

BINDING EDGE

PORT OF TACOMA

WASHINGTON UNITED TERMINAL FENDER SYSTEM REPLACEMENT COMPLETION PROJECT NO. - 201107.02 CONTRACT NO. - 071678

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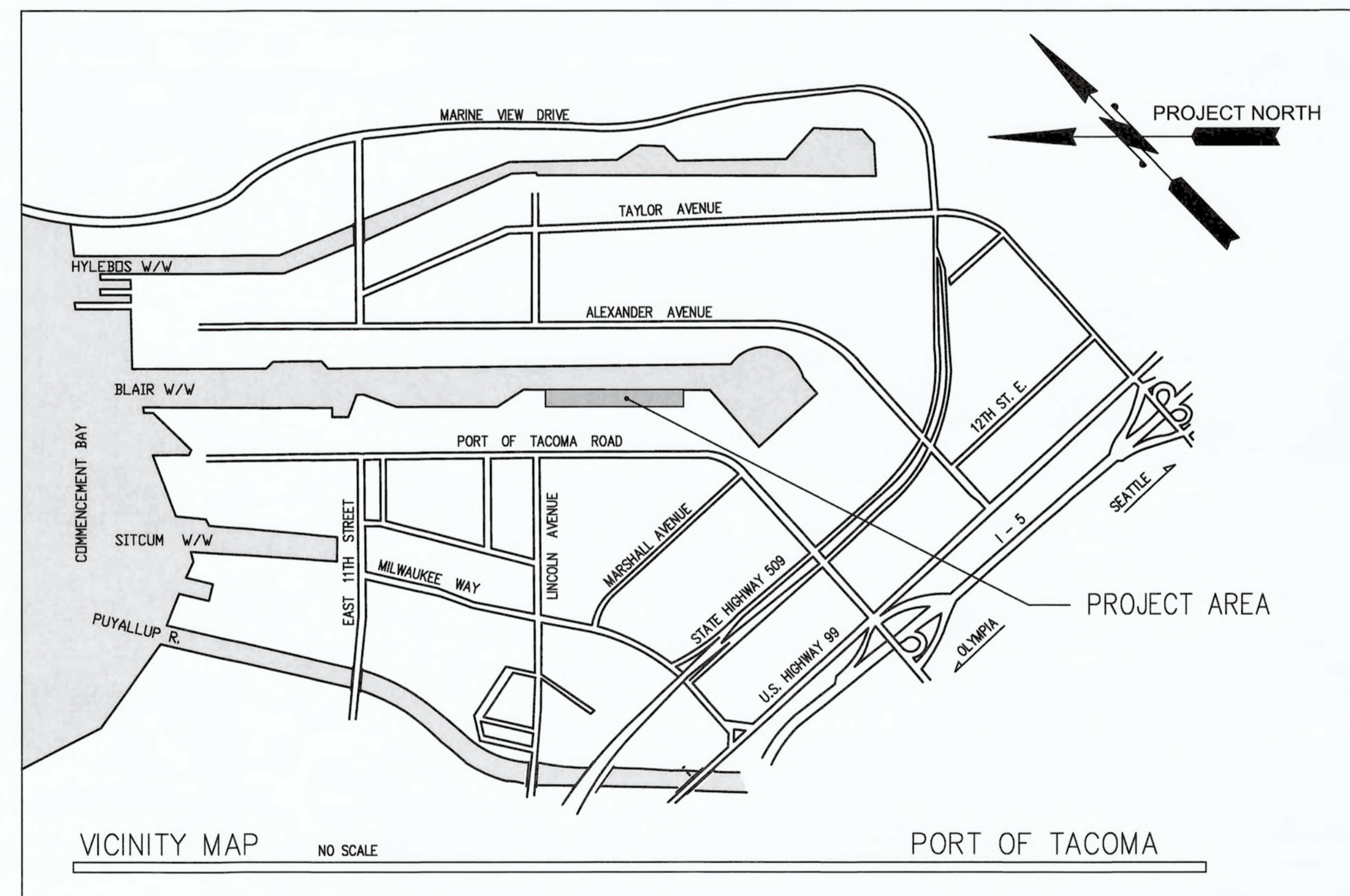
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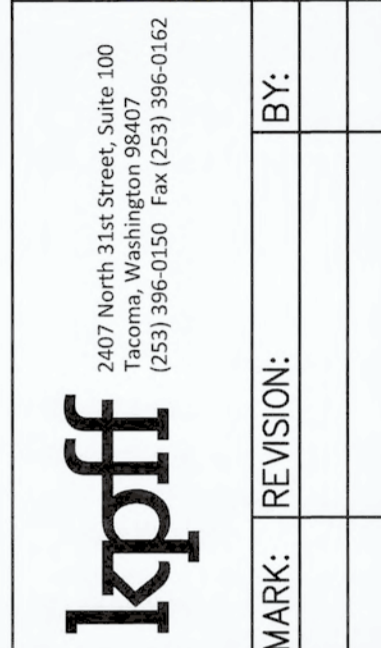
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ELLY BULEGA, PE
Project Manager



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TAH	05/04/2022	DATE
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PROJECT ADDRESS:	ONE SITCUM PLAZA	TACOMA, WA 98421

WASHINGTON UNITED TERMINAL
FENDER SYSTEM REPLACEMENT COMPLETION
COVER SHEET

TOWNSHIP: 21N RANGE: 03E SECTION: 35
DATE-HRZ: WAB3-SF VERT: MLLW 19'18" @ TIDE 22 1933
PARCEL: 25 DRAWING SCALE: AS NOTED

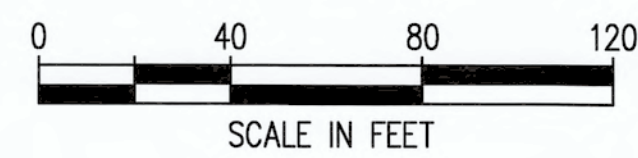
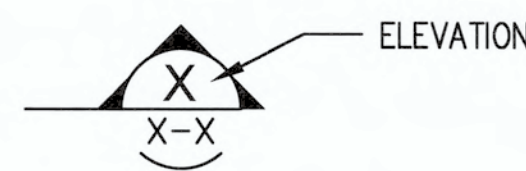
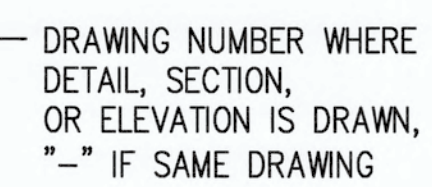
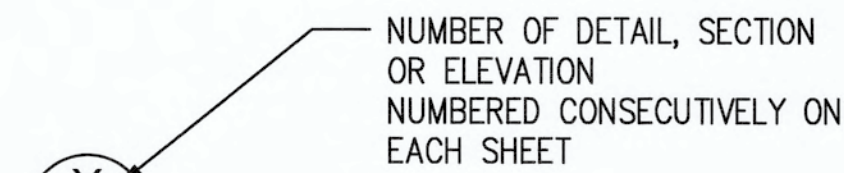
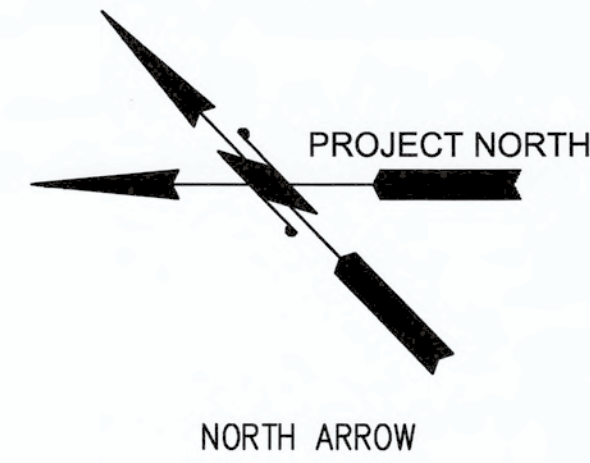
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G1.1
01 OF 18
CONT/CONS: 071678
M. ID: 201107.02
PHASE: ISSUED FOR BIDS

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SYMBOLS



ABBREVIATIONS

#	NUMBER	LT.	LEFT
∅	DIAMETER	M&R	MAINTENANCE AND REPAIR
⊙	AT	MAT	MATERIAL
ACP	ASPHALTIC CONCRETE PAVEMENT	MAX	MAXIMUM
ACI	AMERICAN CONCRETE INSTITUTE	MFR	MANUFACTURER
ADDL	ADDITIONAL	MHHW	MEAN HIGHER HIGH WATER
APPROX	APPROXIMATE	MHW	MEAN HIGH WATER
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MLLW	MEAN LOWER LOW WATER
AVG	AVERAGE	MIN	MINIMUM
AWS	AMERICAN WELDING SOCIETY	MISC	MISCELLANEOUS
BLOG	BUILDING	NDT	NONDESTRUCTIVE TESTING
BOT	BOTTOM	NIC	NOT IN CONTRACT
CL	CENTERLINE	No.	NUMBER
CC	CENTER TO CENTER	NTS	NOT TO SCALE
CDF	CONTROL DENSITY FILL	OC	ON CENTER
CIP	CAST IN PLACE	OD	OUTSIDE DIAMETER
CLR	CLEAR or CLEARANCE	OVH	OVERHEAD
CONC	CONCRETE	PL	PLATE
CONC	CONSTRUCT	POT	PORT OF TACOMA
CTR	CENTER	POV	PRIVATELY OWNED VEHICLE
DET	DETAIL	PSI	POUNDS PER SQUARE INCH
DIA	DIAMETER	PVMT	PAVEMENT
DIM	DIMENSION	R	RIDGE or RADIUS
DWG	DRAWING	REF	REFERENCE
EA	EACH	REINF	REINFORCE OR REINFORCING
EG	EXISTING GRADE	REQ'D	REQUIRED
EL	ELEVATION	SCH or SCHED	SCHEDULE
ELEC	ELECTRICAL	SHT	SHEET
ENGR	ENGINEER	SIM	SIMILAR
EQ	EQUAL	SPECS	SPECIFICATIONS
ETC	ET CETERA	SOFT	SQUARE FEET
EXIST	EXISTING	STD	STANDARD
FT	FOOT, FEET	SYM	SYMMETRIC or SYMBOL
HT	HEIGHT	TYP	TYPICAL
ID	INSIDE DIAMETER	UNO	UNLESS NOTED OTHERWISE
IN	INCH	V or VERT	VERTICAL
INCL	INCLUDE	W/	WITH
INFO	INFORMATION	W/O	WITHOUT
JT	JOINT	WELD	WELDING
L	LENGTH	WABO	WASHINGTON ASSOCIATION OF BUILDING ASSOCIATES
LF	LINEAL FOOT	WHS	WELDED HEADED STUD
LIN	LINEAL or LINEAR		

GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY ALL LEVELS, DIMENSIONS, AND EXISTING CONDITIONS IN THE FIELD BEFORE PROCEEDING. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR FIELD CHANGES PRIOR TO INSTALLATION OR FABRICATION. IN CASE OF DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE PLANS, THE CONTRACTOR SHALL OBTAIN DIRECTION FROM THE ENGINEER BEFORE PROCEEDING. DIMENSIONS AND CALLOUTS NOTED AS PLUS OR MINUS (±) OR (REF) INDICATE UNVERIFIED DIMENSIONS AND ARE APPROXIMATE. NOTIFY THE ENGINEER IMMEDIATELY OF CONFLICTS OR EXCESSIVE VARIATIONS FROM AS INDICATED. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS - DO NOT SCALE THE PLANS.
- A COPY OF THE PLANS SHALL BE ON-SITE WHENEVER CONSTRUCTION IS IN PROGRESS. THROUGHOUT THE PROGRESS OF THE WORK OF THIS CONTRACT, MAINTAIN AN ACCURATE RECORD OF ALL CHANGES IN THE CONTRACT DOCUMENTS. UPON THE COMPLETION OF THIS CONTRACT, PROVIDE ONE COMPLETE SET OF RECORD DOCUMENTS TO THE PORT OF TACOMA.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS OF EXISTING STRUCTURES AND OTHER FEATURES THAT MAY IMPACT THE WORK. CONTRACTOR SHALL BRING ANY CONFLICTS TO THE ENGINEER'S ATTENTION PRIOR TO BEGINNING AFFECTED WORK.
- ANY DAMAGE TO EXISTING UTILITIES, OTHER FACILITIES OR EQUIPMENT DUE TO THE CONTRACTOR'S NEGLIGENCE, EXCEPT FOR ITEMS DESIGNATED FOR DEMOLITION, SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT HIS EXPENSE. THIS INCLUDES ITEMS OUTSIDE THE WORK AREA AND WITHIN THE PORT OF TACOMA PROPERTY THAT ARE DAMAGED BY CONSTRUCTION ACTIVITIES DURING EXECUTION OF THIS CONTRACT.
- THE CONTRACTOR SHALL KEEP ALL STREETS AND VEHICULAR TRAFFIC AREAS USED FOR THIS WORK CLEAN AT ALL TIMES, SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR ANY TRAFFIC CONTROLS REQUIRED DURING THE DURATION OF THIS PROJECT, PER CONTRACTOR'S OPERATION. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- MAINTAIN UTILITY SERVICE TO EXISTING BUILDINGS, BULLRAIL UTILITIES AND FIRE HYDRANTS DURING CONSTRUCTION UNLESS NOTED OTHERWISE OR APPROVED BY THE ENGINEER.
- RECORD DRAWINGS OF EXISTING WHARF AND FENDER SYSTEMS ARE AVAILABLE FROM THE PORT.

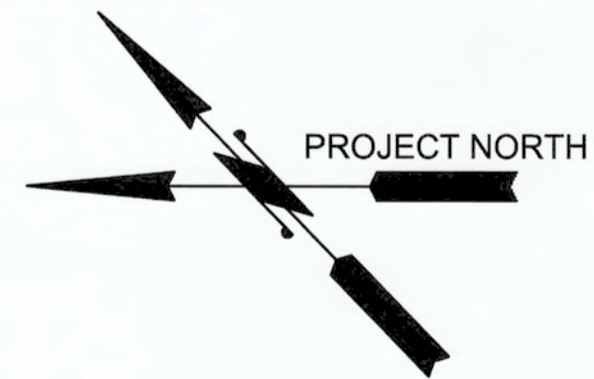
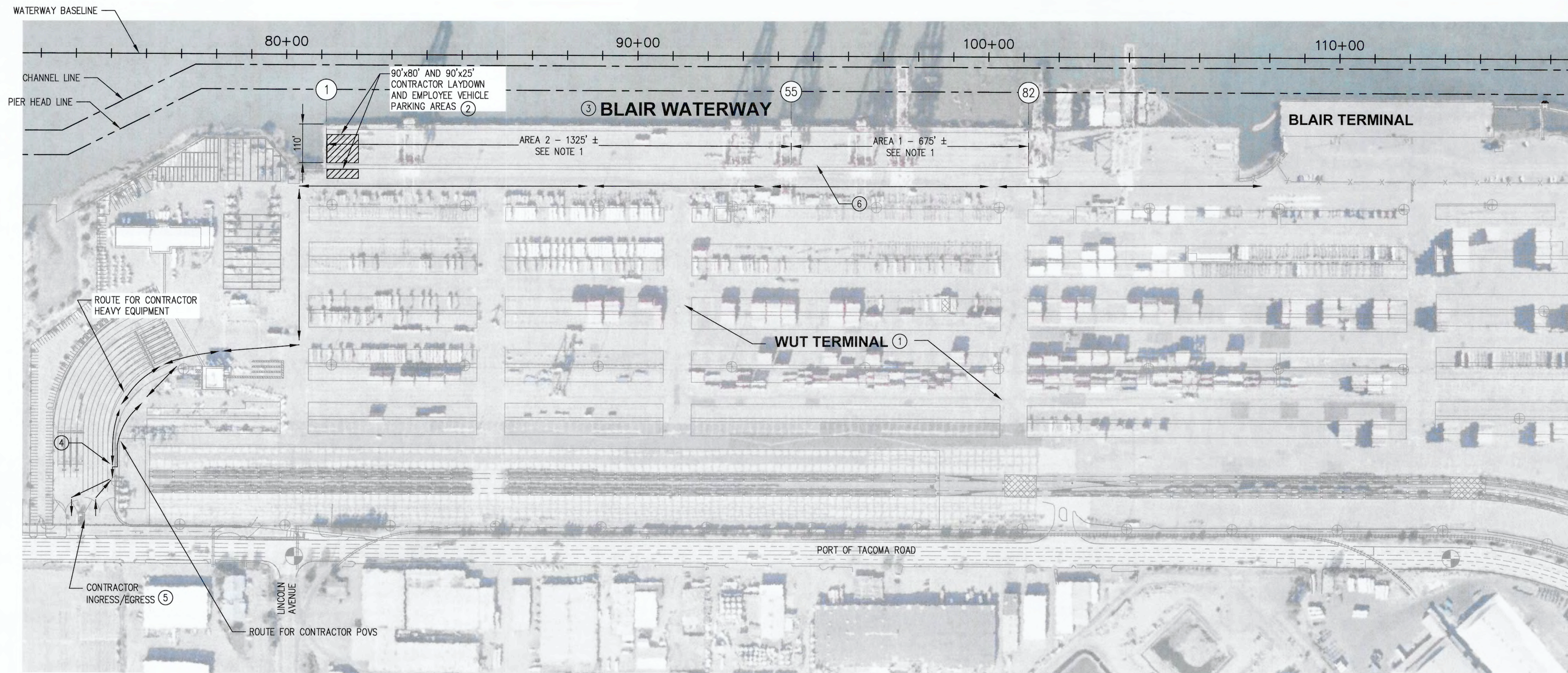
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APPROVED: <i>[Signature]</i> DIRECTOR: ENG. DATE: 05/04/2022 PRINTED BY: gmachuca May 05, 2022 PORT ADDRESS: ONE SITCOM PLAZA TACOMA, WA 98421	TA# 05/04/2022 CHECKED BY: TAD PROJ. ENGR: gmachuca DATE: 05/04/2022	DATE: 05/04/2022 DATE: 05/04/2022 DATE: May 05, 2022 DATE: May 05, 2022
6649 G1.2 02 OF 18	WASHINGTON UNITED TERMINAL FENDER SYSTEM REPLACEMENT COMPLETION SYMBOLS, ABBREVIATIONS AND GENERAL NOTES	TOWNSHIP: 21N RANGE: 03E SECTION: 35 DAT-HRZ: WAB3-SF VERT: MLLW 19.1' @ TIDE 22 1933 PARCEL: 25 DRAWING SCALE: AS NOTED
CONT/CONS: 071678 M. ID: 201107.02 PHASE: ISSUED FOR BIDS	MARK: REVISION: APPR: DATE:	BY:

