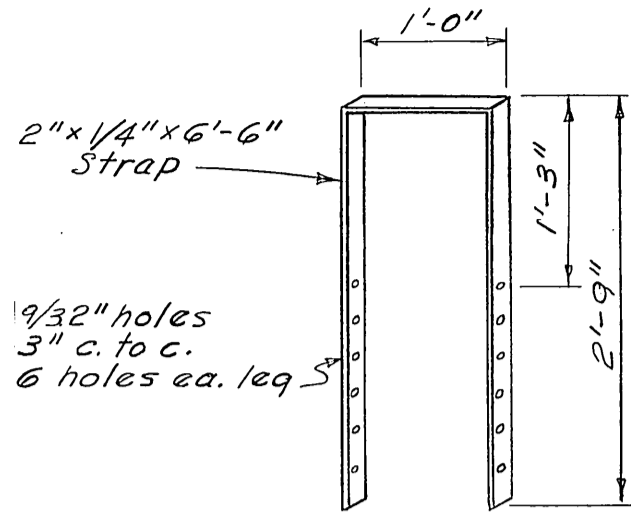
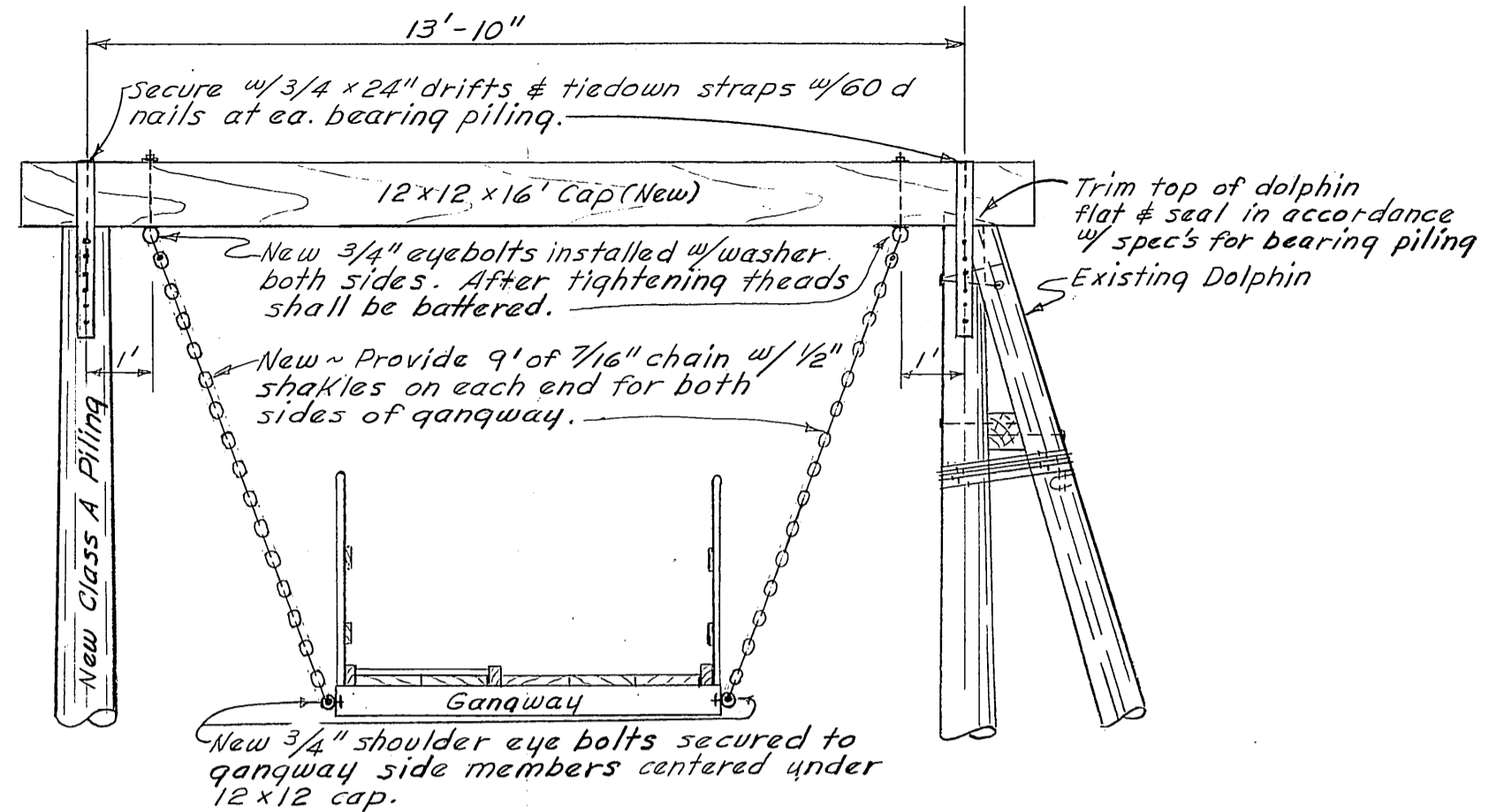


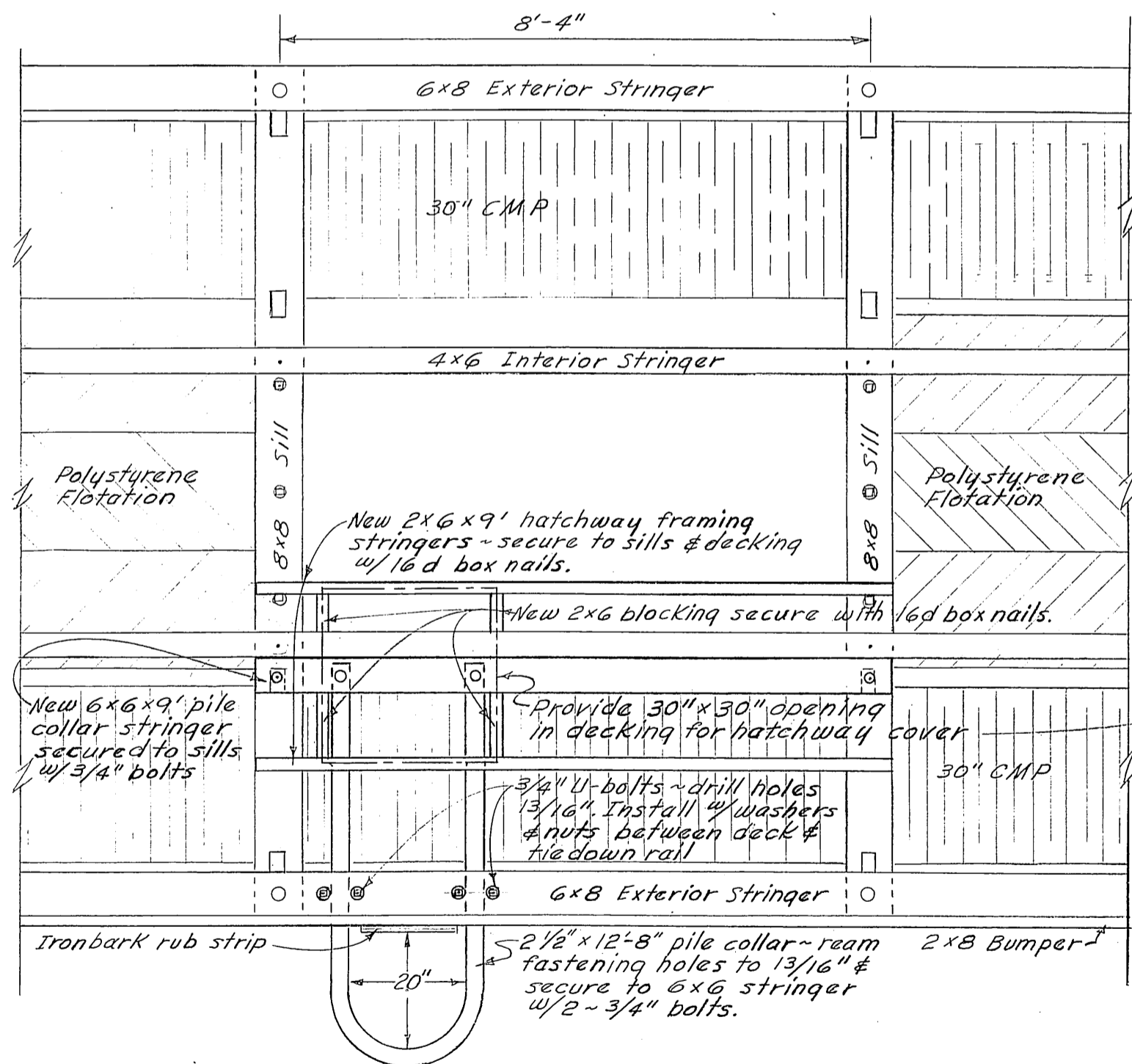
LOCATION PLAN  
1" = 50'



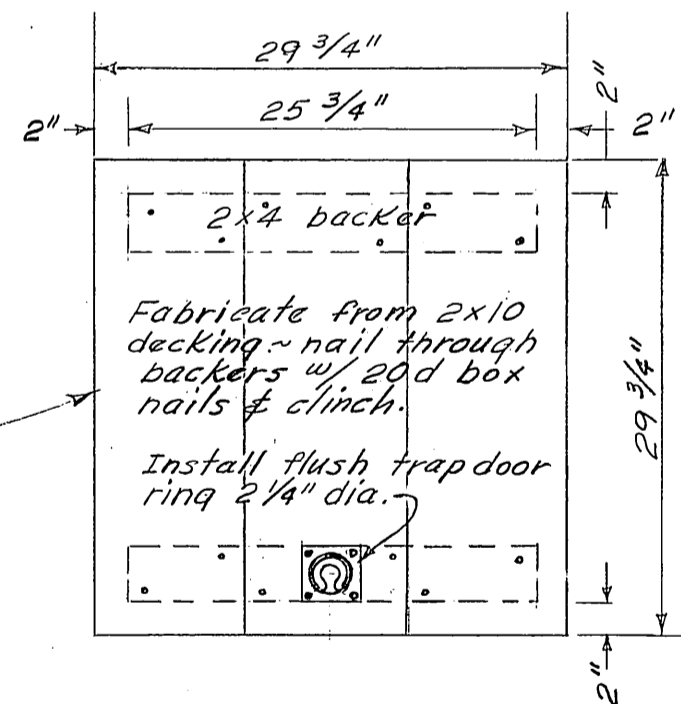
TIE-DOWN STRAP  
3/4" = 1'-0"



