

MEMORANDUM FOR: RECORD

March 16, 2011

**SUBJECT:** DETERMINATION REGARDING THE EXCLUSIONARY STATUS OF DREDGED MATERIAL FROM HAT ISLAND MARINA, SNOHOMISH COUNTY, WASHINGTON.

1. **Introduction.** This memorandum reflects the consensus determination of the Dredged Material Management Program (DMMP) agencies (U.S. Army Corps of Engineers, Washington Departments of Ecology and Natural Resources, and the Environmental Protection Agency) regarding the exclusionary status of dredged material from Hat Island Marina (see Figure 1 for a vicinity map).
2. **Background.** Hat Island Community, Inc. proposes to upgrade and expand its marina facilities. The total volume of dredging/excavation is 70,500 cubic yards, which includes approximately 3,500 cubic yards of maintenance dredging in the existing boat basin; 1,200 cubic yards of maintenance dredging in the entrance channel; 9,900 cubic yards of excavation for breakwater rehabilitation; and 55,900 cubic yards of excavation associated with marina expansion. Most of the material will be placed in a gravel quarry on the island. However, in order to provide enough navigation depth to transport the heavy equipment needed for the project into the marina, up to 1,000 cubic yards of sediment may first need to be dredged from the entrance channel. This material may be loaded on a barge and disposed at the Port Gardner dredged material disposal site.
3. **Exclusionary Criteria.** The CWA Section 404(b)1 Guidelines for Specification of Disposal Sites for Dredged or Fill Material (CFR 40 Section 230.60, subparagraphs a and b) include exclusionary criteria with regard to testing. The Guidelines state that (1) dredged or fill material is most likely to be free from chemical, biological, or other pollutants where it is composed primarily of sand, gravel, or other naturally occurring inert material. Dredged material so composed is generally found in areas of high current or wave energy such as streams with large bed loads or coastal areas with shifting bars and channels; and (2) the extraction site shall be examined in order to assess whether it is sufficiently removed from sources of pollution to provide reasonable assurance that the proposed discharge material is not a carrier of contaminants (EPA, 1980). Dredged material that meets these two guidelines may be excluded from further testing.
4. **Review of Existing Information.** Emergency dredging of the entrance channel was performed in 2008. Approximately 650 cubic yards of material was dredged and disposed at the Port Gardner disposal site. The DMMP agencies requested that samples of the dredged material be taken during the emergency removal action and tested for grain size and total organic carbon. The results indicated that the material was predominantly sand, with low organic carbon content, thereby meeting the exclusionary criteria (see Attachment 1). Based on testing from 2008, the DMMP agencies agreed that additional testing of the entrance-channel material would not be required for the current project.

In order to ascertain the nature of the other material being dredged/excavated for this project, and to determine whether the sediment to be exposed by dredging/excavation would require testing, the DMMP agencies requested that Hat Island Community, Inc. provide additional information for the

site. A geotechnical report (GeoEngineers, 2008) for the expansion project was submitted, along with historical photos. Additional on-line documentation, including a history of Hat Island, was also reviewed. Nothing from this review provided any indication that the sediment to be exposed by dredging/excavation might be contaminated. The soil borings consisted primarily of sand, with a maximum of 10% silt. There has been no industrial or commercial development on the island and there is no fueling facility at the marina. The material being removed for the marina expansion consists largely of dredged material from excavation of the existing boat basin. Photos of dredged material from the existing basin show that it consisted of sand and gravel.

While the existing information provided no indication of potential problems with sediment quality, the DMMP agencies agreed that - due to the size of the project - at least some testing should be conducted. Sampling of the sediment to be exposed by excavation of the marina expansion area would have required drilling equipment due to the depth of the planned excavation. The DMMP agencies agreed that the existing information did not warrant this expense. Instead, the agencies requested that the maintenance material to be dredged from the existing boat basin and the area in the existing boat basin directly adjacent to the expansion area be sampled and tested for grain-size and total organic carbon to verify its exclusionary status.