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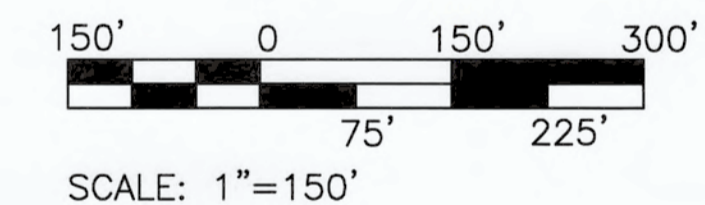
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PORT OF TACOMA FILE: N:\2022\220004 WUT Fender completion\Drawings\Current\03_G2.1-CONST ACC PHASING SEQ PLAN



CONSTRUCTION ACCESS, PHASING, AND SEQUENCING PLAN

SCALE: 1" = 150'



KEY NOTES

- ① WASHINGTON UNITED TERMINAL (WUT) IS A RESTRICTED OPERATING TERMINAL. THE CONTRACTOR SHALL NOT INTERFERE WITH TERMINAL OPERATIONS.
- ② CONTRACTOR SHALL STOCKPILE AND STAGE ALL EQUIPMENT, SUPPLIES AND MATERIALS WITHIN THE PROJECT WORK AREA LIMITS AND LAYDOWN AREA UNLESS NOTED OTHERWISE. WHEN CONTRACT WORK IS COMPLETE, CONTRACTOR SHALL CLEAR AND CLEAN THE WORK AND LAYDOWN AREA AND REPAIR ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS, INCLUDING DAMAGE TO PAVEMENT.
- ③ THE BLAIR WATERWAY IS AN ACTIVE SHIPPING CHANNEL. THE CONTRACTOR SHALL NOT OBSTRUCT SHIPPING OPERATIONS TO AND FROM THE WASHINGTON UNITED TERMINAL, ANY OTHER TERMINAL, OR ANY OTHER VESSEL TRAFFIC IN THE WATERWAY.
- ④ CONTRACTOR SHALL PROTECT-IN-PLACE EXISTING CONCRETE BARRIERS AND NOT IMPACT INCOMING TERMINAL TRAFFIC OR GATE OPERATIONS.
- ⑤ CONTRACTOR SHALL PROVIDE A FLAGGER AT INTERSECTION OF PORT OF TACOMA ROAD AND CONTRACTOR SITE INGRESS/EGRESS ROUTE, IF NECESSARY.
- ⑥ CONTRACTOR SHALL MAINTAIN ACCESS TO PORTIONS OF THE TERMINAL BEYOND ACTIVE CONSTRUCTION LIMITS.

LEGEND:

- PROJECT WORK AREA LIMITS
- CONTRACTOR ACCESS ROUTE
- ▨ CONTRACTOR LAYDOWN AREA

NOTES

1. THE CONTRACTOR SHALL BE RESTRICTED TO WORKING IN ONLY ONE OF THE TWO DESIGNATED WORK AREAS AT ANY GIVEN TIME. THE AREA NOT OCCUPIED BY THE CONTRACTOR SHALL REMAIN OPEN FOR VESSEL BERTHING AND TERMINAL OPERATIONS.
2. THE CONTRACTOR SHALL HAVE (8) 72-HOUR MOBILIZATIONS TO DEMOLISH (15) EXISTING CONFLICTING CONCRETE PILE FENDERS AND COMPLETELY INSTALL (6) CRITICAL FENDERS.
3. IN ADDITION TO THE (8) MOBILIZATIONS ABOVE, IT IS ANTICIPATED THAT THE CONTRACTOR WILL HAVE AT LEAST (2) 12-HOUR WORK WINDOWS PER WEEK DURING WHICH THE REMAINING (10) NON-CRITICAL FENDERS SHALL BE INSTALLED.
4. IF VESSEL SCHEDULE ALLOWS, THE CONTRACTOR WILL BE AWARDED ADDITIVE ALTERNATE WORK TO REMOVE (12) NON-CONFLICTING CONCRETE PILE FENDERS, OR AS MANY AS THE VESSEL SCHEDULE WILL ALLOW.
5. SEE SECTION 01 14 00 - WORK RESTRICTIONS FOR ADDITIONAL INFORMATION.

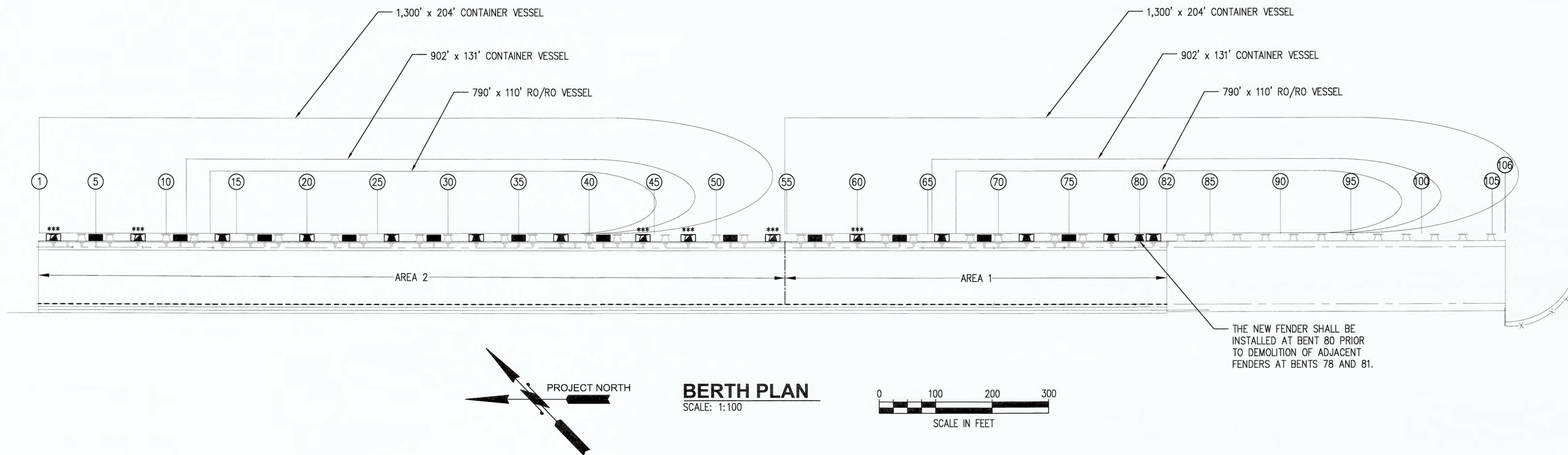
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	REVISION:
	MARK:
	REVISION:
CHECKED BY: TAD DATE: 05/04/2022 DIRECTOR ENG. DATE: 05/04/2022 PRINTED BY: jmachuca DATE: May 05, 2022 PORT ADDRESS: ONE SITCOM PLAZA TACOMA, WA 98421	TA# 05/04/2022 CHECKED BY: TAD DATE: 05/04/2022 DIRECTOR ENG. DATE: 05/04/2022 PRINTED BY: jmachuca DATE: May 05, 2022 PORT ADDRESS: ONE SITCOM PLAZA TACOMA, WA 98421
WASHINGTON UNITED TERMINAL FENDER SYSTEM REPLACEMENT COMPLETION CONSTRUCTION ACCESS, PHASING, AND SEQUENCING PLAN	TOWNSHIP: 21N RANGE: 03E SECTION: 35 DAT-HRZ: WA83-SF VERT: MLW 19.18' @ TIDE 22 1933 DRAWING SCALE: AS NOTED PARCEL: 25
6649 G2.1 03 OF 18 CONT/CONS: 071678 M. ID: 201107.02 PHASE: ISSUED FOR BIDS	

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BERTH PLAN
SCALE: 1:100

LEGEND:

- EXISTING CONE FENDER TO REMAIN
- NEW CONE FENDER TO BE INSTALLED
- EXISTING NON-CONFLICTING PILE FENDER TO BE DEMOLISHED UNDER ADDITIVE ALTERNATE
- NON-CRITICAL INSTALL: EXISTING CONFLICTING PILE FENDER SHALL BE DEMOLISHED AND NEW CONE FENDER SHALL BE INSTALLED
- CRITICAL INSTALL: EXISTING CONFLICTING PILE FENDER SHALL BE DEMOLISHED AND NEW CONE FENDER SHALL BE FULLY INSTALLED WITHIN 72 HOUR WORK WINDOW AND PRIOR TO NEXT VESSEL BERTHING

FENDER REPLACEMENT SCHEDULE												
BENT	EXIST. PILE FENDER TO BE DEMOLISHED	NEW CONE FENDER TO BE INSTALLED	EXIST. FENDER CONFLICTS WITH INSTALL OF NEW FENDER	EXIST. FENDER DOES NOT CONFLICT WITH INSTALL OF NEW FENDER	CRITICAL INSTALLATION	NON-CRITICAL INSTALLATION	CRITICAL AND CONFLICTING DEMO AND INSTALLATION	NON-CRITICAL AND CONFLICTING DEMO AND INSTALLATION	NON-CRITICAL AND NON-CONFLICTING INSTALLATION	MOBILIZATION NO.	BASE BID ITEM	ADDITIVE ALTERNATE BID ITEM
2	DEMO	INSTALL	CONFLICT		CRITICAL		YES			3 - 8	BASE BID	
5	DEMO			NON-CONFLICT								ADD. ALT.
8	DEMO	INSTALL	CONFLICT		CRITICAL		YES			3 - 8	BASE BID	
11	DEMO			NON-CONFLICT								ADD. ALT.
14	DEMO	INSTALL	CONFLICT			NON-CRITICAL		YES		1 OR 2	BASE BID	
17	DEMO			NON-CONFLICT								ADD. ALT.
20	DEMO	INSTALL	CONFLICT			NON-CRITICAL		YES		1 OR 2	BASE BID	
23	DEMO			NON-CONFLICT								ADD. ALT.
26	DEMO	INSTALL	CONFLICT			NON-CRITICAL		YES		1 OR 2	BASE BID	
29	DEMO			NON-CONFLICT								ADD. ALT.
32	DEMO	INSTALL	CONFLICT			NON-CRITICAL		YES		1 OR 2	BASE BID	
35	DEMO			NON-CONFLICT								ADD. ALT.
38	DEMO	INSTALL	CONFLICT			NON-CRITICAL		YES		1 OR 2	BASE BID	
41	DEMO			NON-CONFLICT								ADD. ALT.
44	DEMO	INSTALL	CONFLICT		CRITICAL		YES			3 - 8	BASE BID	
48	DEMO	INSTALL	CONFLICT		CRITICAL		YES			3 - 8	BASE BID	
51	DEMO			NON-CONFLICT								ADD. ALT.
54	DEMO	INSTALL	CONFLICT		CRITICAL		YES			3 - 8	BASE BID	
57	DEMO			NON-CONFLICT								ADD. ALT.
60	DEMO	INSTALL	CONFLICT		CRITICAL		YES			3 - 8	BASE BID	
63	DEMO			NON-CONFLICT								ADD. ALT.
66	DEMO	INSTALL	CONFLICT			NON-CRITICAL		YES		1 OR 2	BASE BID	
69	DEMO			NON-CONFLICT								ADD. ALT.
72	DEMO	INSTALL	CONFLICT			NON-CRITICAL		YES		1 OR 2	BASE BID	
75	DEMO			NON-CONFLICT								ADD. ALT.
78	DEMO	INSTALL	CONFLICT			NON-CRITICAL		YES		1 OR 2	BASE BID	
80		INSTALL				NON-CRITICAL			YES		BASE BID	
81	DEMO	INSTALL	CONFLICT			NON-CRITICAL		YES		1 OR 2	BASE BID	
TOTALS	27	16	15	12	6	10	6	9	1		16	12

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kpff
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(253) 396-0150 Fax (253) 396-0162

CITY OF TACOMA
OFFICE OF THE PORT DIRECTOR
1000 COMMERCIAL AVENUE
TACOMA, WA 98401

APPROVED: _____

TAD
DIRECTOR

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PORT ADDRESS: ONE SITCUM PLAZA
TACOMA, WA 98421

DATE: _____

APPR: _____

BY: _____

REVISION: _____

MARK: _____

WASHINGTON UNITED TERMINAL
FENDER SYSTEM REPLACEMENT COMPLETION
BERTH PLAN

6649

G2.2

04 OF 18

CONT/CONS: 0716/78

M. ID: 201107.02

PHASE: ISSUED FOR BIDS

RANGE: 03E SECTION: 35

TOWNSHIP: 21N

DATE-HRZ: WA83-SF

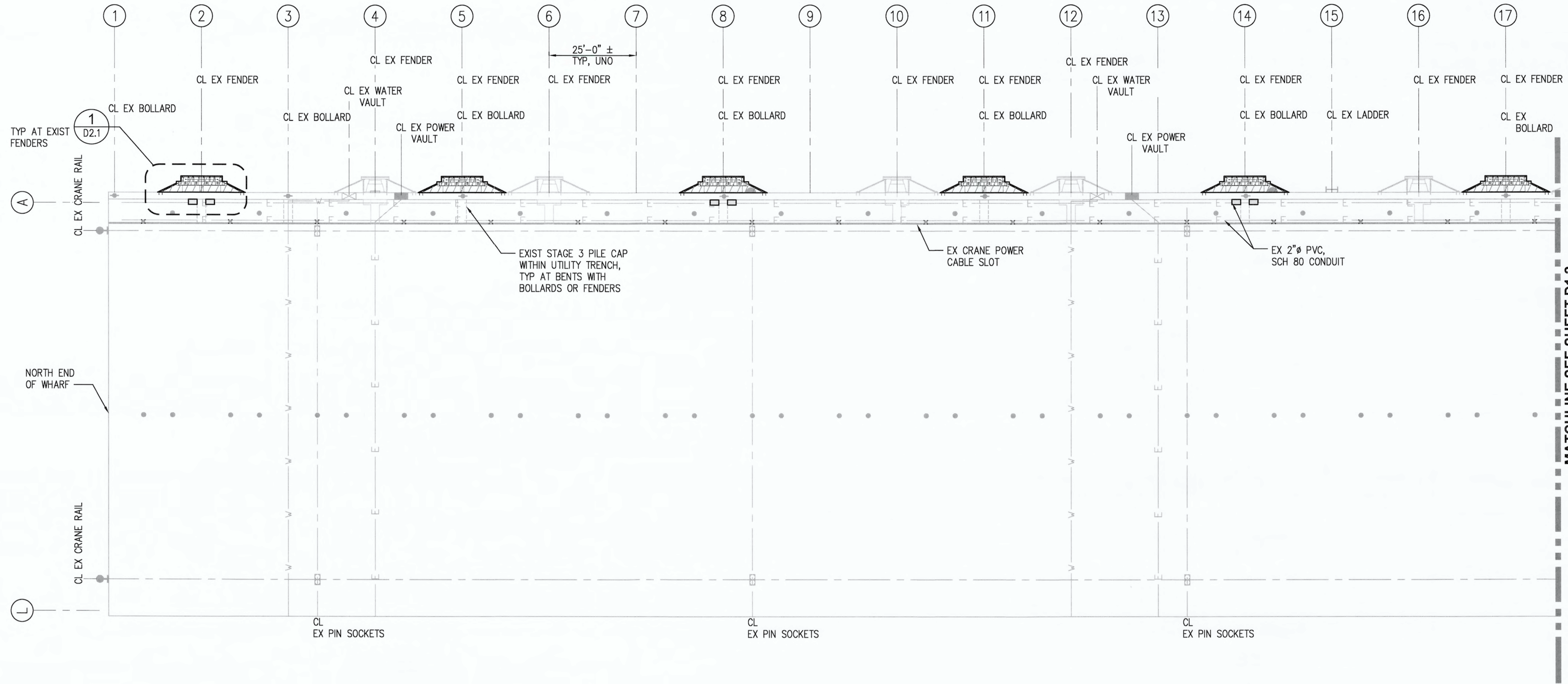
VERT: MLLW 19.18 @ TIDE 22 1933

DRAWING SCALE: AS NOTED

PARCEL: 25

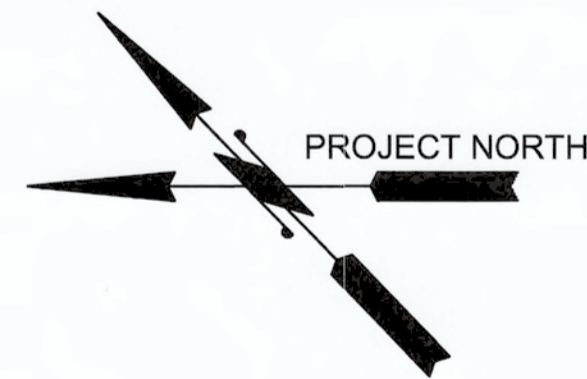
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BLAIR WATERWAY



