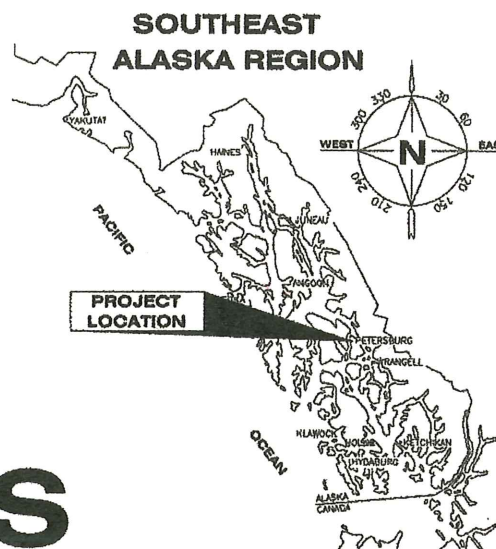


# State of Alaska

Department of Transportation  
and Public Facilities  
Southeast Region

AS-BUILT



## PETERSBURG FERRY TERMINAL IMPROVEMENTS PETERSBURG, ALASKA

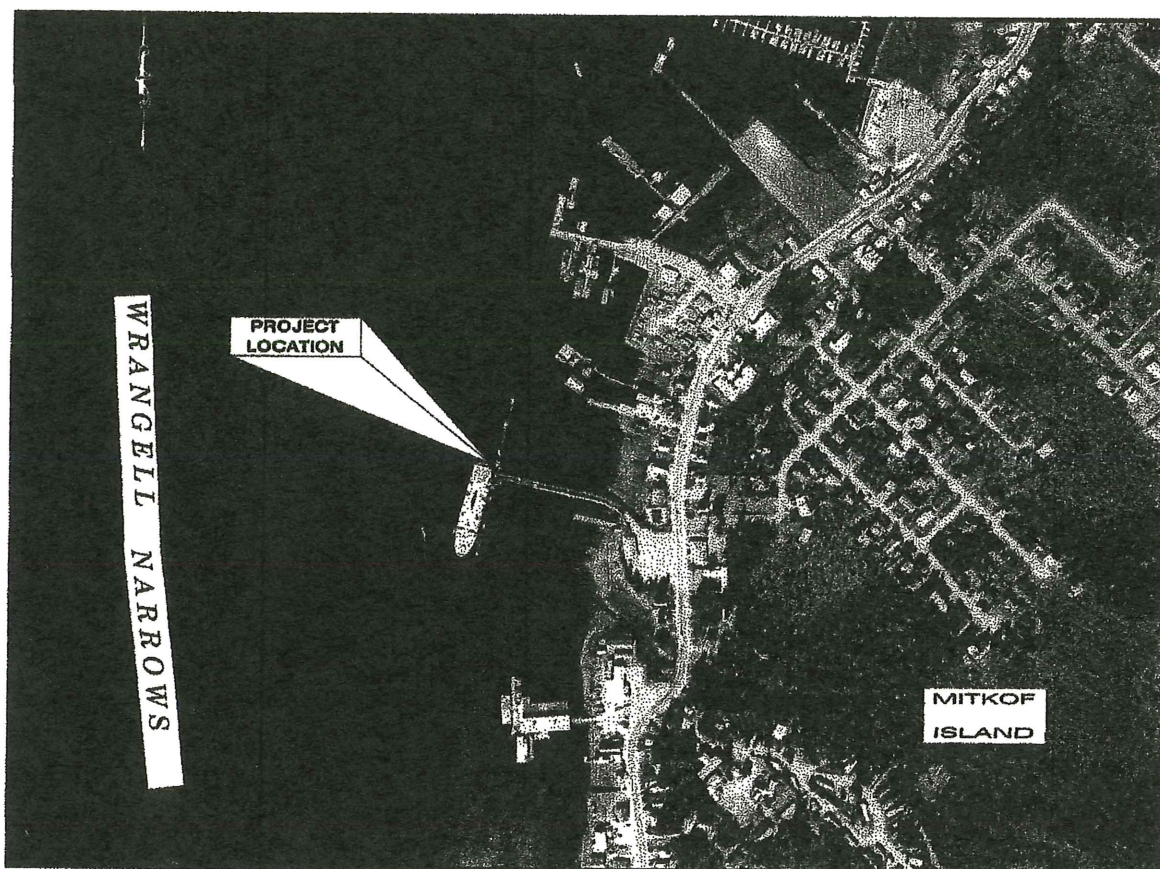
PROJECT No. AC-FBD-0937(34)~69422

CONTACTOR: Tamico Inc.  
PROJECT ENGINEER: Steve Mielke  
BEGIN DATE: February 25, 2013  
END DATE: May 5, 2014

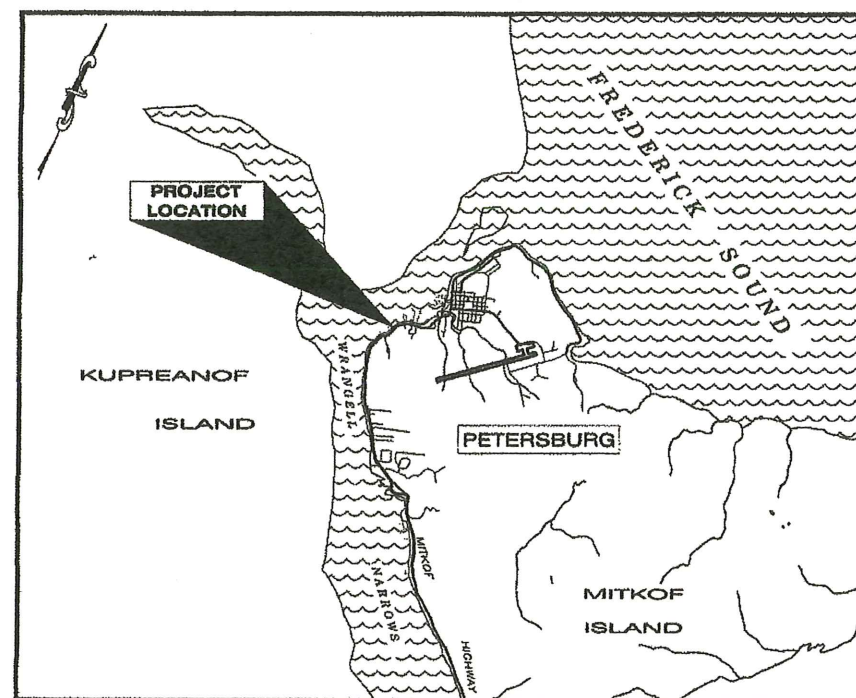
TIDAL DATA	
HTL	+20.0'
MHW	+14.8'
MLLW	0.0'
ELW	-4.5'

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE *Steve Mielke* Date *1-15-18*



SITE MAP



VICINITY MAP

### SHEET INDEX

SHT #	DESCRIPTION
1	TITLE SHEET
2	ESTIMATE OF QUANTITIES & GENERAL NOTES
3	EXISTING SITE PLAN
4	NEW MARINE SITE PLAN
<b>4-PILE DOLPHIN</b>	
5	PLAN & ELEVATION
6	CAP DETAILS
7	CAP & INTERMEDIATE & LOWER WALE DETAILS
8	FENDER PANEL FRAME
9	MISCELLANEOUS DETAILS
<b>6-PILE DOLPHIN</b>	
10	PLAN & ELEVATION
11	CAP DETAILS
12	CAP, HANDRAIL AND LADDER DETAILS
13	INTERMEDIATE & LOWER WALE DETAILS
14	FENDER PANEL FRAME
15	FENDER PANEL DETAILS
16	FENDER SUPPORT BEAM & CHAIN DETAILS
<b>CATWALK &amp; MISC.</b>	
17	CATWALK MODIFICATIONS
18	CATWALK LANDING DETAILS
19	MISCELLANEOUS DETAILS
<b>ELECTRICAL</b>	
20	ELECTRICAL PLAN AND DETAILS

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION



APPROVED: *Chuck Cornea* 6/8/12  
REGIONAL PRE-CONSTRUCTION ENGINEER DATE  
CHUCK CORNEA, P.E.

APPROVED: *Albert H. Clough* 6.8.2012  
DIRECTOR, SOUTHEAST REGION DATE  
ALBERT H. CLOUGH, CPG

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	69422 AC-FBD-0937(34)	2012	1	20

**GENERAL NOTES**

DESIGN SPECIFICATIONS  
PER CONTRACT DOCUMENTS FOR PROJECT NO. 69422/AC-FBD-0937(34)

DESIGN STANDARDS: AISC STEEL CONSTRUCTION MANUAL 13TH ED. LRFD

DESIGN LOADS: BERTHING - 150 FT-KIPS (6-PILE DOLPHIN)  
100 FT-KIPS (4-PILE DOLPHIN)  
MOORING - 50 KIPS

AMHS DESIGN VESSELS:

- M/V AURORA/LECONTE
- M/V FAIRWEATHER/CHENEGA
- M/V TAKU
- M/V MATANUSKA/MALASPINA
- M/V COLUMBIA
- M/V KENNICOTT

MATERIALS  
STEEL SHAPES  
& PLATES:

"BUY AMERICA" PROVISIONS APPLY

PLATES & SHAPES - ASTM A36, UNLESS OTHERWISE NOTED  
HOLLOW STRUCTURAL SECTIONS - ASTM A500 GR B  
HP - ASTM A572 GR 50  
PIPE - ASTM A53 GR B  
STAINLESS STEEL - ASTM A276 TYPE 316  
W - ASTM A992, ASTM A709

PILING: STEEL - API 5L X52, OR ASTM A252 GR 3, OR ASTM A709 GR 50  
FABRICATED TO API 2B

UHMW: ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE PLASTIC ASTM D4020

FASTENERS: PER SPECS

REBAR: LADDER RUNGS - ASTM A706 GR 60

PROTECTIVE COATINGS  
ALL STEEL, PILING,  
& WELDMENTS: GALVANIZED AFTER FABRICATION PER SPECS, UNLESS OTHERWISE NOTED



REBAR: GALVANIZED - ASTM A767



PILING  
SIZE: DIAMETER & WALL THICKNESS AS PER PILING TABLE & PLANS  
TIPS: DRIVING SHOES REQUIRED ON ALL PILES, APF 14001 OR EQUAL



WELDS  
ALL WELDING SHALL BE PERFORMED BY CERTIFIED PERSONS IN ACCORDANCE WITH AWS D1.1  
AND D1.5 AS APPLICABLE.


UNLESS OTHERWISE NOTED ON THE PLANS, ALL FILLET WELDS ARE 1/4" MINIMUM SIZE.


**REFERENCE LEGEND**

ELEVATION VIEW  SECTION VIEW 

VIEW TITLE  **VIEW NAME**  
 **VIEW DESCRIPTION**

DRAWING TITLE/  
SUBTITLE  **DRAWING TITLE**  
 **DRAWING DESCRIPTION**

DETAIL CALLOUT 

DETAIL TAG 

NOTES:  
1. USE THE SHEET NUMBER WHERE THE REFERENCE IS FOUND WHEN REFERENCING TO A DIFFERENT SHEET.  
2. USE A DASH MARK WHEN REFERENCE IS FOUND ON THE SAME SHEET.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN

CHECKED BY: K. MILLER  
DRAWN BY: STAFF

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

**PETERSBURG FERRY  
TERMINAL IMPROVEMENTS**

**ESTIMATE OF QUANTITIES  
& GENERAL NOTES**

PROJECT DESIGNATION: 69422  
YEAR: 2012  
SHEET NO.: 2  
TOTAL SHEETS: 20

PATH: O:\PSG\69422\PLANSET\02\_EST OF QTY & GEN NOTES.DWG  
TAB: 2  
Wednesday, June 06, 2012 4:14:40 PM  
FUMAN, CAROL M (DOT)

NO. DATE DESCRIPTION

**ABBREVIATIONS**

AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION  
ATS ALASKA TIDELAND SURVEY  
BTWN BETWEEN  
C/C CENTER TO CENTER  
CJP COMPLETE JOINT PENETRATION  
CL CENTERLINE  
CNTR CENTER  
CTSK COUNTERSINK  
DL DEAD LOAD  
EA EACH  
ELEV ELEVATION  
EQ EQUAL  
FB FLAT BAR  
GALV GALVANIZED  
GRC GALVANIZED RIGID CONDUIT  
GR GRADE  
HDPE HIGH DENSITY POLYETHYLENE PLASTIC  
HSS HOLLOW STRUCTURAL SECTION  
NM NON-METALLIC  
OC ON CENTER  
PL PLATE  
QTY QUANTITY  
R RADIUS  
REQ'D REQUIRED  
SS STAINLESS STEEL  
STD STANDARD  
SYMM SYMMETRIC  
TYP TYPICAL  
UHMW ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE PLASTIC

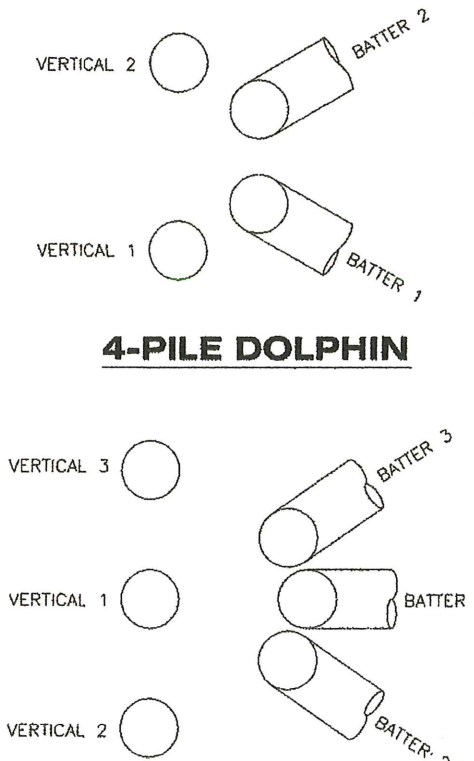
**ESTIMATE OF QUANTITIES**

ITEM #	ITEM DESCRIPTION	PAY UNIT	QUANTITY
202 (1)	DEMOLITION & REMOVAL	LS	ALL REQ'D
202 (13)	TERMINAL CLOSURE PRICE WITHHOLDING	CS	ALL REQ'D
504 (1)	4-PILE MOORING DOLPHIN CAP (W3 & E3)	EA	2
504 (2)	6-PILE MOORING DOLPHIN CAP (W4 & E4)	EA	2
504 (3)	4-PILE MOORING DOLPHIN FENDER SYSTEM (W3 & E3)	EA	2
504 (4)	6-PILE MOORING DOLPHIN FENDER SYSTEM (W4 & E4)	EA	2
504 (5)	RELOCATE & MODIFY EXISTING CATWALKS	LS	ALL REQ'D
505 (1)	30" x 1/2" WALL PIPE PILE, FURNISHED	LF	2120
505 (2)	30" x 1/2" WALL PIPE PILE, DRIVEN	EA	20
505 (3)	150 LB PILE ANODE	EA	44
640 (1)	MOBILIZATION & DEMOBILIZATION	LS	ALL REQ'D
640 (4)	WORKER MEALS & LODGING, OR PER DIEM	LS	ALL REQ'D
641 (1)	EROSION & POLLUTION CONTROL ADMINISTRATION	LS	ALL REQ'D
641 (2)	TEMPORARY EROSION & POLLUTION CONTROL	CS	ALL REQ'D
642 (1)	CONSTRUCTION SURVEYING	LS	ALL REQ'D
644 (1)	FIELD OFFICE	LS	ALL REQ'D
644 (8)	VEHICLES & SKIFF	LS	ALL REQ'D
662 (1)	ELECTRICAL POWER & LIGHTING SYSTEM	LS	ALL REQ'D

New Item's established by Change Order; see table on following page.

**PILE DATA**

STRUCTURE	PILE	PILE SIZE	DESIGN CAPACITY (kips)		ELEVATION (ft)			DLT PILE (SEE NOTE 1)	EST. PILE LENGTH
			UPLIFT	BEARING	EST. MUDLINE	EST. TIP	CUTOFF		
W4	VERTICAL 1	30"Ø x 1/2"	130	100	-30	-75	+25	X	100
	VERTICAL 2		130	100	-30	-75	+25		100
	VERTICAL 3		130	100	-30	-75	+25		100
	BATTER 1		120	230	-30	-75	+32		113
	BATTER 2		120	230	-30	-75	+32		113
	BATTER 3		120	230	-30	-75	+32		113
W3	VERTICAL 1	30"Ø x 1/2"	100	110	-28	-75	+25		100
	VERTICAL 2		100	110	-28	-75	+25		100
	BATTER 1		100	110	-28	-75	+32		113
	BATTER 2		100	110	-28	-75	+32		113
E3	VERTICAL 1	30"Ø x 1/2"	100	110	-24	-74	+25		99
	VERTICAL 2		100	110	-24	-74	+25		99
	BATTER 1		100	110	-24	-74	+32		112
	BATTER 2		100	110	-24	-74	+32		112
E4	VERTICAL 1	30"Ø x 1/2"	130	100	-24	-74	+25	X	99
	VERTICAL 2		130	100	-24	-74	+25		99
	VERTICAL 3		130	100	-24	-74	+25		99
	BATTER 1		120	230	-24	-74	+32		112
	BATTER 2		120	230	-24	-74	+32		112
	BATTER 3		120	230	-24	-74	+32		112
EST. TOTAL LENGTH (ft) =								2118	



See Pile Driving Record, last Page of Asbuilts.

NOTES:

1. PILES DESIGNATED AS DYNAMIC LOAD TEST PILES SHALL BE TESTED IN ACCORDANCE WITH SECTION 505-3.02 DYNAMIC LOAD TEST.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE *Stacy Miller* Date 1-15-18



FINAL ESTIMATE

SUMMARY OF QUANTITIES

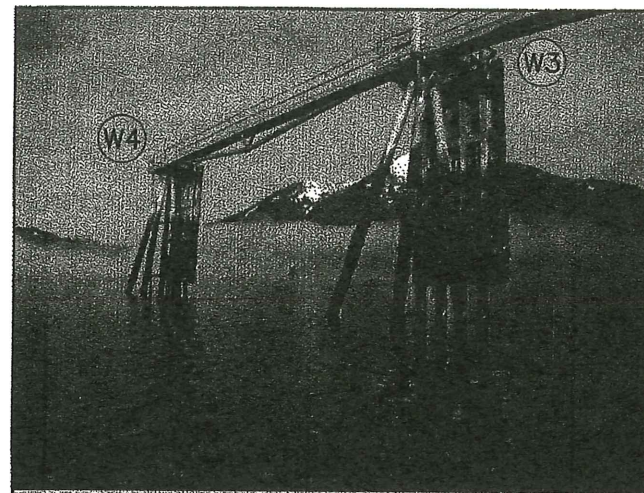
Project No.: AC-FBD-0937(34)/69422

Project Name & Location: Petersburg Ferry Terminal  
Improvements. Petersburg Alaska

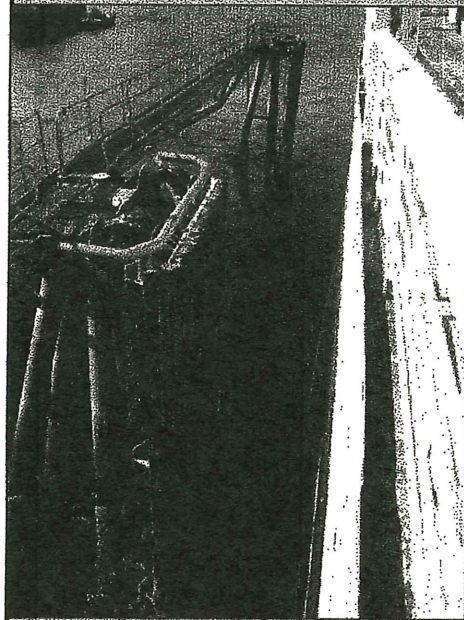
ITEM NO.	FA	ACT.	ITEM	UNIT	UNIT PRICE	QUANTITY	AMOUNT
<b>NEW ITEMS ESTABLISHED BY CHANG ORDER</b>							
202(2)	04	450	Remove & Disposal of Concrete Filled Piling (E4)-CO 05	C.S.		1.00	
504(2a)	04	450	Add Doubler Plates @ 6-Pile Dolphin Caps-CO 04	L.S.		1.00	
504(4a)	04	450	Extra Long Bounding Cable for Anodes (Complete)-CO 04	C.S.		1.00	
504(5a)	04	450	Catwalk Painting-CO 04	C.S.		1.00	
504(6)	04	450	Safety Improvements (Barriers, Chains & Railings)-CO 06	C.S.		1.00	
505(13)	04	450	Additional Pipe Pile Length (E4)-CO 03	L.S.		1.00	
644(8a)	17	450	Vehicle & Skiff - C.O. 02.	L.S.		1.00	
644(9)	17	450	Additional Contractor Provided Services-CO 01	L.S.		1.00	
660(14)	04	450	Solar L.E.D. Navigation/Obstruction lights, M702-5-CO 06	C.S.		1.00	
662(2)	04	450	Rev. Electrical Power and Lighting System-CO 02	L.S.		1.00	
662(3)	04	450	Uninterrupted Lighting Service-CO 06	C.S.		1.00	
662(4)	04	450	New Lighting Contactor-CO 06	L.S.		1.00	
				Total New Items			
				Total Project Amount			

*12 New Items  
Established by  
Change Order.*

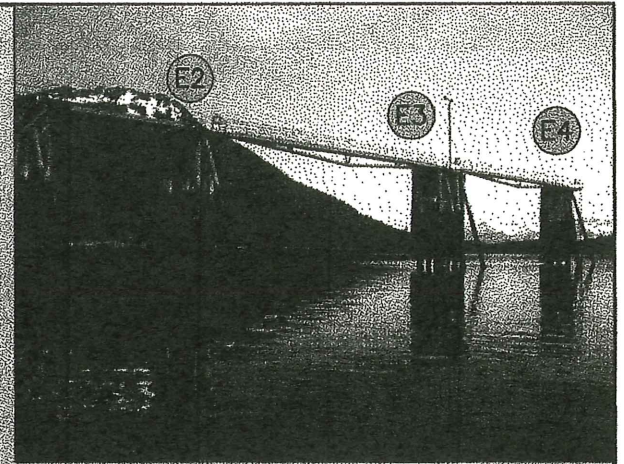
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE Stan Smith Date 1-15-18



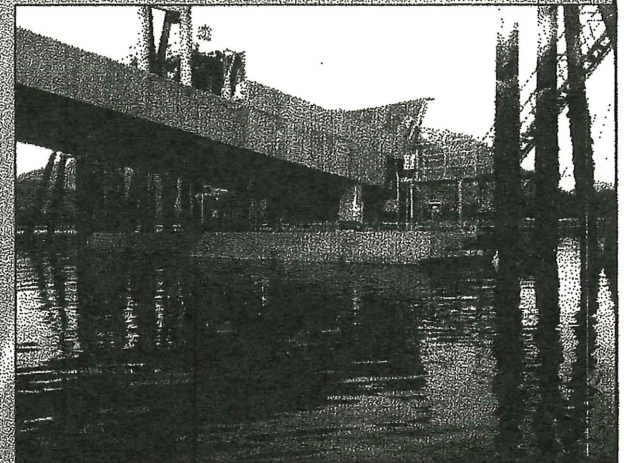
EXISTING CATWALKS AND DOLPHINS - WEST



EXISTING DOLPHINS W3 & W4



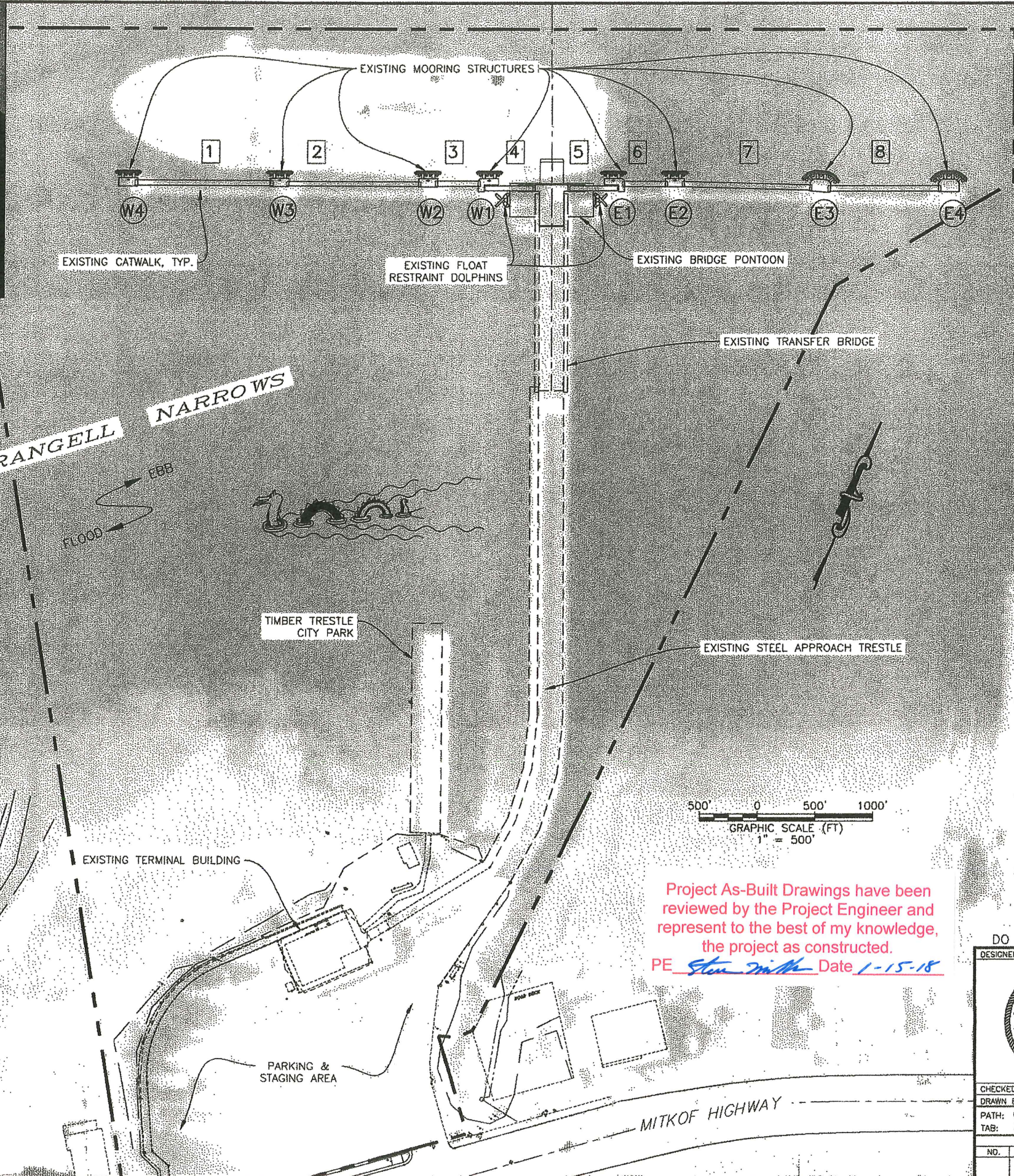
EXISTING CATWALKS AND DOLPHINS-EAST



EXISTING TRANSFER BRIDGE & FLOAT



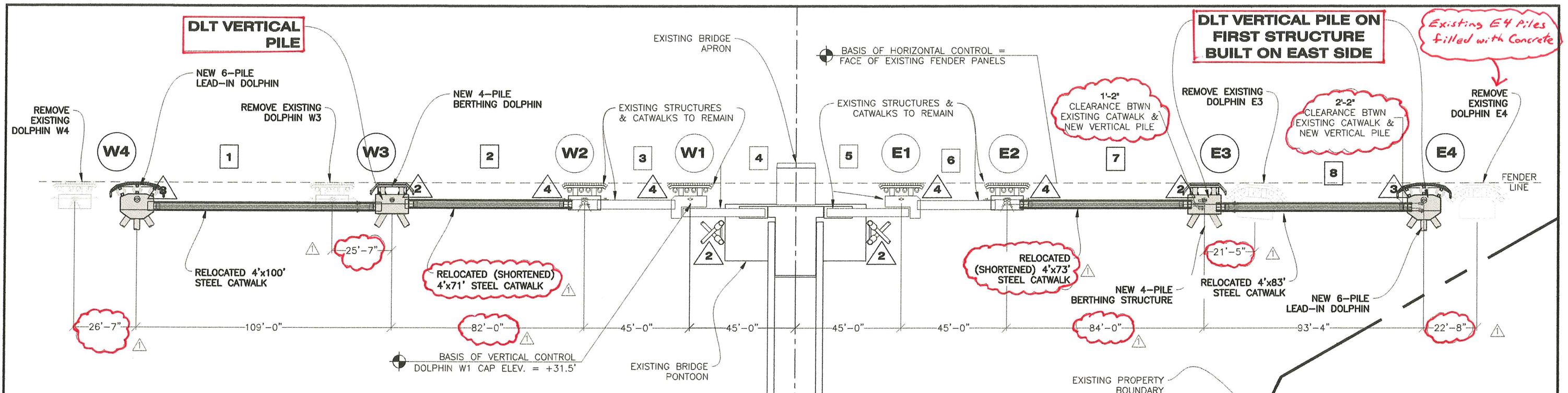
EXISTING APPROACH TRESTLE



**LEGEND**

- (X#) - DOLPHIN
- (#) - CATWALK

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS		DESIGNED BY: K. MILLER		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION							
		<b>PETERSBURG FERRY TERMINAL IMPROVEMENTS</b>									
CHECKED BY: STAFF		<b>EXISTING SITE PLAN</b>									
DRAWN BY: STAFF		PATH: Q:\PSG\69422\PLANSET\03-04_SITE PLAN & NEW DOLPHIN LAYOUT.DWG TAB: 3      Wednesday, June 06, 2012 4:21:42 PM      FUMAN, CAROL M (DOT)									
<table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>REVISIONS DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	REVISIONS DESCRIPTION				PROJECT DESIGNATION <b>69422</b> <b>AC-FBD-0937(34)</b>		YEAR    SHEET NO.    TOTAL SHEETS <b>2012    3    20</b>	
NO.	DATE	REVISIONS DESCRIPTION									



**CONSTRUCTION LIMITATIONS AND SEQUENCING NOTES:**

- CONSTRUCTION PHASING PLAN** - PRIOR TO STARTING ANY FIELD WORK, THE CONTRACTOR SHALL PROVIDE A DETAILED CONSTRUCTION PHASING PLAN. DOLPHINS W4 AND W3 SHALL BE REMOVED AND REPLACED FIRST DUE TO THEIR DETERIORATED CONDITION. THE PHASING PLAN SHALL DESCRIBE THE SEQUENCE AND METHODS FOR REMOVAL AND INSTALLATION OF NEW MOORING STRUCTURES. NO WORK MAY COMMENCE ON SITE UNTIL THE CONSTRUCTION PHASING PLAN HAS BEEN APPROVED BY THE ENGINEER.
- WORK TIMES** - ALL WORK SHALL BE SEQUENCED TO MAINTAIN SAFE USE OF THE FACILITIES BY SCHEDULED FERRY VESSELS. COORDINATE WITH AMHS FOR THE LATEST FERRY SCHEDULES AND UPDATES WHEN SCHEDULING CONSTRUCTION ACTIVITIES.
- UNAUTHORIZED TERMINAL CLOSURES** - FOR EACH OCCURRENCE THAT A SCHEDULED AMHS VESSEL IS PREVENTED FROM USING THE FACILITY AS A RESULT OF THE CONTRACTORS OPERATIONS, A TERMINAL CLOSURE PRICE WITHHOLDING (DEDUCTION IN CONTRACT PAYMENTS) WILL BE ASSESSED UNDER BID ITEM 202(13).
- CLEAR ACCESS TO BERTH** - PRIOR TO SCHEDULED AMHS FERRY ARRIVALS, THE CONTRACTORS EQUIPMENT AND MATERIALS SHALL BE MOVED OR STORED IN LOCATIONS THAT WILL NOT AFFECT SAFE VESSEL ACCESS, BERTHING AND VEHICLE AND PEDESTRIAN TRANSFER OPERATIONS.
- REQUIRED MOORING STRUCTURES** - UNLESS OTHERWISE PERMITTED BY THE ENGINEER, THE CONTRACTOR SHALL NOT REMOVE MORE THAN ONE BERTHING STRUCTURE AT ANY ONE TIME. EXISTING STRUCTURES SHALL NOT BE REMOVED UNTIL NEW STRUCTURES ARE IN PLACE THAT WILL PROVIDE SUITABLE BERTHING OR MOORING FACILITIES FOR THE VESSEL. THE CONTRACTOR SHALL ASSIST THE VESSEL OR THE TERMINAL OPERATIONS PERSONNEL IN ATTACHING AND REMOVING MOORING LINES IF INACCESSIBLE DUE TO LACK ACCESS BY SHIP OR SHORE BASED AMHS STAFF.

