

BINDING EDGE

# PORT OF TACOMA

## TACOMA, WASHINGTON

### BLAIR TERMINAL PIER REPAIRS - PROJECT NO. 091415 W. HYLEBOS LOG DOCK REPAIRS - PROJECT NO. 091372 CONTRACT NO. 069913

#### PORT COMMISSIONERS:

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#### PORT STAFF:

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Chief Executive Officer

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Director of Facilities Development

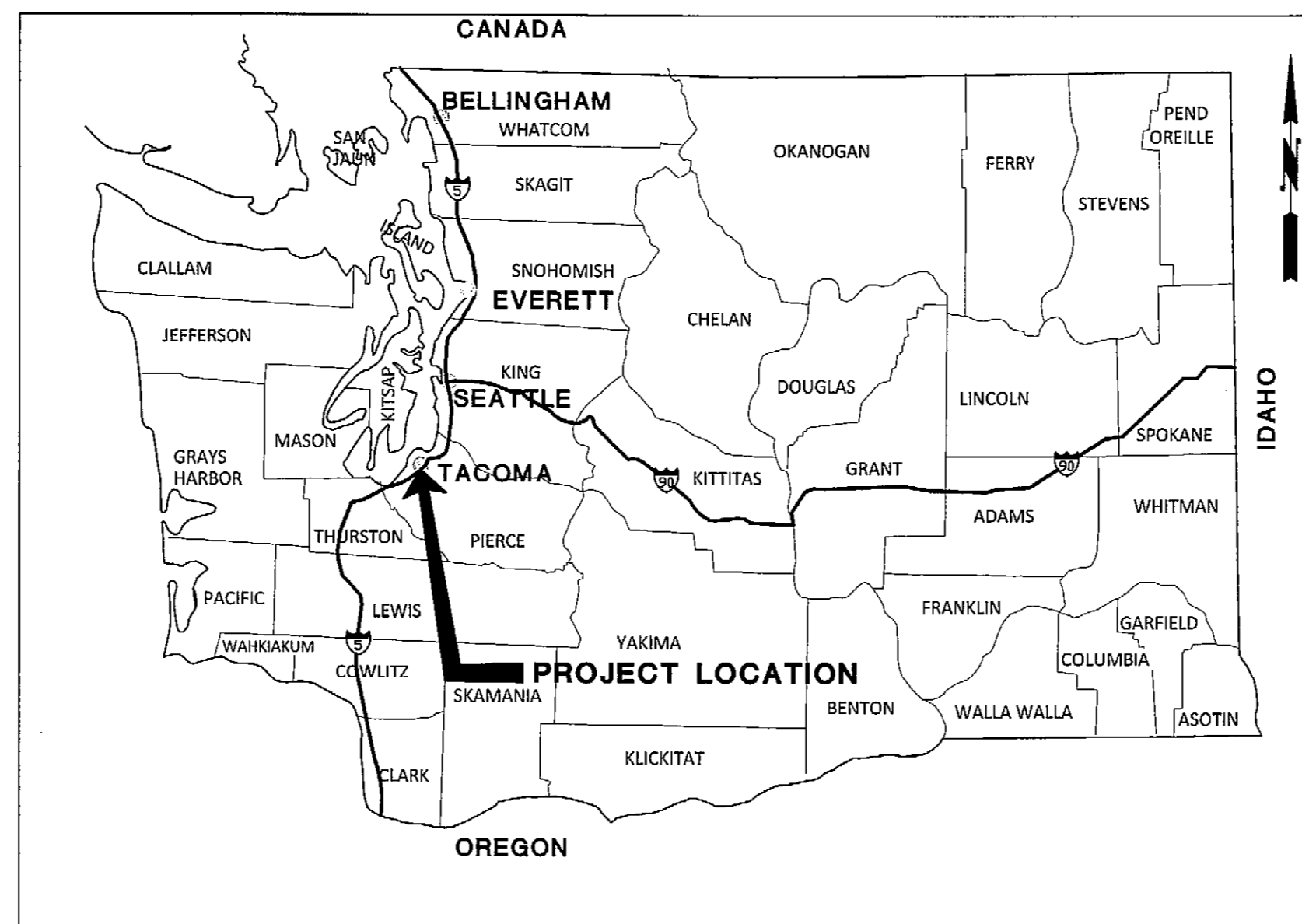
THAIS HOWARD, PE  
Director of Engineering

RICK UNRUH, PE  
Project Manager

#### CONSULTANT:



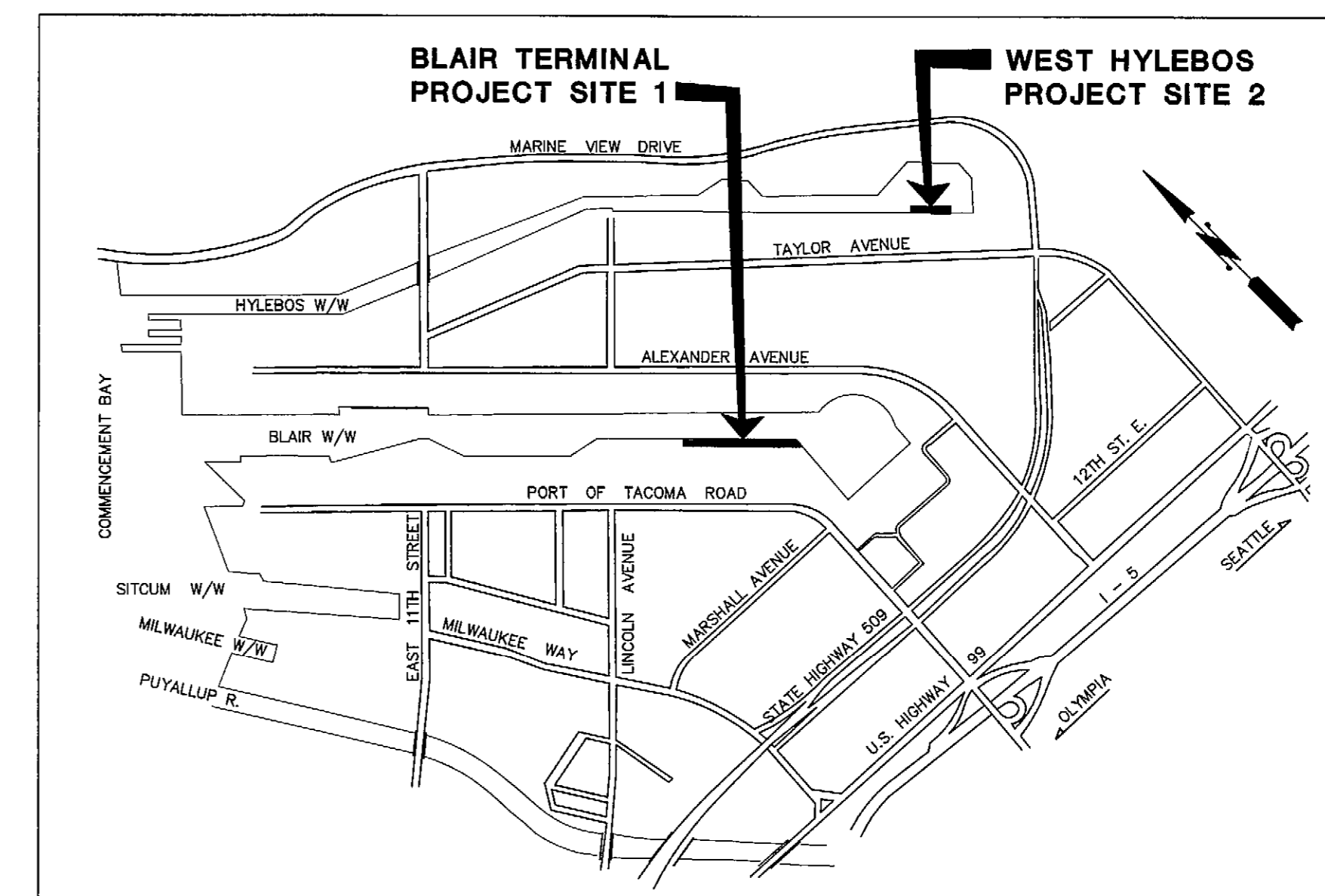
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AREA MAP

WASHINGTON

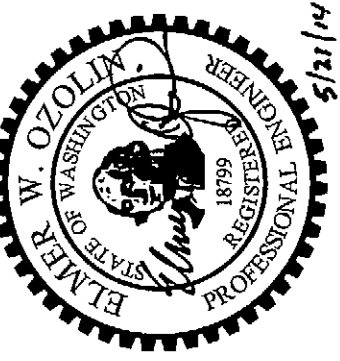
NO SCALE



VICINITY MAP

PORT OF TACOMA

NO SCALE



|     |            |              |
|-----|------------|--------------|
| JRG | CHECKED BY | DATE         |
| TTS | PROJ. ENGR | DATE         |
|     | enros      | May 21, 2014 |

APPROVED: *James J. Jones*  
5-27-14  
DIRECTOR ENGR.

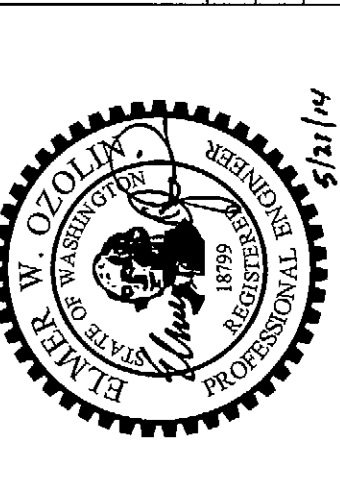
PORT ADDRESS: ONE SITCUM WAY  
TACOMA, WA 98421-2300

PORT OF TACOMA  
BLAIR / WEST HYLEBOS REPAIRS  
COVER SHEET

6527  
G1.0  
1 OF 15  
CON/CONS: 069913  
M. ID: 091415  
PHASE: FOR BID

Port of Tacoma  
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|--------------------|-------------|--|
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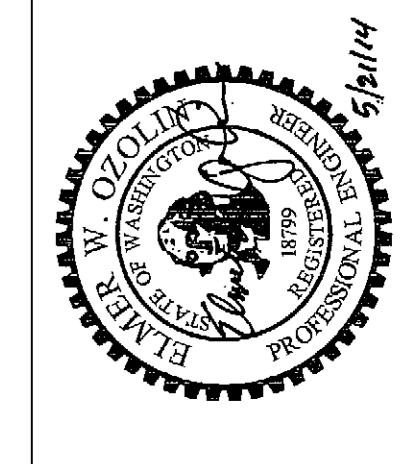
**ABBREVIATIONS**

|        |                                 |
|--------|---------------------------------|
| &      | AND                             |
| Ø      | DIAMETER                        |
| ACZA   | AMMONIACAL COPPER ZINC ARSENATE |
| APPROX | APPROXIMATE                     |
| BOT    | BOTTOM                          |
| CL     | CENTER LINE                     |
| CLR    | CLEAR                           |
| CONC   | CONCRETE                        |
| CONN   | CONNECTION                      |
| CONT   | CONTINUOUS                      |
| DEMO   | DEMOLISH                        |
| EHW    | EXTREME HIGH WATER              |
| EL     | ELEVATION                       |
| ELW    | EXTREME LOW WATER               |
| EXIST  | EXISTING                        |
| HORIZ  | HORIZONTAL                      |
| MHHW   | MEAN HIGHER HIGH WATER          |
| MLLW   | MEAN LOWER LOW WATER            |
| MSL    | MEAN SEA LEVEL                  |
| NO     | NUMBER                          |
| PCF    | POUNDS PER CUBIC FOOT           |
| PL     | PLATE                           |
| REQ'D  | REQUIRED                        |
| SIM    | SIMILAR                         |
| SS     | STAINLESS STEEL                 |
| TRTD   | TREATED                         |
| TYP    | TYPICAL                         |
| VERT   | VERTICAL                        |

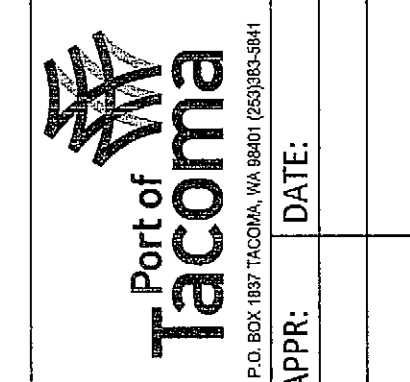
6527  
**G2.0**  
2 OF 15  
CONT/CONS: 069913  
M. ID: 091415  
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**PORT OF TACOMA**  
**BLAIR / WEST HYLEBOS REPAIRS**  
DRAWING LIST, AND ABBREVIATIONS  
TOWNSHIP: 21 RANGE: 03 SECTION: 36  
DAT-HRZ: WAB3-SF VERT: MLLW 19.39 @ TIDE 22 1933  
PARCEL: 321362046 DRAWING SCALE: AS SHOWN

