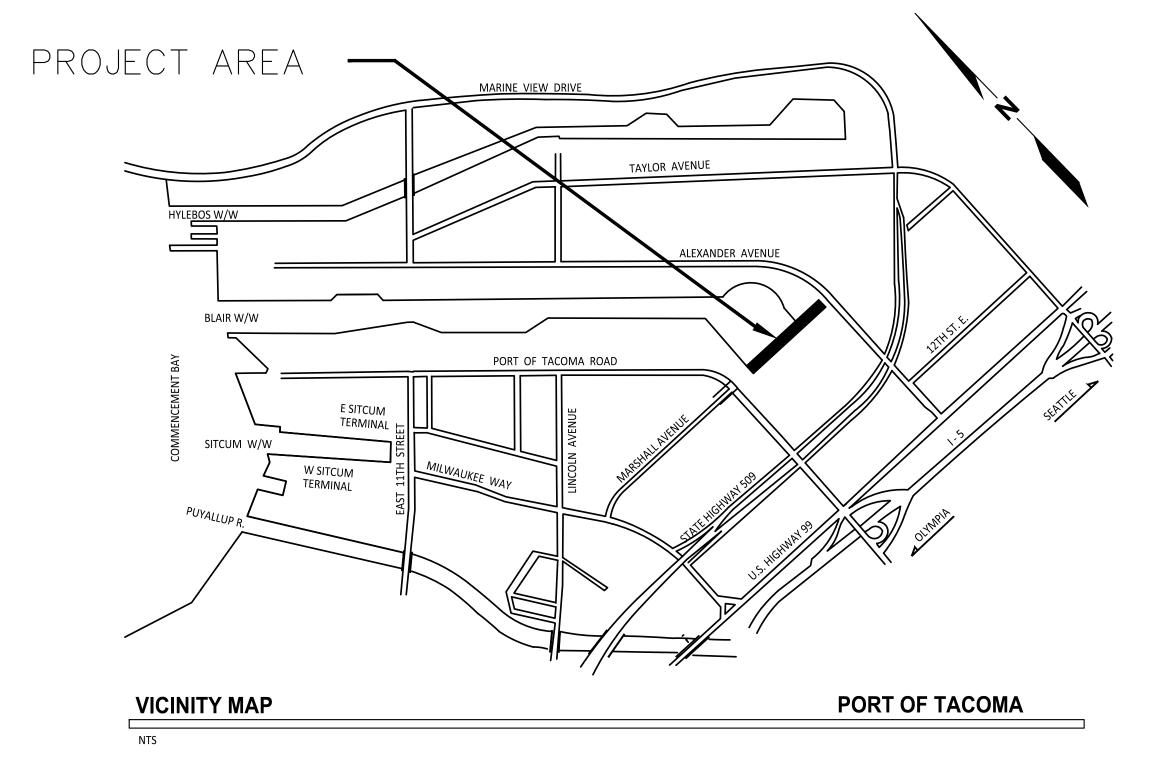
PORT OF TACOMA

TACOMA, WASHINGTON PCT FENDER SYSTEM REPLACEMENT PROJECT CONTRACT NO. 071754 PROJECT NO. 201145.01



NORTHWEST SEAPORT **ALLIANCE MANAGING MEMBERS:**

Port of Seattle Port of Tacoma **Commissioners:**

JOHN McCARTHY

DON MEYER DEANNA KELLER

RICHARD MARZANO KRISTIN ANG

Commissioners:

RYAN CALKINS

TOSHIKO GRACE HASEGAWA

SAM CHO

FRED FELLEMAN **HAMDI MOHAMED**

PORT STAFF:

JOHN WOLFE

NWSA Chief Executive Officer

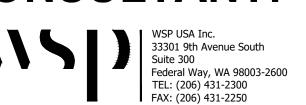
ERIC JOHNSON

Port of Tacoma Executive Director

THAIS HOWARD, P.E. **Director of Engineering**

HUGHES WIKE, P.E. Project Manager

CONSULTANT:



DRAWING LIST

SHEET NO.	DRAWING NO.	DRAWING TITLE							
		GENERAL							
1	G1.0	COVER SHEET AND DRAWING LIST							
2	G1.1	GENERAL NOTES							
3	G1.2	SITE PLAN, ACCESS, CONSTRUCTION SEQUENCE, AND STAGING							
		DEMOLITION							
4	D1.0	WHARF PARTIAL PLAN 1 - EXISTING AND DEMOLITION							
5	D1.1	WHARF PARTIAL PLAN 2 - EXISTING AND DEMOLITION							
6	D1.2	WHARF PARTIAL PLAN 3 - EXISTING AND DEMOLITION							
7	D2.0	PHOTOS 1 - EXISTING WHARF FACE CONFIGURATIONS							
8	D2.1	PHOTOS 2 - EXISTING WHARF FACE CONFIGURATIONS							
9	D2.2	HOTOS 3 - EXISTING WHARF FACE CONFIGURATIONS							
10	D3.0	PLAN, ELEVATIONS AND SECTION 1 - EXISTING FENDER DEMOLITION							
11	D3.1	PLAN, ELEVATIONS AND SECTION 2 - EXISTING FENDER DEMOLITION							
12	D3.2	PLAN, ELEVATIONS AND SECTION 3 - EXISTING FENDER DEMOLITION							
		STRUCTURAL							
13	S1.0	WHARF PARTIAL PLAN 1 - NEW FENDER LAYOUT							
14	S1.1	WHARF PARTIAL PLAN 2 - NEW FENDER LAYOUT							
15	S1.2	WHARF PARTIAL PLAN 3 - NEW FENDER LAYOUT							
16	S2.0	FENDER SYSTEM DETAILS - SHEET 1							
17	S2.1	FENDER SYSTEM DETAILS - SHEET 2							
18	S2.2	FENDER SYSTEM DETAILS - SHEET 3							
19	S2.3	FENDER SYSTEM DETAILS - SHEET 4							
20	S3.0	PILE CAP SPALL REPAIRS							

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)	?		COVER	SHEET A	COVER SHEET AND DRAWING	9
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GENERAL NOTES

CODES AND STANDARDS

PROJECT DESIGN, FABRICATION AND CONSTRUCTION SHALL BE ACCORDING TO THE FOLLOWING CODES AND STANDARDS, IN ADDITION TO ALL APPLICABLE PERMITS, LAWS AND REGULATIONS:

- 1. 2018 TACOMA BUILDING CODE (TBC), 2018 WASHINGTON STATE BUILDING CODE (WSBC) AND THE 2018 WASHINGTON STATE EXISTING BUILDING CODE (WSEBC).
- 2. REINFORCED CONCRETE, GROUT AND MORTAR WORK SHALL CONFORM TO THE REQUIREMENTS OF "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301-16) AND "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318-14).
- 3. STRUCTURAL AND MISCELLANEOUS STEEL FABRICATION AND ERECTION THEREOF SHALL CONFORM TO THE "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" (AISC 303-16) AND "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS" (AISC 360-16).
- 4. WELDING OF STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO "STRUCTURAL WELDING CODE STEEL" (AWS D1.1-2015).
- 5. WELDING OF REINFORCING STEEL SHALL CONFORM TO "STRUCTURAL WELDING CODE REINFORCING STEEL" (AWS D1.4-2011).
- 6. ALL METHODS AND MATERIALS SHALL CONFORM TO ASTM, CURRENT EDITION.
- 7. PIANC GUIDELINES FOR THE DESIGN OF FENDER SYSTEMS (PIANC 2002).

GENERAL

- 1. ALL MATERIAL CERTIFICATIONS, CUT SHEETS, WORKER QUALIFICATIONS, TEST RESULTS AND SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER BEFORE THE ASSOCIATED WORK BEGINS OR MATERIAL IS PURCHASED, WHETHER SPECIFICALLY LISTED AS A REQUIRED SUBMITTAL OR NOT. PORT/ENGINEER SHALL HAVE 2 WEEKS TO REVIEW EACH SUBMITTAL OR RE-SUBMITTAL.
- 2. ALL ELEVATIONS ARE IN REFERENCE TO MEAN LOWER LOW WATER (MLLW)
- 3. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS TO EXISTING FEATURES, STRUCTURES, AND UTILITIES THAT ARE TO REMAIN, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 4. DO NOT SCALE OFF DRAWINGS. FOLLOW DIMENSIONS AND CALLOUTS SHOWN.
- 5. ALL MATERIAL SHALL BE NEW AND MEET APPLICABLE STANDARDS.
- 6. THE CONTRACTOR SHALL VERIFY INFORMATION PROVIDED WITHIN THESE DRAWINGS, SPECIFICATIONS, RECORD DRAWINGS, MANUFACTURER RECOMMENDATIONS AND BRING ANY CONFLICTS TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

SPECIAL INSPECTION

- 1. SPECIAL INSPECTION WILL BE PROVIDED BY THE PORT.
- 2. THE ELEMENTS THAT REQUIRE SPECIAL INSPECTION PER IEBC & TBC CHAPTER 17 ARE:
 - a. GROUT PLACEMENT (CONTINUOUS)
- b. ADHESIVE ANCHORS RODS AND REBAR INSTALLATION (CONTINUOUS)

DESIGN CRITERIA

1. BERTHING:

CONTAINER SHIP

LENGTH OVERALL (LOA):

BEAM:

DRAFT:

DISPLACEMENT:

APPROACH ANGLE:

PERPENDICULAR VELOCITY:

1,300 FEET

194 FEET

220,000 LT

6 DEGREES

0.26 FT/S

1/5TH-POINT BERTHING

- 2. FENDER REQUIREMENTS:
 - A. MINIMUM BERTHING ENERGY = 493 KIP-FT
 - B. MAXIMUM BERTHING REACTION = 265 KIPS
- 3. FENDER PANEL REQUIREMENTS:

VESSEL HULL REACTION PRESSURE < 5.0 KSF

4. LOAD COMBINATIONS:

LOAD COMBINATIONS ARE FROM THE 2018 WSBC AND 2018 WEBC. VESSEL BERTHING LOADS HAVE BEEN INCLUDED PER CHAPTER 31F OF 2019 CBC.

LRFD (STRENGTH DESIGN & STRUCTURAL CAPACITY CHECK)

U = 1.2D + 1.6 BE + 0.17L

ASD (GEOTECHNICAL PILE CAPACITY & STRUCTURE SERVICEABILITY)

S = 1.0D + 1.0BE + 0.17L

<u>LEGEND</u>

BE - BERTHING LOAD

D - STRUCTURE DEAD LOADL - UNIFORM LIVE LOAD OR CONCENTRATED LIVE LOAD

ABBREVIATIONS

APPROX	APPROXIMATE
CL, & CLR CONC CONFIG	CENTERLINE CLEAR CONCRETE CONFIGURATION
DWG	DRAWING
EL, ELEV EXIST	ELEVATION EXISTING
FT	FOOT/FEET
GL	GRIDLINE
ID	INSIDE DIAMETER
KSI	KIPS PER SQUARE INCH
LF	LINEAR FEET

MAX	MAXIMUM
MIN	MINIMUM
MLLW	MEAN LOWER LOW WATER
NTS	NOT TO SCALE

OC	ON CENTER
OD	OUTSIDE DIAMETER
PCT	PIERCE COUNTY TERMINAL
PI	PLATE
ГL	FLATE
PSI	POUNDS PER SQUARE INCH

REINF	REINFORCEMENT

SIM	SIMILAR
SS	STAINLESS STEEL
SYMM	SYMMETRICAL
SQ	SQUARE
TYP	TYPICAL

W/	WITH	
WL	WATER LEVEL	

APPROVED:	
PIERCE COUNTY TERMINAL	PCT FENDER SYSTEM REPLACEMENT PROJECT

MOORING

LINE SHOWN

APPROX, TYP

SCALE: 1" 500' - 0"

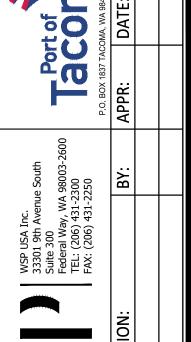
- **NOTES**
- 1. PCT IS AN OPERATING TERMINAL. CONTRACTOR SHALL NOT HINDER TERMINAL OPERATIONS.
- 2. CONTRACTOR MAY INGRESS/EGRESS ALONG THE ROUTE SHOWN MONDAY THROUGH SUNDAY BEFORE 7AM, BETWEEN 11:45AM AND 1PM, AND AFTER 4:45PM. CONTRACTOR SHALL INGRESS/EGRESS OUTSIDE OF THESE HOURS ONLY WITH ESCORT BY THE TERMINAL OPERATOR. CONTRACTOR SHALL CHECK-IN AT GUARD SHACK SHOWN WHEN ENTERING THE TERMINAL. TRAINS MAY BLOCK ENTRANCE FOR AN HOUR OR MORE AT A TIME. CONTRACTOR MAY PARK IN THE LONGSHOREMAN PARKING AND USE THE ELEVATED PEDESTRIAN CROSSING TO ENTER THE SITE.
- 3. CONTRACTOR SHALL COMPLETE THE PROJECT IN 2 PHASES. PHASE 1 SHALL BE COMPLETED BEFORE PHASE 2 STARTS. CONTRACTOR MAY PERFORM WORK WITHIN WORK ZONE 1 INDEPENDENT OF SHIP SCHEDULE. CONTRACTOR MAY PERFORM WORK WITHIN WORK ZONE 2 ONLY WHEN NO VESSEL IS PRESENT AT THE WHARF.
- 4. NO EQUIPMENT, MATERIALS, TOOLS, FALSEWORK, TEMPORARY STRUCTURES OR SCAFFOLDING THAT COULD COME IN CONTACT WITH A VESSEL OR HINDER THE PERFORMANCE OF FENDERS WITHIN WORK ZONE 2 SHALL BE PRESENT WHILE A VESSEL IS AT THE WHARF.
- 5. THE WHARF TYPICALLY RECEIVES 2 VESSELS PER WEEK, NOT SIMULTANEOUSLY. EACH VESSEL IS TYPICALLY AT WHARF FOR 2 DAYS AND 2 NIGHTS. THERE IS TYPICALLY 1 OR 2 DAYS BETWEEN A VESSEL DEPARTING AND THE NEXT VESSEL ARRIVING, TOTALING 2 TO 4 DAYS AND 2 TO 4 NIGHTS, RESPECTIVELY, PER WEEK THAT THERE IS NO VESSEL AT WHARF. VESSEL SCHEDULES AND DELAYS MAY AFFECT DURATIONS.
- CONTRACTOR SHALL COMMUNICATE THE LOCATION OF THEIR WORK ALONG THE WHARF WITH THE PORT, WEEKLY, TO AVOID CONFLICT WITH TERMINAL OPERATIONS, SUCH AS CONTAINER CRANE MAINTENANCE. CONTRACTOR SHALL NOT BE UNDER A CONTAINER CRANE WHILE IT IS OPERATING.

- 7. CONTRACTOR SHOULD PERFORM FENDER REPLACEMENT WORK IN WORK ZONE 1 SEQUENTIALLY, MOVING ALONG THE WHARF FACE FROM EAST TO WEST OR VISA VERSA DURING EACH PHASE, RATHER THAN JUMPING AROUND TO FENDERS THAT ARE NOT ADJACENT.
- ACCESS SCAFFOLDING, FALSEWORK AND TEMPORARY STRUCTURES SHALL BE RE-USEABLE FABRICATIONS THAT CAN BE QUICKLY INSTALLED AND QUICKLY REMOVED TO ALLOW CONTRACTOR TO EASILY MOVE FROM BENT TO BENT, PULL OFF SPECIFIC BENT LOCATIONS TO GET CLEAR OF TERMINAL OPERATIONS, AND TO RE-STAGE AT BENTS MULTIPLE TIMES WITH MINIMAL EFFORT.
- 9. PRECISE LOCATION OF LAYDOWN AREA TO BE COORDINATED WITH THE TERMINAL OPERATOR. THE LAYDOWN AREA SHALL BE FENCED AND SECURED. LAYDOWN AREA SHALL BE KEPT CLEAR OF CRANE RAILS FOR CRANES TO TRAVEL THE FULL RAIL LENGTH.
- 10. WITHIN WORK ZONE 2, AND OUTSIDE THE BUFFER ZONE, THERE SHALL BE NO SPACES BETWEEN FULLY FUNCTIONING FENDER UNITS GREATER THAN 70 FEET, DUE TO THE CONTRACTOR REMOVING AND INSTALLING REPLACEMENT FENDERS. I.E., CONTRACTOR SHALL NOT DISASSEMBLE AN EXISTING FENDER UNIT WITHOUT HAVING THE REPLACEMENT FENDER UNIT/S FULLY INSTALLED TO AVOID LEAVING THE WHARF FACE UNPROTECTED.
- 11. THE PROPOSED FENDER ASSEMBLIES CAUSE AN APPROXIMATELY 5-INCH INCREASE IN VESSEL STANDOFF DISTANCE TO 5'-5", COMPARED TO THE EXISTING FENDER ASSEMBLY'S STANDOFF DISTANCE OF 5 FEET. CONTRACTOR SHALL PLAN THEIR WORK SUCH THAT VESSELS CAN MOOR PARALLEL TO THE WHARF FACE DURING CONTAINER LOADING AND UNLOADING OPERATIONS. DEPENDING ON THE CONTRACTOR'S MEANS AND METHODS, THIS MAY REQUIRE CONTRACTOR TO DESIGN, CONSTRUCT, INSTALL AND REMOVE TEMPORARY SPACERS ON THE FACE OF THE EXISTING FENDER PANELS. SPACERS SHALL BE DURABLE, NOT REQUIRE MAINTENANCE, NOT OVERLOAD THE WEIGHT CAPACITY OF THE EXISTING FENDER UNITS AND NOT DAMAGE VESSELS.

