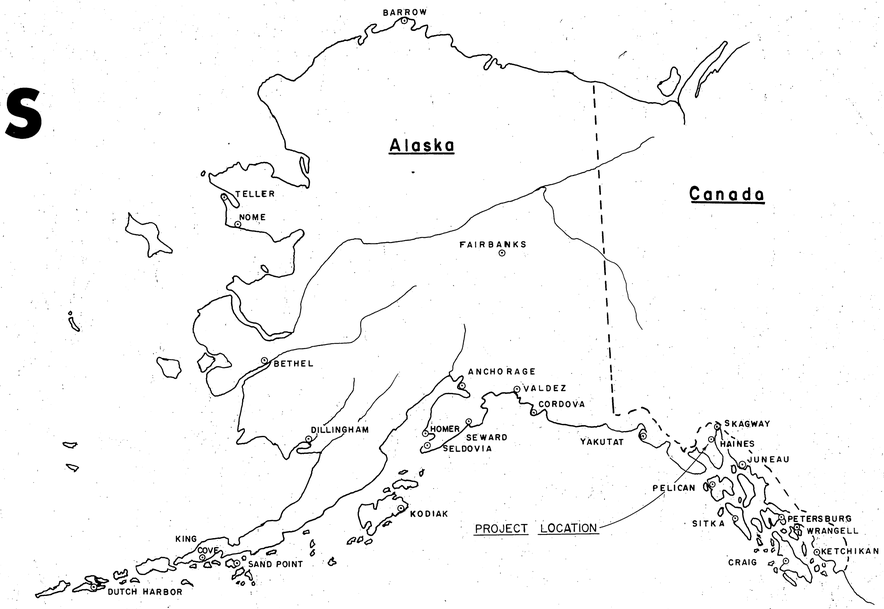
STATE OF ALASKA

DEPARTMENT OF PUBLIC WORKS

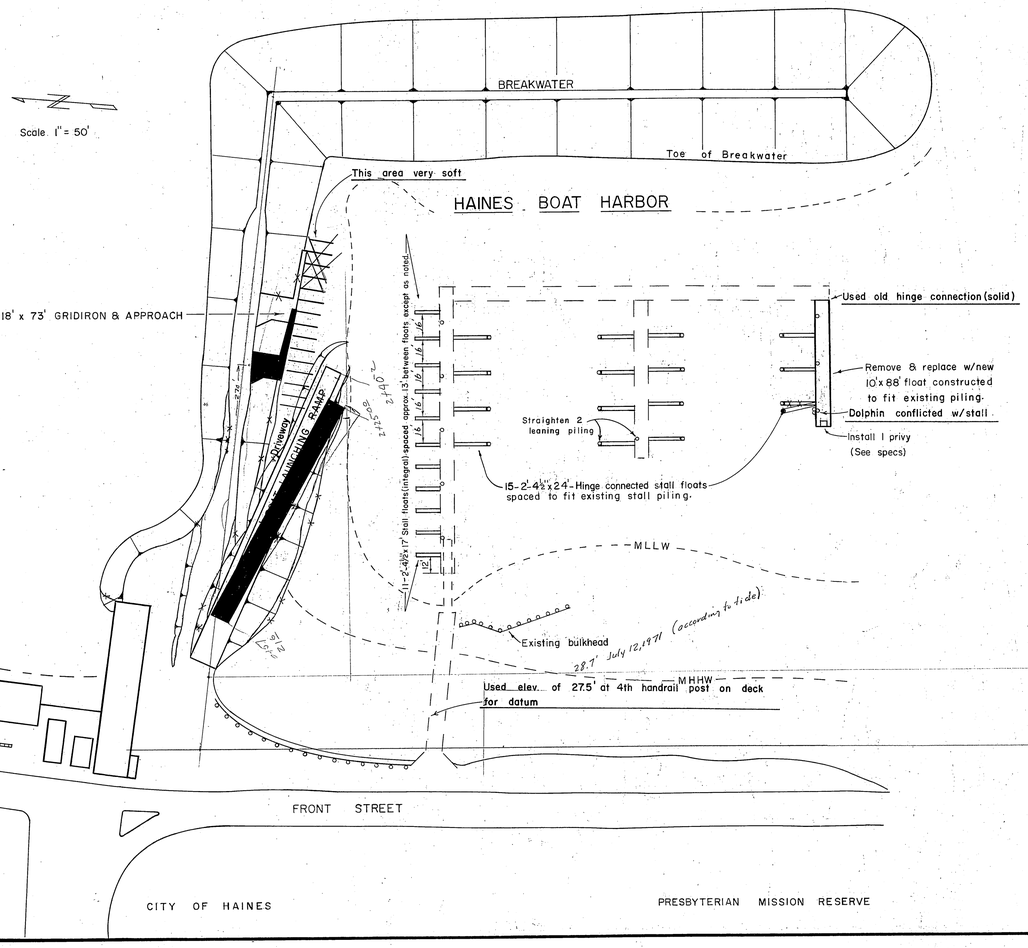
DIVISION OF WATER & HARBORS

HAINES BOAT HARBOR FACILITIES

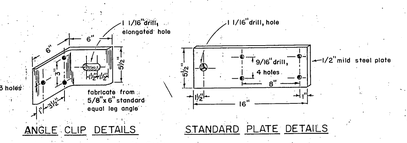
PROJECT NO. 3-68166



Scale 1" = 50'

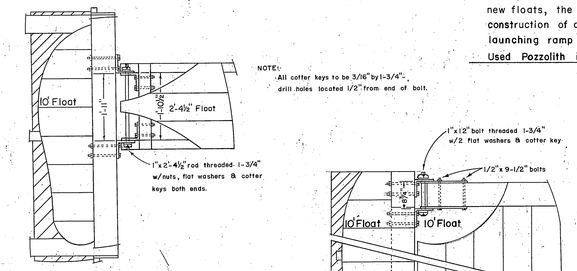


Painted native deck & bullrails with S.O. wood preservative (Oct., 1967)
All native except new 10"x 88' finger & stall floats



ANGLE CLIP DETAILS — STANDARD PLATE DETAILS

No Scale



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