APPROVED: *[Signature]*  
5-27-14  
DIRECTOR ENG. DATE: enos May 21, 2014  
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**GENERAL NOTES**

**GENERAL**

- THESE NOTES CONTAIN GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL VERIFY INFORMATION PROVIDED IN DRAWINGS WITH THE SPECIFICATIONS AND OTHER DOCUMENTS AND BRING ANY CONFLICTS TO THE ATTENTION OF THE ENGINEER BEFORE BEGINNING AFFECTED WORK. THE ENGINEER WILL RESOLVE ANY SUCH CONFLICT.
- THE FACILITIES WILL BE IN OPERATION DURING THE DURATION OF THIS PROJECT. THE CONTRACTOR SHALL KEEP ITS WORKERS, MATERIAL, AND EQUIPMENT CLEAR OF ALL TERMINAL AND SHIPPING OPERATIONS AND SHALL NOT IN ANY WAY HINDER OR DISRUPT FACILITY OPERATIONS. THE PROJECT SITES ARE LOCATED ALONG ACTIVE SHIPPING CHANNELS. AT NO TIME SHALL THE CONTRACTOR OBSTRUCT OR HINDER SHIPPING ACTIVITIES WITHIN THE CHANNELS. ALL WATER BORNE CONSTRUCTION EQUIPMENT SHALL BE MOORED OUT OF THE SHIPPING CHANNELS. NO MOORING LINES OR ANCHORS SHALL BE PLACED WITHIN THE CHANNELS. ALL TERMINAL FACILITIES SHALL BE IN OPERATIONAL ORDER BEFORE NEXT VESSEL ARRIVES.
- ALL DIMENSIONS AND DETAILS (INCLUDING EXISTING MEMBER AND HARDWARE SIZES) SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO FABRICATION AND CONSTRUCTION.
- ALL SHOP DRAWINGS FOR FENDER SYSTEM AND STRUCTURAL REPAIRS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER PRIOR TO FABRICATION.
- ALL ELEVATIONS REFER TO MEAN LOWER LOW WATER (MLLW) ELEVATION 0.00 FT.
- EXISTING FEATURES SHOWN ON THESE DRAWINGS ARE BASED ON EXISTING REFERENCE DRAWINGS AND RECENT FIELD SURVEYS. THE CONTRACTOR SHALL BRING ANY CONFLICTS TO THE ENGINEER'S ATTENTION. ANY DAMAGE TO EXISTING FEATURES CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REVIEWED BY THE ENGINEER AND REPAIRED AT THE CONTRACTOR'S EXPENSE.

**CODES AND STANDARDS**

- ALL METHODS AND MATERIALS SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE, 2012 EDITION, AS AMENDED AND ADOPTED BY THE CITY OF TACOMA.
- REINFORCED CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301) AND "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318). LATEST EDITIONS.
- MISCELLANEOUS STEEL FABRICATION AND ERECTION THEREOF SHALL CONFORM TO THE "AISC STEEL CONSTRUCTION MANUAL." LATEST EDITION.
- TIMBER WORK SHALL CONFORM TO THE LATEST EDITION OF "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" (NDS) AND THE LATEST EDITION OF "AITC TIMBER CONSTRUCTION MANUAL."

**DEMOLITION**

- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE ADEQUACY OF THE EXISTING STRUCTURES AND UTILITIES TO SUPPORT DEMOLITION EQUIPMENT AND LOADS.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTAIN THE DEMOLITION WITHIN THE LIMITS DESIGNATED, TO AVOID DAMAGE TO EXISTING STRUCTURES, UTILITIES, OR FACILITIES, AND TO KEEP ALL DEBRIS FROM FALLING INTO THE WATER. THE CONTRACTOR SHALL PROVIDED FLOATS OR FALSEWORK TO CATCH ALL FALLING DEBRIS UNDER ALL OVERWATER DEMOLITION.
- ALL DEMOLITION MATERIAL, EXCEPT AS NOTED AND/OR SPECIFIED, SHALL BE COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR.

**POST-INSTALLED ANCHORS**

- DRILLING HAMMERS FOR ANCHOR HOLES SHALL BE PNEUMATIC ROTARY TYPE WITH MEDIUM OR LIGHT IMPACT. HOLES SHALL NOT BE CORE DRILLED UNLESS APPROVED BY THE ENGINEER.
- LOCATE DRILLED HOLES TO AVOID EXISTING REINFORCING STEEL AND OTHER EMBEDDED OBJECTS. PRIOR TO DRILLING, LOCATE THE EXISTING REINFORCEMENT USING A PACHOMETER OR OTHER NON-DESTRUCTIVE METHODS APPROVED BY THE ENGINEER. IF EXISTING REINFORCING STEEL IS ENCOUNTERED, OBTAIN APPROVAL FROM THE ENGINEER FOR RELOCATING AND RE-DRILLING THE HOLE. PATCH INCOMPLETE HOLES, OR THOSE THAT EXPOSE REINFORCING STEEL.

**GROUT AND DOWEL ADHESIVE**

- SEE SPECIFICATIONS.

**MISCELLANEOUS STEEL**

- MISCELLANEOUS STEEL SHAPES AND PLATES, SHALL CONFORM TO ASTM A 572 GRADE 50, UNLESS OTHERWISE NOTED.
- BOLTS INCLUDING ECONOMY BOLTS SHALL CONFORM TO ASTM F 593 MINIMUM TENSILE STRENGTH 75 KSI, ALLOY GROUP 2 UNLESS OTHERWISE NOTED.
- NUTS SHALL CONFORM TO ASTM F 594, UNLESS OTHERWISE NOTED.
- ALL MISCELLANEOUS STEEL, EXCLUDING FASTENERS, SHALL BE COATED ACCORDING TO THE SPECIFICATIONS. COATING DAMAGED ACCIDENTALLY OR DUE TO THE CONSTRUCTION PROCESS SHALL BE RESTORED WITH FIELD-APPLIED COATING ACCORDING TO THE SPECIFICATIONS.

**TIMBER**

- ALL TIMBER SHALL BE PACIFIC COAST DOUGLAS FIR, GRADE NO. 1 AND SHALL CONFORM TO THE LATEST SPECIFICATIONS OF THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB).
- ALL TIMBER SHALL BE SAW-SIZED S4S UNLESS OTHERWISE NOTED.
- ALL STRUCTURAL TIMBER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARDS T1, U1, AND UC4B WITH A MINIMUM RETENTION OF 0.60 PCF WATERBORNE PRESERVATIVE. AMMONIACAL COPPER ZINC ARSENATE (ACZA) BMP'S SHALL BE INCORPORATED INTO ALL TIMBER AS SET FORTH BY THE WESTERN WOOD PRESERVERS INSTITUTE WWPI. ALL PRODUCTS SHALL BEAR EVIDENCE THAT THE BMP STANDARDS HAVE BEEN MET.
- AS FAR AS PRACTICAL, ALL TREATED TIMBER SHALL BE CUT TO LENGTH AND BORED PRIOR TO TREATMENT. LEAD HOLES FOR DOWELS AND SPIKES SHALL BE PREBORED 1/16 INCH LESS THAN THE FASTENER SHANK DIAMETER. LEAD HOLES FOR LAG BOLTS SHALL BE PREBORED TO 65 PERCENT OF THE SHANK DIAMETER.
- FIELD TREAT ALL CUTS AND HOLES WITH COPPER NAPHTHENATE PER SPECIFICATIONS.
- SS FENDER WASHERS SHALL BE USED UNDER ALL NUT AND BOLT HEADS BEARING ON TIMBER. BOLTS SHALL BE TIGHTENED WHEN INSTALLED AND SHALL BE RETIGHTENED BEFORE FINAL ACCEPTANCE OF THE CONTRACT.

**PILING**

- FENDER PILES SHALL BE DRIVEN TO THE REQUIRED TIP ELEVATIONS.
- STRUCTURAL PILES SHALL BE DRIVEN TO THE REQUIRED TIP ELEVATION AND SHALL MEET THE DRIVING CRITERIA IN THE SPECIFICATIONS.
- PILES SHALL BE PACIFIC COAST DOUGLAS FIR CONFORMING TO THE LATEST EDITION OF ASTM D 25.
- PILES SHALL HAVE THE FOLLOWING DIMENSIONS:  
  
FENDER PILES: MINIMUM DIAMETER OF 18 INCHES (57 INCH CIRCUMFERENCE) MAXIMUM OF 20 INCHES (63 INCH CIRCUMFERENCE) MEASURED 3 FEET FROM BUTT END AND A MINIMUM TIP DIAMETER OF 9 INCHES.  
  
WEST HYLEBOS STRUCTURAL PILES: MINIMUM DIAMETER OF 14 INCHES (44 INCH CIRCUMFERENCE) MEASURED 3 FEET FROM BUTT END AND A MINIMUM TIP DIAMETER OF 7 INCHES.
- TREATMENT FOR PILES WILL BE 1.5 LBS PER CUBIC FOOT WATERBORNE PRESERVATIVE, AMMONIACAL COPPER ZINC ARSENATE (ACZA). TREATMENT SHALL BE IN ACCORDANCE WITH AWPA STANDARDS T1, U1, AND UC5A.
- ALL TREATED PILES SHALL HAVE POST-TREATMENT IN COMPLIANCE WITH THE BMP'S OUTLINED BY THE WESTERN WOOD PRESERVERS INSTITUTE.

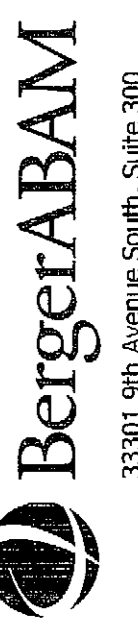
**TIDES**

- TIDAL DATA OBTAINED FROM NOAA WEBSITE FOR STATION ID 9446484 AND CHART 18453 FOR THE 1983 - 2001 EPOCH AS FOLLOWS.


|                               |           |
|-------------------------------|-----------|
| EXTREME HIGH WATER (EHW)      | +14.30 FT |
| MEAN HIGHER HIGH WATER (MHHW) | +11.83 FT |
| MEAN SEA LEVEL (MSL)          | 6.87 FT   |
| MEAN LOWER LOW WATER (MLLW)   | 0.00 FT   |
| EXTREME LOW WATER (ELW)       | -4.30 FT  |

**SPECIAL INSPECTION**

| VERIFICATION AND INSPECTION   | CONTINUOUS DURING TASK LISTED | PERIODICALLY DURING TASK LISTED |
|---|-------------------------------|---------------------------------|
| 1. Verify pile materials, sizes and lengths comply with the requirements.   | X                             | -                               |
| 2. Observe driving operations and maintain complete and accurate records for each pile.   | X                             | -                               |
| 3. Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element. | X                             | -                               |



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Professional Engineer  
Blair / West Hylebos Repairs  
5/14/14

