



Port of Juneau

155 S. Seward Street • Juneau, AK 99801
(907) 586-0292 Phone • (907) 586-0295 Fax

From: *Carl Uchytel*
Port Director

To: CBJ Public Works & Facilities Committee

Via: (1) Docks & Harbor Board approved 10/26
(2) Public Works & Engineering Director

Date: October 27th, 2023

Re: CIP Establishment and Funds Transfer to Cruise Ship Dock Safety Railing

Docks & Harbors requests establishing Capital Improvement Project (CIP) and transfer of \$500,000 from the Docks Enterprise Fund Balance to complete a portion of the Cruise Ship Dock Safety Railing project. The Port Engineer estimates that 1300 linear feet of safety rail is needed at a cost of \$2M.

The Board has identified this project as the 3rd highest priority to the CBJ Capital Improvement Program for FY2024-2029. This has also been submitted as a request for Marine Passenger Fees since completion of the new cruise ship berths in 2017. The estimated Docks Enterprise Fund Balance is \$2.3M as of the end of FY23. If the Assembly approves funding, the remaining Docks Fund Balance will be approximately \$1.8M.

The Docks & Harbors Board has identified risk to CBJ by not taking appropriate action as indicated in encl (1) and in [video link](#).

The proposed work will replicate the same design which has already been completed along the Seawalk and would include new bull rail where necessary to provide a clean and professional appearance. The computer aided design (CAD) for the most recent work along the Marine Park Seawalk is provided in encl (3).

Action Requested:

“Move to transfer \$500,000 from the Docks Fund Balance into a CIP for a Cruise Ship Dock Safety Railing for the November 13, 2023 Assembly Meeting.”

#

Encl:

- (1) Memo dated July 27th, 2023
- (2) Photos of current Seawalk
- (3) CAD of proposed safety railing
- (4) Site plan Map



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From: Docks & Harbors Board
To: City & Borough of Juneau Assembly
Date: July 27th, 2023
Re: Downtown Safety Railings

The Docks & Harbors Board is concerned that CBJ is exposed to unnecessary risks due to the Seawalk not fitted with safety railings from the CT Dock to Marine Park. Prior to construction of the new cruise ship berths in 2017, the face of the dock was a working waterfront in which vessels moored tightly to the bollards along the Seawalk. This created an impractical situation to install and maintain guard/safety railings. With the new pontoon float design and the vessels moved well-off the timber wharf, there is no justification to leave the Seawalk unprotected from potential pedestrian falls of 30+ feet into Juneau Harbor.

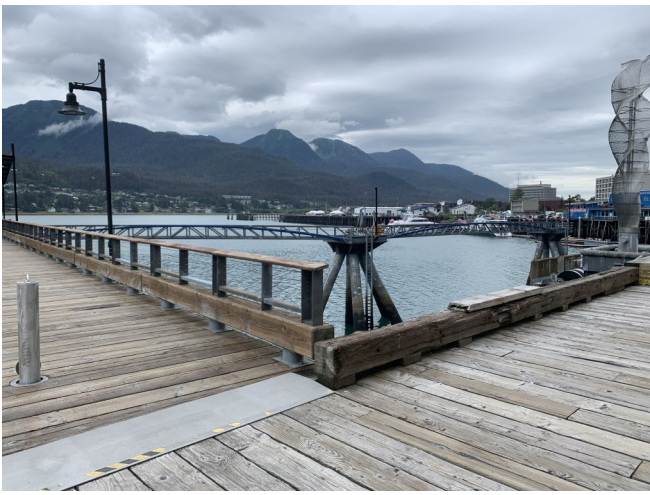
Since the completion of the new cruise ship berths, Docks & Harbors has submitted annual Marine Passenger Fee requests for safety railing as a need along the downtown waterfront. As we experience more cruise passengers with greater concentration along the Seawalk, Board members are becoming more apprehensive that this is an exposure which should be mitigated soonest. There is also bona fide need to protect Juneauites who frequent the docks at all hours and during the off-season when weather is less forgiving.

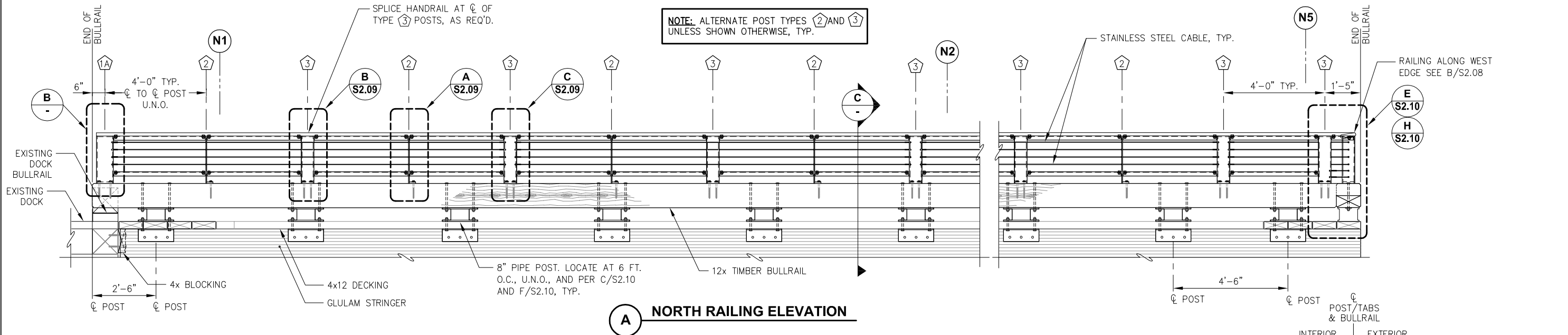
The Board understands a desire to maintain the historic aesthetics of the existing bull rail. However, we encourage examination of the newly constructed safety rails near Marine Park and consider that guardrails provide a good public safety benefit (particularly for elderly and mentally impaired). This design adds a visually pleasant safety element that functionally allows visitors to lean on the top rail and watch the active waterfront. Docks & Harbors staff estimates that 1300 linear feet of safety rail is needed at a cost of \$2M. The Board is contemplating directing staff to execute \$500K of Dock Enterprise Fund Balance to construct a phase prior to the CY24 cruise ship season.

