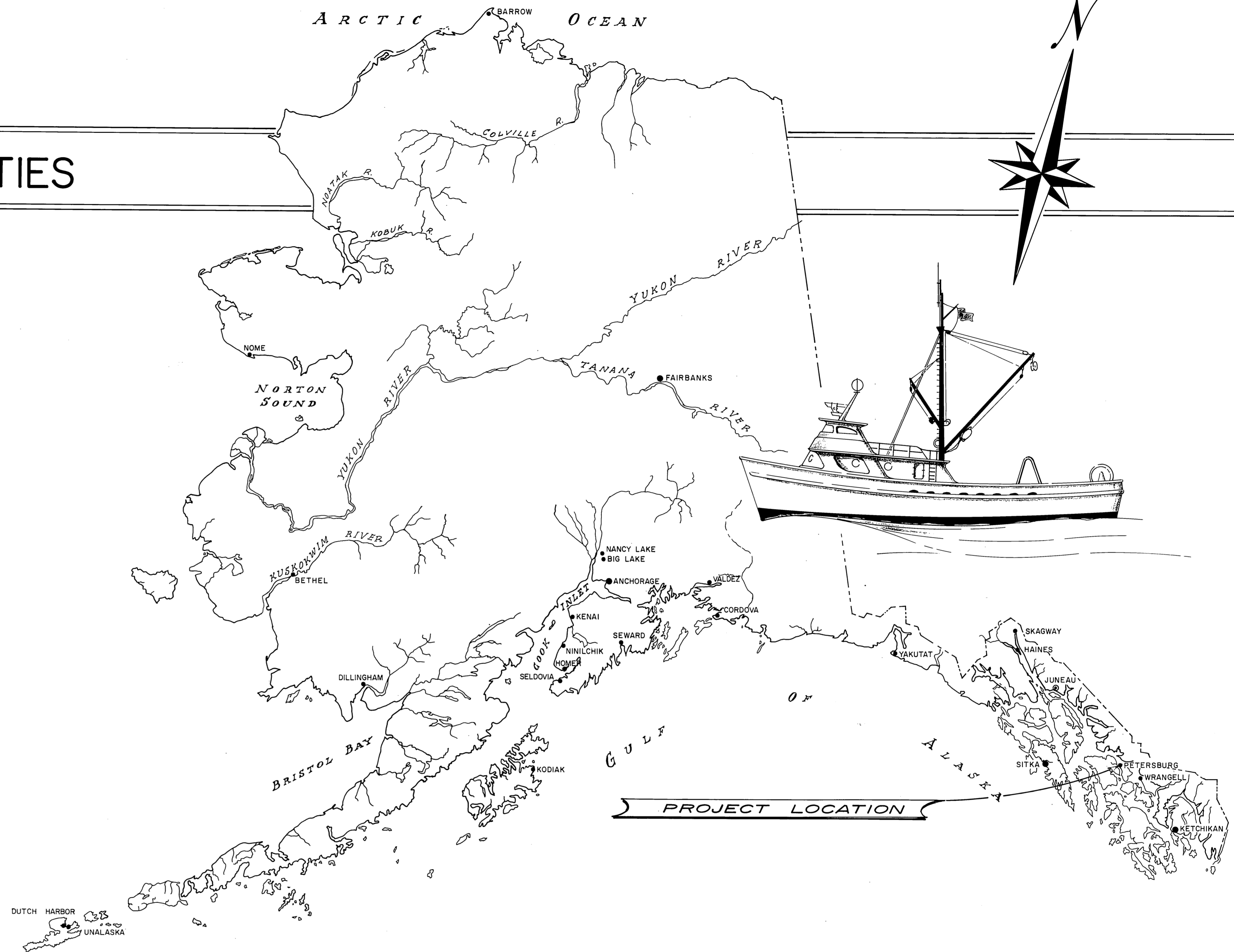


# PETERSBURG BOAT HARBOR FACILITIES

PROJECT NO. 3-71190



Recommend for future specifications on galvanizing: ASTM  
 Add - A-384-55T 'Safeguard against Warpage'  
 A-385-55T 'Provide High Quality Coatings'  
 A-386-55T 'Galvanizing Assembled Steel Products'

### WORK SUMMARY

Major units of this project shall consist of constructing a 12'x134' Approach Structure, furnishing & installing a 6'x50' Steel Gangway, constructing & installing 9668 S.F. of new concrete floats, furnishing & driving 23 float piles (1265L.F.), installing rubber corner bumpers.  
 Alternates are provided in the contract for the additional construction and installation of 5040 S.F. of concrete floats, furnishing & driving 1392 L.F. of float piles, fire protection and water systems for the concrete floats, and miscellaneous repairs in the existing harbor area. (All constructed)

STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS  
**DIVISION OF WATER & HARBORS**

#### INDEX TO SHEETS

1	TITLE SHEET	7	FIRE EQUIP. BLDG & FIRE STOP
2	HARBOR LAYOUTS - MISC. REPAIRS	8	12' APPROACH
3	CONC FLOATS - GANGWAY FLOAT	9	STEEL GANGWAY
4	CONC FLOATS - TYP ASSEMBLIES		
5	CONC FLOATS - MISC DETAILS		
6	CONC FLOATS - WATER SYSTEM		

AS BUILT

APPROVED

*David A. Standley*  
 COMMISSIONER

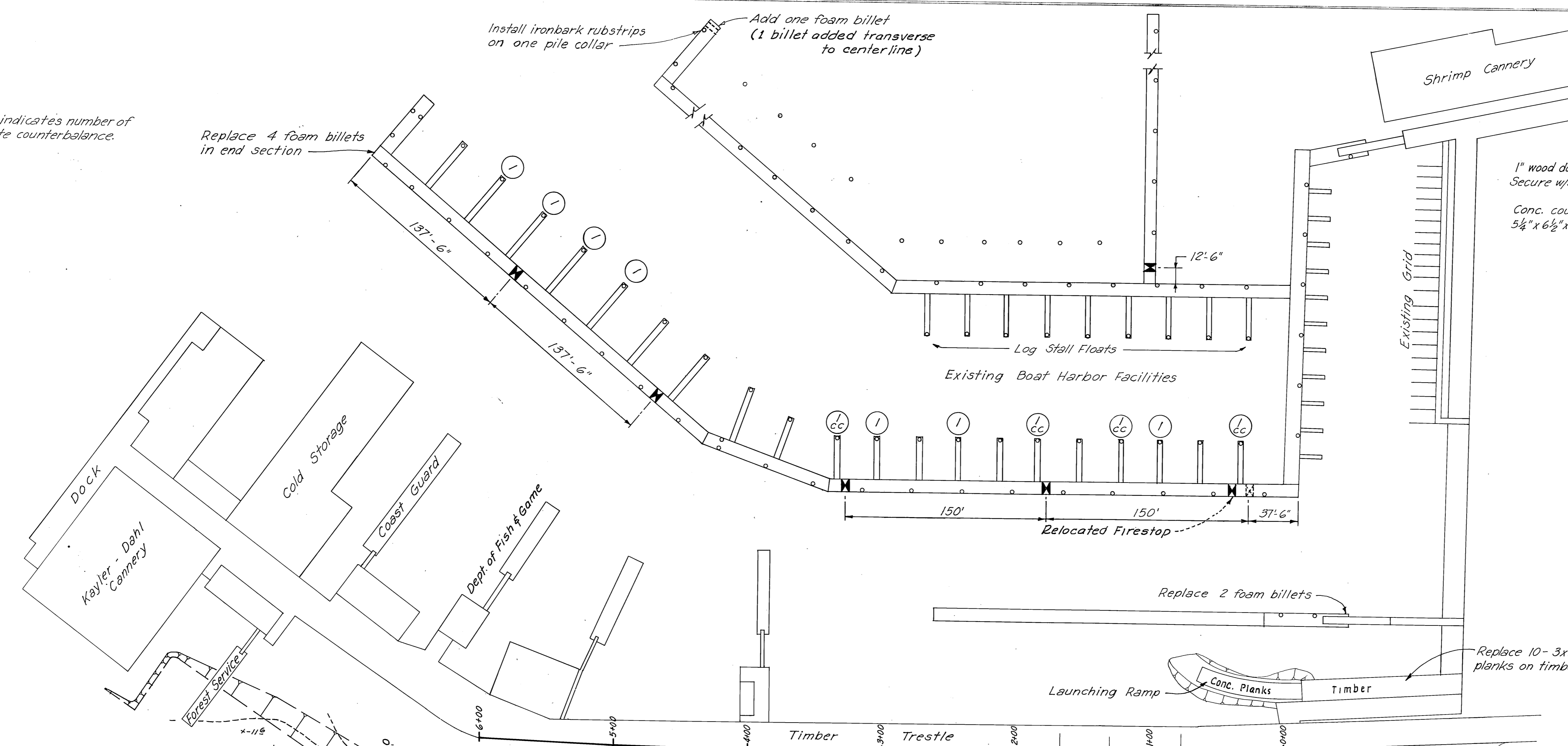
DATE .....

SHEET 1 OF 9

**LEGEND**

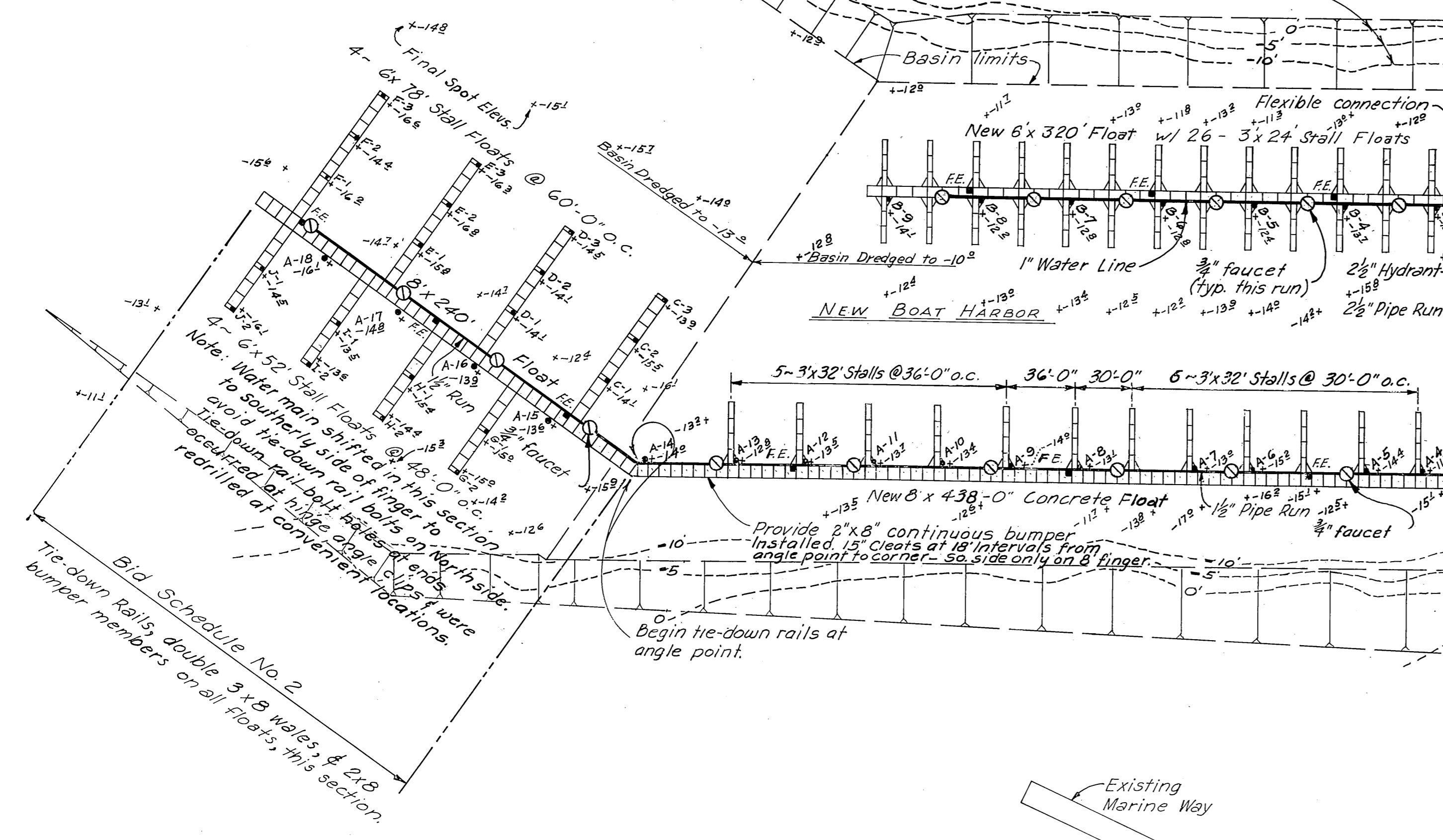
- ☒ Firestop
- Existing piling
- New piling
- ⊙ Leveling flotation. Figure indicates number of pieces. CC denotes concrete counterbalance.
- ⊕ Pipe union
- ⊕ Flexible connection
- ⊕ Hydrant
- ⊕ Fire Extinguisher Cabinet
- ⊕ Hose Faucet
- ⊕ Drain Cock
- +15' Spot Elev. after dredging
- Final Dredge Contours

Scale: 1" = 50'



- Notes:**
- Existing Facilities**
- Furnish & install 7 full size flotation billets at the locations indicated.
  - Cut decking back (approx. 4") to collar stringer on end of 42' & 32' polystyrene stall floats. Add 2x10x4'-0" end bumper strip (approx. 10 req'd), and heavy duty rubber corner bumpers. Add light duty corner bumpers to 17' stall floats. (See Sh. 4 for corner bumper details)
- New Facilities**
- Float piles to be driven to 15' penetration, or refusal as determined by the Engineer. Pile cutoff Elev = 30'
  - Entire Float system shifted 15.54' eastward from the plan position to avoid excessive earth fill at Parking Area. Only Approach revised for true location on this sheet.

For future installations recommend distance be increased between approach and main float from 53' to 55' for similar condition.



**Piling Penetrations**

Pile	Penet.	Pile	Penet.	Pile	Penet.	Pile	Penet.	Pile	Penet.
A-1	15.1'	A-11	10'	B-5	15'	D-3	10'	H-2	6'
A-2	16'	A-12	14'	B-6	11'	E-1	8'	I-1	7'
A-3	16'	A-13	12'	B-7	13'	E-2	8'	I-2	8.6'
A-4	16'	A-14	11'	B-8	9'	E-3	8'		
A-5	13'	A-15	15'	B-9	10'	F-1	13'		
A-6	11'	A-18	10'	C-1	13'	F-2	11'	J-1	10'
A-7	14'	B-1	14'	C-2	11'	F-3	13'	J-2	9'
A-8	16'	B-2	17'	C-3	10'	G-1	8'	A-17	8'
A-9	14'	B-3	16'	D-1	10'	G-2	7.4'	A-16	10'
A-10	12'	B-4	13'	D-2	10'	H-1	10'		

As BUILT

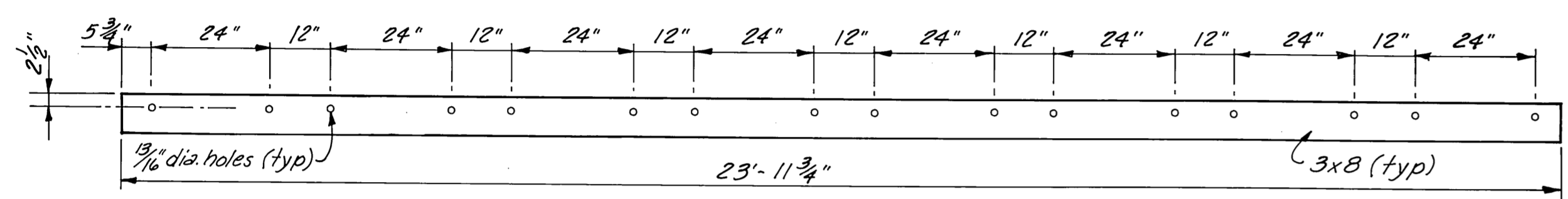
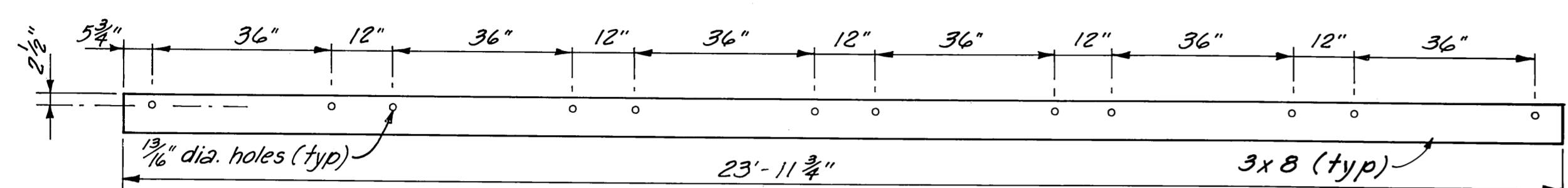
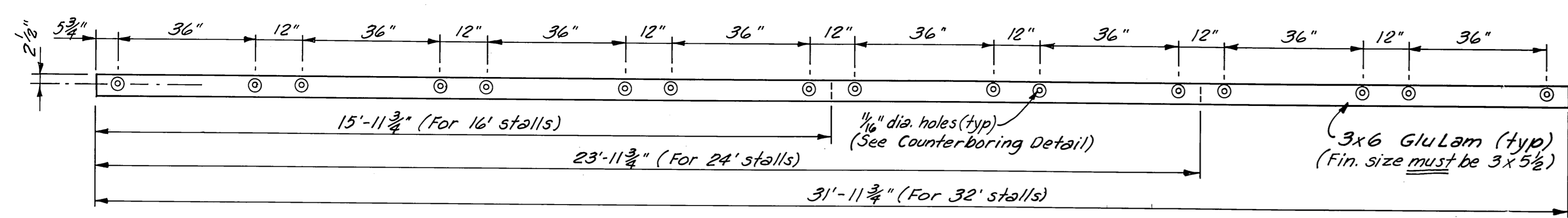
Petersburg  
**HARBOR LAYOUTS**  
MISCELLANEOUS REPAIR DETAILS

As noted

JET

Don Statter

3-71190

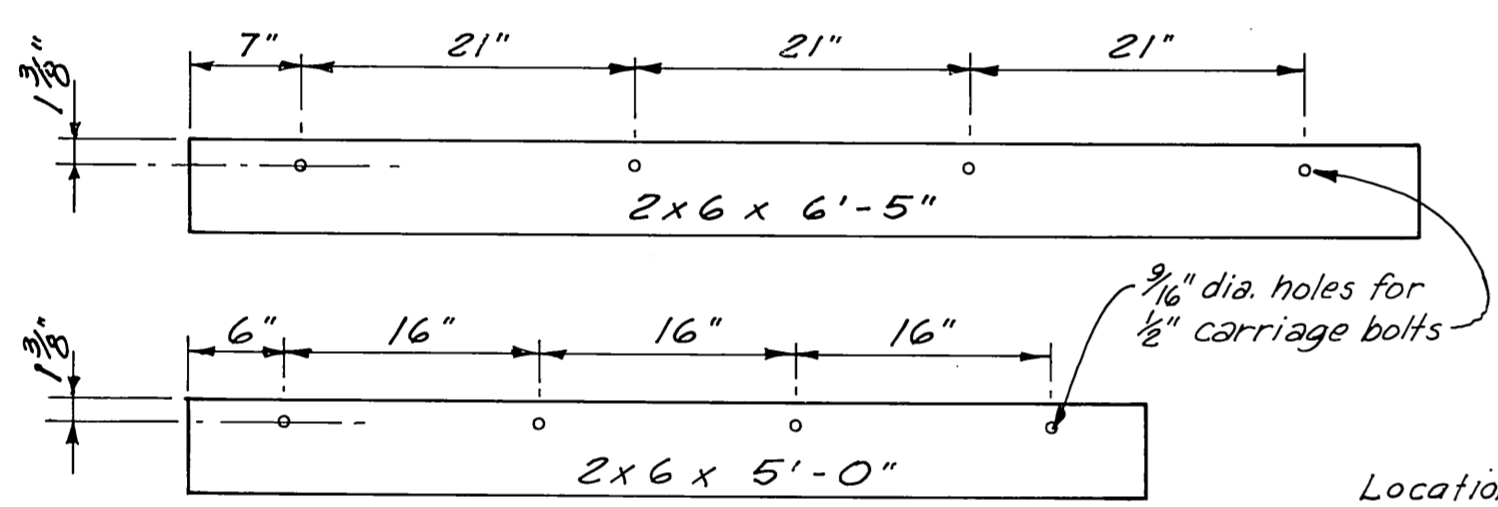


- Notes:
- All wales to be constr. grade Douglas fir, pressure treated w/0.5lb. Pentachlorophenol after fabrication.
  - Wales for Main & Finger floats to be 3x8, S4S, doubled as shown. All butt joints to be made at center of float section.
  - Counter-boring req'd for wales on stall floats, and 2x8 bumpers on gangway float and finger float.
  - Provide odd size lengths at float ends & angles as req'd.
  - Gangway float framing timber for additional flotation to be pressure treated to 12 lb. creosote retention, full cell process.

