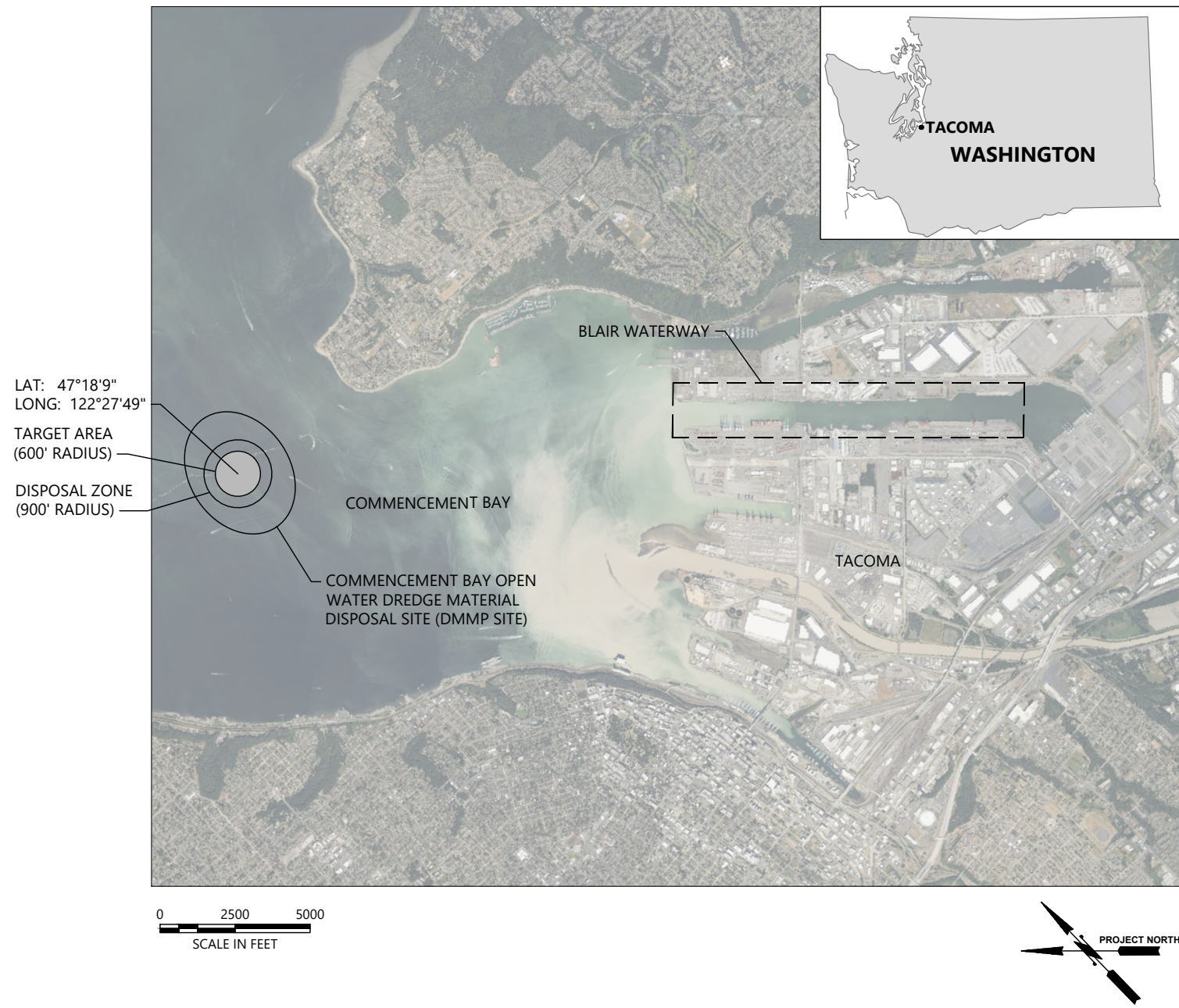


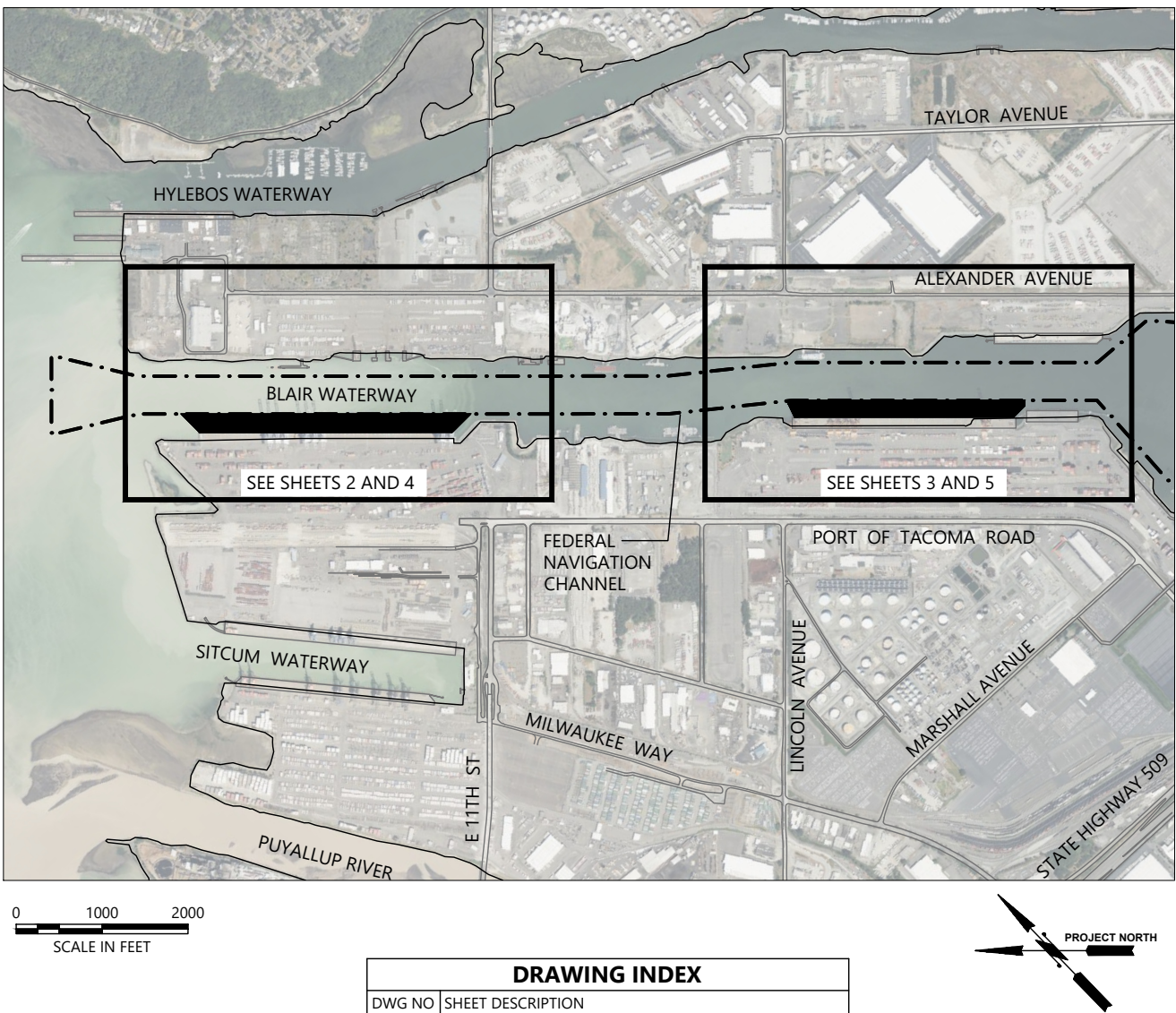
BLAIR WATERWAY BERTH DEEPENING

PORT OF TACOMA

VICINITY MAP

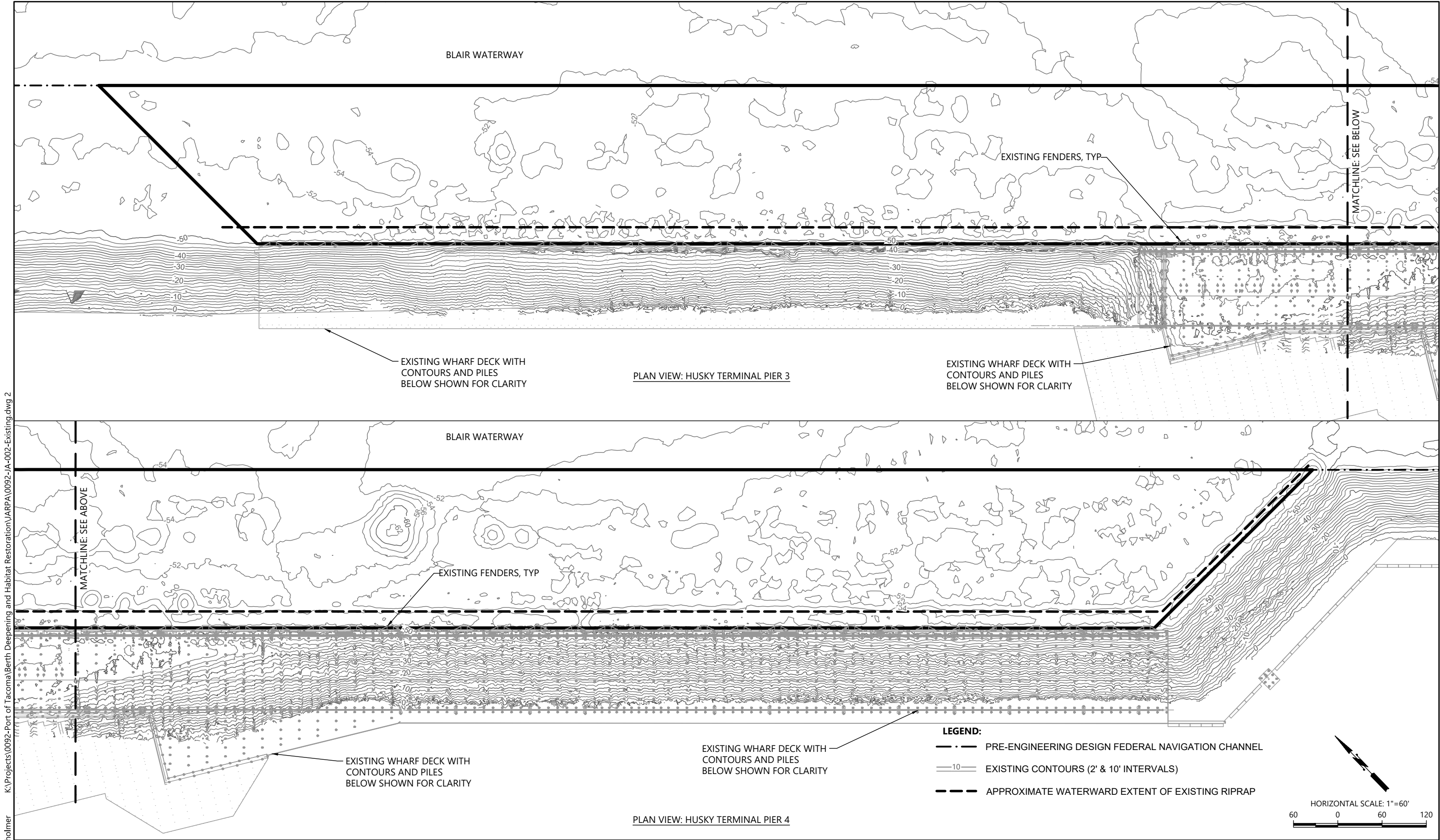


LOCATION MAP



DRAWING INDEX	
DWG NO	SHEET DESCRIPTION
1	VICINITY/LOCATION MAP
2	EXISTING CONDITIONS: HUSKY PIER 3 AND 4
3	EXISTING CONDITIONS: WUT NORTH AND SOUTH
4	PROPOSED CONDITIONS: HUSKY PIER 3 AND 4
5	PROPOSED CONDITIONS: WUT NORTH AND SOUTH
6	SECTION: HUSKY DREDGE SHEET 1
7	SECTION: HUSKY DREDGE SHEET 2
8	SECTION: WUT DREDGE SHEET 1
9	SECTION: WUT DREDGE SHEET 2
10	DETAILS: DREDGING
11	SECTION: HUSKY TOE WALL
12	SECTION: WUT TOE WALL
13	DETAILS: FENDER REPLACEMENT AND SHEET PILE DETAILS
14	DETAILS: TEMPORARY PILE DRIVING TEMPLATE

K:\Projects\0092-Port of Tacoma\Berth Deepening and Habitat Restoration\JARPA\0092-JA-002-Existing.dwg 2
