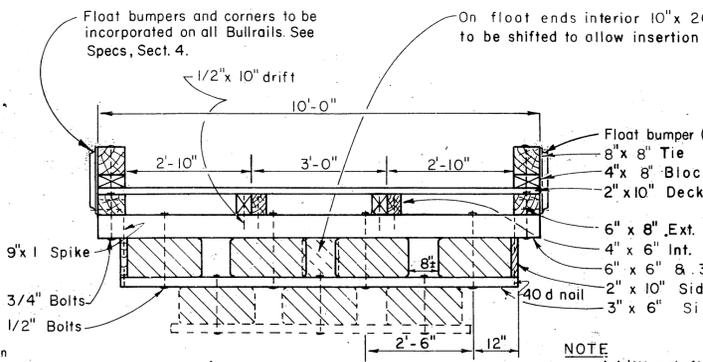


6' FLOAT SECTION
1/2" = 1'-0"

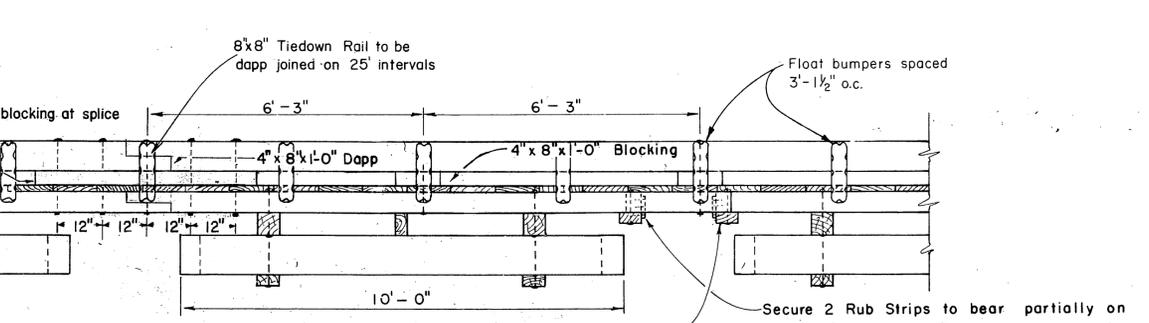
NOTE
6' float construction shall conform to 10' float constr. except as noted.

Leveling note
5' x 20' x 4' to 5' leveling floatation shall be installed as directed by the Engr. (required on approx. 20% of the stall floats including 6' stall floats) Place floatation between lower sill members with the outer edge bearing on siding members (cut side up) Pin floatation together with 1/2" x 14" dowel stock every 12".

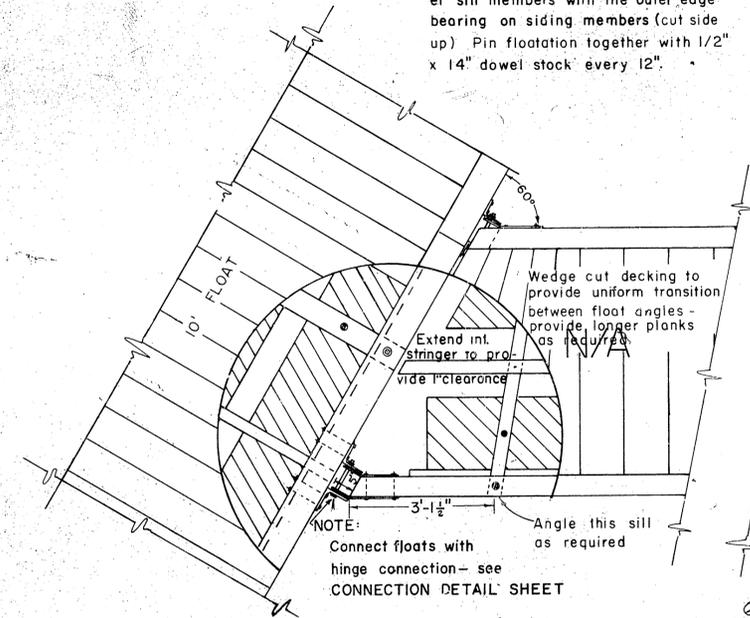


10' FLOAT SECTION
1/2" = 1'-0"

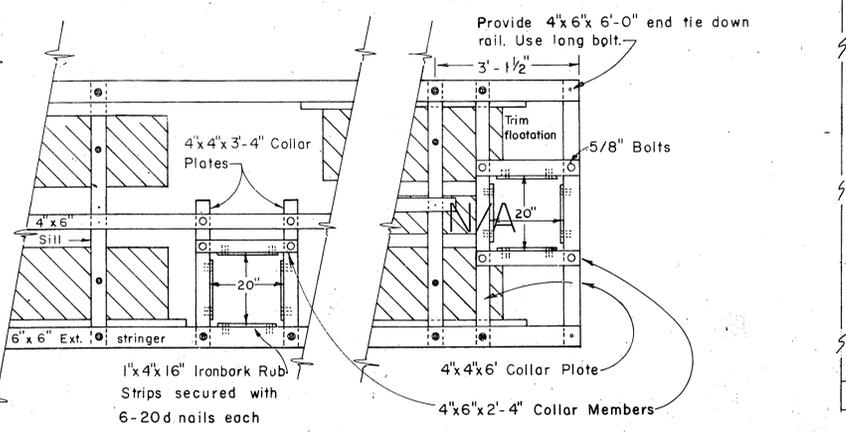
NOTE
Additional floatation to be added on gangway floatation - 3 billets as shown timber gangway - 2 for steel gangway.



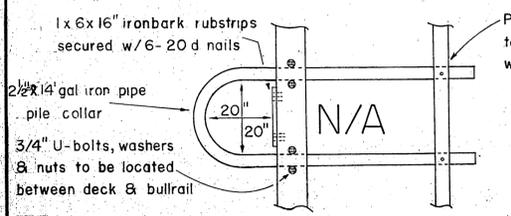
ELEVATION
1/2" = 1'-0"



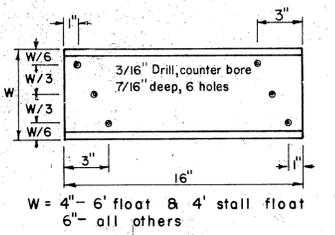
6' FLOAT PILE COLLAR DETAIL



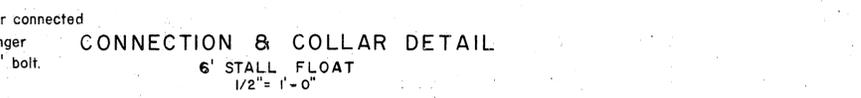
6' FLOAT PILE COLLAR DETAIL



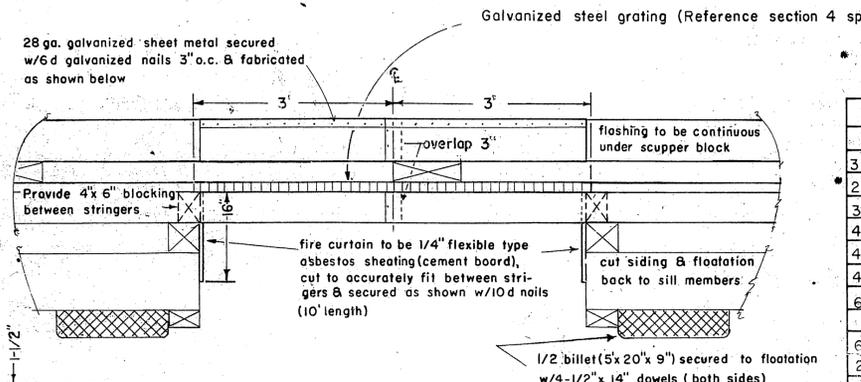
PIPE PILE COLLAR DETAIL
1/2" = 1'-0"



IRONBARK RUB STRIP
1" = 6"



CONNECTION & COLLAR DETAIL
6' STALL FLOAT
1/2" = 1'-0"