LEGEND

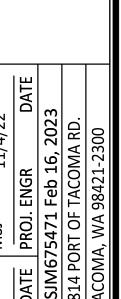
CONTRACTOR INGRESS **EGRESS ROUTE**

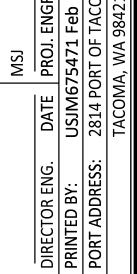
---- OVERSIZED TRUCK ROUTE

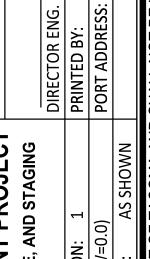


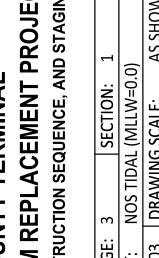








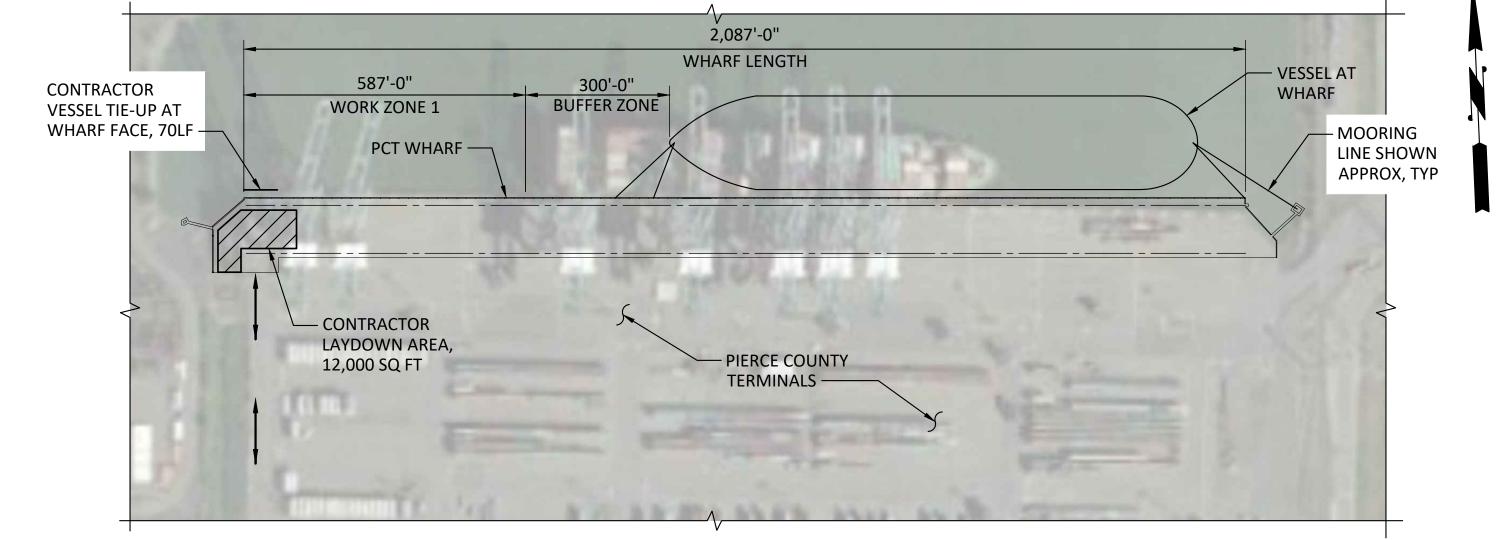




FENDER PROCUREMENT

587'-0"

- PCT WHARF



CONSTRUCTION SEQUENCE AND STAGING - PHASE 1

2,087'-0"

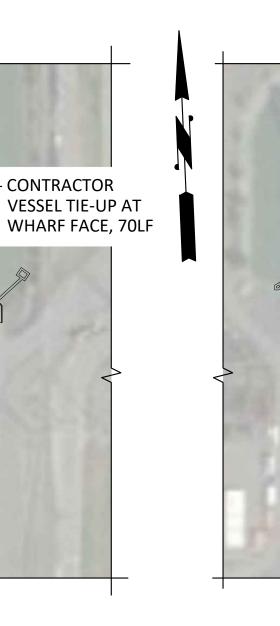
WHARF LENGTH

913'-0"

WORK ZONE 2

PIERCE COUNTY

587'-0"



CONSTRUCTION SEQUENCE AND STAGING - PHASE 2

PIERCE COUNTY

2,087'-0"

WHARF LENGTH

CONSTRUCTION SEQUENCE - NO VESSEL AT WHARF SCALE: 1" 200' - 0"

SCALE: 1" 200' - 0"

VESSEL AT

WHARF -

BUFFER ZONE

587'-0"

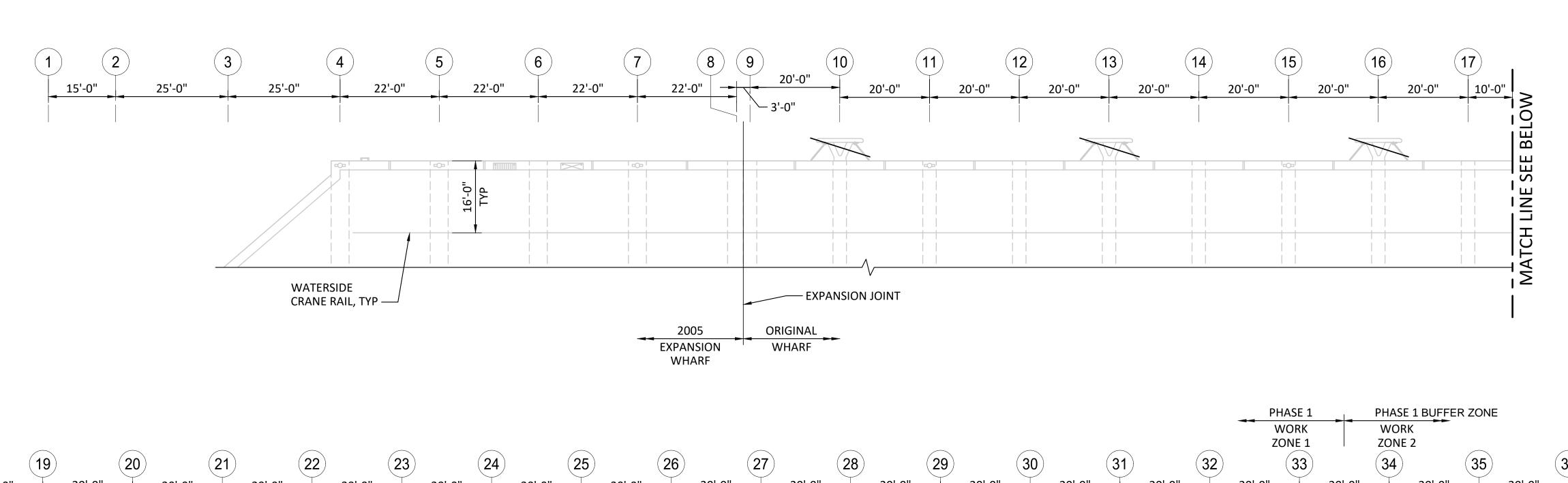
WORK ZONE 1

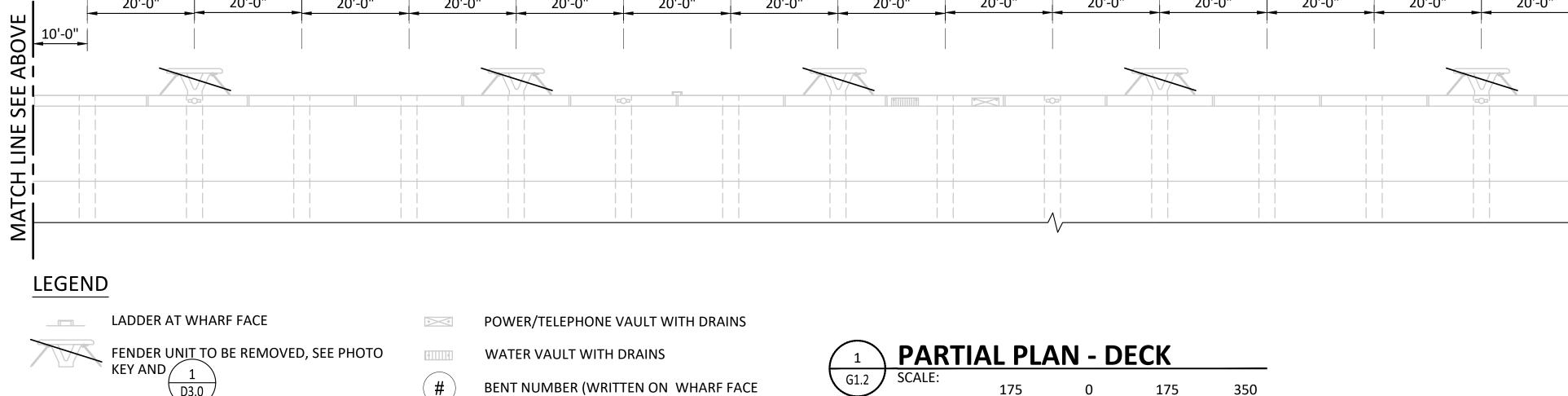
CONTRACTOR LAYDOWN AREA, 12,000 SQ FT -

PCT WHARF

D3.0

WHARF BOLLARD

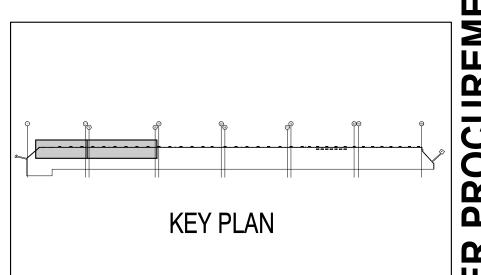




AND TOP OF BULLRAIL)

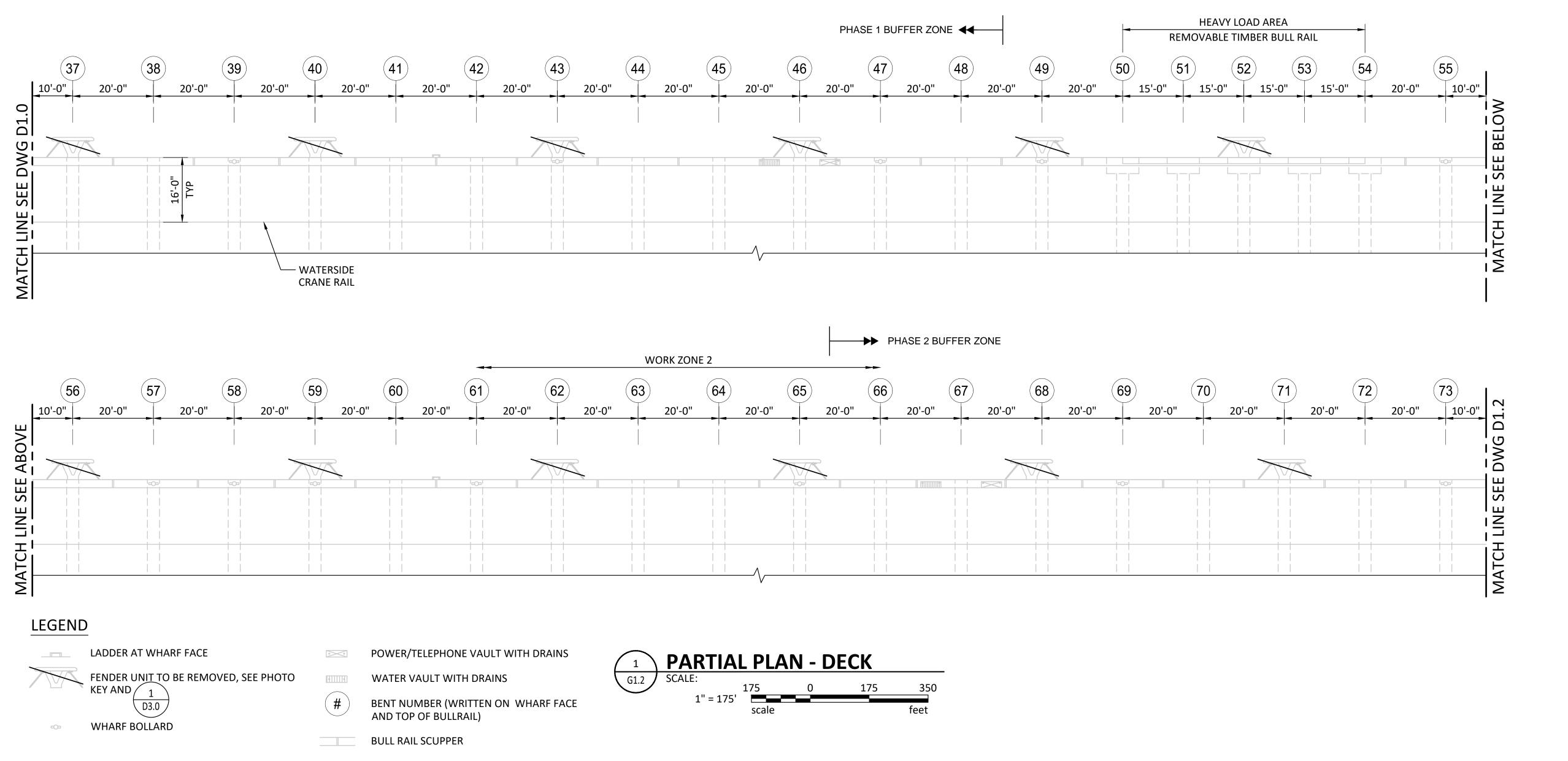
BULL RAIL SCUPPER

		27 #	USA	PH	OTO KEY - E	XISTING WHA	ARF FAC	E CONFIGURATION	80 W		XX	80	
BENT	DESCRIPTION	PHOTO/ WHARF FACE CONFIG.	DWG	EXISTING FENDER?	NEW FENDER?	EXISTING AND NEW FENDER AT THIS BENT?	BENT	DESCRIPTION	PHOTO/ WHARF FACE CONFIG.	DWG	EXISTING FENDER?	NEW FENDER?	EXISTING AND NEW FENDER AT THIS BENT?
4	NO FENDER, WHARF EXPANSION	6	D2.0	- 0	i=	- %	21	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-	YES	-
5	MISSING FENDER, WHARF EXPANSION	5	D2.0	(50)	YES	*1	22	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	S	=
6	NO FENDER, WHARF EXPANSION	6	D2.0	5 0		*	23	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-	₩0	(=)
7	MISSING FENDER, WHARF EXPANSION	5	D2.0	.	YES	-	24	NO FENDER, PILE CAP FACE OFFSET FROM WHARF FACE, ORIGINAL WHARF	10	D2.1	-	YES	: = 0
8	NO FENDER, EXPANSION/ORIGINAL WHARF WEST TRANSITION	7	D2.1	-	9=	-	25	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	=:	
9	NO FENDER, EXPANSION/ORIGINAL WHARF WEST TRANSITION	7	D2.1		.=	•	26	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-	-8	
10	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	YES	YES	27	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-	YES	(=)
11	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	= 1	.=		28	PILE CAP SPALLING, FENDER, PILE CAP EVEN W/ WHARF FACE, ORIGINAL WHARF	1	D2.0	YES	=::	
12	NO FENDER, PILE CAP FACE OFFSET FROM WHARF FACE, ORIGINAL WHARF	10	D2.1	-	YES	- %	29	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-		-
13	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	ii.e	= 1	30	NO FENDER, PILE CAP FACE OFFSET FROM WHARF FACE, ORIGINAL WHARF	10	D2.1	-	YES	(=0)
14	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	₩ 0	(i)=	-	31	FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	11	D2.2	YES	₩ 0	(=0)
15	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	 0	YES	-	32	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-	₩ 0	(=)
16	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	s=		33	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1		YES	
17	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	 (3		-	34	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	= 3	
18	NO FENDER, PILE CAP FACE OFFSET FROM WHARF FACE, ORIGINAL WHARF	10	D2.1	.	YES	-	35	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1		-3	=
19	FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	11	D2.2	YES			36	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-	YES	: = :
20	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	H:		-	TOTAL	S			9	12	1

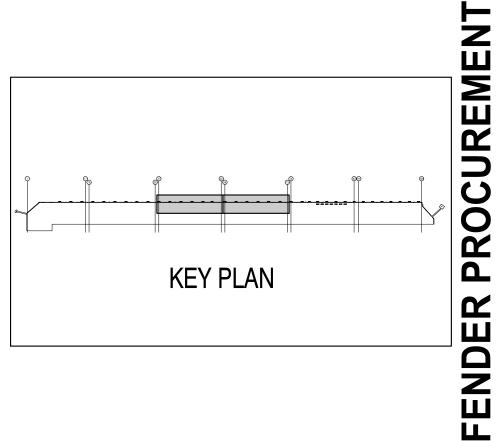


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4 OF 20		EXIS	EXISTING
CONT/CONS: 071754	TOWNSHIP: 20	20	RAN
M. ID: 201145.01	DAT-HRZ:	N/A	VERT
PHASE: FENDER PROCUREMENT	T PARCEL:	0320012066/210	210