APPROVED: *[Signature]*  
5-27-14

CHECKED BY: TTS  
DATE: 5/27/14

PROJ. ENGR: eros  
DATE: May 21, 2014

DATE: 5/14/14

MARK: \_\_\_\_\_

REVISION: \_\_\_\_\_

BY: \_\_\_\_\_

DATE: \_\_\_\_\_

JRG

TTS

PROJ. ENGR

DATE

PORT ADDRESS: ONE SITCUM WAY  
TACOMA, WA 98421-2300

SECTION: 36

VERT: MLLW 19.39' @ TIDE 22 1933

DRAWING SCALE: AS SHOWN

6527

**G2.1**

OF 15

3

CONT/CONS: 069913

M. ID: 091415

PARCEL: 321362046

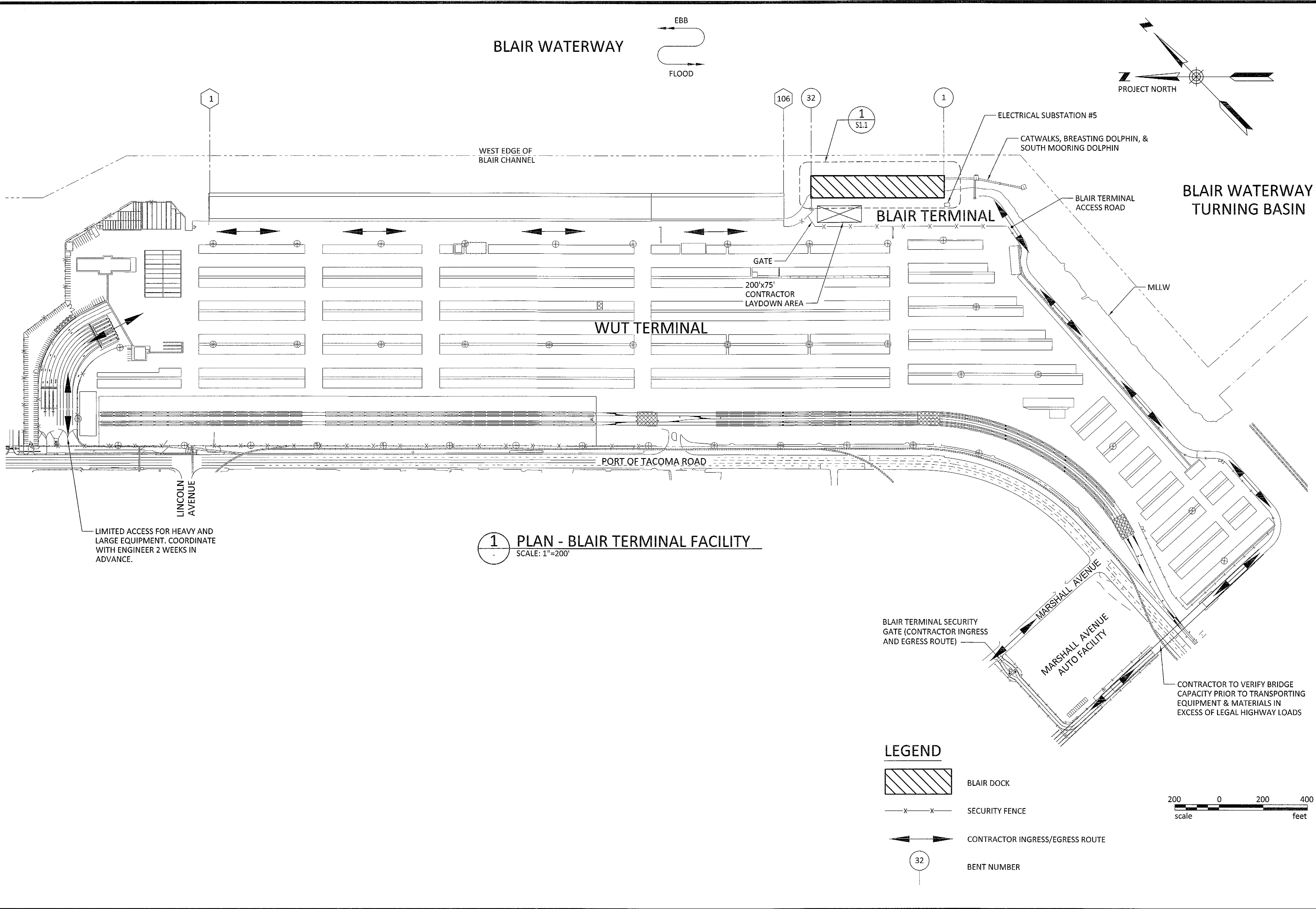
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**PORT OF TACOMA**  
**BLAIR / WEST HYLEBOS REPAIRS**  
GENERAL NOTES


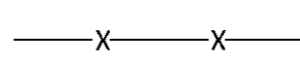
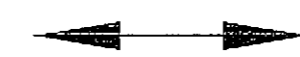

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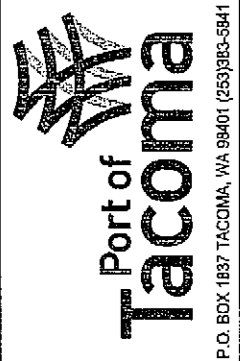


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**1 PLAN - BLAIR TERMINAL FACILITY**  
SCALE: 1"=200'

- LEGEND**
-  BLAIR DOCK
  -  SECURITY FENCE
  -  CONTRACTOR INGRESS/EGRESS ROUTE
  -  BENT NUMBER

200 0 200 400  
scale feet

|  |   |  |                       |                         |      |
|--|---|--|-----------------------|-------------------------|------|
| <br>Port of Tacoma<br>P.O. BOX 187 TACOMA, WA 98402<br>APPR: DATE: | <br>BergerABAM<br>33301 9th Avenue South, Suite 300<br>Federal Way, Washington 98003-2600<br>(206) 431-2300 Fax: (206) 431-2250<br>MARK: REVISION: BY: | <br>5/11/14 | JRG                   | CHECKED BY              | DATE |
|  |   |  | TTS                   | PROJ. ENGR              | DATE |
| APPROVED: <i>[Signature]</i>   | DIRECTOR ENG.   | DATE   | PRINTED BY:           | enros May 21, 2014      |      |
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| <b>PORT OF TACOMA</b><br><b>BLAIR TERMINAL REPAIRS</b><br>BLAIR TERMINAL FACILITY PLAN PROJECT SITE 1  |   | TOWNSHIP: 21   | RANGE: 03             | SECTION: 36             |      |
| CONT/CONS: 069913  | DAT-HRZ: WAB3-SF  | VERT: MLLW 19.39' @ TIDE 22 1933   | PARCEL: 321362046     | DRAWING SCALE: AS SHOWN |      |
| M. ID: 091415  | PHASE: FOR BID  |  |                       |                         |      |
| 6527   | <b>G3.1</b>   | 4 OF 15  |                       |                         |      |

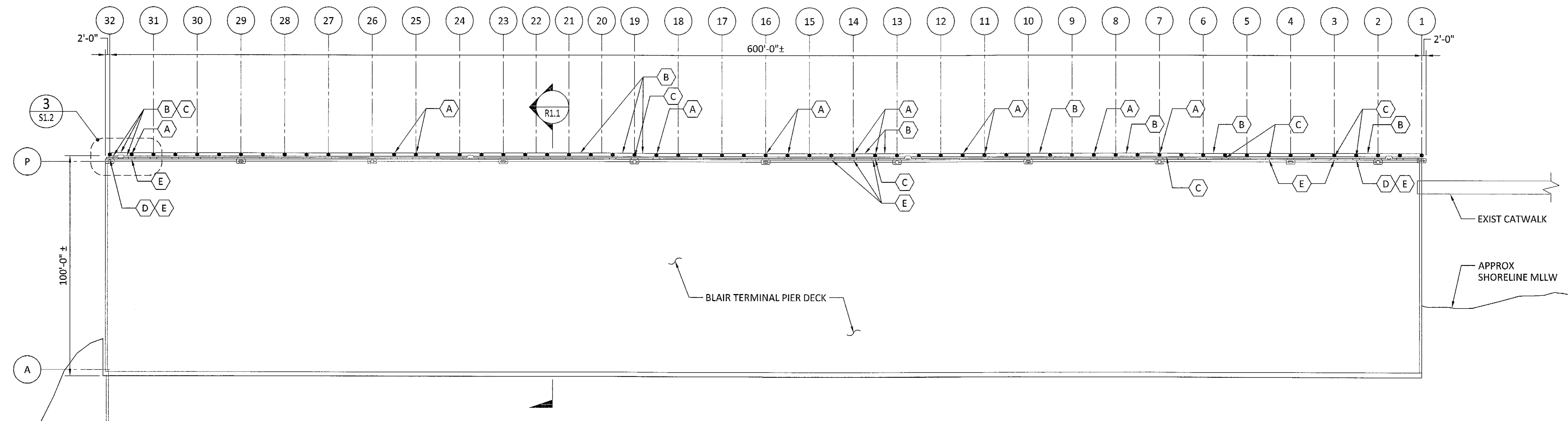
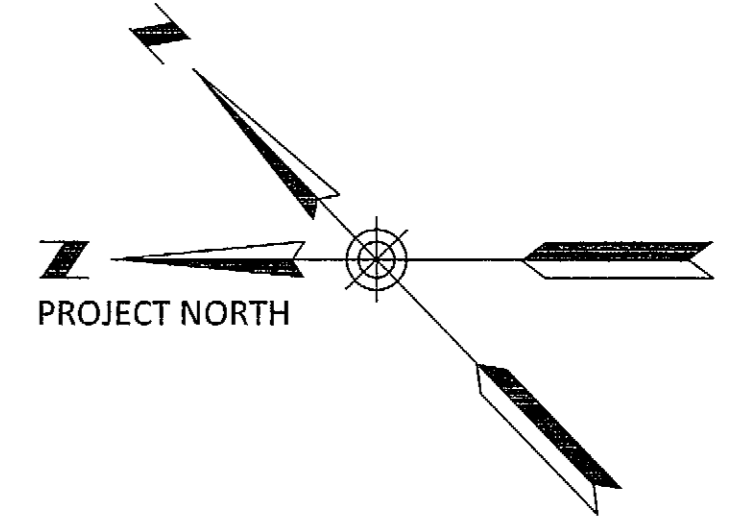
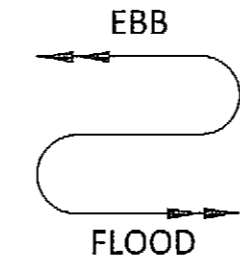
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# BLAIR WATERWAY



## 1 PIER REPAIR PLAN

G3.1 SCALE: 1"=25'-0"

NOTE:  
SEE REFERENCE DRAWING R1.1 & R1.2  
FOR ADDITIONAL INFORMATION.  
RELATED TO ELEVATIONS AND TIDES.

| REPAIR SCHEDULE |   |               |                      |
|-----------------|---|---------------|----------------------|
| MARK            | DESCRIPTION                                       | REPAIR DETAIL | REPRESENTATIVE PHOTO |
| A               | REMOVE AND REPLACE MISSING OR DAMAGED FENDER PILE | 1<br>S1.2     | 1<br>S1.3            |
| B               | REPLACE MISSING OR DAMAGED CHOCK                  | 2<br>S1.2     | 3<br>S1.3            |
| C               | REPLACE MISSING OR DAMAGED WALE                   | 2<br>S1.2     | 4<br>S1.3            |
| D               | REPLACE MISSING FENDER UNIT                       | 4<br>S1.2     | 3<br>S1.3            |
| E               | REPLACE FENDER HARDWARE                           | 4<br>S1.2 SIM | 4<br>S1.3            |

