

ADDENDUM NO. 5
TO THE BID DOCUMENTS
Pioneer Dock Fender Repair
CITY OF HOMER, ALASKA

Addendum Issue Date: February 14, 2023

Bid Submittal Date: February 23, 2023

Previous Addenda Issued: 4

Issued By: Janette Keiser, PE
Public Works Director
City of Homer

Notice to Bidders:

Bidders must **acknowledge receipt of this addendum** by including the Addenda Acknowledgement Form with the bid.

Bidders are required to acknowledge each addenda separately on the Addenda Acknowledgement Form. Any bids received without acknowledgment of addenda may be rejected prior to evaluation.

The Bid Documents for the above project are amended as follows (all other terms and conditions remain unchanged):

- 1. The bid date is revised to Thursday, February 23, 2023 at 2:00 PM. All other important dates shall remain unchanged.**

- 2. Questions from Prospective Bidders:**

Question #1: Regarding the attachment of the rubber element fenders, what if the dock-side concrete anchor bolts are fine, but the fender-side welded anchor studs need to be repaired or replaced?

Answer #1: If the fender-side welded stud anchors are found to be damaged then they will need to be replaced. Updated plan sheets are attached to reflect this.

Question #2: Regarding “Attachment Method A – Dock Plate”, page G6. Would it be acceptable to have the plate fabricated with two additional small holes (5/8”), and use them to temporarily bolt the plate to the face of the dock? Then the plate itself can be used as a template for the larger anchor bolt holes.

Answer #2: Installation of additional bolt holes to use as a method to temporarily support the plate to facilitate installation is acceptable.

Question #3: On page 12 of the bid package, there is a Bid Form to break down the costs. Should the alternative “Attachment Methods” A-C be included in item #7 “Install Energy Absorbers & Anchor Bolts with Acrylic Adhesive” or should we add another line or two?

Answer #3: Using the Attachment plate would represent a new bid item. A new bid form is attached and the attached, revised plan sheets also reflect this clarification.

BID FORM

Homer Pioneer Dock Fender Repair Project

ITEM NO.	SPEC NO.	BID ITEM DESCRIPTION	UNIT	QUAN TITY*	UNIT BID PRICE	TOTAL BID PRICE
1	101	Mobilization & Demobilization	LS	1		
2		Demolition	LS	1		
3		Fender Sleeve Repair at Fenders 14, 15 & 16	EA	3		
4		Replace Chain Attachment Fender Pad Eyes	EA	1		
5		Replace Chain Attachment Dock Pad Eyes	EA	12		
6		Replace Energy Adjusters & Shackles	EA	12		
7		Install Energy Absorbers & Anchor Bolts with Acrylic Adhesive	EA	12		
7A		Install Marine Fender Attachment Plate	EA	6		
8		Furnish & Install Transition Plates	EA	6		
9		Repair DIA Electrical Conduit & 10 AWG Wire	LS	1		

Grand Total All Bid Items: \$_____

Name of Bidding Company_____

Address of Bidding Company_____

Signature of Company Representative _____ Date _____

Printed Name of Company Representative_____

Phone#/Email_____

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HOMER PIONEER DOCK FENDER REPAIRS HOMER, ALASKA

02
2/14/2023



KEN CASTNER
MAYOR - CITY OF HOMER

ROB DUMOUCHEL
CITY MANAGER - CITY OF HOMER

JANETTE KEISER, PE
PUBLIC WORKS DIRECTOR - CITY OF HOMER

BRYAN HAWKINS
PORT & HARBOR DIRECTOR - CITY OF HOMER

Designed By:

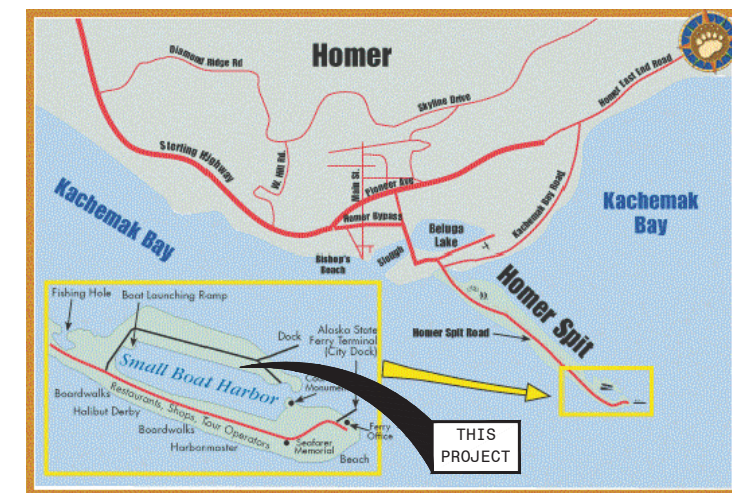


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LOCATION



VICINITY

INDEX OF DRAWINGS

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G1	COVER SHEET
G2	GENERAL NOTES
G3	EXISTING SITE & REPAIR SCHEDULE
G4	EXISTING FENDERS DEMOLITION
G5	DOCK FENDER DETAILS
G6	DOCK FENDER ATTACHMENT METHOD A - DOCK PLATE DETAILS
G7	DOCK FENDER ATTACHMENT METHOD B - FENDER PLATE DETAILS
G8	DOCK FENDER ATTACHMENT METHOD C - REPLACEMENT STUD DETAILS
G9	EXISTING CONDITION PHOTOGRAPHS

01

ISSUED FOR CONSTRUCTION

INDEX G1

GENERAL NOTES

PURPOSE

RESTORE THE FENDERS TO THE PRE-EVENT / ORIGINAL DESIGN CONDITION.

SCOPE OF WORK

THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCE, OR PROCEDURES OF CONSTRUCTION, SAFETY, QUALITY CONTROL, AND TO PERFORM OR FURNISH THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

1. MOBILIZATION AND DEMOBILIZATION: ALL REQUIRED.
2. DEMOLITION: ALL REQUIRED.
3. FENDER SLEEVE REPAIRS AT FENDERS 14, 15 AND 16. INSPECT PIN PILES AND REPAIR, IF NEEDED PER DETAIL 3 AND 6 ON DRAWING G5. 01
4. REPLACE CHAIN ATTACHMENT FENDER PAD EYES: FURNISH AND INSTALL ALL HARDWARE AS SHOWN IN THE PLANS. 01
5. REPLACE CHAIN ATTACHMENT DOCK PAD EYES: FURNISH AND INSTALL ALL HARDWARE AS SHOWN IN THE PLANS. INSPECT EXISTING ANCHOR BOLTS FOR DAMAGE AND REPLACE WITH OWNER PROVIDED ANCHOR BOLTS, IF NEEDED. OWNER HAS OPTION TO TAKE POSSESSION OF EXISTING PAD EYES THAT HAVE BEEN REMOVED. 01
6. REPLACE CHAIN, CHAIN ADJUSTERS AND SHACKLES: FURNISH AND INSTALL ALL HARDWARE AS SHOWN IN THE PLANS. OWNER WILL FURNISH CHAIN ADJUSTERS. 01
7. INSTALL ENERGY ABSORBER AND ANCHOR BOLTS WITH ACRYLIC ADHESIVE: AFTER REMOVAL AND INSPECTION OF EXISTING ENERGY ABSORBER, THE OWNER WILL DIRECT THE CONTRACTOR TO REUSE THE EXISTING OR INSTALL A NEW ENERGY ABSORBER WITH NEW ANCHOR BOLTS. (WHILE ENERGY ABSORBERS ARE REMOVED, INSPECT FENDER PILE ANCHOR STUDS. REPLACE IF DAMAGED. SEE DRAWINGS G6, G7 AND G8 FOR ENERGY ABSORBER CONNECTION METHOD. 02
- 7A. IF USING ATTACHMENT METHOD A (SHEET G6), USE MARINE FENDER ATTACHMENT PLATE IN CONJUNCTION WITH ANCHOR BOLTS INSTALLATIONS AS DESCRIBED ABOVE IN NOTE 7. 02
8. TRANSITION PLATES: FURNISH AND INSTALL. 02
9. REPLACE 3/4" ELECTRICAL CONDUIT & 10 AWG WIRE: REPLACE AND CONNECT APPROXIMATELY 10 FEET OF ELECTRICAL CONDUIT AND 10 AWG WIRE WITH JUNCTION BOXES IN ACCORDANCE WITH LATEST VERSION OF NATIONAL ELECTRICAL CODE (NEC) 02

DRAWING SCALES

DRAWING SCALES ARE PROVIDED ON DRAWINGS FOR CONVENIENCE. SCALES SHOWN ARE FOR FULL SIZE 22"x34" DRAWINGS. REDUCED SCALE DRAWINGS SHOULD BE INTERPRETED ACCORDINGLY. DIMENSIONS AND NOTES SHALL TAKE PRECEDENCE OVER SCALES.