This photo was taken on July 3rd. A member of the public attempted to awake this individual, then notifications were made to the Port Staff, JPD and CCFR. The individual was eventually assisted by CARES.









A NORTH RAILING ELEVATION

- RAILING NOTES:**
1. TOP AND BOTTOM BENT PLATES BOLTED CONNECTIONS MUST BE INSTALLED PRIOR TO CABLE INSTALLATION AND TIGHTENING.
 2. ALL WELDS SHALL BE GROUND SMOOTH AND ALL METAL EDGES DEBURRED AND LIGHTLY ROUNDED PRIOR TO GALVANIZING.
 3. TREAT TIMBER FIELD CUTS PER SPECIFICATIONS. ALL CUT OR FIELD WELDED GALV. MEMBERS SHALL BE GALV. REPAIRED PER SPECIFICATIONS.
 4. LOCATION OF TURNBUCKLES FOR ILLUSTRATION PURPOSES ONLY. COORDINATE ACTUAL LOCATIONS PER CABLE MANUFACTURERS RECOMMENDATIONS.
 5. TIGHTEN STAINLESS STEEL CABLE AS NECESSARY TO ALLEVIATE SAGGING PER MANUFACTURES RECOMMENDATIONS.

RAILING POST SCHEDULE

| TYPE | TAB & HOLE LOCATIONS | NOTES |
|------|----------------------|---|
| ①A | RIGHT SIDE ONLY | CABLE PENETRATE RIGHT SIDE WITH TURNBUCKLES SEE DETAIL B/S2.07 |
| ①B | LEFT SIDE ONLY | CABLE PENETRATE LEFT SIDE WITH TURNBUCKLES SEE DETAIL B/S2.07 SIM. |
| ② | BOTH SIDES | CABLE PENETRATE BOTH SIDE NO TURNBUCKLES, SEE DETAIL A/S2.09 |
| ③ | BOTH SIDES | CABLE PENETRATE BOTH SIDES, TURNBUCKLES AS NOTED IN GUARD RAIL NOTES, SEE DETAILS B&C/S2.09 |

B RAILING POST TYPE ①A ELEVATION ①B (OPP HAND)

C TYPICAL POST SECTION

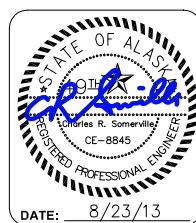


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9360 Glacier Highway, Ste. 100
Juneau, Alaska 99801
Phone: 907-586-2093
Fax: 907-586-2099
www.pndengineers.com