Plan - cutaway view — Plan - cutaway view — Elevation

Elevation

2'-4½" FLOAT

Scale ½" to 1'-0"

10' FLOAT

Scale ½" to 1'-0"

TYPICAL HINGE CONNECTION DETAILS

WORK SUMMARY

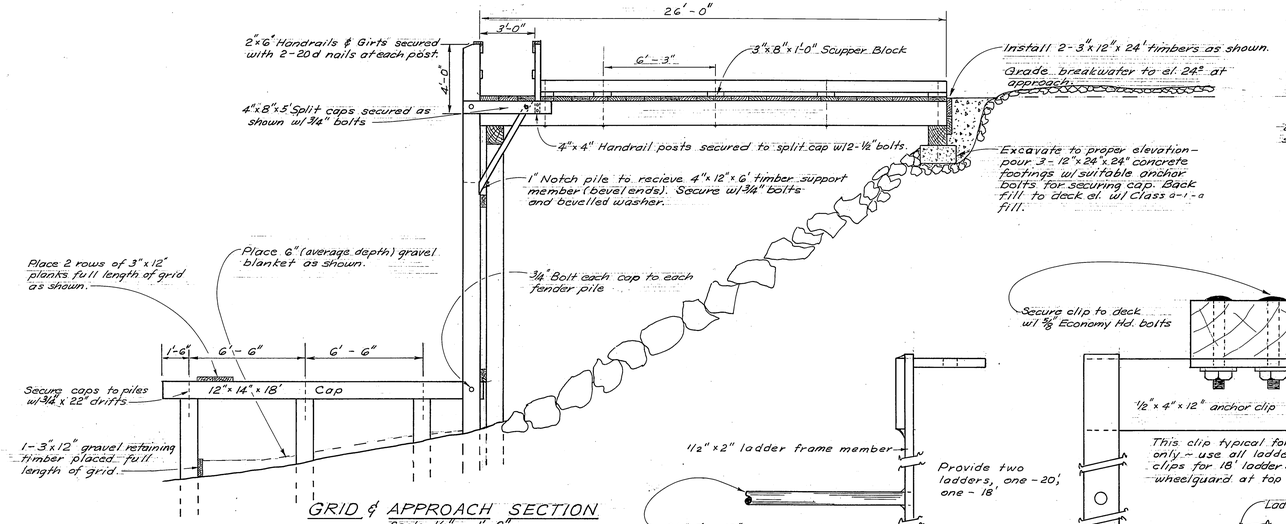
Major units of this project shall include the removal & disposal of the existing stall floats & 10'x 88' finger float, the construction & installation of 2145 S.F. of new floats, the construction of an 18' x 73' gridiron & construction of a 12' x 168' solid pour precast concrete boat launching ramp & associated earthwork.