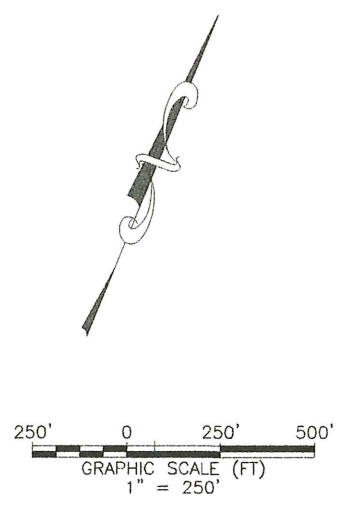
**DEMOLITION NOTES:**

- THE SOUTHWEST BATTER PILE ON EXISTING DOLPHIN W4 HAS A FULL CIRCUMFERENTIAL CRACK BELOW WATERLINE.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *Steve Miller* Date *1-15-18*

**LEGEND**

- X#** DOLPHIN
- #** CATWALK
- #** OF ANODES



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN

CHECKED BY: K. MILLER  
DRAWN BY: STAFF

STATE OF ALASKA  
49th  
JOEL D. OSBURN  
CE-11014  
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

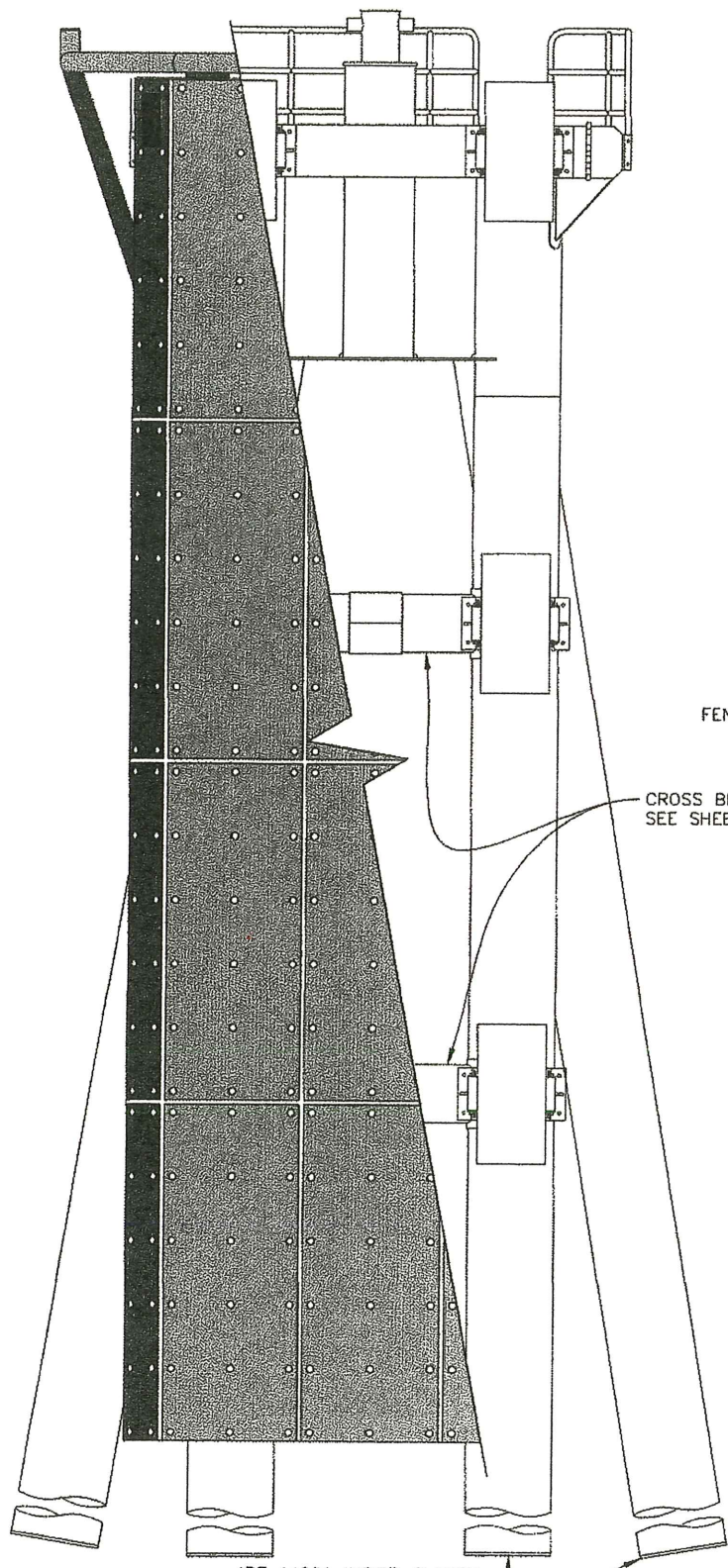
**PETERSBURG FERRY  
TERMINAL IMPROVEMENTS**

**NEW MARINE SITE PLAN  
REVISED**

PATH: O:\PSG\69422\MF\CONSTRUCTION\REVISED PLANSET DRAWINGS\03-04\_SITE PLAN & NEW DOLPHIN LAY  
 TAB: 4 Wednesday, December 12, 2012 1:18:07 PM OSBURN, JOEL D (DOT)

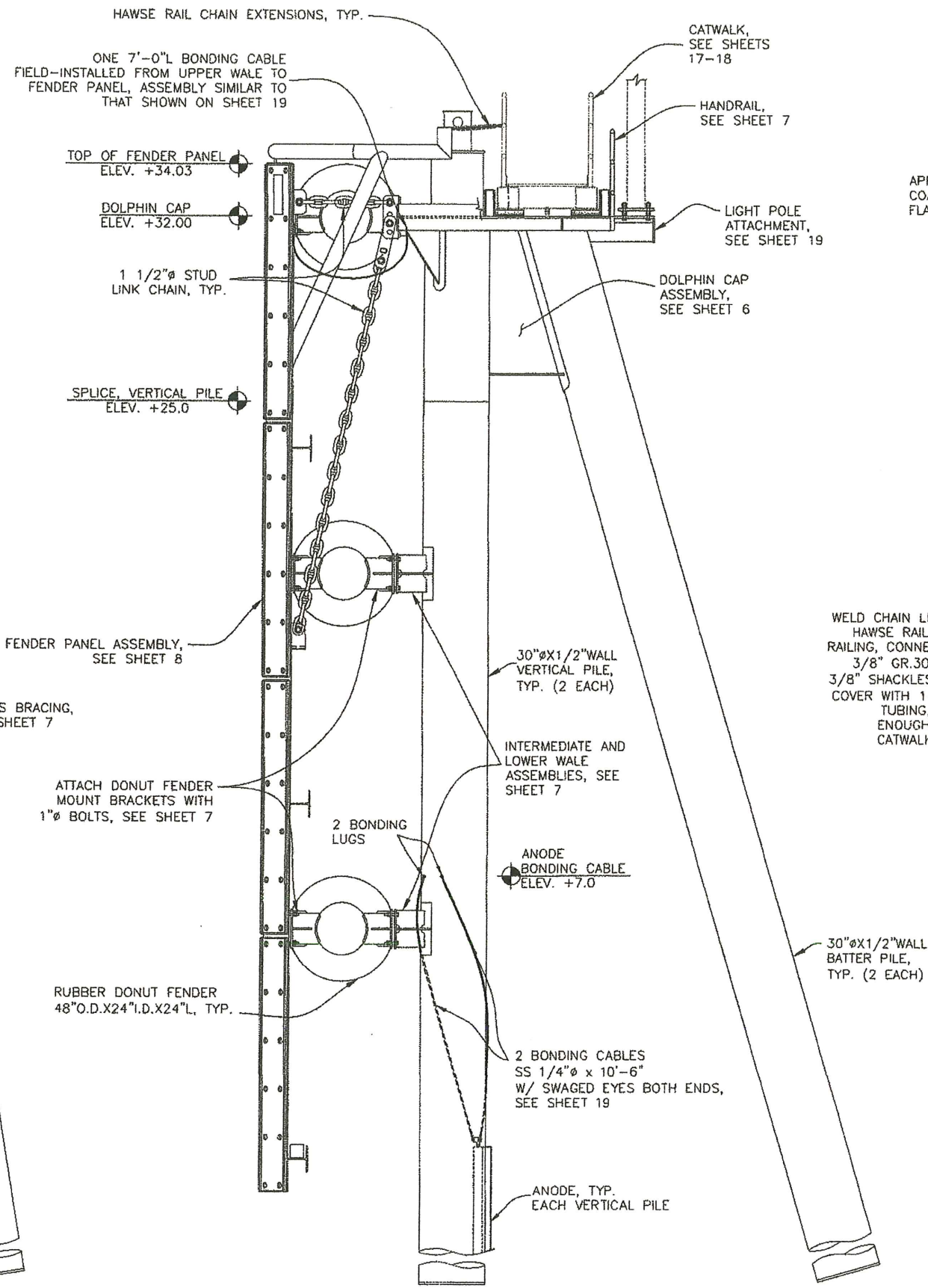
NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
1	12/12/12	MOVED DOLPHINS & SHORTENED CATWALKS	<b>69422 AC-FBD-0937(34)</b>	<b>2012</b>	<b>4</b>	<b>20</b>

MOORING LINE ASSEMBLY NOT SHOWN. SEE SHEET 19.

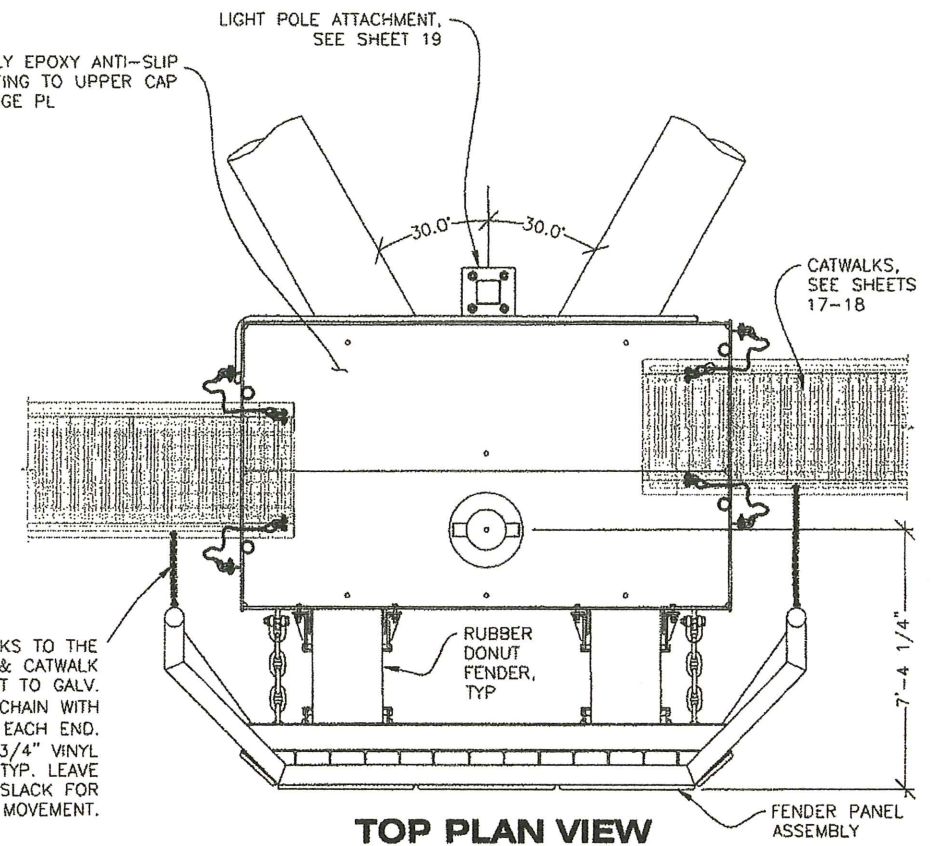


**FRONT ELEVATION**  
**4-PILE DOLPHIN**

APF 14001 INSIDE-FLANGE DRIVING SHOE, TYP.



**SIDE ELEVATION**  
**4-PILE DOLPHIN**



**TOP PLAN VIEW**  
**4-PILE DOLPHIN**

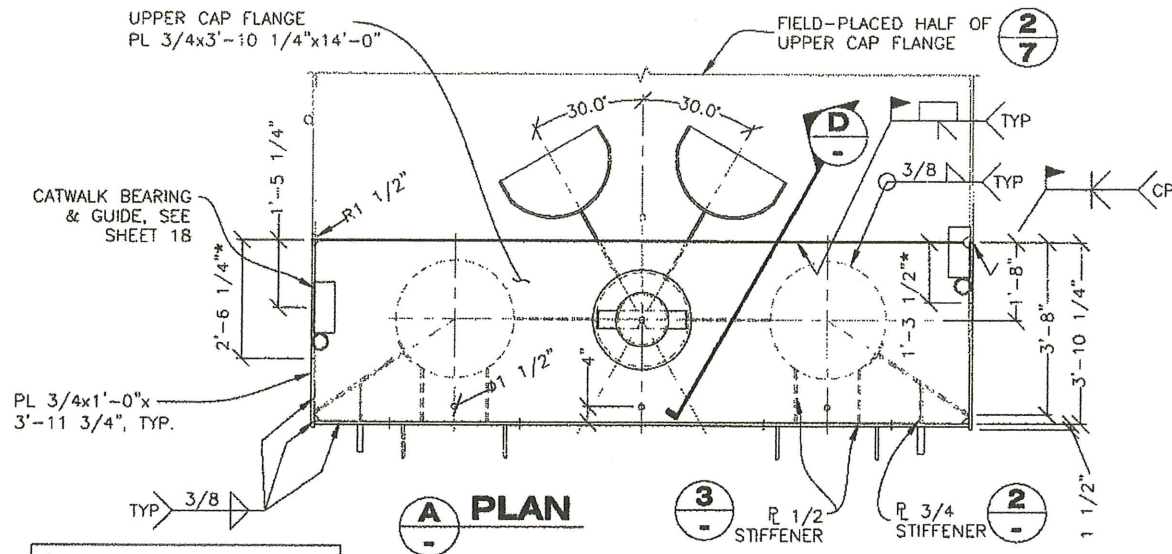
(DOLPHIN W3 SHOWN; MIRROR STRUCTURE ABOUT CENTER OF DOLPHIN CAP FOR DOLPHIN E3)

NOTE: SEE SHEET 20 FOR ELECTRICAL PLAN

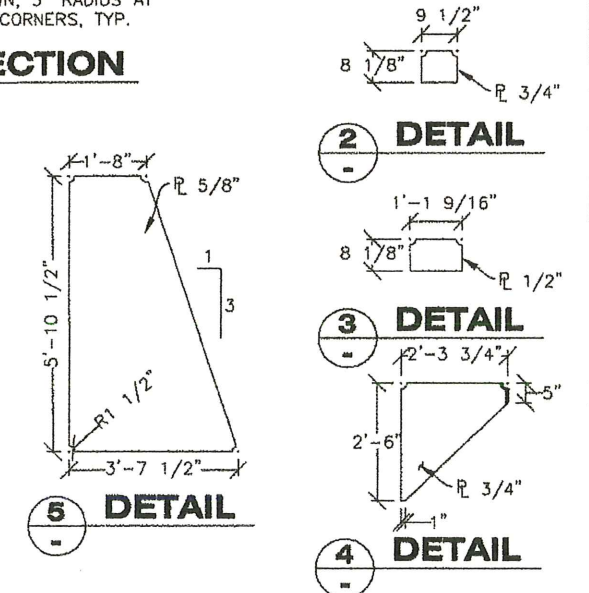
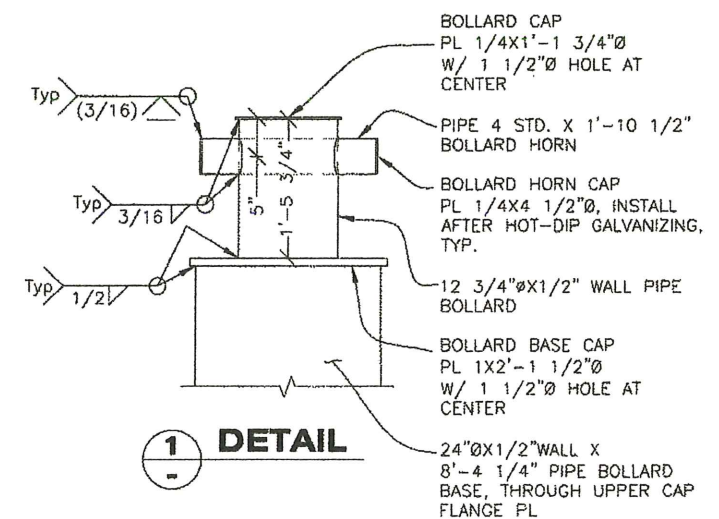
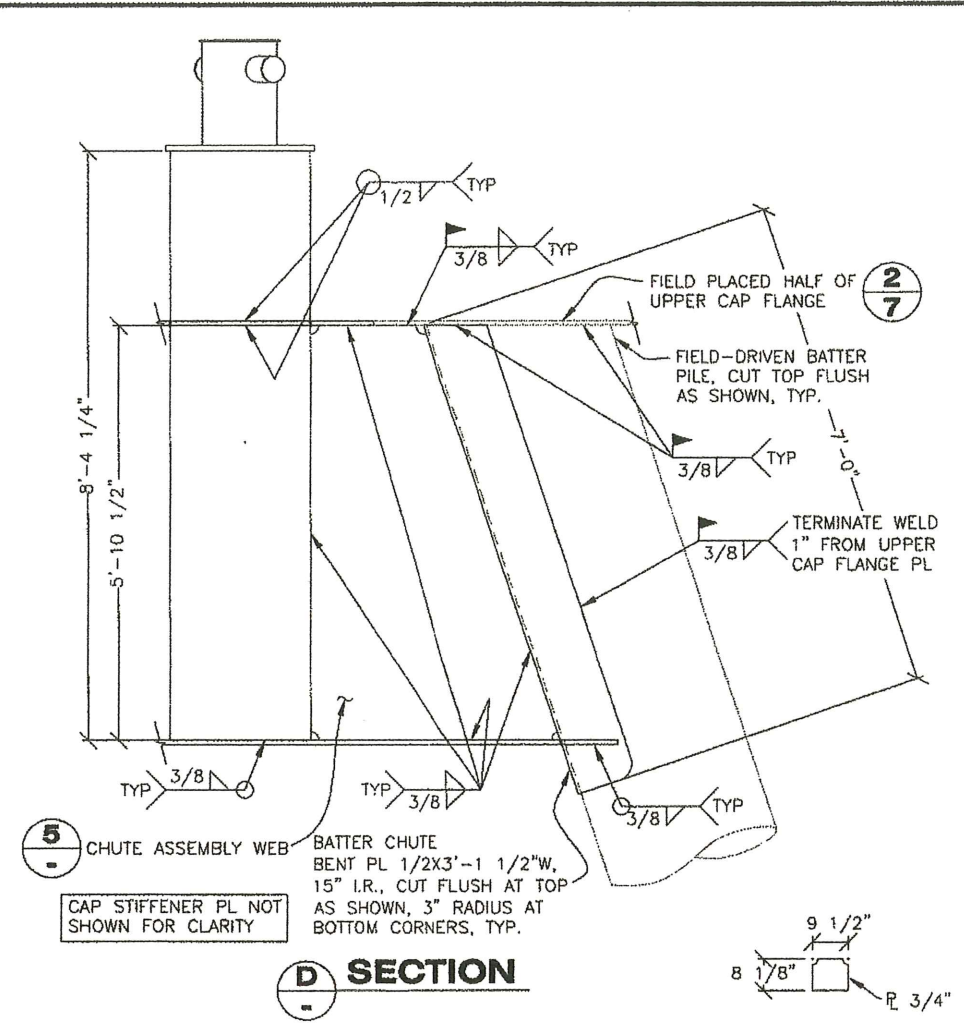
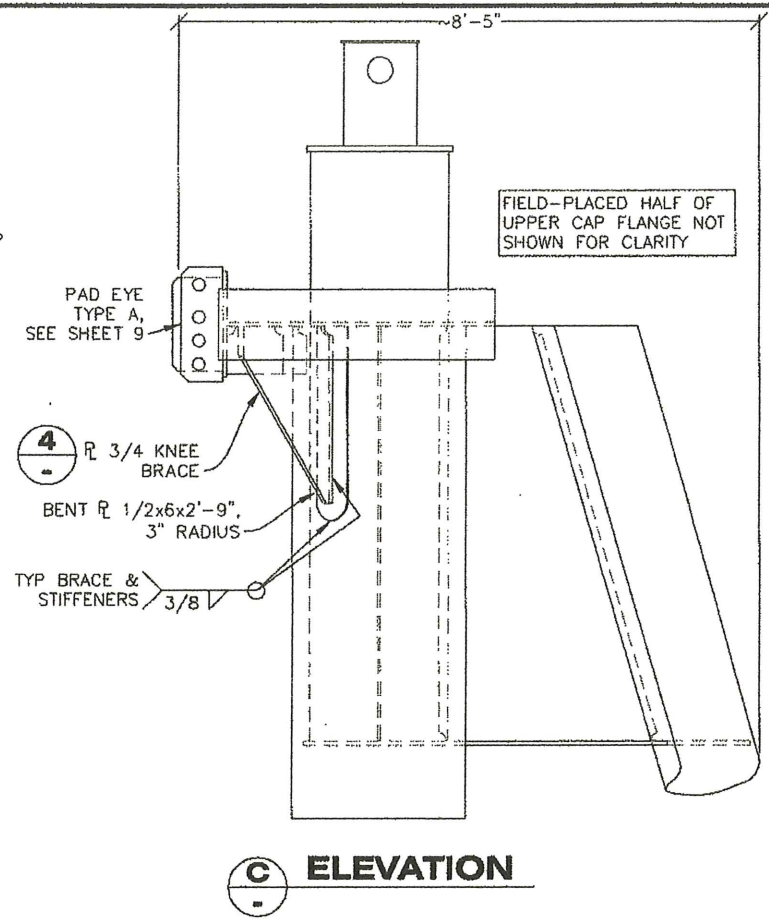
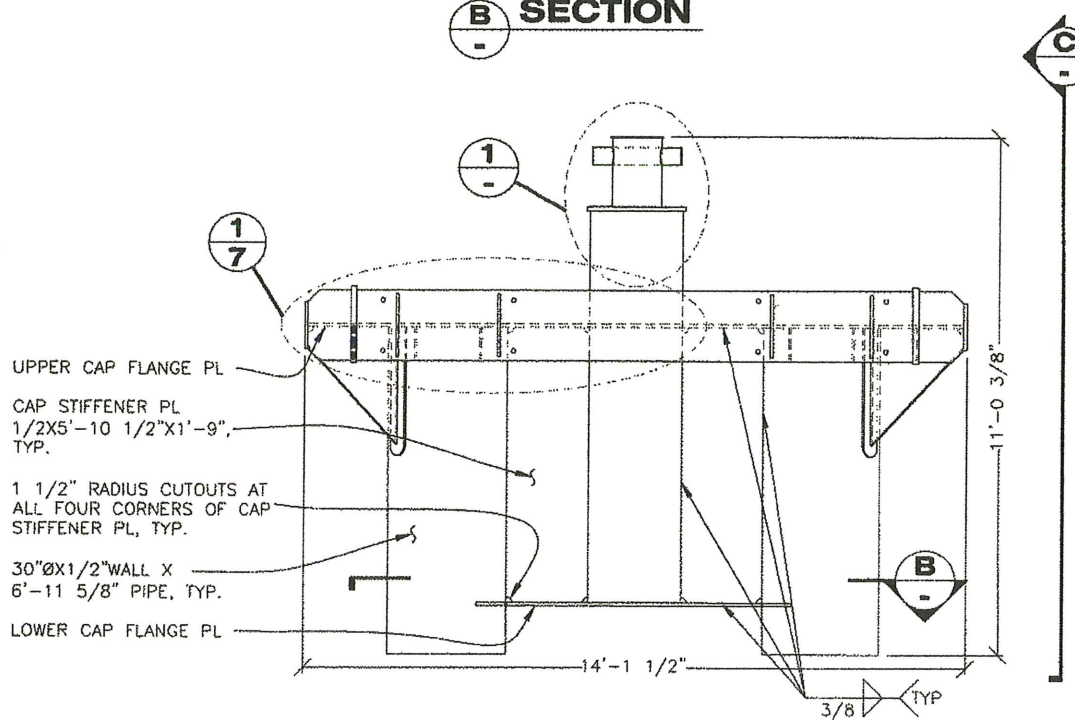
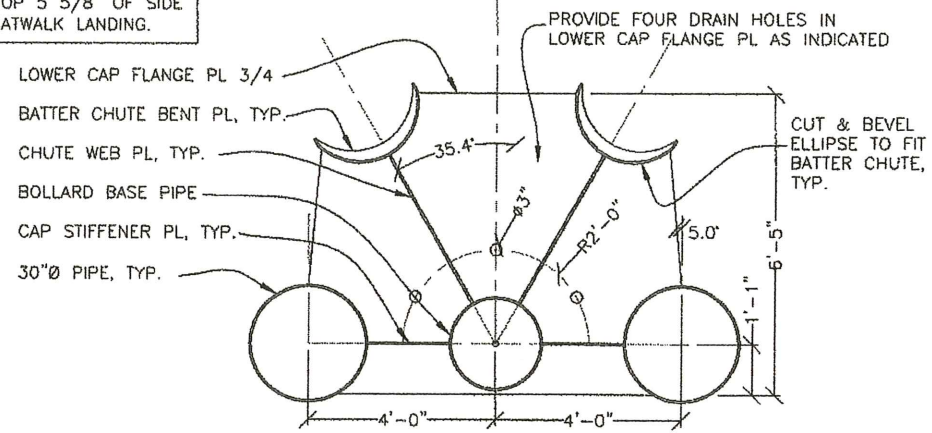
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE *[Signature]* Date 1-15-18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION																								
		<b>PETERSBURG FERRY TERMINAL IMPROVEMENTS</b>																								
		<b>PLAN &amp; ELEVATION 4-PILE DOLPHIN</b>																								
CHECKED BY: STAFF	PATH: Q:\PSG\69422\PLANSET\05_4--PILE STRUCTURES E3, W3.DWG TAB: 5 Wednesday, June 06, 2012 4:28:38 PM FUMAN, CAROL M (DOT)																									
DRAWN BY: STAFF																										
<table border="1"> <thead> <tr> <th colspan="3">REVISIONS</th> <th>PROJECT DESIGNATION</th> <th>YEAR</th> <th>SHEET NO.</th> <th>TOTAL SHEETS</th> </tr> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>69422</th> <th>2012</th> <th>5</th> <th>20</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td>AC-FBD-0937(34)</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS	NO.	DATE	DESCRIPTION	69422	2012	5	20				AC-FBD-0937(34)							
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS																				
NO.	DATE	DESCRIPTION	69422	2012	5	20																				
			AC-FBD-0937(34)																							



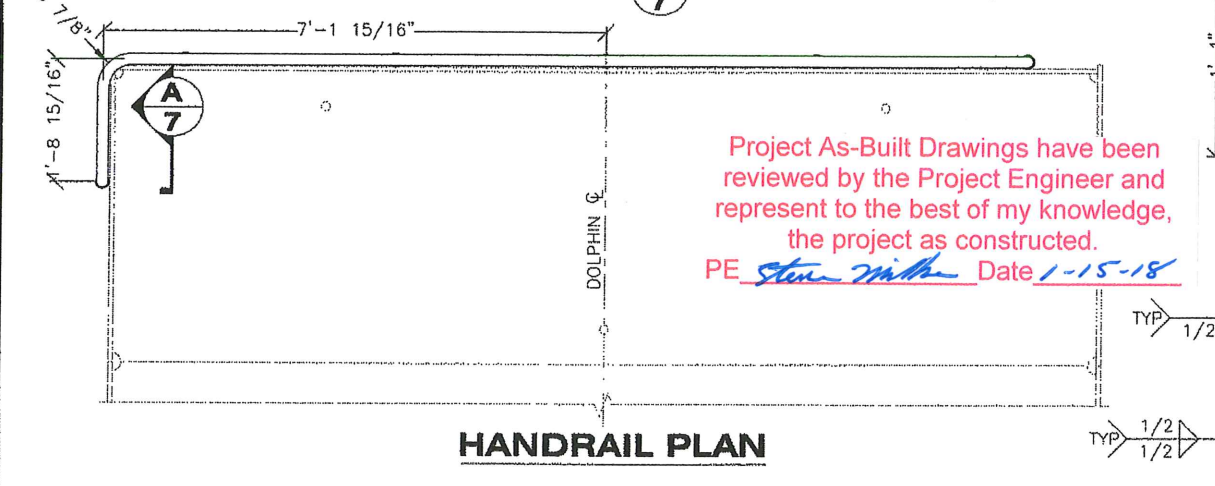
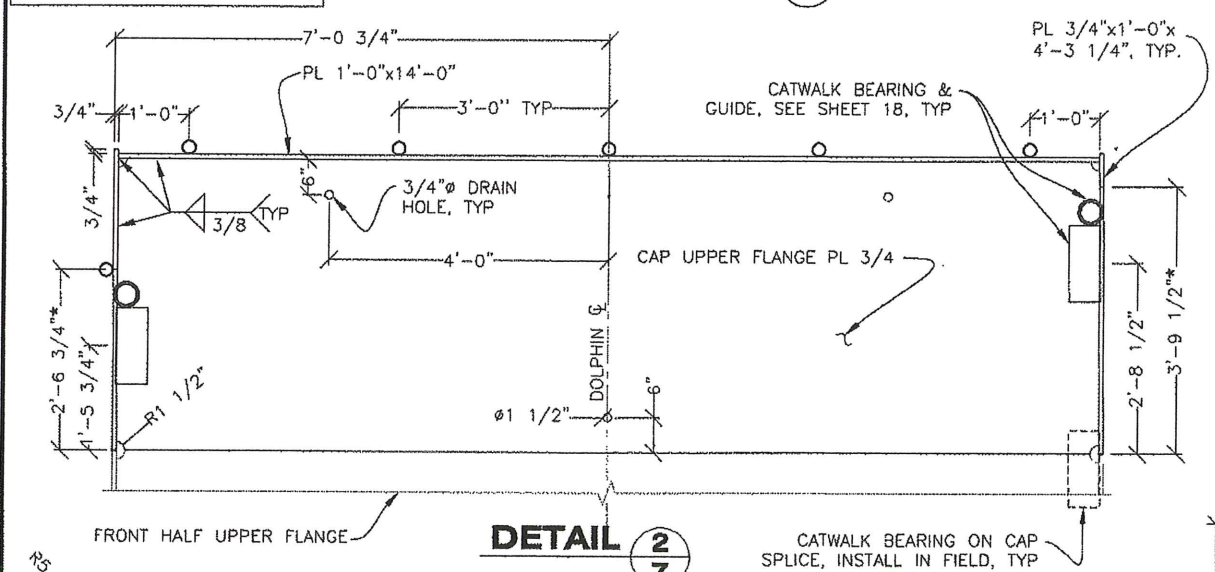
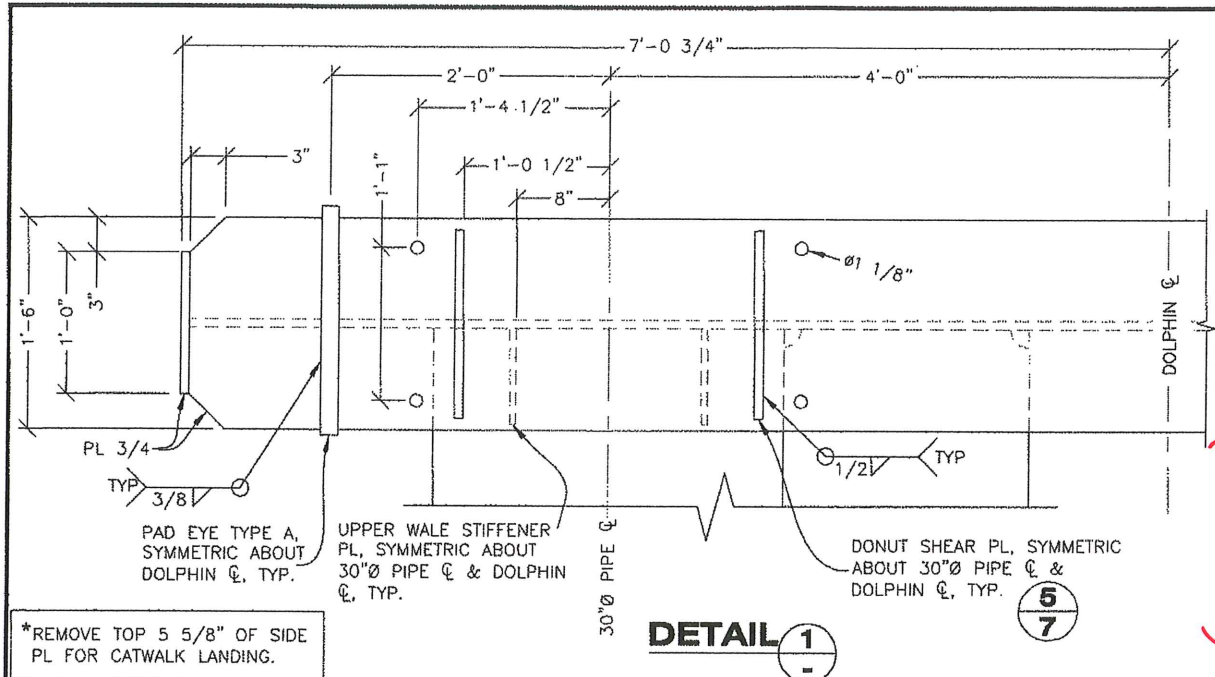
\*REMOVE TOP 5 5/8" OF SIDE  
PL FOR CATWALK LANDING.