Sep 03, 2025 10:05am dholmer



REFERENCE #:
APPLICANT: PORT OF TACOMA
LOCATION: BLAIR WATERWAY
TACOMA, WA 98421

NAME: BLAIR WATERWAY BERTH DEEPENING
ADJACENT PROPERTY OWNERS:
SEE JARPA ATTACHMENT C

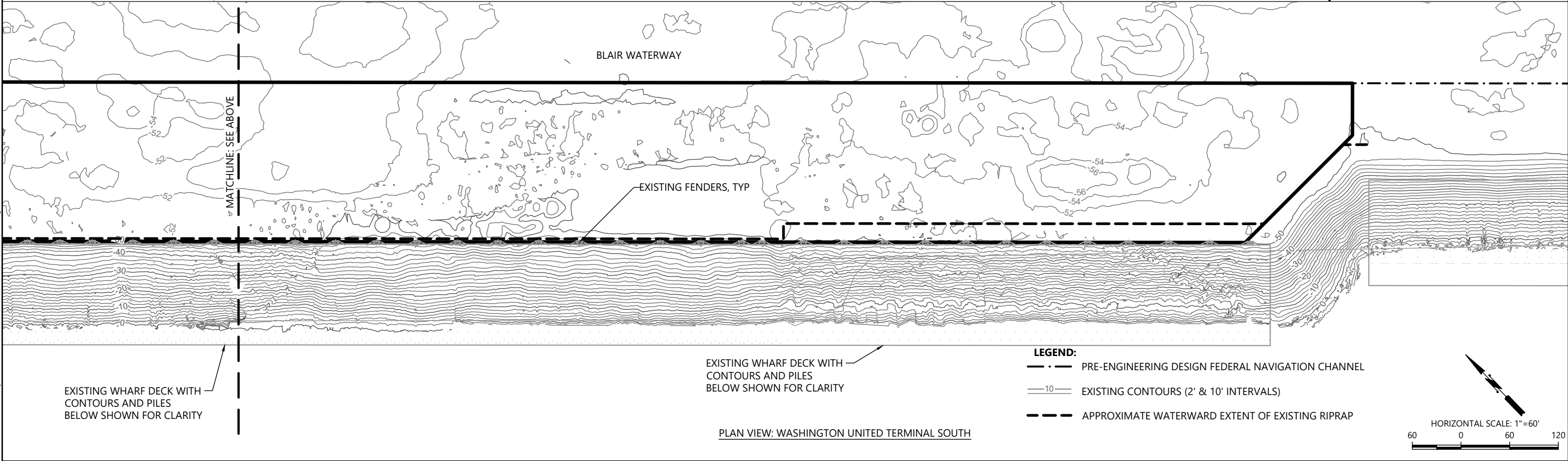
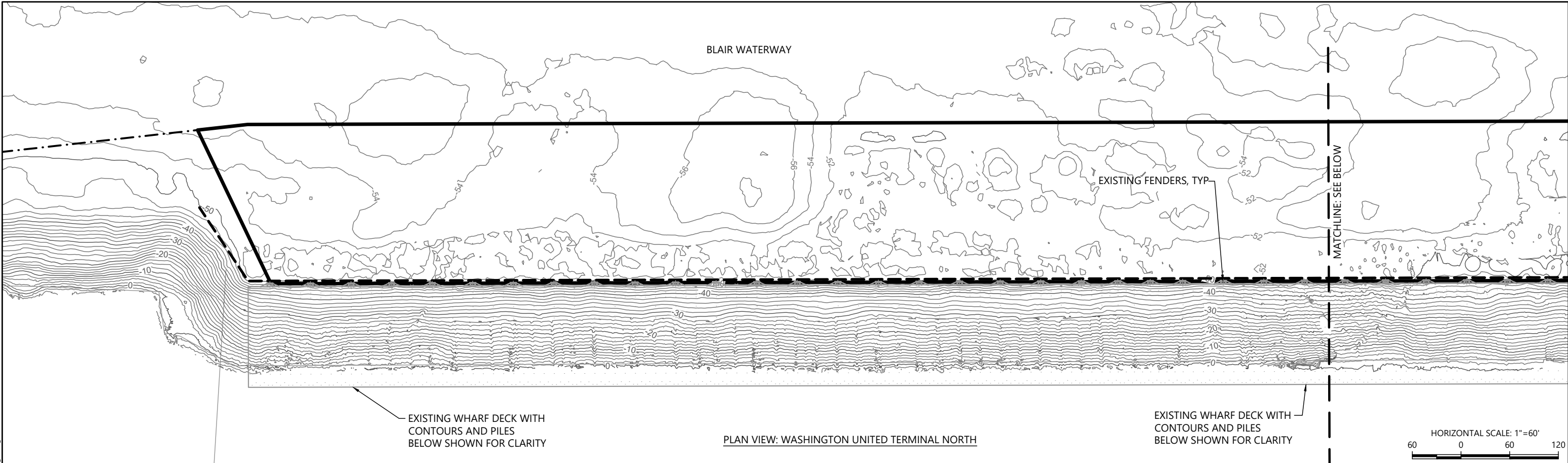
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PURPOSE: DEEPENING OF BLAIR WATERWAY AT WASHINGTON UNITED TERMINAL AND HUSKY TERMINAL

HORIZONTAL DATUM: NAD83 (2011), WA, SOUTH ZONE, U.S. FEET
VERTICAL DATUM: MLLW, FEET
LATITUDE: N47.268346°/N47.274489°
LONGITUDE: W122.398534°/W122.407014°
S-T-R: MULTIPLE, SEE JARPA SECTION 5E

IN: BLAIR WATERWAY
NEAR/AT: TACOMA
COUNTY: PIERCE
STATE: WASHINGTON
DATE: JUNE 2025

EXISTING CONDITIONS:
HUSKY PIER 3 AND 4

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1201 3RD AVE, SUITE 2600
SEATTLE, WA 98101
206-287-9130

