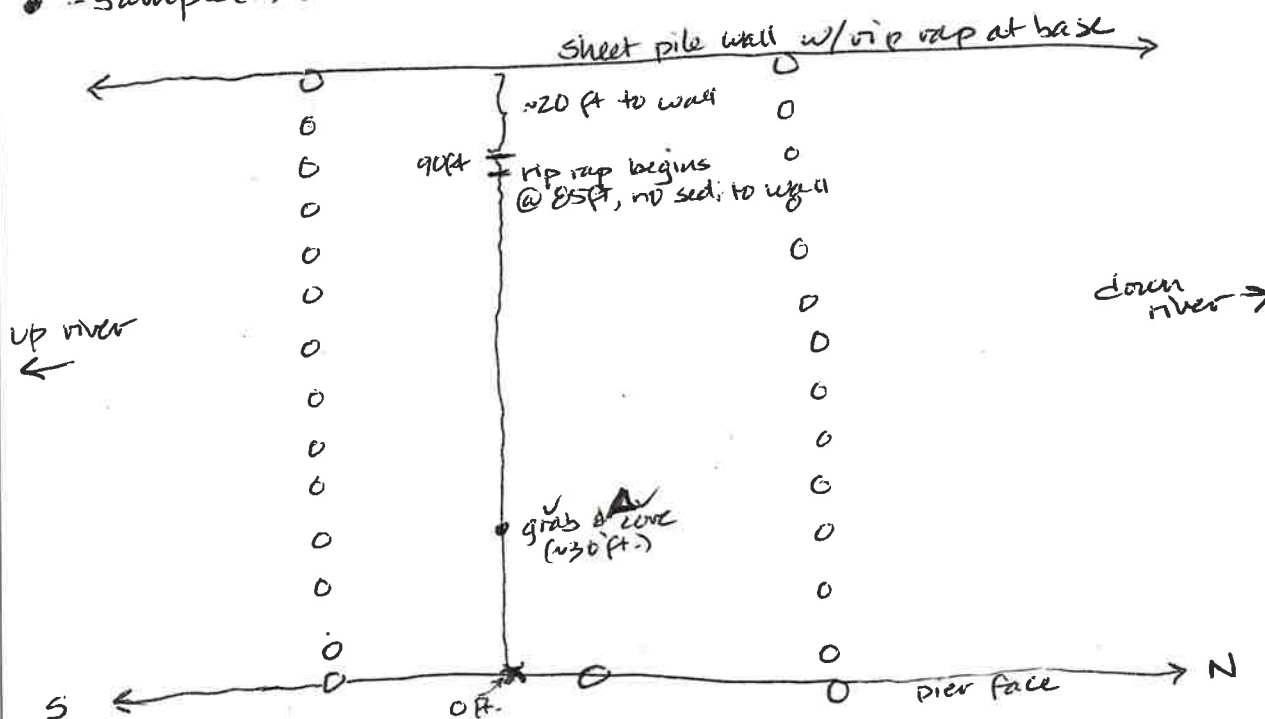


Weather: 60s, sunny  
Tide Source: RTK tide station  
Crew: TD, LVB, EP

- - pilings
- X - coordinates (0 ft) at pier face
- ▲ - target (approx)
- - sample(s) collected

T115 (Berth 4) ↑



Transect 1:  
Anchored at pier face between piling rows where target is located,  
~30 ft. away.

Coordinates (at 0 ft along pier face)  
203295.09 1268427.60

Video survey start: 0937  
stop: 0951

RTK: +5.68 ft.  
RTK: +5.78 ft.

Cove and grab collected at 30 ft along transect line.



# UNDER-STRUCTURE FORM - TRANSECT DATA

p1 of 2

Project Name / #: AOLC MR Phase 1

Weather: 60s, sunny

Date: 04.29.23

Tide Source: RTK tide station

Sampling Method: dner hand-collected

Crew: TD, LVB, EP

Location ID: 1800

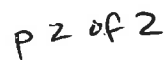
Transect Number: 1

Transect Length (ft): 90.0

Transect Start: pier face

Transect End: rip rap, shallow water

CALC MW	Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes
-23.3	0	0937	+5.68	-29	73.0	silt, tr. shell frag
-21.3	5	0939		-27	73.0	silt, tr. shell frag
-21.3	10	0939		-27	73.0	silt, tr. shell frag.
-19.3	15	0940		-25	73.0	silt, tr. shell frag.
-18.3	20	0941		-24	73.0	silt, tr. shell frag.
-17.3	25	0941		-23	73.0	silt, tr. shell frag.
-16.3	30	0941		-22	73.0	silt, tr. shell frag & org. debris (grab sample + core collected here)
-15.3	35	0942		-21	73.0	silt, tr. shell & org debris
-14.3	40	0943		-20	73.0	silt, tr. shell & org. debris
-13.3	45	0943		-19	73.0	silt, tr. shell & org debris
-11.3	50	0944		-17	73.0	silt, tr. shell frag.
-10.2	55	0945	+5.78	-16	1.2	silt, tr. shell frag & org debris (rock layer @ 1.2 ft. depth)
-9.2	60	0945		-15	0.7	silt, tr. shell frag & org. debris. (crushed rock @ 0.7 ft.)
-7.2	65	0946		-13	0.1	silt, shell frag, org. debris, crushed rock.
-5.2	70	0947		-11	0.2	silt, shell frag, org debris, larger rocks
-3.2	75	0948		-9	0.1	silt, shell frag, org debris, crushed rock.
-2.2	80	0948		-8	trace	silt, shell frag, crushed rock



Weather: 60s, sunny

Tide Source: RTK tide station

Crew: TD, LVB, EP.

Transect Length (ft): 90.0

Transect End: rip rap, shallow water

Transect End: rip rap, shallow water

[illegible]

call  
mini

+ 0.8

+ 1.8

# UNDER-STRUCTURE FORM

Project Name / #: LOW AOCs MR Phase 1

Weather: 40s, partly sunny

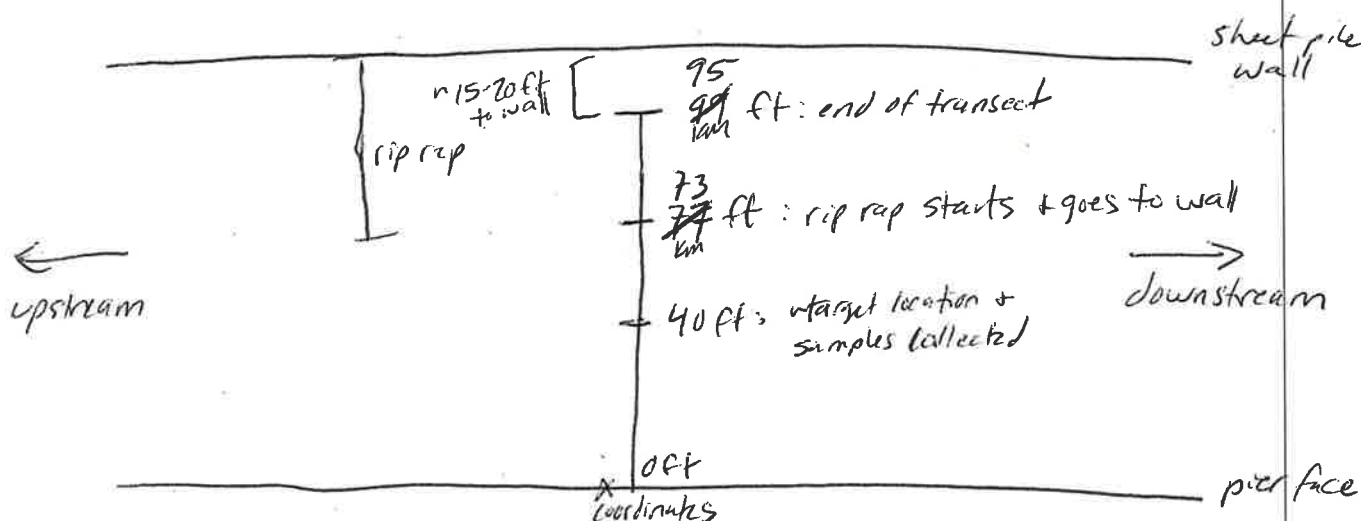
Date: 4/12/23

Tide Source: RTK

Sampling Method: diver / hand collected

Crew: Km, LVB

Location ID: 1801



## Transect 1

Anchored at pier face in front of opening between pilings where target is located

Coordinates: 203083.5, 1268496.94 (@ 0 ft)  
at pier face

video survey start: 0902 RTK: 9.71 ft  
end: 0916 RTK: 9.73 ft

grab and core collected @ 40 ft along transect



# UNDER-STRUCTURE FORM – TRANSECT DATA

page 1 of 2

Project Name / #: LOW AOC5 MR Phase 1  
Date: 4/12/23  
Sampling Method: hand / diver collected

Weather: 40s, partly sunny  
Tide Source: KTK  
Crew: KM, LVB

Location ID: <u>1801</u>		Transect Length (ft): <u>km 95</u>			
Transect Number: <u>1</u>		Transect End: <u>Shallow water / rip rap</u>			
Transect Start: <u>pier face</u>					
Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes
0	0902	+9.71	31	3.0+	silty sediment w/ shell hash
5	0903		30	3.0+	
10	0904		28	3.0+	
15	0905		27	3.0+	
20	0905		26	3.0+	
25	0905		24	3.0+	
30	0906		24	3.0+	
35	0906		23	3.0+	
40	0907		21	3.0+	
45	0907		20	2.3	
50	0908		19	1.9	
55	0908		19	1.4	organic matter
60	0909		17	0.6	rocks
65	0910		15	0.3	+ gravel <sup>km</sup> / rocks
70	0911		13	0.1	rocks
75	0913		12	<0.1	(little sediment) start rip-rap @ 73 ft
80	0913		10	0.0	(trace sediment), rip-rap

Note: Max probe depth: 3 ft  
Tape offset by 1 ft to avoid debris on bottom (1 ft away from pier face toward open water) so transect points are at +1 on tape + in video relative to points recorded in this form



## UNDER-STRUCTURE FORM – TRANSECT DATA

Project Name / #: LOW AOLS MR Phase I

Weather: 40s, partly sunny

Date: 4/12/23

Tide Source: RTK

Sampling Method: diver/hand collected

Crew: KIM, LVB

Location ID: 1801

Transect Number: 1

Transect Length (ft): 95

Transect Start: pier face

Transect End: shallow water / riprap

[illegible]



