

**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
**Office of Conservation and Coastal Lands**  
**Honolulu, Hawaii**

February 12, 2016

**Board of Land and  
Natural Resources  
State of Hawaii  
Honolulu, Hawaii**

**REGARDING:** Proposed MEMORANDUM OF UNDERSTANDING between THE STATE OF HAWAII, Department of Land and Natural Resources, by its Board of Land and Natural Resources and the WAIKIKI BEACH SPECIAL IMPROVEMENT DISTRICT ASSOCIATION to Help Fund the Replacement of the Royal Hawaiian Groin at Waikiki, Oahu, Hawaii

The Department of Land and Natural Resources (DLNR) is proposing to conduct a project in partnership with the Waikiki Beach Special Improvement District Association (WBSIDA) to replace the failing Royal Hawaiian Groin (RHG) (**Exhibit 1**). The RHG has been in place since 1927 and is at risk of failure. The Department published a draft environmental assessment (DEA) for the project on January 26, 2016. *20Documents/EA\_and\_EIS\_Online\_Library/Oahu/2010s/2016-1-23-OA-5B-DEA-Royal-Hawaiian-Groin-Replacement.pdf*. The Department is seeking the permission of the Board to enter into a cost share agreement with the WBSIDA to share in the cost of the replacement of the Royal Hawaiian Groin. The project is estimated to cost up to \$1,500,000.

The proposed public-private partnership between DLNR and WBSIDA follows on the success of the 2012 Waikiki Beach Restoration Project to restore and maintain the vital public and visitor beach resources at Waikiki, which have suffered from chronic and seasonal erosion over the past few decades. The RHG is essential to the stability of Waikiki Beach. If the structure fails, much of Waikiki Beach will be rapidly lost to erosion.

The Department is seeking an appropriation from the Legislature for \$1,500,000 for the project for which a 50% cost match is required in private funds (**Exhibit 2, proposed CIP appropriation**). Thus, the DLNR wishes to enter into an MOU with the WBSIDA for which they will be responsible for funding 50% of the construction which could be up to \$750,000. The source of public funds for the cost match is from the WBSIDA through financing from the Waikiki Beach Special Improvement District No. 3.

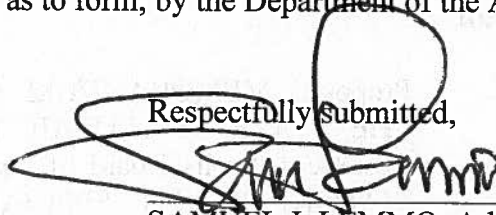
**Board of Land and  
Natural Resources**

The proposed Memorandum of Understanding (MOU) is attached (**Exhibit 3**). The Department of the Attorney General is currently reviewing the MOU. The proposed donor, WBSIDA, is in agreement with the proposed language of the MOU. If significant changes to the MOU are required, the matter will be resubmitted to the Board for review and approval.

**RECOMMEDATION:**

That the Board of Land and Natural Resources (BLNR) approve the Department entering into an MOU for the subject project, and authorize the Chairperson to finalize and sign the MOU subject to the approval, as to form, by the Department of the Attorney General.

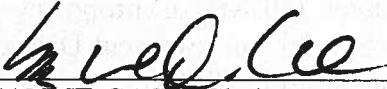
Respectfully Submitted,



SAMUEL J. LEMMO, Administrator  
Office of Conservation and Coastal Lands

Approved for submittal:

By:

  
\_\_\_\_\_  
SUZANNE CASE, Chairperson  
Board of Land and Natural Resources

RECEIVED  
OFFICE OF CONSERVATION  
AND COASTAL LANDS

**DRAFT ENVIRONMENTAL ASSESSMENT  
ROYAL HAWAIIAN GROIN IMPROVEMENT PROJECT**

Honolulu, Oahu, Hawaii

DEPT. OF LAND &  
NATURAL RESOURCES  
STATE OF HAWAII

*January 2016*



**Prepared for:**

State of Hawaii  
Department of Land and Natural Resources  
P.O. Box 621  
Honolulu, HI 96813

**Prepared by:**

Sea Engineering, Inc.  
Makai Research Pier  
Waimanalo, HI 96795

*Job No. 25428*



**EXHIBIT 1**

## 1. INTRODUCTION

### 1.1 Project Location and General Description

The existing Royal Hawaiian Groin (RHG) is located on Waikiki Beach, along the shoreline of Mamala Bay on the south shore of the island of Oahu, Hawaii. An overview of the project site is shown on Figure 1-1, and the existing groin is shown on Figure 1-2. The approximately 370-foot-long groin extends seaward from the shoreline between the Sheraton Waikiki and Royal Hawaiian hotels. The groin anchors and stabilizes the middle section of Waikiki Beach, known as the Royal Hawaiian Beach Sector or Royal Hawaiian Littoral Cell, which extends from the groin 1,730 feet east to the Ewa Kuhio Beach crib wall. The Royal Hawaiian Beach backshore is occupied from west to east by the Royal Hawaiian, the Outrigger Waikiki, and the Moana Surfrider hotels, and three beach concession operations at the east end. The Moana (1901) and the Royal Hawaiian (1927) are, respectively, the oldest and second oldest hotels in Waikiki. The RHG was originally constructed in 1927, and lengthened and heightened in 1930. No reported maintenance of the groin has been accomplished since that time. The location of the groin, the regulatory shorelines, property lines, and TMK's in the project area are shown on Figure 1-3.