NOTE: ALL HOLES MUST BE IN STRAIGHT LINE.

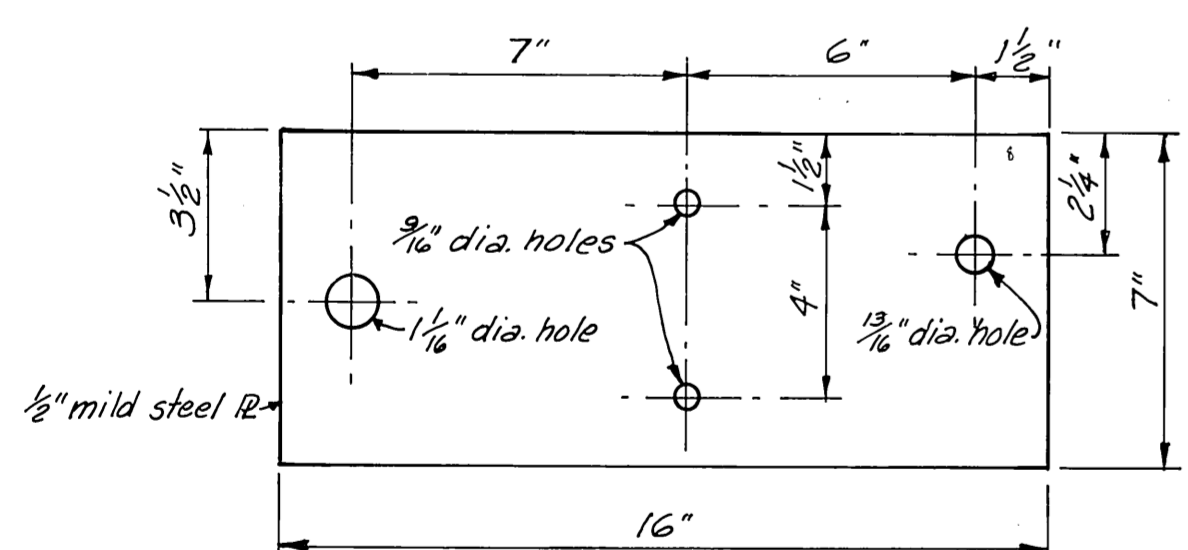
TYPICAL WALES

1/2" = 1'-0"



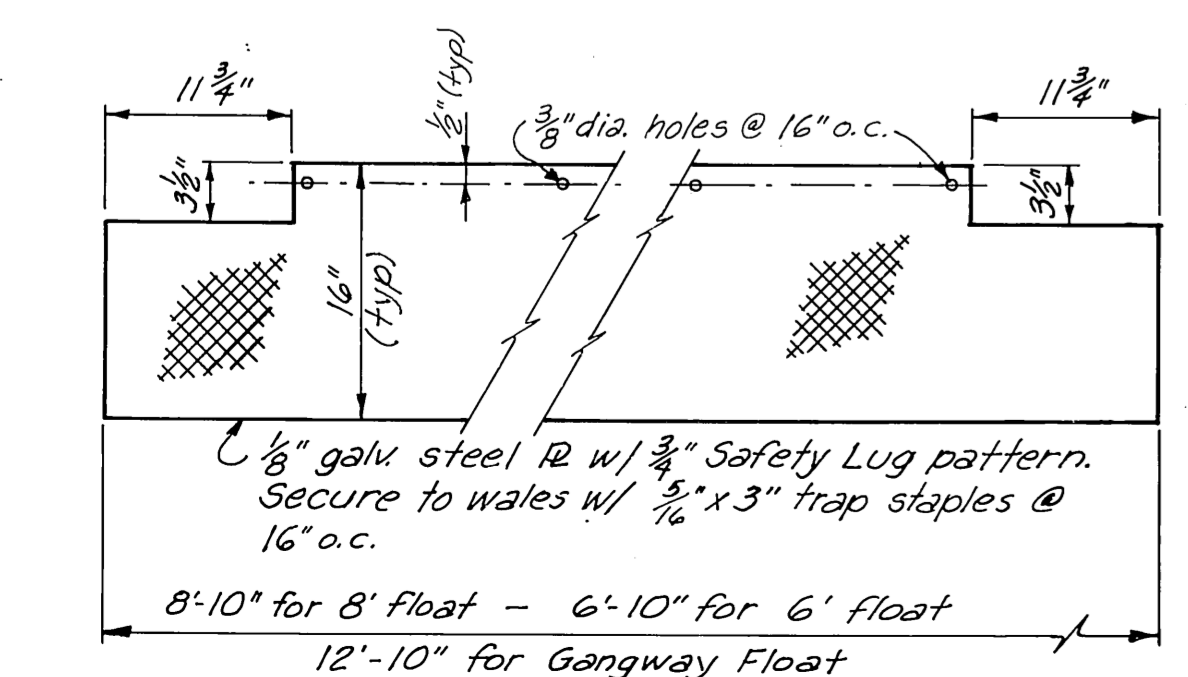
ANGLE CONNECTOR WALES

1" = 1'-0"



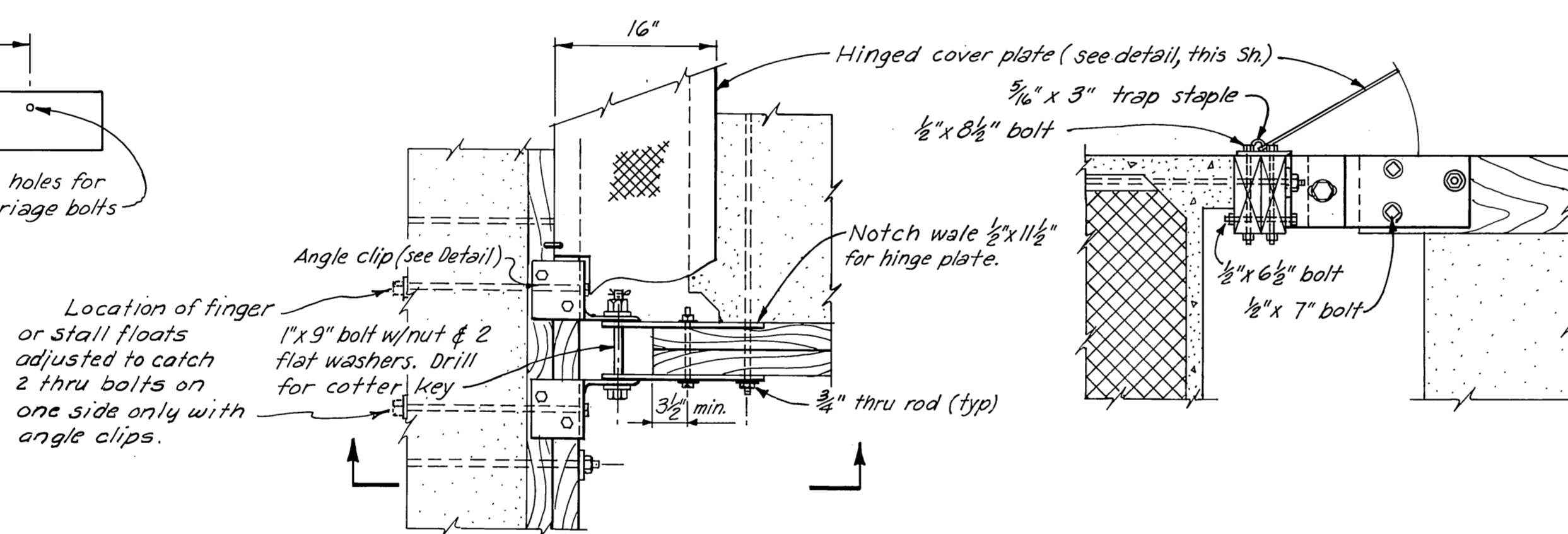
STANDARD PLATE - RIGHT ANGLE CONNECTION

3" = 1'-0"



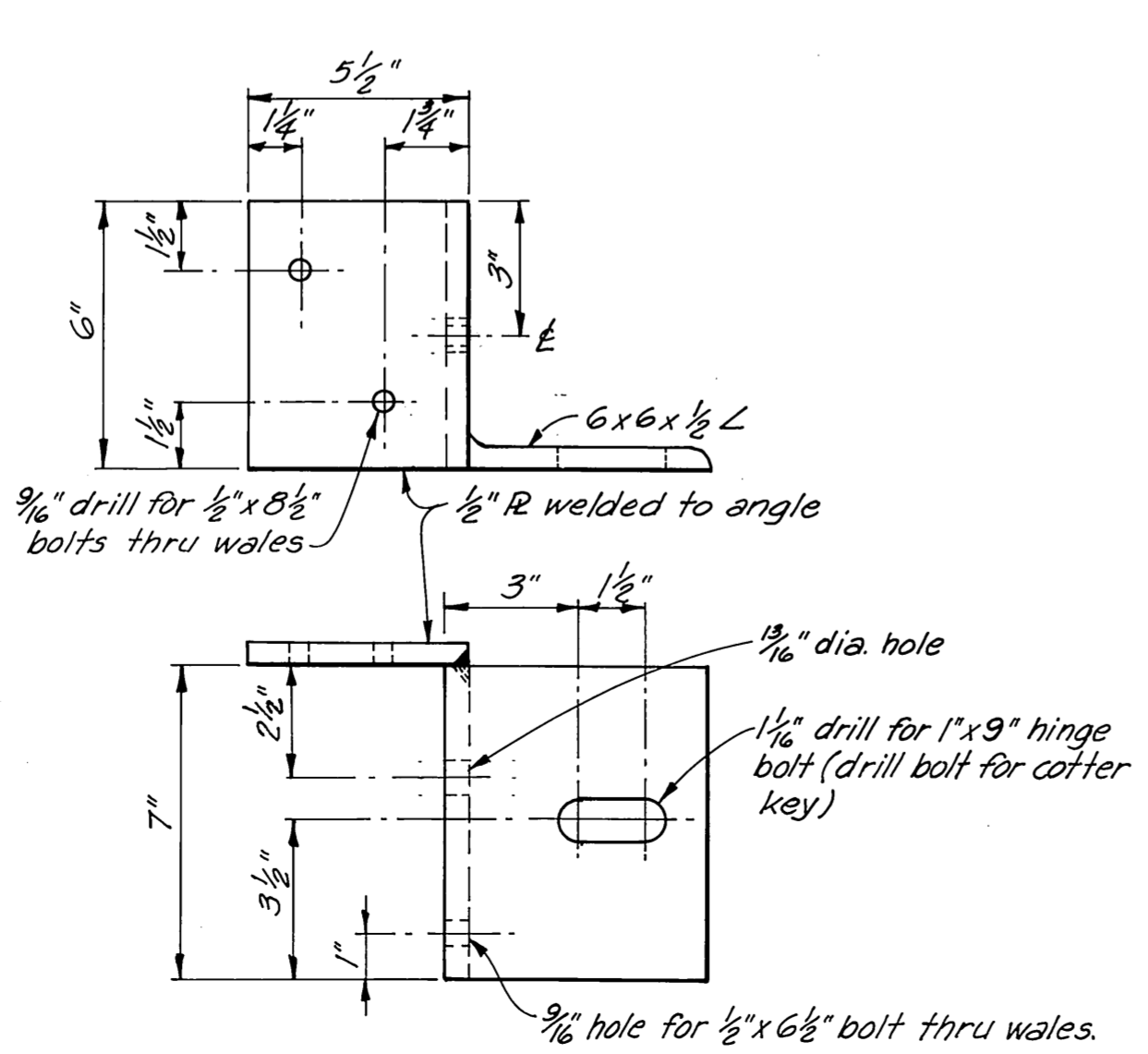
COVER PLATE

1" = 1'-0"



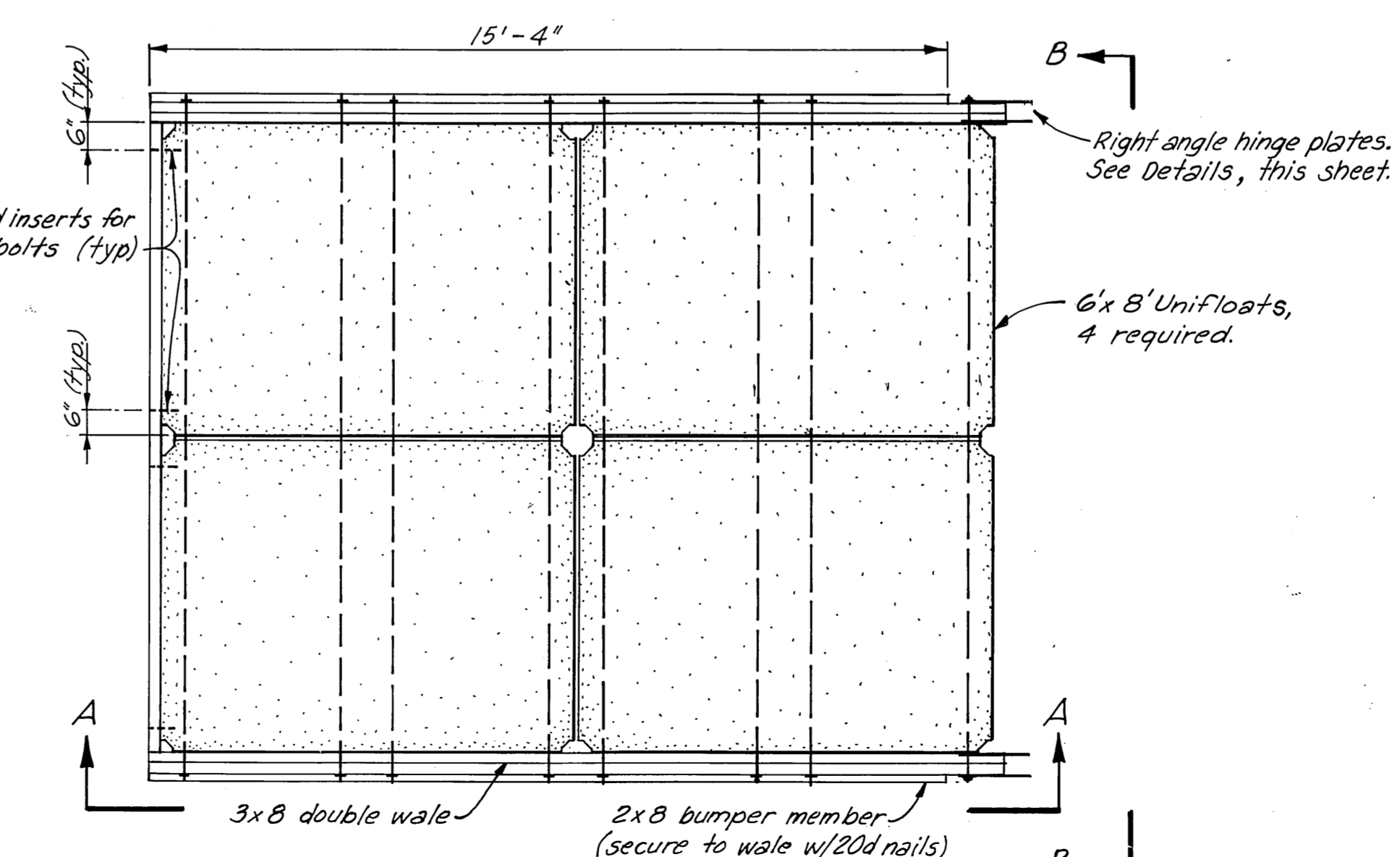
TYPICAL RIGHT ANGLE CONNECTION

1" = 1'-0"



