



## O&M INSPECTION REPORT FOR NAVIGATION PROJECTS

Nawiliwili Small Boat Harbor

Honolulu Engineer District

CEPOH-EC-T

Nawiliwili07rpt-SBH.doc

1. Project Name: Nawiliwili SBH

2. Date of Inspection: June 11, 2007

3. Inspection Personnel:

| Name          | Agency/Office | Telephone No. |
|---------------|---------------|---------------|
| a. Dan Meyers | CEPOH-EC-T    | 438-8875      |

4. Discussion:

The original construction of the breakwater(s) and revetted dike called for rough and irregular placement of the armor stone layer.

Conducted site inspection and noted the following:

Revetted Dike:



a. Sta. 3+95, Overview, Juvenile trees are well established and should be removed.



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b. Sta. 5+23, HS, remove mooring anchor.



c. Sta.5+50, HS, overview of root.



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d. Sta. 6+51, HS, Monitor 20' x 4' area of missing armor layer (underwater).



e. Sta. 7+26, OS, flipped armor stone and tree should be removed and crest eroded (potholes).



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f. Sta. 8+62, Overview, crest eroded (potholes).

Note: Sta. 9+12, PC Marker, White Cap



g. Sta, 9+00, OS, remove vegetation, unable to inspect.



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h. Sta. 11+33, HS, overview of sideslope, and crest eroded (potholes).

Note: Sta. 11+64 Turnaround.



i. Sta. 13+82, OS, overview of sideslope adj. to # 7 green chnl marker.



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- j. Sta. Sta. 16+10, Crest, fill low spot approximately 8" deep.



- k. Sta. 16+30, HS, overview adjacent to green chnl marker # 5.



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1. Sta. 16+62, OS, remove tree.

Breakwater:



- m. Sta. 18+30, begin breakwater, vegetation starting to take root.



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n. Sta. 19+34, overview at 1<sup>st</sup> bend, aerial marker.



o. Sta. 19+46, crest & hinge voids.



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p. Sta. Sta. 20+04, HS, flipped armor stone.



q. Sta. 20+27, OS, scalloped toe area.



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r. Sta. 20+30, OS, cracked armor stone.



s. Sta. 21+34, OS, overview at second bend.



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t. Sta. 21+34, Crest, maker "X" at 2<sup>nd</sup> bend.



u. Sta. 21+89, OS, sunken boat at toe of structure. No problem.



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v. Sta. 22+50, CL cracked armor stone.



x. Sta. 22+56, OS, monitor scalloped and dislodged armor stone.



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y. Sta. 22+83, head and aerial survey cross, no change since last inspection.



z. Stub Breakwater overview.



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aa. Sta. 3+92, overview of stub breakwater.



bb. Sta. 4+86, HS, monitor movement of various 100# armor stones slight settling at hinge.



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cc. Sta. 5+36, Overview of head.



dd. Sta. 5+36, OS, Overview.



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5. Conclusion:

Vegetation control needs to be done and the crest of the revetted dike has numerous eroded areas caused by excessive vehicular traffic. Abandoned vehicles have been removed from the structure in the past and during this inspection and questionable activities were being conducted. The rating for FY07 is Fair.

Signed: \_\_\_\_\_  
Dan Meyers, CEPOH-EC-T

Signed: \_\_\_\_\_  
James Pennaz, P.E., Ch, CEPOH-EC-T

Enclosure(s)

1. Site Plan (8½"x11")
2. Fact Sheet Dated June 2002 (8½"x11")





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## NAWILIWILI SMALL BOAT HARBOR, KAUAI, HAWAII

### CONDITION OF IMPROVEMENT 30 SEPTEMBER 1989

PREVIOUS PROJECTS: None.

EXISTING PROJECT: Authorized 22 May 1964 under Section 107 of the River and Harbor Act of 1960, as amended. Provides for an entrance channel 1,035 feet long, 120 feet wide and 12 feet deep; access channel 690 feet long, 80 feet wide, 8-10 feet deep; a revetted dike 1,458 feet long; a stub breakwater 142 feet long; and a breakwater 453 feet long.

### PROGRESS OF WORK

Completed and Under Maintenance: The project was completed in October 1974.

Work Remaining: None.

### COST OF CONSTRUCTION:

| <u>Completed Works:</u> | <u>New Work</u> |
|-------------------------|-----------------|
| United States Funds     | \$ 562,800      |
| Contributed Funds       |                 |
| Required                | 405,471         |
| Other                   | <u>203,143</u>  |
| Total Costs             | \$1,171,414     |

RANGE OF TIDES: The range of tide between mean lower low water and mean higher high water is 1.8 feet. The extreme tidal range under normal condition is 4 feet.