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

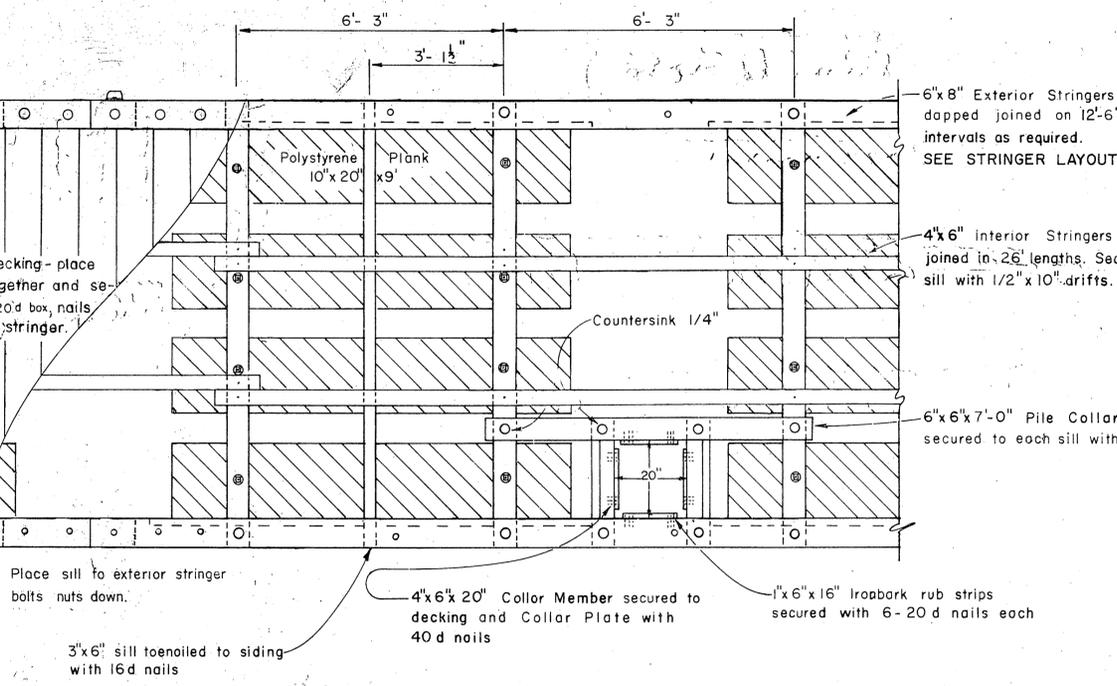
NOTES
Secure grating to stringers with saddle clips & 1/4" lag bolts - 5 at each stringer per 6' width.

Galvanized steel grating (Reference section 4 specifications)

Exact width to conform to width of floatation material

MATERIALS		
ITEM	DRESSING	TREATMENT
3x6 - 4x6 & 6x6 upper sill	S-1-E 1/8" off	12 lbs. ret.
2x10 Siding	2x10 ²	" "
3x6 Lower Sill	Rough	" "
4x4 & 3x6 Collar Plates	Rough	8 lbs. ret.
4x6 Collar Members	S-2-E	" "
4x6 Interior Stringers	" "	" "
6x6 & 6x8 Ext Stringers	S-4-S	" "
6x6 Collar Stringers	" "	" "
2x10 Decking	S-1-S-2-E	" "
4x6 & 4x8 Blocking	S-4-S	" "
6x6 & 8x8-Rail	" "	" "

All material to be construction grade Douglas Fir.
All piling will be Class A creosoted to 12 lbs. retention.
All 12 lb. ret. creosoted treatment to be Full Cell All B " " " Empty Cell



PLAN VIEW 10' FLOAT
1/2" = 1'-0"

PRE-DRILLED BOLT HOLES
COLLAR MEMBERS - all holes
SILLS - holes for floatation plank bolts
STRINGERS - 1. holes for stringer to sill bolts
TIE DOWN RAIL - all holes
PILE COLLAR STRINGER - 10' FLOAT - all holes
FIELD DRILLED BOLT HOLES
SILLS - 1. holes for stringer to sill bolts
2. pile collar stringer to sill
PILE COLLAR INT. STRINGER - 6' FLOAT - all holes
RAIL BLOCKING - all holes
COLLAR PLATES - all holes
EXT. STRINGER - 1. holes for tie down rail bolts
2. " " pile collar plate bolts

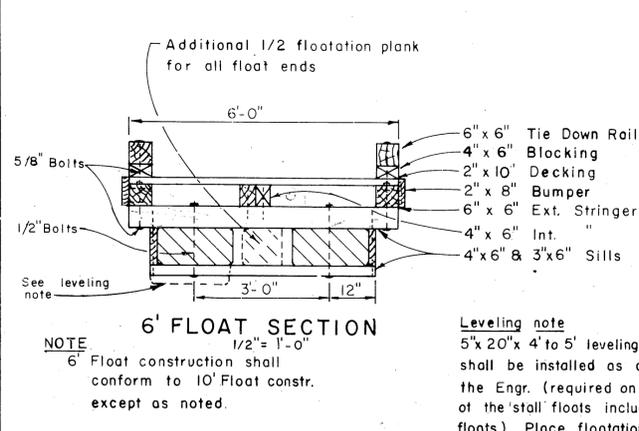
REVISIONS DECEMBER 1967
1. Remove wood float bumpers; add vinyl float bumpers.

REVISIONS JAN 1968
1. Add polyethylene barrier note
2. Delete reference to extruded polystyrene billets

