

MEMORANDUM FOR: RECORD

September 22, 2016

SUBJECT: DMMP TIER 1 ANTIDegradation EVALUATION OF THE PROPOSED POST-DREDGE SEDIMENT SURFACE TO VERIFY COMPLIANCE WITH THE WASHINGTON STATE ANTIDegradation POLICY FOR THE SANDY POINT HARBOR ENTRANCE MAINTENANCE DREDGING (NWS-2016-188), WHATCOM COUNTY.

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 suitability of the exposed sediment surface after removal of approximately 25,000 cubic yards (cy) of accumulated sediment from the entrance channel to the Sandy Point Canal System and marina. All material will be removed from the water and disposed in an upland location, so DMMP evaluation of the proposed dredged material was not necessary. However, in order to determine compliance with the Sediment Management Standards (SMS) antidegradation policy (Washington Administrative Code [WAC]-173-204-120), a Tier 1 evaluation of the proposed post-dredge surface was conducted.
2. **Project.** The project area is on a spit on the north edge of Lummi Bay, off the Strait of Georgia (Figures 1-2). The extensive Sandy Point Canal System was initially dredged and created in the early 1960's and has not been dredged since. Sand and gravel have accumulated at the entrance due to longshore drift, limiting boat access. Approximately 25,000 cy of material will be removed from below mean high water (MHW); another 11,200 cy of material will be excavated above MHW (Figure 3). The material, primarily sand and gravel, will be disposed entirely in upland areas. It is expected to be used as construction material.
3. **Proposed Dredged Material.** Material previously dredged was described as sand and gravel. To confirm that the material now proposed for dredging is similarly coarse-grained, the project proponent collected material from test pits in four locations within the proposed dredge prism in 2015, and analyzed for several sediment conventionals (Table 1).

Table 1. Sediment conventionals from four test pits in the proposed dredge prism.

	S1	S2	S3	S4
Gravel (%)	71	83	69	69
Sand (%)	28	16	31	31
Fines (Silt + Clay) (%)	1	1	0	0
TOC (%)	0.75	1.4	0.54	0.39
Description	poorly graded gravel with sand	poorly graded gravel with sand	well graded gravel with sand	poorly graded gravel with sand

4. Antidegradation Evaluation. Proposed dredged material from locations sufficiently removed from sources of contaminants, and with less than 20% fines and low TOC, is not considered to be a “carrier of contaminants (40 CFR 230.60 (a) and (b)). Proposed exposed surface underlying such material is assumed to meet the state antidegradation policy, unless there is a site-specific reason-to-believe that the exposed material differs considerably from the overlying material. Tier 1 analysis of the dredge area showed little reason-to-believe that the post-dredge surface would not comply with the state antidegradation policy. The DMMP required no additional sampling to verify compliance with state antidegradation standards.

5. References.

DMMP 2008. *DMMP Clarification Paper: Quality of Post-Dredge Sediment Surfaces (Updated)*. Prepared by David Fox (USACE), Erika Hoffman (EPA) and Tom Gries (Ecology) for the Dredged Material Management Program, June 2008.

Ecology (Washington State Department of Ecology) 2013. *Sediment Management Standards – Chapter 173-204 WAC*. Washington State Department of Ecology, February 2013

Northwest Agricultural Consultants, 2015. Data report prepared for Vic Unick, October 2015.

6. Signature. This determination was coordinated by the undersigned with Laura Inouye (Ecology), Justine Barton (EPA) and Celia Barton (DNR).

signed copy on file in DMMP office

Date

Lauran Warner - Seattle District Corps of Engineers

Copies Furnished:

DMMP agencies

Ronald Jepson, Ronald T. Jepson & Assoc.