5. **Sampling.** Dredged material samples were taken from the two areas shown in Figure 2. Three field samples were collected from each area. These three samples were then composited to form a laboratory sample for each area. Samples were collected with a 36-inch PVC "clam gun". The composited samples were submitted to a testing laboratory for analysis of grain size and TOC.
6. **Grain-size and TOC Analysis.** The approved sampling and analysis plan was followed and quality control guidelines specified by the DMMP programs were met. The data were considered sufficient and acceptable for regulatory decision-making under the DMMP program.

The testing results were as follows:

Parameter	Maintenance	Expansion
finest content (%):	2.4	2.5
TOC (%):	0.33	0.16

The grain-size analysis showed that the dredged material was predominantly medium-to-coarse sand (79-94 percent) and gravel (4-19 percent) with very low fines content. The TOC results were well below 0.5%.

7. **Exclusionary Status Determination.** The DMMP agencies have traditionally used 20 percent fines and a TOC of 0.5% as the upper limits for determining eligibility for exclusionary status. The fines content from the Hat Island project met the grain-size criterion for exclusionary status, as did the TOC content.

With respect to the potential for sediment contamination, the DMMP agencies determined that Hat Island Marina is sufficiently removed from sources of pollution to provide reasonable assurance that the proposed discharge material is not a carrier of contaminants.

In summary, the DMMP agencies have determined that dredged/excavated material from the Hat Island Marina meets the exclusionary criteria under the Clean Water Act and does not require additional chemical testing.

8. **Sediment Exposed by Dredging.** Based on the exclusionary status of the dredged material and the review of additional existing information, the DMMP agencies believe the probability that the sediment exposed by dredging might have concentrations of chemicals of concern that exceed the Sediment Management Standards Sediment Quality Standards (Ecology, 1995) is very low. The agencies agreed that no testing of the newly exposed sediment is necessary.
9. **Project Summary.** Table 1 includes project summary and tracking information.

**Table 1. Project Summary**

Project ranking	Exclusionary
Dredged/excavated volume	Total: 70,500 cubic yards Open-water disposal: up to 1,000 cubic yards
SAP received	February 4, 2011
SAP approved	February 7, 2011
Sampling date	February 15, 2011
Data report received	March 9, 2011
DAIS Tracking number	HATIM-1-A-X-302
USACE Permit Application Number	NWS-2008-796
Frequency Determination (10 years)	February 2021

10. **References.**

Ecology, 1995. *Sediment Management Standards – Chapter 173-204 WAC*. Washington State Department of Ecology, December 1995.

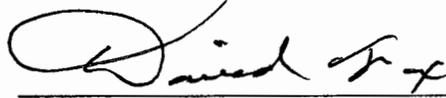
EPA, 1980. *40 CFR Part 230 Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material*, Environmental Protection Agency, December 1980.

GeoEngineers, 2008. *Geotechnical Engineering Services, Hat Island Marina Improvements, Hat Island, Washington*. GeoEngineers, January 2008.

11. Agency Signatures.

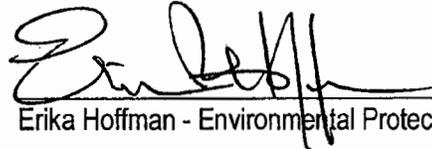
Concur:

3/24/11  
Date



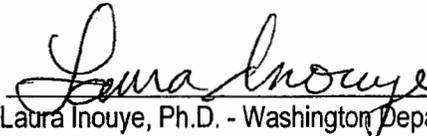
David Fox, P.E. - Seattle District Corps of Engineers

3/21/11  
Date



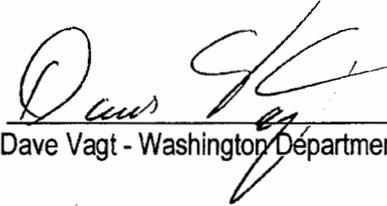
Erika Hoffman - Environmental Protection Agency

March 21, 2011  
Date



Laura Inouye, Ph.D. - Washington Department of Ecology

3/23/2011  
Date



Dave Vagt - Washington Department of Natural Resources

Copies furnished:

DMMP signatories  
Olivia Romano, Seattle District Regulatory  
Shane Phillips, Coast and Harbor Engineering  
Charles Motson, Hat Island Community, Inc.