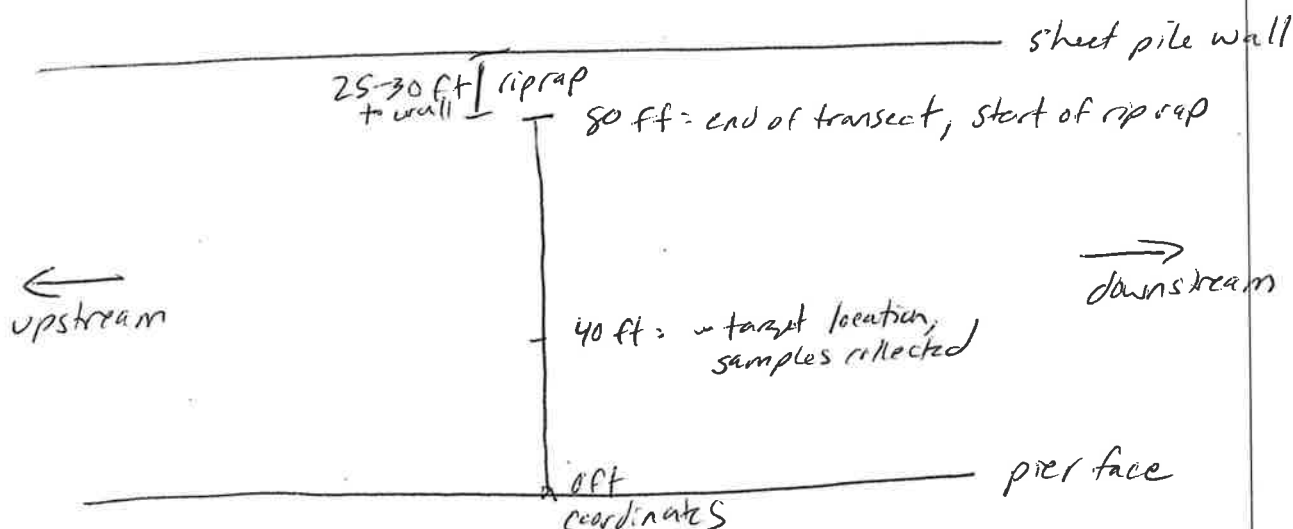


## UNDER-STRUCTURE FORM

Project Name / #: LOW AOCs MR Phase 1  
Date: 4/12/23  
Sampling Method: diver/hand collection

Weather: 40s, partly sunny  
Tide Source: RTK  
Crew: KM, LVB

Location ID: 1802



### Transect 1:

Anchored at pier face in front of opening between pilings where target is located

Coordinates: 202904.98, 1268557.36 (0 ft)  
at pier face

video survey start: 1306 RTK: 4.18 ft  
end: 1359 RTK: 2.37 ft

grab and core collected @ 40 ft along transect



## UNDER-STRUCTURE FORM – TRANSECT DATA

Project Name / #: Lbw ADCS MR Phase 1  
Date: 4/12/23  
Sampling Method: Diver/hand collection

Weather: 40s, partly sunny  
Tide Source: RTK  
Crew: KM, LWB

Location ID: <u>1802</u>		Transect Length (ft): <u>80</u>			
Transect Number: <u>1</u>		Transect End: <u>shallow water, rip rap</u>			
Transect Start: <u>pier face</u>					
Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes
0	1306	4.18	24	3.0+	silty sediment w/ shell hash
5	1308		22	3.0+	
10	1310		21	3.0+	
15	1311		20	3.0+	
20	1313		18	3.0+	
25	1315	3.53	18	3.0+	
30	1316		17	3.0+	
35	1318		15	3.0+	
40	1350	2.37	13	3.0+	
45	1352		12	3.0+	
50	1353		11	2.9	
55	1354		10	2.7	rocks
60	1354		9	0.6	rocks
65	1355		7	0.2	rocks
70	1357		6	<0.1	rocks
75	1358		4	0.1	rocks
80	1359		2	0.2	silty sediment over rip rap

Max probe depth: 3.0 ft





## UNDER-STRUCTURE FORM

Project Name / #: LDW AOC5 MR Phase I

Weather: partly cloudy, 50s

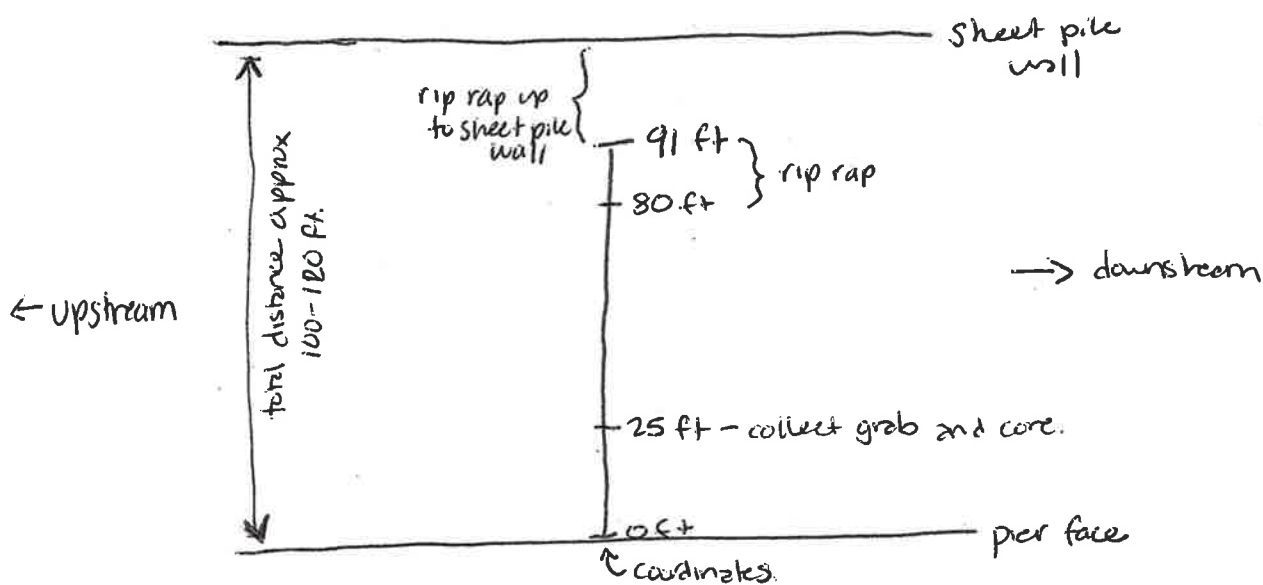
Date: April 5, 2023

Tide Source: RTK

Sampling Method: diver / hand-collected

Crew: SR, LVB

Location ID: 1803



### Transect 1:

Anchored at pier face in front of opening in piles.  
Located in-line with target coordinates.

Approx 35 yds from pier face to sheet pile wall.

Coordinates: 202724.88, 1268616.01

Video Survey start: 1451  
end: 1508

RTK tide: +6.35 ft mLLW  
" " "



# UNDER-STRUCTURE FORM – TRANSECT DATA

Project Name / #: LDW AOC5 MR Phase I  
 Date: April 5, 2013  
 Sampling Method: diver / hand collected

Weather: partly cloudy, SQs  
 Tide Source: RTK  
 Crew: SP, LVB

Location ID: <u>1803</u>		Transect Length (ft): <u>91 ft</u>				
Transect Number: <u>1</u>		Transect End: <u>shallow water / rip rap</u>				
Transect Start: <u>pier face</u>						
Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes	
0 ft	1451	+6.35	18.7	25 ft	3.0+	Silty sediment, shell hash (less than at 1804) w/ fine sand
5 ft	1452			24 ft	3.0+	
10 ft	1453			23 ft	3.0+	
15 ft	1454			22 ft	3.0+	
20 ft	1456			20 ft	3.0+	trace woody debris
25 ft	1457		-12.7	19 ft	3.0+	grab + core collected @ 25 ft.
30 ft	1458			18 ft	3.0+	
35 ft	1458			17 ft	3.0+	Starting to be less shell frags
40 ft	1459			16 ft	3.0+	Same sediment material (Silty w/ fine sand)
45 ft	1500			16 ft	3.0+	
50 ft	1500		-8.7	15 ft	3.0+	
55 ft	1501			14 ft	3.0+	
60 ft	1502			13 ft	3.0+	
65 ft	1503			12 ft	3.0+	
70 ft	1504			11 ft	1.3	
75 ft	1505		-3.7	10 ft	0.5	
80 ft	1506			8 ft	0	Starting to see rip rap pieces
85 ft	1507			6 ft	0	rip rap w/ pockets of sediment (thin layer)
90 ft	1508		+2.4	4 ft	0	larger rip rap, minimal sediment.
91						



## UNDER-STRUCTURE FORM

Project Name / #: LDWNR Acc5 Phase1

Weather: partly cloudy, 40s

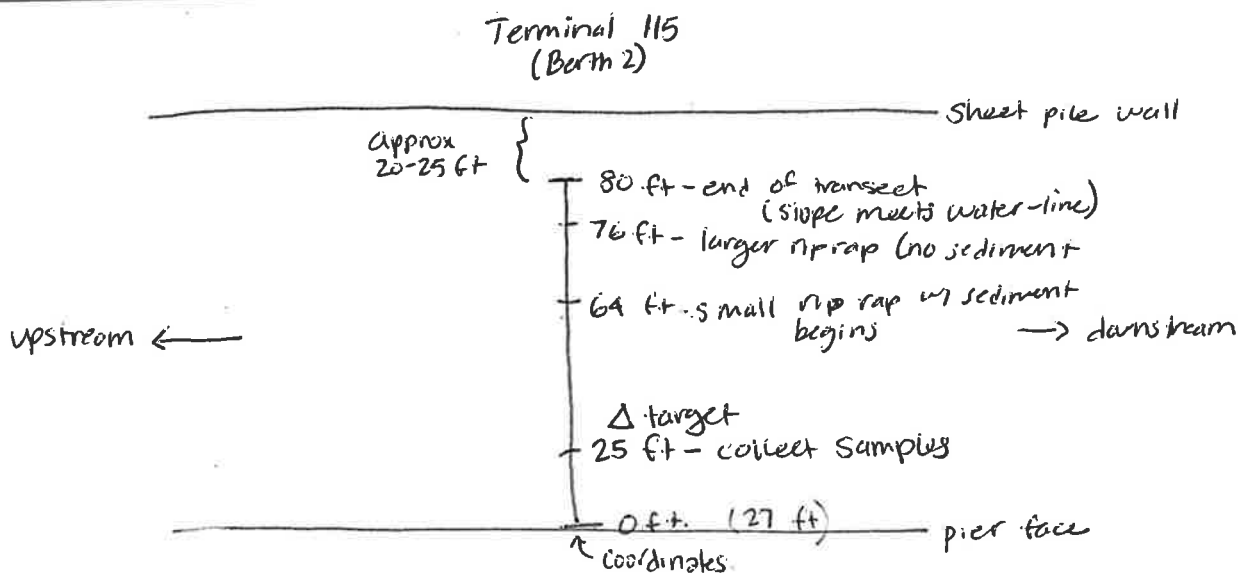
Date: 4.5.2023

Tide Source: RTK

Sampling Method: diver/hand collected

Crew: SP, LVB

Location ID: 1804



### Transect 1:

Anchored at pier face in front of opening between pile rows.

Located just upstream of target — target is under loading ramp, so shifted to avoid.

Coordinates at pier face: 202533.76, 1268677.76

Video Survey start: 1119 RTK: +1.79  
end: 1135 RTK: +1.79

Grab + core collected 25 ft along transect.



