

March 25, 2020

**Prepared by:**

Dredged Material Management Office  
Seattle District, U.S. Army Corps of Engineers

**MEMORANDUM FOR: RECORD**

**SUBJECT:** DETERMINATION REGARDING THE SUITABILITY OF PROPOSED DREDGED MATERIAL FROM THE J.E. MCAMIS, INC. LOWER COLUMBIA RIVER MAINTENANCE DREDGING PROJECT, LONGVIEW, WASHINGTON (Permit Application # NWS-2019-0953) EVALUATED UNDER SECTION 404 OF THE CLEAN WATER ACT FOR IN-WATER PLACEMENT OR BENEFICIAL USE.

1. **Introduction.** This memorandum reflects the consensus determination of the Dredged Material Management Program (DMMP) agencies (U.S. Army Corps of Engineers, Washington State Department of Ecology, Washington State Department of Natural Resources, and the Environmental Protection Agency) regarding the suitability of sediment proposed for dredging from the Columbia River federal navigation channel in the vicinity of Astoria, Oregon and Skamokawa, Longview and Vancouver, Washington for in-water placement or beneficial use.

2. **Project Summary.** J.E. McAmis proposes to dredge up to 50,000 cubic yards (cy) of sediment per year for up to 10 years. J.E. McAmis is proposing to mechanically dredge material from the Columbia River Federal Navigation Channel with a clamshell bucket. See Sheet C0.0 for the site vicinity map. Material will be dredged, placed in a materials barge and transported via tug to J.E. McAmis' upland materials storage facility in Longview, WA (see Sheet C0.1) where it will be offloaded and stored for future commercial use. Dredging of shoaled material will occur in coordination with Portland District Navigation Section solely within the horizontal and vertical confines of the authorized Federal Navigation Channel in four stretches of the Columbia River on an as-needed basis to maintain the navigation channel:

Reach 1	Columbia River Miles 14 to 22	See sheets C1.0 – C1.1
Reach 2	Columbia River Miles 28 to 36	See sheets C2.0 – C2.1
Reach 3	Columbia River Miles 66 to 76	See sheets C3.0 – C3.1
Reach 4	Columbia River Miles 100 to 106.5	See sheets C4.0 – C4.1

Future commercial use of the dredged material is expected to be as upland fill, in-water fill and for environmental capping projects. Any in-water placement of the stored dredged material would be permitted separately.

**Table 1. Project Summary**

Project ranking	Very Low
Proposed dredging volume	Up to 50,000 cy annually for 10 years
Proposed dredging depth	-43 feet CRD plus 2 feet overdepth
Sampling dates	22-31 March 2016

Portland District SDM	5 July 2017
EIM Study ID	Not yet in EIM
USACE Permit Application Number	NWS-2019-0953
Recency Expiration (rank = 10 years)	March 2026

3. **Portland District Corps of Engineers Study.** USACE Portland District is responsible for maintenance dredging of the Columbia River Navigation Channel and conducting periodic sediment sampling to ensure that material from the channel can continue to be dredged and disposed in-water without adverse effects to the environment. The LCR deep-draft FNC is assigned a “very low” rank by PSET because the project is dominated by coarse sands (>80% sand), low total organic carbon (<0.5%) and strong river and tidal currents. Per section 3.5.3 of the 2016 SEF manual, chemical testing is not required. This is consistent with the 2018 DMMP User Manual Section 4.3 and Tables 5-1 and 5-5.

The Columbia River Federal Navigation Channel was last sampled and tested in March 2016 (USACE 2017). A total of 59 surface sediment grab samples were collected between RM 3 and 106.5, see Figure 1. Samples were analyzed for grain size, TOC and bulk density in order to confirm compliance with the exclusionary criteria under the Clean Water Act.

Multiple samples were taken from each of the areas proposed for possible dredging by J.E. McAmis, as follows:

- Reach 1 (CRM 14-22): Samples 50, 57, 65, and 77
- Reach 2 (CRM 28-36): Samples 102, 111, 116, 125, and 128
- Reach 3 (CRM 66-76): Samples 212, 215, 220, 224, 226, and 231
- Reach 4 (CRM 100-106.5): Samples 282, 284, 285, 287, 292, 293, and 299

Results from these samples showed that all of the material had very low TOC (between 0.1 to 0.29%), high sand content (from 84.0 to 99.9% sand) and correspondingly low fines content (from <0.1% to 1.9% fines). A few samples contained relatively less sand (84-90%), but these all had higher percentages of gravel and in all cases the combined gravel and sand fraction was >98%. The results thus demonstrate that FNC material in the areas proposed for dredging by J.E. McAmis is predominantly coarse-grained with low TOC, and meets the exclusionary criteria in the Clean Water Act.

On the basis of Portland District’s sediment characterization report, the Portland Sediment Evaluation Team (PSET) issued a suitability determination indicating that the navigation channel sediment is suitable for unconfined aquatic placement (PSET, 2017). The PSET group consists of the Portland District Army Corps of Engineers, Environmental Protection Agency, National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Ecology and Oregon Department of Environmental Quality. The navigation channel is ranked “very low” and the suitability determination is valid for 10 years from the sampling date.

4. **Suitability Determination.** The Corps of Engineers study demonstrated that the sediment in the area proposed by J.E. McAmis for dredging and storage for future projects is clean sand. The DMMP agencies agree with the determination made by the Portland Sediment Evaluation Team that the material is suitable for unconfined aquatic placement. Therefore, no additional sampling and testing is required until the PSET suitability determination expires in March 2026.

This memorandum 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.

This memorandum also does not constitute agency approval of any in-water projects utilizing dredged material from the J.E. McAmis dredging operation and UMSF. Each project will be subject to separate review and permitting, as appropriate for the specified use.

A determination regarding the suitability of the dredged material for upland disposal or other upland commercial use must be coordinated with the appropriate local Health Department.

5. **References.**

DMMP 2018. *Dredged Material Evaluation and Disposal Procedures, User Manual.* Prepared by the DMMP agencies, December 2018.

