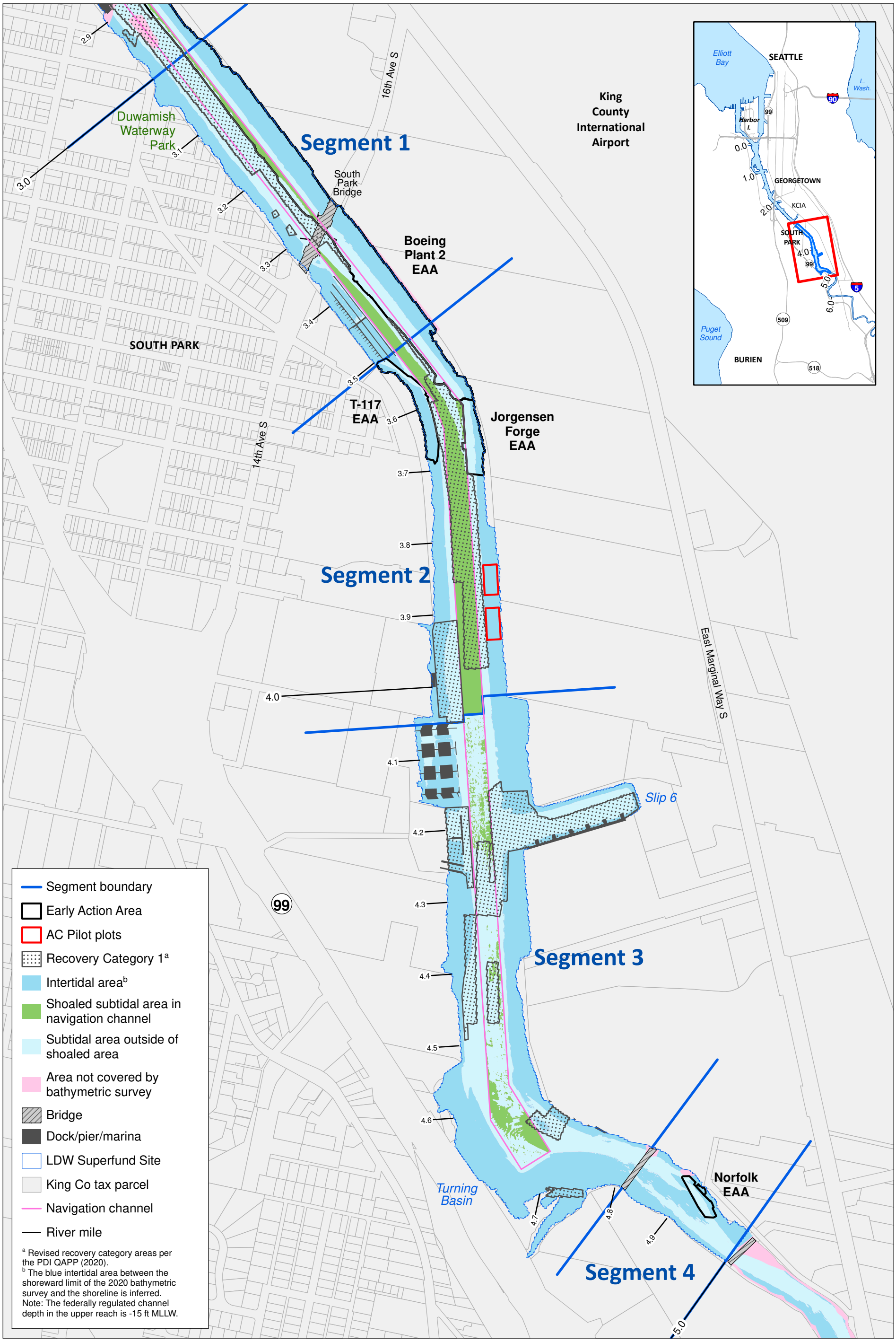

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Map 2-1. Upper reach of the LDW

PRE-DESIGN INVESTIGATION PHASE I DATA EVALUTATION REPORT FOR THE LDW UPPER REACH

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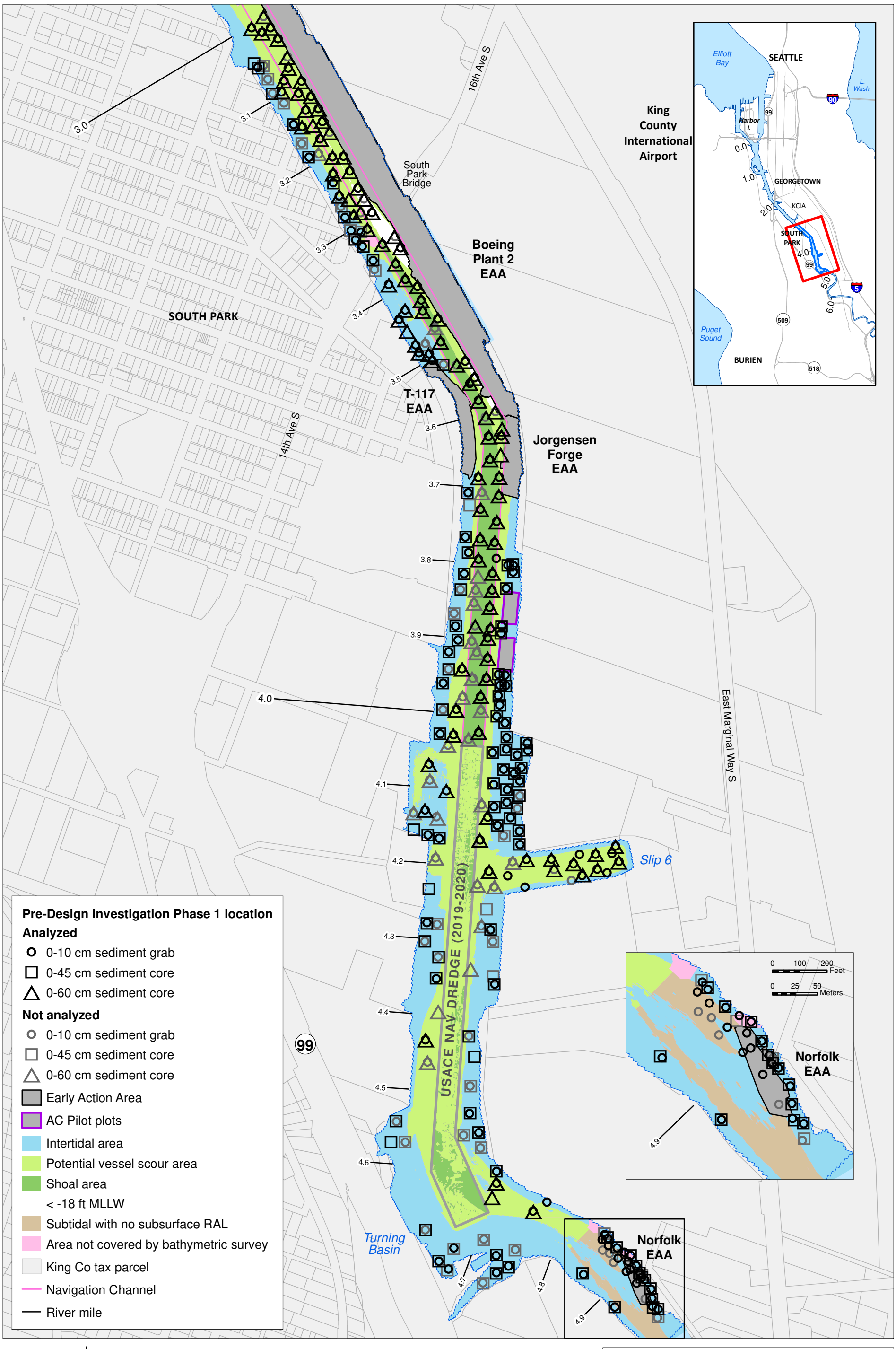
Prepared by craigh, 2/9/21; W:\Projects\Duwamish AOC4\GIS\Maps and Analyses\Phase I\Data Evaluation Report\Map 2-1 7059 Upper Reach.mxd



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N

0 500 1,000 Feet
0 200 400 Meters

Map 2-2. Phase I PDI sediment sampling locations and intervals

PRE-DESIGN INVESTIGATION PHASE I DATA EVALUTATION REPORT FOR THE LDW UPPER REACH

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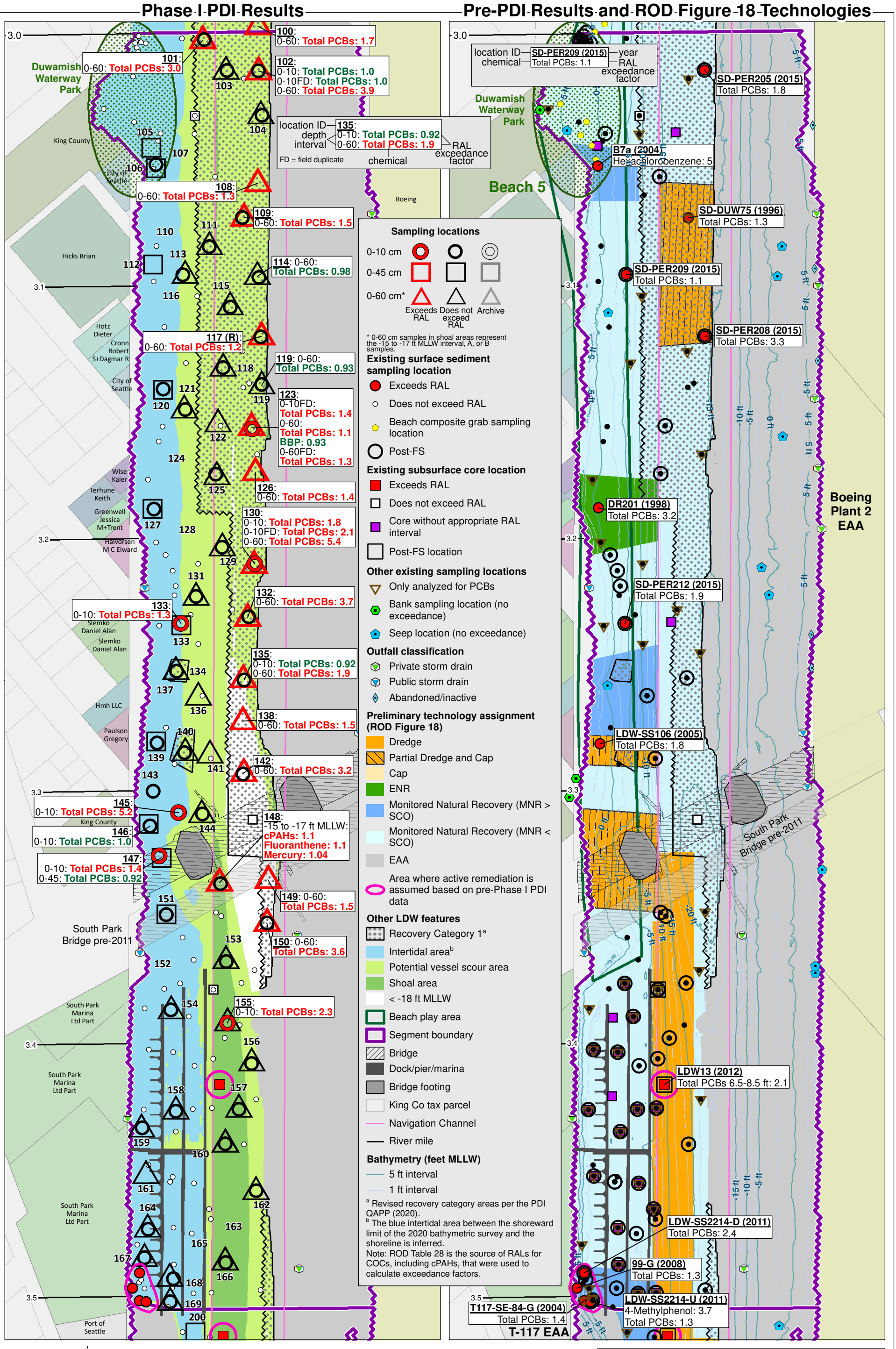
Prepared by craigh, 1/26/21; W:\Projects\Duwamish AOC4\GIS\Maps and Analyses\Phase I\Data Evaluation Report\Map 2-2 7234 Phase I PDI locations.mxd

Phase I PDI Results

Pre-PDI Results and ROD Figure 18 Technologies



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0 200 400 Feet

0 50 100 Meters

Scale is the same for each inset map

Map 2-3a. Segment 1 (RM 3.0 to RM 3.5)
Phase I PDI results

PRE-DESIGN INVESTIGATION PHASE I DATA EVALUATION REPORT FOR THE LDW UPPER REACH

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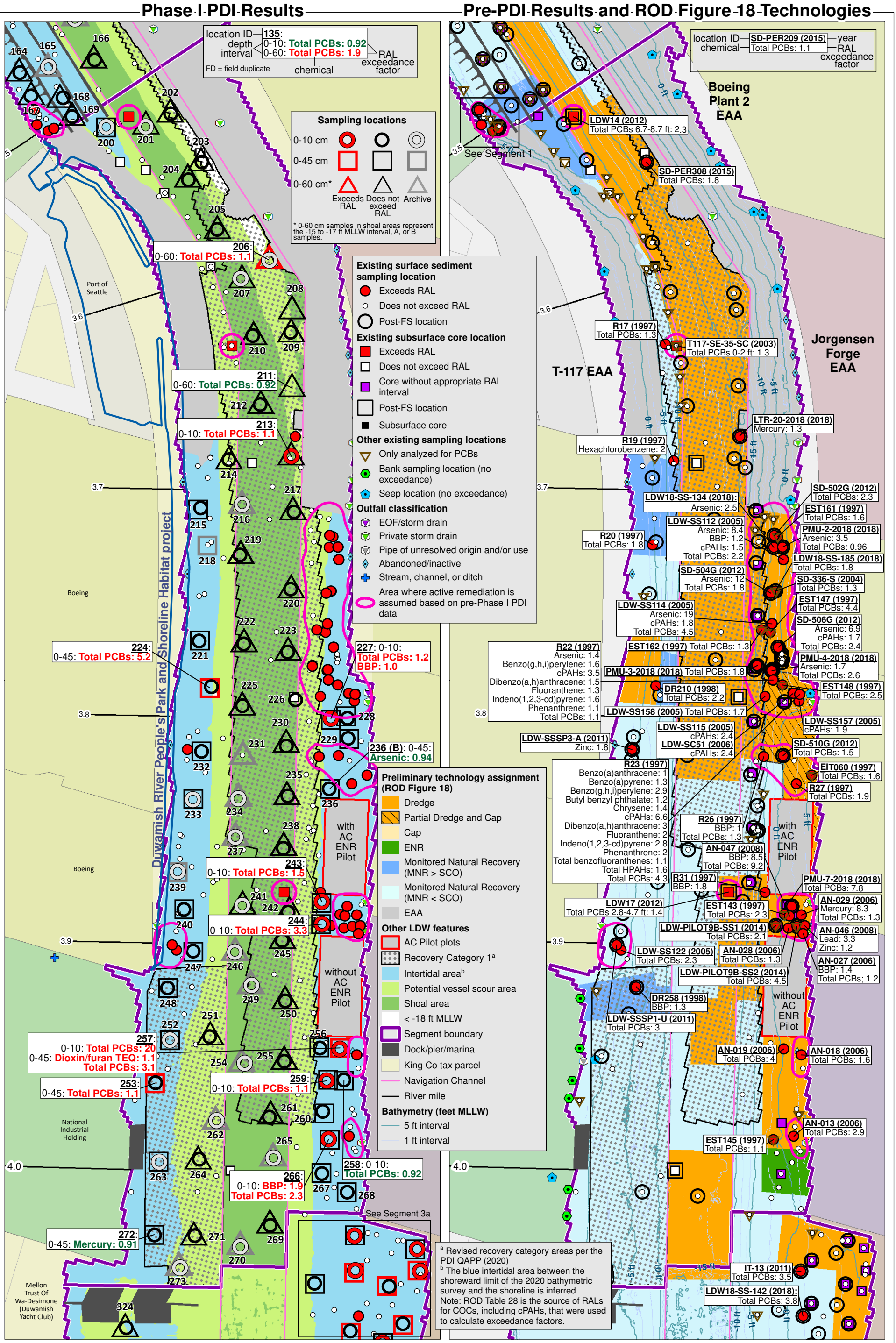
Prepared by craigh, 2/9/21; W:\Projects\Duwamish AOC4\GIS\Maps and Analyses\Phase I\Data Evaluation Report\Map 2-3a 7172 Upper Reach Ph1 Data - Segment 1.mxd

Phase I PDI Results

Pre-PDI Results and ROD Figure 18 Technologies



[a] Revised recovery category areas per the PDI QAPP (2020)
[b] The blue intertidal area between the shoreward limit of the 2020 bathymetric survey and the shoreline is inferred.
Note: ROD Table 28 is the source of RALs for COCs, including cPAHs, that were used to calculate exceedance factors.