Used Pozzolith in concrete

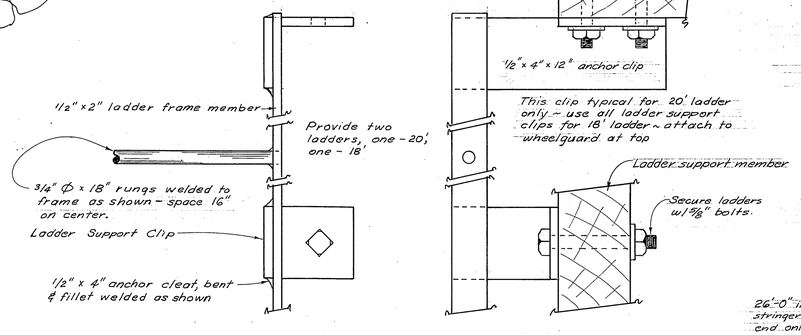
INDEX TO SHEETS

AS BUILT

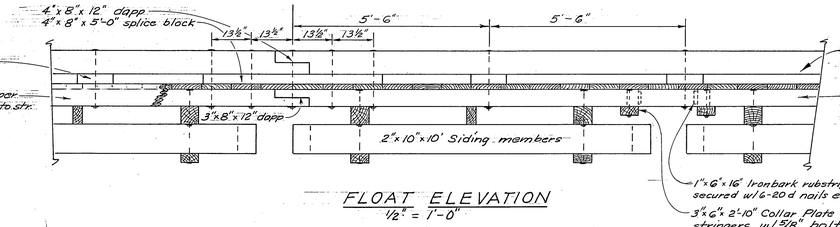
DATE Mar. 31, 1967 — APPROVED George R. MacDonald, COMMISSIONER



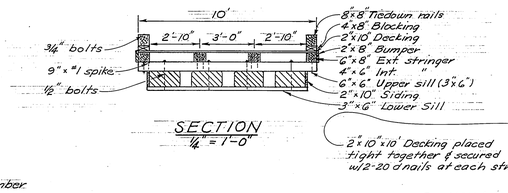
GRID & APPROACH SECTION
Scale 1/4" = 1'-0"



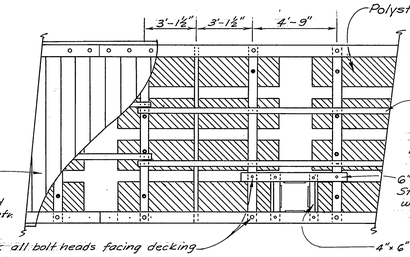
LADDER CONSTRUCTION DETAILS
Scale 1" = 4"



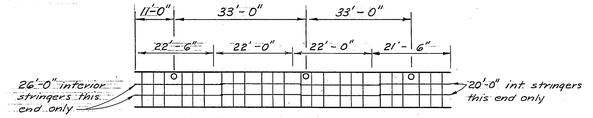
FLOAT ELEVATION
1/2" = 1'-0"



SECTION
1/4" = 1'-0"



FLOAT PLAN VIEW
1/4" = 1'-0"



STRINGER DIAGRAM
10' x 88' Float
1" = 20'

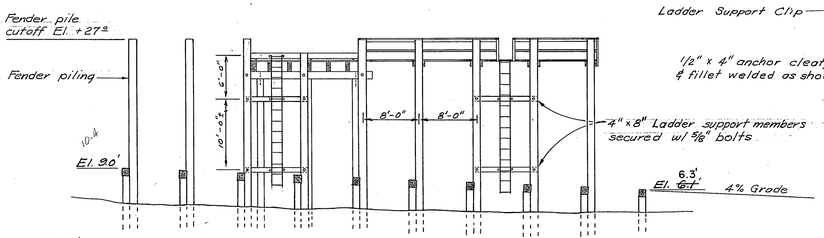
1. Exterior stringers to be spliced at the locations indicated - distances given are between centers of dapp joints.
2. Tie down rails to be spliced at the same locations as exterior stringer splices.
3. Interior stringers to be in 24' lengths except as noted.
4. Pile collars to be constructed to fit the existing piling at the locations shown above.

10' FLOAT MATERIAL		
ITEM	DRESSING	TREATMENT
6x6 & 3x6 Sills	S 1 E 1/8" off	12# creo ret.
2x10 Siding	2 x 10 1/2"	"
6x8 Ext. Stringer	S 4 S	8# " "
4x6 Int. "	S 2 E	"
6x6 Collar "	"	"
8x8 Tiedown Rail	S 4 S	"
4x8 Blocking	"	"
3x6 Collar Plates	Rough	"
4x6 " Members	S 2 E	"
2x10 Bumpers	S 4 S	"

All timber material to be construction grade Douglas Fir.
All 12# ret. creo. treatment to be Full Cell
All 8# " " " " " Empty Cell

