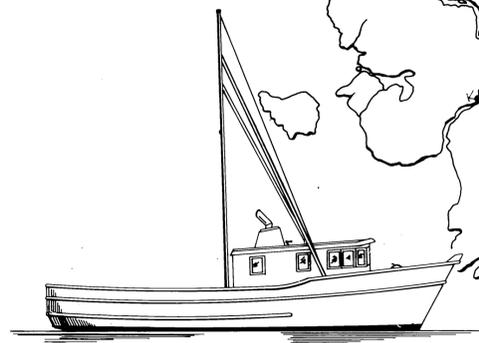
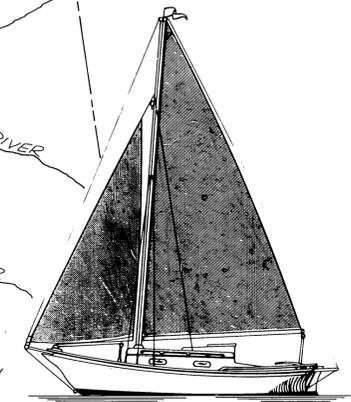
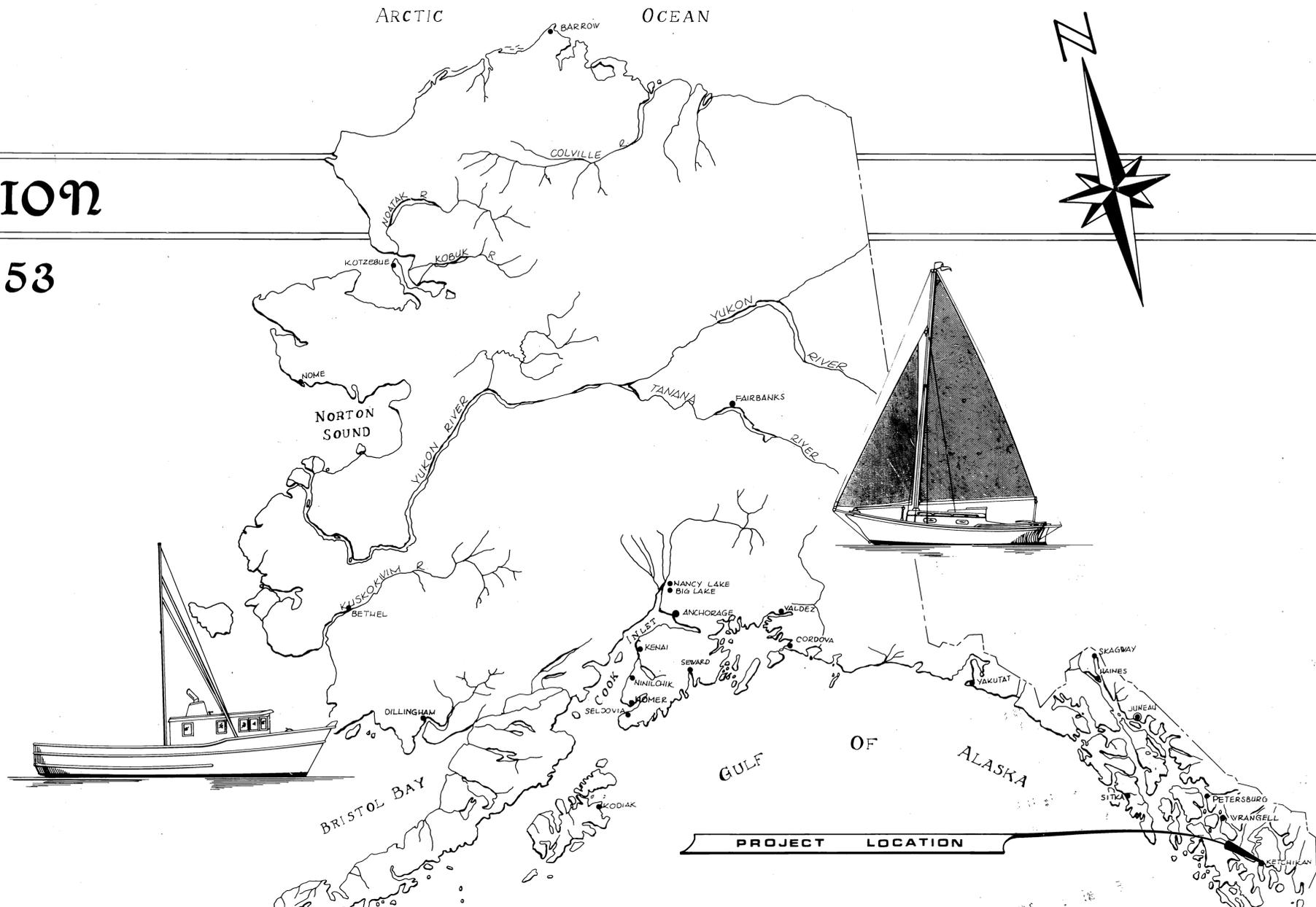
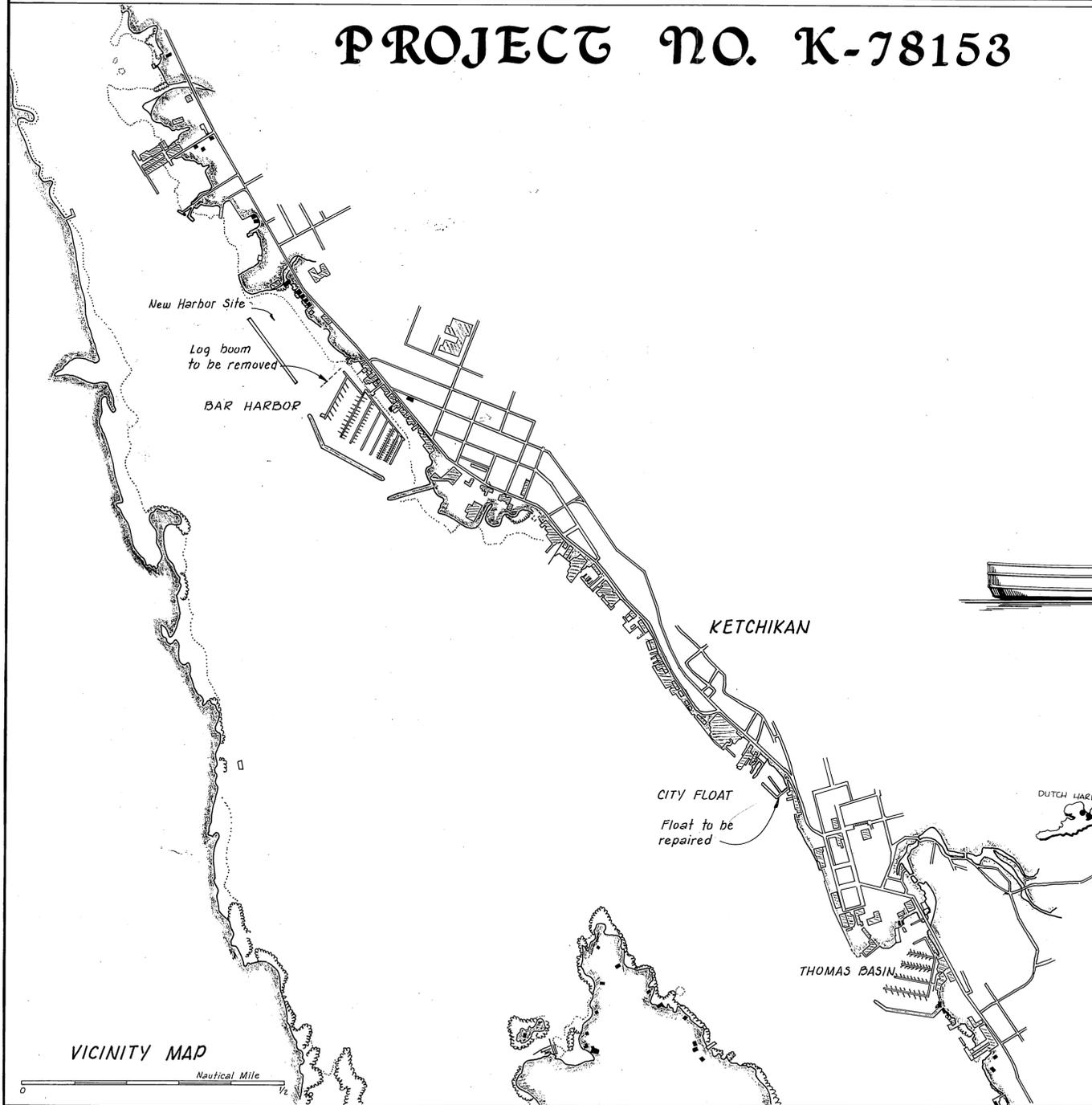
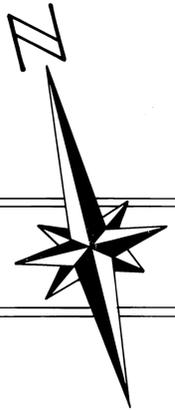


KETCHIKAN BAR HARBOR
Modified connection Plate
K78153 4-2-84 SHEET 1 of 1

NOTE: Hot Dip Galvanize

KETCHIKAN BAR HARBOR EXPANSION PROJECT NO. K-78153

ARCTIC OCEAN



PROJECT LOCATION

—WORK SUMMARY—

- This Project Consists of :
1. Constructing Approximately 2,112 Sq. Ft. of Concrete Approaches.
 2. Constructing 2~6' x 65' Steel Gangways.
 3. Constructing Approximately 51,467 Sq. Ft. of Concrete Float & Associated Piling.
 4. Removing Existing (350' approx.) Log Boom.
 5. Repairing City Float.
 6. Constructing Water System.
 7. Constructing Electrical Utilities.

VICINITY MAP
Nautical Mile

AS BUILT * & xpm.
Start: July 25, 1984
Stop: September 21, 1984 D.B.
Contractor: W.S. Construction Co.
Project Engineer: Mark Halvorsen
Date: November 26, 1984
Added to Mylar: Dec. 18, 1984

INDEX TO SHEETS

1. TITLE SHEET & VICINITY MAP	19. TYPICAL STALL FLOAT UNITS
2. HARBOR LAYOUT	20. CONC. STALL FLOAT WELDMENTS
3. FLOAT LAYOUT SHTS.	21. PILE COLLAR DETAILS
4. APPROACH LAYOUTS	22. LAUNCHING RAMP MODIF. & DET.
5. " DET. SHTS. A & B	23. PILE SOCKET DETAILS
6. GANGWAY DET. SHTS. A & B	24. ALASCOM CABLE PROTECTION
7. FLOAT CONN. DETAIL	25. EXIST. CITY FLOAT & REPAIRS
8. GANGWAY FLOAT DETAILS	26. ELECTRICAL PLANS & DETAILS
9. HEAVY DUTY FLOAT UNITS	27. WATER SYSTEM DETAILS
10. TYPICAL FLOAT UNITS	28. CHAIN LINK FENCE DETAILS
11. MISC. FLOAT DET. SHTS. A & B	29. COAST GUARD WATER & SEWAGE
12. COVER R2 DETAILS	30. ALTERNATE FLOATS LAYOUT
13. TYPICAL STALL FLOATS	31. ALTERNATE FLOAT DETAILS
14.	32.
15.	33.
16.	34.
17.	35.
18.	36.