		₹ 19		РНОТО	KEY - EXIST	ING WHARF	FACE COI	NFIGURATION					
BENT	DESCRIPTION	PHOTO/ WHARF FACE CONFIG.	DWG	EXISTING FENDER?	NEW FENDER?	EXISTING AND NEW FENDER AT THIS BENT?	021-051-059-4-051-051-0	DESCRIPTION	PHOTO/ WHARF FACE CONFIG.	DWG	EXISTING FENDER?		EXISTING AND NEW FENDER AT THIS BENT?
37	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	:=:	-	56	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	=	(=
38	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	*	: = :	-	57	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-	-	-
39	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	2	YES	_	58	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	=1	YES	<u> </u>
40	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	72	-	59	FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	11	D2.2	YES	=	=
41	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	<u>e</u> :	120	-	60	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	=	YES	-
42	NO FENDER, PILE CAP FACE OFFSET FROM WHARF FACE, ORIGINAL WHARF	10	D2.1	<u>=</u>	YES	=	61	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-	-	×
43	FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	11	D2.2	YES	122	-	62	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	-	-
44	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	<u> </u>	-	8	63	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	P1	YES	1
45	NO FENDER, PILE CAP FACE OFFSET FROM WHARF FACE, ORIGINAL WHARF	10	D2.1		YES	8	64	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	81		-
46	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES			65	FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	11	D2.2	YES		-
47	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	÷	(a)	¥	66	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	¥	YES	=
48	NO FENDER, PILE CAP FACE OFFSET FROM WHARF FACE, ORIGINAL WHARF	10	D2.1	-	YES	-	67	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-:	s a n	8 -
49	FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	11	D2.2	YES	B⊞i	5	68	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	S m .t	
50	NO FENDER, PILE CAP FACE OFFSET FROM WHARF FACE, ORIGINAL WHARF	10	D2.1	=	b = i	-	69	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-:	YES	A.T.
51	NO FENDER, HEAVY LOAD AREA, ORIGINAL WHARF	12	D2.2	-	YES	-	70	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-1	(-)(1 = 3
52	FENDER, GROUT PAD ON PILE CAP FACE, HEAVY LOAD AREA, ORIGINAL WHARF	13	D2.2	YES	10 11 1	-	71	FENDER W/ 1.5" SURFACE MOUNT PL, ORIGINAL WHARF	3	D2.0	YES	YES	YES
53	NO FENDER, HEAVY LOAD AREA, ORIGINAL WHARF	12	D2.2	- 1	13=0	-	72	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-1	(= 3)	
54	NO FENDER, HEAVY LOAD AREA, ORIGINAL WHARF	12	D2.2	- 1	:=	-	73	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-1	YES	-
55	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-	YES	-	TOTALS				12	13	1

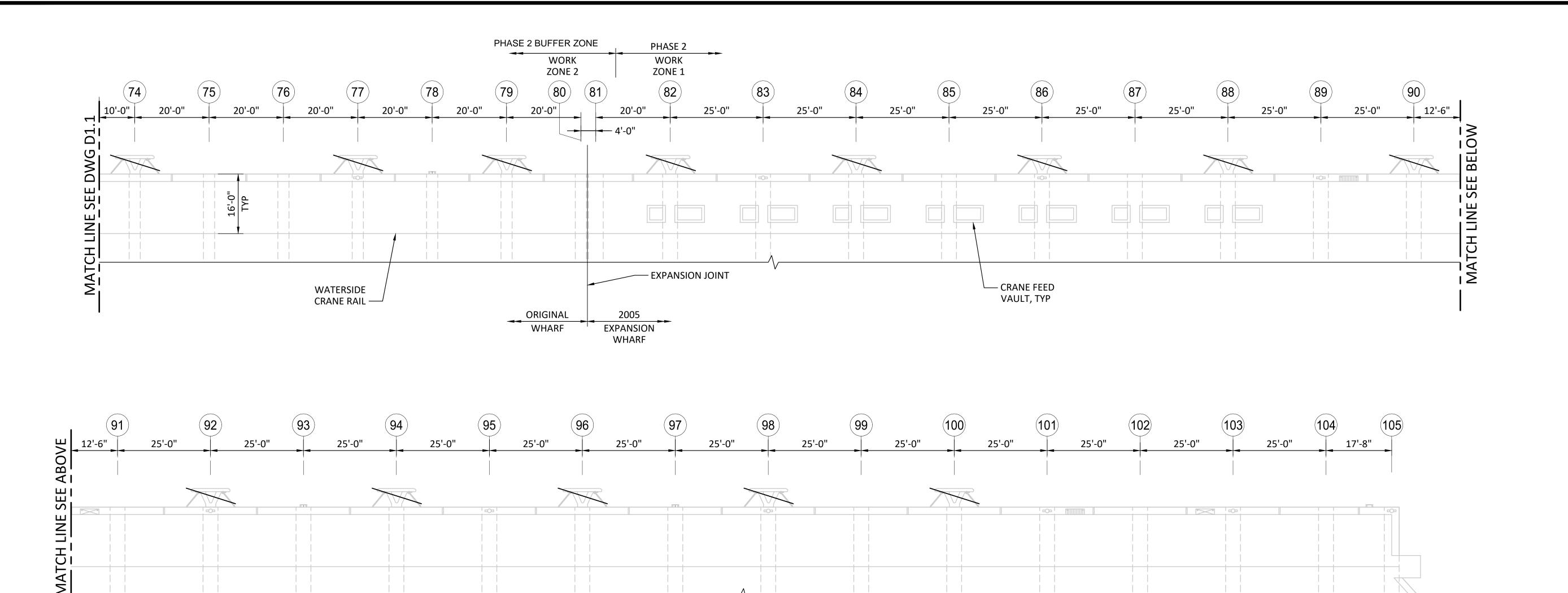


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6684		PIERCE	COUN	PIERCE COUNTY TERMINAL	IINAL	APPF
7	PCT FEN	SYS AHUI	TEM R	FPI ACEN	PCT FENDER SYSTEM REPLACEMENT PROJECT	
	i - - - -		ARF PAR	WHARF PARTIAL PLAN 2		
5 OF 20		EXIS	TING AND	EXISTING AND DEMOLITION	7	
CONT/CONS: 071754	TOWNSHIP: 20	20	RANGE: 3		SECTION: 1	PRIN
M. ID: 201145.01	DAT-HRZ: N/A	N/A	VERT:	VERT: NOS TIDAL (MLLW=0.0)	LLW=0.0)	POR
PHASE: FENDER PROCUREMENT PARCEL:	PARCEL:	0320012066/	21003	0320012066/21003 DRAWING SCALE:	ALE: AS SHOWN	

Tacon Tacon

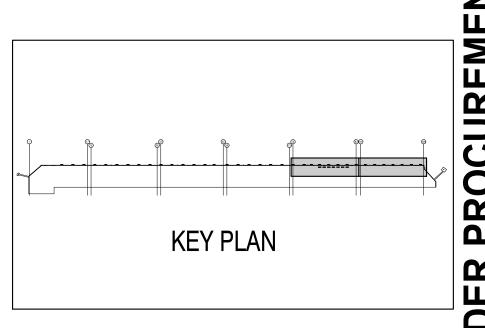
WHARF BOLLARD



LEGEND				PART	IAL PLA	4N - D	ECK	
LADDER AT WHARF FACE	•	POWER/TELEPHONE VAULT WITH DRAINS	G1.2	SCALE:	175	0	175	35
FENDER UNIT TO BE REMOVED, SEE PHOTO	HIIII	WATER VAULT WITH DRAINS		1" =	_	0	1/3	feet
$\begin{array}{c} \text{KEY AND} \\ \hline \\ \text{D3.0} \end{array}$	#	BENT NUMBER (WRITTEN ON WHARF FACE AND TOP OF BULLRAIL)			Jeane			

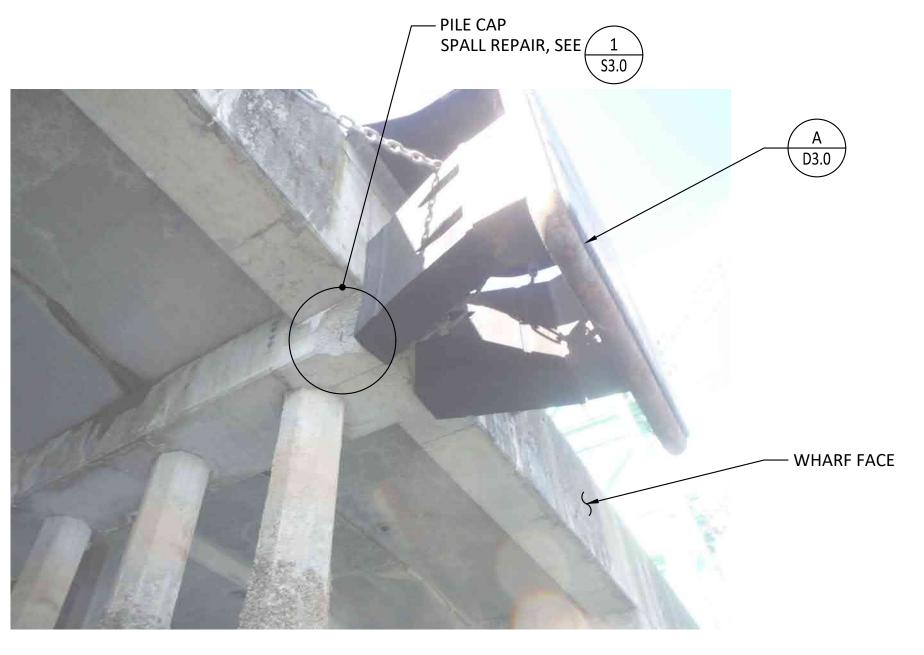
BULL RAIL SCUPPER

				PHOT	TO KEY - EXIS	STING WHARF	FACE CO	NFIGURATION				_	
BENT	DESCRIPTION	PHOTO/ WHARF FACE CONFIG.	DWG	EXISTING FENDER?	NEW FENDER?	EXISTING AND NEW FENDER AT THIS BENT?	BENT	DESCRIPTION	PHOTO/ WHARF FACE CONFIG.	DWG	EXISTING FENDER?	A-1	EXISTING AND NEW FENDER AT THIS BENT?
74	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	= 1 = 10	(27)	91	NO FENDER, WHARF EXPANSION	6	D2.0	20	8 = 8	3 <u>=</u>
75	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1		Ξλ		92	FENDER, WHARF EXPANSION	14	D2.2	YES	YES	YES
76	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	1 .77 1	YES	िया	93	NO FENDER, WHARF EXPANSION	6	D2.0	₩.	i Edil	12 N
77	PILE CAP SPALLING, FENDER, PILE CAP EVEN W/ WHARF FACE, ORIGINAL WHARF	2	S2.0	YES	亚 科	ा । विका	94	FENDER, WHARF EXPANSION	14	D2.2	YES	YES	YES
78	NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF	9	D2.1	-		15.1	95	NO FENDER, WHARF EXPANSION	6	D2.0	50 25	15%	1574
79	FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF	8	D2.1	YES	YES	YES	96	FENDER, WHARF EXPANSION	14	D2.2	YES	YES	YES
80	NO FENDER, EXPANSION/ORIGINAL WHARF EAST TRANSITION	4	D2.0		≡ a	(5)	97	NO FENDER, WHARF EXPANSION	6	D2.0	-	(=)	-
81	NO FENDER, EXPANSION/ORIGINAL WHARF EAST TRANSITION	4	D2.0		= 0	, (8)	98	FENDER, WHARF EXPANSION	14	D2.2	YES	YES	YES
82	FENDER, WHARF EXPANSION	14	D2.2	YES	YES	YES	99	NO FENDER, WHARF EXPANSION	6	D2.0	<i>≡</i> 2	(E.	
83	NO FENDER, WHARF EXPANSION	6	D2.0	1991	= 0	-	100	FENDER, WHARF EXPANSION	14	D2.2	YES	YES	YES
84	FENDER, WHARF EXPANSION	14	D2.2	YES	YES	YES	101	NO FENDER, WHARF EXPANSION	6	D2.0	1 8	-	3 4
85	NO FENDER, WHARF EXPANSION	6	D2.0	=	2 55	121	102	MISSING FENDER, WHARF EXPANSION	5	D2.0	43	YES	*
86	FENDER, WHARF EXPANSION	14	D2.2	YES	YES	YES	103	NO FENDER, WHARF EXPANSION	6	D2.0	발생	-	~
87	NO FENDER, WHARF EXPANSION	6	D2.0	-		- 	104	MISSING FENDER, WHARF EXPANSION	5	D2.0	23	YES	3 <u>=</u>
88	FENDER, WHARF EXPANSION	14	D2.2	YES	YES	YES	105	NO FENDER, WHARF EXPANSION	6	D2.0	23	(2)	3 <u>4</u>
89	NO FENDER, WHARF EXPANSION	6	D2.0	-		2 1 <u>2</u> 21 2	TOTALS				13	14	11
90	FENDER, WHARF EXPANSION	14	D2.2	YES	YES	YES							



	FENDER PROCUREMEN	CUKEMEN	
	6684	PIERCE (O
	ر د د	PCT FENDER SYST	
	7:	WHAI	⋖
	6 OF 20	EXISTII	Ē
	CONT/CONS: 071754	TOWNSHIP: 20	R
	M. ID: 201145.01	DAT-HRZ: N/A	M
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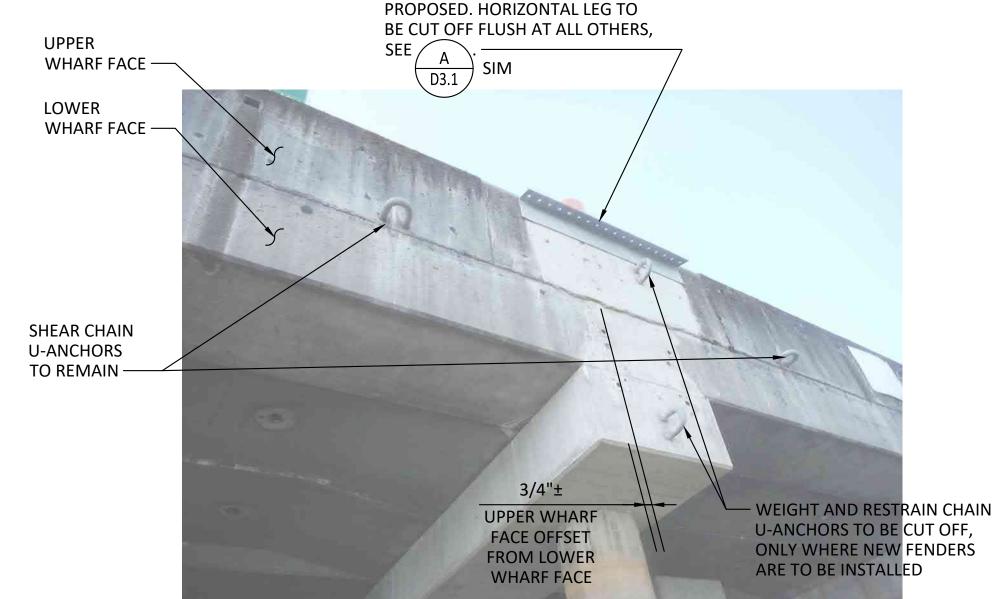
— PILE CAP SPALL REPAIR, SEE 1

PILE CAP SPALLING, FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF

- WHARF FACE

PILE CAP SPALLING, FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF

FOWLING CLAMP TO BE REMOVED ONLY WHERE NEW FENDERS ARE PROPOSED. HORIZONTAL LEG TO BE CUT OFF FLUSH AT ALL OTHERS,



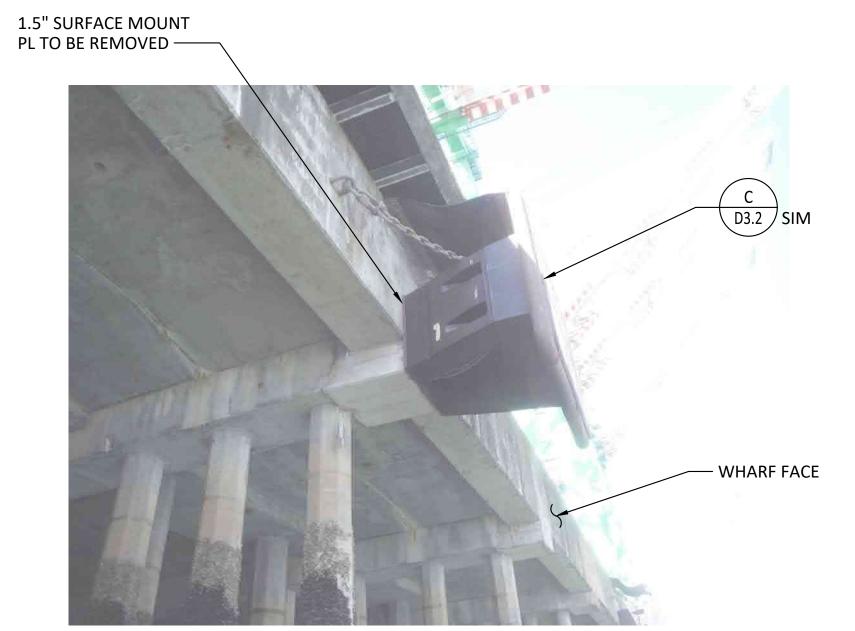


SCALE: N.T.S.