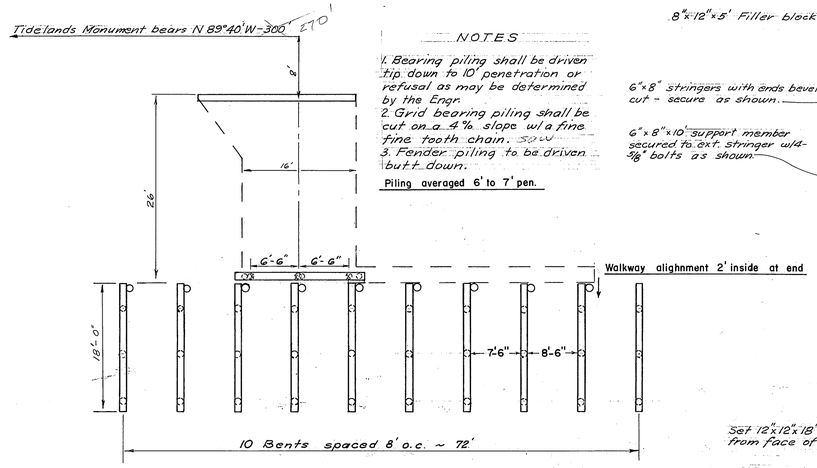
GENERAL NOTES

All hardware to be hot-dipped galvanized. A malleable iron washer shall be placed between all nut & wood surfaces. All bolts to be of the economy headed type. Bolt holes to be drilled true size except sill bolt holes for flotation billets to be 1/8" oversize. Drift holes to be drilled 1/16" undersize. All field drilled holes shall be treated w/ hot creo. oil. Pressure treated creosote material shall be cut to size prior to treatment. Tie-down rails shall extend accross float ends. All bolt heads facing decking shall be countersunk 1/4" prior to treatment. Field drill drift bolt holes. A barrier of 4 mil black polyethylene shall be placed between all contact surfaces of creo. timber and floatation billets (except siding members)



Planking on grid omitted for clarity

GRID PROFILE
Scale 1" = 10'

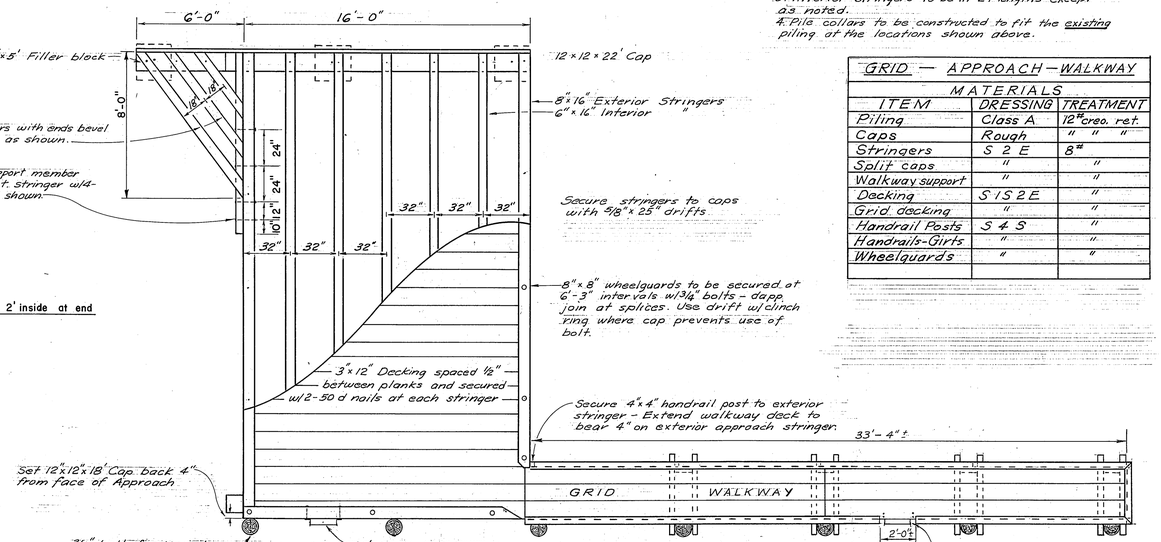


NOTES

1. Bearing piling shall be driven tip down to 10' penetration or refusal as may be determined by the Engr.
2. Grid bearing piling shall be cut on a 4% slope w/ a fine fine tooth chain. SOUW
3. Fender piling to be driven butt down.

Piling averaged 6' to 7' pen.