APPROVED

Robert Martin Jr. 15 Feb 83
DIRECTOR S.E. D. & C. DATE

RECOMMEND FOR APPROVAL
Mark Halvorsen 15 Feb 83
CHIEF S.E. HARBOR D. & C. DATE

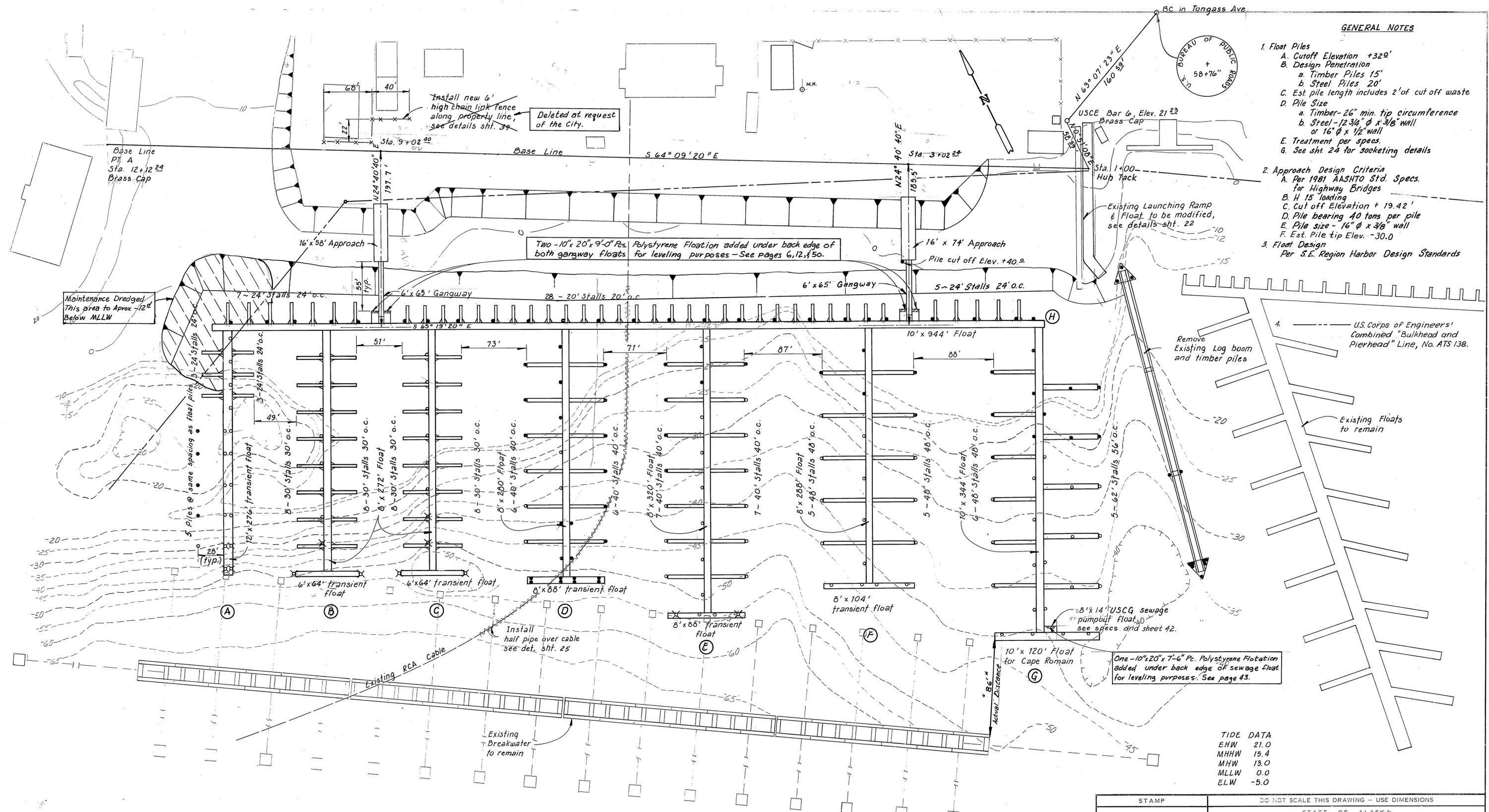
SHEET 1 OF 50

STATE
OF
ALASKA

DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION
HARBOR DESIGN & CONSTRUCTION

GENERAL NOTES

1. **Float Piles**
 - A. Cutoff Elevation +32.0'
 - B. Design Penetration
 - a. Timber Piles 15'
 - b. Steel Piles 20'
 - C. Est. pile length includes 2' of cut off waste
 - D. Pile Size
 - a. Timber-26" min. tip circumference
 - b. Steel-12 3/4" ϕ x 3/8" wall or 16" ϕ x 1/2" wall
 - E. Treatment per specs.
 - G. See sht. 24 for socketing details
2. **Approach Design Criteria**
 - A. Per 1981 AASHTO Std. Specs. for Highway Bridges
 - B. H 15' loading
 - C. Cut off Elevation +19.42'
 - D. Pile bearing 40 tons per pile
 - E. Pile size - 16" ϕ x 3/8" wall
 - F. Est. Pile tip Elev. -30.0
3. **Float Design**
Per S.E. Region Harbor Design Standards



TIDE DATA

EHW	21.0
MHHW	15.4
MHW	13.0
MLLW	0.0
ELW	-5.0

Horizontal Control
Basis of Bearing:
BPR B.C. mon. 58+76
to USCE Bar G N 63°07'23" E, 160.59'

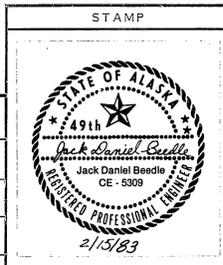
Vertical Control
Datum : USCE Bar G , Elev. 21.23

Note : Distances shown to or between floats are to edge of conc.

See attached Pile Layout, sht. 2A for actual float & approach pile layout, type of pile & type of installation for each pile at each location.
Also shows actual location of the Alascom Cable.

KEY TO PILING SYMBOLS

•	Timber Pile	(77)
○	12 3/4" ϕ x 3/8" wall steel pile	(83)
⊗	16" ϕ x 1/2" wall steel pile	(13)
not shown	16" ϕ x 3/8" wall approach pile	(12)



DO NOT SCALE THIS DRAWING - USE DIMENSIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HARBOR DESIGN AND CONSTRUCTION

Bar Harbor, Ketchikan Alaska

HARBOR LAYOUT

SCALE 1"=50'	SURVEYED	APPROVED
DESIGNED JDB	DRAWN TS	Robert P. Beck
CHECKED TS	DATE 8-82	James A. Lowell
PROJECT NUMBER K-78153	SHEET 2 OF 50	

GENERAL NOTES

1. Float Piles
 - A. Cutoff Elevation +32.0'
 - B. Design Penetration
 - a. Timber Piles 15'
 - b. Steel Piles 20'
 - C. Est. pile length includes 2' of cut off waste
 - D. Pile Size
 - a. Timber-26" min tip circumference
 - b. Steel-12 3/4" ϕ x 3/8" wall or 16" ϕ x 1/2" wall
 - E. Treatment per specs.
 - G. See sht. 24 for socketing details
2. Approach Design Criteria
 - A. Per 1981 AASHTO Std. Specs. for Highway Bridges
 - B. H 15 loading
 - C. Cut off Elevation + 19.42'
 - D. Pile bearing 40 tons per pile
 - E. Pile size - 16" ϕ x 3/8" wall
 - F. Est. Pile tip Elev. -30.0
3. Float Design
 - A. Per S.E. Region Harbor Design Standards

Base Line
PT. A
Sta. 12+12.24
Brass Cap

Install new 6' high chain link fence along property line, see details sht. 39

USCE Bar 6, Elev. 21.23
Brass Cap

Existing Launching Ramp & Float to be modified, see details sht. 22

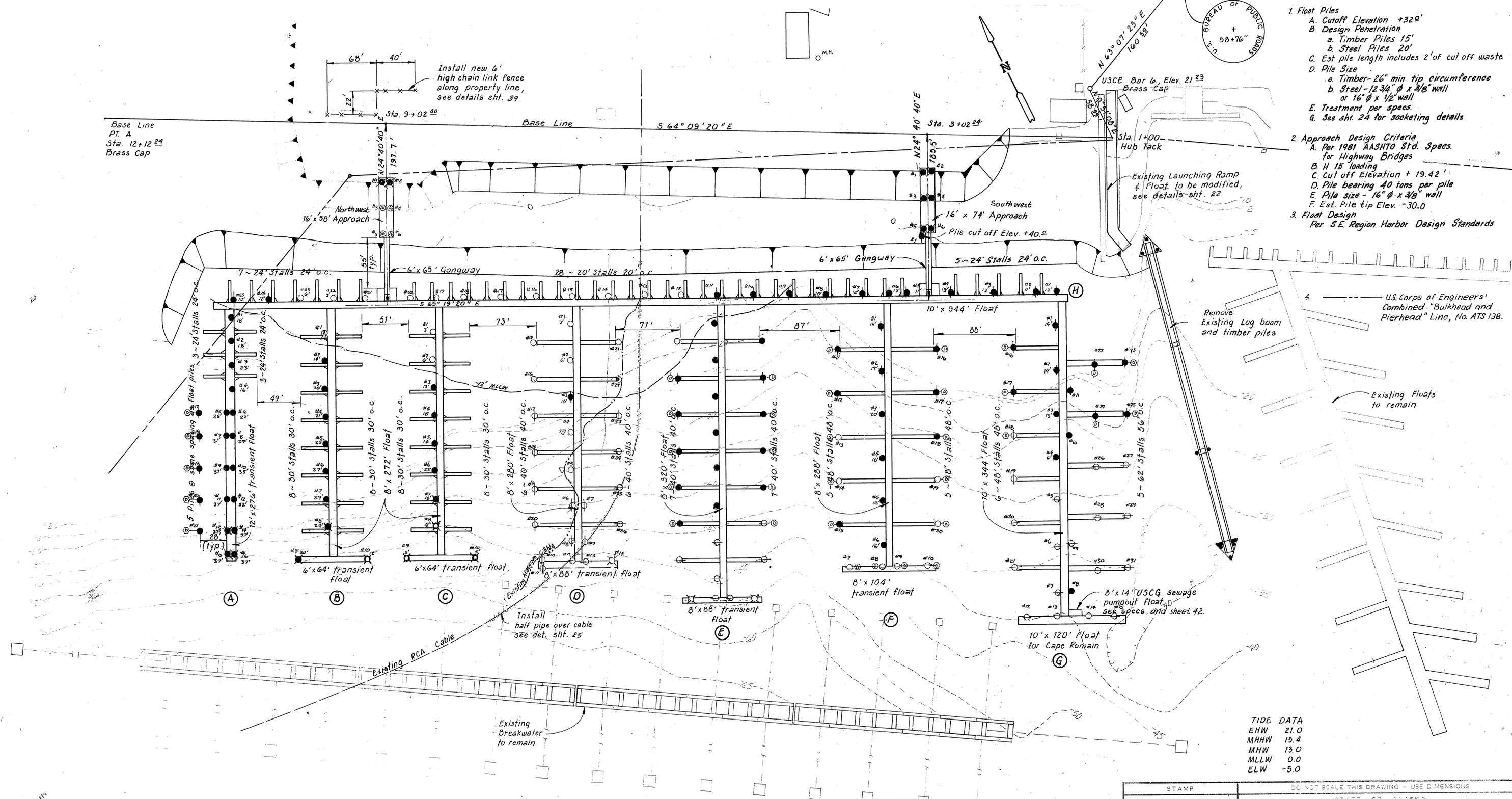
U.S. Corps of Engineers' Combined "Bulkhead and Pierhead" Line, No. ATS 138.