NO FENDER, EXPANSION/ORIGINAL WHARF EAST TRANSITION

MISSING FENDER, WHARF EXPANSION

										D1	_					
				FENDI	ER QUANT	ITIES FOR E	ACH WHA	RF FACE C	ONFIGURA	TION						
РНОТО	1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTALS	DWG
DWG	D2.0	D2.0	D2.0	D2.0	D2.0	D2.0	D2.1	D2.1	D2.1	D2.1	D2.2	D2.2	D2.2	D2.2		
VALUA DE FACE CONFICURATION	1				2	2	2	6	14	4	2				33	D1.0
WHARF FACE CONFIGURATION QUANTITY BY DWG			1					6	18	4	4	3	1		37	D1.1
QUANTITY BY DWG		1		2	2	12		2	3					10	32	D1.2
TOTALS	1	1	1	2	4	14	2	14	35	8	6	3	1	10	102	
	į.	š:	57		in the state of th	31.3		27		Ž.	1		Š el 73	. The	- 137	
EXISTING FENDERS	1	1	1					14			6		1	10	34	
NEW FENDERS			1		4			2	14	7		1		10	39	
EXISTING AND NEW FENDER								,			5					
OCCURING AT SAME BENT			1					2						10	13	



FENDER W/ 1.5" SURFACE MOUNT PL, ORIGINAL WHARF





NOTES

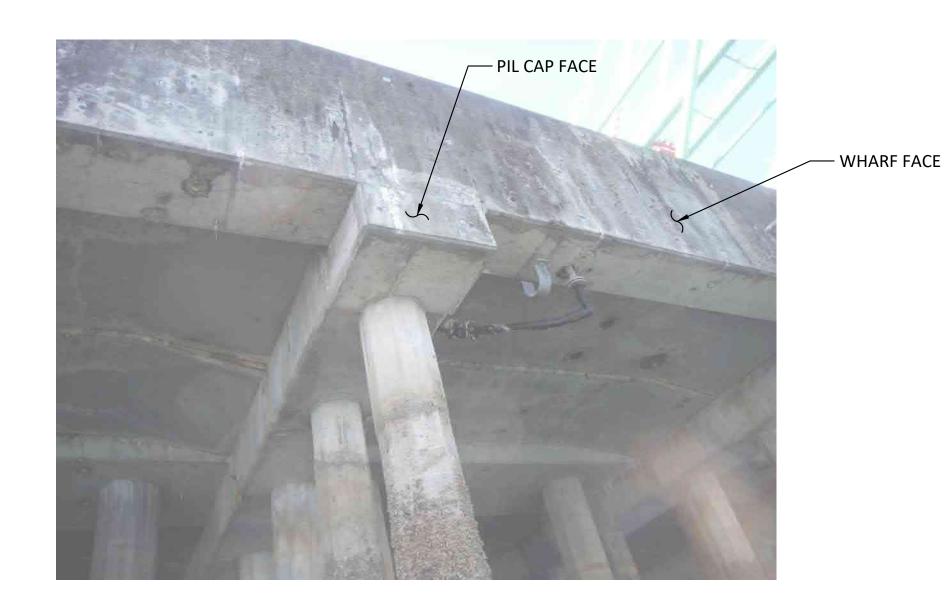
- 1. DRAWING SHALL BE PRINTED IN COLOR.
- 2. PHOTOS SHOWN ARE TYPICAL OF THE WHARF FACE AT BENT LOCATIONS SHOWN ON D1.0, D1.1 AND D1.2.

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6684		PIERCE CC	2
D2.0	PCT FEN	PCT FENDER SYSTEI	围一
7 OF 20		EXISTING WHAR	HAR
CONT/CONS: 071754	TOWNSHIP: 20		RAN
M. ID: 201145.01	DAT-HRZ:	N/A	VER
PHASE: FENDER PROCUREMENT PARCEL:	PARCEL:	0320012066/210	210



NO FENDER, EXPANSION/ORIGINAL WHARF WEST TRANSITION



NO FENDER, PILE CAP FACE EVEN W/ WHARF FACE, ORIGINAL WHARF D1.0 SCALE: N.T.S.

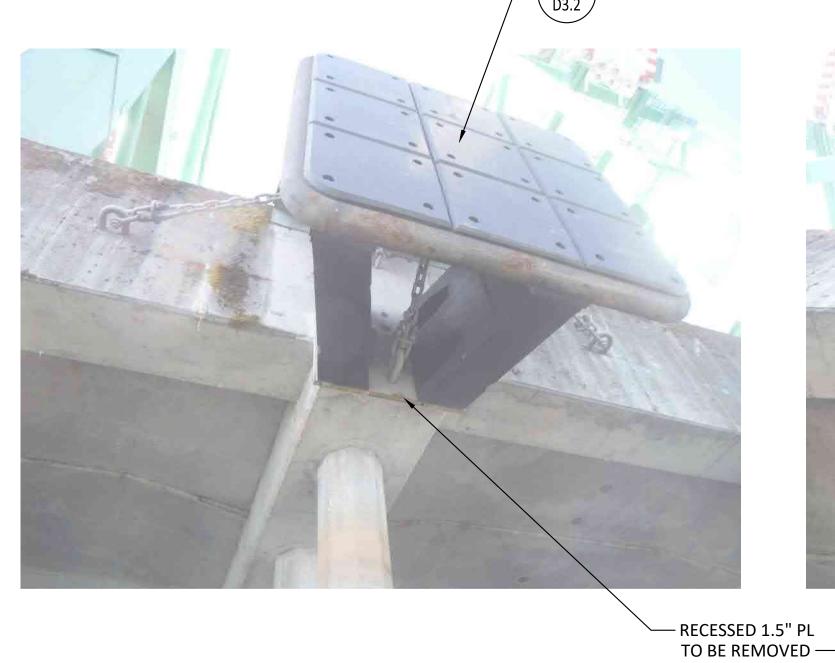
D1.1, D1.2

E: N.T.S.

D1.0 SCALE: N.T.S.

D1.1

FENDER QUANTITIES FOR EACH WHARF FACE CONFIGURATION (SAME AS D2.0)

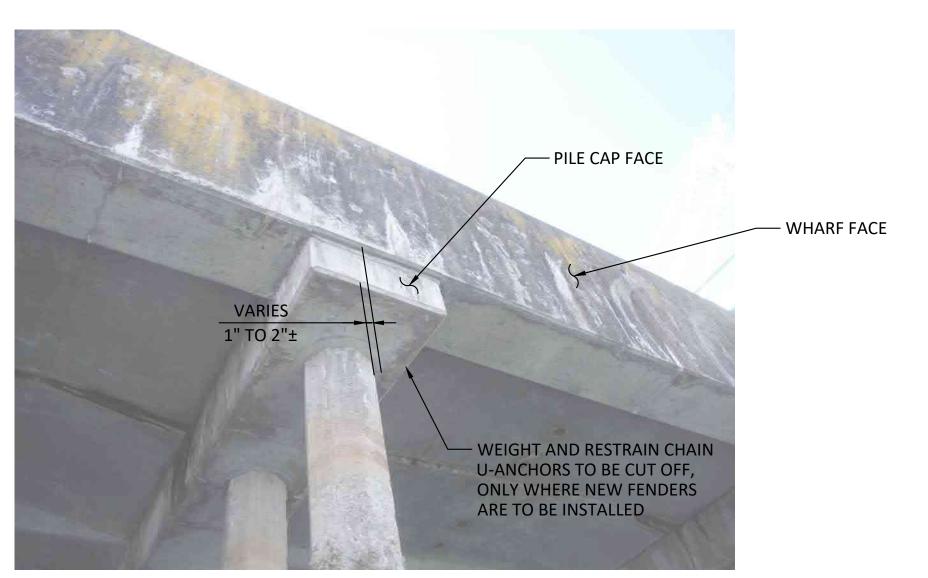




FENDER W/ RECESSED 1.5" PL, ORIGINAL WHARF

SCALE: N.T.

D1.1, D1.2



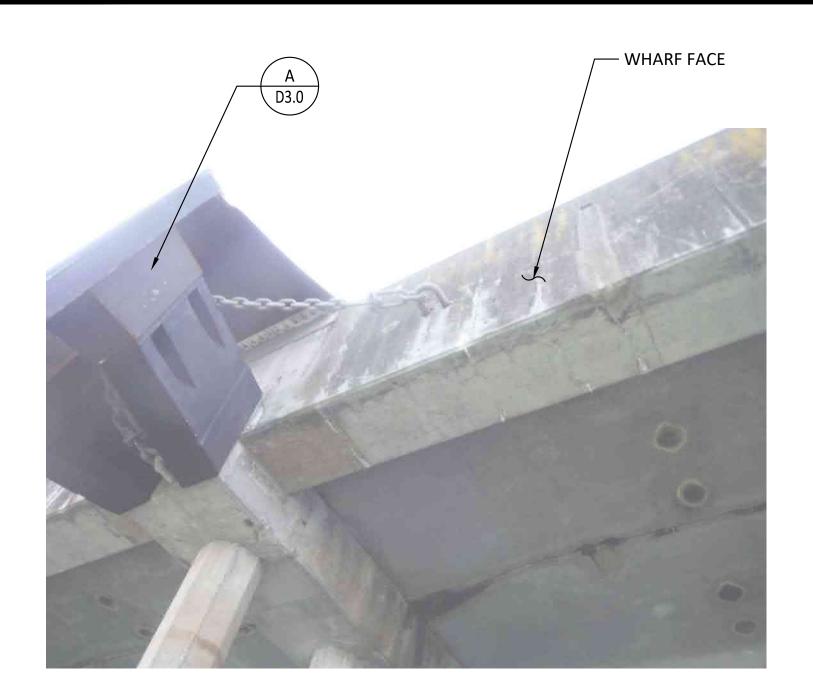
NO FENDER, PILE CAP FACE OFFSET FROM WHARF FACE, ORIGINAL WHARF

			FEI	NDER QUAI	NTITIES FO	R EACH W	HARF FACE	CONFIGUR	RATION (SA	AME AS D2	.0)					
РНОТО	1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTALS	DWG
DWG	D2.0	D2.0	D2.0	D2.0	D2.0	D2.0	D2.1	D2.1	D2.1	D2.1	D2.2	D2.2	D2.2	D2.2		
WHARF FACE CONFIGURATION	1				2	2	2	6	14	4	2				33	D1.0
QUANTITY BY DWG			1					6	18	4	4	3	1		37	D1.1
QUANTITI BI DWG		1		2	2	12		2	3					10	32	D1.2
TOTALS	1	1	1	2	4	14	2	14	35	8	6	3	1	10	102	
						157	112	E			,				10	
EXISTING FENDERS	1	1	1					14			6		1	10	34	
NEW FENDERS			1		4			2	14	7		1		10	39	
EXISTING AND NEW FENDER																
OCCURING AT SAME BENT			1					2						10	13	

NOTES

- 1. DRAWING SHALL BE PRINTED IN COLOR.
- 2. PHOTOS SHOWN ARE TYPICAL OF THE WHARF FACE AT BENT LOCATIONS SHOWN ON D1.0, D1.1 AND D1.2.

6684 D2 1 8 OF 20 CONT/CONS: 071754 M. ID: 201145.01	PIER	PCT FENDER S	EXISTIN	TOWNSHIP: 20	DAT-HRZ: N/A	וביטטרכט יושטשעשן
	6684	D2.1	8 OF 20		M. ID: 201145.01	DILACE, FEMILE DESCRIPTIATE DADCEI.





NO FENDER, HEAVY LOAD AREA,

D1.1 SCALE: N.T.S.

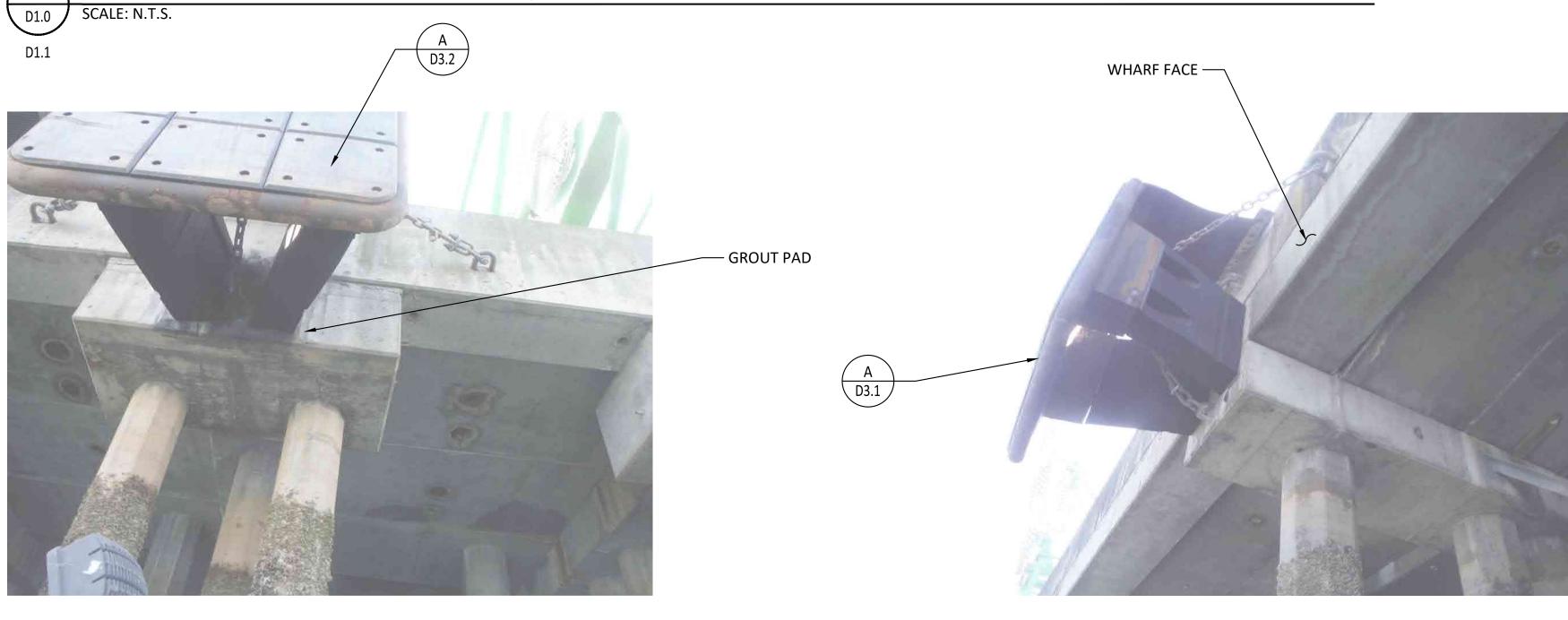
ORIGINAL WHARF

1" TO 2"±

WHARF FACE

— FACE OF PILE CAP





FENDER, GROUT PAD ON PILE CAP FACE, HEAVY LOAD AREA, ORIGINAL WHARF SCALE: N.T.S.

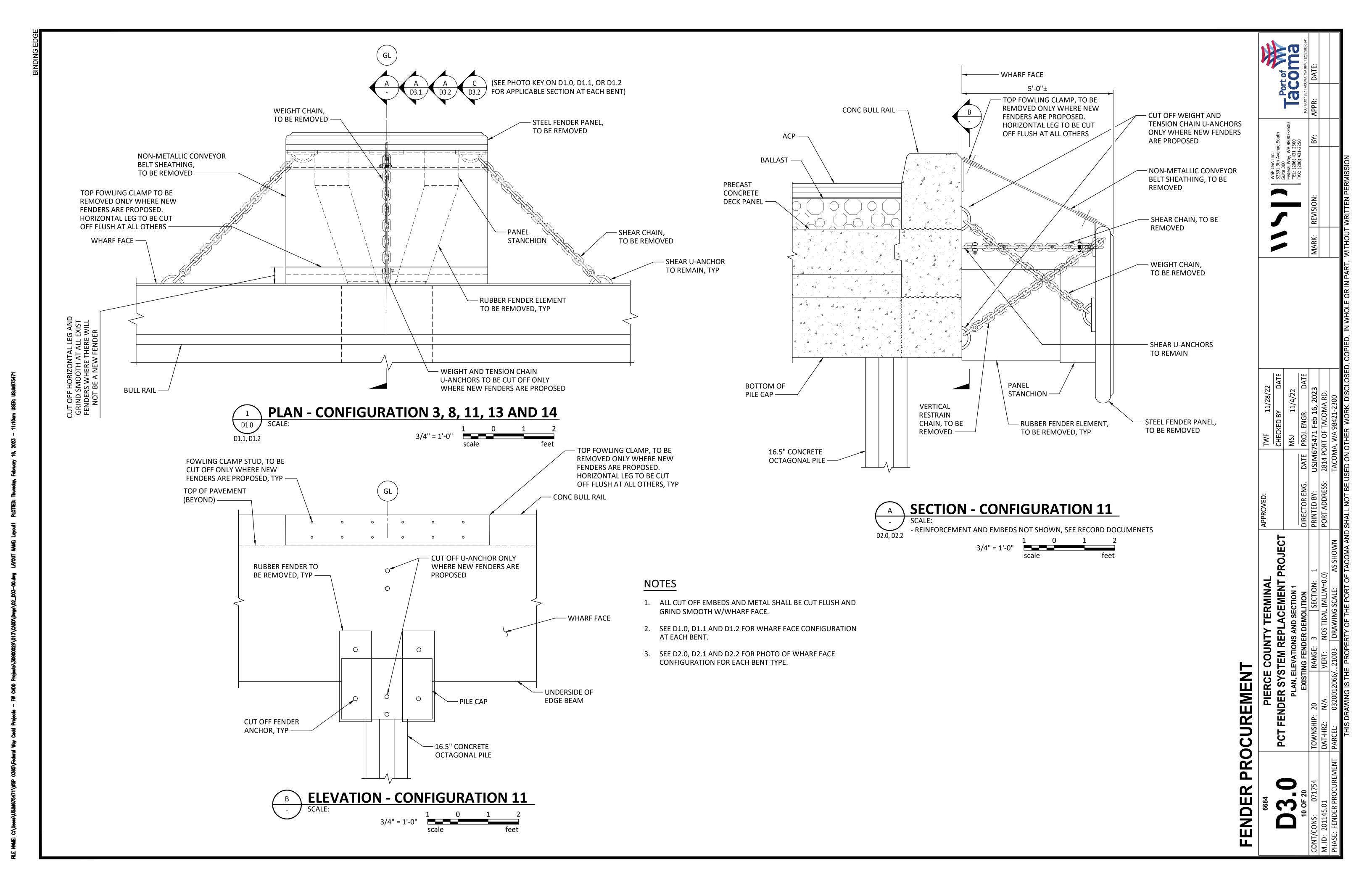
FENDER, WHARF EXPANSION SCALE: N.T.S.

