



State of Hawaii, Division of Boating and Ocean Recreation: Pokai Bay Jetty Wall Improvements Waianae, Oahu, Hawaii



23 October 2025

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Agenda

1. Problems
2. Opportunities
3. Constraints
4. Project Scoping: Design Concepts
5. Questions?

Problems

- Jetty wall structure breaches
- Water quality in Pokai Bay

Opportunities

- Repair breaches
- Increase flow through the jetty
- Improve flow on the leeside of the jetty

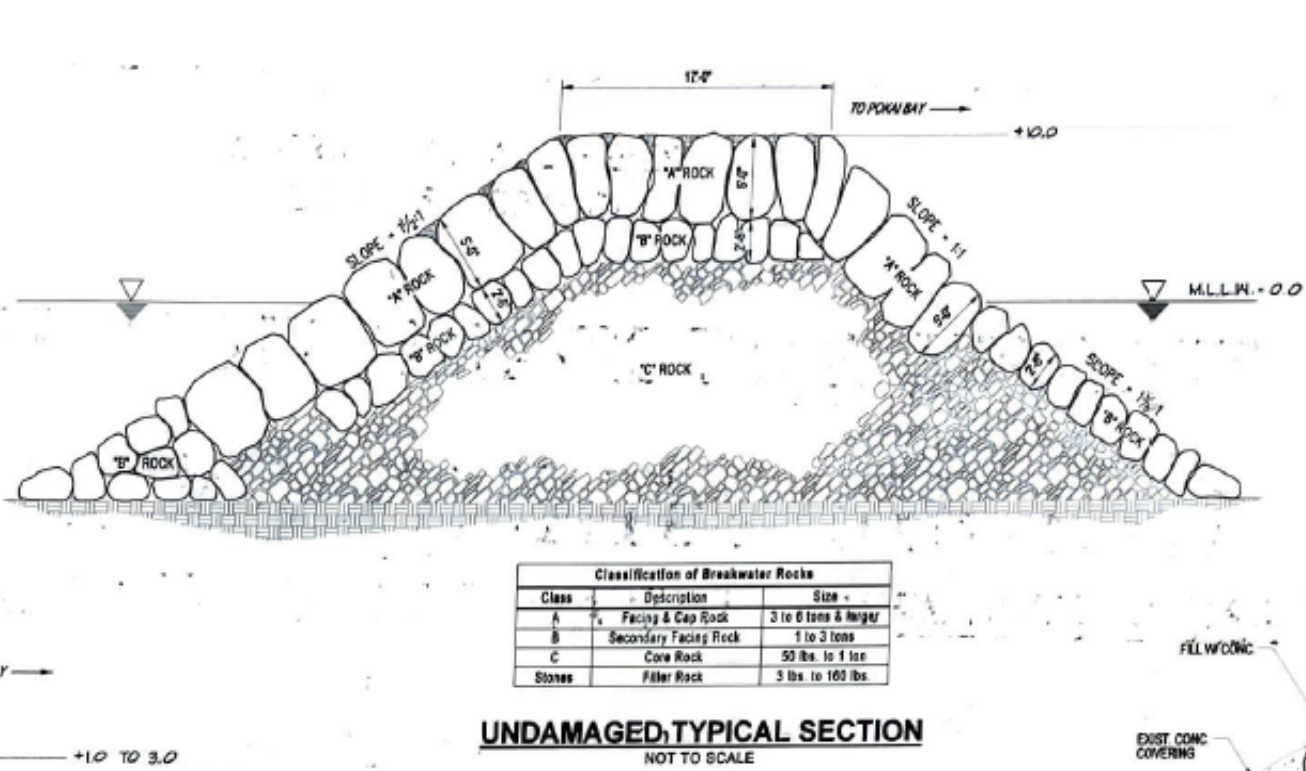
Constraints

- Improvements limited to the jetty wall
- Environmental Permitting
 - Hawaii Revised Statutes (HRS) 343 Exemption
 - USACE Nationwide Permit #3 and #33
- Design Schedule: by June 2025
- Design Budget: ~\$500k
- Construction Funding: ~\$5M in available funds