# UNDER-STRUCTURE FORM – TRANSECT DATA

Project Name / #: LDW AOC5 MR Phase1

Weather: partly cloudy, 40s

Date: 4.5.2023

Tide Source: RTH

Sampling Method: diver / hand collected

Crew: SP, LVB

Location ID: <u>1804</u>		Transect Length (ft): <u>80 ft</u>			
Transect Number: <u>1</u>		Transect End: <u>rip/rap &amp; meanng water line</u>			
Transect Start: <u>pier face</u>					
Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes
0 ft	1119	+1.74	27	3.0+	Silty sediment, lots of shell hash trace organics
5 ft	1120	-17.2	19 <sup>64</sup>	3.0+	
10 ft	1121	-15.2	17 <sup>64</sup>	3.0+	
15 ft	1122	-14.2	16	3.0+	
20 ft	1123	-13.2	15	3.0+	Sea star
25 ft	1124	-12.2	14	3.0+	Δ target / collect samples.
30 ft	1125	-11.2	13	3.0+	
35 ft	1126	-10.2	12	3.0+	
40 ft	1127	-10.2	12	3.0+	Sediment feels shifter during probing.
45 ft	1128	-9.2	11	2.2	
50 ft	1129	-8.2	10	3.0+	less shell hash, still silty sediment
55 ft	1130	-7.2	9	1.5	
60 ft	1131	-6.2	8	1.2	rip rap at 64 ft.
65 ft	1132	-5.2	7	0.3	Starting to see rip rap w/ sediment between
70 ft	1133	-3.2	5	0.1	open area w/o rip rap / less rip rap.
75 ft	1134	-2.2	4	0	mostly rip rap, small pockets of sediment
80 ft.	1135	-1.2	3	3 cm	large pieces of rip rap, limited silty sediment in places.

# UNDER-STRUCTURE FORM

Project Name / #: ADCS MR Phase 1  
Date: 04.28.23  
Sampling Method: Diver hand-collect

Weather: 60s, sunny  
Tide Source: RTK tide station  
Crew: TD, LVB, EP.

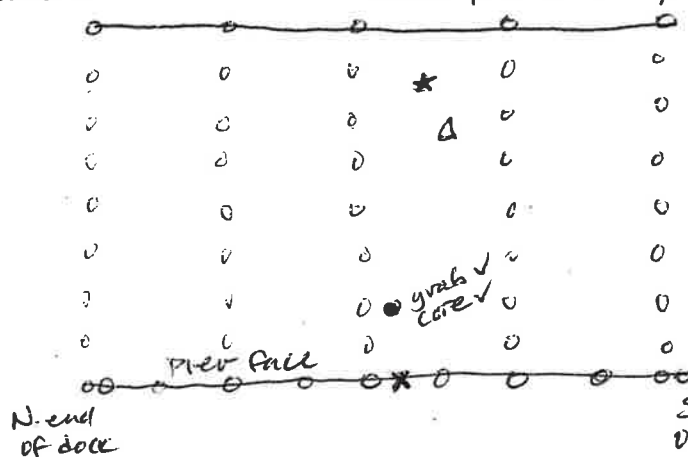
Location ID: 1805

O - piling  
x - coordinates (0 ft) at pier face  
Δ - target  
● - sample(s) collected

Centrindred ↑

sheet pile wall w/ rip rap box

down  
← river



\* 75' at bottom of rip rap.  
~ 4' deep, @ 1455  
~ 10 ft. from sheet  
pile wall  
RTK + 4.60 ft.

## Transect 1

Anchored at pier face, between 3rd & 4th row of piling, ~ 70 ft from target

Coordinates (at 0 ft. along pier face):

203140.58      1268933.14

video survey start: 1504  
stop: 1552

RTK: +4.26 ft  
RTK: +3.37 ft.

Grab & core collected at 36 ft along transect line to most  
represent area under dock. Most of it is subtidal  
even though target coordinate is intertidal.

\* not to scale





# UNDER-STRUCTURE FORM - TRANSECT DATA

Project Name / #: ADCS MR Phase I  
Date: 04.28.23  
Sampling Method: over hand collect.

Weather: 60s, sunny  
Tide Source: RTK tide station  
Crew: TD, WBS, EP

Location ID: <u>1805</u>		Transect Length (ft): <u>75.0</u>			
Transect Number: <u>j</u>		Transect End: <u>rip rap/shallow water</u>			
Transect Start: <u>pier face</u>					
Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes
0	1504	+4.26	-24	>3.0	shell fragments, sand and silt.
5	1507		-23	>3.0	shell fragments, sand, silt, firm
10	1508		-22	>3.0	shell frag, sand & silt, firm
15	1510		-20	>3.0	shell frag, silt & sand, softer
20	1512		-19	>3.0	crab shell frag, silt w sand, tr. clay.
25	1514		-18	>3.0	anemone shell frag, silt
30	1515	+3.45	-16	>3.0	less shell frag, silt (core attempt 1 & grab sample here)
35	1516		-15	>3.0	less shell frag, silt
40	1518		-14	2.5	less shell frag, silt
45	1520		-13	2.1	less shell frag, silt, tr. clay
50	1546	+3.37 <del>+3.54</del>	-12	>3.0	tr. shell frag, silt w/ tr. clay
55	1548		-11	2.4	tr. shell frag, silt w/ tr. clay.
60	1549		-10	>3.0	tr. shell frag, silt
65	1549		-8	>3.0	tr. shell frag, silt
70	1551		-7	2.4	tr. shell frag, silt
75	1552		-6	1.2	rip rap begins, tr. shell frag, silt.

CALC  
MLLW

- 19.7

- 18.7

- 17.7

- 15.7

- 14.7

- 13.7

- 12.1

- 11.1

- 10.1

- 9.1

- 8.6

- 7.6

- 6.6

- 4.6

- 3.6

- 2.6

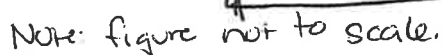


Weather: partly cloudy, 50s, breezy

Tide Source: RTH

Crew: SR, TD, CC, LVB

Location ID: 1806



- transect 1: conducted by hand at low tide (1615 start)
- three sets of coordinates taken offset from transect (see figure)



# UNDER-STRUCTURE FORM - TRANSECT DATA

Project Name / #: LDW AUC5 MR Phase 1  
 Date: 4-11-2023  
 Sampling Method: hand collected

Weather: partly cloudy, 50s, breezy  
 Tide Source: RTH  
 Crew: SR, TD, CC, LVB

Location ID: <u>1806</u>		Transect Length (ft): <u>81 ft</u>			
Transect Number: <u>1</u>		Transect End: <u>bulkhead</u>			
Transect Start: <u>water line</u>					
Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes
0	1615	-0.4	3.5"	3.0+	Silly sand (FIM), <sup>some</sup> shell hash, glass,
5	1615		0	3.0+	<sup>SP</sup> Silty sand (FIM/C) w/ some silt, trace gravel/shells
10	1616		0	3.0+	SS + IT samples @ 10 ft
15	1616		0	3.0+	
20	1616		0	3.0+	
25	1617		0	<del>3.0</del> 2.65	
30	1617		0	2.5	
35	1618		0	2.25	sand/ gravel starting to be more gravel from this point on.
40	1618		0	2.05	
45	1619		0	1.65	more gravel, metal fragments, glass
50	1619		0	1.26	
55	1620		0	0.75	log across transect, starting to be more rock
60	1620		0	0.35	
65	1621		0	0.35	sand, gravel, cobble
70	1622		0	0.3	concrete slab chunks/composite
75	1623		0	1.25	
80	1623	✓	0	0.29	larger pieces of cement/composite

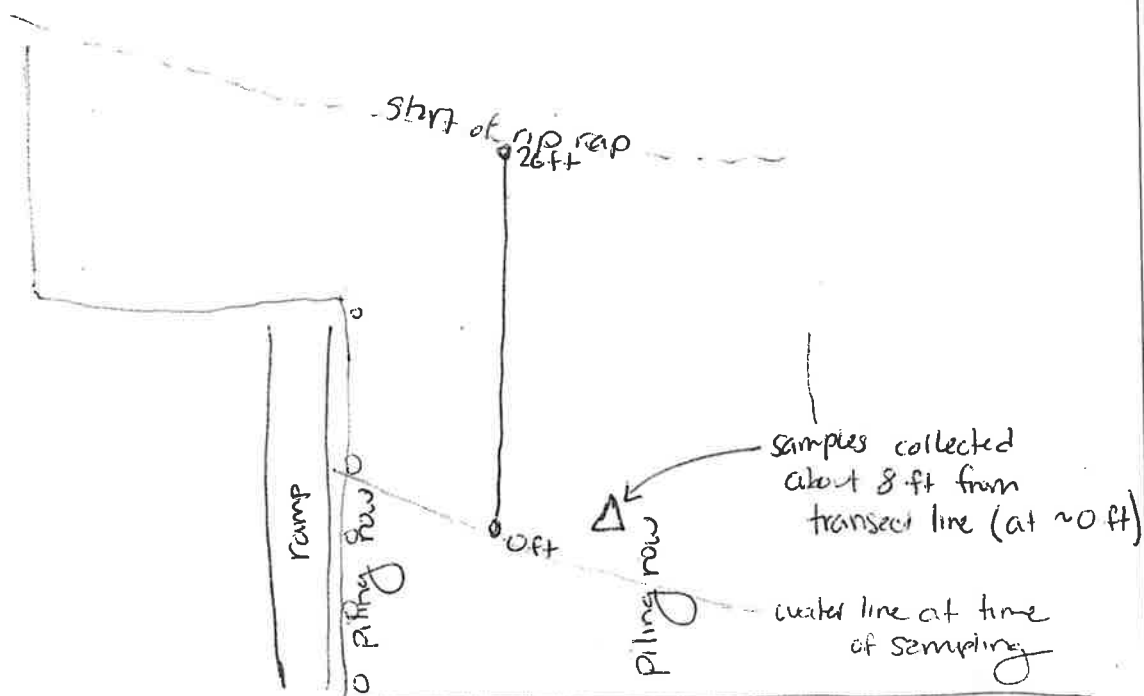


## UNDER-STRUCTURE FORM

Project Name / #: LDW AOC5 MR Phase I  
Date: 4.11.2023  
Sampling Method: hand collected

Weather: partly cloudy, 50s, breezy  
Tide Source: RTK  
Crew: SR, TD, CC, LVB

Location ID: 1807



- transect 1: conducted by hand at low tide (1500 start)
- Coordinates taken at start of transect (0 ft) and at sample collection location (SS1807 + 171807)



Weather: partly cloudy, 50s, breezy

Tide Source: RTK

Crew: SR, TD, CC, LVB

[illegible]



## UNDER-STRUCTURE FORM

Project Name / #: LDW ACC5 MRPhase1

Weather: 30s, cloudy

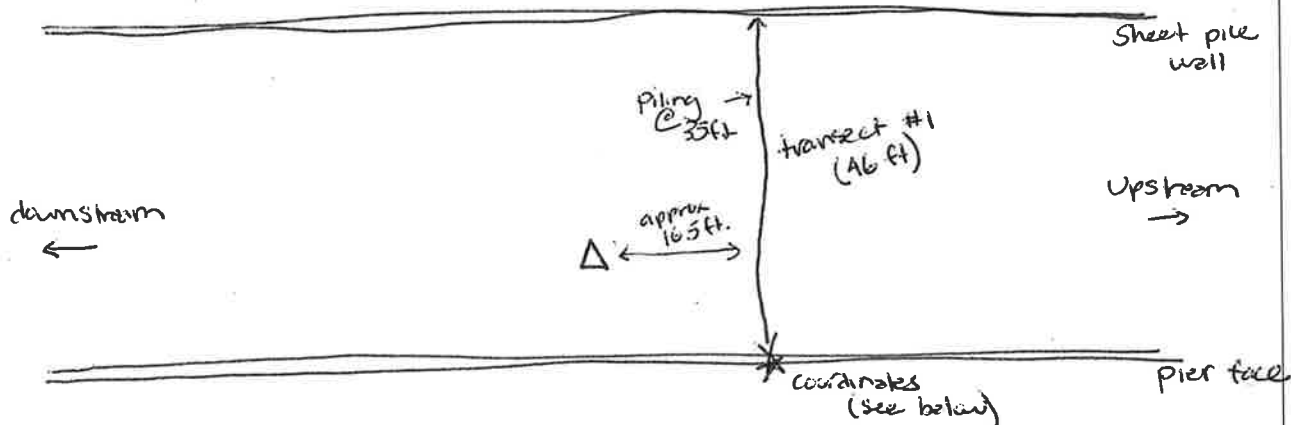
Date: 3/3/2023

Tide Source: RTK

Sampling Method: diver / hand-collected

Crew: KM

Location ID: 1808



### Notes:

target coordinates located in area with low hanging debris;

transsect #1 located in adjacent space between pilings.