Figure 1-1 Overview of project site

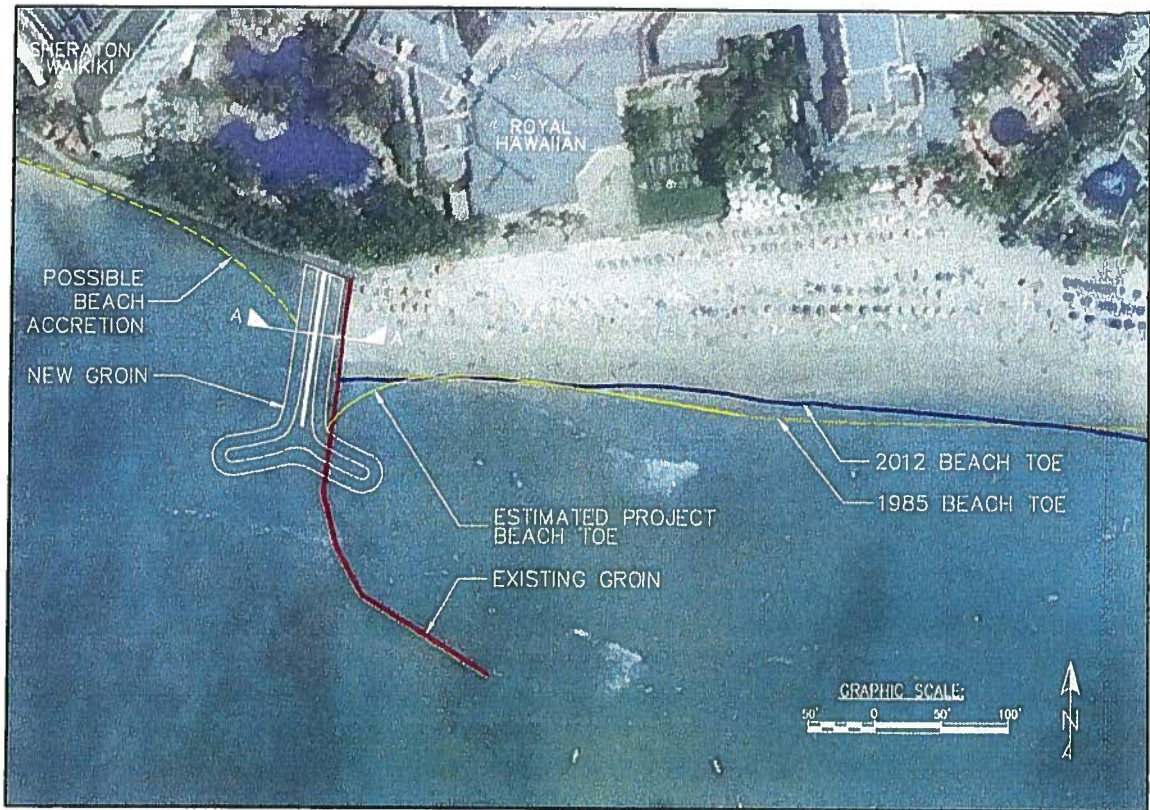


Figure 2-1 Plan view of proposed 180-foot long groin

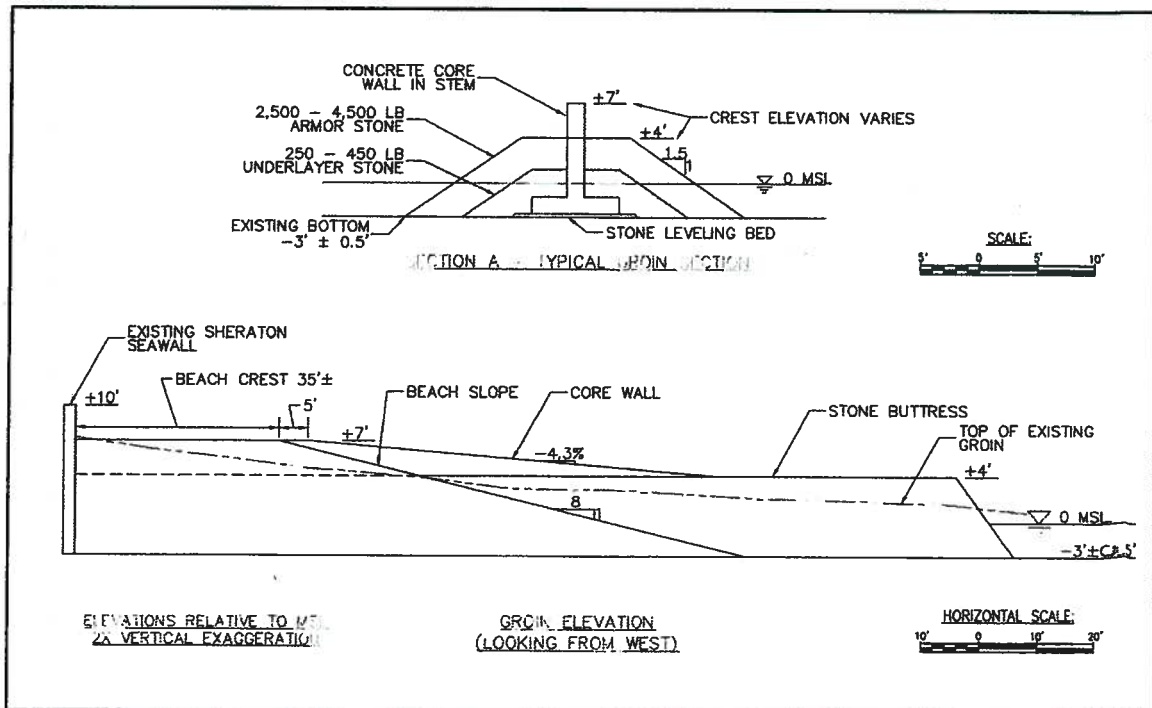


Figure 2-2 Groin section and elevation views

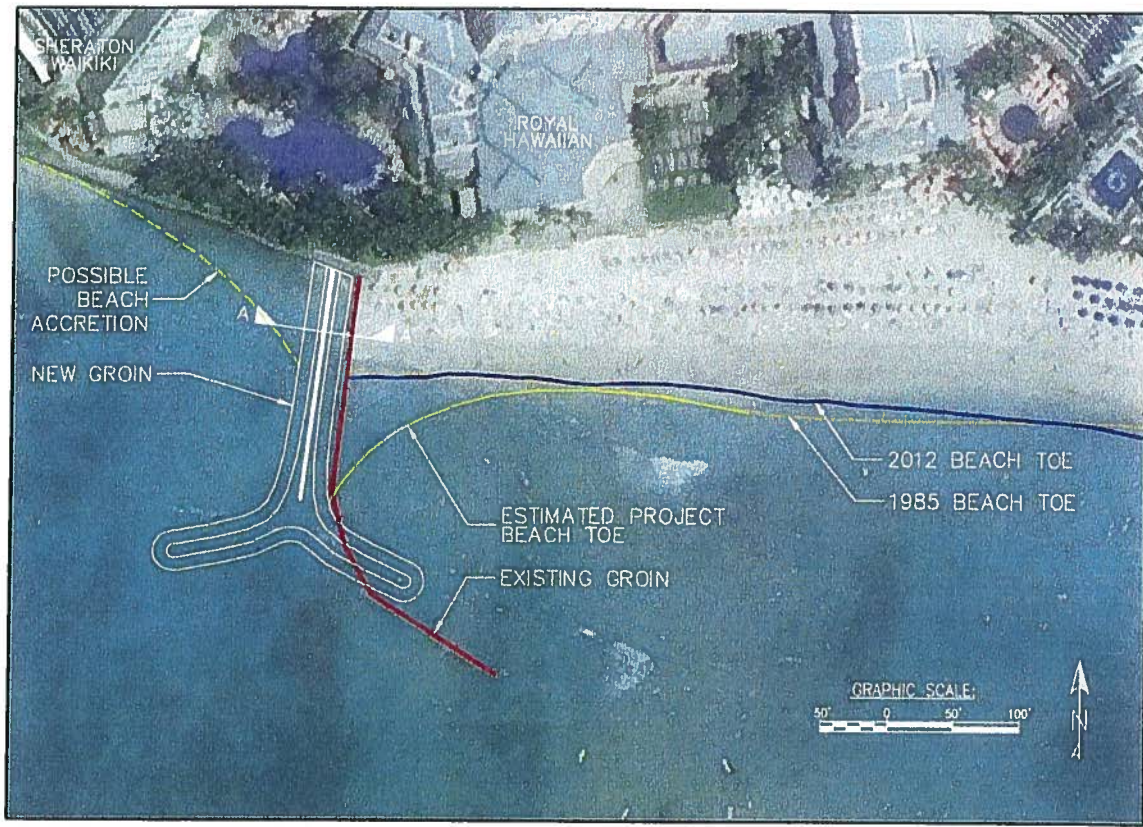


Figure 2-3 Plan view of 280-foot long groin

### 2.1.3 Option 3 – Adaptive Reuse of the Existing Groin

While the existing groin is very deteriorated, it would be possible to construct a rock rubblemound groin structure around the remnants of the existing groin, with the existing groin then becoming the core wall to prevent sand migration through the structure. This plan is shown on Figure 2-4 and Figure 2-5 and would consist of a 130-foot-long stem centered on the existing groin, and a 30-foot-long L-head, for a total length of 160 feet. This option would have the same general section and elevation profile as options 1 and 2. The nearshore the rock crest elevation would be +7 feet to fully buttress the existing groin, and would transition to +4 feet 60 feet from shore. A cast-in-place crest cap would be constructed to raise the crest elevation of the existing groin by up to 2 feet after placement of the rock. Given the fragile nature of the existing concrete block groin, construction around it would have to be done very carefully to avoid damage to or displacement of the existing structure. Construction would also require installation of a temporary barrier, such as steel sheet pile, near the east side of the groin to hold the sand back and permit excavation of sand adjacent to the groin for stone placement, and placement of a temporary stone construction access causeway from shore.