GRID & APPROACH PILE & CAP LAYOUT
Scale 1" = 10'



APPROACH & WALKWAY PLAN
Scale 1/4" = 1'-0"

GRID — APPROACH — WALKWAY		
MATERIALS		
ITEM	DRESSING	TREATMENT
Piling	Class A	12# creo. ret.
Caps	Rough	" " "
Stringers	S 2 E	8#
Split caps	"	"
Walkway support	"	"
Decking	S 1 S 2 E	"
Grid decking	"	"
Handrail Posts	S 4 S	"
Handrails-Girts	"	"
Wheelguards	"	"

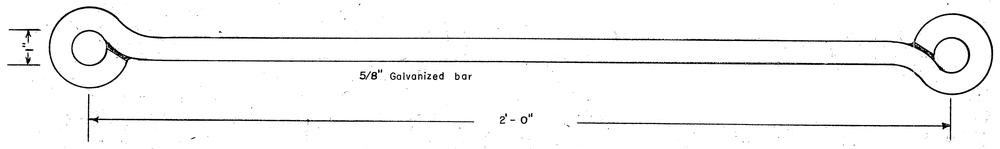
STATE OF CALIF.
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER AND HARBORS

10' x 88' FLOAT & GRID CONSTRUCTION DET'LS

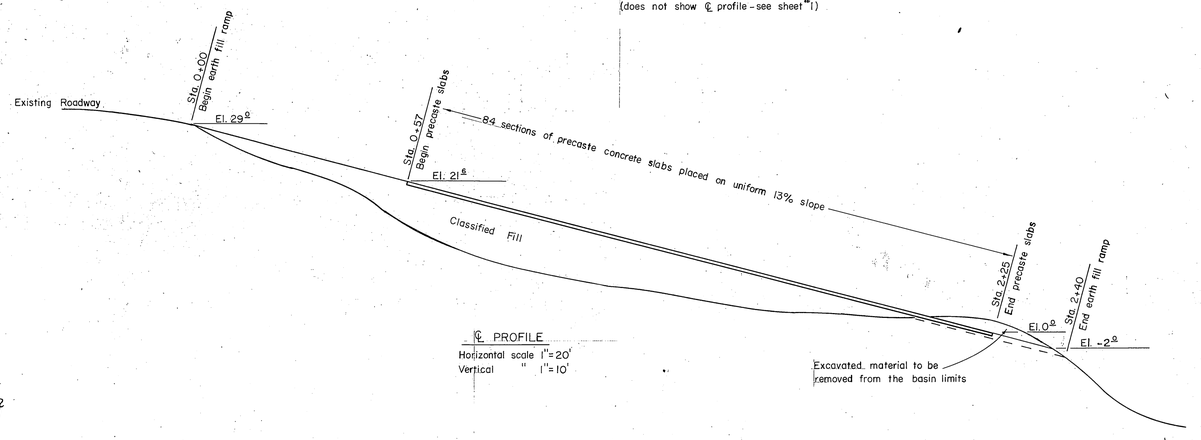
As shown
3-25-67
3-68166

DW DW DS

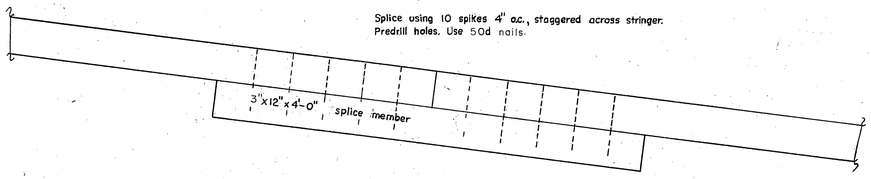
SHEET 2 OF 5 SHEETS



CONNECTING BAR DETAILS
Scale 1" = 2"

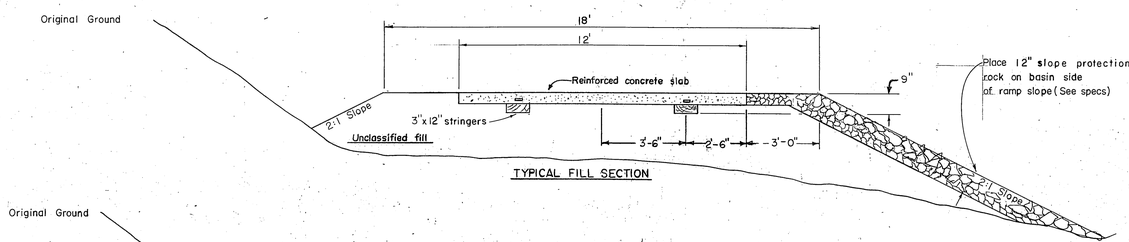


Stringers to be 3x12 timbers, 8# retention creosote treatment. Used creosote material may be used if in sound condition. Minimum length to be 16' & spliced as shown.