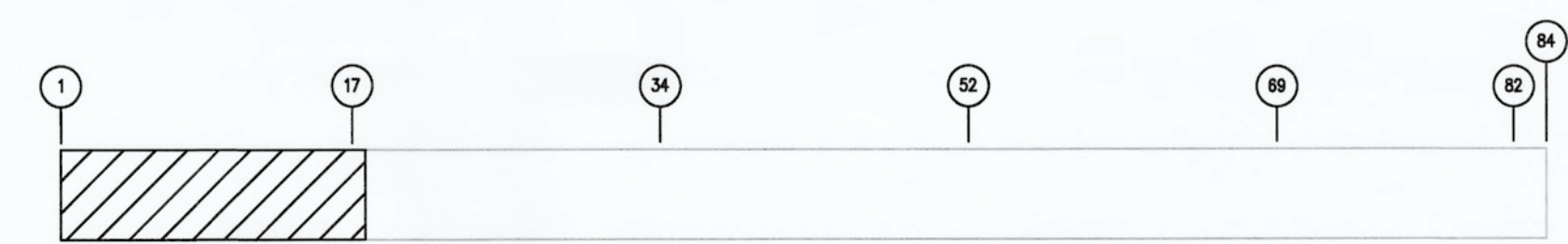
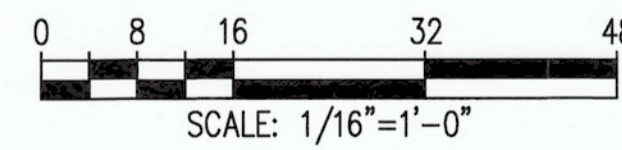
LEGEND:

- EXIST FENDER SYSTEM TO BE DEMOLISHED, SEE D2.1 (27 LOCATIONS)
- DEMO FOR TENSION CHAIN ANCHORAGE CONNECTION
- EXIST BOLLARD
- EXIST CRANE STOP
- EXIST DECK DRAIN
- EXIST CABLE SLOT DRAIN
- EXISTING FENDER SYSTEM TO REMAIN
- EXIST PIN SOCKET W/2"Ø DRAIN
- EXIST LIFE RING
- EXIST POWER VAULT
- EXIST WATER VAULT
- EXIST ELECTRICAL CONDUITS. SEE REFERENCE DRAWINGS FOR MATERIAL, SIZE, AND NUMBER OF CONDUITS
- EXIST WATER LINE. SEE REFERENCE DRAWINGS FOR MATERIAL AND SIZE



DEMOLITION PLAN

SCALE: 1/16" = 1'-0"



KEY PLAN

ISSUED FOR BIDS



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Tacoma, Washington 98407
(253) 396-0150 Fax (253) 396-0162



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WASHINGTON UNITED TERMINAL
FENDER SYSTEM REPLACEMENT COMPLETION
DEMOLITION PLAN
SHEET 1

6649
D1.1
05 OF 18
CONTR/CONS: 071678
M. ID: 201107.02
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TOWNSHIP: 21N
RANGE: 03E
SECTION: 35
DATE-HRZ: WA83-SF
VERT: MILLW 19:18' @ TIDE 22 1933
DRAWING SCALE: AS NOTED

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BLAIR WATERWAY

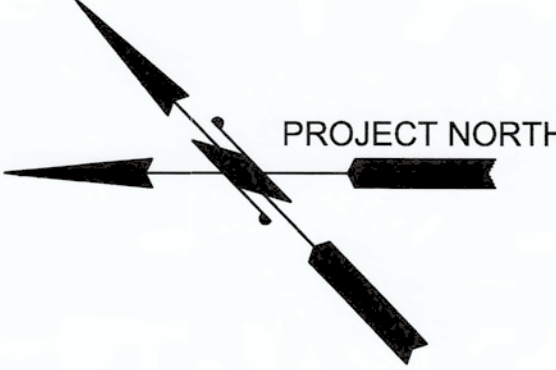


MATCHLINE SEE SHEET D1.1

MATCHLINE SEE SHEET D1.3

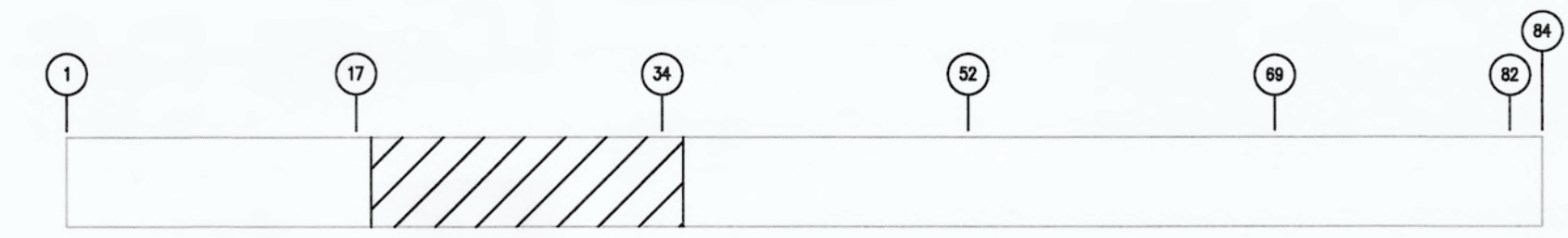
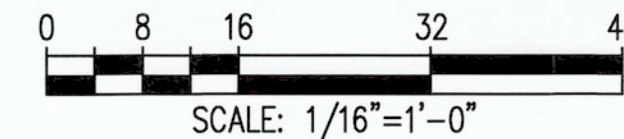
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- EXIST POWER VAULT
- EXIST WATER VAULT
- EXIST ELECTRICAL CONDUITS. SEE REFERENCE DRAWINGS FOR MATERIAL, SIZE, AND NUMBER OF CONDUITS
- EXIST WATER LINE. SEE REFERENCE DRAWINGS FOR MATERIAL AND SIZE



DEMOLITION PLAN

SCALE: 1/16" = 1'-0"



KEY PLAN

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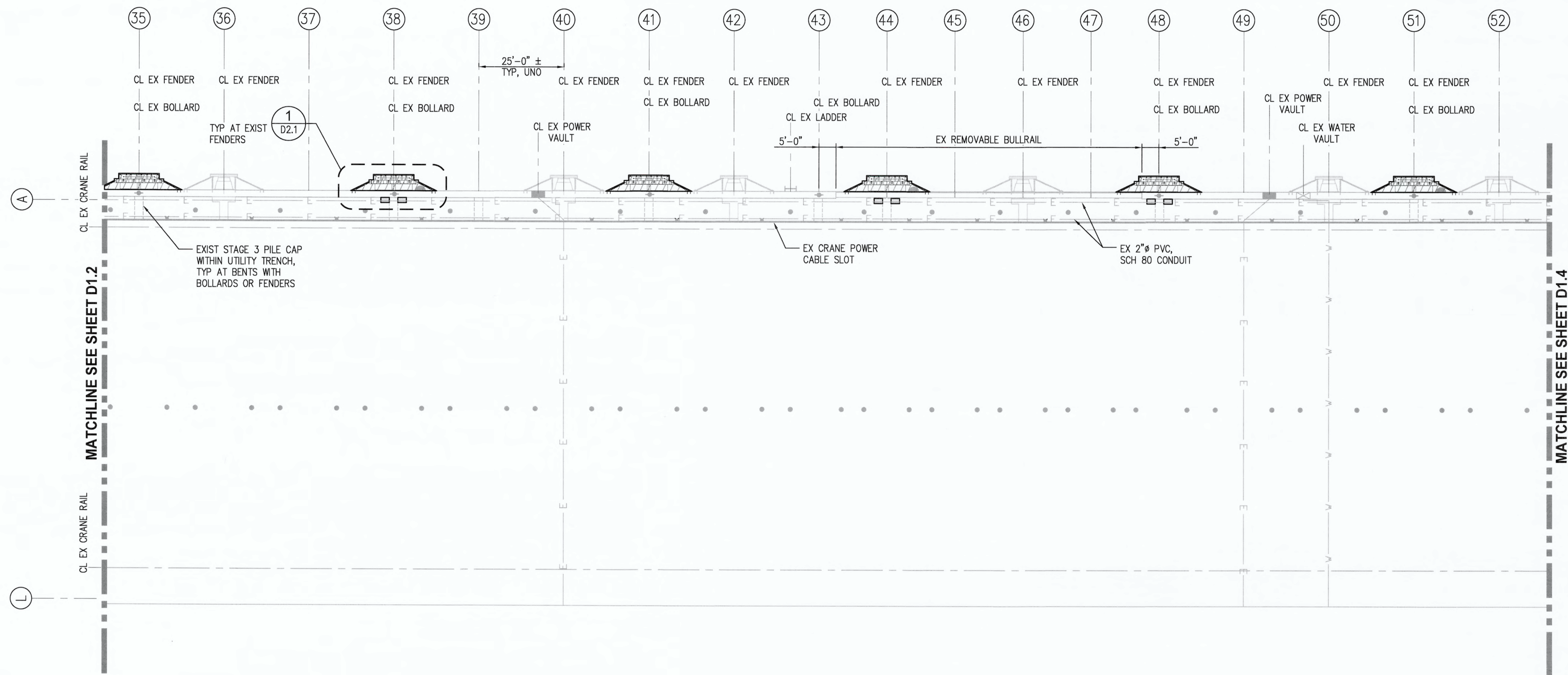
 2407 North 31st Street, Suite 100 Tacoma, Washington 98407 (253) 396-0350 Fax (253) 396-0162	 PORT OF TACOMA 1000 COMMERCIAL AVENUE, TACOMA, WA 98402	2025 	APPROVED: _____ TA# 05/04/2022 CHECKED BY: TAD DIRECTOR ENGR. DATE: gmachuca May 05, 2022 PRINTED BY: gmachuca PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98421	DATE: _____ BY: _____ REVISION: _____ APPR: _____
	WASHINGTON UNITED TERMINAL FENDER SYSTEM REPLACEMENT COMPLETION SHEET 2			SECTION: 35 RANGE: 03E TOWNSHIP: 21N DAT-HRZ: WA83-SF M. ID: 201107.02 PARCEL: 25 DRAWING SCALE: AS NOTED

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BINDING EDGE

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BLAIR WATERWAY

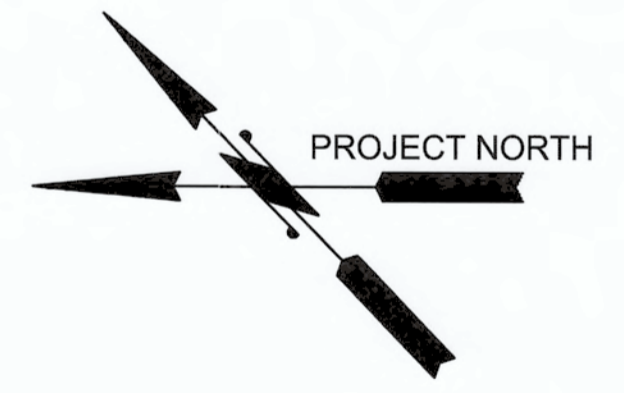


MATCHLINE SEE SHEET D1.2

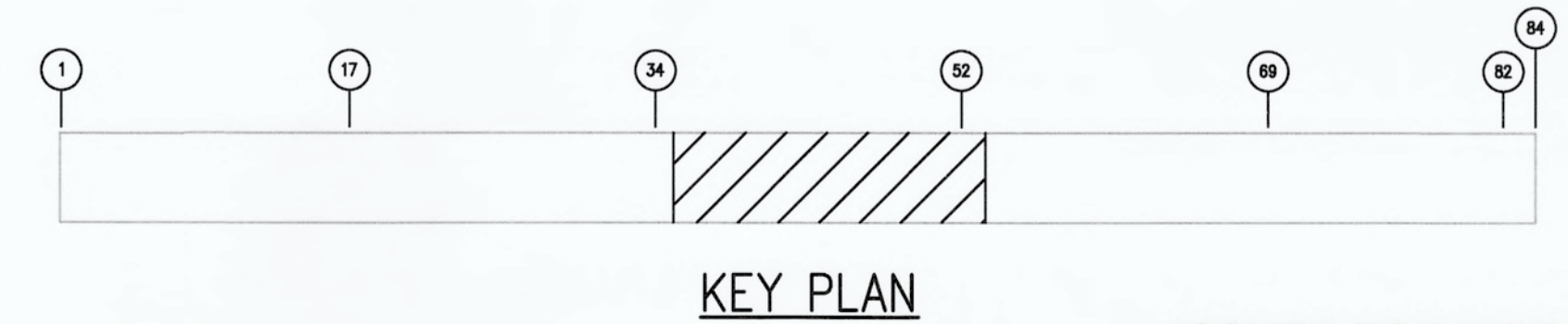
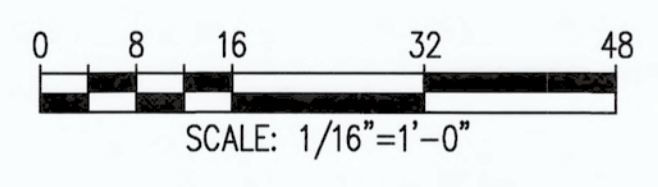
MATCHLINE SEE SHEET D1.4

LEGEND:

- EXIST FENDER SYSTEM TO BE DEMOLISHED, SEE D2.1 (27 LOCATIONS)
- DEMO FOR TENSION CHAIN ANCHORAGE CONNECTION
- EXIST BOLLARD
- EXIST CRANE STOP
- EXIST DECK DRAIN
- EXIST CABLE SLOT DRAIN
- EXISTING FENDER SYSTEM TO REMAIN
- EXIST PIN SOCKET W/2"Ø DRAIN
- EXIST LIFE RING
- EXIST POWER VAULT
- EXIST WATER VAULT
- EXIST ELECTRICAL CONDUITS. SEE REFERENCE DRAWINGS FOR MATERIAL, SIZE, AND NUMBER OF CONDUITS
- EXIST WATER LINE. SEE REFERENCE DRAWINGS FOR MATERIAL AND SIZE



DEMOLITION PLAN
SCALE: 1/16" = 1'-0"

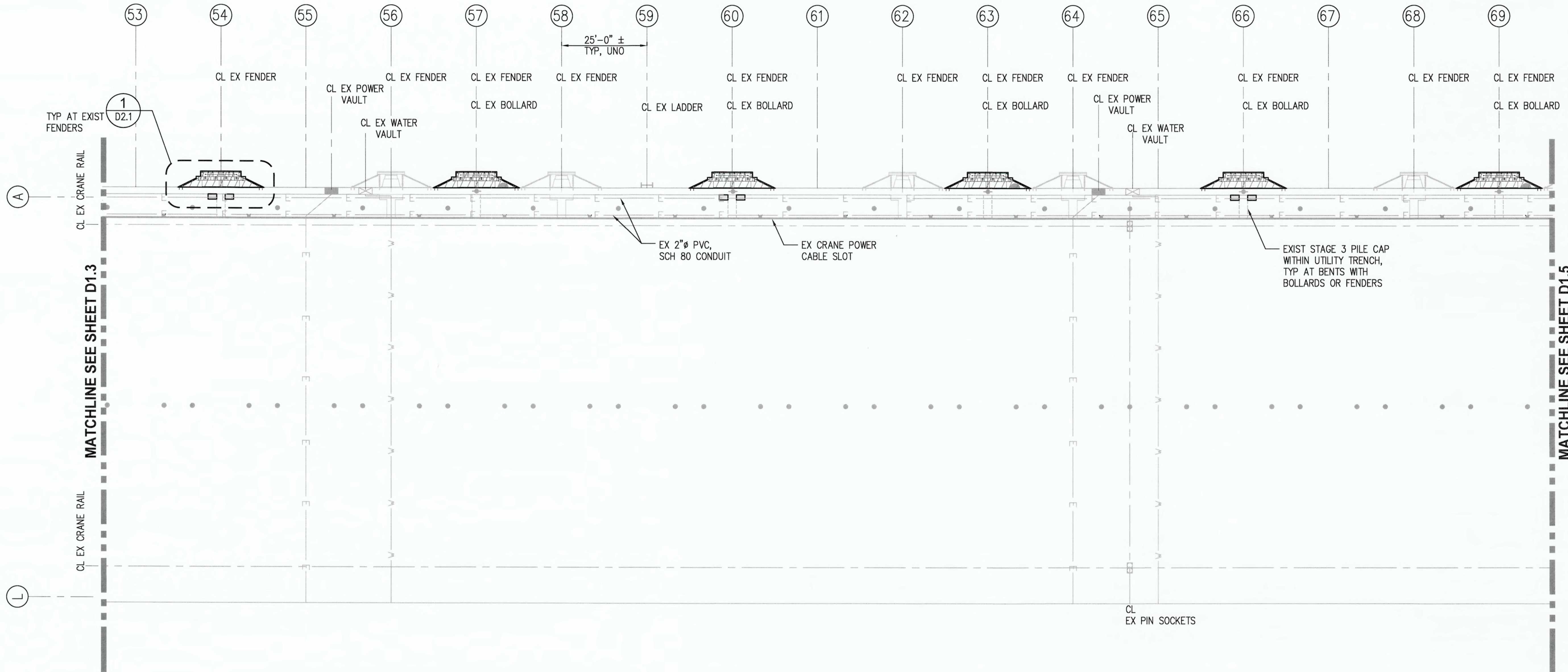


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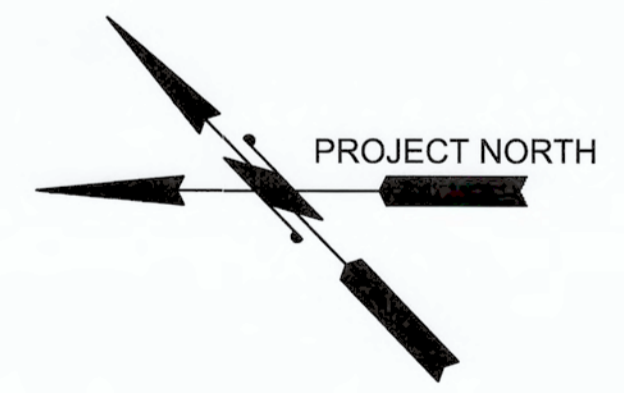
 2407 North 31st Street, Suite 100 Tacoma, Washington 98507 (253) 336-0250 Fax (253) 336-0162		APPROVED: TAD DIRECTOR ENGR. DATE: 05/04/2022	CHECKED BY: TAD DATE: 05/04/2022	TA# 05/04/2022 DATE: 05/04/2022
		PRINTED BY: gmatthuca DATE: May 05, 2022 PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98421	MARK: REVISION: BY: DATE:	APPR: DATE:
WASHINGTON UNITED TERMINAL FENDER SYSTEM REPLACEMENT COMPLETION SHEET 3		RANGE: 03E SECTION: 35 TOWNSHIP: 21N DAT-HRZ: WA83-SF VERT: MLLW 19'18" @ TIDE 22, 1933 PARCEL: 25 DRAWING SCALE: AS NOTED		6649 D1.3 07 OF 18
CONT/CONS: 071678 M. ID: 201107.02 PHASE: ISSUED FOR BIDS		THIS DRAWING IS THE PROPERTY OF THE PORT OF TACOMA AND SHALL NOT BE USED ON OTHER WORK, DISCLOSED, COPIED, IN WHOLE OR IN PART, WITHOUT WRITTEN PERMISSION		