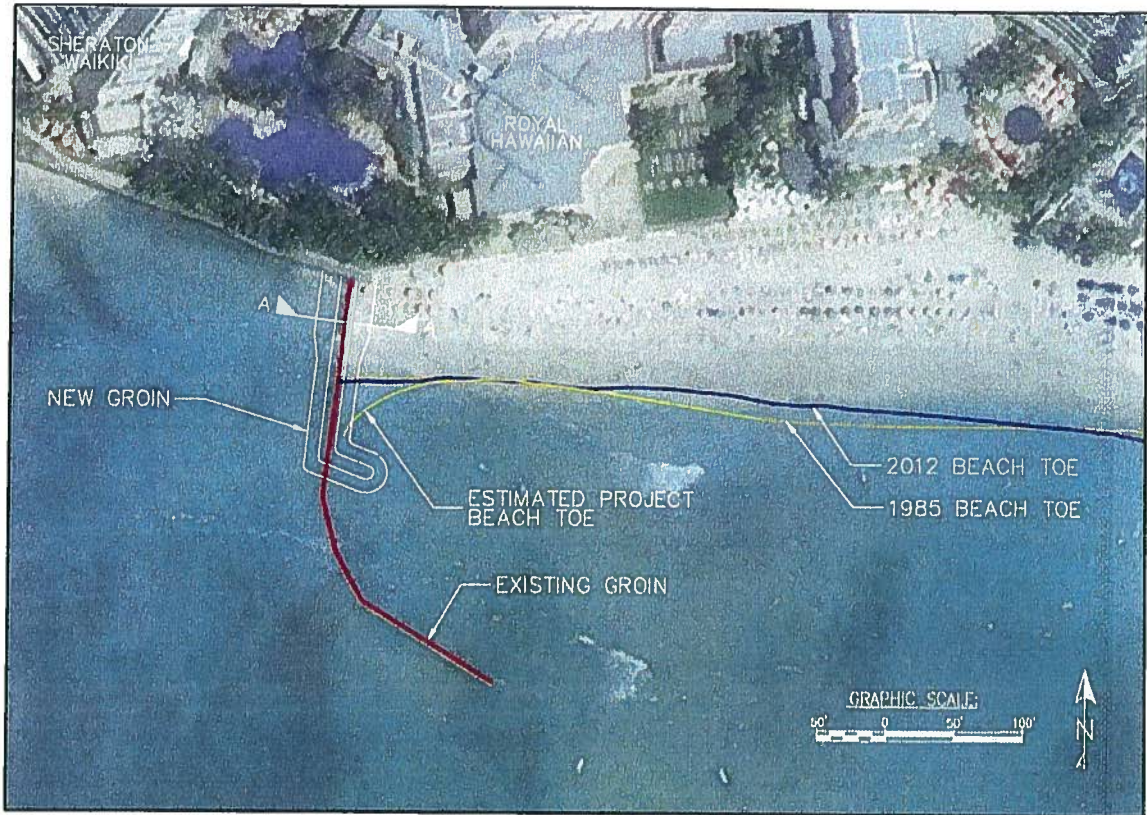


Figure 2-4 Adaptive Reuse groin plan view

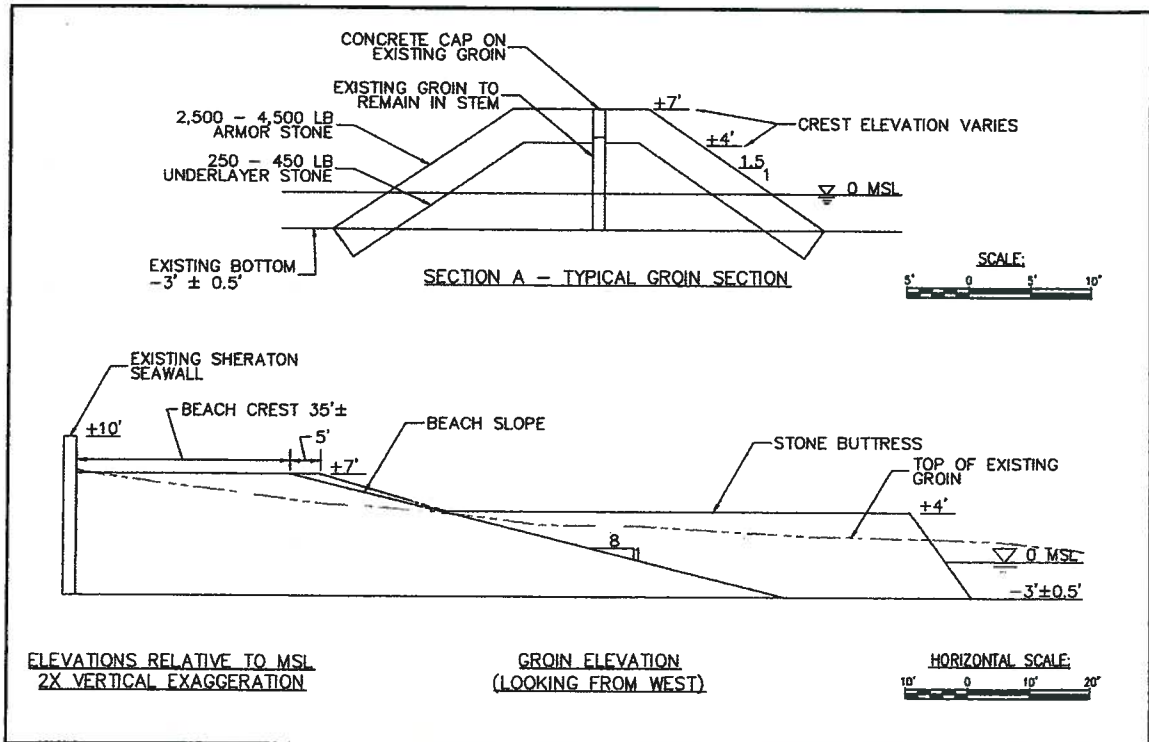


Figure 2-5 Adaptive Reuse groin section and elevation