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N

0 200 400 Feet

0 50 100 Meters

Scale is the same for each inset map

Map 2-3b. Segment 2 (RM 3.5 to RM 4.05)
Phase I PDI results

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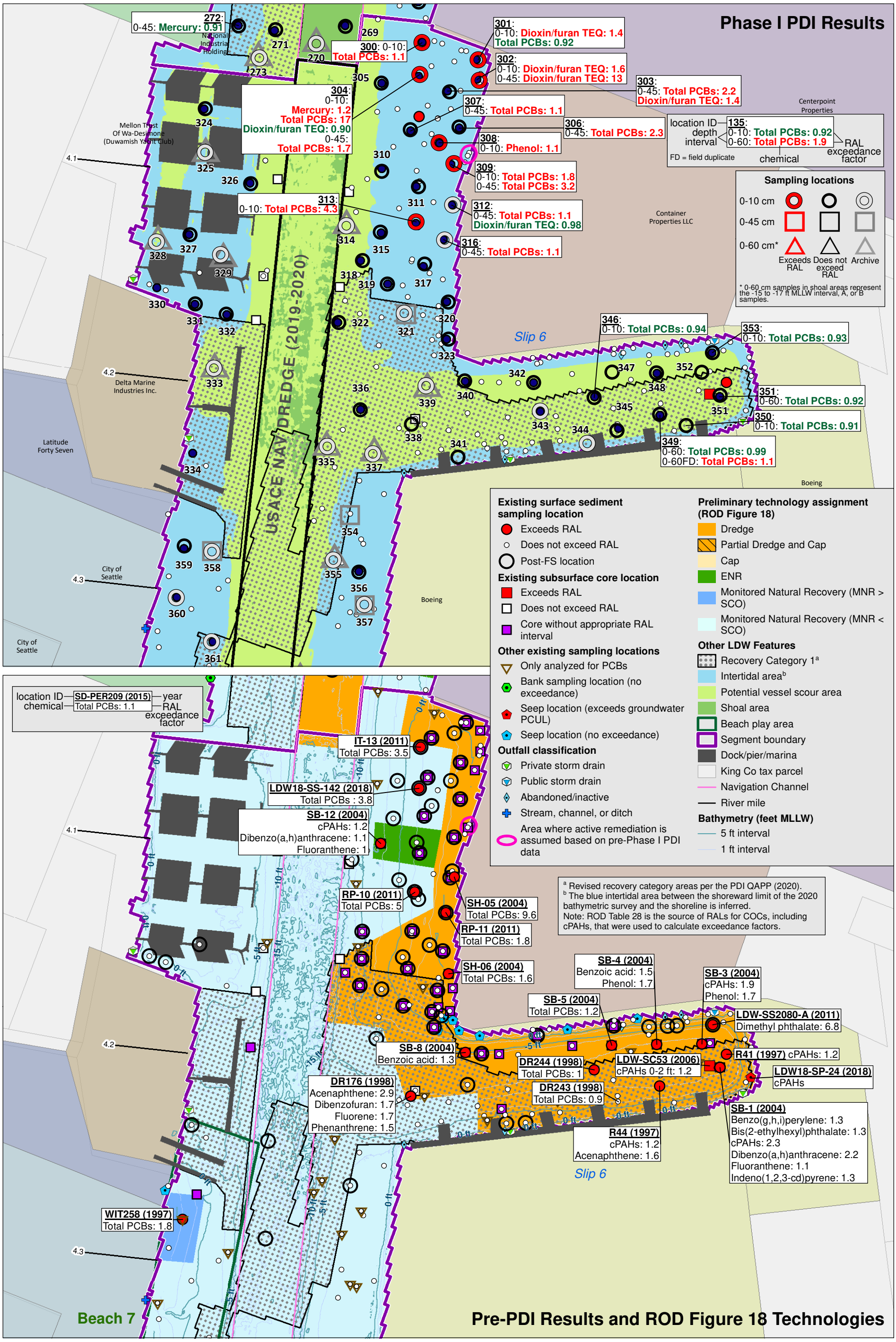

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N

0 200 400 Feet

0 50 100 Meters

Scale is the same for each inset map

Map 2-3c. Segment 3a (RM 4.05 to RM 4.35) Phase I PDI results

Pre-Design Investigation Phase I Data Evalutation Report for the LDW Upper Reach

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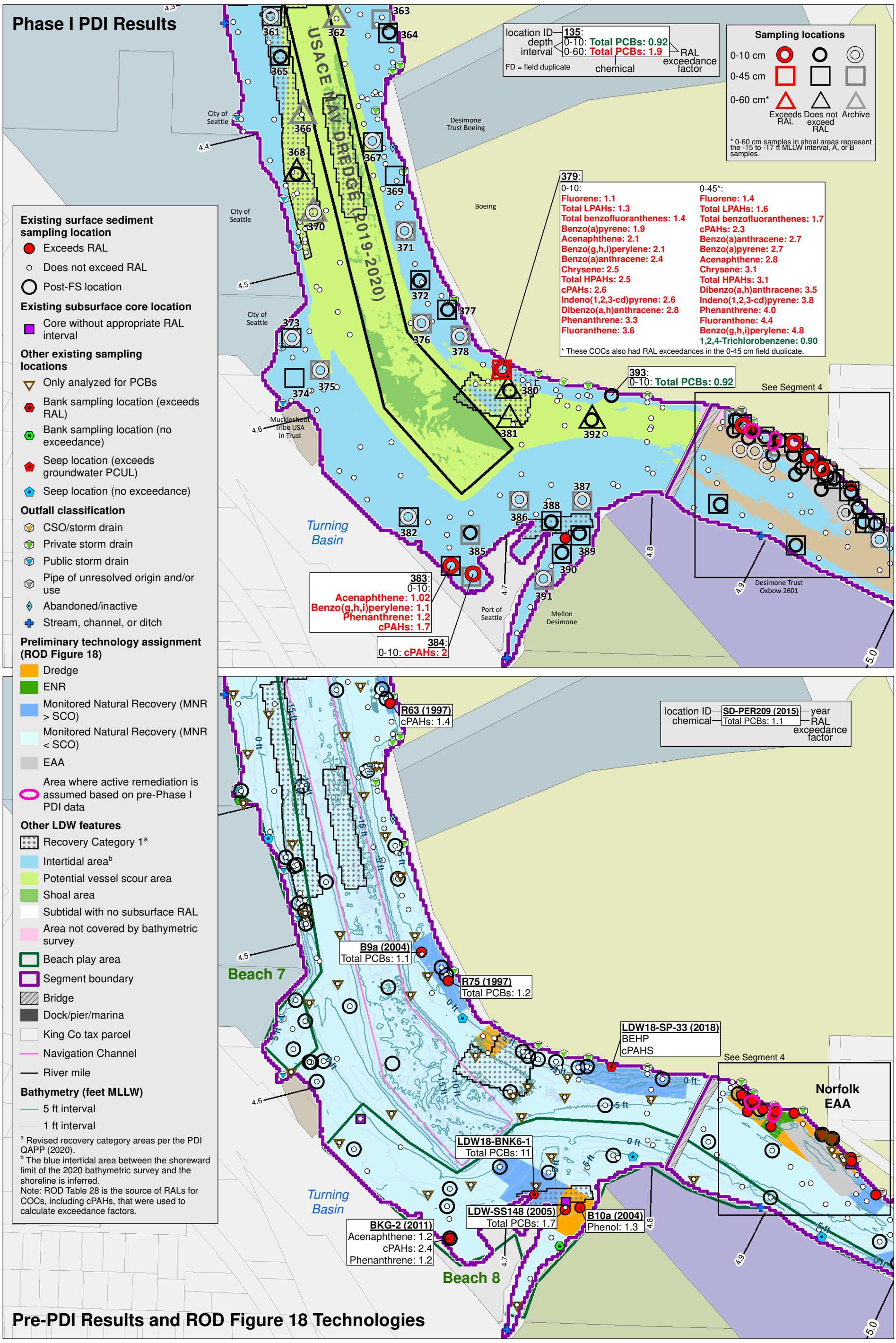

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N

0 300 600 Feet

0 100 200 Meters

Scale is the same for each inset map

Map 2-3d. Segment 3b (RM 4.35 to RM 4.81)
Phase I PDI results

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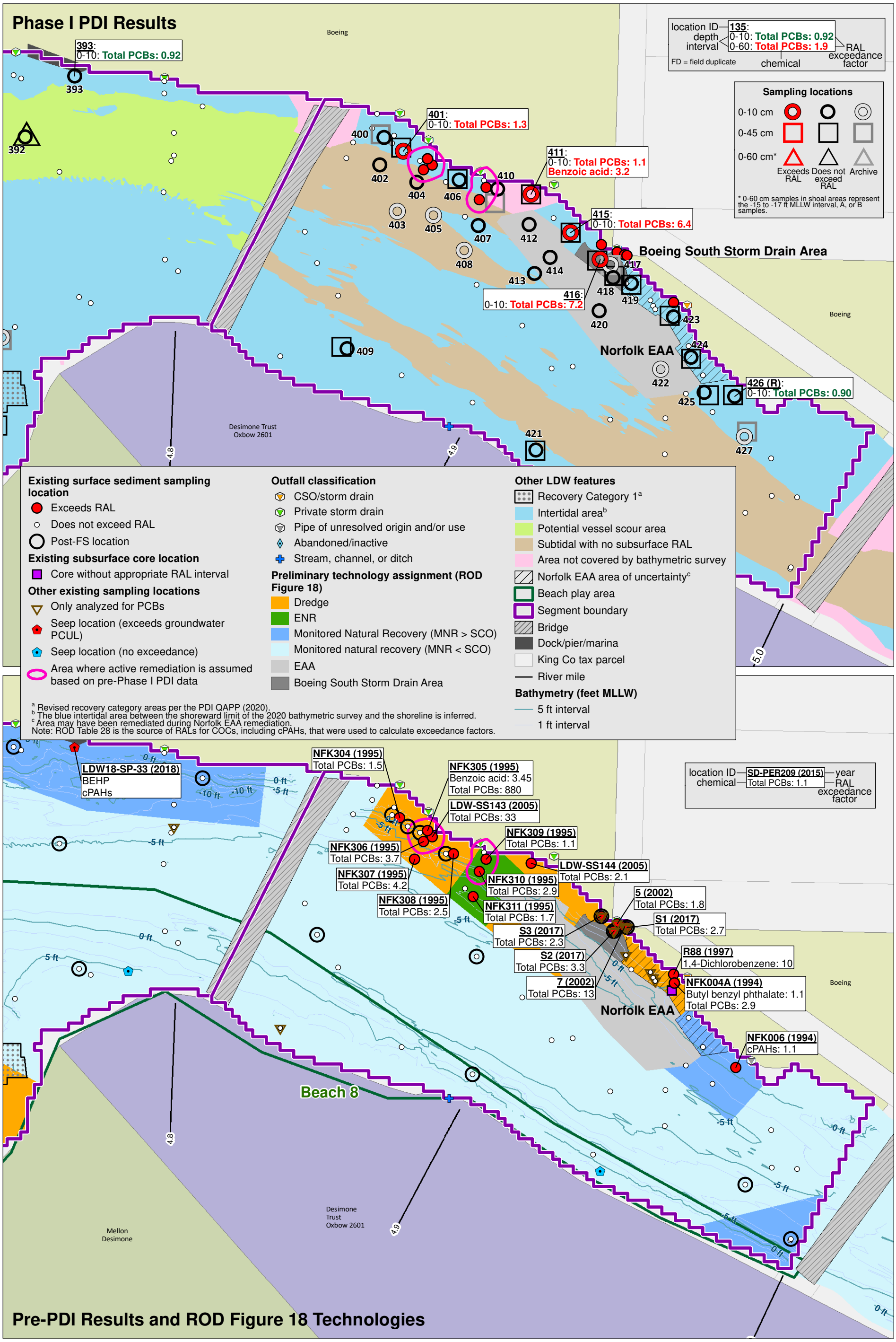

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N

0 100 200 Feet

0 40 80 Meters

Scale is the same for each inset map

Map 2-3e, Segment 4 (RM 4.81 to RM 5.0)
Phase I PDI results

PRE-DESIGN INVESTIGATION PHASE I DATA EVALUTATION REPORT FOR THE LDW UPPER REACH

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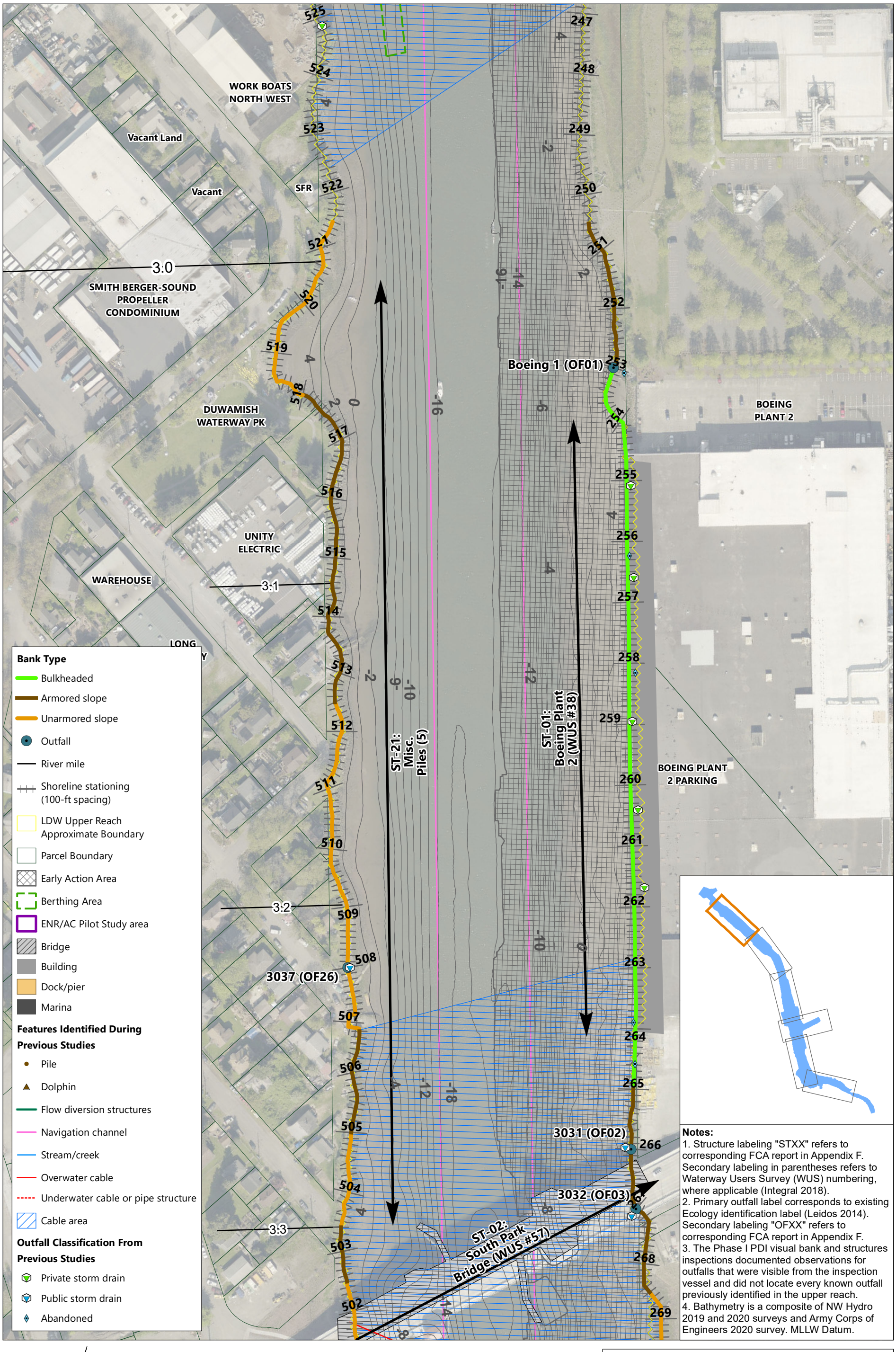

Notes:
1. Structure labeling "STXX" refers to corresponding FCA report in Appendix F. Secondary labeling in parentheses refers to Waterway Users Survey (WUS) numbering, where applicable (Integral 2018).
2. Primary outfall label corresponds to existing Ecology identification label (Leidos 2014). Secondary labeling "OFXX" refers to corresponding FCA report in Appendix F.
3. The Phase I PDI visual bank and structures inspections documented observations for outfalls that were visible from the inspection vessel and did not locate every known outfall previously identified in the upper reach.
4. Bathymetry is a composite of NW Hydro 2019 and 2020 surveys and Army Corps of Engineers 2020 survey. MLLW Datum.

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0 100 200 Feet

0 20 40 Meters

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Map 2-4a
Visual bank and structure inspections overview, RM 3.0 to RM 3.35

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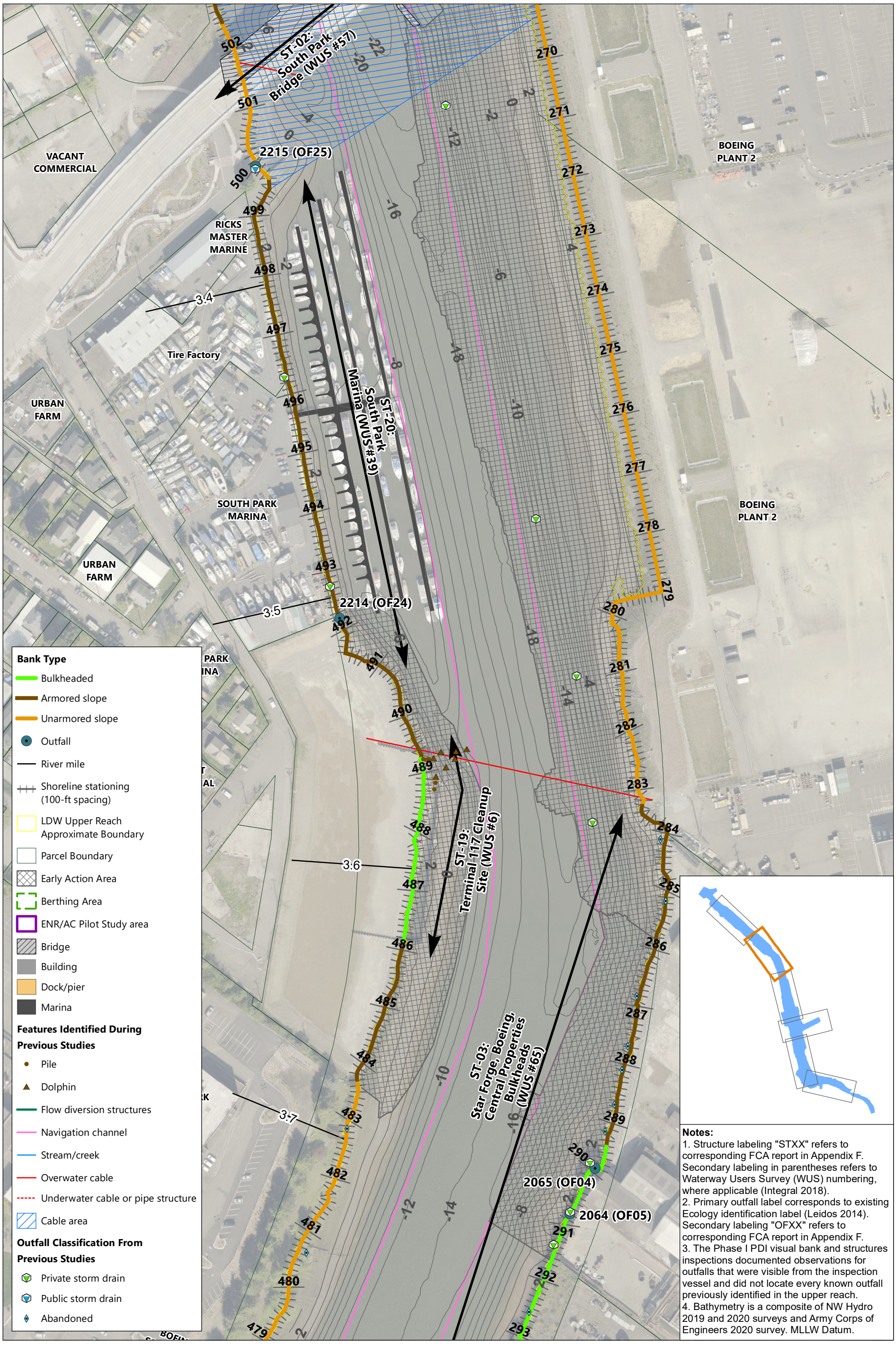
Prepared by adowell, 2/9/2021; \\orcas\gis\Jobs\KingCounty_0067\LDW\Maps\DataEvaluationReport\LDW_AQ_Windward_Shoreline_Classification_WINDWARD_TEMPLATE.mxd



Notes:
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2. Primary outfall label corresponds to existing Ecology identification label (Leidos 2014). Secondary labeling "OFXX" refers to corresponding FCA report in Appendix F.
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4. Bathymetry is a composite of NW Hydro 2019 and 2020 surveys and Army Corps of Engineers 2020 survey. MLLW Datum.