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE Steve Miller Date 1-15-18

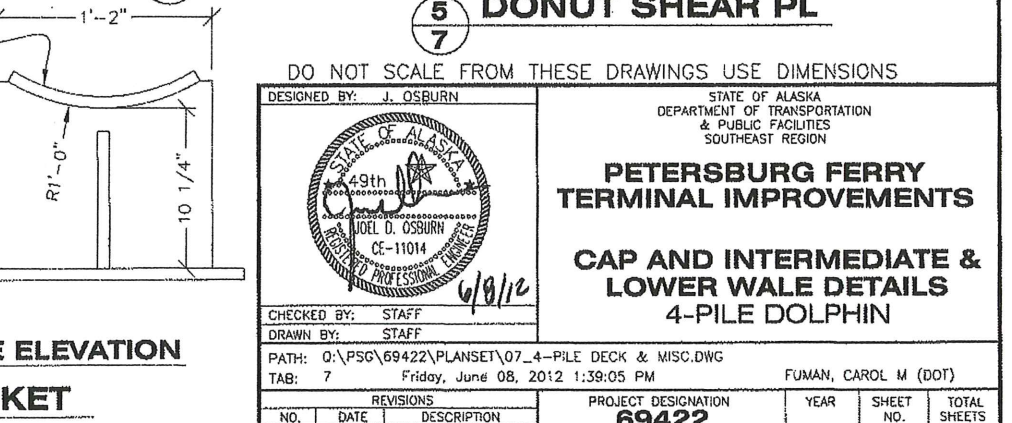
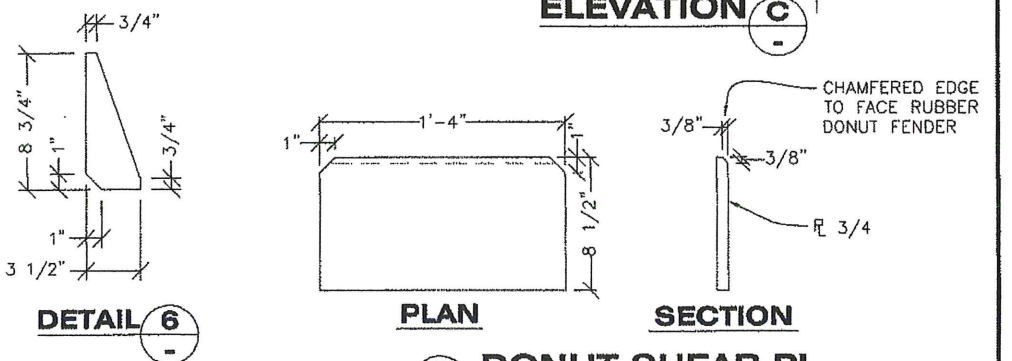
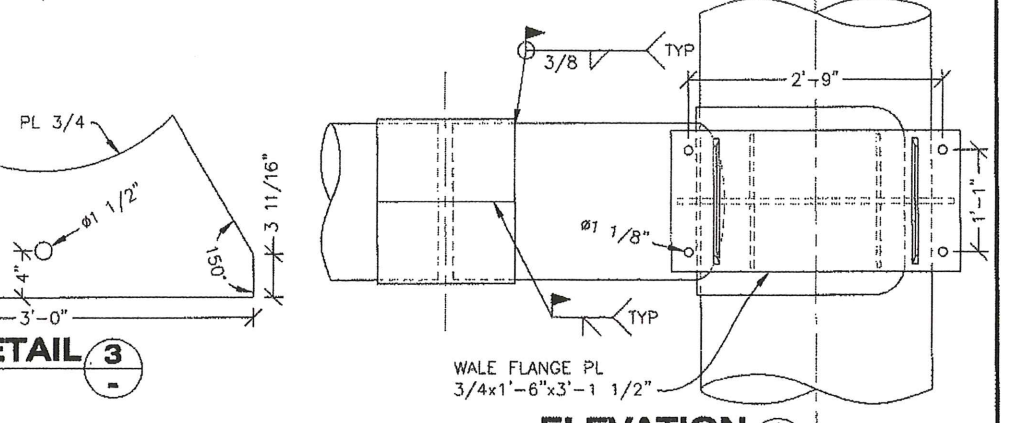
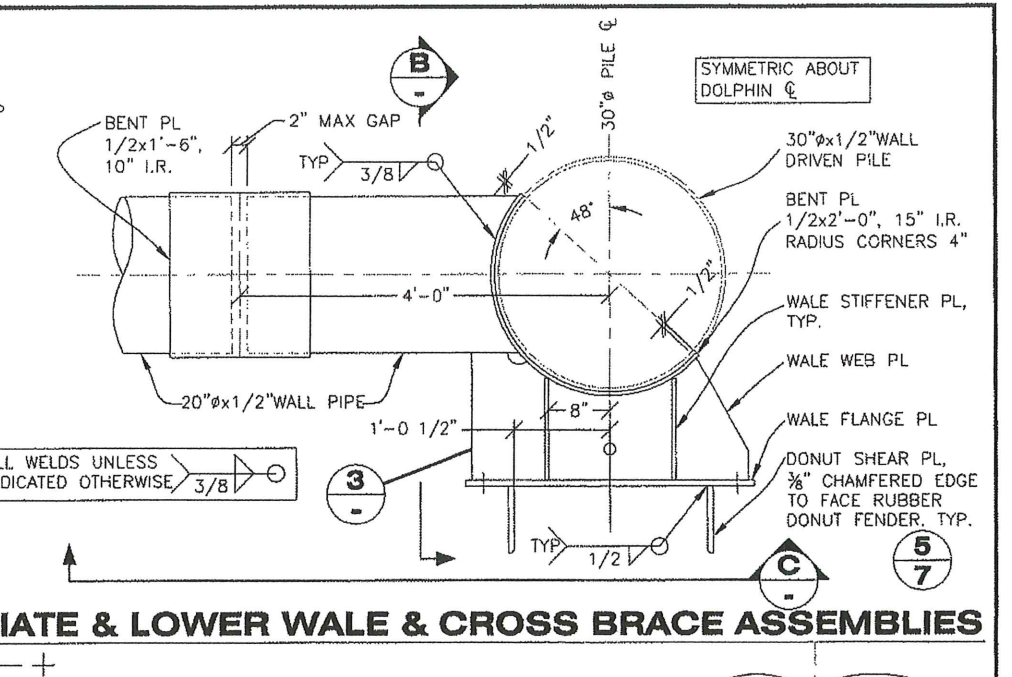
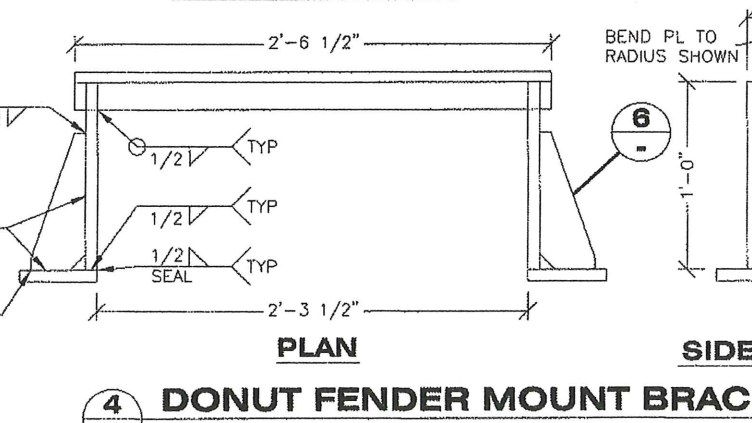
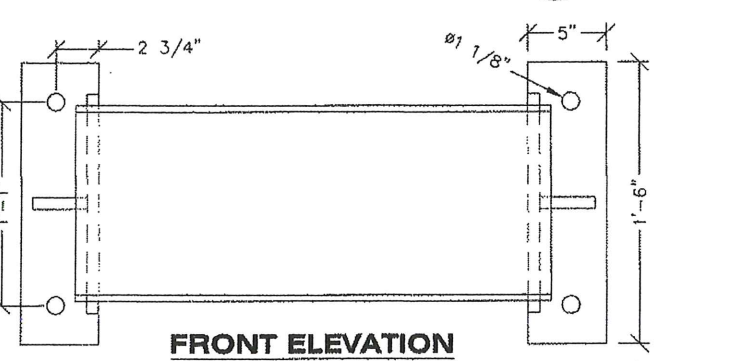
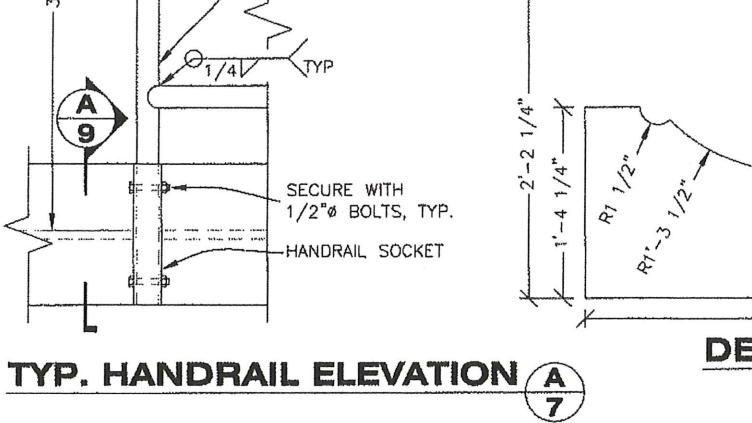
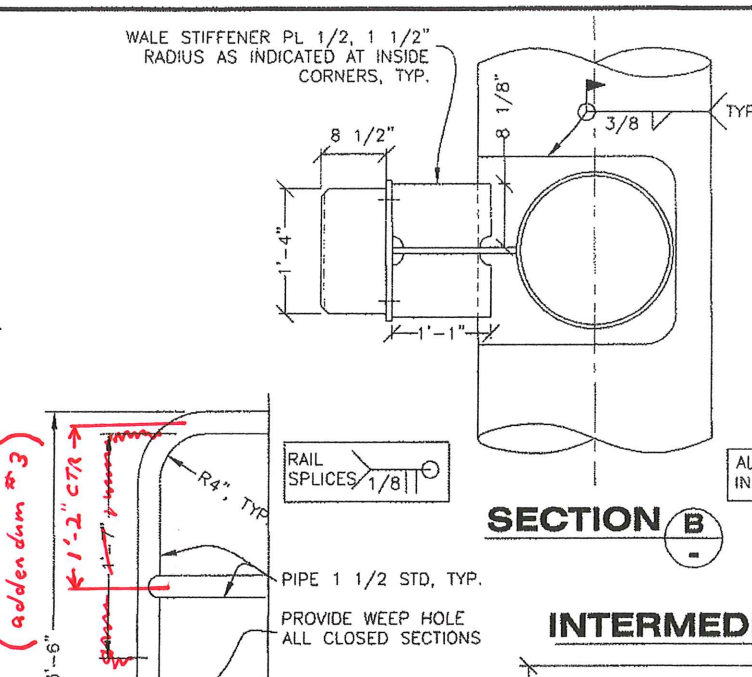
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION			
	<b>PETERSBURG FERRY TERMINAL IMPROVEMENTS</b>			
	<b>CAP DETAILS 4-PILE DOLPHIN</b>			
CHECKED BY: STAFF	6/8/12	PROJECT DESIGNATION <b>69422</b>		YEAR <b>2012</b>
DRAWN BY: STAFF	Friday, June 08, 2012 1:38:56 PM		SHEET NO. <b>6</b>	TOTAL SHEETS <b>20</b>
PATH: Q:\PSC\69422\PLANSET\06_4-PILE CAP.DWG	FUMAN, CAROL M (DOT)			
TAB: 6	REVISIONS	DESCRIPTION		
NG.	DATE	DESCRIPTION		



**NOTES:**

1. FIT HANDRAIL TO MATCH SOCKET ARRANGEMENT AS SHOWN.
2. ALL DONUT FENDER MOUNT BRACKET PLATES ARE 3/4" THICK.



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *Steve Miller* Date 1-15-18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN

CHECKED BY: STAFF

DRAWN BY: STAFF

PATH: O:\PSG\69422\PLANSET\07\_4-PILE DECK & MISC.DWG

TAB: 7 Friday, June 08, 2012 1:39:05 PM

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

**PETERSBURG FERRY  
 TERMINAL IMPROVEMENTS**

**CAP AND INTERMEDIATE &  
 LOWER WALE DETAILS  
 4-PILE DOLPHIN**

PROJECT DESIGNATION  
**69422**

YEAR  
**2012**

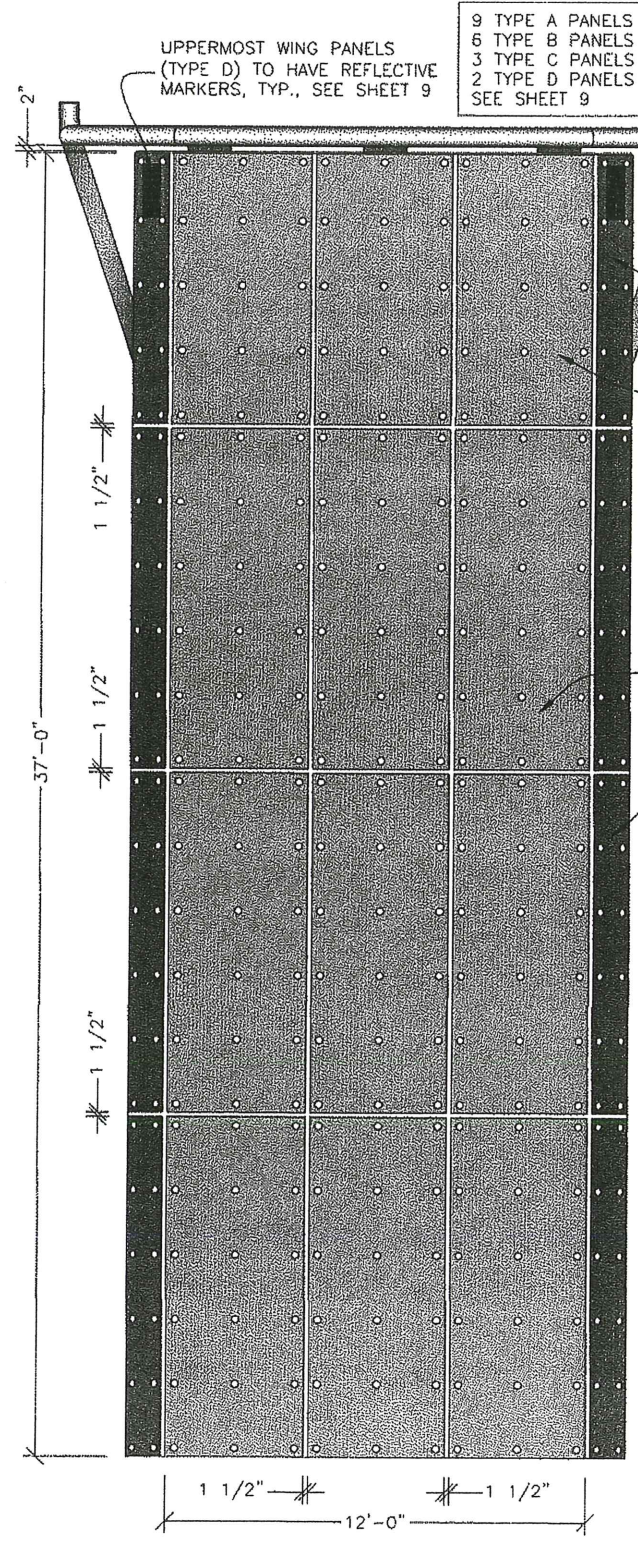
SHEET NO.  
**7**

TOTAL SHEETS  
**20**

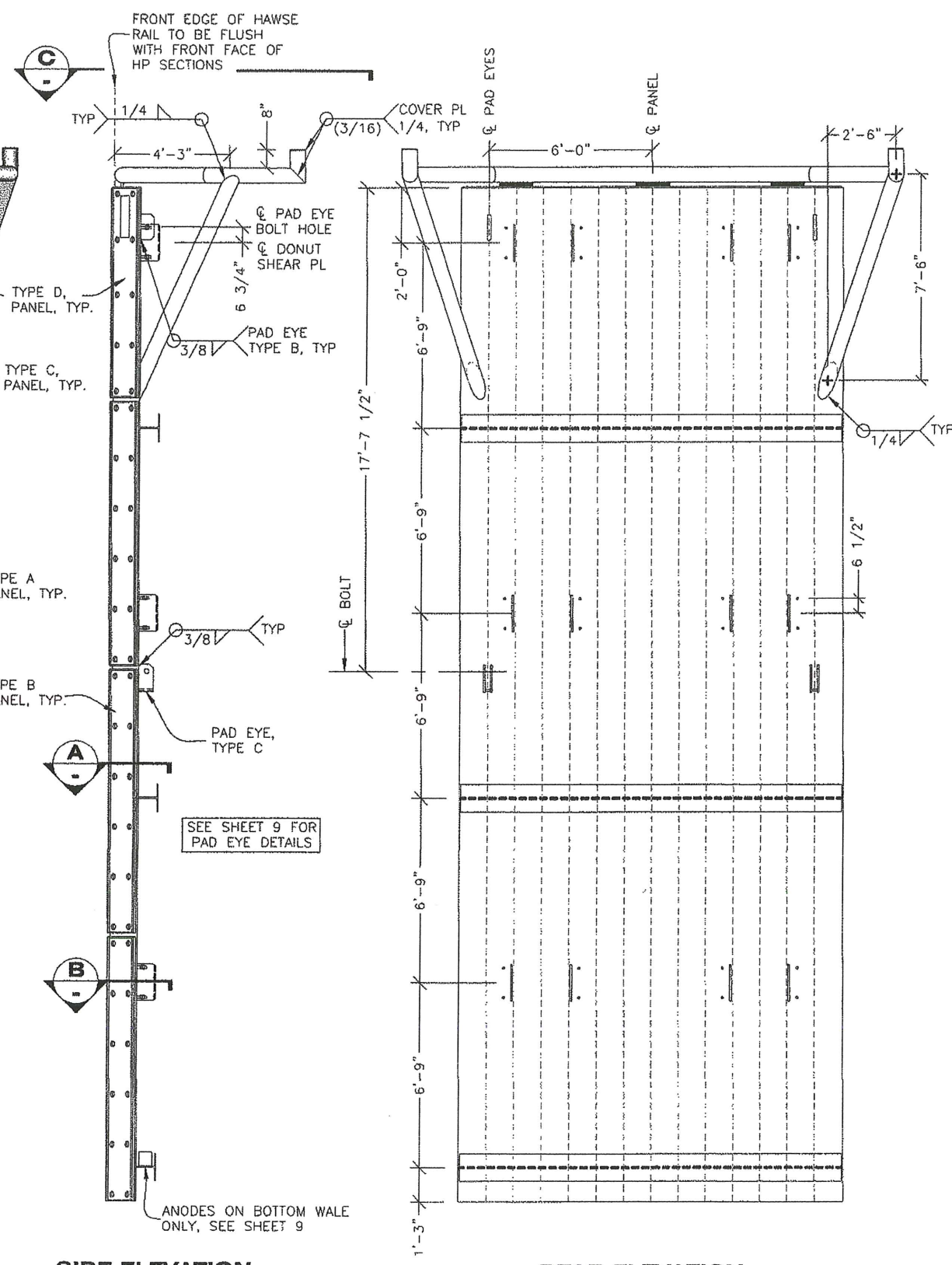
REVISIONS

NO.	DATE	DESCRIPTION

FUMAN, CAROL M (DOT)



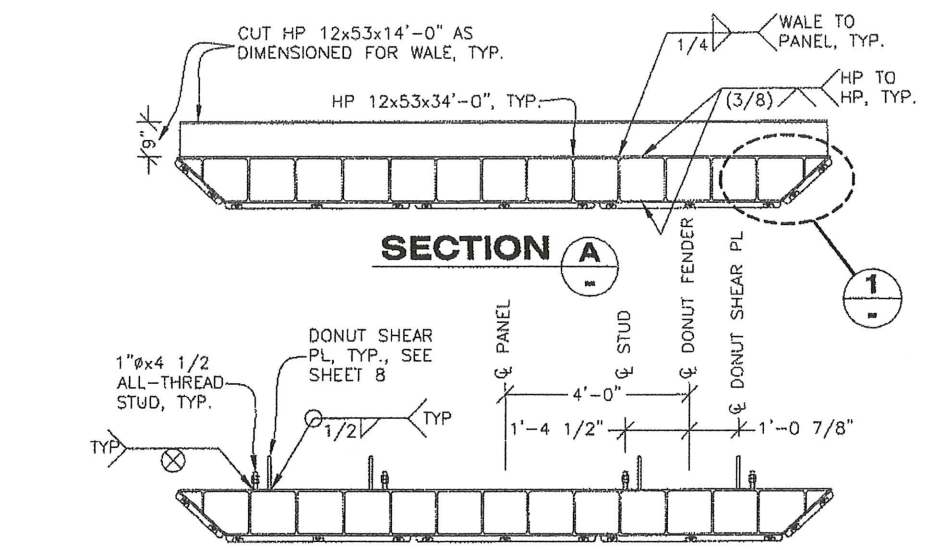
**FRONT ELEVATION**



**SIDE ELEVATION**

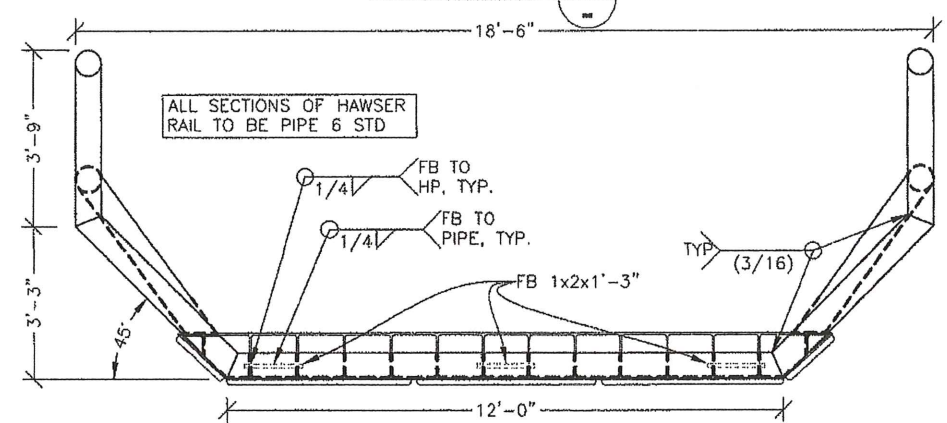
**REAR ELEVATION**

**FENDER PANEL ASSEMBLY**

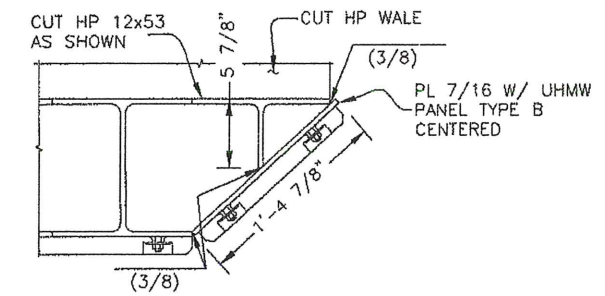


**SECTION A**

**SECTION B**



**SECTION C**

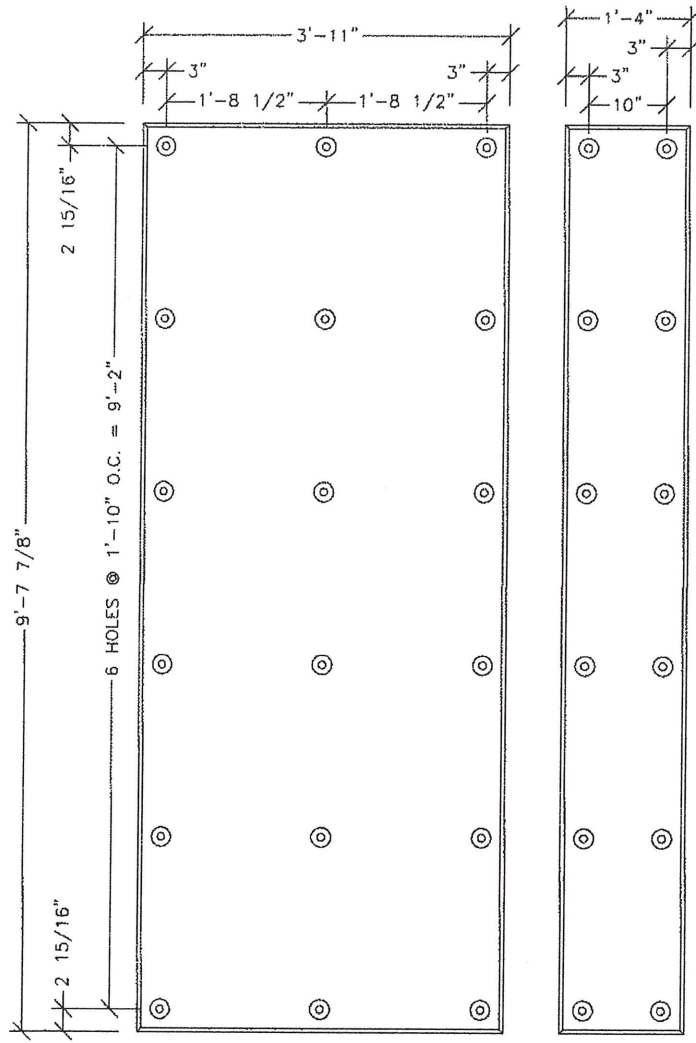


**DETAIL 1**

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE Steve Miller Date 1-15-18

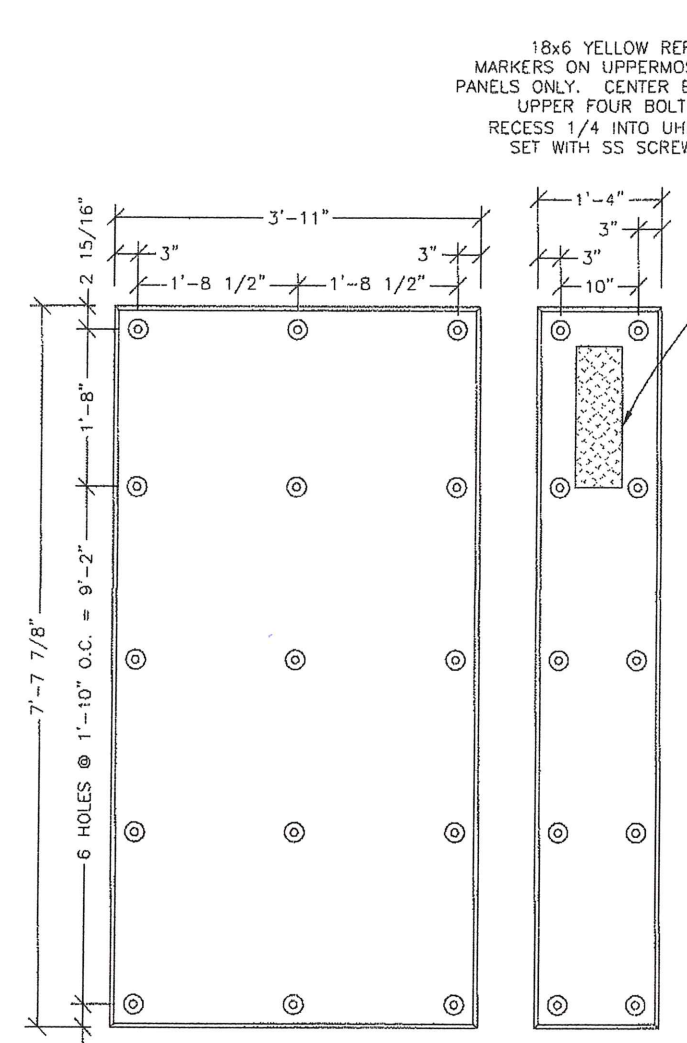
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION			
	<b>PETERSBURG FERRY TERMINAL IMPROVEMENTS</b>			
	<b>FENDER PANEL FRAME 4-PILE DOLPHIN</b>			
CHECKED BY: K. MILLER	DATE: 6/8/12	PROJECT DESIGNATION: 69422	YEAR: 2012	SHEET NO.: 8
DRAWN BY: STAFF	DATE: Friday, June 08, 2012 1:39:10 PM	PROJECT DESIGNATION: AC-FBD-0937(34)	YEAR: 2012	SHEET NO.: 8
PATH: Q:\PSG\69422\PLANSET\08 - 4-PILE FENDER FRAME.DWG TAB: 8		FUMAN, CAROL M (DOT) PROJECT DESIGNATION: 69422 YEAR: 2012 SHEET NO.: 8 TOTAL SHEETS: 20		



**TYPE A**  
(BLACK IN COLOR)

**TYPE B**  
(YELLOW IN COLOR)



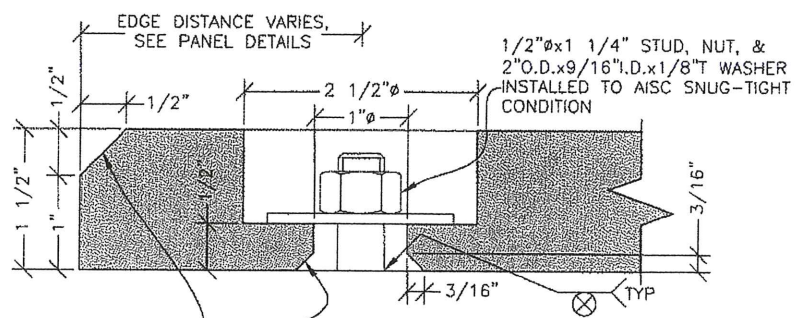
**TYPE C**  
(BLACK IN COLOR)

**TYPE D**  
(YELLOW IN COLOR)

18x6 YELLOW REFLECTIVE MARKERS ON UPPERMOST WING PANELS ONLY. CENTER BETWEEN UPPER FOUR BOLT HOLES. RECESS 1/4 INTO UHMW AND SET WITH SS SCREWS, TYP.

