FINAL

Attachment C
Sample-Specific Details and Rationale

This attachment provides detailed information regarding sediment sampling locations in the Inlet at RM 2.2W. The tables included in this attachment are:

- Table C-1 Sample Location Rationale and Analytes
- Table C-2 Sample Location Details
- Table C-3 Vertical Extent Core Profiles

Tables C-1 and C-2 provide location-specific details regarding rationale for collection, analytes, and details for sample collection to be used by the field crew. Table C-3 presents the core profiles for the vertical extent samples; the profiles provide details regarding which intervals will be analyzed and archived at each location.

Table C-1
Sample Location Rationale and Analytes

Location No.[1]	RM	Area No.	Tidal Category	Sample Type(s)					Recovery Category	In FNC?	Shoaling Area	Potential Vessel Scour Area	Mudline Elevation (feet MLLW)[1]	Rationale					Notes	Analytes By Sample Type[3]		
				0–10 cm	0–45 cm	0–60 cm	Shoal	Vertical Extent						Horizontal Bounding[2]	Vertical Extent	Side Slope	Reoccupation	Other		Surface Sediment Samples (0–10 cm)	Subsurface Sediment Samples (0–45 cm, 0–60 cm, or Shoaling Intervals)	Vertical Extent Samples
Outer Inlet																						
1590	2.3	20	Intertidal	x	x			a	2	No	No	No	6.0	x	a					Full suite (PCBs, metals, mercury, PAHs, phthalates, other SVOCs), dioxins/furans	PCBs, dioxins/furans, arsenic, PAHs	Archive
1591	2.2	20	Intertidal	x	x				2	No	No	No	1.0	x						Full suite (PCBs, metals, mercury, PAHs, phthalates, other SVOCs), dioxins/furans	PCBs, dioxins/furans, arsenic, PAHs	-
1592	2.2	20	Intertidal		a			x	2	No	No	No	6.6		x				Location part of Transect 7 (see Map 4-2b).	-	Archive	PCBs, mercury
1593	2.2	20	Intertidal		a			x	2	No	No	No	6.6		x				Location part of Transect 6 (see Map 4-2b).	-	Archive	PCBs, mercury
1594	2.2	20	Intertidal		a			x	2	No	No	No	2.0		x				Location part of Transect 6 (see Map 4-2b).	-	Archive	PCBs, mercury
1595	2.2	20	Intertidal		a			x	2	No	No	No	7.0		x					-	Archive	PCBs, mercury
Inner Inlet																						
1596	2.2	20	Intertidal		a			x	2	No	No	No	6.9		x				Location part of Transect 5 (see Map 4-2a).	-	Archive	PCBs, mercury
1597	2.2	20	Intertidal		a			x	2	No	No	No	6.7		x				Location part of Transect 5 (see Map 4-2a).	-	Archive	PCBs, mercury
1598	2.2	20	Intertidal		a			x	2	No	No	No	7.5		x				Location part of Transect 4 (see Map 4-2a).	-	Archive	PCBs, mercury
1599	2.2	20	Intertidal		a			x	2	No	No	No	6.2		x				Location part of Transect 4 (see Map 4-2a).	-	Archive	PCBs, mercury
1600	2.2	20	Intertidal		a			x	2	No	No	No	5.6		x			x	Location part of Transect 3 (see Map 4-2a). Location will help delineate extent of material that may require Subtitle C disposal (PCBs > 50 ppm).	-	Archive	PCBs, mercury
1601	2.2	20	Intertidal		a			x	2	No	No	No	6.9		x			x	Location part of Transect 3 (see Map 4-2a). Location will help delineate extent of material that may require Subtitle C disposal (PCBs > 50 ppm).	-	Archive	PCBs, mercury
1602	2.2	20	Intertidal		a			x	2	No	No	No	5.1		x			x	Location will help delineate extent of material that may require Subtitle C disposal (PCBs > 50 ppm).	-	Archive	PCBs, mercury
1603	2.2	20	Intertidal		a			x	2	No	No	No	7.7		x				Location part of Transect 2 (see Map 4-2a).	-	Archive	PCBs, mercury
1604	2.2	20	Intertidal		a			x	2	No	No	No	6.9		x			x	Location part of Transect 2 (see Map 4-2a). Location will help delineate extent of material that may require Subtitle C disposal (PCBs > 50 ppm).	-	Archive	PCBs, mercury
1605	2.2	20	Intertidal		a			x	2	No	No	No	4.5		x			x	Location will help delineate extent of material that may require Subtitle C disposal (PCBs > 50 ppm).	-	Archive	PCBs, mercury
1606	2.2	20	Intertidal		a			x	2	No	No	No	6.8		x				Location part of Transect 1 (see Map 4-2a).	-	Archive	PCBs, mercury
1607	2.2	20	Intertidal		a			x	2	No	No	No	4.0		x				Location part of Transect 1 (see Map 4-2a).	-	Archive	PCBs, mercury
1608	2.2	20	Intertidal		a			x	2	No	No	No	4.6		x				Location part of Transect 1 (see Map 4-2a).	-	Archive	PCBs, mercury

