CENPS-OP-DMMO

MEMORANDUM FOR RECORD 18 June 1993

SUBJECT: DETERMINATION OF THE SUITABILITY OF DREDGED MATERIAL TESTED UNDER PSDDA EVALUATION PROCEDURES FOR THE U.S. NAVY, NORTON TERMINAL DREDGING PROJECT FOR DISPOSAL AT THE PSDDA PORT GARDNER OPEN-WATER NONDISPERSIVE SITE.

1. The U.S. Navy proposes to dredge 82,000 cubic yards of sediments from Norton Terminal at Everett Washington. The following summary reflects the PSDDA agencies' (Corps of Engineers, Department of Ecology, Department of Natural Resources and the Environmental Protection Agency) consensus decision on the acceptability of the sampling plan and all relevant test data to make a determination of suitability for the disposal of the material at the PSDDA Port Gardner open-water nondispersive site.

2. The initial ranking for the project area was "moderate", based on the guidance provided in the PSDDA Management Plan Report, Phase II (page A-11) for all existing berthing facilities. A review of PSDDA sampling and testing data from projects in the vicinity provided the basis for down-ranking the project area to "low-moderate."

3. A sampling and analysis plan was developed for this project and approved by the PSDDA agencies on 19 January 1993.

4. Four dredged material management units (DMMU) were characterized. The sampling and compositing scheme was based upon an estimated dredged volume of 115,000 cubic yards, 60,000 from the surface (0-4 feet) and 55,000 from the subsurface (>4 feet). Information gathered during sampling reduced the estimated volume to 82,000 cubic yards, but the level of sampling effort was not reduced. Eight locations were sampled. DMMUs C1 and C2 each consisted of composited surface sediments from four sample locations. DMMU C3 and C4 each consisted of composited subsurface sediments from four sample locations.

5. The chemistry data indicated one detected exceedance of the Dredging Year 1993 PSDDA screening levels (SL) for DMMU C4. Anthracene was detected at a level of 180 mg/kg (SL = 130 mg/kg). There were no exceedances of any bioaccumulation triggers or maximum levels.

6. The SL exceedance for C4 triggered the requirement for biological testing under the tiered testing approach. The amphipod 10-day acute toxicity test, echinoderm sediment larval combined mortality and abnormality (effective mortality) test, the *Neanthes* 20-day biomass test and the saline Microtox bacterial luminescence test were conducted. PSDDA interpretation guidelines specified in the Phase II Management Plan Report (Sept. 1989) modified by changes made at the second and fourth annual review meetings, were used to evaluate the bioassay data. The control sediment for the amphipod and *Neanthes* bioassays was collected from West Beach. The seawater control for the sediment larval test came from Burrard Inlet. The reference sediment (all bioassays) came from Holmes Harbor.

7. There were no hits for any of the bioassays. The reference sediment in the sediment larval test failed to meet performance standards. The test was rerun within the 56 day holding time. The retest met performance standards. Reference sediments and negative controls for all other bioassays

performed within their respective performance standards and there were no quality assurance problems with any of these tests.

8. In summary, the PSDDA-approved sampling and testing plan was followed, and quality assurance, quality control guidelines specified by PSDDA were generally complied with during testing. The data gathered were deemed sufficient and acceptable for regulatory decision-making under the PSDDA program.

9. Based on the analysis of the chemical and biological testing, the PSDDA agencies concluded that all 82,000 cubic yards of proposed dredged material were suitable for unconfined open-water disposal at the PSDDA Port Gardner nondispersive site.

10. This memorandum documents the suitability of proposed dredged sediments for disposal at a PSDDA open-water disposal 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.