coordinates at pier face: 201211.98  
1270185.2

visual survey: start = 1143, RTK = +7.32 ft (1130-1145)  
end = 1150, RTK = +7.39 ft (1145-1200)

collect core (SC1808) @ 1250

collect grab (SS1808) @ 1325

# UNDER-STRUCTURE FORM

Project Name / #: LOW AQS MP Phase 1

Weather: 30s, cloudy

Date: 3/3/23

Tide Source: RTK

Sampling Method: diver / hand collection

Crew: KM

Location ID: 1808

## Transect 1:

(water depth and time recorded at each 5' interval along transect)

Pier Face	5	10	15	20	25	30	35	40	45ft	Sheet Pile Wall @ 46ft
coordinates @ downline by pier face	19ft	18ft	17ft	16ft	16ft	15ft	14ft	13ft	12ft	
Visual survey: start 1143, end 1150	1143	1143	1143	1144	1146	1147	1148	1149	1150	
RTK: 7.32 ft @ 1143 (1130-1145)										
7.39 ft @ 1145-1200										
probing:	5ft	10	15	20	25	30	35	40	45	
start @ 1200	3.0	3.0	3.0	3.0	2.4 km	1.0 km	0.5 km	0.5	2.1	
(ft deep, up to 3 ft)					3.0	2.4	1.0			

Visual survey: start 1143, end 1150  
RTK: 7.32 ft @ 1143 (1130-1145)  
7.39 ft @ 1145-1200  
probing: 5ft 10 15 20 25 30 35 40 45  
start @ 1200 3.0 3.0 3.0 3.0 2.4 km 1.0 km 0.5 km 0.5 2.1  
(ft deep, up to 3 ft)

target coordinates are under an area with low hanging debris; ran transect line under adjacent space between pilings

1250: collect core: SC 1808

1325: collect grab: SS 1808

coordinates @ pier face for transect: 201211.98, 12701P5.2





## UNDER-STRUCTURE FORM - TRANSECT DATA

Project Name / #: LDW AOC5 MR Phase 1

Weather: 30s, cloudy

Date: 3/3/2023

Tide Source: RTK

Sampling Method: diver / hand-collected

Crew: KM

Location ID: 1808

Transect Number: 1

Transect Length (ft): 46 ft

Transect Start: pier face

Transect End: sheet pile wall

Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes	Mud line (ft MLLW)
0	-	-	-	-	Silty sediment w/ shell hash	
5	1143	+7.39	-19	3.0		-11.6
10	1143	+7.39	-18	3.0		-10.6
15	1143	+7.39	-17	3.0		-9.6
20	1144	+7.39	-16	3.0		-8.6
25	1146	+7.39	-16	3.0		-8.6
30	1147	+7.39	-15	2.4		-7.6
35	1148	+7.39	-14	1.0		-6.6
40	1149	+7.39	-13	0.5		-5.6
45	1150	+7.39	-12	2.1		-4.6

Note - max probe depth of 3ft

# UNDER-STRUCTURE FORM

Project Name/ #: LDW AOC5 MR Phase 1

Weather: 40s, partly sunny

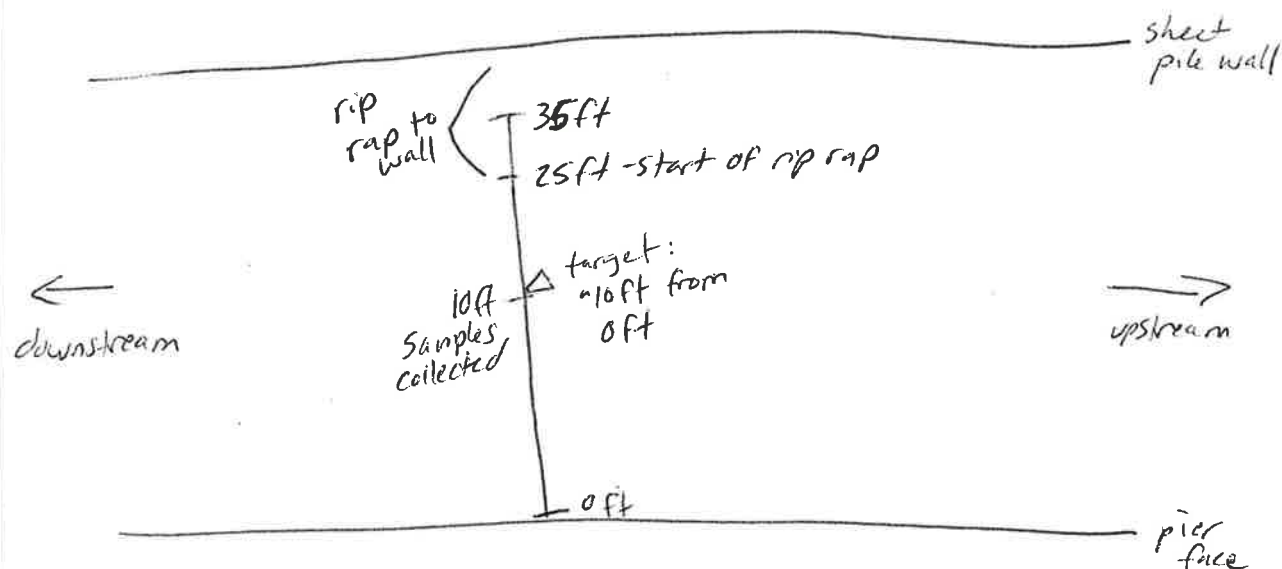
Date: 3/31/23

Tide Source: RTK

Sampling Method: direct hand-collect

Crew: KM, LVB

Location ID: 1809



## Transect 1:

Located in space between pilings where target is located

coordinates @ 0ft: 201100.95, 1270284.17

Video Survey: start: 1330 RTK: 7.01 ft

end: 1353 RTK: 6.87 ft

rip rap starts at 25 ft and goes to wall. Little/no sediment starting at 35 ft and to wall @ ~44 ft

Samples collected @ 10 ft (grab + core)



Weather: 90s, partly cloudy

Tide Source: RTK

Crew: km, LVB

Note: video starts at 15 ft and then goes back to 0 ft, 5 ft, + 10 ft before skipping ahead to 20 ft and completing the survey  
Probing: max 3.0 ft



## UNDER-STRUCTURE FORM - Overview Form

Project Name / #: LDW AOCB MR Phazel

Weather: 40s, rain

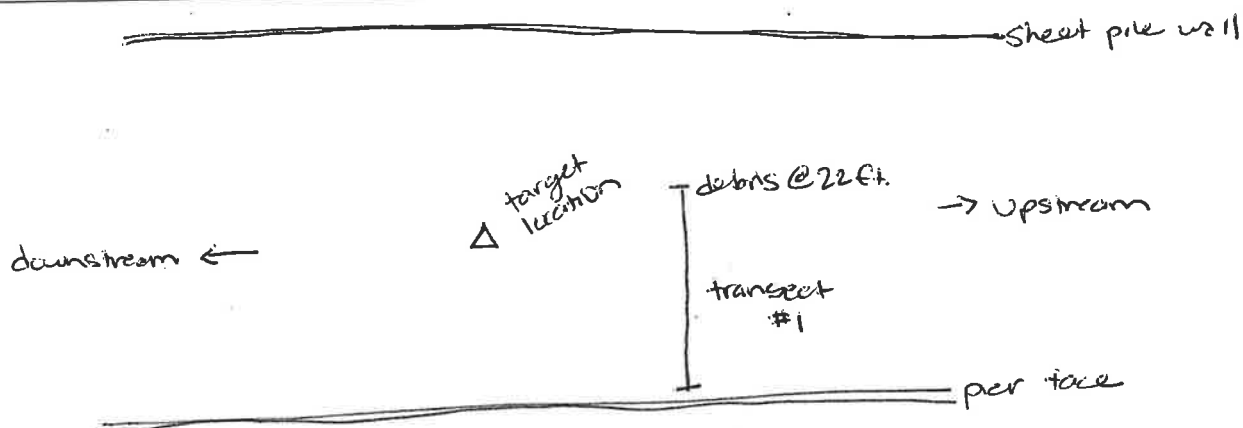
Date: 3/3/2023

Tide Source: RTK

Sampling Method: diver / hand-collect

Crew: KM, SR

Location ID: 1810



### Notes:

transsect 1 located in space between pilings adjacent to target (upstream) due to low-hanging obstacles above target.

coordinates: 200946.86  
1270430.66

video / visual survey: start = 1530, RTK tide height = +7.53 ft  
end = 1551, RTK tide height = +7.31 ft

transsect ended at 22 ft from pier face due to debris; no access beyond this point for diver safety.

probing not conducted and no samples collected due to safety concerns (cold). Return to location at later date.

# UNDER-STRUCTURE FORM

Project Name / #: LDW AOC5 MR Phase 1

Weather: 40s, rain

Date: 3/3/23

Tide Source: RTK

Sampling Method: diver / hand collect

Crew: KM, SR

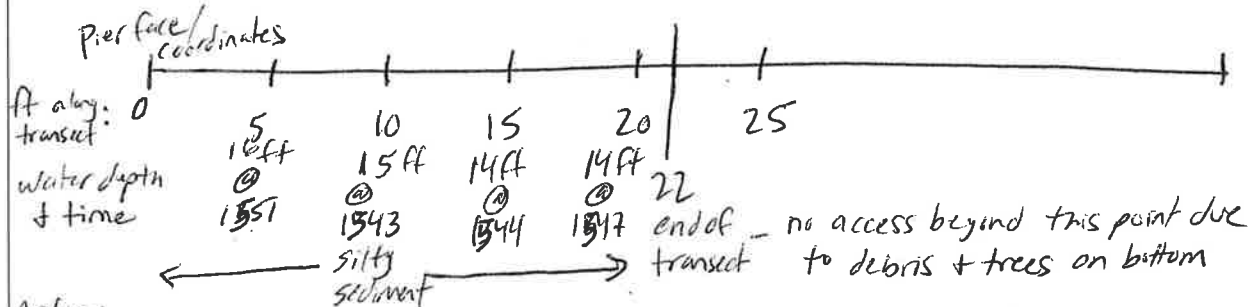
Location ID: 1810

Transect 1: located under space between pilings adjacent to target due to low hanging obstacles above target area. Coordinates: 200946.86, 1270430.66

Visual / video Survey:

start: 1530 RTK tide height: 7.53 ft

end: 1551 RTK tide height: 7.31 ft



probing

(from 40 ft deep up to 3 ft)

probing not conducted + no samples collected; will return to location at later date