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0 110 220 Feet
0 20 40 Meters

Map 2-4b
Visual bank and structure inspections overview, RM 3.35 to RM 3.75

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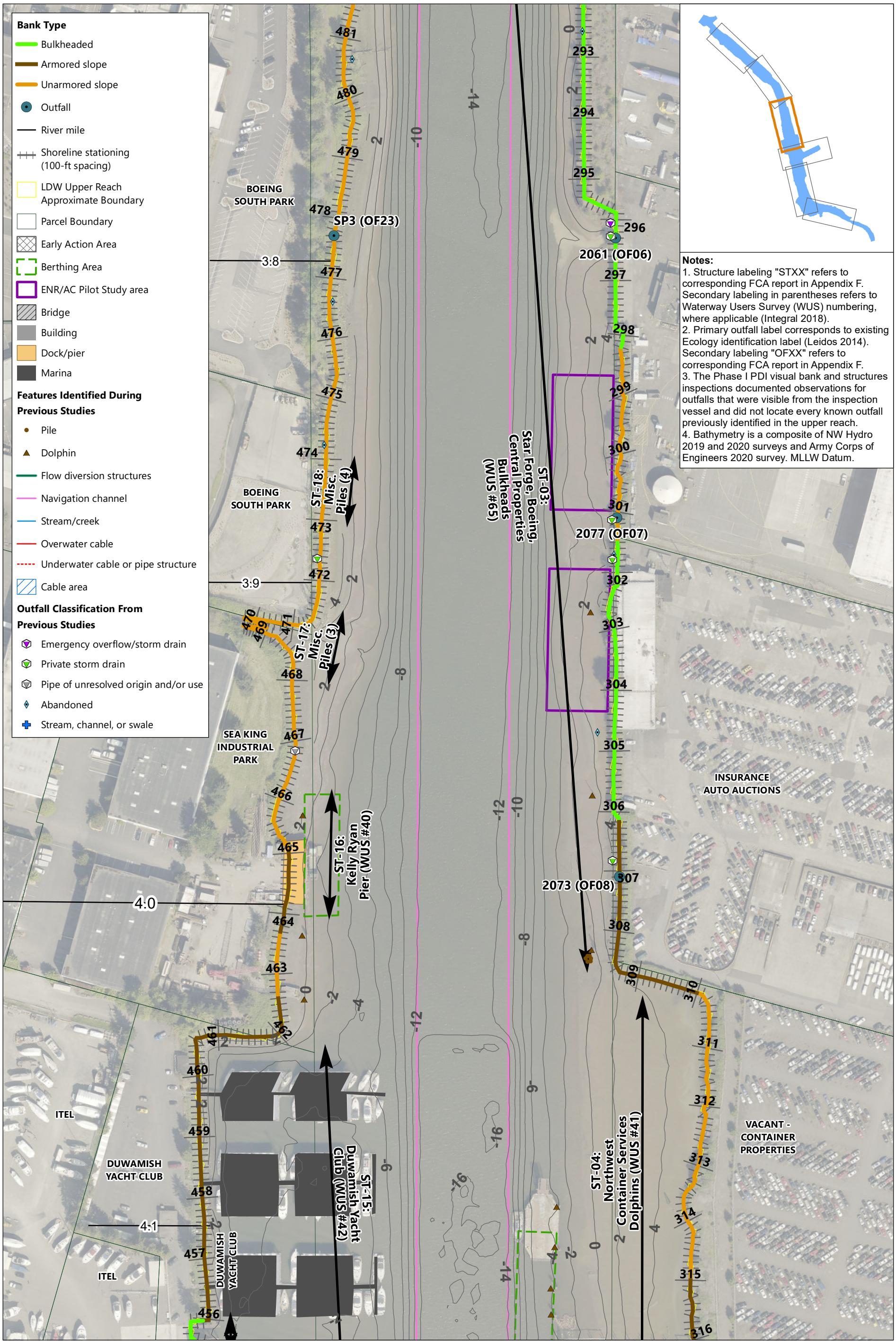
Prepared by adowell, 2/9/2021; \\orcas\gis\Jobs\KingCounty_0067\LDW\Maps\DataEvaluationReport\LDW_AQ_Windward_Shoreline_Classification_WINDWARD_TEMPLATE.mxd



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N

0 100 200 Feet

0 20 40 Meters

Map 2-4c
Visual bank and structure inspections overview, RM 3.75 to RM 4.1

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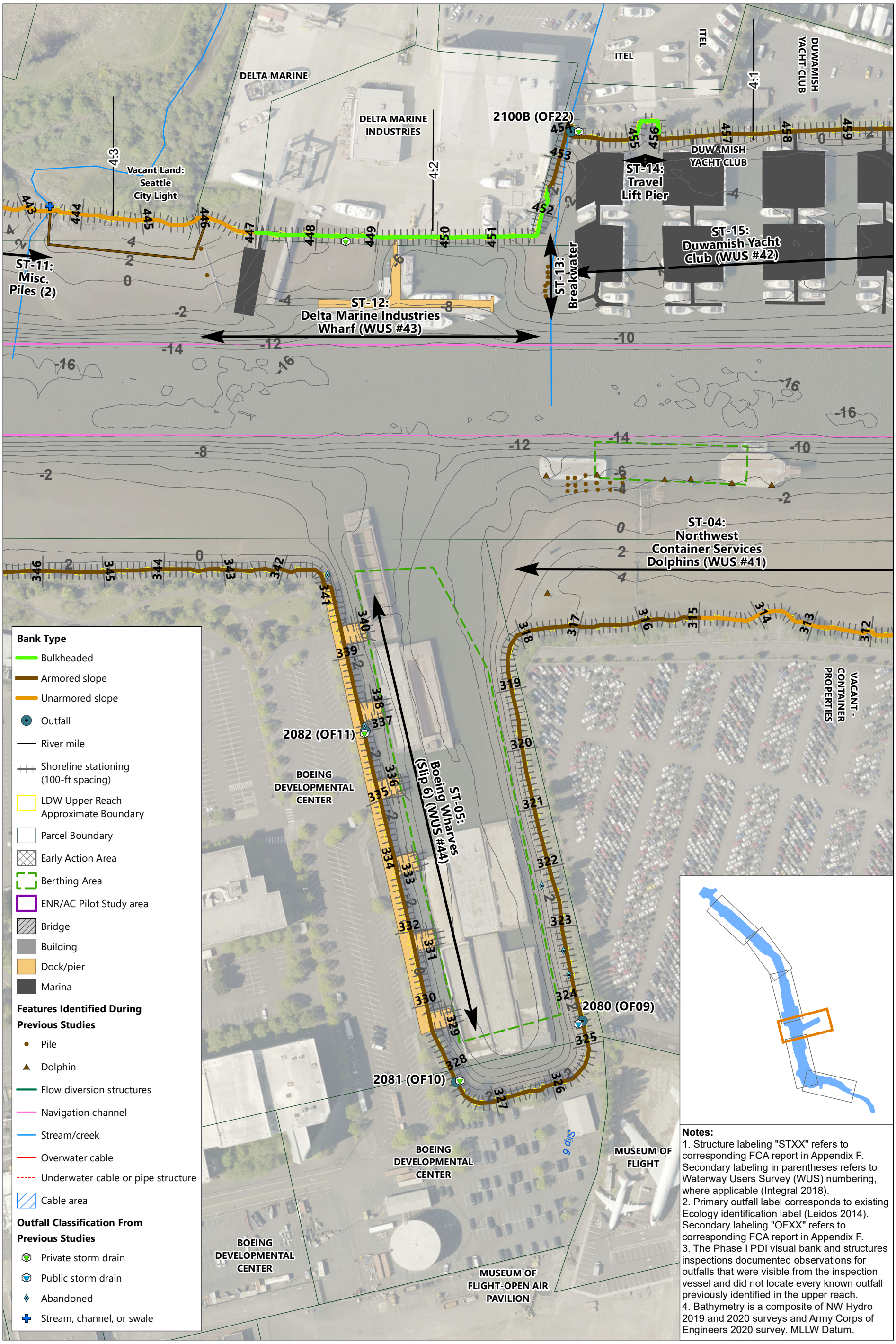
Prepared by adowell, 2/9/2021; \\orcas\gis\Jobs\KingCounty_0067\LDW\Maps\DataEvaluationReport\LDW_AQ_Windward_Shoreline_Classification_WINDWARD_TEMPLATE.mxd



Notes:
1. Structure labeling "STXX" refers to corresponding FCA report in Appendix F. Secondary labeling in parentheses refers to Waterway Users Survey (WUS) numbering, where applicable (Integral 2018).
2. Primary outfall label corresponds to existing Ecology identification label (Leidos 2014). Secondary labeling "OFXX" refers to corresponding FCA report in Appendix F.
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4. Bathymetry is a composite of NW Hydro 2019 and 2020 surveys and Army Corps of Engineers 2020 survey. MLLW Datum.

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N

0 110 220 Feet

0 20 40 Meters

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Map 2-4d
Visual bank and structure inspections overview, RM 4.1 to RM 4.3

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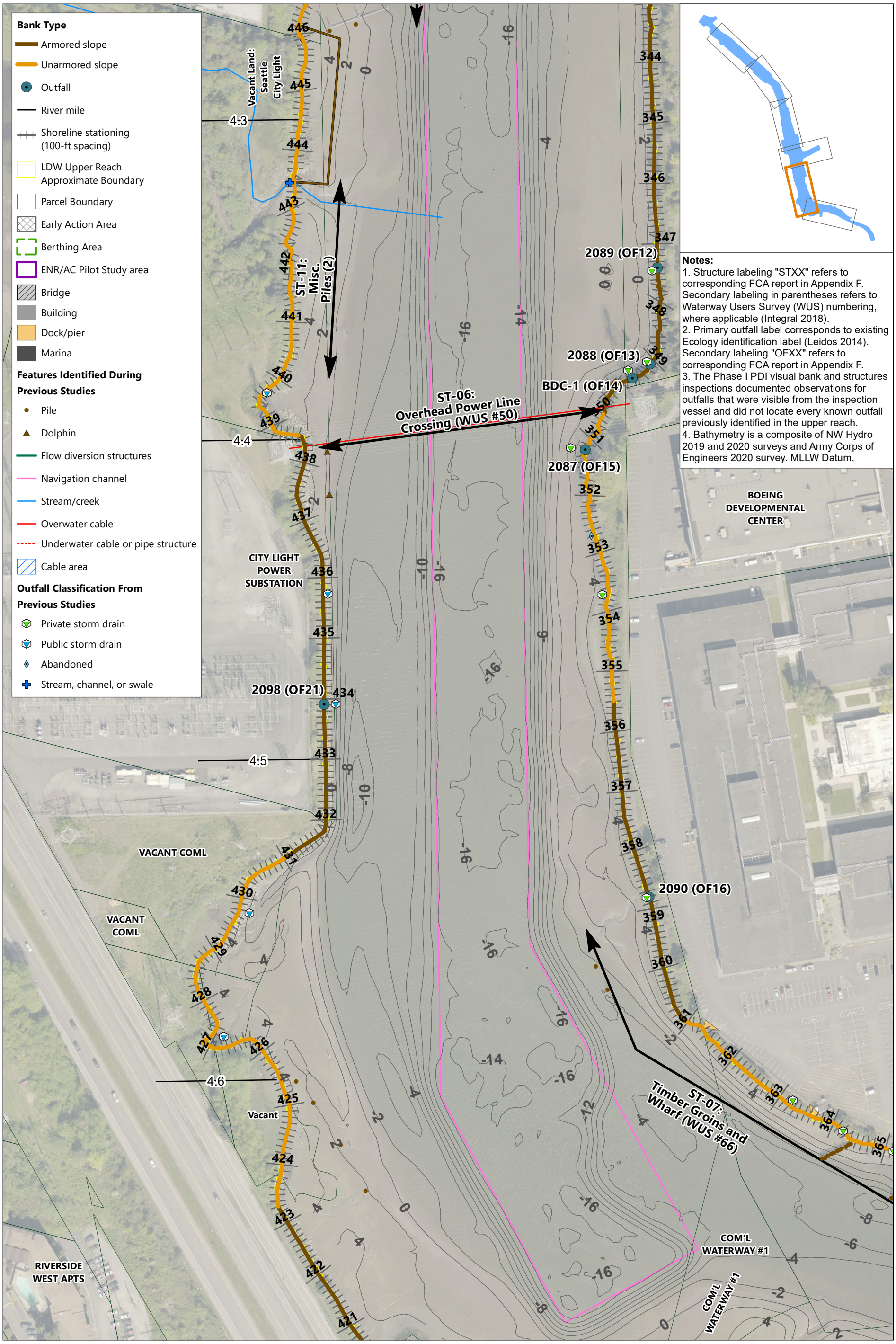
Prepared by adowell, 2/9/2021; \\orcas\gis\Jobs\KingCounty_0067\LDW\Maps\DataEvaluationReport\LDW_AQ_Windward_Shoreline_Classification_WINDWARD_TEMPLATE.mxd



Notes:
1. Structure labeling "STXX" refers to corresponding FCA report in Appendix F. Secondary labeling in parentheses refers to Waterway Users Survey (WUS) numbering, where applicable (Integral 2018).
2. Primary outfall label corresponds to existing Ecology identification label (Leidos 2014). Secondary labeling "OFXX" refers to corresponding FCA report in Appendix F.
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4. Bathymetry is a composite of NW Hydro 2019 and 2020 surveys and Army Corps of Engineers 2020 survey. MLLW Datum.

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N

0 110 220 Feet
0 20 40 Meters

Map 2-4e
Visual bank and structure inspections overview, RM 4.3 to RM 4.7

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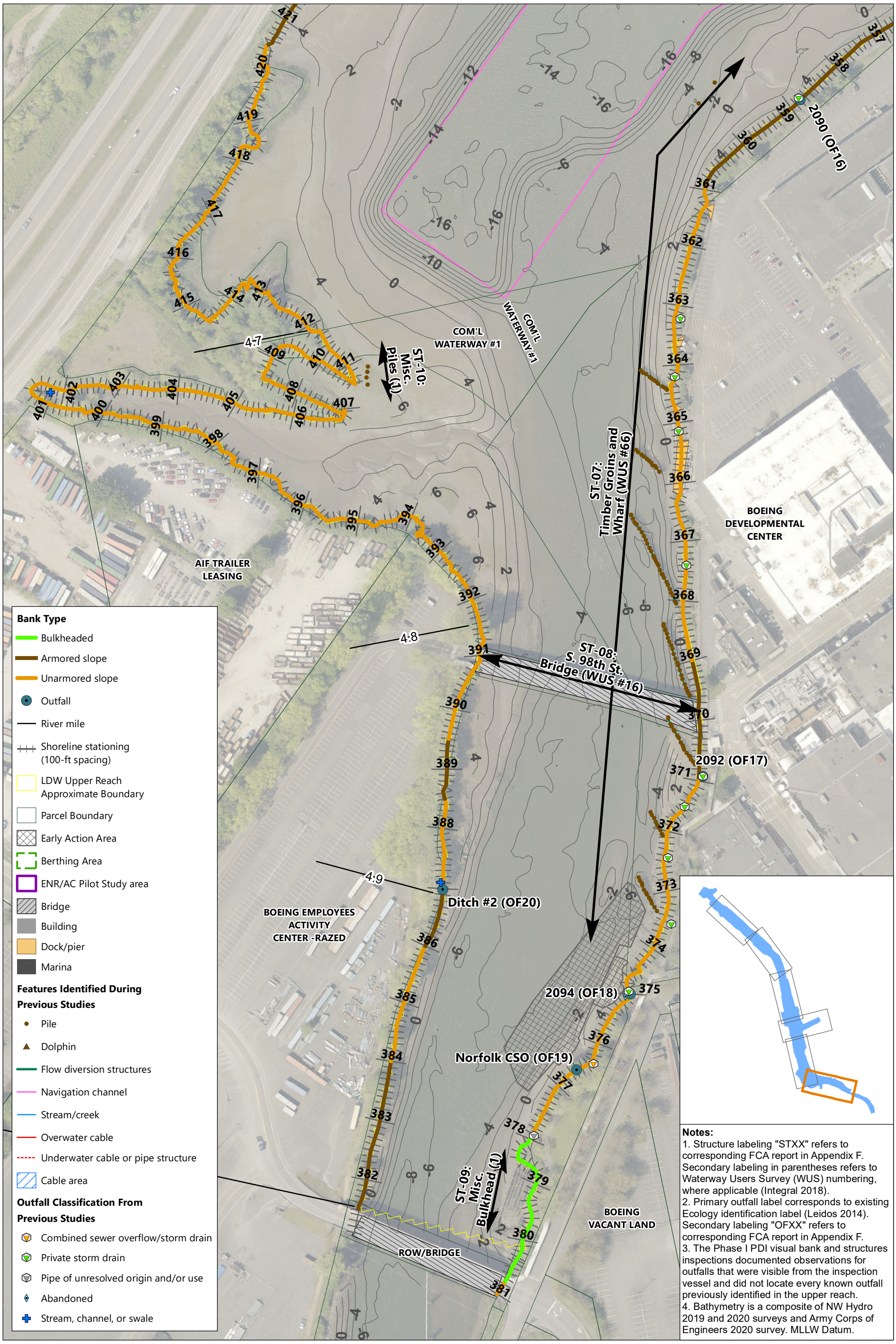

Notes:
1. Structure labeling "STXX" refers to corresponding FCA report in Appendix F. Secondary labeling in parentheses refers to Waterway Users Survey (WUS) numbering, where applicable (Integral 2018).
2. Primary outfall label corresponds to existing Ecology identification label (Leidos 2014). Secondary labeling "OFXX" refers to corresponding FCA report in Appendix F.
3. The Phase I PDI visual bank and structures inspections documented observations for outfalls that were visible from the inspection vessel and did not locate every known outfall previously identified in the upper reach.
4. Bathymetry is a composite of NW Hydro 2019 and 2020 surveys and Army Corps of Engineers 2020 survey. MLLW Datum.