MATERIALS AND CONSTRUCTION

OWNER PROVIDED MATERIALS

- A. RUBBER BUCKLING COLUMN ENERGY ABSORBING FENDERS. QTY 12
- B. SIMPSON STRONG TIE AT-XP ACRYLIC ADHESIVE (OR APPROVED EQUAL). QTY 1 L.S.
- C. 1 1/2" x 1'-9" LONG ANCHOR BOLT, HOT DIPPED GALVANIZED ASTM 193 GR B7. QTY 24
- D. 1 1/2" HOT DIPPED GALVANIZED NUTS, ASTM A194 GR 2H. QTY 24
- E. 1 1/2" HOT DIPPED GALVANIZED WASHERS. QTY 24
- F. 1" x 1'-3" LONG ANCHOR BOLT, HOT DIPPED GALVANIZED ASTM 193 GR B7. QTY 24
- G. 1" HOT DIPPED GALVANIZED NUT, ASTM A194 GR 2H. QTY 24
- H. 1" HOT DIPPED GALVANIZED WASHERS. QTY 24
- I. 3/8" HOT DIPPED GALVANIZED WASHERS. QTY 24
- J. 1 1/8" HOT DIPPED GALVANIZED NUT, ASTM A194 GR 2H. QTY 24
- K. HOT DIPPED GALVANIZED CHAIN ADJUSTER. QTY 12 01

FENDER SLEEVE

MAIN FENDER SLEEVE: STEEL FENDER PIPE SHALL BE HOT DIP GALVANIZED LONGITUDINAL SEAM OR SEAMLESS PIPE CONFORMING TO ASTM A252 GRADE 3, OR SPIRAL SEAM PIPE OF ASTM A709 GRADE 50.

STRUCTURAL MATERIAL

PLATES AND SHAPES: ASTM A572 GR 50 UNLESS NOTED OTHERWISE
 TRANSITION PLATE: ASTM B209

BOLTS, STUDS, NUTS & WASHERS

1. ALL BOLTS CONNECTING STEEL TO STEEL CONNECTIONS SHALL BE ASTM A325, HOT DIP GALVANIZED, UNLESS OTHERWISE NOTED. 01
2. WELDED THREADED STUDS SHALL BE ASTM F1554 GRADE 55. HOT DIP GALVANIZED UNLESS OTHERWISE NOTED.
3. ACRYLIC ADHESIVE ANCHOR STUDS SHALL BE ASTM A193 GRADE B7 HOT DIP GALVANIZED.
4. HARDENED STEEL FLAT WASHERS SHALL CONFORM TO ASTM F436 HOT DIPPED GALVANIZED.
5. HEAVY HEAD HEX HEAD NUTS SHALL CONFORM TO ASTM A194 GRADE 2H HOT DIPPED GALVANIZED.

STEEL WELDING

WELDING SHALL COMPLY WITH LATEST AWS D1.1 AND BE PERFORMED BY WELDERS WHO ARE QUALIFIED AS SPECIFIED IN AWS FOR THE PARTICULAR PROCESS THAT THE WELDER WILL PERFORM. QUALIFICATIONS WILL BE IN ACCORDANCE WITH AWS D1.1 SECTION 4.1.3. USE E70XX FILLER METAL. ALL SMAW ELECTRODES SHALL BE PROPERLY CONDITIONED LOW HYDROGEN. SUBMIT WELDER QUALIFICATIONS AND WELDING PROCEDURES TO ENGINEER FOR APPROVAL AT LEAST 15 DAYS PRIOR TO WELDING.

ALL SHOP WELDS SHALL BE 100% VISUALLY INSPECTED BY THE CONTRACTOR. IN ADDITION 10% OF ALL COMPLETE JOINT PENETRATION (CJP) SHOP WELDS SHALL BE TESTED BY ULTRASONIC TESTING (UT) EXAMINATION OR OTHER NDT METHODS APPROVED BY ENGINEER. ALL FIELD WELDS WILL BE 100% VISUALLY INSPECTED BY THE OWNER. ANY WELD FAILING INSPECTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, WHICH WILL INCLUDE RETESTING.

GALVANIZED COATING

ALL STEEL MEMBERS INCLUDING FABRICATIONS AND HARDWARE SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 AND ASTM A153 AS APPLICABLE. (ITEMS REQUIRING FABRICATION (EXAMPLE: 3'-4" x 3'-4" MARINE FENDER ATTACHMENT PLATE) SHALL BE GALVANIZED AFTER FABRICATION VIA THERMAL SPRAY COATING (ZINC). REPAIRS OF GALVANIZED COATING SHALL BE THERMAL SPRAY COATED PER NACE NO. 12/AWS C2.23/SSPC-CS 23.00. 01

CONNECTION HARDWARE

ALL BOLTS, NUTS, DOWELS, PINS, AND WASHERS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153.

CAST IN PLACE CEMENT

MIX DESIGN.....4000 PSI W/C 0.45 MAX, 4" MAX SLUMP 01

PIONEER DOCK FENDER REPAIR SCHEDULE				
ITEM NO	PAY ITEM	UNIT	QUANTITY	REFERENCE
1	MOBILIZATION & DEMOBILIZATION	LUMP SUM	ALL REQUIRED	ALL
2	DEMOLITION	LUMP SUM	ALL REQUIRED	SHEET G4
3	FENDER SLEEVE REPAIR AT FENDERS 14, 15, AND 16	EA	3	SHEET G5 DET 3,&6
4	REPLACE CHAIN ATTACHMENT FENDER PAD EYES	EA	1	SHEET G5 DET 7,&8
5	REPLACE CHAIN ATTACHMENT DOCK PAD EYES	EA	12	SHEET G5 DET 7,&8
6	REPLACE CHAIN, CHAIN ADJUSTERS AND SHACKLES	EA	12	SHEET G5 DET 7 01
7	INSTALL ENERGY ABSORBERS AND ANCHOR BOLTS WITH ACRYLIC ADHESIVE	EA	12	SHEET G5,G6,G7,G8
7A	INSTALL MARINE FENDER ATTACHMENT PLATE	EA	6	SHEET G6 DET 3 01
8	TRANSITION PLATES	EA	6	SHEET G5 DET 2,4,&5 02
9	REPAIR 3/4" ELECTRICAL CONDUIT & 10 AWG WIRE	LUMP SUM	ALL REQUIRED	SHEET G6 DET 5



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City of Homer
 HOMER PIONEER DOCK
 FENDER REPAIRS