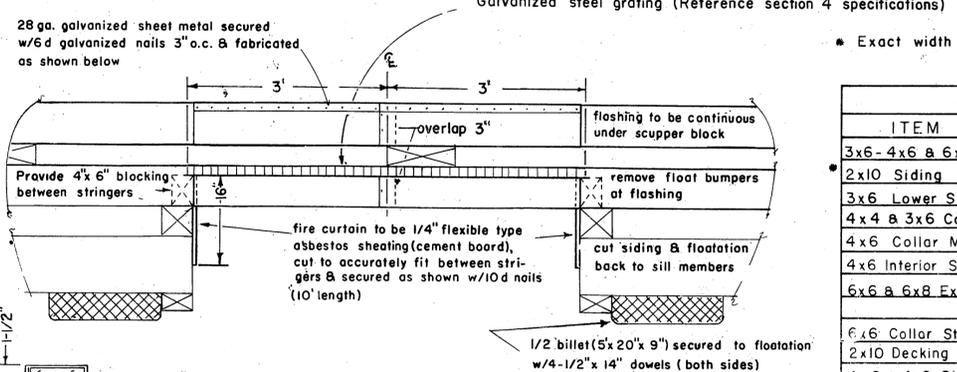
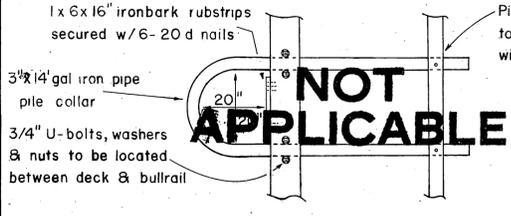
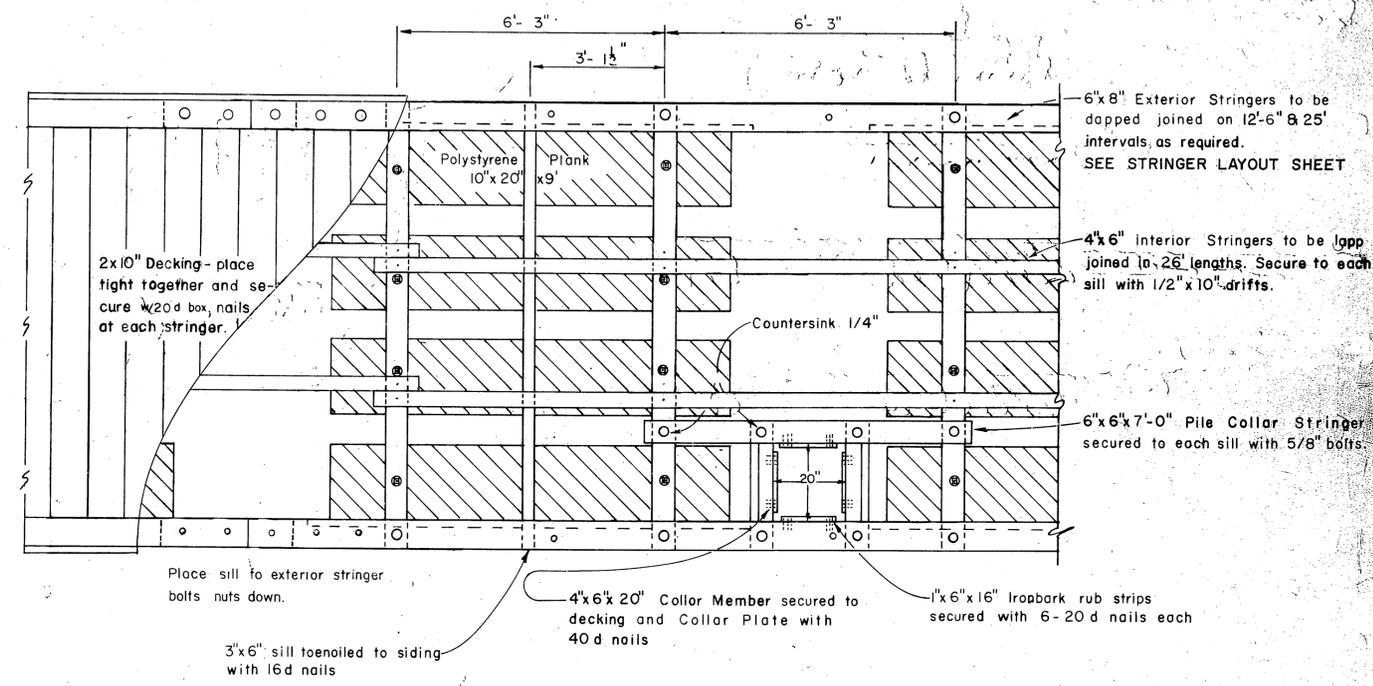
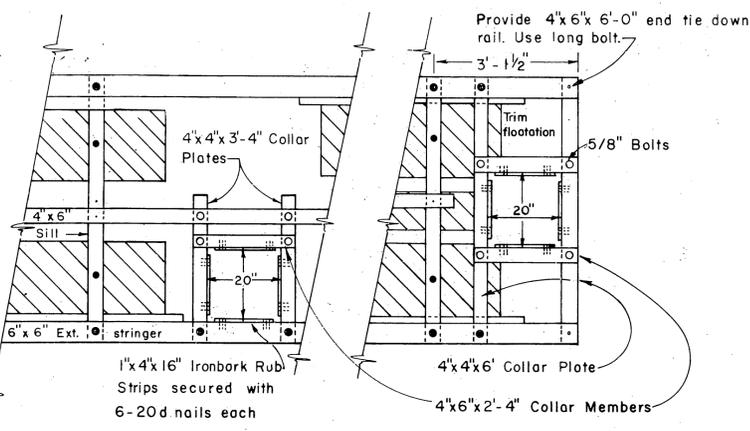
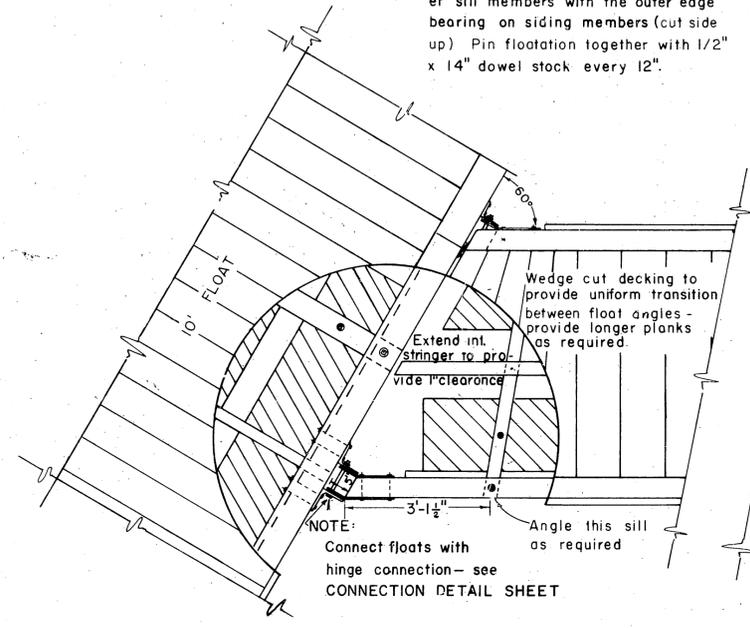
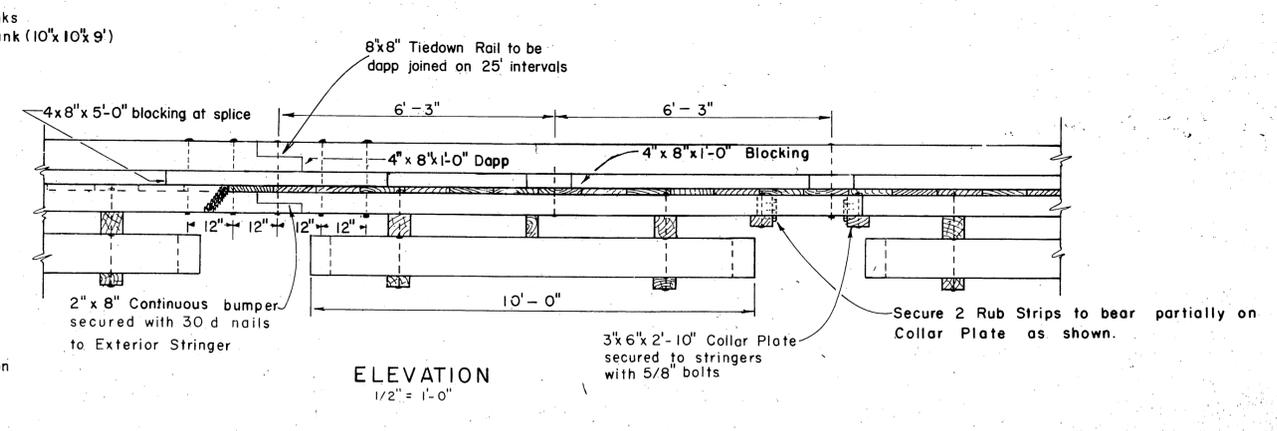
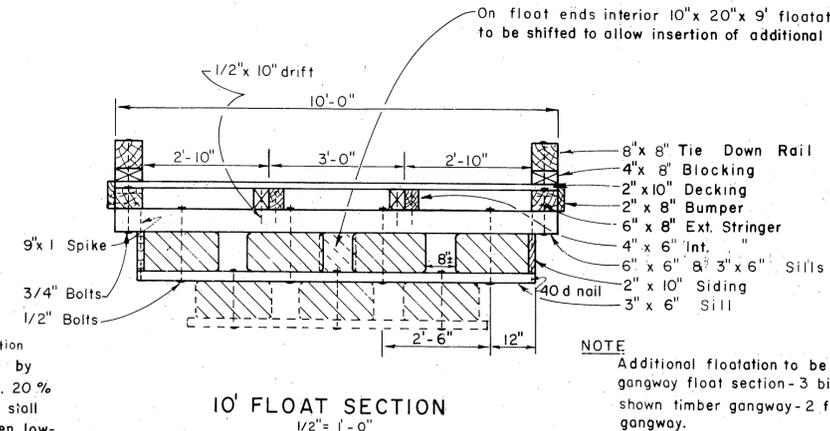
NOTES
All hardware to be hot-dipped galvanized. A malleable iron washer shall be placed between all nut and wood surfaces. All bolts to be of the economy headed type. Bolt holes to be drilled true size except sill bolt holes for floatation planks 1/8" oversize. Drift holes to be drilled 1/16" undersize. All field drill holes shall be treated with hot creosote oil. All pressure treated creosote material shall be cut to size prior to treatment. Tie down 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 bolt holes. A barrier of 6 mil black polyethylene shall be placed between the contact surfaces of all creosote timber and floatation material (except float siding members)

REVISIONS JUNE 1966
1. Change deck to 2x10 placed tight together.
AUG 1966
1. Change stringer & rail splice locations - delete splice block

STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER AND HARBORS		
TYPICAL FLOATS		
SCALE AS SHOWN	DATE March 1965	APPROVED DON STATTER DIRECTOR
DESIGNED BY RPH-DS	DRAWN BY DW	CHECKED BY DS



Leveling note
5" x 20" x 4' to 5' leveling floatation shall be installed as directed by the Engr. (required on approx. 20% of the stall floats including 6' stall floats) Place floatation between lower sill members with the outer edge bearing on siding members (cut side up) Pin floatation together with 1/2" x 14" dowel stock every 12".