REFERENCE #:
APPLICANT: PORT OF TACOMA
LOCATION: BLAIR WATERWAY
TACOMA, WA 98421

NAME: BLAIR WATERWAY BERTH DEEPENING
ADJACENT PROPERTY OWNERS:
SEE JARPA ATTACHMENT C

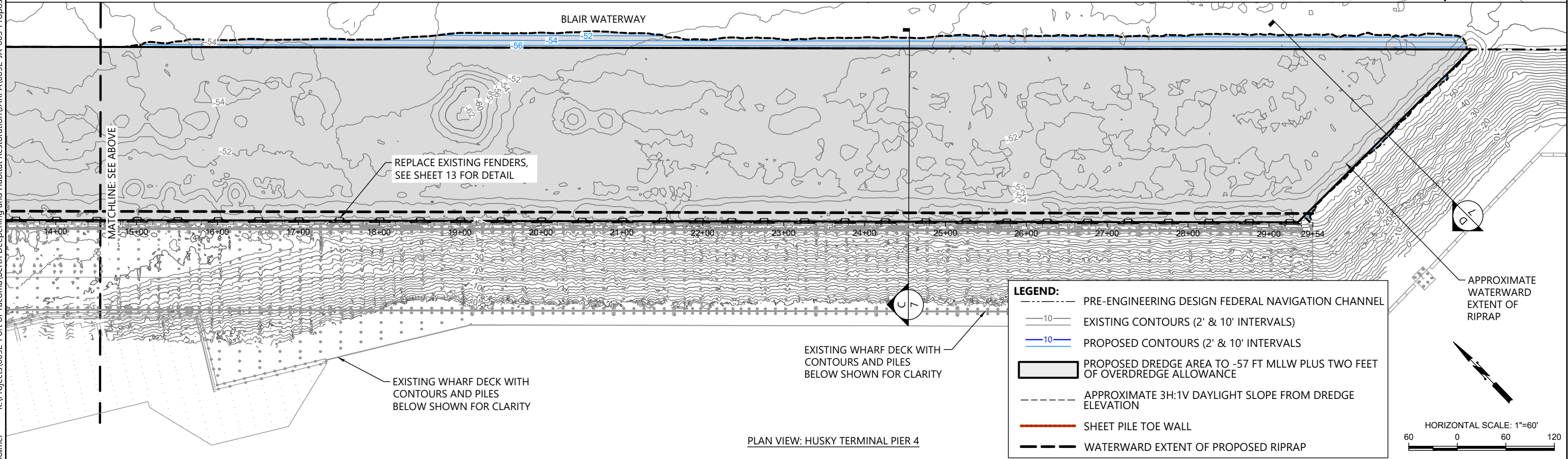
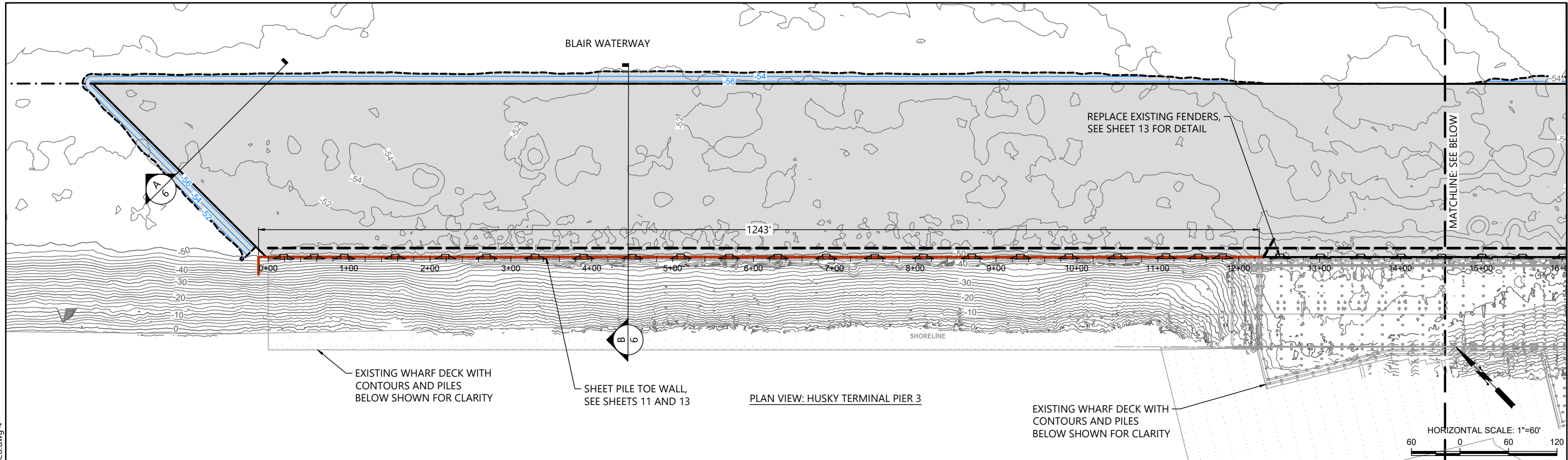
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LONGITUDE: W122.398534°/W122.407014°
S-T-R: MULTIPLE, SEE JARPA SECTION 5E

IN: BLAIR WATERWAY
NEAR/AT: TACOMA
COUNTY: PIERCE
STATE: WASHINGTON
DATE: JUNE 2025

**EXISTING CONDITIONS: WUT
NORTH AND SOUTH**

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Sep 03, 2025 10:07am dholmer



1201 3RD AVE, SUITE 2600
SEATTLE, WA 98101
206-287-9130

REFERENCE #:
APPLICANT: PORT OF TACOMA
LOCATION: BLAIR WATERWAY
TACOMA, WA 98421

NAME: BLAIR WATERWAY BERTH DEEPENING
ADJACENT PROPERTY OWNERS:
SEE JARPA ATTACHMENT C

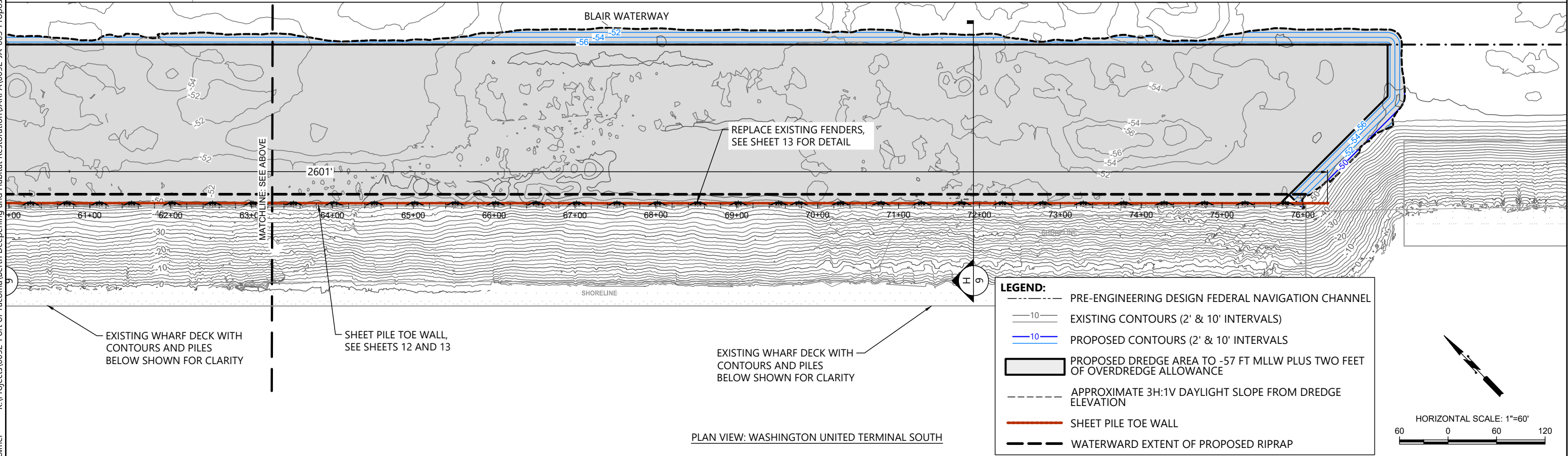
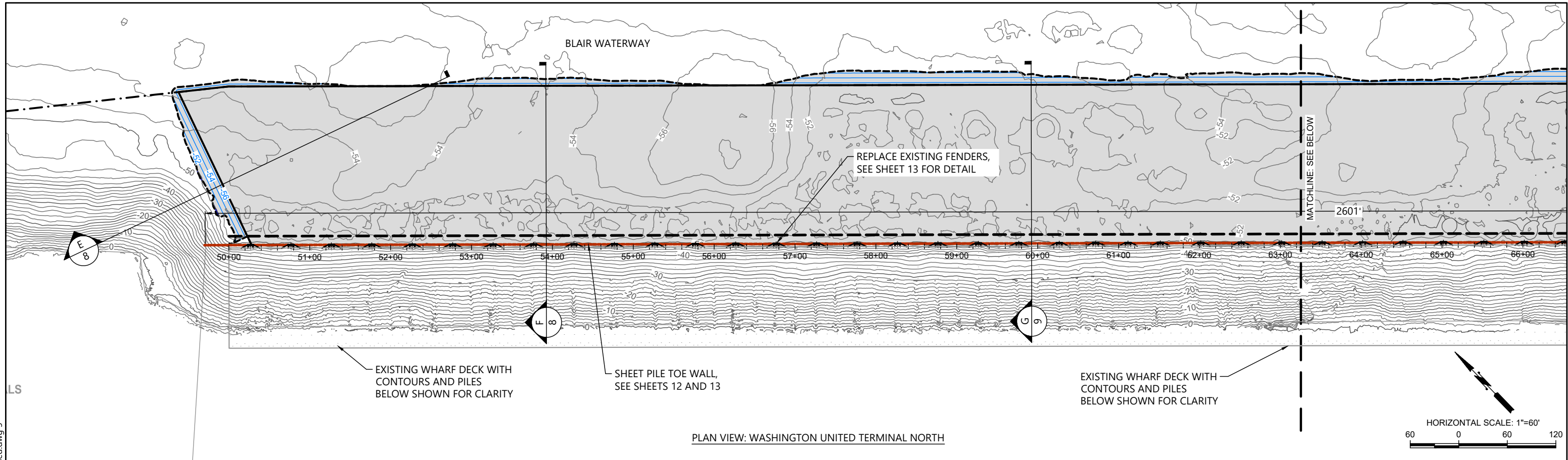
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S-T-R: MULTIPLE, SEE JARPA SECTION 5E

IN: BLAIR WATERWAY
NEAR/AT: TACOMA
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STATE: WASHINGTON
DATE: JUNE 2025

PROPOSED CONDITIONS:
HUSKY PIER 3 AND 4
SHEET: 4 OF 14

K:\Projects\0092-Port of Tacoma\Berth Deepening and Habitat Restoration\JARPA\0092-JA-003-Proposed.dwg 5
Sep 03, 2025 10:08am dholmer