No.	Description	Date
01	ADDENDUM	1/19/23
02	ADDENDUM	2/14/23

Drawn By: JMC Checked By: DRP

Date: FEBRUARY 14, 2023

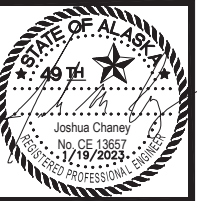
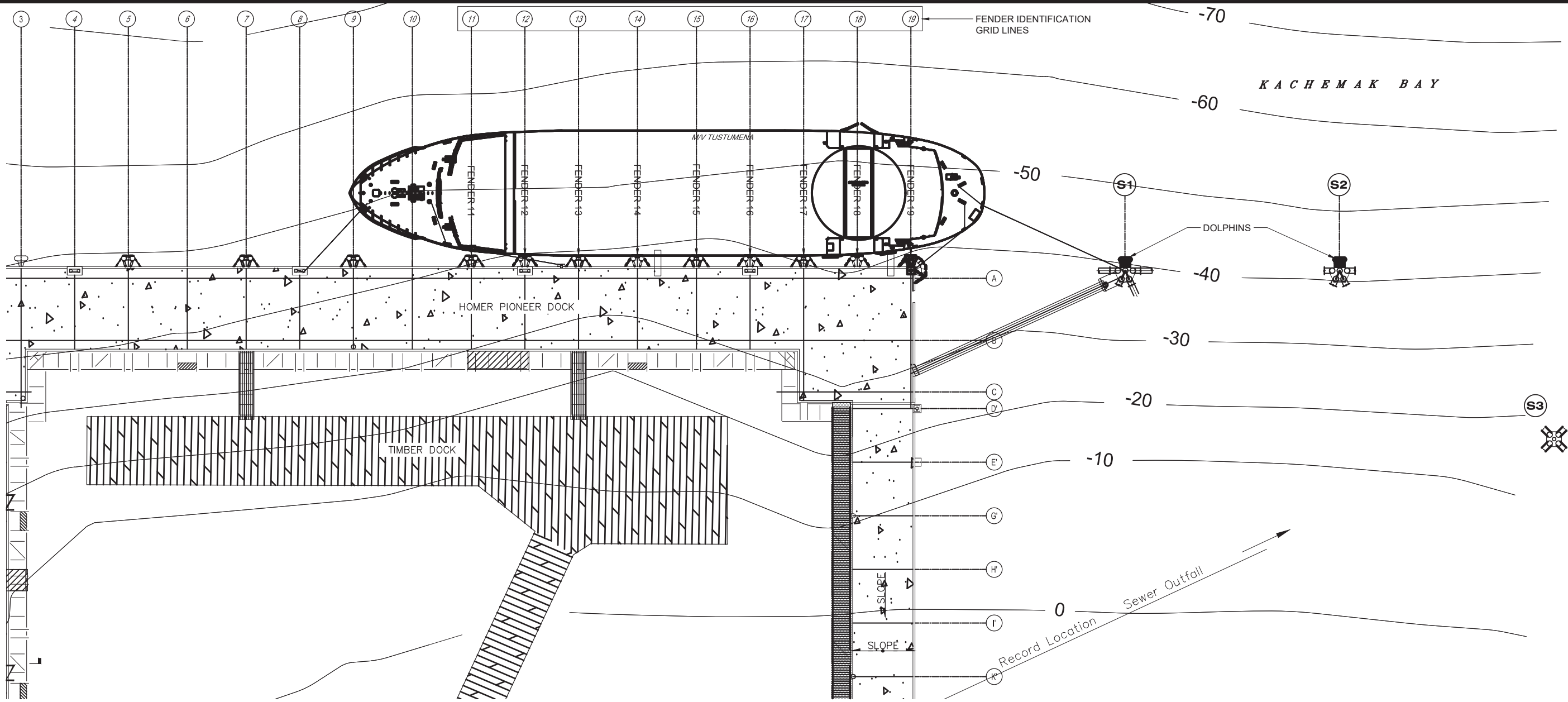
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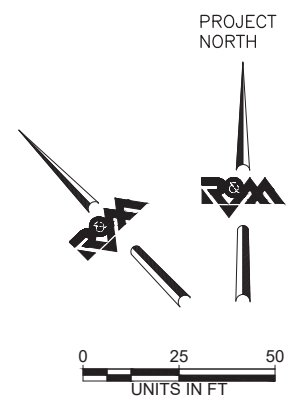
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City of Homer
**HOMER PIONEER DOCK
 FENDER REPAIRS**



- LEGEND**
- (A) PILE ROW
 - (16) PILE COLUMN

No.	Description	Date
01	ADDENDUM	1/19/23
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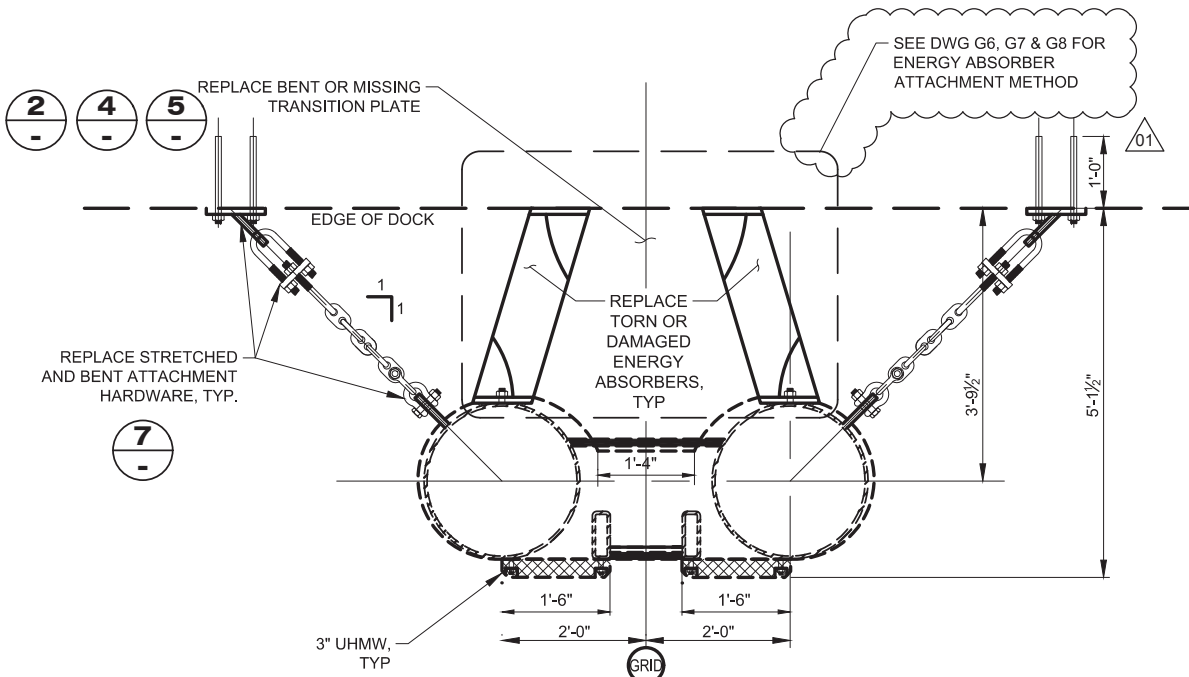
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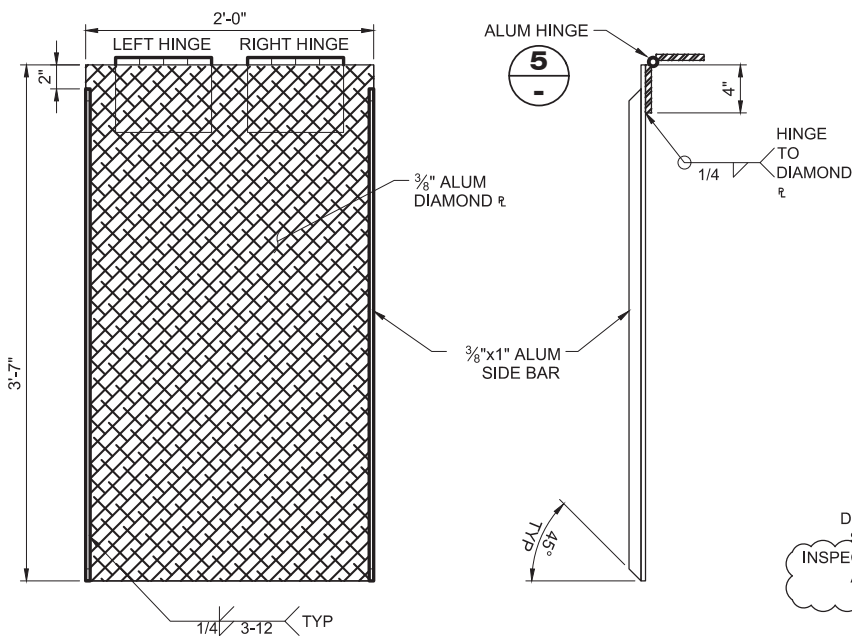
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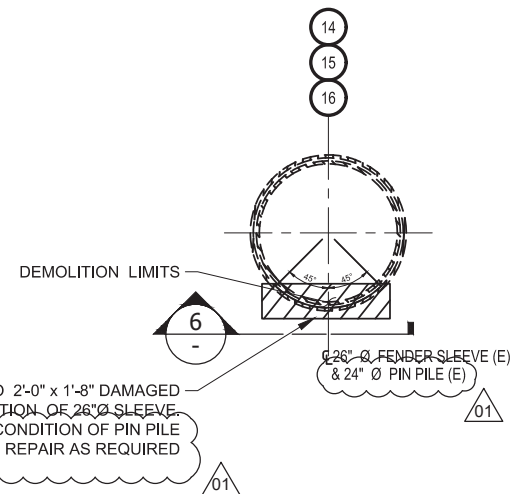
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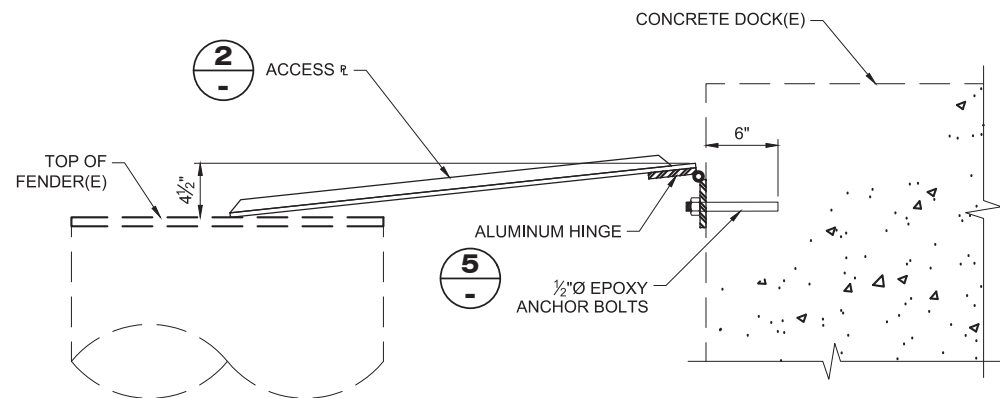
1 TOP PLAN
Scale: NTS