PSET, 2017. *Portland Sediment Evaluation Team (PSET) Level 2 dredged material suitability determination for the U.S. Army Corps of Engineers – Portland District's (Corps) operation and maintenance (O&M) dredging of the Lower Columbia River (LCR) deep-draft Federal Navigation Channel (FNC) in the Columbia River from River Mile (RM) 3 to 106.5 in Oregon and Washington.* Prepared by Bridgette Lohrman (EPA Region 10) for PSET. 5 July 2017.

SEF 2018. *Sediment Evaluation Framework for the Pacific Northwest.* Prepared by the Northwest Regional Sediment Evaluation Team. May 2018.

USACE, 2017. *Sediment Quality Evaluation Report: Lower Columbia River Federal Navigation Channel, River Miles 3 to 106.5.* Prepared by the USACE Portland District Sediment Quality Team. 21 April 2017.

**11. Agency Signatures.**

The signed copy is on file in the Dredged Material Management Office,  
Seattle District USACE

Concur:

\_\_\_\_\_  
Date Kelsey van der Elst - Seattle District Corps of Engineers

\_\_\_\_\_  
Date Justine Barton - Environmental Protection Agency

\_\_\_\_\_  
Date Laura Inouye, Ph.D. - Washington Department of Ecology

\_\_\_\_\_  
Date Shannon Soto - Washington Department of Natural Resources

Copies furnished:

DMMP signatories

Danette Guy, USACE Seattle District Regulatory PM

Scott Vandegrift, J.E. McAmis, Inc.

Joshua Elliott, Maul Foster & Alongi, Inc.



**SHEET INDEX:**

- C0.0 - SITE VICINITY MAP
- C0.1 - UPLAND MATERIAL STORAGE FACILITY MAP
- C1.0 - REACH 1 OVERVIEW
- C1.1 - REACH 1 ENLARGED PLAN & TYP SECTION
- C2.0 - REACH 2 OVERVIEW
- C2.1 - REACH 2 ENLARGED PLAN & TYP SECTION
- C3.0 - REACH 3 - OVERVIEW
- C3.1 - REACH 3 ENLARGED PLAN & TYP SECTION
- C4.0 - REACH 4 - OVERVIEW
- C4.1 - REACH 4 ENLARGED PLAN & TYP SECTION

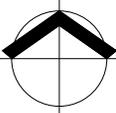
**ADJACENT PROPERTY OWNERS:**

1. PACIFIC FIBRE PRODUCTS, INC.
2. KAPSTONE KRAFT PAPER CORPORATION
3. COWLITZ COUNTY PUBLIC WORKS DEPARTMENT
4. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
5. OREGON DEPARTMENT OF STATE LANDS

HORIZONTAL DATUM: NAD83, OREGON STATE PLANE NORTH, US SURVEY FEET  
 VERTICAL DATUM: COLUMBIA RIVER DATUM (CRD)

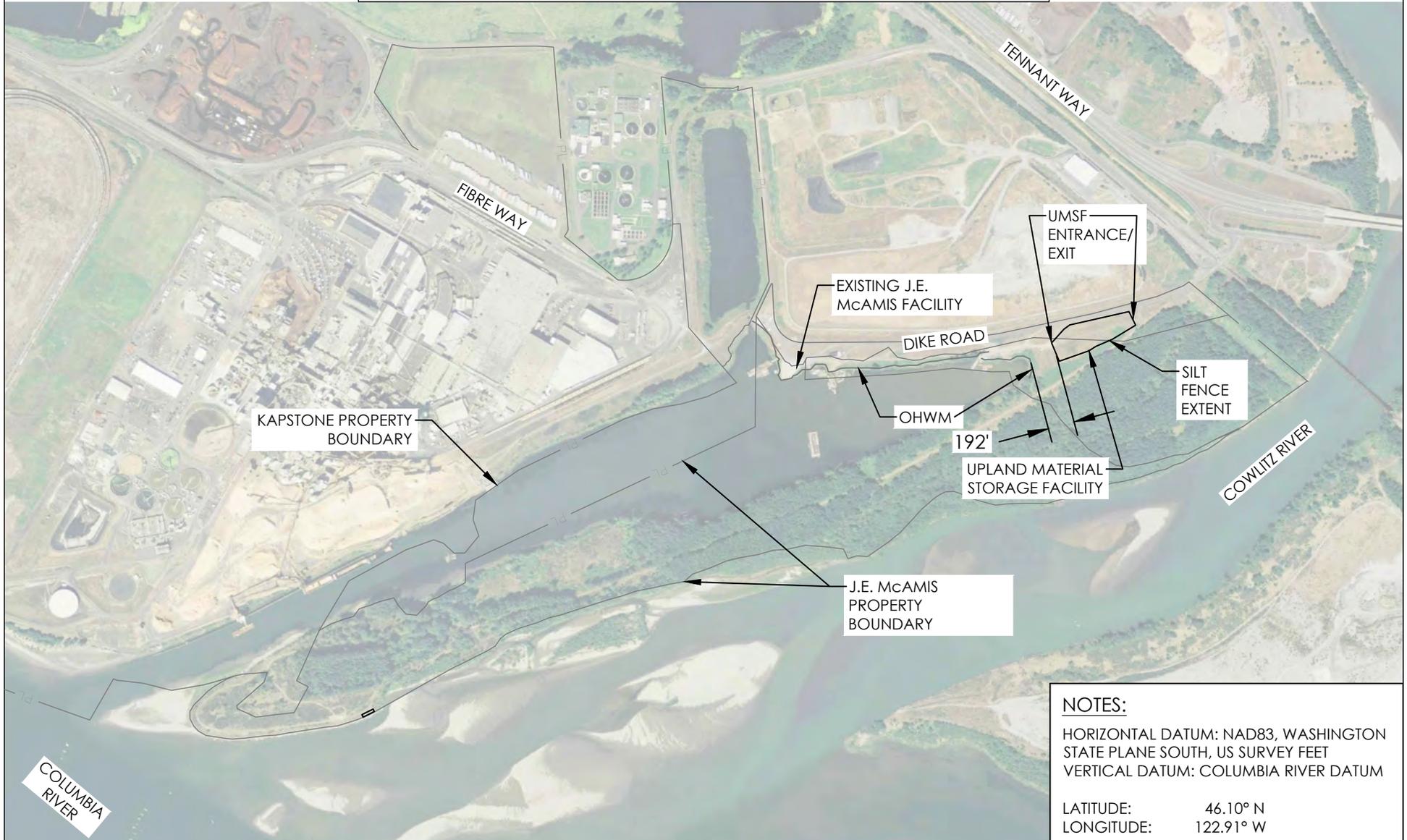
LATITUDE: 46.10° N  
 LONGITUDE: 122.91° W