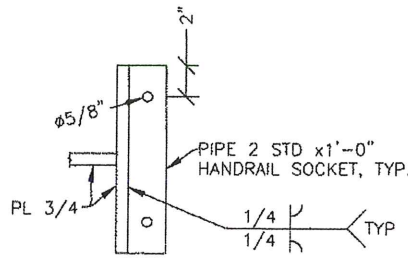
**1 1/2" UHMW FENDER PANELS**

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE Stevie Miller Date 1-15-18

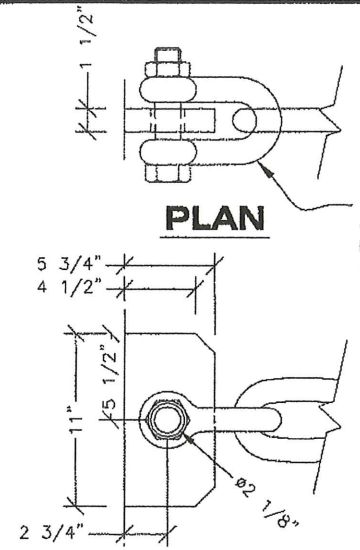


CHAMFER FRONT FACE AND BACK HOLE EDGES AS SHOWN

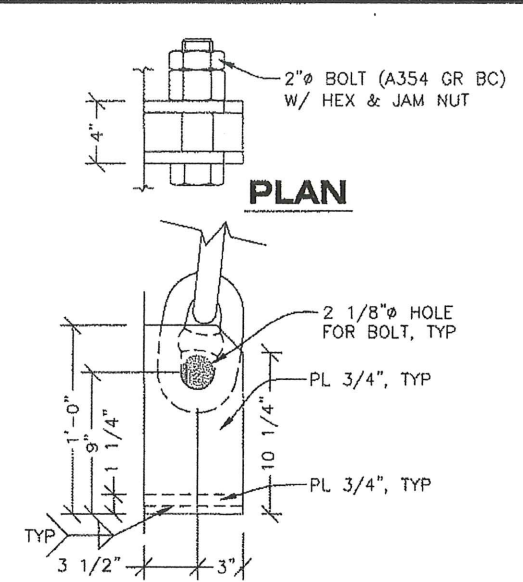
**UHMW FASTENER HOLES & EDGE CHAMFERS**



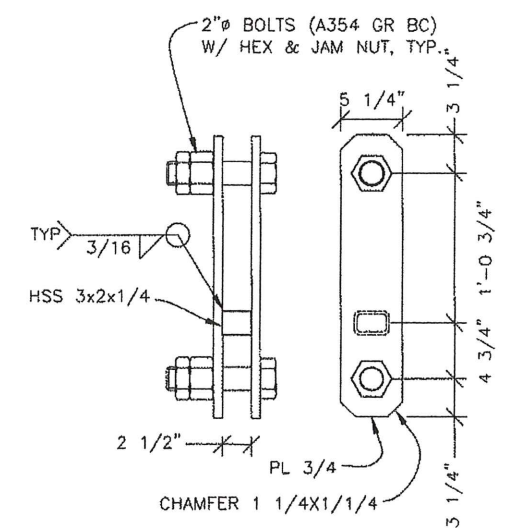
**A SECTION**  
**9 HANDRAIL SOCKET**



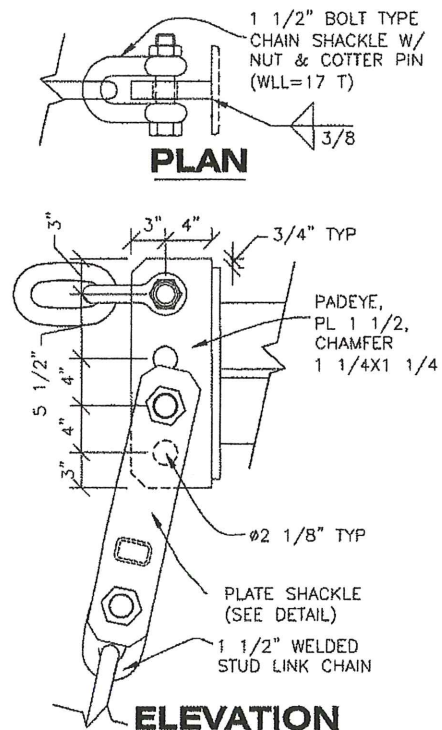
**ELEVATION**  
**PAD EYE TYPE B**



**ELEVATION**  
**PAD EYE TYPE C**

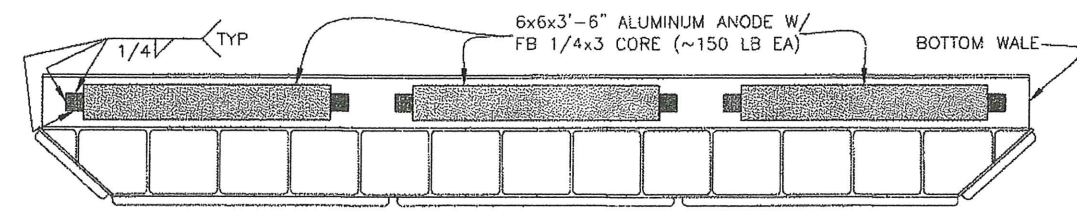


**PLATE SHACKLE DETAIL**



**ELEVATION**  
**PAD EYE TYPE A**

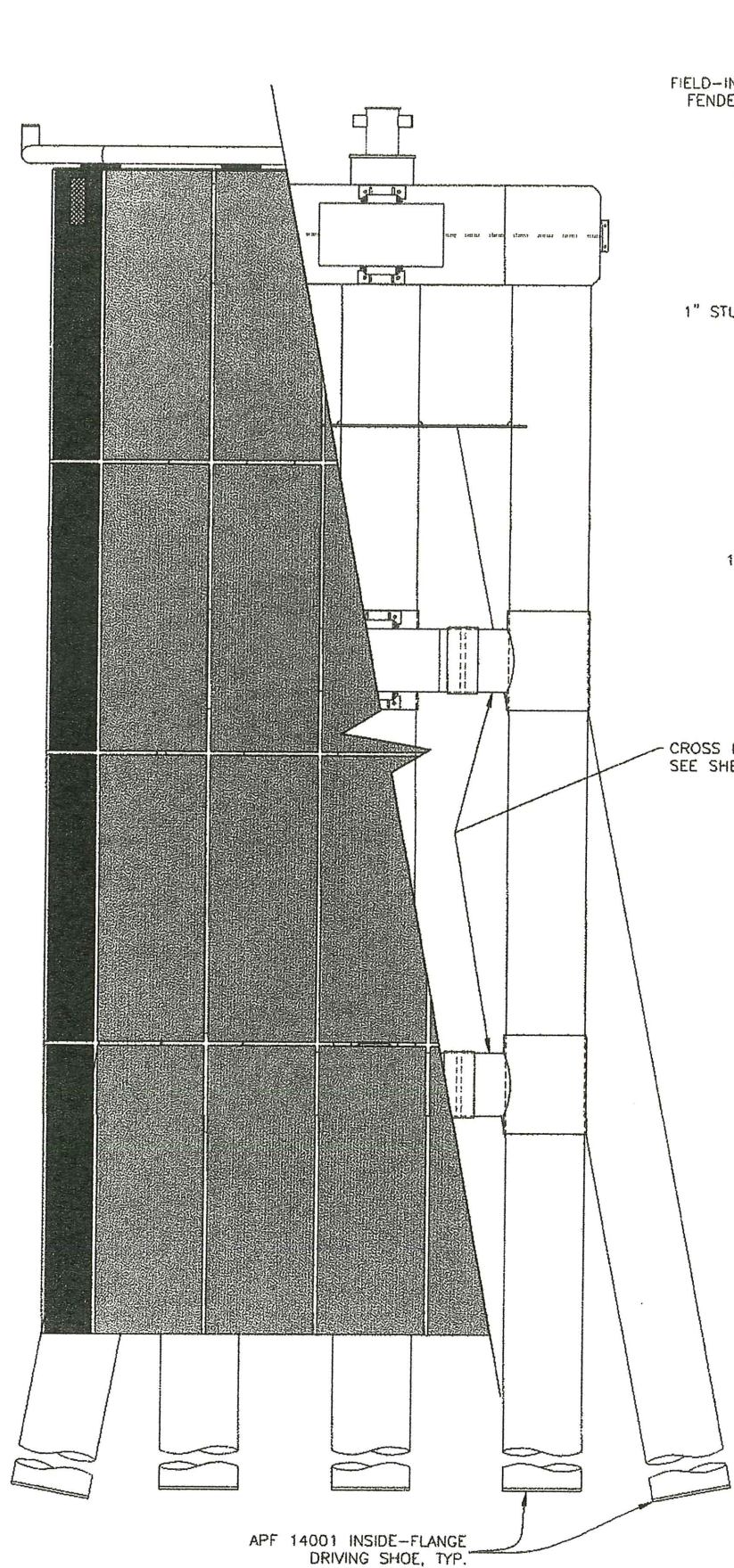
- CHAIN NOTES:**
1. STUD MAY BE REMOVED IN END LINKS OF HORIZONTAL CHAIN TO PASS SHACKLE. DO NOT REMOVE STUDS IN VERTICAL CHAIN.
  2. INSTALL CHAIN FREE OF TWISTS. DO NOT TWIST CHAIN TO ADJUST LENGTH.
  3. FIELD ADJUST  $\phi$  SHACKLE AND CHAIN SO THAT FENDER PANEL IS AT, OR JUST ABOVE, DESIGN ELEVATION.



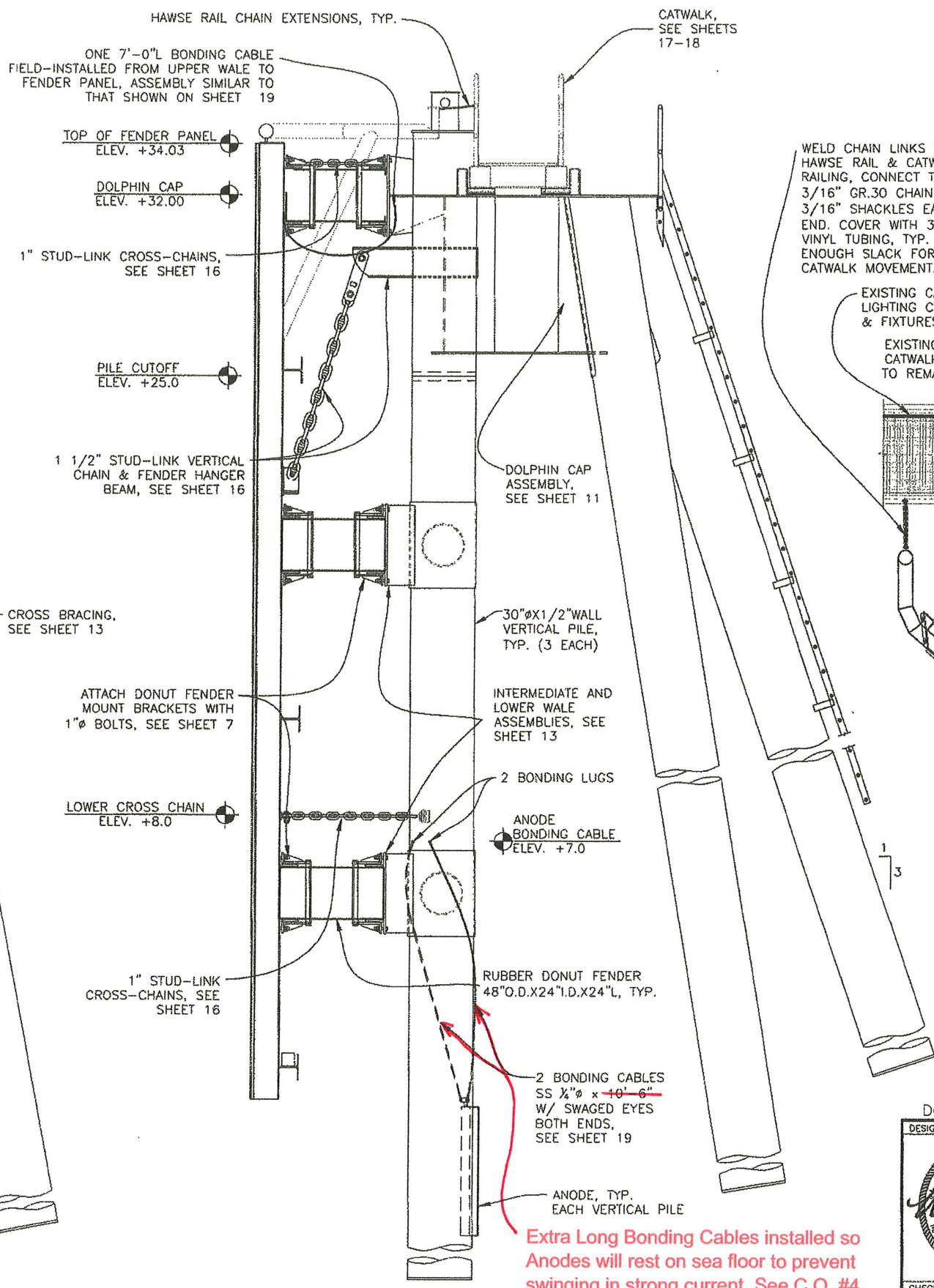
**FENDER PANEL ANODES**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

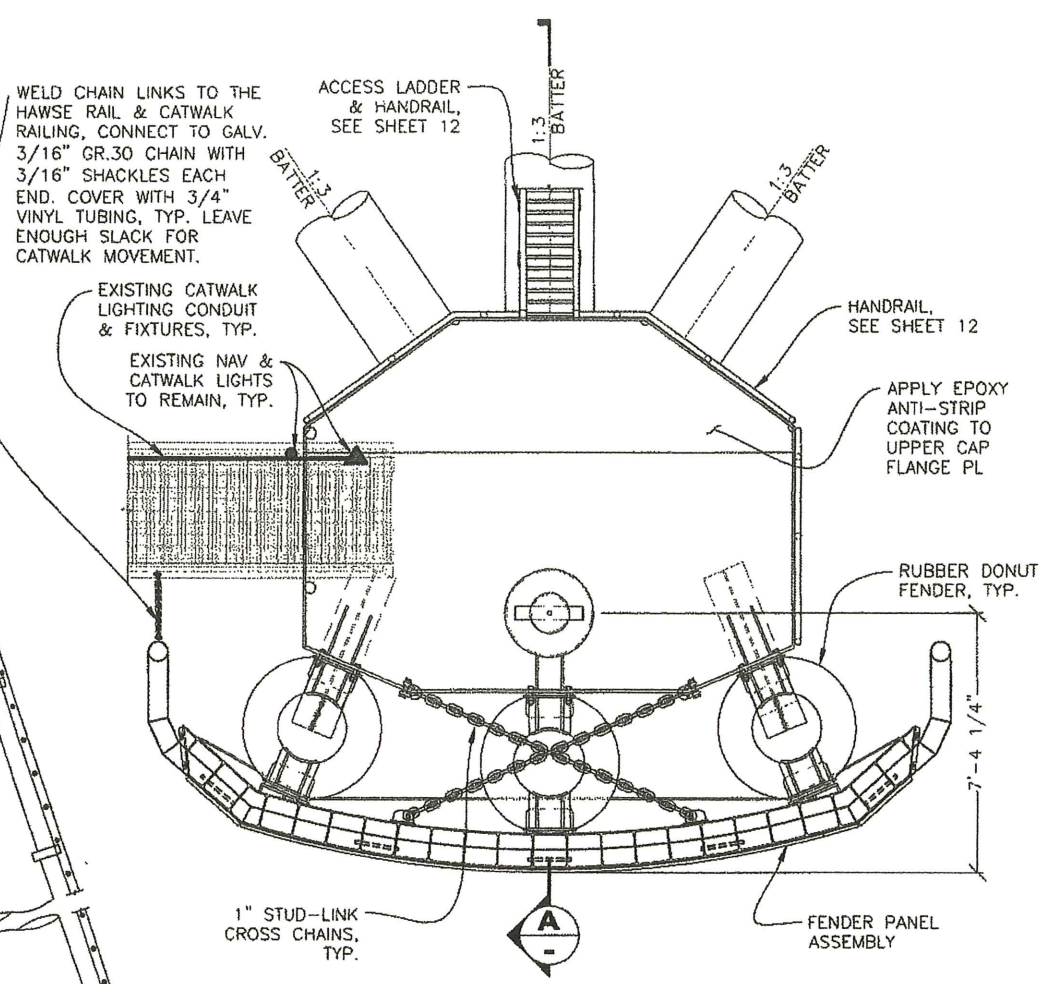
DESIGNED BY: J. OSBURN	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION
CHECKED BY: K. MILLER	<b>PETERSBURG FERRY TERMINAL IMPROVEMENTS</b>
DRAWN BY: STAFF	<b>MISCELLANEOUS DETAILS 4-PILE DOLPHIN</b>
PATH: O:\PSG\69422\PLANSSET\09 - 4-PILE FENDER DETAILS.DWG	6/8/12
TAB: 9 Friday, June 08, 2012 2:10:14 PM	FUMAN, CAROL M (DOT)
REVISIONS	PROJECT DESIGNATION
NO. DATE DESCRIPTION	<b>69422</b>
	YEAR
	<b>2012</b>
	SHEET NO.
	<b>9</b>
	TOTAL SHEETS
	<b>20</b>



**FRONT ELEVATION  
6-PILE DOLPHIN**



**A SIDE ELEVATION  
6-PILE DOLPHIN**



**TOP PLAN VIEW  
6-PILE DOLPHIN**

(DOLPHIN W4 SHOWN; MIRROR STRUCTURE ABOUT DOLPHIN CAP CENTER FOR DOLPHIN E4)

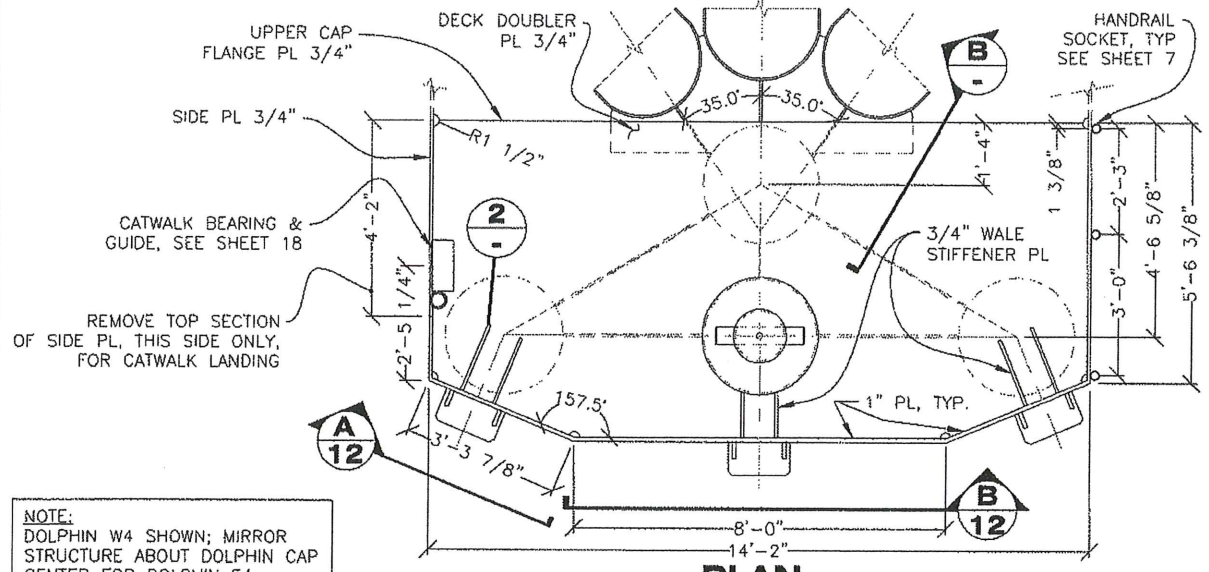
NOTE: SEE SHEET 20 FOR ELECTRICAL PLAN

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE *Sten Mielke* Date *1-15-18*

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

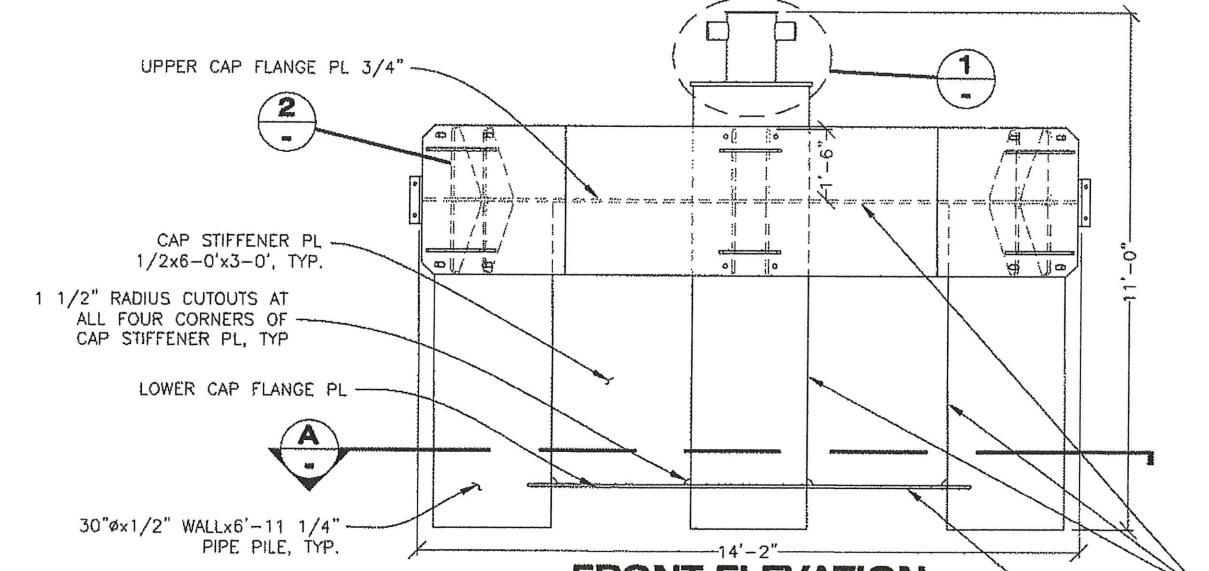
DESIGNED BY: J. OSBURN		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
CHECKED BY: K. MILLER		<b>PETERSBURG FERRY TERMINAL IMPROVEMENTS</b>	
DRAWN BY: STAFF		<b>PLAN &amp; ELEVATION 6-PILE DOLPHIN</b>	
PATH: G:\PSG\69422\PLANSET\10_6--PILE STRUCTURES E4, W4.DWG		PROJECT DESIGNATION <b>69422</b>	YEAR <b>2012</b>
TAB: 10 Wednesday, June 06, 2012 4:37:06 PM		SHEET NO. <b>10</b>	TOTAL SHEETS <b>20</b>
FUMAN, CAROL M (DOT)		AC-FBD-0937(34)	
REVISIONS			
NO.	DATE	DESCRIPTION	

Extra Long Bonding Cables installed so Anodes will rest on sea floor to prevent swinging in strong current. See C.O. #4.

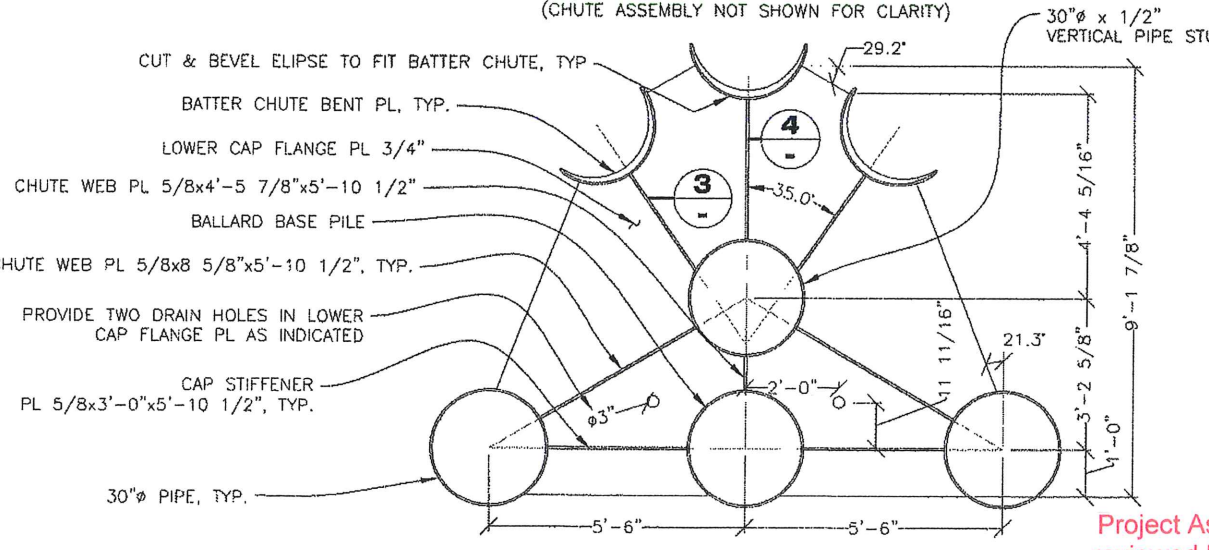


NOTE:  
DOLPHIN W4 SHOWN; MIRROR  
STRUCTURE ABOUT DOLPHIN CAP  
CENTER FOR DOLPHIN E4

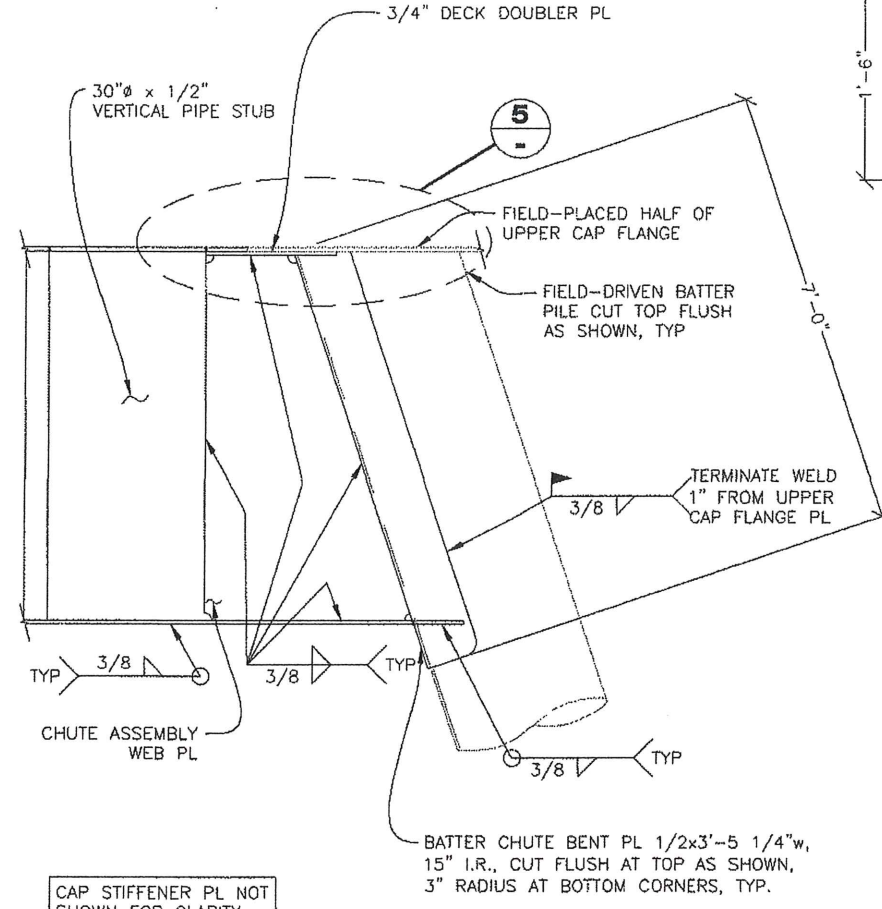
**PLAN  
UPPER CAP**



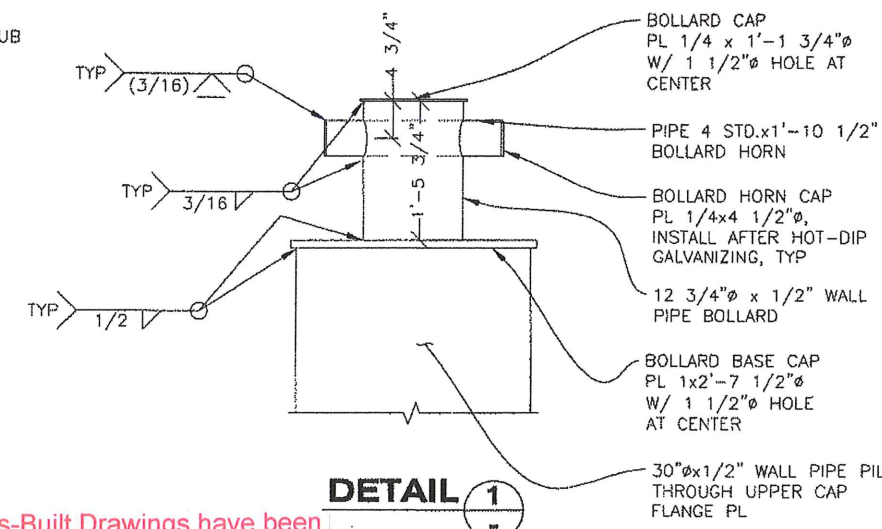
**FRONT ELEVATION  
DOLPHIN CAP**  
(CHUTE ASSEMBLY NOT SHOWN FOR CLARITY)