Remove Existing Log boom and timber piles

Existing Floats to remain

TIDE DATA

EHW	21.0
MHHW	15.4
MHW	13.0
MLLW	0.0
ELW	-5.0



Horizontal Control
Basis of Bearing:
BPR B.C. mon. 58+76
to USCE Bar 6 N 63°07'23"E, 160.59'

Vertical Control
Datum: USCE Bar 6, Elev. 21.23

Type of piles on float "D" changed to fit actual location of Alascom cable. Three timber piles on float "D" transient float deleted & used on float "D"; an add'l. 3 timber piles were replaced w/ steel pile on the transient float for necessary strength. Add'l. steel pile added to float "E" for add'l. strength. Steel pile replaced one timber pile on float "G" for add'l. strength. Two steel piles were replaced by two timber piles on float "C" where greater strength was not required; - steel pile used elsewhere.

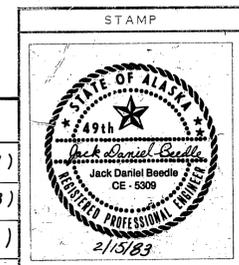
Note: Distances shown to or between floats are to edge of conc.

Totals	
● Driven Timber Pile	21
● Driven 16" steel pile	4
● Pile in place - Driven 12 3/4" steel pile	2
● Pile in place - Driven 12 3/4" steel pile socket	11
● Shallow water 16" steel pile socket	37
○ Driven timber pile socket	7
○ Deep water timber pile socket	1
○ Deep water 12 3/8" steel pile socket	1
○ Deep water 16" steel pile socket	1
○ Projected driven pile	1
○ Shallow water 12 3/8" pile socket	1

Note: Pile nos. # coincide w/pile records; dimensions are feet of penetration obtained from driving Piles; See pile records for others.

KEY TO PILING SYMBOLS

●	Timber Pile	(77)
○	12 3/8" ϕ x 3/8" wall steel pile	(83)
⊗	16" ϕ x 1/2" wall steel pile	(13)
not shown	16" ϕ x 3/8" wall approach pile	(12)



DO NOT SCALE THIS DRAWING - USE DIMENSIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HARBOR DESIGN AND CONSTRUCTION

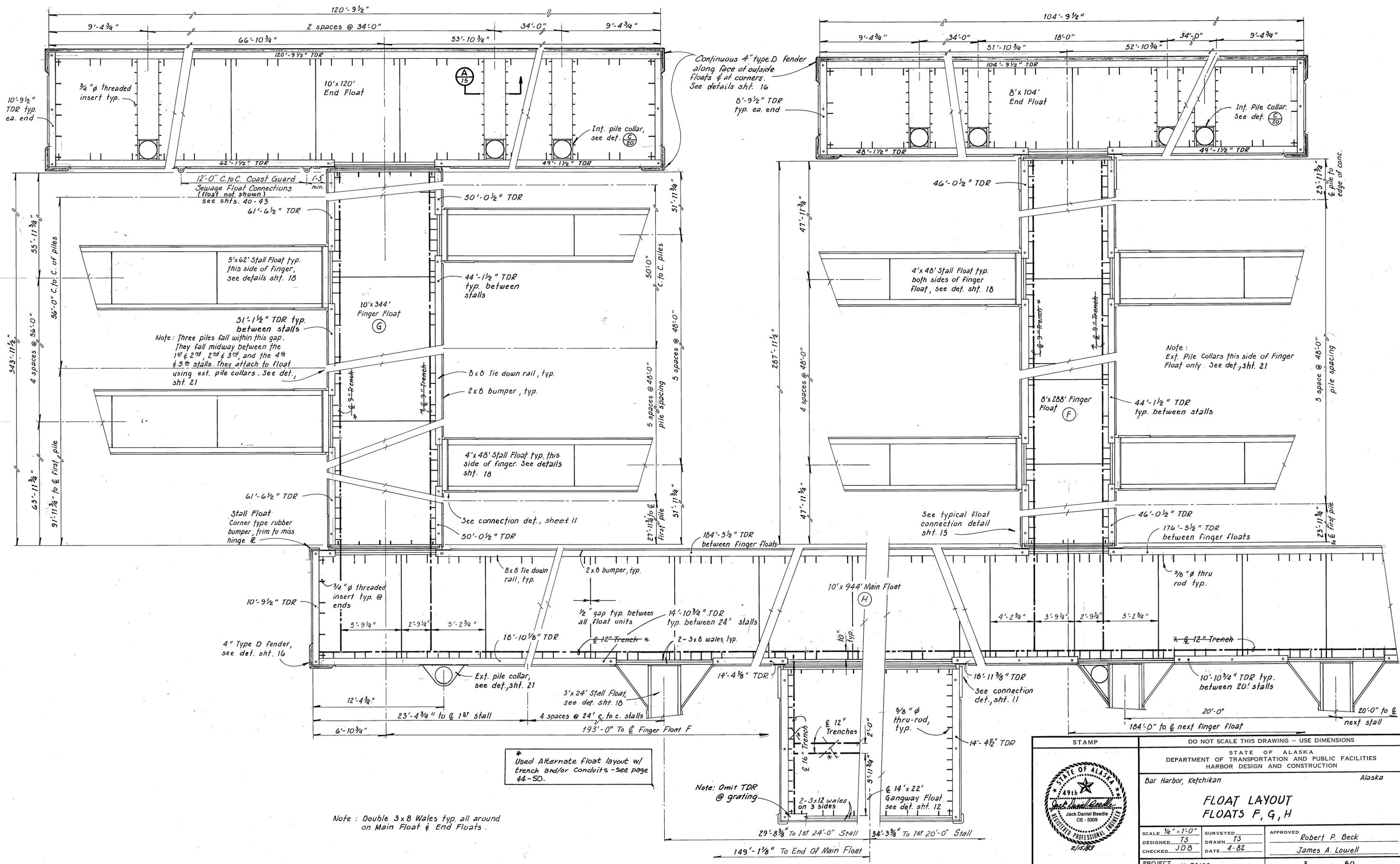
Bar Harbor, Ketchikan Alaska

HARBOR LAYOUT

DESIGNED JDB
CHECKED TS
DATE 8-82

APPROVED
Robert P. Beck
James A. Lowell

PROJECT NUMBER K-78153 SHEET 2A OF 50



STAMP

DO NOT SCALE THIS DRAWING - USE DIMENSIONS

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
 HARBOR DESIGN AND CONSTRUCTION

Bar Harbor, Ketchikan Alaska

**FLOAT LAYOUT
 FLOATS F, G, H**

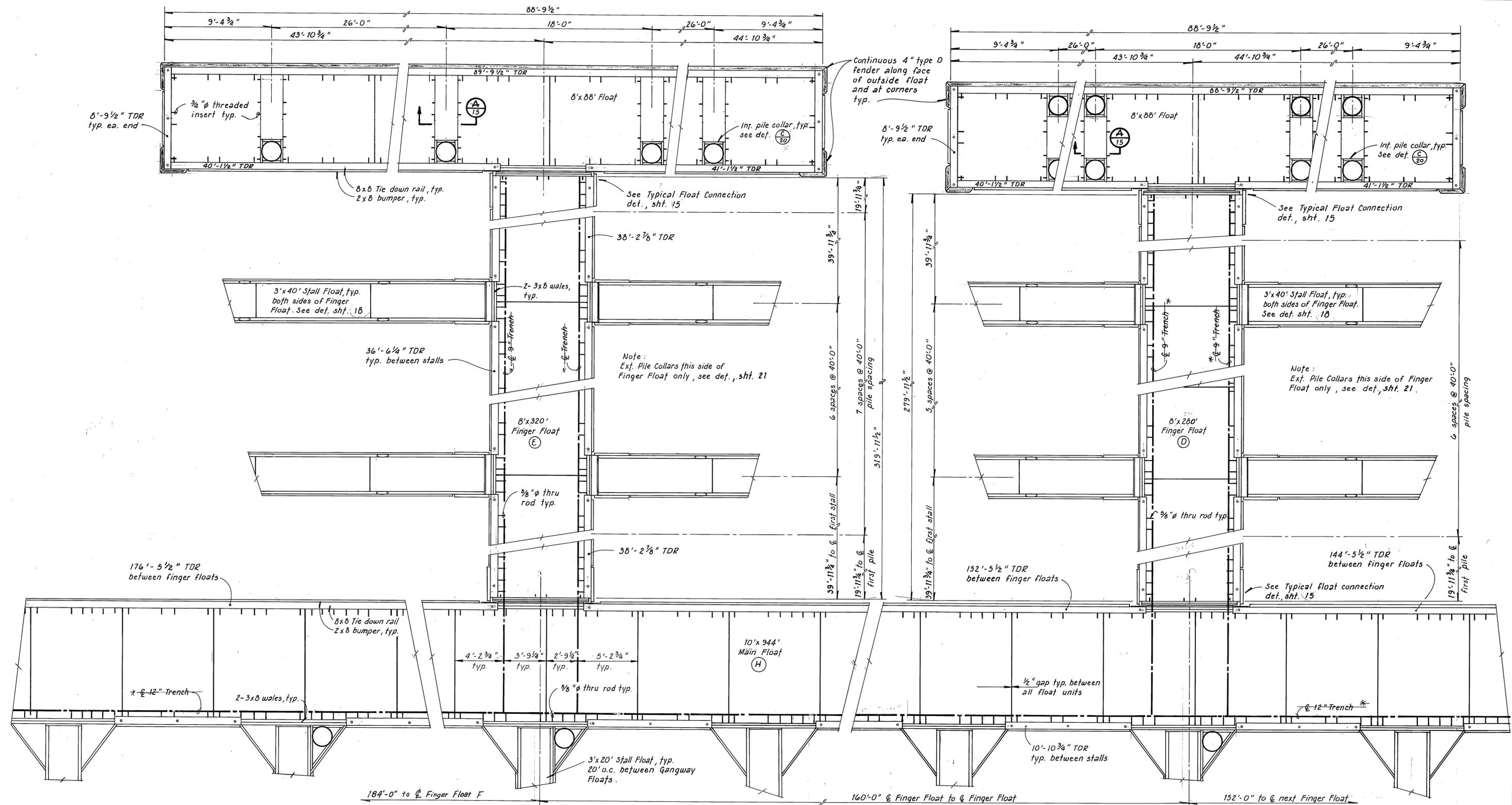
SCALE 3/4" = 1'-0"
 DESIGNED TS
 CHECKED JDB