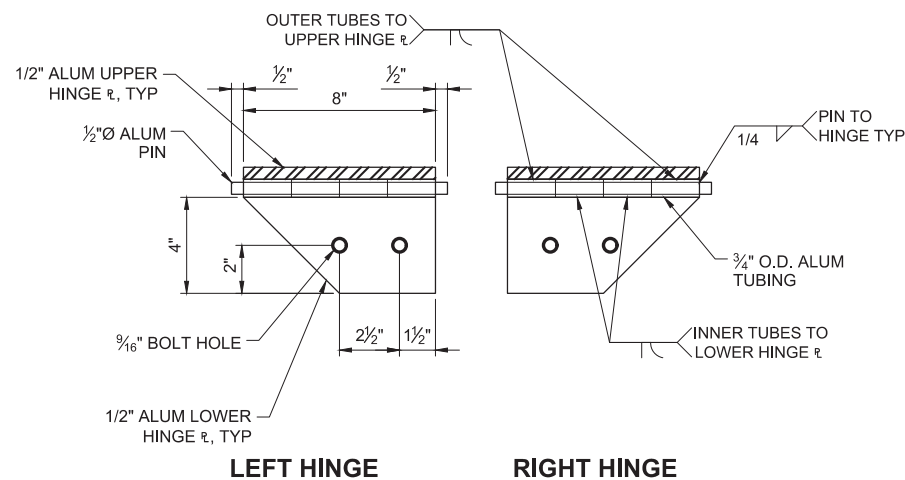
2 TRANSITION PLATE DETAIL
Scale: NTS



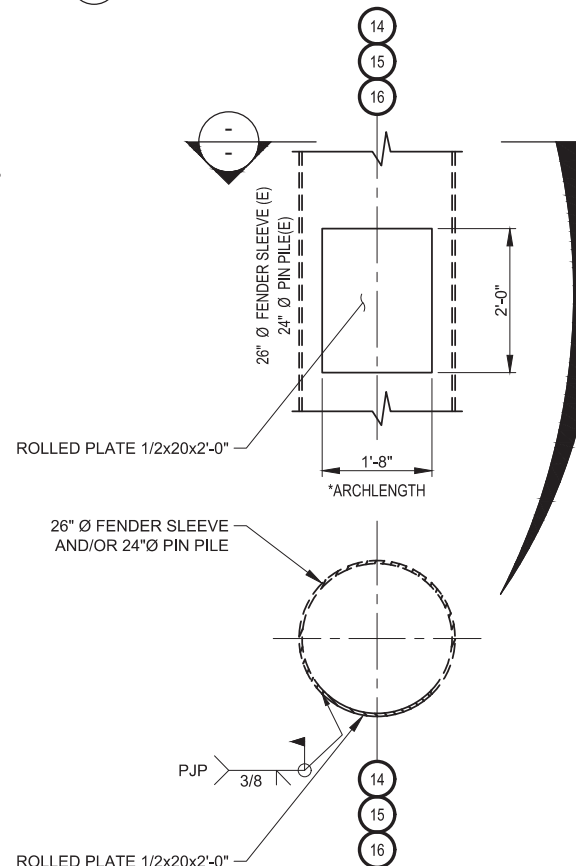
3 FENDER SLEEVE/ PIN PILE DEMO PLAN
Scale: NTS



