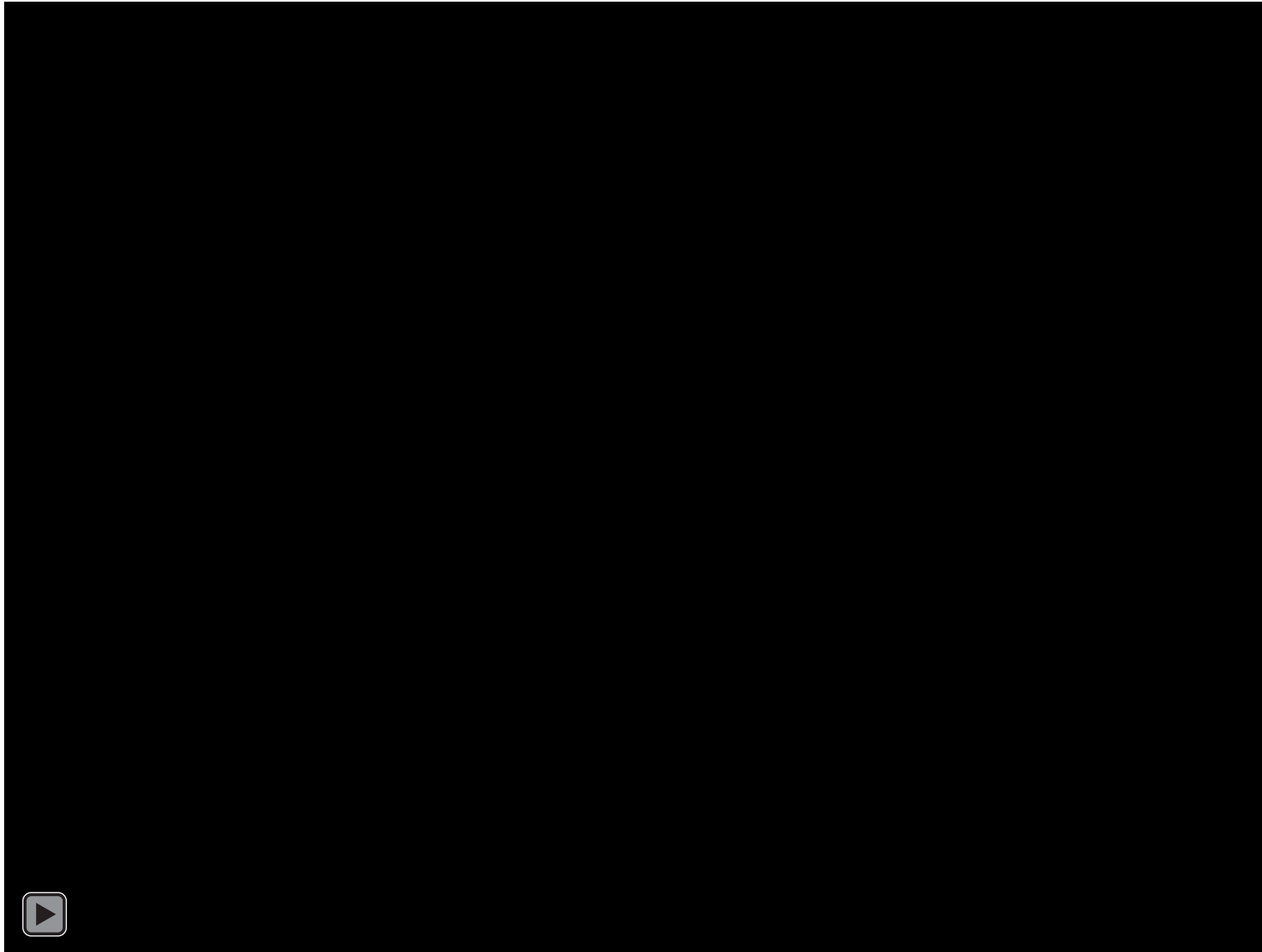
Completed/ Submitted	<ul style="list-style-type: none">• Topographic Survey• Archaeological Literature Review & Field Inspection• Basis of Design• Marine Assessment Report• Draft Cultural Impact Assessment
In Progress	<ul style="list-style-type: none">• Draft Environmental Assessment (EA)