Table C-1
Sample Location Rationale and Analytes

Location No.[1]	RM	Area No.	Tidal Category	Sample Type(s)					Recovery Category	In FNC?	Shoaling Area	Potential Vessel Scour Area	Mudline Elevation (feet MLLW)[1]	Rationale					Notes	Analytes By Sample Type[3]		
				0–10 cm	0–45 cm	0–60 cm	Shoal	Vertical Extent						Horizontal Bounding[2]	Vertical Extent	Side Slope	Reoccupation	Other		Surface Sediment Samples (0–10 cm)	Subsurface Sediment Samples (0–45 cm, 0–60 cm, or Shoaling Intervals)	Vertical Extent Samples
1609	2.2	20	Intertidal		a			x	2	No	No	No	6.3		x					-	Archive	PCBs, mercury
1610	2.2	20	Intertidal		a			x	2	No	No	No	7.4		x					-	Archive	PCBs, mercury

Notes:
1. Mudline elevations are based on the 2021/2023 bathymetry survey data, supplemented within the inlet by the 2018 Dalton Olmsted & Fuglevand survey.
2. Horizontal bounding includes sample placement intended to characterize areas with interpolation uncertainty.
3. The columns indicating analytes by sample type use green shading to show that sample interval(s) will be collected and analyzed in Tier 1 and gray shading to indicate that sample interval(s) will be collected and archived. A dash (-) indicates that a given interval will not be collected.
a: Tier 2 sample to be collected and archived
FNC: Federal Navigation Channel
MLLW: mean lower low water
PAH: polycyclic aromatic hydrocarbon
PCB: polychlorinated biphenyl
RM: river mile
SVOC: semivolatile organic compound
x: Tier 1 sample to be collected and analyzed