DESIGN: MDS CHECKED: JLD SCALE: AS SHOWN

DRAWN: WRB APPROVED: CRS

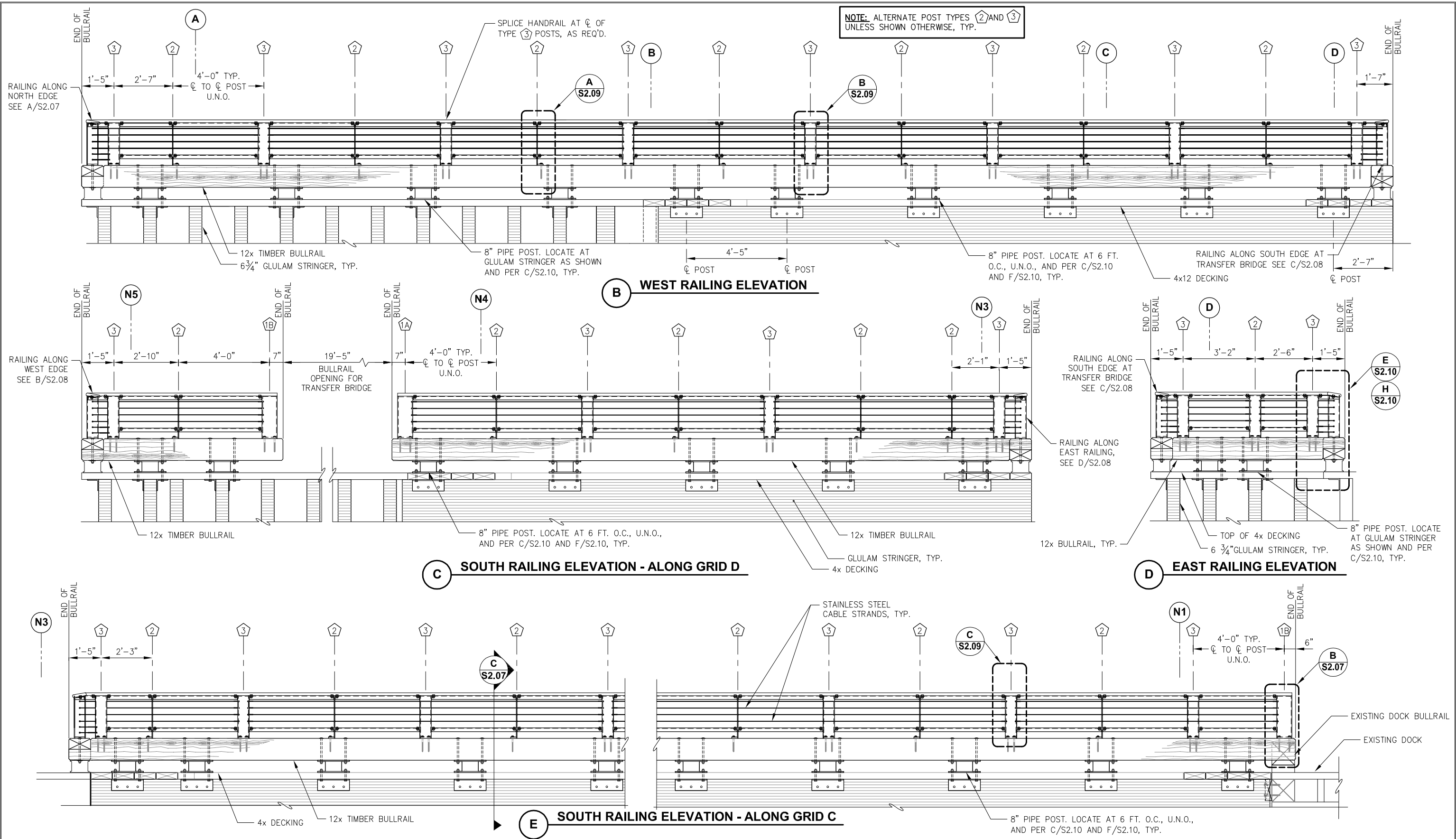


PORT OF JUNEAU CRUISE SHIP BERTHS
CONTRACT NO. DH12-001

SHEET TITLE:
NORTH BERTH APPROACH DOCK RAILING ELEVATIONS AND DETAILS

PN&D PROJECT NO.: 102050.04 DWG. FILE: -----DWG

S2.07
SHEET
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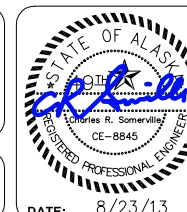
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DRAWN: WRB APPROVED: CRS

SCALE:
AS SHOWN

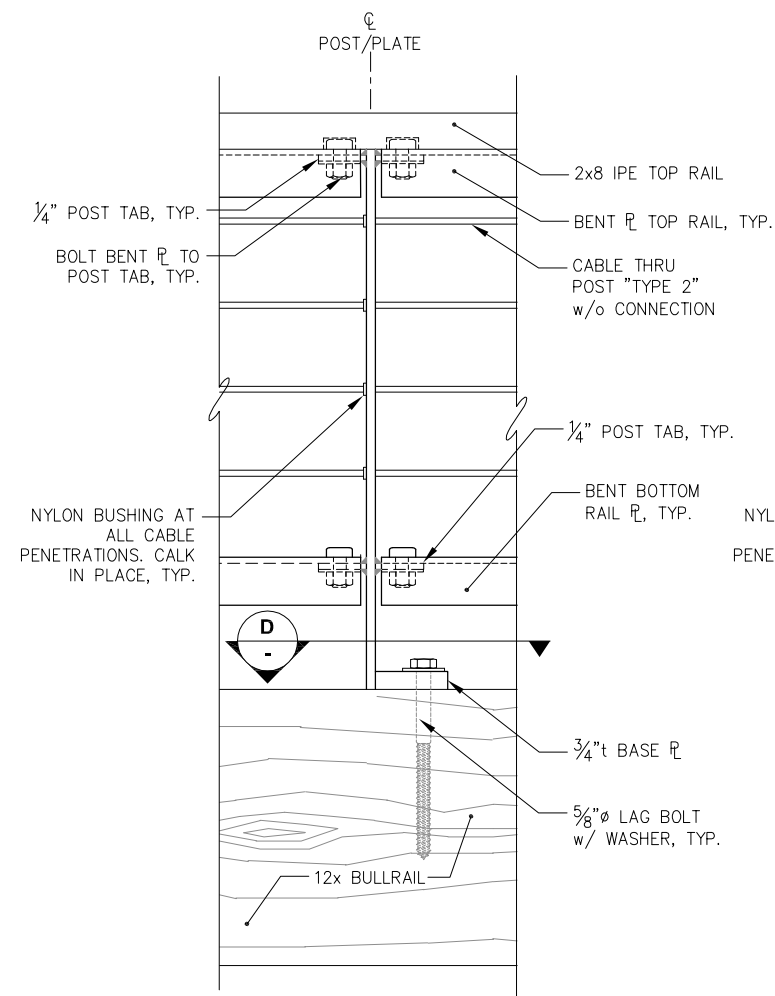


**PORT OF JUNEAU
CRUISE SHIP BERTHS
CONTRACT NO. DH12-001**

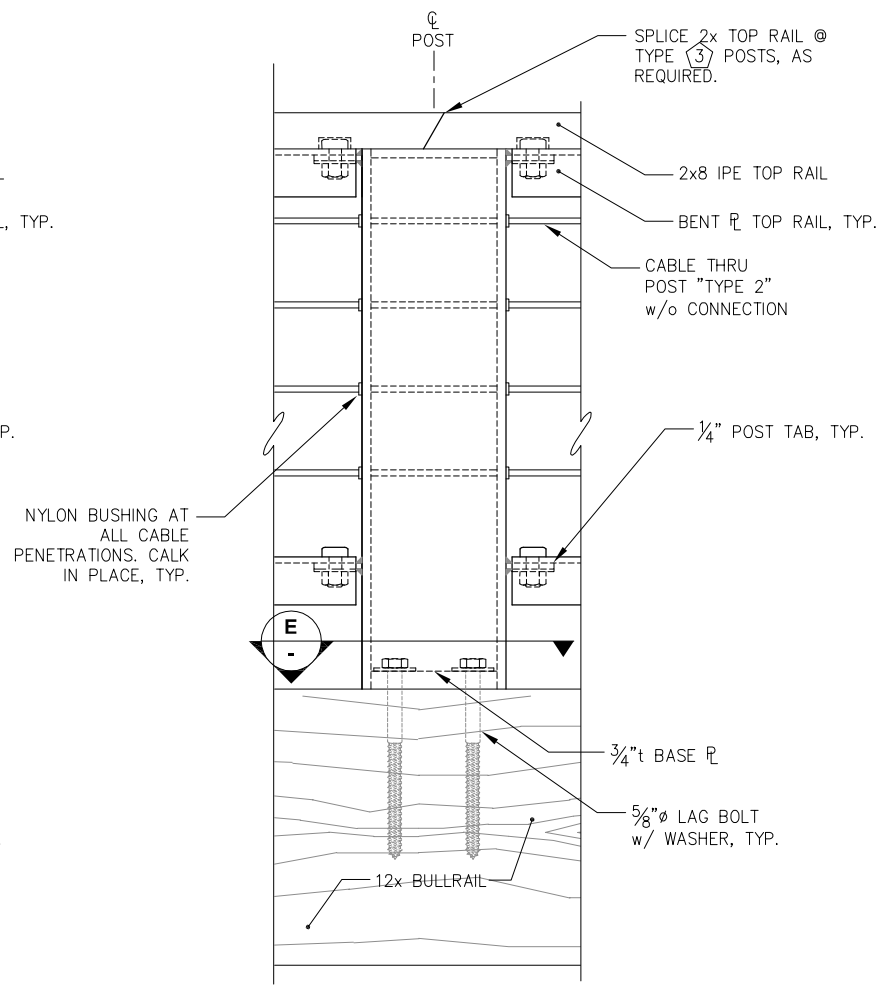
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**NORTH BERTH APPROACH DOCK
RAILING ELEVATIONS**