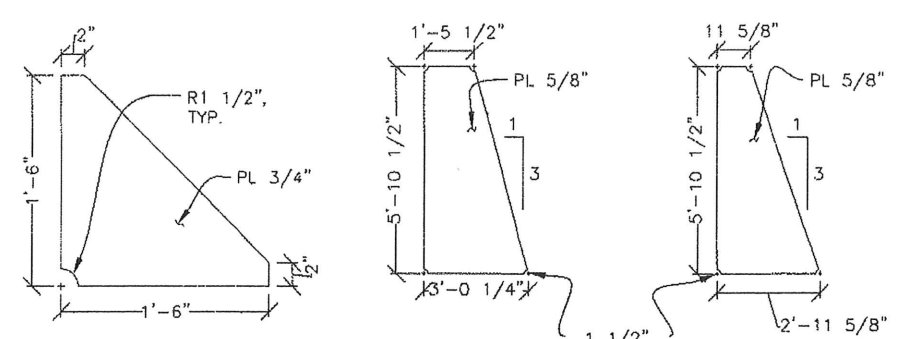
**SECTION A  
LOWER CAP**



**SECTION B  
BATTER CHUTE**



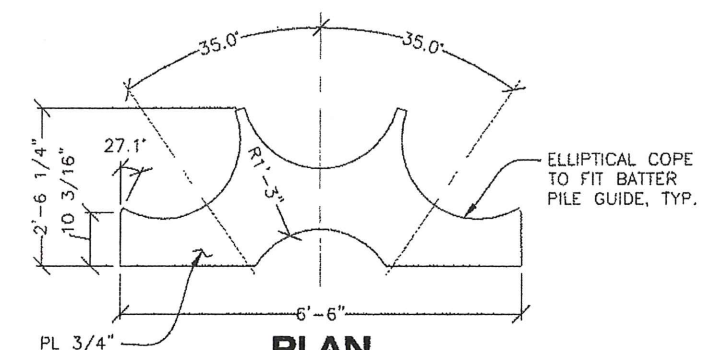
**DETAIL 1**



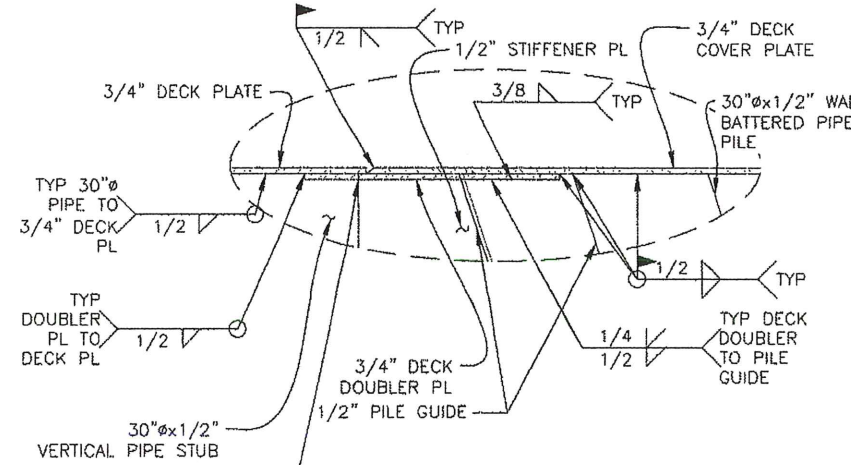
**DETAIL 2**

**3**

**4**



**PLAN  
DOUBLER PLATE**

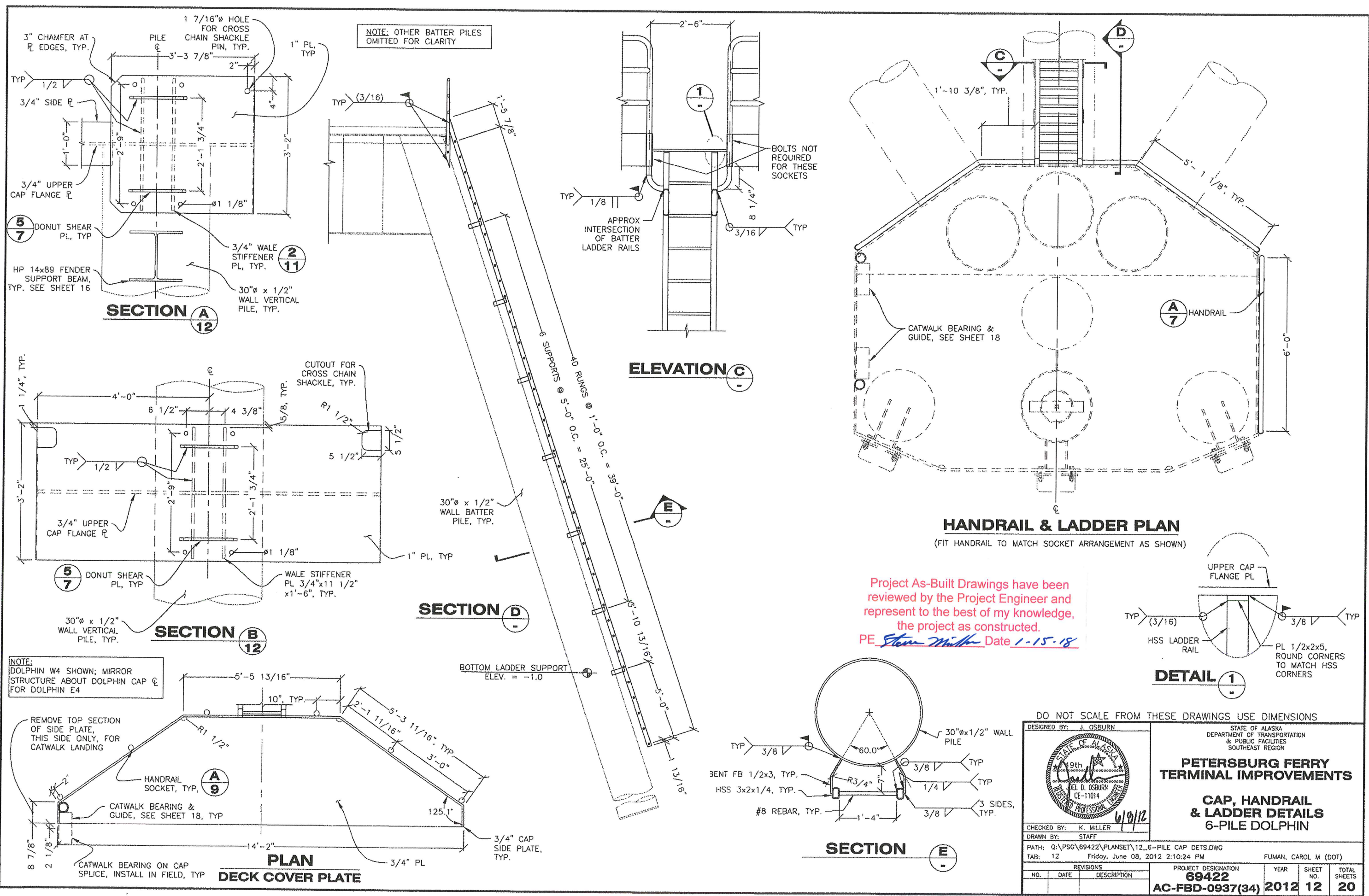


**DETAIL 5  
3/4" DOUBLER & CAP PL**

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE *Sten Miller* Date 1-15-18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
CHECKED BY: K. MILLER		<b>PETERSBURG FERRY TERMINAL IMPROVEMENTS</b>	
DRAWN BY: STAFF		<b>CAP DETAILS 6-PILE DOLPHIN</b>	
PATH: Q:\PSG\69422\PLANSET\11_6-PILE CAP DETS.DWG		FUMAN, CAROL M (DOT)	
TAB: 11 Friday, June 08, 2012 2:10:19 PM		REVISIONS	
PROJECT DESIGNATION <b>69422</b>		YEAR <b>2012</b>	
NO. DATE DESCRIPTION		SHEET NO. <b>11</b>	
AC-FBD-0937(34)		TOTAL SHEETS <b>20</b>	

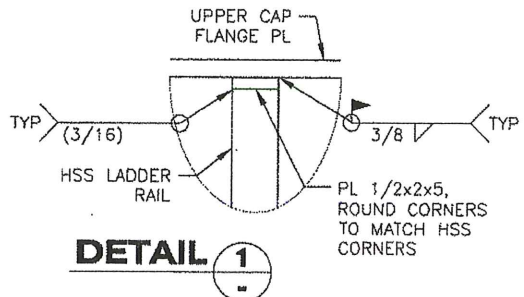


NOTE: OTHER BATTER PILES OMITTED FOR CLARITY

BOLTS NOT REQUIRED FOR THESE SOCKETS

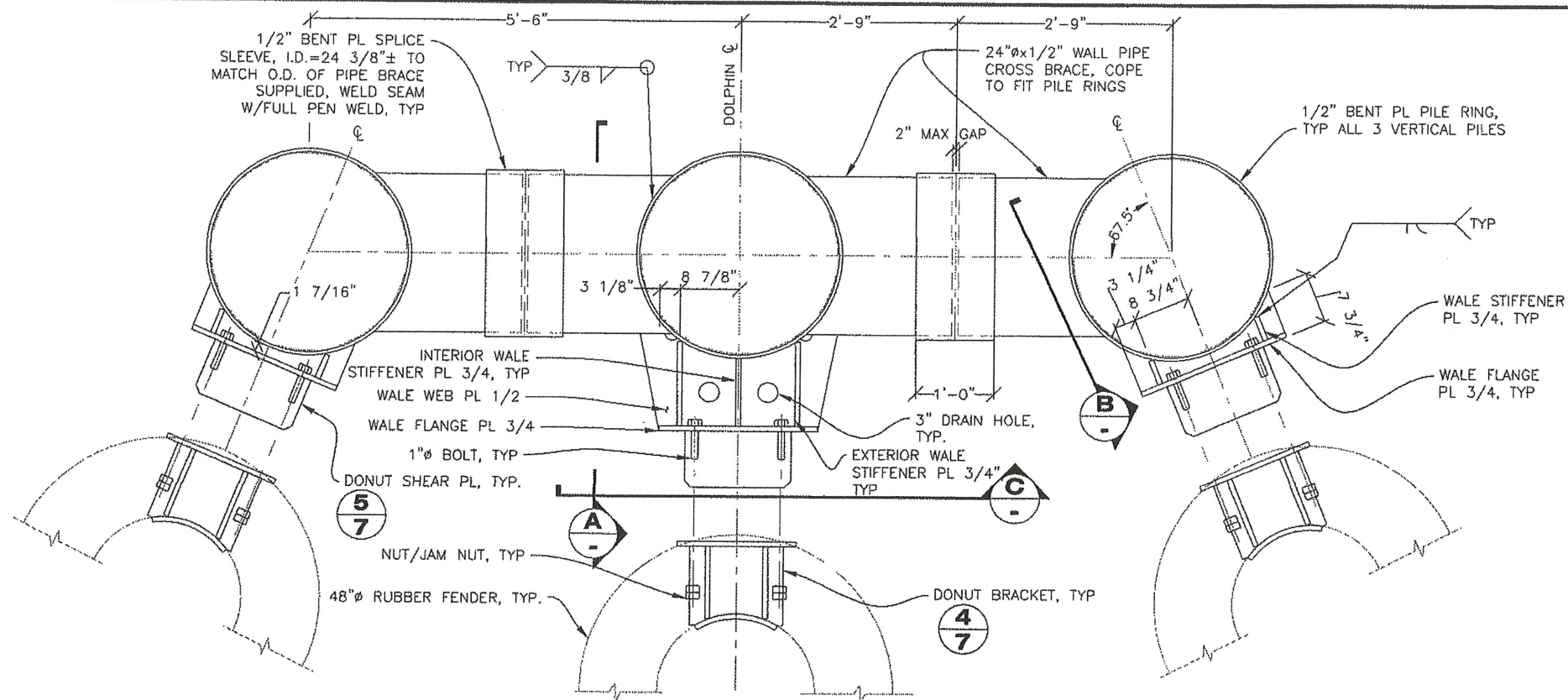
CATWALK BEARING & GUIDE, SEE SHEET 18

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE Steve Miller Date 1-15-18



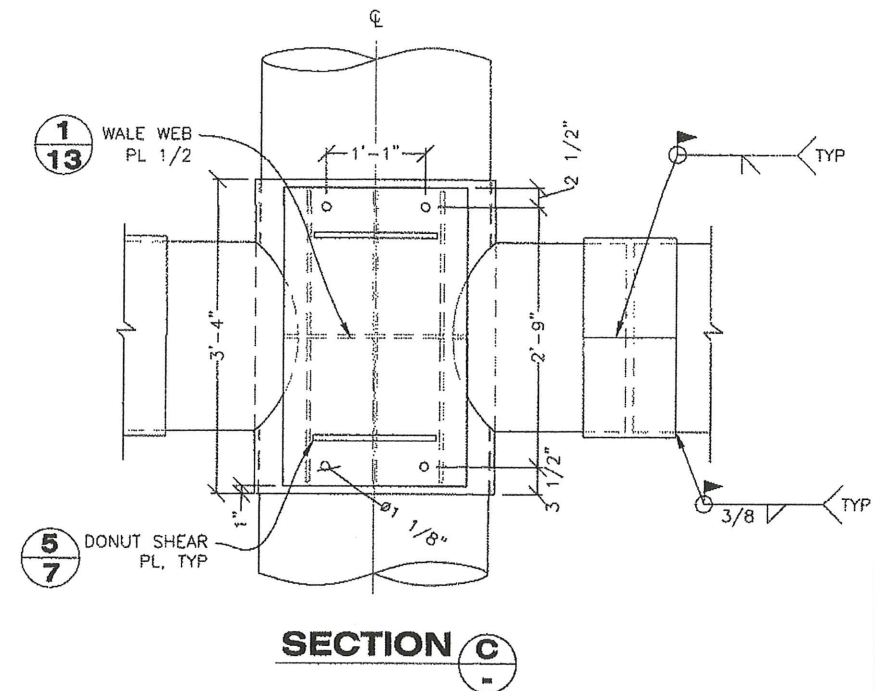
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
CHECKED BY: K. MILLER		<b>PETERSBURG FERRY TERMINAL IMPROVEMENTS</b>  <b>CAP, HANDRAIL &amp; LADDER DETAILS</b> <b>6-PILE DOLPHIN</b>	
DRAWN BY: STAFF			
PATH: Q:\PSG\69422\PLANS\12_6-PILE CAP DETS.DWG		PROJECT DESIGNATION	YEAR
TAB: 12 Friday, June 08, 2012 2:10:24 PM		<b>69422</b>	2012
REVISIONS		NO.	SHEET
		NO.	TOTAL
		DATE	SHEETS
		DESCRIPTION	20
			20

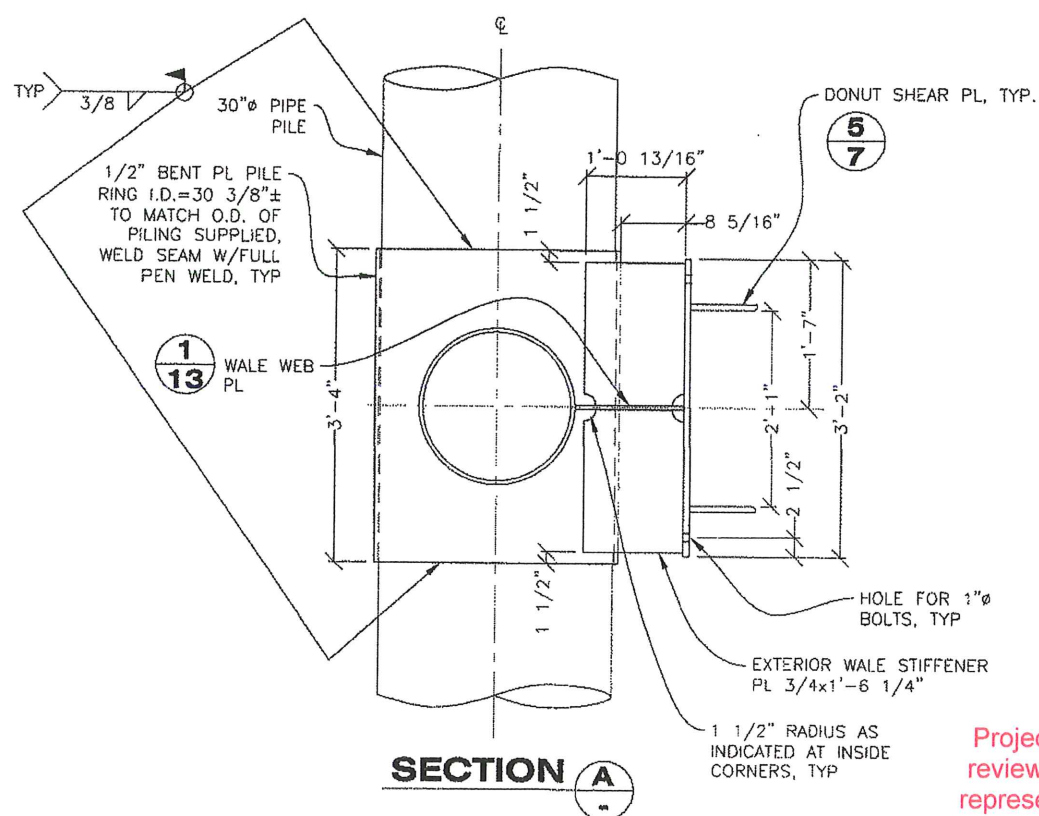


**SECTION TYP LOWER/INTERMEDIATE WALE & CROSS-BRACE ASSEMBLY**  
 SYMMETRICAL ABOUT  $\phi$

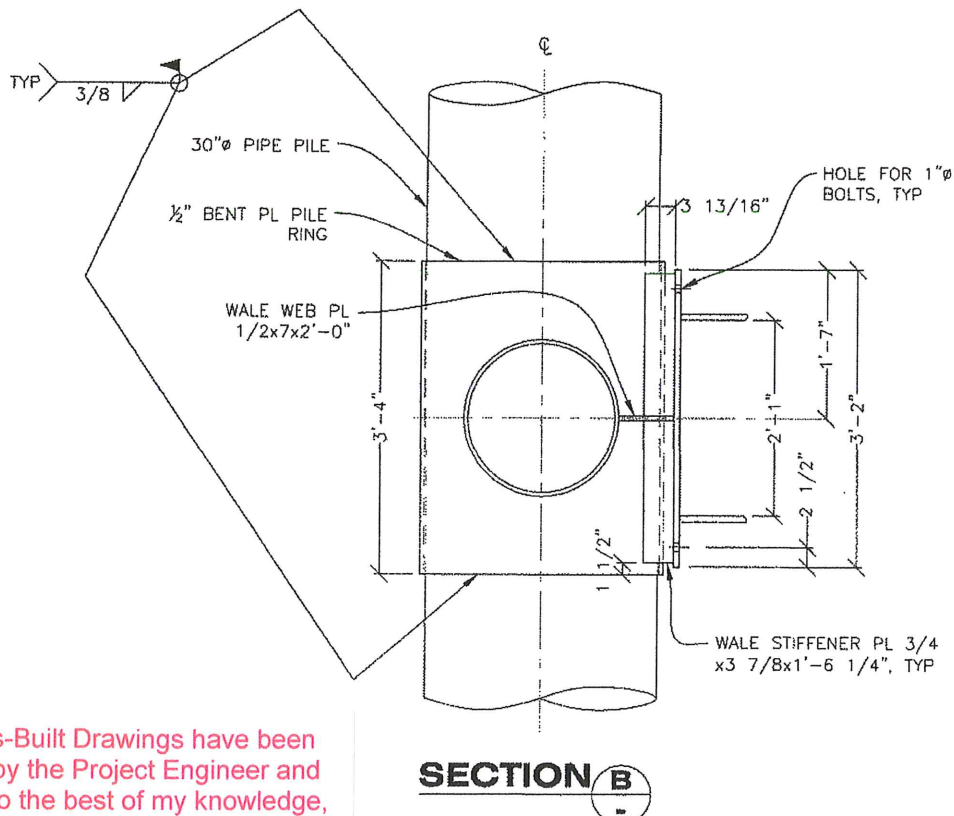
ALL WELDS UNLESS INDICATED OTHERWISE  $\frac{3}{8}$



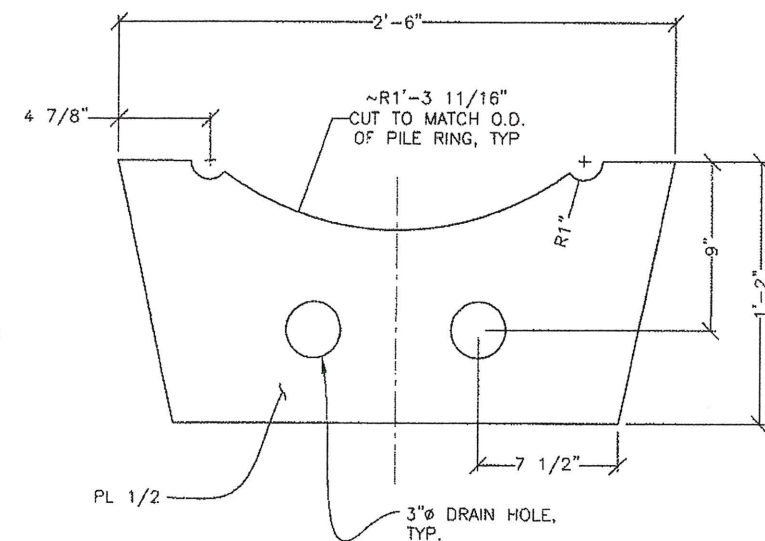
**SECTION C**



**SECTION A**



**SECTION B**



**1 13 DETAIL WALE WEB PL**

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE Steve Miller Date 1-15-18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN

CHECKED BY: K. MILLER  
 DRAWN BY: STAFF

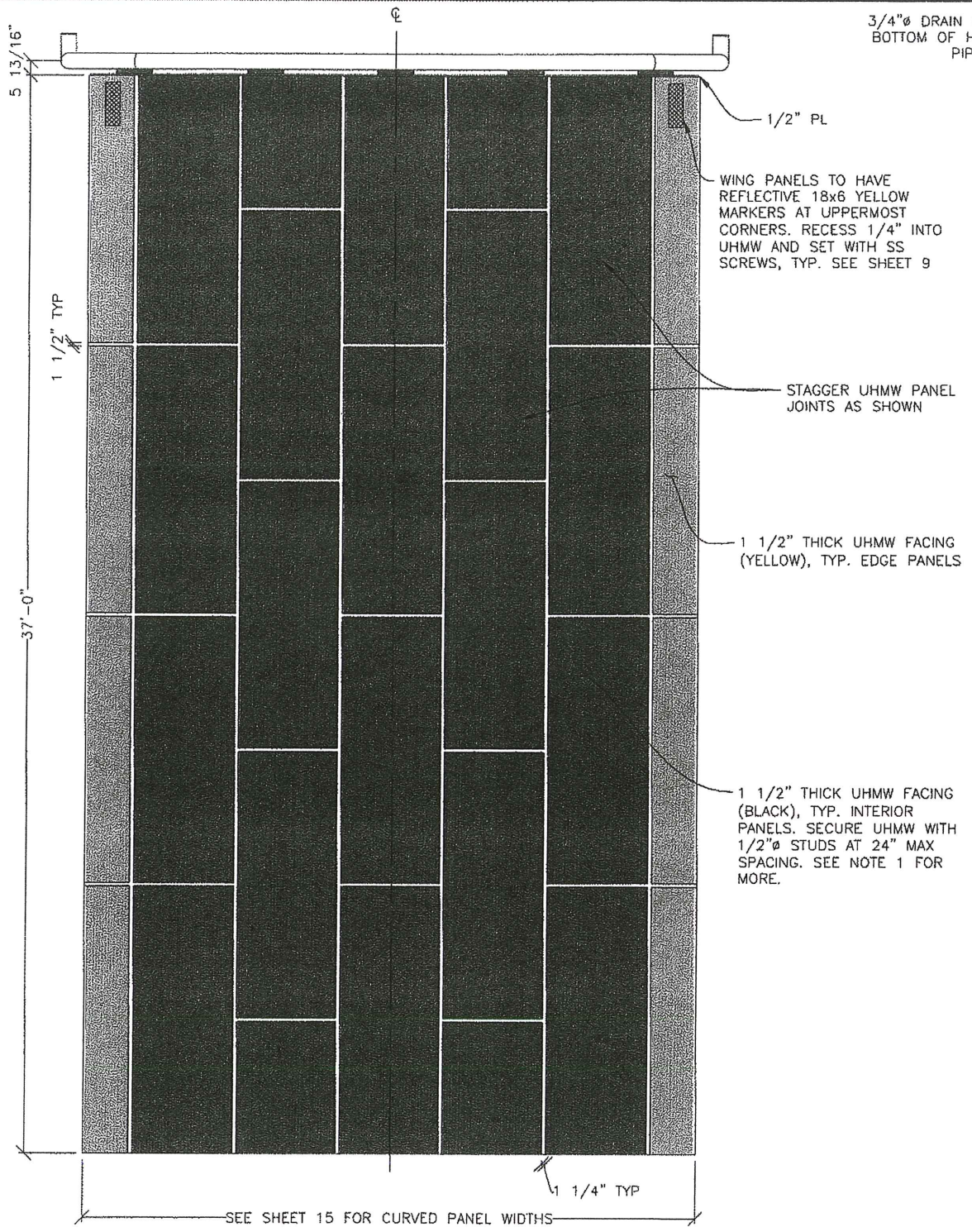
PATH: Q:\PSG\69422\PLANSET\13\_6-PILE WALE DETS.DWG  
 TAB: 13 Friday, June 08, 2012 2:10:28 PM FUMAN, CAROL M (DOT)

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

**PETERSBURG FERRY TERMINAL IMPROVEMENTS**

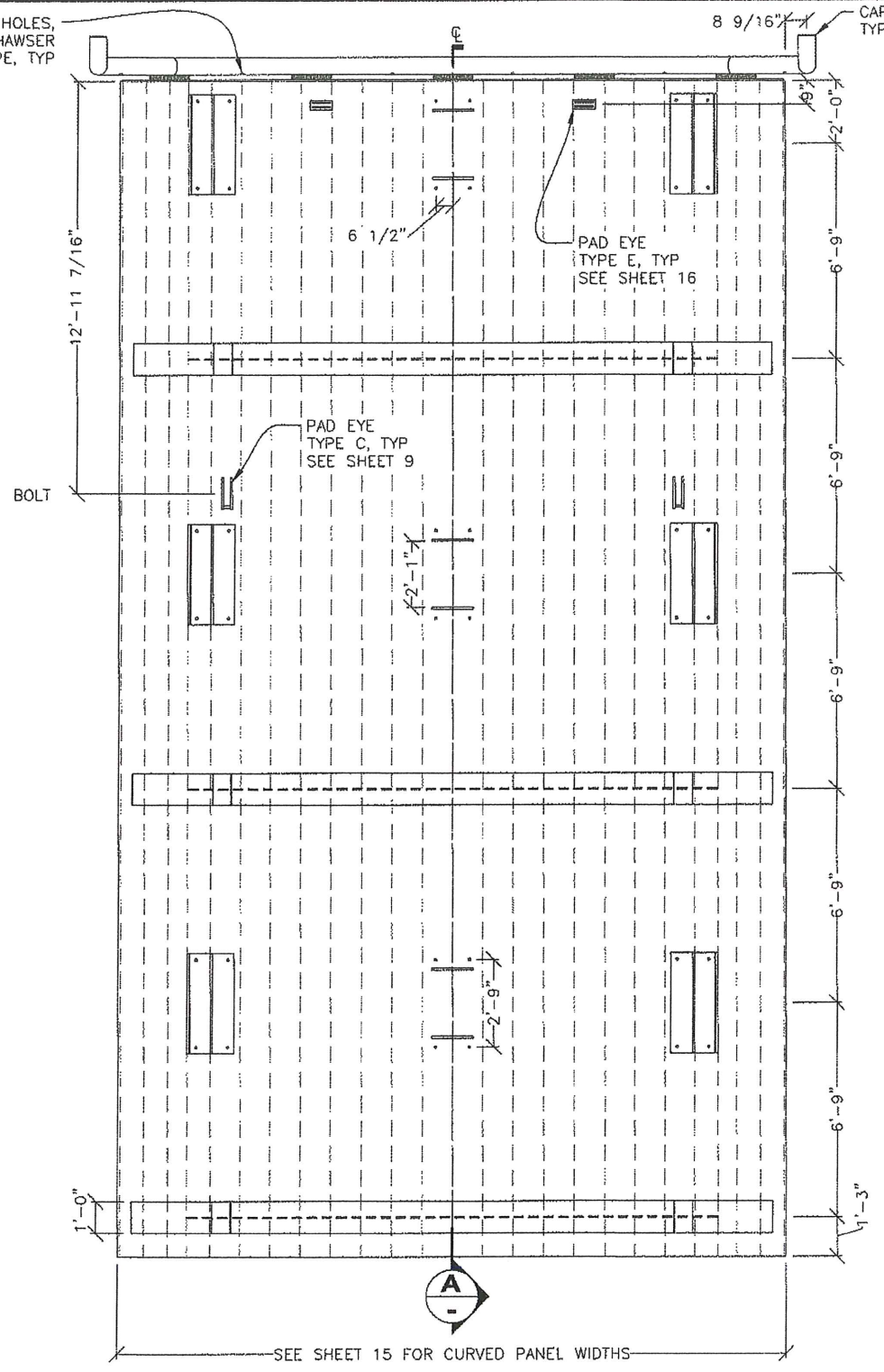
**INTERMEDIATE & LOWER WALE DETAILS**  
**6-PILE DOLPHIN**

NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			<b>69422</b>		<b>13</b>	<b>20</b>
			<b>AC-FBD-0937(34)</b>	<b>2012</b>		

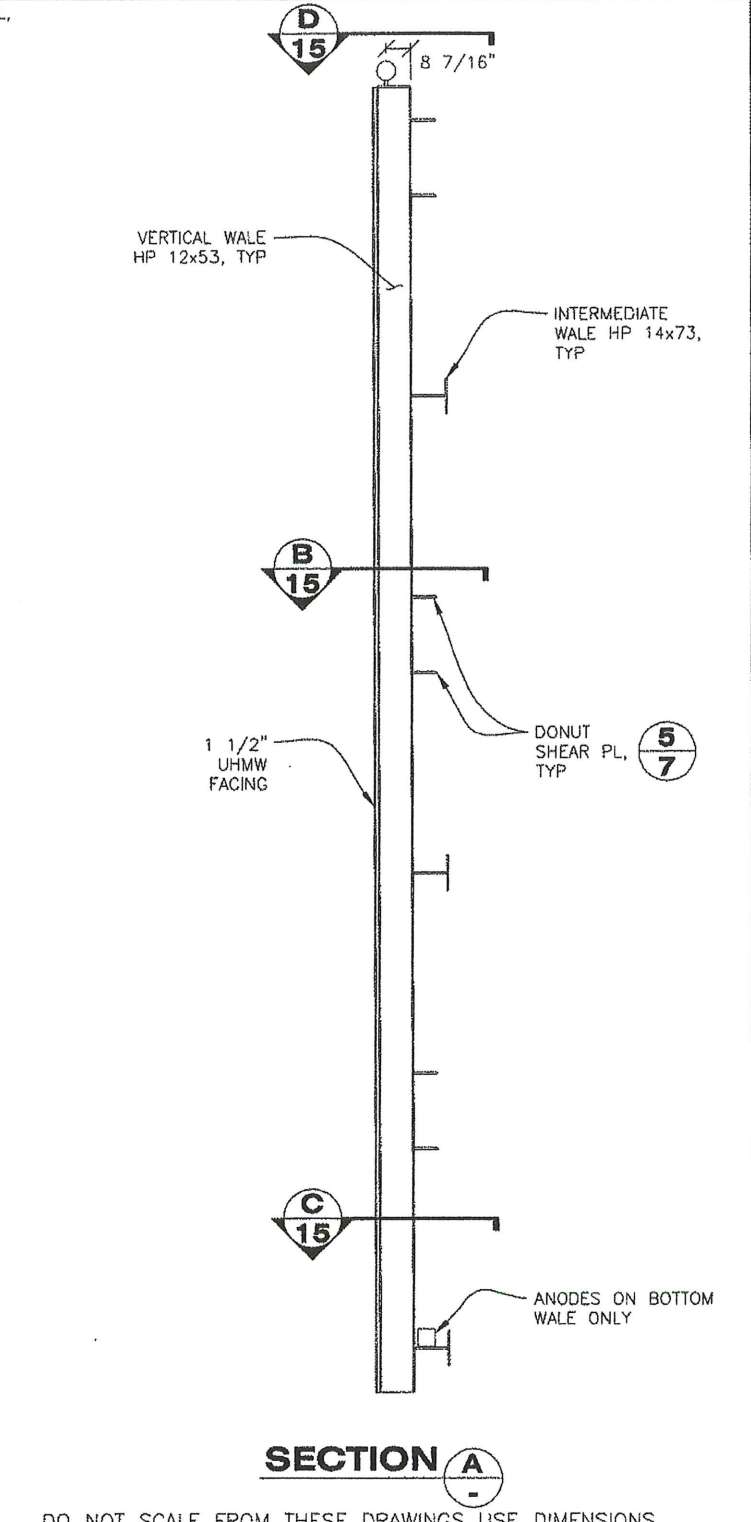


**ELEVATION  
FRONT OF PANEL**  
SYMMETRIC ABOUT  $\phi$

**NOTE:**  
TYPICAL UHMW FACING LENGTH AND WIDTH TO BE THE LONGEST PRACTICAL DIMENSION FOR THE AREA BEING COVERED. SUBMIT FACING AND STUD LAYOUTS FOR APPROVAL. COORDINATE FACING INSTALLATION WITH UHMW PANEL SUPPLIER. PANEL SIZE, SPACE BETWEEN PANELS AND HOLE LOCATION PER MANUFACTURER'S RECOMMENDATION. SEE HOLE AND EDGE CHAMFER DETAIL ON SHEET 9 & KERF CUT DETAIL ON SHEET 15.