Table C-2
Sample Location Details

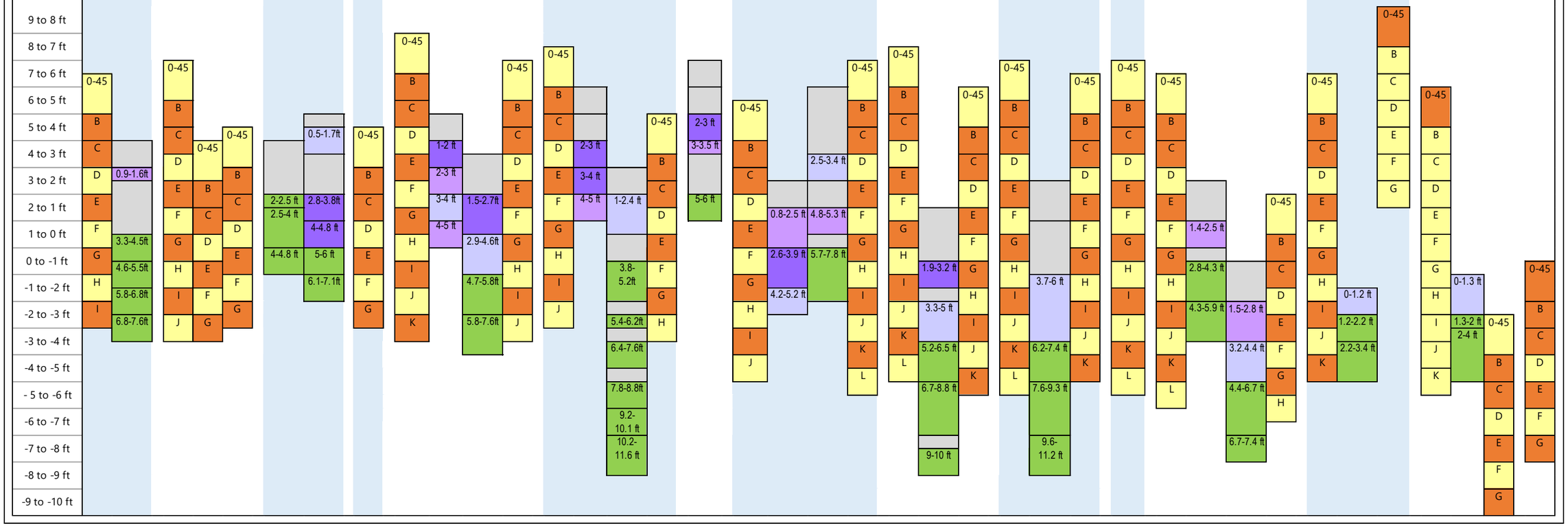
Location No.	RM	Area No.	Tidal Category	Sample Type(s)					Reoccu-pation?	Toxicity Test?	In the FNC?	Mudline Elevation (ft MLLW)[1]	Vertical Extent Details				Estimated Shoal Thickness	Target Coordinates			
				0–10 cm	0–45 cm	0–60 cm	Shoal	Vertical Extent					Vertical Category	Authorized or Operating Depth	Target Core Elevation or Length	Estimated Core Length (ft)		X	Y	Longitude	Latitude
Outer Inlet																					
1590	2.3	20	Intertidal	x	x			a	-	-	No	6.0	location-specific	-	-5 ft MLLW	11.0	-	1270336	200270	-122.33171	47.53915
1591	2.2	20	Intertidal	x	x				-	-	No	1.0	-	-	-	-	-	1270306	200308	-122.33183	47.53926
1592	2.2	20	Intertidal		a			x	-	-	No	6.6	location-specific	-	-5 ft MLLW	11.6	-	1270246	200291	-122.33207	47.53921
1593	2.2	20	Intertidal		a			x	-	-	No	6.6	location-specific	-	-6 ft MLLW	12.6	-	1270194	200279	-122.33228	47.53917
1594	2.2	20	Intertidal		a			x	-	-	No	2.0	location-specific	-	-6 ft MLLW	8.0	-	1270194	200371	-122.33229	47.53942
1595	2.2	20	Intertidal		a			x	-	-	No	7.0	location-specific	-	-5 ft MLLW	12.0	-	1270157	200309	-122.33243	47.53925
Inner Inlet																					
1596	2.2	20	Intertidal		a			x	-	-	No	6.9	location-specific	-	-5 ft MLLW	11.9	-	1270108	200338	-122.33264	47.53933
1597	2.2	20	Intertidal		a			x	-	-	No	6.7	location-specific	-	-5 ft MLLW	11.7	-	1270106	200368	-122.33264	47.53941
1598	2.2	20	Intertidal		a			x	-	-	No	7.5	location-specific	-	-5 ft MLLW	12.5	-	1270037	200326	-122.33292	47.53929
1599	2.2	20	Intertidal		a			x	-	-	No	6.2	location-specific	-	-5 ft MLLW	11.2	-	1270035	200374	-122.33293	47.53942
1600	2.2	20	Intertidal		a			x	-	-	No	5.6	location-specific	-	-5 ft MLLW	10.6	-	1269973	200292	-122.33318	47.53920
1601	2.2	20	Intertidal		a			x	-	-	No	6.9	location-specific	-	-5 ft MLLW	11.9	-	1269971	200353	-122.33319	47.53936
1602	2.2	20	Intertidal		a			x	-	-	No	5.1	location-specific	-	-3 ft MLLW	8.1	-	1269930	200337	-122.33335	47.53932
1603	2.2	20	Intertidal		a			x	-	-	No	7.7	location-specific	-	-3 ft MLLW	10.7	-	1269895	200315	-122.33349	47.53925
1604	2.2	20	Intertidal		a			x	-	-	No	6.9	location-specific	-	-3 ft MLLW	9.9	-	1269895	200353	-122.33350	47.53936
1605	2.2	20	Intertidal		a			x	-	-	No	4.5	location-specific	-	-3 ft MLLW	7.5	-	1269854	200322	-122.33366	47.53927
1606	2.2	20	Intertidal		a			x	-	-	No	6.8	location-specific	-	-3 ft MLLW	9.8	-	1269831	200320	-122.33375	47.53927
1607	2.2	20	Intertidal		a			x	-	-	No	4.0	location-specific	-	-3 ft MLLW	7.0	-	1269831	200347	-122.33376	47.53934
1608	2.2	20	Intertidal		a			x	-	-	No	4.6	location-specific	-	-3 ft MLLW	7.6	-	1269831	200360	-122.33376	47.53937
1609	2.2	20	Intertidal		a			x	-	-	No	6.3	location-specific	-	-3 ft MLLW	9.3	-	1269757	200361	-122.33406	47.53937
1610	2.2	20	Intertidal		a			x	-	-	No	7.4	location-specific	-	-3 ft MLLW	10.4	-	1269935	200304	-122.33333	47.53923