[illegible]



# UNDER-STRUCTURE FORM

Project Name/#: LDW AGCS MR Phase 1

Weather: 40s, cloudy

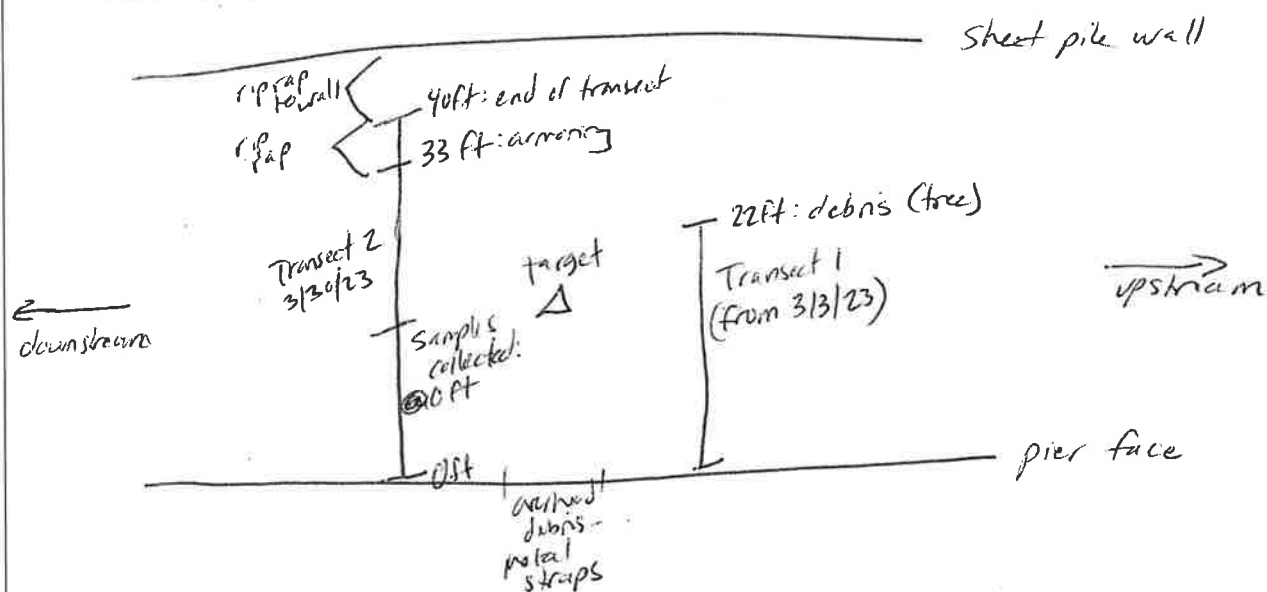
Date: 3/30/23

Tide Source: RTK

Sampling Method: diver/hand-collected

Crew: KM, LVB

Location ID: 1810



## Transect 2:

Transect 2 located in space between piers adjacent & just downstream of target coordinates (low-hanging obstacles prevent entry to space b/t piers closest to target)

coordinates: 200968.03  
@ 0 ft 1270406.54

video/visual survey: start: 1006 RTK: 7.36 ft  
end: 1017 RTK: 7.39 ft

transect ends @ 40 ft in rip rap. Rip rap starts @ 33 ft and goes to sheet pile wall @ ~45 ft. No/little sediment starting @ 40 ft.  
grab and core collected @ 10 ft



## UNDER-STRUCTURE FORM – TRANSECT DATA

Project Name / #: LDW AOC5 MR Phase 1

Weather: 40s, cloudy

Date: 3/30/23

Tide Source: RTK

Sampling Method: diver/hand-collected

Crew: KM, LVB

Location ID: <u>1810</u>		Transect Length (ft): <u>40 ft</u>			
Transect Number: <u>2</u>		Transect End: <u>rip rap @ 40 ft</u>			
Transect Start: <u>pier face</u>					
Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes
<u>0</u>	<u>1006</u>	<u>7.36</u>	<u>18</u>	<u>3.0<sup>+</sup></u>	<u>silty sediment w/ shell hash</u>
<u>5</u>	<u>1007</u>	<u>7.36</u>	<u>17</u>	<u>3.0<sup>+</sup></u>	<u>silty sediment</u>
<u>10</u>	<u>1008</u>	<u>7.36</u>	<u>16</u>	<u>3.0<sup>+</sup></u>	<u>silty sediment</u>
<u>15</u>	<u>1009</u>	<u>7.36</u>	<u>14</u>	<u>3.0<sup>+</sup></u>	
<u>20</u>	<u>1011</u>	<u>7.36</u>	<u>13</u>	<u>2.6</u>	
<u>25</u>	<u>1013</u>	<u>7.36</u>	<u>11</u>	<u>1.8</u>	
<u>30</u>	<u>1014</u>	<u>7.36</u>	<u>9.10</u>	<u>1.0<sup>(then create)</sup></u>	
<u>35</u>	<u>1015</u>	<u>7.36</u>	<u>8</u>	<u>0.7</u>	
<u>40</u>	<u>1017</u>	<u>7.39</u>	<u>6</u>	<u>0.0</u>	<u>no sediment - all rip rap to wall @ 45 ft</u>

\* max probe depth: 3 ft

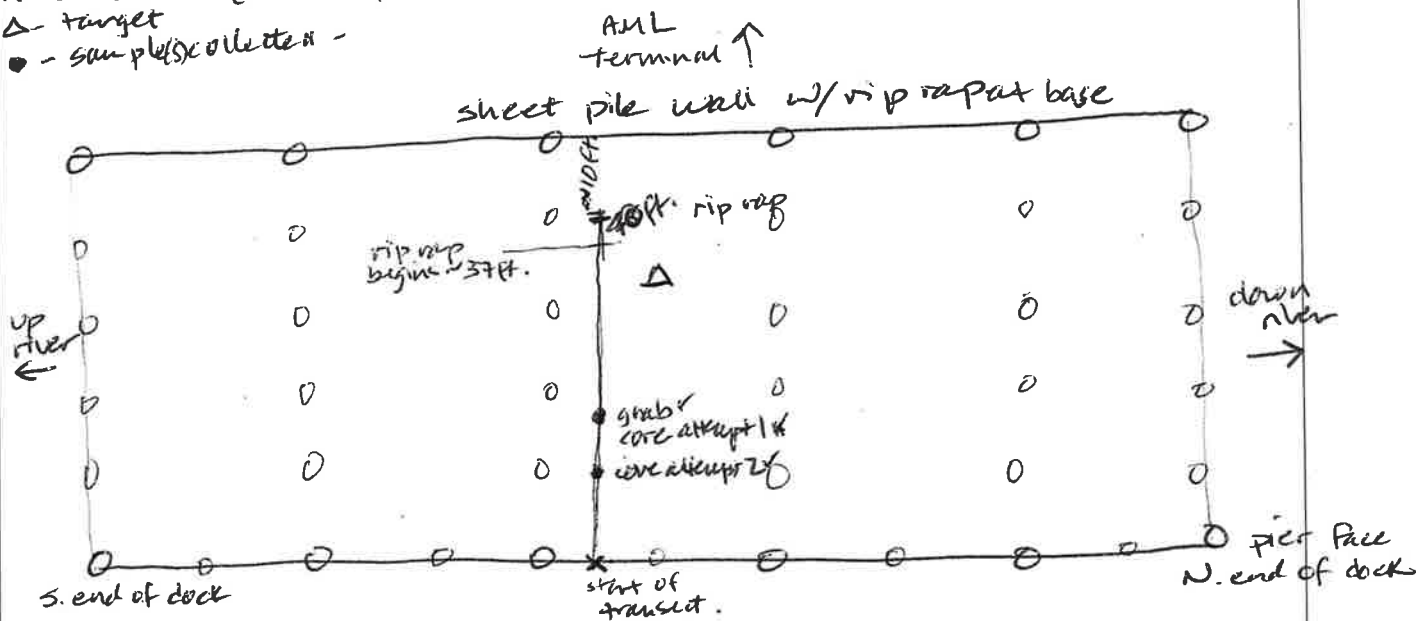
# UNDER-STRUCTURE FORM

Project Name / #: AOC5 MR Phase 1  
Date: 04.28.23  
Sampling Method: diver hand-collect

Weather: SDS, sunny  
Tide Source: RTK tide station  
Crew: TD, LVB, EP

Location ID: 1811

- O - pilings
- X - coordinates (0 ft) at pier face
- Δ - target
- - sample(s) collected



Transect 1  
Anchored at pier face, between 3rd & 4th piles, where target is located ~33 ft away.

Coordinates (at 0 ft along pier face):  
200834.80 1269920.55

Video survey start: 1019  
stop: 1029

RTK: +6.49 ft  
RTK: +6.49 ft.

Grab ~~core~~ collected ~15 ft. along transect - accepted  
Core attempt 1 - 15 ft. along transect - rejected  
Core attempt 2 - 10 ft. along transect - accepted.

\* not to scale



Weather: 50s, sunny

Tide Source: RTK tide station

Crew: TD, LVB, EP

[illegible]



## UNDER-STRUCTURE FORM

Project Name / #: LDW AOC5 MR Phase 1

Weather: 40s. cloudy

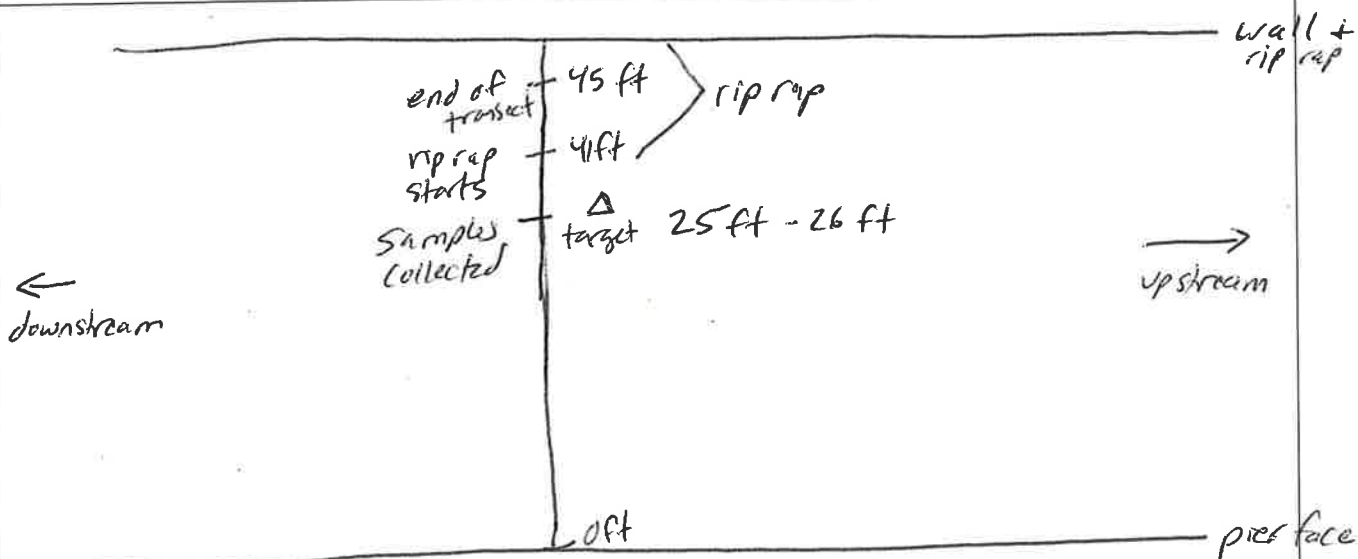
Date: 4/3/23

Tide Source: RTK

Sampling Method: diver / hand collected

Crew: KM, LVB

Location ID: 1812



### Transect 1:

General: space between pilings narrow

Transect located in same space between pilings as target

Coordinates @ 0 ft: 200094.64, 1271200.88

video survey: start: 0905 RTK: 5.88 ft

end: 0915

+ 26 ft

grab and core collected at 25 ft<sup>^</sup> along Transect 1 (grab @ 25 ft;  
accepted core at 26 ft)