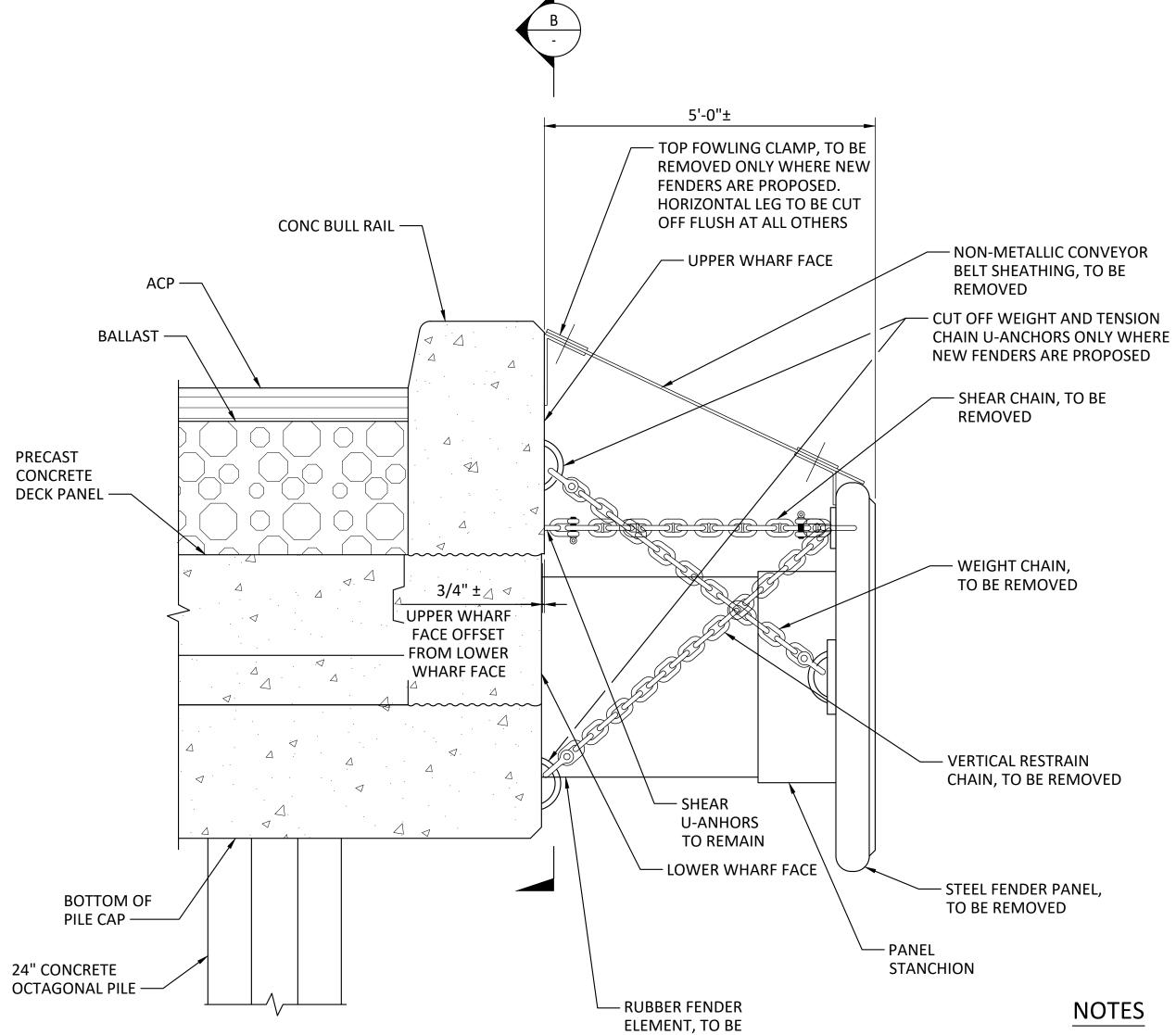
			FE	NDER QUA	NTITIES FO	R EACH WI	HARF FACE	CONFIGUR	ATION (SA	ME AS D2.0	D)					
РНОТО	1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTALS	DWG
DWG	D2.0	D2.0	D2.0	D2.0	D2.0	D2.0	D2.1	D2.1	D2.1	D2.1	D2.2	D2.2	D2.2	D2.2		
WILLARD FACE CONFICURATION	1				2	2	2	6	14	4	2				33	D1.0
WHARF FACE CONFIGURATION QUANTITY BY DWG			1.					6	18	4	4	3	1.		37	D1.1
QUANTITY BY DWG		1		2	2	12	9	2	3			2		10	32	D1.2
TOTALS	1	1	1	2	4	14	2	14	35	8	6	3	1	10	102	
30	2. 7.1		20	1		200	700		12.		ar a	#2		2		
EXISTING FENDERS	1	1	1					14			6		1	10	34	
NEW FENDERS			1		4			2	14	7		1		10	39	
EXISTING AND NEW FENDER													7			
OCCURING AT SAME BENT			1					2						10	13	i

NOTES

- 1. DRAWING SHALL BE PRINTED IN COLOR.
- 2. PHOTOS SHOWN ARE TYPICAL OF THE WHARF FACE AT BENT LOCATIONS SHOWN ON D1.0, D1.1 AND D1.2.

1000		PIERCE COUNTY		_
C CC	PCT FEN	PCT FENDER SYSTEM REP	TEM R	EP
7:12			PHOTOS	70S
9 OF 20		EXISTING WHARF FACE C	HARF FA	CE C
CONT/CONS: 071754	TOWNSHIP: 20		RANGE: 3	3
M. ID: 201145.01	DAT-HRZ:	N/A	VERT:	NOS
PHASE: FENDER PROCUREMENT PARCEL:	PARCEL:	0320012066/21003 DRA	21003	DR/



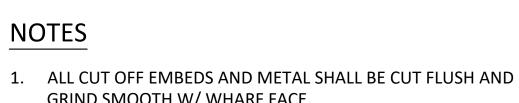


REMOVED, TYP

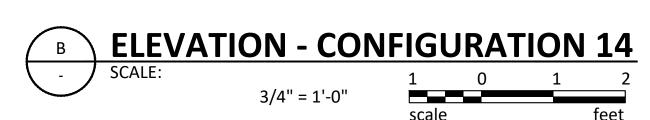
SECTION - CONFIGURATION 14

D2.2, D3.0 - REINFORCEMENT AND EMBEDS NOT SHOWN, SEE RECORD DOCUMENTS

3/4" = 1'-0"



- GRIND SMOOTH W/ WHARF FACE. 2. SEE D1.0, D1.1 AND D1.2 FOR WHARF FACE CONFIGURATION
- AT EACH BENT.
- 3. SEE D2.0, D2.1 AND D2.2 FOR PHOTO OF WHARF FACE CONFIGURATION FOR EACH BENT TYPE.



GL

0

0

ATTACHMENT BOLTS FROM THREADED INSERTS, TYP —

FOWLING CLAMP STUD, TO BE

FENDERS ARE PROPOSED, TYP —

CUT OFF ONLY WHERE NEW

TOP OF PAVEMENT

LOWER WHARF FACE —

REMOVE FENDER

(BEYOND) —

UPPER WHARF FACE —

FENDER PROCUREMENT	CUR	EMEN	—						
6684		PIERCE	COUN	TY TE	PIERCE COUNTY TERMINAL	APPROVED:		TWF 11/28/22	
	PCT FF	NDFR SYS	STEM R	FPI AC	PCT FENDER SYSTEM REPLACEMENT PROJECT			CHECKED BY DATE	
	 - - - -	PLAN, E	LEVATION	PLAN, ELEVATIONS AND SECTION 2	ECTION 2			MSJ 11/4/22	
11 OF 20		EXIST	ING FEND	EXISTING FENDER DEMOLITION	LITION	DIRECTOR ENG.	DATE	PROJ. ENGR DATE	
CONT/CONS: 071754	TOWNSHIP: 20	20	RANGE: 3	3	SECTION: 1	PRINTED BY:	USJM6	USJM675471 Feb 16, 2023	
M. ID: 201145.01	DAT-HRZ: N/A	N/A	VERT:	NOS TIDA	VERT: NOS TIDAL (MLLW=0.0)	PORT ADDRESS:		2814 PORT OF TACOMA RD.	
PHASE: FENDER PROCUREMENT PARCEL:	PARCEL:	0320012066/21003 DRAWING SCALE:	21003	DRAWING	G SCALE: AS SHOWN		TACOM,	TACOMA, WA 98421-2300	
	i	i ()		T 10 / (± 0;		H 0 1 4 1 0	100		

— TOP FOWLING CLAMP, TO BE

FENDERS ARE PROPOSED.