SURVEYED TS
 DRAWN TS
 DATE 4-82

APPROVED
 Robert P. Beck
 James A. Lowell

PROJECT NUMBER K-78153
 SHEET 3 OF 50

2/15/83

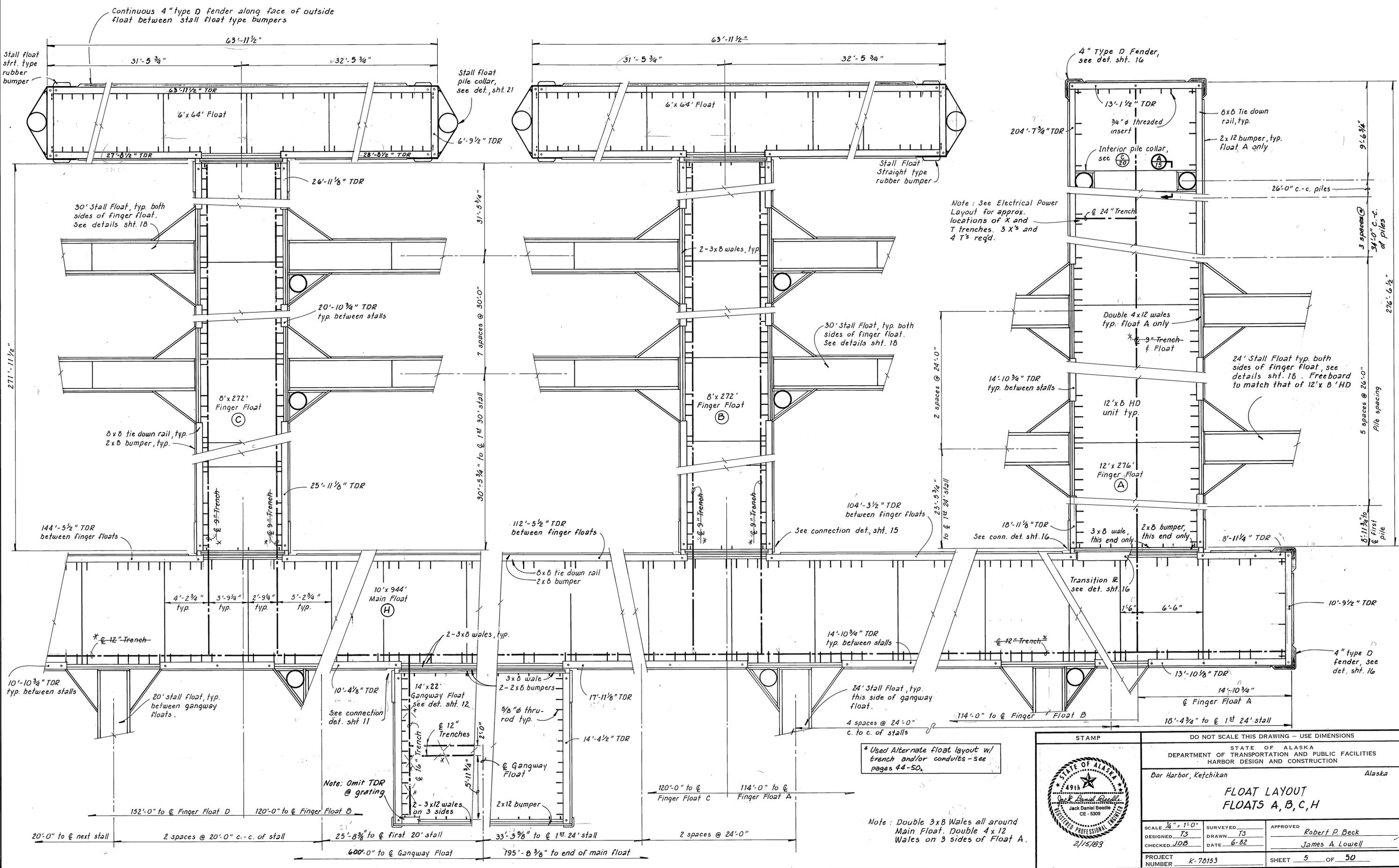


Note: Double 3x8 Wales typ. all around on Main Float and End Floats.

*Used Alternate float layout w/ trench and/or Conduits - See pages 44-50.

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION			
Bar Harbor, Ketchikan		Alaska	
FLOAT LAYOUT FLOATS D, E, H			
SCALE: 1/4" = 1'-0"	SURVEYED: TS	APPROVED: Robert P. Beck	
DESIGNED: TS	DRAWN: TS	James A. Lowell	
CHECKED: JDB	DATE: 4-82		
PROJECT NUMBER: K-78153	SHEET: 4		OF: 50





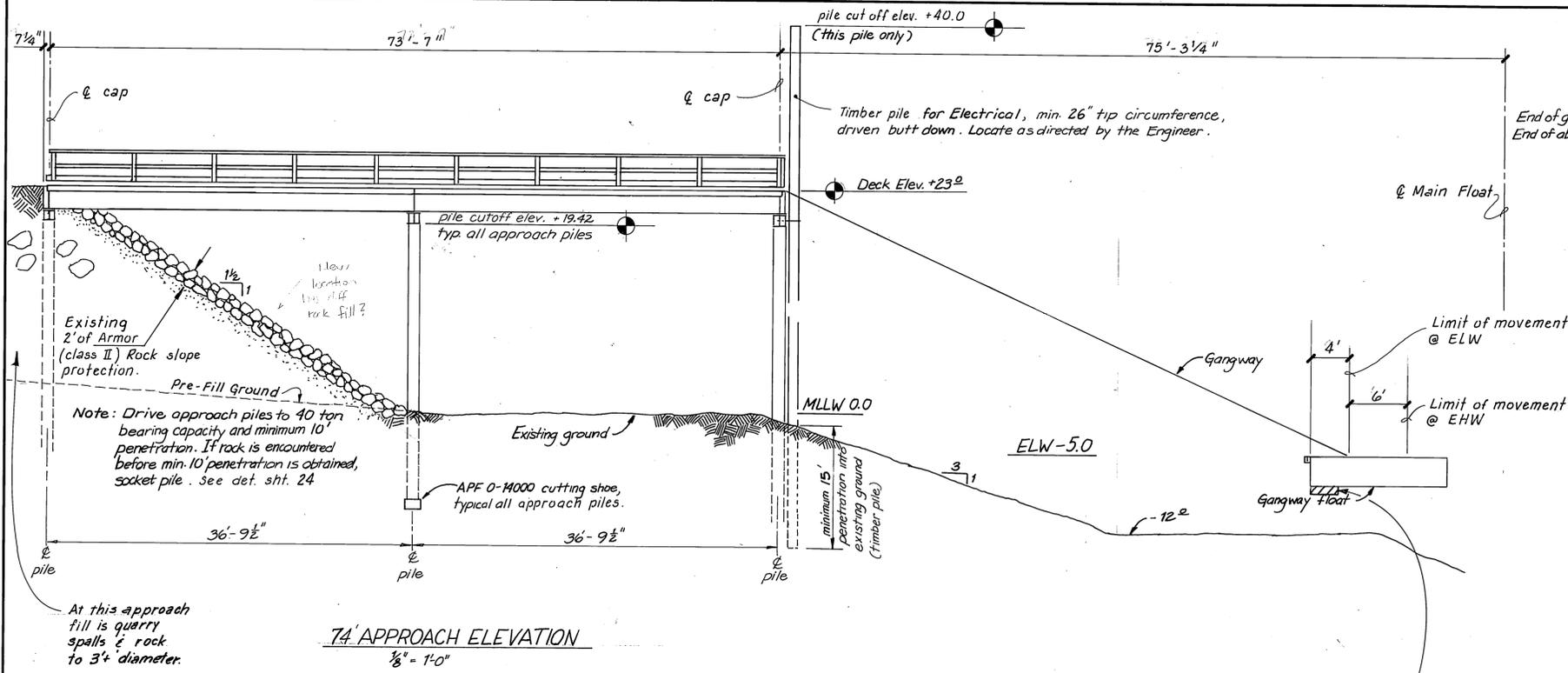
Note: See Electrical Power Layout for approx. locations of X and T trenches. 3 X's and 4 T's req'd.

* Used Alternate float layout w/ trench and/or conduits - see pages 44-50.