REFERENCE #:
APPLICANT: PORT OF TACOMA
LOCATION: BLAIR WATERWAY
TACOMA, WA 98421

NAME: BLAIR WATERWAY BERTH DEEPENING
ADJACENT PROPERTY OWNERS:
SEE JARPA ATTACHMENT C

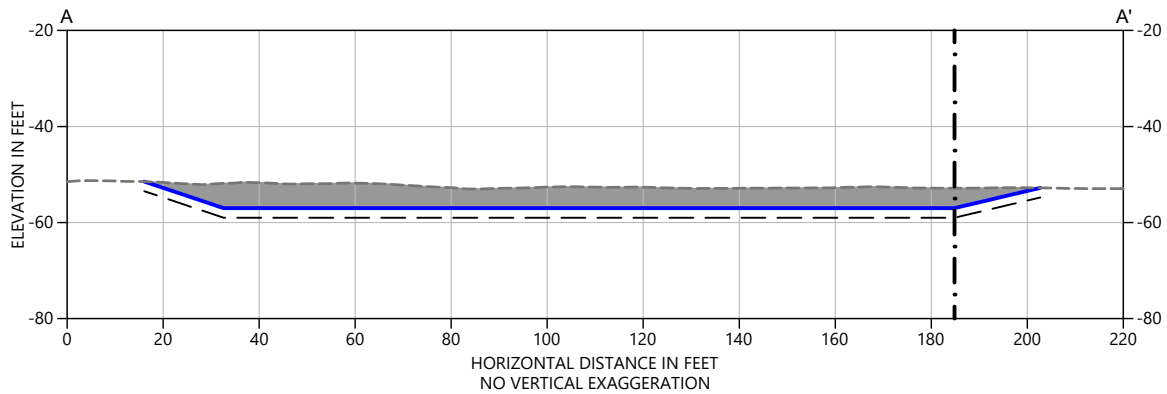
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S-T-R: MULTIPLE, SEE JARPA SECTION 5E

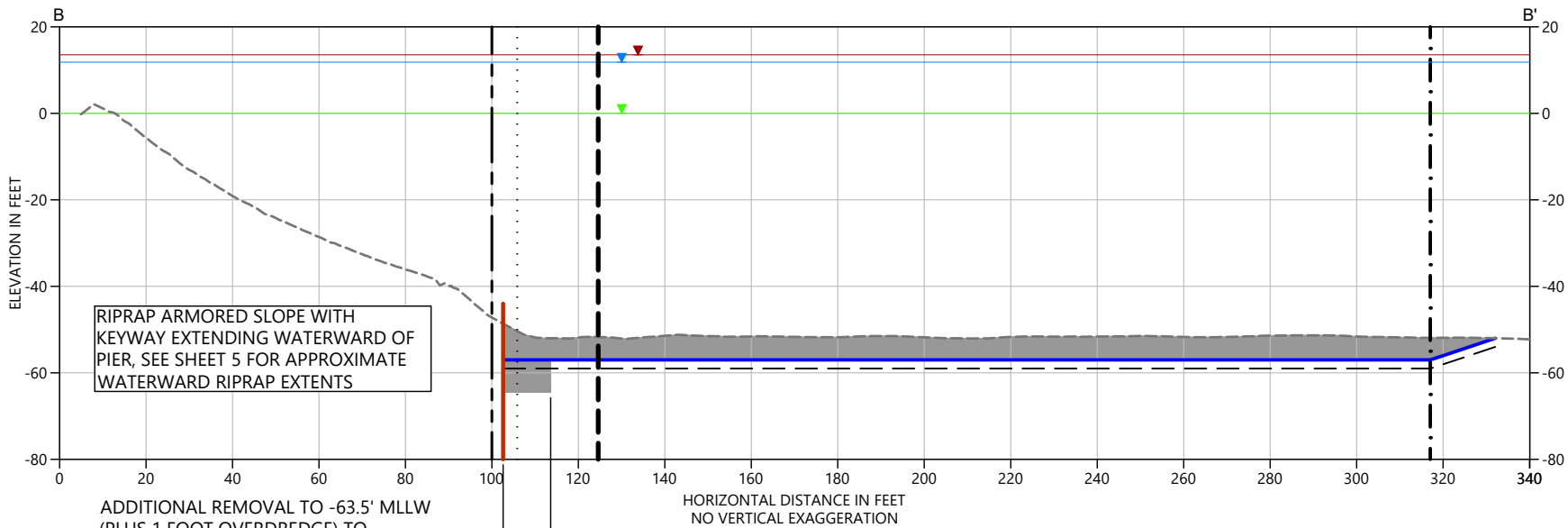
IN: BLAIR WATERWAY
NEAR/AT: TACOMA
COUNTY: PIERCE
STATE: WASHINGTON
DATE: JUNE 2025

**PROPOSED CONDITIONS: WUT
NORTH AND SOUTH**

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A
6
HUSKY: DREDGING SECTION VIEW
SCALE: 1" = 20'



B
6
HUSKY: DREDGING SECTION VIEW
SCALE: 1" = 20'

NOTES:
1. SEE DRAWING 10 DREDGING DETAILS FOR REMOVAL ELEVATIONS AND TOLERANCES.

- LEGEND:**
- EXISTING GRADE
 - EXISTING FACE OF PIER
 - ... EXISTING FACE OF FENDER LINE
 - . - PRE-ENGINEERING DESIGN FEDERAL NAVIGATION CHANNEL
 - APPROXIMATE EXTENT OF EXISTING RIPRAP
 - PROPOSED DREDGE
 - REQUIRED DREDGE ELEVATION (-57' MLLW)
 - - - ALLOWABLE OVERDEPTH (-59' MLLW)
 - ▼ HTL (+13.55' MLLW)
 - ▼ MHHW (+11.83 MLLW)
 - ▼ MLLW (+0 MLLW)
 - PROPOSED TOE WALL



1201 3RD AVE, SUITE 2600
SEATTLE, WA 98101
206-287-9130

REFERENCE #:
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TACOMA, WA 98421

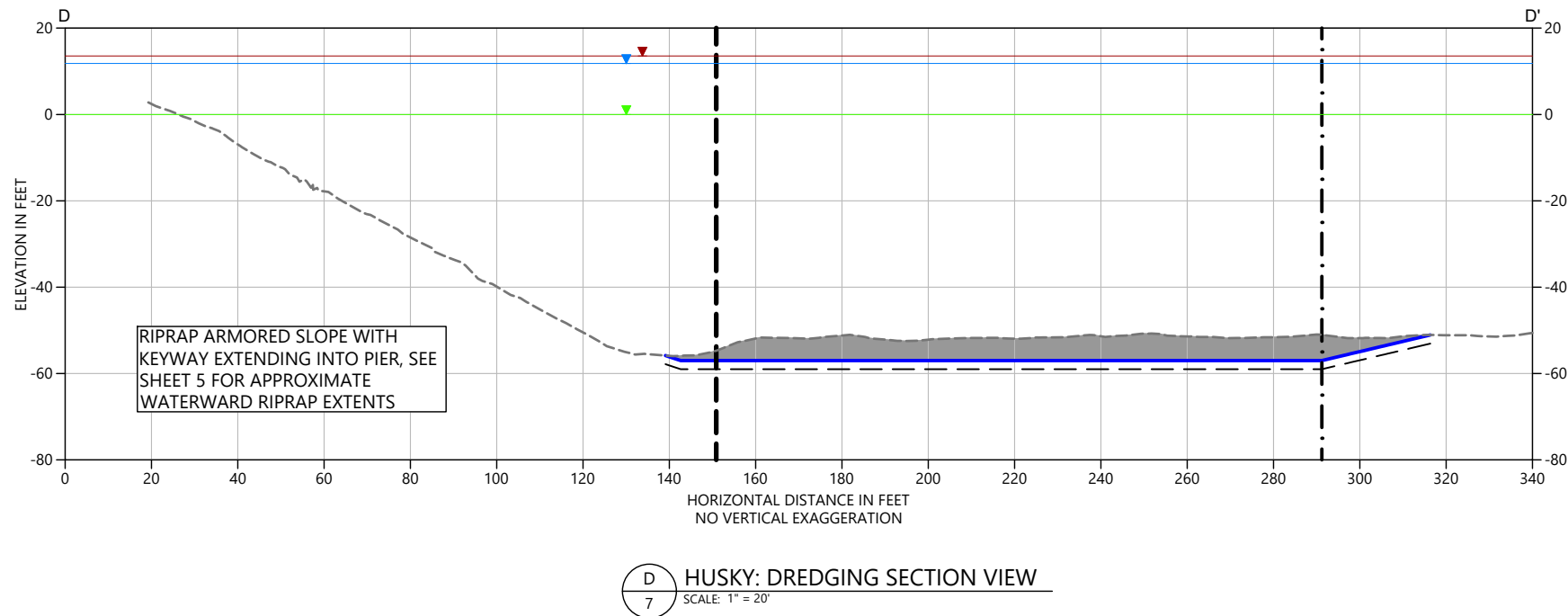
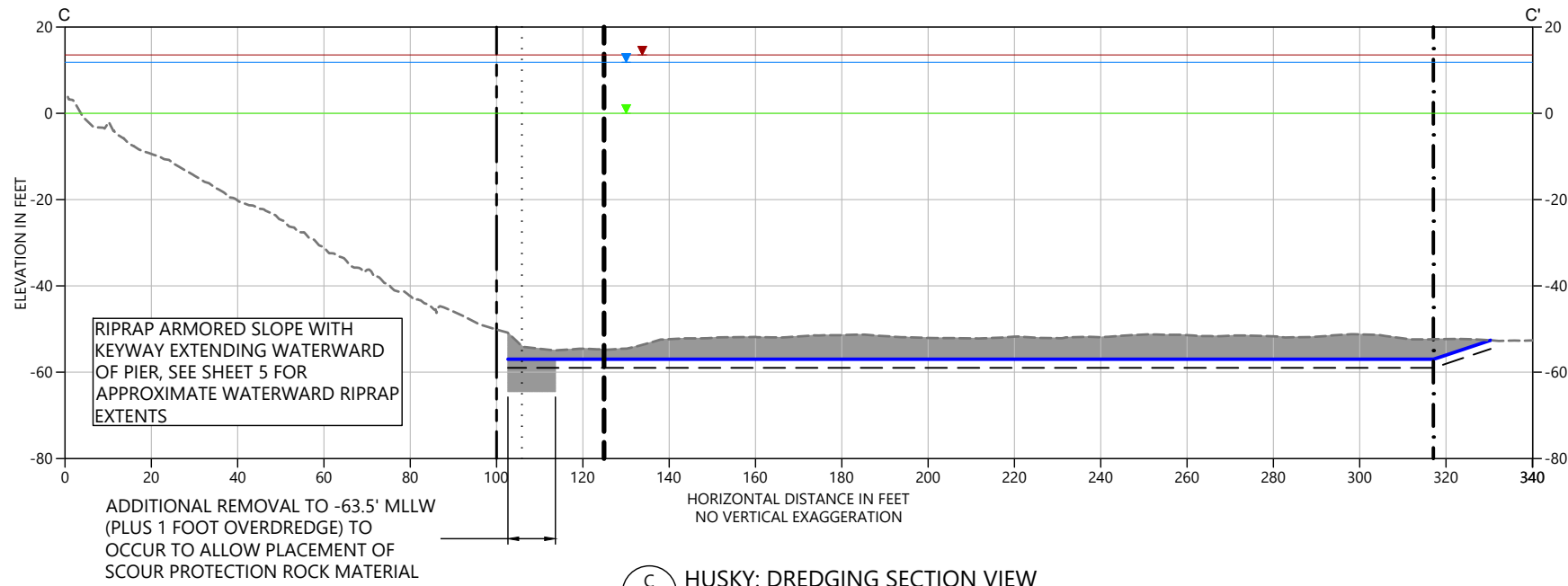
NAME: BLAIR WATERWAY BERTH DEEPENING
ADJACENT PROPERTY OWNERS:
SEE JARPA ATTACHMENT C