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N

0 110 220 Feet

0 20 40 Meters

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Map 2-4f
Visual bank and structure inspections overview, RM 4.7 to RM 5.0

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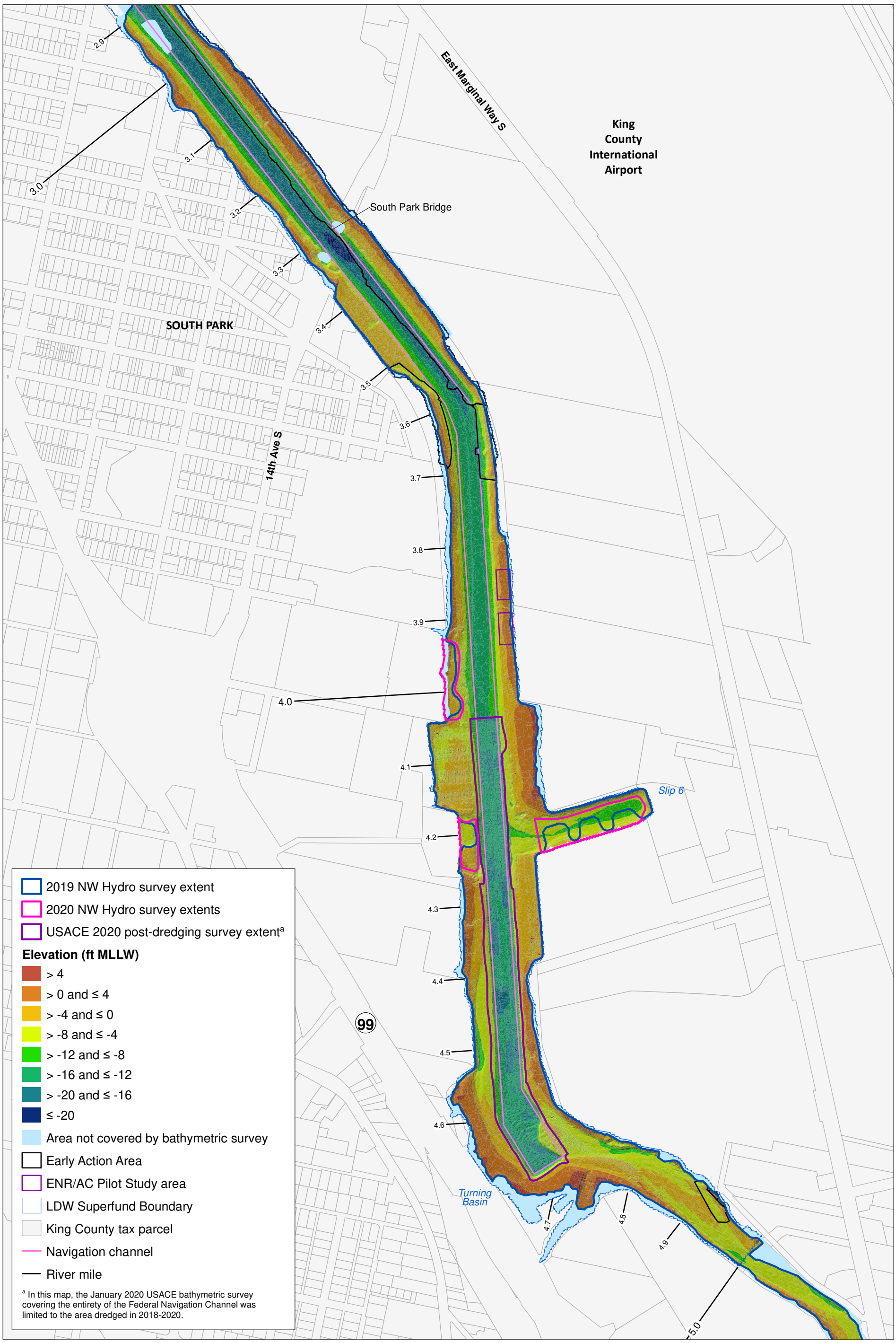
Prepared by adowell, 2/9/2021; \\orcas\gis\Jobs\KingCounty_0067\LDW\Maps\DataEvaluationReport\LDW_AQ_Windward_Shoreline_Classification_WINDWARD_TEMPLATE.mxd



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N

0 500 1,000 Feet

0 200 400 Meters

Map 2-5. Bathymetric survey extents

PRE-DESIGN INVESTIGATION PHASE I DATA EVALUATION REPORT FOR THE LDW UPPER REACH

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Prepared by craigh, 1/26/21; W:\Projects\Duwamish AOC4\GIS\Maps and Analyses\Phase I\Data Evaluation Report\Map 2-5 7260 Bathy with contours.mxd

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0 140 280 Feet
0 50 100 Meters

Map 2-6a. Bathymetric survey results (combined surveys), Segment 1 (RM 3.0 to RM 3.5)

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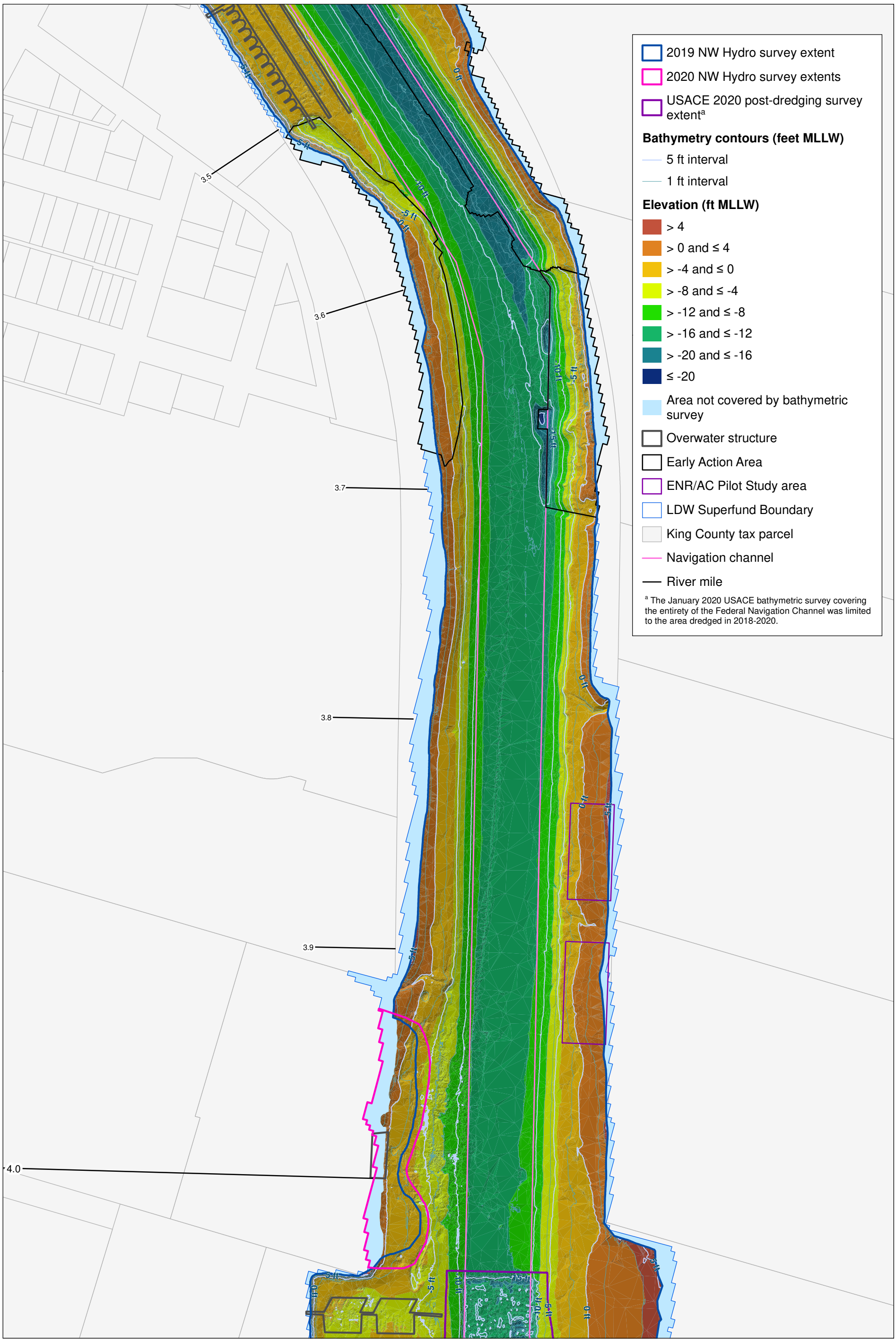
Prepared by craigh, 2/5/21; W:\Projects\Duwamish AOC4\GIS\Maps and Analyses\Phase I\Data Evaluation Report\Map 2-6a 7260 Bathy with contours - Segment 1.mxd



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N

0 150 300 Feet

0 50 100 Meters

Map 2-6b. Bathymetric survey results (combined surveys), Segment 2 (RM 3.5 to RM 4.05)

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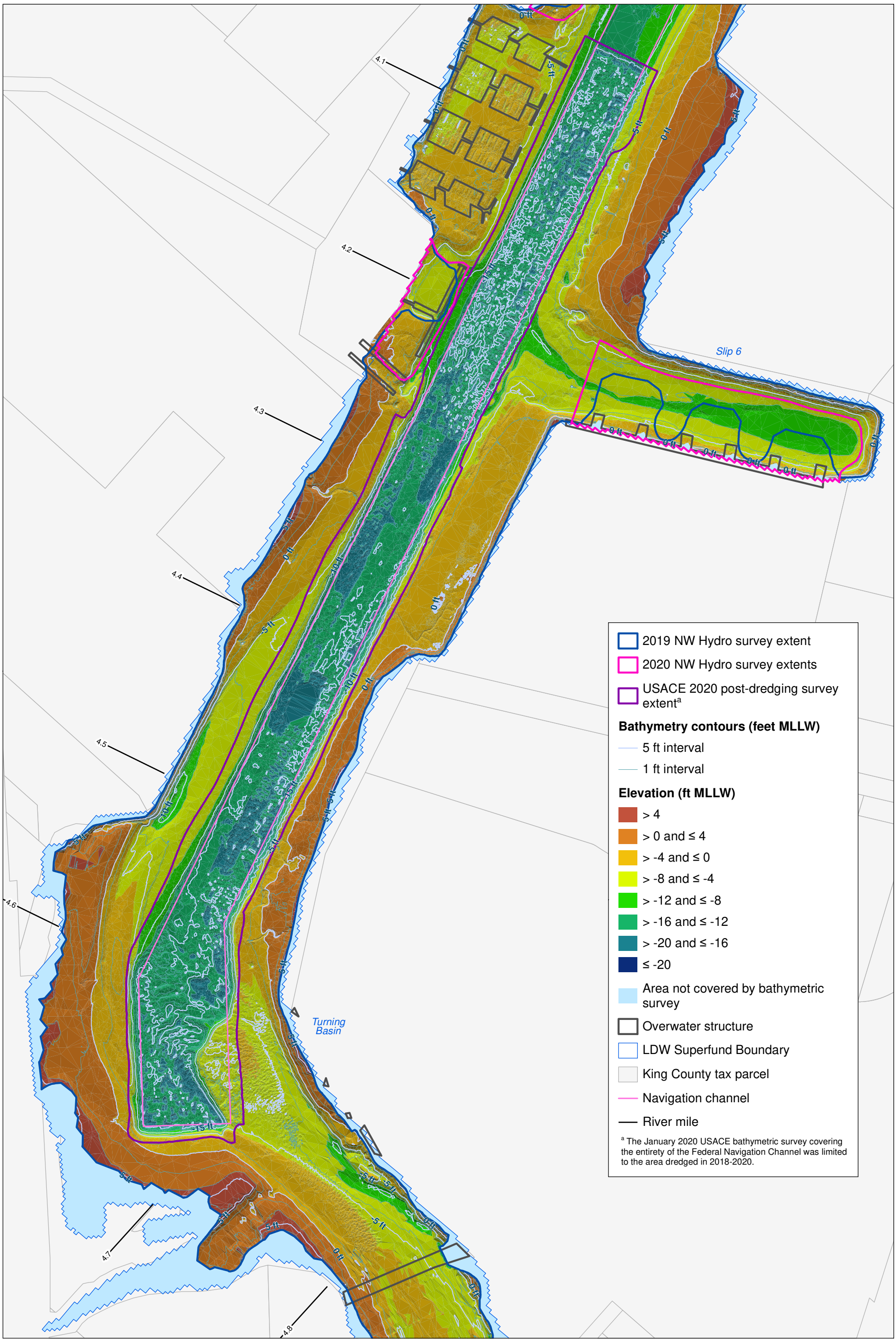
Prepared by craigh, 2/5/21; W:\Projects\Duwamish AOC4\GIS\Maps and Analyses\Phase I\Data Evaluation Report\Map 2-6b 7260 Bathy with contours - Segment 2.mxd



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N

0 190 380 Feet

0 70 140 Meters

Map 2-6c. Bathymetric survey results (combined surveys), Segment 3 (RM 4.05 to RM 4.81)

PRE-DESIGN INVESTIGATION PHASE I DATA EVALUTATION REPORT FOR THE LDW UPPER REACH

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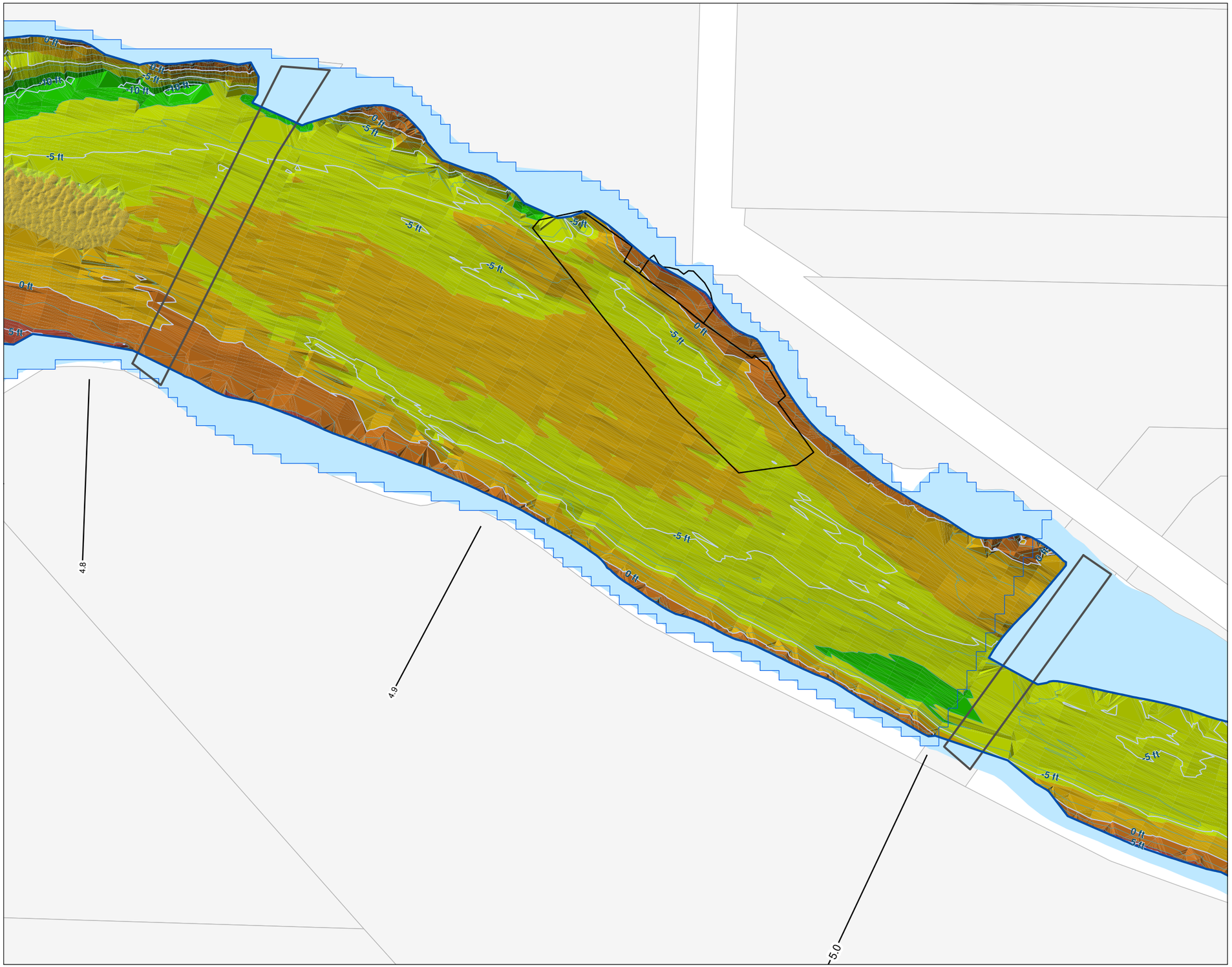
Prepared by craigh, 2/5/21; W:\Projects\Duwamish AOC4\GIS\Maps and Analyses\Phase I\Data Evaluation Report\Map 2-6c 7260 Bathy with contours - Segment 3.mxd



2019 NW Hydro survey extent

Bathymetry contours (feet MLLW)

5 ft interval

1 ft interval

Elevation (ft MLLW)

> 4

> 0 and ≤ 4

> -4 and ≤ 0

> -8 and ≤ -4

> -12 and ≤ -8

> -16 and ≤ -12

> -20 and ≤ -16

≤ -20

Area not covered by bathymetric survey

Overwater structure

Early Action Area

LDW Superfund Boundary

King County tax parcel

River mile

[a] The January 2020 USACE bathymetric survey covering the entirety of the Federal Navigation Channel was limited to the area dredged in 2018-2020.