Notes:
1. Mudline elevations are based on the 2021/2023 bathymetry survey data, supplemented within the inlet by the 2018 Dalton Olmsted & Fuglevand survey.
a: Tier 2 sample to be collected and archived
FNC: Federal Navigation Channel
MLLW: mean lower low water
RM: river mile
x: Tier 1 sample to be collected and analyzed

Table C-3
Vertical Extent Core Profiles

Area 20 (Inlet at RM 2.2W)

Location ID:	1609	FS2154-A-SE	1606	1607	1608	FS2154-C-SE	FS2154-B-SE	1605	1603	HSA1	FS2154-D-SE	1604	1610	HSA2	FS2154-F-SE	1602	HSA3	1600	FS2154-H-SE	FS2154-G-SE	1601	1598	FS2154-I-SE	1599	1596	FS2154-J-SE	1597	1595	1593	FS2154-L-SE	FS2154-K-SE	1594	1592	FS2154-M-SE	1427	1590	LDW-SC40	1428	1434
Year:	2024	2012	2024	2024	2024	2012	2012	2024	2024	2020	2012	2024	2024	2020	2012	2024	2020	2024	2012	2012	2024	2024	2012	2024	2024	2012	2024	2024	2024	2012	2012	2024	2024	2012	2024	2024	2006	2024	2024
Mudline:	6.3	4.0	6.8	4.0	4.6	4.2	5.2	4.5	7.7	est. +5	3.7	6.9	7.4	est. +6	2.9	5.1	est. +7	5.6	2.4	5.9	6.9	7.5	1.7	6.2	6.9	2.5	6.7	7.0	6.6	2.6	-0.6	2.0	6.6	-1.7	est.+9	6.0	-0.8 ft	-2.6	-0.4
Recovery:	-	89%	-	-	-	86%	92%	-	-	na	75%	-	-	na	78%	-	na	-	48%	85%	-	-	58%	-	-	53%	-	-	-	72%	69%	-	-	54%	-	-	na	-	-
Core Target:	-3 ft	-	-3 ft	-3 ft	-3 ft	-	-	-3 ft	-3 ft	-	-	-3 ft	-3 ft	-	-	-3 ft	-	-5 ft	-	-	-5 ft	-5 ft	-	-5 ft	-5 ft	-	-5 ft	-5 ft	-6 ft	-	-	-6 ft	-5 ft	-	7.5 ft	-5 ft	-	7.5 ft	7.5 ft



Notes:
Mudline elevations are shown in feet MLLW. Sample interval measurements are in centimeters unless otherwise indicated.
Light blue shading indicates grouping of cores in transects.
Light green shading indicates locations presented in QAPP Addendum No. 1, which are shown here for informational purposes.
Core recoveries are shown for existing cores (cores from 2012 are recovery corrected). Recovery percentages shown in red denote recoveries less than 60%, indicating higher levels of uncertainties in the core interval depths.
For Phase II cores (indicated with blue shading), colors indicate the following: Orange – Tier 1 sample to be analyzed; Yellow – Tier 2 sample to be archived for potential analysis.
For existing vertical extent cores, shades of purple indicate concentrations above surface sediment RALs for any COC. Specifically, dark purple indicates EFs > 100, purple indicates EFs of 10–100, and light purple indicates EFs < 10 (with one exception—the 2.9–4.6-foot interval for FS2154-D-SE—all purple shading is based on EFs for total PCBs). Green shading indicates concentrations below all surface sediment RALs. Gray shading indicates intervals that were not analyzed.

COC: contaminant of concern
EF: exceedance factor
ID: identification
MLLW: mean lower low water
PCB: polychlorinated biphenyl
RAL: remedial action level
RM: river mile