OFF FLUSH AT ALL OTHERS

CONC BULL RAIL

REMOVED ONLY WHERE NEW

HORIZONTAL LEG TO BE CUT

- CUT OFF U-ANCHOR

FENDERS ARE PROPOSED

- RUBBER FENDER

TO BE REMOVED,

- UNDERSIDE OF

EDGE BEAM

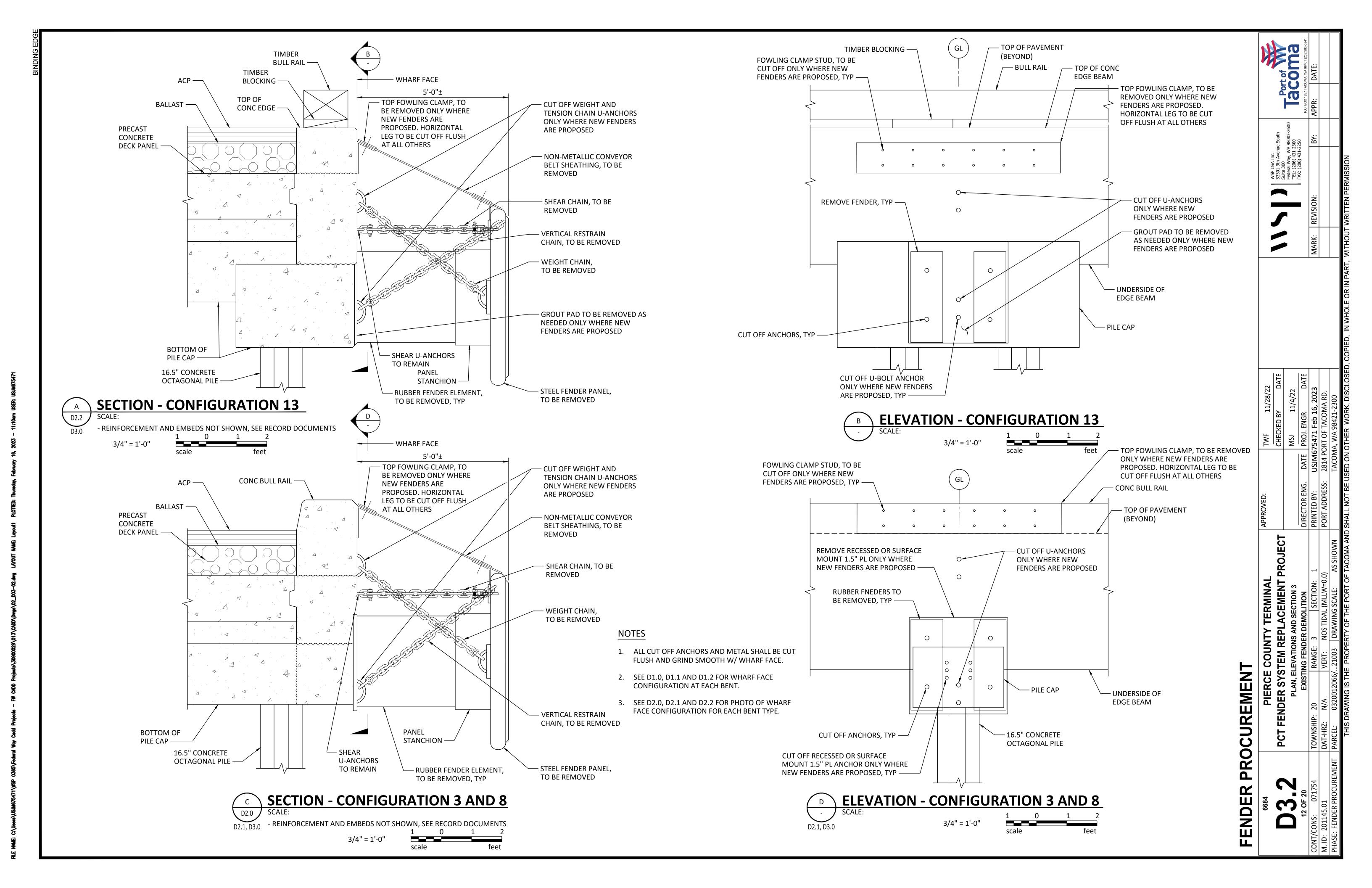
— PILE CAP

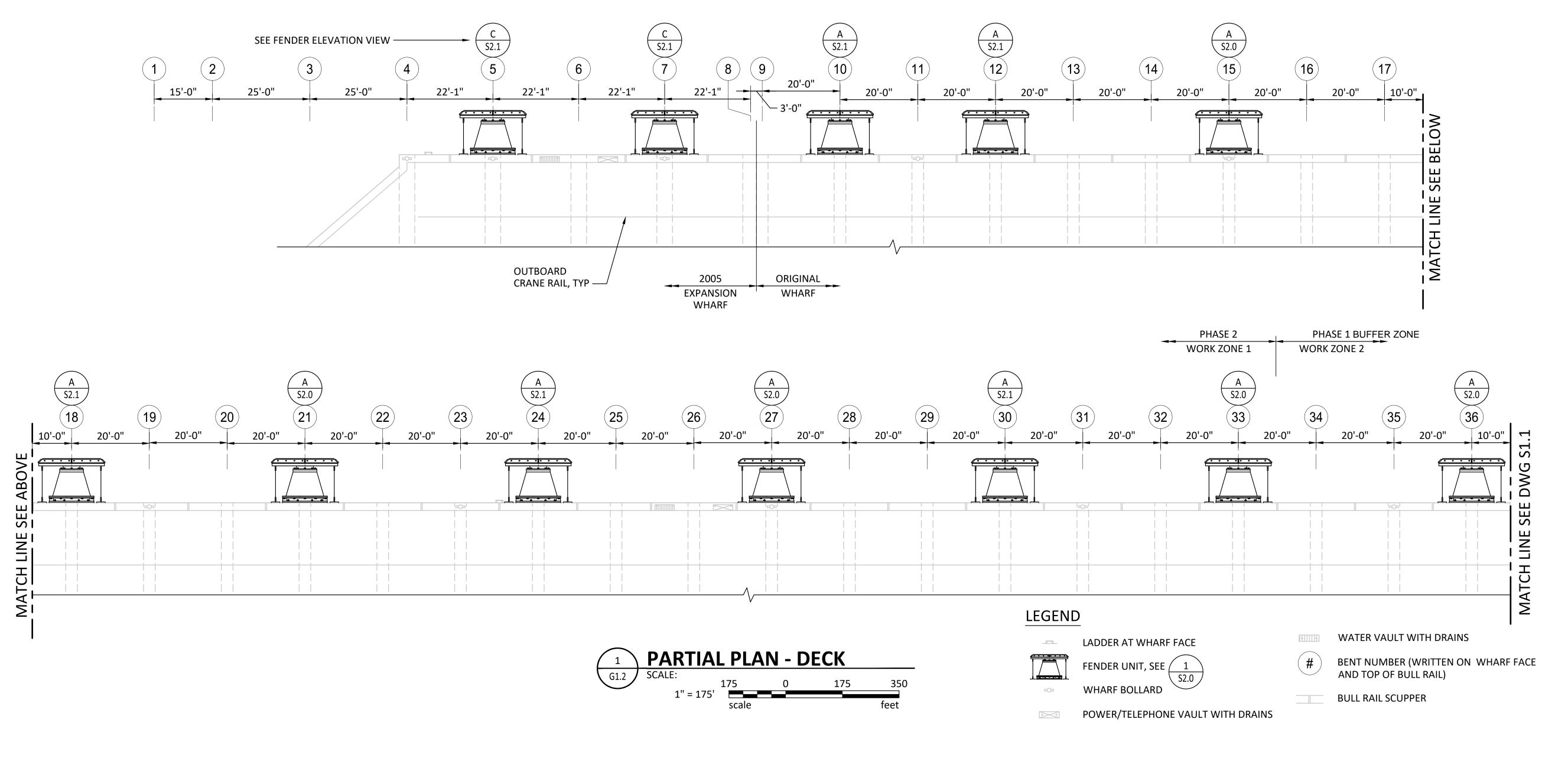
– 24" CONCRETE

OCTAGONAL PILE

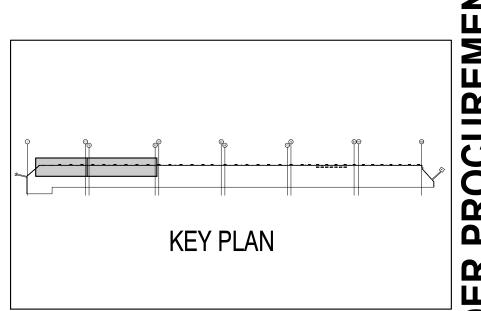
— FACE OF PILE CAP

ONLY WHERE NEW





				PH	OTO KEY - E	XISTING WHA	ARF FACE	CONFIGURATION (SAME AS D1.0)			_		
BENT	DESCRIPTION	PHOTO/ WHARF FACE CONF.	DWG NO.	EXISTING FENDER?	NEW FENDER?	EXISTING AND NEW FENDER AT THIS BENT?	BENT	DESCRIPTION	PHOTO/ WHARF FACE CONF.	DWG NO.	EXISTING FENDER?	NEW FENDER?	EXISTING AND NEW FENDER AT THIS BENT?
4	NO FENDER, TYP BENT, WHARF EXPANSION	6	D2.0	-	:=	:=	21	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	(<u>-</u>	YES	:=
5	MISSING FENDER, TYP BENT, WHARF EXPANSION	5	D2.0	: <u>=</u> 0	YES	<u>-</u>	22	FENDER W/ RECESSED 1.5" PL, TYP BENT, ORIGINAL WHARF	8	D2.1	YES	72	82
6	NO FENDER, TYP BENT, WHARF EXPANSION	6	D2.0	3 - 22	12	-	23	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	22	22	
7	MISSING FENDER, TYP BENT, WHARF EXPANSION	5	D2.0	= 3	YES	E=	24	NO FENDER, BULLRAIL PROUD OF PILE CAP, TYP BENT, ORIGINAL WHARF	10	D2.1	-	YES	
8	NO FENDER, EXPANSION/ORIGINAL WHARF WEST TRANSITION	7	D2.1	4	-	:=	25	FENDER W/ RECESSED 1.5" PL, TYP BENT, ORIGINAL WHARF	8	D2.1	YES	=	:-
9	NO FENDER, EXPANSION/ORIGINAL WHARF WEST TRANSITION	7	D2.1	-	-	s=	26	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	-		:=
10	FENDER W/ RECESSED 1.5" PL, TYP BENT, ORIGINAL WHARF	8	D2.1	YES	YES	YES	27	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	-	YES	:=
11	NO FENDER, PILE CAP FLUSH W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	₩t	-	:-	28	PILE CAP SPALLING, FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	1	D2.0	YES		:=
12	NO FENDER, BULLRAIL PROUD OF PILE CAP, TYP BENT, ORIGINAL WHARF	10	D2.1	=	YES	2=	29	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	(0=	() =	.=
13	FENDER W/ RECESSED 1.5" PL, TYP BENT, ORIGINAL WHARF	8	D2.1	YES	:=	-	30	NO FENDER, BULLRAIL PROUD OF PILE CAP, TYP BENT, ORIGINAL WHARF	10	D2.1	-	YES	~
14	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	Helds	-	-	31	FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	11	D2.2	YES	ı	Œ
15	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	** (*)	YES	-	32	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	10=	15=	. =
16	FENDER W/ RECESSED 1.5" PL, TYP BENT, ORIGINAL WHARF	8	D2.1	YES	-	s a	33	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	0=	YES	:=
17	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1		-	·=	34	FENDER W/ RECESSED 1.5" PL, TYP BENT, ORIGINAL WHARF	8	D2.1	YES	S#	:=
18	NO FENDER, BULLRAIL PROUD OF PILE CAP, TYP BENT, ORIGINAL WHARF	10	D2.1	.75%	YES	877	35	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	11 5	85	2 .5
19	FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	11	D2.2	YES	ia.	150	36	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	0.5	YES	-
20	NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF	9	D2.1	- 6	i 		TOTALS				9	12	1



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6684		PIERCE COUNTY	COUN	E
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13 OF 20		Z	NEW FENDER I	ERI
CONT/CONS: 071754	TOWNSHIP: 20	20	RANGE: 3	3
M. ID: 201145.01	DAT-HRZ: N/A	N/A	VERT:	NO
PHASE: FENDER PROCUREMENT PARCEL:	PARCEL:	0320012066/21003 DR	21003	DR

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D2.1

D2.1

D2.1

D2.1

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D2.2

D2.1

YES

YES

YES

YES

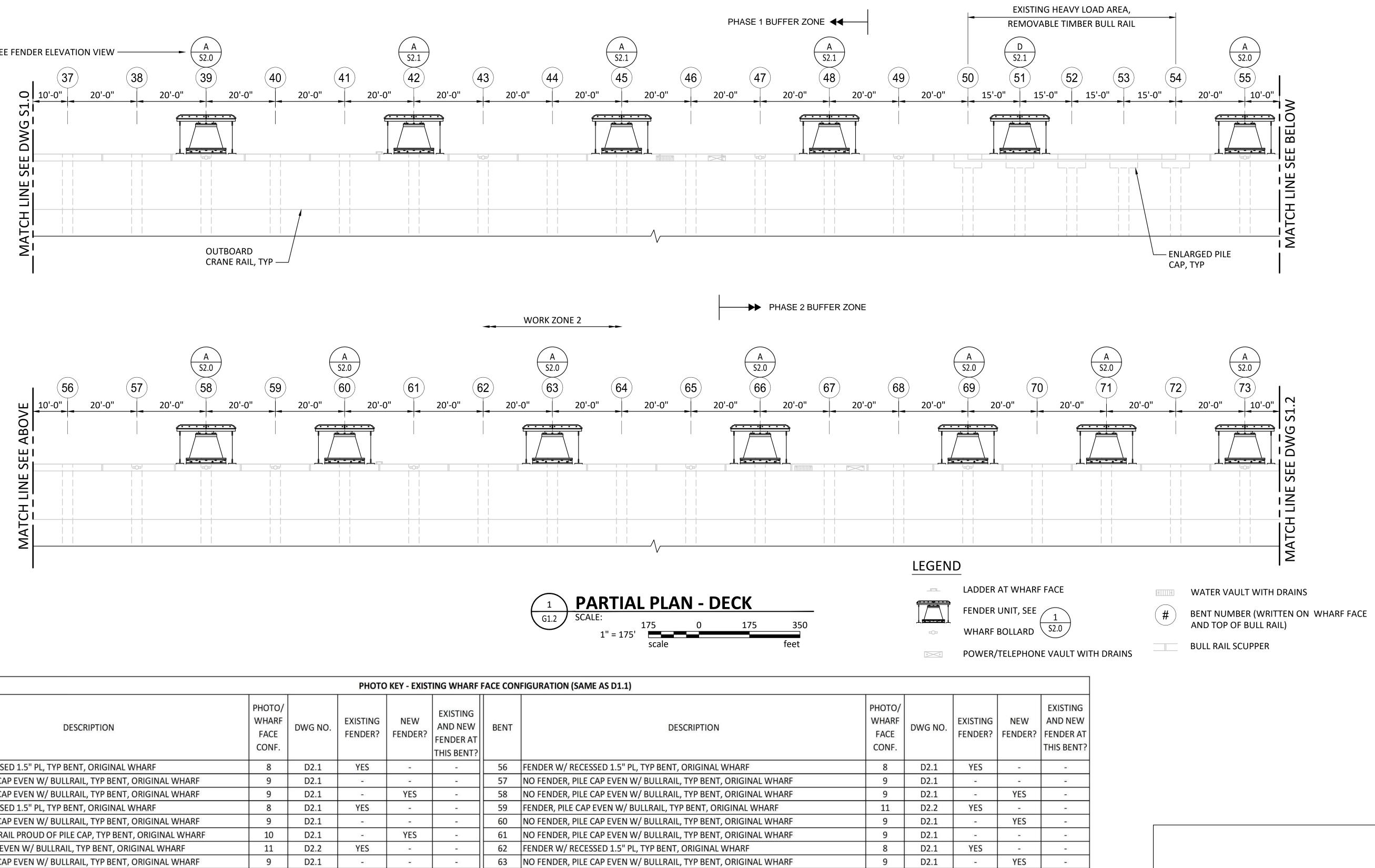
YES

1.5

YES

YES

TOTALS



64 NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF

66 NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF

67 NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF

69 NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF

70 NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF

72 NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF

73 NO FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF

71 | FENDER W/ 1.5" SURFACE MOUNT PL, TYP BENT, ORIGINAL WHARF

65 FENDER, PILE CAP EVEN W/ BULLRAIL, TYP BENT, ORIGINAL WHARF

68 | FENDER W/ RECESSED 1.5" PL, TYP BENT, ORIGINAL WHARF

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D2.1

D2.2

D2.1

D2.1

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D2.0

D2.1

D2.1

YES

YES

YES

12

YES

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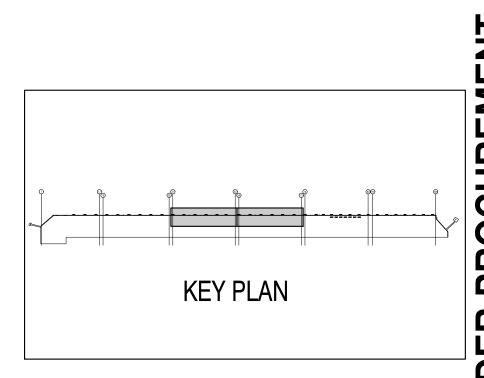
YES

YES

YES

13

YES



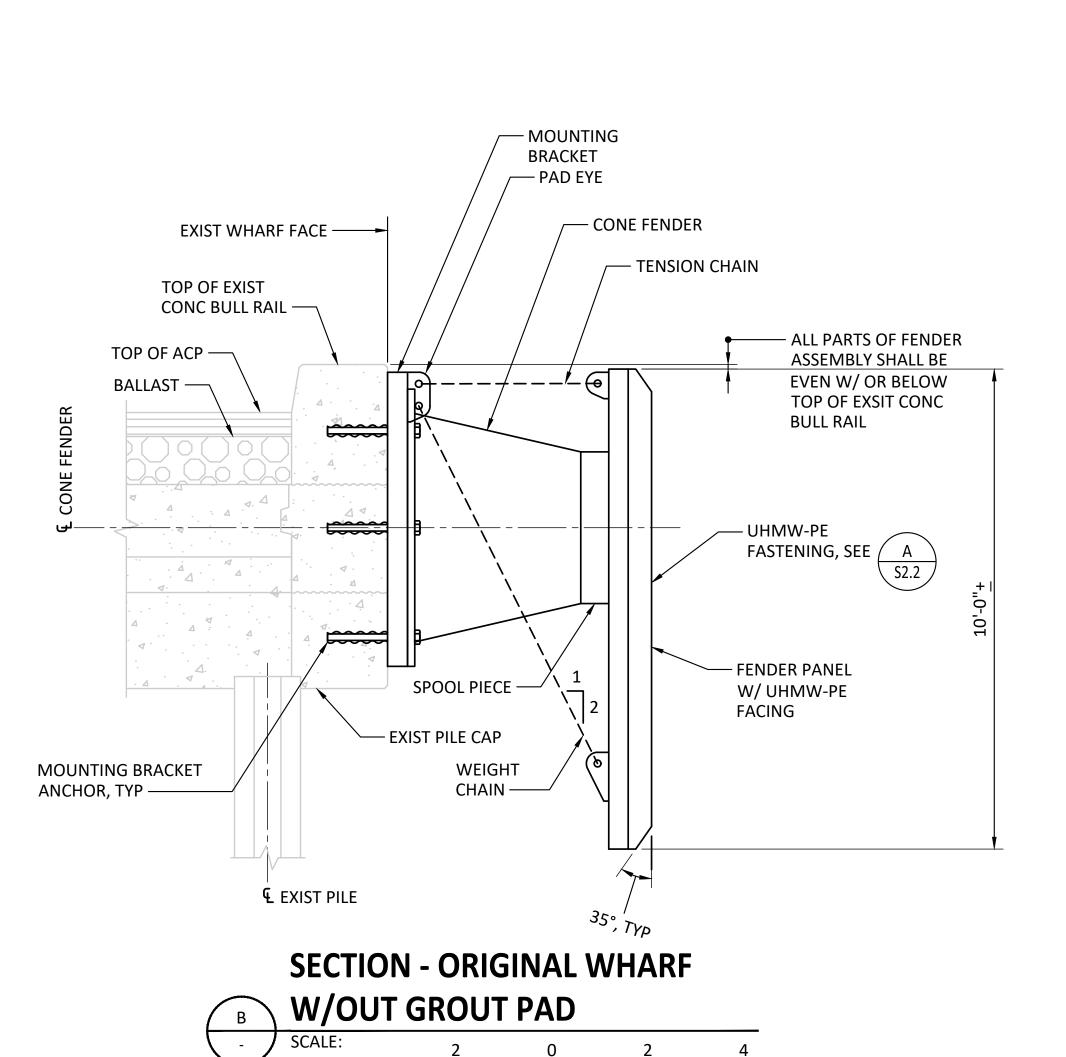
	<u>}</u>

99	6684		PIERCE COUNTY TERMINAL	COUN	ITY TEF	RMINAL
U	_	PCT FEN	PCT FENDER SYSTEM REPLACEMENT	TEM R	EPLACI	EMENT
つ	-		M	IARF PAR	WHARF PARTIAL PLAN 2	12
14 OF 20)F 20		Z	EW FEND	NEW FENDER LAYOUT	_
CONT/CONS:	071754	TOWNSHIP: 20		RANGE:	RANGE: 3 SECTION:	SECTION:
M. ID: 201145.0	M. ID: 201145.01 DAT-HRZ:	DAT-HRZ: N/A		VERT:	VERT: NOS TIDAL (MLLW=0.	(MLLW=0.
PHASE: FENDER	PROCUREMENT		0320012066/21003 DRAWING SCALE:	21003	DRAWING	SCALE:

Port of a CO

NOTES

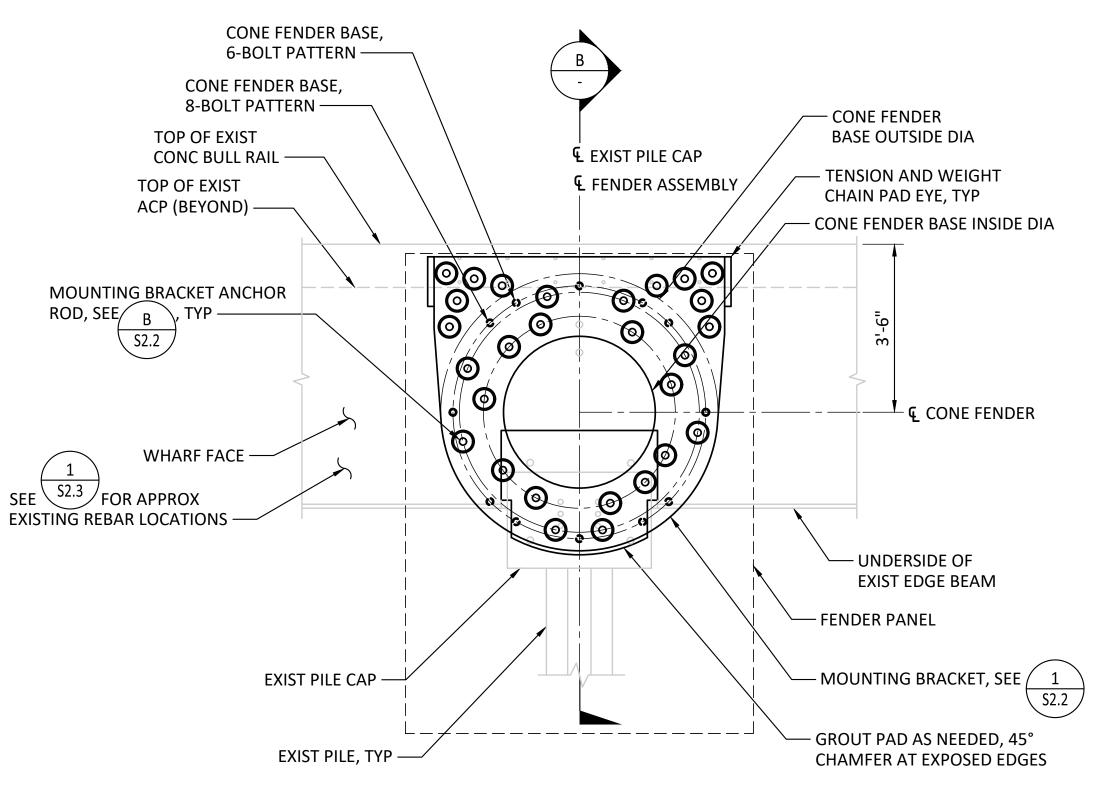
- 1. CONE FENDER, FENDER PANEL, MOUNTING BRACKET, PAD EYE AND CHAIN HARDWARE (FENDER ASSEMBLY) SHOWN ARE REPRESENTATIVE OF AN ACCEPTABLE PRODUCT SUBJECT TO APPROVAL BY THE ENGINEER.
- 2. FOR FENDER LOCATIONS, SEE DWG S1.0, S1.1 AND S1.2. SEE SPECIFICATION SECTION 35 59 13 MARINE FENDER FOR INSTALLATION AND REQUIREMENTS.