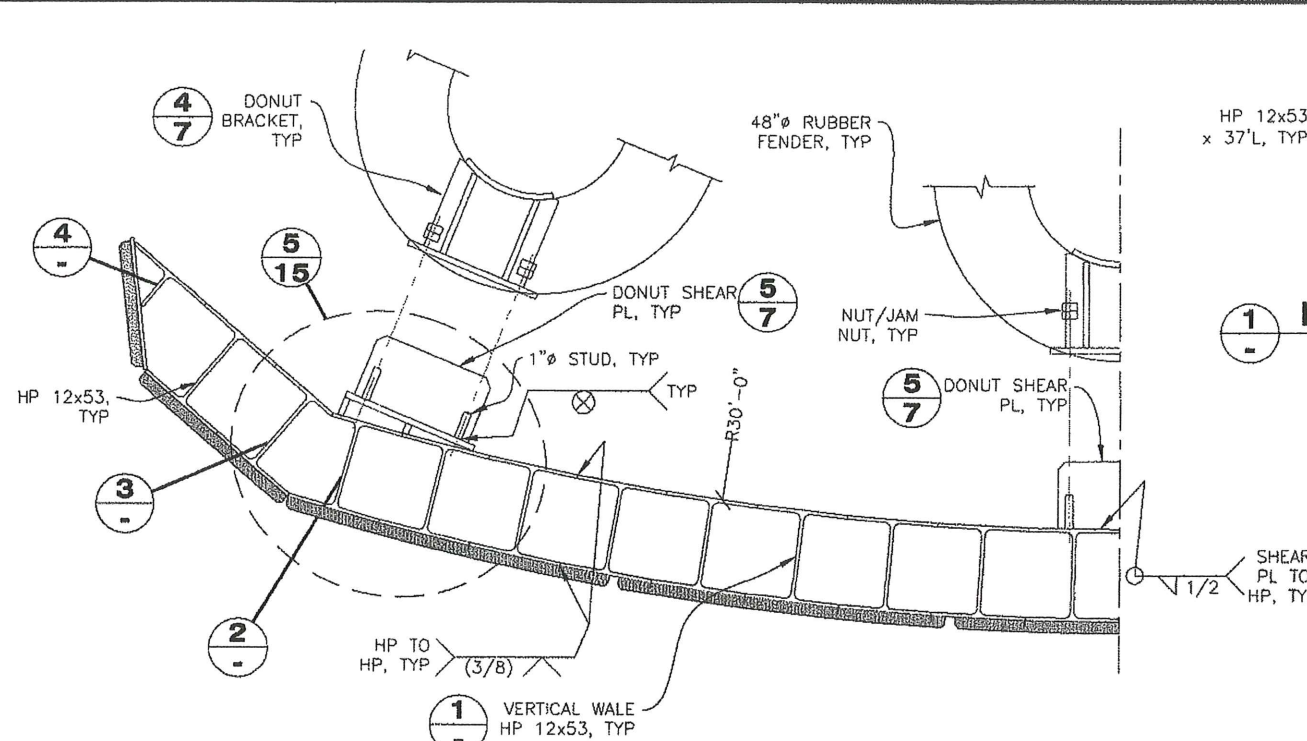
**ELEVATION  
BACK OF PANEL**  
SYMMETRIC ABOUT  $\phi$



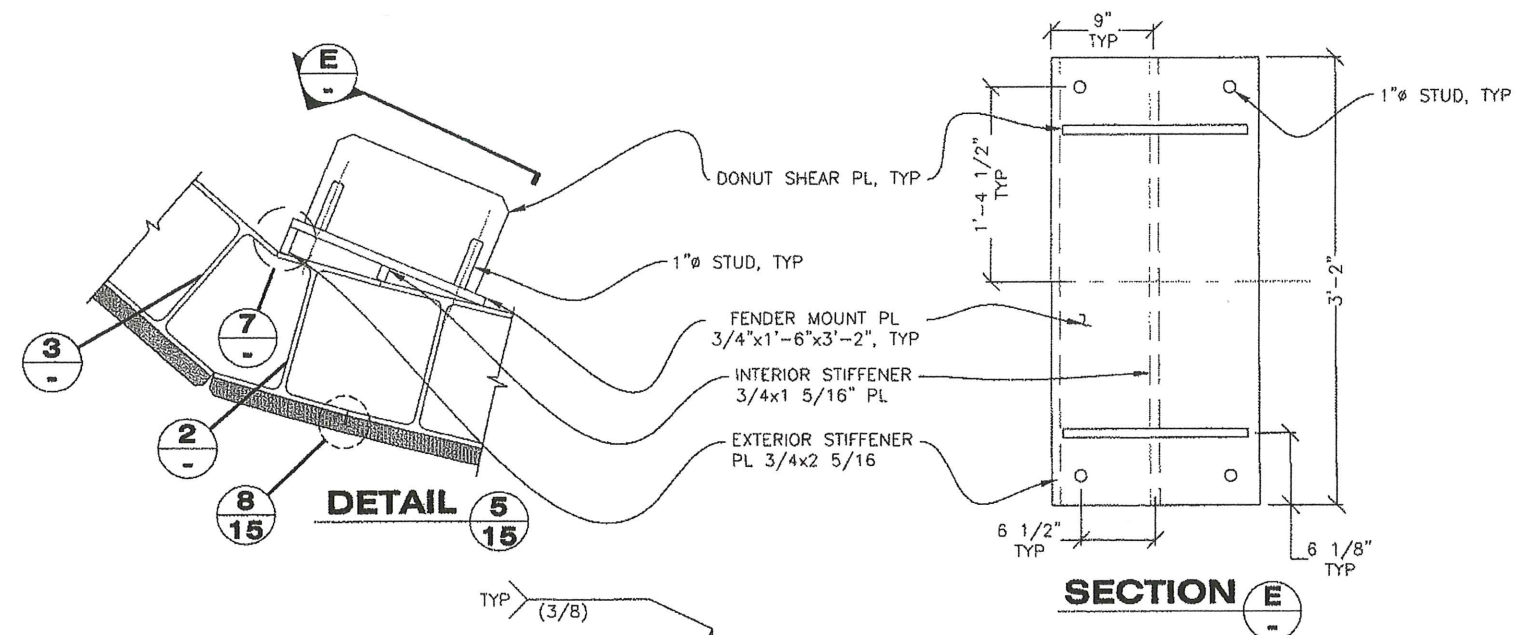
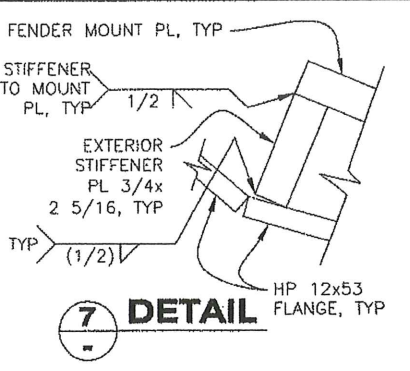
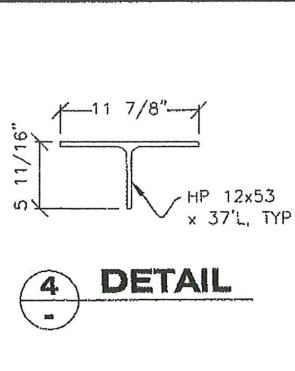
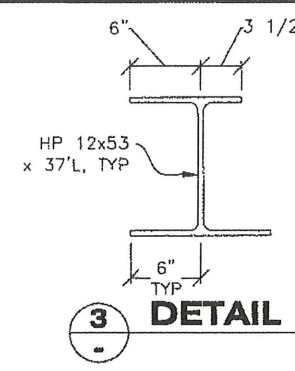
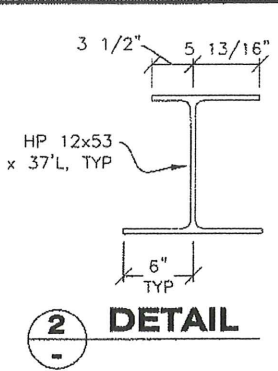
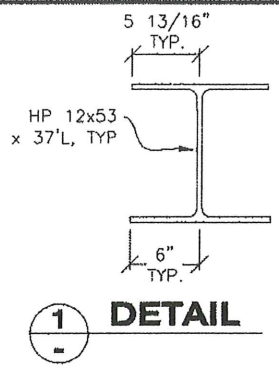
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
		<b>PETERSBURG FERRY TERMINAL IMPROVEMENTS</b>	
CHECKED BY: K. MILLER		<b>FENDER PANEL FRAME 6-PILE DOLPHIN</b>	
DRAWN BY: STAFF		PROJECT DESIGNATION <b>69422</b>	
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FUMAN, CAROL M (DOT)		TOTAL SHEETS	20
AC-FBD-0937(34)			

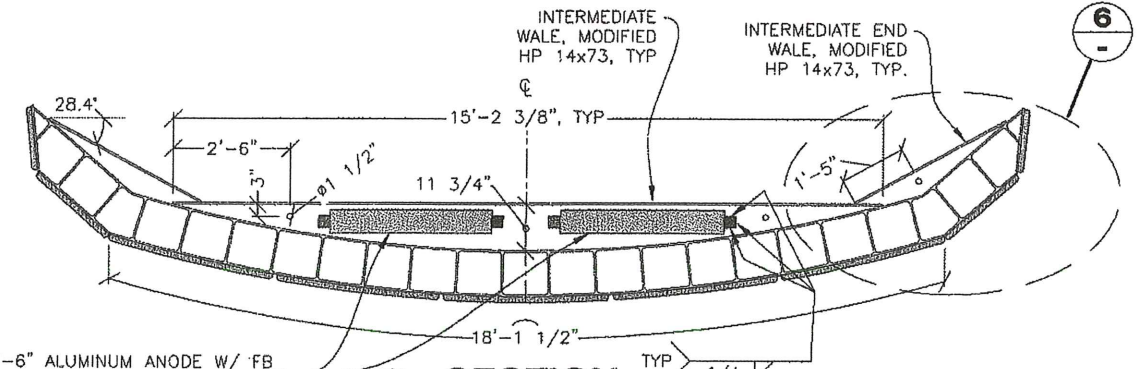
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE *Steve Miller* Date 1-15-18



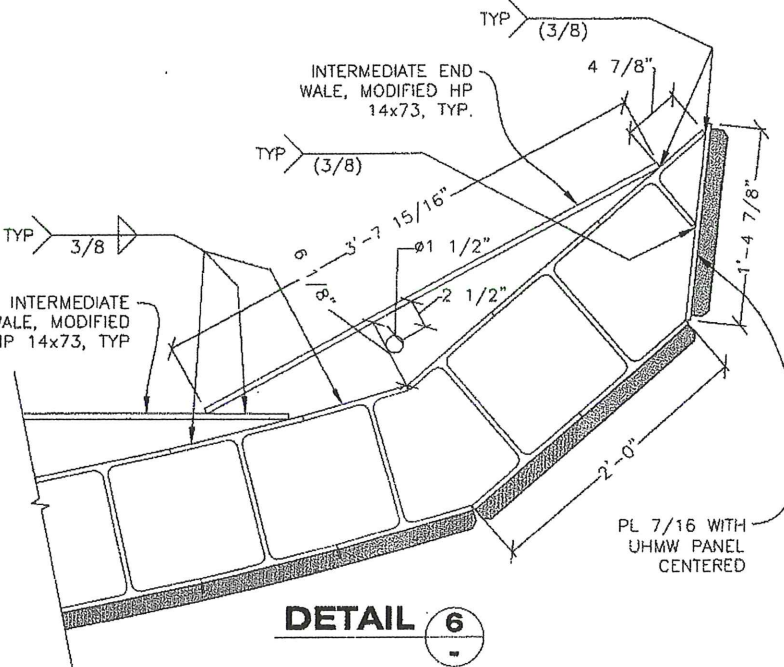
**B TYPICAL SECTION**  
**15 FENDER PANEL**  
 HALF PANEL SHOWN FOR DISPLAY PURPOSES.  
 SYMMETRIC ABOUT  $\phi$



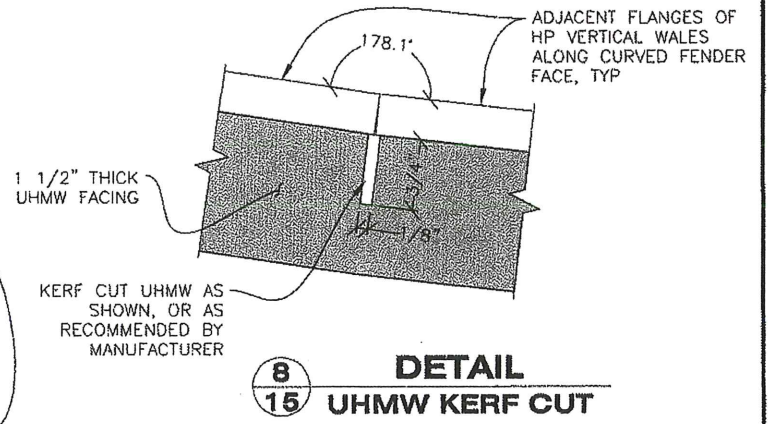
**SECTION E**



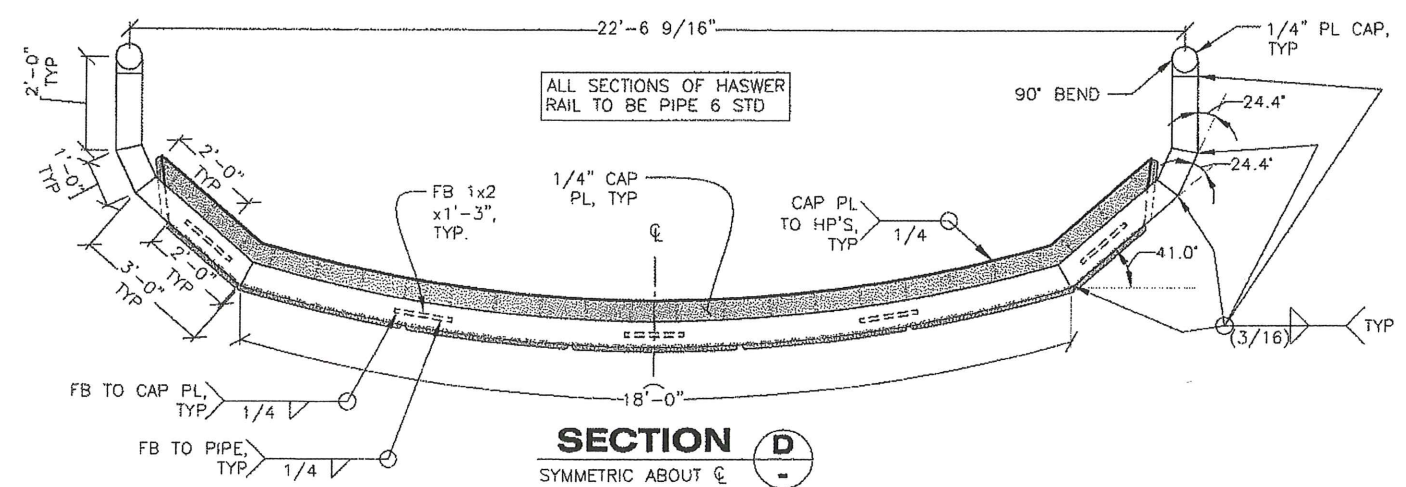
**C SECTION**  
**15** SYMMETRIC ABOUT  $\phi$



**DETAIL 6**



**8 15 UHMW KERF CUT**



**SECTION D**  
**15** SYMMETRIC ABOUT  $\phi$

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *Stev Milk* Date *1-15-18*

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN

CHECKED BY: K. MILLER  
 DRAWN BY: STAFF

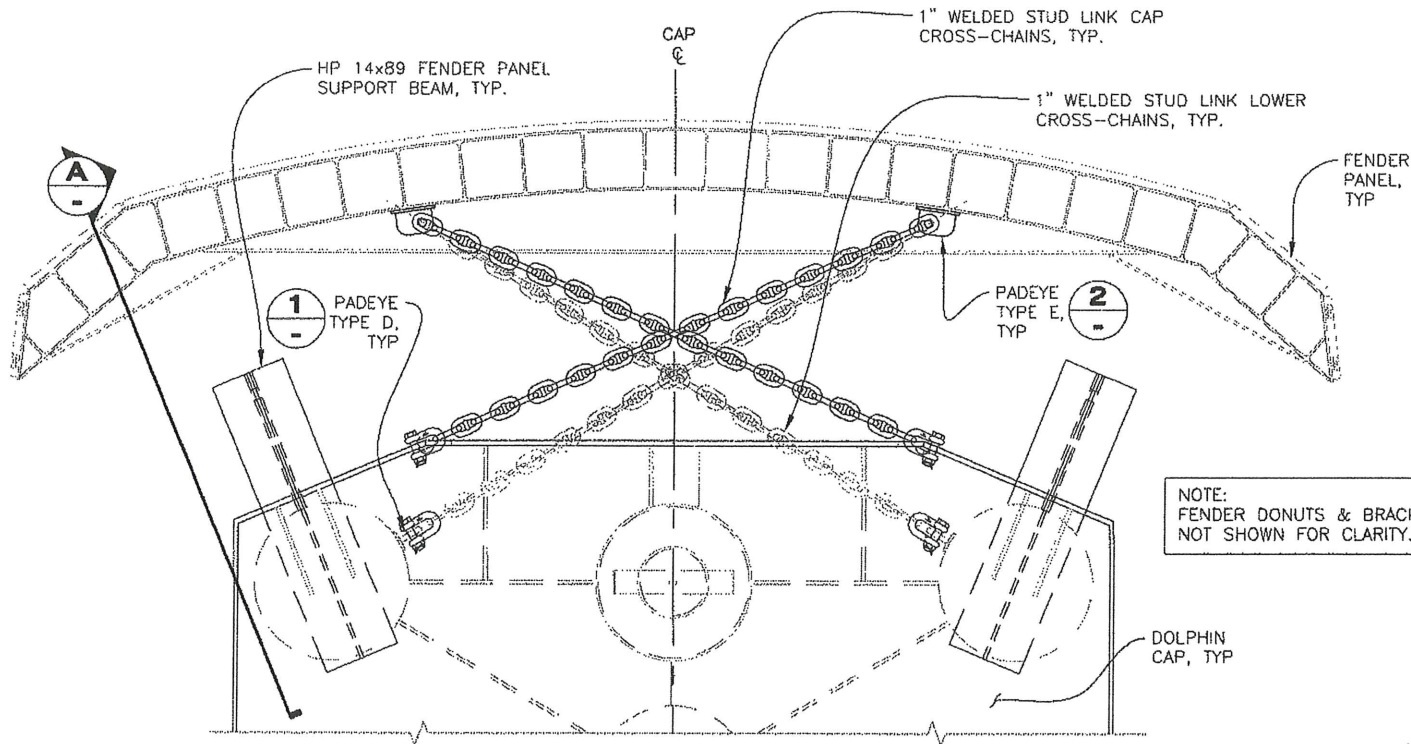
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STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

**PETERSBURG FERRY  
 TERMINAL IMPROVEMENTS**

**FENDER PANEL DETAILS  
 6-PILE DOLPHIN**

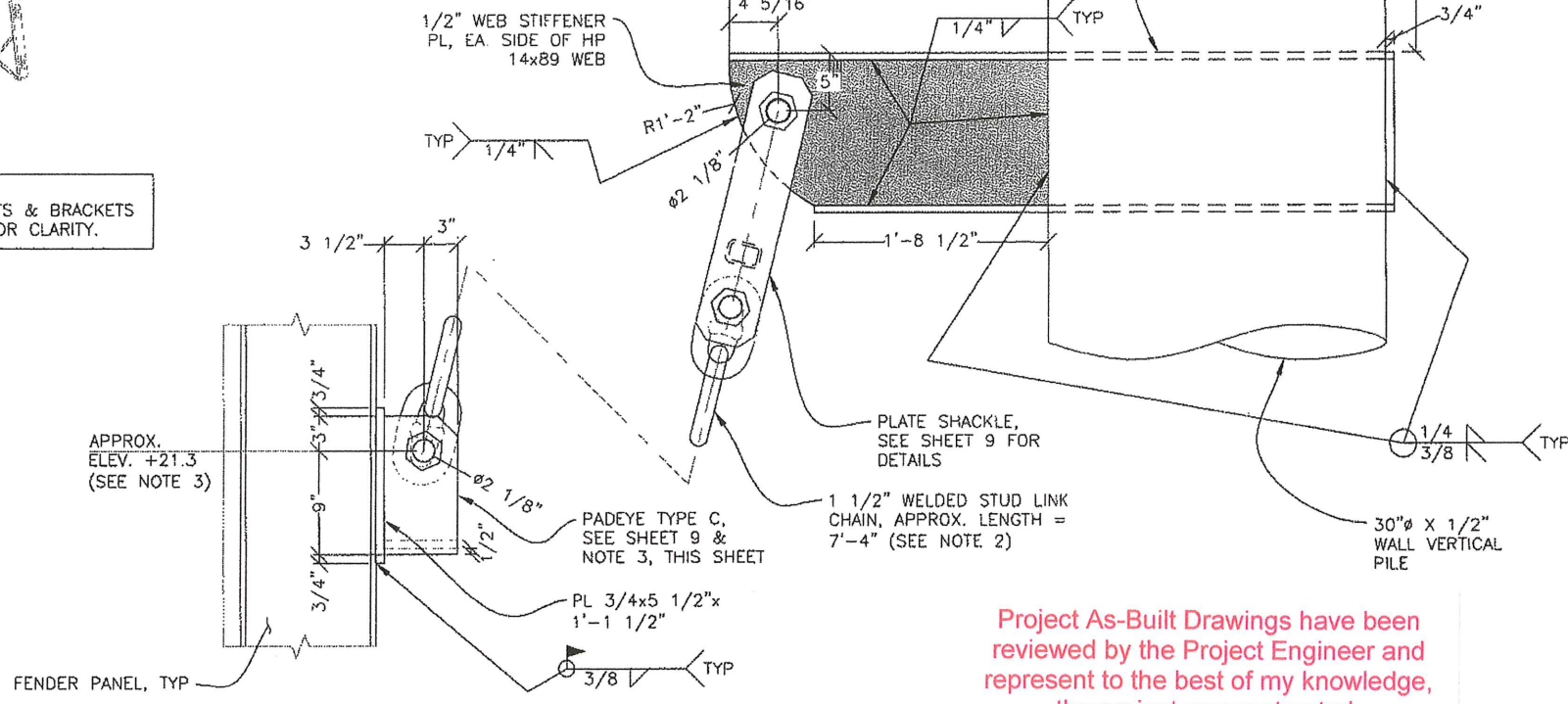
NO.	DATE	REVISIONS DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			<b>69422</b>			
			<b>AC-FBD-0937(34)</b>	<b>2012</b>	<b>15</b>	<b>20</b>



**CROSS-CHAIN & FENDER SUPPORT BEAM PLAN**

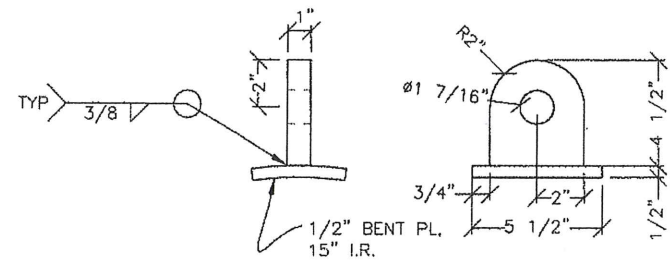
- NOTES:**
- 1) STUD MAY BE REMOVED IN END LINKS OF CROSS CHAINS TO PASS SHACKLE. DO NOT REMOVE STUDS IN VERTICAL CHAIN.
  - 2) INSTALL CHAIN FREE OF TWISTS. DO NOT TWIST CHAIN TO ADJUST LENGTH.
  - 3) FIELD LOCATE PADEYE TYPE 'C' SO THAT FENDER PANEL IS AT, OR JUST ABOVE, DESIGN ELEVATION.
  - 4) FIELD LOCATE PADEYE TYPES 'D' AND 'E' SO CROSS CHAINS ARE LESS THAN TAUT, SLIGHTLY SLACK.

NOTE: FENDER DONUTS & BRACKETS NOT SHOWN FOR CLARITY.

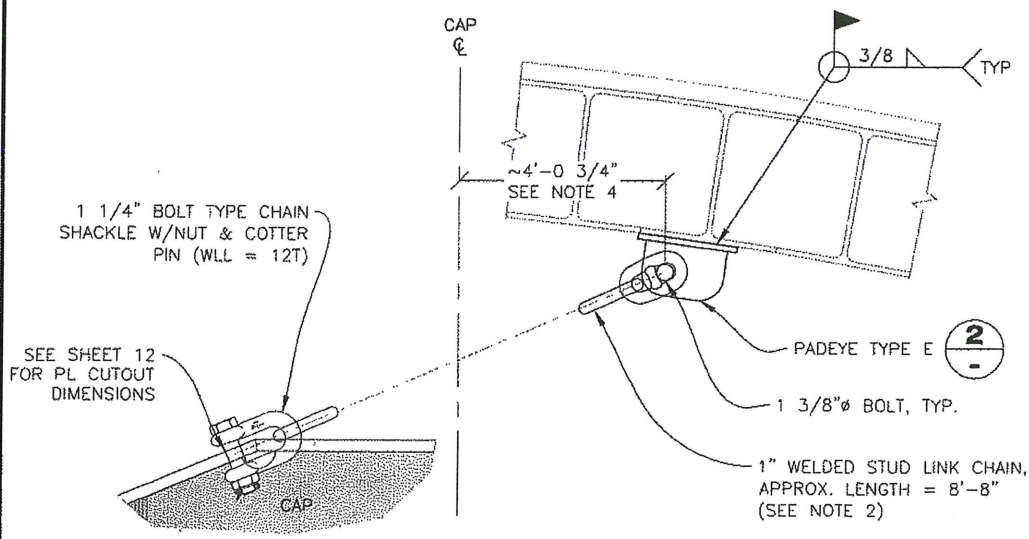


**SECTION A**

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *Steve Miller* Date *1-15-18*

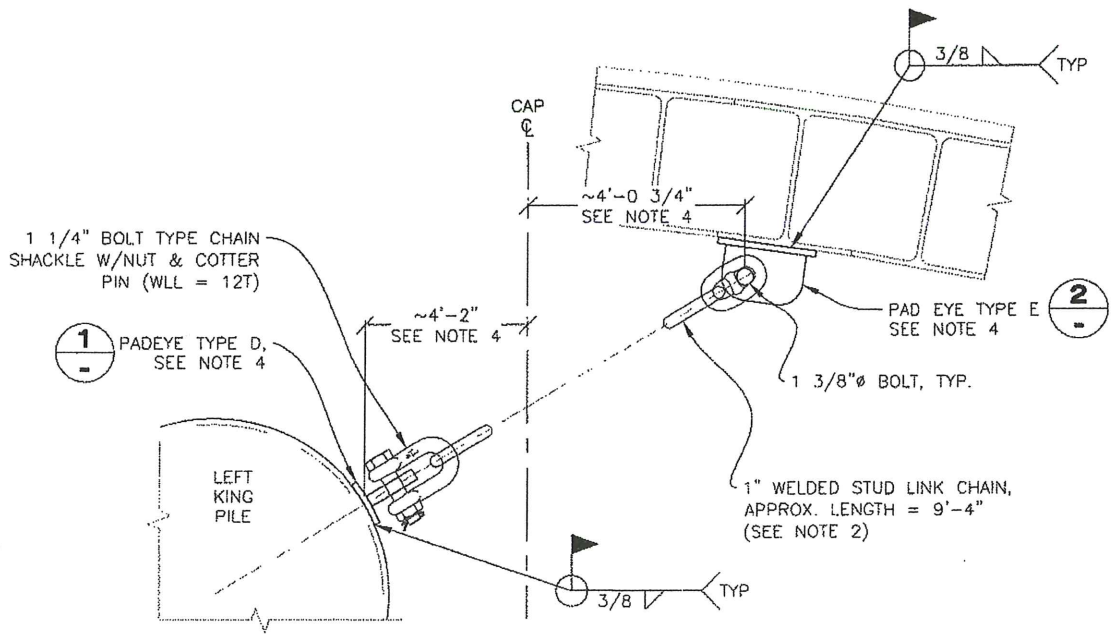


**1 - PADEYE TYPE D**



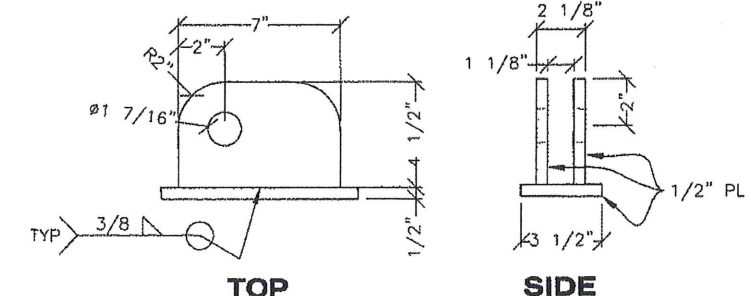
**CAP CROSS-CHAIN PLAN**

(LEFT SIDE SHOWN; MIRROR DETAIL ABOUT CAP CENTERLINE FOR RIGHT SIDE)



**LOWER CROSS-CHAIN PLAN**

(LEFT SIDE SHOWN; MIRROR DETAIL ABOUT CAP CENTERLINE FOR RIGHT SIDE)



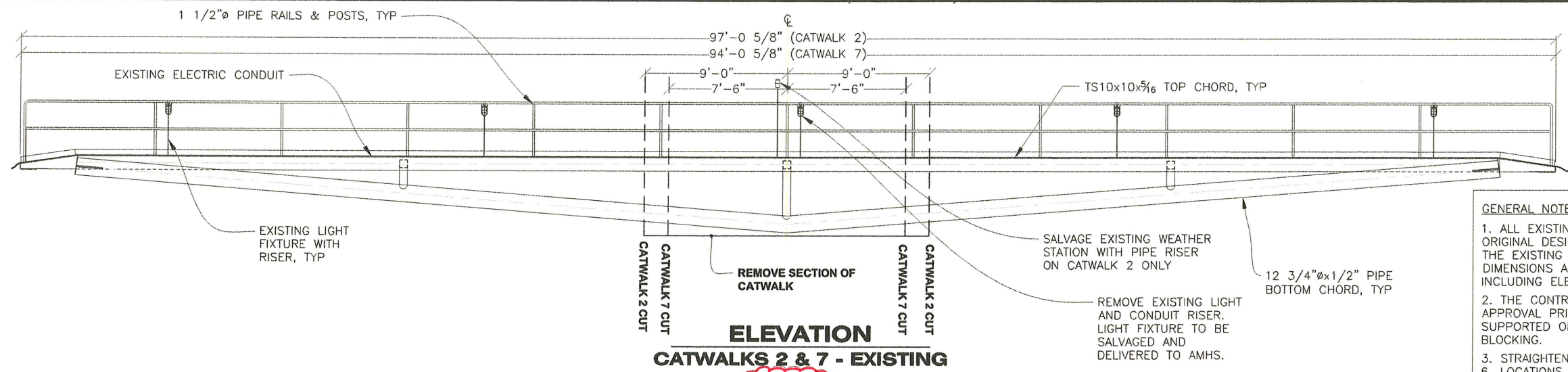
**2 - PADEYE TYPE E**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

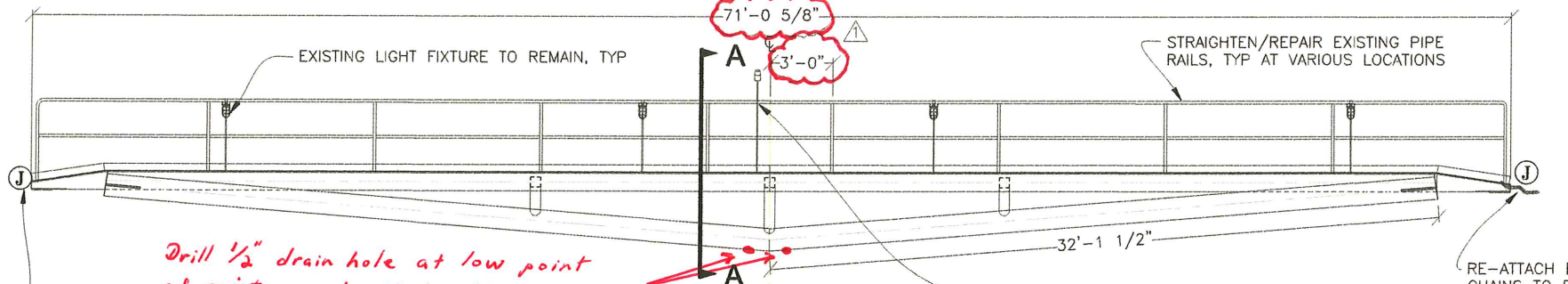
DESIGNED BY: J. OSBURN	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION		
<b>PETERSBURG FERRY TERMINAL IMPROVEMENTS</b>			
<b>FENDER SUPPORT BEAM &amp; CHAIN DETAILS</b>			
<b>6-PILE DOLPHIN</b>			
CHECKED BY: K. MILLER	6/8/12		
DRAWN BY: STAFF			
PATH: Q:\PSG\69422\PLANSET\16_6-PILE FENDER HANGER BEAM & CHAIN.DWG		FUMAN, CAROL M (DOT)	
TAB: 16	Friday, June 08, 2012 2:10:49 PM		
REVISIONS		PROJECT DESIGNATION	YEAR
NO.	DATE	DESCRIPTION	SHEET NO.
			69422
			AC-FBD-0937(34)
			2012
			16
			20

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *Stam Smith* Date 1-15-18

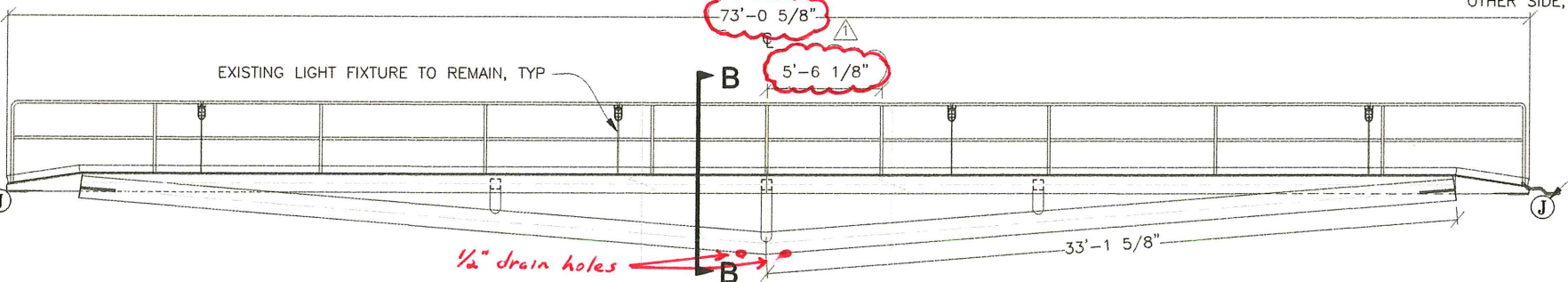
- GENERAL NOTES:**
1. ALL EXISTING CATWALK FEATURES NOT SHOWN. REFERENCE AS-BUILT AND ORIGINAL DESIGN DRAWINGS. THE CONTRACTOR SHALL THOROUGHLY INSPECT THE EXISTING STRUCTURES AND DOCUMENT ALL PERTINENT AS-BUILT DIMENSIONS AND CONDITIONS PRIOR TO REMOVAL AND MODIFICATION - INCLUDING ELECTRICAL COMPONENTS.
  2. THE CONTRACTOR SHALL SUBMIT A REMOVAL AND REPAIR PLAN FOR APPROVAL PRIOR TO START OF WORK. THE GANGWAY WEIGHT MAY NOT BE SUPPORTED ON THE PIPE HANDRAILS WITHOUT SUITABLE LOAD-BEARING BLOCKING.
  3. STRAIGHTEN AND REPAIR EXISTING BENT HANDRAILS ON CATWALKS 1, 2 & 6. LOCATIONS AND EXTENT OF EXISTING DAMAGED RAILS VARY. CATWALKS 1 AND 6 NOT SHOWN ON THIS PLAN SHEET. HANDRAIL REPAIRS WILL CONSIST OF HEAT-STRAIGHTENING IN-PLACE AND/OR REMOVAL AND REPLACEMENT AS ELECTED BY THE CONTRACTOR.
  4. ALL ELECTRICAL WORK NOT SHOWN. SEE SHEET 4.
  5. REPAIR ALL DAMAGED PAINT COATING AREAS WITH NEW PAINT COATINGS. REPAIR ALL DAMAGED GALVANIZED COATINGS WITH HOT-STICK ZINC REPAIR METHODS. REFERENCE SPECIFICATIONS.
  6. FOR CATWALK LANDING DETAILS, SEE SHEET 18
  7. REMOVE ALL CONDUCTORS AND MIDDLE LIGHT FIXTURE. REMOVE CONDUITS TO MATCH THE CATWALK REMOVAL SECTION SHOWN. RECONNECT CONDUIT.