SandSaver Pilot Program

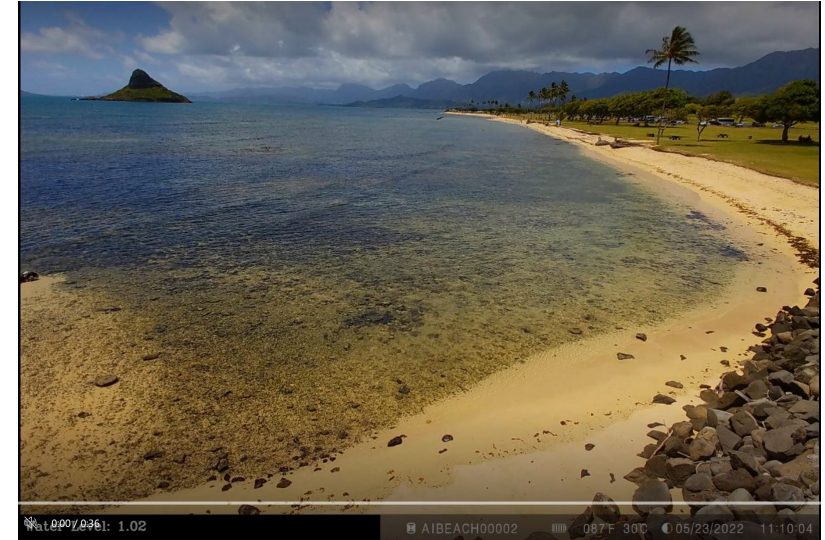
Kualoa, Oahu



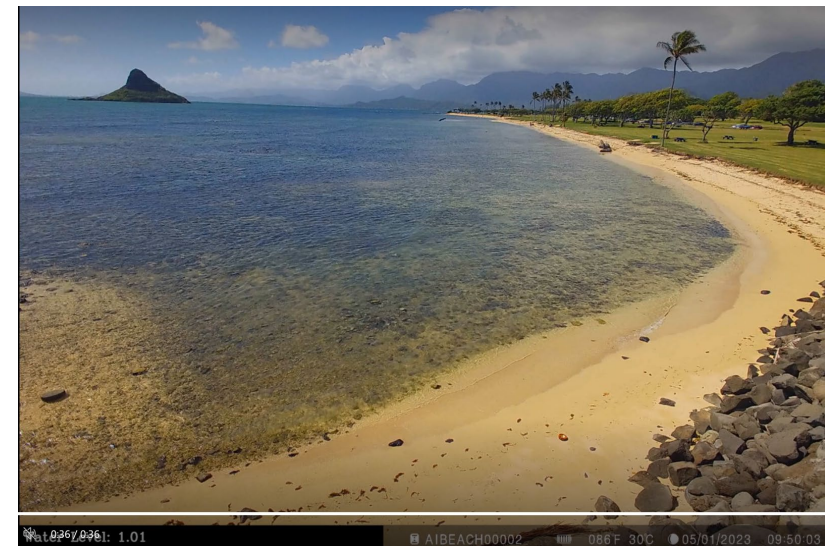
Shoreline Monitoring



May 2022



May 2023



KUALOA -SANDSAVER PILOT

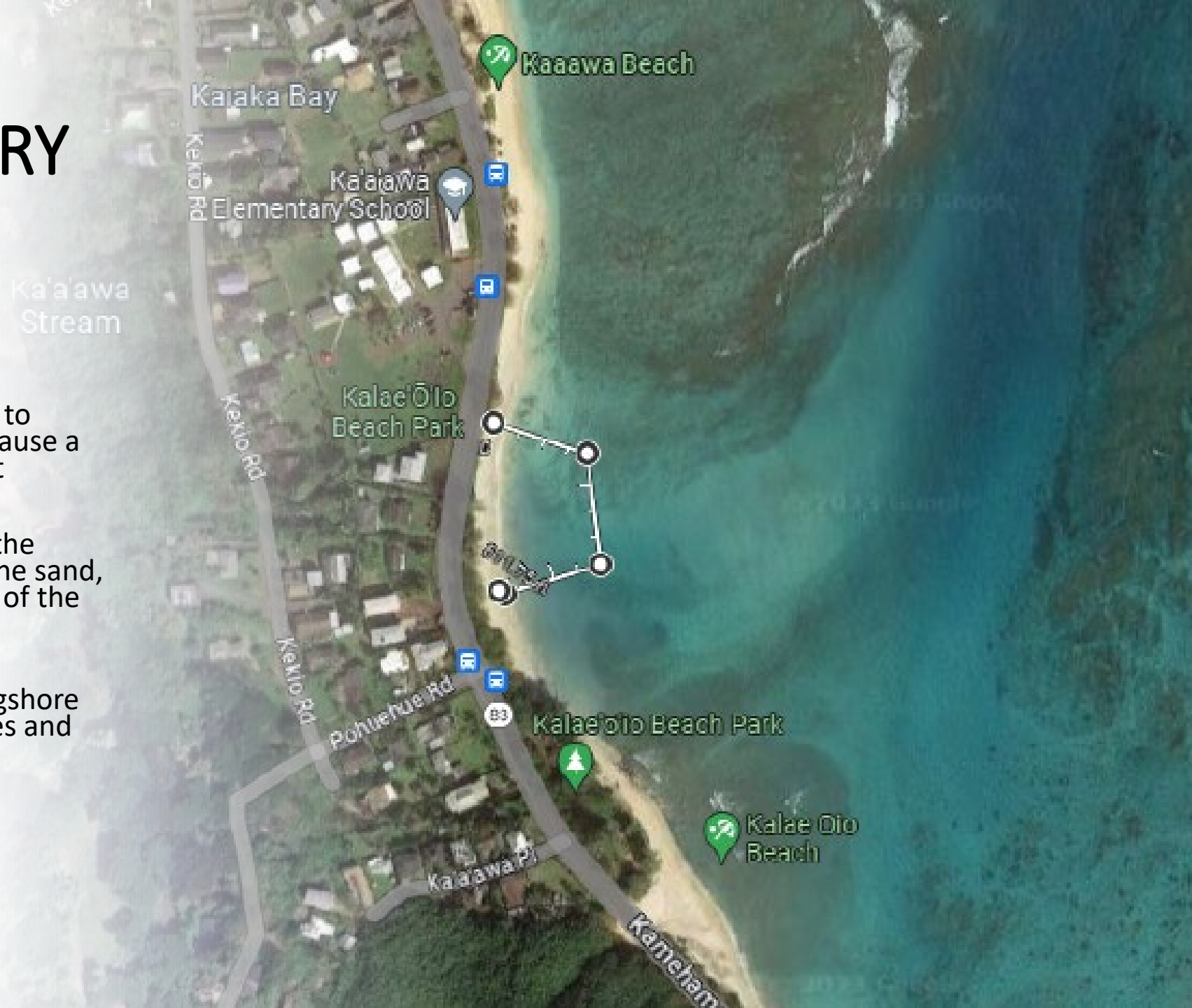
- Design: 60%
- Environmental Permitting and Clearance : Spring 2024
- Estimate Construction: Summer 2024
- Cost: \$750K



TRADITIONAL
DRY STACK WALL

TRADITIONAL DRY STACK WALL

- Tentative Location:
Vicinity of Kalae' Oio Beach Park
- Sidewalls were made high enough to accrete sand, yet not too high to cause a reflection of the longshore current
- Front wall is high enough to keep the outward current from taking out the sand, yet not too tall to cause reflection of the incoming wave
- Within a fringing reef that has longshore sediment transport from both sides and outward current channel area
- Schedule and Cost- TBD



MAHALO

[http://hidot.hawaii.gov/
presentations](http://hidot.hawaii.gov/presentations)



BACK UP



Typical Permits Needed for Shoreline Projects

Permit / Approval	Agency
Nationwide Permit (NWP) #13 – Bank Stabilization	US Army Corps of Engineers (USACE), Honolulu District
National Environmental Policy Act (NEPA) Categorical Exemption (CE)/ Environmental Assessment/ Environmental Impact Statement	US Environmental Protection Agency (EPA)
Section 4F of the US Department of Transportation (DOT) Act	Federal Highway Administration (FHWA)