WINTER GANGWAY HANGER DETAIL  
3/8" = 1'-0"



PILE COLLAR REVISION DETAIL  
1/2" = 1'-0"



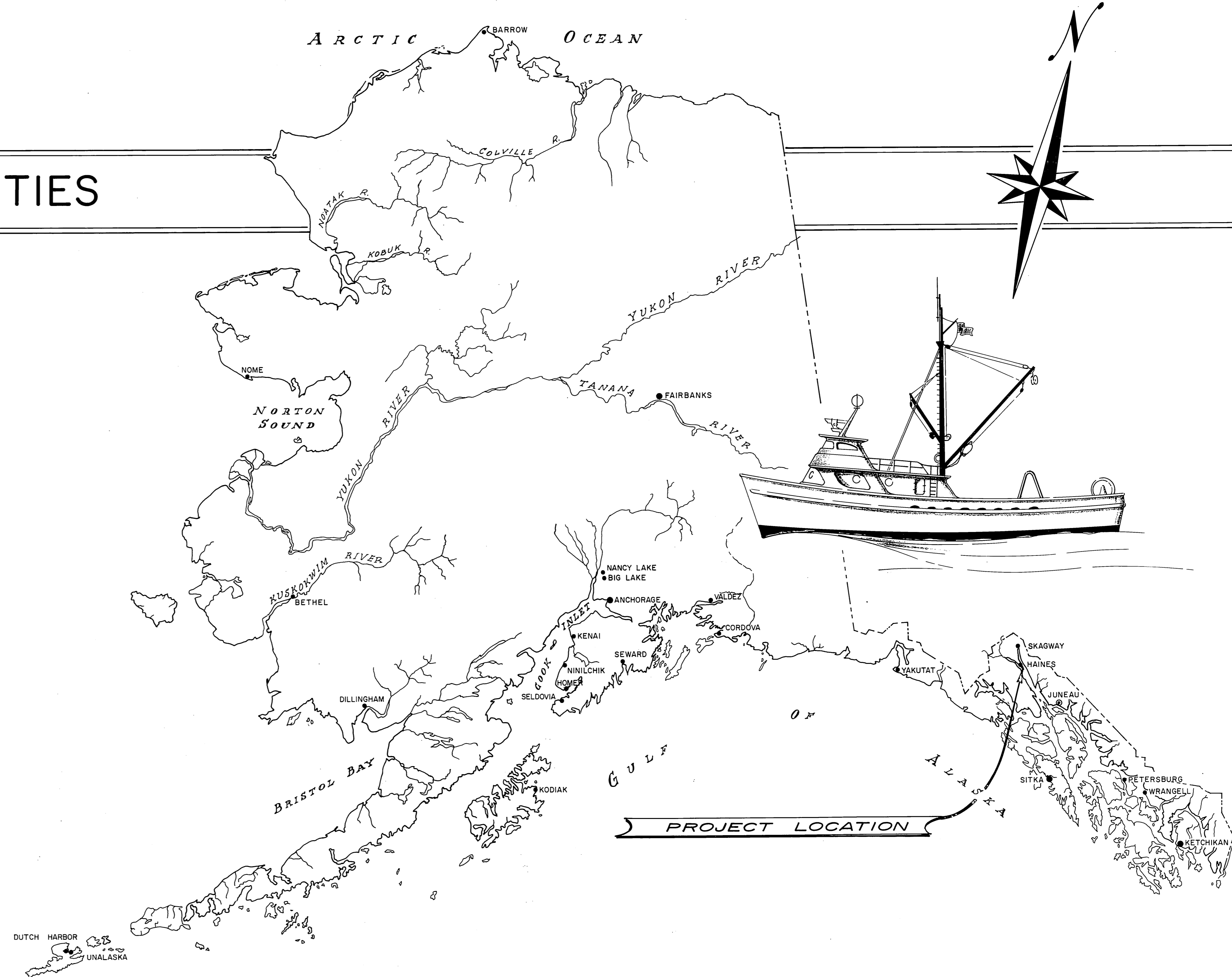
HATCHWAY COVER DETAIL  
1" = 1'-0"