MATERIALS

ITEM	DRESSING	TREATMENT
3x6- 4x6 & 6x6 upper sill	S-1-E 1/8" off	12 lbs. ret.
2x10 Siding	2 x 10 1/2"	" "
3x6 Lower Sill	Rough	" "
4 x 4 & 3x6 Collar Plates	Rough	8 lbs. ret.
4x6 Collar Members	S-2-E	" "
4x6 Interior Stringers	" "	" "
6x6 & 6x8 Ext Stringers	S-4-S	" "
6x6 Collar Stringers	" "	" "
2x10 Decking	S-1-S-2-E	" "
4x6 & 4x8 Blocking	S-4-S	" "
6x6 & 8x8 Rail	" "	" "
2x8 Bumper	" "	" "

All material to be construction grade Douglas Fir
All piling will be Class A creosoted to 12 lbs. retention
All 12 lb. ret. creosoted treatment to be Full Cell
All 8 " " " " Empty Cell

- PRE-DRILLED BOLT HOLES**
COLLAR MEMBERS - all holes
SILLS - holes for floatation plank bolts
STRINGERS - 1. holes for stringer to sill bolts
- TIE DOWN RAIL** - all holes
PILE COLLAR STRINGER - 10' FLOAT - all holes
- FIELD DRILLED BOLT HOLES**
SILLS - 1. holes for stringer to sill bolts
2. pile collar stringer to sill
- PILE COLLAR INT. STRINGER - 6' FLOAT** - all holes
RAIL BLOCKING - all holes
COLLAR PLATES - all holes
EXT. STRINGER - 1. holes for tie down rail bolts
2. " " pile collar plate bolts

- REVISIONS MARCH 1965**
- Omit end plates.
 - Clarified pre-drilling note.
 - Change decking gap from 1/2" to 3/4".
 - Change 2" x 10" rough siding members to 2" x 10 1/2" actual size.
 - Change 3" x 6", 4" x 6" and 6" x 6" upper sills from rough to S-1-E 1/8" off.
 - Revised hinge connection and 6' float pile collar.
 - Change sill spacing from 6'-0" to 6'-3".
- REVISIONS JAN 1966**
- Add polyethylene barrier note
 - Delete reference to extruded polystyrene billets

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 true size except sill bolt holes for floatation planks 1/8" oversize. Drift holes to be drilled 1/16" undersize. All field drill holes shall be treated with hot creosote oil. All pressure treated creosote material shall be cut to size prior to treatment. Tie down rails shall extend across all float ends except under gangway. All bolt heads facing decking shall be countersunk 1/4" inch previous to treatment. Field drill all drift bolt holes. A barrier of 6 mil black polyethylene shall be placed between the contact surfaces of all creosote timber and floatation material (except float siding members)

REVISIONS JUNE 1966

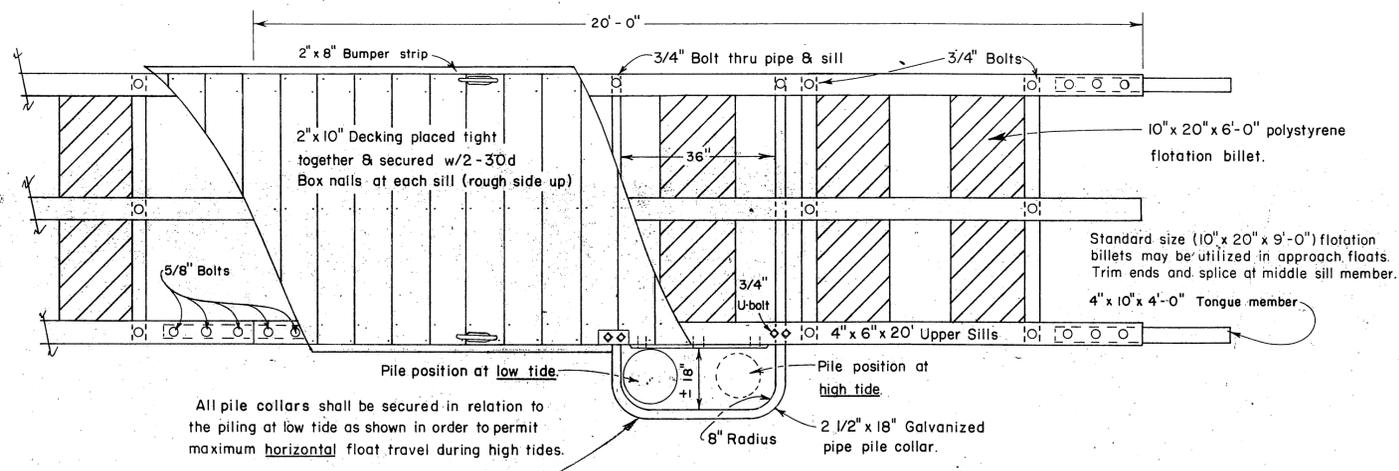
- Change deck to 2" x 10 placed tight together.
- AUG. 1966
- Change stringer & rail splice locations - delete splice block

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

TYPICAL FLOATS

SCALE AS SHOWN
DATE March 1965
PROJ. NO. _____
DESIGNED BY RPH-DS
DRAWN BY D W
CHECKED BY D S

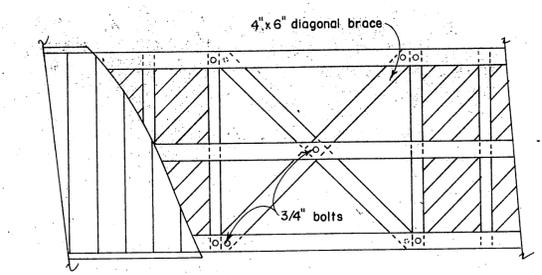
APPROVED DON STATTER
DIRECTOR



PLAN (coupled sections)

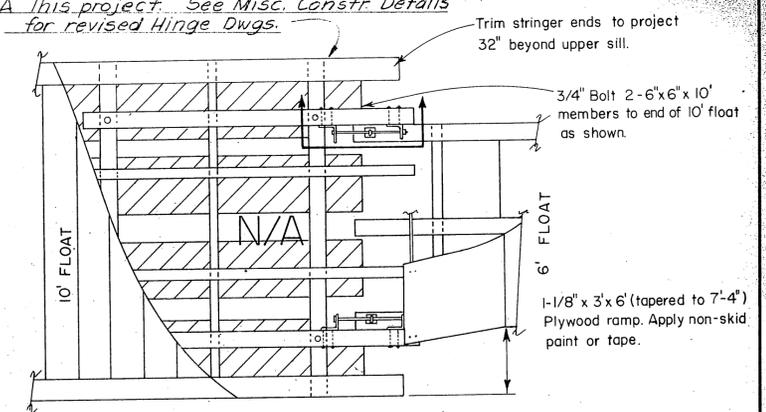
NOTE: Collars & coupled sections N/A this project.

Diagonal bracing shall be placed on each of the float sections that do not incorporate pile collars. Bracing members to be field cut to abut float crossmembers as shown.