PN&D PROJECT NO.: 102050.04 DWG. FILE: ----.DWG

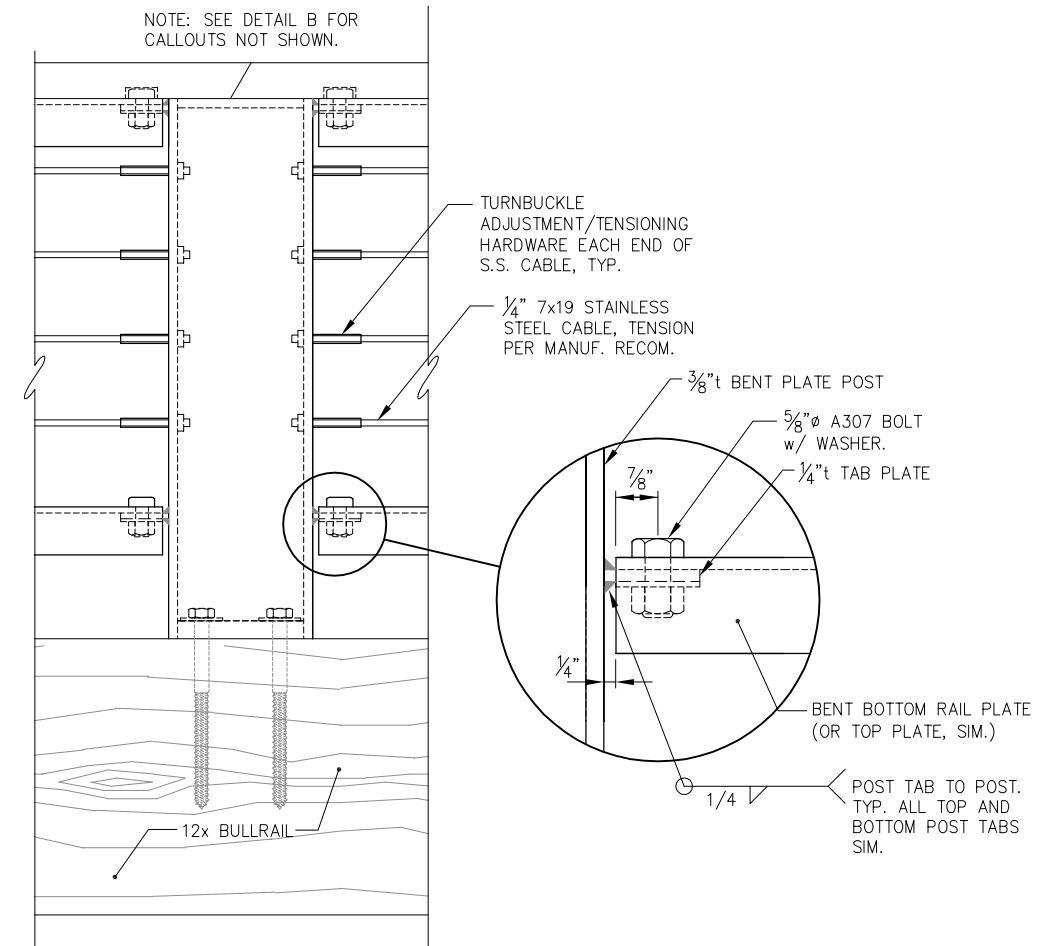
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26 OF 124



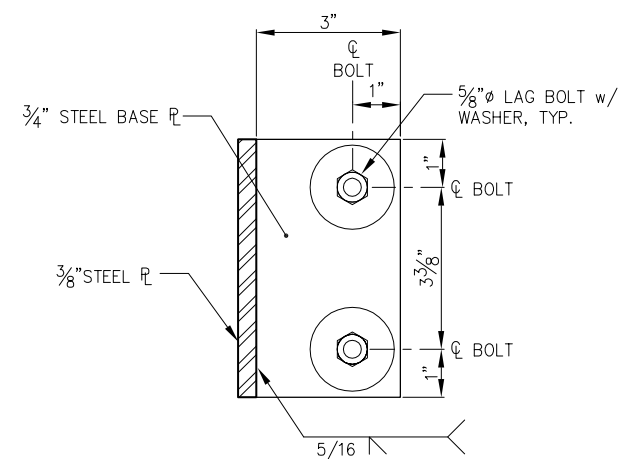
A STANDARD RAILING POST TYPE 2 ELEVATION