MFA JOB #:	1618.01.01-02	REFERENCE #:	NWS-XXXX-XX
CHECKED:	J. ELLIOTT	APPLICANT NAME:	J.E. MCAMIS, INC.
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	LOWER COLUMBIA RIVER MAINTENANCE DREGDING
DATE:	10/01/2019	PROJECT ADDRESS:	100 TENNANT WAY LONGVIEW, WASHINGTON
 <b>MAUL FOSTER ALONGI</b> 2001 NW 19th AVE, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com	WATERWAY: [IF ANY]	COLUMBIA RIVER	
	SHEET # OF #:	1 OF 10	



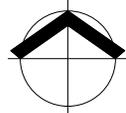
DRAWING NOT TO SCALE

**SHEET  
C0.0**



**NOTES:**  
 HORIZONTAL DATUM: NAD83, WASHINGTON STATE PLANE SOUTH, US SURVEY FEET  
 VERTICAL DATUM: COLUMBIA RIVER DATUM  
 LATITUDE: 46.10° N  
 LONGITUDE: 122.91° W

MFA JOB #:	1618.01.01-02	REFERENCE #:	NWS-XXXX-XX
CHECKED:	J. ELLIOTT	APPLICANT NAME:	J.E. MCAMIS, INC.
DRAWN:	M. TARBERT	PROPOSED PROJECT:	LOWER COLUMBIA RIVER MAINTENANCE DREGDING
DATE:	10/01/2019	PROJECT ADDRESS:	100 TENNANT WAY LONGVIEW, WASHINGTON
 <b>MAUL FOSTER ALONGI</b> 2001 NW 19th AVE, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com	WATERWAY: [IF ANY]	N/A	
	SHEET # OF #:	2 OF 10	





NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

**SHEET  
C0.1**

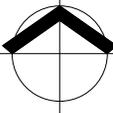


**LEGEND:**

-  EXISTING SHOALING AREA TO BE DREDGED
-  DREDGE ACTION AREAS
-  FEDERAL NAVIGATION CHANNEL BOUNDARY
-  COLUMBIA RIVER MILE MARKER
-  OREGON/WASHINGTON STATE BOUNDARY

MFA JOB #:	1618.01.01-02
CHECKED:	J. ELLIOTT
DRAWN:	E. LUNDEEN
DATE:	10/01/2019
 <b>MAUL FOSTER ALONGI</b> 2001 NW 19th AVE, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) <a href="http://www.maulfoster.com">www.maulfoster.com</a>	

REFERENCE #:	NWS-XXXX-XX
APPLICANT NAME:	J.E. MCAMIS, INC.
PROPOSED PROJECT:	LOWER COLUMBIA RIVER MAINTENANCE DREGDING
PROJECT ADDRESS:	100 TENNANT WAY LONGVIEW, WASHINGTON
WATERWAY: [IF ANY]	COLUMBIA RIVER
SHEET # OF #:	3 OF 10





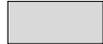
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

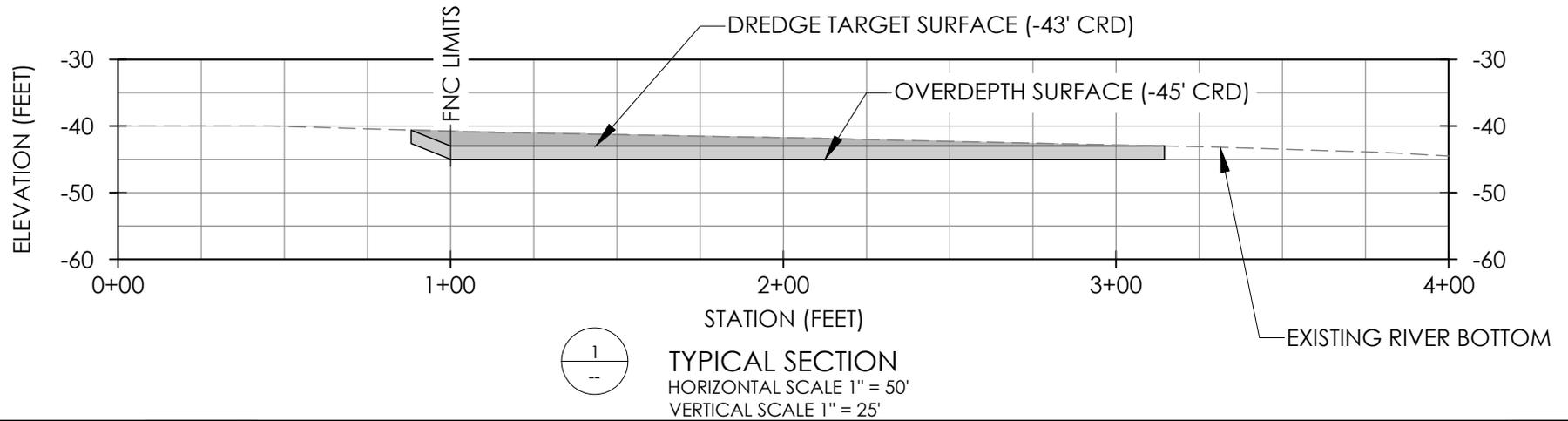
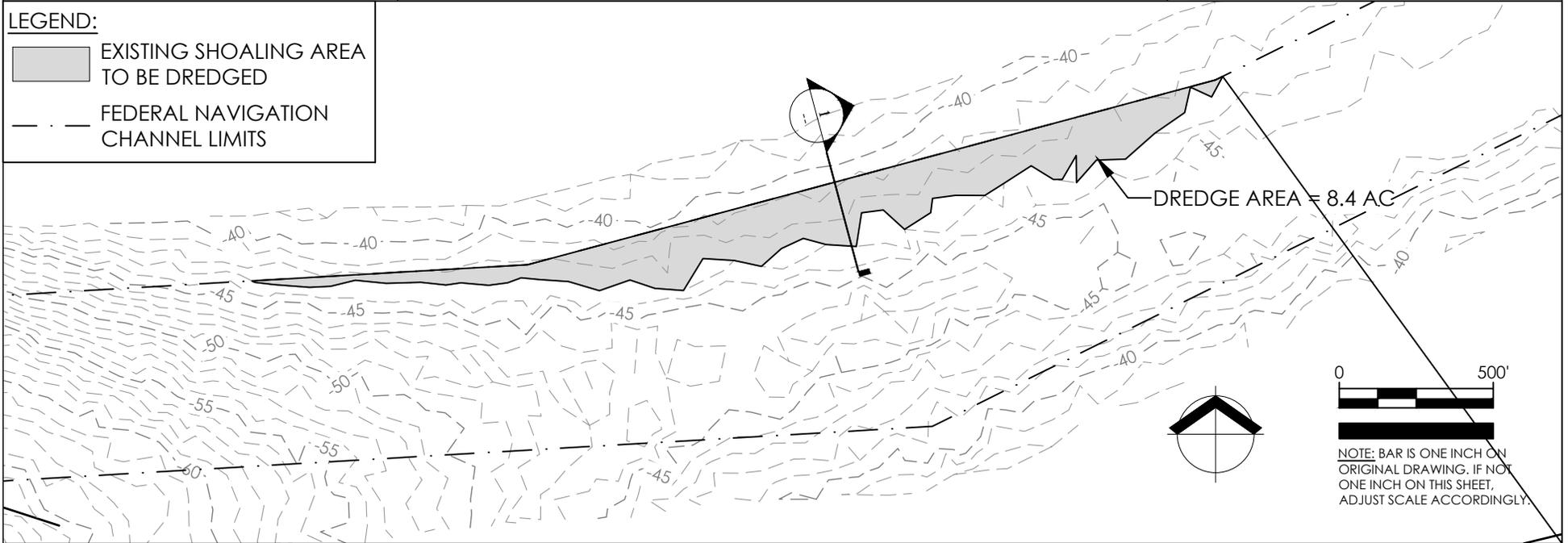
SHEET  
C1.0