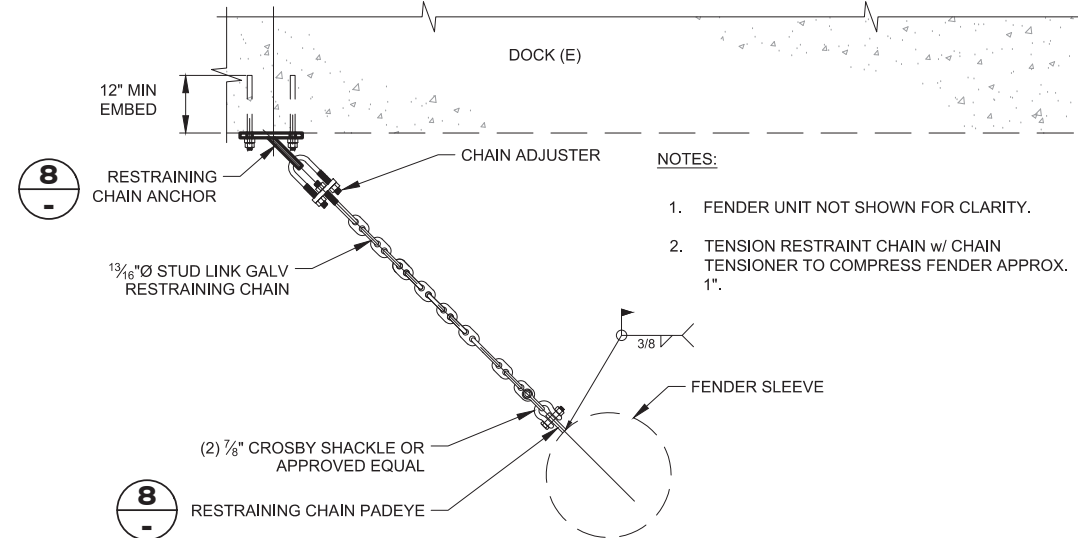
4 TRANSITION PLATE DETAIL
Scale: NTS



5 TRANSITION PLATE HINGE DETAIL
Scale: NTS

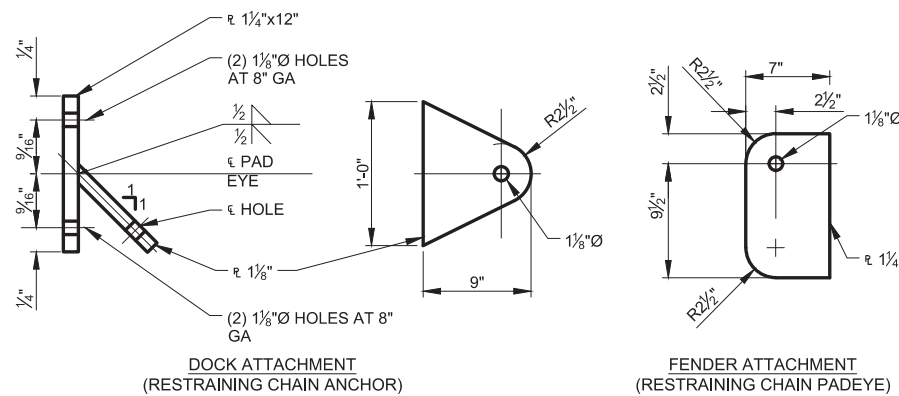


6 FENDER SLEEVE/ PIN PILE REPAIR
Scale: NTS

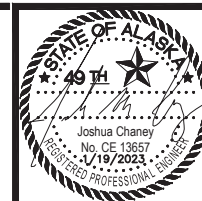


7 RESTRAINING CHAIN PLAN
Scale: NTS

- NOTES:
- FENDER UNIT NOT SHOWN FOR CLARITY.
 - TENSION RESTRAINT CHAIN w/ CHAIN TENSIONER TO COMPRESS FENDER APPROX. 1".



8 CHAIN STOP ATTACHMENTS
Scale: NTS



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City of Homer
HOMER PIONEER DOCK FENDER REPAIRS

No.	Description	Date
01	ADDENDUM	1/19/23
02	ADDENDUM	2/14/23

Drawn By: JMC Checked By: DRP

Date: FEBRUARY 14, 2023

Project No: 3002.02

SHEET TITLE: DOCK FENDER DETAILS

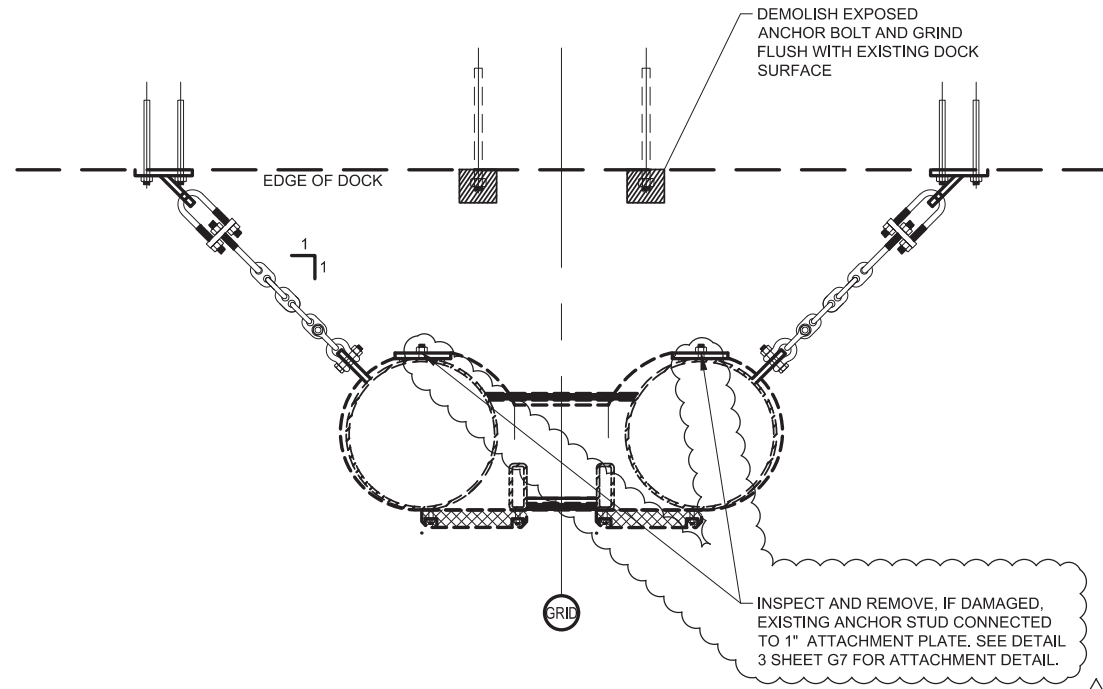
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SHEET TITLE: DOCK FENDER DETAILS

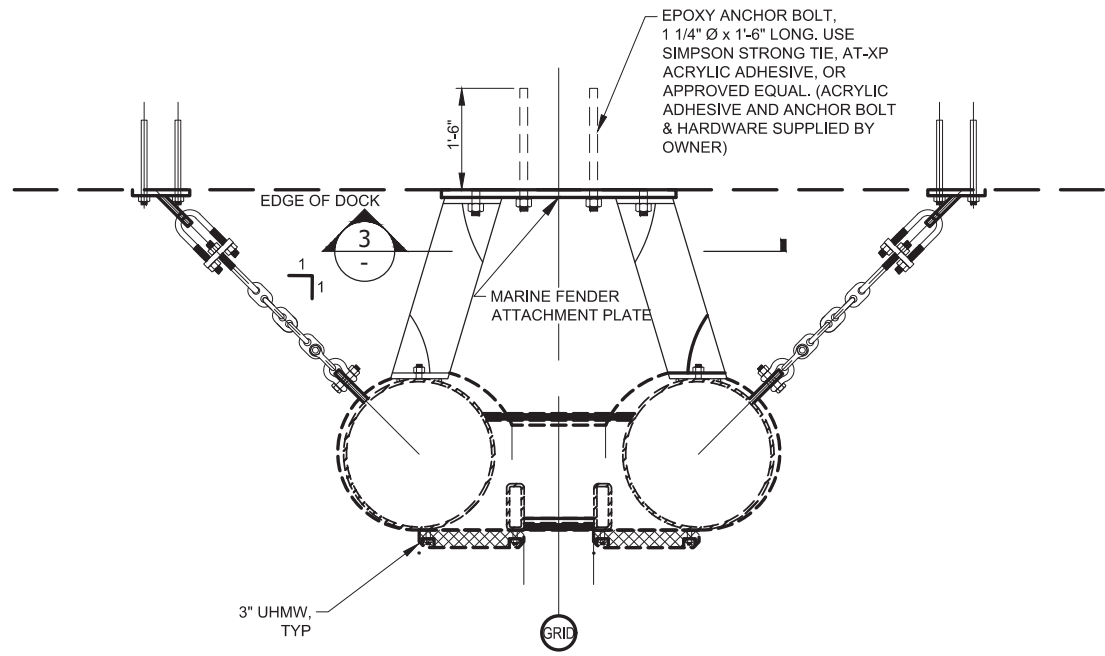
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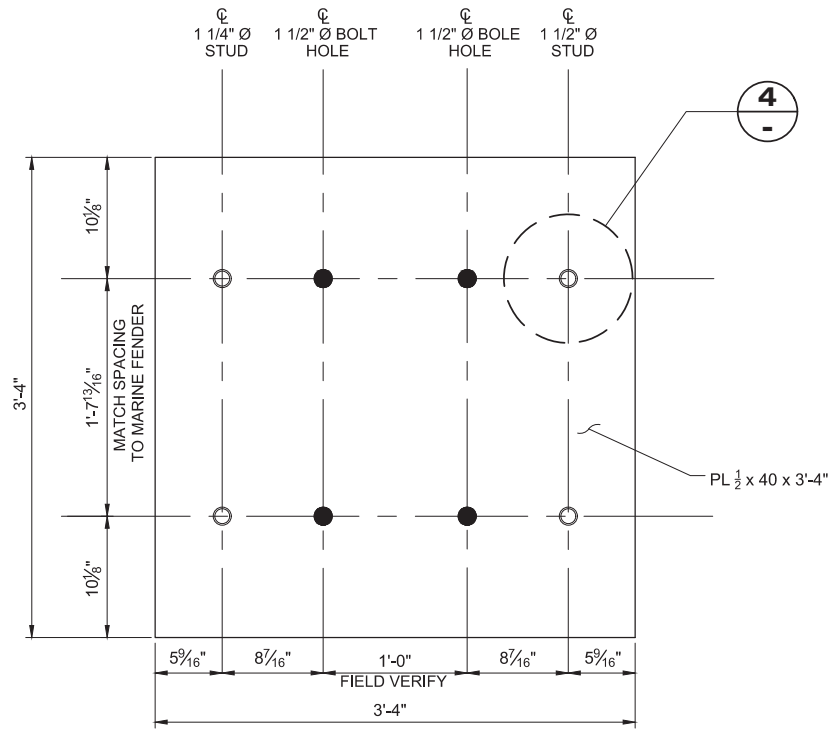
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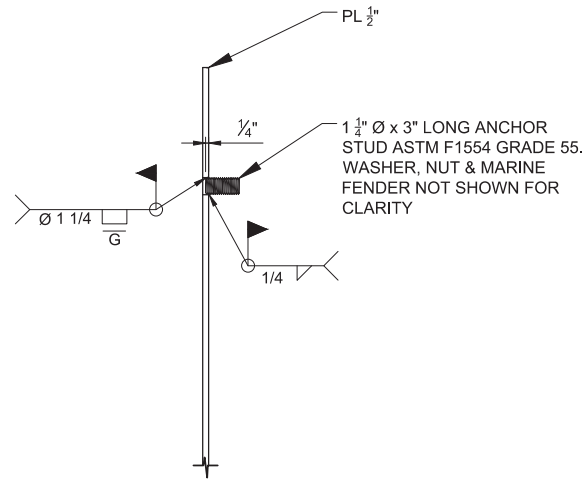
1 TOP PLAN DEMOLITION
Scale: NTS