Randel Perry, Corps Regulatory

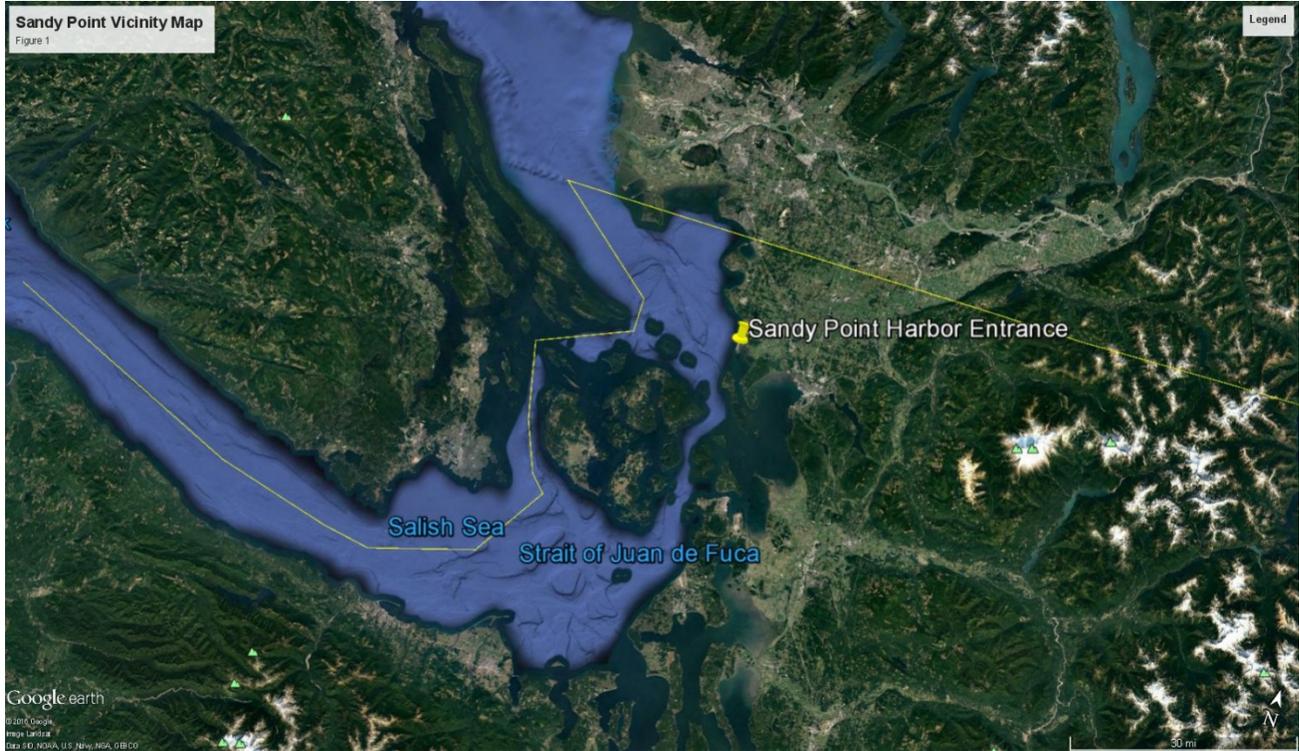
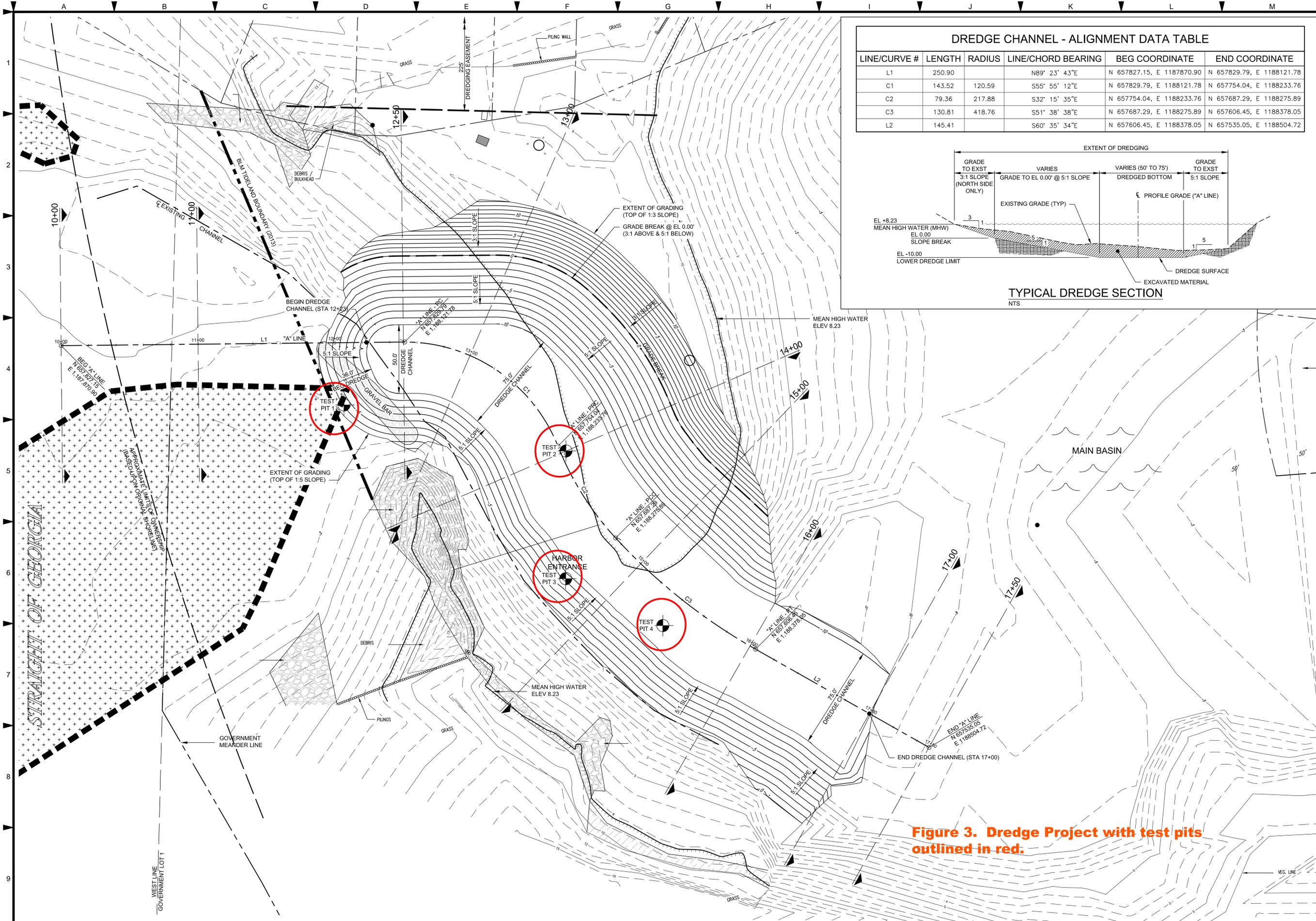