AS BUILT

# LETNIKOF COVE FLOAT FACILITIES

PROJECT NO. 3-70189

AS BUILT



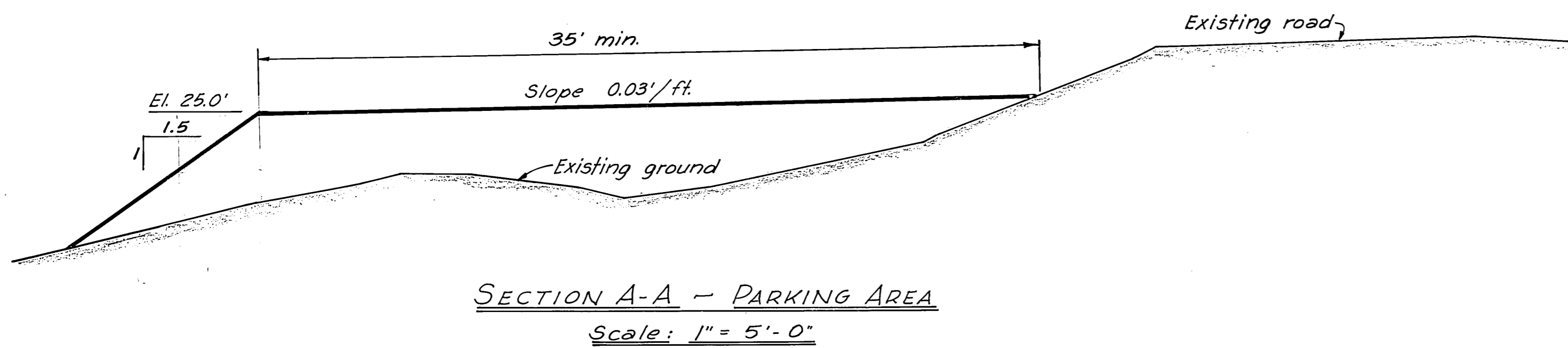
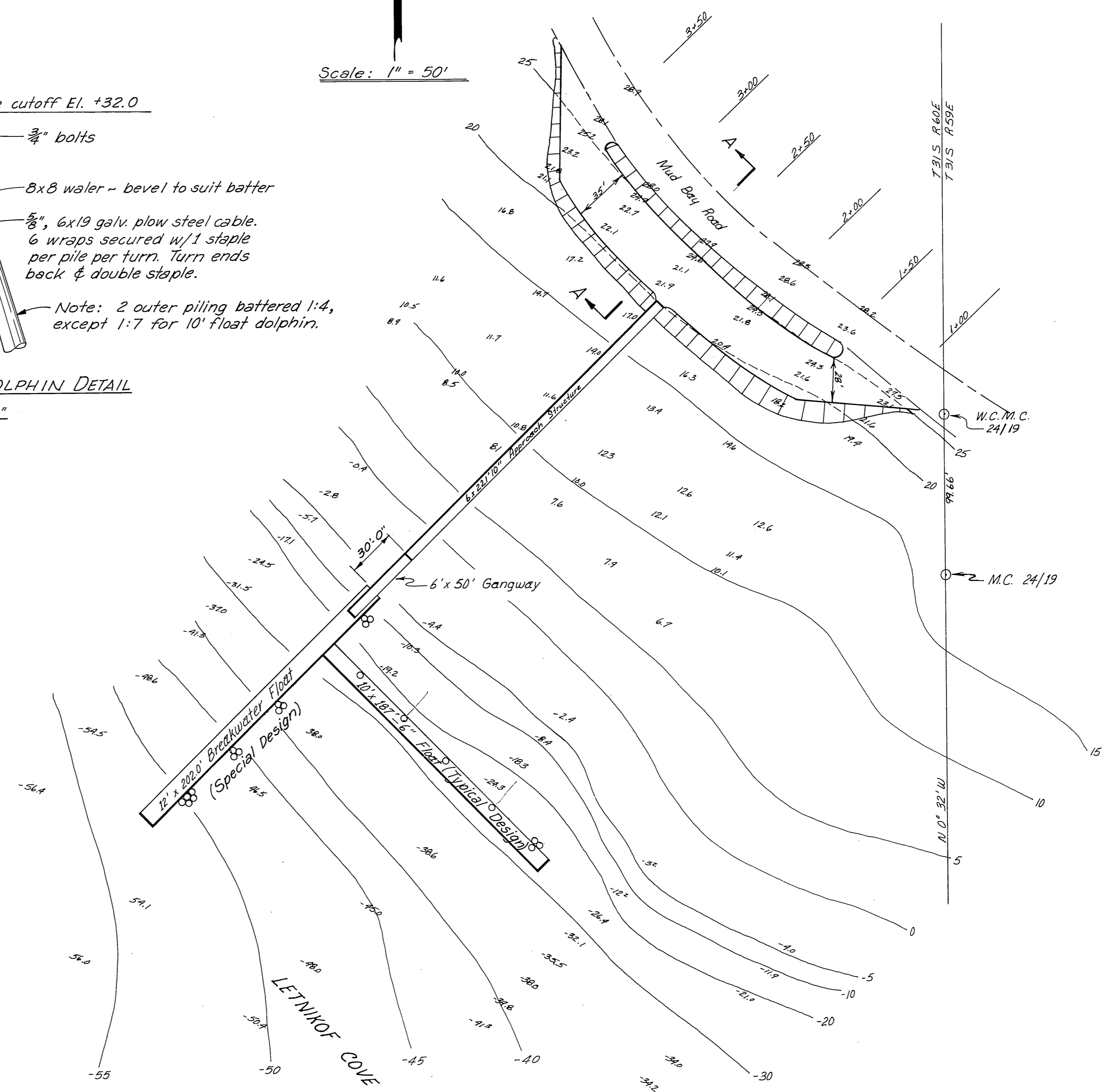
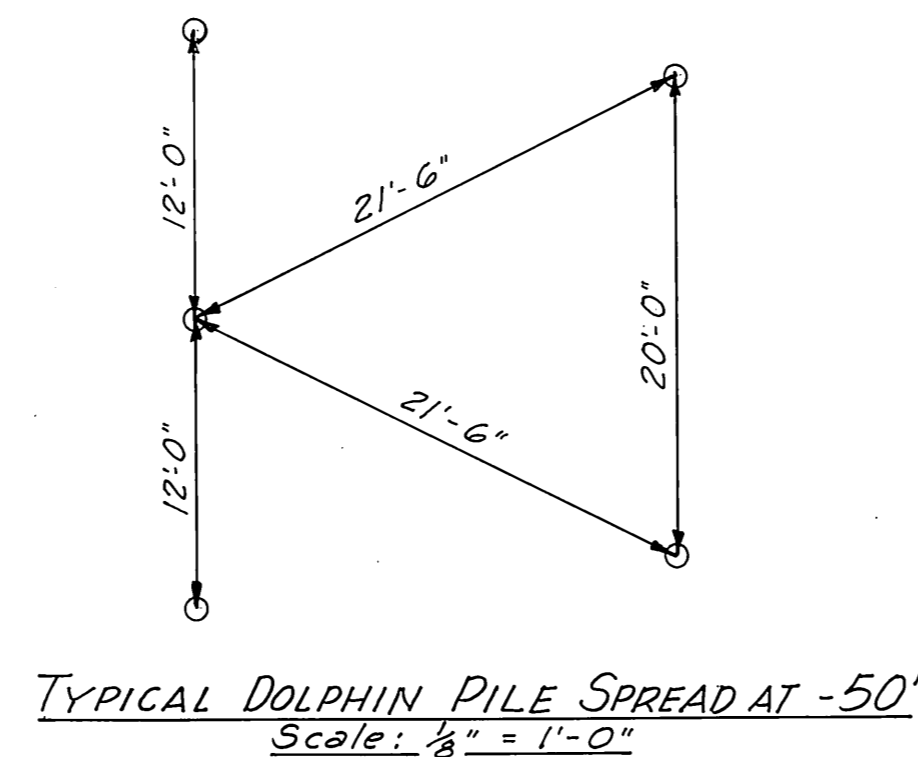
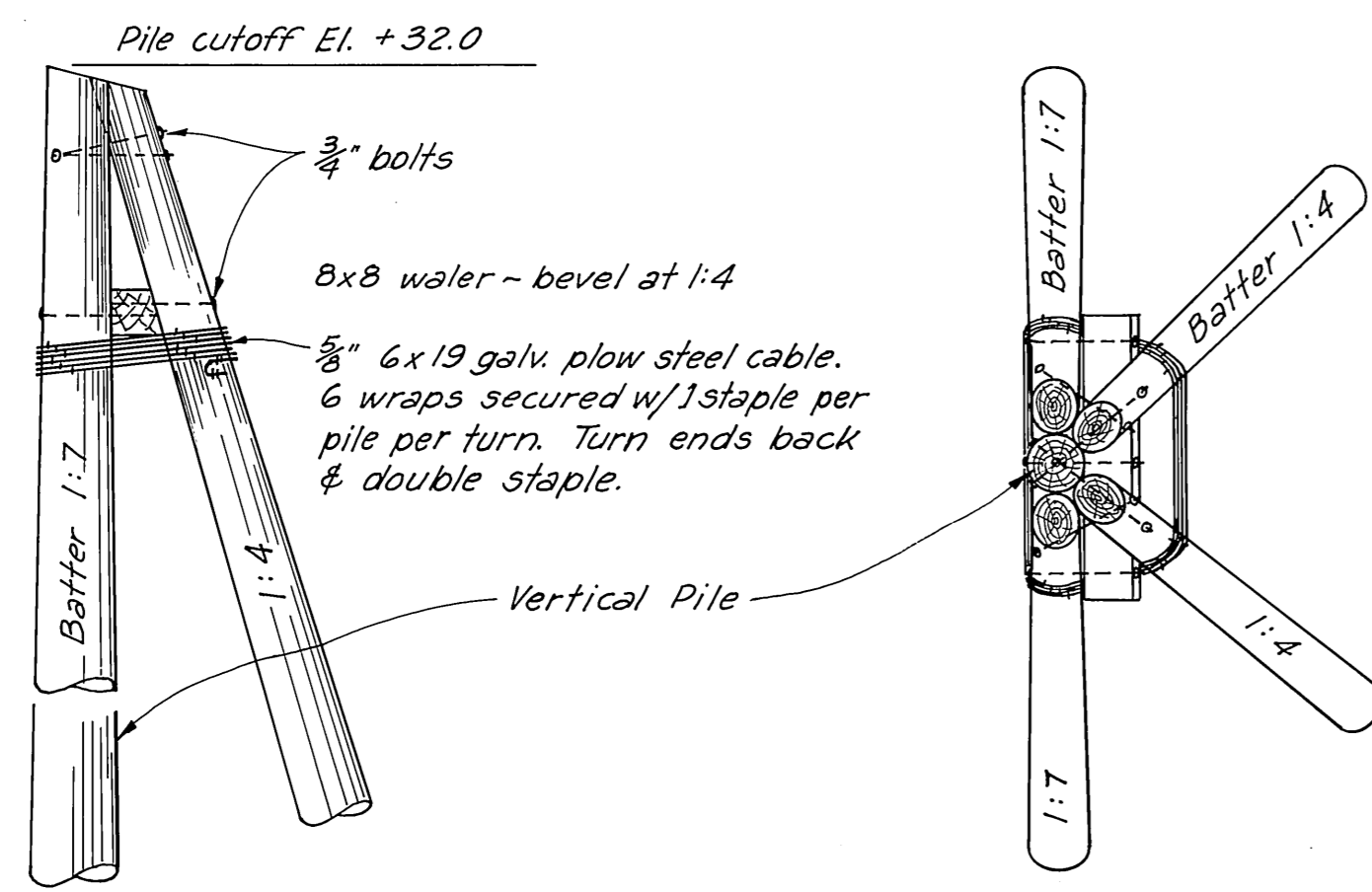
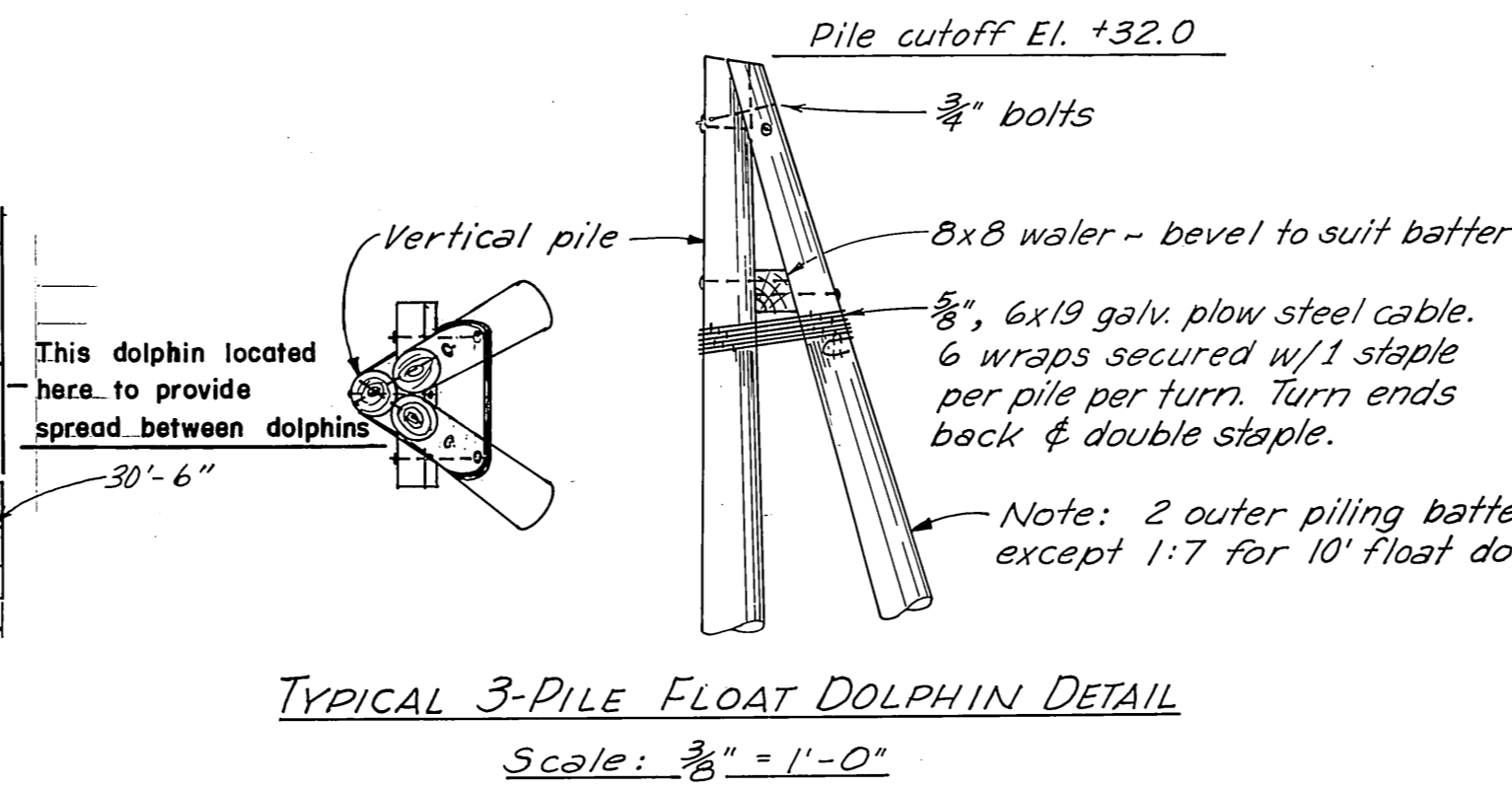
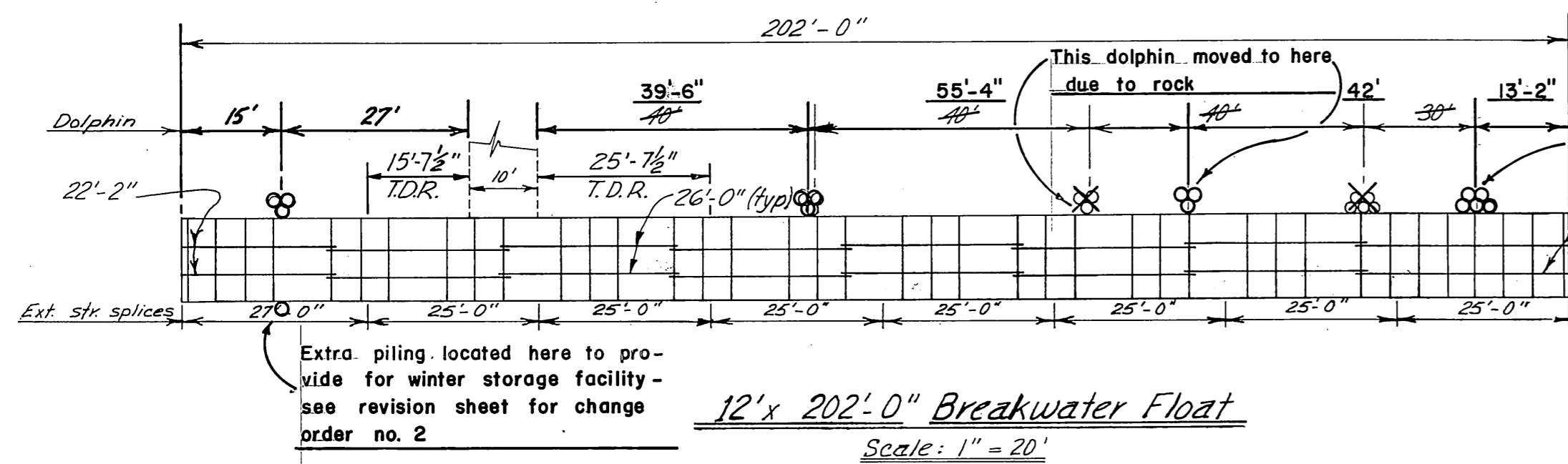
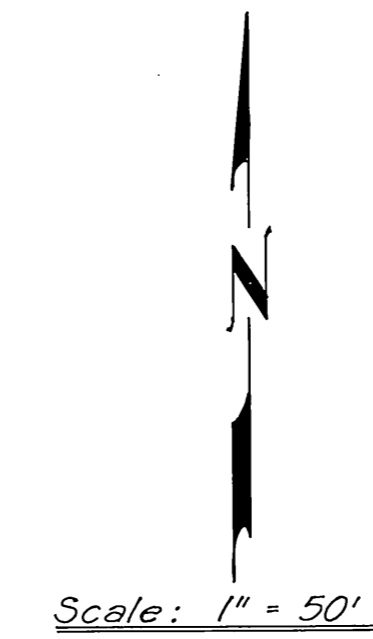
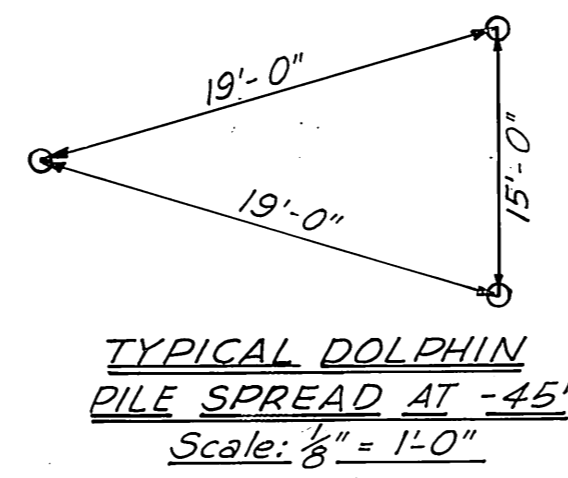
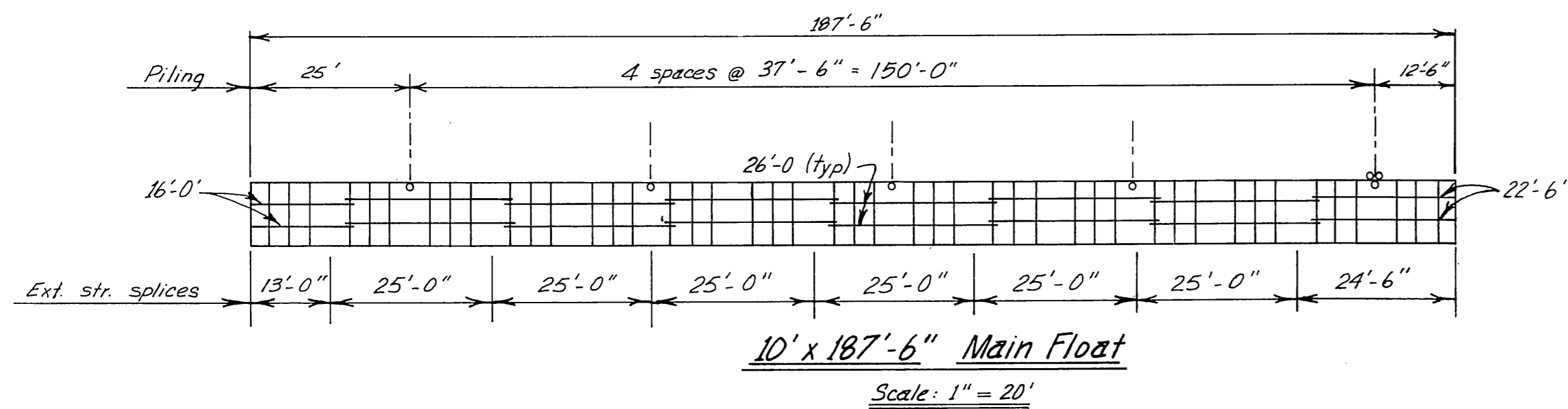
### WORK SUMMARY