2 TOP PLAN INSTALLATION
Scale: NTS



3 MARINE FENDER ATTACHMENT PLATE
Scale: NTS

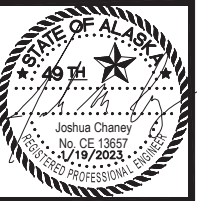


4 MARINE FENDER STUD
Scale: NTS

DEMOLITION AND INSTALLATION NOTES

1. DEMOLISH EXISTING ANCHOR BOLTS PROTRUDING FROM EDGE OF DOCK, PER DETAIL 1. GRIND FLUSH TO SMOOTH SURFACE TO ALLOW FOR INSTALLATION OF MARINE FENDER ATTACHMENT PLATE.
2. INSPECT AND REMOVE, IF DAMAGED, EXISTING ANCHOR STUD CONNECTED TO FENDER PILE SLEEVE. SEE DETAIL 3 SHEET G7 FOR ANCHOR STUD WELDING DETAIL.
3. FIELD VERIFY ALL DIMENSIONS BEFORE DRILLING 1 1/4" Ø AND 1 1/2" Ø HOLES INTO 3'-4" x 3'-4" MARINE FENDER ATTACHMENT PLATE. ADJUST HOLE PLACEMENT TO AVOID CLASHING WITH EXISTING REBAR.
4. INSTALL FOUR (4) ANCHOR STUDS ONTO MARINE FENDER ATTACHMENT PLATE. USE PLUG WELD PER DETAIL 4.
5. ATTACH MARINE FENDER ATTACHMENT PLATE TO EXISTING EDGE OF DOCK. USE OWNER SUPPLIED 1 1/4" Ø EPOXY ANCHOR BOLTS, NUTS & WASHERS.
6. INSTALL OWNER SUPPLIED MARINE FENDER.

ATTACHMENT METHOD A - DOCK PLATE



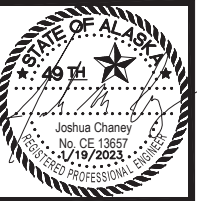
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City of Homer
**HOMER PIONEER DOCK
FENDER REPAIRS**

No.	Description	Date
01	ADDENDUM	1/19/23
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Drawn By: JMC
Checked By: DRP
Date: FEBRUARY 14, 2023
Project No: 3002.02
Sheet Title: DOCK FENDER ATTACHMENT METHOD A - DOCK PLATE DETAILS

SHEET NO:



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City of Homer
 HOMER PIONEER DOCK
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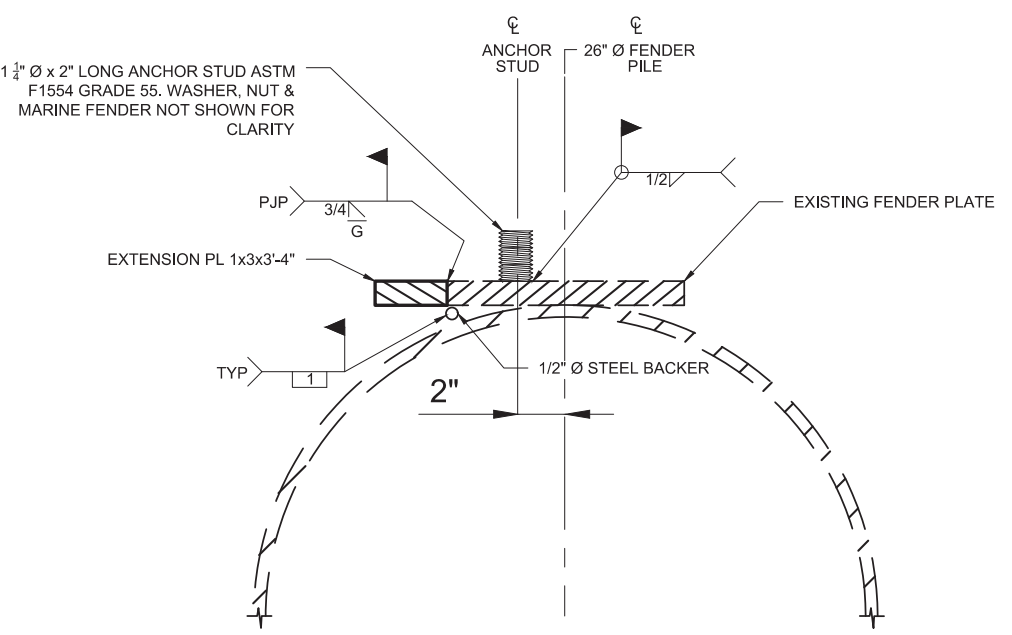
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Project No: 3002.02
 SHEET TITLE: DOCK FENDER ATTACHMENT METHOD B - FENDER PLATE DETAILS