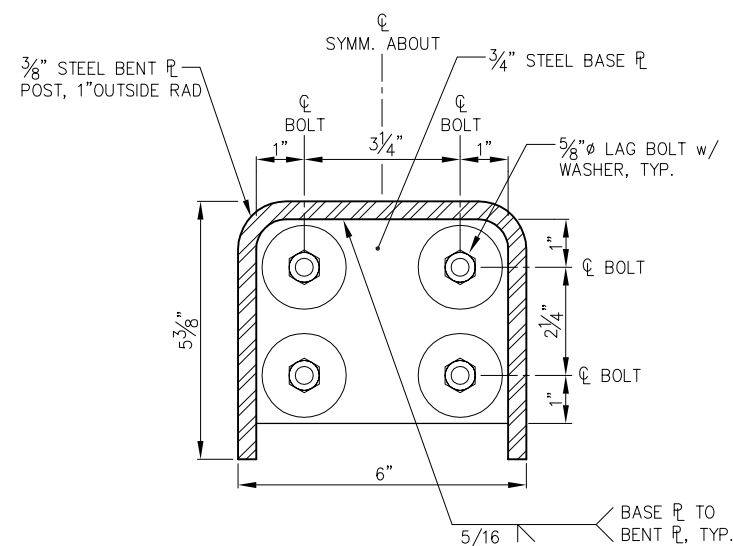
B POST TYPE 3 w/o TURNBUCKLES ELEVATION



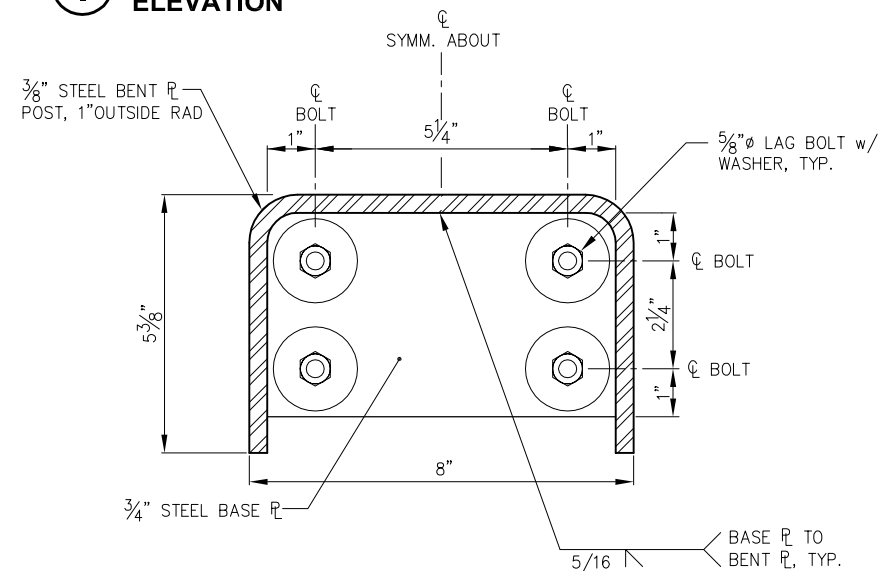
C POST TYPE 3 w/ TURNBUCKLES ELEVATION



D POST BASE PLATE TYPE 2



E POST BASE PLATE TYPE 3



F POST BASE PLATE TYPE 1A & 1B



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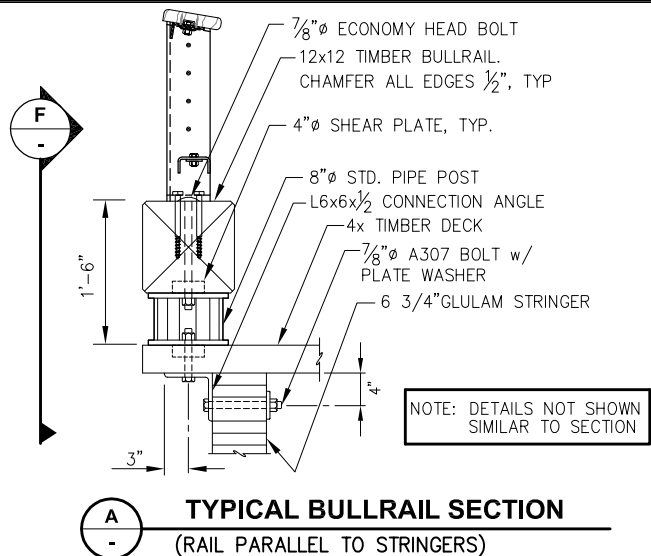
DATE: 8/23/13

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CRUISE SHIP BERTHS
CONTRACT NO. DH12-001

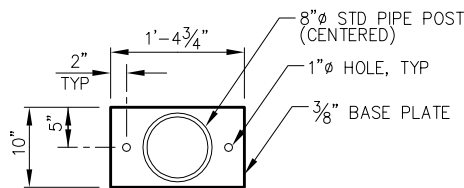
SHEET TITLE:
TYPICAL RAILING POST DETAILS