N

0 20 40 Yards

0 10 20 Meters

Map 2-6d. Bathymetric survey results (combined surveys), Segment 4 (RM 4.81 to RM 5.0)

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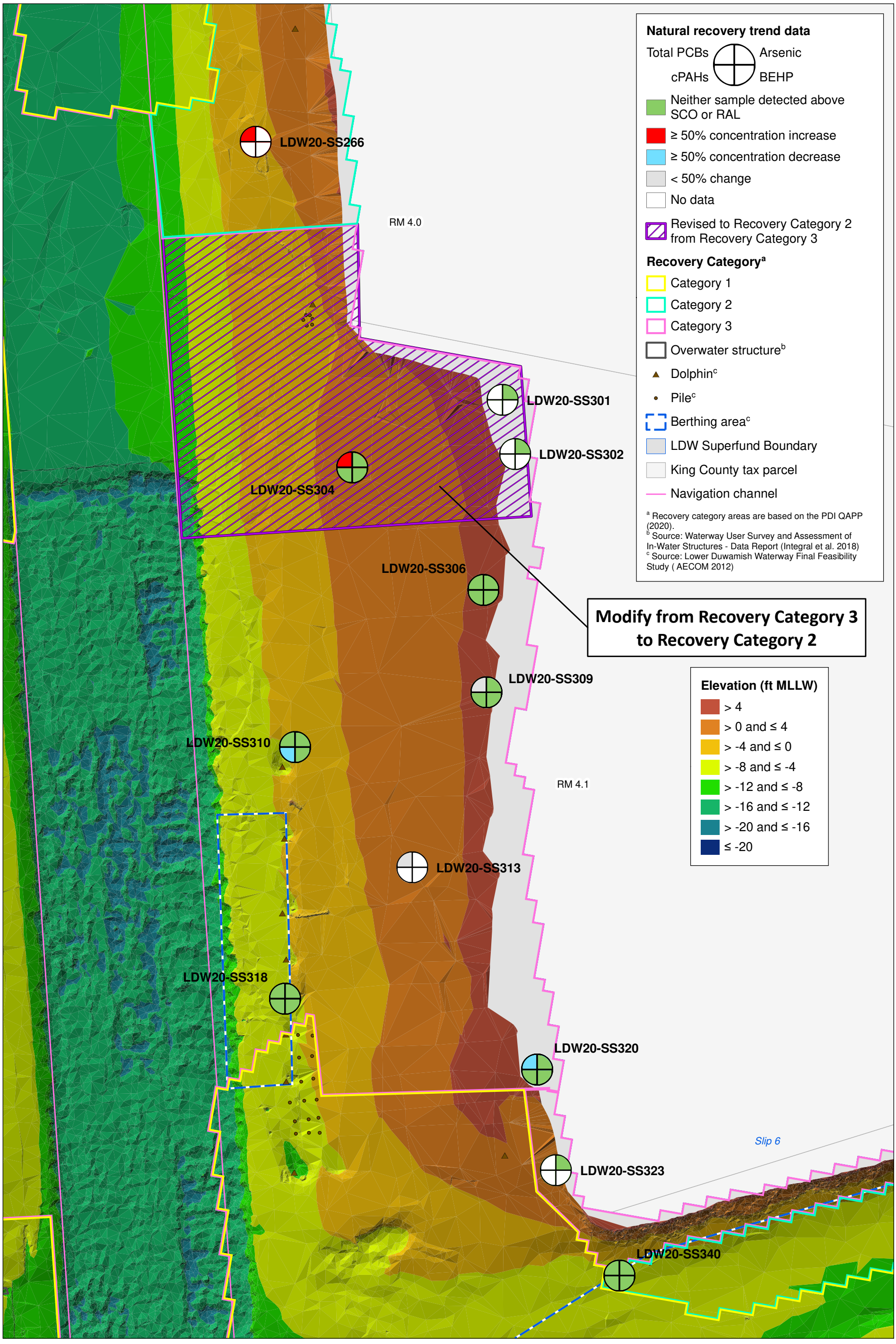

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N

0 50 100 Feet

0 10 20 Meters

Map 3-1. Recommended recovery category modification

PRE-DESIGN INVESTIGATION PHASE I DATA EVALUTATION REPORT FOR THE LDW UPPER REACH

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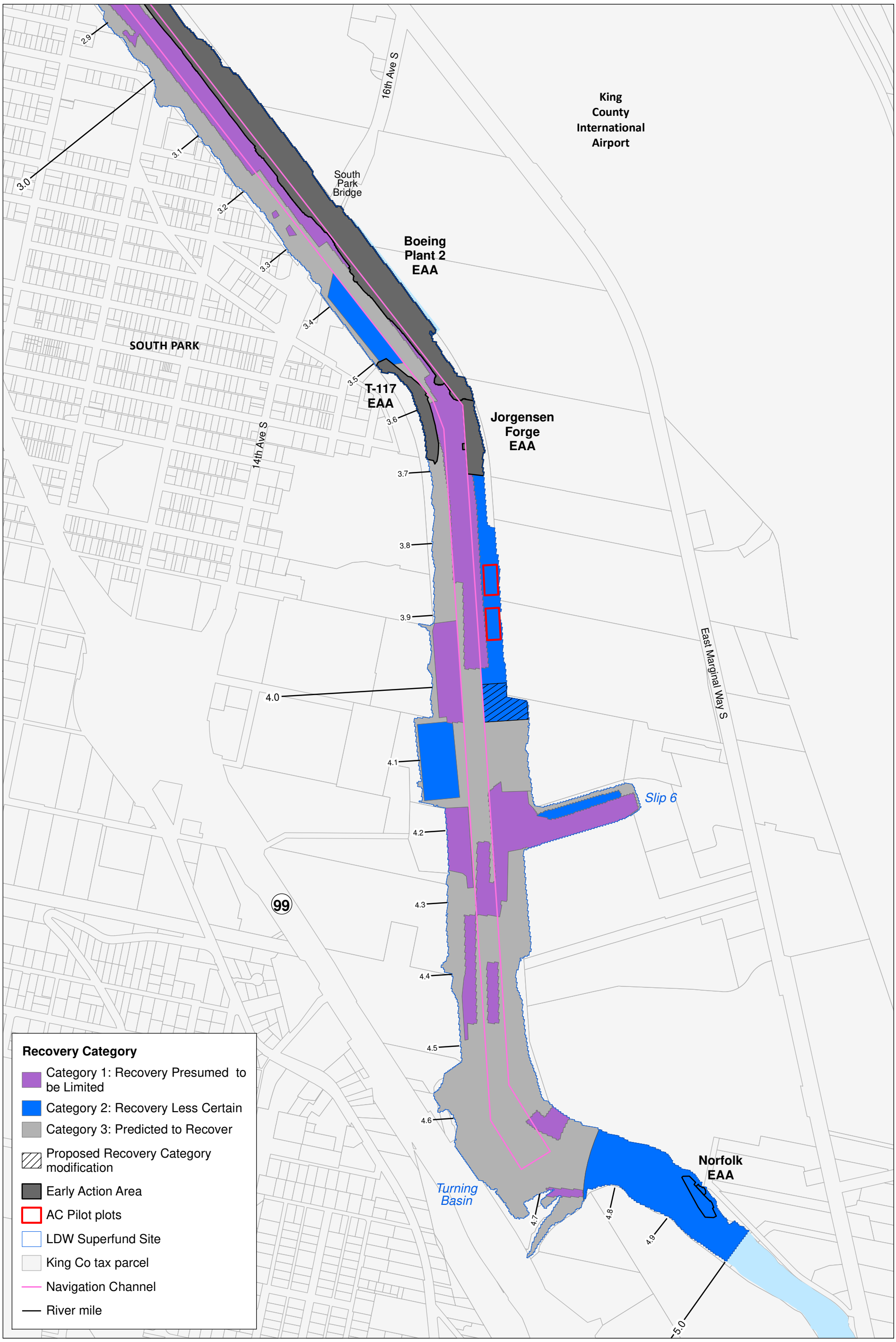
Prepared by craigh, 2/9/21; W:\Projects\Duwamish AOC4\GIS\Maps and Analyses\Phase I\Data Evaluation Report\Map 3-1 7109 Recommended recovery categories - A4.mxd



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N

0 500 1,000 Feet

0 200 400 Meters

Map 3-2. Final recovery categories for the upper reach

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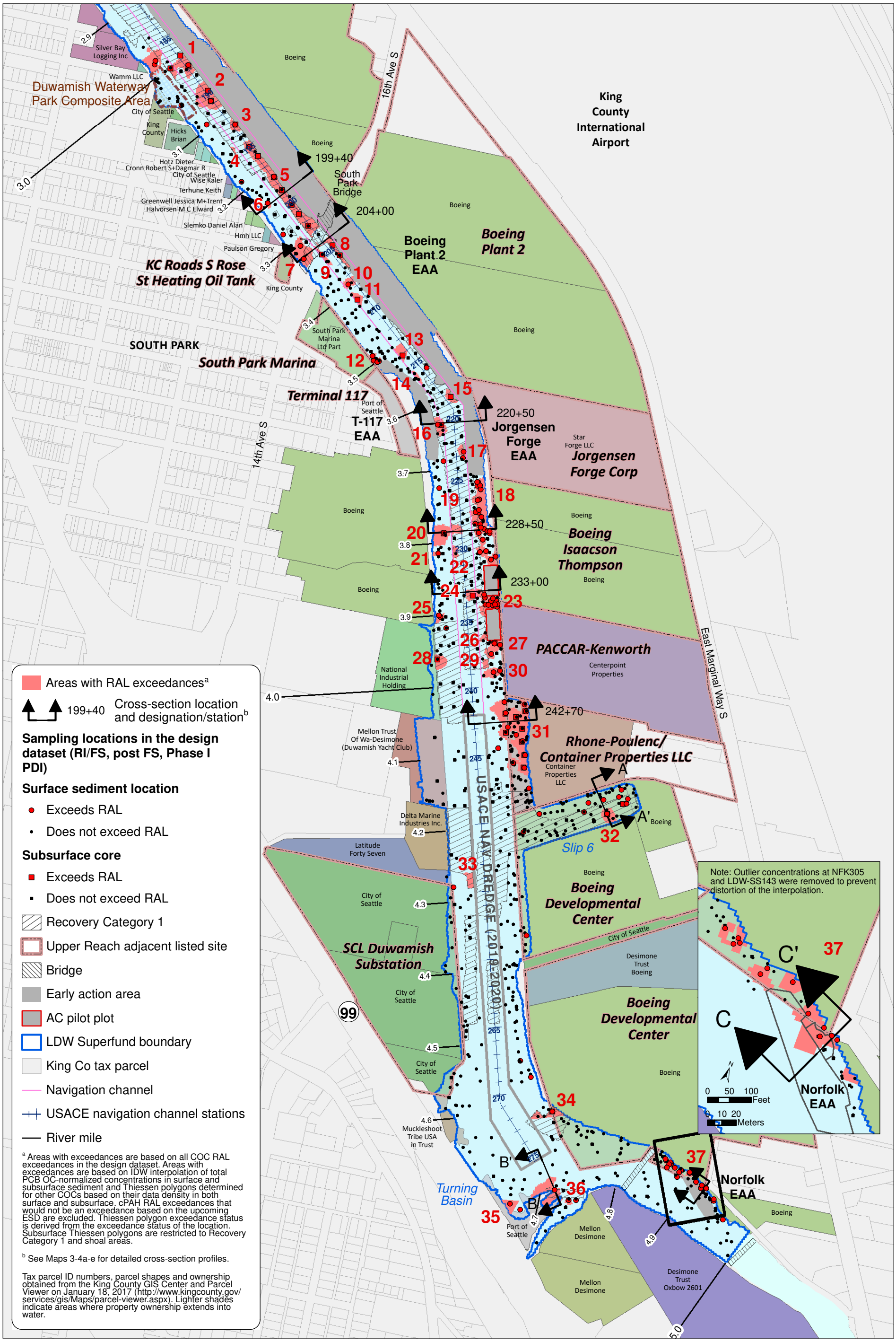
Prepared by craigh, 1/26/21; W:\Projects\Duwamish AOC4\GIS\Maps and Analyses\Phase I\Data Evaluation Report\Map 3-2 7109 Proposed recovery categories.mxd



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Map 3-3. Areas with RAL exceedances

PRE-DESIGN INVESTIGATION PHASE I DATA EVALUATION REPORT FOR THE LDW UPPER REACH

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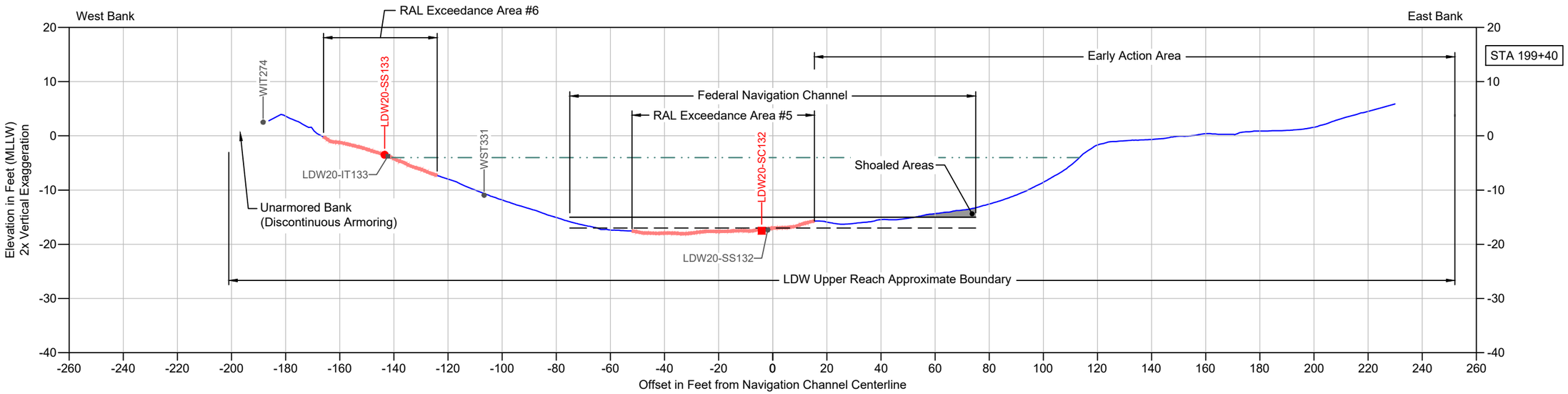
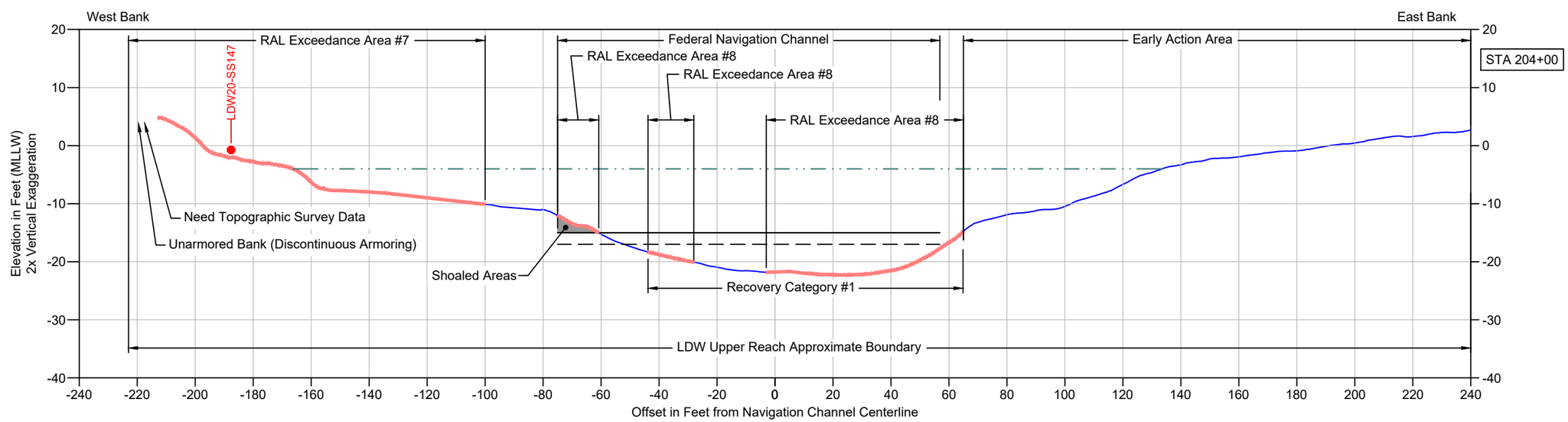
Prepared by craigh, 2/10/21; W:\Projects\Duwamish AOC4\GIS\Maps and Analyses\Phase I\Data Evaluation Report\Map 3-3 7259 Prelim RAL exceedance areas wPropOwnership.mxd





Legend:

- Existing Bathymetry (2019/20)
- Authorized Channel Elevation (-15' MLLW)
- 2' Allowable Overdepth (-17' MLLW)
- RAL Exceedance Area 12/16/20 Boundaries
- Intertidal/Subtidal Transition (-4' MLLW)

Surface Sediment PCB Location
- Exceeds RAL
- Does Not Exceed RAL

Subsurface PCB Core
- Exceeds RAL
- Does Not Exceed RAL

Notes:
1. Samples shown on each cross section are within 30 feet of the transect
2. Areas not designated as Recovery Categories 1 or 2 are Recovery Category 3.

Map 3-4a. Cross Sections 199+40 and 204+00

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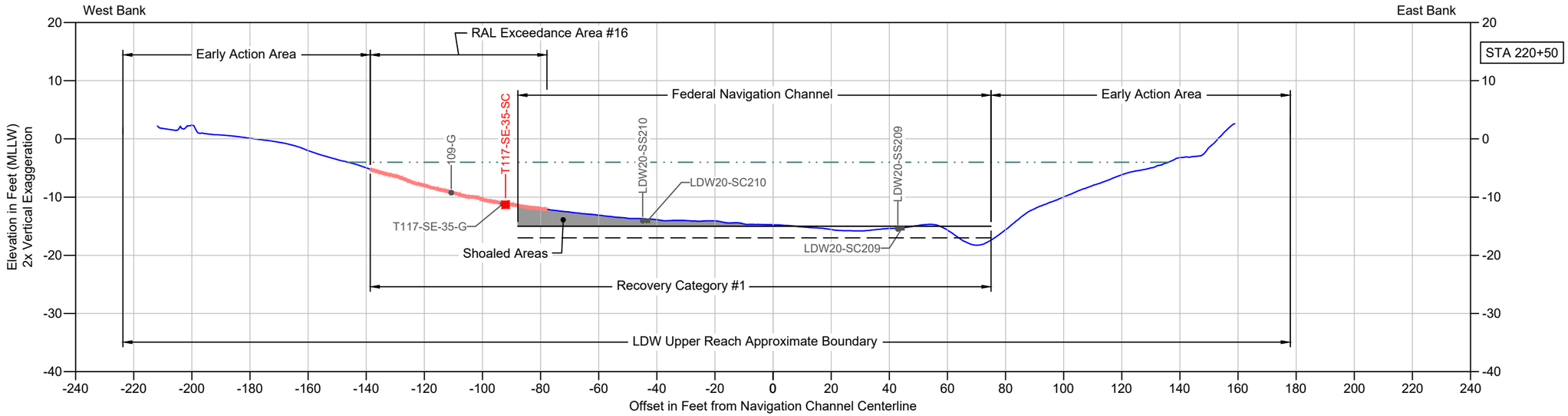
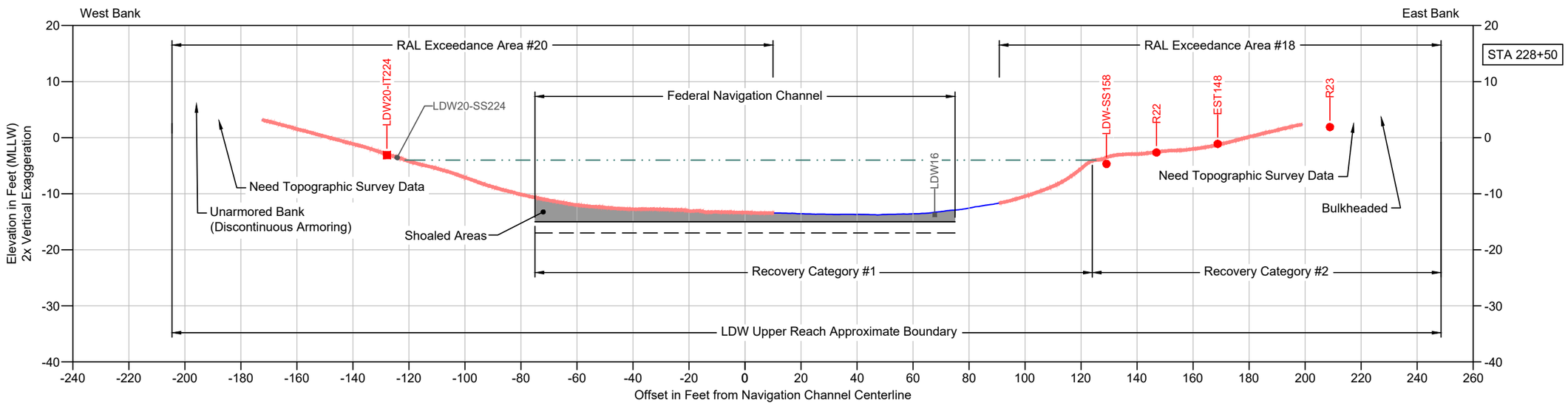
Jan 27, 2021 9:03am tgriga \\gala\CAD\Projects\0067-King County\LDW Upper Reach Engineering Services\0067-RP-012 LDW Sections.dwg Map 3-4a





Legend:

- Existing Bathymetry (2019/20)
- Authorized Channel Elevation (-15' MLLW)
- 2' Allowable Overdepth (-17' MLLW)
- RAL Exceedance Area 12/16/20 Boundaries
- Intertidal/Subtidal Transition (-4' MLLW)

Surface Sediment PCB Location
- Exceeds RAL
- Does Not Exceed RAL

Subsurface PCB Core
- Exceeds RAL
- Does Not Exceed RAL

Notes:
1. Samples shown on each cross section are within 30 feet of the transect
2. Areas not designated as Recovery Categories 1 or 2 are Recovery Category 3.