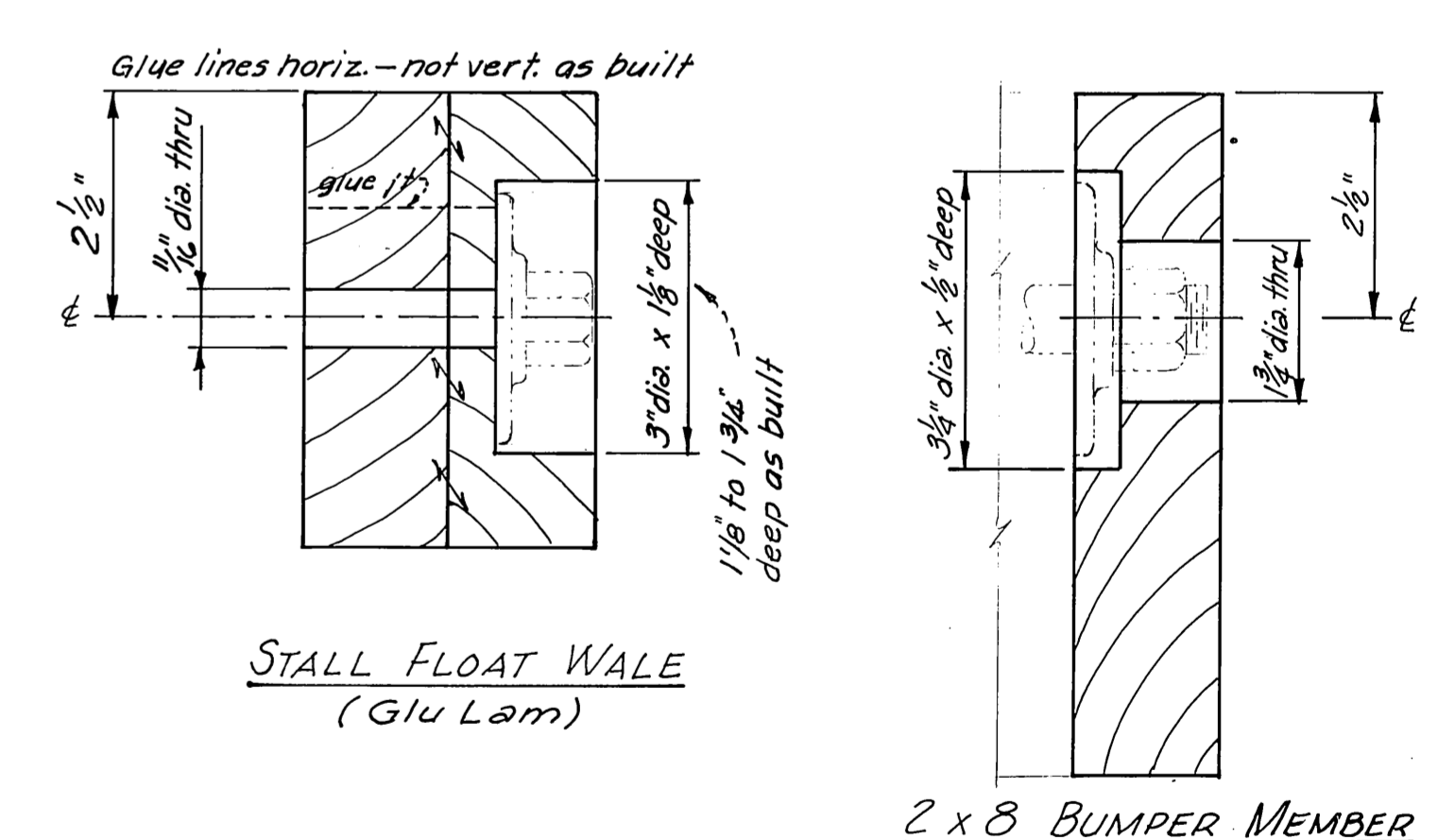
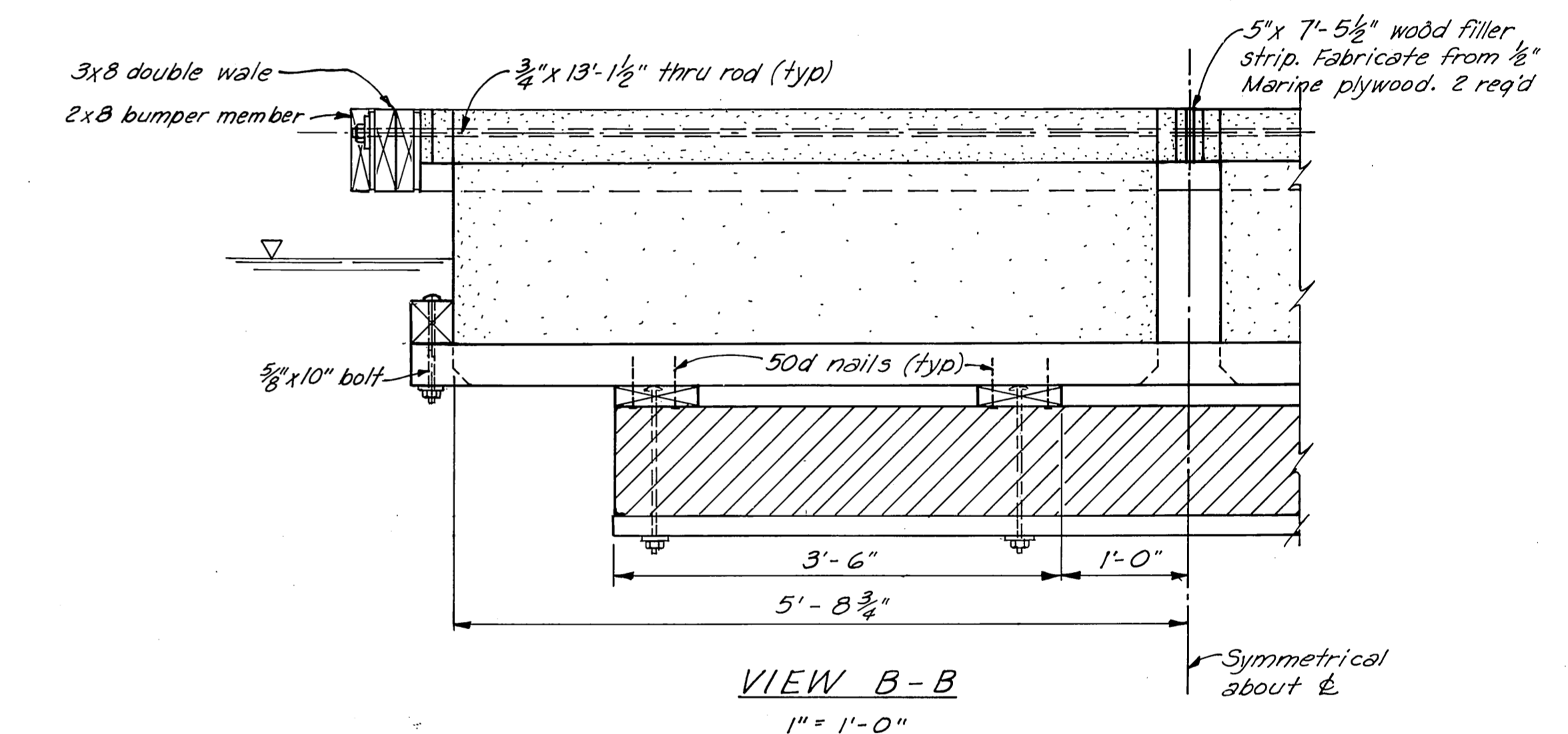
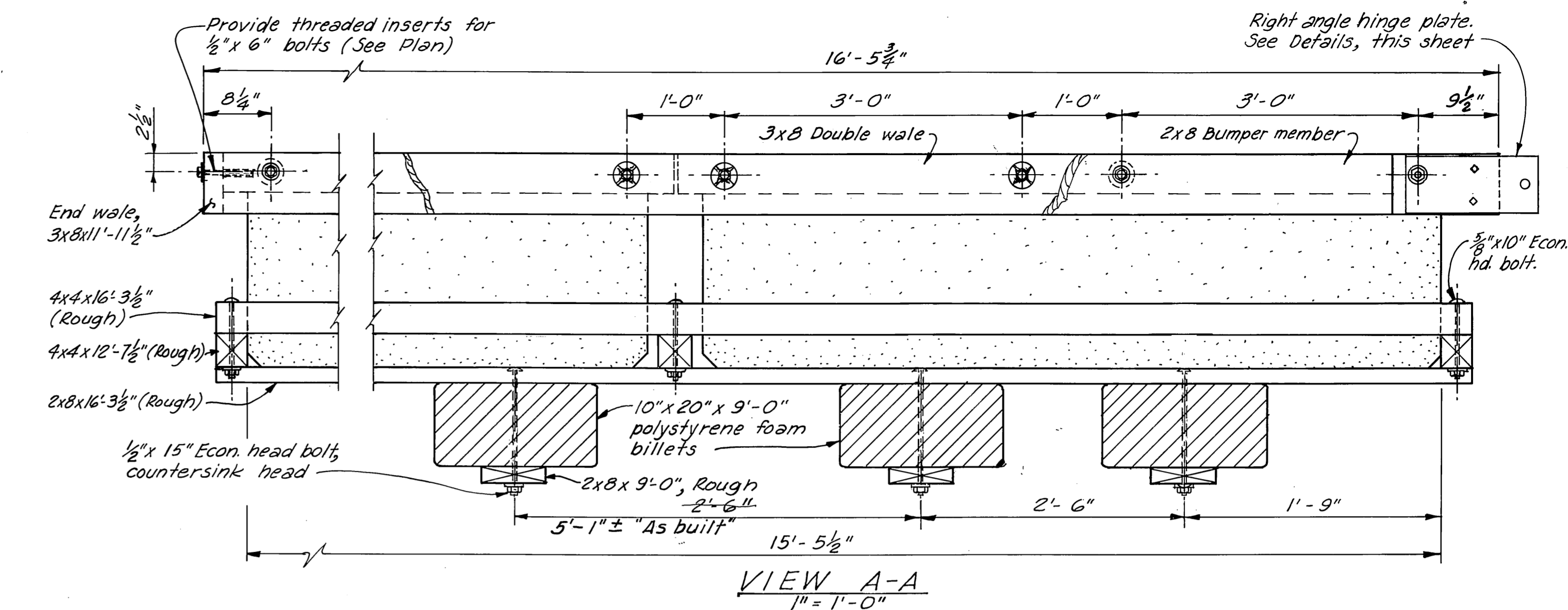
ANGLE CLIP

3" = 1'-0"



GANGWAY FLOAT - PLAN

3/8" = 1'-0"



TYPICAL COUNTERBORING DETAIL

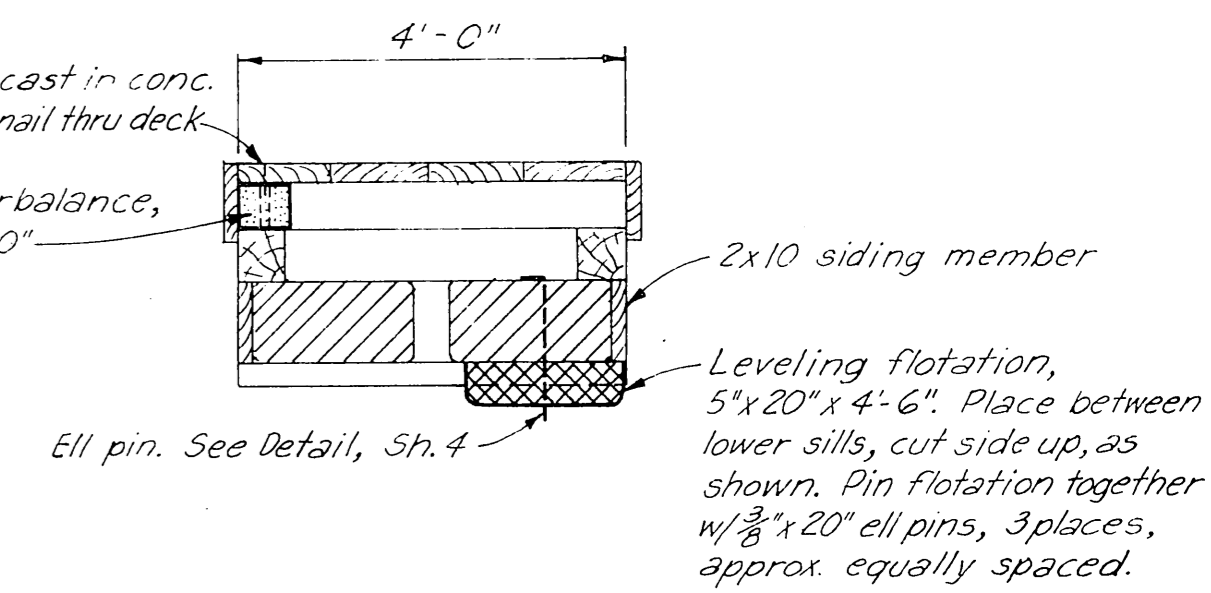
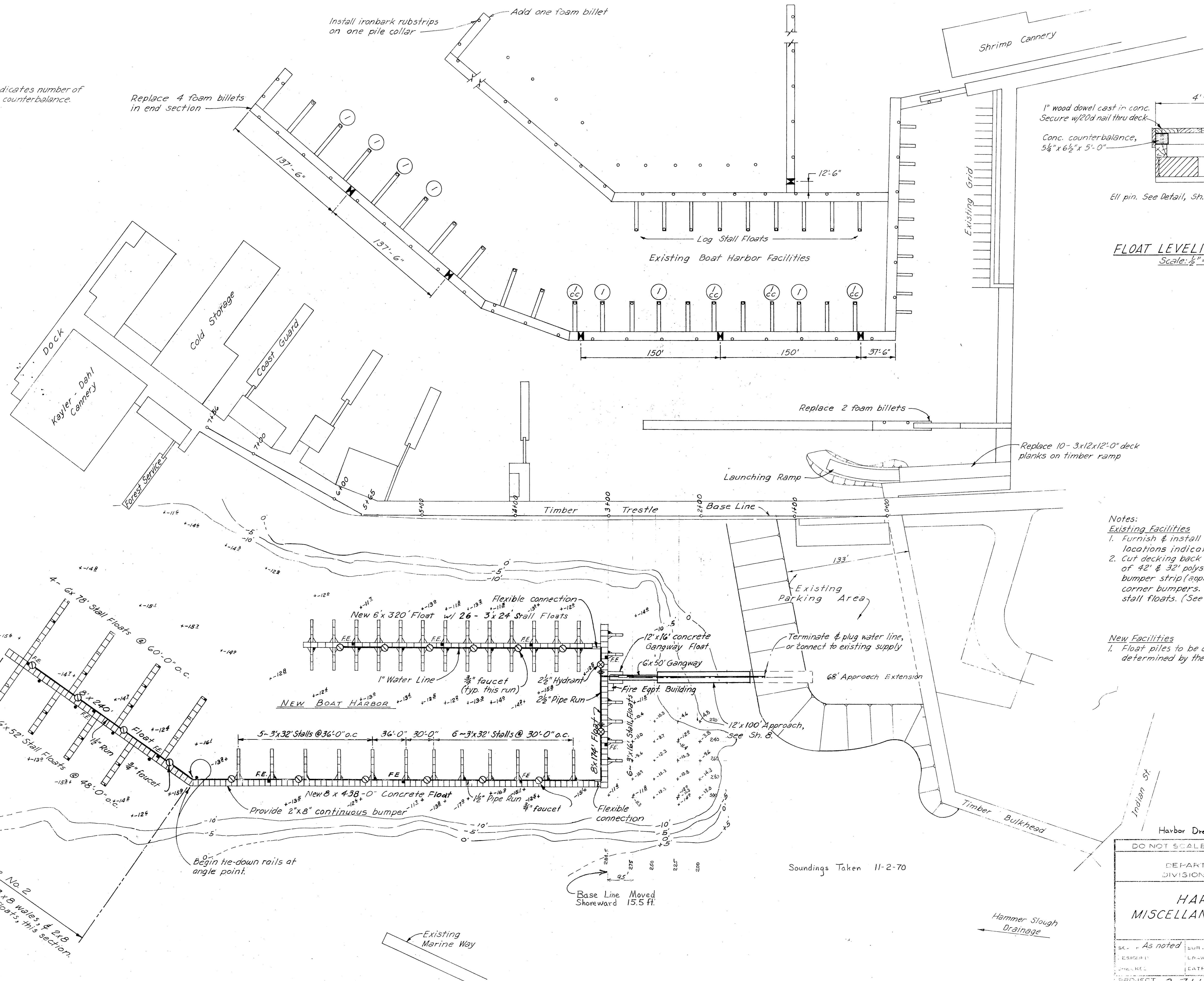
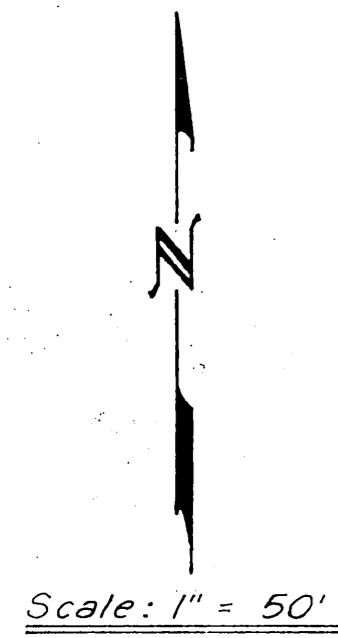
Half Size

DO NOT SCALE THIS DRAWING - USE DIMENSIONS		
STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER AND HARBORS		
CONCRETE FLOATS GANGWAY FLOAT & STANDARD DETAILS		
SCALE As noted	SURVEYED	APPROVED
DESIGNED	DRAWN JET	Don Statter
CHECKED	DATE 4-10-70	DIRECTOR
PROJECT NUMBER 3-71190	SHEET 3 OF 9	

As BUILT

**LEGEND**

- Firestop
- Existing piling
- New piling
- ⊙ Leveling flotation. Figure indicates number of pieces. CC denotes concrete counterbalance.
- ⊕ Pipe union
- ⊕ Flexible connection
- ⊕ Hydrant
- FE ■ Fire Extinguisher Cabinet
- ⊕ Hose Faucet



**FLOAT LEVELING DETAIL**  
Scale: 1/2" = 1'-0"

**Notes:**

Existing Facilities

1. Furnish & install 7 full size flotation billets at the locations indicated.
2. Cut decking back (approx. 4") to collar stringer on end of 42' & 32' polystyrene stall floats. Add 2x10x4'-0" end bumper strip (approx. 10 req'd), and heavy duty rubber corner bumpers. Add light duty corner bumpers to 17' stall floats. (See Sh. 4 for corner bumper details)

New Facilities

1. Float piles to be driven to 15' penetration, or refusal as determined by the Engineer. Pile cutoff Elev. = 30'

Harbor Dredging As Built

DO NOT SCALE THIS DRAWING - USE DIMENSIONS  
STATE OF ALASKA  
DEPARTMENT OF PUBLIC WORKS  
DIVISION OF WATER AND HARBORS