# NWS-2019-953

## REACH 1 ENLARGED PLAN & TYPICAL SECTION

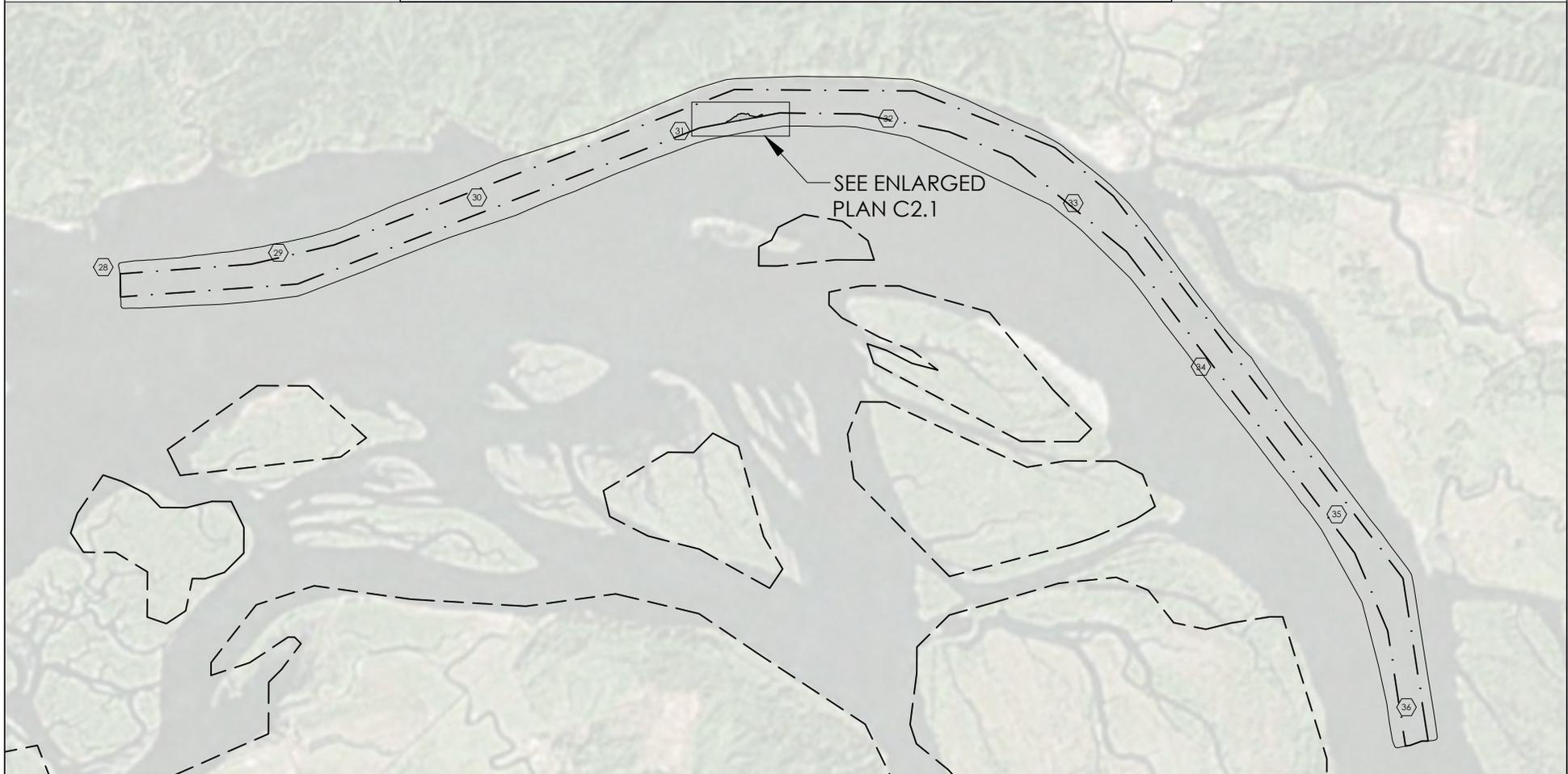
### LEGEND:

-  EXISTING SHOALING AREA TO BE DREDGED
-  FEDERAL NAVIGATION CHANNEL LIMITS



MFA JOB #:	1618.01.01-02	REFERENCE #:	NWS-XXXX-XX
CHECKED:	J. ELLIOTT	APPLICANT NAME:	J.E. MCAMIS, INC.
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	LOWER COLUMBIA RIVER MAINTENANCE DREGDING
DATE:	10/01/2019	PROJECT ADDRESS:	100 TENNANT WAY LONGVIEW, WASHINGTON
 <b>MAUL FOSTER ALONGI</b> 2001 NW 19th AVE, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) www.maulfooster.com		WATERWAY: [IF ANY]	COLUMBIA RIVER
		SHEET # OF #:	4 OF 10

SHEET  
C1.1



LEGEND:

- EXISTING SHOALING AREA TO BE DREDGED
- DREDGE ACTION AREAS
- FEDERAL NAVIGATION CHANNEL BOUNDARY
- COLUMBIA RIVER MILE MARKER
- OREGON/WASHINGTON STATE BOUNDARY

MFA JOB #:	1618.01.01-02	REFERENCE #:	NWS-XXXX-XX
CHECKED:	J. ELLIOTT	APPLICANT NAME:	J.E. MCAMIS, INC.
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	LOWER COLUMBIA RIVER MAINTENANCE DREGDING
DATE:	10/01/2019	PROJECT ADDRESS:	100 TENNANT WAY LONGVIEW, WASHINGTON
<b>MAUL FOSTER ALONGI</b> 2001 NW 19th AVE, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com		WATERWAY: [IF ANY]	COLUMBIA RIVER
		SHEET # OF #:	5 OF 10

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

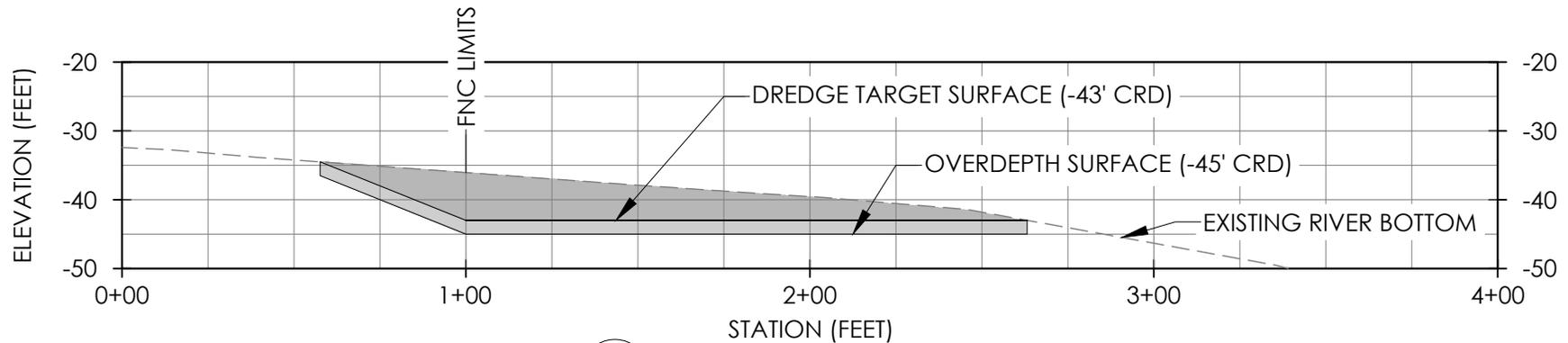
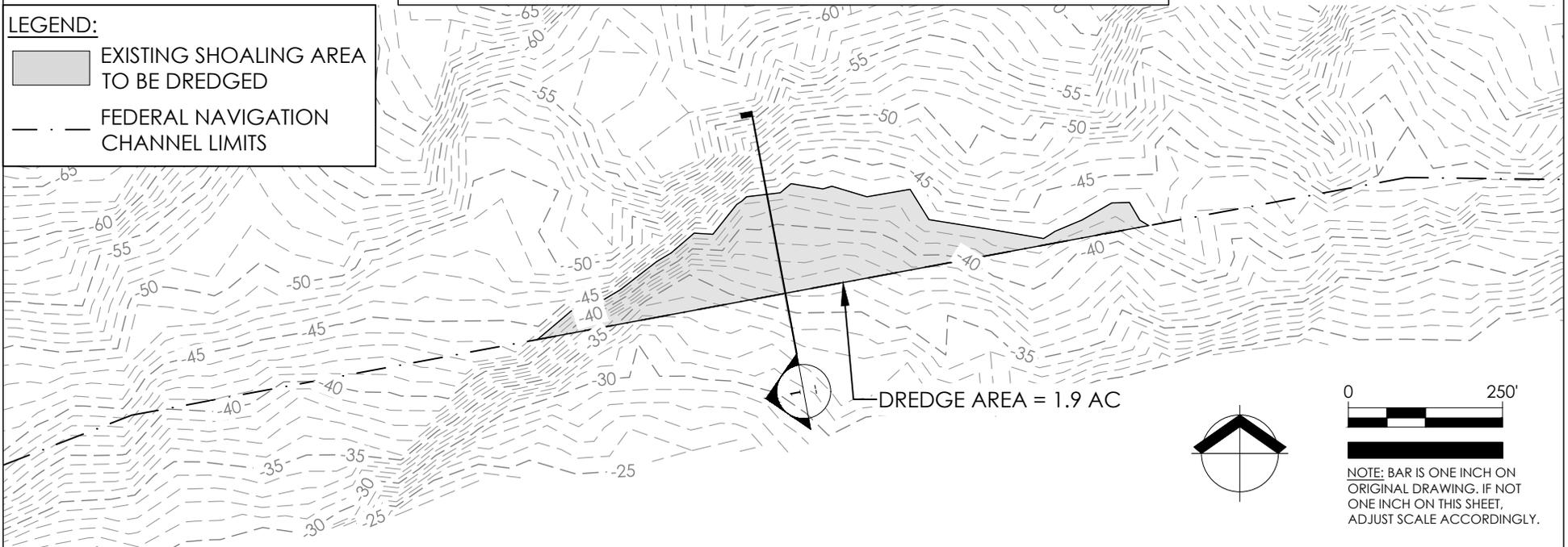
SHEET  
C2.0