Major units of this project include the construction of a 6' x 221'-10" Approach (1331 S.F.); construction & installation of a 12' x 202' Breakwater Float (2424 S.F.), a 10' x 187'-6" Typical Float (1875 S.F.), and a 6' x 50' steel gangway; furnishing & driving 4 single float piling (310 L.F.) and 17 dolphin piling (1510 L.F.), and hauling & placing 1385 c.y. of pit run gravel.

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

INDEX TO SHEETS	
1 TITLE & LOCATION	6 TYPICAL STEEL GANGWAY
2 FLOAT LAYOUT - STRINGER DIAGRAMS - DOLPHIN DETAILS - PARKING AREA DETAILS	
3 TYPICAL 6' APPROACH & PROFILE	
4 TYPICAL BREAKWATER FLOAT	
5 TYPICAL 10' FLOAT	

APPROVED  
*Harold A. Stenlund*  
 COMMISSIONER  
 DATE \_\_\_\_\_  
 SHEET 1 OF 6

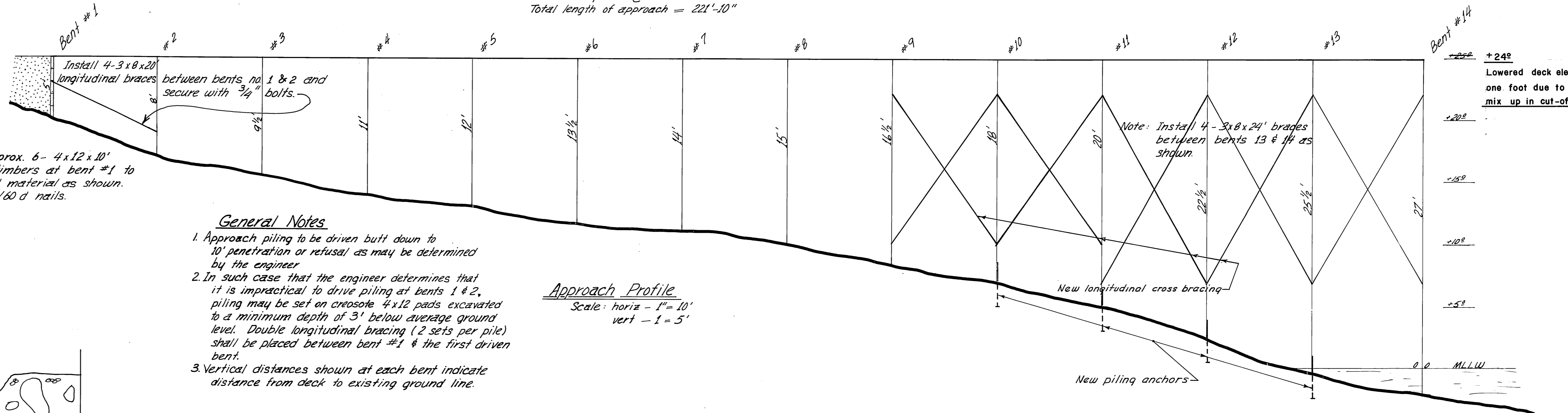


- General Notes:
- All float piling shall be Class "A", 12# cred. retention, and shall be driven butt down to 20' penetration or refusal, as determined by the Engineer. Provide one pipe pile collar for each dolphin.
  - Exterior stringer splice locations are typical for both sides of float. Distances are c to c of dapp joints or to butt at float end.
  - Interior stringer dimensions are full length, 26' except as noted.
  - Tiedown rails to be spliced at same locations as ext. stringer splices. Provide tiedown rail at float end.

NOTE: Do NOT SCALE THIS DRAWING - Use DIMENSIONS.

STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER AND HARBORS	
<b>PROJECT LAYOUT</b>	
<b>STRINGER DIAGRAMS- DOLPHIN DETAILS</b>	
<b>PARKING AREA DETAILS</b>	
SCALE - As noted	APPROVED - Don Statter
DATE - March 25, 1969	DIRECTOR
PROJ. NO. - 3-70189	DRAWN BY - EAC
	CHECKED BY -

14 Bents Spaced @ 17'-0" o.c.  
Total length of approach = 221'-10"



Install approx. 6 - 4x12x10' creosote timbers at bent #1 to retain fill material as shown. Secure w/60 d nails.

Install 4-3x8x20' longitudinal braces between bents no. 1 & 2 and secure with 3/4" bolts.

Note: Install 4 - 3x8x24' braces between bents 13 & 14 as shown.