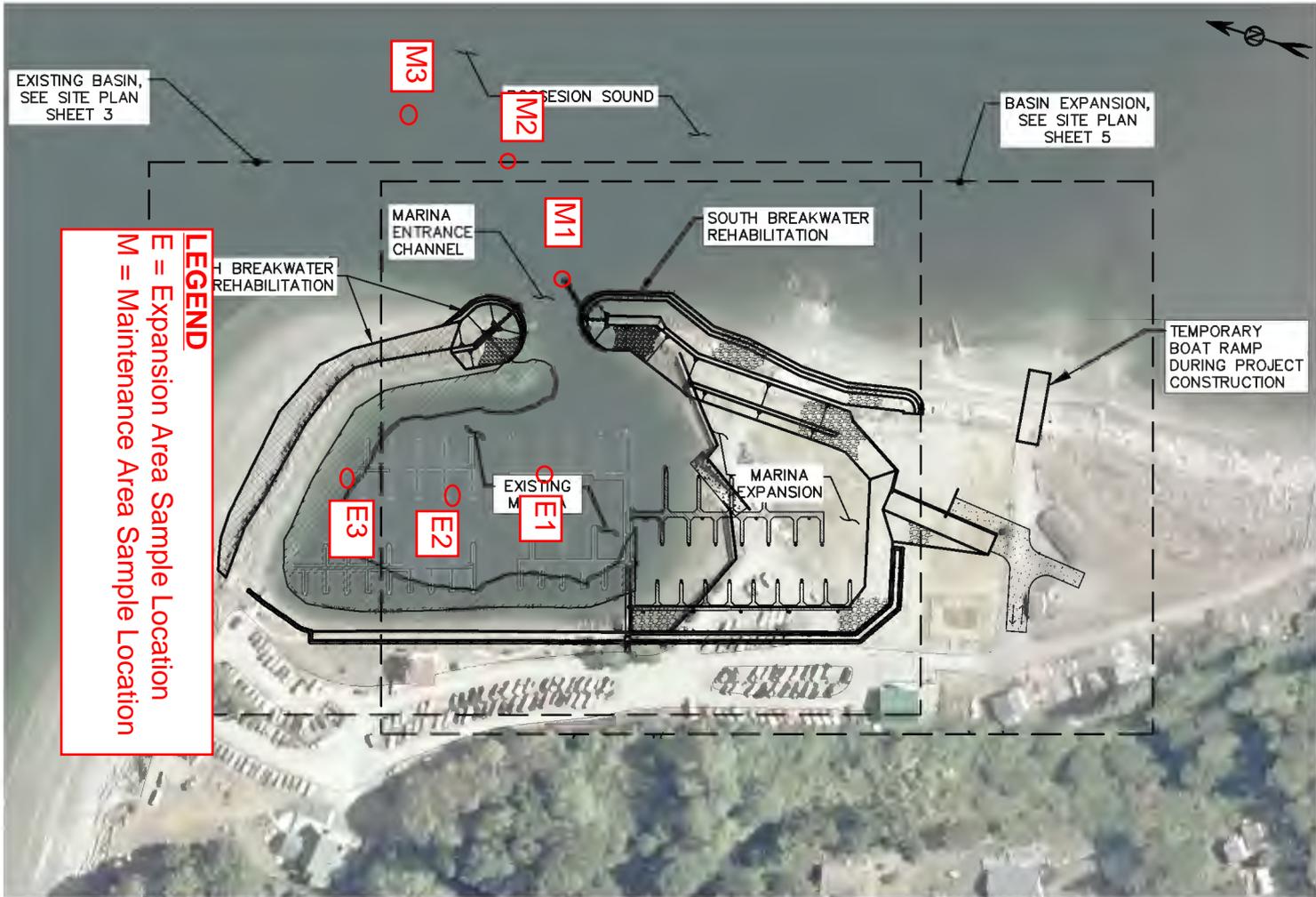
Figure 1



Hat Island  
Marina



0 500 1,000 2,000 Feet



**LEGEND**  
 E = Expansion Area Sample Location  
 M = Maintenance Area Sample Location

**SITE PLAN - OVERVIEW**



- LEGEND:**
- NEW ROCK BREAKWATER/REVTMENT
  - NEW FLOATING DOCKS
  - NEW ROADWAY
  - NEW CRANE PAD
  - SLOPE INDICATOR

TIDAL WATER LEVELS (MLLW)	
MEAN HIGHER HIGH WATER	+11.09'
MEAN SEA LEVEL	+6.48'
MEAN LOWER LOW WATER	0.00'

PURPOSE: MARINA IMPROVEMENTS AND EXPANSION  
 DATUM: MLLW  
 ADJACENT PROPERTY OWNERS:  
 DOKKA, ROBERT & BARBARA  
 BRIGHT, CHARLES & PATRICIA  
 PUGET SOUND YACHT CLUB

**HAT ISLAND MARINA  
 IMPROVEMENT PROJECT**  
 Figure 2  
 REVIEW  
 APPLICATION BY: HAT ISLAND COMMUNITY, INC.

PROPOSED: MARINA IMPROVEMENTS AND EXPANSION  
 IN: POSSESSION SOUND  
 AT: HAT ISLAND DIVISION  
 COUNTY: SNOHOMISH  
 SHEET 2 OF 12 DATE: 9/17/10

CENWS-OD-TS-DMMO

MEMORANDUM FOR: RECORD

June 4, 2008

**SUBJECT:** DETERMINATION REGARDING THE NO-TEST STATUS OF DREDGED MATERIAL FROM THE HAT ISLAND MARINA, POSSESSION SOUND, SNOHOMISH COUNTY, WASHINGTON UNDER THE DREDGED MATERIAL MANAGEMENT PROGRAM.

1. **Introduction.** This memorandum reflects the consensus determination of the Dredged Material Management Program (DMMP) agencies (U.S. Army Corps of Engineers, Washington Departments of Ecology and Natural Resources, and the Environmental Protection Agency) regarding the no-test status of dredged material from the Hat Island Marina.
2. **Background.** The Hat Island Marina (see Attachments 1 through 3) is a small private marina consisting of 80 slips. It also serves as a terminal for the Hat Island Ferry. Sedimentation during the winter and spring of 2008 caused the marina entrance to become too shallow for the ferry, which grounded twice, sustaining damage. Several private vessels have grounded as well. The Hat Island Community, Inc. - operators of the marina - submitted a joint aquatic resources permit application (JARPA) on May 28, 2008 for emergency dredging of 650 cubic yards of sediment from the entrance channel. Upland disposal is planned.
3. **No-Test Determination.** Under the DMMP guidelines, small projects may be exempt from testing if they meet certain volume restrictions (PSDDA 1988). For moderate-ranked areas, the no-test volume limit is 1,000 cubic yards (DMMP, 2008). Hat Island Marina meets this guideline. Therefore, the DMMP agencies have determined that no testing is required for this project.

This memorandum documents the evaluation of dredged material from the Hat Island Marina entrance channel. However, it does **not** constitute final agency approval of the project. During the public comment period that follows a public notice, the resource agencies will provide input on the overall project. A final decision will be made after full consideration of agency input, and after an alternatives analysis is done under section 404(b)(1) of the Clean Water Act.