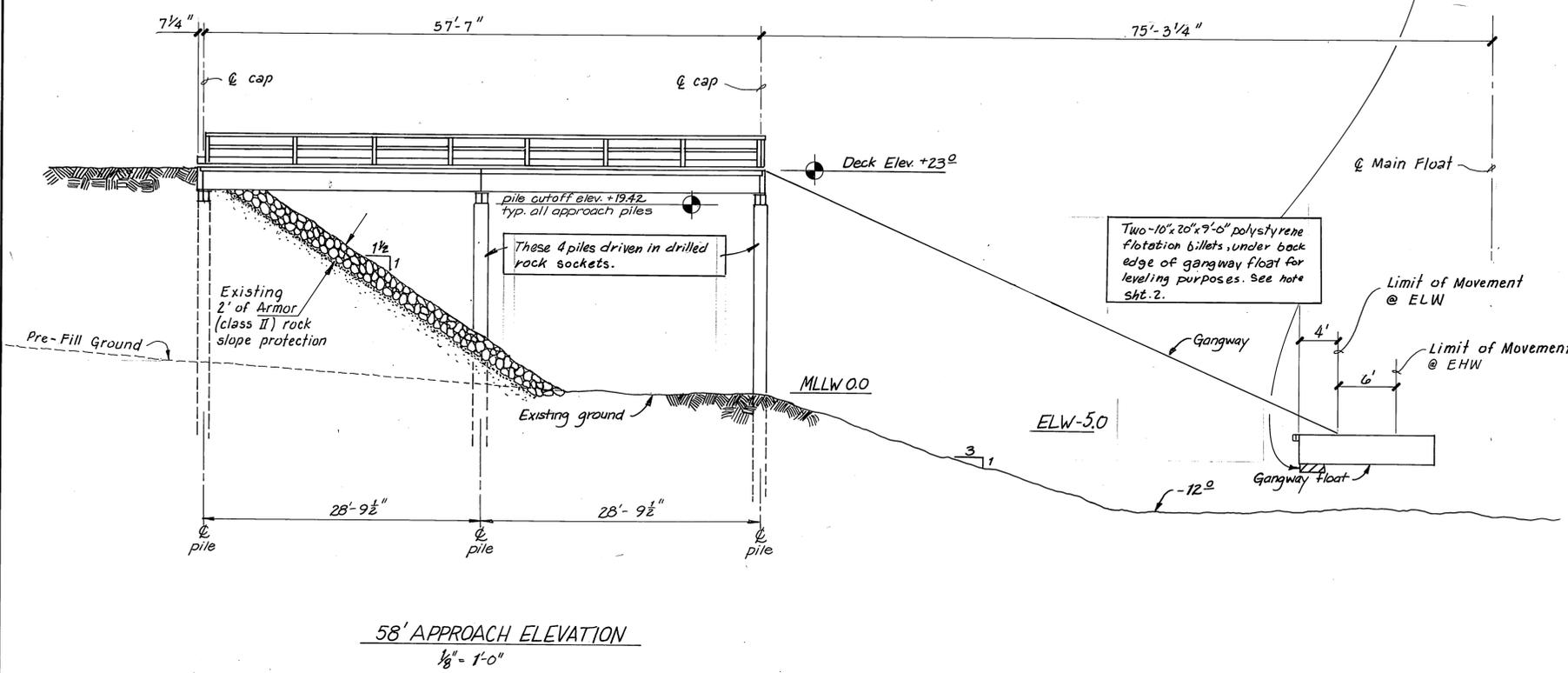
Note: Double 3x8 Wales all around Main Float. Double 4x12 Wales on 3 sides of Float A.

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION			
Bar Harbor, Ketchikan		Alaska	
FLOAT LAYOUT FLOATS A, B, C, H			
SCALE: 1/4" = 1'-0"	SURVEYED	APPROVED	
DESIGNED: JS	DRAWN: JS	Robert P. Beck	
CHECKED: JDB	DATE: 6-82	James A. Lowell	
PROJECT NUMBER: K-78153	SHEET 5		OF 50

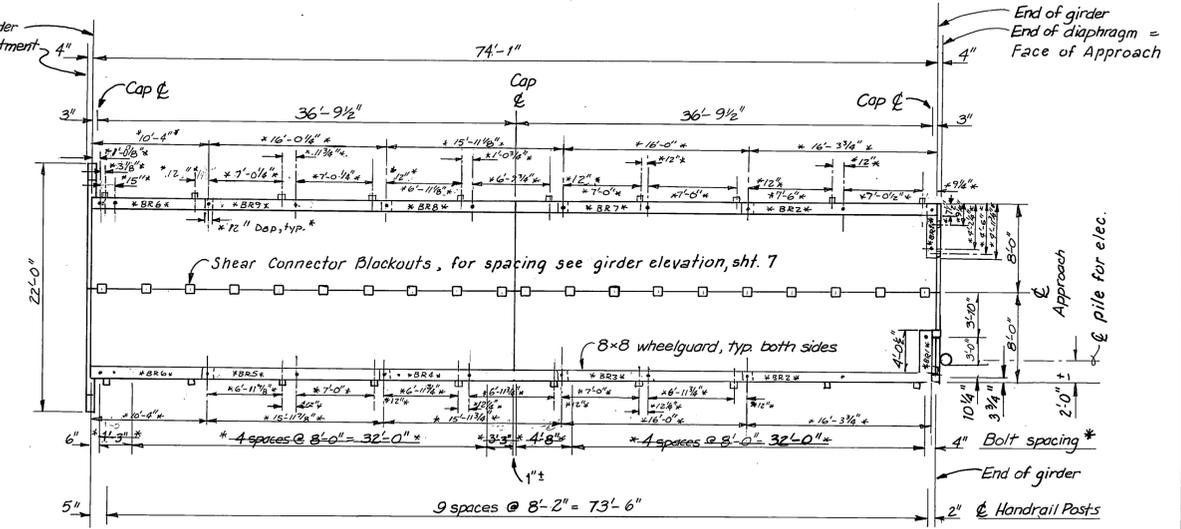




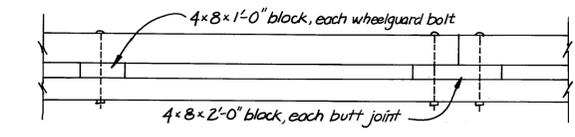
74' APPROACH ELEVATION
1/8" = 1'-0"



58' APPROACH ELEVATION
1/8" = 1'-0"



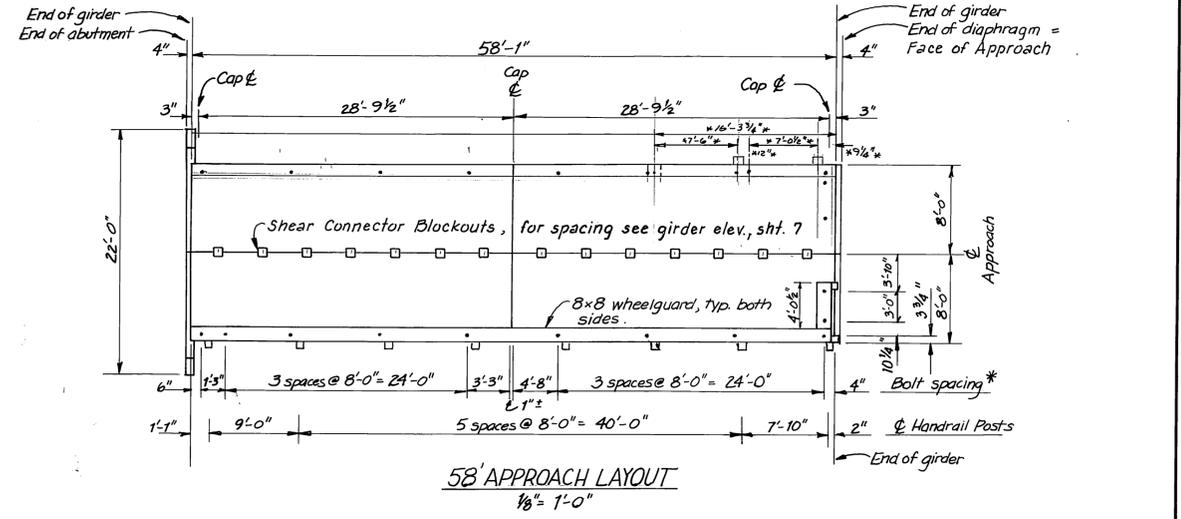
74' APPROACH LAYOUT
1/8" = 1'-0"



WHEELGUARD BUTT JOINT
1/2" = 1'-0"

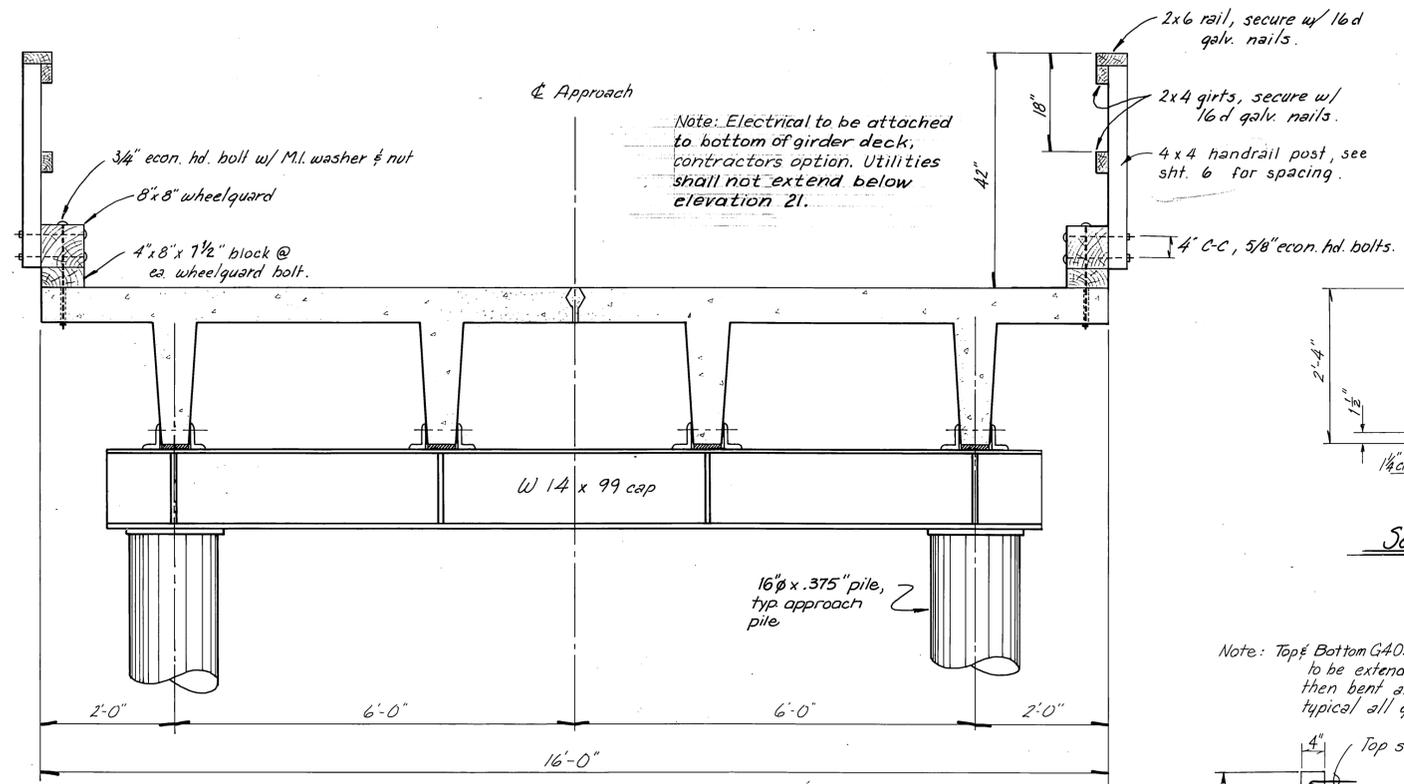
* Wheelguard to be butt joined. Maximum 3/4" ϕ bolt spacing 8'-0". Bolts in addition to those shown will be required @ butt joints. Fabricator's option as to wheelguard lengths and bolt spacing.