BLAIR WATERWAY

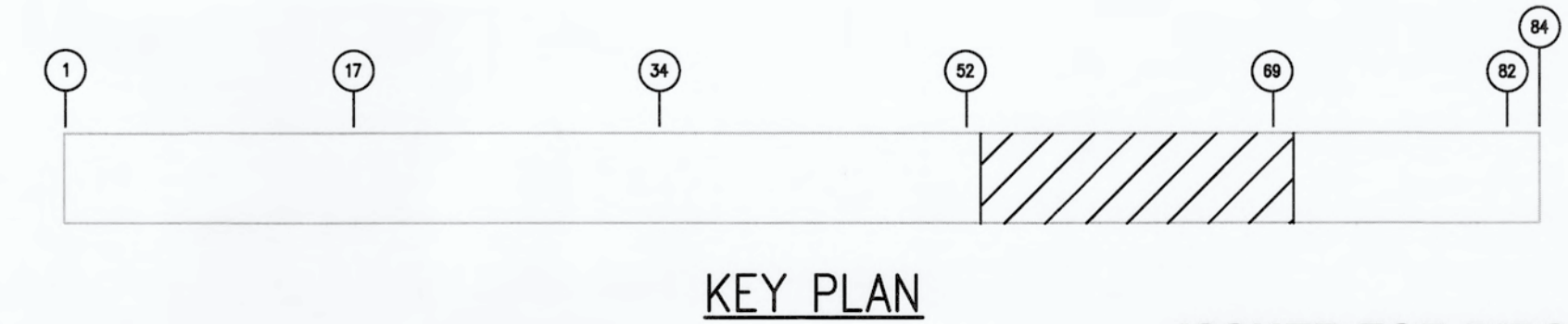
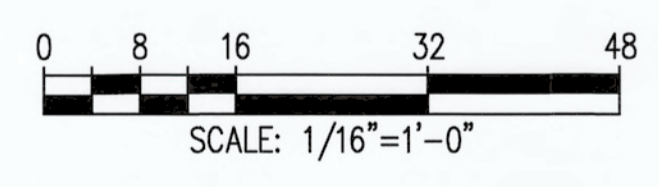


LEGEND:

- EXIST FENDER SYSTEM TO BE DEMOLISHED, SEE D2.1 (27 LOCATIONS)
- DEMO FOR TENSION CHAIN ANCHORAGE CONNECTION
- EXIST BOLLARD
- EXIST CRANE STOP
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- EXISTING FENDER SYSTEM TO REMAIN
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- EXIST POWER VAULT
- EXIST WATER VAULT
- EXIST ELECTRICAL CONDUITS. SEE REFERENCE DRAWINGS FOR MATERIAL, SIZE, AND NUMBER OF CONDUITS
- EXIST WATER LINE. SEE REFERENCE DRAWINGS FOR MATERIAL AND SIZE



DEMOLITION PLAN
SCALE: 1/16" = 1'-0"



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PRINTED BY:	ONE SITCUM PLAZA	PORT ADDRESS:	ONE SITCUM PLAZA	TACOMA, WA 98421

**WASHINGTON UNITED TERMINAL
FENDER SYSTEM REPLACEMENT COMPLETION**

DEMOLITION PLAN
SHEET 4

6649

D1.4
08 OF 18

CONT/CONS: 071678
M. ID: 201107.02
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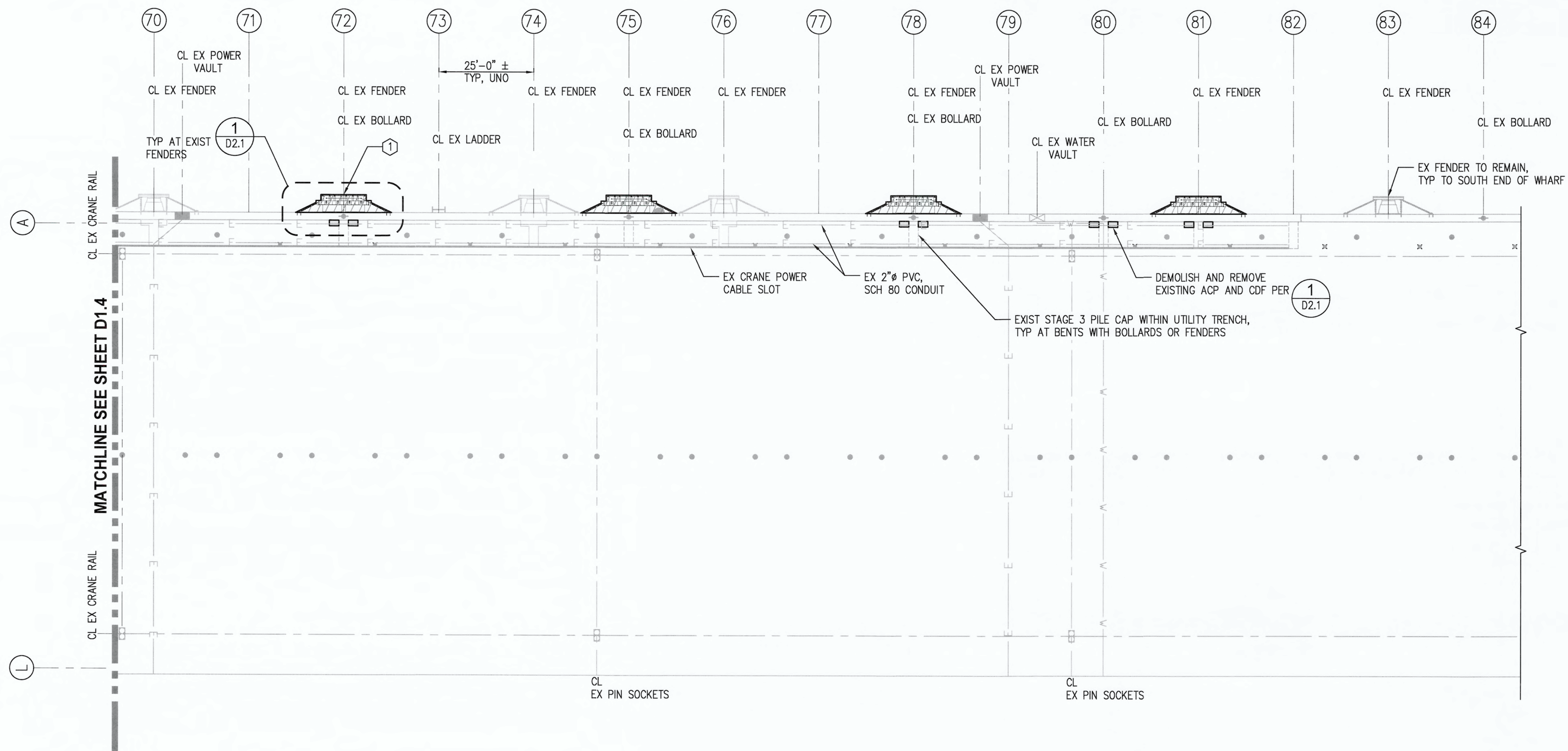
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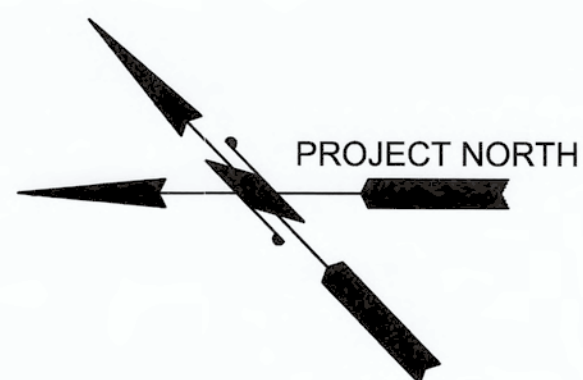
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BLAIR WATERWAY



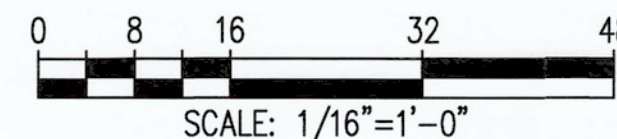
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- DEMO FOR TENSION CHAIN ANCHORAGE CONNECTION
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- EXIST CRANE STOP
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- EXIST WATER LINE. SEE REFERENCE DRAWINGS FOR MATERIAL AND SIZE



DEMOLITION PLAN

SCALE: 1/16" = 1'-0"



KEY PLAN

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6649

08

OF 18

D1.5

WASHINGTON UNITED TERMINAL

FENDER SYSTEM REPLACEMENT COMPLETION

DEMOLITION PLAN

SHEET 5

RANGE: 03E

TOWNSHIP: 21N

SECTION: 35

DATE: 201107.02

VERT: MLLW 19.1' @ TIDE 22 1933

PARCEL: 25

DRAWING SCALE: AS NOTED

PHASE: ISSUED FOR BIDS

APPROVED:

TAH

CHECKED BY

DATE

TAD

05/04/2022

PROJ. ENGR

DATE

DIRECTOR ENG. DATE

gmdchucco

May 05, 2022

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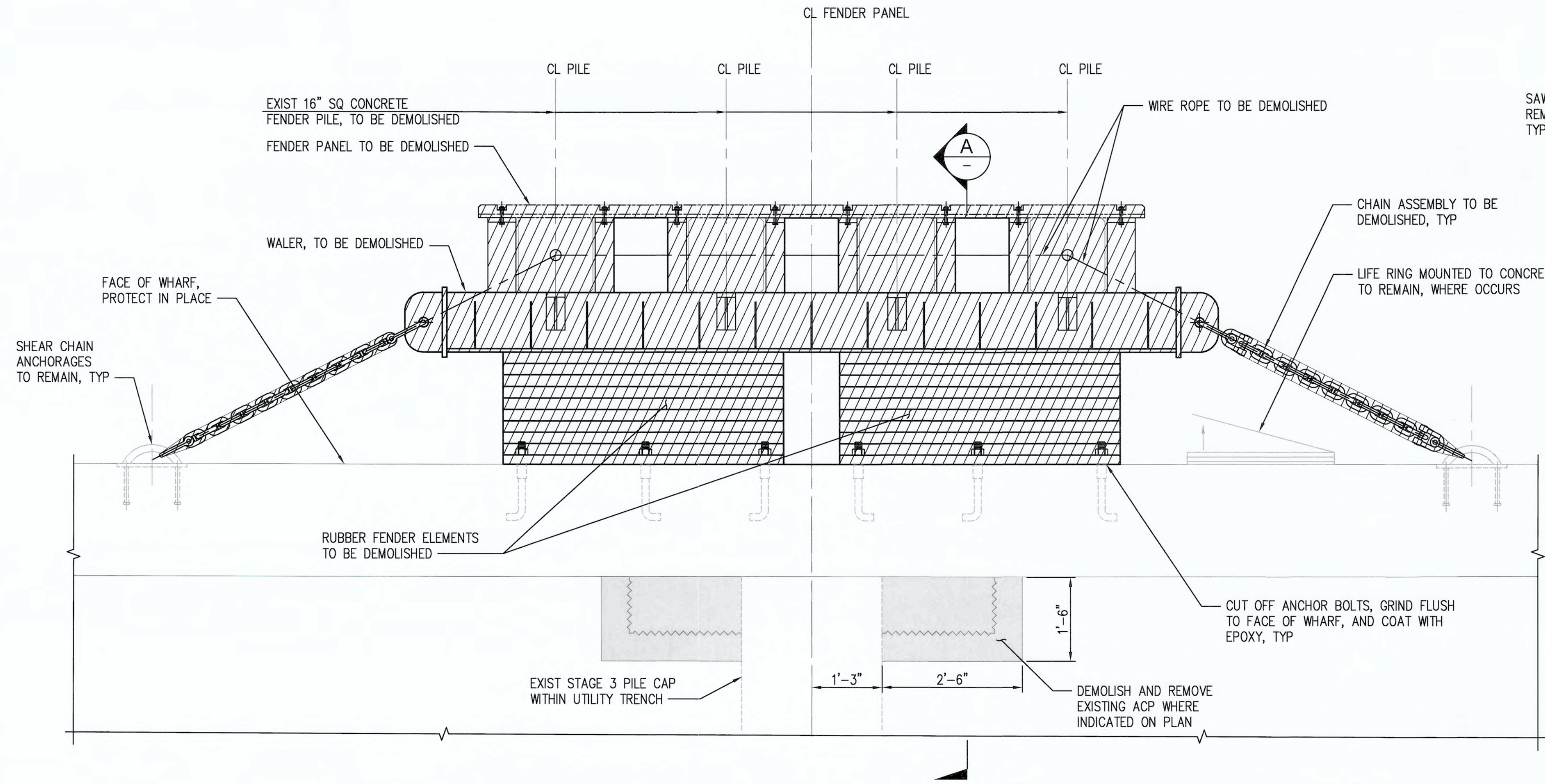
DATE:



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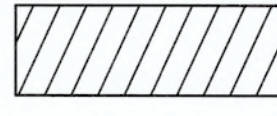




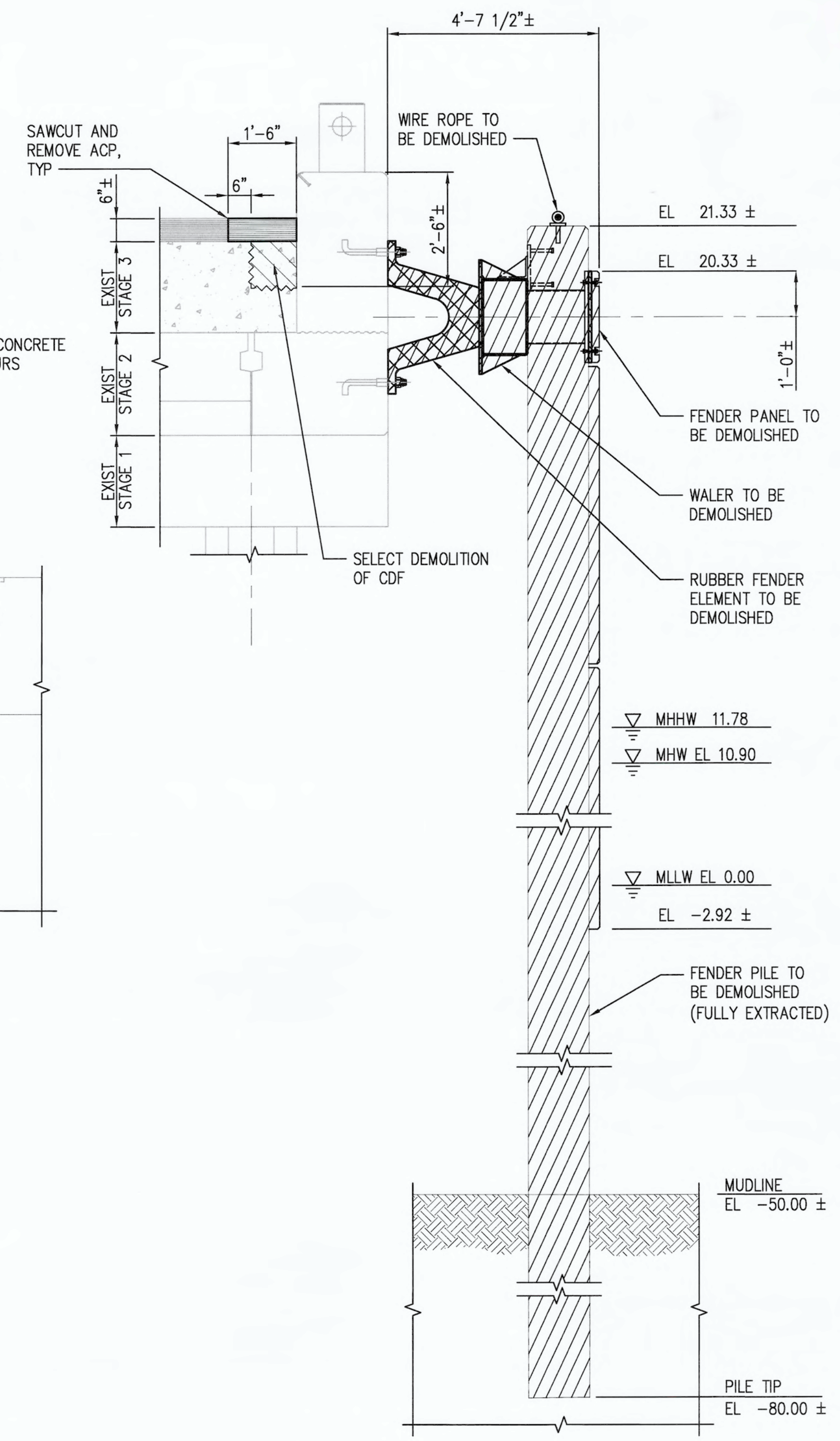
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1 PLAN - TYPICAL FENDER DEMOLITION
 D1.2, D1.3, D1.4, D1.5 SCALE: 3/4" = 1'-0"

LEGEND:

-  DEMOLISH AND REMOVE EXISTING STRUCTURE AND APPURTENANCES
-  DEMOLISH AND REMOVE EXIST ACP
-  DEMOLISH AND REMOVE EXIST CDF



A SECTION - TYPICAL FENDER DEMOLITION
 SCALE: 1/2" = 1'-0"

 2407 North 31st Street, Suite 100 Tacoma, WA 98407 (253) 396-0150 Fax (253) 396-0152 P.O. BOX 1037 TACOMA, WA 98401 (253)396-0441	DATE:
	APPR:
 2407 North 31st Street, Suite 100 Tacoma, WA 98407 (253) 396-0150 Fax (253) 396-0152	BY:
	REVISION:
	MARK:
	DATE:
WASHINGTON UNITED TERMINAL FENDER SYSTEM REPLACEMENT COMPLETION SHEET 1 DEMOLITION SECTIONS AND DETAILS	CHECKED BY: TAD DATE: 05/04/2022 DIRECTOR ENGR. DATE: gmachuca May 05, 2022 PRINTED BY: gmachuca PORT ADDRESS: ONE SITCOM PLAZA TACOMA, WA 98421
6649 D2.1 10 OF 18	TOWNSHIP: 21N RANGE: 03E SECTION: 35 DAT-HRZ: WAB3-SF M. ID: 201107.02 PHASE: ISSUED FOR BIDS

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GENERAL

- THESE NOTES CONTAIN GENERAL INFORMATION AND ARE NOT COMPLETE FOR CONSTRUCTION PURPOSES. CONTRACTOR SHALL VERIFY INFORMATION GIVEN HERE WITH SPECIFICATIONS AND OTHER DOCUMENTS AND BRING ANY CONFLICTS TO THE ATTENTION OF THE PORT BEFORE BEGINNING AFFECTED WORK. THE ENGINEER WILL RESOLVE ANY SUCH CONFLICT.
- ALL DIMENSIONS AND DETAILS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO FABRICATION AND CONSTRUCTION.
- VERTICAL DATUM: MLLW = 0.00'

CODES AND STANDARDS

- ALL METHODS AND MATERIALS SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE, 2015 EDITION.
- REINFORCED CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".