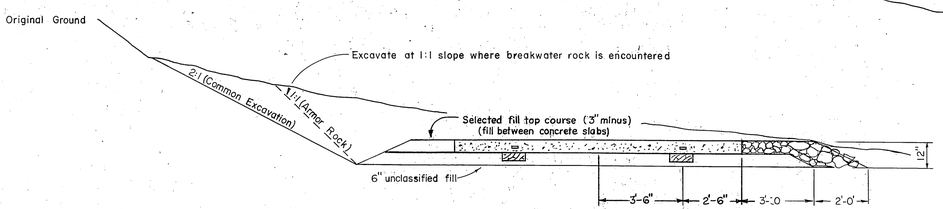


STRINGER SPLICE DETAIL
Scale 1 1/2" to 1'-0"

USED SOLID POUR SLAB

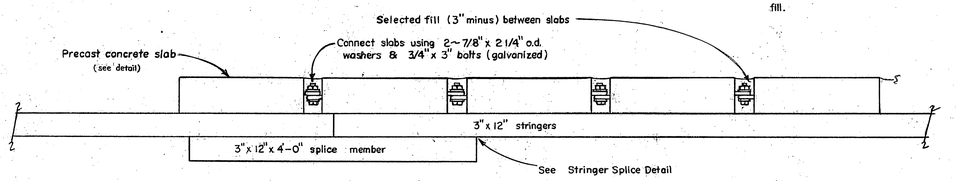


TYPICAL FILL SECTION



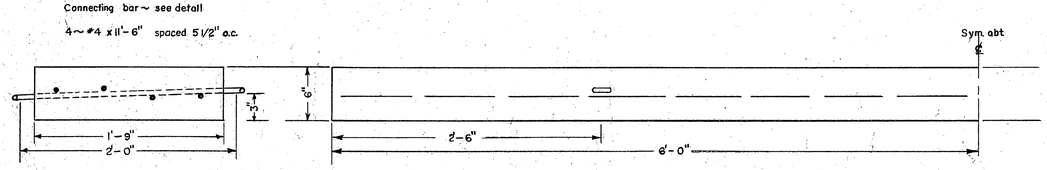
TYPICAL CUT SECTION

TYPICAL RAMP CROSS SECTIONS
Scale 1" to 3'-0"



Not used - poured solid slab

STRINGER & PRECAST SLAB PLACEMENT
Scale 1" to 1'-0"



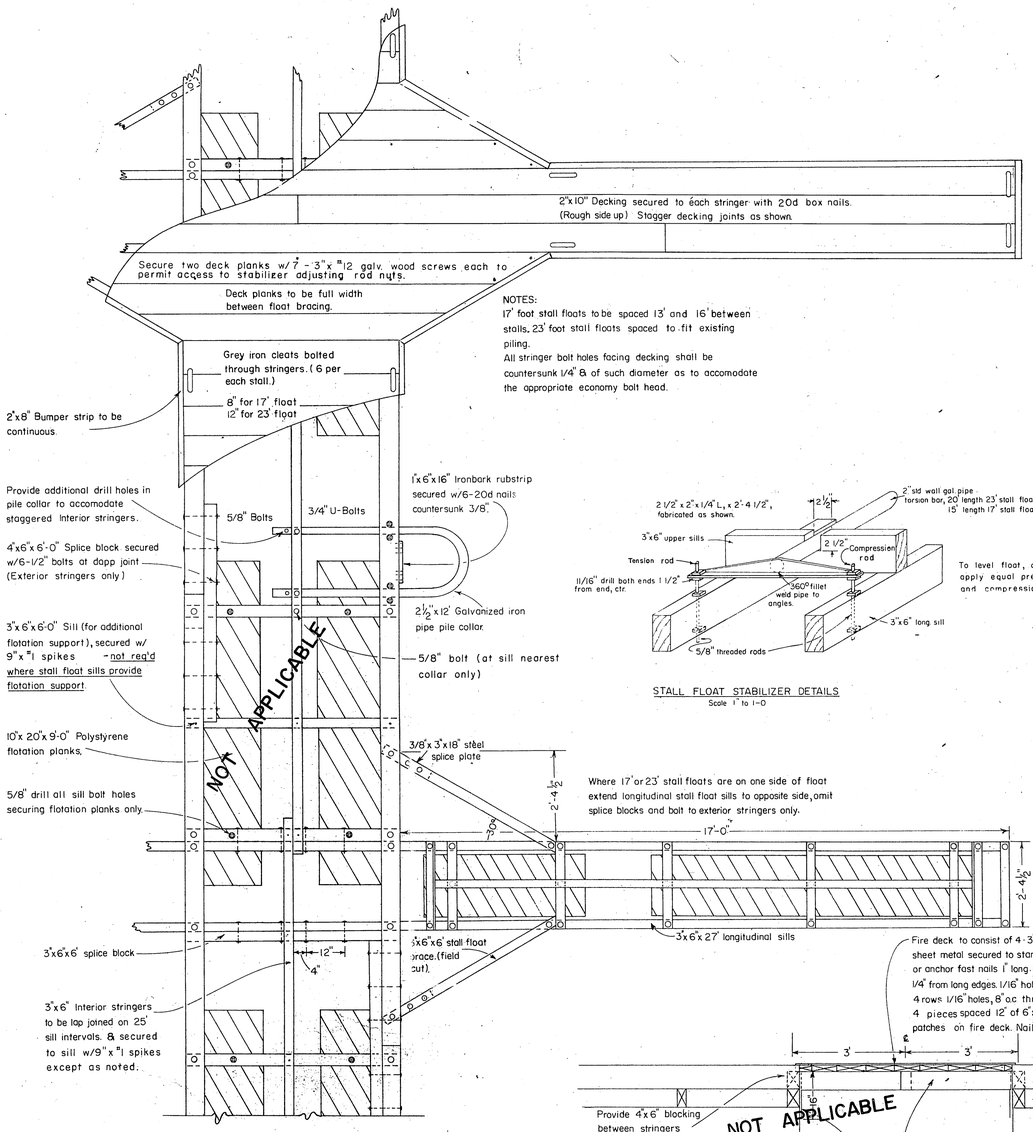
PRECAST CONCRETE SLAB
Scale 1 1/2" to 1'-0"