PN&D PROJECT NO.: 102050.04 DWG. FILE: -----DWG

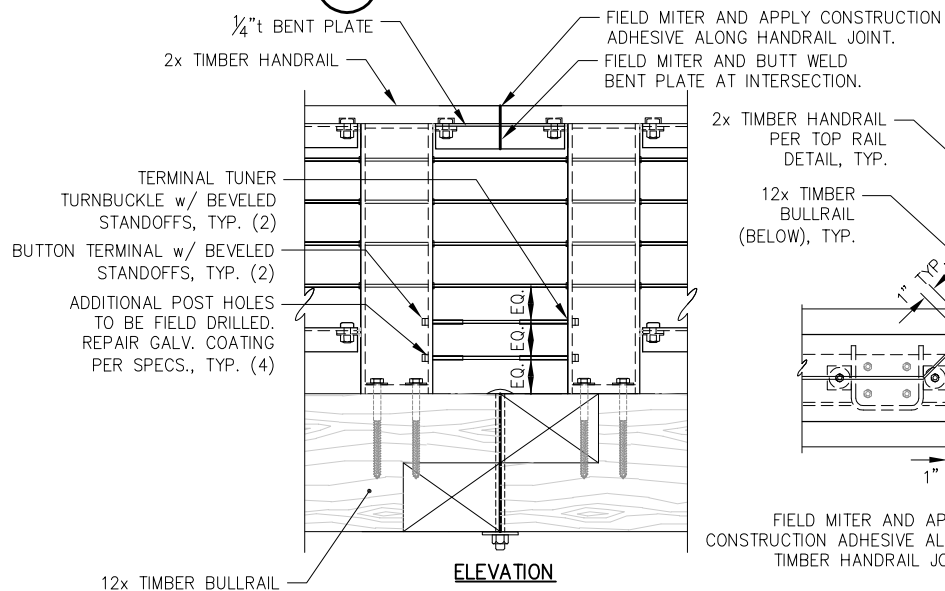
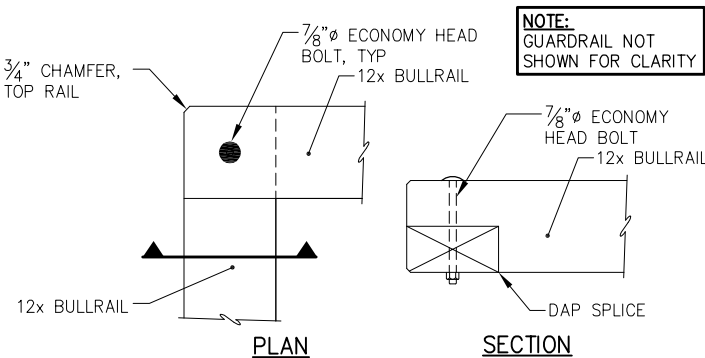
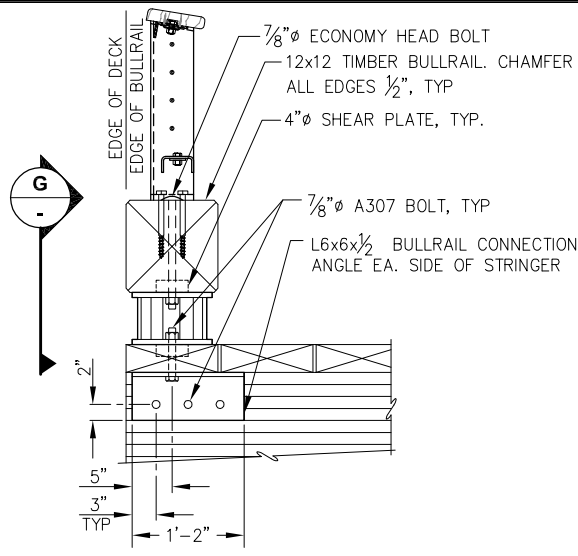
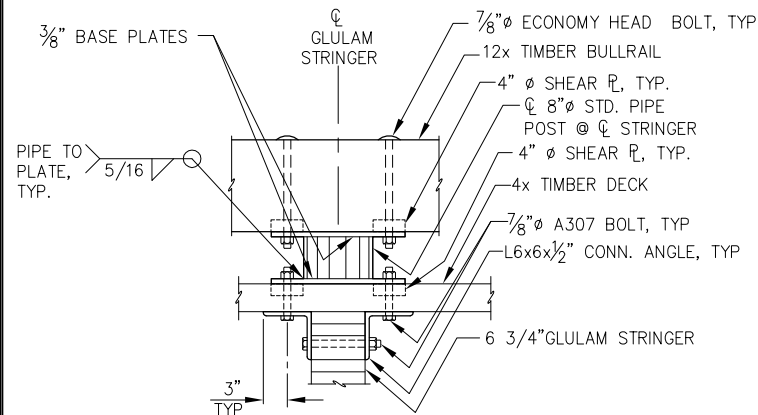
S2.09
SHEET
27 OF 124



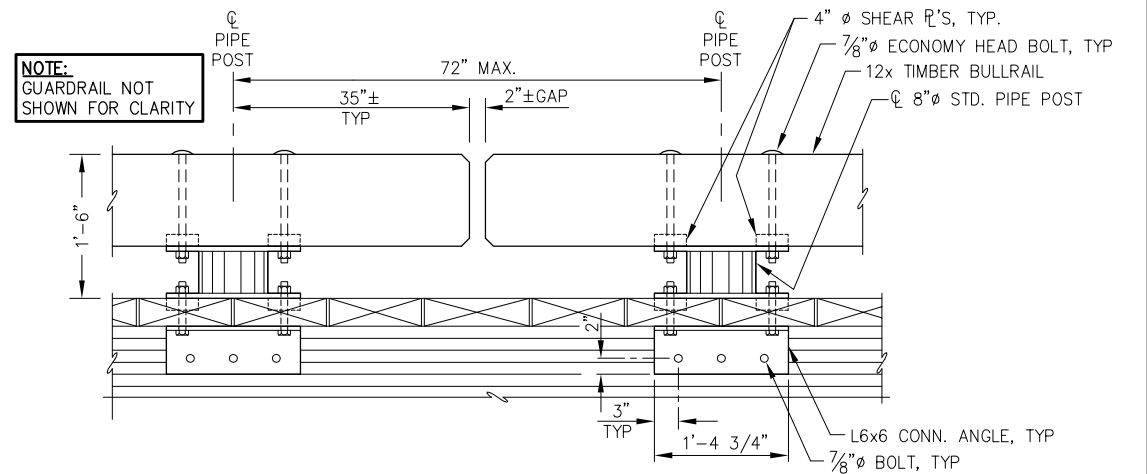
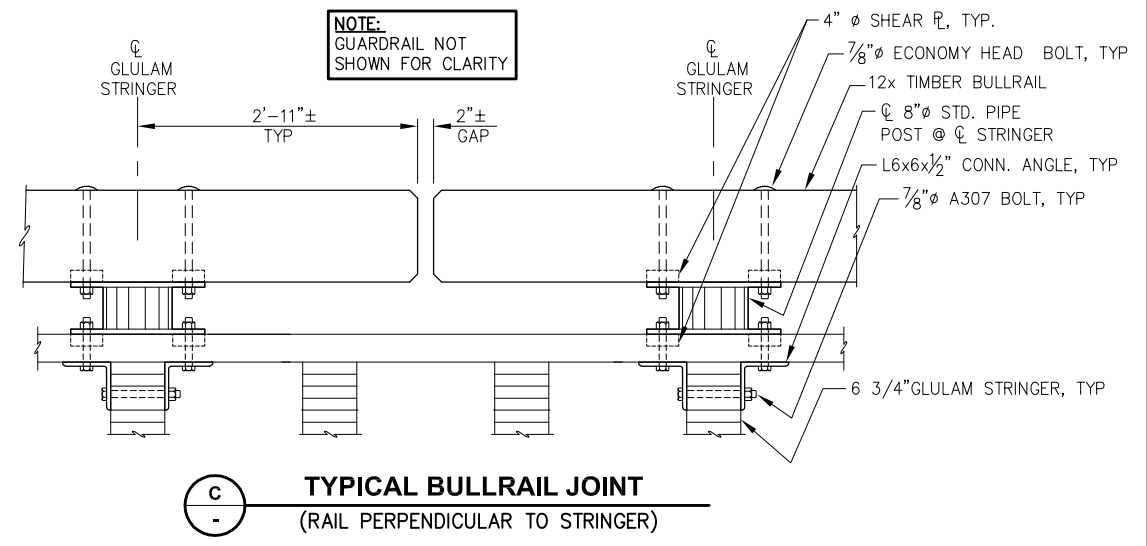
NOTE: ALL BULLRAIL CONNECTION BOLTS SHALL BE 7/8" Ø UNLESS OTHERWISE NOTED.