Wheelguards are dapped at joints.



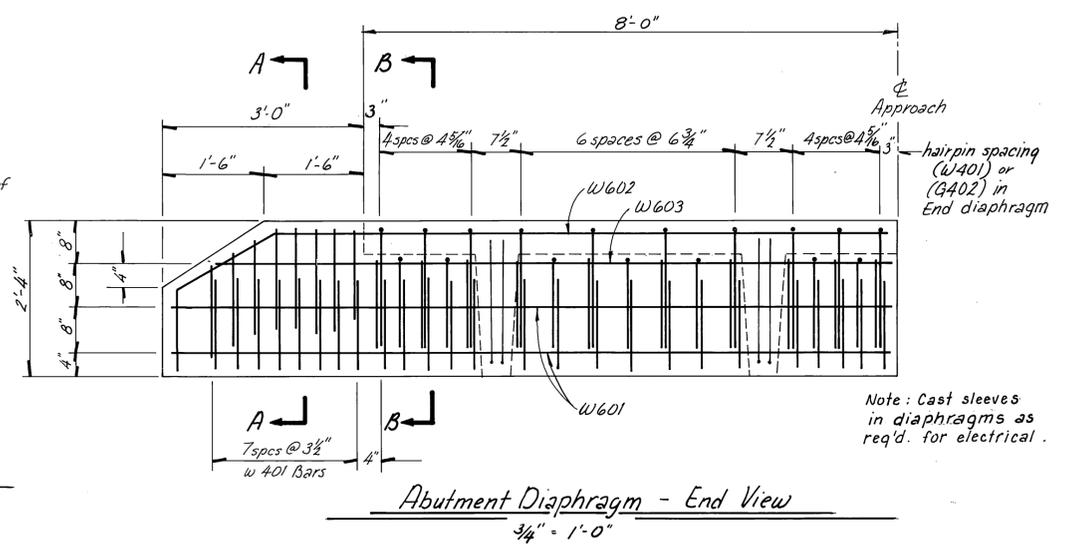
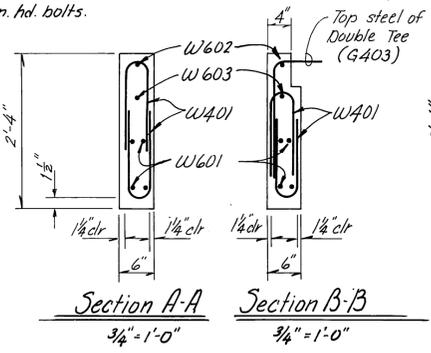
58' APPROACH LAYOUT
1/8" = 1'-0"

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
APPROACH LAYOUTS			
SCALE	SURVEYED	APPROVED	
DESIGNED <i>BS</i>	DRAWN <i>BS</i>	Robert P. Beck James A. Lowell	
CHECKED <i>KR</i>	DATE 9-82		
PROJECT NUMBER	K-78153	SHEET	6 OF 50

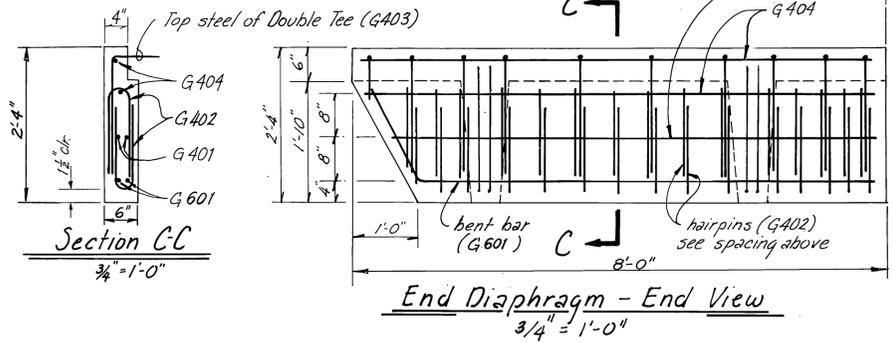


TYPICAL APPROACH SECTION
3/4" = 1'-0"

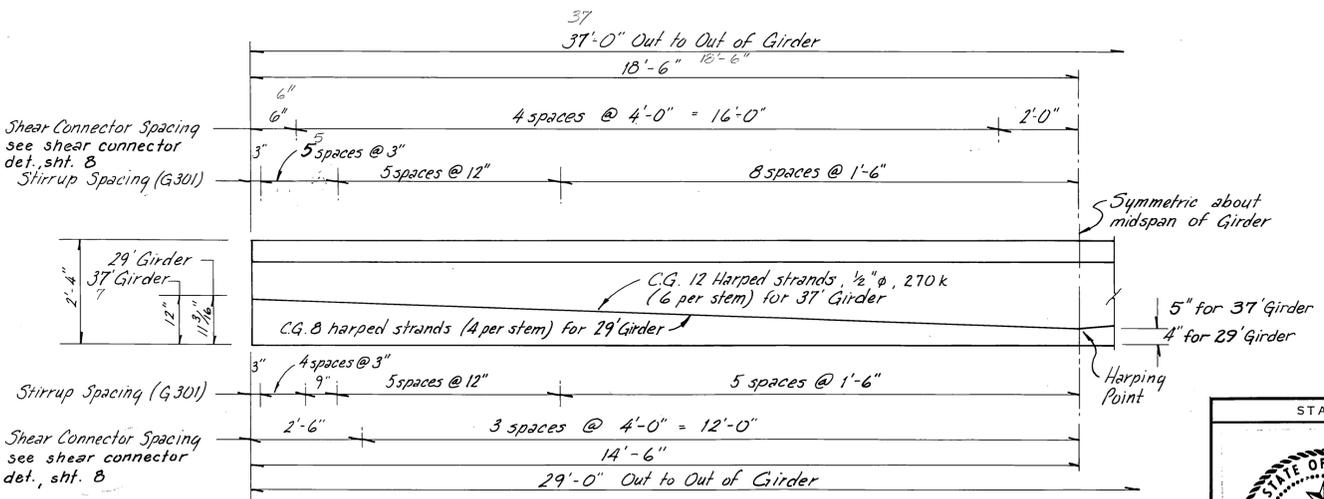
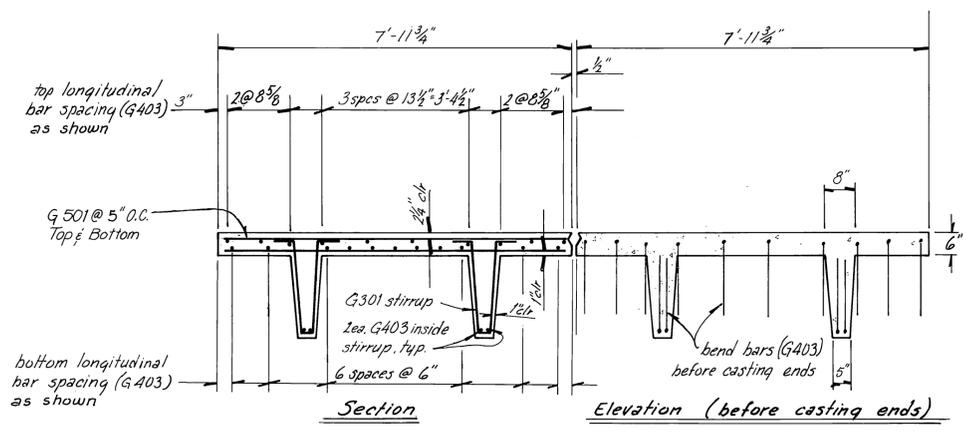
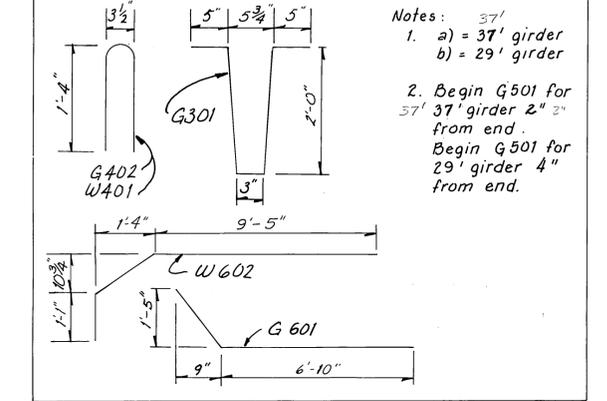
DESIGN NOTES
f'c = 6000 psi @ 28 days
Strands stress @ release = 170 ksi
after losses = 154 ksi
Rebar 1" clear unless otherwise noted.



Note: Top & Bottom G403 longitudinal reinforcement to be extended 2'-0" beyond end of Girder, then bent and tied into abut. & end diaphragms typical all girders.