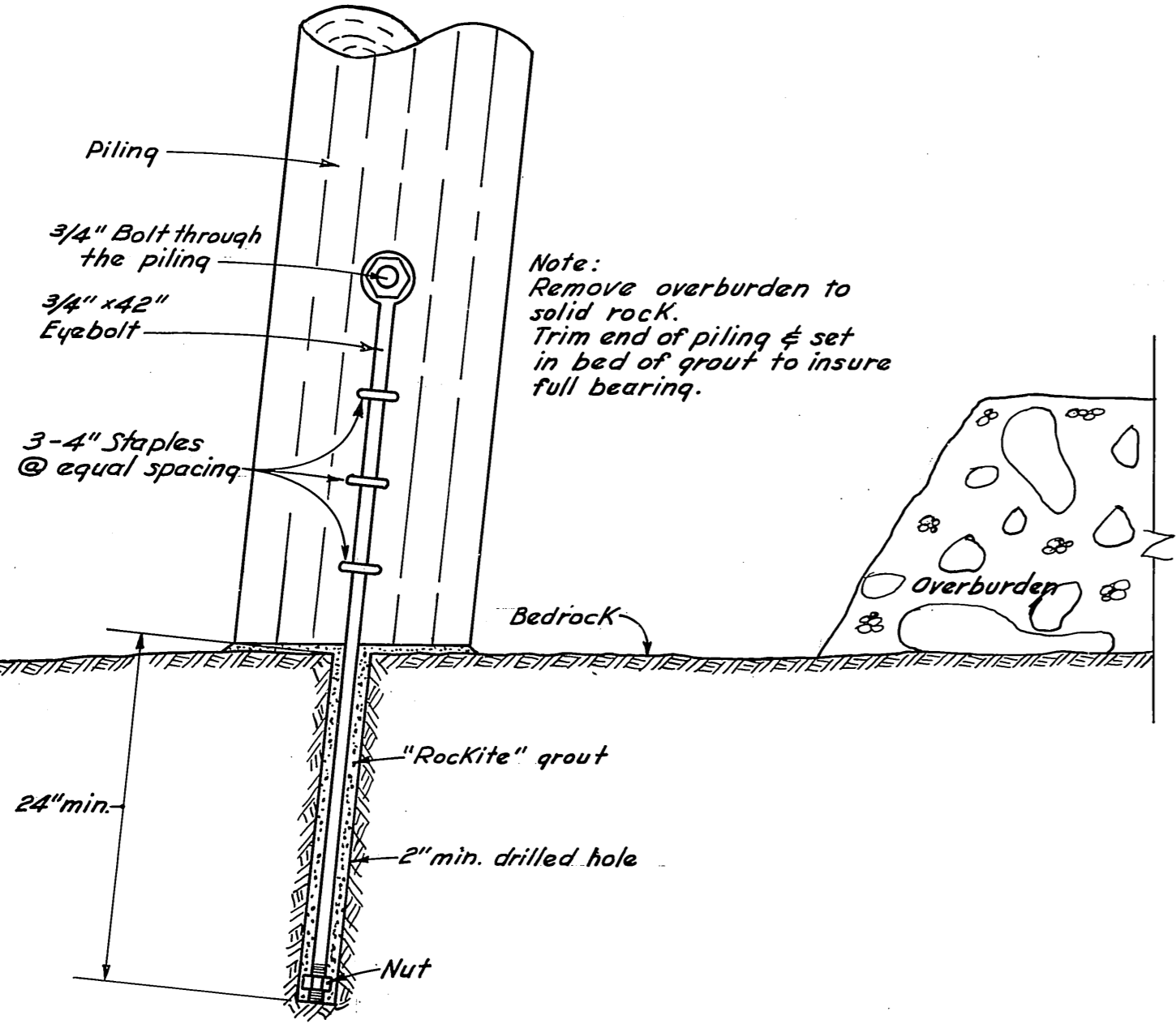
+24'  
Lowered deck elev. one foot due to mix up in cut-off  
+22'  
+20'  
+18'  
+16'  
+14'  
+12'  
+10'  
+8'  
+6'  
+4'  
+2'  
0 MLLW

**General Notes**

1. Approach piling to be driven butt down to 10' penetration or refusal as may be determined by the engineer.
2. In such case that the engineer determines that it is impractical to drive piling at bents 1 & 2, piling may be set on creosote 4x12 pads excavated to a minimum depth of 3' below average ground level. Double longitudinal bracing (2 sets per pile) shall be placed between bent #1 & the first driven bent.
3. Vertical distances shown at each bent indicate distance from deck to existing ground line.

**Approach Profile**

Scale: horiz - 1" = 10'  
vert - 1" = 5'



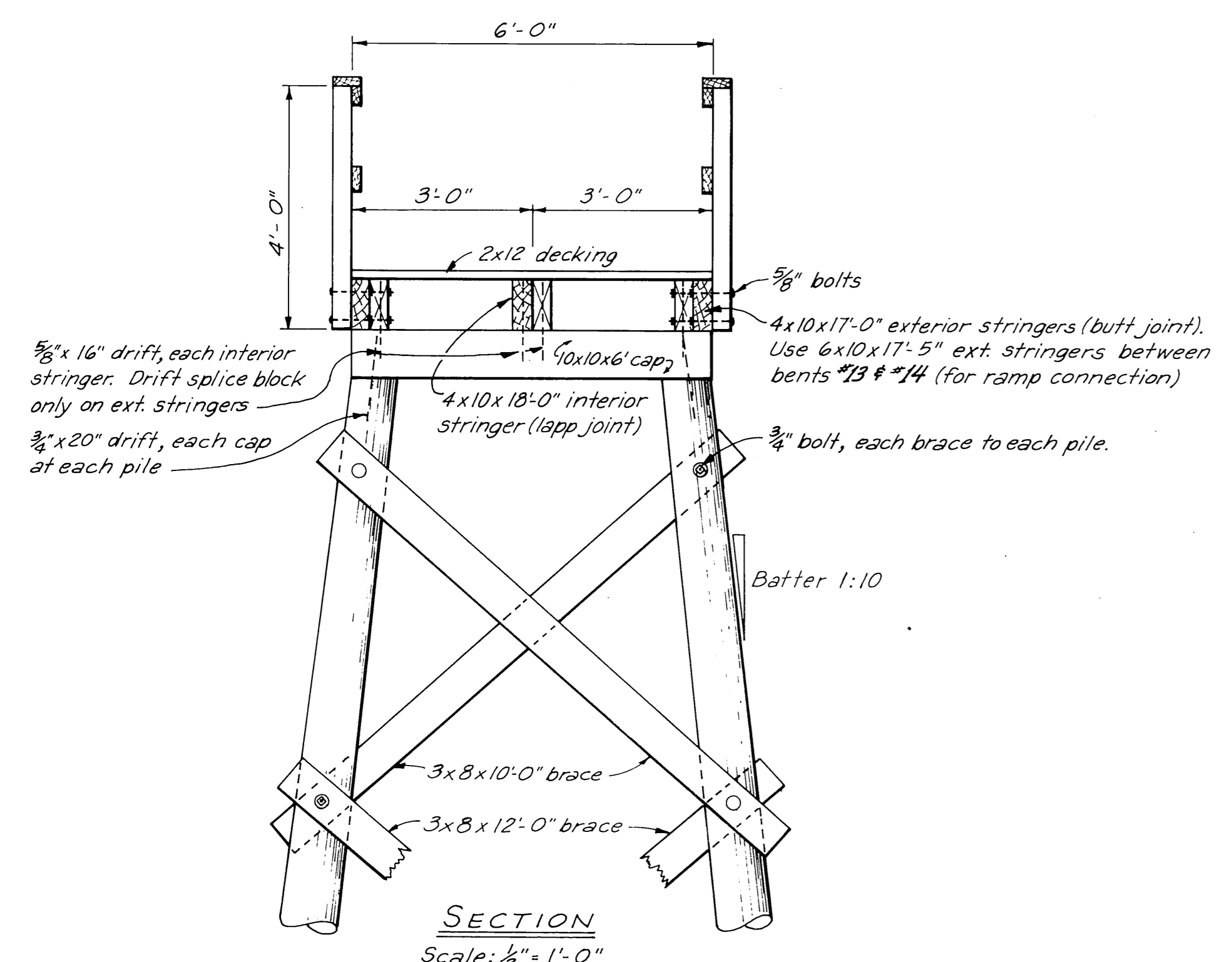
**DETAIL**  
Piling Anchor  
1/2" x 1'-0"

**CHANGE ORDER NO. 2**

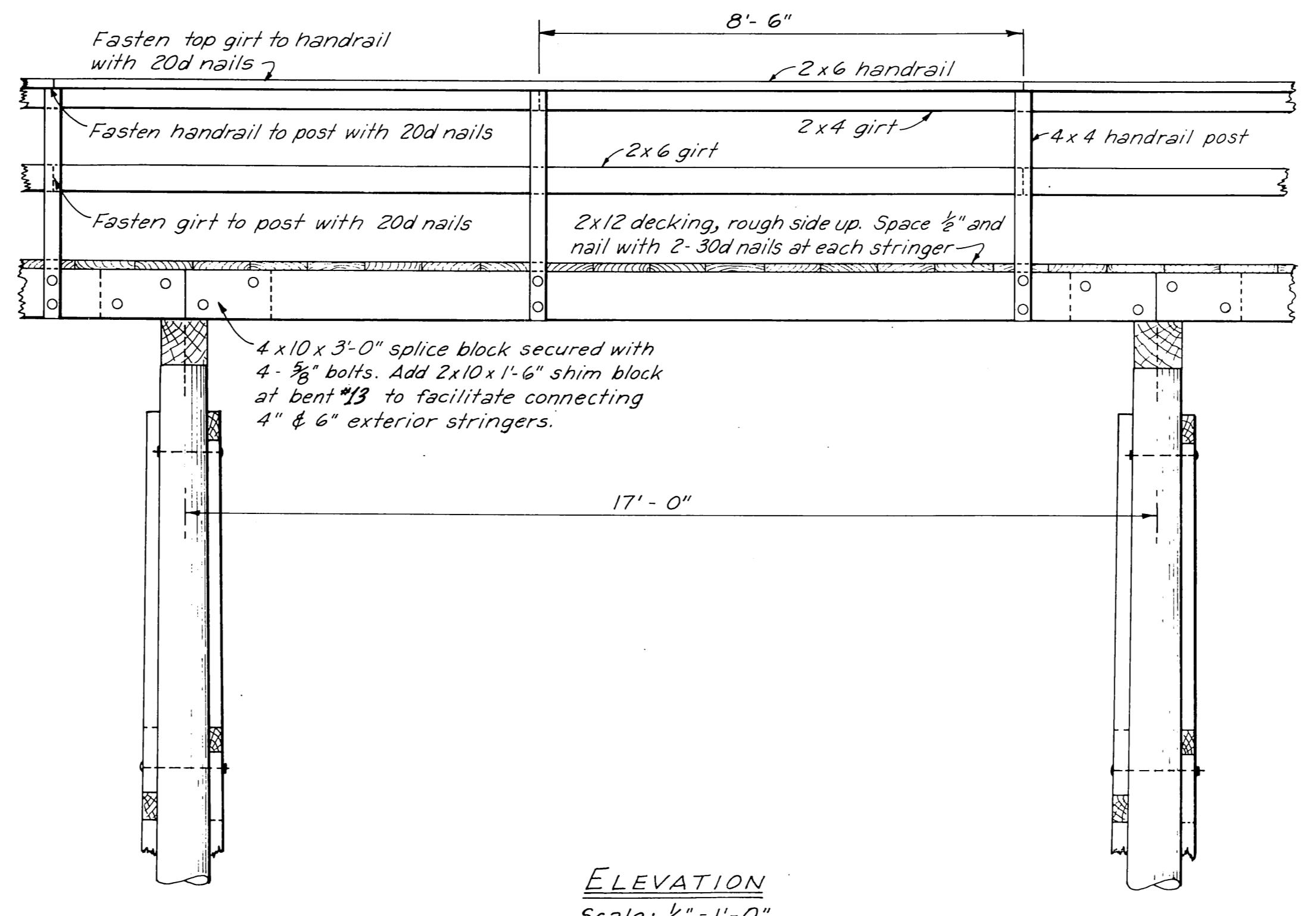
1. Add piling anchors to all piling at bents 10-11-12-13.
2. Add longitudinal cross bracing between bents 9 # 13 inclusive.  
8-3x8x22' between bents 9-10-11.  
8-3x8x24' between bents 11-12-13.