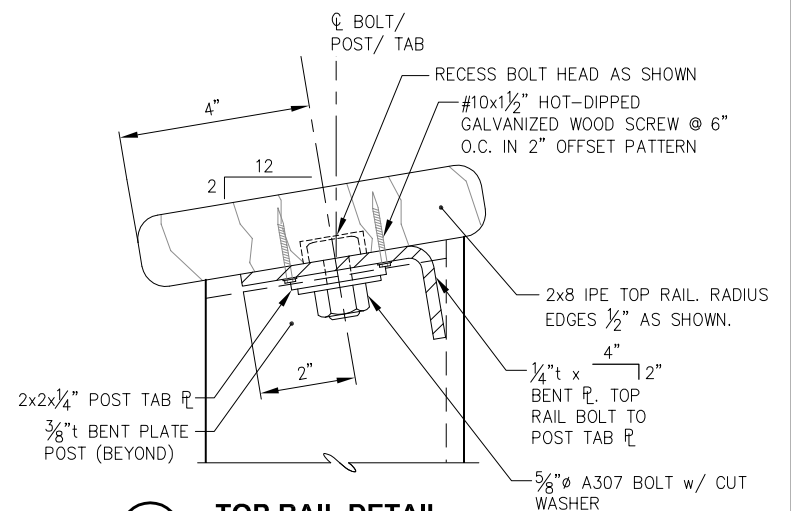
NOTE: PROVIDE AT 6-FT O.C. MAX AND 2-FT MAX FROM BULLRAIL ENDS. MIN. 2 POST BASE PER 12x12 PIECE.



NOTE: OUTSIDE CORNER DETAIL SHOWN; INSIDE CORNER DETAIL SIMILAR.



NOTE: DETAILS NOT SHOWN SIMILAR TO DETAIL B.



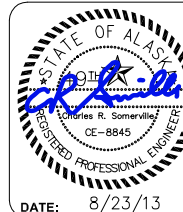
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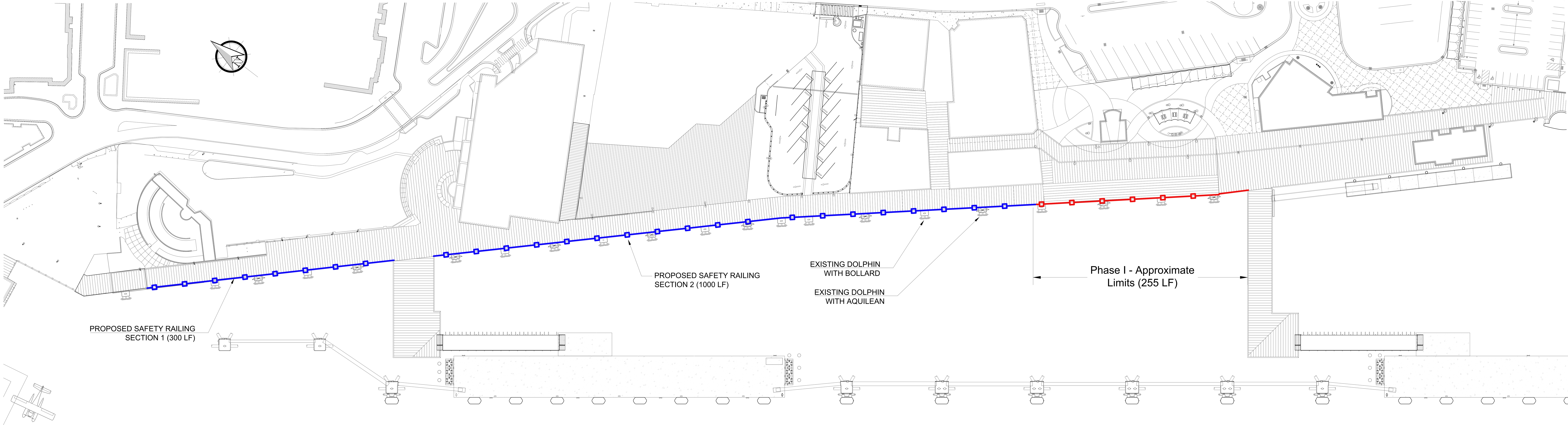
**PORT OF JUNEAU
CRUISE SHIP BERTHS
CONTRACT NO. DH12-001**

SHEET TITLE:
**TYPICAL APPROACH DOCK
RAILING DETAILS**

PN&D PROJECT NO.: 102050.04

DWG. FILE:

S2.10
SHEET
28 OF 124



Waterfront Safety Improvements (Complete Project)

Concept level Cost Estimate

Costs based on 2022 Project: Marine Park Deckover

| | Units | Quantity | Unit Cost | Amount |
|---|-------|-----------|-------------|-------------|
| Mobilization | LS | All Req'd | \$25,000 | \$25,000 |
| Demolition and Disposal of Existing Bullrail | LS | All Req'd | \$50,000 | \$50,000 |
| Furnish and Install Pedestrian Guard Rail * | LF | 1100 | \$1,800 | \$1,980,000 |
| Furnish and Install Railing at Dolphins/Aquileans** | EA | 20 | \$25,000 | \$500,000 |
| Estimated Construction Bid Price | | | \$2,555,000 | |

* 1300 linear feet of waterfront require railing, assume no railing installed in front of Dolphins (20 ea. @ 10 feet wide)

** Adding railing to the Dolphins would allow access to safety ladders and provide viewing and seating location, consistent with the current usage today.