### LEGEND

- BOLLARD
- LADDER
- CLEAT
- FENDER SYSTEM
- REPAIR MARK



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APPROVED: *TTS*

DIRECTOR ENG. DATE: 5-27-14

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6527 **S1.1** OF 15

6 OF 15

CONTR/CONS: 069913

M. ID: 091415

PHASE: FOR BID

PORT OF TACOMA  
BLAIR TERMINAL  
REPAIR PLAN

TOWNSHIP: 21 RANGE: 03 SECTION: 36

DATE-HRZ: WAB3-SF VERT: MLLW 19.39 @ TIDE 22 1933

PARCEL: 321362046 DRAWING SCALE: AS SHOWN

MARK: \_\_\_\_\_

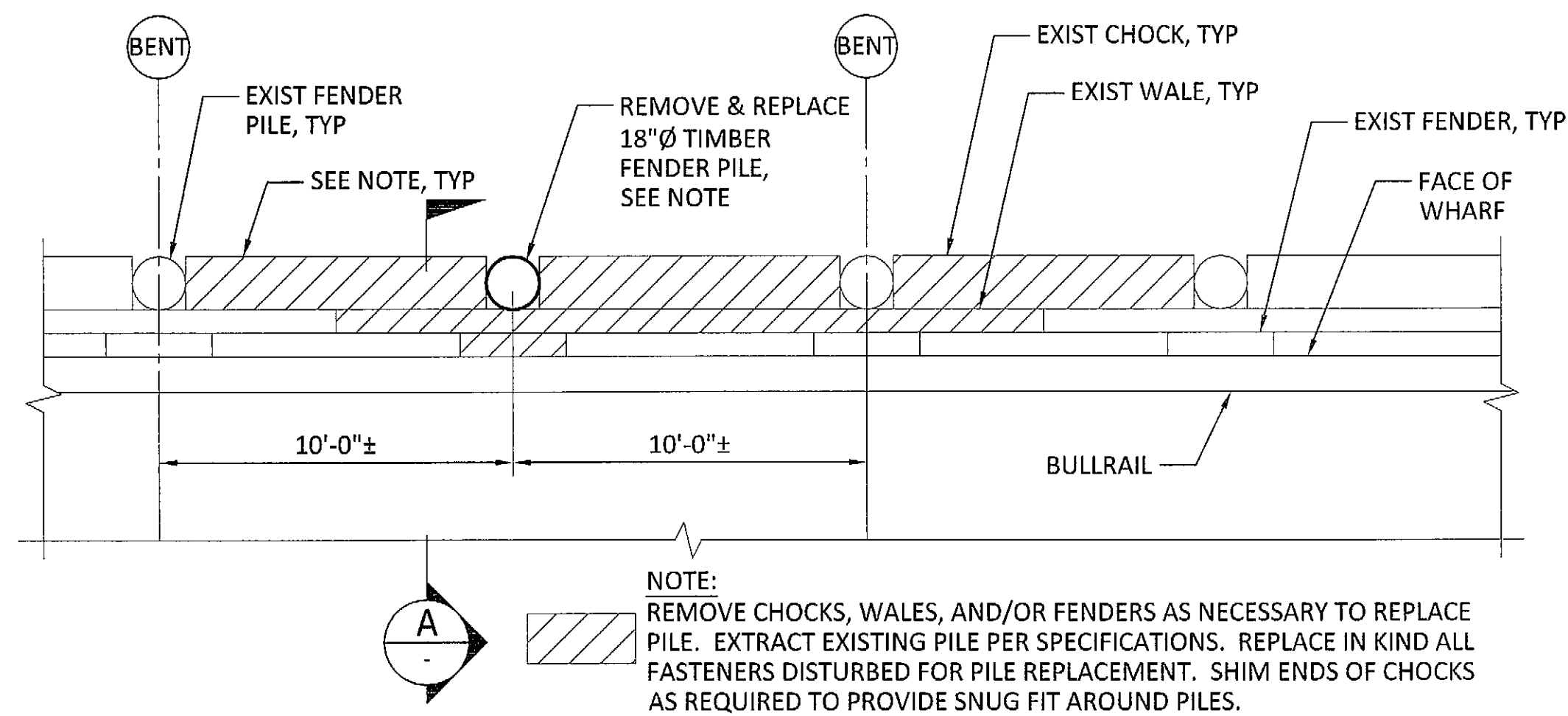
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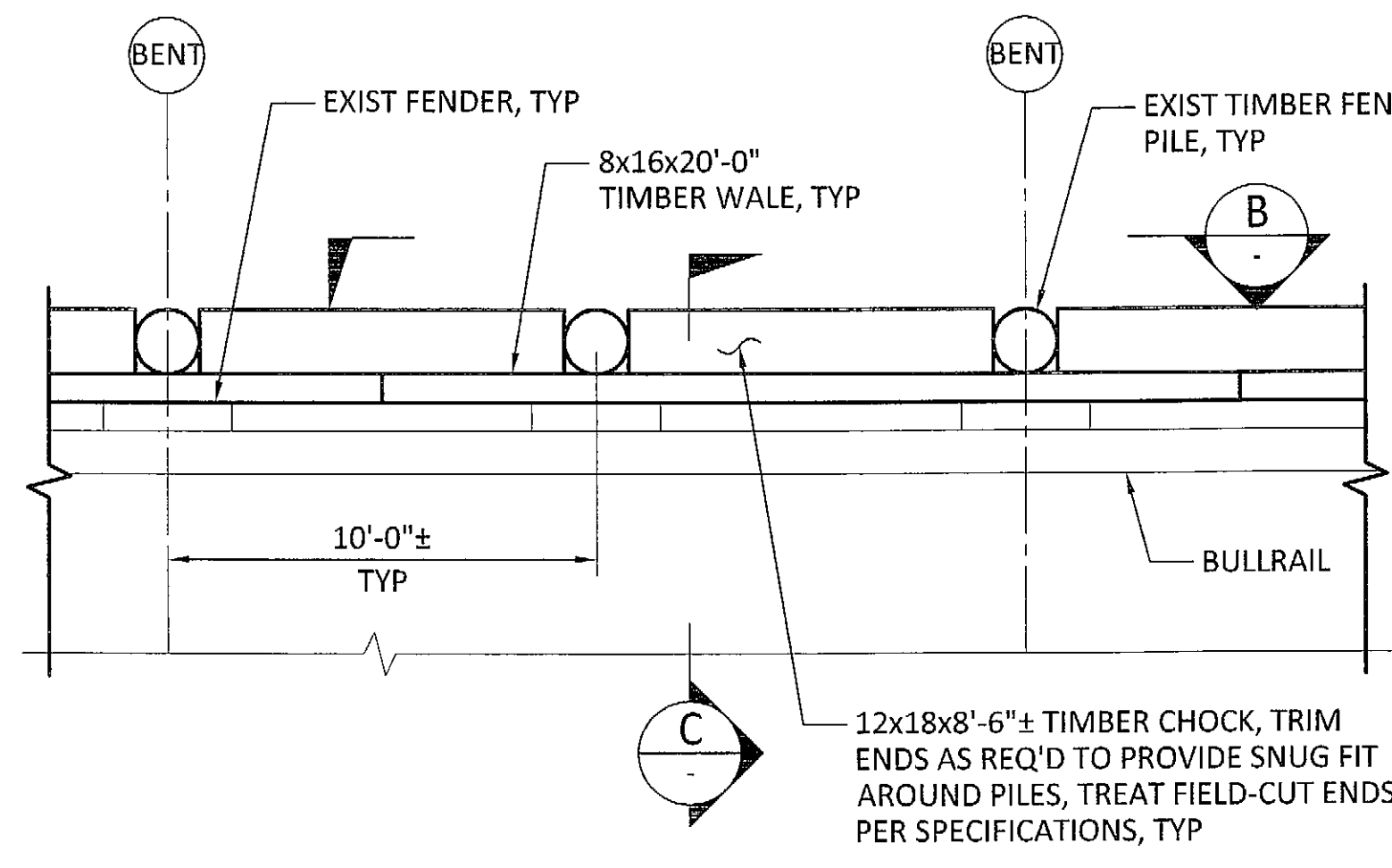
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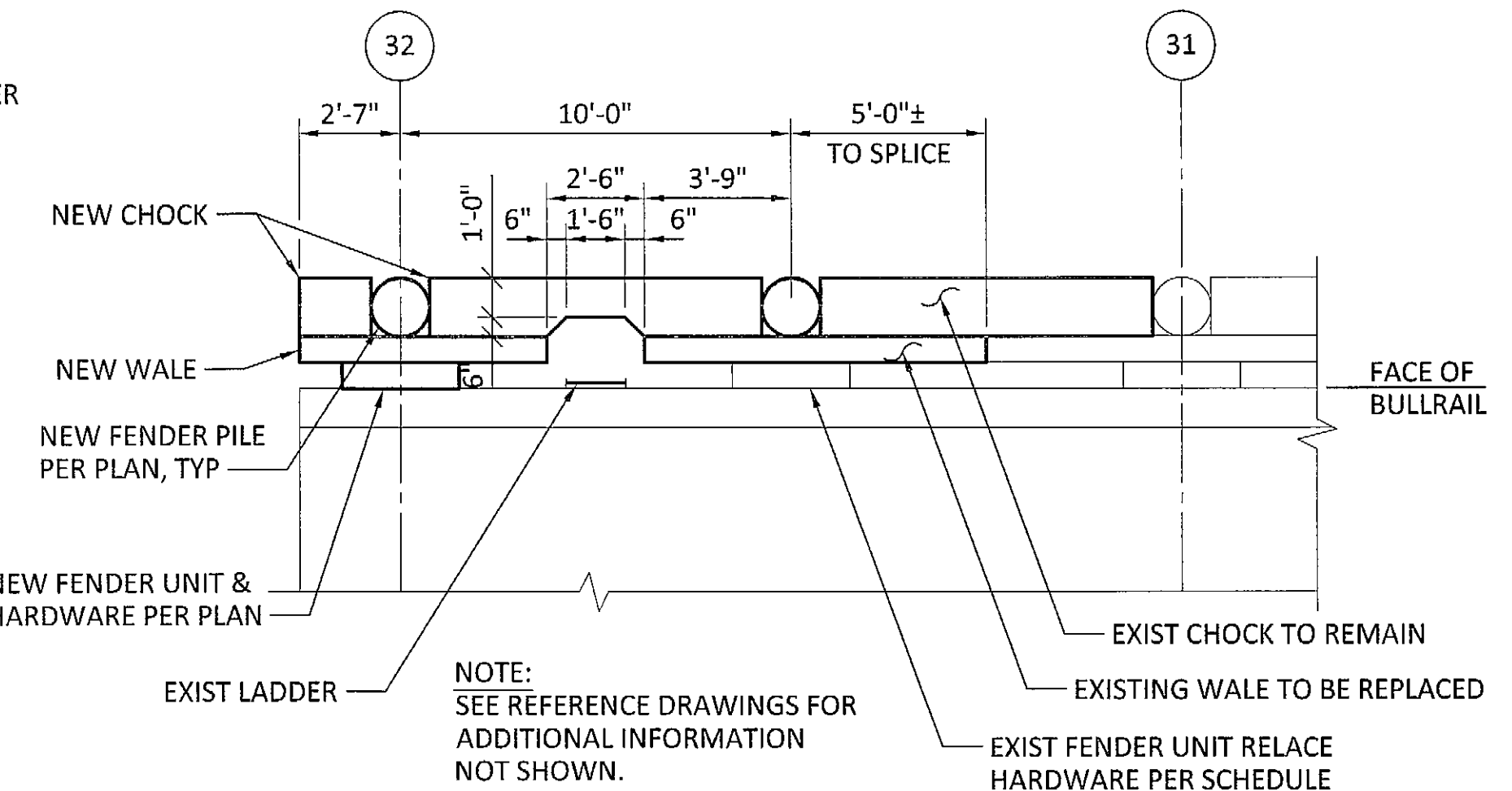
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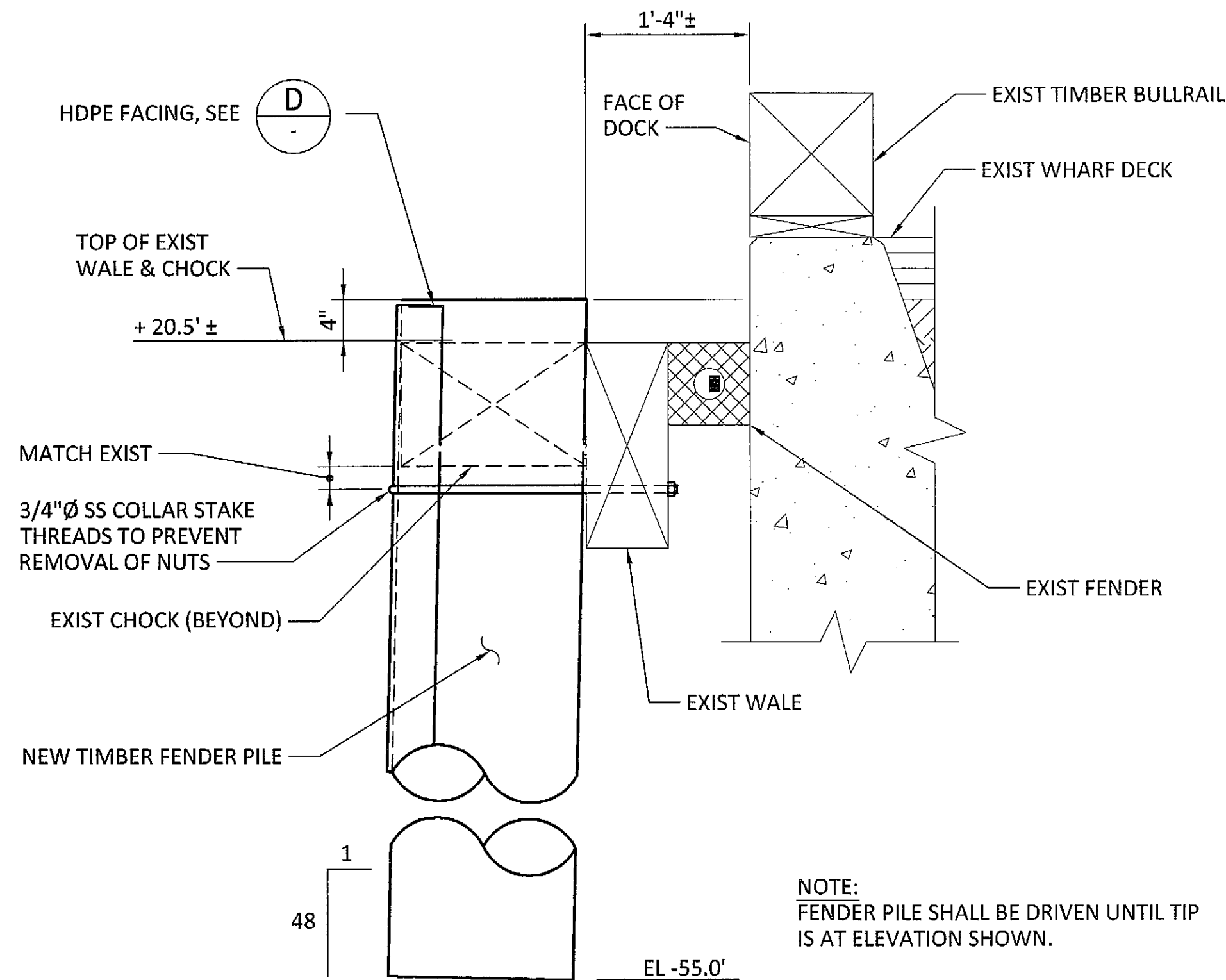
**1** DETAIL - PILE REPLACEMENT  
S1.1 SCALE: 1/4"=1'-0"