DESIGN CRITERIA

- VESSELS
 - A. CONTAINER SHIP 1
 LENGTH OVERALL (LOA): 1300 FEET
 BEAM: 204 FEET
 DRAFT: 48 FEET
 DISPLACEMENT: 220,000 LT
 - B. CONTAINER SHIP 2
 LENGTH OVERALL (LOA): 902 FEET
 BEAM: 131 FEET
 DRAFT: 40 FEET
 DISPLACEMENT: 90,000 LT
 - C. RO/RO VESSEL
 LENGTH OVERALL (LOA): 790 FEET
 BEAM: 110 FEET
 DRAFT: 38 FEET
 DISPLACEMENT: 60,000 LT
- BERTHING LOADS
 - A. CONTAINER SHIP
 APPROACH VELOCITY: 1.5 KNOTS (2.53 FT/S)
 APPROACH ANGLE: 6 DEGREES
 PERPENDICULAR VELOCITY: 0.16 KNOT (0.26 FT/S)
 - B. RO/RO VESSEL
 APPROACH VELOCITY: 1.36 KNOT (2.3 FT/S)
 APPROACH ANGLE: 10 DEGREES
 PERPENDICULAR VELOCITY: 0.24 KNOT (0.4 FT/S)
- FENDER REQUIREMENTS
 - A. MINIMUM BERTHING ENERGY = 490 KIP-FT
 - B. MAXIMUM BERTHING REACTION = 320 KIPS

REINFORCED CONCRETE

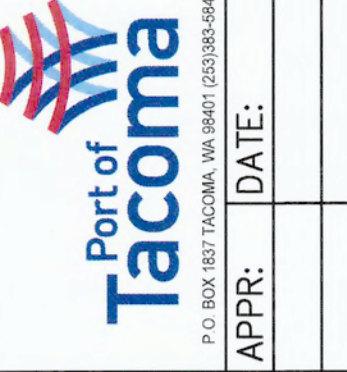
- REINFORCING STEEL
 - A. ALL REINFORCING STEEL SHALL BE DEFORMED STEEL BARS CONFORMING TO ASTM A 615 - GRADE 60, EXCEPT AS NOTED.
 - B. SPACE BARS EQUALLY BETWEEN DIMENSIONED LIMITS, UNLESS NOTED OTHERWISE.
 - C. REINFORCING SHALL BE SUPPORTED AS SPECIFIED BY THE PROJECT SPECIFICATIONS AND THE CRSI "MANUAL OF STANDARD PRACTICE," (MSP). REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH "ACI DETAILING MANUAL," ACI SP-66.
- CAST-IN-PLACE CONCRETE
 - A. MINIMUM 7 DAY COMPRESSIVE STRENGTH 4000 PSI
- CONSTRUCTION JOINTS SHALL BE PROVIDED ONLY AS NOTED ON THE DRAWINGS AND AS SPECIFICALLY PERMITTED BY THE ENGINEER.
- CONCRETE MIX SHALL HAVE A MAXIMUM WATER CEMENT RATIO OF 0.40 UNLESS NOTED OTHERWISE.
- ALL CONCRETE SHALL BE AIR ENTRAINED WITH A TARGET OF 5% ± 1 1/2% UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS.

POST-INSTALLED ANCHORS

- POST-INSTALLED ANCHORS SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATION. SPECIAL INSPECTION IS REQUIRED FOR ALL POST-INSTALLED ANCHORS.
- POST-INSTALLED ANCHOR BOLTS WERE PROCURED BY PORT UNDER A PREVIOUS CONTRACT AND WILL BE SUPPLIED TO THE CONTRACTOR. REFER TO THE PROJECT MANUAL FOR A COMPLETE LIST AND DETAILS OF POST-INSTALLED ANCHOR BOLT COMPONENTS. CONTRACTOR SHALL VERIFY POST-INSTALLED ANCHOR BOLT COMPONENTS PRIOR TO CONSTRUCTION.
- HOLES FOR POST-INSTALLED ANCHORS MAY BE DRILLED BY HAMMER DRILL OR CORE DRILL.
- UNLESS NOTED OTHERWISE, EXISTING REINFORCING BARS SHALL NOT BE CUT WITHOUT PRIOR APPROVAL FROM THE PORT.
- CONTRACTOR SHALL UTILIZE GROUND-PENETRATING RADAR (GPR) METHODS TO FIELD VERIFY EXISTING REINFORCING BAR LOCATIONS PRIOR TO DRILLING.
- CONTRACTOR SHALL MARK THE SURFACE OF THE CONCRETE WITHIN THE IMMEDIATE SURROUNDING AREA OF PROPOSED ANCHORS WITH THE LOCATIONS OF ALL EXISTING REINFORCING BARS AND OBTAIN PORT APPROVAL PRIOR TO DRILLING.
- CONTRACTOR SHALL SUBMIT CERTIFICATION THAT GPR LOCATING PERSONNEL HAVE EXPERIENCE-BASED TRAINING THAT MEETS OR EXCEEDS THE GUIDELINES DETAILED IN AMERICAN SOCIETY OF NONDESTRUCTIVE TESTING (ASNT) DOCUMENT "RECOMMENDED PRACTICE SNT-TC-1A, PERSONNEL QUALIFICATION AND CERTIFICATION IN NONDESTRUCTIVE TESTING", LEVEL I.
- ACCEPTABLE ADHESIVES ARE HILTI HIT-RE 500 V3, SIMPSON SET-XP, OR FISCHER FIS EM PLUS 390 S. ICBO OR ICC REPORTS SHALL BE SUBMITTED FOR ALL ADHESIVE ANCHOR PRODUCTS.

INSPECTION

- INSPECTION WILL BE PERFORMED BY THE PORT.



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PRINTED BY: gmachuca May 05, 2022
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WASHINGTON UNITED TERMINAL
FENDER SYSTEM REPLACEMENT COMPLETION
STRUCTURAL NOTES

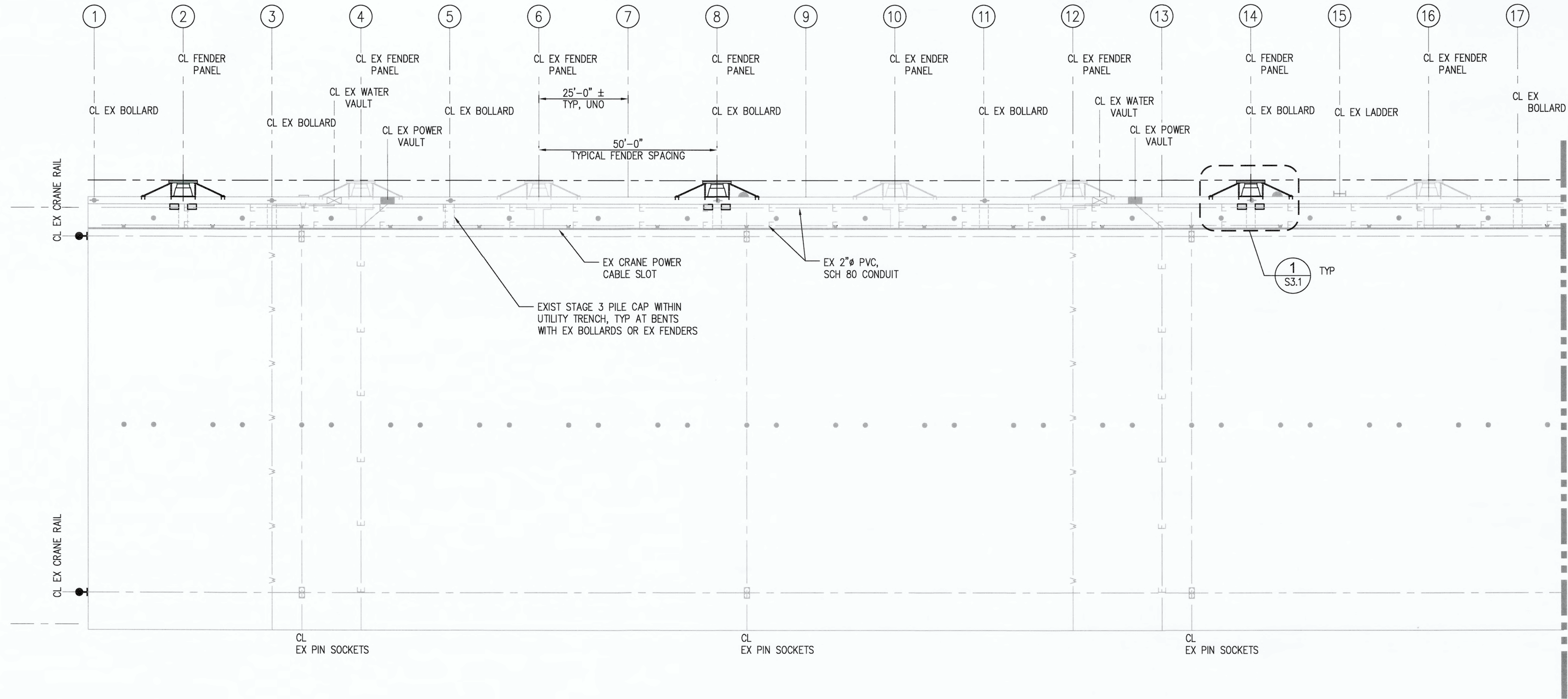
TOWNSHIP: 21N RANGE: 03E SECTION: 35
DATE-HRZ: WA83-SF VERT: MLLW 19.18' @ TIDE 22 1933
PARCEL: 25 DRAWING SCALE: AS NOTED

6649
S1.1
11 OF 18
CONT/CONS: 071678
M. ID: 201107.02
PHASE: ISSUED FOR BIDS

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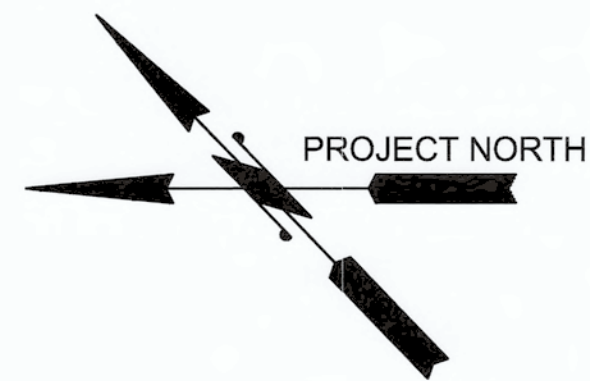
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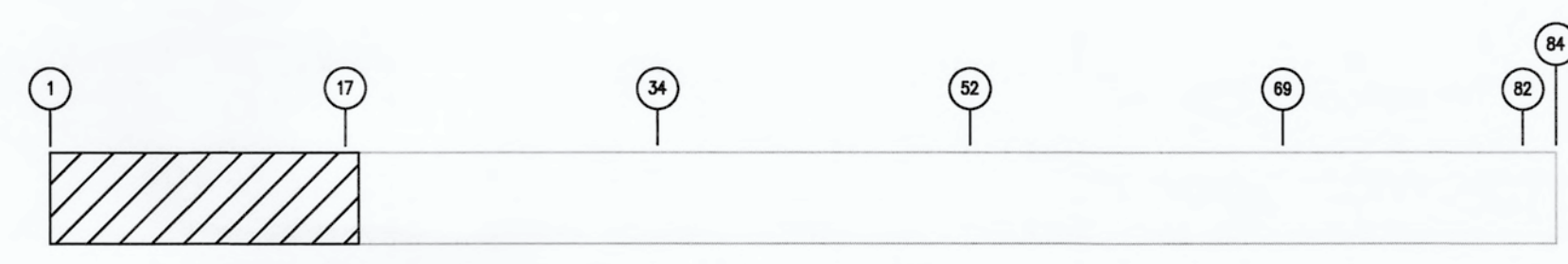
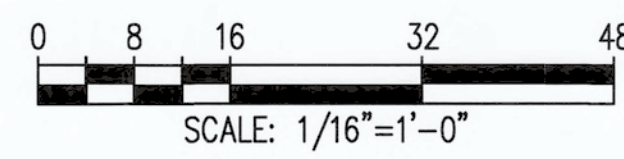
MATCHLINE SEE SHEET S2.2

LEGEND:

- FENDER SYSTEM TO BE INSTALLED WHERE SHOWN (16 LOCATIONS), SEE S3.1
- TENSION CHAIN ANCHORAGE CONNECTION
- EXIST BOLLARD
- EXIST CRANE STOP
- EXIST DECK DRAIN
- EXIST CABLE SLOT DRAIN
- EXIST LADDER
- EXIST FENDER SYSTEM TO REMAIN
- EXIST PIN SOCKET W/2"Ø DRAIN
- EXIST LIFE RING
- EXIST POWER VAULT
- EXIST WATER VAULT
- EXIST ELECTRICAL CONDUITS. SEE REFERENCE DRAWINGS FOR MATERIAL, SIZE, AND NUMBER OF CONDUITS
- EXIST WATER LINE. SEE REFERENCE DRAWINGS FOR MATERIAL AND SIZE



FENDER PLAN
SCALE: 1/16" = 1'-0"



KEY PLAN

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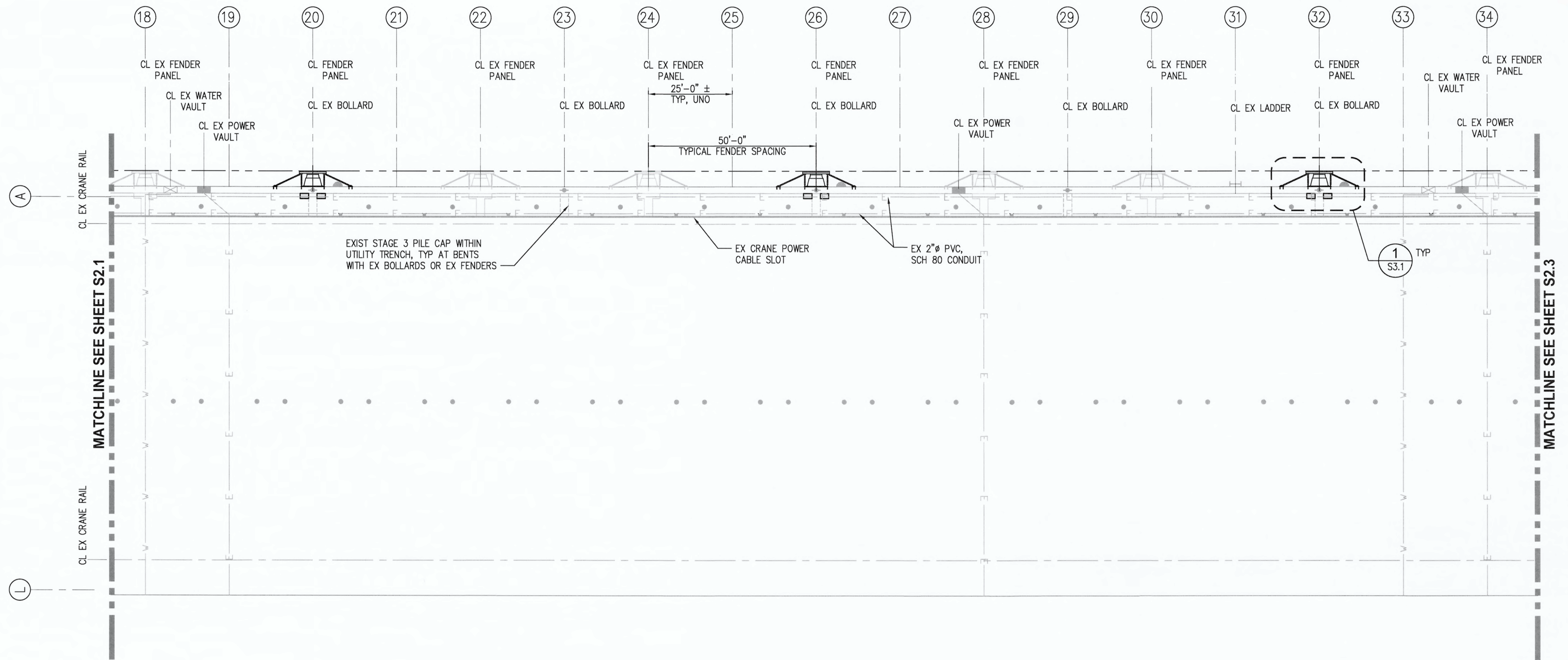