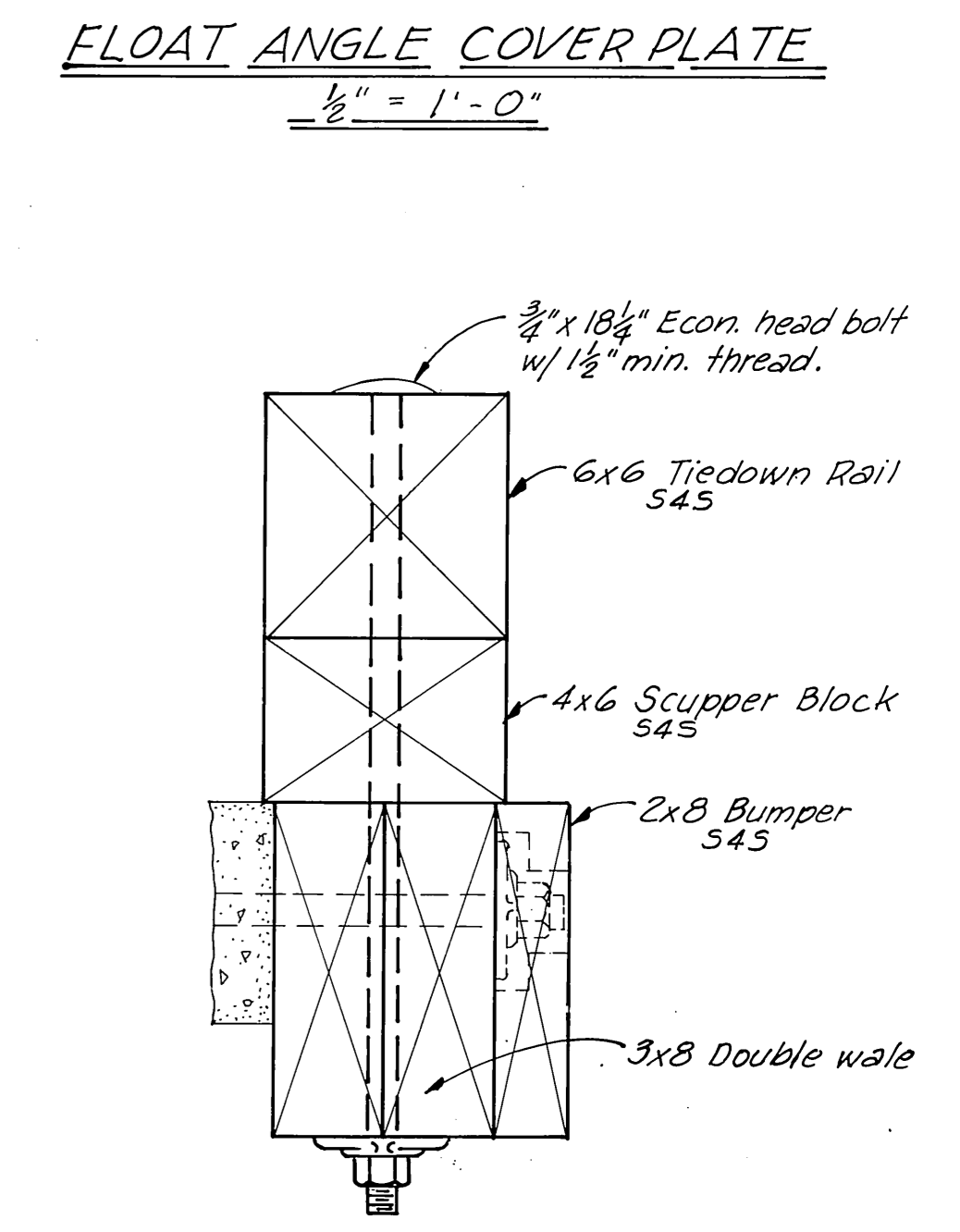
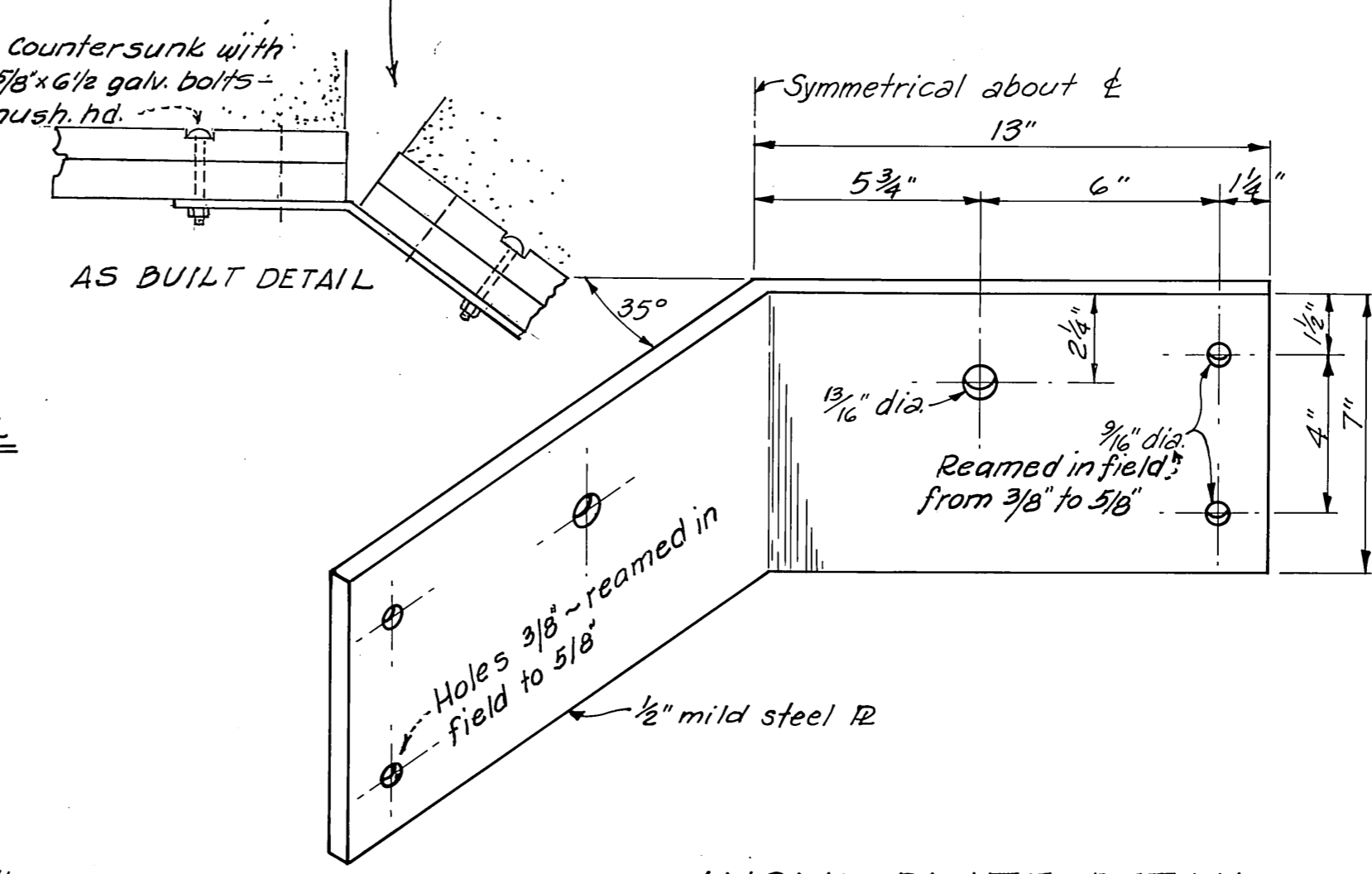
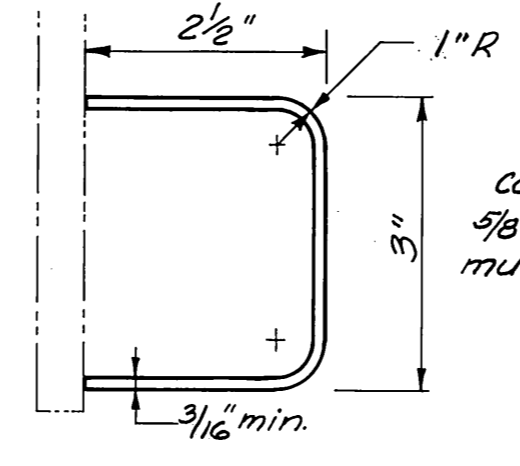
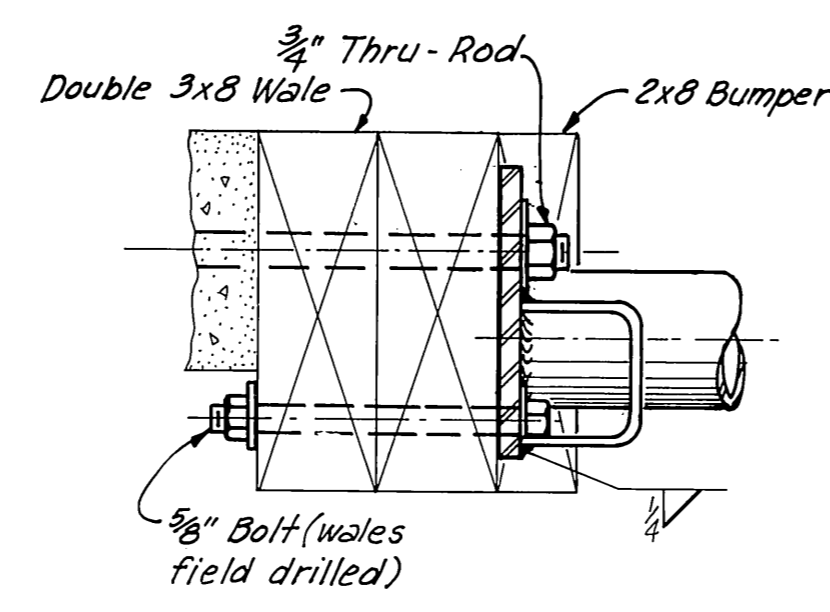
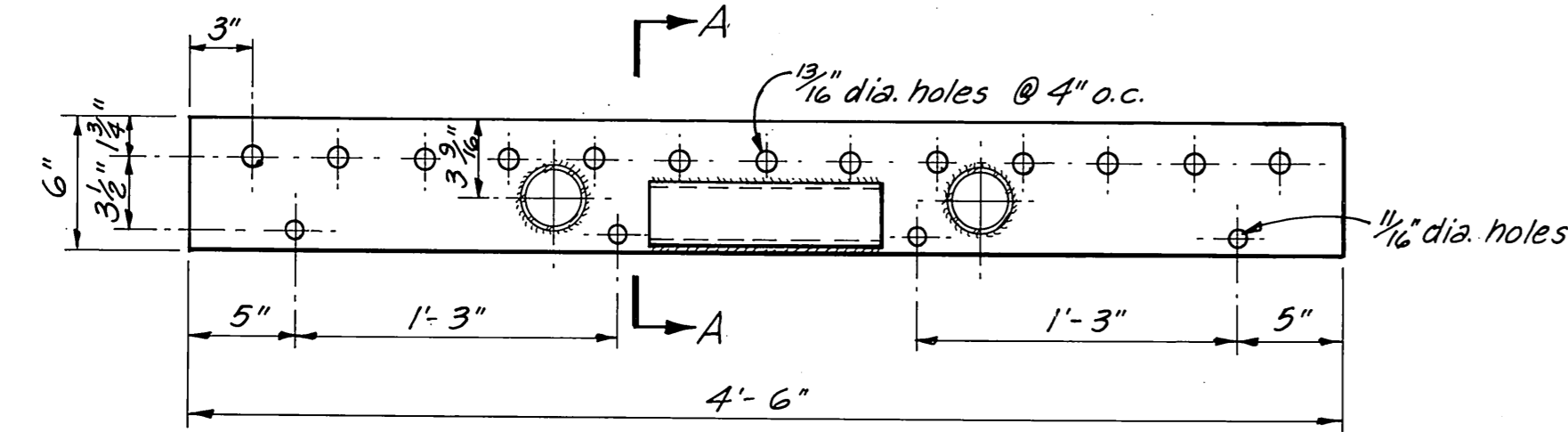
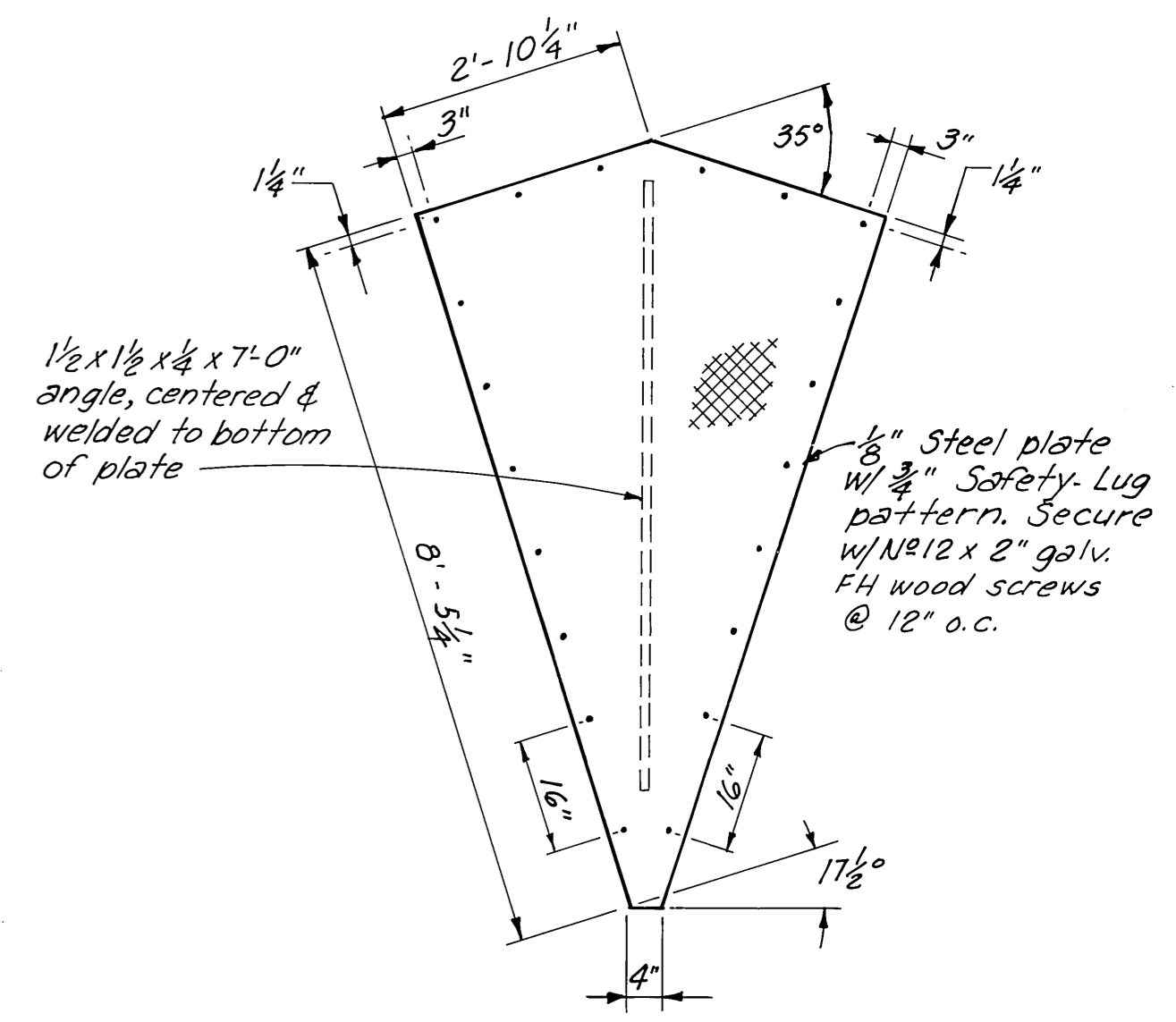
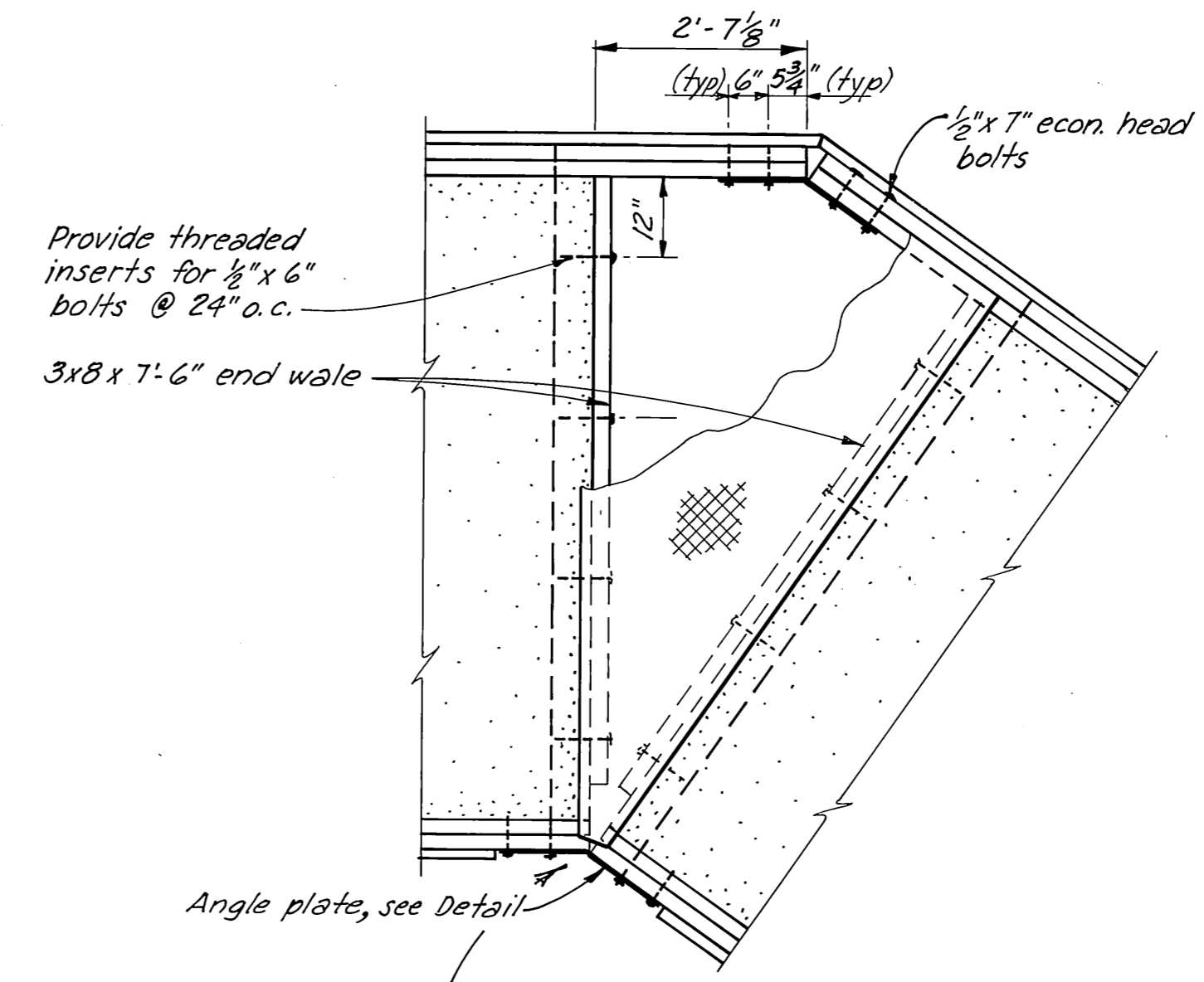
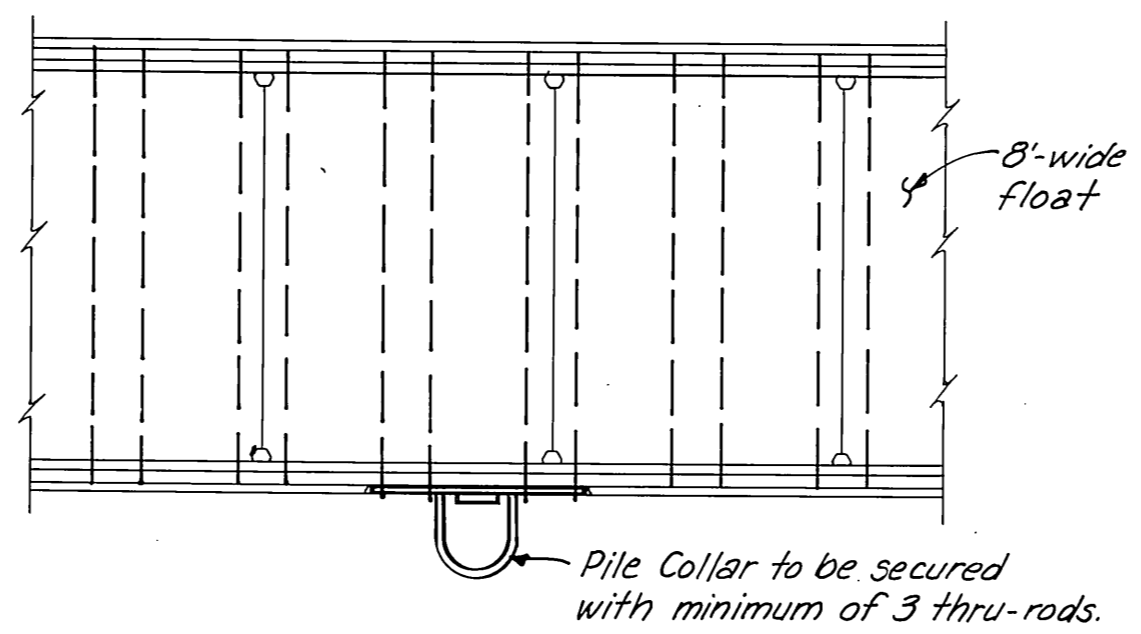
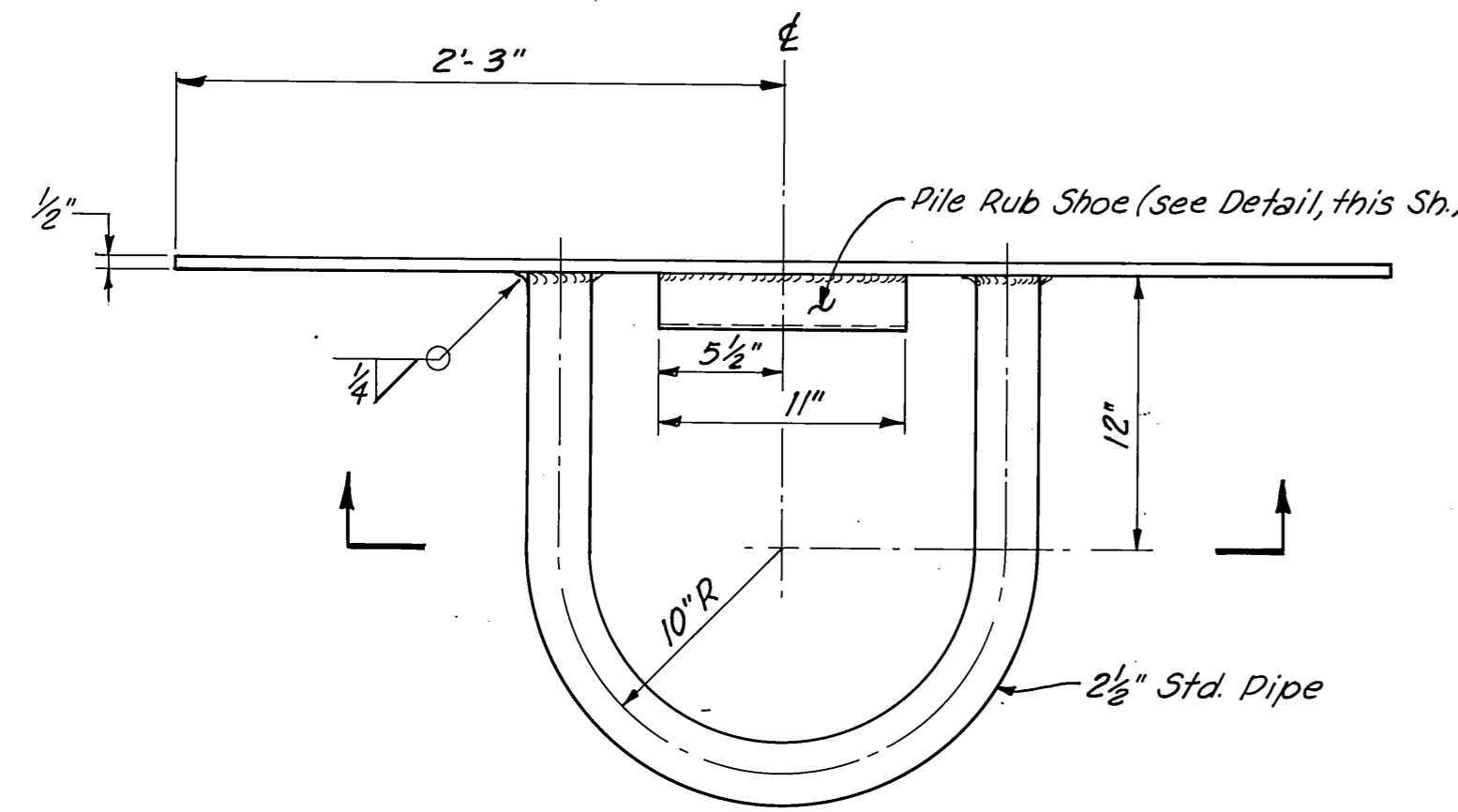
**HARBOR LAYOUTS  
MISCELLANEOUS REPAIR DETAILS**