# UNDER-STRUCTURE FORM – TRANSECT DATA

Project Name / #: LDW ADCS MR Phase 1  
 Date: 4/3/23  
 Sampling Method: direct/hand collected

Weather: 40s, cloudy  
 Tide Source: RTK  
 Crew: KM, LVB

Location ID: <u>1812</u>		Transect Length (ft): <u>45</u>			
Transect Number: <u>1</u>		Transect End: <u>rip rap @ 45 ft</u>			
Transect Start: <u>pier face / 0 ft</u>					
Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes
0	0905	5.88	14	0.9*	silty sediment, some sand + shell hash, debris
5	0908	5.88	13	3.0+	silty sediment, rocks, shell hash + sand
10	0908	5.88	11	3.0+	silty sediment, trace sand
15	0909	5.88	9	3.0+	silty sediment, some sand
20	0910	5.88	8	3.0+	f
25	0910	5.88	8	3.0+	
30	0911	5.88	7	3.0+	silty sediment, organic matter
35	0912	5.88	7	3.0+	silty sediment, shell hash
40	0913	5.88	6	1.0	silty sediment, rocks
45	0914	5.88	5	0.0	42 ft: rip rap starts trace silty sediment of rip rap

max probe depth: 3 ft

\* Probe depths: 0 - 0.9 ft - debris in area



# UNDER-STRUCTURE FORM

Project Name / #: LDW AOC5 MR Phase 1

Weather: 40s, rain

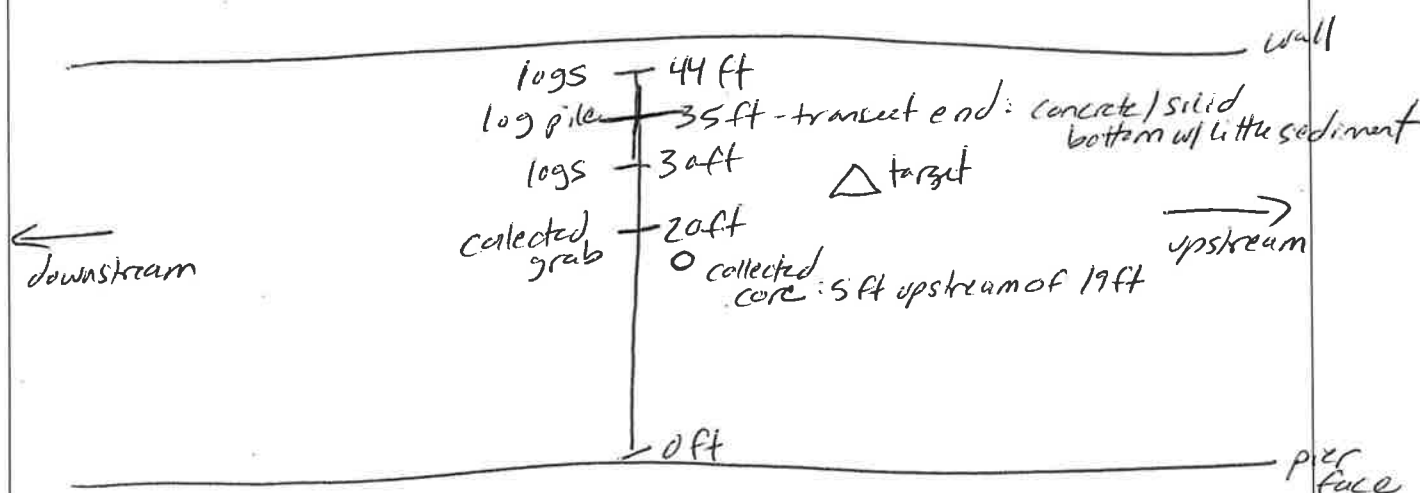
Date: 4/3/23

Tide Source: RTK

Sampling Method: diver / hand collected

Crew: KM, LVB

Location ID: 1813



## Transect 1:

Target coordinates located in a very narrow space between pilings with debris and slanted pilings; too narrow for diver. Ran transect to closest accessible area downstream.

Coordinates @ 0 ft: 200025.52, 1271260.65

Visual survey start: 1247 RTK: 5.45 ft  
end: 1255

grab sample collected @ 20 ft along transect  
attempted core collection at various locations along transect; debris prevented collection. Core collected 5 ft upstream of 19 ft point along transect



Weather: 40s, rain

Tide Source: RTK

Crew: KM, LVB

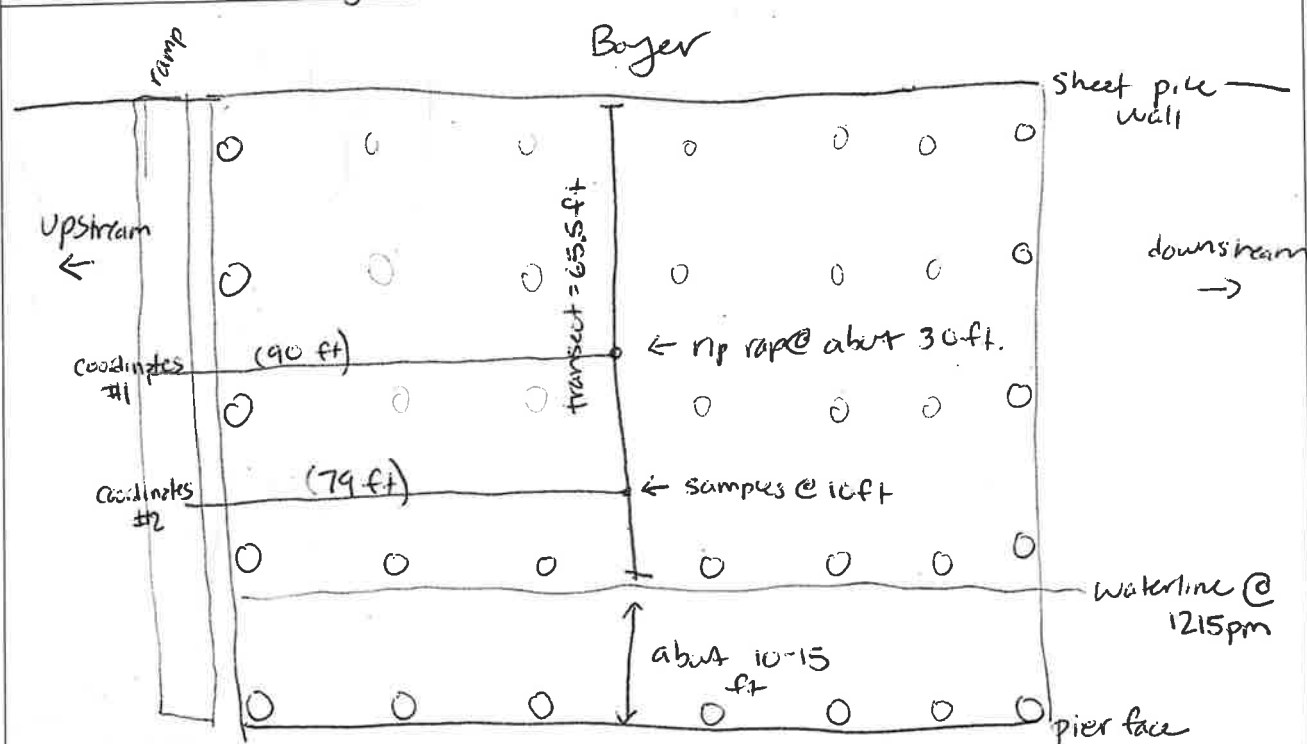
max probing depth: 3.0 ft

# UNDER-STRUCTURE FORM

Project Name / #: AOC5 MR Phase I  
Date: 5-08-2023  
Sampling Method: hand collected

Weather: partly cloudy, 50s  
Tide Source: RTK tide station  
Crew: SR, TD, CC, LVB

Location ID: 1814 (Boyer)



- Samples collected at 10 ft along transect line (IT1814 + SS1814)
- Coordinate #1 1271145.22 E, 199475.97 N  
Coordinates taken 90 ft upstream from 30 ft pt. on transect
- Coordinates #2 1271159.44 E, 199487.91 N  
Coordinates taken 79 ft upstream from 10 ft point on transect (where samples collected)

Note: not to scale.



# UNDER-STRUCTURE FORM - TRANSECT DATA

Project Name / #: AOC5 MR Phase I  
Date: 05.08.2023  
Sampling Method: hand collected