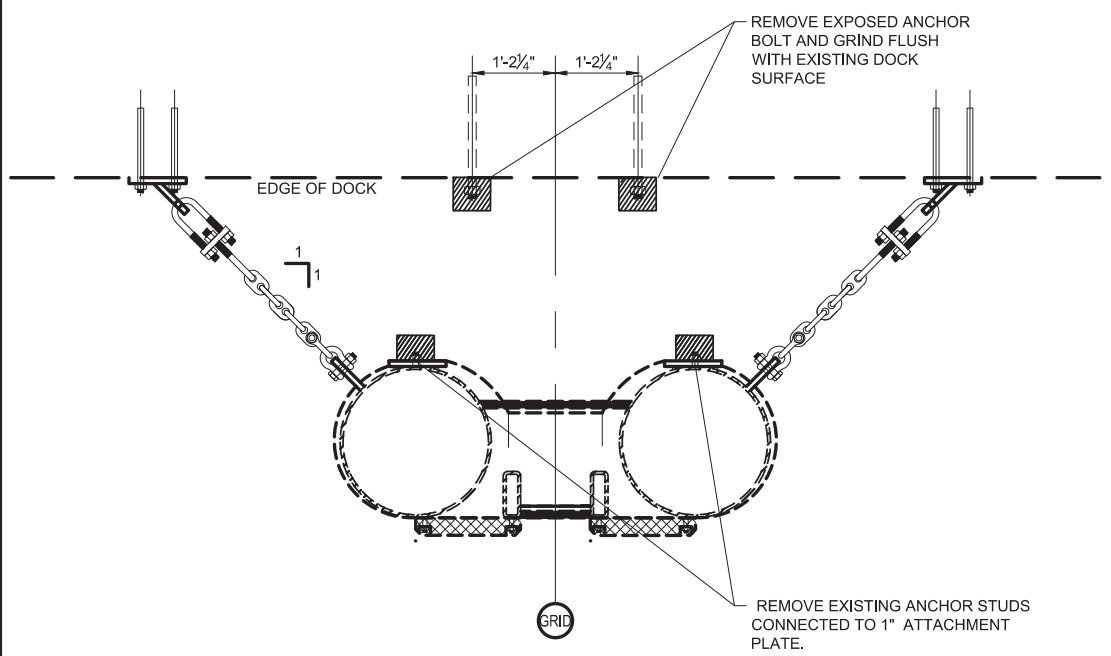
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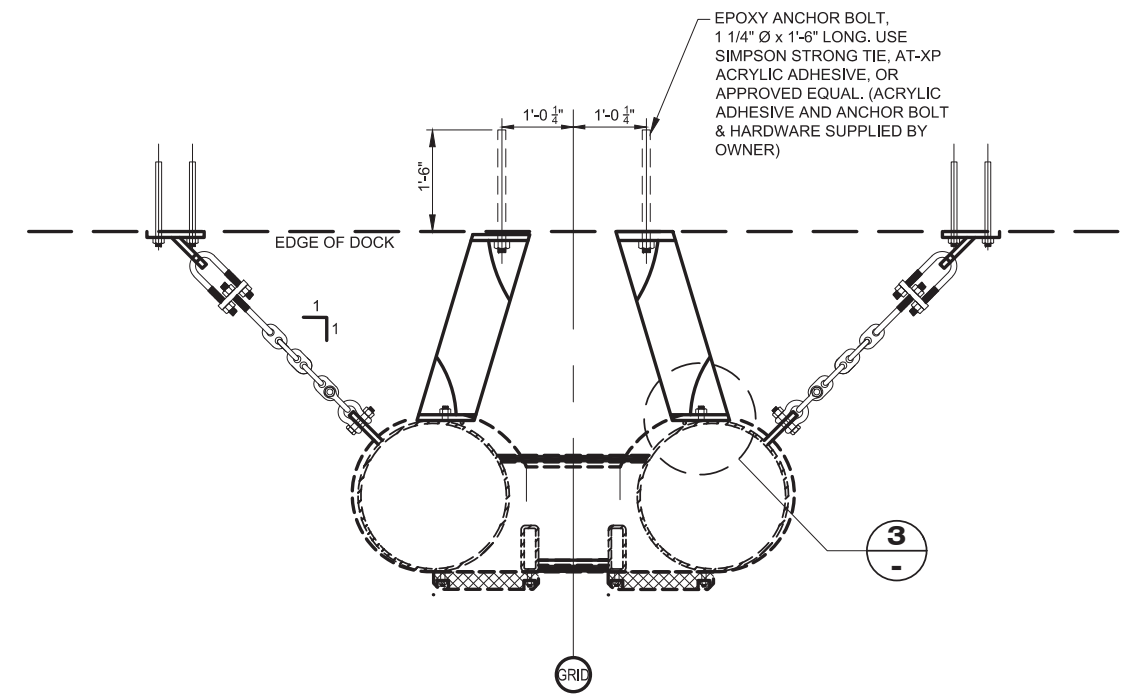


3 MARINE FENDER EXTENSION PLATE
 Scale: NTS

1 1/4" Ø x 2" LONG ANCHOR STUD ASTM F1554 GRADE 55. WASHER, NUT & MARINE FENDER NOT SHOWN FOR CLARITY



1 TOP PLAN DEMOLITION
 Scale: NTS



2 TOP PLAN INSTALLATION
 Scale: NTS

EPOXY ANCHOR BOLT, 1 1/4" Ø x 1'-6" LONG. USE SIMPSON STRONG TIE, AT-XP ACRYLIC ADHESIVE, OR APPROVED EQUAL. (ACRYLIC ADHESIVE AND ANCHOR BOLT & HARDWARE SUPPLIED BY OWNER)

ATTACHMENT METHOD B - FENDER PLATE

DEMOLITION AND INSTALLATION NOTES

1. DEMOLISH SECTION OF EXISTING ANCHOR BOLTS PROTRUDING FROM EDGE OF DOCK, PER DETAIL 1.
2. DEMOLISH, EXISTING ANCHOR STUDS FROM 1" ATTACHMENT PLATE CONNECTED TO EXISTING FENDER SLEEVE.
3. INSTALL TWO (2) ANCHOR STUDS AND 1" EXTENSION PLATE PER PILE. ANCHOR STUDS ARE TO MOVE 2" HORIZONTALLY INBOARD (TOWARDS GRIDLINE) FROM PREVIOUS ANCHOR STUD LOCATION. MATCH ANCHOR STUDS TO MARINE FENDER HOLE PATTERN.
4. INSTALL MARINE FENDER ATTACHMENT PLATE AND OWNER SUPPLIED 1 1/4" Ø ANCHOR BOLTS 2" HORIZONTALLY INBOARD (TOWARDS GRIDLINE) FROM PREVIOUS LOCATION OF EXISTING ATTACHMENT PLATES AND ANCHOR BOLTS.
5. INSTALL OWNER SUPPLIED MARINE FENDER.

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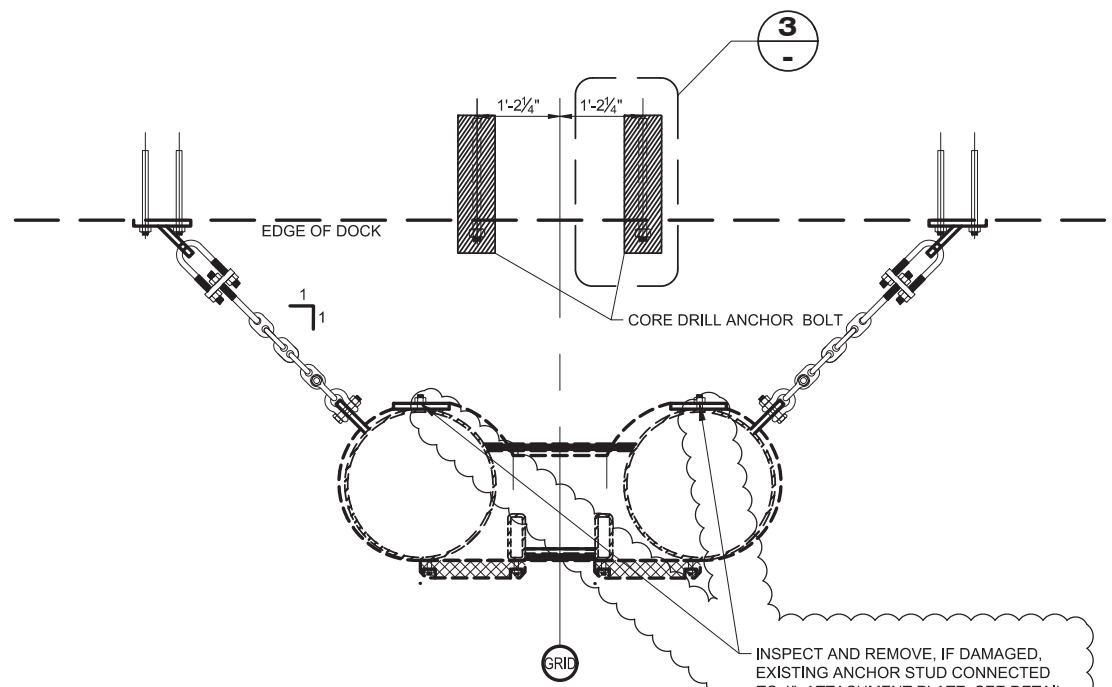
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City of Homer
**HOMER PIONEER DOCK
 FENDER REPAIRS**

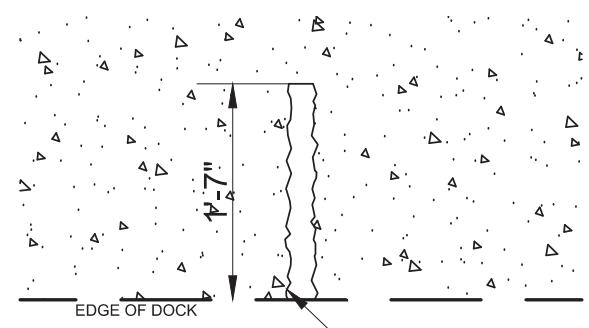
No.	Description	Date
01	ADDENDUM	1/19/23
02	ADDENDUM	2/14/23

Drawn By	JMC	Checked By	DRP
Date	FEBRUARY 14, 2023		
Project No.	3002.02		
SHEET TITLE	DOCK FENDER ATTACHMENT METHOD C - REPLACEMENT STUD DETAILS		
SHEET NO.			