Section 7 of the Endangered Species Act (ESA)	National Marine Fisheries Service (NMFS), Pacific Island Regional Office and US Fish and Wildlife Service (USFWS), Pacific Islands Fish and Wildlife Office
Section 305, Essential Fish Habitat (EFH), of the Magnuson-Stevens Fishery Conservation and Management Act (MSA)	National Marine Fisheries Service (NMFS), Pacific Island Regional Office
Coastal Zone Management (CZM) Federal Consistency Concurrence	State Department of Business, Economic Development and Tourism (DBEDT), Office of Planning and Sustainable Development (OPSD)
Conservation District Use Permit (CDUP)	State Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL)
Section 106 of the National Historic Preservation Act (NHPA)	State DLNR, State Historic Preservation Division (SHPD)
HRS 6E to determine if any significant historic properties would be affected	State DLNR, SHPD
HRS 195D to determine if any endangered species and critical habitat would be affected	State DLNR, Division of Aquatic Resources (DAR) and State DLNR, Division of Forestry and Wildlife (DOFAW)
Right-of-Entry (ROE) Permit to enter and work on State property	State DLNR, Land Division
Special Management Area (SMA) Permit	City and County of Honolulu (CCH) Department of Planning and Permitting (DPP)
Right-of-Entry (ROE) Permit to enter and work on CCH property	CCH Department of Parks and Recreation (DPR)
HEPA -Chapter 343 Exemption/ Environmental Assessment/ Environmental Impact Statement	Office of Environmental Quality Control (OEQC)