Weather: partly cloudy, 50S  
Tide Source: RTK tide station  
Crew: SR, TD, CC

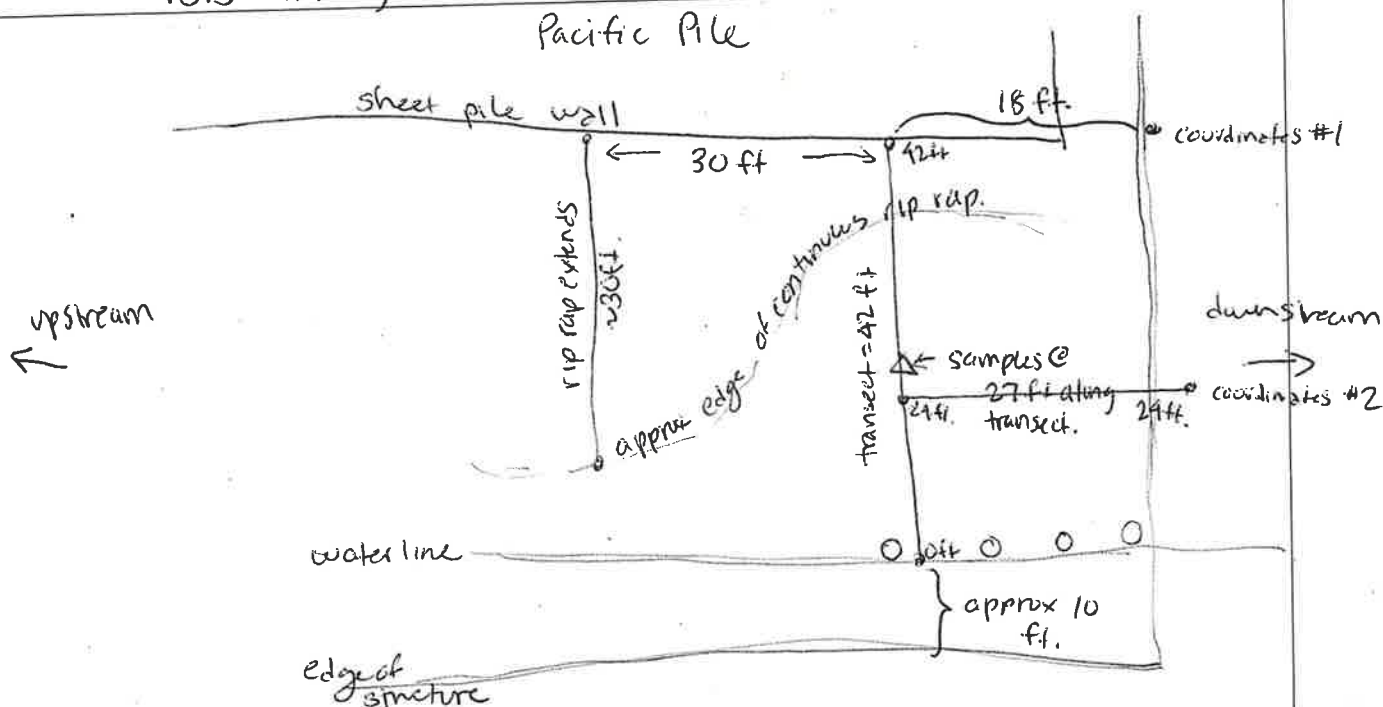
Location ID: <u>1814</u>		Transect Length (ft): <u>65.5 ft</u>			
Transect Number: <u>1</u>		Transect End: <u>Sheet pile wall</u>			
Transect Start: <u>Water line</u>					
Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes
0	1215	-0.91	-0.1 ft	2.6	M sand w/ fines + silt, trace cobble (mudlines -1.0 ft + mud)
5	1217		-	2.5	Silty sand, trace cobble
10	1218		-	2.5	Silty sand, trace cobble, shell fragments
15	1219		-	1.6	Silty sand, starting to be less silty. trace cobble / gravel
20	1220		-	1.6	Silty sand, trace gravel / cobble
25	1221		-	1.2	Silty sand (less silty), trace gravel / cobble
30	1221		-	1.7	Silty sand, edge of transition to cobble / rip rap.
35	1222		-	2.3	pocket of sandy silt amid rip rap (concrete pieces, gravel, brick)
40	1223		-	1.3	Silty sand pocket amid rip rap / gravel
45	1224		-	1.3	Silty sand pocket amid rip rap / gravel
50	1225		-	1.3	Sandy silt amid rip rap / gravel
55	1225		-	1.6	Sandy silt w/ larger grain sand (M/C), amid gravel / rip rap
60	1226		-	1.5	Silty sand, (M/C), amid
65	1227		-	1.0	Sand w/ trace silt, gravel, less rip rap

# UNDER-STRUCTURE FORM

Project Name / #: AOC5 ME Phase 1  
Date: 05.08.2023  
Sampling Method: hand collected

Weather: partly cloudy, 60s  
Tide Source: RTR tide station  
Crew: SR, TD, CC, LVB

Location ID: 1815 (PPM)



- Transect between 3rd + 4th row of pilings along pile of rip rap  
Very soft unconsolidated sediment, esp. closer to water line.

- Coordinates #1 — 1271992.11 E, 198614.60 N  
taken 18 ft. downstream of 42 ft pt on transect (edge of structure)

- Coordinates #2 — 1271993.26 E, 198632.06 N  
taken 24 ft. downstream of 24 ft pt on transect (just beyond edge of structure)

not to scale, low accuracy on coordinates





Weather: partly cloudy, 60s.  
Tide Source: RTK tide station  
Crew: SR, TD, CC, LVB

[illegible]



# UNDER-STRUCTURE FORM

Project Name / #: LOW AOC5 MR Phase 1

Weather: 90s, rain

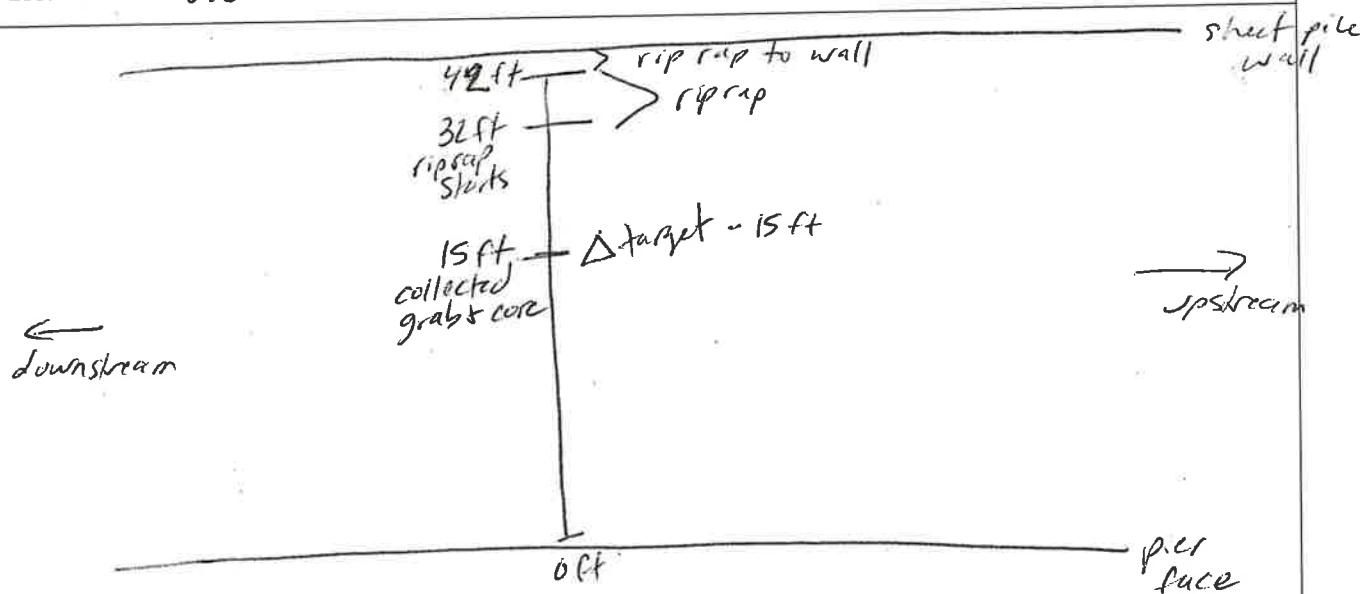
Date: 3/31/23

Tide Source: RTK

Sampling Method: hand / diver collected

Crew: KM, CC

Location ID: 1816



## Transect 1:

Located in space between pilings where target is located

Coordinates: 198615.75, 1272808.93  
(@ 0 ft)

video survey: start: 0846 RTK: 6.75 ft  
and: 0855

Samples (grab & core) collected @ 15 ft along transect

rip rap starts @ 32 ft and goes to wall. No sediment  
starting @ 35 ft (and to wall)



## UNDER-STRUCTURE FORM - TRANSECT DATA

Project Name / #: LOW AOCs MR Phase 1

Weather: 40s, rain

Date: 3/31/23

Tide Source: KTR

Sampling Method: hand/liver collection

Crew: KM, CC

Location ID: 1816

Transect Number: 1

Transect Length (ft): 42 ft

Transect Start: pier face

Transect End: rip rap @ 42 ft

Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes
0	0846	6.75	15	3.0+	silty sediment
5	0849	6.75	14	3.0+	
10	0850	6.75	13	3.0+	
15	0850	6.75	<sup>KM</sup> 12	2.8	
20	0851	6.75	10	3.0+	
25	0852	6.75	9	3.0+	
30	0852	6.75	8	2.7	silty sediment w/ shell hash
35	0853	6.75	7	0.0	rip rap starts @ 32 ft: 1.7 ft of sediment no sediment; rip rap
40-42	0854	6.75	4	0.0	no sediment; rip rap to wall

probing: up to 3.0 ft



## UNDER-STRUCTURE FORM

Project Name / #: LOW AOC5 MR Phase 1

Weather: 40s, rain

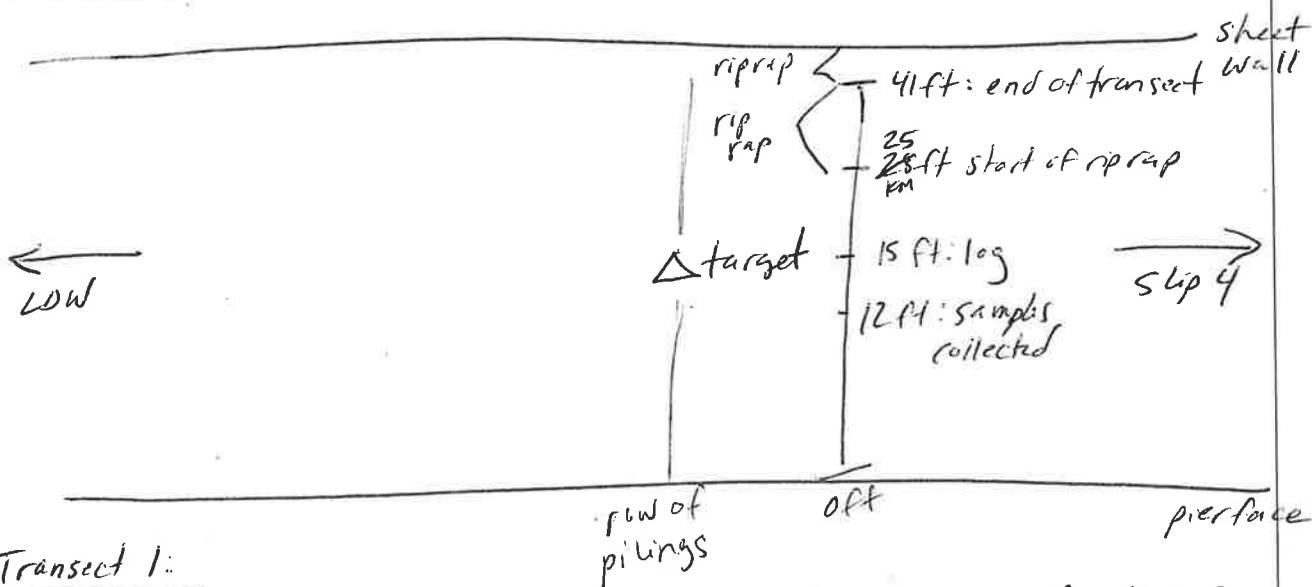
Date: 3/31/23

Tide Source: RTK

Sampling Method: hand/diver collected

Crew: KM, CC

Location ID: 1817



### Transect 1:

Just to right of target, as target is located by a row of pilings  
coordinates: 198657.07, 1272952.46 @ boat (0 ft)

video survey: start: 1118 RTK: 6.84  
end: 1135 RTK: 6.92

rip rap starts @ 25 ft and goes to wall at ~45 ft. No  
sediment starting at 30 ft and to wall.

grab and core collected at 12 ft.