DIAGONAL BRACE DETAIL
Scale 3/8" = 1'-0"

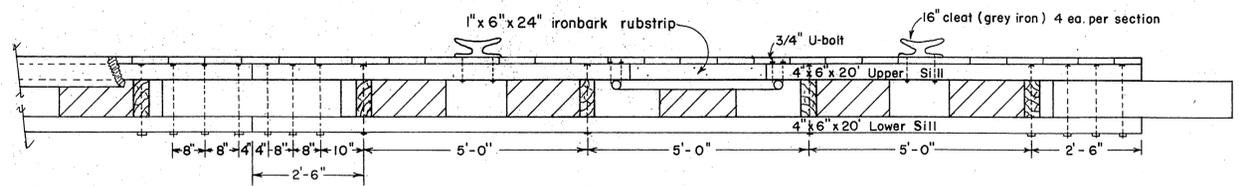
N/A This project. See Misc. Constr. Details for revised Hinge Dwgs.



DETAIL A (Travelling Hinge Connection)
For connecting 6' float to typical 10' float

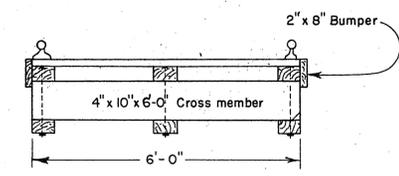
Scale 3/8" = 1'-0"

See Detail B for Elevation view.

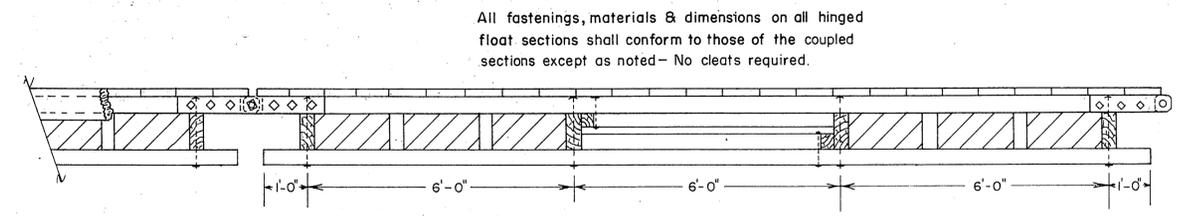


ELEVATION (coupled sections)
Scale 1/2" = 1'-0"

NOTE: No cleats this contract.

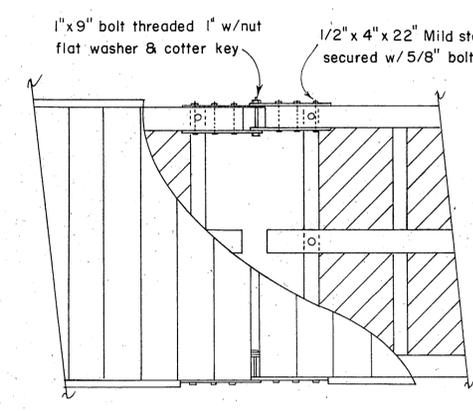


TYPICAL SECTION
Scale 1/2" = 1'-0"

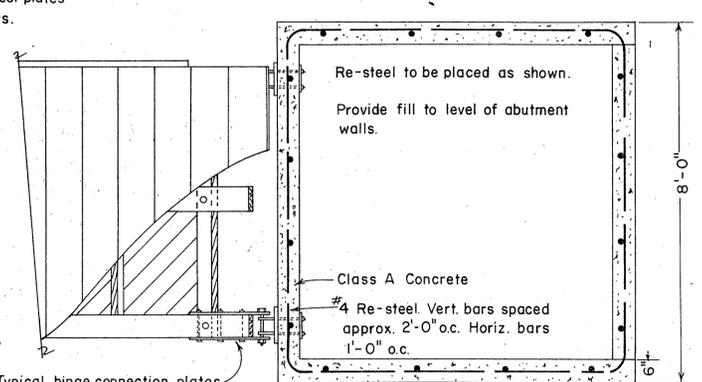


ELEVATION (hinged sections)
Scale 1/2" = 1'-0"

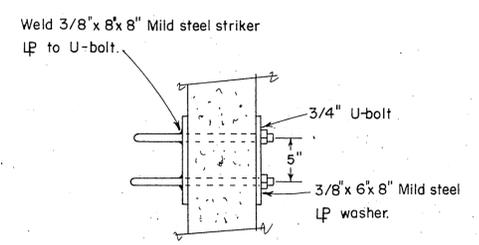
All fastenings, materials & dimensions on all hinged float sections shall conform to those of the coupled sections except as noted - No cleats required.



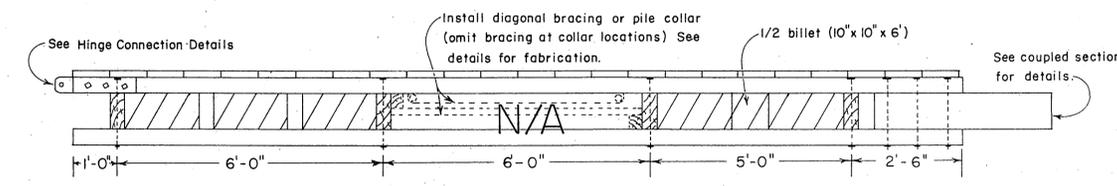
PLAN
Scale 1/2" = 1'-0"



PLAN
Scale 1/2" = 1'-0"

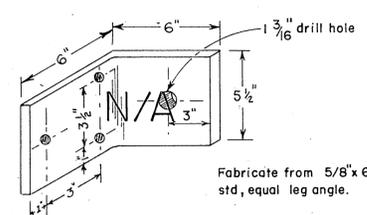


U-BOLT DETAIL
Scale 1/2" = 1'-0"

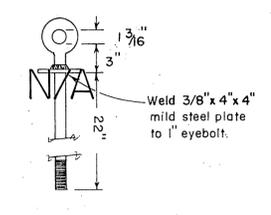


ELEVATION (Alternately hinged ~ coupled section)
Scale 1/2" = 1'-0"

N/A this contract

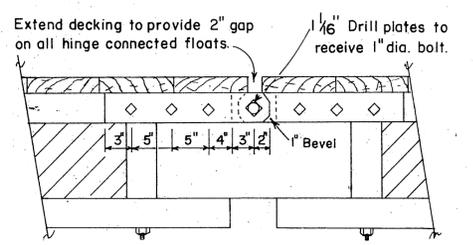


ANGLE CLIP DETAIL
(Travelling Connection Only)
1" = 5"

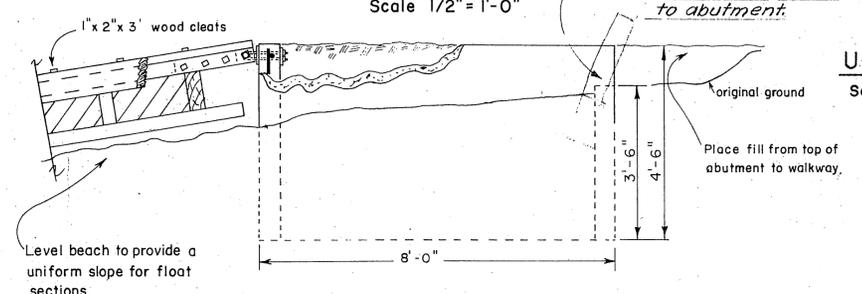


EYEBOLT DETAIL
1" = 1'-6"

NOTES
All bolt holes to be drilled (& countersunk where required) prior to creosote pressure treatment except collars, cleats & connections. All timber material with exception of bumpers & decking to be construction grade Douglas Fir creosote treated to 12 lb. ret. (full cell) Sills & diagonal bracing to be rough. Cross members *SIE. Decking & bumper to be const. grade Doug. fir SIS 8 lb. creosote retention. (empty cell)
Floats are to be constructed in 20' sections & coupled together as shown.
Hinged sections are to be used wherever floats go aground, or as indicated.
All bolts to be 3/4" unless otherwise specified.
All hardware to be hot dipped galvanized.
A malleable washer shall be placed between all nut & wood surfaces. All bolts to be of the mushroom head type. Bolt holes to be drilled true size. 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 except diagonal braces. *SIE 1/8" off nominal width.