Concur:

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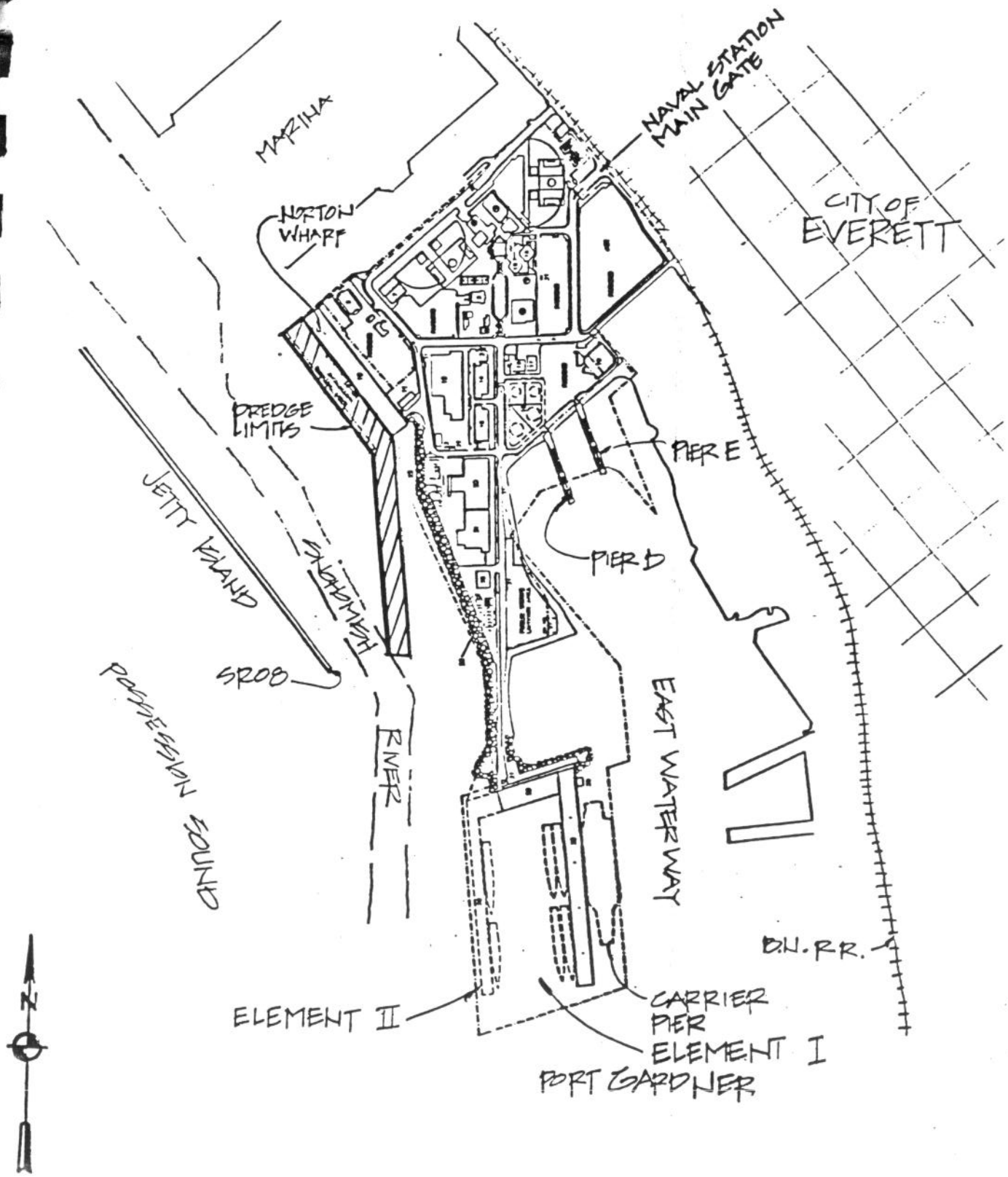
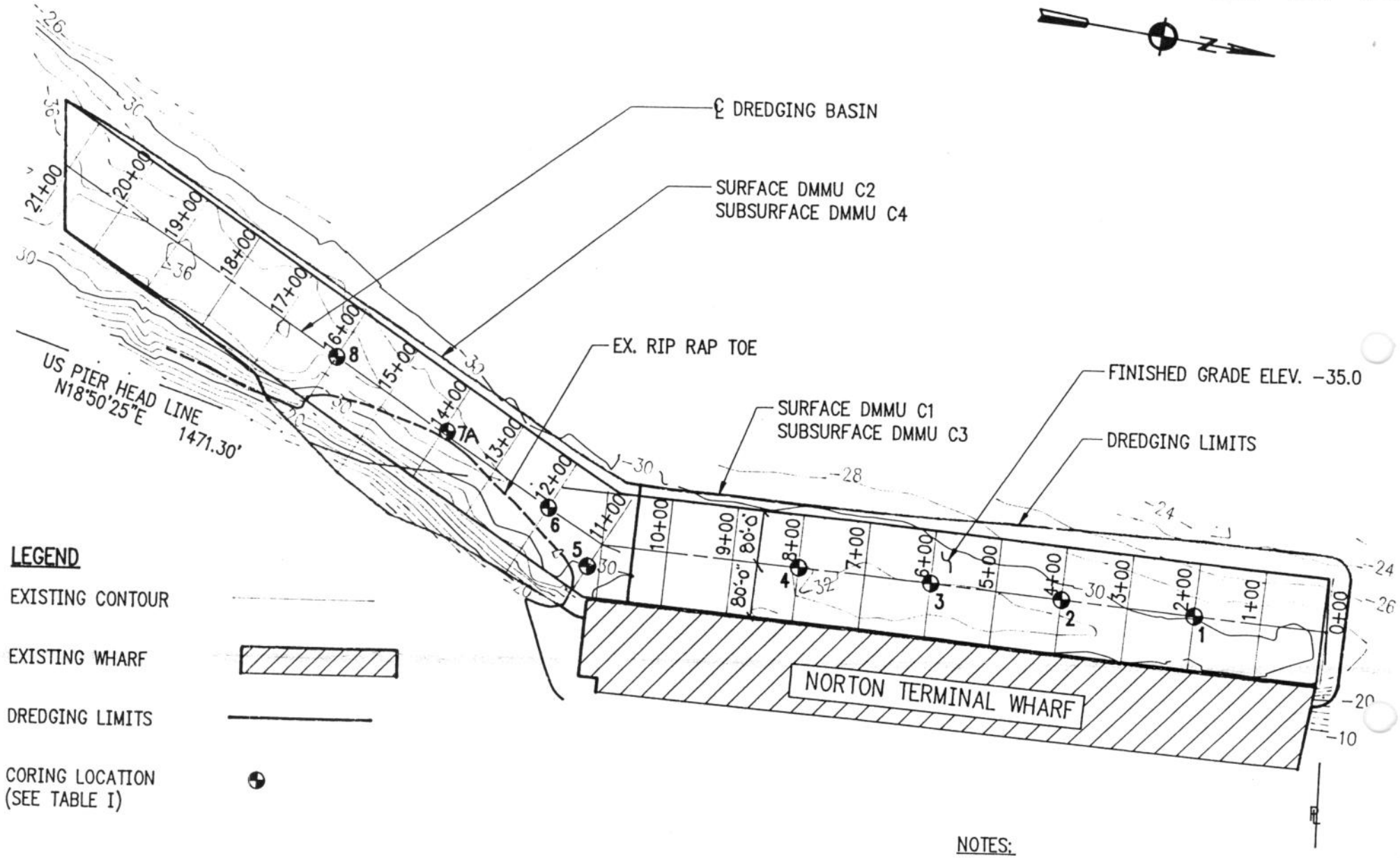


LOCATION MAP

1000 0 1000 2000
SCALE IN FEET 1" = 1000'

FIGURE 2

US NAVAL STATION PUGET SOUND
EVERETT, WA



NOTES:

1. ALL ELEVATIONS ARE BASED ON A DATUM OF MLLW = 0.00 FT

DREDGING PLAN

SCALE: 1" = 200'

FIGURE 1

US NAVAL STATION PUGET SOUND
EVERETT, WA

NORTON TERMINAL WHARF MAINTENA[illegible] DREDGING