# NWS-2019-953

## REACH 2 ENLARGED PLAN & TYPICAL SECTION

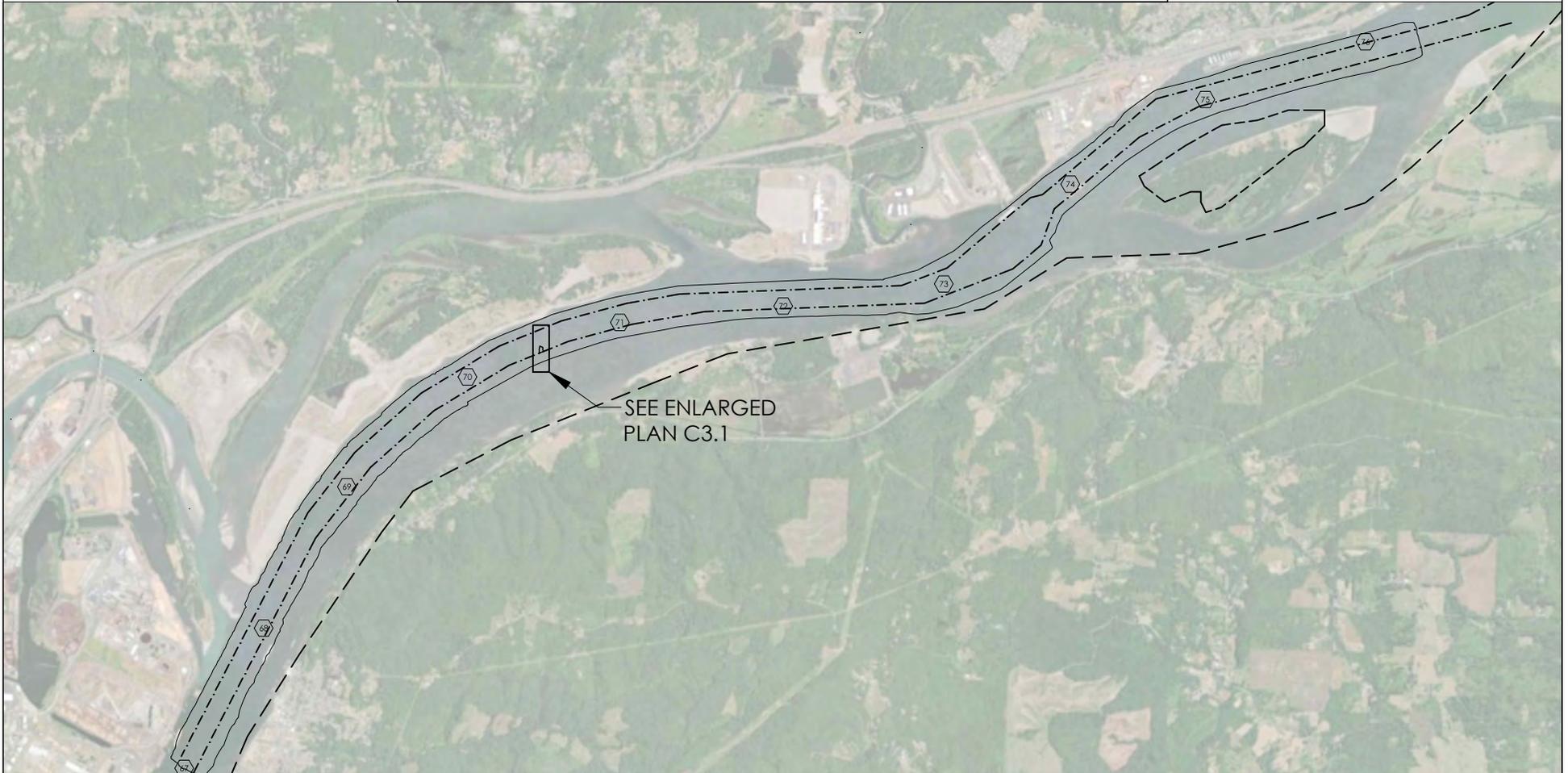
### LEGEND:

-  EXISTING SHOALING AREA TO BE DREDGED
-  FEDERAL NAVIGATION CHANNEL LIMITS



**TYPICAL SECTION**  
 HORIZONTAL SCALE 1" = 50'  
 VERTICAL SCALE 1" = 25'

MFA JOB #: 1618.01.01-02 CHECKED: J. ELLIOTT DRAWN: E. LUNDEEN DATE: 10/01/2019	REFERENCE #: NWS-XXXX-XX APPLICANT NAME: J.E. MCAMIS, INC. PROPOSED PROJECT: LOWER COLUMBIA RIVER MAINTENANCE DREGDING PROJECT ADDRESS: 100 TENNANT WAY LONGVIEW, WASHINGTON WATERWAY: [IF ANY] COLUMBIA RIVER SHEET # OF #: 6 OF 10	SHEET C2.1
 <b>MAUL FOSTER ALONGI</b> 2001 NW 19th AVE, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com		



**LEGEND:**

- EXISTING SHOALING AREA TO BE DREDGED
- DREDGE ACTION AREAS
- FEDERAL NAVIGATION CHANNEL BOUNDARY
- COLUMBIA RIVER MILE MARKER
- OREGON/WASHINGTON STATE BOUNDARY

MFA JOB #:	1618.01.01-02	REFERENCE #:	NWS-XXXX-XX
CHECKED:	J. ELLIOTT	APPLICANT NAME:	J.E. MCAMIS, INC.
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	LOWER COLUMBIA RIVER MAINTENANCE DREGDING
DATE:	10/01/2019	PROJECT ADDRESS:	100 TENNANT WAY LONGVIEW, WASHINGTON
 <b>MAUL FOSTER ALONGI</b> 2001 NW 19th AVE, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com	WATERWAY: [IF ANY]	COLUMBIA RIVER	
	SHEET # OF #:	7 OF 10	

0 5000'

