

23 November 1993

SUBJECT: DETERMINATION ON THE SUITABILITY OF MAINTENANCE DREDGED MATERIAL TESTED FOR THE DES MOINES MARINA, CITY OF DES MOINES, WASHINGTON (93-2-00006) FOR DISPOSAL AT A PSDDA UNCONFINED OPEN-WATER DISPOSAL SITE.

1. The following summary reflects the consensus determination of the PSDDA Agencies' (U.S. Army Corps of Engineers, Department of Ecology, Department of Natural Resources, and the Environmental Protection Agency) with jurisdiction on dredging and disposal on the suitability of the estimated 5,200 cubic yards of maintenance material proposed for dredging from the Des Moines Marina located at Des Moines, Washington for disposal at a PSDDA unconfined open-water disposal site (Commencement Bay nondispersive site). The determination of suitability is based on the acceptability of the sampling conducted on September 28-29, 1993 and all relevant test data contained in November 5, 1993 Data Summary Report submitted to DMMO by Mr. Ron Wills of Hartman Associates, Incorporated on November 11, 1993.
2. The Agencies' approved sampling and testing plan was followed, and quality assurance/quality control guidelines specified by PSEP and the PSDDA program were generally complied with. This project was ranked high and proposed maintenance dredging material characterized was spatially separated into a North area DMMU comprising 4,700 cubic yards and a South area DMMU comprising 500 cubic yards. Samples were collected by a hand powered sediment corer (2" in diameter and 48" in length lined with a CAB plastic liner tube) at two locations in the North DMMU for a better spatial representation, and composited for one analysis (C-1). At the smaller South DMMU, a single uncomposited sample was collected and analyzed (S-2). The data gathered were sufficient and acceptable for decision making by the Agencies based on best professional judgement.
3. The results of these analyses showed that all chemicals of concern were quantitated below the PSDDA screening levels for the two DMMU evaluated. Testing for Tributyl tin indicated this chemical was below the PSDDA SL. No biological testing was deemed necessary based on these chemical testing results. The sediment conventional characterization data summaries are depicted in the following table.

Table 1. Summary of Sediment Conventional Parameters.

Conventional Parameters	C-1 (North)	S-2 (South)
Grain Size (%):		
Gravel	18.1	18.0
Sand	78.3	60.5
Silt	2.4	14.1
Clay	1.1	7.4
Total Solids, %	87.4	71.2
Total Volatile Solids, %	1.0	2.3
Total Organic Carbon, %	0.11	1.3
Bulk Ammonia, mg/Kg	4.0	10
Total Sulfides, mg/Kg	110	130

4. The Agencies concluded based on the above discussion and summary of sediment chemical testing results for the Des Moines Marina maintenance dredging project, at Des Moines, Washington, that all the material tested (5,200 cubic yards) was suitable for disposal at either a PSDDA nondispersive or dispersive open-water disposal site.

5. This memorandum documents the suitability of proposed dredged sediments for unconfined open-water disposal at a PSDDA site. It does not constitute final agency approval of the project. A public notice will be issued for this project. During the public comment period, which 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.

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Concur:

24 Nov. 1993

Date

David R. Kendall

David R. Kendall, Ph.D  
Seattle District Corps of Engineers

December 2, 1993

Date

Justine S. Barton

Justine Barton/John Malek  
Environmental Protection Agency  
Region X

Nov. 29, 1993

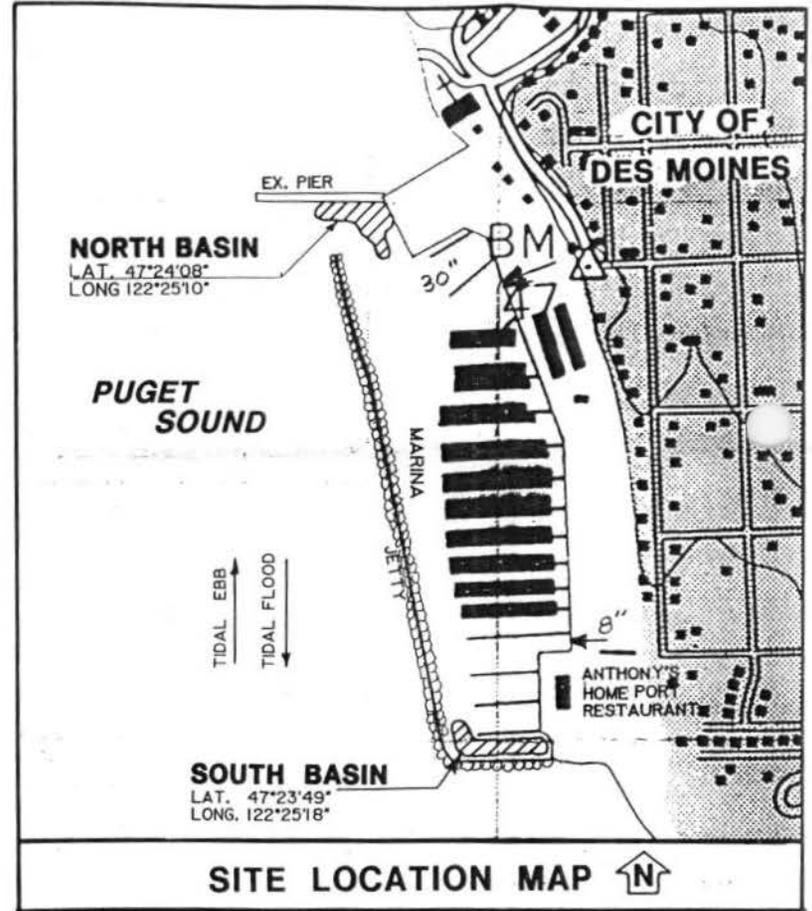
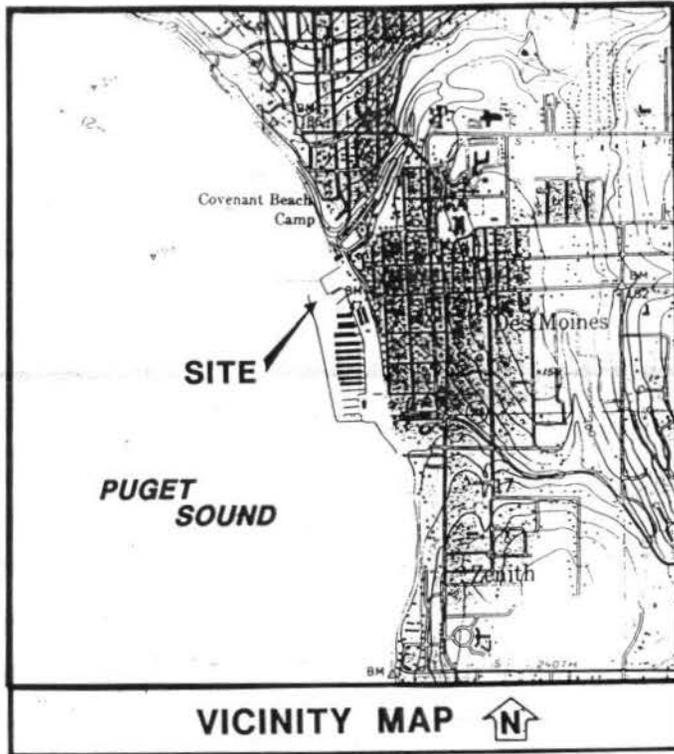
Date