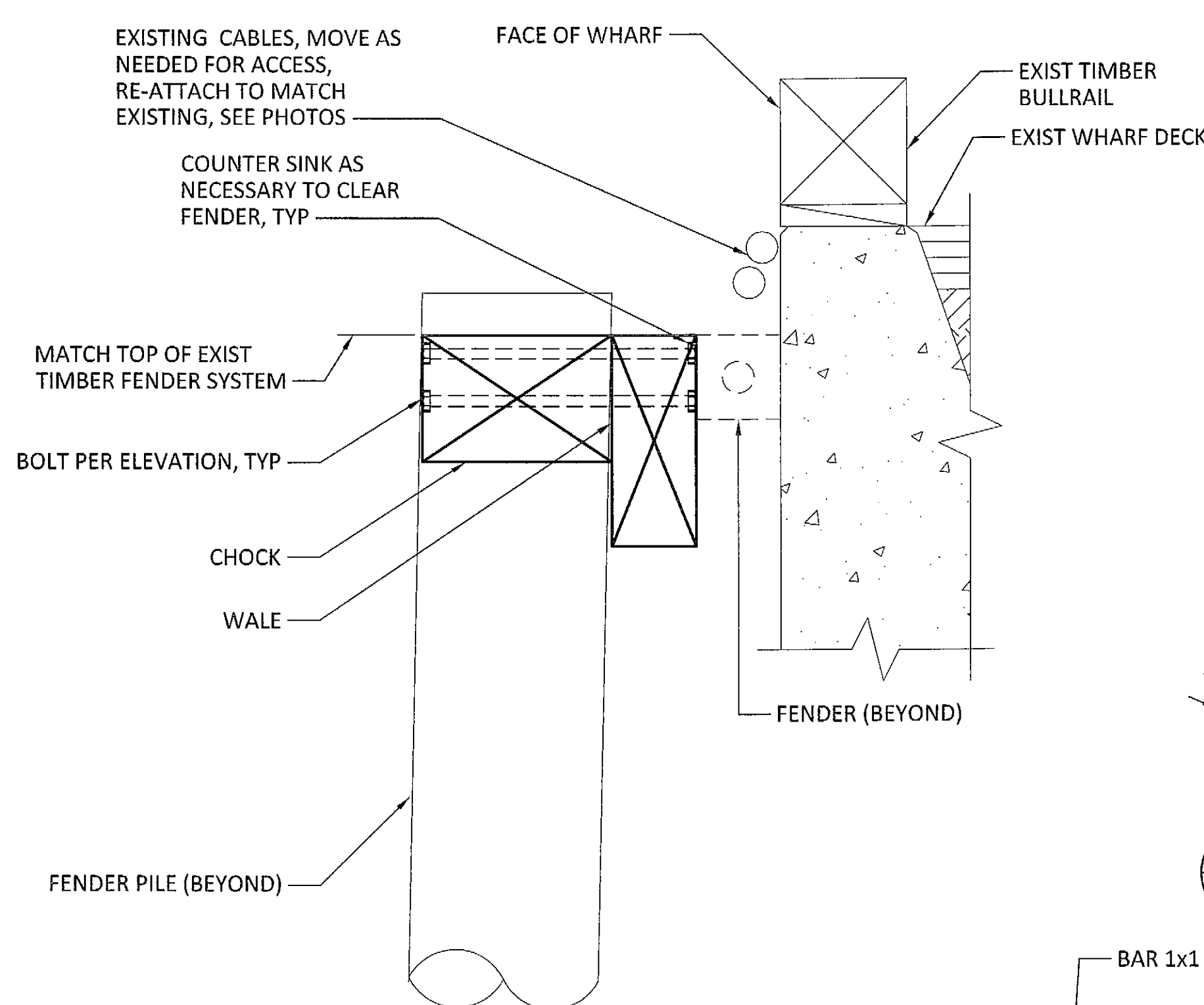
**2** DETAIL - WALE & CHOCK REPLACEMENT  
S1.1 SCALE: 1/4"=1'-0"



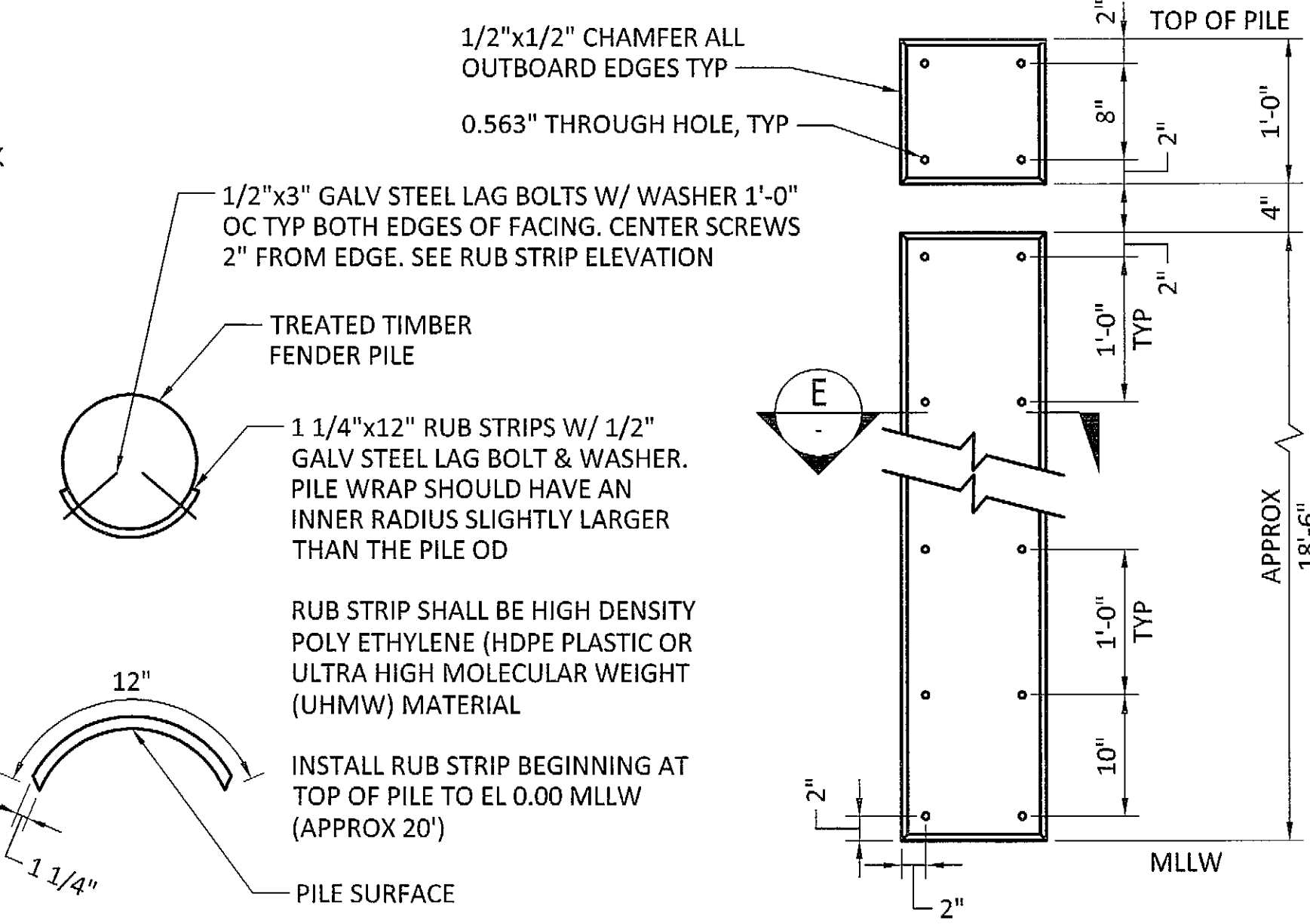
**3** DETAIL - FENDER SYSTEM REPAIR  
S1.1 SCALE: 1/4"=1'-0"