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

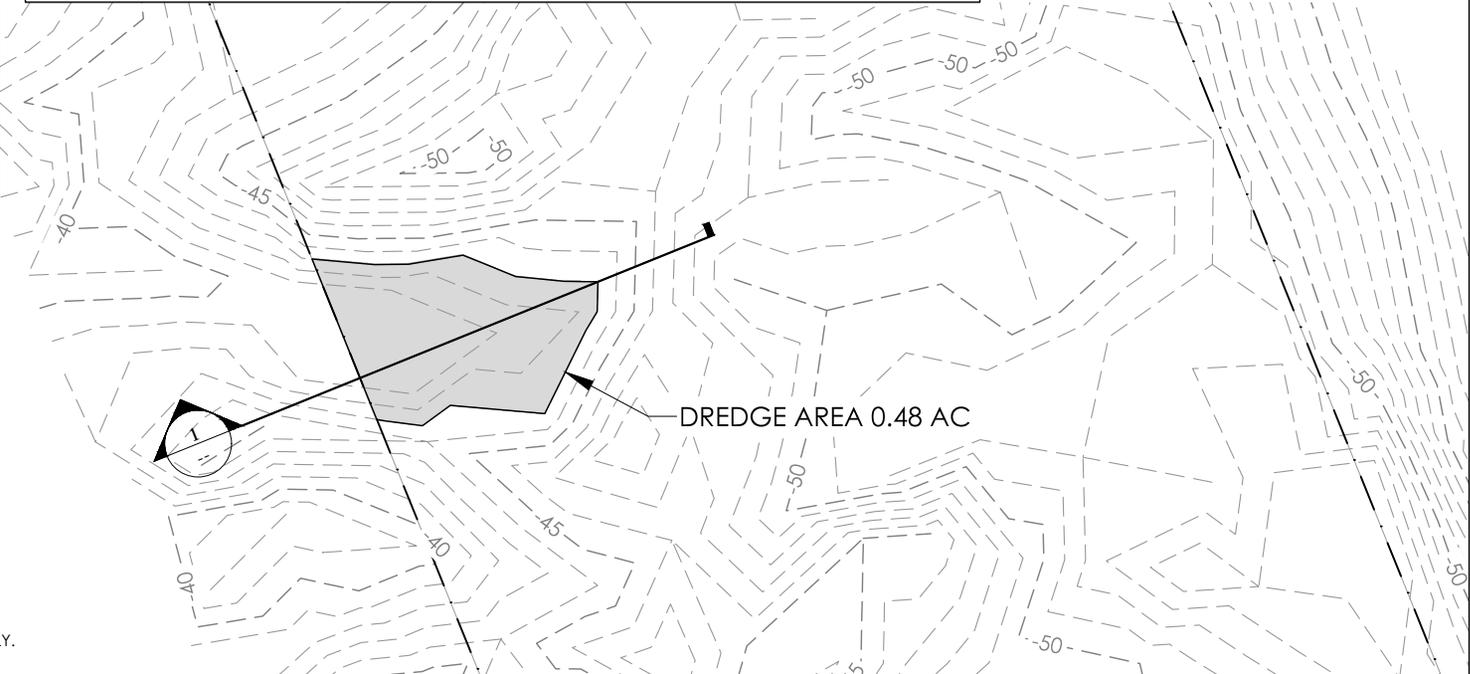
SHEET  
C3.0

# NWS-2019-953

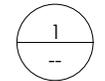
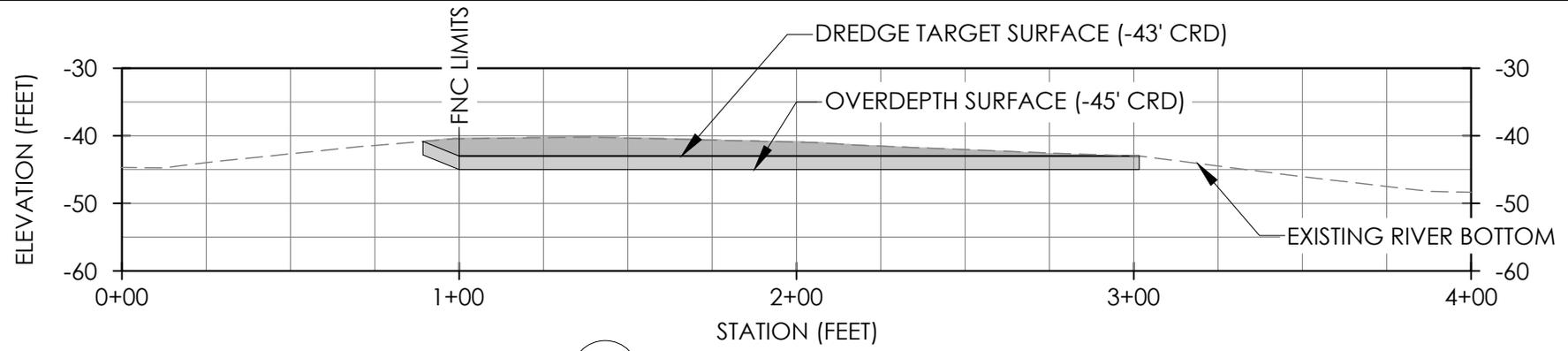
## REACH 3 ENLARGED PLAN & TYPICAL SECTION

### LEGEND:

-  EXISTING SHOALING AREA TO BE DREDGED
-  FEDERAL NAVIGATION CHANNEL LIMITS



NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.