Tom Luster

Tom Luster  
Washington Department of Ecology

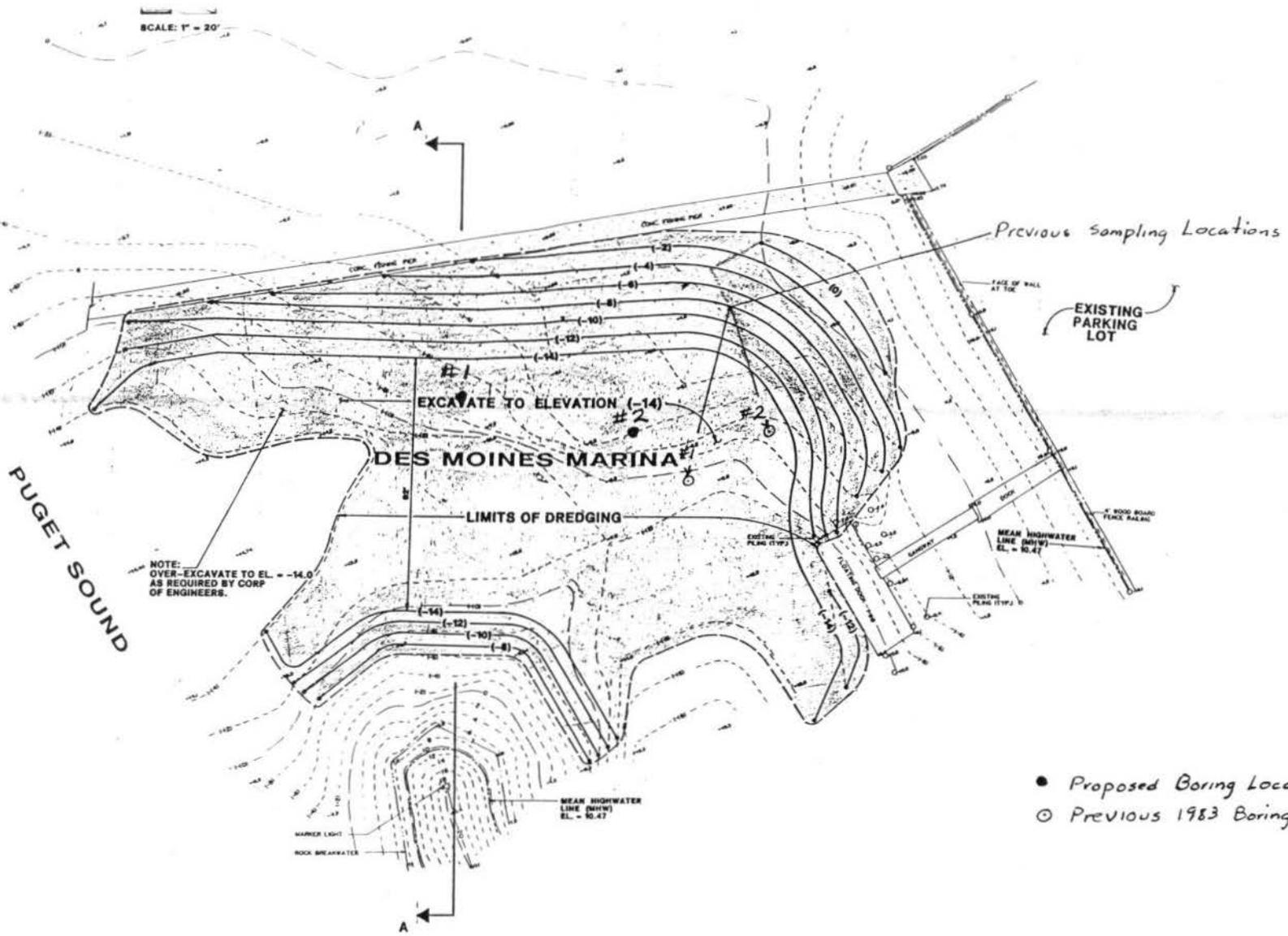
Copies Furnished:

Tom Mueller, Corps  
Justine Barton/John Malek, EPA  
Tom Luster, Ecology  
Gene Revelas, DNR  
DMMO File