PROPOSED: DREDGING TO -57 FT MLLW PLUS TWO FEET OF OVERDREDGE ALLOWANCE, TOE WALL INSTALLATION, FENDER REPLACEMENT
PURPOSE: DEEPENING OF BLAIR WATERWAY AT WASHINGTON UNITED TERMINAL AND HUSKY TERMINAL

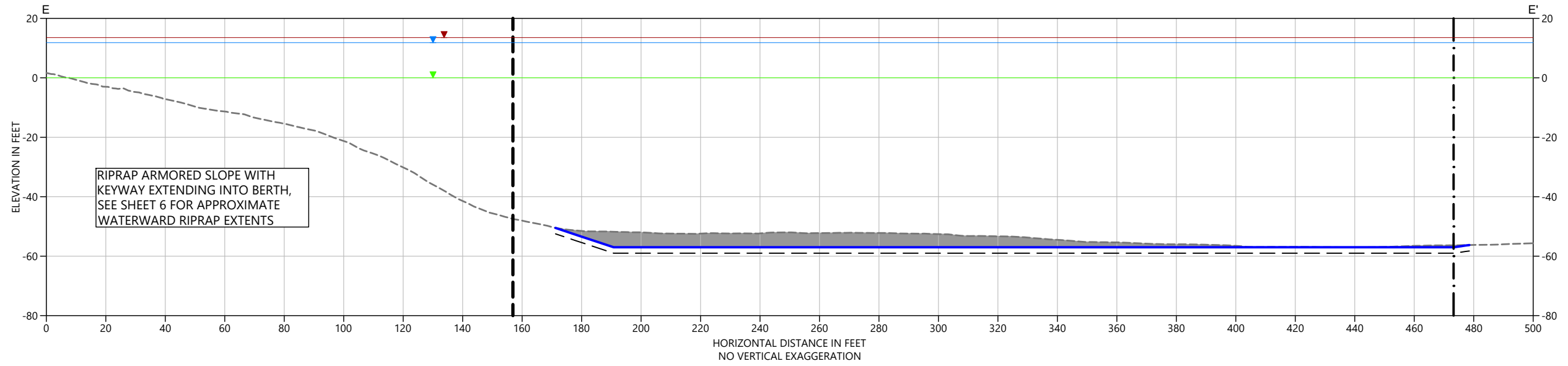
HORIZONTAL DATUM: NAD83 (2011), WA, SOUTH ZONE, U.S. FEET
VERTICAL DATUM: MLLW, FEET
LATITUDE: N47.268346°/N47.274489°
LONGITUDE: W122.398534°/W122.407014°
S-T-R: MULTIPLE, SEE JARPA SECTION 5E

IN: BLAIR WATERWAY
NEAR/AT: TACOMA
COUNTY: PIERCE
STATE: WASHINGTON
DATE: JUNE 2025

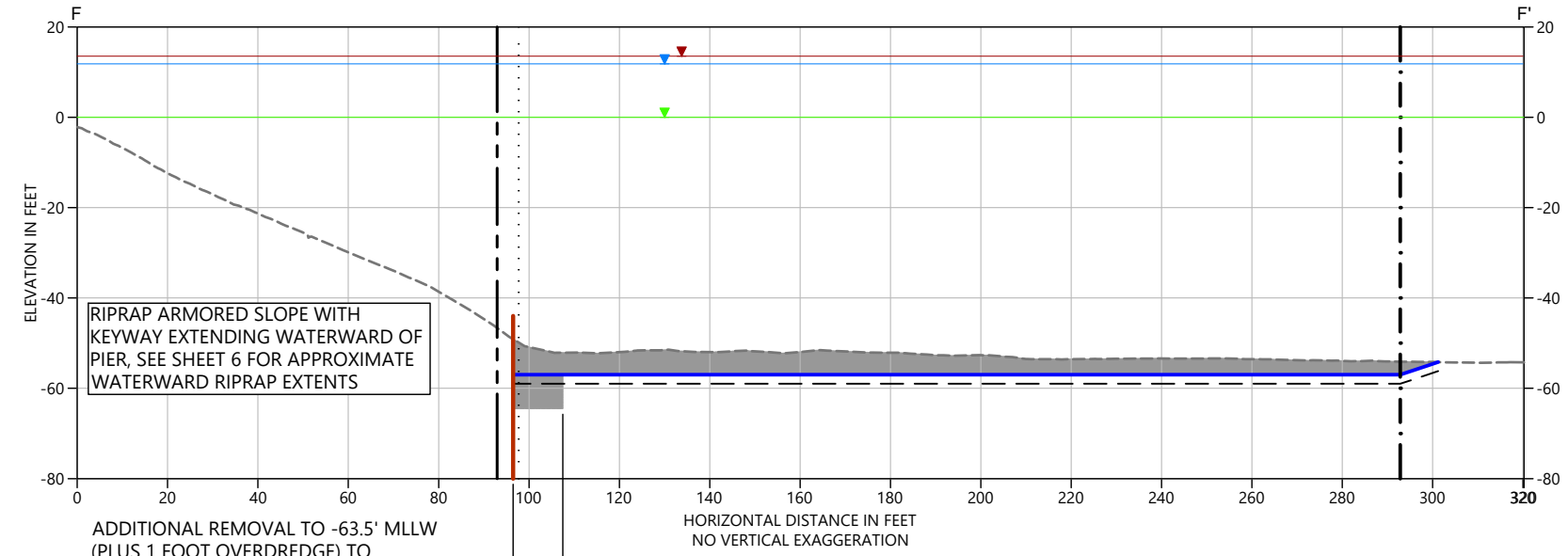
**SECTION: HUSKY DREDGE
SHEET 1**



- NOTES:**
- SEE DRAWING 10 DREDGING DETAILS FOR REMOVAL ELEVATIONS AND TOLERANCES.
- LEGEND:**
- EXISTING GRADE
 - EXISTING FACE OF PIER
 - ... EXISTING FACE OF FENDER LINE
 - · - PRE-ENGINEERING DESIGN FEDERAL NAVIGATION CHANNEL
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 - ▼ MHHW (+11.83 MLLW)
 - ▼ MLLW (+0 MLLW)
 - PROPOSED TOE WALL



E
8
WUT: DREDGING SECTION VIEW
SCALE: 1" = 20'