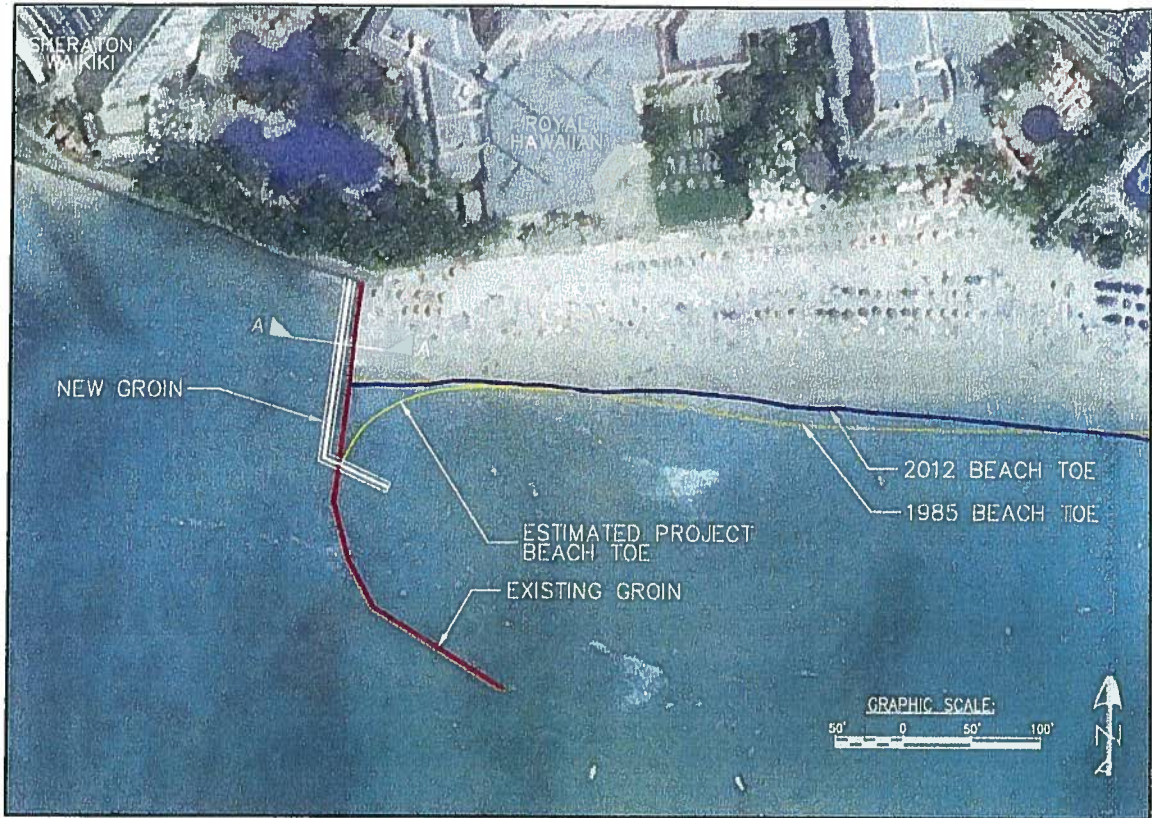


Figure 2-6 Concrete wall groin plan view

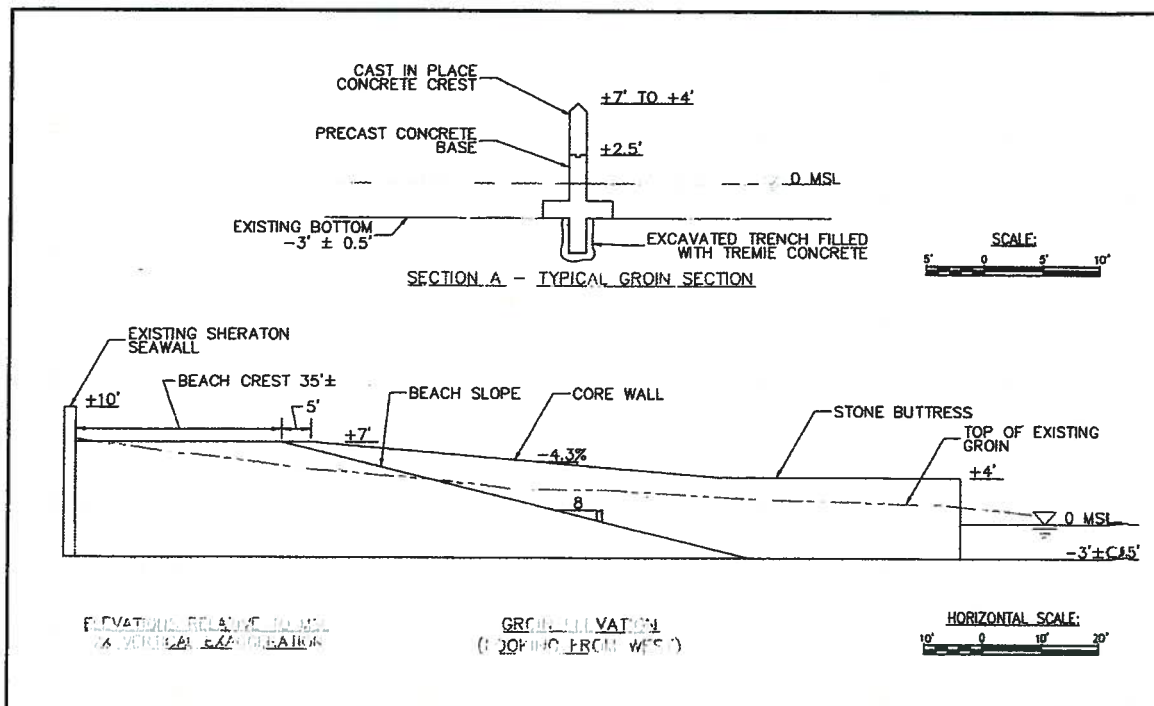


Figure 2-7 Concrete wall groin section and elevation





(a)