Waterfront Safety Improvements - Phase I

Concept level Cost Estimate

Costs based on 2022 Project: Marine Park Deckover

| | Units | Quantity | Unit Cost | Amount |
|---|-------|-----------|-----------|-----------|
| Mobilization | LS | All Req'd | \$15,000 | \$15,000 |
| Demolition and Disposal of Existing Bullrail | LS | All Req'd | \$10,000 | \$10,000 |
| Furnish and Install Pedestrian Guard Rail * | LF | 225 | \$1,800 | \$405,000 |
| Furnish and Install Railing at Dolphins/Aquileans** | EA | 3 | \$25,000 | \$75,000 |
| Estimated Construction Bid Price | | | \$505,000 | |

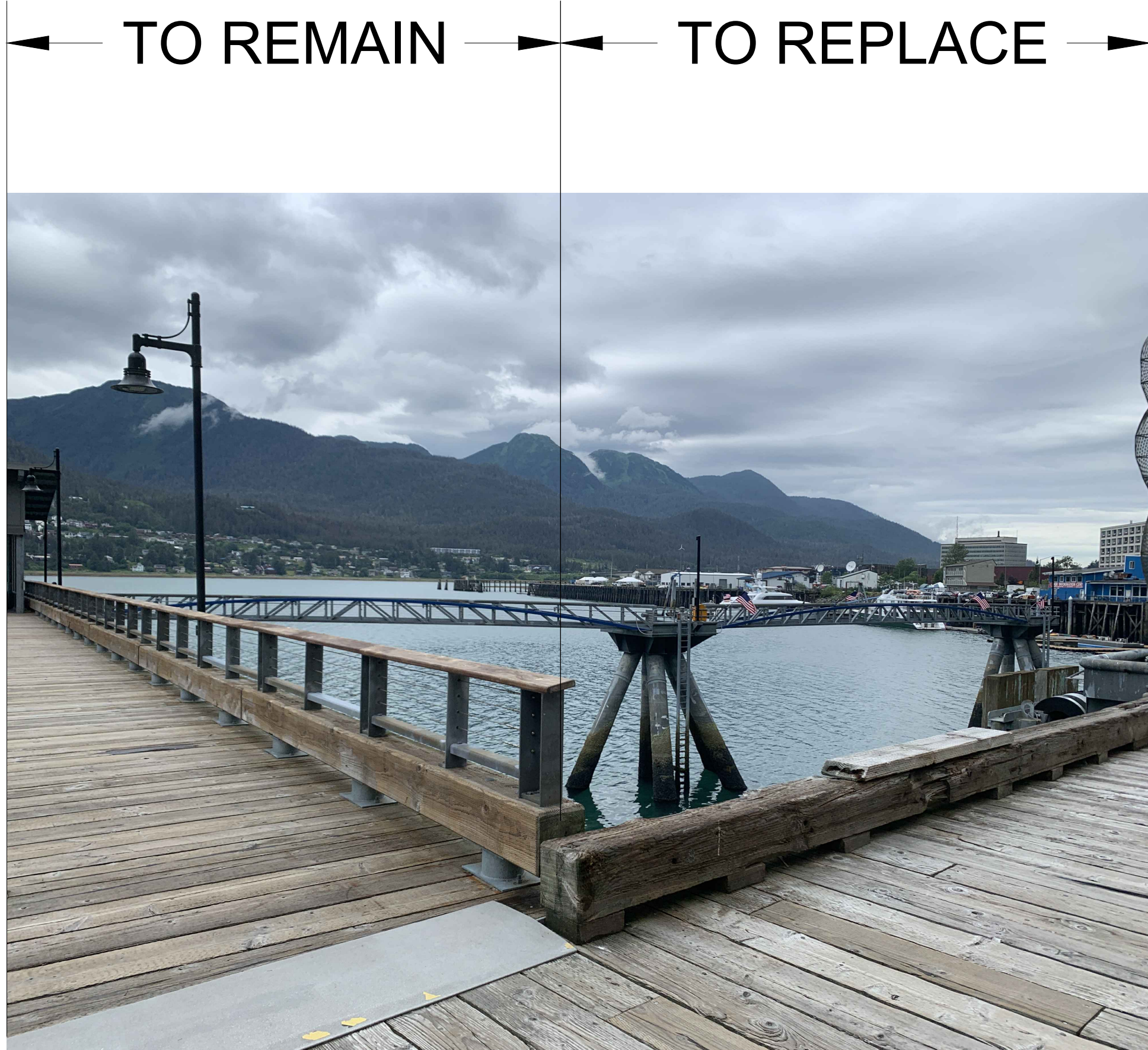
* Bid price will determine full length of Pedestrian Guard Rail installed under this phase. Length shown is an estimate.

** Adding railing to the Dolphins would allow access to safety ladders and provide viewing and seating location, consistent with the current usage today.

COMPLETE PROJECT AND PHASE I
PRELIMINARY COSTS



PROPOSED PEDESTRIAN GUARDRAIL
CURRENTLY INSTALLED AT MARINE PARK



PROPOSED PEDESTRIAN GUARDRAIL
CURRENTLY INSTALLED AT AS & CT APPROACH DOCKS

CITY AND BOROUGH OF JUNEAU
DOCKS & HARBORS
155 SOUTH SEWARD STREET
JUNEAU, ALASKA 99801
PHONE: 907-586-0292

CONCEPT SITE PLAN

WATERFRONT SAFETY IMPROVEMENTS

| | | | |
|-----------|----|---------------|--------------|
| DESIGN: | MS | DATE: | OCTOBER 2023 |
| CHECKED: | CU | CONTRACT NO.: | X |
| APPROVED: | CU | FILE NO. | X |
| | | SHEET: | |