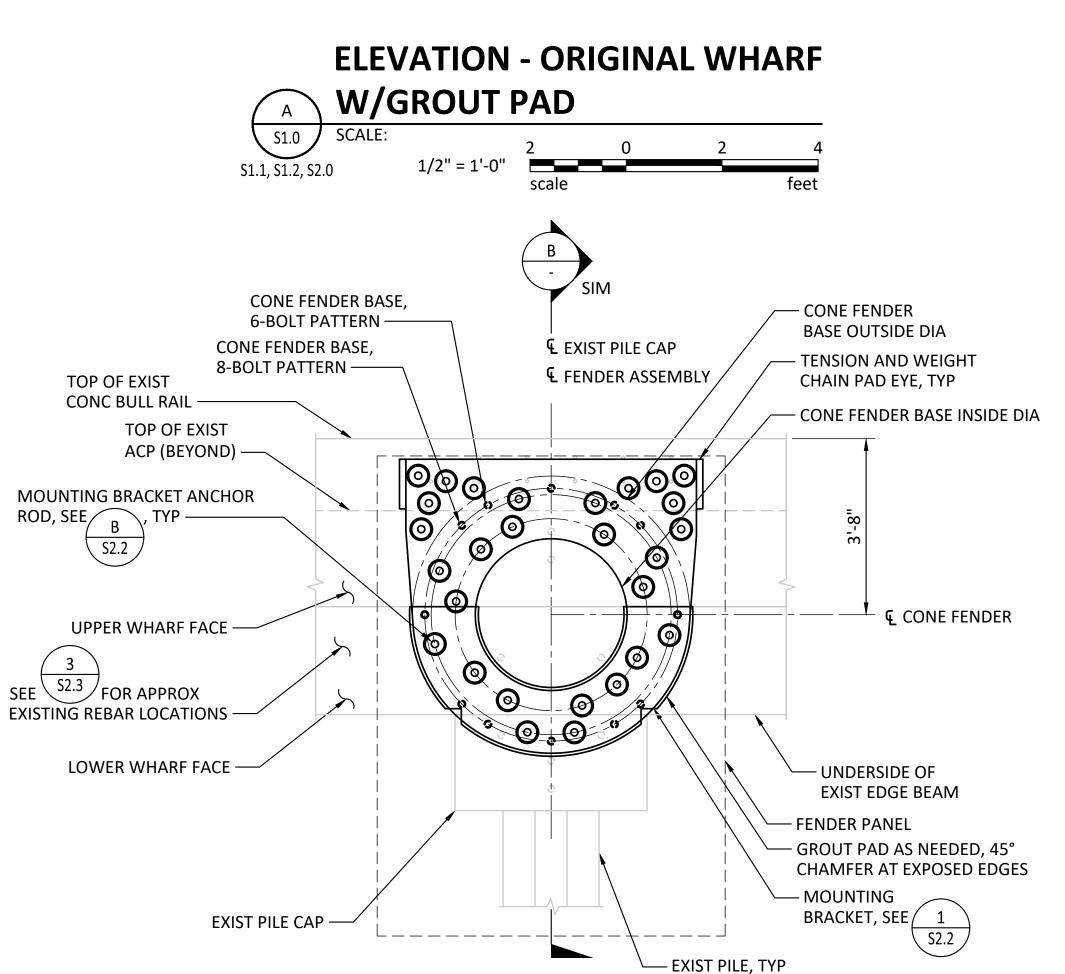


FENDER PROCUREMENT

-					
TACOMA, WA 98421-2300	TACON	0320012066/21003 DRAWING SCALE: AS SHOWN	066/21003	PARCEL: 0320012	PHASE: FENDER PROCUREMENT F
2814 PORT OF TACOMA RD.	PORT ADDRESS: 2814 F	VERT: NOS TIDAL (MLLW=0.0)	VERT:	DAT-HRZ: N/A	M. ID: 201145.01
USJM675471 Feb 16, 2023	PRINTED BY: USJM(SECTION: 1	RANGE: 3	TOWNSHIP: 20	CONT/CONS: 071754
DATE PROJ. ENGR DATE	DIRECTOR ENG. DATE	.T.1	SHEET 1		16 OF 20
MSJ 11/4/22		EM DETAILS	FENDER SYSTEM DETAILS		0770
CHECKED BY DATE		PCT FENDER SYSTEM REPLACEMENT PROJECT	YSTEM R	PCT FENDER S	
TWF 11/28/22	APPROVED:	PIERCE COUNTY TERMINAL	CE COUN	PIER	6684

Tacon Tacon





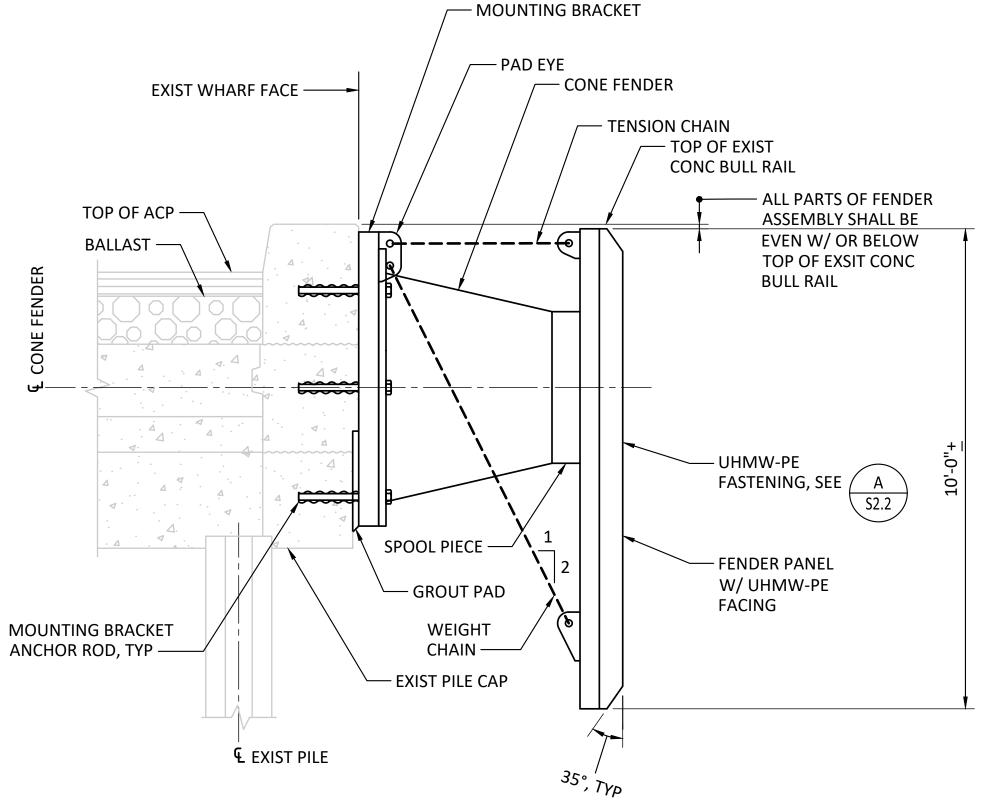
ELEVATION - WHARF EXPANSION

S1.0

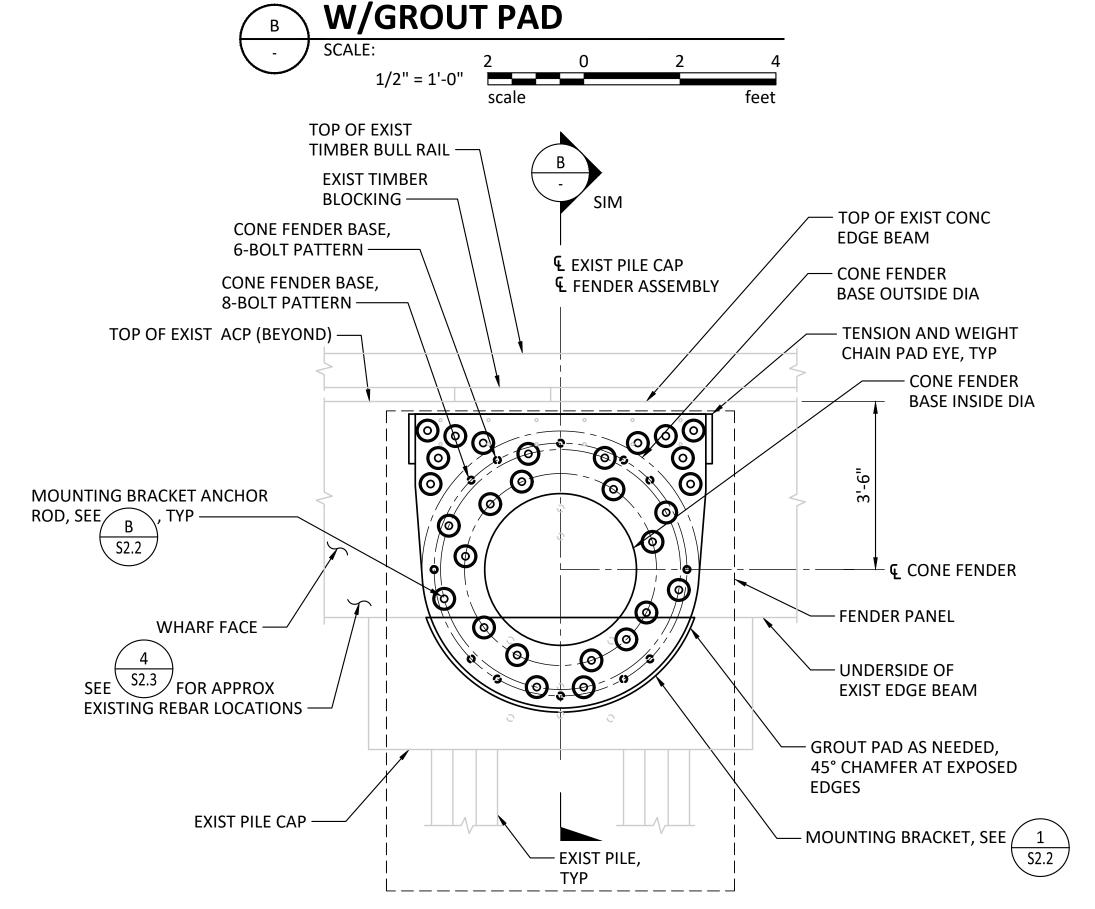
S1.1, S1.2, S2.0

NOTES

SEE ELEVATION A/S2.0 FOR MOUNTING BRACKET ANCHOR AREA DELINEATION AND NOTES ON DWG S2.0 FOR ANCHOR ROD INSTALLATION.







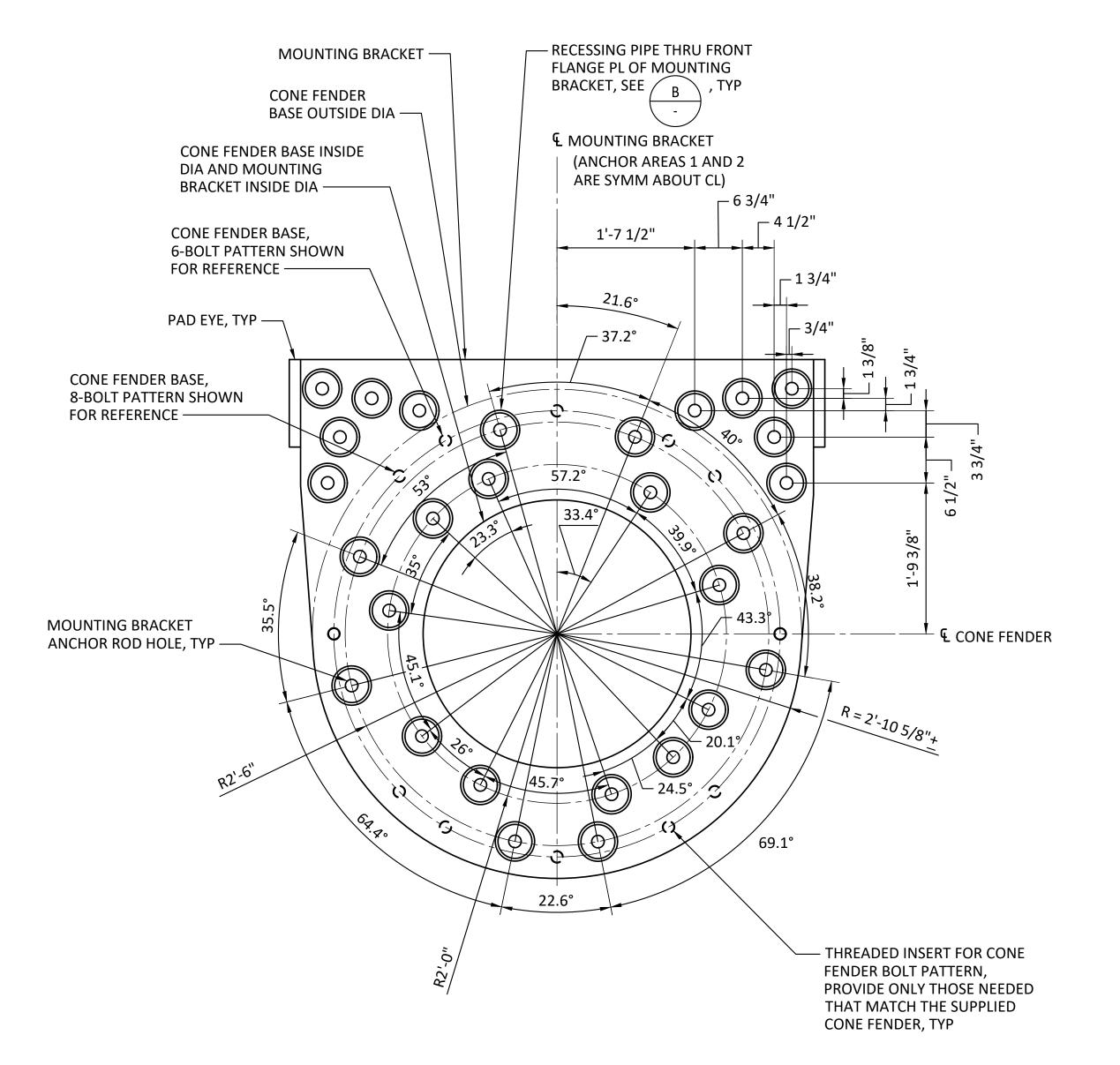
SECTION - EXIST HEAVY LOAD AREA

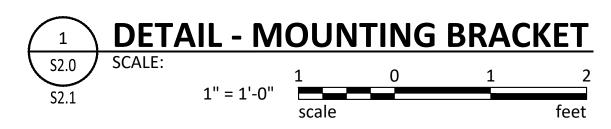
1/2" = 1'-0"

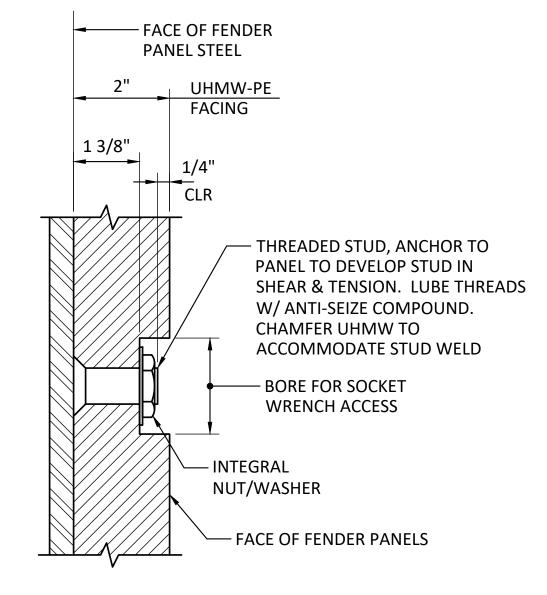
S1.1

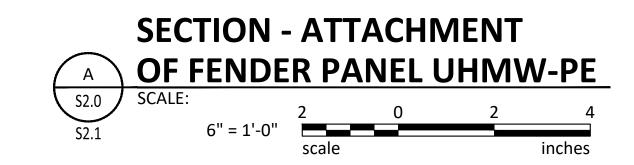
FENDER PROCOREMEN	CURE	I WILL							
6684		PIERCE COUR	COUNTY TERMINAL	MINAL	APPROVED:	•	TWF 11/28/22	•	d5/M
7 00	PCT FEN	PCT FENDER SYSTEM REPLACEMENT PROJECT	PEPLACE	MENT PROJEC			CHECKED BY DATE		3330
7.70		FENDER SYS	FENDER SYSTEM DETAILS	S	•	_ _	MSJ 11/4/22	>	Federal V TEL: (20
17 OF 20		SHI	SHEET 2		DIRECTOR ENG. DATE PROJ. ENGR	DATE	PROJ. ENGR DATE		FAX
CONT/CONS: 071754	TOWNSHIP: 20	20 RANGE: 3		SECTION: 1	PRINTED BY:	USJM67	USJM675471 Feb 16, 2023	MARK:	MARK: REVISION:
M. ID: 201145.01	DAT-HRZ: N	N/A VERT:	VERT: NOS TIDAL (MLLW=0.0)	ALLW=0.0)	PORT ADDRESS:	2814 PO	PORT ADDRESS: 2814 PORT OF TACOMA RD.		
PHASE: FENDER PROCUREMENT PARCEL:		0320012066/21003 DRAWING SCALE:	DRAWING S	CALE: AS SHOWN	_	TACOMA	TACOMA, WA 98421-2300		