4. **Project Summary.** Table 1 includes project summary and tracking information.

**Table 1. Project Summary**

Project ranking (marina)	Moderate
Dredged volume	650 cubic yards
Dredged depth	-15.7 feet (NGVD29)
JARPA received	May 28, 2008
USACE Permit Application Number	NWS-2008-796-NO

5. References.

DMMP, 2008. *Dredged Material Evaluation and Disposal Procedures – Users Manual*.  
Dredged Material Management Program Agencies: U.S. Army Corps of Engineers Seattle  
District, U.S. Environmental Protection Agency Region 10, Washington State Department of  
Ecology, Washington State of Natural Resources. May 2008.

PSDDA, 1988. *Evaluation Procedures Technical Appendix – Phase I – Central Puget Sound*.  
U.S. Army Corps of Engineers Seattle District, U.S. Environmental Protection Agency Region  
10, Washington State Department of Ecology, Washington State of Natural Resources. June  
1988.

6. Agency Signatures.

Concur:

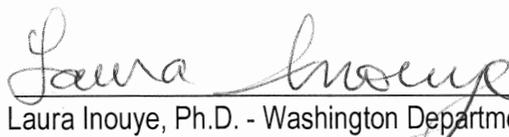
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David Fox, P.E. - Seattle District Corps of Engineers

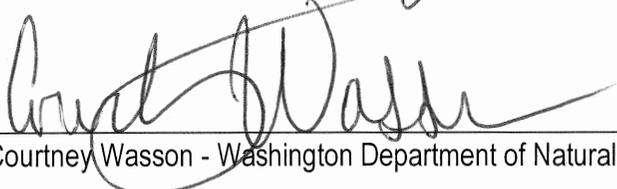
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Erika Hoffman - Environmental Protection Agency

6/5/08  
Date

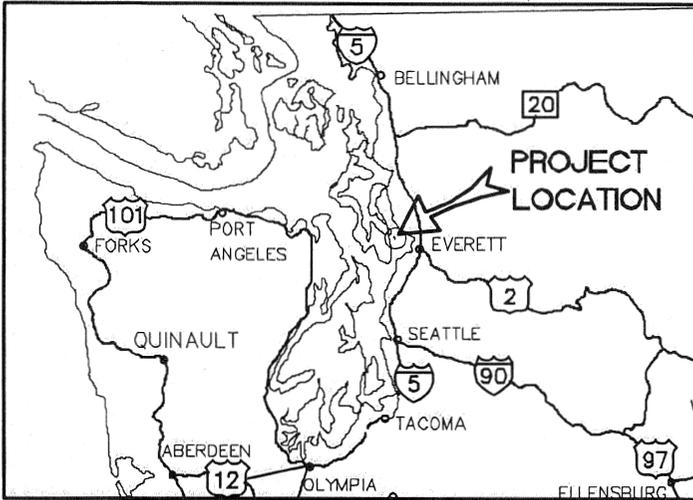
  
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Laura Inouye, Ph.D. - Washington Department of Ecology