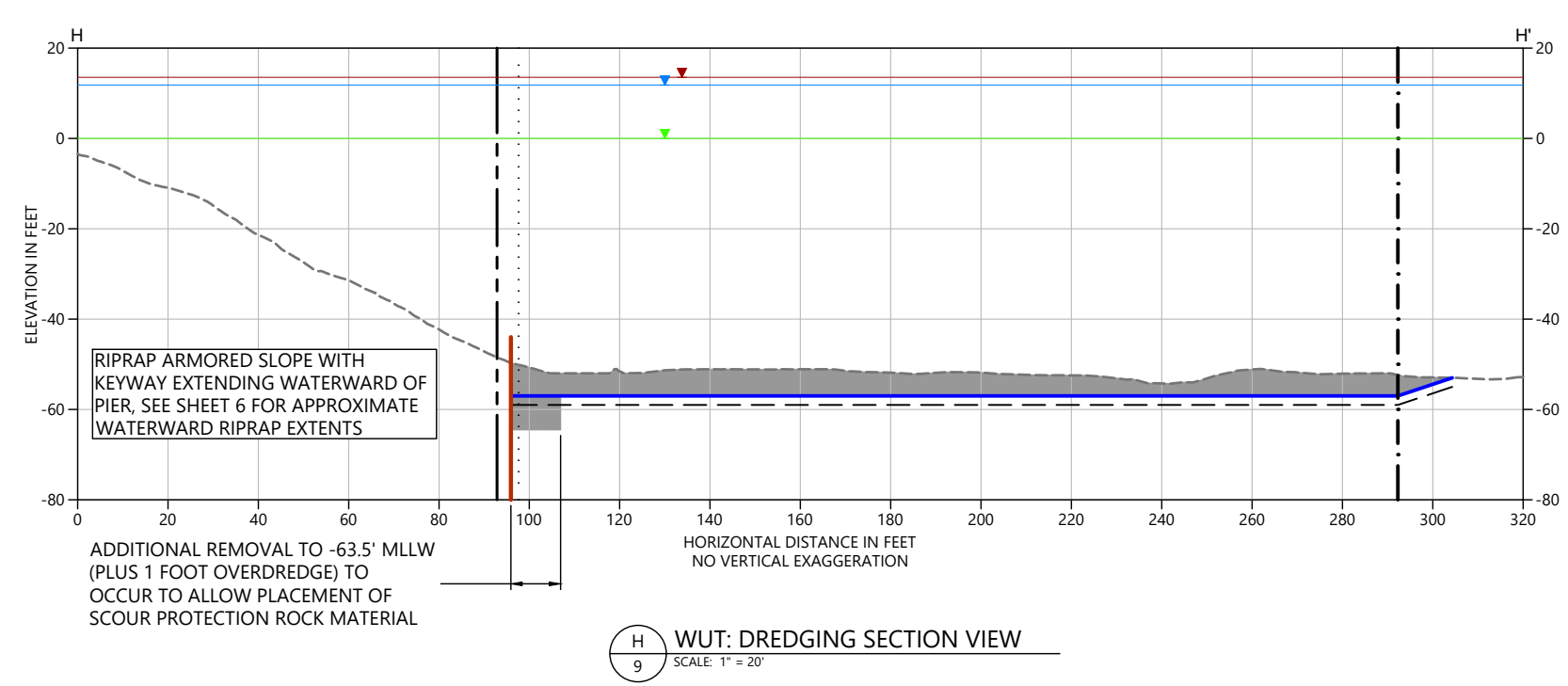
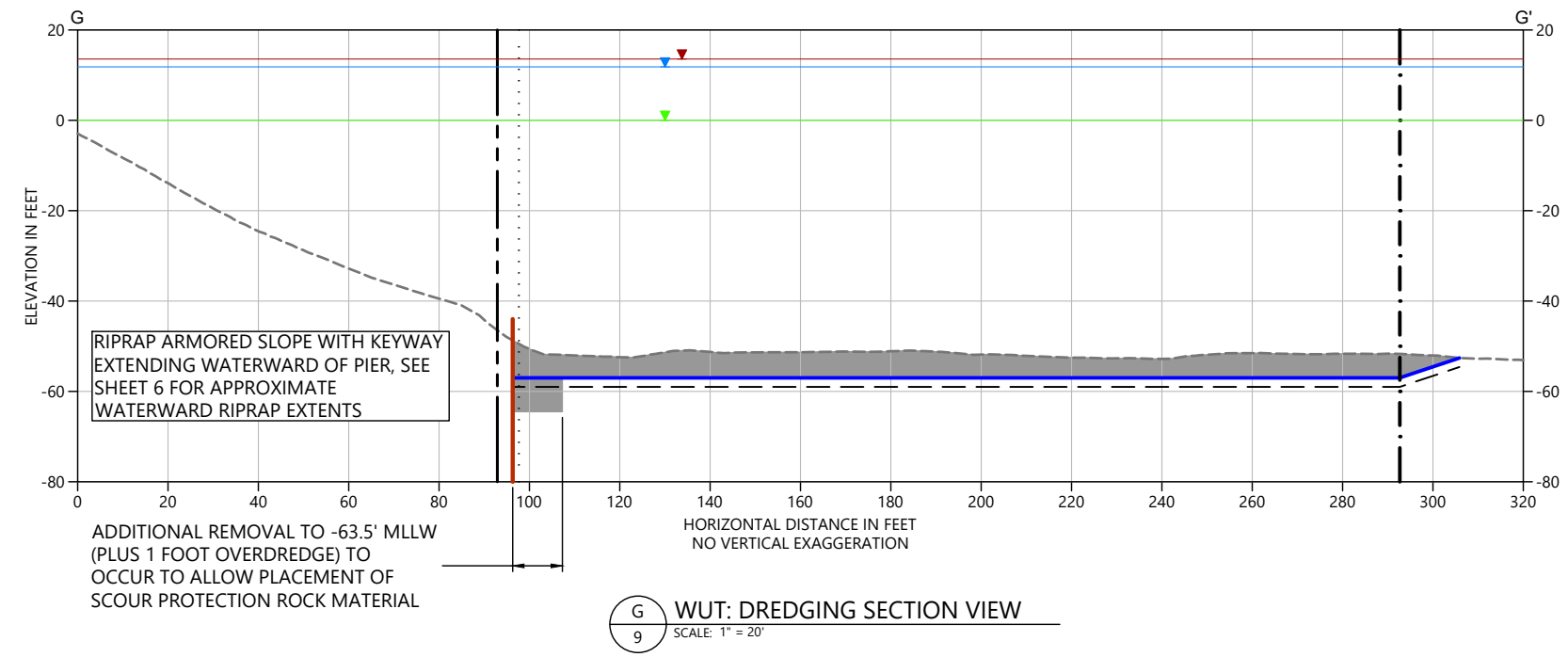


F
8
WUT: DREDGING SECTION VIEW
SCALE: 1" = 20'

- NOTES:**
- SEE DRAWING 10 DREDGING DETAILS FOR REMOVAL ELEVATIONS AND TOLERANCES.
- LEGEND:**
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 - MLLW (+0 MLLW)
 - PROPOSED TOE WALL

Sep 03, 2025 10:09am dholmer K:\Projects\0092-Port of Tacoma\Berth Deepening and Habitat Restoration\JARPA\0092-JA-003-Proposed.dwg 8

 1201 3RD AVE, SUITE 2600 SEATTLE, WA 98101 206-287-9130	REFERENCE #: APPLICANT: PORT OF TACOMA LOCATION: BLAIR WATERWAY TACOMA, WA 98421	NAME: BLAIR WATERWAY BERTH DEEPENING ADJACENT PROPERTY OWNERS: SEE JARPA ATTACHMENT C	PROPOSED: DREDGING TO -57 FT MLLW PLUS TWO FEET OF OVERDREDGE ALLOWANCE, TOE WALL INSTALLATION, FENDER REPLACEMENT PURPOSE: DEEPENING OF BLAIR WATERWAY AT WASHINGTON UNITED TERMINAL AND HUSKY TERMINAL	HORIZONTAL DATUM: NAD83 (2011), WA, SOUTH ZONE, U.S. FEET VERTICAL DATUM: MLLW, FEET LATITUDE: N47.268346°/N47.274489° LONGITUDE: W122.398534°/W122.407014° S-T-R: MULTIPLE, SEE JARPA SECTION 5E	IN: BLAIR WATERWAY NEAR/AT: TACOMA COUNTY: PIERCE STATE: WASHINGTON DATE: JUNE 2025	SECTION: WUT DREDGE SHEET 1 SHEET: 8 OF 14
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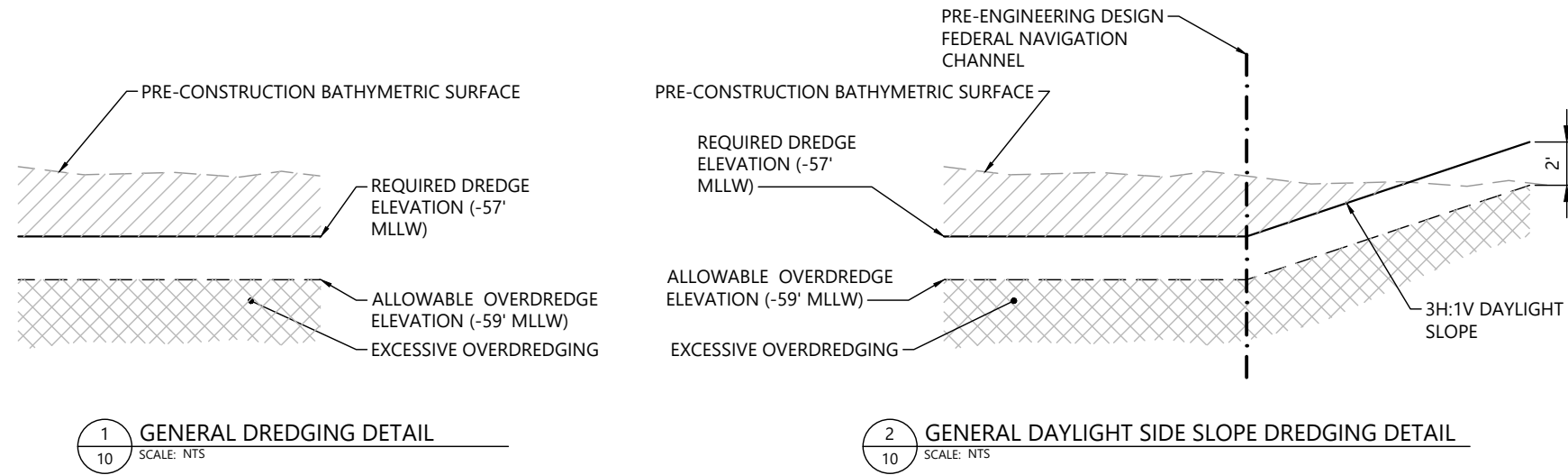


- NOTES:**
- SEE DRAWING 10 DREDGING DETAILS FOR REMOVAL ELEVATIONS AND TOLERANCES.
- LEGEND:**
- EXISTING GRADE
 - EXISTING FACE OF PIER
 - EXISTING FACE OF FENDER LINE
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 - MLLW (+0 MLLW)
 - PROPOSED TOE WALL

Sep 03, 2025 10:10am dholmer K:\Projects\0092-Port of Tacoma\Berth Deepening and Habitat Restoration\JARPA\0092-JA-003-Proposed.dwg 9

 1201 3RD AVE, SUITE 2600 SEATTLE, WA 98101 206-287-9130	REFERENCE #: APPLICANT: PORT OF TACOMA LOCATION: BLAIR WATERWAY TACOMA, WA 98421	NAME: BLAIR WATERWAY BERTH DEEPENING ADJACENT PROPERTY OWNERS: SEE JARPA ATTACHMENT C	PROPOSED: DREDGING TO -57 FT MLLW PLUS TWO FEET OF OVERDREDGE ALLOWANCE, TOE WALL INSTALLATION, FENDER REPLACEMENT PURPOSE: DEEPENING OF BLAIR WATERWAY AT WASHINGTON UNITED TERMINAL AND HUSKY TERMINAL	HORIZONTAL DATUM: NAD83 (2011), WA, SOUTH ZONE, U.S. FEET VERTICAL DATUM: MLLW, FEET LATITUDE: N47.268346°/N47.274489° LONGITUDE: W122.398534°/W122.407014° S-T-R: MULTIPLE, SEE JARPA SECTION 5E	IN: BLAIR WATERWAY NEAR/AT: TACOMA COUNTY: PIERCE STATE: WASHINGTON DATE: JUNE 2025	SECTION: WUT DREDGE SHEET 2 SHEET: 9 OF 14
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NOTE:
REQUIRED DREDGING FOOTPRINTS ARE SHOWN ON SHEETS 4 AND 5, CONTRACTOR MUST REMOVE ALL MATERIAL WITHIN THESE FOOTPRINTS TO -57 FT MLLW. CONTRACTOR WILL BE PAID UP TO ONE FOOT OF MATERIAL REMOVED BELOW THE REQUIRED ELEVATIONS. CONTRACTOR IS ALLOWED TO DREDGE UP TO TWO FEET BELOW REQUIRED ELEVATIONS, MATERIAL REMOVED DEEPER THAN TWO FEET BELOW REQUIRED ELEVATIONS WILL BE PENALIZED.