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

CONSTRUCTION DETAILS

BOAT LAUNCHING RAMP

SCALE as shown
DATE 4/14/67
PROJ. NO. 3-68166
APPROVED DON STATTER
DIRECTOR
SURVEYED BY DW, MH
DRAWN BY CD
CHECKED BY RB

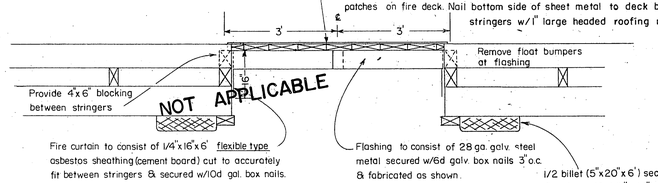


PLAN VIEW
17' STALL FLOAT ASSEMBLED

NOTES:
17' foot stall floats to be spaced 13' and 16' between stalls, 23' foot stall floats spaced to fit existing piling.
All stringer bolt holes facing decking shall be countersunk 1/4" ϕ of such diameter as to accomodate the appropriate economy bolt head.

STALL FLOAT STABILIZER DETAILS
Scale 1" to 1-0

To level float, adjust nuts to apply equal pressure on tension and compression rods.

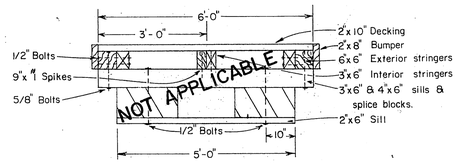


6"x6"
S4S Ext. stringer
one piece fabrication

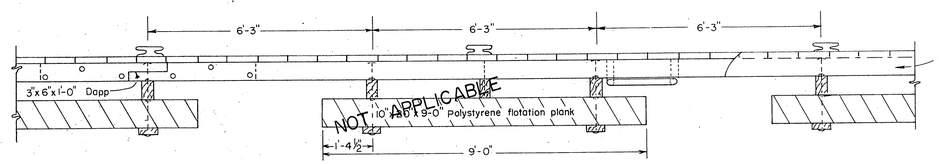
FLASHING FABRICATION
Scale 1" to 1'-0"

3"x6"
S2E Int. stringer
two piece fabrication

FIRE STOP DETAILS
Scale 1/2" to 1'-0"

