



## O&M INSPECTION REPORT FOR NAVIGATION PROJECTS

Port Allen Deep Draft Harbor  
Honolulu Engineer District  
CEPOH-EC-T

Pt. Allen 07rpt-DDH.doc

1. Project Name: Port Allen DDH

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 Root of the structure is in need of repair. The trunk and head portions are showing signs of settling.

Conducted site inspection and noted the following



a. Overview at start of the existing Breakwater from trunk to root. Ocean side is to the left, and harbor side is to the right.



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b. Approximate Sta. 1+00, OS, overview of root.



c. Sta. -0+17 to -0+80, HS, overview of root.



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d. Sta. -0+20, overview of root, crest failure. Additional settling at sideslope this year.



e. Sta. -0+20, overview of harborside of root, crest failure. Additional settling at sideslope this year.



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f. Sta. -0+30, HS, overview of sideslope / crest failure.

Note 0-12 is located of first marker, 0+20 is white cross



g. Sta, 1+00, HS, sideslope steepening, 1" separation at the hinge. No change.



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h. Sta. 2+29, OS, dislodged armor stone adj pipe saddle # 7.



i. Sta. 1+60, OS, 1 ea. Armor stone dislodged.



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j. Sta. 2+33, OS, flipped armor stone.



k. Sta. 2+93 to Sta. 3+33, OS, hinge separation, approx 40LF.



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l. Sta. 3+83, crest settling.



m. Sta. 4+12, Overview of OS/Crest.



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n. Sta. 5+30 to,5+32, HS, sideslope steepening.

Note: 5+20 Reach Marker, Sta 6+12 White Cross.



o. Sta. 6+40, HS, void approx. 4x5 feet deep, 6'x6' at waterline



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p. Sta. Sta. 6+68, CL, Flipped Armor Stone.



q. Sta.7+00 to Sta. 7+90, OS, settling at hinge.



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r. Sta. 8+81, OS, Monitor 2 voids and settling on OS.



s. Sta. 9+31, Crest 25 LF of settling.



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t. Sta. 10+00, Crest, hinge setting.



u. Sta. 10+00, HS, dislocated armor stones at waterline numerous locations.



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v. Sta. 10+46, HS, Overview facing root.



x. Sta. 11+05, OS, Rib # 1 Tribar # 29, cracked & separated 2.0 inches from rib.



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y. Sta. 11+30, OS, head, tribar # 24, 8 inch separation from rib cap.



z. Sta. 11+28, HS, Tribar # 9, separating from rib cap 4 inches.



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aa. Overview of head.

5. Conclusion:

The root of the structure is in need of repairs. FY 05 funding was provided but no repairs made as of this date. The project is in need of repairs however still maintains functionality. 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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## PORT ALLEN HARBOR, HAWAII

### CONDITION OF IMPROVEMENT 30 SEPTEMBER 1993

PREVIOUS PROJECTS: None.

EXISTING PROJECT: Authorized by the River and Harbor Acts of 30 August 1935 and 2 March 1945. Provides for a rubblemound breakwater 1,126 feet deep and a harbor basin 1,500 feet long, 1,200 feet wide and 35 feet deep.

### PROGRESS OF WORK

Completed and Under Maintenance: The project was completed in 1948. Last maintenance dredging was completed in March 1977; total material dredged was 141,891 cubic yards. Repair work on storm damages to breakwater caused by Hurricane IKA was completed in January 1984. A contract awarded in March 1991 to repair breakwater damaged by the storm of February-March 1989 was completed in July 1991 for \$280,700.

Work Remaining: A contract to repair breakwater damaged by Hurricane Iniki in September 1992 was awarded in September 1993 for \$790,678. Contract is scheduled for completion in July 1994.

### COST OF CONSTRUCTION:

|                               | <u>New Work</u> | <u>Maintenance</u> | <u>Total</u>   |
|-------------------------------|-----------------|--------------------|----------------|
| <u>Completed Works:</u>       |                 |                    |                |
| United States Funds           | \$752,645       | \$1,403,293        | \$2,155,938    |
| Contributed Funds<br>Required | <u>202,000</u>  | <u>0</u>           | <u>202,000</u> |
| Total Costs                   | \$952,645       | \$1,403,293        | \$2,355,938    |
| <u>Uncompleted Works:</u>     |                 |                    |                |
| United States Funds           |                 | \$1,221,000        | \$1,221,000    |
| Total Estimated Costs         |                 | \$1,221,000        | \$1,221,000    |

RANGE OF TIDES: The range of tide between mean lower low water and mean higher high water is 1.7 feet; the extreme range is 4.0 feet.