6/5/08  
Date

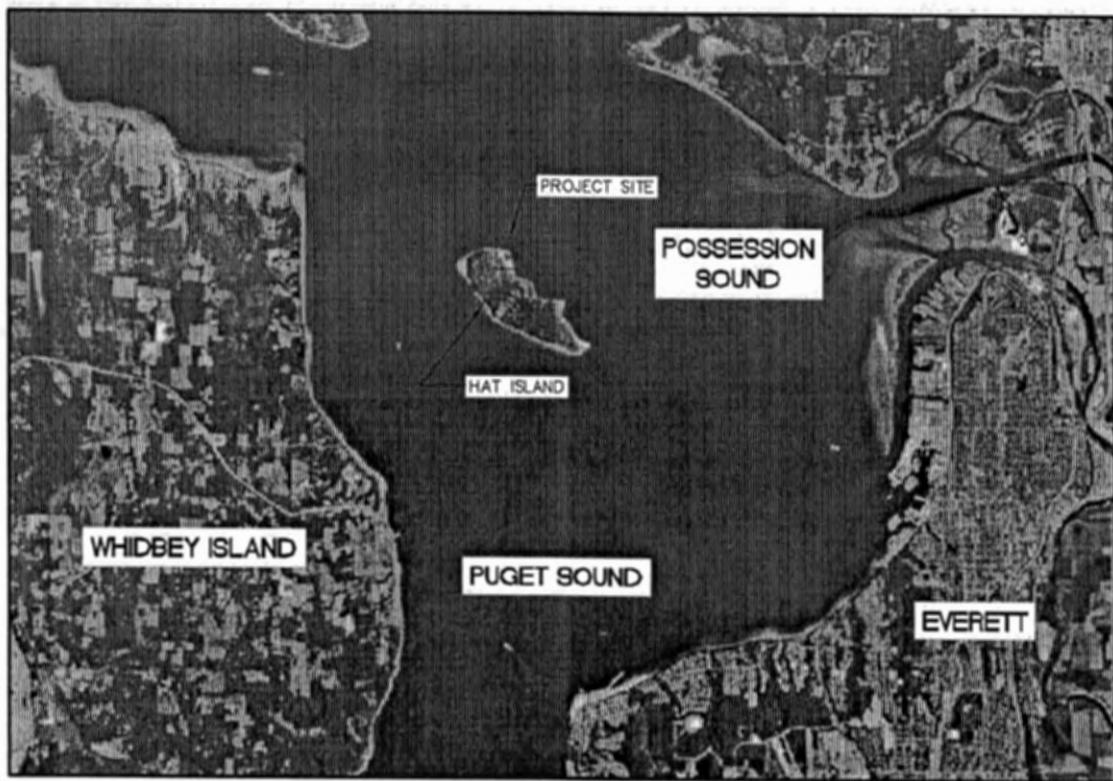
  
\_\_\_\_\_  
Courtney Wasson - Washington Department of Natural Resources

Copies furnished:

DMMP signatories  
Jonathan Smith, Seattle District Regulatory  
Jon Houghton, Pentec Environmental



**WASHINGTON KEY MAP**



**LOCATION MAP**

TIDAL WATER LEVELS (NGVD29)	
MEAN HIGHER HIGH WATER	+5.37'
MEAN SEA LEVEL	+0.76'
MEAN LOWER LOW WATER	-5.72'

**PURPOSE:** DREDGING EXISTING ENTRANCE CHANNEL

**DATUM:** NGVD29

**ADJACENT PROPERTY OWNERS:**

DOKKA, ROBERT & BARBARA  
 BRIGHT, CHARLES & PATRICIA  
 PUGET SOUND YACHT CLUB

**HAT ISLAND MARINA  
 ENTRANCE CHANNEL  
 EMERGENCY DREDGING**

APPLICATION BY: HAT ISLAND COMMUNITY, INC.