**FIGURE 1**  
**VICINITY MAP AND SITE PLAN**

← Stormwater outfall

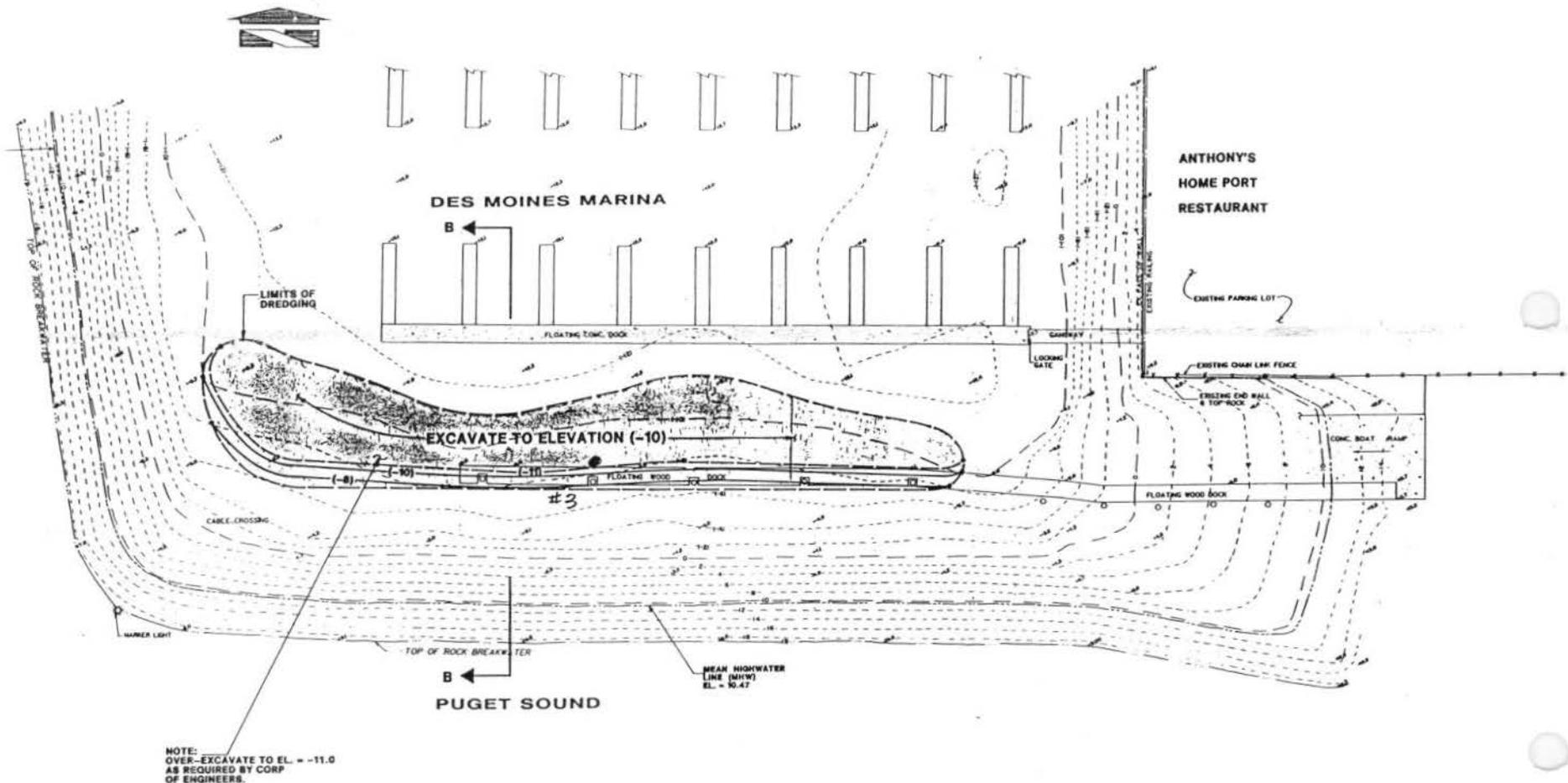


- Proposed Boring Locations
- Previous 1983 Boring Locations

**FIGURE 2**  
**PREVIOUS SAMPLING LOCATIONS IN**  
**THE DES MOINES MARINA AND NORTH**  
**AREA CONCEPTUAL DREDGING PLAN**

Marina  
 No. S.  
 98189  
 700

**Barghausen**  
**Consulting Engineers Inc.**  
 Land Planning, Survey & Engineering Specialists  
 18716 72nd Ave South Kent, Wash. 98032 (206) 251-2222



**FIGURE 3**  
**SOUTH AREA CONCEPTUAL DREDGING PLAN**