SCALE: As noted	DESIGNED BY: JET	DRAWN BY: Don Statter
PROJECT NO: 3-71190	DATE:	

Soundings Taken 11-2-70

Base Line Moved Shoreward 15.5 ft.





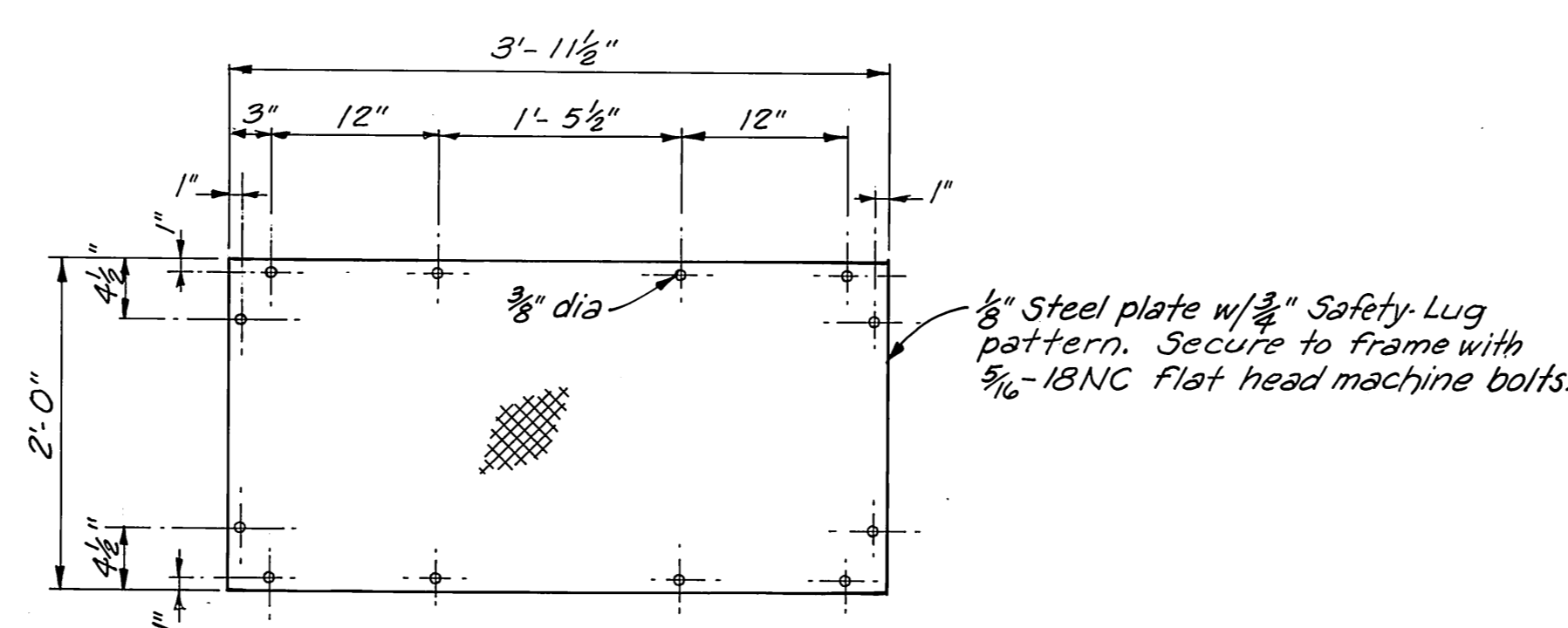
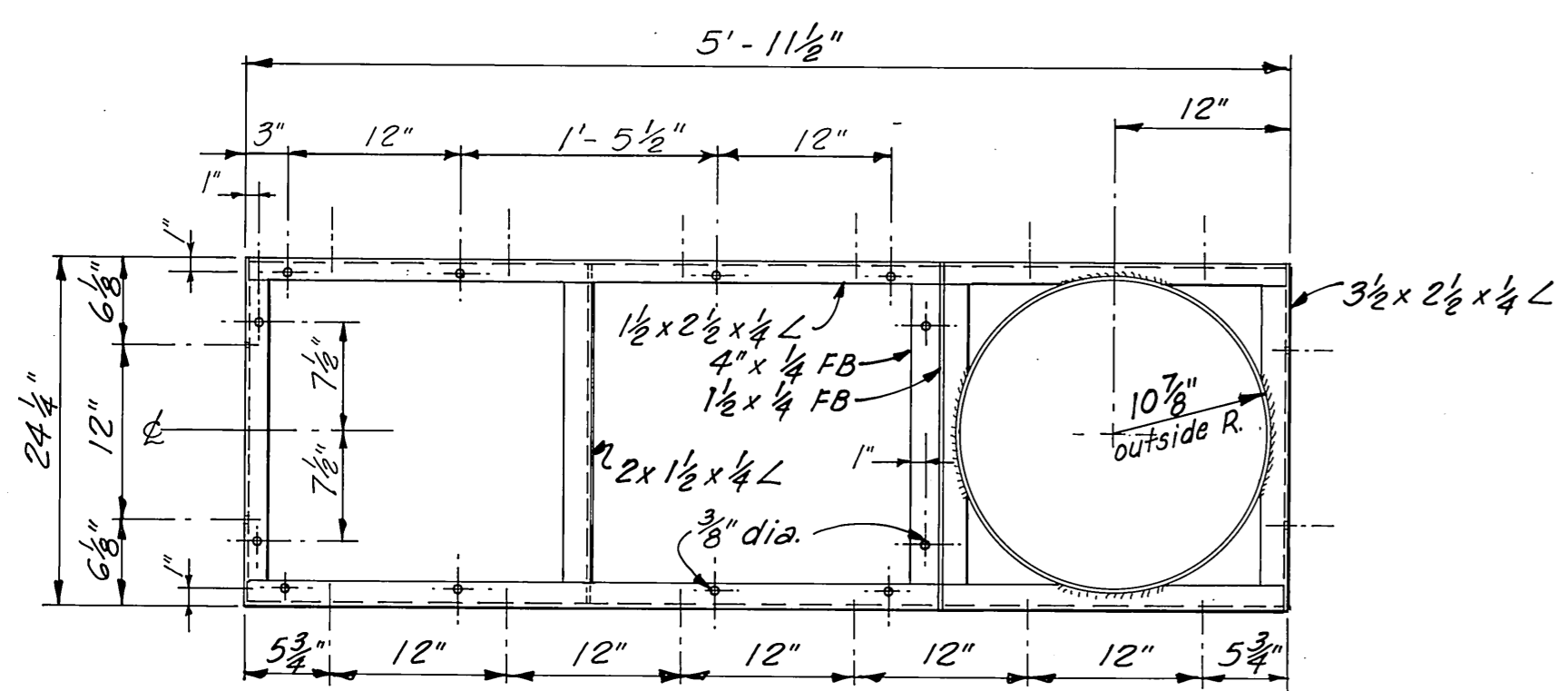
**PILE COLLAR**  
1/2" = 1'-0"

**SECTION A-A**  
3" = 1'-0"

**PILE RUB SHOE DETAIL**  
Half Scale

**FLOAT ANGLE DETAIL**  
1/2" = 1'-0"

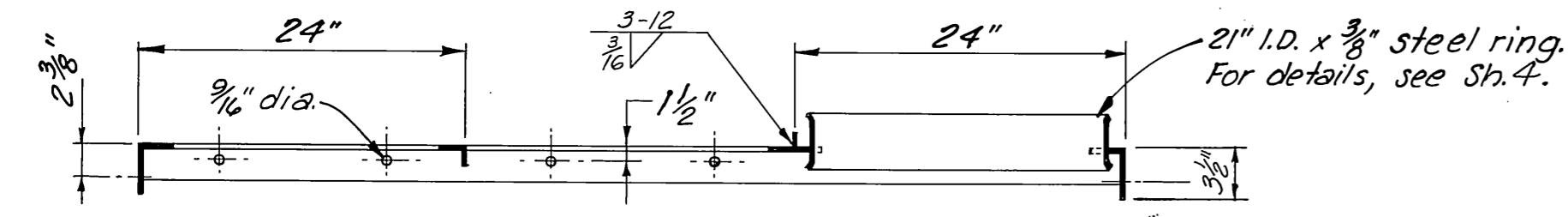
**FLOAT ANGLE COVER PLATE**  
1/2" = 1'-0"



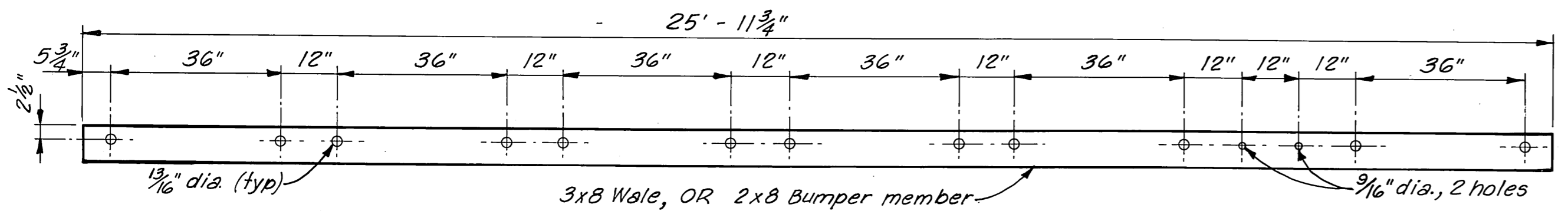
**COVER PLATE - 6'x2' PILE COLLAR CONNECTOR**  
1" = 1'-0"

**ANGLE PLATE DETAIL**  
3" = 1'-0"

**TIE-DOWN RAIL**  
3" = 1'-0"



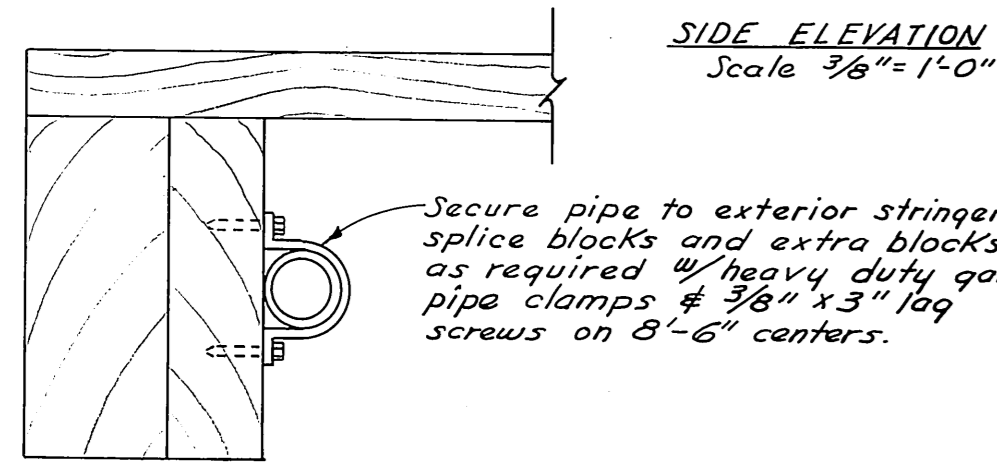
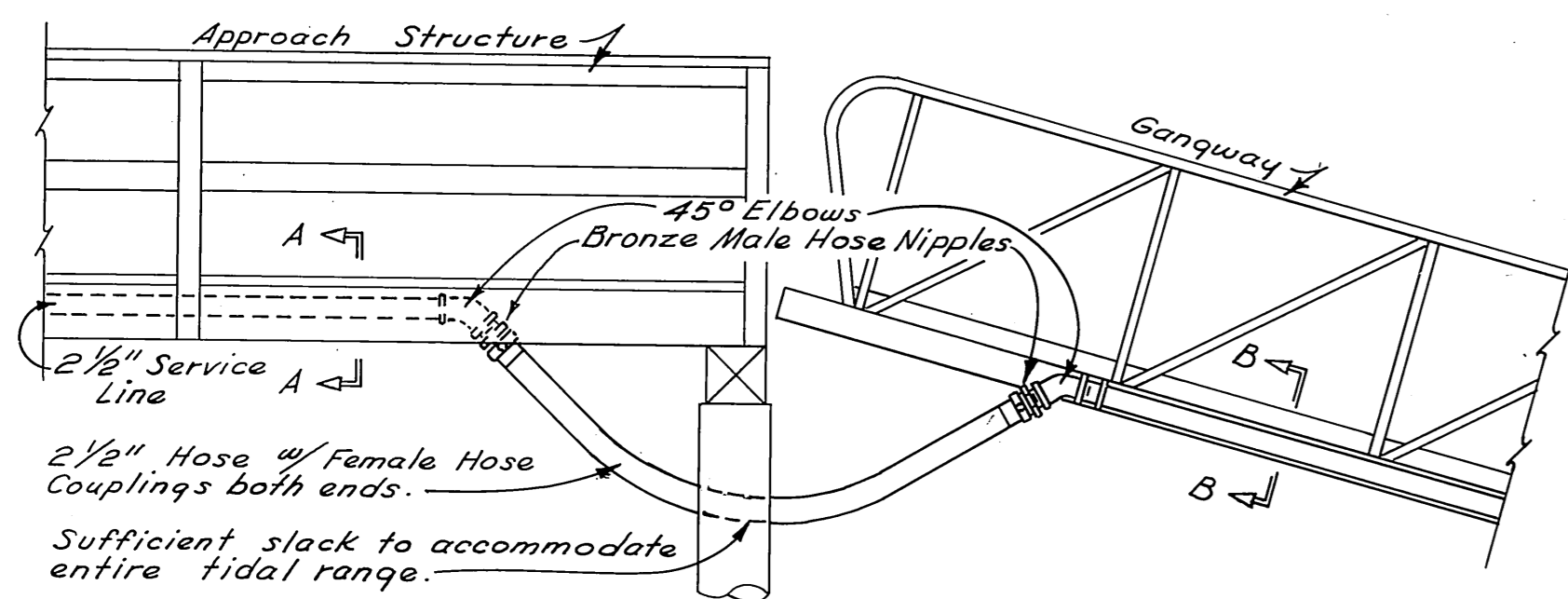
All mat'l mild steel. Hot dip galvanize after fabrication.  
**6'x2' CONNECTOR & PILE COLLAR**  
1" = 1'-0"



Note: Hole sizes are for 3x8 wale, only. For 2x8 Bumper, see Counterboring Detail, Sheet 3.  
**DRILLING LAYOUT FOR WALE & BUMPER MEMBER - 6'-WIDE STALL FLOATS**  
1/2" = 1'-0"

DO NOT SCALE THIS DRAWING - USE DIMENSIONS		
STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER AND HARBORS		
<b>CONCRETE FLOATS MISCELLANEOUS DETAILS</b>		
SCALE <i>As Noted</i>	SURVEYED	APPROVED
DESIGNED	DRAWN <i>JET</i>	<i>Don Statter</i>
CHECKED	DATE <i>4-9-70</i>	DIRECTOR
PROJECT NUMBER <i>3-71190</i>	SHEET <i>5</i> OF <i>9</i>	

As BUILT

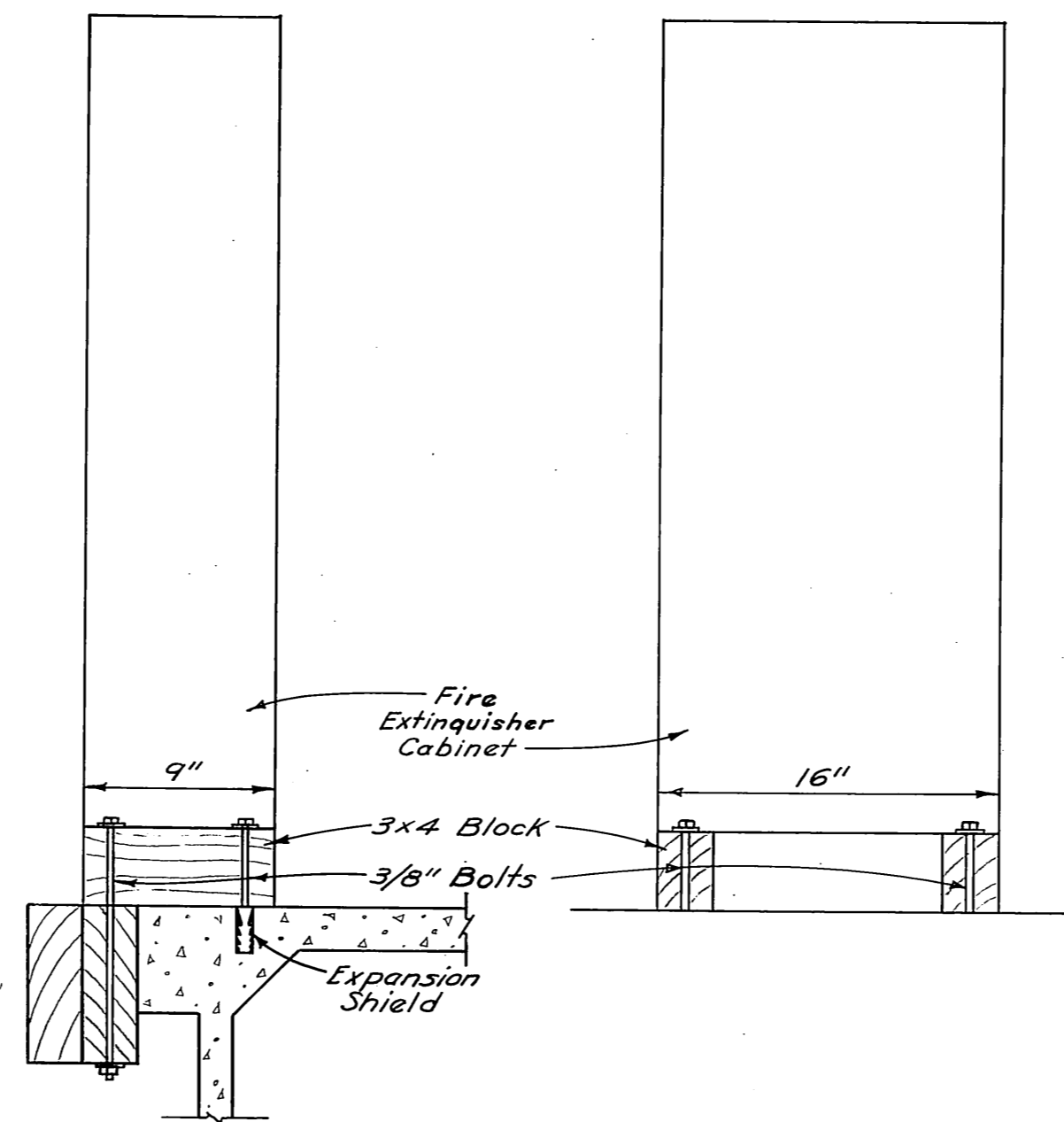


Bolt pipe to the outside of the longitudinal stringer w/ 3/8" U-bolts on 8" ctr's. Drill mounting holes and treat w/ cold galv. solution.