Map 3-4b. Cross Sections 220+50 and 228+50

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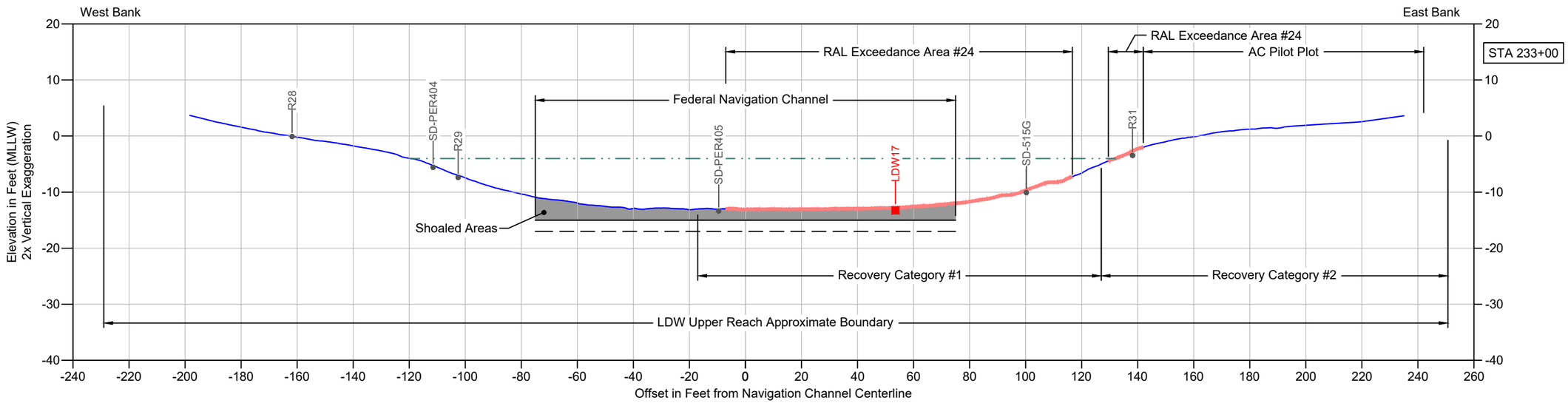
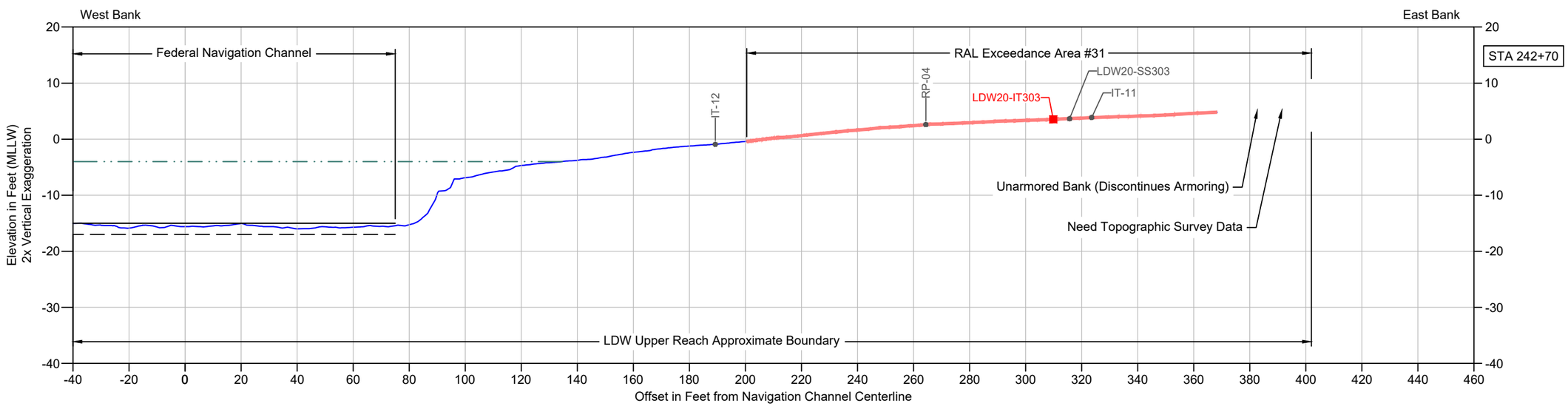
Jan 27, 2021 9:03am tgriga \\gala\CAD\Projects\0067-King County\LDW Upper Reach Engineering Services\0067-RP-012 LDW Sections.dwg Map 3-4b





Legend:

- Existing Bathymetry (2019/20)
- Authorized Channel Elevation (-15' MLLW)
- 2' Allowable Overdepth (-17' MLLW)
- RAL Exceedance Area 12/16/20 Boundaries
- Intertidal/Subtidal Transition (-4' MLLW)

Surface Sediment PCB Location
- Exceeds RAL
- Does Not Exceed RAL

Subsurface PCB Core
- Exceeds RAL
- Does Not Exceed RAL

Notes:
1. Samples shown on each cross section are within 30 feet of the transect
2. Areas not designated as Recovery Categories 1 or 2 are Recovery Category 3.

Map 3-4c. Cross Sections 233+00 and 242+70

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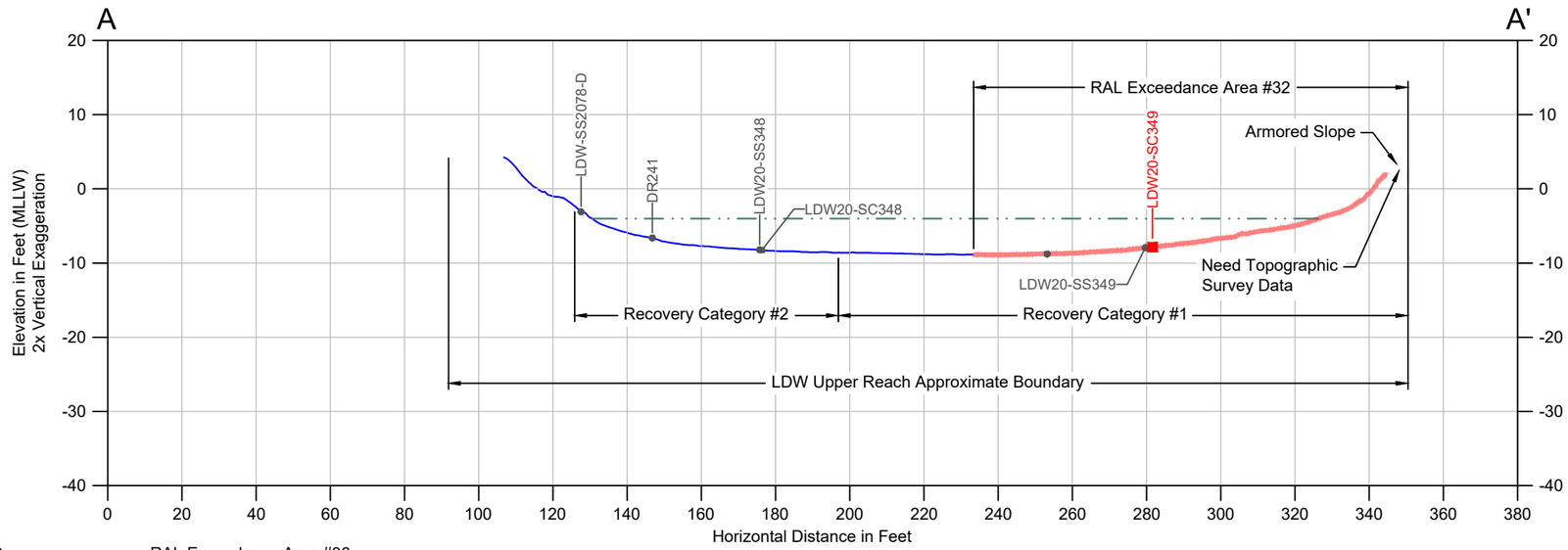

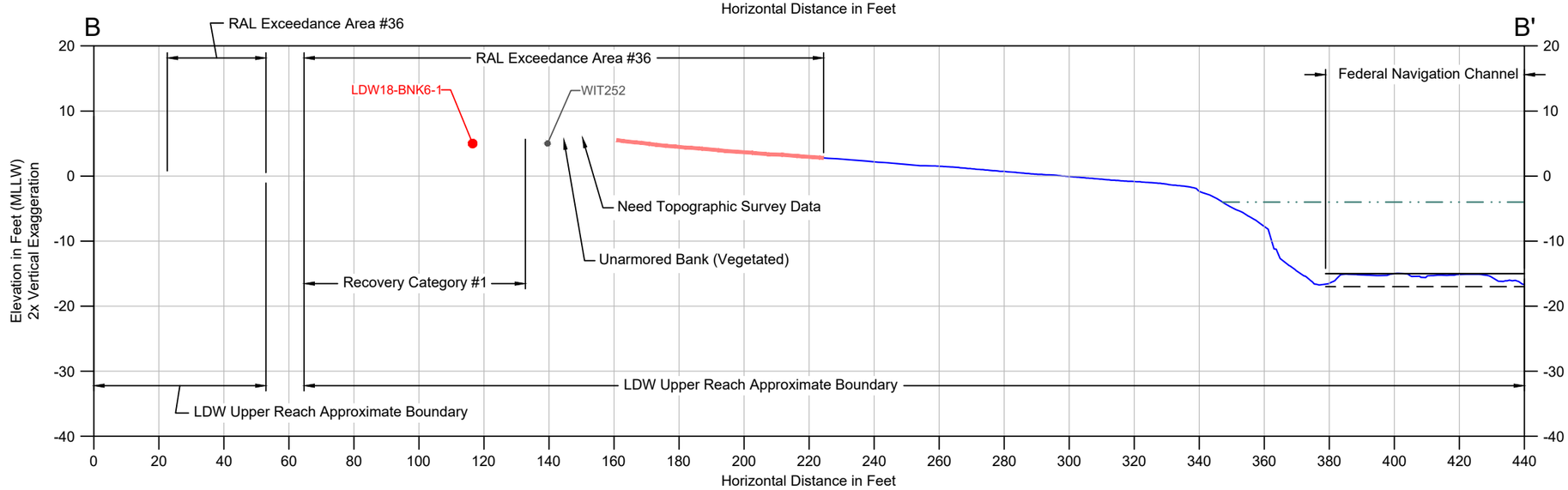

Legend:

- Existing Bathymetry (2019/20)
- Authorized Channel Elevation (-15' MLLW)
- 2' Allowable Overdepth (-17' MLLW)
- RAL Exceedance Area 12/16/20 Boundaries
- Intertidal/Subtidal Transition (-4' MLLW)

Surface Sediment PCB Location
- Exceeds RAL
- Does Not Exceed RAL

Subsurface PCB Core
- Exceeds RAL
- Does Not Exceed RAL

Notes:
1. Samples shown on each cross section are within 30 feet of the transect
2. Areas not designated as Recovery Categories 1 or 2 are Recovery Category 3.

Map 3-4d. Cross Sections A-A' and B-B'

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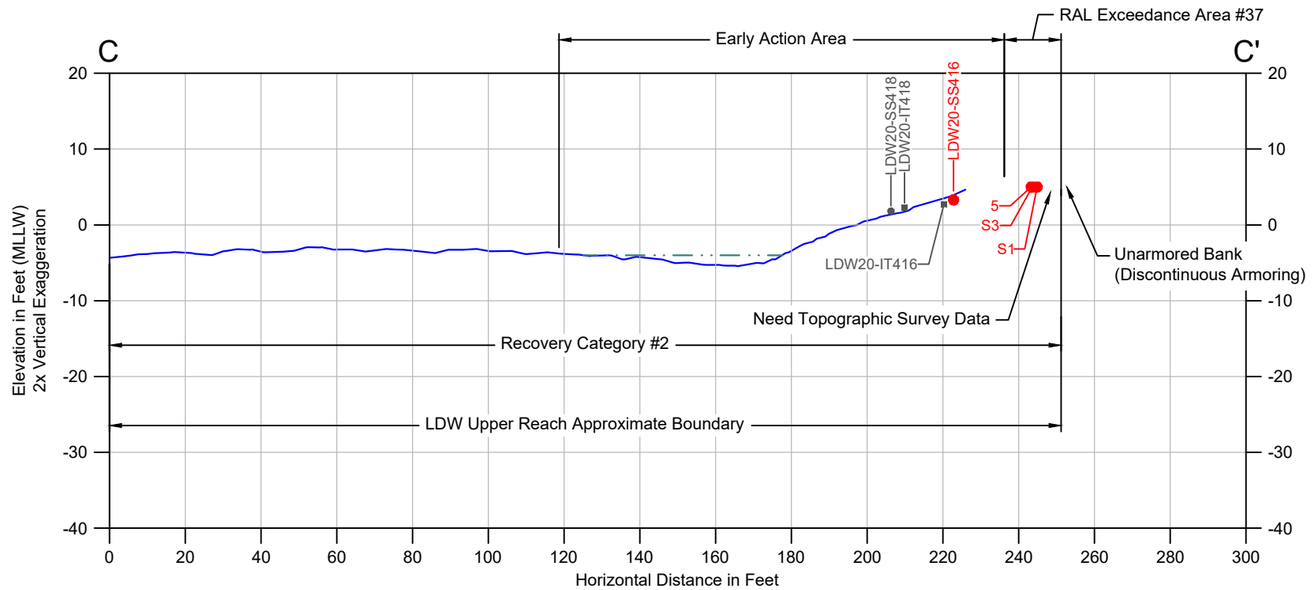

Legend:

- Existing Bathymetry (2019/20)
- Authorized Channel Elevation (-15' MLLW)
- 2' Allowable Overdepth (-17' MLLW)
- RAL Exceedance Area 12/16/20 Boundaries
- Intertidal/Subtidal Transition (-4' MLLW)

Surface Sediment PCB Location
- Exceeds RAL
- Does Not Exceed RAL

Subsurface PCB Core
- Exceeds RAL
- Does Not Exceed RAL

Notes:
1. Samples shown on each cross section are within 30 feet of the transect
2. Areas not designated as Recovery Categories 1 or 2 are Recovery Category 3.

Map 3-4e. Cross Section C-C'

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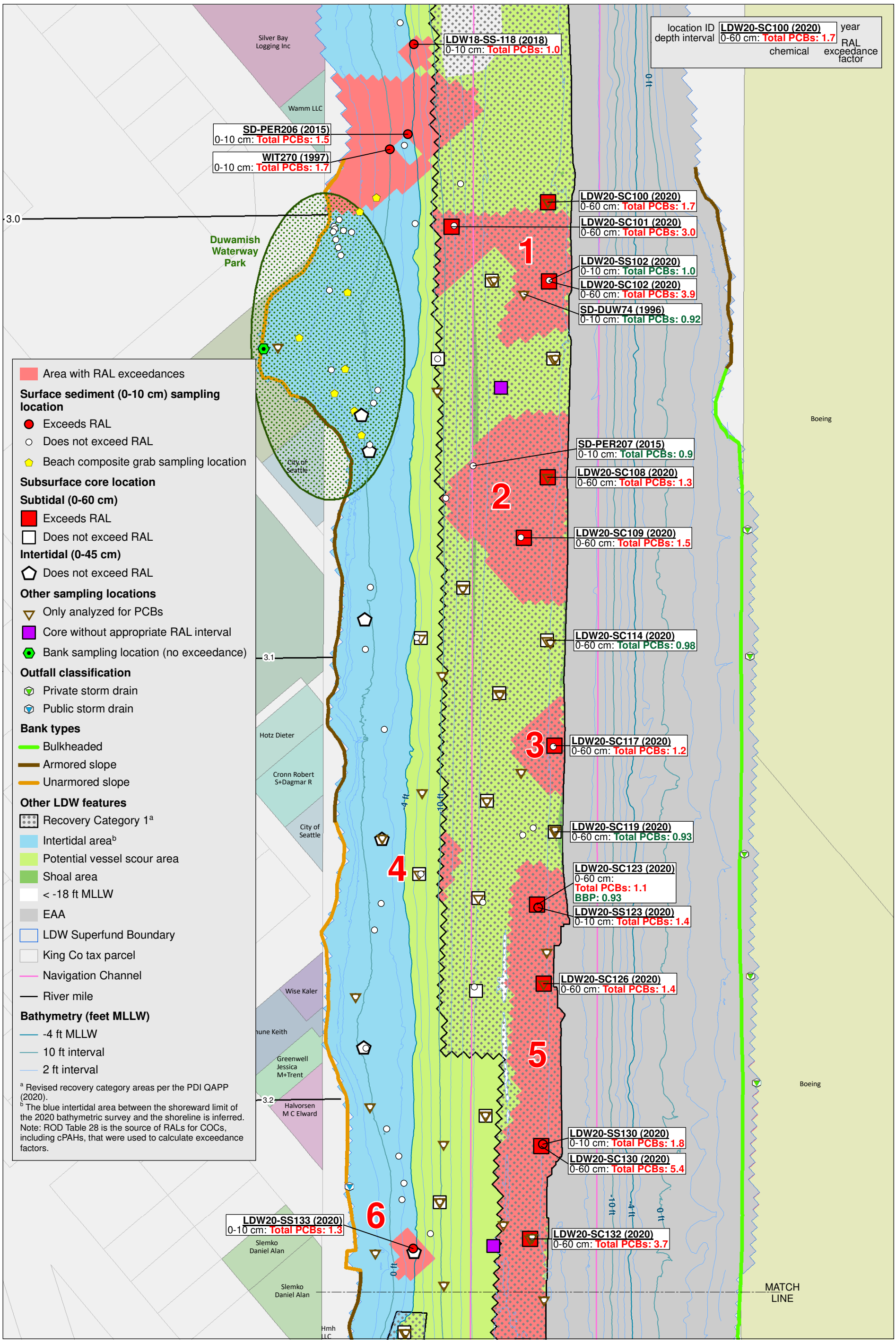