**PROPOSED:** ENTRANCE CHANNEL EMERGENCY DREDGING

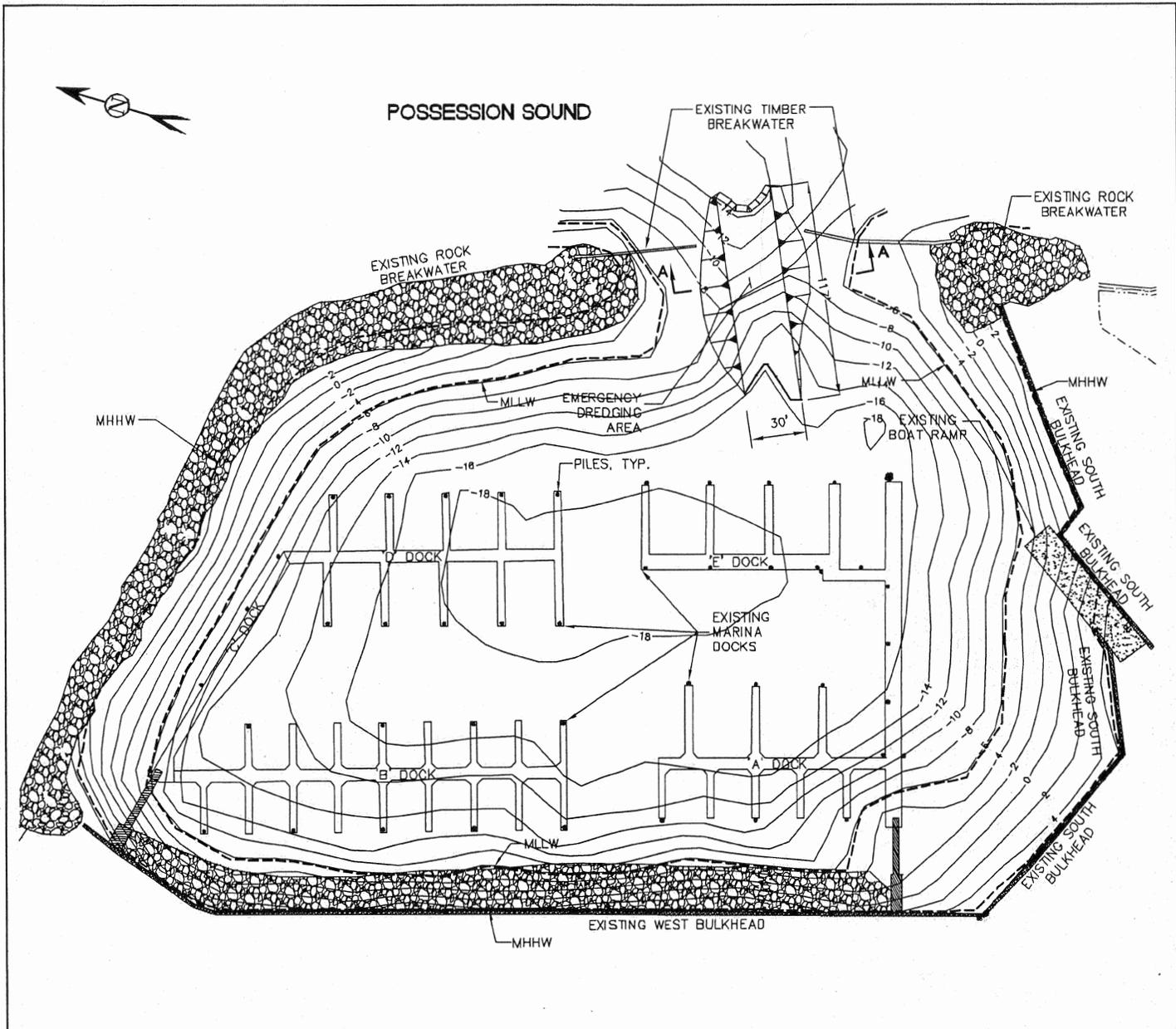
**IN:** POSSESSION SOUND

**AT:** HAT ISLAND DIVISION

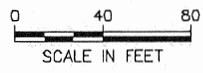
**COUNTY:** SNOHOMISH

SHEET 1 OF 3

DATE: 5/23/08



**PLAN VIEW**



- NOTES:**
1. SURVEY CONTOURS BASED ON HYDROGRAPHIC SURVEY CONDUCTED BY BLUEWATER ENGINEERING, JUNE 2007. SIGNIFICANT SHOALING HAS OCCURED SINCE THE JUNE 2007 SURVEY.
  2. VOLUME OF EMERGENCY DREDGING:  
BASE DREDGING (-15.7'): 600 CY  
INCLUDING 1' OVERDREDGE: 650 CY