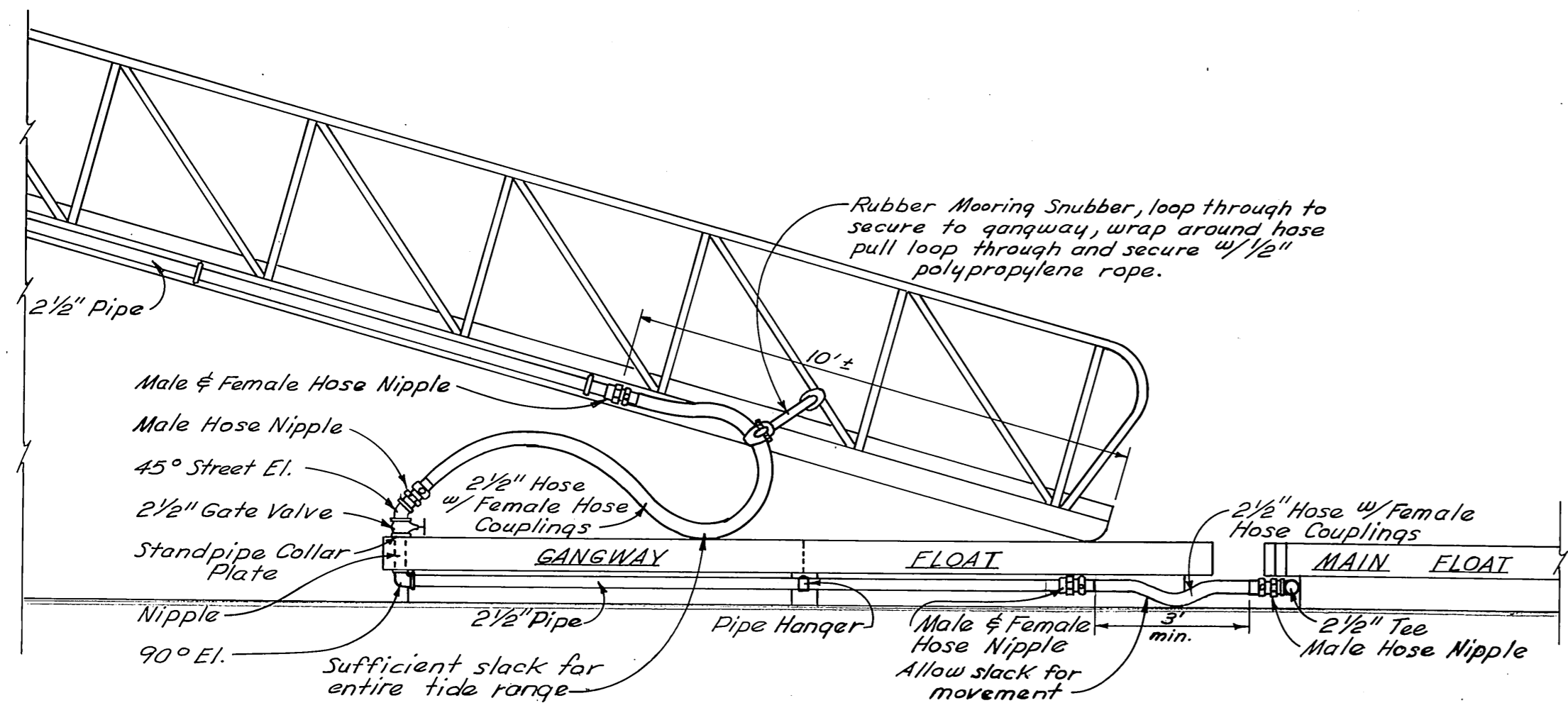
SECTION A-A  
No Scale

SECTION B-B  
No Scale

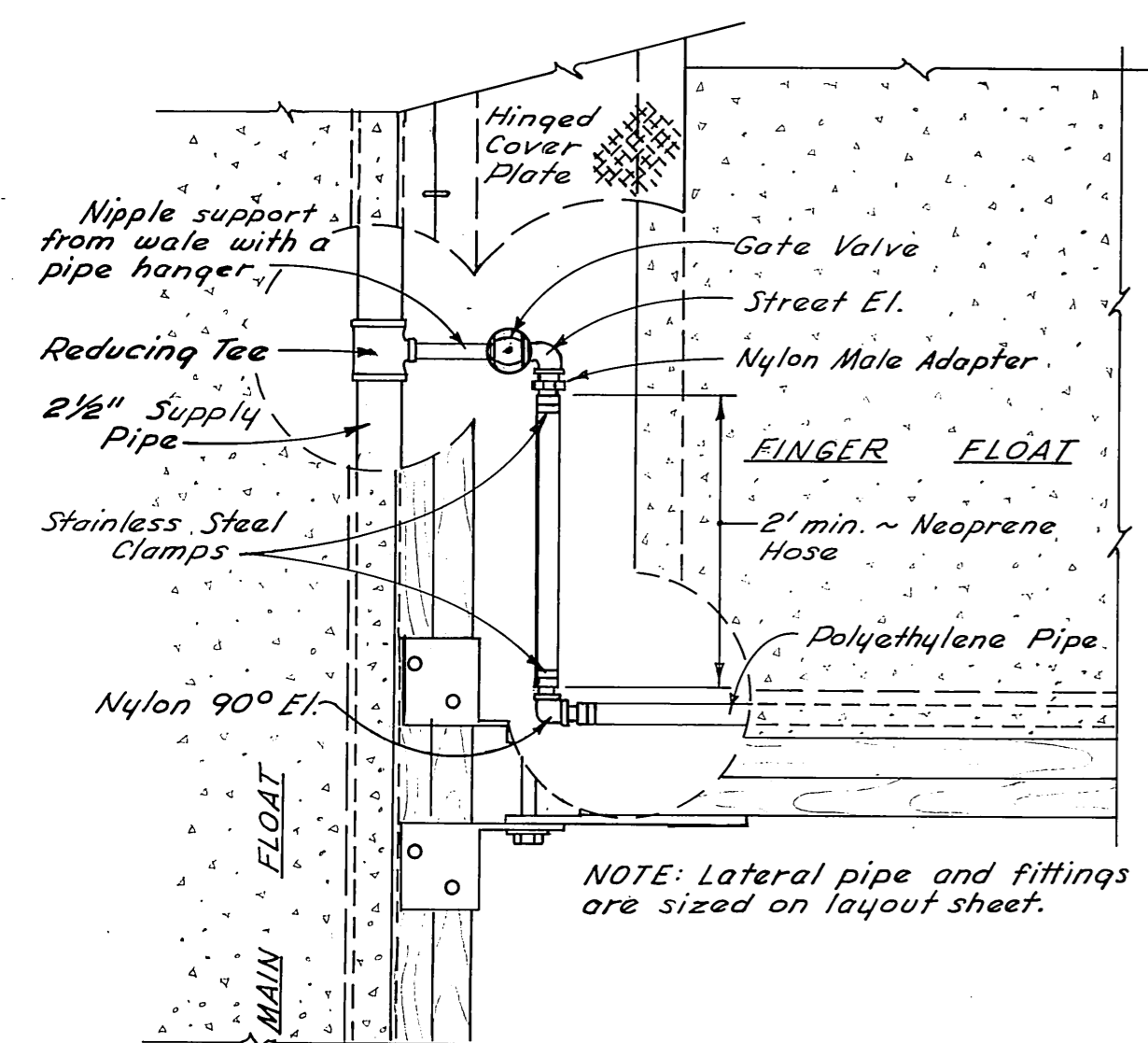
FLEXIBLE CONNECTION DETAILS  
Approach to Gangway



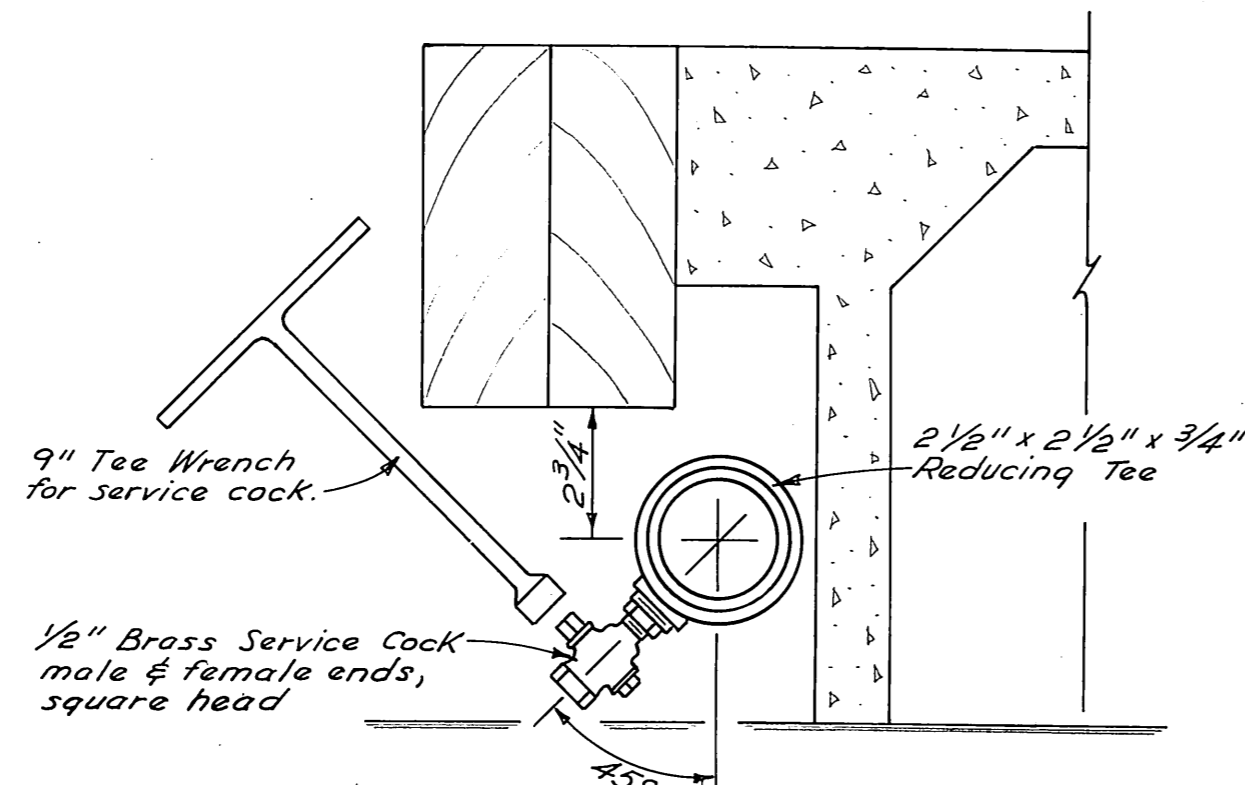
FIRE EXTINGUISHER  
CABINET CONNECTION  
Scale 1/2" = 1'-0"



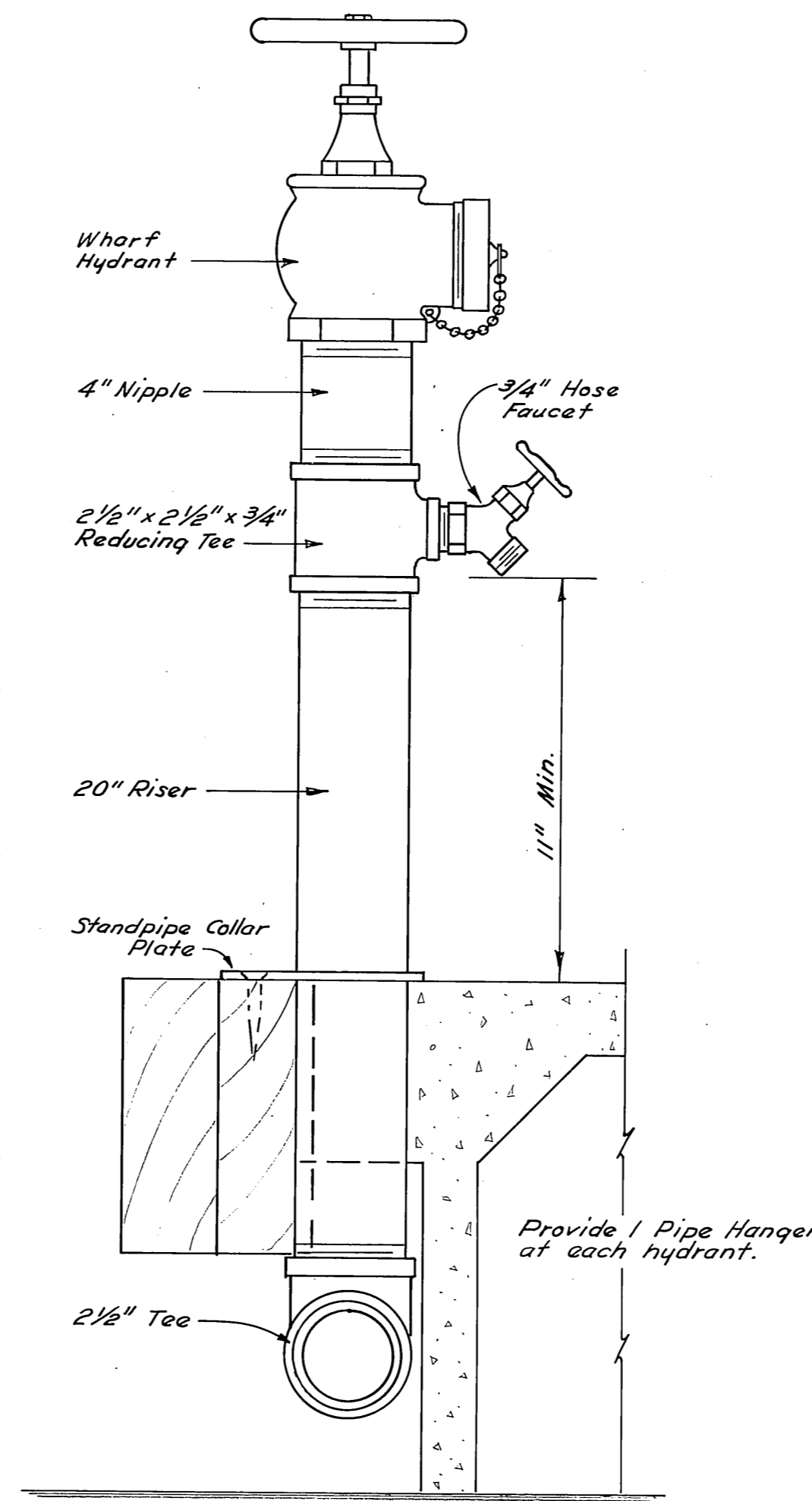
FLEXIBLE CONNECTION DETAILS  
Gangway Float  
Scale 3/8" = 1'-0"



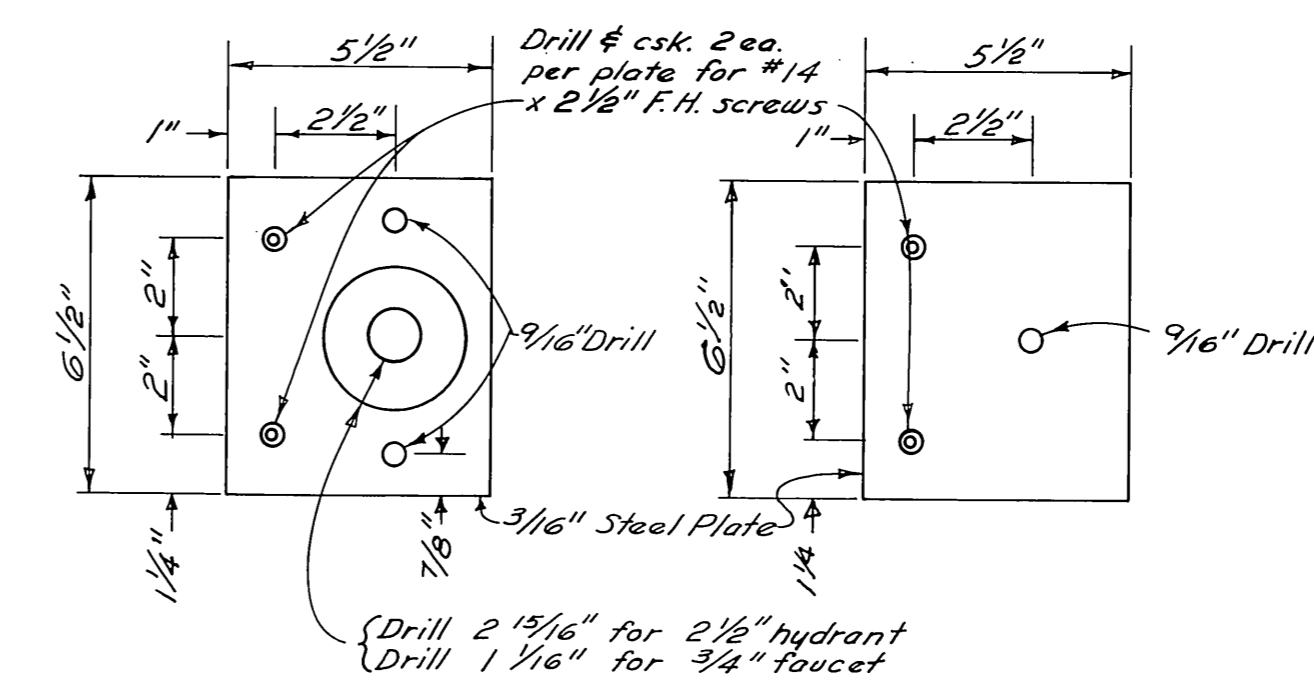
FLEXIBLE CONNECTION DETAIL  
Main Float to Finger Float  
Scale 1" = 1'-0"