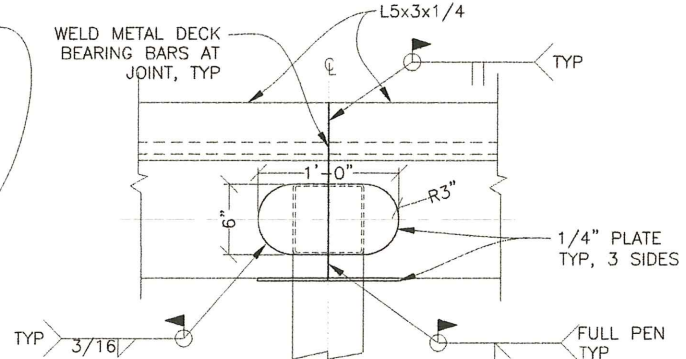
**ELEVATION  
CATWALKS 2 & 7 - EXISTING**



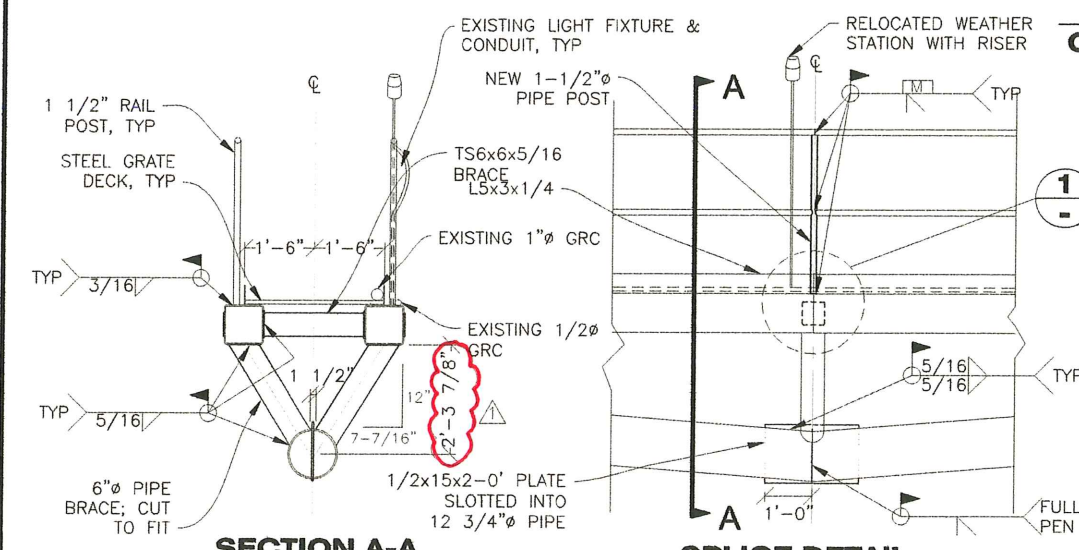
**ELEVATION  
CATWALK 2 - MODIFIED**



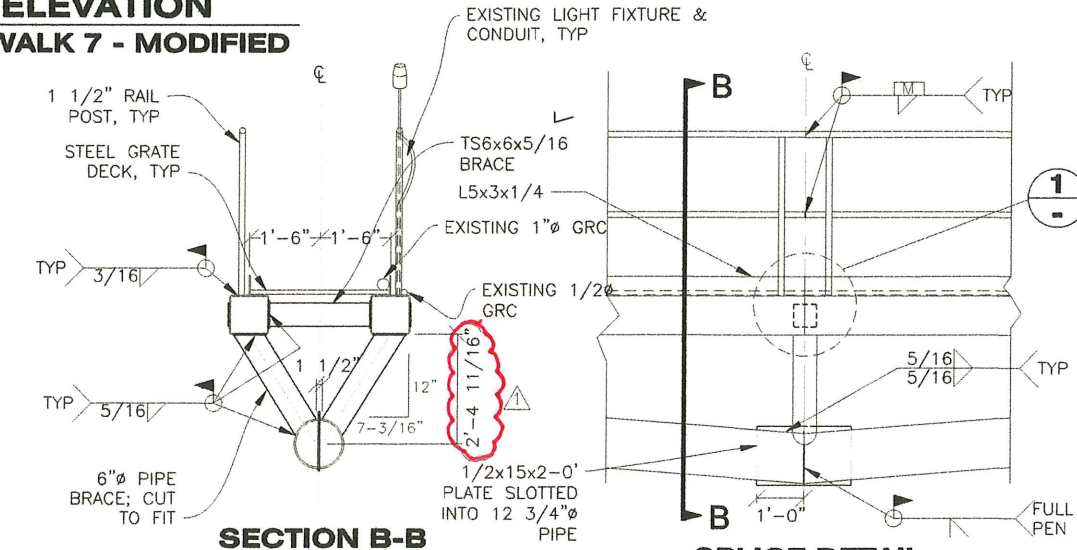
**ELEVATION  
CATWALK 7 - MODIFIED**



**1  
-  
DETAIL  
TOP CHORD SPLICE**  
(RAIL POSTS NOT SHOWN)



**SECTION A-A  
CATWALK 2**



**SECTION B-B  
CATWALK 7**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: JDO / MAH

CHECKED BY: K. MILLER  
 DRAWN BY: STAFF

STATE OF ALASKA  
 49th  
 MAUREEN A. HANSEN  
 EE-9050  
 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA  
 49th  
 JOEL D. OSBURN  
 CE-11014  
 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

**PETERSBURG FERRY  
 TERMINAL IMPROVEMENTS**

**CATWALK MODIFICATIONS  
 REVISED**

PROJECT DESIGNATION: 69422  
 YEAR: 2012  
 SHEET NO: 17  
 TOTAL SHEETS: 20

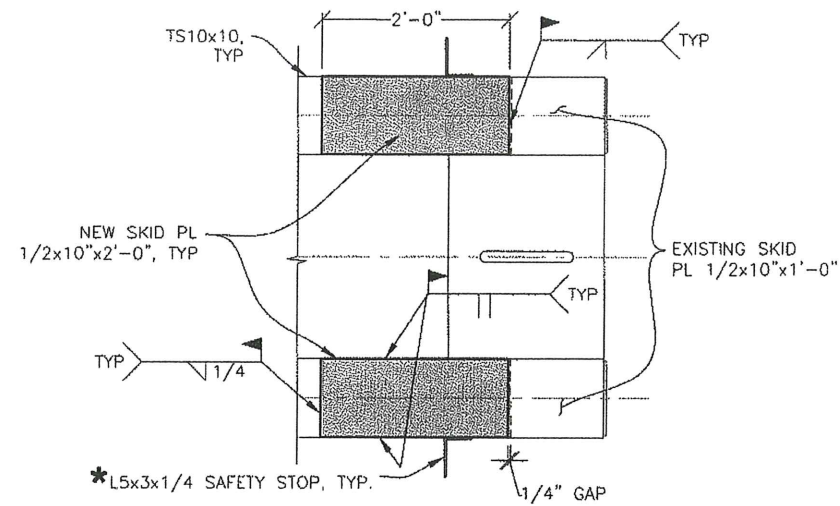
NO. DATE DESCRIPTION  
 12/12/12 SHORTENED CATWALKS

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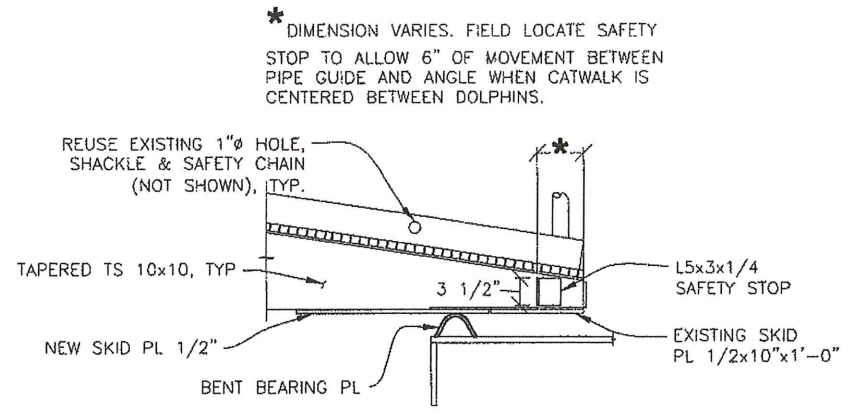
*Drill 1/2\"/>*

*1/2\"/>*

*2'-4 11/16\"/>*

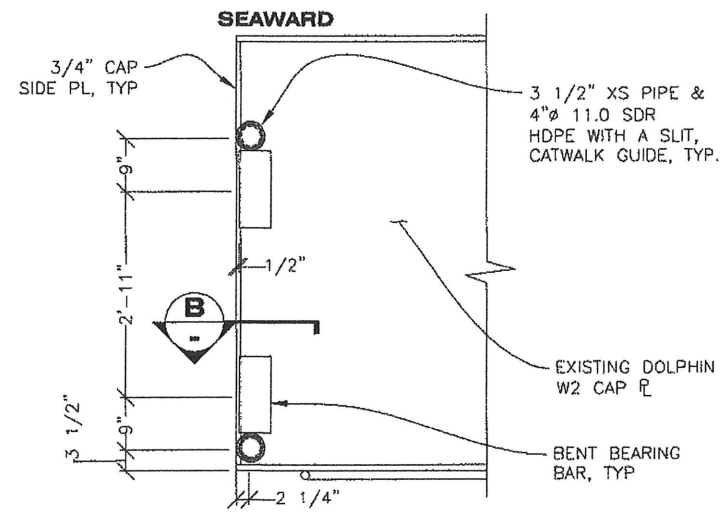
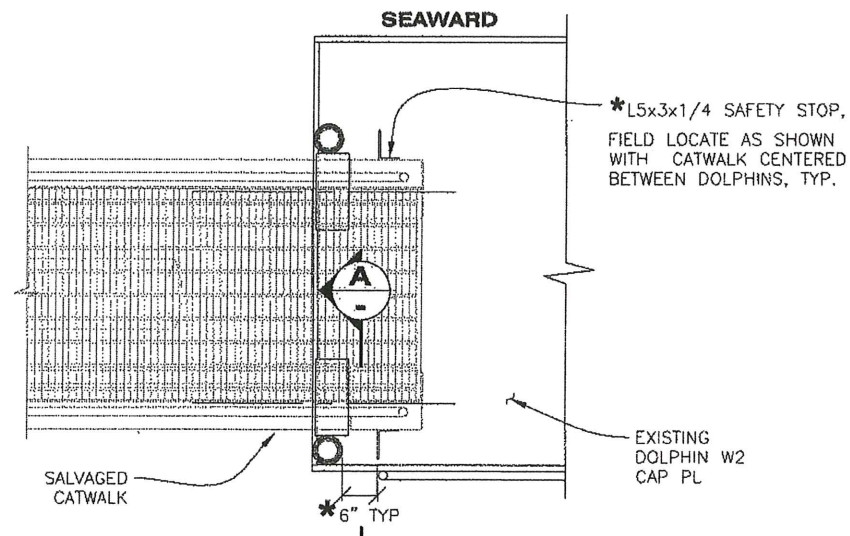


**CATWALK BOTTOM PLAN**



**END ELEVATION**

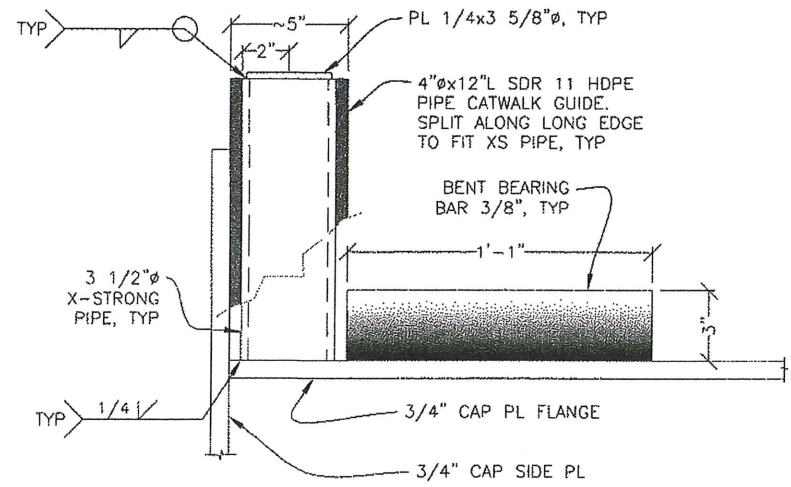
**CATWALK SKID PL MODIFICATION**



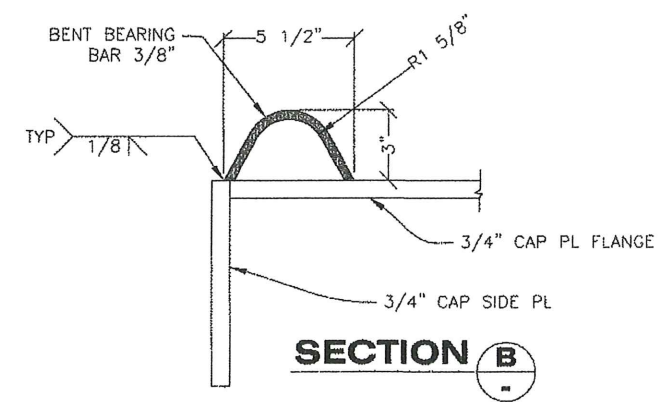
- NOTES:**
1. INSTALL BENT BEARINGS AND PIPE GUIDES ON BOTH SIDES OF DOLPHINS W4, W3, E3, E4, WEST SIDE OF W2 AND EAST SIDE OF E2.
  2. INSTALL SAFETY STOPS ON CATWALKS 1, 2, 7 & 8, BOTH ENDS.

**MODIFICATION PLAN - EXISTING DOLPHIN & SALVAGED CATWALK**

(DOLPHIN W2 SHOWN; MIRROR CATWALK LANDING DETAILS ABOUT CENTER DOLPHIN CAP FOR E2)



**SECTION A**



**SECTION B**

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE *Steve Miller* Date *1-15-18*

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: K. NOVIKOVA

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

**PETERSBURG FERRY TERMINAL IMPROVEMENTS**

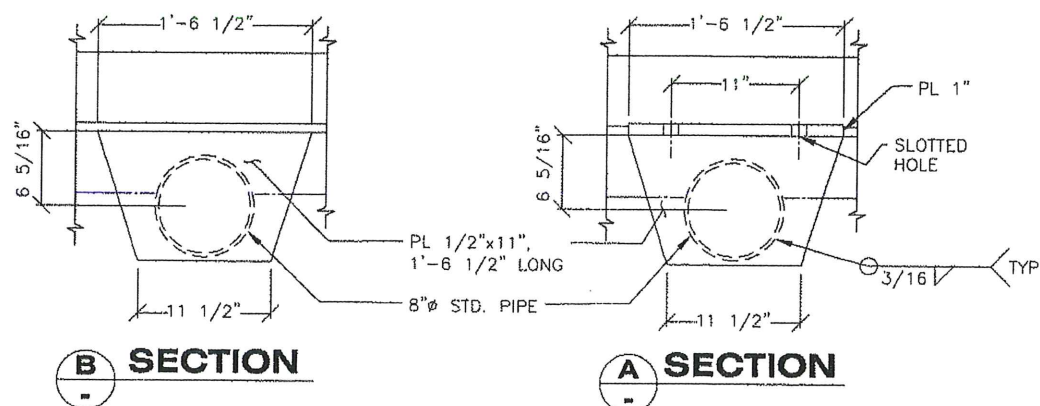
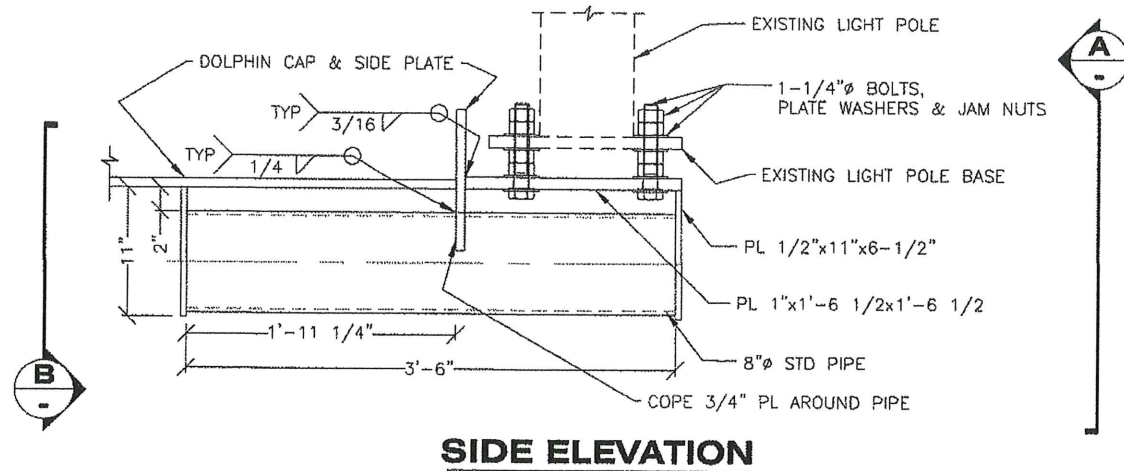
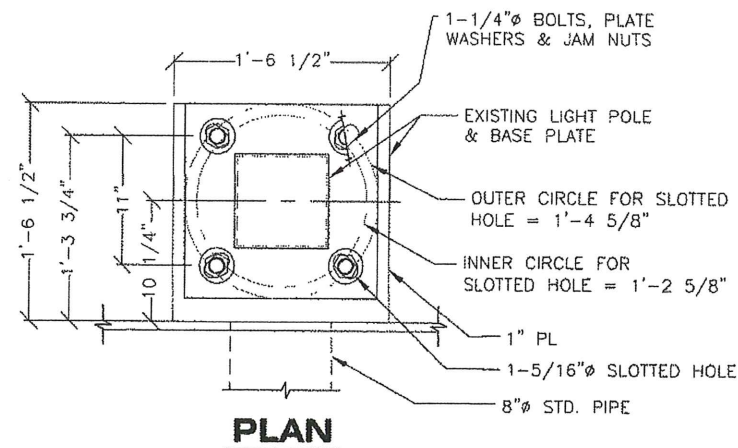
**CATWALK LANDING DETAILS**

CHECKED BY: J. OSBURN  
 DRAWN BY: KRN

6/8/12

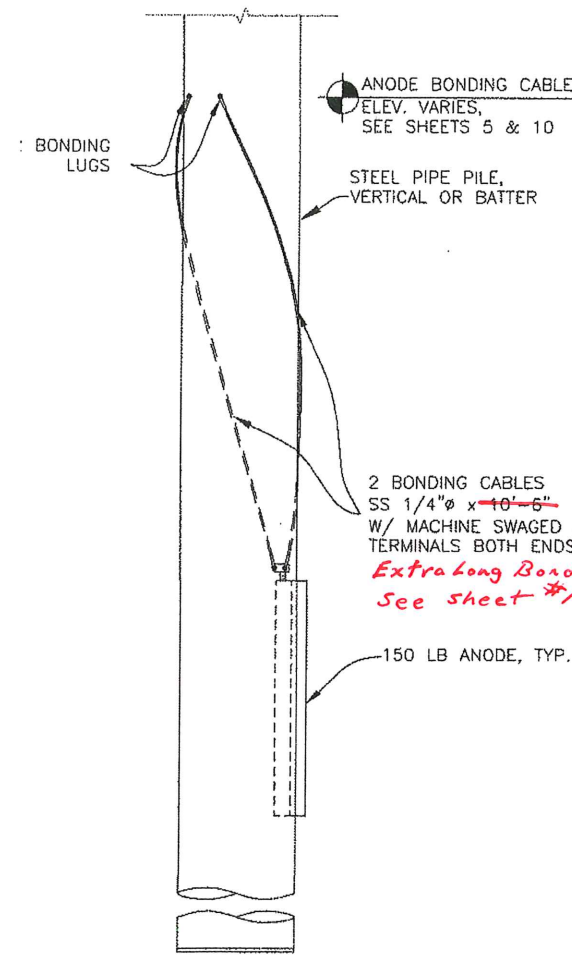
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REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	<b>69422</b>	<b>2012</b>	<b>18</b>	<b>20</b>
			<b>AC-FBD-0937(34)</b>			

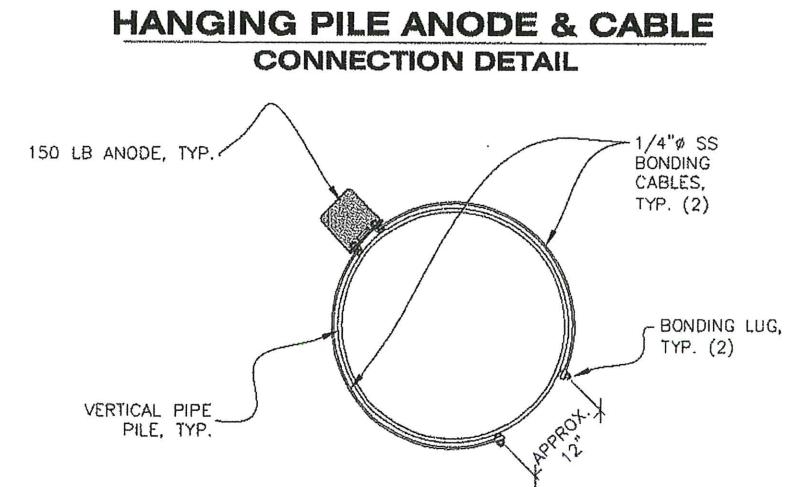
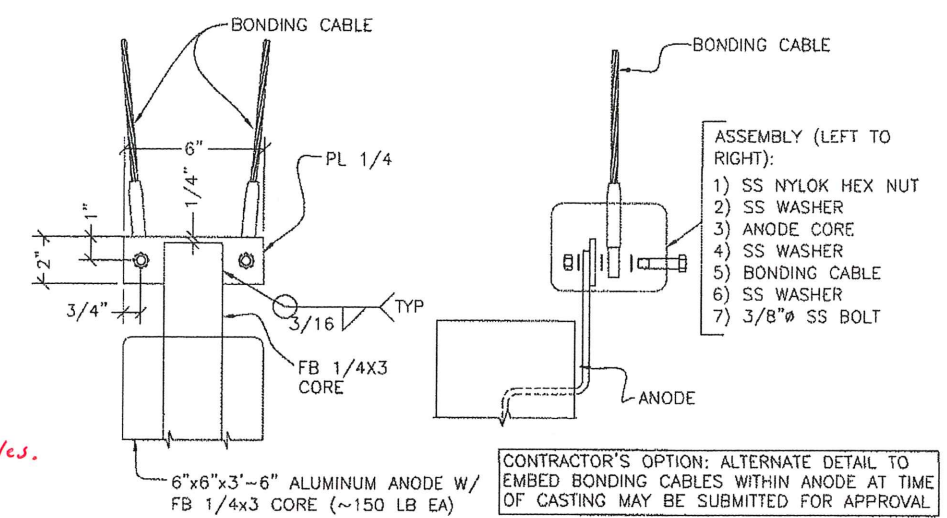
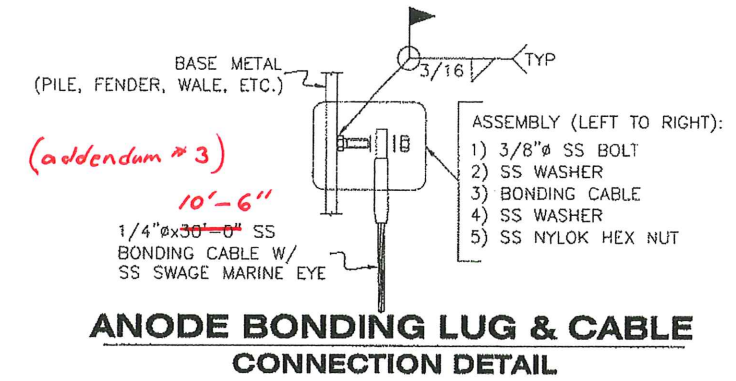


**LIGHT POLE ATTACHMENT**

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 PE Steve Miller Date 1-15-18



- NOTES:
- INSTALL AN ANODE ON EACH VERTICAL PILE, NEW & EXISTING DOLPHINS, INCLUDING PONTOON RESTRAINT STRUCTURES AND TRESTLE BENTS.
  - INSTALL ANODES ON OUTBOARD VERTICAL FENDER PILES, EXISTING DOLPHINS (W1-2, E1-2).
  - INSTALL ANODES ON ALL PILES OF EXISTING TRESTLE PIER 7, AND OUTBOARD PILES ON EXISTING TRESTLE BENTS 4--6. TRESTLE PILES ARE 16" Ø x 1/2" WALL.
  - EXISTING DOLPHIN KING PILES ARE 18" Ø x 1/2" WALL, VERTICAL FENDER PILES ARE 24" Ø x 1/2" WALL.
  - SEE SHEET 4 FOR QUANTITY OF ANODES AT EACH PILE-SUPPORTED STRUCTURE.



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. OSBURN

CHECKED BY: K. MILLER  
 DRAWN BY: STAFF

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

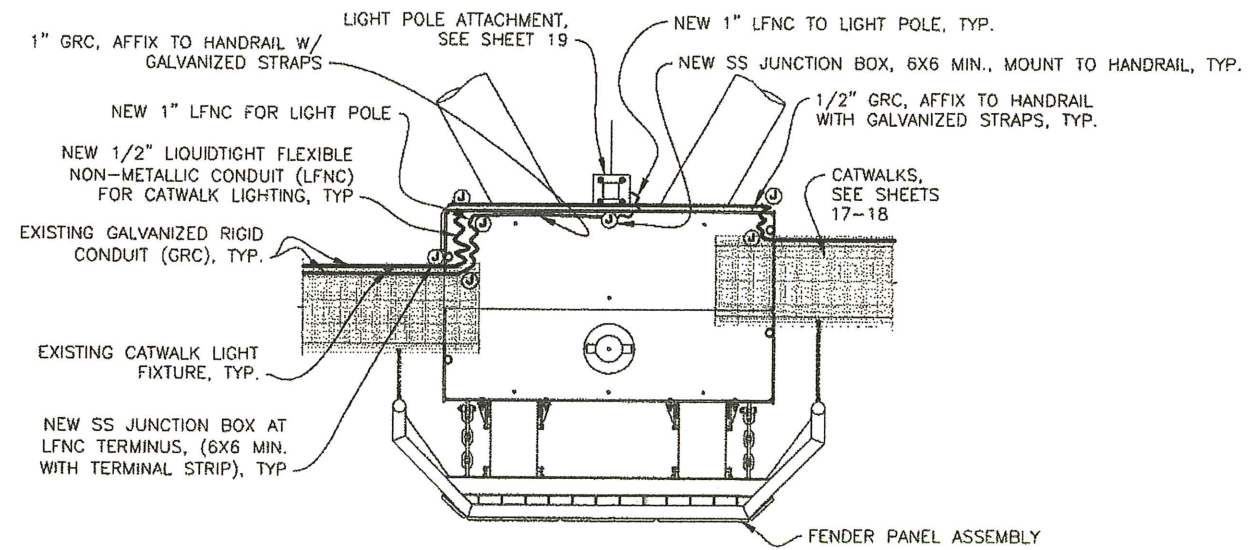
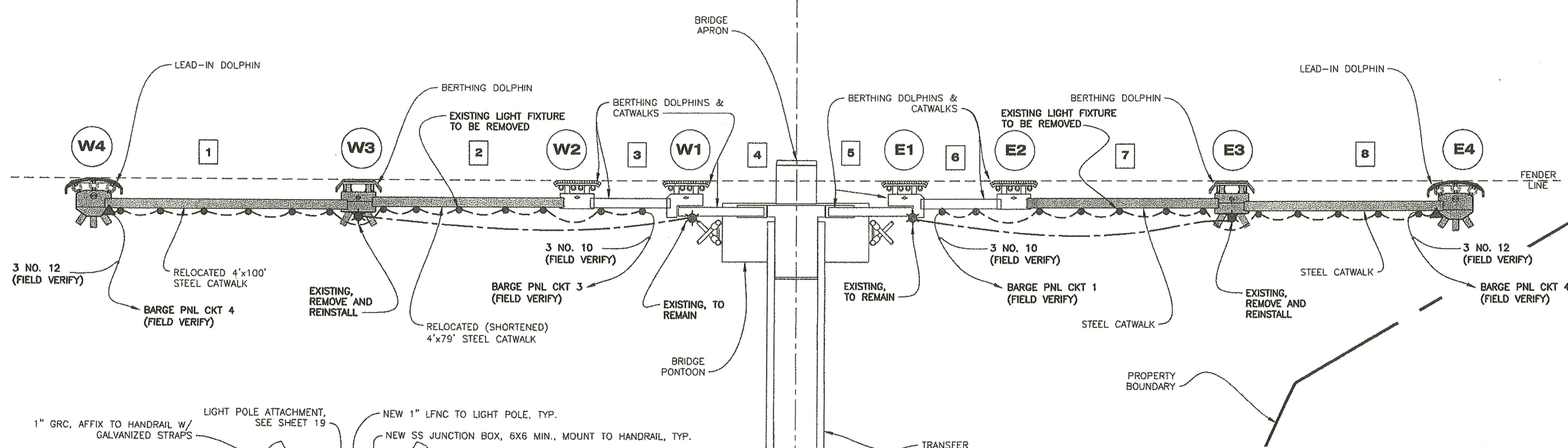
**PETERSBURG FERRY TERMINAL IMPROVEMENTS**

**MISCELLANEOUS DETAILS**

6/8/12

PATH: Q:\PSG\69422\PLANSET\19\_MISC DETS.DWG  
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REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	69422	2012	19	20
			AC-FBD-0937(34)			



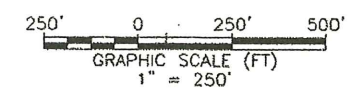
**ELECTRICAL RECONSTRUCTION NOTES:**

1. ALL EXISTING AND NEW ELECTRICAL WORK NOT SHOWN, THE SCOPE OF ELECTRICAL WORK ON THIS PROJECT REQUIRES THE REMOVAL AND RESTORATION OF THE EXISTING LIGHTING CIRCUITS AND FIXTURES AS GENERALLY INDICATED ON THE PLANS. ~~IT IS THE INTENT OF THE PROJECT TO SALVAGE, MODIFY AND RE-INSTALL EXISTING CONDUITS EXCEPT AT NEW DOLPHIN STRUCTURES WHERE NEW FIXED AND FLEXIBLE CONDUITS SHALL BE UTILIZED TO CONNECT TO EXISTING CONDUITS, RACEWAYS OR JUNCTION BOXES.~~ REPLACE ALL CONDUCTORS WITHIN THE LIMITS OF WORK SHOWN. MATCH EXISTING CONDUCTOR SIZES. FIELD VERIFY CONDUCTOR SIZES SHOWN ON PLANS PRIOR TO ORDERING MATERIAL.
2. THE CONTRACTOR SHALL EMPLOY A QUALIFIED ELECTRICIAN TO THOROUGHLY INSPECT AND DOCUMENT ALL EXISTING ELECTRICAL FEATURES PRIOR TO START OF WORK. NOTIFY THE ENGINEER IF DEFECTS ARE FOUND AND WHEN EXISTING MATERIALS CANNOT BE UTILIZED.
3. LIGHTING CIRCUITS SHALL BE TEMPORARILY TERMINATED IN AN APPROVED MANNER SO THAT THE REMAINDER OF THE LIGHTING SYSTEMS REMAIN IN SERVICE DURING DEMOLITION AND CONSTRUCTION.