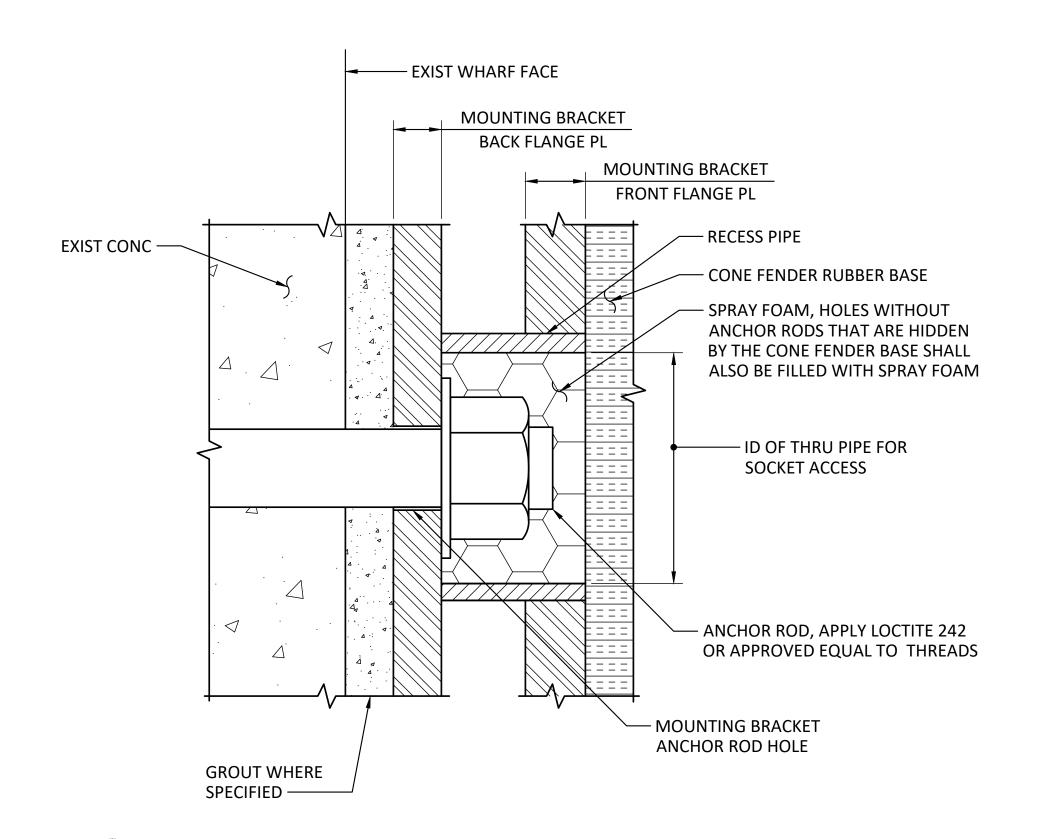
Tacoma

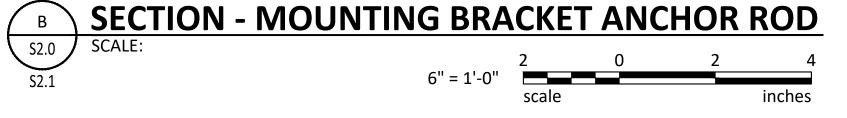






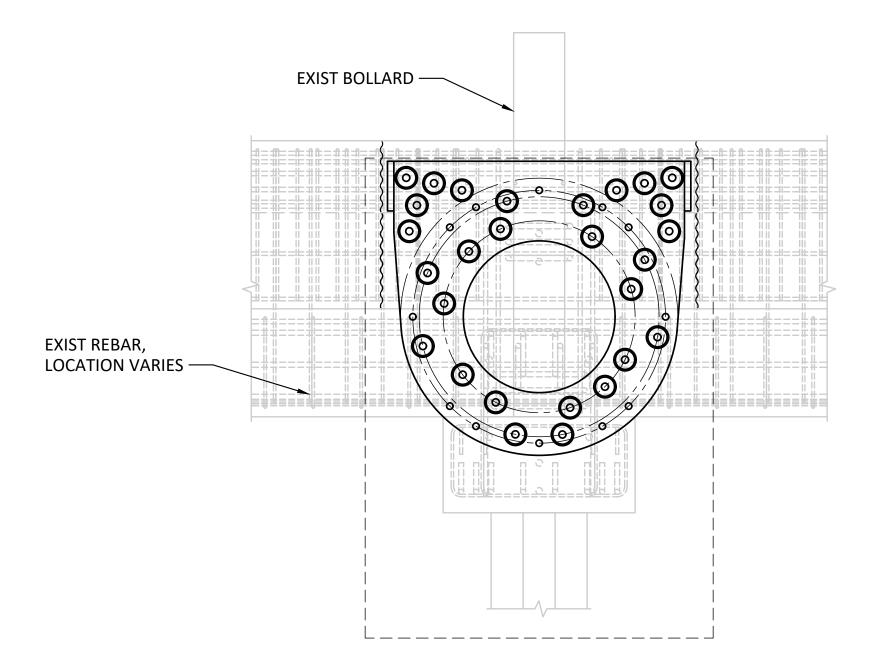


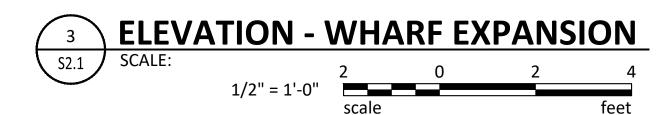




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6684		PIERCE	COUN	PIERCE COUNTY TERMINAL	7
C C C C	PCT FE	NDER SYS	TEM R	PCT FENDER SYSTEM REPLACEMENT PROJECT	T PROJECT
7.70		FEN	DER SYS	FENDER SYSTEM DETAILS	
18 OF 20			SHE	SHEET 3	
CONT/CONS: 071754	TOWNSHIP: 20	20	RANGE: 3	3 SECTION: 1	i : 1
M. ID: 201145.01	DAT-HRZ: N/A		VERT:	VERT: NOS TIDAL (MLLW=0.0)	-0.0)
PHASE: FENDER PROCUREMENT PARCEL:	PARCEL:	0320012066/	21003	0320012066/21003 DRAWING SCALE: AS SHOWN	AS SHOWN

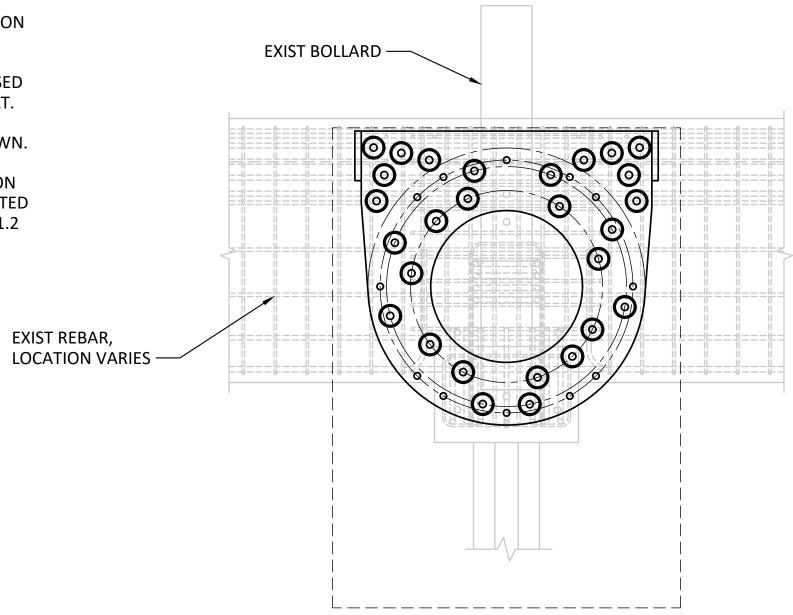
ELEVATION - ORIGINAL WHARF W/GROUT PAD SCALE: 1/2" = 1'-0" 2 0 2 4 1/2" = 1'-0"

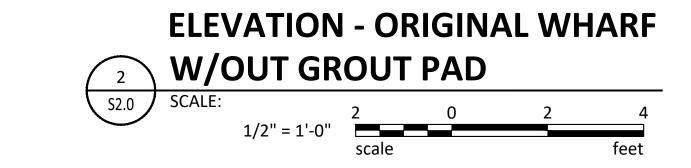


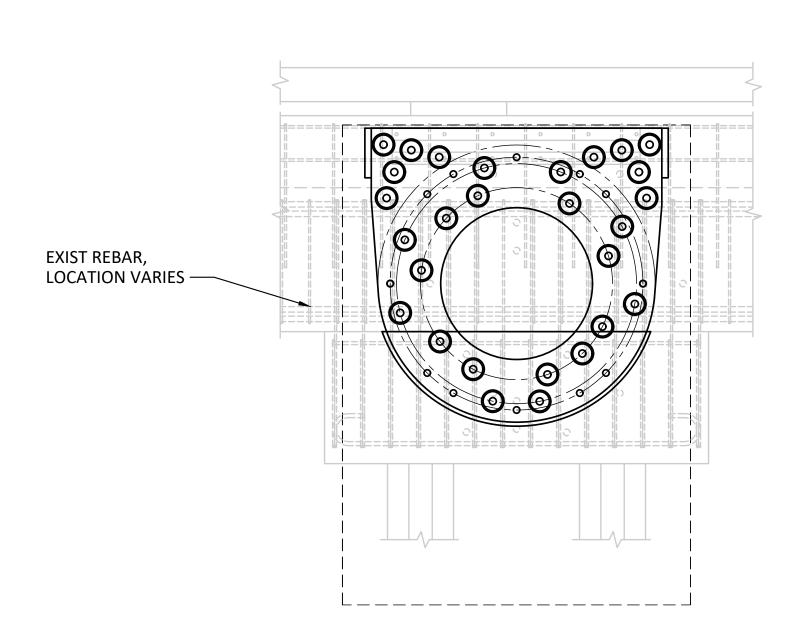


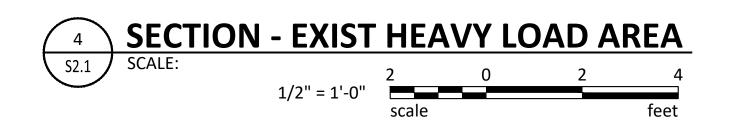
NOTES

- 1. THE EXISTING REINFORCEMENT INFORMATION ON THIS DWG IS PROVIDED FOR GENERAL INFORMATION. EXISTING REBAR AND EXISTING ANCHORS ARE SHOWN APPROXIMATE AND BASED ON RECORD DRAWINGS THAT ARE NOT AS-BUILT.
- 2. SEE S2.0 AND 2.1 FOR INFORMATION NOT SHOWN.
- 3. BENTS WITH BOLLARDS PRESENT ARE SHOWN ON THIS DWG AND REPRESENT THE MOST CONGESTED MOUNTING LOCATION. SEE SD1.0, S1.1, AND S1.2 FOR BOLLARD LOCATIONS



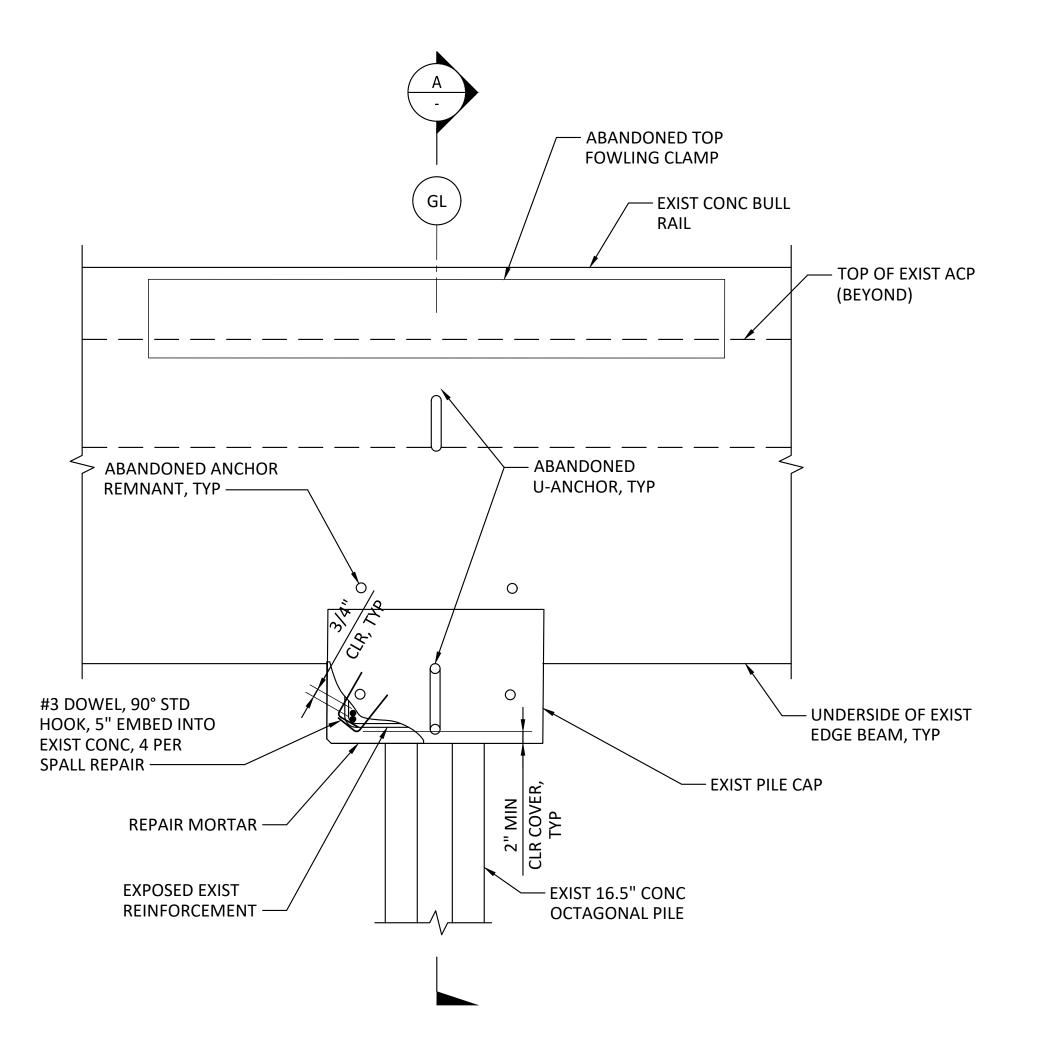


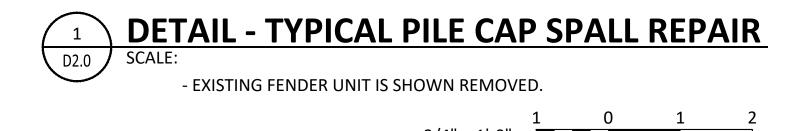


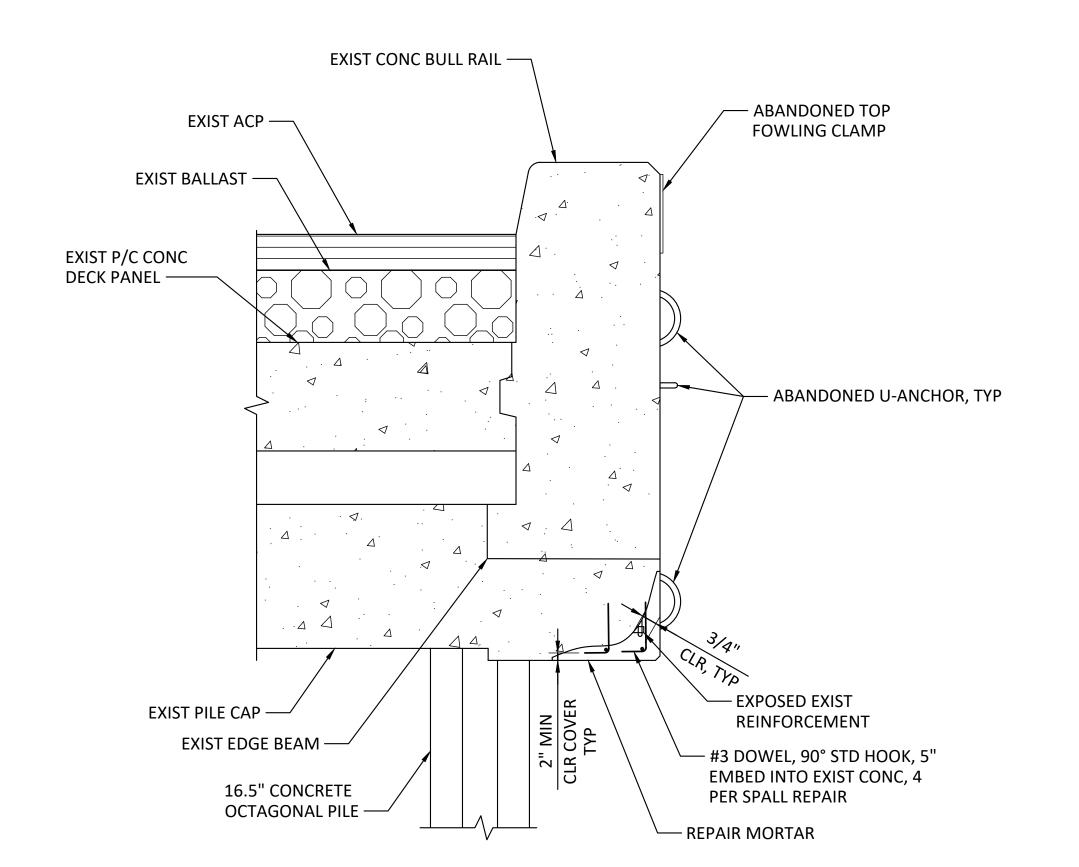


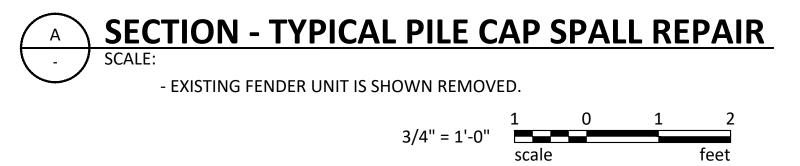
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53. 50.0F CONT/CONS: 071754 M. ID: 201145.01 PHASE: FENDER PROCUREMEN	PCT FENDER SYS	TOWNSHIP: 20	DAT-HRZ: N/A	NT PARCEL: 0320012066/.
	S3. 0		M. ID: 201145.01	PHASE: FENDER PROCUREMENT

Tacoma