DRAIN DETAIL  
Scale 3" = 1'-0"

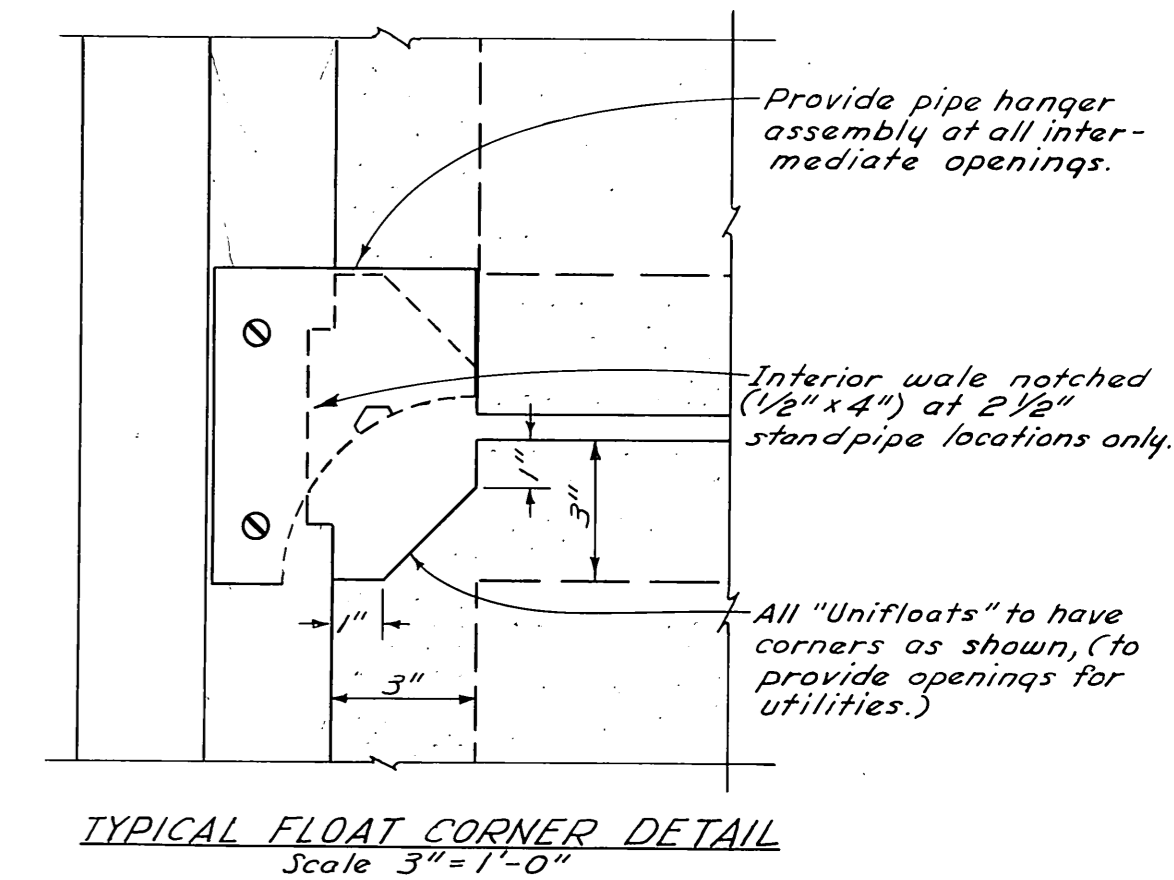


HYDRANT DETAIL  
Scale 3" = 1'-0"

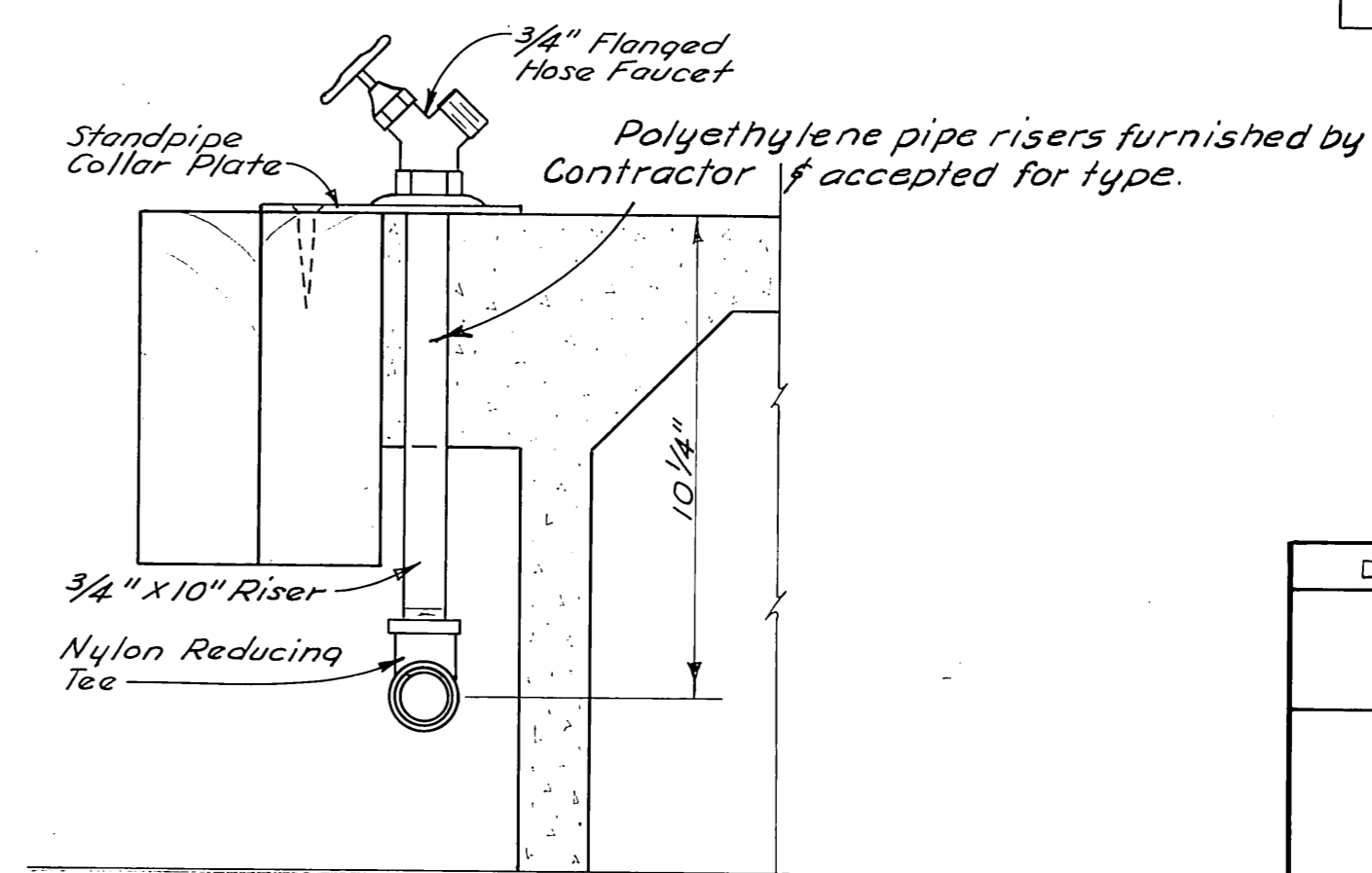


STANDPIPE COLLAR PLATE  
Scale 3" = 1'-0"

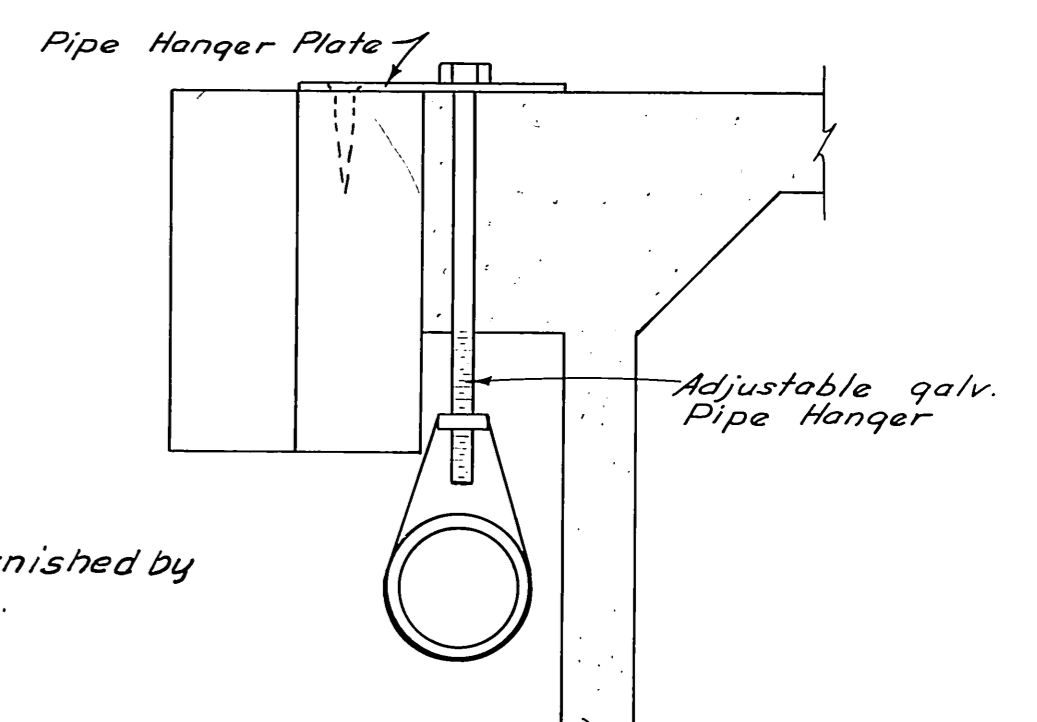
PIPE HANGER PLATE  
Scale 3" = 1'-0"



TYPICAL FLOAT CORNER DETAIL  
Scale 3" = 1'-0"



FAUCET DETAIL  
Scale 3" = 1'-0"

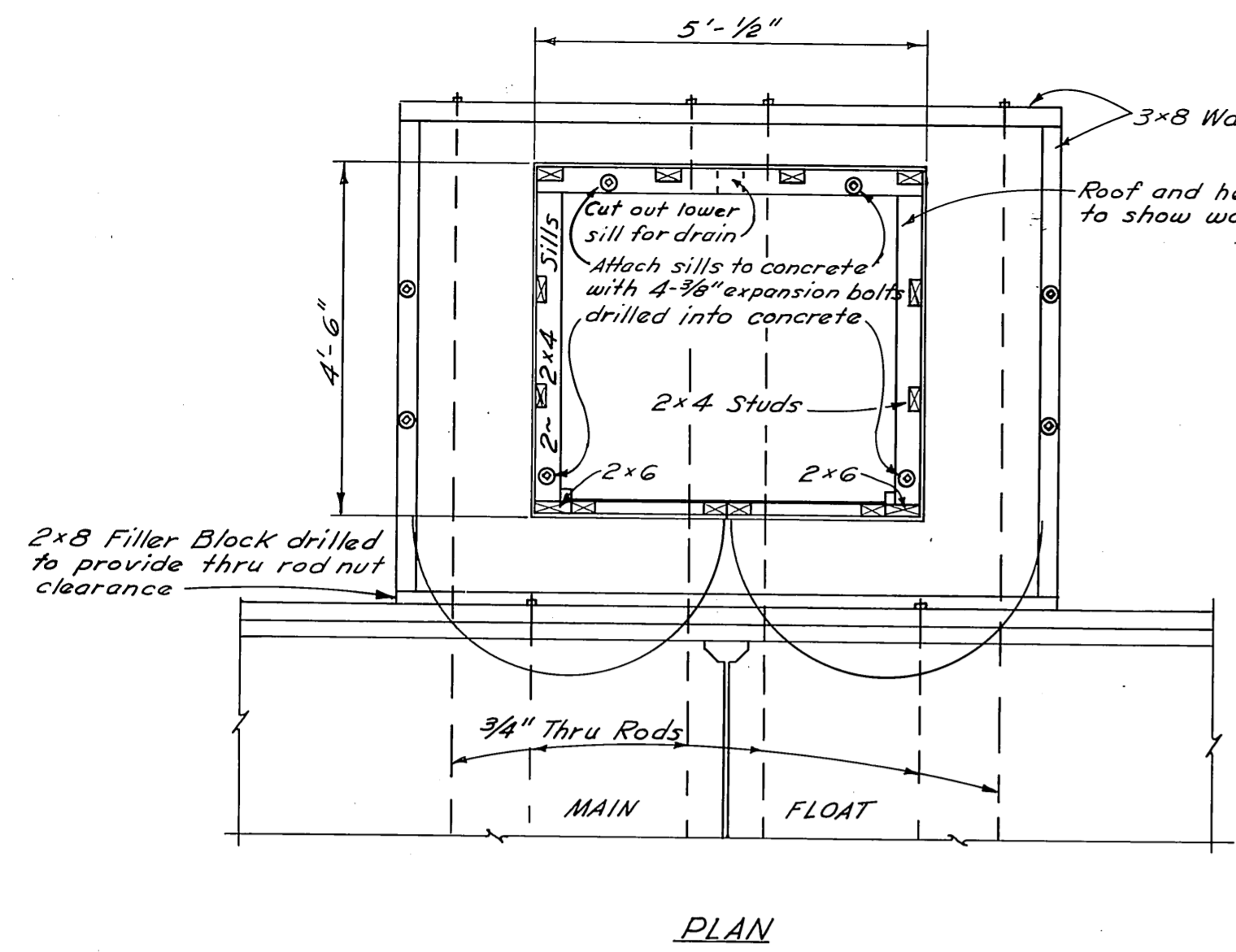


PIPE HANGER ASSEMBLY  
Scale 3" = 1'-0"

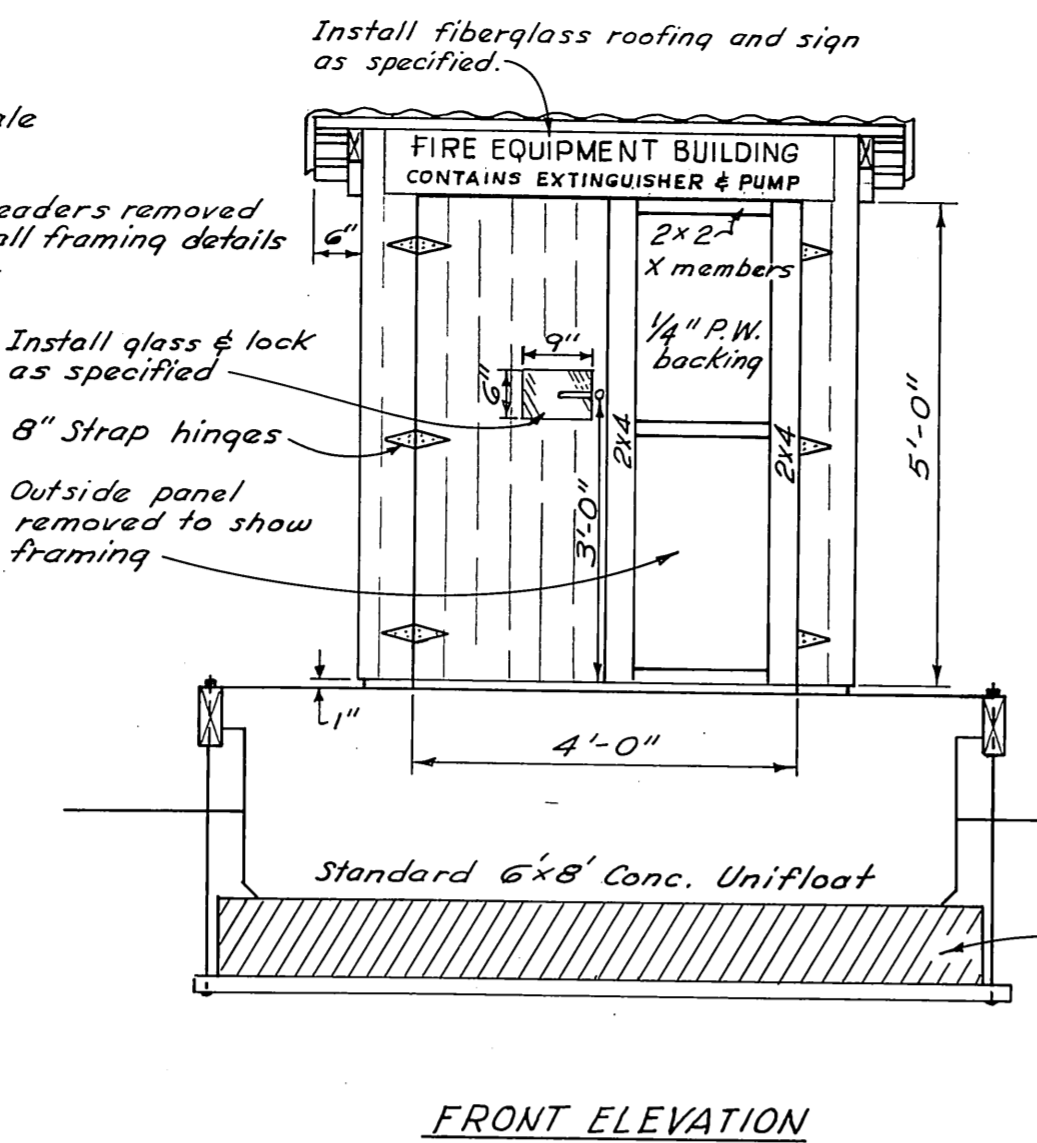
AS BUILT

DO NOT SCALE THIS DRAWING - USE DIMENSIONS		
STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER AND HARBORS		
<b>CONCRETE FLOAT WATER SYSTEM DETAILS</b>		
SCALE As Noted	SURVEYED	APPROVED
DESIGNED D. S. M.	DRAWN E. L. S.	DON STATTER DIRECTOR
CHECKED D. S. M.	DATE 4-8-70	
PROJECT NUMBER 3-71190		SHEET 6 OF 9