**NOTES:**

1. All hardware to be hot dip galvanized. A malleable iron washer shall be placed between all nut and wood surfaces.
2. All bolts to be of the economy headed type. Bolt holes to be drilled true size.
3. Drift holes to be 1/16" undersize.
4. All pressure treated creosote materials shall be cut to size prior to treatment.
5. Drift holes in stringers & splice blocks, and bolt holes in exterior stringers for splice blocks shall be drilled prior to treatment. All other holes may be field drilled.
6. All field drilled holes shall be treated with hot creosote oil.



**SECTION**  
Scale: 1/2" = 1'-0"



**ELEVATION**  
Scale: 1/2" = 1'-0"

MATERIALS		
ITEM	DRESSING	TREATMENT
Piling	Class B	12# Creo. Ret.
Bracing	Rough	" " "
Caps	S45	8# Creo. Ret.
Stringers	S2E	" " "
Splice Block	"	" " "
Decking	S15	" " "
Handrail Post	S45	" " "
Handrail	"	" " "
Girts	"	" " "

All 12-lb. creo. treatment to be Full Cell.  
All 8-lb. creo. treatment to be Empty Cell.  
All material to be constr. grade Douglas fir.

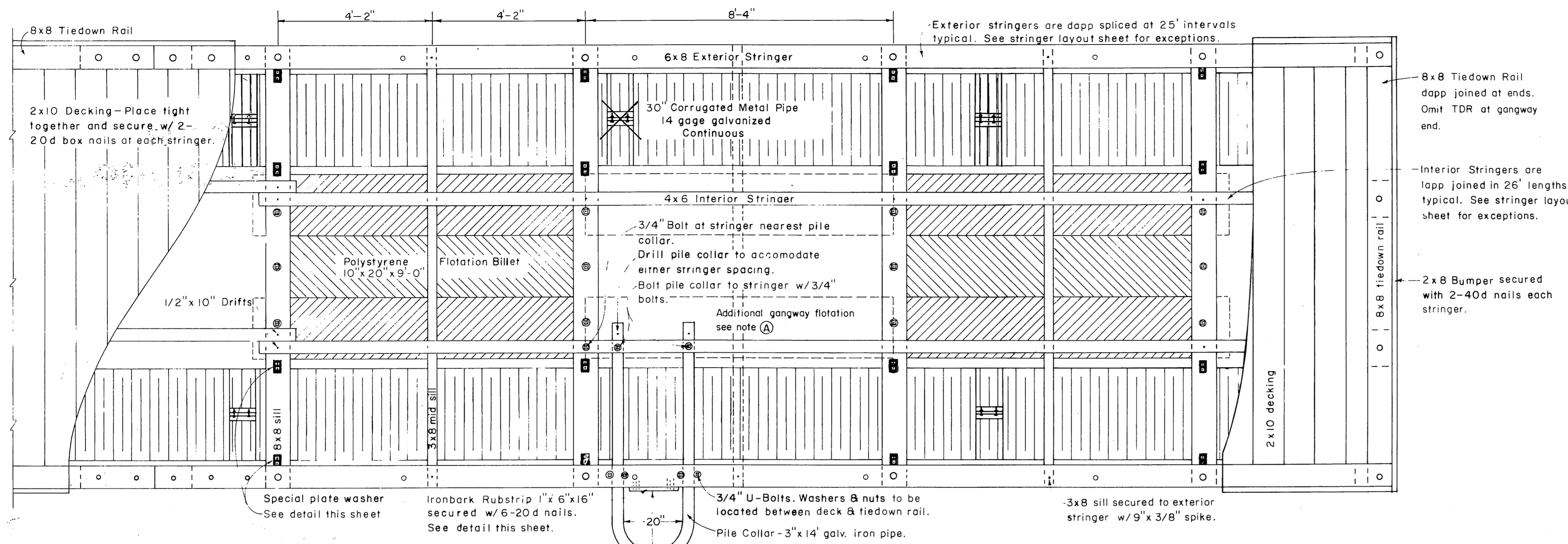
**AS BUILT**

NO.	DATE	REVISION	BY
1	11/10/69	Change Order No. 2	AS

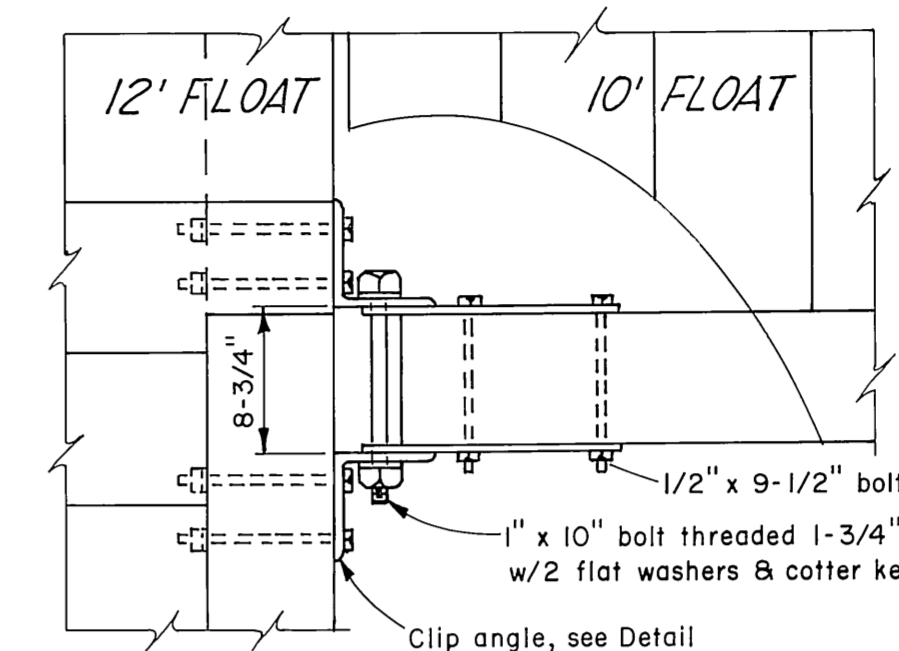
STATE OF ALASKA  
DEPARTMENT OF PUBLIC WORKS  
DIVISION OF WATER AND HARBORS

**TYPICAL 6'-0" APPROACH CONSTRUCTION DETAILS**

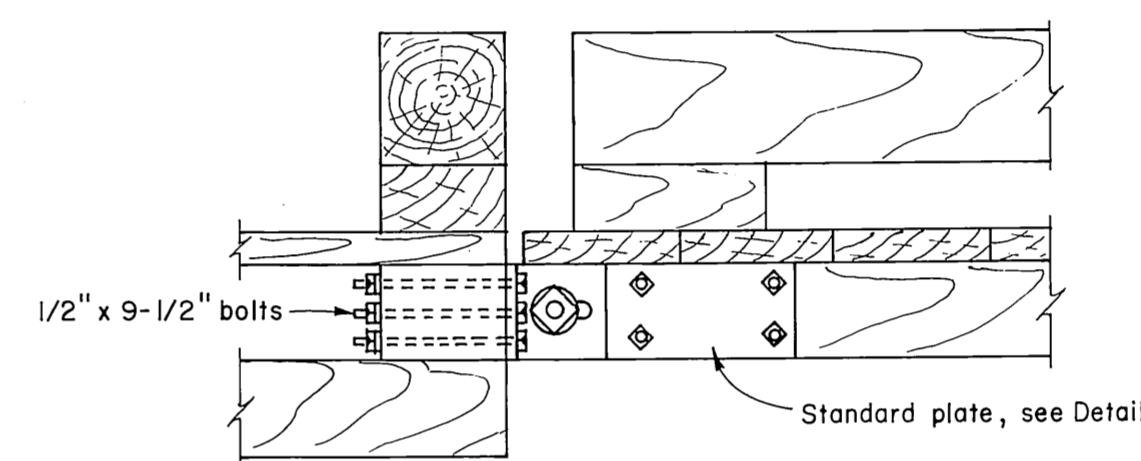
SCALE As noted	APPROVED Don Statter
DATE 4-8-69	DIRECTOR
PROJ. NO. 3-70169	
SURVEYED BY	DRAWN BY SAC
	CHECKED BY



(A) Modification for additional flotation under gangway section. Shift flotation billets 4" longitudinally in the two end sections and install 2 flotation billets between 2nd and 3rd 8x8 sills. Trim billets to 8'4" length, butt end to end with shifted billets. Add 3x8 middle sill.