Weather: 40s, rain

Tide Source: RTK

Crew: KM, CC

[illegible]

max probe depth: 3 ft



## UNDER-STRUCTURE FORM

Project Name / #: LOW AOCs MR Phase 1

Weather: 30s, cloudy

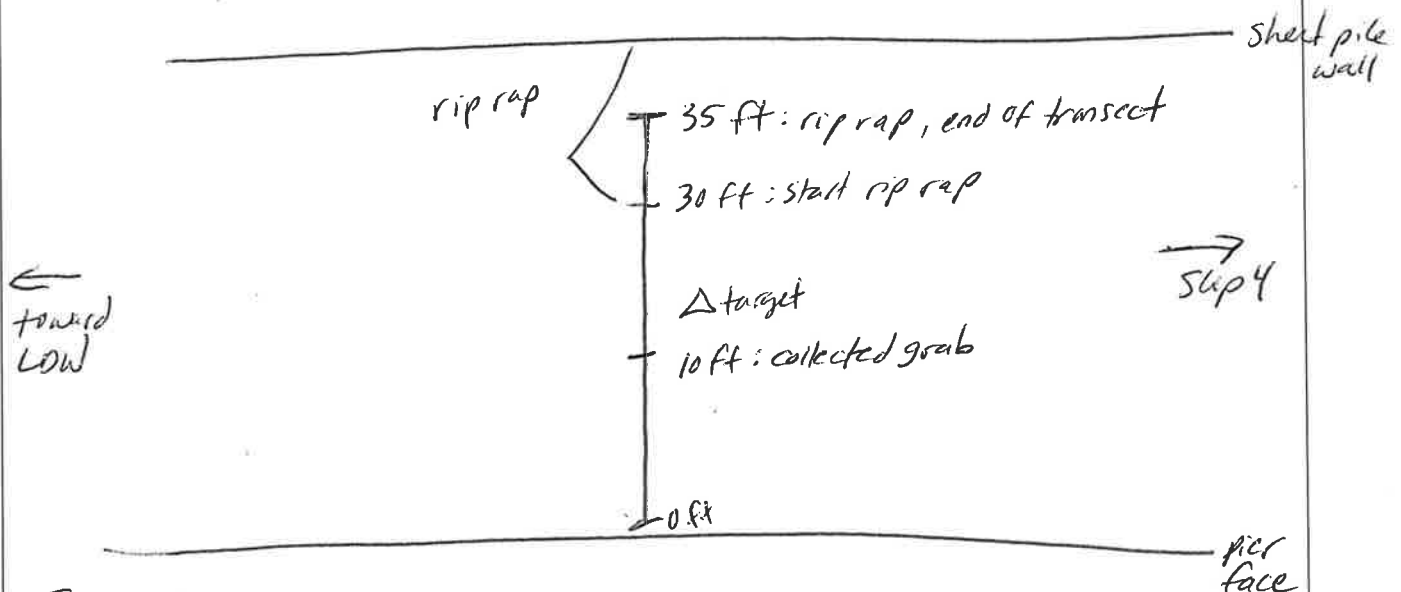
Date: 4/4/23

Tide Source: RTK

Sampling Method: diver/hand collected

Crew: KM, LVB

Location ID: 1817<sup>km</sup> 1818



### Transect 1:

Anchored at pier face and opening between pile rows where target is located

coordinates @ boat: <sup>(10ft)</sup> 198766.07, 1273069.24

visual survey start: 0932 RTK: 4.66 ft

end: 0947 RTK: 4.24 ft

grab and core collected @ 10 ft along transect



Weather: 30s, cloudy

Tide Source: RTK

Crew: KM, LUB

[illegible]

max sediment probe depth: 3 ft



# UNDER-STRUCTURE FORM

Project Name / #: LDW AOC5 MR Phase1

Weather: 40s, overcast

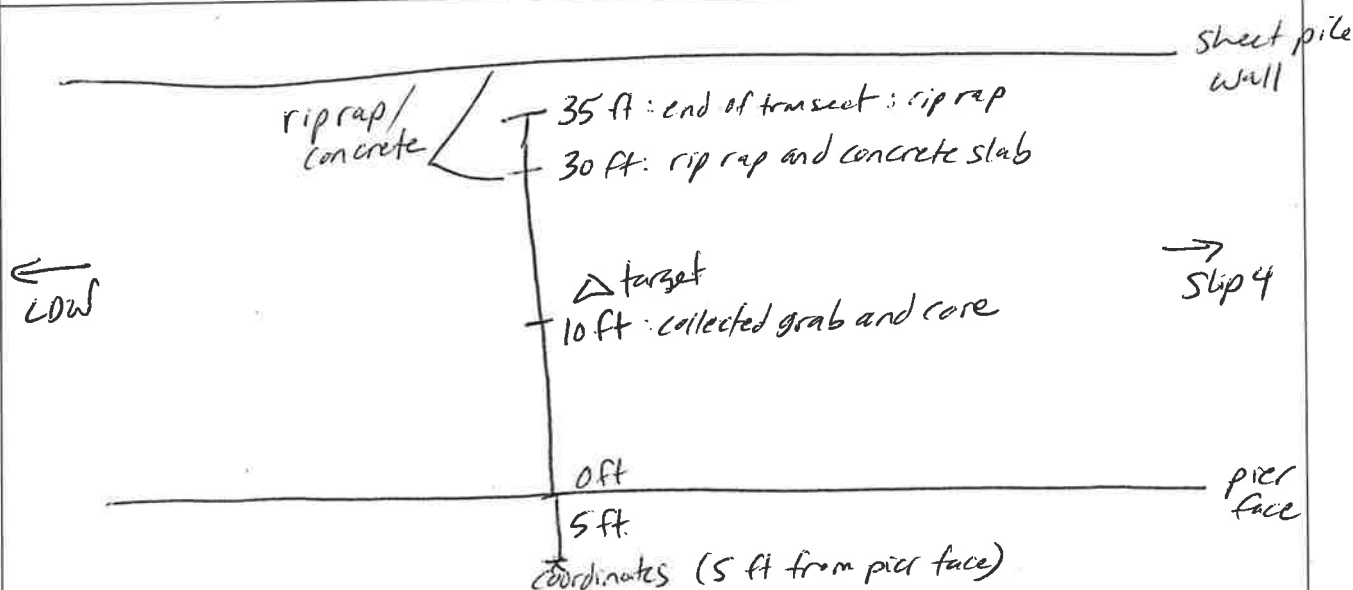
Date: 4/4/23

Tide Source: RTK

Sampling Method: diver/hand collected

Crew: KM, LVB

Location ID: 1819



## Transect 1:

Anchored 5 ft from pier face, in front of opening between pile rows where target is located

coordinates (@ 5 ft from pier face): 198852.59, 1273168.09

video survey start: 1231 RTK: 3.66 ft  
end: 1240 RTK: 3.66 ft



Weather: 40s, cloudy  
Tide Source: RTK  
Crew: KM, LVB

max probing depth: 3.0 ft

\* Note: tape markers on video are +5 ft from transect points on form due to boat anchoring 5 ft from pier face

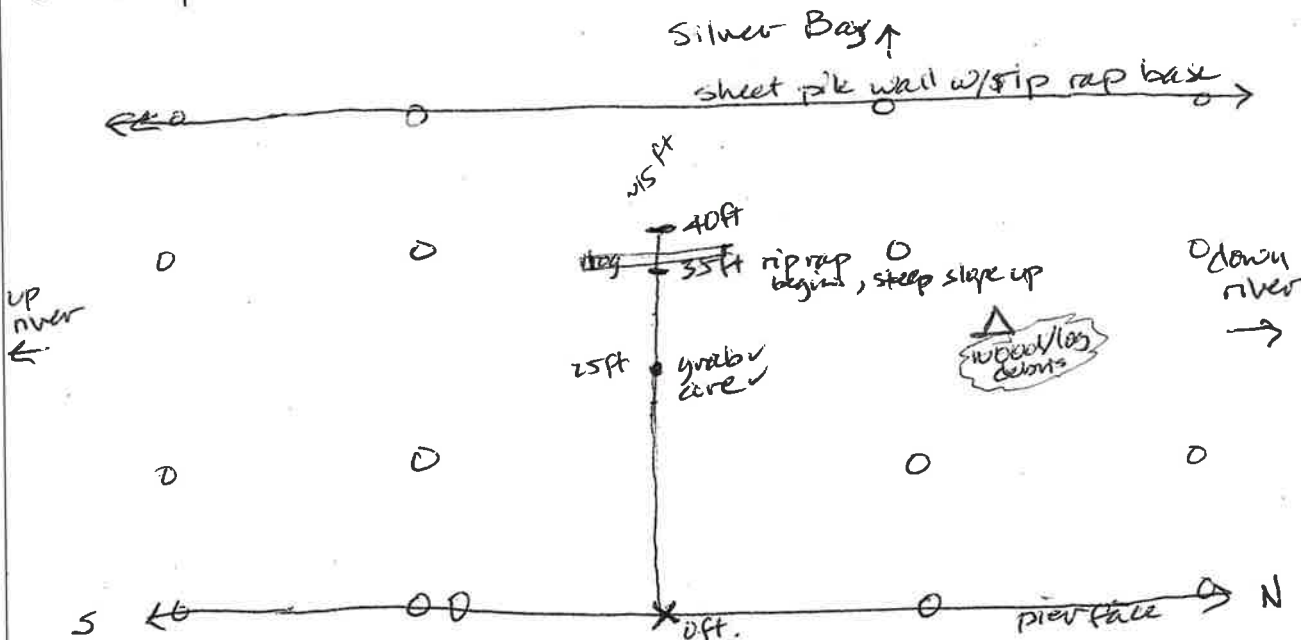
# UNDER-STRUCTURE FORM

Project Name / #: ADCS MR Phase I  
Date: 04.29.23  
Sampling Method: river hand-collected

Weather: hi 60s, sunny  
Tide Source: RTK tide station  
Crew: TD, LVB, EP

Location ID: 1820

O - pilings  
X - coordinates (0 ft at pier face)  
Δ - target  
• - sample(s) collected



## Transsect 1:

Anchored at pier face. Had to move over from area where target is to avoid debris and diagonal pilings, ~33 ft away (in adjacent area)

Coordinates (at 0 ft along pier face)

198068.67 1272702.76

Video survey start: 1333  
stop: 1342

RTK: +7.12 ft  
RTK: +7.12 ft.

Grab and core collected at 25 ft along transect tape.

NOT TO SCALE



# UNDER-STRUCTURE FORM - TRANSECT DATA

Project Name / #: ADCS MR Phase 1  
Date: 04.29.23  
Sampling Method: diver hand-collected

Weather: hi 60s, sunny  
Tide Source: RTK tide station  
Crew: TD, LVB, EP

Location ID: 1820

Transect Number: 1

Transect Length (ft): 40.0

Transect Start: pier face

Transect End: rip rap in shallow water

Transect Point (ft)	Time	RTK Tide Height (ft)	Water Depth (ft)	Probe Depth (ft)	Bottom Description and Notes
0	1333	+7.12	-12	>3.0	silt, tr. shell frag.
5	1334		-10	>3.0 <del>2.7</del>	silt, tr. org. debris.
10	1335		-9	>3.0	silt, tr. org. debris
15	1336		-8	>3.0	silt, tr. org. debris & shell frag.
20	1338		-8	>3.0	silt, org. debris.
25	1339		-7	>3.0	silt, tr. org. debris (grab and core collected here)
30	1340		-6	>3.0	silt, diver kneeling on concrete, rocks beneath surface.
35	1341		-6	1.3	rip rap visible, silt, tr. shell frag & org. debris. log between 35-40' (no staff)
40	1342		-3	0	rip rap, barnacles, no/trawl sed.

core  
MLW  
-4.9  
-2.9  
-1.9  
-0.9  
-0.9  
+0.1  
+1.1  
+1.1  
+4.1