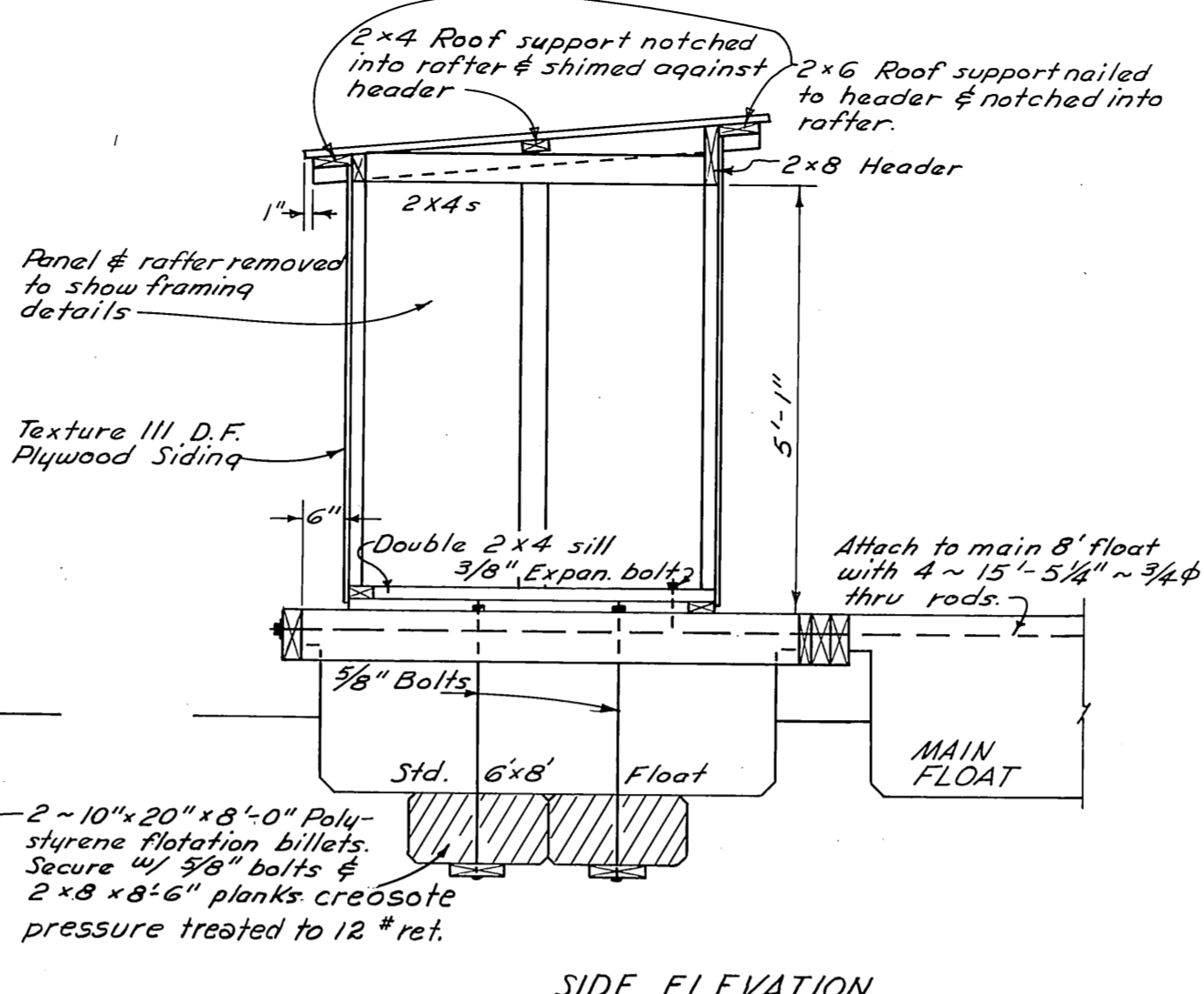
Difficulty in straightening polyethylene pipe when cold - recommend galv. steel pipe in the future.



PLAN

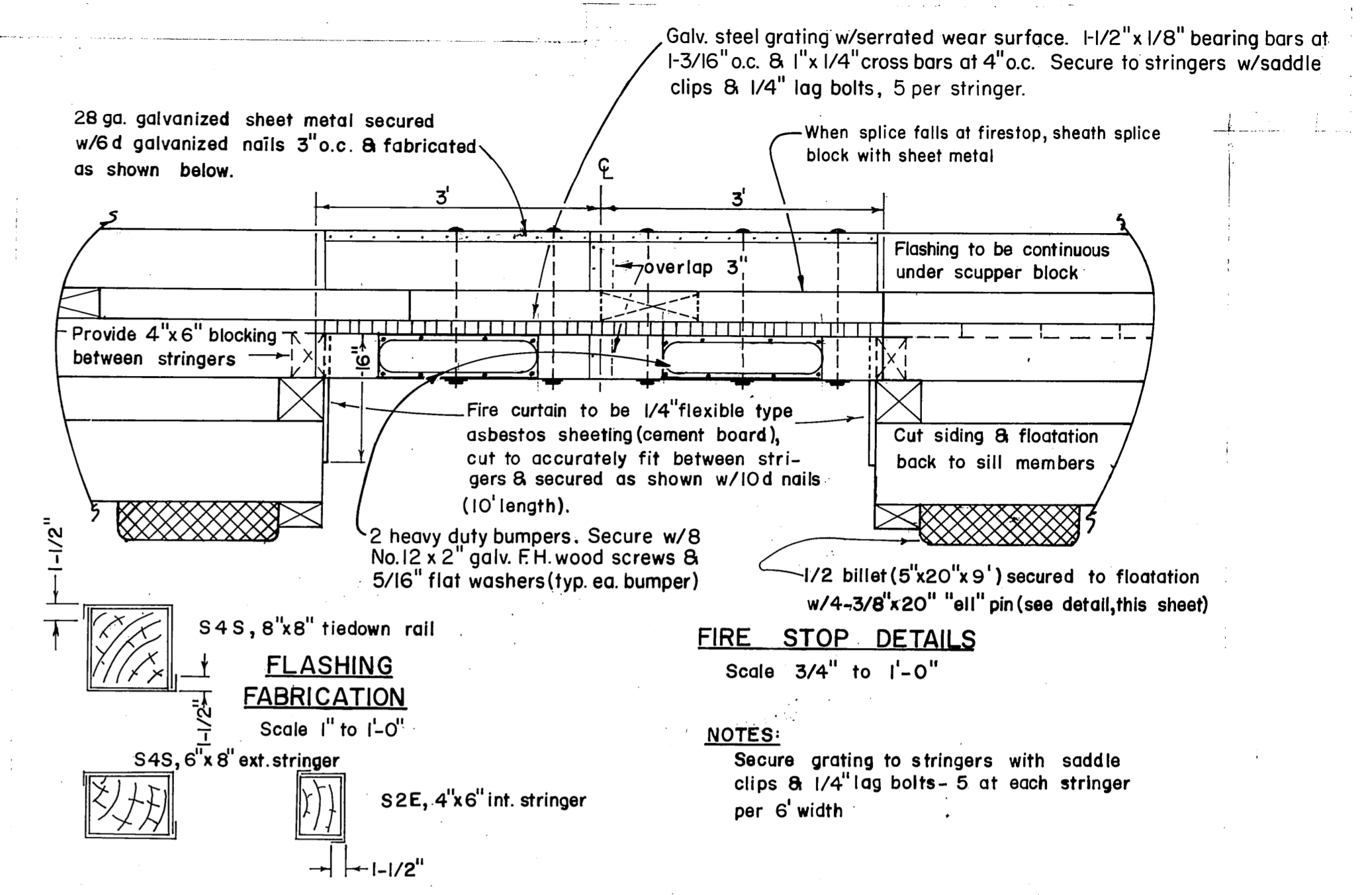


FRONT ELEVATION



SIDE ELEVATION

FIRE EQUIPMENT BUILDING  
Scale 1/2" = 1'-0"



FLASHING FABRICATION  
Scale 1" to 1'-0"

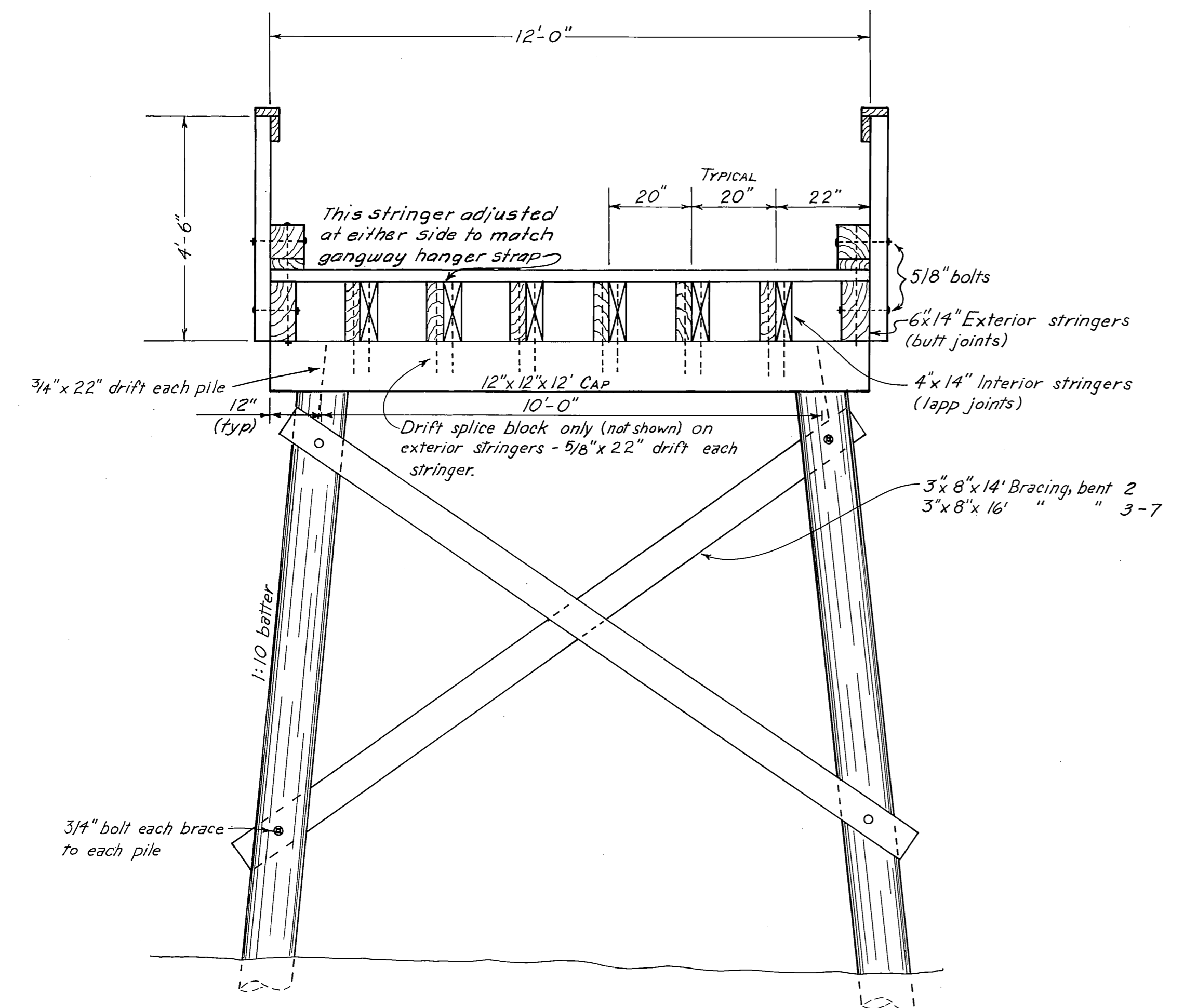
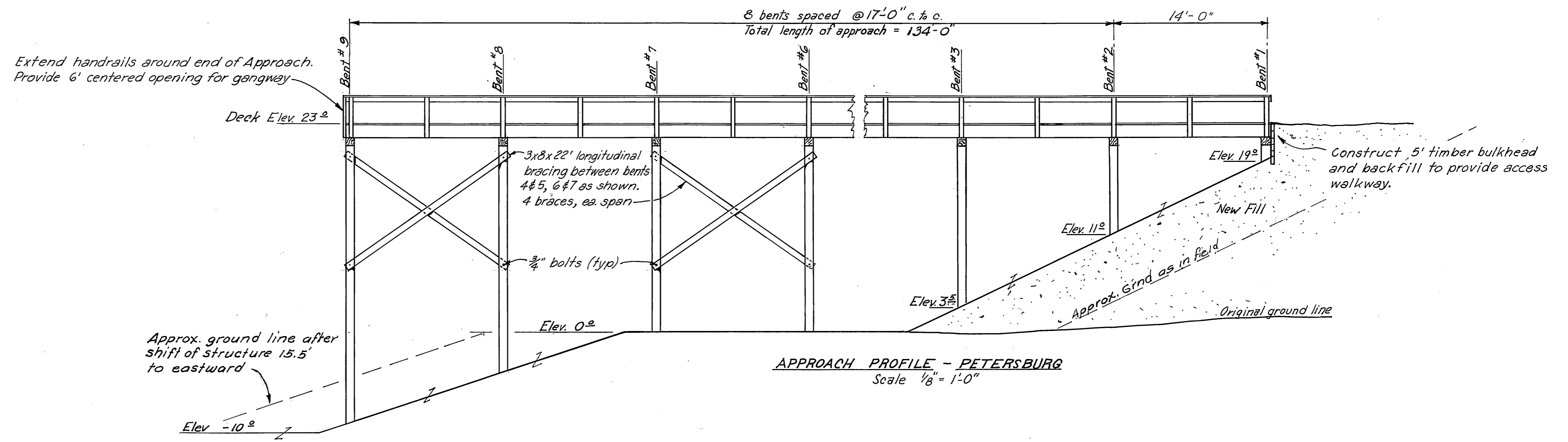
FIRE STOP DETAILS  
Scale 3/4" to 1'-0"

NOTES:  
Secure grating to stringers with saddle clips & 1/4" lag bolts - 5 at each stringer per 6' width

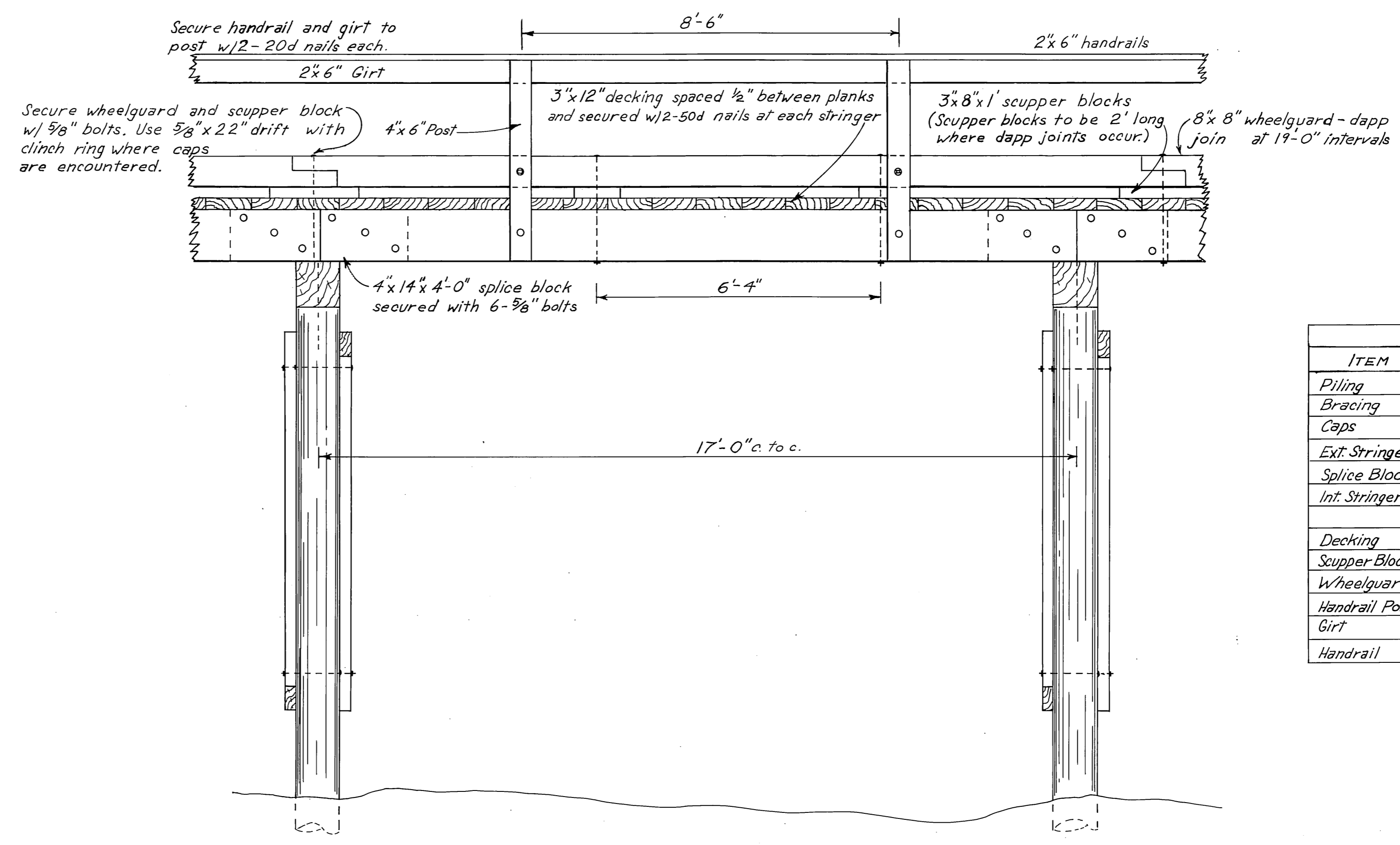
FIRE STOP FOR EXISTING TIMBER FLOATS

AS BUILT

DO NOT SCALE THIS DRAWING - USE DIMENSIONS		
STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER AND HARBORS		
<b>FIRE EQUIPMENT BUILDING &amp; FIRE STOP DETAILS</b>		
SCALE <i>As Noted</i>	SURVEYED	APPROVED
DESIGNED	DRAWN <i>E.L.S.</i>	<b>DON STATTER</b> DIRECTOR
CHECKED <i>D.S.M.</i>	DATE <i>4-10-70</i>	
PROJECT NUMBER	<i>3-71190</i>	SHEET <i>7</i> OF <i>9</i>



TYPICAL APPROACH SECTION  
Scale 1/2" = 1'-0"



TYPICAL APPROACH ELEVATION  
Scale 1/2" = 1'-0"

NOTES  
All hardware to be galvanized w/malleable iron washers between nut & wood surfaces. All bolts to be of mushroom head type. Bolt holes to be drilled 1/16" oversize. Drift holes to be drilled 1/16" undersize. All drill holes to be treated with hot creosote oil. All pressure treated creosote material shall be cut to size prior to treatment.  
Approach piles shall be driven tip down to 20' penetration or refusal as determined by the Engineer.

ITEM	MATERIALS			TYPE
	GRADE	DRESSING	CREO. TREAT.	
Piling	Class B		12" Ret.	Douglas Fir
Bracing	Construction	Rough	"	"
Caps	"	S&S	8" Ret.	"
Ext. Stringers	"	"	"	"
Splice Blocks	"	S2E	"	"
Int. Stringers	"	"	"	"
Decking	"	S1S2E	"	"
Scupper Block	"	S&S	"	"
Wheelguard	"	"	"	"
Handrail Post	"	"	"	"
Girt	"	"	* W.R. Penta	"
Handrail	"	"	* W.R. Penta	"

\* W.R. Penta Retention = .3 lb/cu. ft

DO NOT SCALE THIS DRAWING - USE DIMENSIONS

STATE OF ALASKA  
DEPARTMENT OF PUBLIC WORKS  
DIVISION OF WATER AND HARBORS

**PETERSBURG 12'-0" APPROACH  
CONSTRUCTION DETAILS**

SCALE AS SHOWN	SURVEYED	APPROVED
DESIGNED D.S.	DRAWN CED/LET	DON STATTER
CHECKED	DATE 4-14-10	DIRECTOR
PROJECT NUMBER 3-71190	SHEET 8 OF 9	

As BUILT