**A** SECTION  
SCALE: 1"=1'-0"

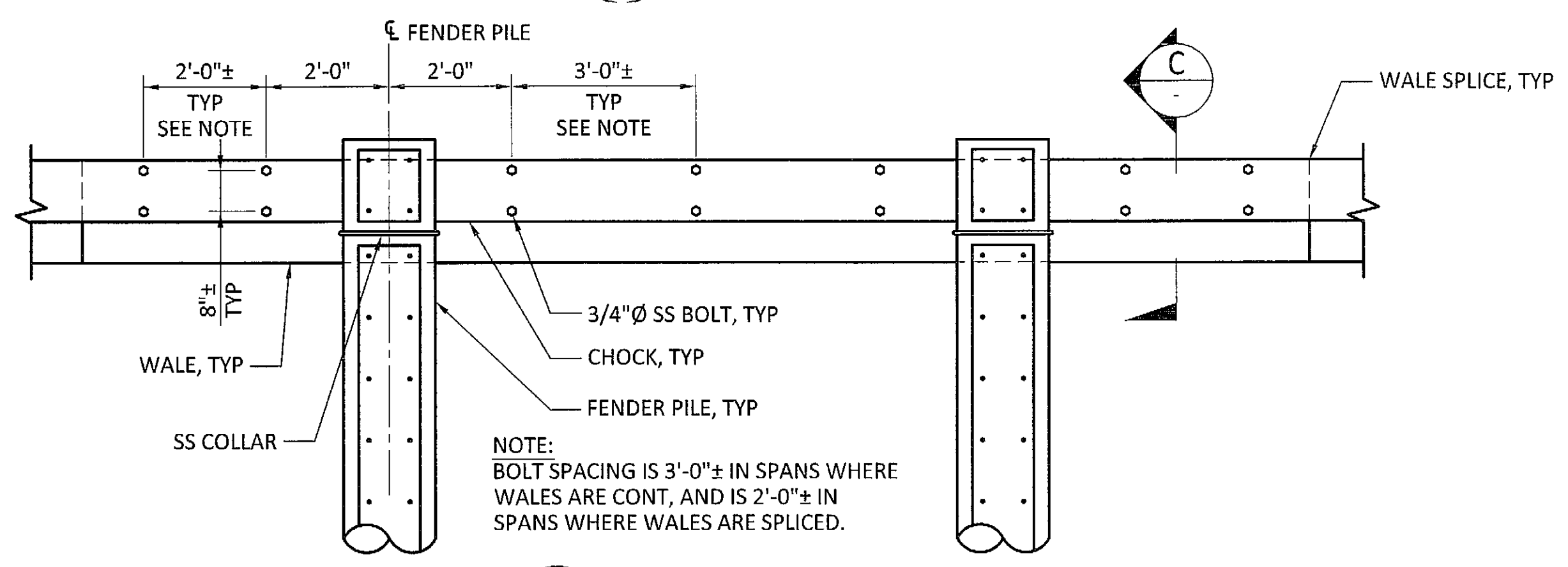


**C** SECTION  
SCALE: 1"=1'-0"

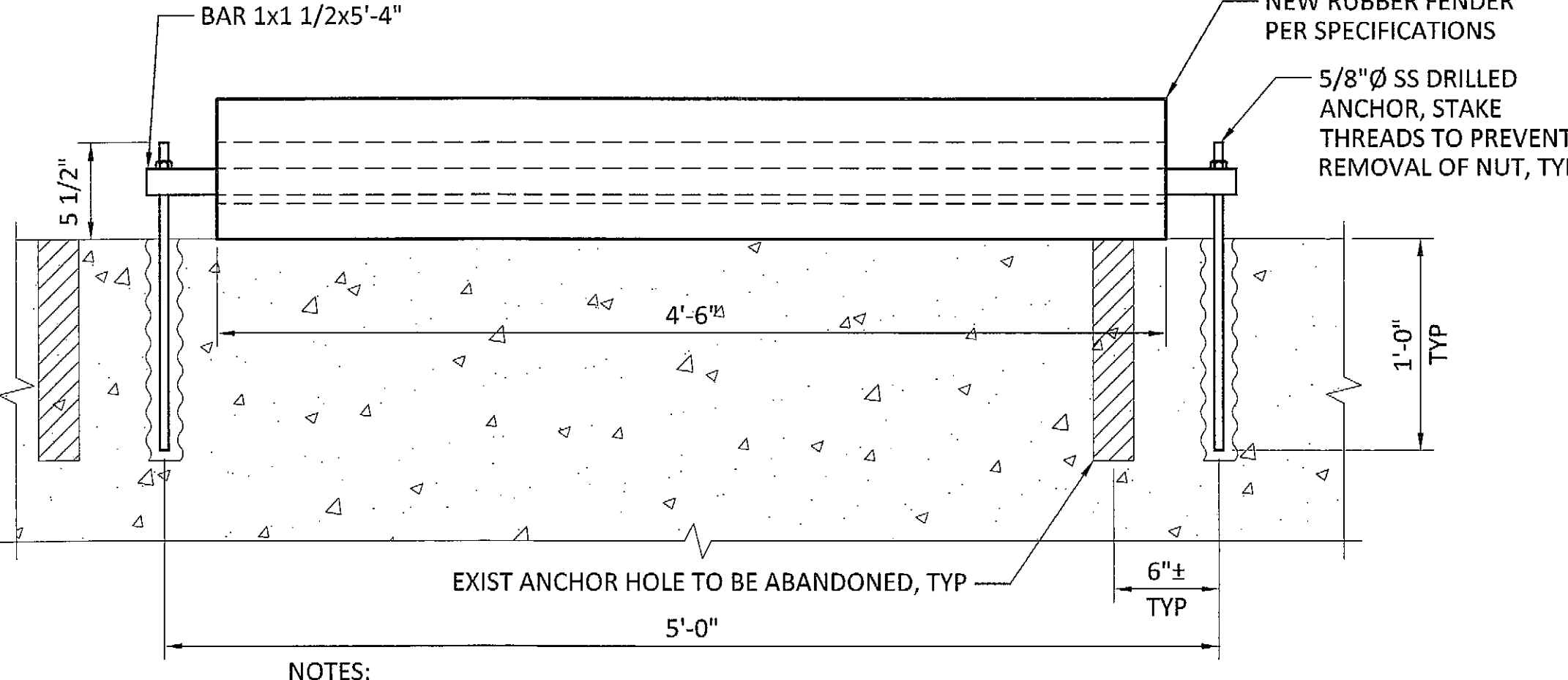
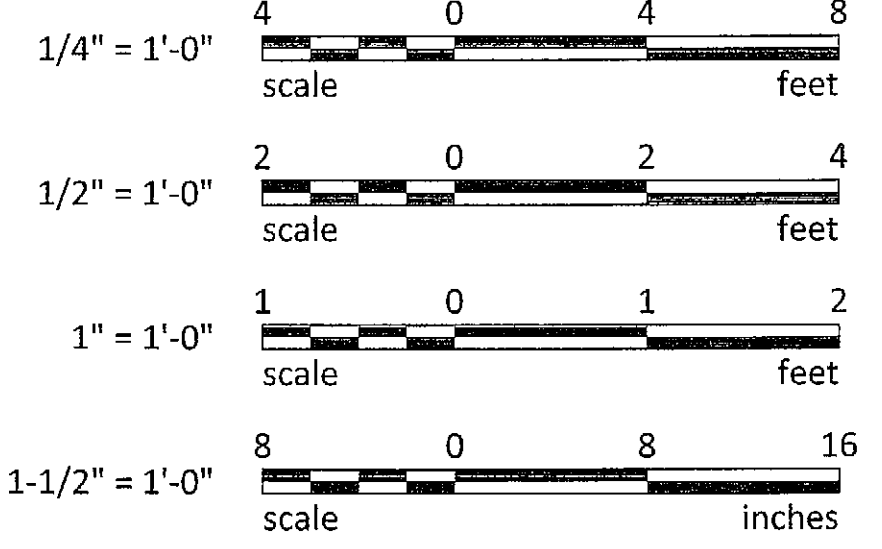


**E** SECTION  
SCALE: NTS

**D** SECTION - HDPE STRIP  
SCALE: NTS



**B** ELEVATION  
SCALE: 1/2"=1'-0"



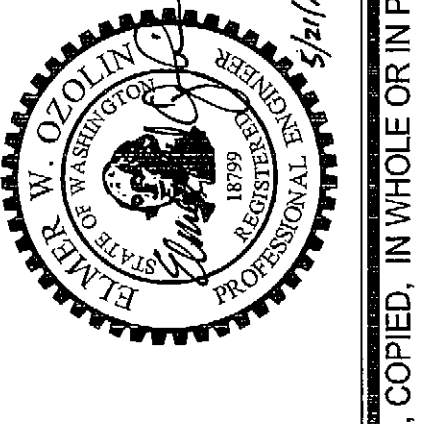
- NOTES:
1. CENTER FENDER APPROXIMATELY 10'-6" FROM ADJACENT, EXIST FENDER.
  2. WHERE PRACTICAL, SALVAGE EXISTING CONNECTION HARDWARE.
  3. SIM DENOTES EXIST FENDER WITH NEW HARDWARE ONLY.

**4** DETAIL - FENDER  
S1.1 SCALE: 1 1/2"=1'-0"

**BergerABAM**  
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Federal Way, Washington 98003-2600  
(206) 431-2300 Fax: (206) 431-2250

**Port of Tacoma**  
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DATE: \_\_\_\_\_  
APPR: \_\_\_\_\_  
BY: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
MARK: \_\_\_\_\_



|                |                       |                |                       |
|----------------|-----------------------|----------------|-----------------------|
| APPROVED:      | JRG                   | CHECKED BY:    | DATE                  |
|                | TTS                   | PROJ. ENGR     | DATE                  |
| DIRECTOR ENGR: | DATE                  | PRINTED BY:    | DATE                  |
| S-2014         | enrs MAY 21, 2014     | ONE SITCUM WAY | TACOMA, WA 98421-2300 |
| PORT ADDRESS:  | TACOMA, WA 98421-2300 |                |                       |

**PORT OF TACOMA**  
**BLAIR TERMINAL**  
REPAIR DETAILS

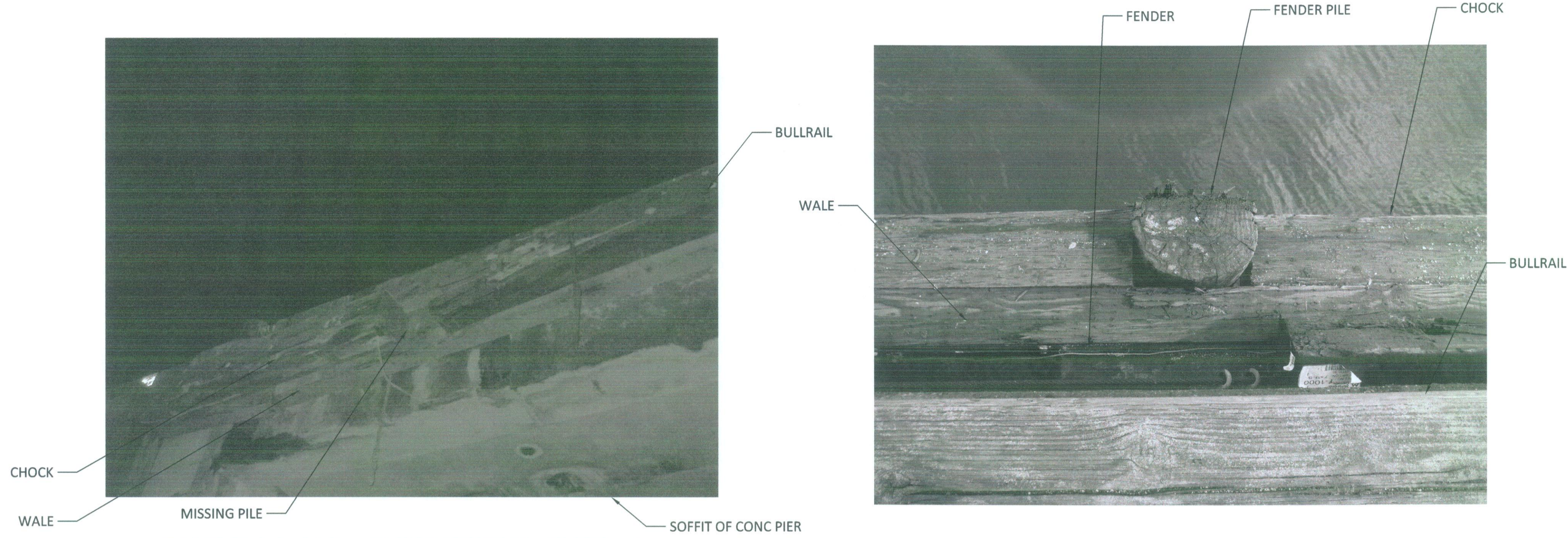
SECTION: 36  
RANGE: 03  
TOWNSHIP: 21  
DATE-HRZ: WA83-SF  
VERT: MLLW 19.39 @ TIDE 22 1933  
PARCEL: 321362046  
DRAWING SCALE: AS SHOWN

6527  
**S1.2**  
OF 15  
CONTR/CONS: 069913  
M. ID: 091415  
PHASE: FOR BID

PORT OF TACOMA FILE: C:\Federal\Way\2014\14.0005\05\CADD\Drawings\02\_S01-02

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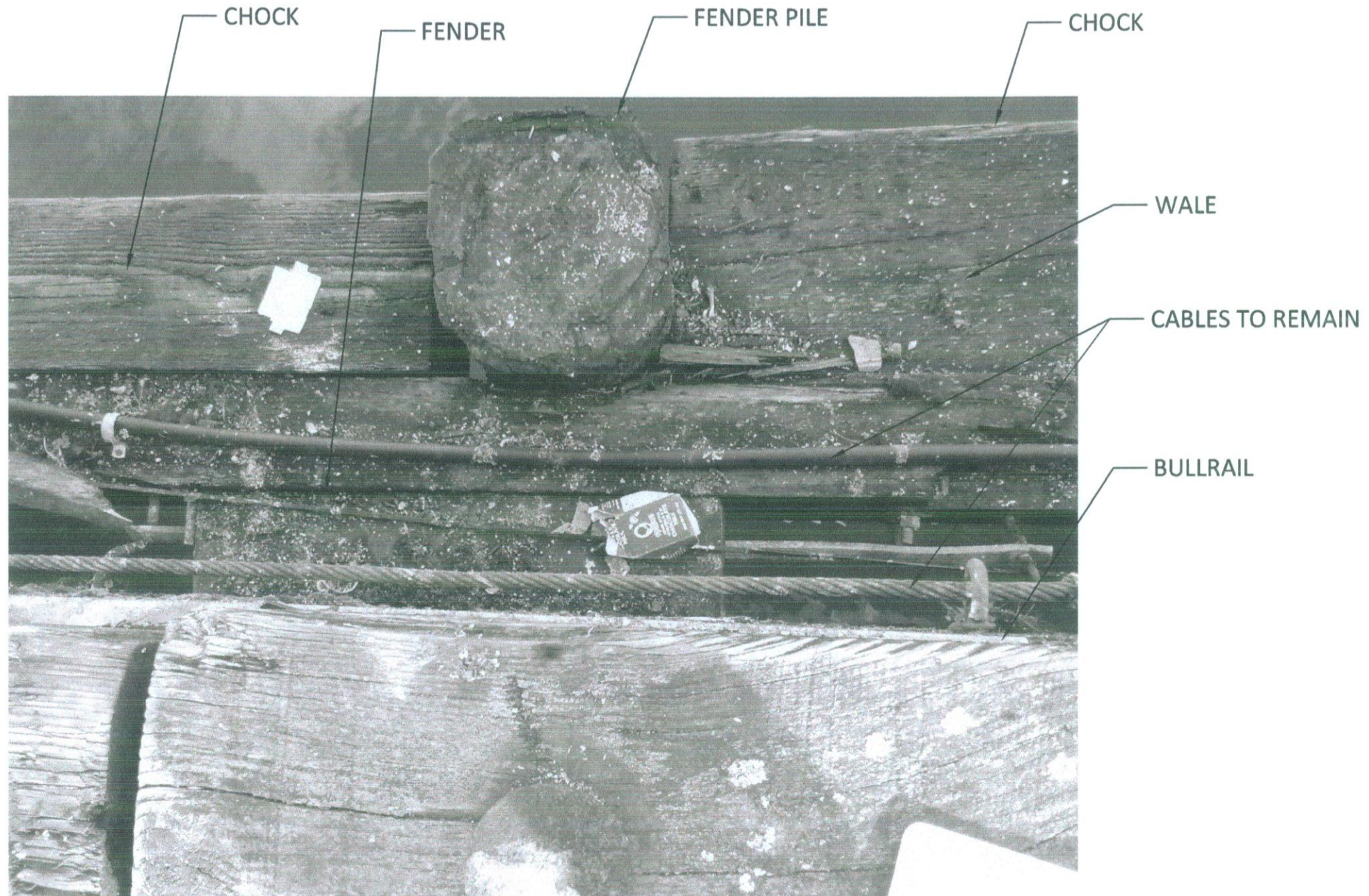