**LEGEND**  
—— CONTOURS

TIDAL WATER LEVELS (NGVD29)	
MEAN HIGHER HIGH WATER	+5.37'
MEAN SEA LEVEL	+0.76'
MEAN LOWER LOW WATER	-5.72'

**PURPOSE:** DREDGE EXISTING ENTRANCE CHANNEL

**DATUM:** NGVD29

**ADJACENT PROPERTY OWNERS:**  
DOKKA, ROBERT & BARBARA  
BRIGHT, CHARLES & PATRICIA  
PUGET SOUND YACHT CLUB

**HAT ISLAND MARINA  
ENTRANCE CHANNEL  
EMERGENCY DREDGING**

APPLICATION BY: HAT ISLAND COMMUNITY, INC.

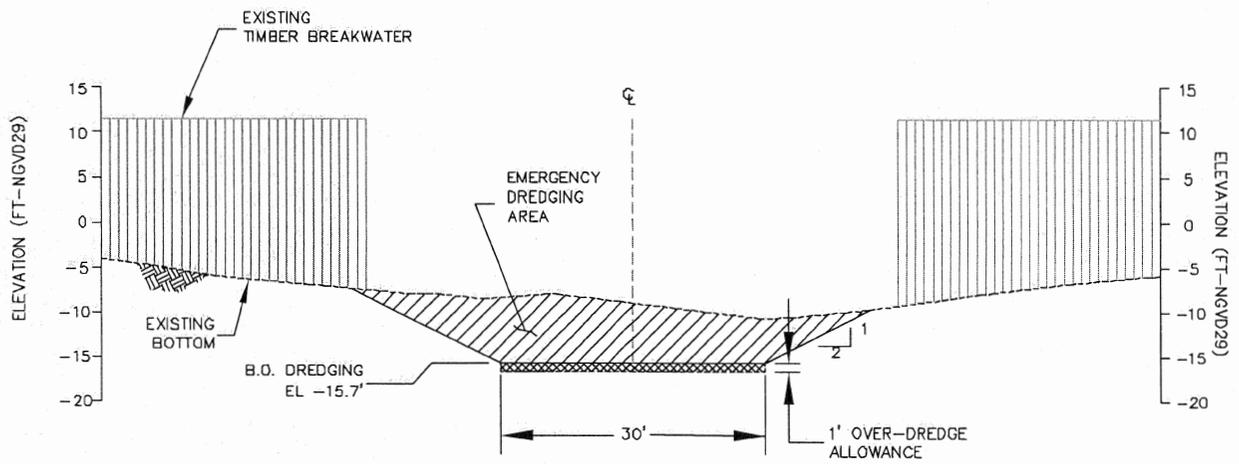
**PROPOSED:** ENTRANCE CHANNEL EMERGENCY DREDGING

**IN:** POSSESSION SOUND

**AT:** HAT ISLAND DIVISION

**COUNTY:** SNOHOMISH

SHEET 2 OF 3      DATE: 5/23/08



**SECTION A-A**

TIDAL WATER LEVELS (NGVD29)	
MEAN HIGHER HIGH WATER	+5.37'
MEAN SEA LEVEL	+0.76'
MEAN LOWER LOW WATER	-5.72'

**PURPOSE:** DREDGE EXISTING ENTRANCE CHANNEL

**DATUM:** NGVD29

**ADJACENT PROPERTY OWNERS:**

DOKKA, ROBERT & BARBARA  
 BRIGHT, CHARLES & PATRICIA  
 PUGET SOUND YACHT CLUB

**HAT ISLAND MARINA  
 ENTRANCE CHANNEL  
 EMERGENCY DREDGING**

APPLICATION BY: HAT ISLAND COMMUNITY, INC.

**PROPOSED:** ENTRANCE CHANNEL EMERGENCY DREDGING

**IN:** POSSESSION SOUND

**ΔI:** HAT ISLAND DIVISION

**COUNTY:** SNOHOMISH

SHEET 3 OF 3

**DATE:** 5/23/08