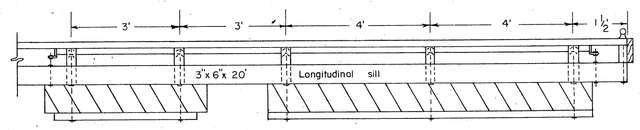


6' FLOAT SECTION

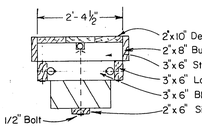


6' FLOAT ELEVATION

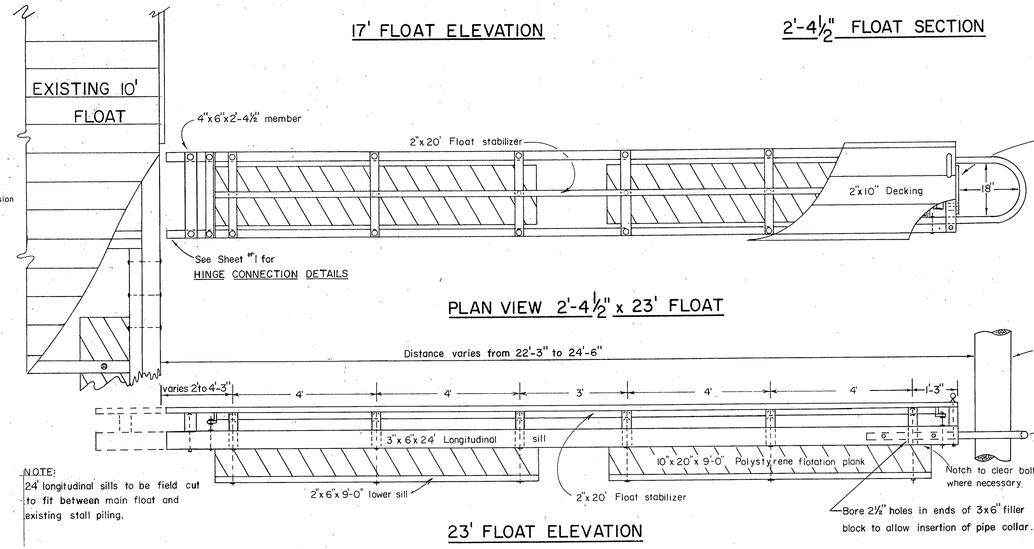
NOTE: Use 3"x 6"x 27' Longitudinal sills when securing 17' stall floats to 10' wide float.



17' FLOAT ELEVATION



2'-4½" FLOAT SECTION



PLAN VIEW 2'-4½" x 23' FLOAT

NOTE:
24' longitudinal sills to be field cut to fit between main float and existing stall piling.

23' FLOAT ELEVATION

MATERIALS		
ITEM	DRESSING	TREATMENT
PILING		12 lb. ret.
2"x6" LOWER SILLS	ROUGH	" "
3"x6", 4"x6" SPLICE BLKS.	S-2-E	" "
3"x6" LONGITUDINAL		" "
STALL FLOAT SILLS	S-2-E	
3"x6" BLOCKING	S-2-E	" "
6"x6" EXT. STRINGERS	S-4-S	8 lb. ret.
3"x6" INT. STRINGERS	S-2-E	" "
2"x10" DECKING	S-1-S-2-E	" "
2"x 8" BUMPERS	S-4-S	" "

All timber material to be CONSTRUCTION GRADE DOUGLAS FIR
All 12 lb. Creo. treatment to be FULL CELL
All 8 lb. Creo. treatment to be EMPTY CELL

6' FLOAT BOLT HOLES
PRE-DRILL
SILLS - holes for flotation plank bolts
STRINGERS - holes for stringers to sill bolts
2 splice block holes
FIELD-DRILL
SILLS - holes for stringer to sill bolts
STRINGERS - 1. pile collar holes
2. holes for exterior stringers to longitudinal stall float sill bolts
SPLICE BLOCKS - all holes
NOT APPLICABLE

STALL FLOAT BOLT HOLES
PRE-DRILL
STRINGERS - all holes
BLOCKING - all holes
LONGITUDINAL SILLS - 1. stringer to sill holes
2. splice block holes
FIELD DRILL
LONGITUDINAL SILLS - holes for 6' float exterior stringer bolts & float stabilizer
SPLICE BLOCK & BRACES - all holes
Field drill all 9" spike holes

NOTES
All hardware to be hot dip Galvanized. A malleable washer shall be placed between all nut and wood surfaces. All bolts to be of the economy head type. Bolt holes to be drilled true size, except holes for flotation planks 1/8" oversize. 9" spike holes to be drilled 1/16" undersize. All drill holes shall be treated with hot creosote oil. All pressure treated creosote material shall be cut to size prior to treatment. All bolts to be 5/8" except flotation plank bolts and exterior stringer splice block bolts. 5/8" bolt holes facing decking to be countersunk 1/4" deep by 2-1/8" diameter - 1/2" bolt holes 1/4" x 1-3/4" prior to treatment. Connect 6' float to main float with hinge connection as shown on connection detail sheet. A barrier of 6 mil polyethylene shall be placed between the contact surfaces of all creo. timber and flotation material.

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

23' STALL FLOATS

SCALE 1/2" = 1'-0"
DATE AUGUST 1966
PROJ. NO. 3-68146
APPROVED DON D. STATTER DIRECTOR
DESIGNED BY D.S. DRAWN BY C.D. CHECKED BY D.S.