Figure 1. Sandy Point Harbor Vicinity



Figure 2. Sandy Point Harbor Area



DREDGE CHANNEL - ALIGNMENT DATA TABLE					
LINE/CURVE #	LENGTH	RADIUS	LINE/CHORD BEARING	BEG COORDINATE	END COORDINATE
L1	250.90		N89° 23' 43"E	N 657827.15, E 1187870.90	N 657829.79, E 1188121.78
C1	143.52	120.59	S55° 55' 12"E	N 657829.79, E 1188121.78	N 657754.04, E 1188233.76
C2	79.36	217.88	S32° 15' 35"E	N 657754.04, E 1188233.76	N 657687.29, E 1188275.89
C3	130.81	418.76	S51° 38' 38"E	N 657687.29, E 1188275.89	N 657606.45, E 1188378.05
L2	145.41		S60° 35' 34"E	N 657606.45, E 1188378.05	N 657535.05, E 1188504.72

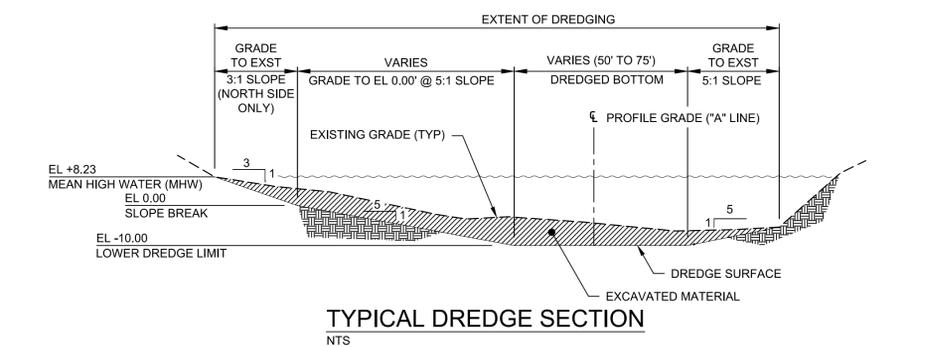


Figure 3. Dredge Project with test pits outlined in red.

REVISIONS	ID	ISSUE DATE	DESCRIPTION
	#		



RONALD T. JEPSON & ASSOC.
 CIVIL ENGINEERS, SURVEYORS, LAND PLANNERS
 222 GRAND AVENUE, SUITE C, BELLEVUE, WASHINGTON 98020
 PH: 360-733-5760 EMAIL: RJE@JEPSONENGINEERING.COM

PREPARED FOR: U.S. ARMY CORPS OF ENGINEERS
**SANDY POINT NAVIGATION CHANNEL
 PLAN & TYPICAL SECTION**
 MAINTENANCE DREDGING PROJECT (NWS-2016-188)
 SANDY POINT, WHATCOM COUNTY, WASHINGTON

SCALE: 1" = 30'

PROJECT ID: 14106
 ISSUE DATE: 7/26/2016
 SHEET ID: 5 OF 6