\*Establish new item 662(2) Revised Electrical Power & Lighting. Replace all existing conduits, conductors, j-boxes, and catwalk handrail lighting fixtures with new components, starting at W1 to W4, and E1 to W4, per Change Order #2. Note: Existing overhead mast lighting removed and reinstalled.

**LEGEND**

- ~~RED GLOBE CATWALK LIGHT FIXTURE (EXISTING)~~ **New Solar L.E.D. obstruction Lights**
- WHITE GLOBE CATWALK LIGHT FIXTURE (EXISTING)
- OVERHEAD MAST LIGHT FIXTURE (EXISTING)
- CATWALK LIGHTING CIRCUIT, 1/2" (REUSE EXISTING - INSTALL NEW AS REQ'D)
- OVERHEAD MAST LIGHTING CIRCUIT, 1" (REUSE EXISTING - INSTALL NEW AS REQ'D)
- X#** DOLPHIN
- #** CATWALK



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE Sten Miller Date 1-15-18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: M. HANSEN

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
SOUTHEAST REGION

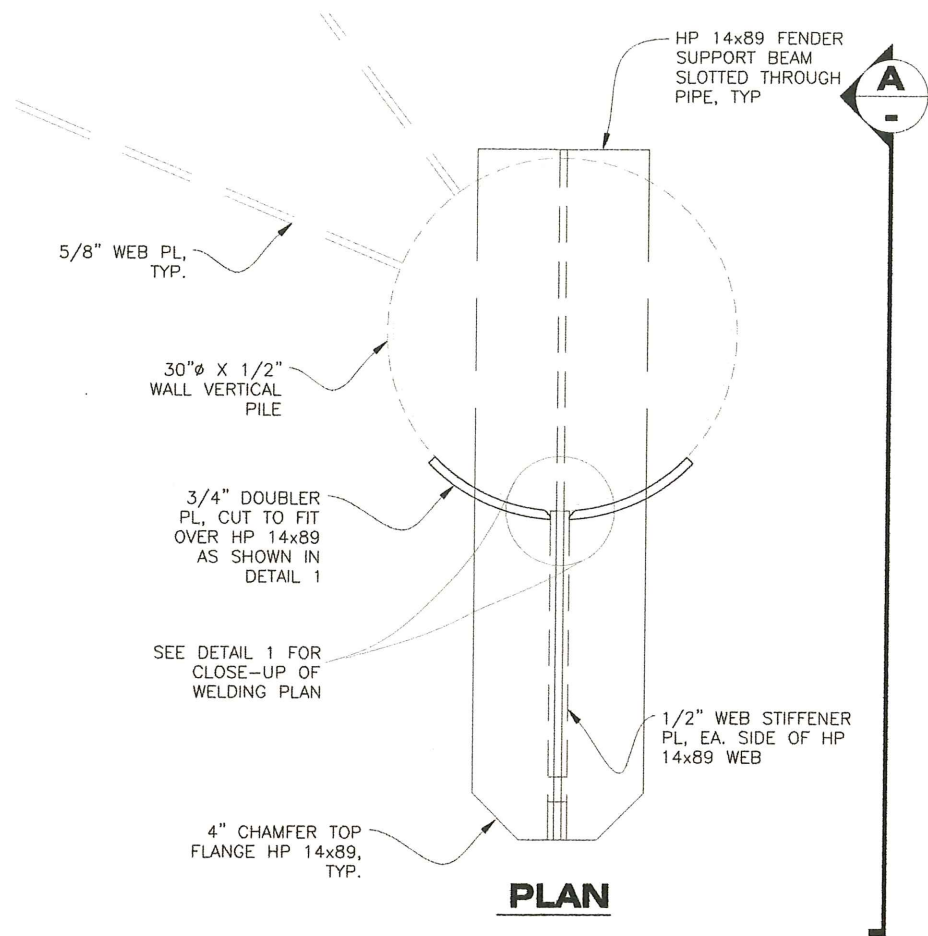
**PETERSBURG FERRY TERMINAL IMPROVEMENTS**

**ELECTRICAL PLAN AND DETAILS**

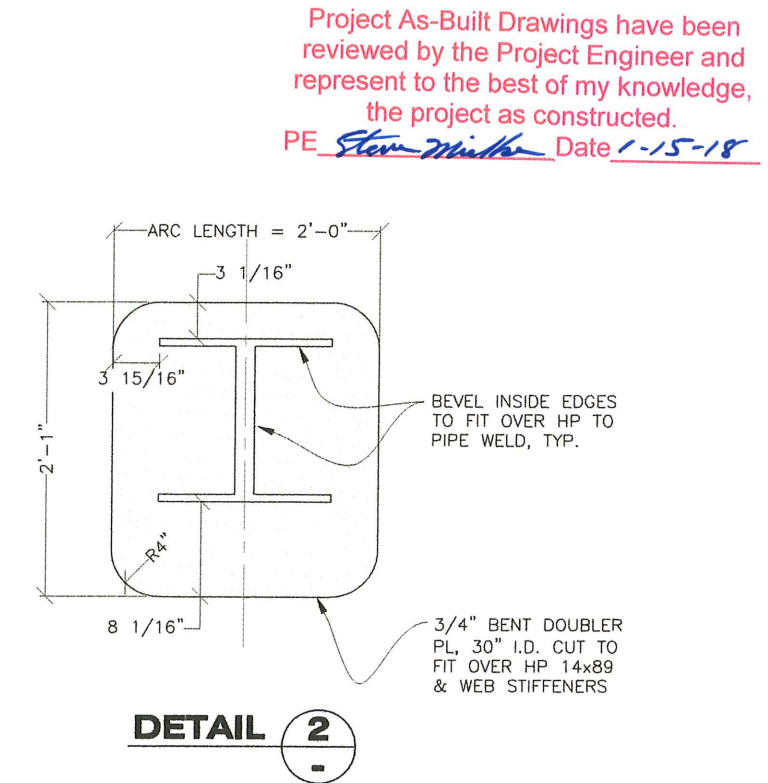
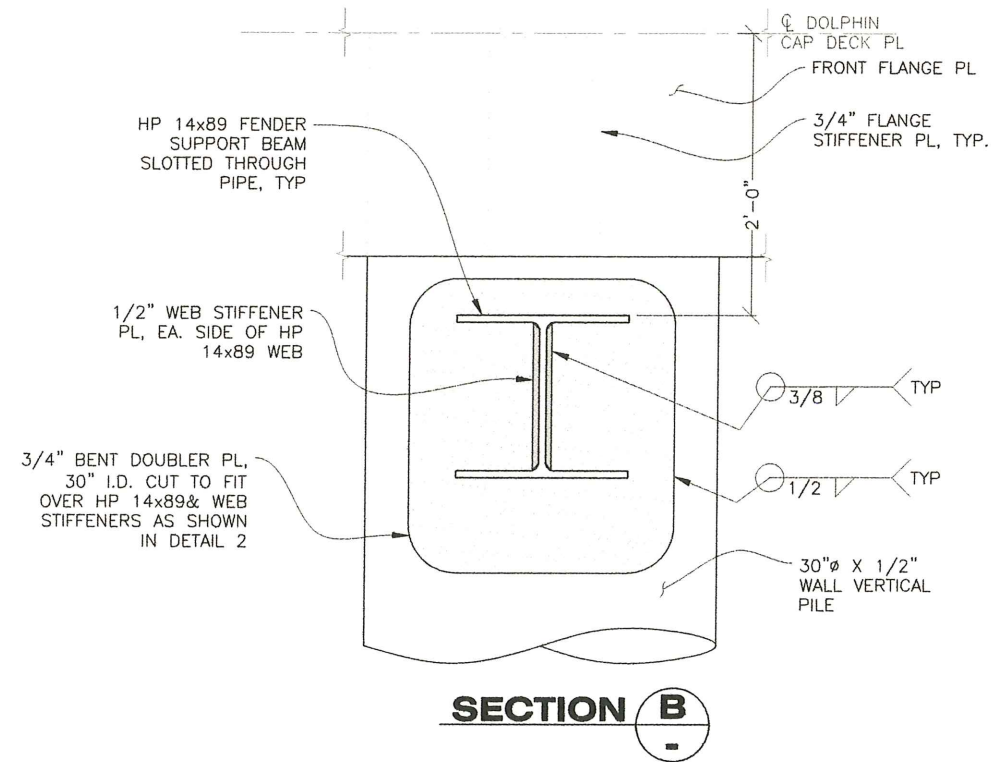
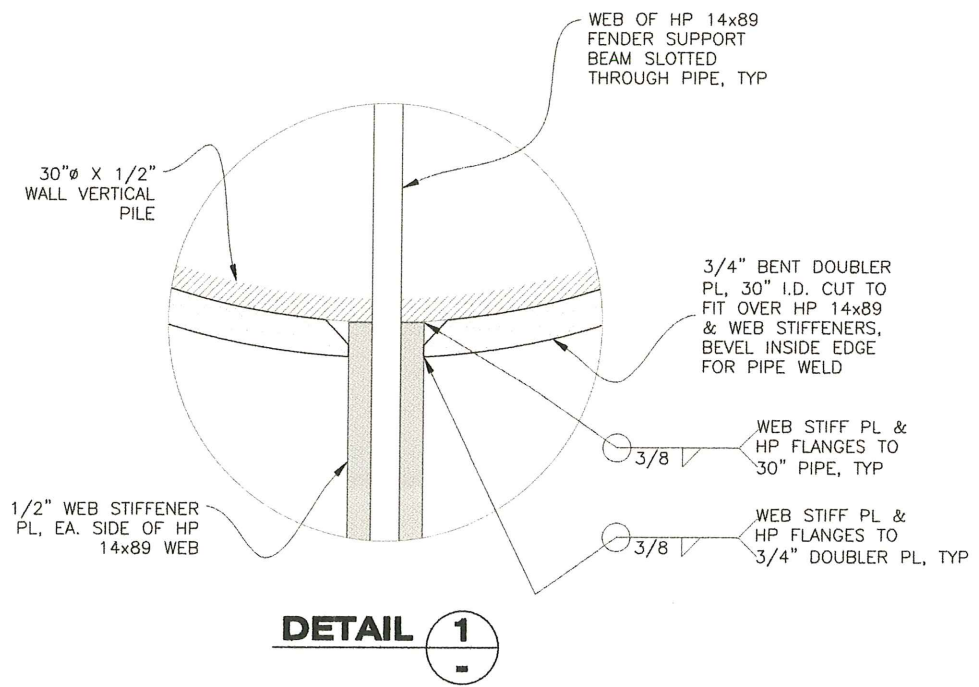
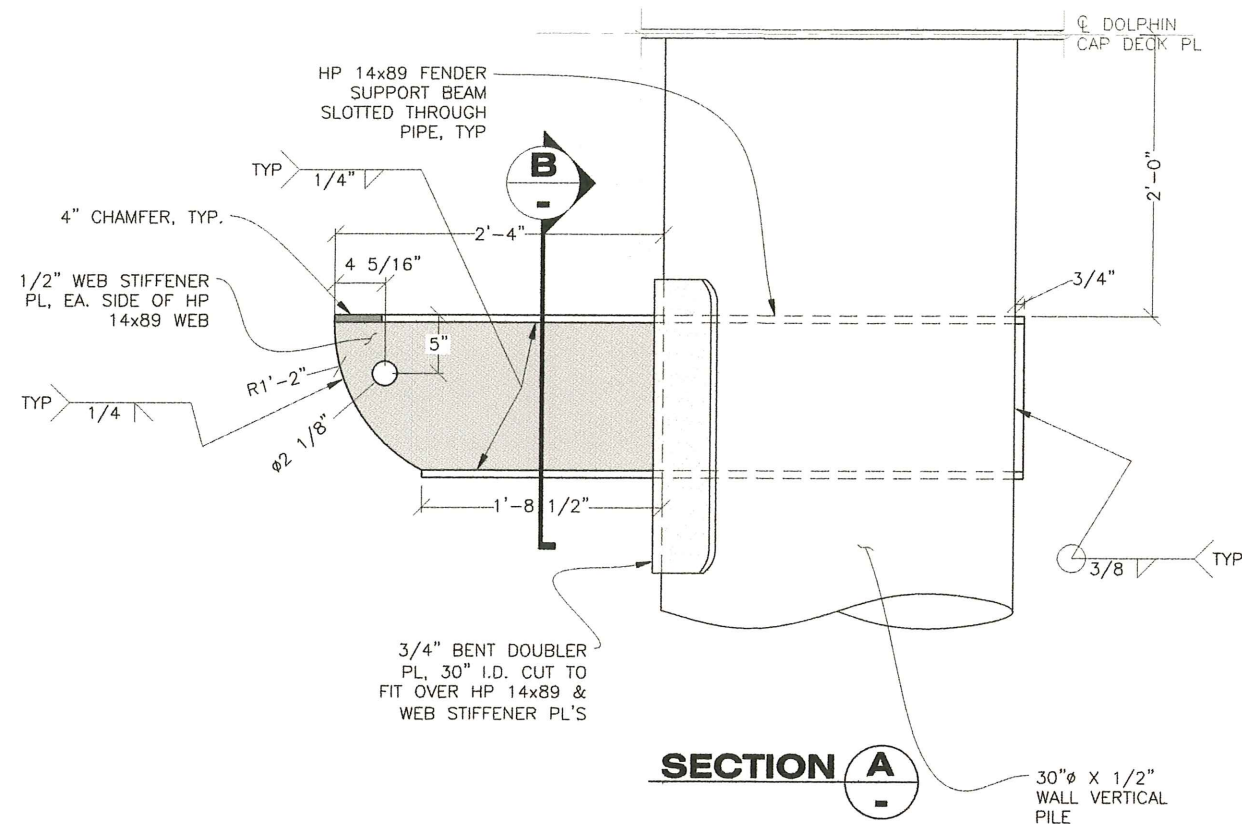
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DRAWN BY: STAFF

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NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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			<b>AC-FBD-0937(34)</b>	<b>2012</b>	<b>20</b>	<b>20</b>



**NOTE:**  
ASSEMBLE HP 14x89 AND PILE FIRST, WELD-OUT. THEN SLIDE 3/4\"/>



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE Stevie Miller Date 1-15-18

**FENDER SUPPORT BEAM  
6-PILE DOLPHIN**

*504(2a) Add Doubler Plates @ 6-Pile Dolphin Caps.  
#69422/AC-FBD-0937(34) Petersburg F/T improvements  
Change Order #4, Attachment #1.*

Attachment A

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND  
PUBLIC FACILITIES

Computations

For Gap Chain Replacement

Item No. 504(6)

DATE 10-3-13

Project No. 69422

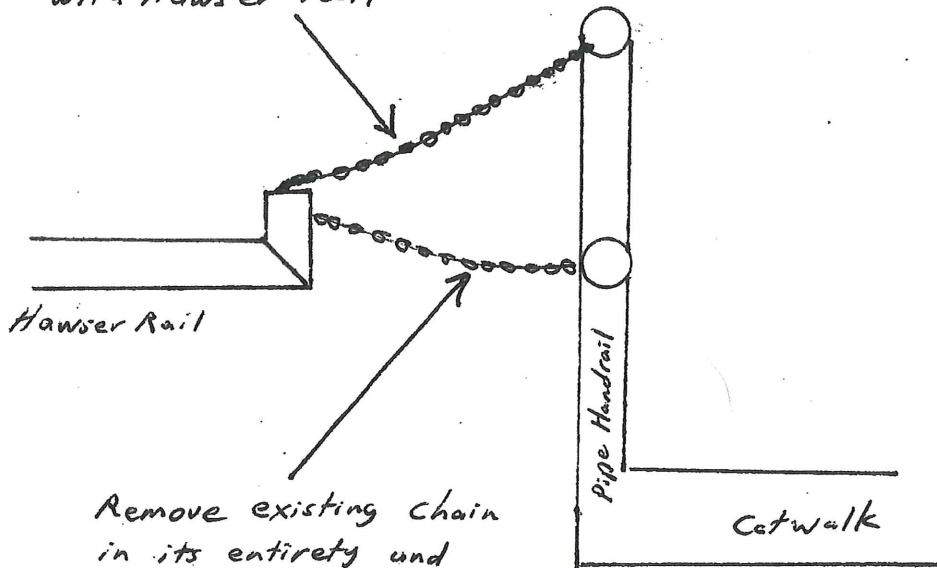
Project Name PSG-F/T

Calc. by Steve Mielke

Checked By \_\_\_\_\_

Change Order #6.

Install new chains between  
upper pipe handrail and  
top of Hawser Rail.  
No shackle at connection  
with Hawser Rail



Remove existing chain  
in its entirety and  
repair coatings.

Weld chain to Hawser Rail (No shackles). Weld chain link  
to pipe handrail and connect galv. 3/16 GR30 chain with  
shackle at pipe handrail only. Cover chain with 3/4" vinyl  
tubing. Install with some slack, but maintain negative  
slope from pipe handrail.

Install/Replace gap chains at structures:

W4, W3, E3, and E4.

Project As-Built Drawings have been  
reviewed by the Project Engineer and  
represent to the best of my knowledge,  
the project as constructed.

PE Steve Mielke Date 1-15-19

Attachment B

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND  
PUBLIC FACILITIES

Computations

For Handrail Modifications @ W3 and E3

Item No. 504(6)

DATE 10-3-13

Project No. 69422

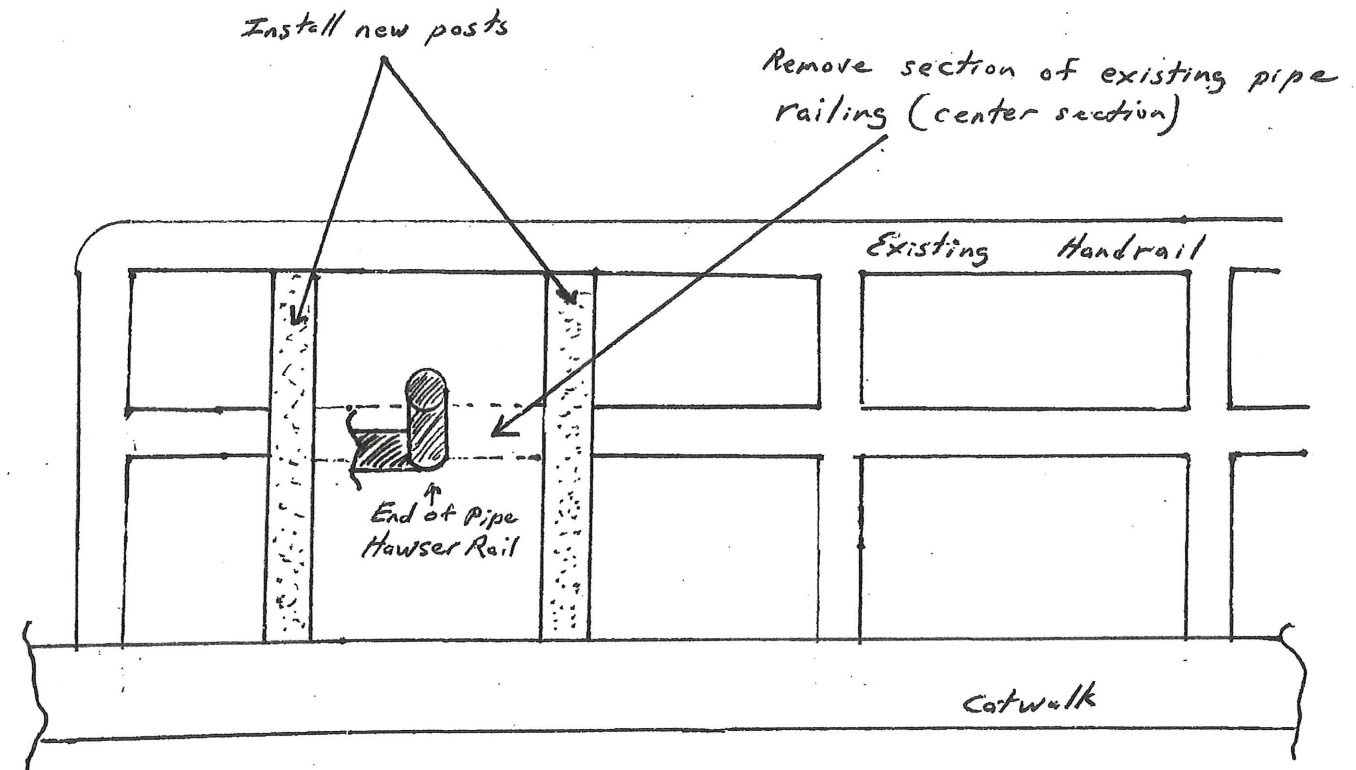
Project Name PSG-F/T

Calc. by Steve Mielke

Checked By \_\_\_\_\_

Change Order #6.

W3 and E3



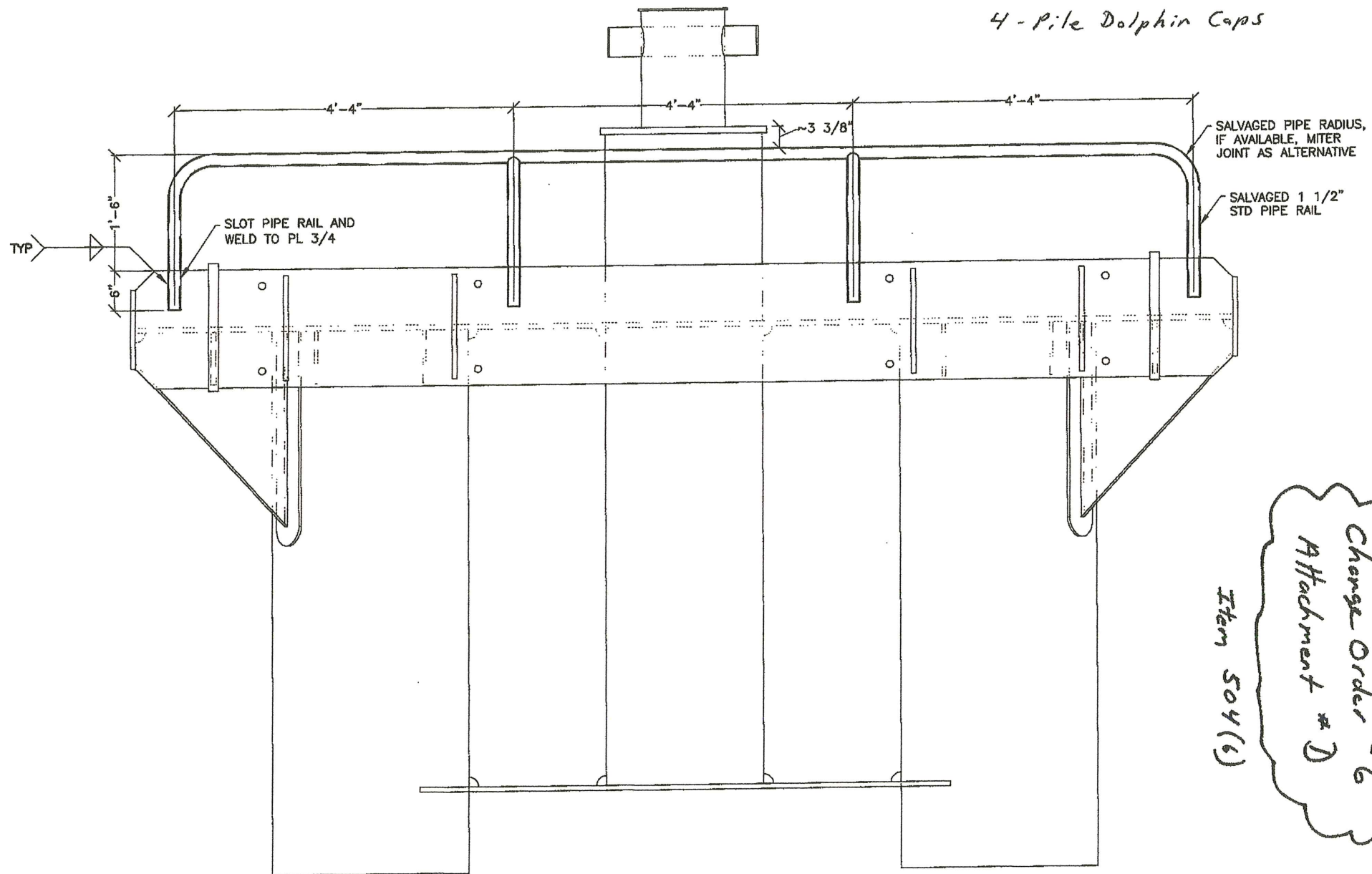
18"  
approximately

Modification required to prevent Hawser Rail returns  
to come into contact with pipe handrail during  
compression of 4-pile dolphin tender panels.

Project As-Built Drawings have been  
reviewed by the Project Engineer and  
represent to the best of my knowledge,  
the project as constructed.

PE Steve Mielke Date 1-15-19

#69422  
PSG F/T Improvements  
Add Safety Rails to  
4-Pile Dolphin Caps



Change Order # 6  
Attachment # D  
Item 504 (6)

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
PE Steve Miller Date 1-15-19

**PILE DRIVING RECORD**

INSURE WHICH SHOWING THE LOCATION OF THE PILES BY NUMBER SHALL BE DRAWN ON THE BACK OF THIS FORM OR ON AN ATTACHED SHEET  
STRUCTURE NAME **Petersburg Ferry Terminal** CONTRACTOR **Tamico Inc.** PROJECT NAME **PSG-Ferry Terminal Improvements**  
PROJECT NO **#69422 ~ AC-FBD-0937(34)** DISTRICT **Southeast** TYPE OF BRIDGE **4-Pile and 6-Pile Dolphins (W4, W3, E3, and E4).**  
TYPE OF HAMMER **Single Acting Diesel** MANUFACTURER **DELMAG (modified)** D19-42, S/N: 24000-368  
WT OF RAM OR GRAVITY HAMMER **4,189 lbs** STROKE LENGTH MAX **132 inches, or 11-foot** NO. BLOWS PER MIN **34-52** MFG'S MAX. ENERGY RATING **46,090 ft-lbs**

DATE	ABUTMENT OR PIER NO	PILE NO	TYPE OF PILE (specify tip & butt, diameter of timber & concrete pile in inches)	LENGTH PLACED IN LEADS INCLUDING EXTENSIONS (FT)	NET LENGTH CUTOFF TO TIP (FT)	PENETRATION IN GROUND (FT)	PILE CUTOFF ELEV	OBSERVED GROUND ELEV	PILE TIP ELEV	DROP OF HAMMER (INCHES)	AVG PENETRATION LAST 5 BLOWS	COMPUTED BEARING (TONS)	REMARKS SPECIFY BATTER IF ANY. HOW DID PILE DRIVE; SPECIFY SPLICES, CORE STOPPERS, EXTENSION LENGTHS USED
3/13	W4	V1	30" x 1/2" Wall	105.6	7.6	50.0	+25.0	-23.0	-73.0				Earth plug EL -30.0 ✓
3/13		V2	30" x 1/2" Wall	105.5	7.6	49.9	+25.0	-23.0	-72.9				Earth plug EL -29.9 ✓
3/13		V3	30" x 1/2" Wall	105.5	6.4	51.1	+25.0	-23.0	-74.1				Earth plug EL -26.1 ✓
7/13		B1	30" x 1/2" Wall	105.3	9.3	42.1	+32.0	-19.0	-58.9				3:1 batter / open ended
6/13		B2	30" x 1/2" Wall	105.3	6.3	44.1	+32.0	-20.0	-61.7				3:1 batter / open ended
6/13		B3	30" x 1/2" Wall	105.1	7.6	41.5	+32.0	-21.0	-60.3				3:1 batter / open ended
3/13	W3	V1	30" x 1/2" Wall	105.4	5.6	52.4	+25.0	-22.4	-74.8				Earth plug EL -24.7 ✓
3/13		V2	30" x 1/2" Wall	105.5	6.0	52.1	+25.0	-22.4	-74.5				Earth plug EL -25.5 ✓
6/13		B1	30" x 1/2" Wall	105.3	6.3	42.5	+32.0	-21.5	-61.7				3:1 batter / open ended
6/13		B2	30" x 1/2" Wall	105.3	9.3	40.0	+32.0	-21.0	-58.9				3:1 batter / open ended
3/13	E3	V1	30" x 1/2" Wall	105.3	5.1	54.1	+25.0	-21.1	-75.2				Earth plug EL -26.5 ✓
3/13		V2	30" x 1/2" Wall	105.3	0.0	59.3	+24.9	-21.1	-80.4				1/10 <sup>th</sup> low, Earth plug EL -23.3 ✓
7/13		B1	30" x 1/2" Wall	105.3	8.8	42.1	+32.0	-19.5	-59.3				3:1 batter / open ended
7/13		B2	30" x 1/2" Wall	105.3	11.3	39.1	+32.0	-20.0	-57.0				3:1 batter / open ended
8/13	E4	V1	30" x 1/2" Wall	115.3	6.8	62.2	+25.0	-21.3	-83.5				Earth plug EL -31.0 ✓
8/13		V2	30" x 1/2" Wall	115.3	7.3	61.7	+25.0	-21.3	-83.0				Earth plug EL -29.9 ✓
8/13		V3	30" x 1/2" Wall	115.3	7.7	61.3	+25.0	-21.3	-82.6				Earth plug EL -26.1 ✓
8/13		B1	30" x 1/2" Wall	115.3	2.5	59.1	+32.0	-18.8	-74.8				3:1 batter / open ended

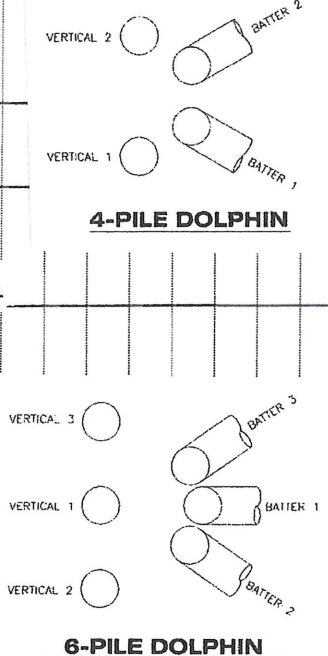
PREPARED BY **Steve Mielke** DATE **January 15, 2019** CHECKED BY **Steve Mielke** DATE **1-17-19**  
NAME **Steve Mielke** TOTAL LENGTH FURNISHED **See page 2**

25D-099

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8/13	E4	B2	30" x 1/2" Wall	115.3	0.3	61.1	+32.0	-19.0	-76.8				3:1 batter / open ended
8/13		B3	30" x 1/2" Wall	115.3	6.8	54.6	+32.0	-19.0	-70.7				3:1 batter / open ended



Project As-Built Drawings have been represented to the best of my knowledge, the project as constructed.  
PE Steve Mielke Date 1-17-19

PREPARED BY **Steve Mielke** DATE **January 15, 2019** CHECKED BY **Steve Mielke** DATE **1-17-19**  
NAME **Steve Mielke** TOTAL LENGTH FURNISHED

25D-099