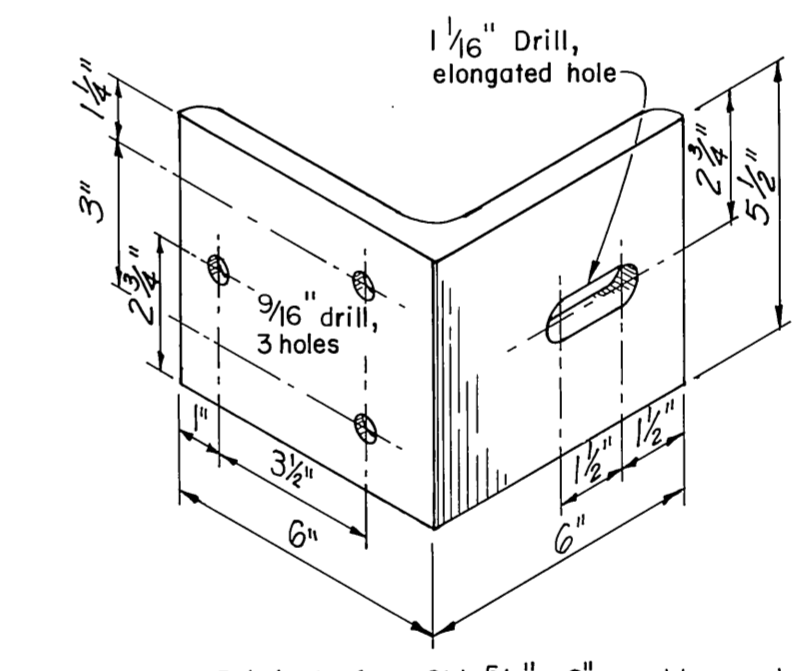


PLAN  
(Typ. both sides of float)



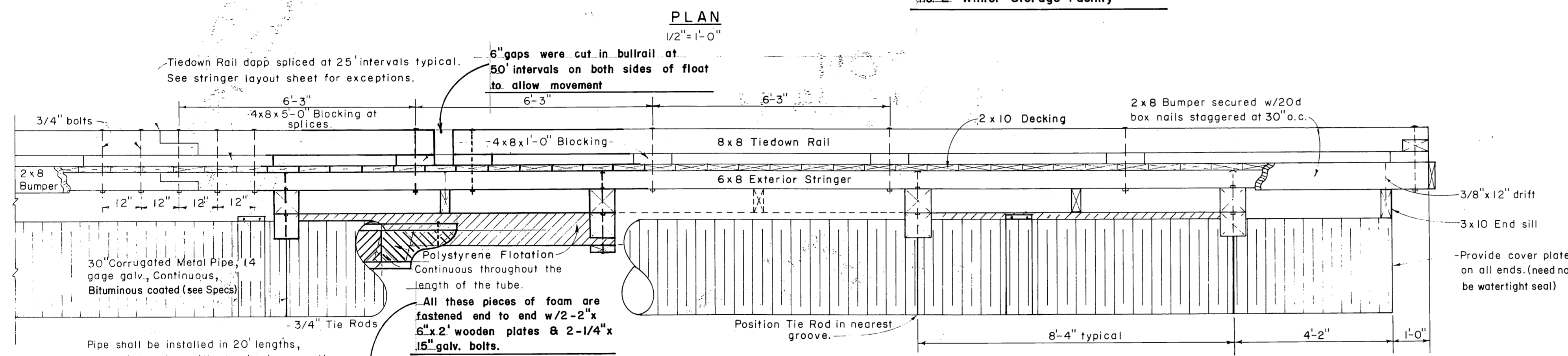
ELEVATION

HINGE CONNECTION DETAIL  
Scale: 1" = 1'-0"

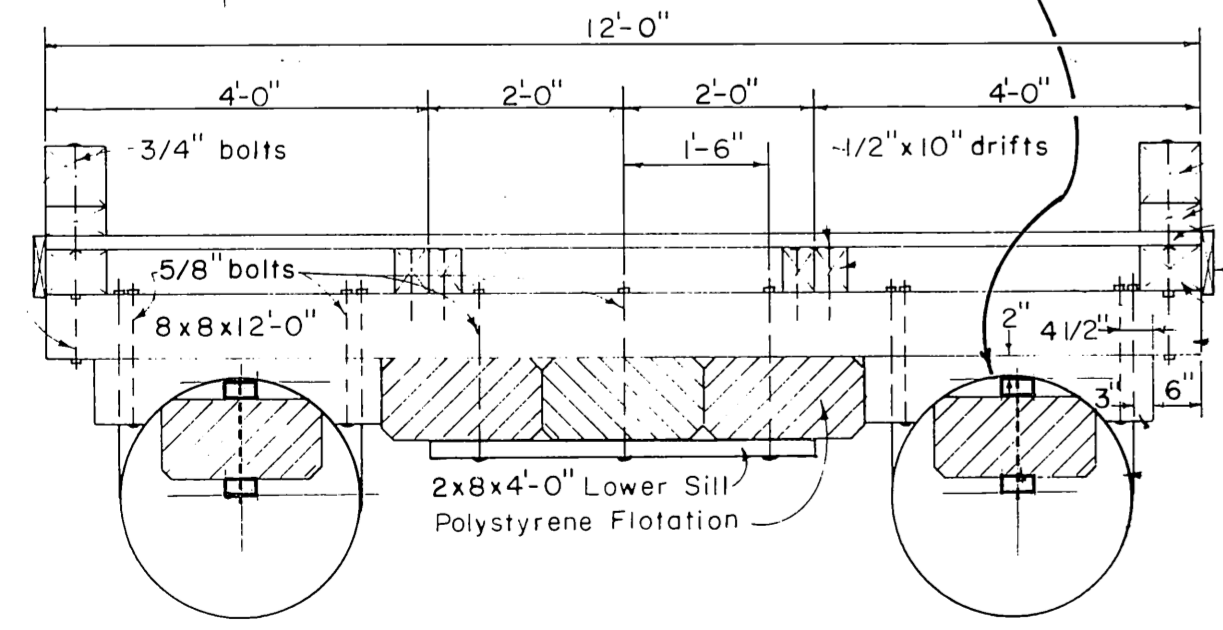


Fabricate from Std. 5/8" x 6" equal leg angle

CLIP ANGLE DETAIL  
Scale: 3" = 1'-0"

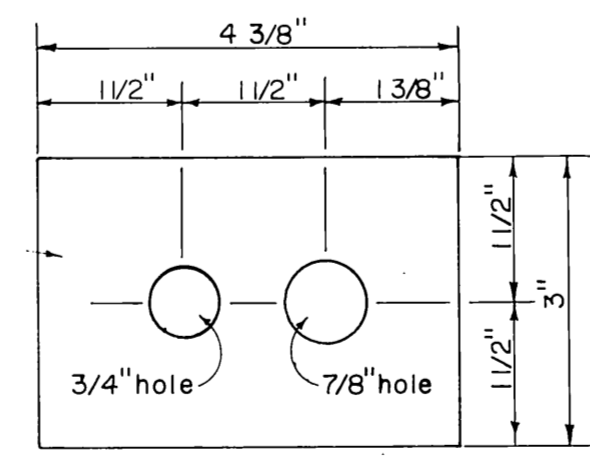


ELEVATION  
1/2" = 1'-0"

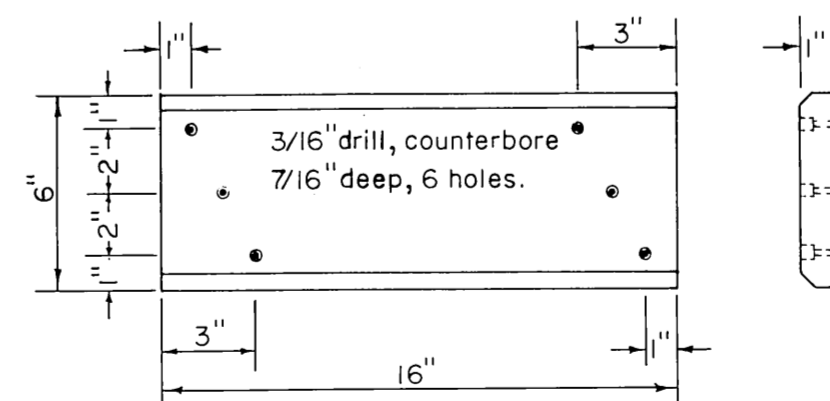


SECTION  
1/2" = 1'-0"

- 8x8 Tiedown Rail
- 4x8 Blocking
- 2x10 Decking
- 2x8 Bumper
- 6x8 Exterior Stringer
- 4x6 Interior Stringer
- 8x8 & 3x8 Sills
- 8x8 3'-0" Pipe blocks
- 30" C.M.P.
- Polystyrene Flotation 10' x 20' x 9'-0" billets for the full length of tube.



DETAIL  
SPECIAL PLATE WASHER  
1/2" = 1"



DETAIL  
IRONBARK RUB STRIP  
1" = 6"

MATERIALS		
ITEM	DRESSING	TREATMENT
3x8 & 8x8 upper sills	S-2-E	12 lbs. ret.
8x8 pipe blocks	S-1-E	" "
2x8 lower sill	Rough	" "
4x6 interior stringers	S-2-E	8 lbs. ret.
6x8 exterior stringers	S-4-S	" "
2x8 bumpers	" "	" "
2x10 decking	S-1- S-2-E	" "
4x8 blocking	S-4-S	" "
8x8 tiedown rail	" "	" "
3x10 end sill	S-2-E	" "

All material to be construction grade Douglas Fir  
All piling will be Class A creosoted to 12 lbs. retention.  
All 12 lb. retention creosoted treatment to be full cell.  
All 8 lb. " " " " " empty cell.

**PRE-DRILLED BOLT HOLES**

- STRINGERS:** 1. Holes for stringer to sill bolts.  
2. " " " " tie rods.  
3. " " " " pipe block bolts.
- SILLS:** 1. Holes for flotation billet bolts.  
2. " " " " tie rods.  
3. " " " " pipe block bolts.