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0 100 200 Feet
0 25 50 Meters

Map 4-1a. Design dataset with RAL exceedance areas, RM 3.0 to RM 3.2

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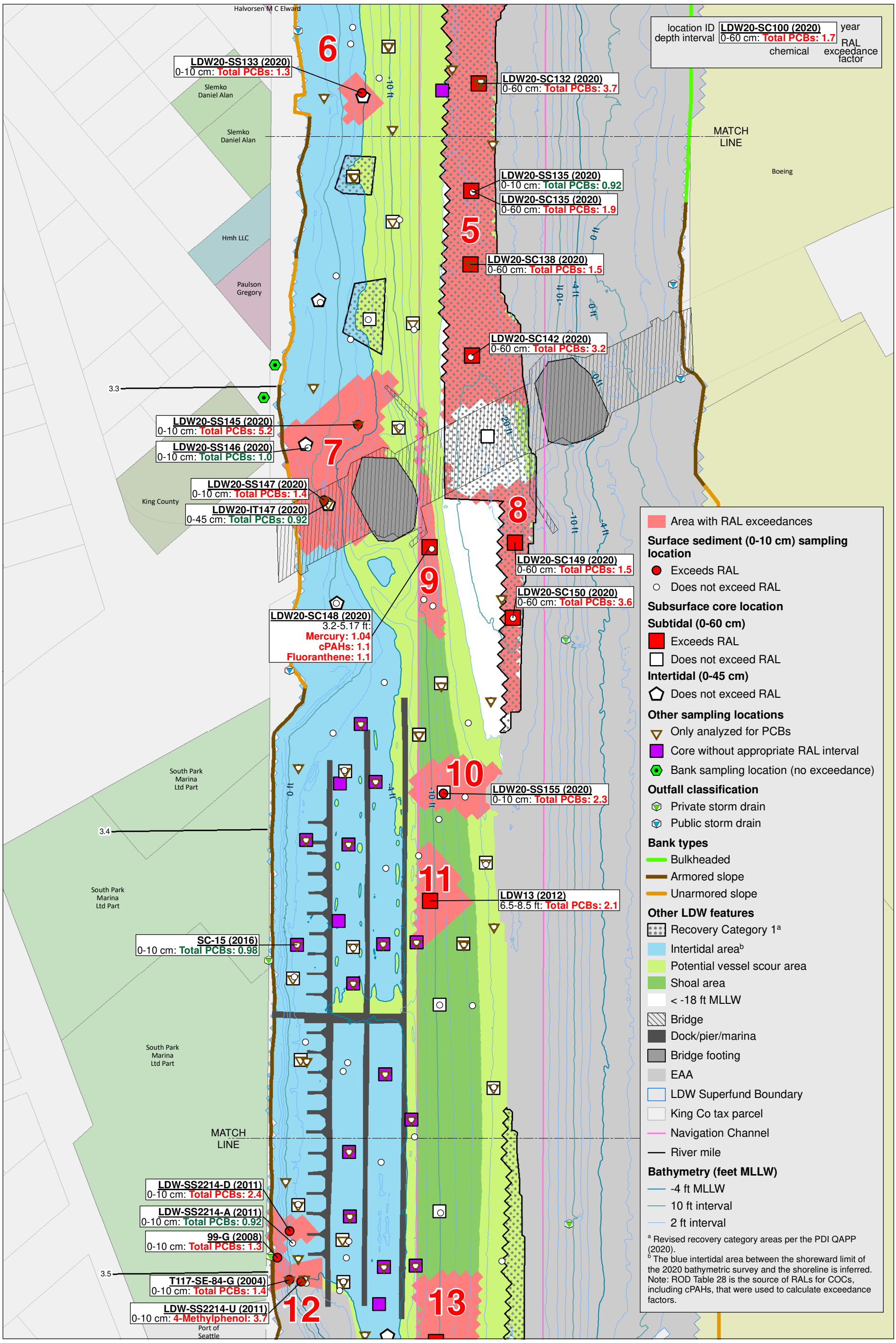

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0 100 200 Feet
0 25 50 Meters

Map 4-1b. Design dataset with RAL exceedance areas, RM 3.2 to RM 3.5

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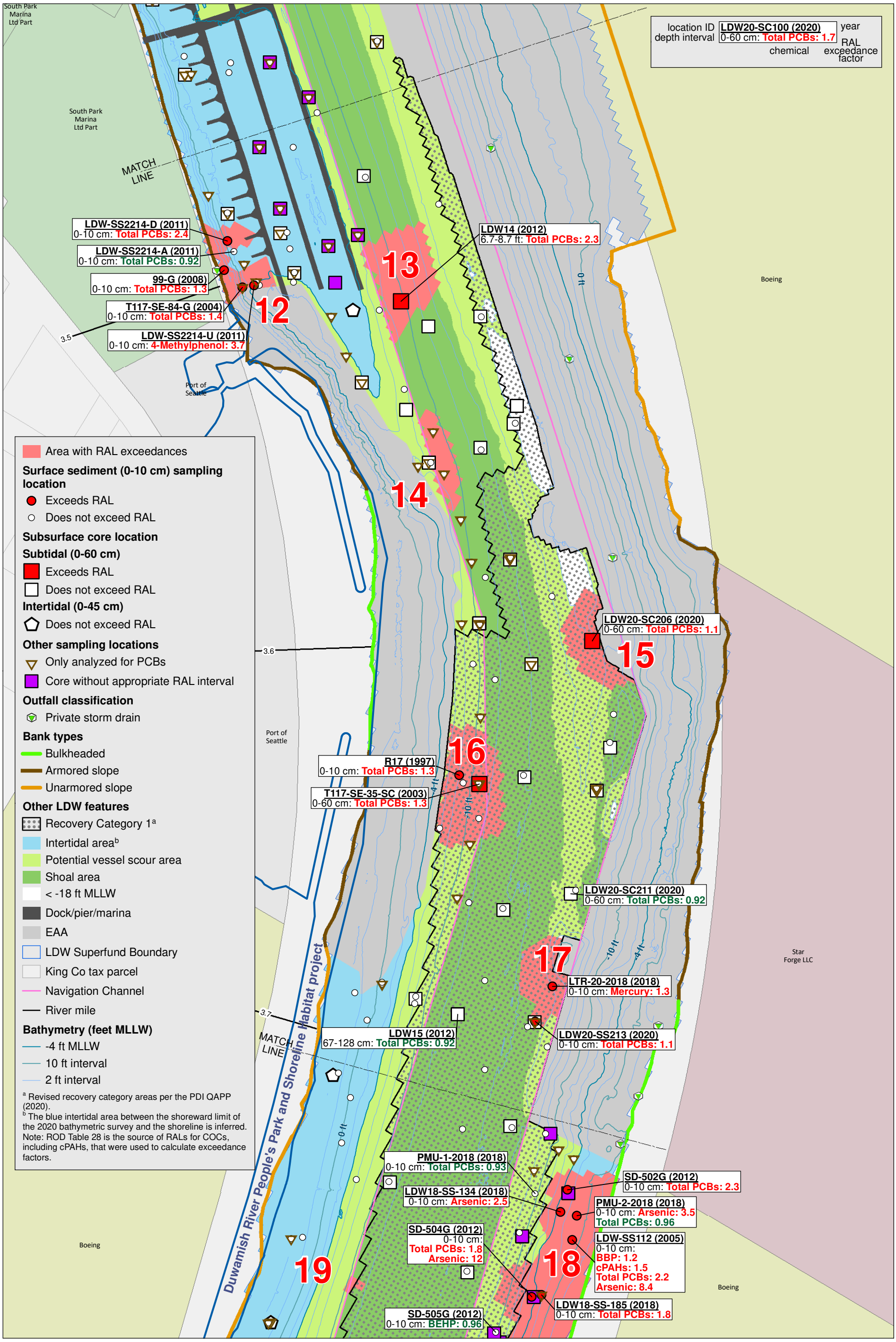

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N

0 100 200 Feet

0 25 50 Meters

Map 4-1c. Design dataset with RAL exceedance areas, RM 3.5 to RM 3.75

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location ID LDW20-SC100 (2020) year
depth interval 0-60 cm: Total PCBs: 1.7 RAL exceedance factor
chemical

Area with RAL exceedances

Surface sediment (0-10 cm) sampling location
- Exceeds RAL
- Does not exceed RAL

Subsurface core location

Subtidal (0-60 cm)
- Exceeds RAL
- Does not exceed RAL

Intertidal (0-45 cm)
- Exceeds RAL
- Does not exceed RAL

Other sampling locations
- Only analyzed for PCBs
- Core without appropriate RAL interval
- Bank sampling location (no exceedance)

Outfall classification
- EOF/storm drain
- Private storm drain
- Pipe of unresolved origin and/or use
- Stream, channel, or ditch

Bank types
- Bulkheaded
- Armored slope
- Unarmored slope

Other LDW features
- Recovery Category 1[a]
- Intertidal area[b]
- Potential vessel scour area
- Shoal area
- Dock/pier/marina
- EAA
- AC Pilot plots
- LDW Superfund Boundary
- King Co tax parcel
- Navigation Channel
- River mile

Bathymetry (feet MLLW)
- -4 ft MLLW
- 10 ft interval
- 2 ft interval

[a] Revised recovery category areas per the PDI QAPP (2020).
[b] The blue intertidal area between the shoreward limit of the 2020 bathymetric survey and the shoreline is inferred.
Note: ROD Table 28 is the source of RALs for COCs, including cPAHs, that were used to calculate exceedance factors.

MATCH LINE

Duwamish River People's Park and Shoreline Habitat project

Star Forge LLC

Boeing

Centerpoint Properties

National Industrial Holding

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29
30

3.8
3.9
4.0

SD-502G (2012) 0-10 cm: Total PCBs: 2.3
PMU-2-2018 (2018) 0-10 cm: Arsenic: 3.5 Total PCBs: 0.96
PMU-1-2018 (2018) 0-10 cm: Total PCBs: 0.93
LDW18-SS-134 (2018) 0-10 cm: Arsenic: 2.5
LDW18-SS-185 (2018) 0-10 cm: Total PCBs: 1.8
LDW-SS112 (2005) 0-10 cm: BBP: 1.2 cPAHs: 1.5 Total PCBs: 2.2 Arsenic: 8.4
SD-504G (2012) 0-10 cm: Total PCBs: 1.8 Arsenic: 12
LDW-SS114 (2005) 0-10 cm: cPAHs: 1.8 Total PCBs: 4.5 Arsenic: 19
SD-505G (2012) 0-10 cm: BEHP: 0.96
PMU-3-2018 (2018) 0-10 cm: Total PCBs: 1.8
EST162 (1997) 0-10 cm: Total PCBs: 1.3
SD-506G (2012) 0-10 cm: cPAHs: 1.7 Total PCBs: 2.4 Arsenic: 6.9
LDW20-IT224 (2020) 0-45 cm: Total PCBs: 5.2
RARE_2_B_1 (2015) 0-10 cm: Zinc: 0.94
EST147 (1997) 0-10 cm: Total PCBs: 4.4
PMU-4-2018 (2018) 0-10 cm: Arsenic: 1.5 Total PCBs: 3
R22 (1997) 0-10 cm: Total PCBs: 1.1 Phenanthrene: 1.1 Fluoranthene: 1.3 Arsenic: 1.4 Dibenzo(a,h)anthracene: 1.5 Benzo(g,h,i)perylene: 1.6 Indeno(1,2,3-cd)pyrene: 1.6 cPAHs: 3.5 Chrysene: 0.91 Total HPAHs: 0.94
EST148 (1997) 0-10 cm: Total PCBs: 2.5
R23 (1997) 0-10 cm: Benzo(a)anthracene: 1.0 Total benzofluoranthenes: 1.1 BBP: 1.2 Benzo(a)pyrene: 1.3 Chrysene: 1.4 Total HPAHs: 1.6 Fluoranthene: 2.0 Phenanthrene: 2.0 Indeno(1,2,3-cd)pyrene: 2.8 Benzo(g,h,i)perylene: 2.9 Dibenzo(a,h)anthracene: 3 Total PCBs: 4.3 cPAHs: 6.6
LDW-SS158 (2005) 0-10 cm: Total PCBs: 1.7
LDW20-SS227 (2020) 0-10 cm: BBP: 1.0 Total PCBs: 1.2
LDW-SSSP3-A (2011) 0-10 cm: Zinc: 1.8
LDW-SS157 (2005) 0-10 cm: cPAHs: 1.9
R26 (1997) 0-10 cm: BBP: 1.0 Total PCBs: 1.3
LDW-SC51 (2006) 0-10 cm: cPAHs: 2.2
SD-510G (2012) 0-10 cm: Total PCBs: 1.5
LDW-SS115 (2005) 0-10 cm: cPAHs: 2.4 Total PCBs: 0.92
LDW20-IT236 (2020) 0-45 cm: Arsenic: 0.94
EIT060 (1997) 0-10 cm: Total PCBs: 1.6
R27 (1997) 0-10 cm: Total PCBs: 1.9
R31 (1997) 0-10 cm: BBP: 1.8
LDW20-SS243 (2020) 0-10 cm: Total PCBs: 1.5
PMU-7-2018 (2018) 0-10 cm: Total PCBs: 8.5
AN-047 (2008) 0-10 cm: BBP: 8.5 Total PCBs: 9.2
LDW17 (2012) 0-2 ft: Total PCBs: 1.1 2.8-4.7 ft: Total PCBs: 1.4
AN-029 (2006) 0-10 cm: Total PCBs: 1.3 Mercury: 8.3
EST143 (1997) 0-10 cm: Total PCBs: 2.3
AN-046 (2008) 0-10 cm: Zinc: 1.2 Lead: 3.3
LDW20-SS244 (2020) 0-10 cm: Total PCBs: 3.3
LDW-PILOT9B-SS2 (2014) 0-10 cm: Total PCBs: 4.5
LDW-PILOT9B-SS1 (2014) 0-10 cm: Total PCBs: 2.1
AN-027 (2006) 0-10 cm: Total PCBs: 1.2 BBP: 1.4
LDW-SSSP1-U (2011) 0-10 cm: Total PCBs: 3
LDW-SS122 (2005) 0-10 cm: Total PCBs: 2.3
AN-028 (2006) 0-10 cm: Total PCBs: 1.3
B9b (2004) 0-10 cm: Total PCBs: 1
LDW20-IT257 (2020) 0-45 cm: Dioxin/furan TEQ: 1.1 Total PCBs: 3.1
LDW20-SS257 (2020) 0-10 cm: Total PCBs: 20
AN-018 (2006) 0-10 cm: Total PCBs: 1.6
LDW20-IT253 (2020) 0-45 cm: Total PCBs: 1.1
LDW20-SS259 (2020) 0-10 cm: Total PCBs: 1.1
LDW20-SS258 (2020) 0-10 cm: Total PCBs: 0.92
AN-013 (2006) 0-10 cm: Total PCBs: 2.9
LDW20-SS266 (2020) 0-10 cm: BBP: 1.9 Total PCBs: 2.3
AN-011 (2006) 0-10 cm: Total PCBs: 1

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N

0 100 200 Feet
0 25 50 Meters

Map 4-1d. Design dataset with RAL exceedance areas, RM 3.75 to RM 4.0

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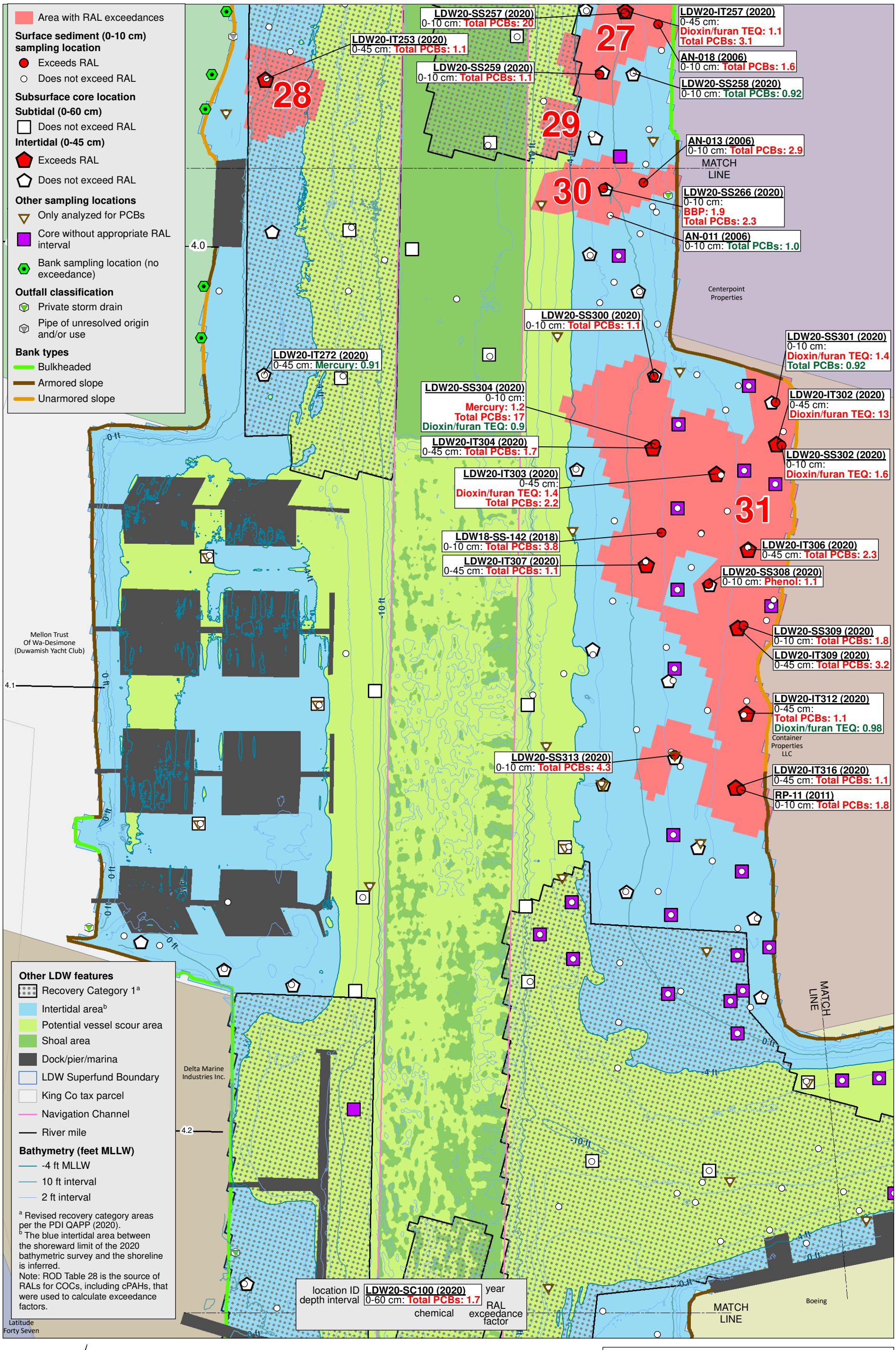