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TAD	05/04/2022
DIRECTOR ENGR. DATE	PROJ. ENGR. DATE
gmatucha	May 05, 2022
PRINTED BY:	PORT ADDRESS: ONE SITCOM PLAZA
	TACOMA, WA 98421

APPROVED:	
WASHINGTON UNITED TERMINAL FENDER SYSTEM REPLACEMENT COMPLETION SHEET 1	
TOWNSHIP: 21N	SECTION: 35
RANGE: 03E	VERT: MLLW 19.18' @ TIDE 22.1933
DATE: 20107.02	DRAWING SCALE: AS NOTED
PARCEL: 25	

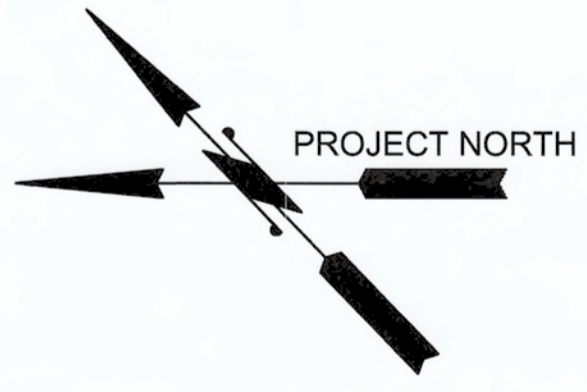
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12	OF 18
CONT/CONS: 071678	
M. ID: 20107.02	
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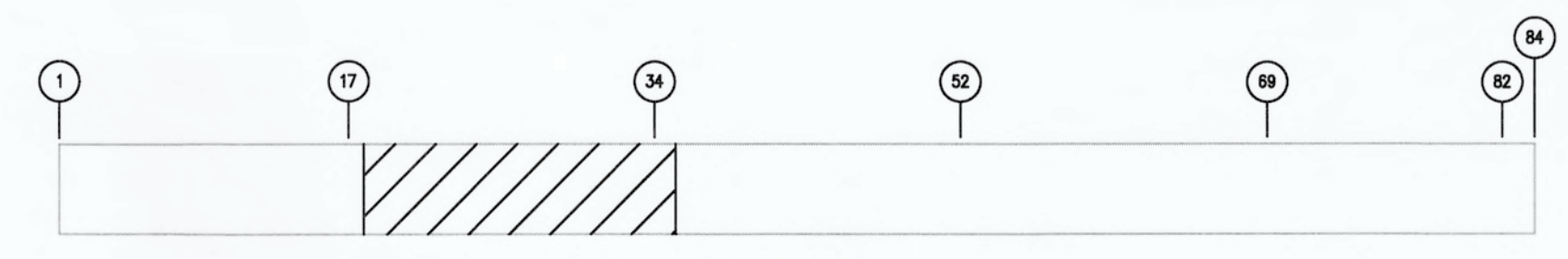
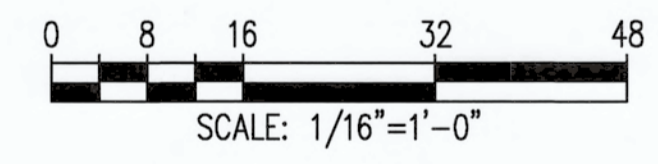


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- TENSION CHAIN ANCHORAGE CONNECTION
- EXIST BOLLARD
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FENDER PLAN
SCALE: 1/16" = 1'-0"



KEY PLAN

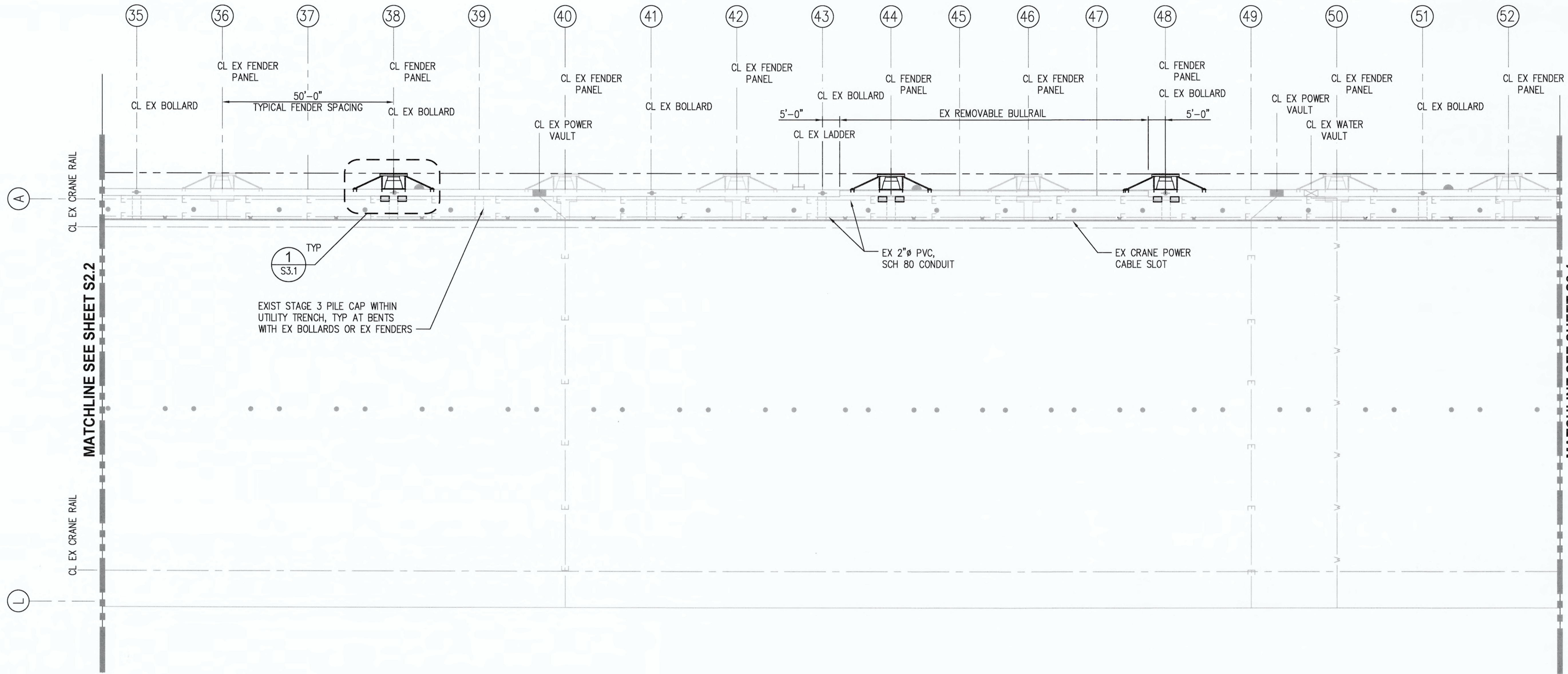
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		6649 S2.2 13 OF 18	WASHINGTON UNITED TERMINAL FENDER SYSTEM REPLACEMENT COMPLETION SHEET 2

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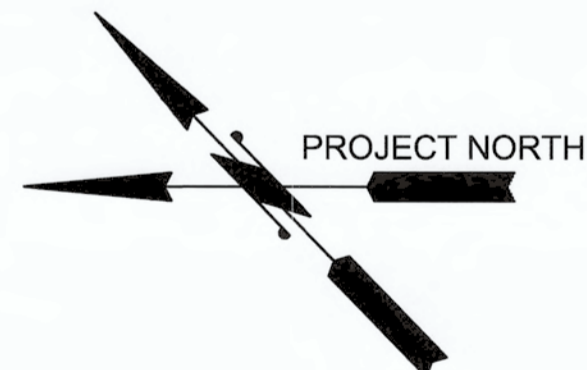


MATCHLINE SEE SHEET S2.2

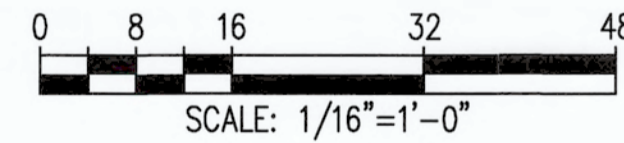
MATCHLINE SEE SHEET S2.4

1 TYP
S3.1

EXIST STAGE 3 PILE CAP WITHIN UTILITY TRENCH, TYP AT BENTS WITH EX BOLLARDS OR EX FENDERS

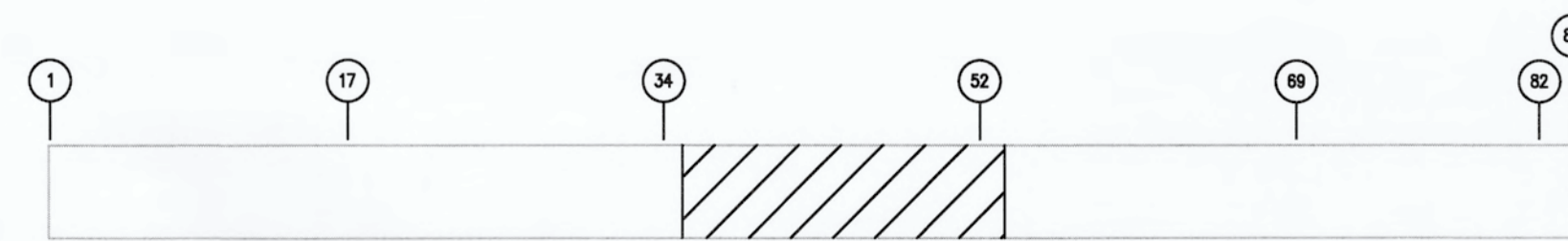


FENDER PLAN
SCALE: 1/16" = 1'-0"



LEGEND:

- | | | | |
|--|--|--|--|
| | FENDER SYSTEM TO BE INSTALLED WHERE SHOWN (16 LOCATIONS), SEE S3.1 | | EXIST PIN SOCKET W/2"Ø DRAIN |
| | TENSION CHAIN ANCHORAGE CONNECTION | | EXIST LIFE RING |
| | EXIST BOLLARD | | EXIST POWER VAULT |
| | EXIST CRANE STOP | | EXIST WATER VAULT |
| | EXIST DECK DRAIN | | EXIST ELECTRICAL CONDUITS. SEE REFERENCE DRAWINGS FOR MATERIAL, SIZE, AND NUMBER OF CONDUITS |
| | EXIST CABLE SLOT DRAIN | | EXIST WATER LINE. SEE REFERENCE DRAWINGS FOR MATERIAL AND SIZE |
| | EXIST LADDER | | |
| | EXIST FENDER SYSTEM TO REMAIN | | |



KEY PLAN

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S2.3
14 OF 18

CONT/CONS: 071678
M. ID: 201107.02
PHASE: ISSUED FOR BIDS

**WASHINGTON UNITED TERMINAL
FENDER SYSTEM REPLACEMENT COMPLETION
SHEET 3**

TOWNSHIP: 21N RANGE: 03E SECTION: 35
DATE-HRZ: WAB3-SF VERT: MLLW 19.18' @ TIDE 22 1933
PARCEL: 25 DRAWING SCALE: AS NOTED

APPROVED:

[Signature]
DIRECTOR ENGR. DATE: gmachuca May 05, 2022
PORT ADDRESS: ONE SITCUM PLAZA
TACOMA, WA 98421

TAH 05/04/2022

CHECKED BY: TAD
PROJ. ENGR. DATE: May 05, 2022



kpff

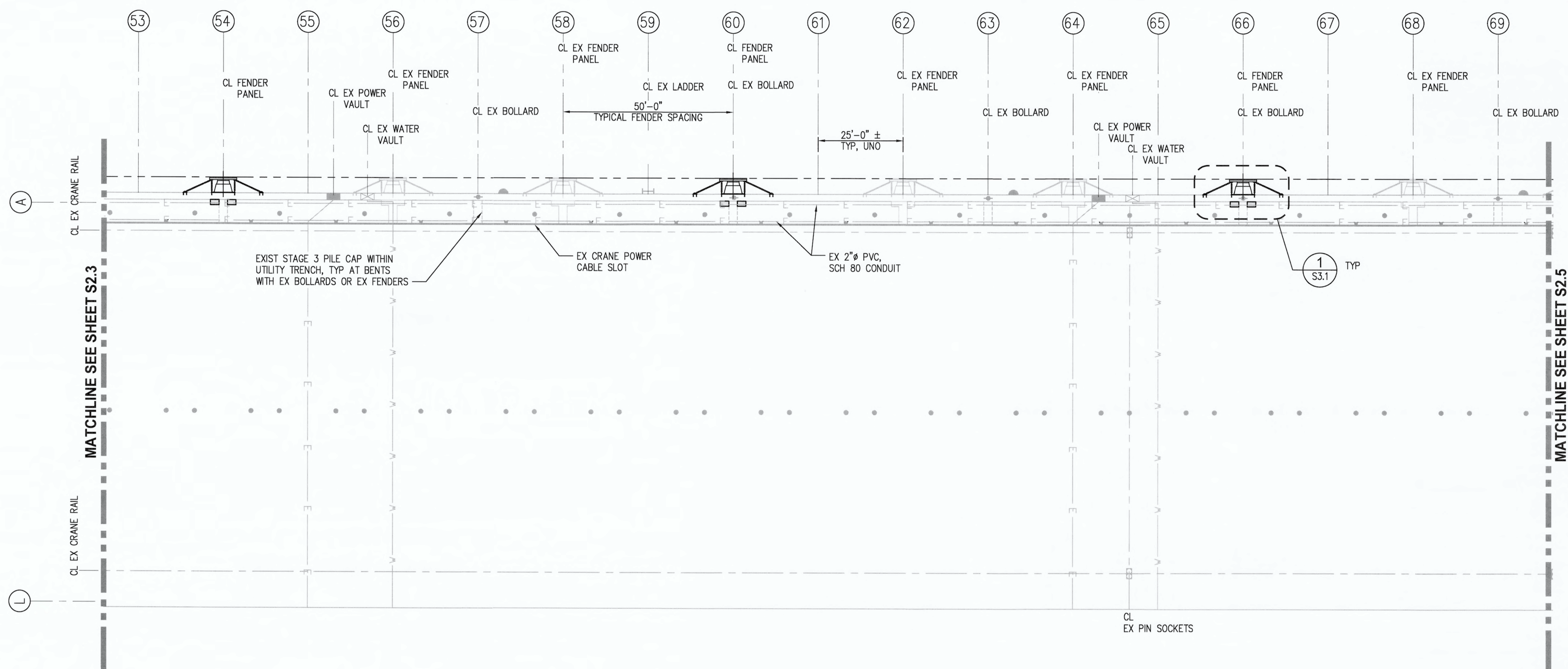
2407 North 31st Street, Suite 100
Tacoma, Washington 98406
(253) 536-0350 Fax (253) 536-0162

Part of Tacoma
P.O. BOX 1007 TACOMA, WA 98404

MARK: REVISION: BY: DATE: APPR: DATE:

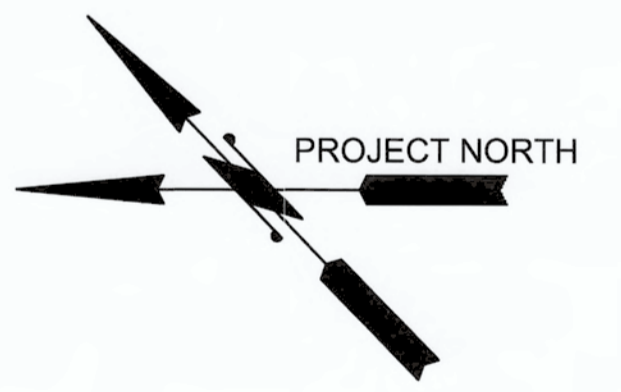
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PORT OF TACOMA FILE: N:\2022\2200004 WUT Fender completion\Drawings\Current\15_S2.4-DECK PLAN - SHEET 4

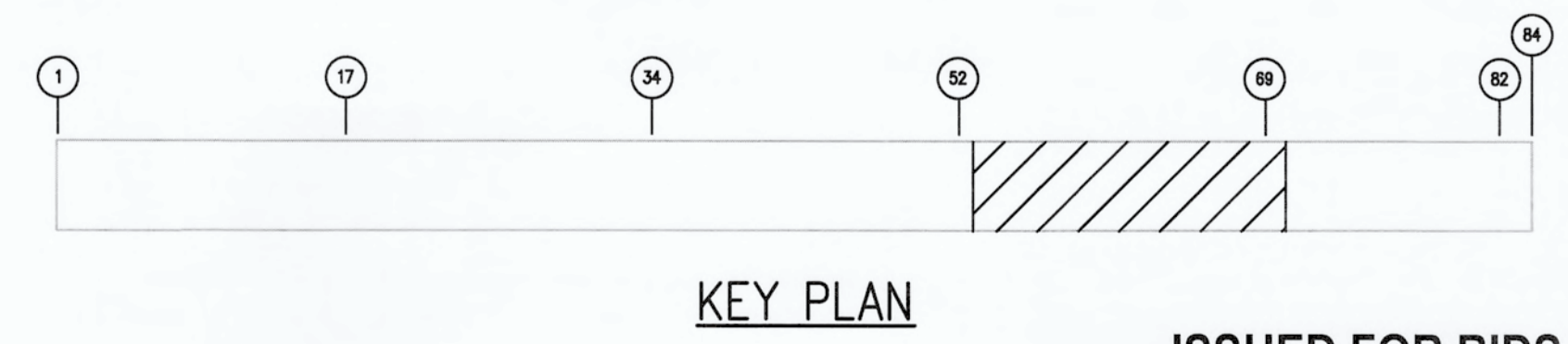
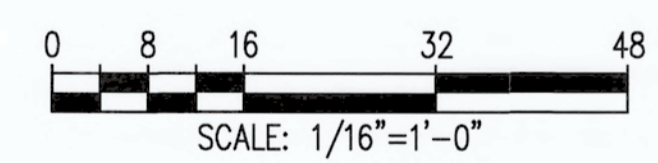


LEGEND:

- | | | | |
|--|--|--|--|
| | FENDER SYSTEM TO BE INSTALLED WHERE SHOWN (16 LOCATIONS), SEE S3.1 | | EXIST PIN SOCKET W/2"Ø DRAIN |
| | TENSION CHAIN ANCHORAGE CONNECTION | | EXIST LIFE RING |
| | EXIST BOLLARD | | EXIST POWER VAULT |
| | EXIST CRANE STOP | | EXIST WATER VAULT |
| | EXIST DECK DRAIN | | EXIST ELECTRICAL CONDUITS. SEE REFERENCE DRAWINGS FOR MATERIAL, SIZE, AND NUMBER OF CONDUITS |
| | EXIST CABLE SLOT DRAIN | | EXIST WATER LINE. SEE REFERENCE DRAWINGS FOR MATERIAL AND SIZE |
| | EXIST LADDER | | |
| | EXIST FENDER SYSTEM TO REMAIN | | |



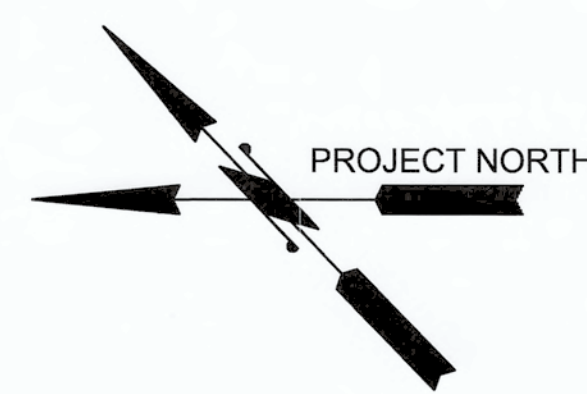
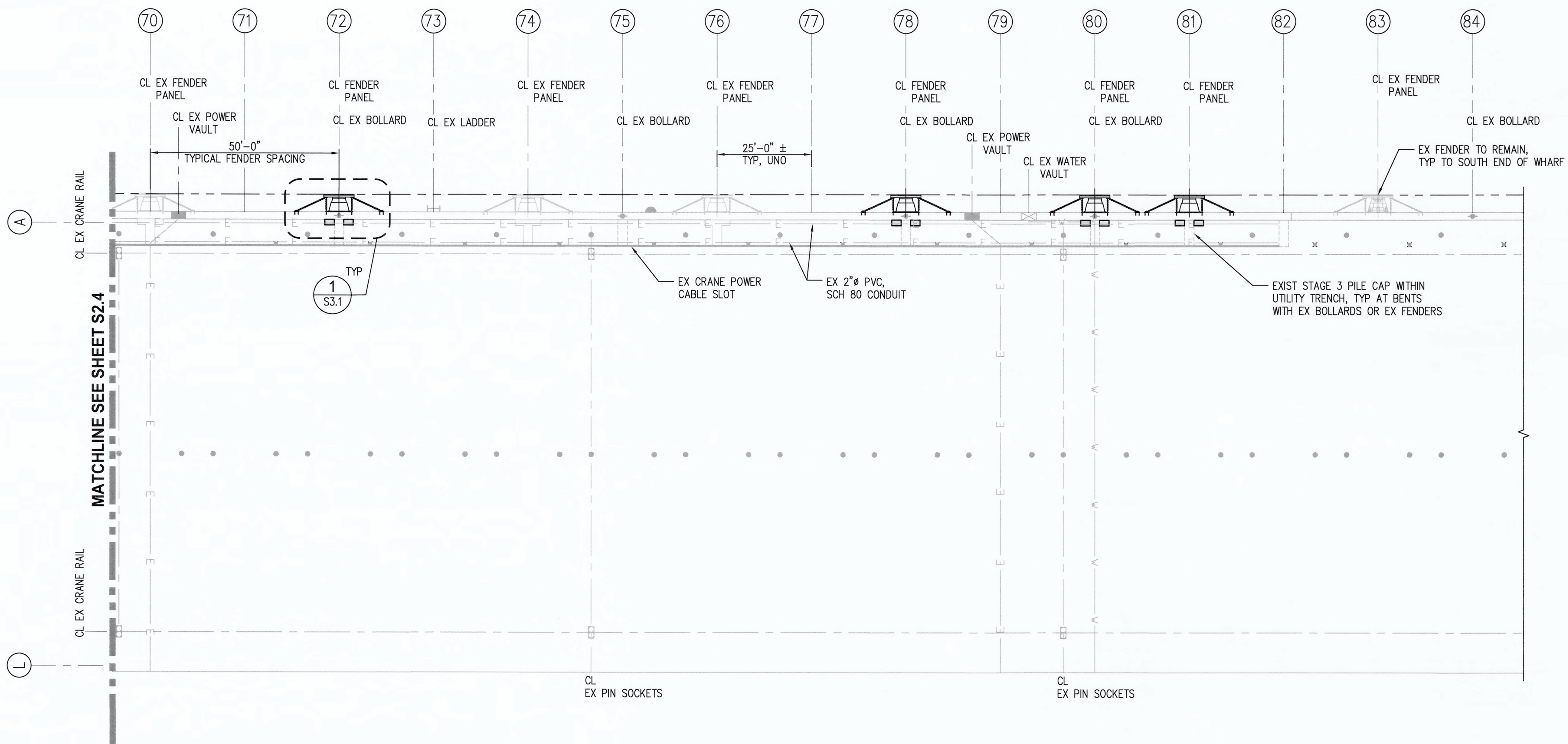
FENDER PLAN
SCALE: 1/16" = 1'-0"



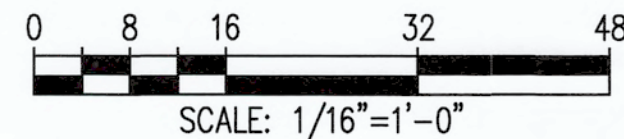
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 2407 North 31st Street, Suite 100 Tacoma, WA 98503 (253) 396-0150 Fax (253) 396-0152 P.O. BOX 1007 TACOMA, WA 98501-0300-0411	APPR: _____ DATE: _____
	BY: _____ DATE: _____
MARK: _____ REVISION: _____	BY: _____ DATE: _____
	TA# 05/04/2022 CHECKED BY: TAD DATE: 05/04/2022 PROJECT: WASHINGTON UNITED TERMINAL REPLACEMENT COMPLETION PROJECT ENGINEER: gmachuca DATE: May 05, 2022 PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98421
WASHINGTON UNITED TERMINAL FENDER SYSTEM REPLACEMENT COMPLETION SHEET 4	TOWNSHIP: 21N RANGE: 03E SECTION: 35 DAT-HRZ: WAB3-SF VERT: MLLW 19.18 @ TIDE 22 1933 DRAWING SCALE: AS NOTED
66-49 S2.4 15 OF 18	CONT/CONS: 071678 M. ID: 20107.02 PHASE: ISSUED FOR BIDS

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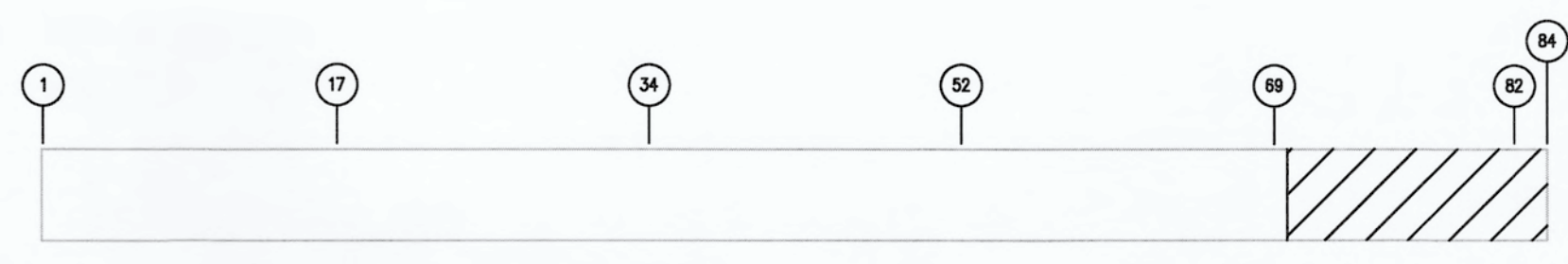


FENDER PLAN
SCALE: 1/16" = 1'-0"



LEGEND:

- | | | | |
|--|--|--|--|
| | FENDER SYSTEM TO BE INSTALLED WHERE SHOWN (16 LOCATIONS), SEE S3.1 | | EXIST PIN SOCKET W/2" Ø DRAIN |
| | TENSION CHAIN ANCHORAGE CONNECTION | | EXIST LIFE RING |
| | EXIST BOLLARD | | EXIST POWER VAULT |
| | EXIST CRANE STOP | | EXIST WATER VAULT |
| | EXIST DECK DRAIN | | EXIST ELECTRICAL CONDUITS. SEE REFERENCE DRAWINGS FOR MATERIAL, SIZE, AND NUMBER OF CONDUITS |
| | EXIST CABLE SLOT DRAIN | | EXIST WATER LINE. SEE REFERENCE DRAWINGS FOR MATERIAL AND SIZE |
| | EXIST LADDER | | |
| | EXIST FENDER SYSTEM TO REMAIN | | |

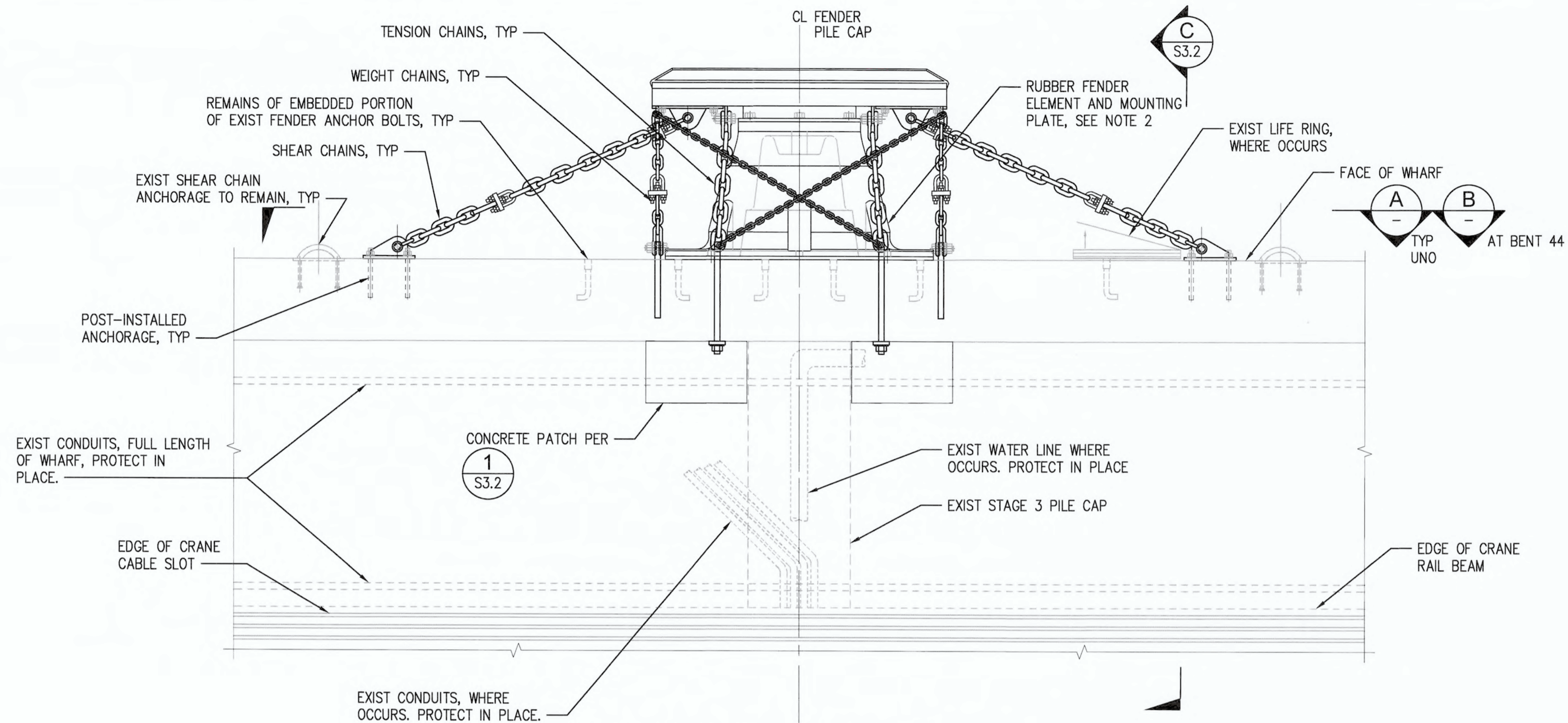


KEY PLAN

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 2407 North 31st Street, Suite 100 Tacoma, Washington 98407 (252) 396-0150 Fax (252) 396-0162			APPROVED: DIRECTOR ENGR. DATE: gmoachuca May 05, 2022 PRINTED BY: gmoachuca May 05, 2022 PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98421	TAH 05/04/2022 CHECKED BY TAD DATE 05/04/2022 PROJ. ENGR. DATE May 05, 2022 PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98421
	WASHINGTON UNITED TERMINAL FENDER SYSTEM REPLACEMENT COMPLETION FENDER PLAN SHEET 5	TOWNSHIP: 21N RANGE: 03E SECTION: 35 DAT-HRZ: WAB3-SF VERT: MLLW 19.18' @ TIDE 22 1933 PARCEL: 25 DRAWING SCALE: AS NOTED	THIS DRAWING IS THE PROPERTY OF THE PORT OF TACOMA AND SHALL NOT BE USED ON OTHER WORK, DISCLOSED, COPIED, IN WHOLE OR IN PART, WITHOUT WRITTEN PERMISSION	

6649
S2.5
 16 OF 18
 CONT/CONS: 071678
 M. ID: 201107.02
 PHASE: ISSUED FOR BIDS



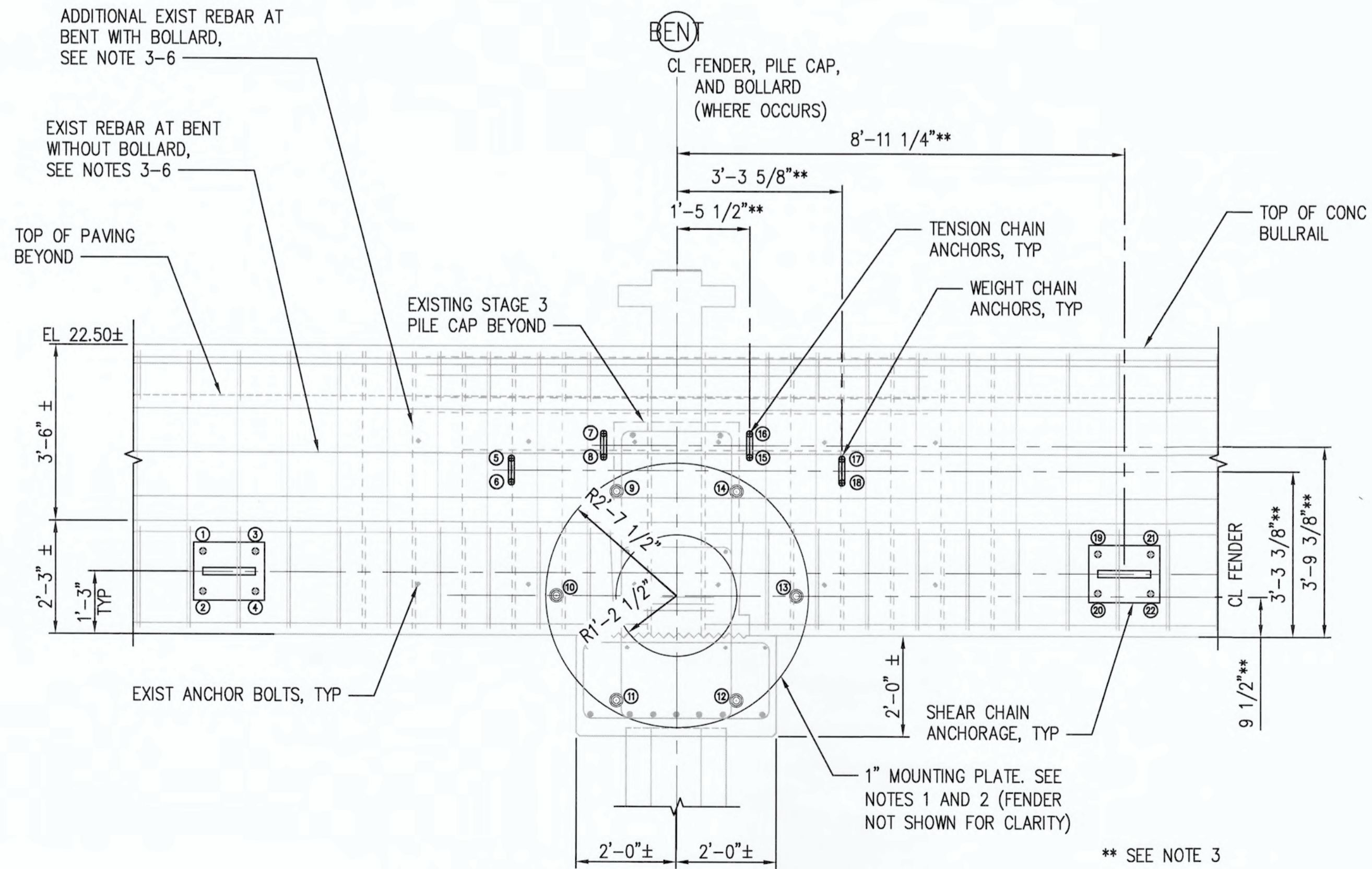
1 PLAN - TYPICAL FENDER
 S2.2, S2.3, S2.1, S2.4, S2.5 SCALE: 1/2" = 1'-0"