**1** PHOTO DETAIL - EXIST FENDER SYSTEM FROM BELOW W/ MISSING PILE  
S1.1

**2** PHOTO DETAIL - EXIST FENDER SYSTEM FROM ABOVE  
S1.1



**3** PHOTO DETAIL - EXISTING FENDER SYSTEM AT BENT 31/32 LOOKING NORTH  
S1.1



**4** PHOTO DETAIL - EXIST FENDER SYSTEM FROM ABOVE  
S1.1

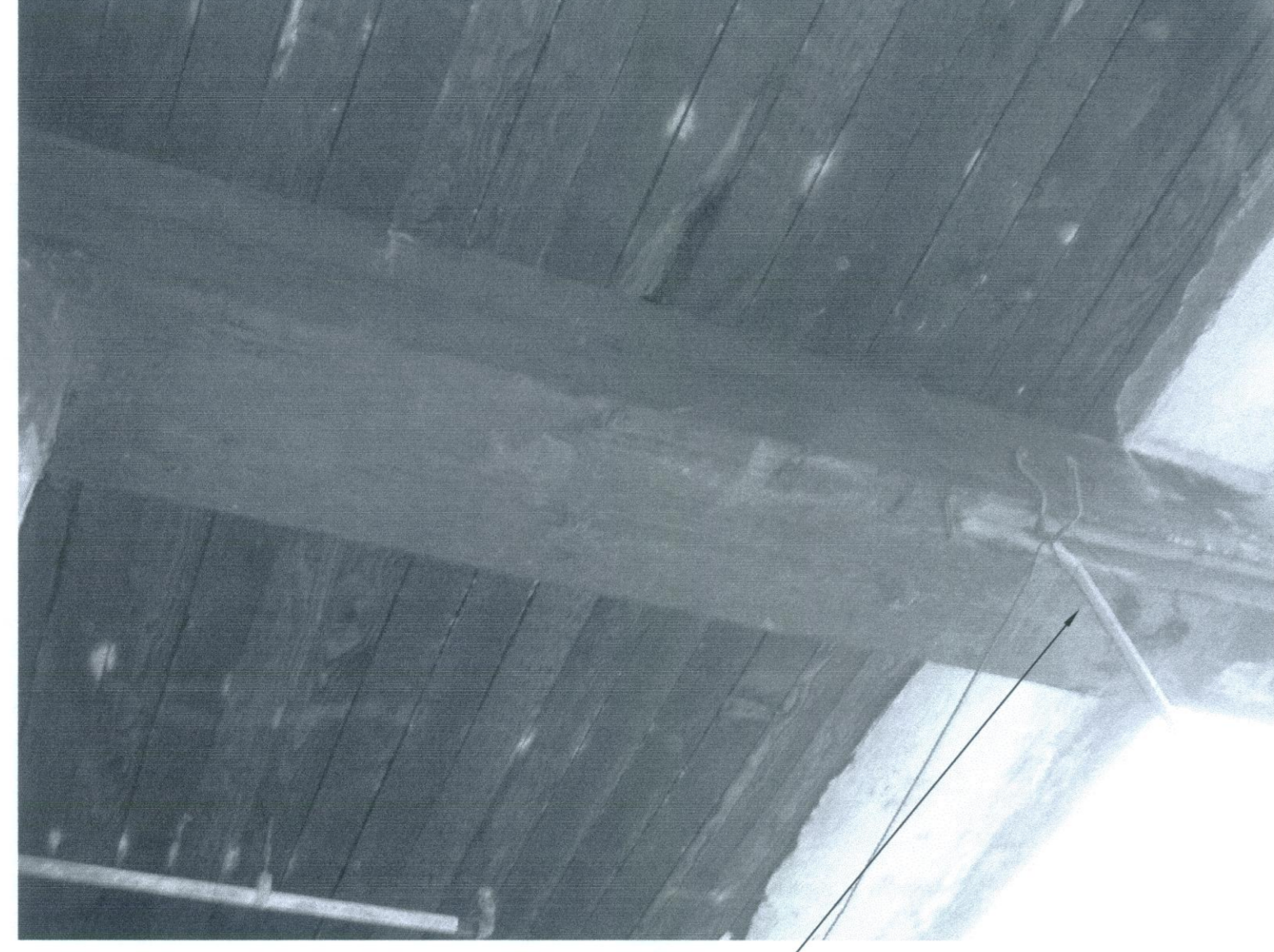
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|---|---|---|---|--|--|---|-------------------------|
| <b>6527</b><br><b>S1.3</b><br>8 OF 15<br>CONT/CONS: 069913<br>M. ID: 091415<br>PHASE: FOR BID | <b>PORT OF TACOMA</b><br><b>BLAIR TERMINAL</b><br>DETAIL PHOTOGRAPHS              |   |   |  | APPROVED: <i>[Signature]</i><br>DIRECTOR ENG. DATE: 5-27-14    | JRG CHECKED BY: TTS<br>PROJ. ENGR DATE: enos May 21, 2014 | DATE:<br>DATE:<br>DATE: |
|   | TOWNSHIP: 21<br>RANGE: 03<br>SECTION: 36<br>DAT-HRZ: WA89-SF<br>PARCEL: 321362046 | VERT: MLLW 19.39' @ TIDE 22 1933<br>DRAWING SCALE: AS SHOWN | PRINTED BY: enos<br>PORT ADDRESS: ONE SITCUM WAY<br>TACOMA, WA 98421-2300 | BERGER ABAM<br>33301 9th Avenue South, Suite 300<br>Federal Way, Washington 98003-2600<br>(206) 431-2300 Fax: (206) 431-2250 | PORT OF TACOMA<br>P.O. BOX 1837 TACOMA, WA 98401 (206)383-5841 | MARK:<br>REVISION:<br>BY:<br>APPR:<br>DATE:               |                         |





PILE BEARING LOSS

**4** PHOTO DETAIL - PILE BEARING LOSS  
S2.2



DRIFT PIN FROM MISSING PILE

**1** PHOTO DETAIL - MISSING STRUCTURAL PILE  
S2.2



BROKEN REPAIR BANDS

**2** PHOTO DETAIL - BROKEN PILE REPAIR BANDS  
S2.2



BROKEN PILE CAP SPLICE

**3** PHOTO DETAIL - BROKEN PILE CAP SPLICE  
S2.2

6527  
**S2.3**  
11 OF 15  
CONT/CONS: 069913  
M.ID: 091372  
PHASE: FOR BID

PORT OF TACOMA  
WEST HYLEBOS LOG DOCK  
PHOTOGRAPHS

TOWNSHIP: 21 RANGE: 03 SECTION: 36  
DAT-HRZ: WAB3-SF VERT: MLLW 19.39 @ TIDE 22 1933  
PARCEL: 321362046 DRAWING SCALE: AS SHOWN