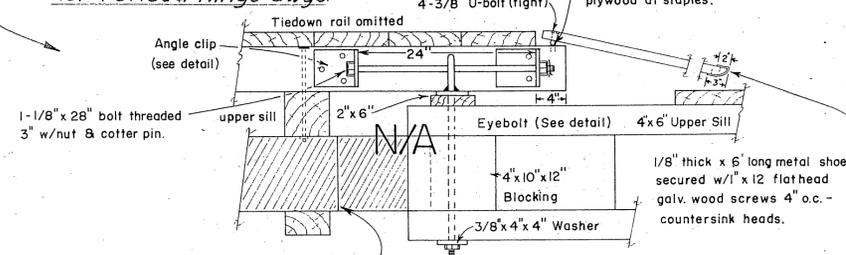
ELEVATION HINGE CONNECTION DETAILS
Scale 1" = 1'-0"



ELEVATION SHORESIDE CONNECTION DETAIL & CONCRETE ABUTMENT
Scale 1/2" = 1'-0"

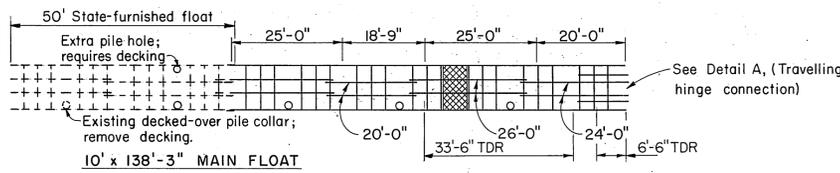
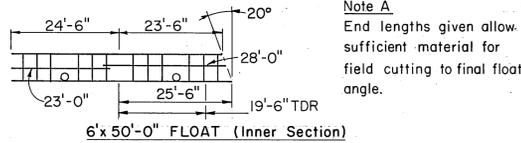
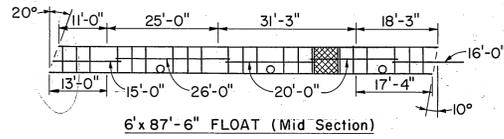
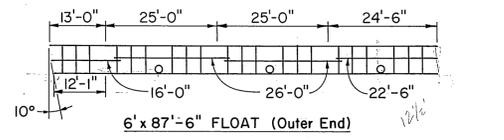
NOTE: See Misc. Constr. Details for revision to abutment.

N/A this project. See Misc. Constr. Details for revised hinge dwgs.



DETAIL B - Travelling Hinge (half tide position)
Scale - 1" = 1'-0"

STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER AND HARBORS	
TYPICAL 6' SECTIONAL FLOAT	
SCALE As shown	APPROVED Don Statter DIRECTOR
DATE JULY 1967	DRAWN BY C.D. CHECKED BY D.S.
PROJ. NO. 5-62113	

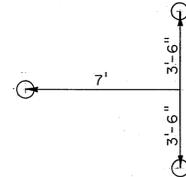


STRINGER & TIE-DOWN RAIL DIAGRAMS
Scale: 1" = 20'-0"

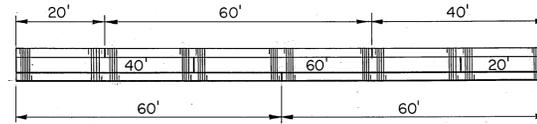
Notes:

- All exterior stringers to be spliced at the locations indicated (typical for both sides of floats). Distances indicated for exterior stringers & tie-down rails are center to center between dapp joints or to butt at float end.
- Interior stringer dimensions given full length.
- Tie-down rails to be spliced at the same locations as exterior stringer splices, except as noted.
- Provide tie-down rail at outside float ends.
- 10'x50' State-furnished float will be connected to 10'x88'-3" float as shown. Field dapp stringer ends of furnished float and construct standard splice connection (see "Typical Floats"). Re-deck float at extra pile hole. Remove 2x8 timber bumper members and provide vinyl plastic bumpers as detailed on Sh. 3, "Typical Floats".

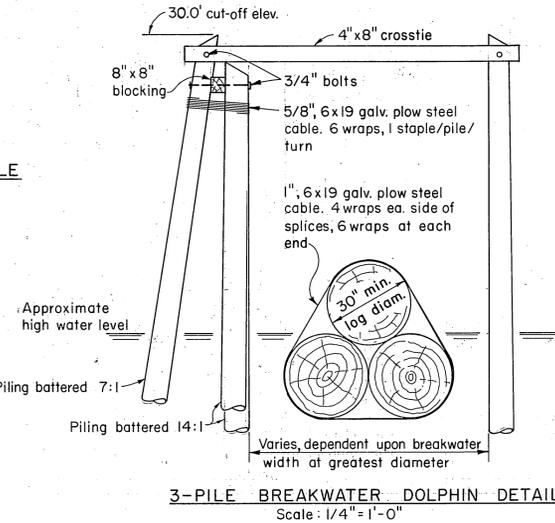
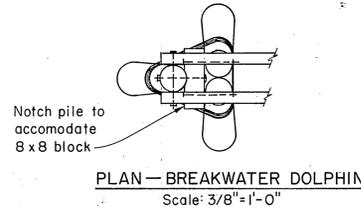
Note A
End lengths given allow sufficient material for field cutting to final float angle.



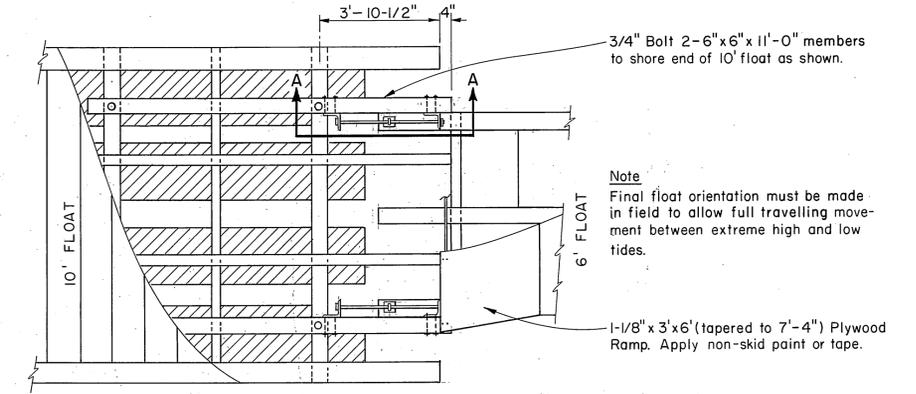
TYPICAL DOLPHIN PILE SPREAD-21 FEET
Scale: 1/4" = 1'-0"



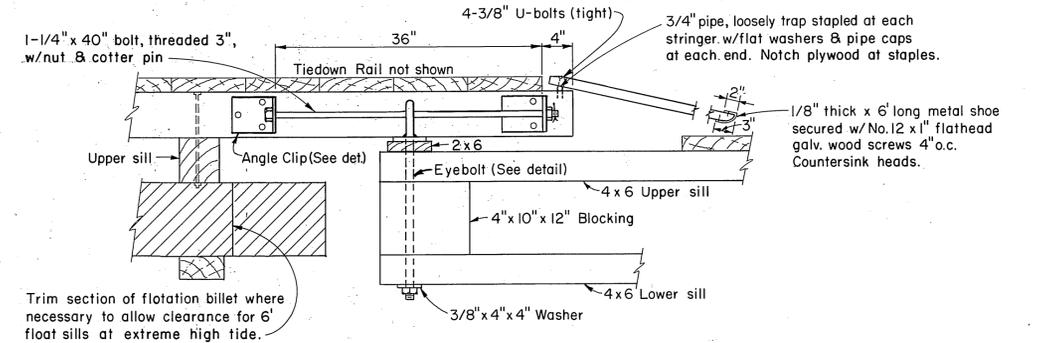
SUGGESTED BREAKWATER LOG LAYOUT AND LASHING DIAGRAM
Scale: 1" = 20'-0"