NOTES

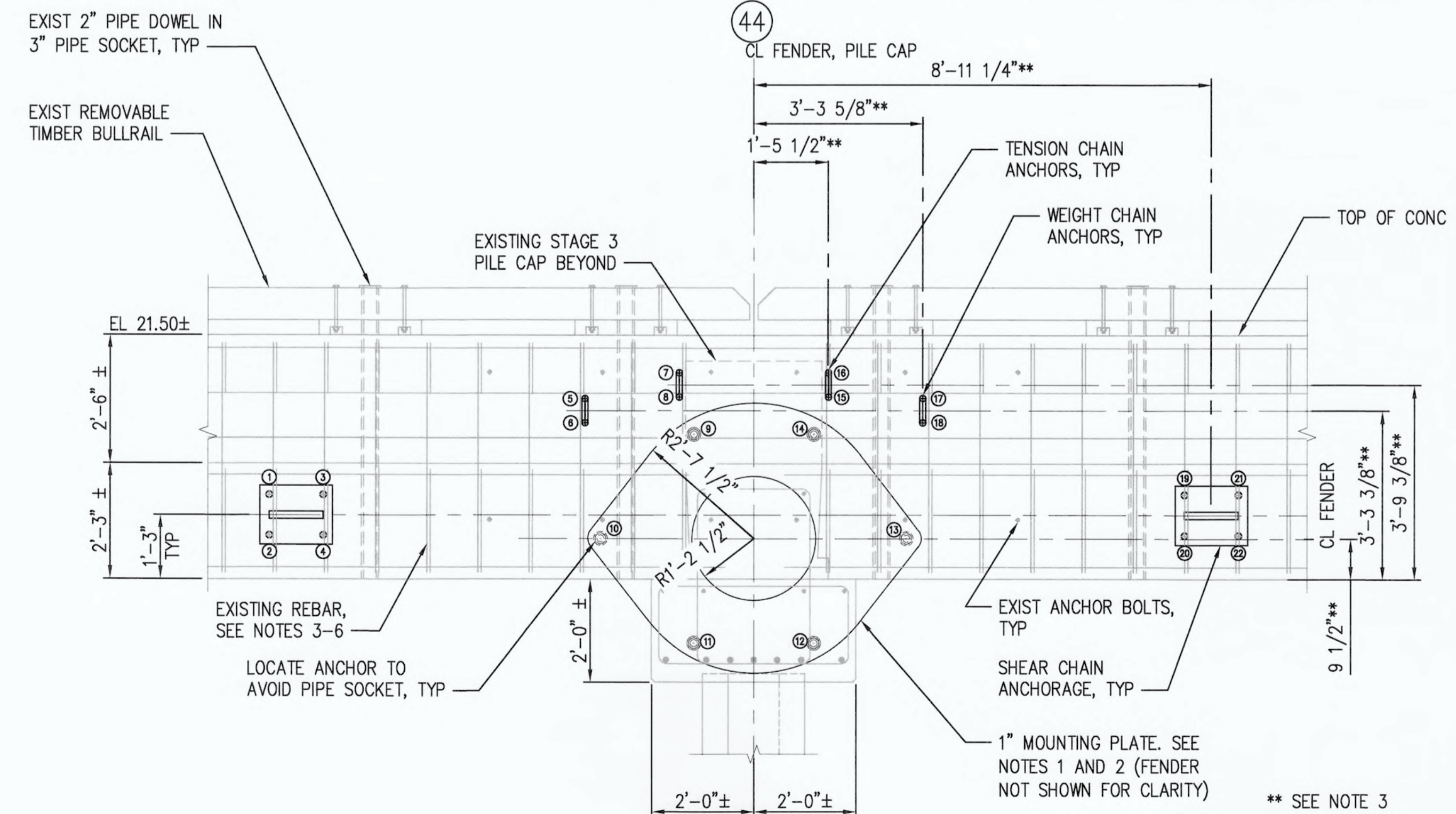
- ALL FENDER SYSTEM COMPONENTS WERE PROCURED BY THE PORT UNDER A PREVIOUS CONTRACT AND WILL BE SUPPLIED TO THE CONTRACTOR. REFER TO PROJECT MANUAL FOR A COMPLETE LIST AND DETAILS OF AVAILABLE FENDER SYSTEM COMPONENTS. FENDER SYSTEM SHOWN IS REPRESENTATIVE OF ACTUAL MATERIALS PROCURED BY THE PORT. CONTRACTOR SHALL VERIFY FENDER SYSTEM COMPONENTS AND DIMENSIONS PRIOR TO CONSTRUCTION.
- THE FACE OF CONCRETE SHALL BE GROUND-DOWN AND/OR BUILT UP TO PROVIDE UNIFORM BEARING BEHIND THE FENDER MOUNTING PLATE. THE CONTRACTOR SHALL GRIND DOWN HIGH POINTS TO BE FLUSH WITH SURROUNDING FACE OF WHARF. AFTER ANCHOR BOLTS ARE INSTALLED BUT PRIOR TO FASTENING THE FENDER TO FACE OF WHARF, A CEMENTITIOUS VERTICAL AND OVERHEAD REPAIR MORTAR (SIKAQUICK VOH OR APPROVED EQUAL) SHALL BE APPLIED TO FACE OF CONCRETE. MIXING, SURFACE PREPARATION AND APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. PLATES SHALL BE SET AND ANCHORS SHALL BE TIGHTENED WHILE MORTAR IS STILL PLASTIC.
- ** INDICATES DIMENSION SHALL BE ADJUSTED AS REQUIRED TO AVOID INTERFERENCE BETWEEN PROPOSED ANCHORS AND EXISTING REINFORCING BARS. REINFORCING BARS SHOWN AS EXISTING ARE PER PORT RECORD DRAWINGS. ACTUAL CONDITIONS MAY VARY. ANCHOR LOCATIONS SHOWN ARE APPROXIMATE. ACTUAL LOCATIONS SHALL BE DETERMINED BY CONTRACTOR. ANCHORS SHALL BE LOCATED SUCH THAT EXISTING REINFORCING BARS ARE NOT CUT EXCEPT AS NOTED BELOW.
- CONTRACTOR SHALL LOCATE AND MARK EXISTING REINFORCING BAR LOCATIONS PER POST-INSTALLED ANCHOR NOTES ON SHEET S1.1. IF THE LOCATIONS OF PROPOSED ANCHORS CONFLICT WITH EXISTING REINFORCING BARS, CONTRACTOR SHALL SHIFT PROPOSED ANCHOR GROUP LOCATIONS TO AVOID APPARENT CONFLICTS. ANCHOR LOCATIONS SHALL BE ADJUSTED AS GROUPS WITHIN THE LIMITS NOTED IN THE TABLE BELOW.

GROUP NO.	ANCHOR NO.	ALLOW. RANGE OF ADJUSTMENT	
		VERTICAL	HORIZONTAL
1	1-4	NONE	2" AWAY FROM CL 3" TOWARD CL
2	5 & 6	3/4" UP 2 1/4" DOWN	4" AWAY FROM CL 4" TOWARD CL
3	7-16	2" UP 2" DOWN	2" AWAY FROM CL 2" TOWARD CL
4	17 & 18	3/4" UP 2 1/4" DOWN	4" AWAY FROM CL 4" TOWARD CL
5	19-22	NONE	2" AWAY FROM CL 3" TOWARD CL

- IF APPARENT CONFLICTS BETWEEN EXISTING REINFORCING BARS AND PROPOSED ANCHORS CANNOT BE RESOLVED BY ADJUSTING ANCHOR LOCATIONS, THEN CONTRACTOR MAY CORE DRILL THROUGH EXISTING REINFORCING BARS AT THE FOLLOWING ANCHOR LOCATIONS PROVIDED THAT ADJACENT VERTICAL BARS ARE NOT CUT:
 A. ANCHORS 1-6, 9-14, 17-22
 B. ANCHORS 7, 8, 15, & 16 PROVIDED THAT THE ADDITIONAL HORIZONTAL REINFORCING CENTERED ON BOLLARD IS NOT CUT
- FOR ALL OTHER APPARENT CONFLICTS A REQUEST SHALL BE SUBMITTED TO THE PORT IN WRITING. THE REQUEST SHALL USE THE ESTABLISHED ANCHOR NUMBERING TO NOTE ALL ANCHOR BOLTS WITH APPARENT CONFLICTS. REQUEST SHALL INCLUDE DIRECTION AND APPROXIMATE DEPTH OF THE CONFLICTING BAR, AND INDICATE ANY OTHER ANCHOR LOCATIONS AT THE SAME BENT WHERE REINFORCING BARS WILL BE CUT.



A ELEVATION - TYPICAL FENDER
 SCALE: 1/2" = 1'-0"



B ELEVATION - FENDER AT BENT 44
 SCALE: 1/2" = 1'-0"

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APPROVED: _____

CHECKED BY: TAD

DATE: 05/04/2022

DATE: 05/04/2022

PROJ. ENGR. DATE

DATE: May 05, 2022

PRINTED BY: amachuca

PORT ADDRESS: ONE SITCOM PLAZA

TACOMA, WA 98421

WASHINGTON UNITED TERMINAL
FENDER SYSTEM REPLACEMENT COMPLETION

FENDER SYSTEM DETAILS
SHEET 1

TOWNSHIP: 21N RANGE: 03E SECTION: 35

MILW 19.18' @ TIDE 22 1933

DAT-HRZ: WA83-SF

PARCEL: 25

DRAWING SCALE: AS NOTED

6649

S3.1

17 OF 18

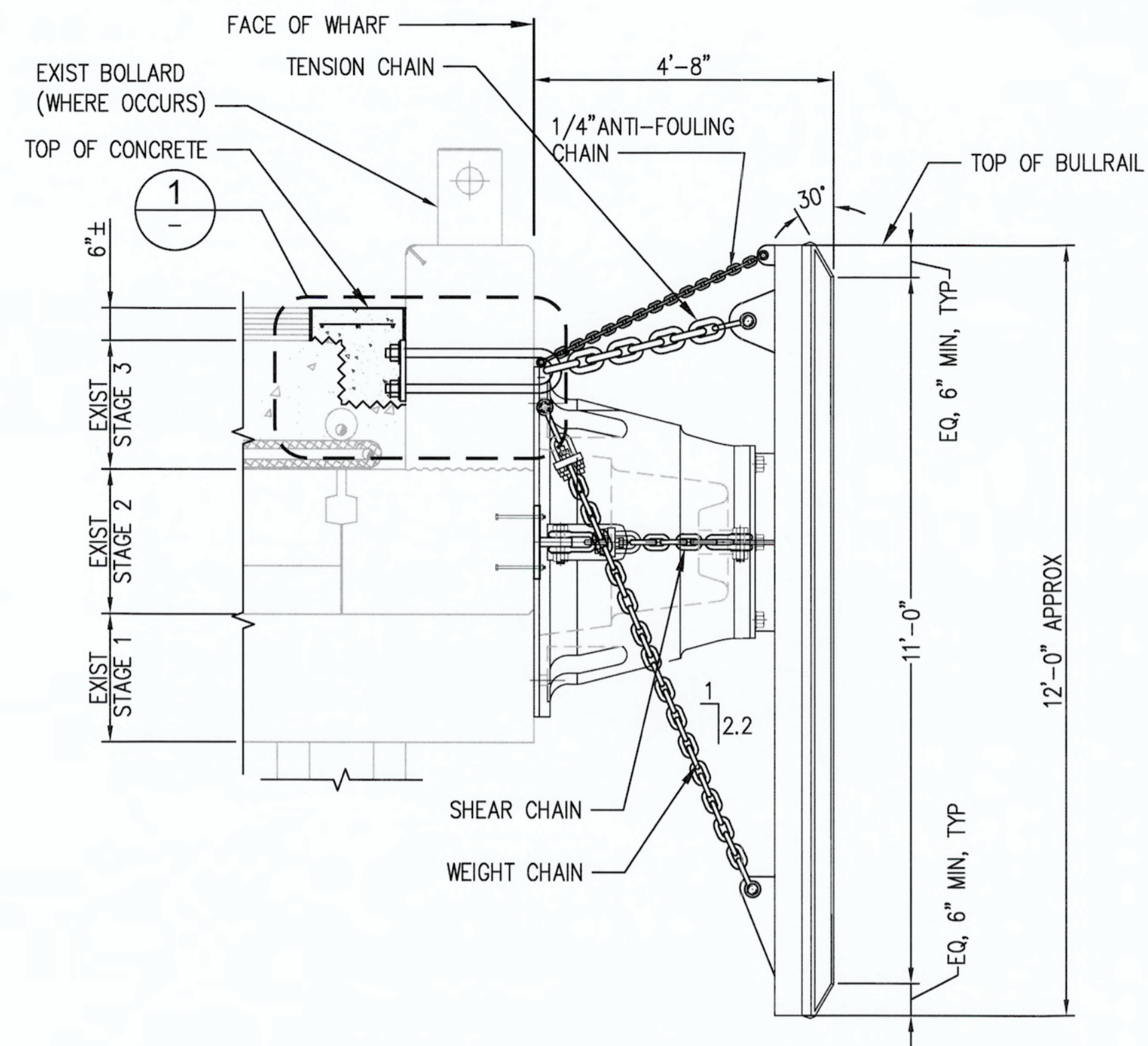
CONT/CONS: 071678

M. ID: 201107.02

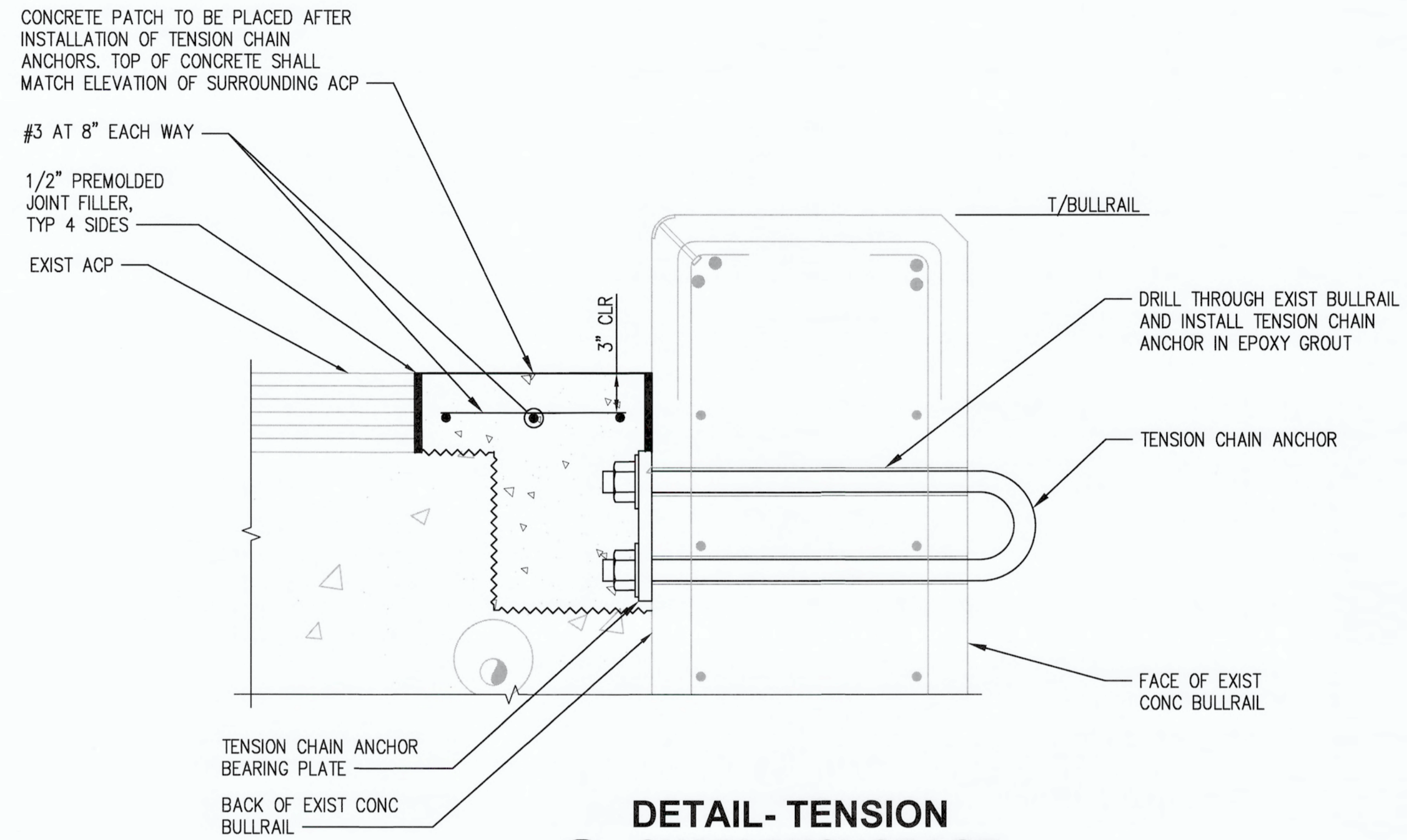
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A SECTION - TYPICAL FENDER
S3.1 SCALE: 1/2" = 1'-0"



1 DETAIL - TENSION CHAIN ANCHORAGE
S3.1 SCALE: 1 1/2" = 1'-0"

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6649
S3.2
18 OF 18

CONT/CONS: 071678	TOWNSHIP: 21N	RANGE: 05E	SECTION: 35
M. ID: 201107.02	DAT-HRZ: WA83-SF	VERT: MLLW 19.18' @ TIDE 22 1933	
PHASE: ISSUED FOR BIDS	PARCEL: 25	DRAWING SCALE: AS NOTED	

WASHINGTON UNITED TERMINAL
FENDER SYSTEM REPLACEMENT COMPLETION
FENDER SYSTEM DETAILS
SHEET 2

TAH	05/04/2022	CHECKED BY	DATE
TAD	05/04/2022	PROJ. ENGR	DATE
DIRECTOR ENG. DATE	05/05/2022	PRINTED BY:	gmrachuca
PORT ADDRESS: ONE SITCUM PLAZA	TACOMA, WA 98421		



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Port of Tacoma
APPR: DATE:
BY:
REVISION:
MARK:

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