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N

0 100 200 Feet

0 25 50 Meters

Map 4-1e. Design dataset with RAL exceedance areas, RM 4.0 to RM 4.25

PRE-DESIGN INVESTIGATION PHASE I DATA EVALUTATION REPORT FOR THE LDW UPPER REACH

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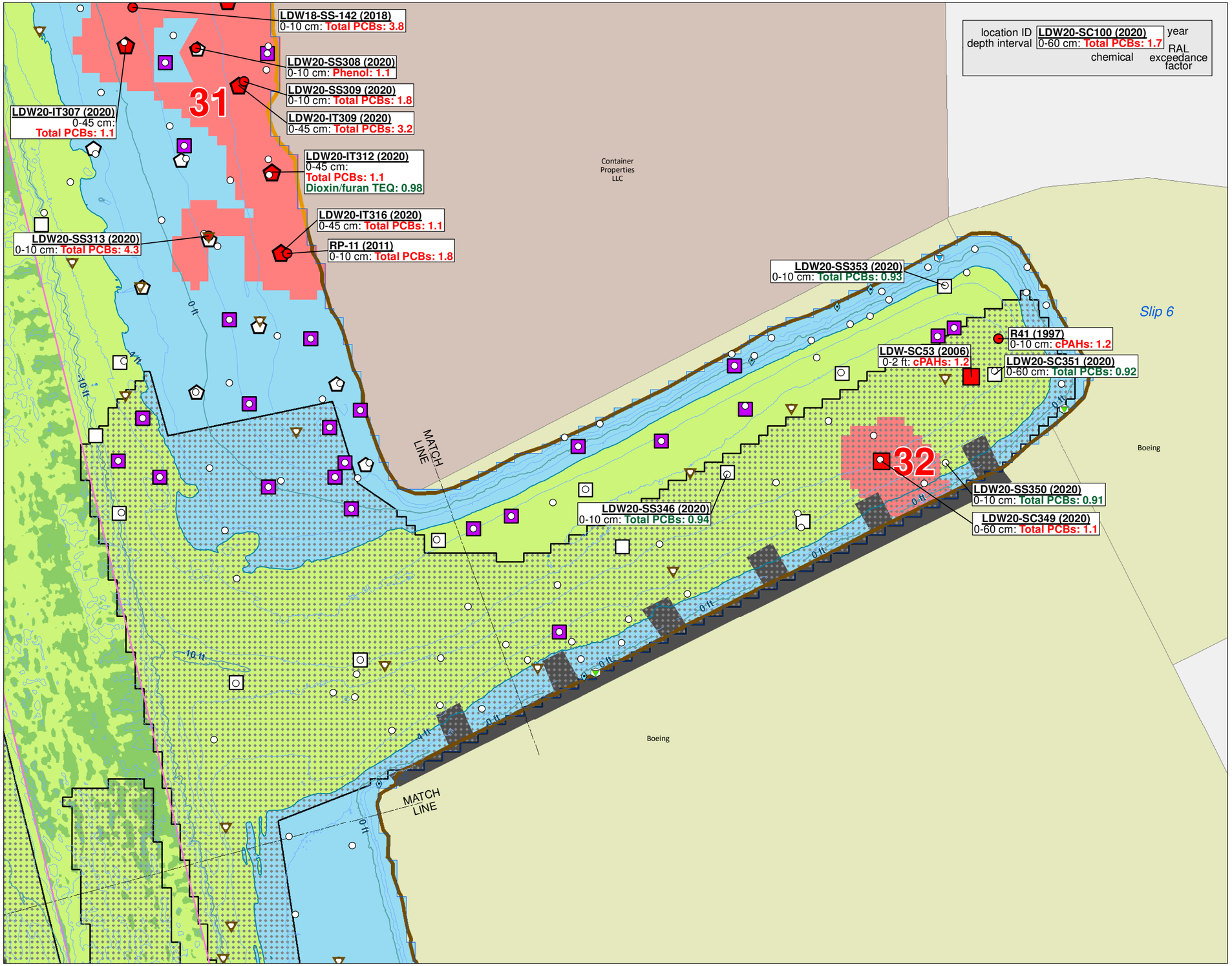

Area with RAL exceedances

Surface sediment (0-10 cm) sampling location

- Exceeds RAL
- Does not exceed RAL

Subsurface core location

Subtidal (0-60 cm)

- Exceeds RAL
- Does not exceed RAL

Intertidal (0-45 cm)

- Exceeds RAL
- Does not exceed RAL

Other sampling locations

- Only analyzed for PCBs
- Core without appropriate RAL interval

Outfall classification

- Private storm drain
- Public storm drain
- Abandoned/inactive

Bank types

- Armored slope
- Unarmored slope

Other LDW features

- Recovery Category 1[a]
- Intertidal area[b]
- Potential vessel scour area
- Shoal area
- Dock/pier/marina
- King Co tax parcel
- Navigation Channel

Bathymetry (feet MLLW)

- -4 ft MLLW
- 10 ft interval
- 2 ft interval

[a] Revised recovery category areas per the PDI QAPP (2020).
[b] The blue intertidal area between the shoreward limit of the 2020 bathymetric survey and the shoreline is inferred.
Note: ROD Table 28 is the source of RALs for COCs, including cPAHs, that were used to calculate exceedance factors.

N

0 50 100 Feet

0 25 50 Meters

Map 4-1f. Design dataset with RAL exceedance areas, Slip 6

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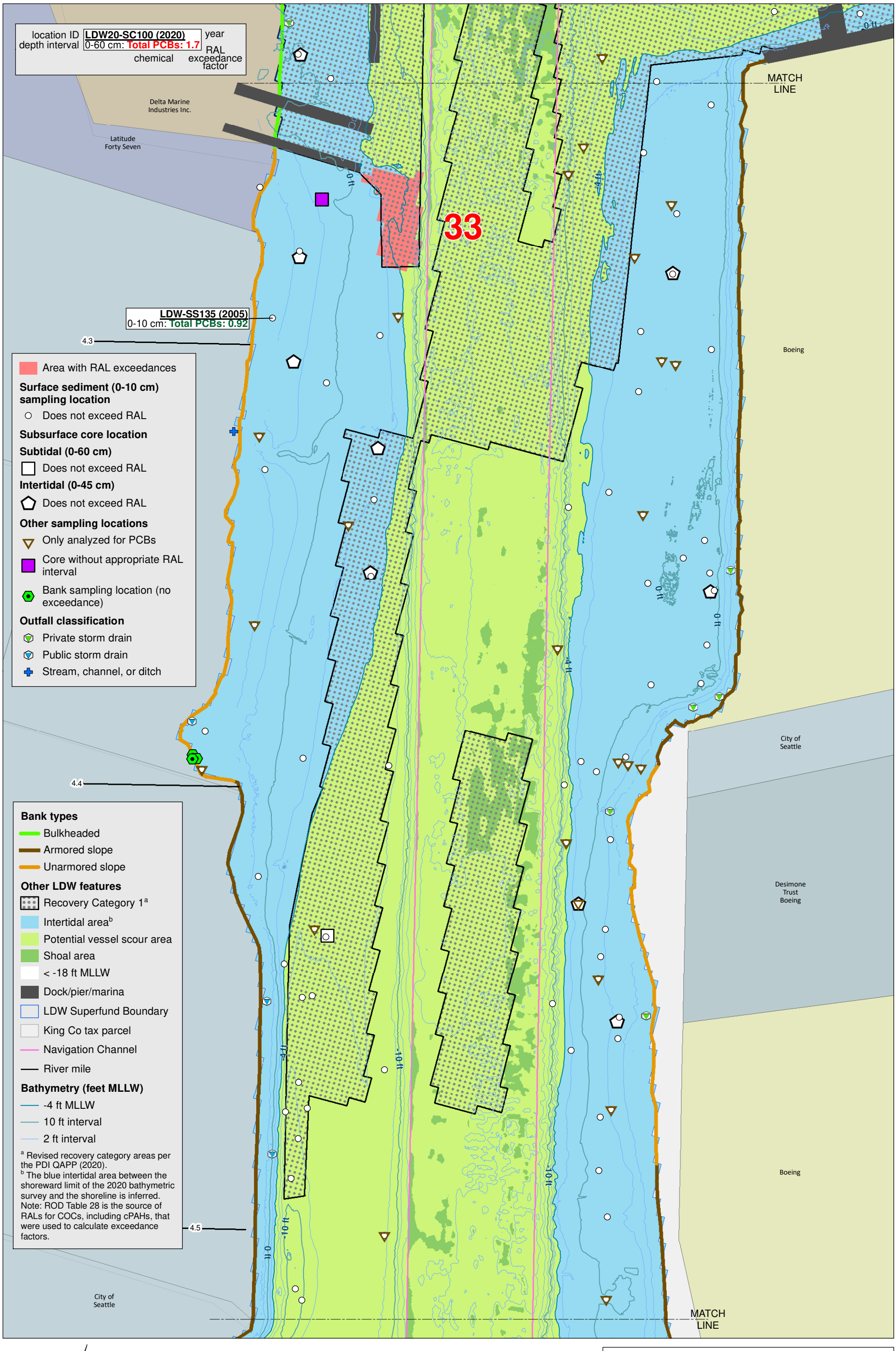

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Map 4-1g. Design dataset with RAL exceedance areas, RM 4.25 to RM 4.5

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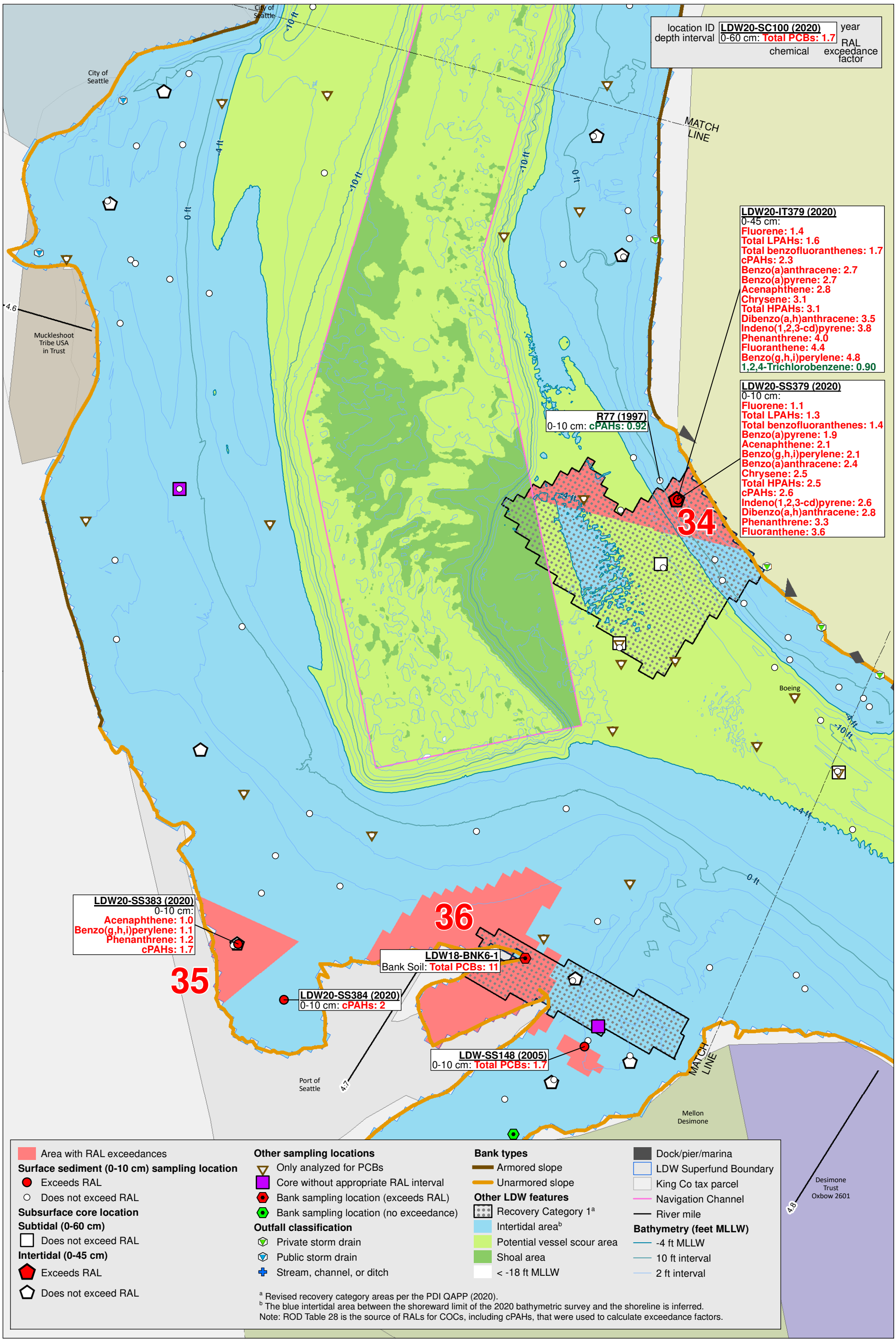

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N

0 100 200 Feet

0 25 50 Meters

Map 4-1h. Design dataset with RAL exceedance areas, RM 4.5 to RM 4.8

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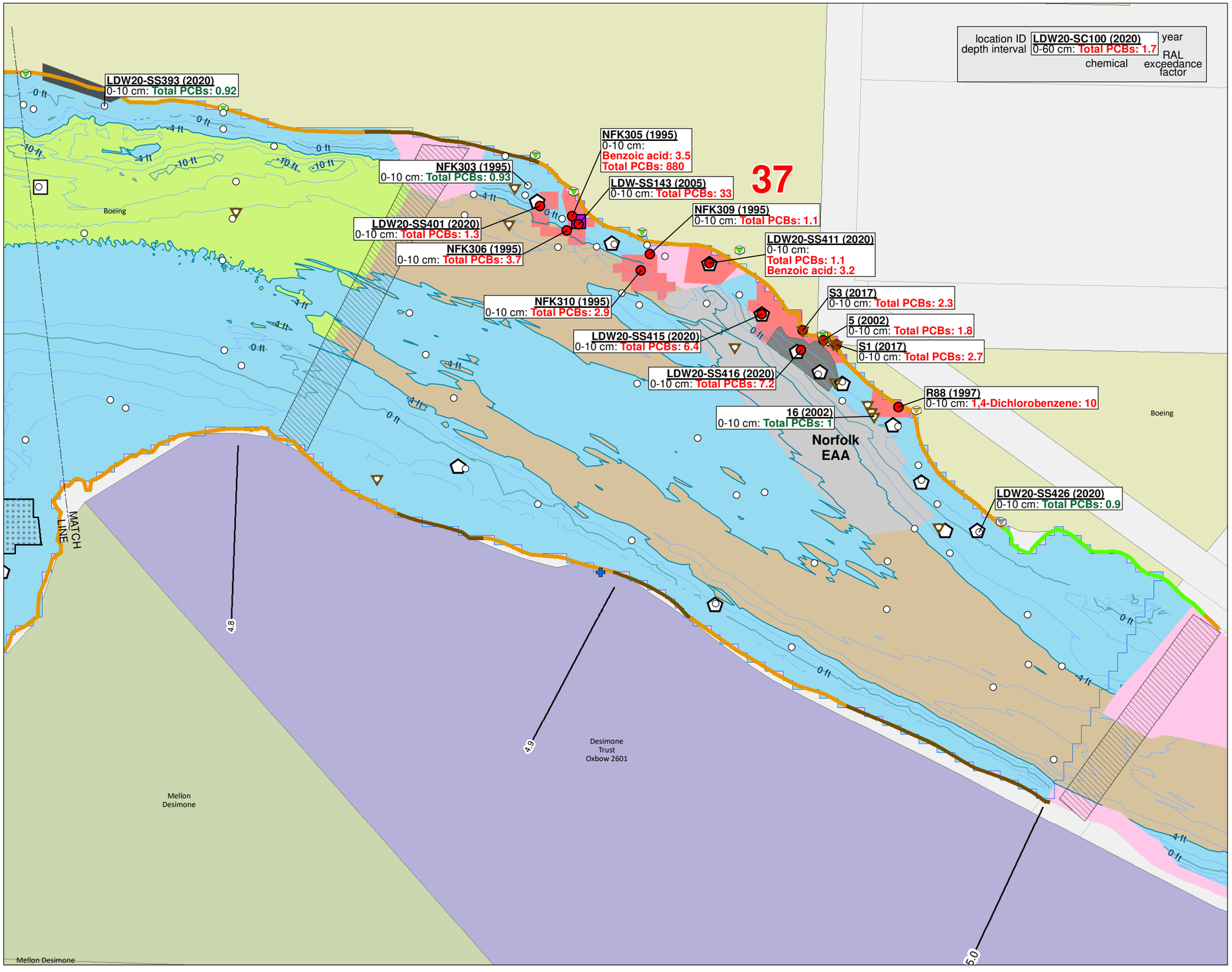

Area with RAL exceedances

Surface sediment (0-10 cm) sampling location

- Exceeds RAL
- Does not exceed RAL

Subsurface core location

Subtidal (0-60 cm)

- Does not exceed RAL

Intertidal (0-45 cm)

- Does not exceed RAL

Other sampling locations

- Only analyzed for PCBs
- Core without appropriate RAL interval

Outfall classification

- CSO/storm drain
- Private storm drain
- Pipe of unresolved origin and/or use
- Abandoned/inactive
- Stream, channel, or ditch

Bank types

- Bulkheaded
- Armored slope
- Unarmored slope

Other LDW features

- Recovery Category 1[a]
- Intertidal area[b]
- Potential vessel scour area
- Subtidal with no subsurface RAL
- Area not covered by bathymetric survey
- Bridge
- Dock/pier/marina
- Boeing South Storm Drain
- EAA
- King Co tax parcel
- River mile

Bathymetry (feet MLLW)

- -4 ft MLLW
- 10 ft interval
- 2 ft interval

[a] Revised recovery category areas per the PDI QAPP (2020).
[b] The blue intertidal area between the shoreward limit of the 2020 bathymetric survey and the shoreline is inferred.
Note: ROD Table 28 is the source of RALs for COCs, including cPAHs, that were used to calculate exceedance factors.

N

0 60 120 Feet

0 25 50 Meters

Map 4-1i. Design dataset with RAL exceedance areas, RM 4.8 to RM 5.0

PRE-DESIGN INVESTIGATION PHASE I DATA EVALUTATION REPORT FOR THE LDW UPPER REACH **DRAFT**

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