REFERENCE #:
APPLICANT: PORT OF TACOMA
LOCATION: BLAIR WATERWAY
TACOMA, WA 98421

NAME: BLAIR WATERWAY BERTH DEEPENING
ADJACENT PROPERTY OWNERS:
SEE JARPA ATTACHMENT C

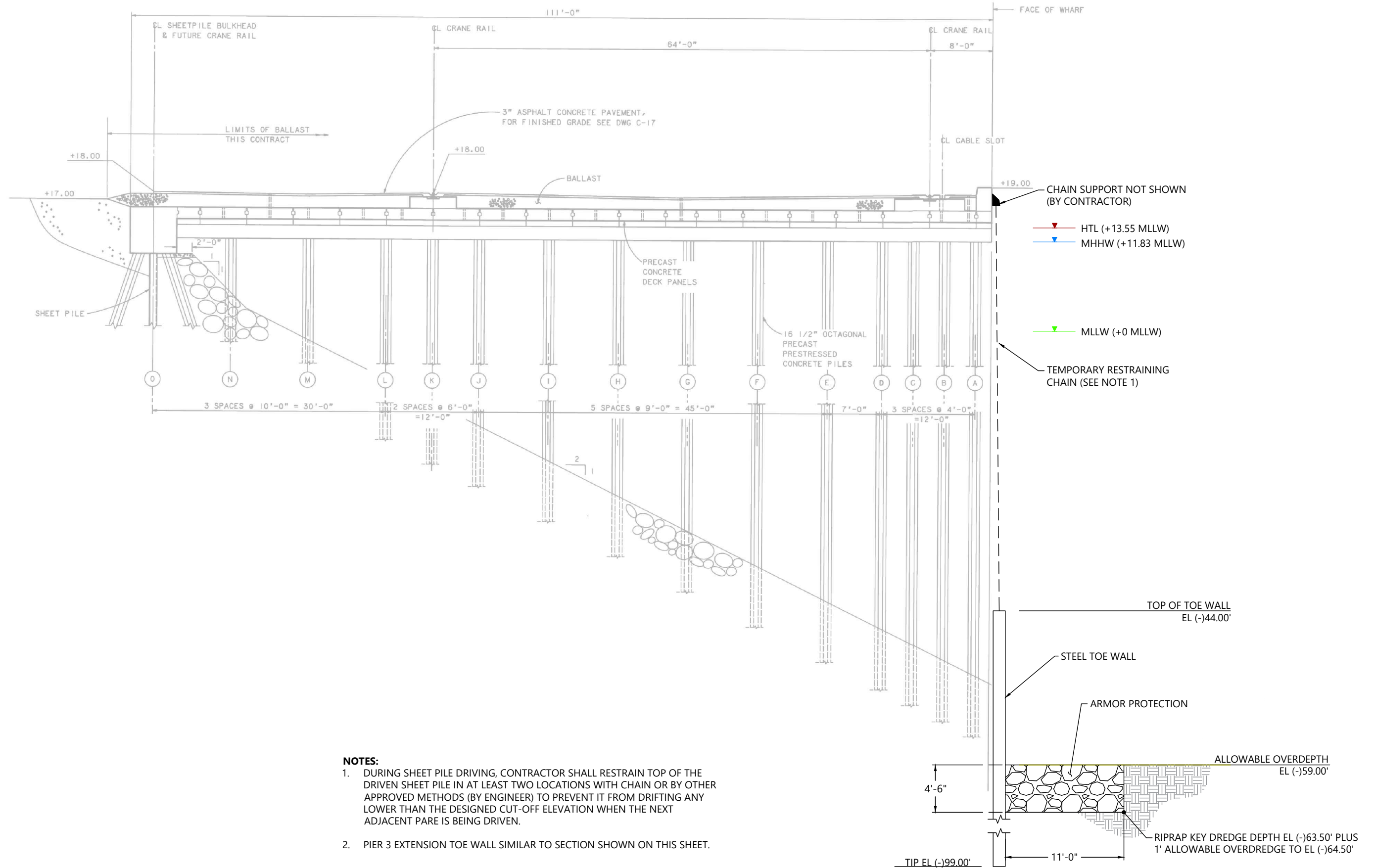
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S-T-R: MULTIPLE, SEE JARPA SECTION 5E

IN: BLAIR WATERWAY
NEAR/AT: TACOMA
COUNTY: PIERCE
STATE: WASHINGTON
DATE: JUNE 2025

DETAILS: DREDGING
SHEET: 10 OF 14

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REFERENCE #:
APPLICANT: PORT OF TACOMA
LOCATION: BLAIR WATERWAY
TACOMA, WA 98421

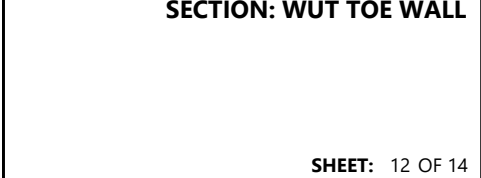
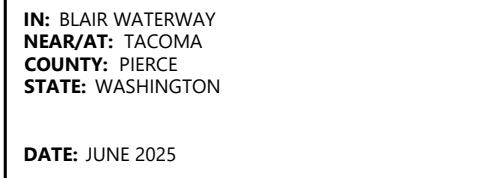
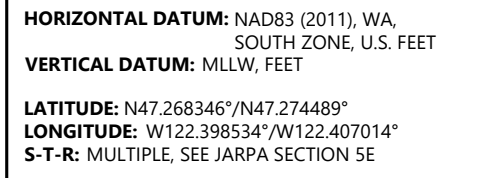
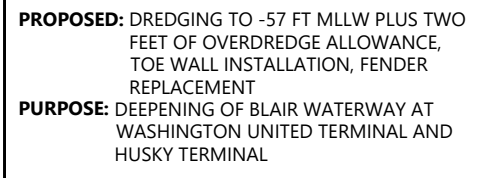
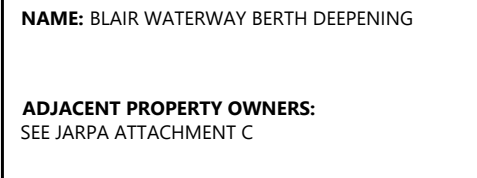
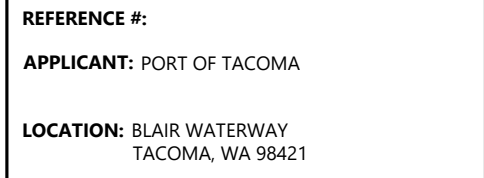
NAME: BLAIR WATERWAY BERTH DEEPENING
ADJACENT PROPERTY OWNERS:
SEE JARPA ATTACHMENT C