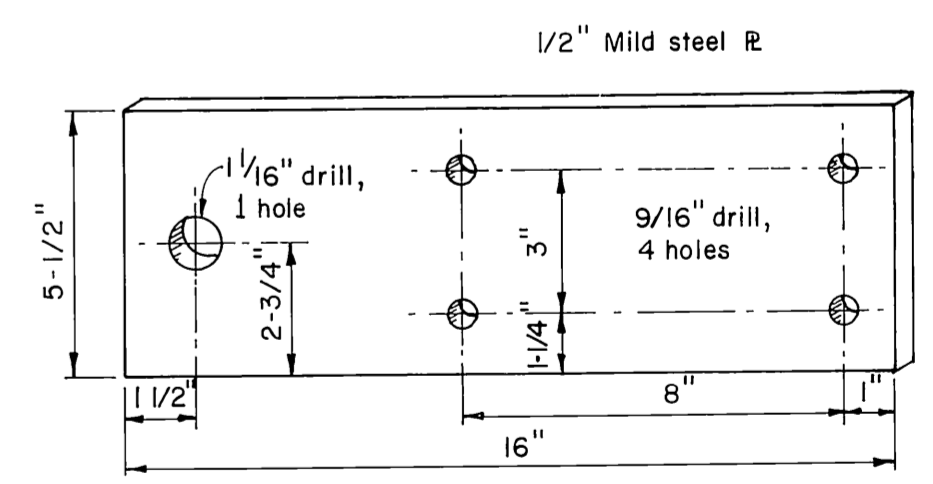
**TIEDOWN RAIL:** 1. All holes.

**FIELD DRILLED BOLT HOLES**

- EXT. STRINGER:** 1. Holes for tiedown rail bolts.  
2. " " " " pile collar bolts.
- INT. STRINGER:** 1. Holes for pile collar bolts.
- RAIL BLOCKING:** 1. All holes.
- SILLS:** 1. Holes for stringer to sill bolts.

**NOTES:**

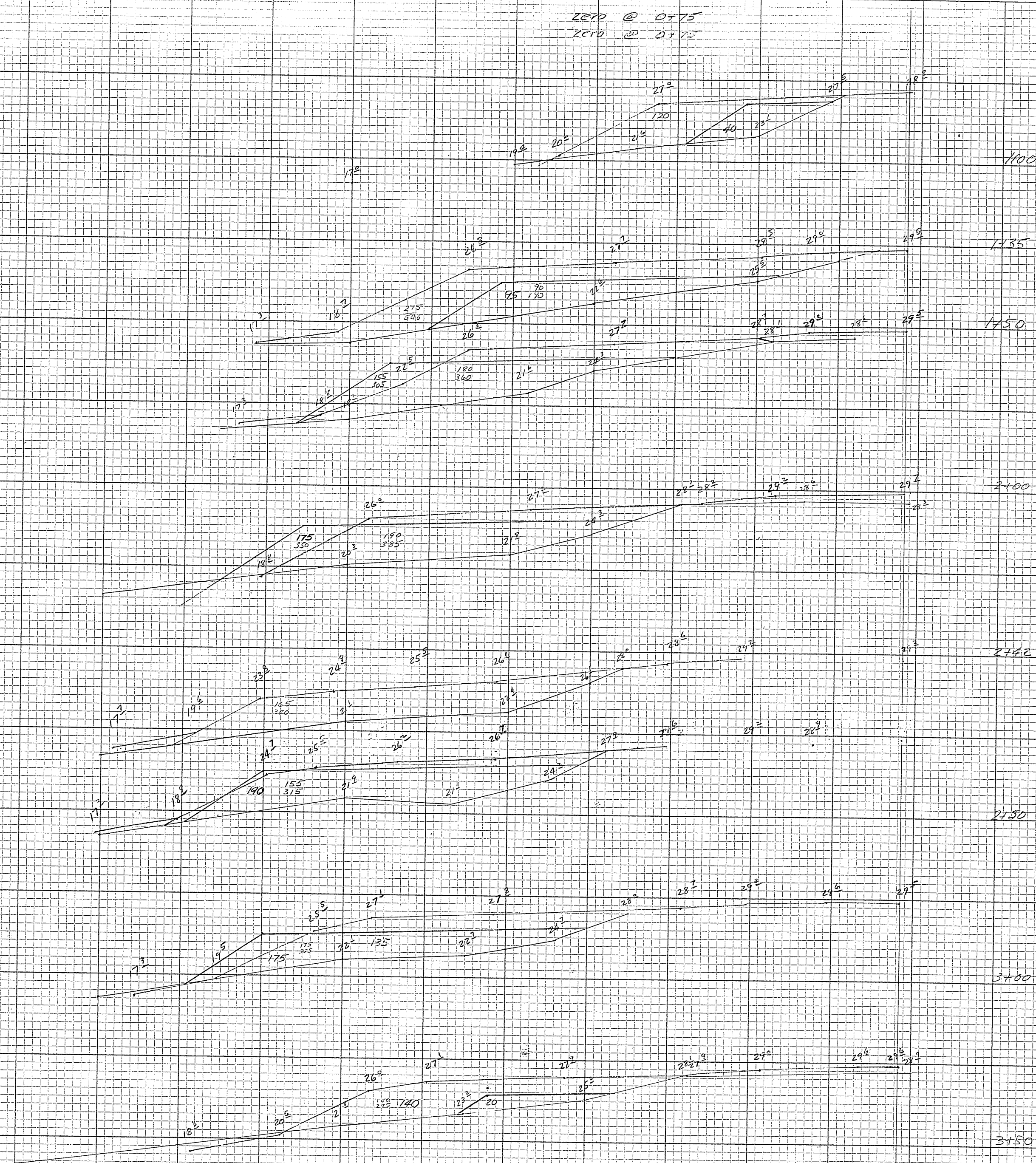
All hardware to be hot-dipped galvanized. A malleable iron washer shall be placed between all nut and wood surfaces. All bolts to be of the economy headed type. Bolt holes to be drilled 1/16" oversize except sill bolt holes for flotation billets 1/8" oversize. Drift holes to be drilled 1/16" undersize. All field drilled holes shall be treated with hot creosote oil. All pressure treated creosote material shall be cut to size prior to treatment. Tiedown rails shall extend across all float ends except under gangway. All bolt heads facing decking shall be countersunk 1/4" previous to treatment. Field drill all drift holes. A barrier of 6 mill black polyethylene shall be placed between the contact surfaces of all creosote timber and flotation material.



STANDARD PLATE DETAIL  
Scale: 3" = 1'-0"

NO DATE	REVISION	FR
STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER AND HARBORS		
<b>TYPICAL BREAKWATER FLOAT</b>		
SCALE As Shown DATE March 1969 PROJ NO. 3-70189	APPROVED DON STATTER DIRECTOR	
DESIGNED BY D.S.-D.W.	DRAWN BY E.L.S.	CHECKED BY D.W.

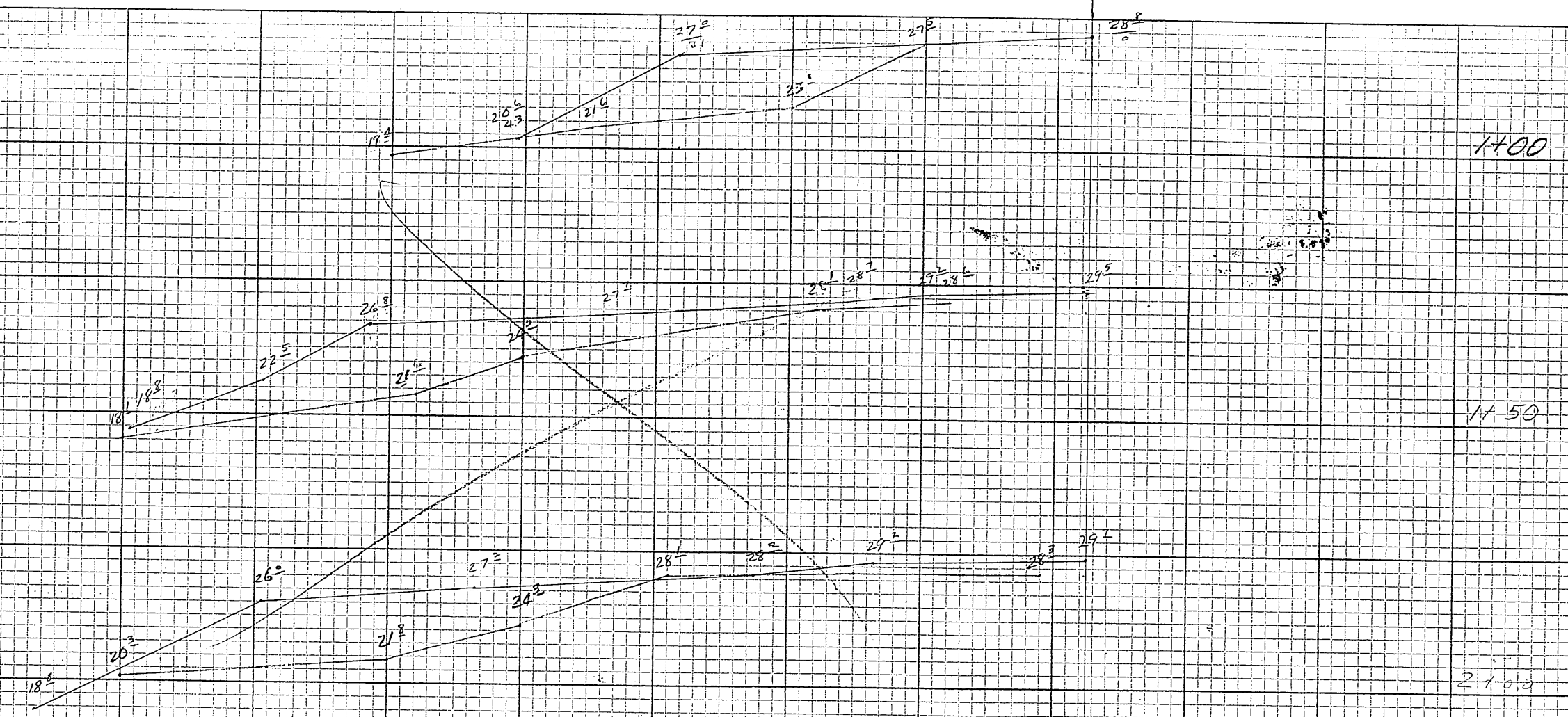
zero @ 0+75  
 zero @ 2+75



zero DESIGN @ 3+75  
 zero AS BUILT @ 4+00

DESIGN = 1308 C.Y.  
 AS BUILT = 1869 C.Y.

PENCIL = ORIGINAL GROUND  
 Red = Design Limits  
 Blue = AS BUILT



LETNIKOF COVE PARKING AREA AS BUILT  
 PROJ. No. 3-10189