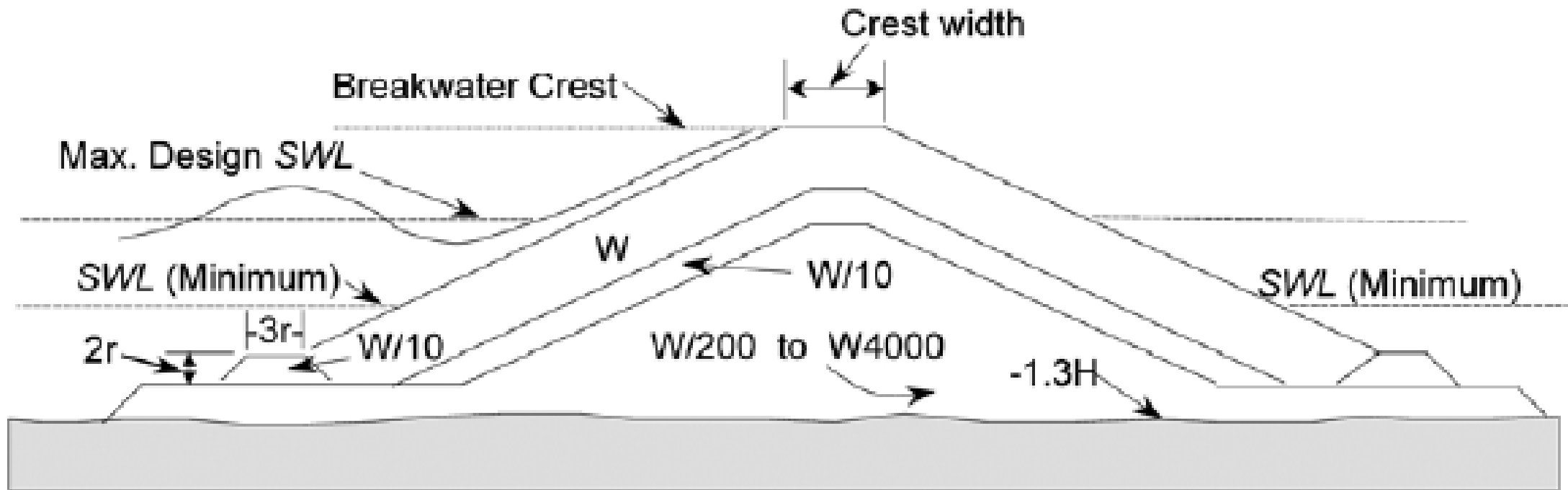
Project Scoping: Design Concepts

- Repair full jetty length
- Increase jetty porosity
- Other circulation considerations
 - Shorten breakwater
 - Create openings in jetty
 - Install culverts through the jetty
- Provide concrete jetty cap

As-Built Jetty Wall Cross-Section



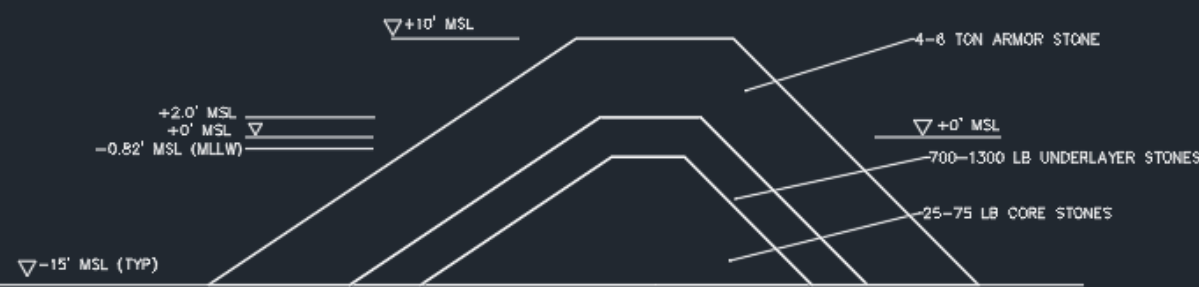
Standard Breakwater Cross-Section



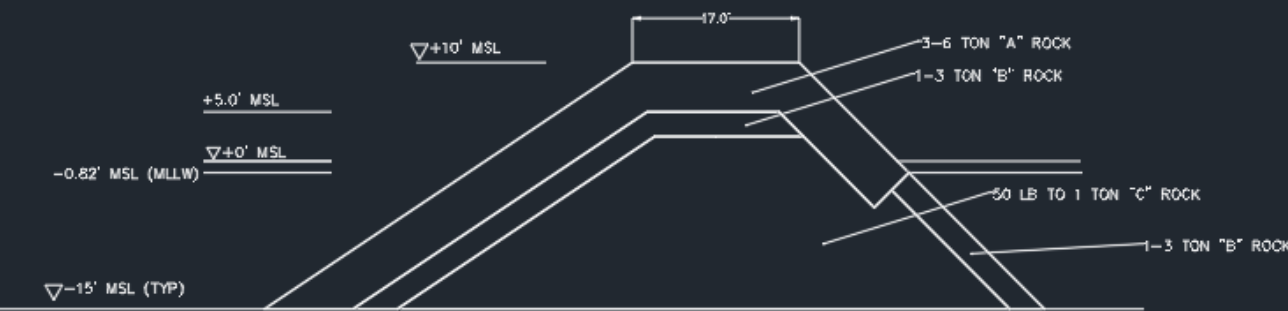
Recommended Three-layer Section

Comparison of Cross-Sections

Modified Cross-Section



As-Built Cross-Section



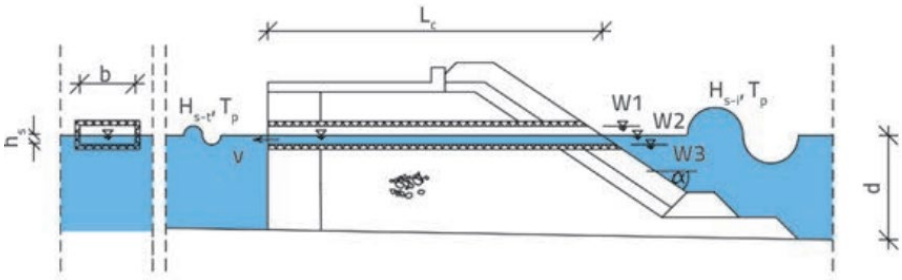
Shorten Jetty Wall



Segmented Jetty Wall



Jetty Wall Culverts



Jetty Wall Concrete Cap



Questions?