(b)

**Figure 2-9 Project site looking offshore: (a) existing condition, (b) with proposed 180-ft rock groin**

**FORM PAB**

Department of Budget  
and Finance (rev. 7/94)

**Questionnaire - General Obligation Bond Fund Appropriations**

|                                  |  |                   |
|----------------------------------|--|-------------------|
| <b>PART 1</b>                    | Department and Project                             |                   |
| 1 Department                     | Land and Natural Resources                         |                   |
| 2 Project Name                   | Royal Hawaiian Groin Replacement, Waikiki, Oahu    | 3 Project CIP No. |
| 4 Session Law (act no. and year) | 5 Program Area Function<br>Government-wide Support | 6 Item No.        |
| 7 Project Description            | Replace old Royal Hawaiian Groin with modern groin |                   |

|               |   |                                      |
|---------------|---|--------------------------------------|
| <b>PART 2</b> | Project Cost and Funding Sources  |                                      |
| 8             | Does this request for funding require general obligation bond fund appropriations?<br>If "no" box is checked, no further information other than signature and date is required. | <input checked="" type="radio"/> Yes |
| 9             | Has any appropriations been made for any portion of project prior to this request?  | <input type="checkbox"/> Yes         |
| 10            | Funding sources for costs of project made by this request   |                                      |
| a             | Direct Federal payment for construction and related capital costs   |                                      |
| b             | General obligation bond fund appropriations   | 750000                               |
| c             | General fund appropriations   |                                      |
| d             | Other State of Hawaii and county funds  |                                      |
| e             | Section 501(c)(3) funds   |                                      |
| f             | Private funds   | 750000                               |
| g             | Total capital costs made by this request  |                                      |

|               |   |                                |
|---------------|---|--------------------------------|
| <b>PART 3</b> | Use of general obligation bond fund appropriations and use of project   |                                |
| 11            | Total amount made by this request for each purpose to which general obligation bond fund appropriations will be applied                     |                                |
| a             | Total construction and related capital costs  | 750000                         |
| b             | Total nonconstruction and noncapital State of Hawaii costs  |                                |
| c             | Total grants to counties  |                                |
| d             | Total grants to Section 501(c)(3) corporations  |                                |
| e             | Total grants to private persons and organizations and Federal government  |                                |
| f             | Private funds   | 750000                         |
| g             | Total loans to Section 501(c)(3) corporations   |                                |
| h             | Total loans to private persons and organizations and Federal government   |                                |
| i             | Total use of general obligation bond fund appropriations  |                                |
| 12            | Total square footage and percentage of use of project for each purpose to which general obligation bond fund appropriations will be applied |                                |
|               |   | Square Footage      Percentage |
| a             | Total common area   |                                |
| b             | Total area used by State of Hawaii and counties   |                                |
| c             | Total area used by Section 501(c)(3) corporations   |                                |
| d             | Total area used by private persons and organizations and Federal government in trade or business  |                                |
| e             | Total area  |                                |

|               |  |                              |
|---------------|--|------------------------------|
| <b>PART 4</b> | Payment of operating and debt service costs and management of project  |                              |
| 13            | Will any lease or contract with a concessionaire or vendor be entered into in respect of any portion of the project? If yes, attach schedule and copy of each contract.  | <input type="checkbox"/> Yes |
| 14            | Will any lease, incentive payment contract or management contract be entered into in respect of any portion of the project? If yes, attach schedule and copy of each contract.   | <input type="checkbox"/> Yes |
| 15            | Will any payment be made (directly or indirectly) by the Federal government or any private person or organization pursuant to contract or other arrangement in respect to any portion of the project? If yes, attach schedule and copy of each contract. | <input type="checkbox"/> Yes |

EXHIBIT 2

CAPITAL PROJECT INFORMATION AND JUSTIFICATION SHEET

|                   |     |                 |  |
|-------------------|-----|-----------------|--|
| EXPENDING AGENCY: |     | CAPITAL PROJECT |  |
| USER PROGRAM ID   |     | NUMBER          |  |
| DEPT NUMBER       | 101 |                 |  |
| LNR               |     |                 |  |

PROJECT TITLE: Royal Hawaiian Groin Replacement, Waikiki, Oahu

PROJECT DESCRIPTION: Construction to replace the Royal Hawaiian Groin at Waikiki Beach with a new groin in the same location

| COST ELEMENT | TOTAL ESTIMATED PROJECT COST (in Thousands of Dollars) |      |     |    |      |     |                                |      |     |    |      |     | TOTAL PROJECT COST |              |      |     |
|--------------|--|------|-----|----|------|-----|--------------------------------|------|-----|----|------|-----|--------------------|--------------|------|-----|
|              | PRIOR APPROPRIATIONS (Including MOF)                   |      |     |    |      |     | APPROPRIATIONS (Including MOF) |      |     |    |      |     |                    | FUTURE YEARS |      |     |
| ACT          | YR   | ITEM | ACT | YR | ITEM | ACT | YR                             | ITEM | ACT | YR | ITEM | ACT | YR                 |              | ITEM |     |
| PLANS        |  |      |     |    |      |     |                                |      |     |    |      |     |                    |              |      |     |
| LAND         |  |      |     |    |      |     |                                |      |     |    |      |     |                    |              |      |     |
| DESIGN       |  |      |     |    |      |     |                                |      |     |    |      |     |                    |              |      |     |
| CONSTRUCT    |  |      |     |    |      |     |                                |      |     |    |      |     |                    |              |      |     |
| EQUIPMENT    |  |      |     |    |      |     |                                |      |     |    |      |     |                    |              |      |     |
| TOTALS       |  |      |     |    |      |     |                                |      |     |    |      |     |                    |              | 1500 | C/R |