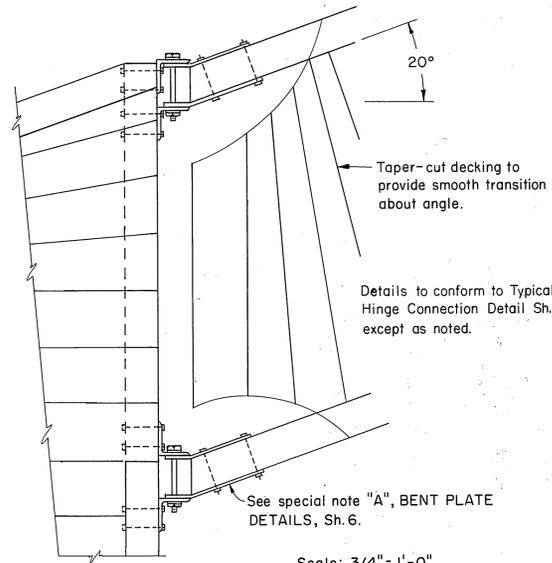
3-PILE BREAKWATER DOLPHIN DETAILS
Scale: 1/4" = 1'-0"



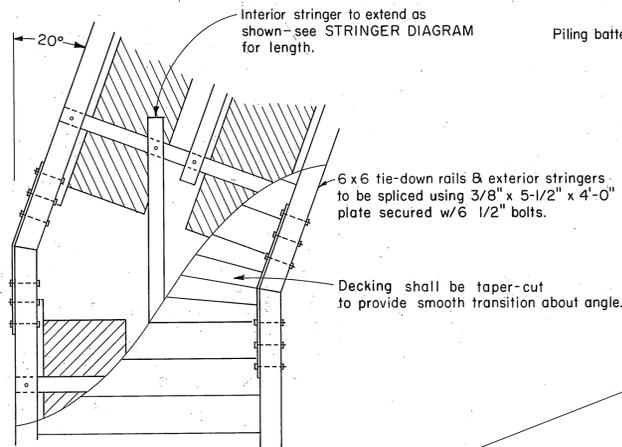
DETAIL A (Travelling Hinge Connection)
Scale: 3/8" = 1'-0"



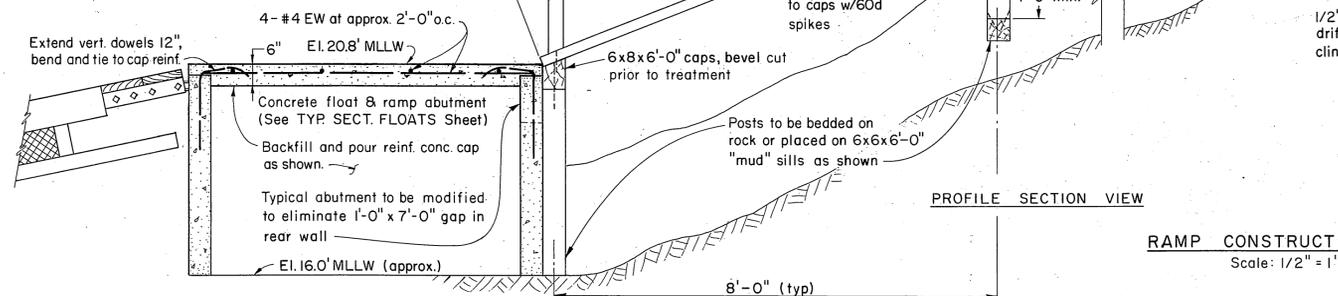
SECTION A-A (half-tide position)
Scale: 1" = 1'-0"



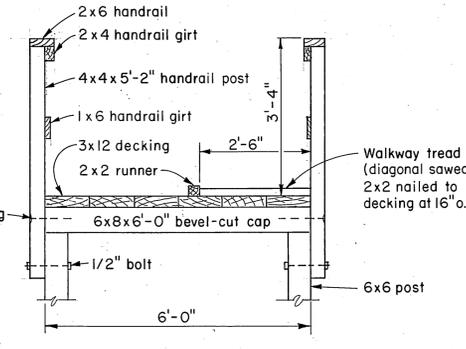
6' - 20° ANGLED FLOAT CONNECTION DETAILS
Scale as shown



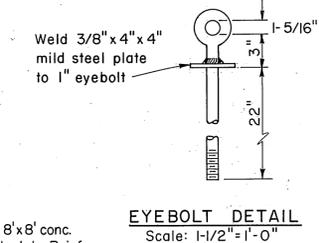
Scale: 1/2" = 1'-0"



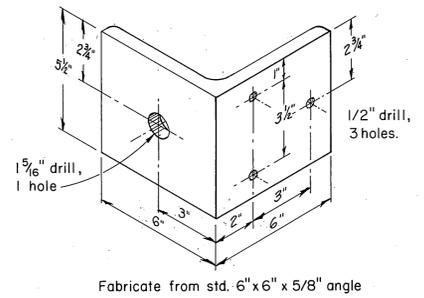
RAMP CONSTRUCTION DETAILS
Scale: 1/2" = 1'-0"



RAMP X-SECTION



EYEBOLT DETAIL
Scale: 1-1/2" = 1'-0"



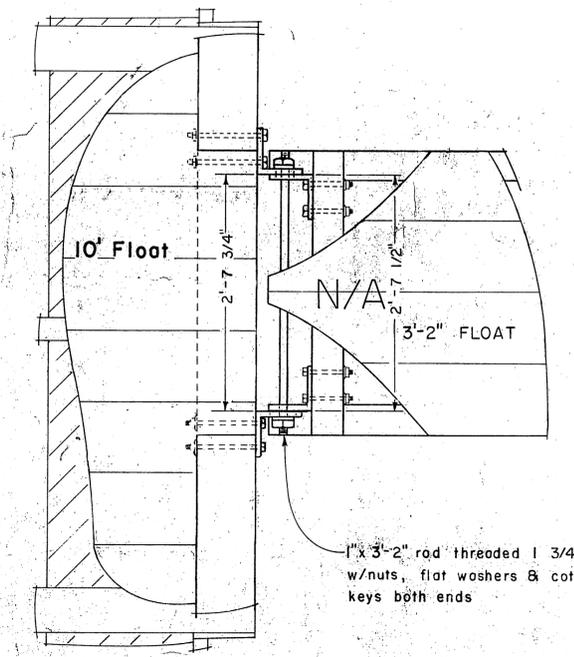
ANGLE CLIP DETAIL (travelling connection only)
Scale: 3" = 1'-0"

NOTES

All lumber to be construction grade Douglas fir creosote pressure treated to 8 lb. retention (empty cell), dressed as follows prior to treatment:
1x6 girts, 2x4 girts, 2x6 handrails, and 4x4 handrail posts: S4S.
6x6 posts, 6x6 mudsills: Rough.
6x8 caps (beveled as shown): S1E.
3x12 decking: S1S2E

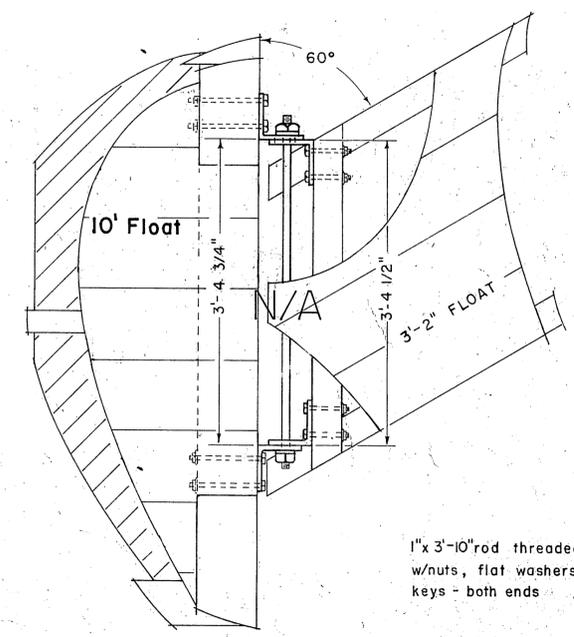
STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER AND HARBORS	
MISCELLANEOUS CONSTRUCTION AND REPAIR DETAILS	
SCALE: As shown	DATE: Nov. 1967
PROJ. NO. 5-68113	APPROVED: Don Statter DIRECTOR
DRAWN BY: JET	CHECKED BY: [Signature]

NOTE:
All cotter keys to be 3/16" x 1/4" -
drill holes located 1/2" from end of bolt.