**TYPICAL SECTION**  
 HORIZONTAL SCALE 1" = 50'  
 VERTICAL SCALE 1" = 25'

MFA JOB #:	1618.01.01-02	REFERENCE #:	NWS-XXXX-XX
CHECKED:	J. ELLIOTT	APPLICANT NAME:	J.E. MCAMIS, INC.
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	LOWER COLUMBIA RIVER MAINTENANCE DREGDING
DATE:	10/01/2019	PROJECT ADDRESS:	100 TENNANT WAY LONGVIEW, WASHINGTON
 <b>MAUL FOSTER ALONGI</b> 2001 NW 19th AVE, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com		WATERWAY: [IF ANY]	COLUMBIA RIVER
		SHEET # OF #:	8 OF 10

SHEET  
C3.1



LEGEND:

- EXISTING SHOALING AREA TO BE DREDGED
- DREDGE ACTION AREAS
- FEDERAL NAVIGATION CHANNEL BOUNDARY
- COLUMBIA RIVER MILE MARKER
- OREGON/WASHINGTON STATE BOUNDARY

MFA JOB #:	1618.01.01-02	REFERENCE #:	NWS-XXXX-XX
CHECKED:	J. ELLIOTT	APPLICANT NAME:	J.E. MCAMIS, INC.
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	LOWER COLUMBIA RIVER MAINTENANCE DREGDING
DATE:	10/01/2019	PROJECT ADDRESS:	100 TENNANT WAY LONGVIEW, WASHINGTON
 MAUL FOSTER ALONGI 2001 NW 19th AVE, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) www.maulfooster.com	WATERWAY: [IF ANY]	COLUMBIA RIVER	
	SHEET # OF #:	9 OF 10	

0 6000'

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

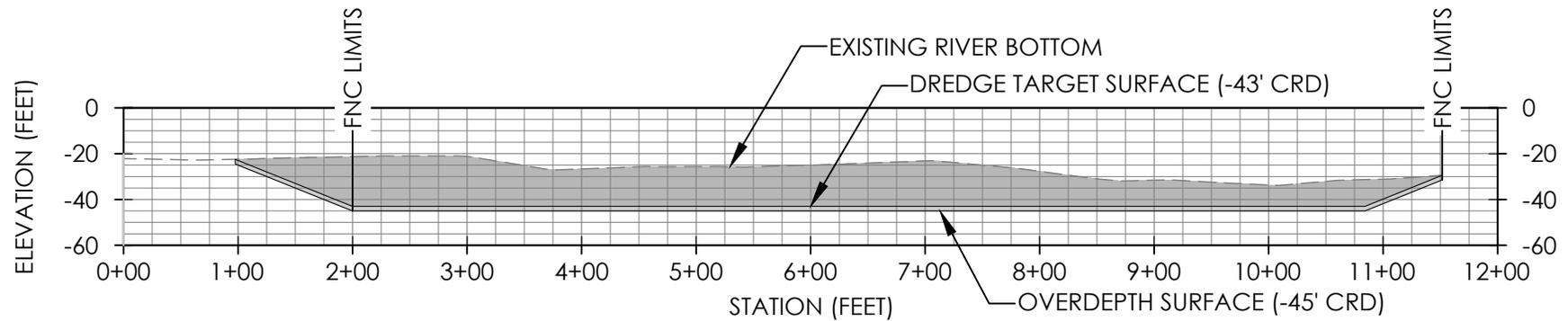
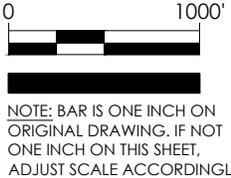
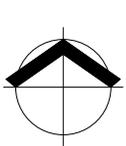
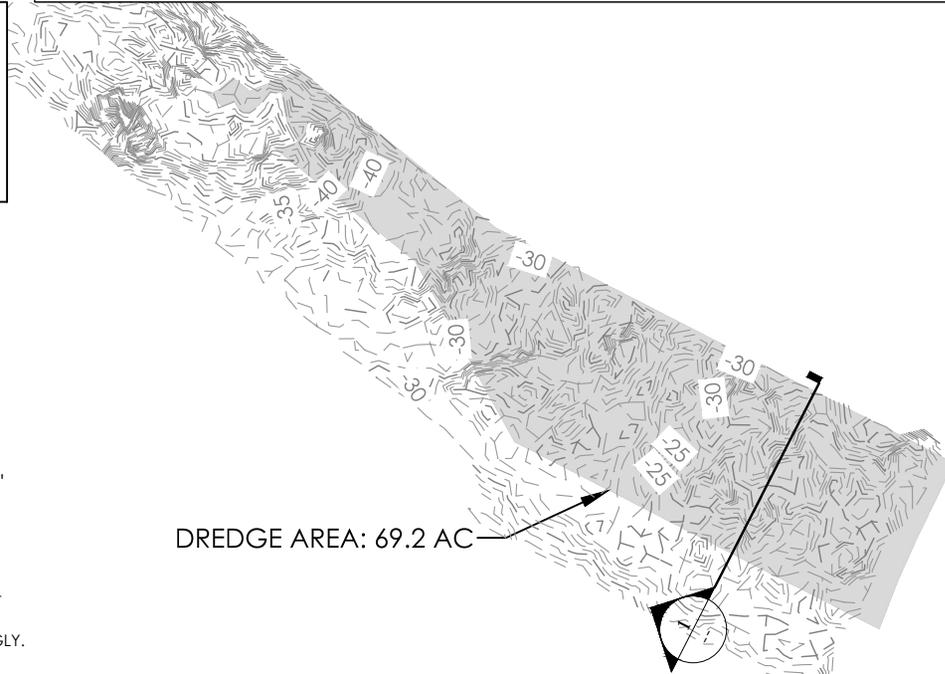
SHEET  
C4.0

# NWS-2019-953

## REACH 4 ENLARGED PLAN & TYPICAL SECTION

### LEGEND:

- EXISTING SHOALING AREA TO BE DREDGED
- FEDERAL NAVIGATION CHANNEL LIMITS



**TYPICAL SECTION**  
 HORIZONTAL SCALE 1" = 150'  
 VERTICAL SCALE 1" = 75'

MFA JOB #:	1618.01.01-02	REFERENCE #:	NWS-XXXX-XX
CHECKED:	J. ELLIOTT	APPLICANT NAME:	J.E. MCAMIS, INC.
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	LOWER COLUMBIA RIVER MAINTENANCE DREGDING
DATE:	10/01/2019	PROJECT ADDRESS:	100 TENNANT WAY LONGVIEW, WASHINGTON
<b>MAUL FOSTER ALONGI</b> 2001 NW 19th AVE, Suite 200 Portland, OR 97209 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com		WATERWAY: [IF ANY]	COLUMBIA RIVER
		SHEET # OF #:	10 OF 10

SHEET  
C4.1

Figure 1. Lower Columbia River Deep-draft Federal Navigation Channel Project Location.