PROJECT INFORMATION AND JUSTIFICATION (use back if necessary):

a. Total Scope of Project

The proposed project is to replace the Royal Hawaiian Groin (RHG) at Waikiki Beach. The existing groin was constructed around 1927. The groin is comprised of large concrete stacked blocks and extends several hundred feet into the ocean. The groin is connected to the seawall in from of the western end of the Royal Hawaiian Hotel. The structure has been leaking sand and has begun to lean/bow significantly in a northwest direction, and is in jeopardy of falling. A new groin would be constructed next to the existing groin, and the old groin would be removed. The new groin would be constructed based on modern coastal engineering specifications, and would most likely consist of a sealed rubble mound structure. The foot print of the new groin would be similar to the old groin, and would serve the exact same purpose as the old groin which is to retain/trap sand.

b. Identification of Need and Evaluation of Existing Situation.

The project is to replace the RHG at Waikiki Beach. The existing groin was constructed around 1927. The groin is comprised of large concrete stacked blocks. The structure has been leaking sand and has begun to lean/bow significantly, and is in jeopardy of falling. The groin is a terminal structure that captures/traps sand and allows the central portion of Waikiki Beach (the most heavily used portion) to remain stable and wide. The State completed the Waikiki Beach Maintenance project in May, 2012 and placed approximately 26,000 cubic yards of sand on the beach at a cost of over \$2,000,000. If the groin fails, this sand will escape and the previously nourished beach will be severely eroded. This would result in severe economic hardship for Waikiki, which relies heavily on a healthy beach for its economic wellbeing.

c. Alternatives Considered and Impact if Project is Deferred.

Deferral or do nothing alternatives are not viable because the structure may fail at any time. The sand losses would be severely problematic for the visitor industry in Waikiki, which comprises 42 percent (income) of Hawaii's total visitor economy. The RHG was built in 1927 as its responsible for maintaining the stability/volume of the main portion of Waikiki Beach (Kuhio Beach to Royal Hawaiian Hotel). Deferral is not a good idea as the groin appears to be in imminent danger of falling. There is no other viable alternative to total replacement. It would not be economically viable to repair the groin.

d. Discuss What Improvements Will Take Place When Project Completed (including benefits to be derived and/or deficiencies this project intends to correct).

The groin will be built roughly in the same place as the old groin. It will differ only due to design modifications, and will look different (rubble mound vs. straight block wall). It will function exactly the same as the old wall (terminal groin). The project will benefit Waikiki Beach because it will resolve the sand leaking problem and will ensure that Waikiki Beach will remain stable and secure.

e. Impact Upon Future Operating Requirements (show initial and ongoing funding requirements by cost element, including position count, means of financing, fiscal year).

There will be no on-going operating budget requirements. Periodic inspection would be conducted within existing operational budgets.

f. Additional Information:

Private funds will be sought to cost share in this project.

EXHIBIT 2

MEMORANDUM OF UNDERSTANDING  
(ROYAL HAWAIIAN GROIN REPLACEMENT PROJECT)

This memorandum of understanding (MOU), dated \_\_\_\_\_, outlines the agreement between the State of Hawaii, Department of Land and Natural Resources (DLNR) and the Waikiki Beach Special Improvement District Association (WBSIDA) regarding replacement of the Royal Hawaiian Groin at Waikiki, Oahu, Hawaii.

RECITALS

- A. The WBSIDA, in concert with DLNR, through its Board of Land and Natural Resources (BLNR) and Office of Conservation and Coastal Lands (OCCL), enter into this agreement to fund replacement of the Royal Hawaiian Groin (the "Project").
- B. The Project work will entail planning, design, permitting, and construction for the replacement of the Royal Hawaiian Groin, an engineered shoreline erosion control structure at the Ewa (West) end of Waikiki Beach which has been in place since 1927 and is at risk of failure.
- C. This MOU covers construction, monitoring, and an after action report for the Project.
- D. The intent of this Project is to protect and preserve the beach resource at Waikiki for the benefit of the public at large, to alleviate hazards to upland development from long-term and seasonal beach erosion, and to plan for and design the optimal solution for beach stabilization in full compliance with environmentally sound planning and design principles as determined through the establishment of an acceptable design and EA, gain all permitting necessary to initiate the project, and to provide for construction and monitoring and an after action report.
- E. DLNR has engaged the services of a coastal engineering company, to produce the EA and a comprehensive conceptual design report. If it is determined that a project is feasible, DLNR will engage the services of a coastal engineering company for permitting, design, and construction management. The State of Hawaii intends to appropriate \$1,500,000, total, for the Project, for which a 50% cost match is required from public and private partners. Thus, the DLNR wishes to enter into an MOU with the WBSIDA for \$750,000 to cover the costs of the Project construction. The source of public and private funds for the cost match is from the WBSIDA through financing from the Waikiki Beach Special Improvement District No. 3.
- F. DLNR will manage planning, permitting, and construction for the Project. The DLNR and WBSIDA desire to memorialize their understanding of the terms and conditions upon which DLNR and WBSIDA will provide said funds.