REINFORCING STEEL - ONE GIRDER				
Mark	Size	No.	Length	Type
G301	3	a) 74/b) 62	5'-3"	Bent
G401	4	2	7'-2"	
G402	4	30	2'-10"	Bent
G403	4	25		
G404	4	2 17B	7'-7"	
G501	5	a) 178/b) 138	7'-7"	
G601	6	2	9'-0"	Bent
W401	4	50	2'-10"	Bent
W601	6	4	10'-8"	
W602	6	1	12'-1"	Bent
W603	6	1	10'-1"	



STAMP

DO NOT SCALE THIS DRAWING - USE DIMENSIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HARBOR DESIGN AND CONSTRUCTION

Bar Harbor, Ketchikan Alaska

APPROACH DETAILS
SHT. A

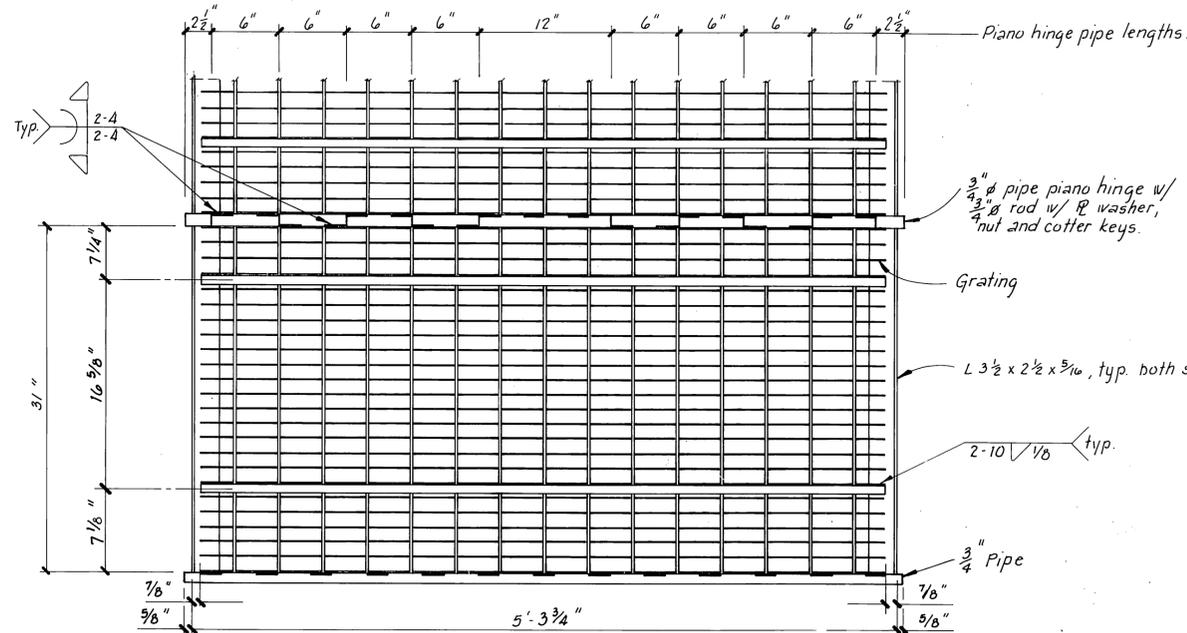
SCALE: As Shown
DESIGNED: BS
CHECKED: KR

SURVEYED: 12/16/81
DRAWN: J.D./J.M.N.
DATE: 9-82

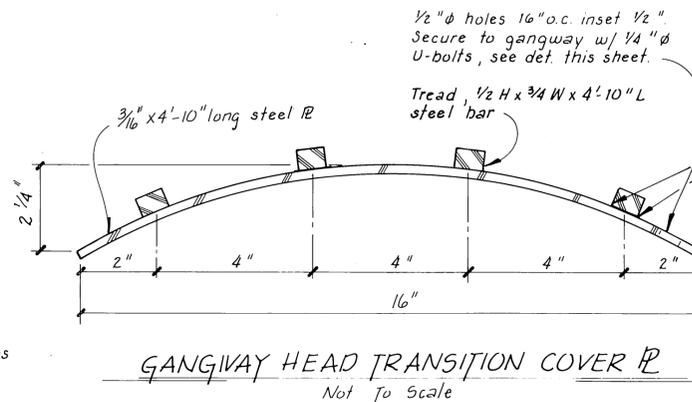
APPROVED: Robert P. Beck
James A. Lowell

PROJECT NUMBER: K-78153
SHEET: 7 OF 50

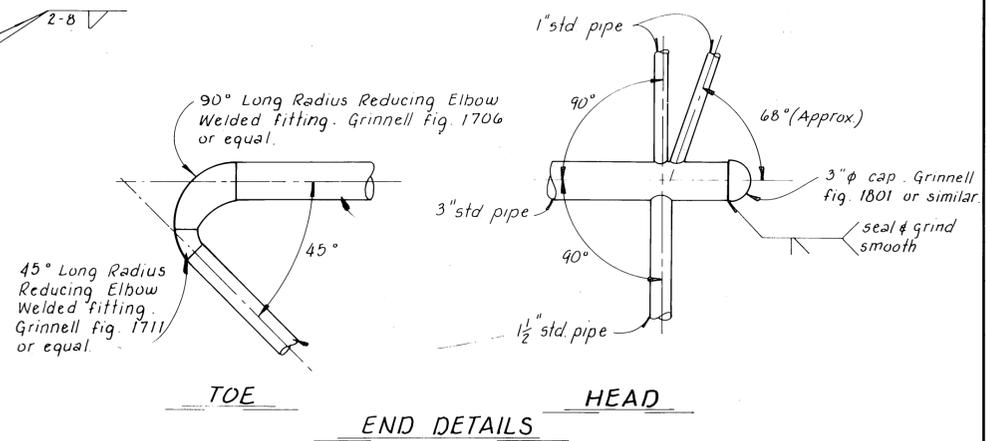
2/15/83



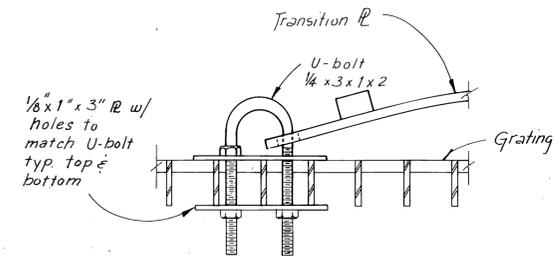
TOE TRANSITION PIECE PLAN
1 1/2" = 1'-0"



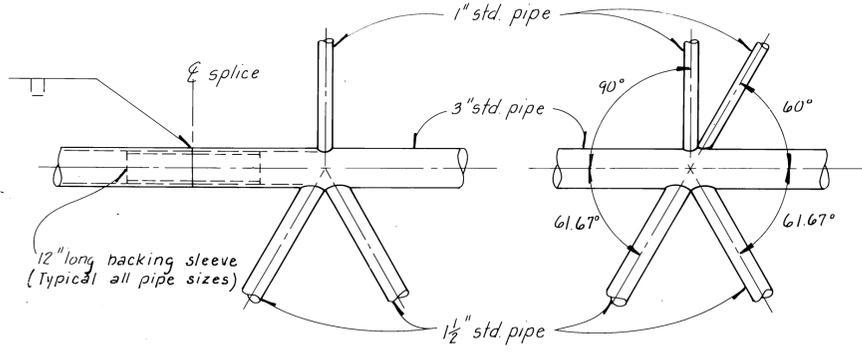
GANGWAY HEAD TRANSITION COVER
Not To Scale



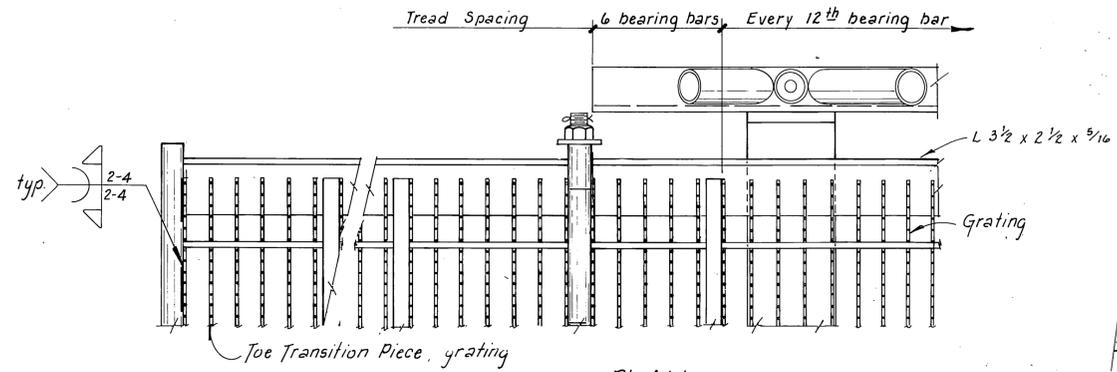
TOE **HEAD**
END DETAILS



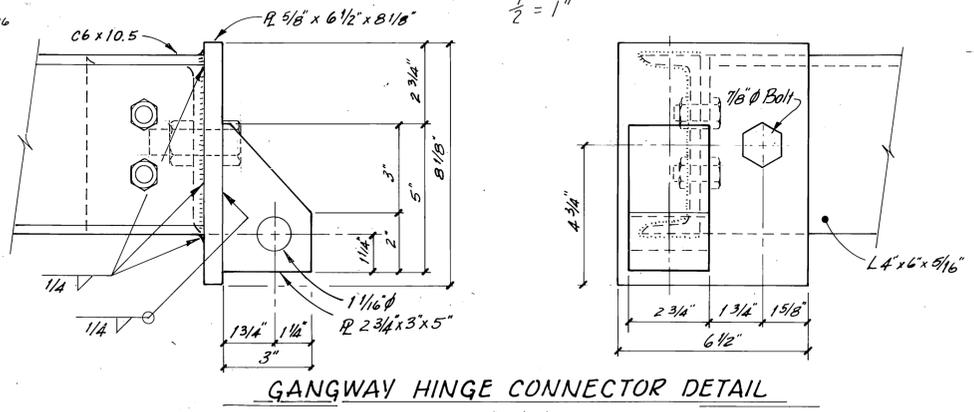
TRANSITION CONNECTION
1/2" = 1'-0"



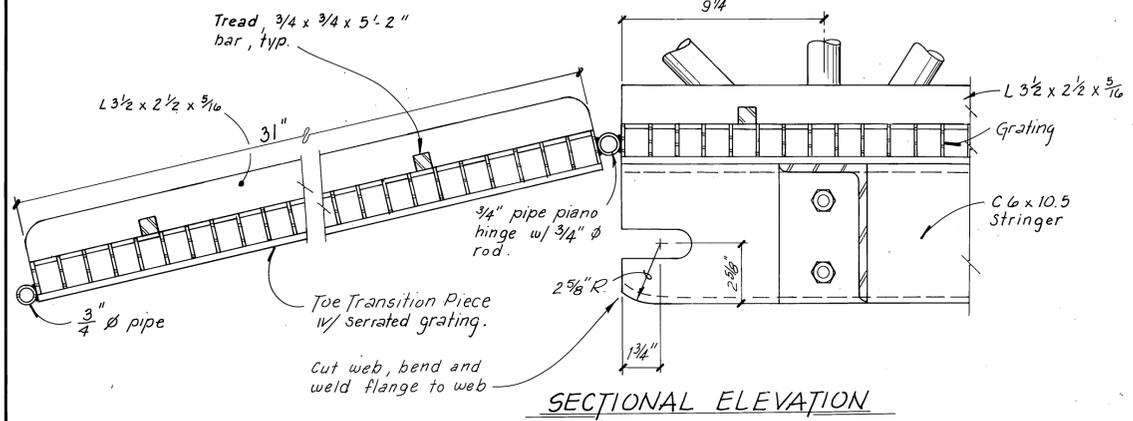
PIPE SPLICE DETAIL **BRACE DETAIL**



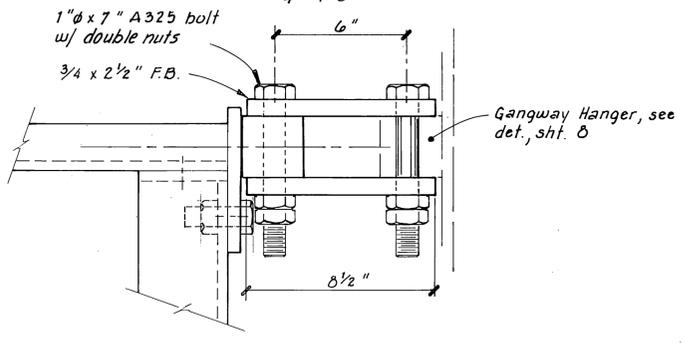
PLAN
3'-1'-0"