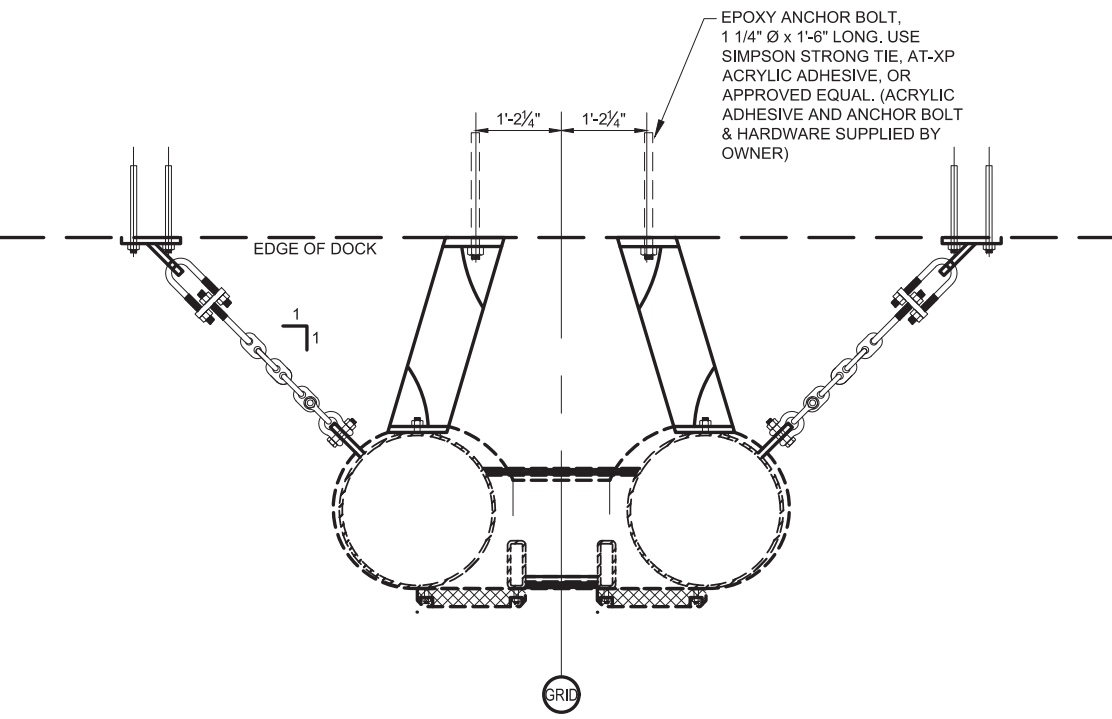
G8



1 TOP PLAN DEMOLITION
 Scale: NTS



3 CORE DRILLED HOLE TYP
 Scale: NTS



2 TOP PLAN INSTALLATION
 Scale: NTS

ATTACHMENT METHOD C - REPLACEMENT STUD

DEMOLITION AND INSTALLATION NOTES

1. INSPECT AND REMOVE, IF DAMAGED, EXISTING ANCHOR STUD CONNECTED TO FENDER PILE SLEEVE. SEE DETAIL 3 SHEET G7 FOR ANCHOR STUD WELDING DETAIL.
2. DEMOLISH VIA CORE DRILLING (MIN 2" DIA CORE DRILLING BIT) EXISTING 1 1/4" Ø ANCHOR BOLTS, PER DETAIL 1.
3. ROUGHEN INTERIOR CORE OF NEWLY DRILLED CORE.
4. BACKFILL ROUGHENED SURFACE CORE DRILLED HOLE WITH 4000 PSI CONCRETE. ALLOW CONCRETE TO CURE TO 70% STRENGTH BEFORE ANCHOR BOLT INSTALLATION.
5. INSTALL OWNER SUPPLIED 1 1/4" Ø EPOXY ANCHOR BOLTS.
6. INSTALL OWNER SUPPLIED MARINE FENDER AND ANCHOR NUTS & WASHERS.
7. METHOD OF ATTACHMENT NOT VIABLE AT GRIDLINES 15, 17 & 19.

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Plotted 2/14/2023 10:45 AM by Joshua Chaney

01

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Plotted 2/14/2023 10:44 AM by Joshua Chaney



1 TYPICAL FENDER DAMAGE



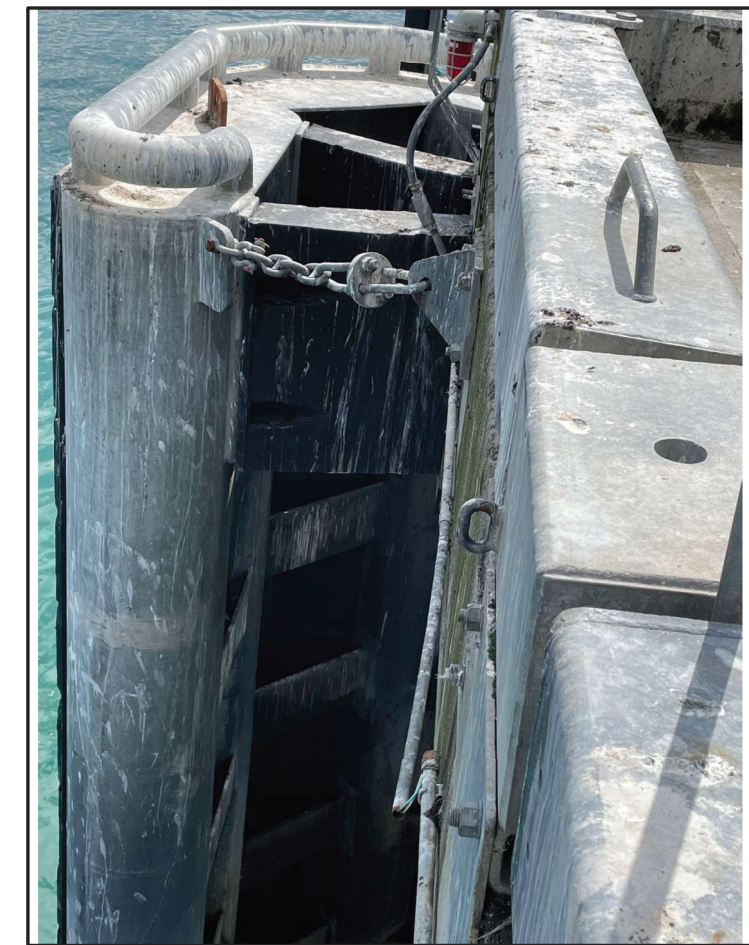
2 TYPICAL ATTACHMENT HARDWARE DAMAGE



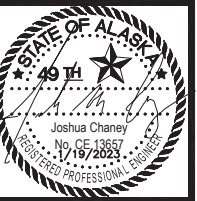
3 SOUTH SLEEVE DAMAGE TO FENDER 14



4 SOUTH SLEEVE DAMAGE TO FENDER 15



5 DAMAGED CONDUIT FENDER 19



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City of Homer
**HOMER PIONEER DOCK
 FENDER REPAIRS**

No.	Description	Date
01	ADDENDUM	1/19/23
02	ADDENDUM	2/14/23

Drawn By: JMC
 Checked By: DRP

Date: FEBRUARY 14, 2023

Project No: 3002.02

EXISTING CONDITION PHOTOGRAPHS

SHEET NO:

G9