AGREEMENT

Now, THEREFORE, DLNR and WBSIDA hereby agree as follows:

1. Cost of Project: The current estimated cost of the Project as described above is approximately ONE MILLION FIVE HUNDRED THOUSAND DOLLARS (\$1,500,000).
2. Joint Funding of the Project: DLNR and WBSIDA agree to pursue joint funding of the project. WBSIDA shall accrue one-half of the estimated cost of the Project and DLNR shall accrue one-half of the estimated cost of the Project to be paid by the State.
3. Contribution: WBSIDA agrees to contribute to the DLNR, FIFTY PERCENT OF THE PROJECT COST (SEVEN HUNDRED AND FIFTY THOUSAND DOLLARS, the "WBSIDA Contribution"), upon and subject to the terms and conditions set forth in this MOU. DLNR agrees to fund FIFTY PERCENT OF THE PROJECT COST (SEVEN HUNDRED AND FIFTY THOUSAND DOLLARS) under this MOU.
4. Use of Funds: The DLNR agrees that the funding provided by WBSIDA shall be used solely as set forth in the MOU to support the Project to replace the failing Royal Hawaiian Groin structure.
5. Conditions of Funding. WBSIDA's obligation to deposit the WBSIDA Contribution shall be conditioned upon the satisfaction in all material respects of the following provisions.
6. Disbursement: The funds deposited by WBSIDA pursuant to this agreement shall be held in a separate account and shall not be commingled with other funds of the State.
7. DLNR's Disbursement of Money to the Contractor: The DLNR shall fund each progress payment by drawing down on the accounts of DLNR and WBSIDA who are funding the total cost of the work under this MOU.
8. Return of Funds: Any funds comprising the WBSIDA Contribution shall be returned to WBSIDA as set forth herein below:
  - a. If for any reason the DLNR is unable to award a contract for a consultant for any portion of the project as provided in paragraph C above by June 30, 2018, the DLNR shall provide written notification to WBSIDA and shall promptly return any unused portion of the WBSIDA Contribution to WBSIDA.
  - b. If for any reason a contract for the purposes of this MOU is awarded but there are circumstances which arise by June 30, 2018 which prevent or otherwise make impracticable its completion, the DLNR shall promptly return any unused portion of the WBSIDA Contribution to WBSIDA.

- c. If, after the DLNR's final acceptance of work covered by this MOU and DLNR's final payment to the consultant is made, there are any unused funds, the DLNR shall promptly return any unused portion of the WBSIDA Contribution to WBSIDA.

9. Miscellaneous Provisions:

- a. Partial Invalidity: If any provision of the MOU or its application to any person or circumstance shall to any extent be invalid or unenforceable, the remaining provisions of this MOU, or the application of such provision to person or circumstances other than those as to which it is invalid or unenforceable, shall not be affected.
- b. Governing Law: This MOU shall be construed, interpreted and applied in accordance with the laws of the State of Hawaii.
- c. No Third Party Beneficiaries: No term or provision of the MOU is intended to be, or shall it be, for the benefit of any person, firm, organization or corporation not a party hereto, and no such other person, firm, organization or corporation shall have any right or cause of action hereunder.
- d. No Partnership: Any intention to create a joint venture or partnership relation between the parties hereto is hereby expressly disclaimed.
- e. Modifications: This MOU may not be modified except by a written agreement signed by both parties.
- f. Binding on and Inuring to Benefit of Successors and Assigns: This MOU shall be binding upon, and shall insure to the benefit of the parties, and their respective successors and assigns.
- g. Notices: All notices and other communications in connection with this MOU shall be in writing and shall be deemed to have been received by a party when actually received in the case of hand delivery, facsimile transmission, e-mail, or internationally recognized courier services, or three (3) days after being sent by United States mail, as the case may be, using the information of the DLNR and WBSIDA as shown below. Any refusal to accept delivery of a written notice delivered or mailed to the addresses set forth below resulting in non-operation of the receiving party's facsimile equipment, shall be deemed to be receipt of such notice for the purpose of this MOU.

DLNR: Department of Land and Natural Resources  
Office of Conservation and Coastal Lands  
1151 Punchbowl Street  
Honolulu, Hawaii 96822  
Facsimile No.: (808) 587-0377

WBSIDA: Waikiki Beach Special Improvement District Association  
2250 Kalakaua Avenue, Suite 315  
Honolulu, Hawaii 96815  
Facsimile No.: (808) 923-2622

Counterparts; Facsimile Execution: The parties hereto agree that this instrument may be executed in counterparts, each of which shall be deemed an original, and said counterparts shall together constitute one and the same agreement, binding upon all of the parties hereto, notwithstanding that all of the parties are not signatory to the original or the same counterparts. For all purposes, including, without limitation, recordation, filing and delivery of this instrument, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document. An executed counterpart of this instrument transmitted and received by facsimile or email shall be deemed for all purposes to be an original, executed counterpart thereof.

IN WITNESS WHEREOF, the DLNR and WBSIDA have executed this Memorandum of Understanding as of the date first above written.

Approved as to form:

**Waikiki Beach Special Improvement  
District Association**

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Print name: \_\_\_\_\_

Title: \_\_\_\_\_

Approved as to form:

**State of Hawaii, Department of Land and  
Natural Resources**

By: \_\_\_\_\_

By: \_\_\_\_\_

Suzanne D. Case, Chairperson  
Board of Land and Natural Resources

Title: \_\_\_\_\_

Approved by the Board of Land and Natural  
Resources at its meeting held on:

\_\_\_\_\_