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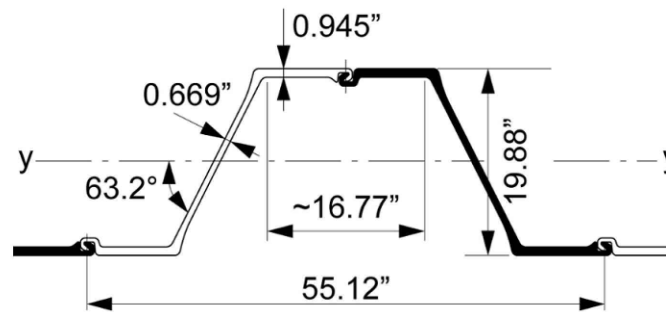
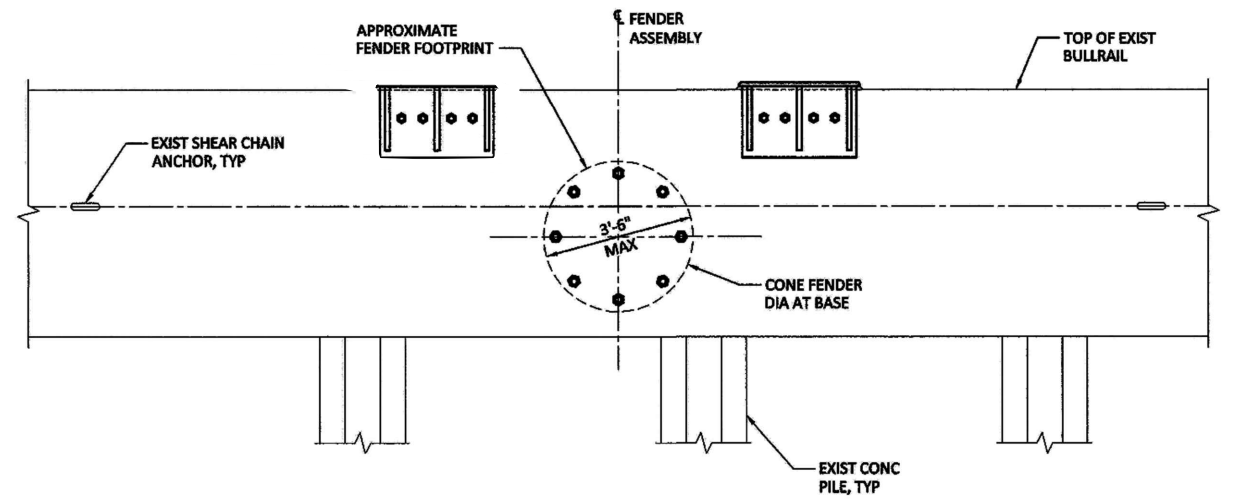
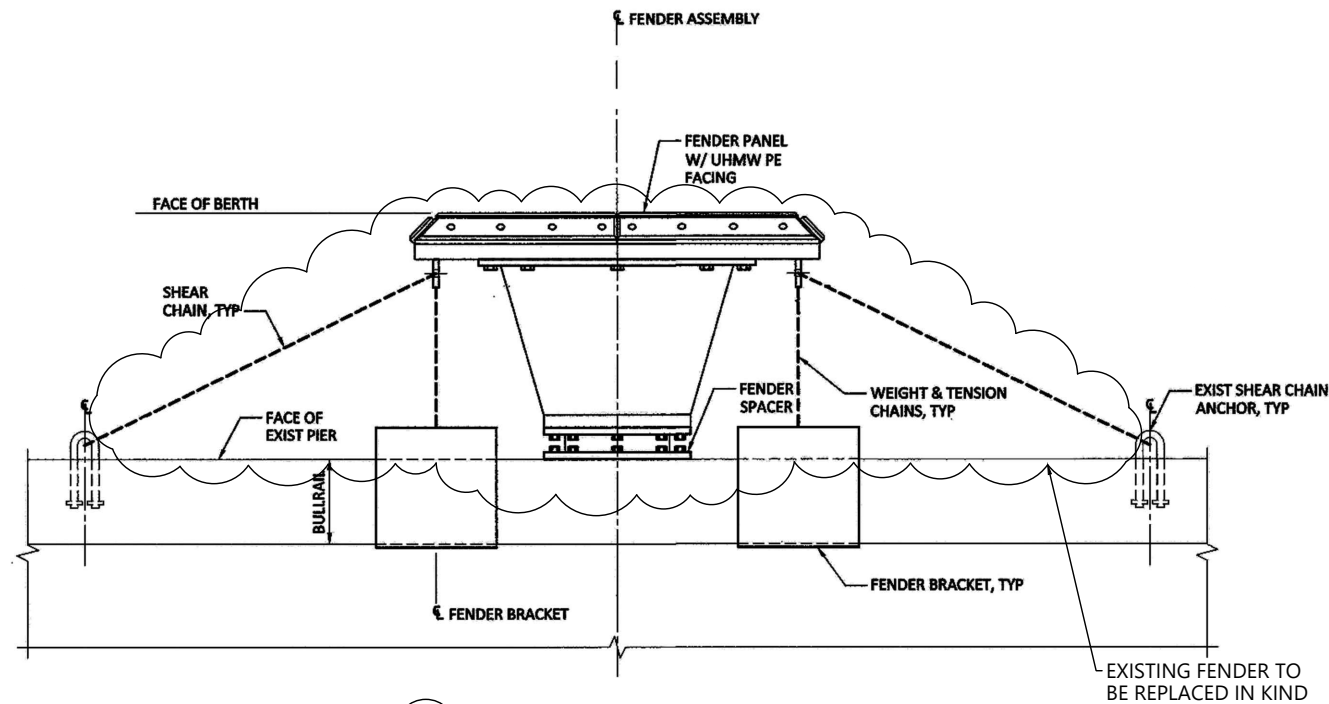
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IN: BLAIR WATERWAY
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COUNTY: PIERCE
STATE: WASHINGTON
DATE: JUNE 2025

SECTION: HUSKY TOE WALL

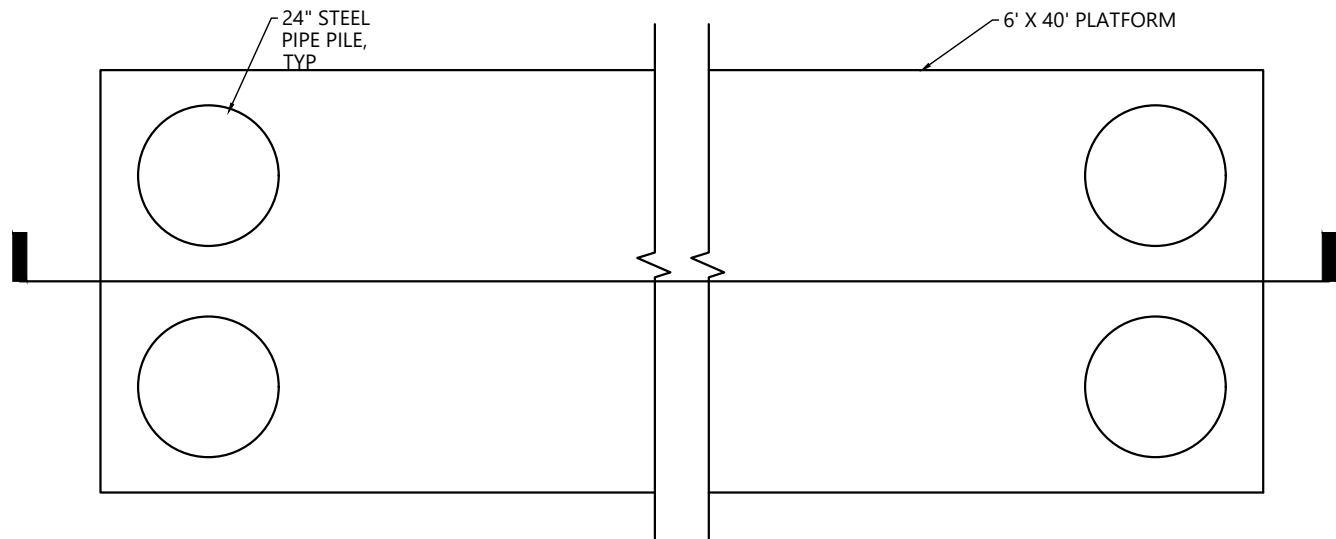


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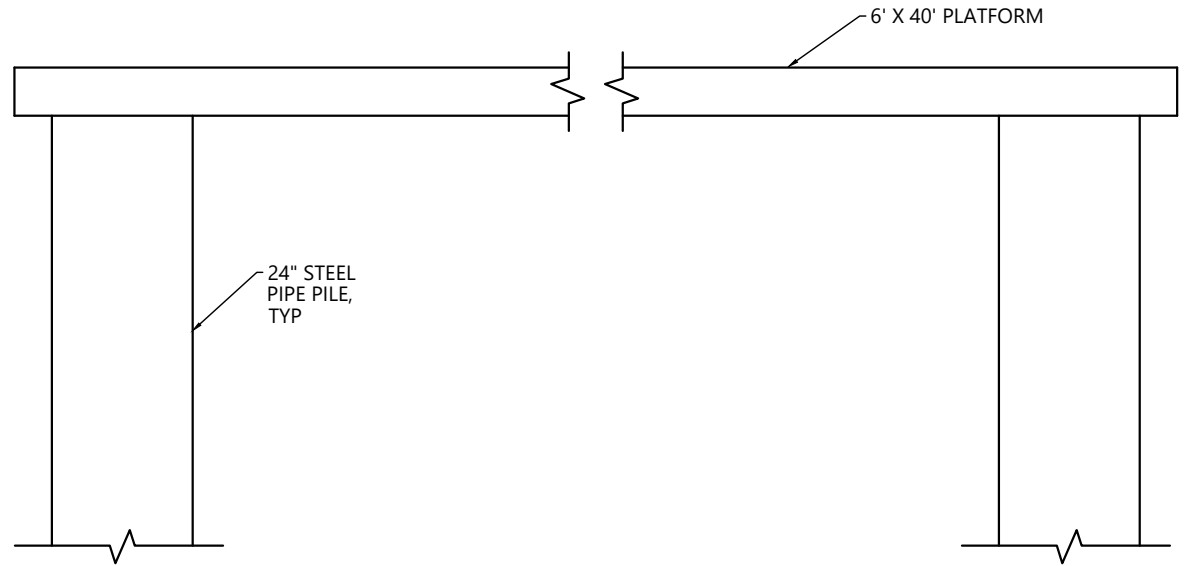


MINIMUM SHEET PILE PROPERTIES						
SHEET PILE TYPE*	ELASTIC SECTION MODULUS (IN ³ /FT)	PLASTIC SECTION MODULUS (IN ³ /FT)	FLANGE THICKNESS (IN)	WEB THICKNESS (IN)	CROSS SECTIONAL AREA (IN ² /FT)	MOMENT OF INERTIA (IN ⁴ /FT)
Z-SHAPE	95.9	111.3	0.945	0.669	14.97	953
*THE BASIS FOR THE BULKHEAD DESIGN IS A Z-SHAPE SHEET PILE WITH THE MINIMUM SECTION PROPERTIES PROVIDED IN THIS TABLE. ALTERNATIVE BULKHEAD CONFIGURATIONS MAY BE ACCEPTABLE, SUBJECT TO REVIEW AND APPROVAL BY THE WDFW.						

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1 PLAN: TEMPORARY PILE DRIVING TEMPLATE
14 SCALE: NTS



2 ELEVATION: TEMPORARY PILE DRIVING TEMPLATE
14 SCALE: NTS



1201 3RD AVE, SUITE 2600
SEATTLE, WA 98101
206-287-9130

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REPLACEMENT
PURPOSE: DEEPENING OF BLAIR WATERWAY AT
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IN: BLAIR WATERWAY
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DATE: JUNE 2025

**DETAILS: TEMPORARY PILE
DRIVING TEMPLATE**