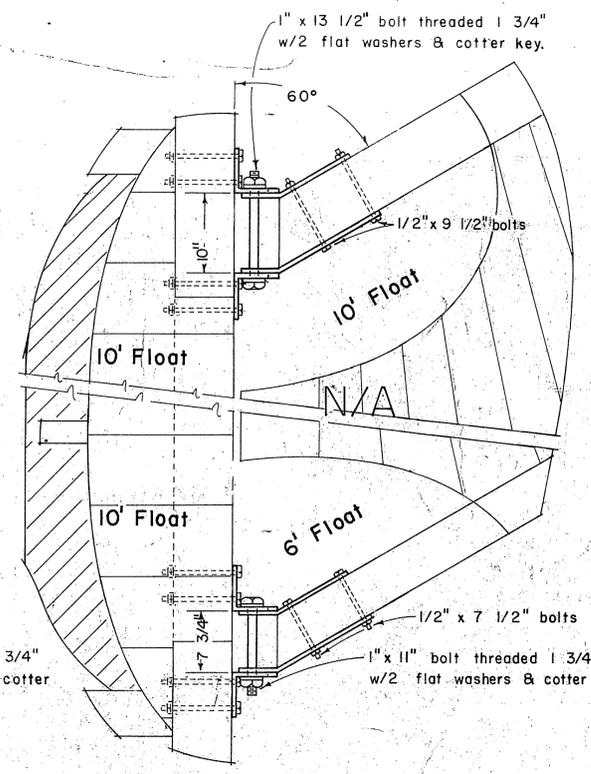
1" x 3'-2" rod threaded 1/4"
w/nuts, flat washers & cotter
keys both ends

Plan - cutaway view



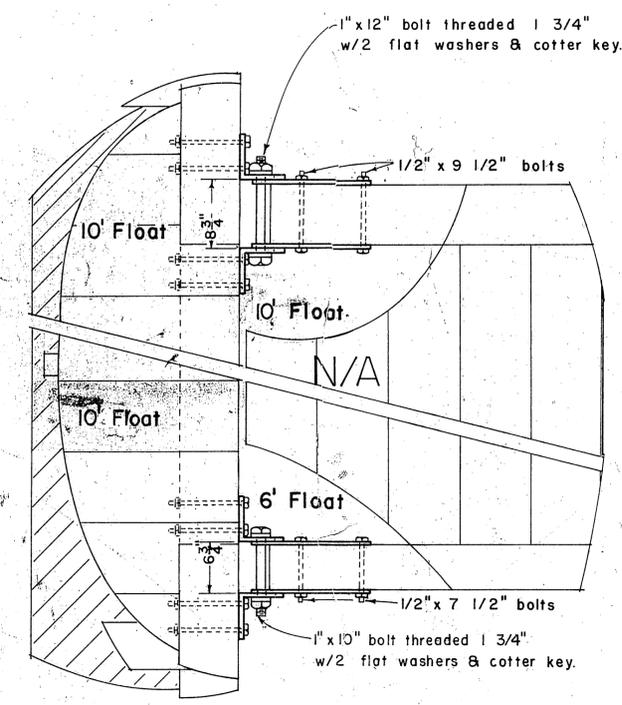
1" x 3'-10" rod threaded 1/4"
w/nuts, flat washers & cotter
keys - both ends

Plan - cutaway view



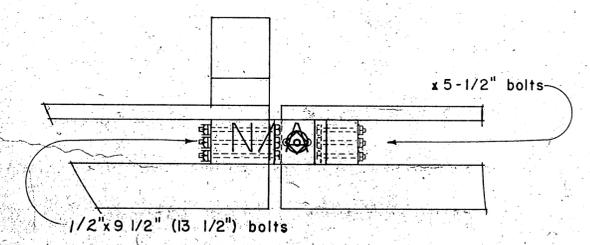
1/2" x 7 1/2" bolts
1" x 11" bolt threaded 1/4"
w/2 flat washers & cotter key.

Plan - cutaway views



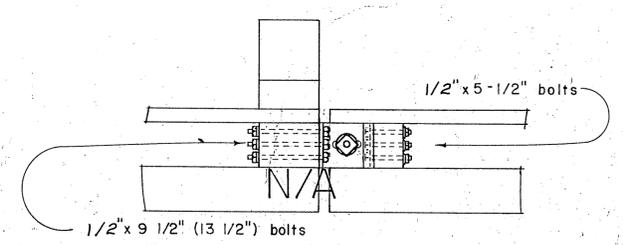
1" x 10" bolt threaded 1/4"
w/2 flat washers & cotter key.

Plan - cutaway views



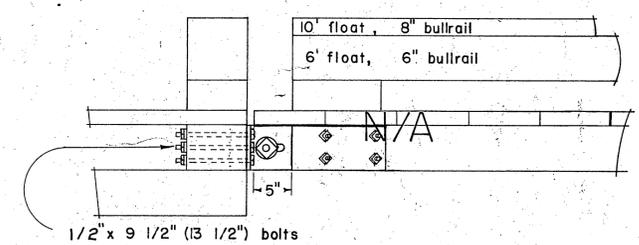
Elevation

3'-2" FLOAT
Right angle connection
Scale 1" to 1'-0"



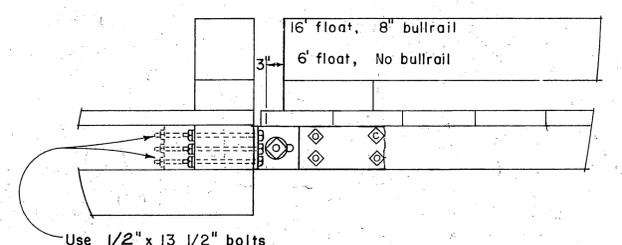
Elevation

3'-2" FLOAT
60° angle connection
Scale 1" to 1'-0"



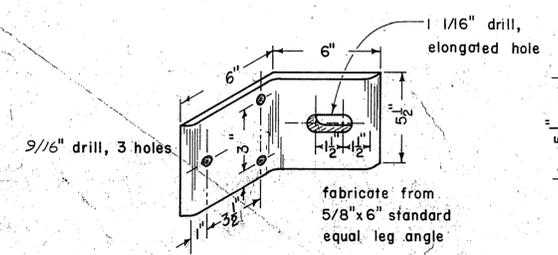
Elevation

6' & 10' FLOATS
60° angle connection
Scale 1" to 1'-0"

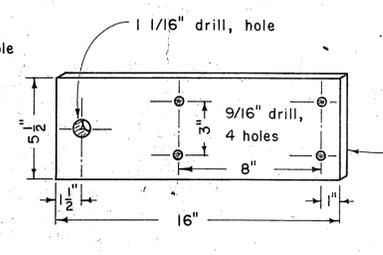


Elevation

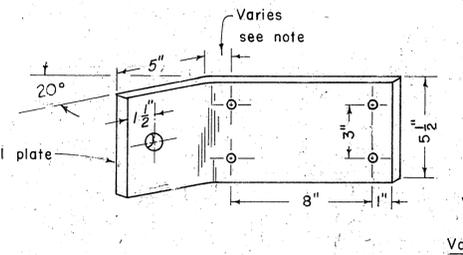
6' & 10' FLOATS
Right angle connections
Scale 1" to 1'-0"



ANGLE CLIP DETAILS



STANDARD PLATE DETAILS
Scale 1" to 5"



BENT PLATE DETAILS

Variable dimension note:
dimension to be -
2" all short side plates; for 16" plate
5 1/2" outside plates 6' angled float; for 19 1/2" plate
6 5/8" outside plates 10' angled float; for 20 5/8" plate
Special Note 2" 4 3/16" outside plates 6' angled float; for 18 3/16" plate.

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

TYPICAL HINGE CONNECTION DETAILS

Scale - As shown
Date - April 1965
Proj. No. 5-60113
Approved - CON STATER
Director
Designed by - DS
Drawn by - B
Checked by - DS