APPROVED: *[Signature]*  
DIRECTOR ENG. DATE: 5-27-14

JRG CHECKED BY: TTS DATE:  
PRINTED BY: enos May 21, 2014  
PORT ADDRESS: ONE SITCUM WAY TACOMA, WA 98421-2300



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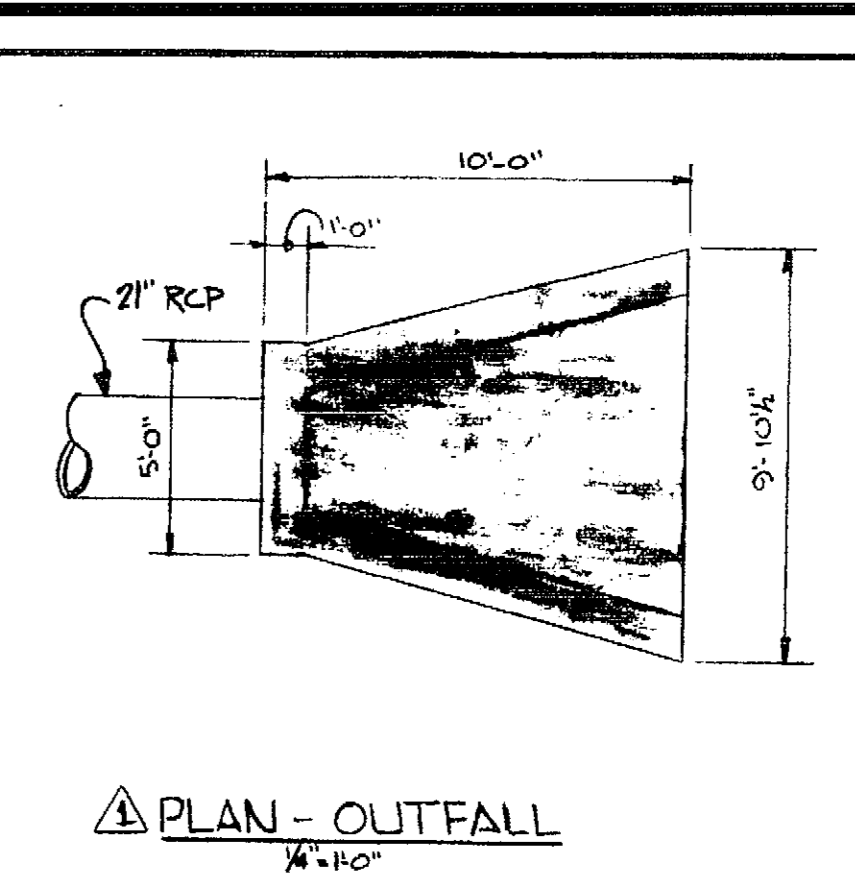
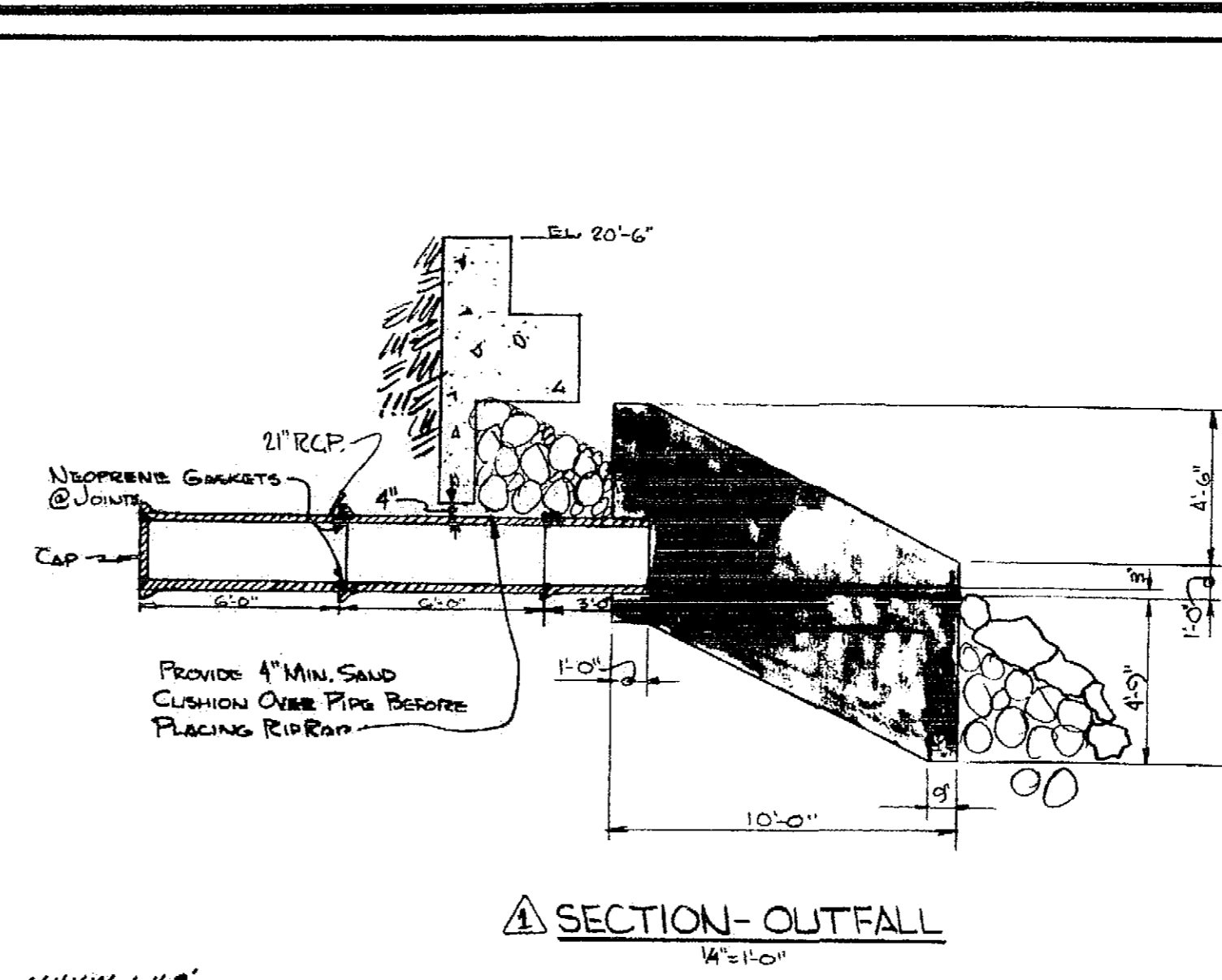
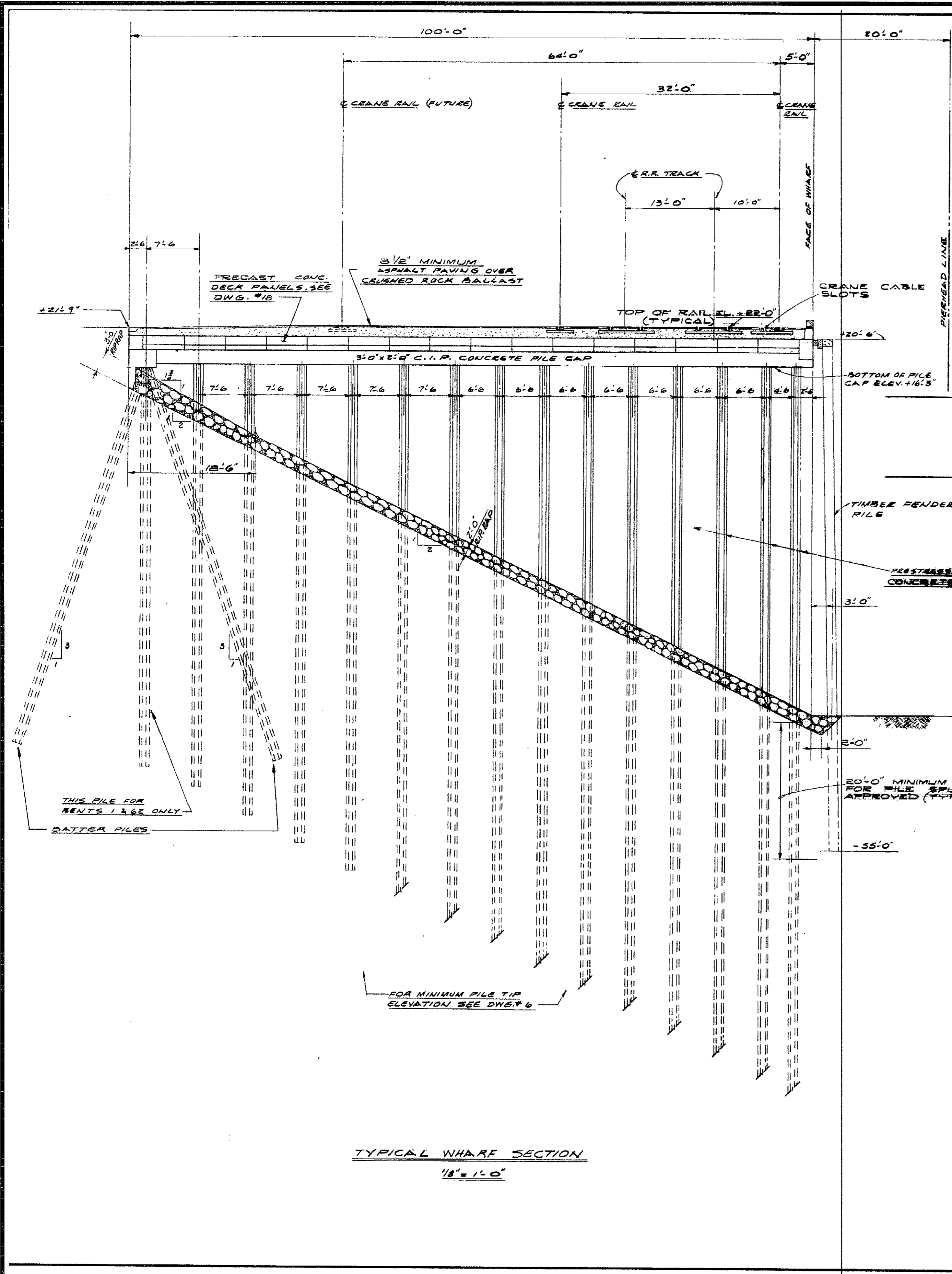
MARK: REVISION: BY: DATE:  
APPR: DATE:

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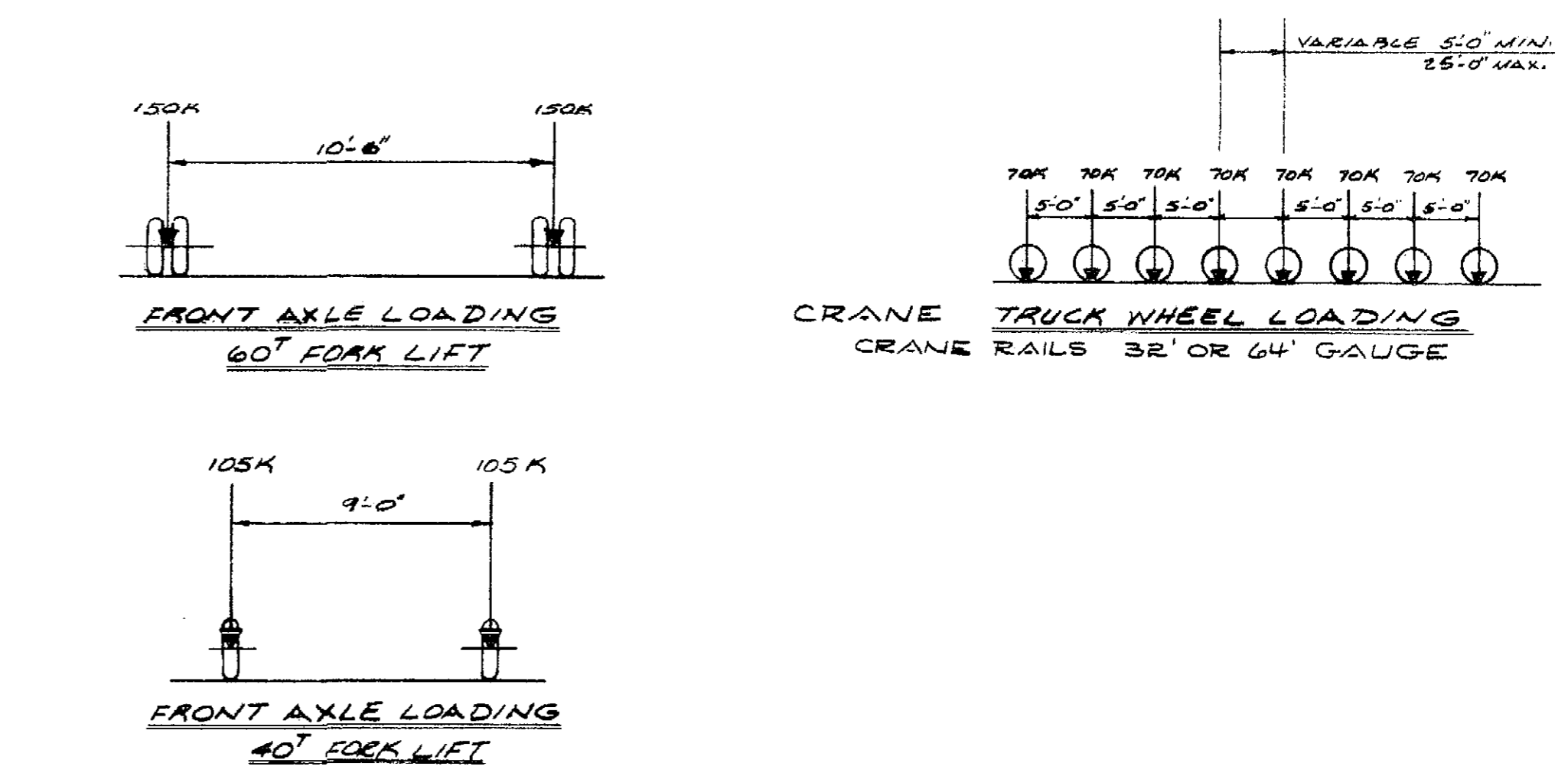
BINDING EDGE

PORT OF TACOMA FILE: C:\Federal\May\20\4\14\0005\05\CADD\Drawings\03\_R01-01



**NOTES:**

- 1) ALL REINFORCING STEEL #5 @ 1'-0" C.C. EACH WAY FOR WALLS & SLAB.
- 2) ALL CONC. TO BE 3000 PSI.
- 3) CONTRACTOR TO PROVIDE STUB TO EXTEND 5' BEYOND CURTAIN WALL.



**NOTES**

1. LIVE LOADS:  
UNIFORM LIVE LOAD OF 100 PSF ON ANY AREA.  
130,000# FORK LIFT ON ANY AREA.  
COOPER E-60 LOADING ON RAILROAD.
2. ELEVATIONS ARE IN FEET & REFER TO D.O. MEAN LOWER LOW WATER U.S. COAST & GEODETIC SURVEY TIDE CHART DATUM.

**BergetABAM**

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PRINTED BY: enos May 21, 2014

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**PORT OF TACOMA**

**BLAIR / WEST HYLEBOS REPAIRS**

BLAIR TERMINAL

REFERENCE DRAWING

TOWNSHIP: 21 RANGE: 03 SECTION: 36

DAT-HRZ: WAB8-SF VERT: MLLW 19.39 @ TIDE 22 1993

PARCEL: 321362046 DRAWING SCALE: AS SHOWN

JOB NO. 1251

DRWN: GMA

TRAC: GMA

CHECKED: DATE

SCALE

AS PREPARED

DWG. NO. 8

**PORT OF TACOMA**

**BLAIR WATERWAY TERMINAL**

**CONTAINER & BULK HANDLING FACILITY**

**BERTHS A & B**

**TYPICAL WHARF SECTIONS**

CONTR/CONS: 069913

M. ID: 091415

PHASE: FOR BID

APPROVED: *M. Marshall* 6-18-70 DATE

7-10-70 DATE

7-10-70 DATE

7-10-70 DATE

**MARSHALL, BARR & PACQUER**

SEATTLE, WASHINGTON 98101

CONSULTING ENGINEERS

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