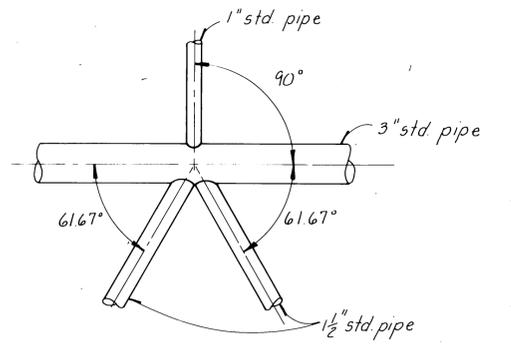
GANGWAY HINGE CONNECTOR DETAIL
4" = 1'-0"



SECTIONAL ELEVATION
3" = 1'-0"

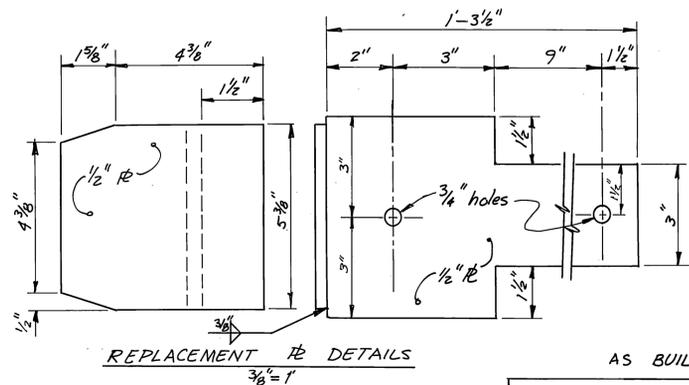
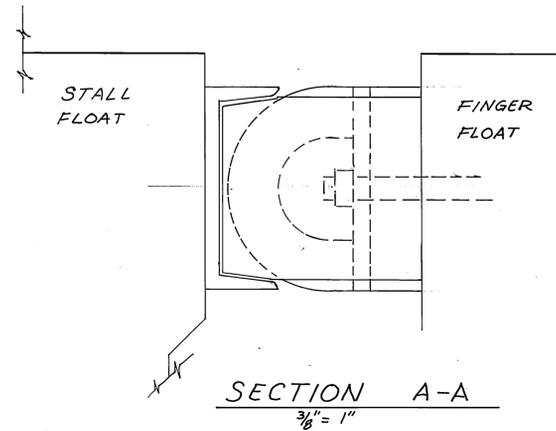
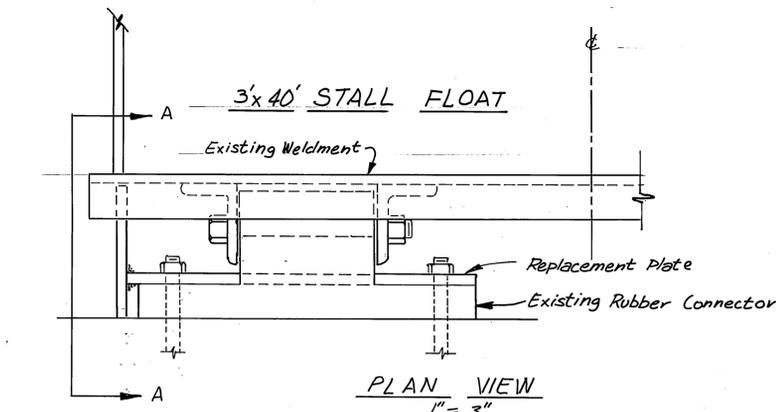


GANGWAY HINGE ASSY. DETAIL
3" = 1'-0"



TYPICAL
HANDRAIL DETAILS
1 1/2" = 1'-0"

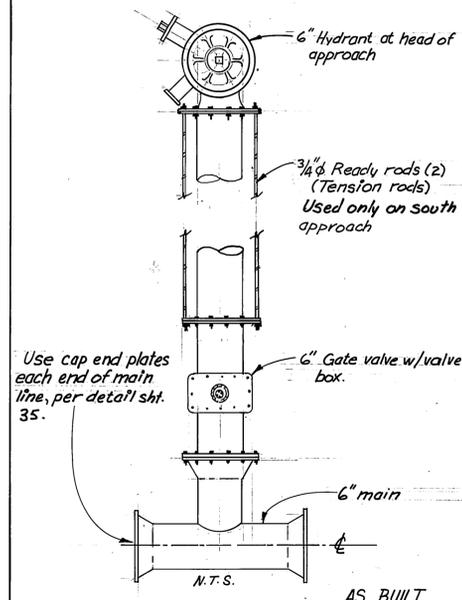
	DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION Bar Harbor, Ketchikan Alaska 6'x65'-0" COVERED STEEL GANGWAY SHEET B	
SCALE As Shown DESIGNED: JRM/JDB CHECKED: JDB	SURVEYED: 1/80 DRAWN: JIM/ITS DATE: 11-80	APPROVED: Robert P. Beck James A. Lowell
PROJECT NUMBER: K-78153	SHEET 10 OF 50	



Note: Hot Dip Galvanize

KETCHIKAN BAR HARBOR
Modified Connection Plate
for 3'x40' stall floats.

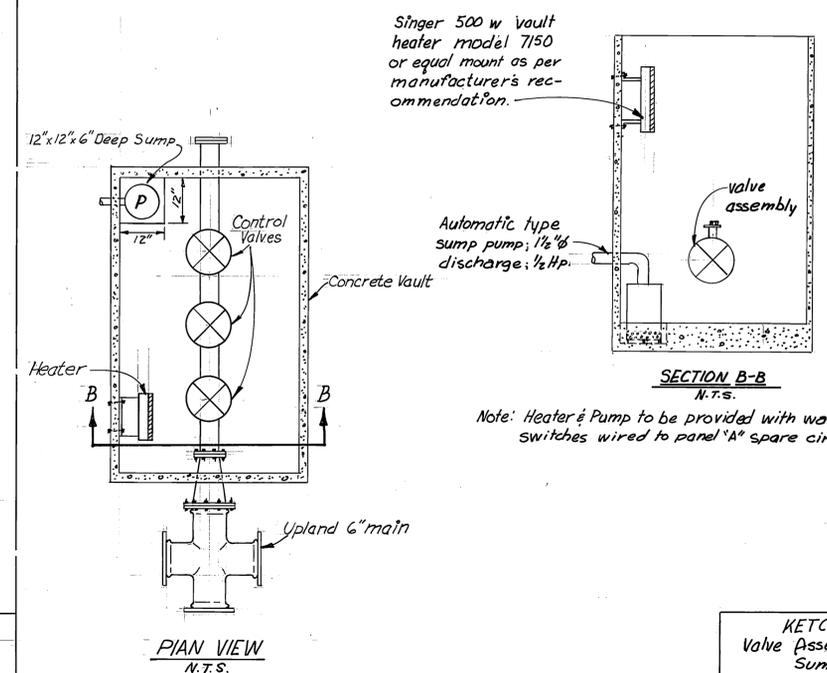
K-78153 12-20-89 Detail Section D



Use cap end plates
each end of main
line, per detail sht.
35.

Ketchikan Bar Harbor
6" gate valve addition @
firehydrant.

K-78153 Detail Section 35A

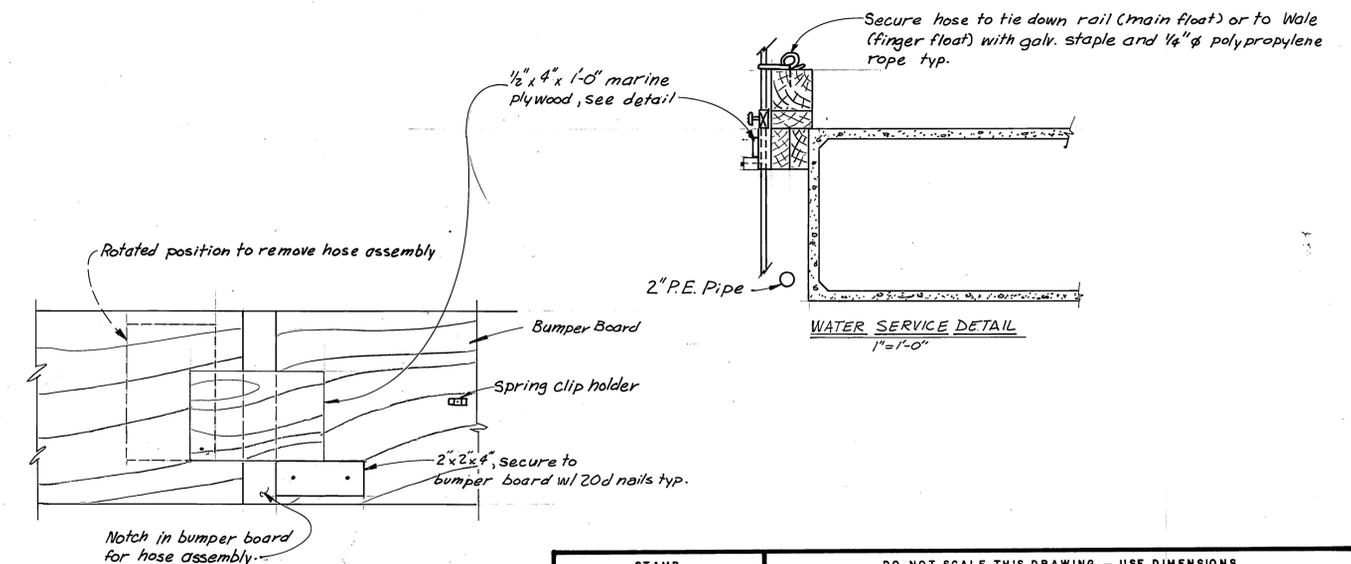


Singer 500 w vault
heater model 7150
or equal mount as per
manufacturer's recom-
mendation.

Note: Heater & Pump to be provided with watertight
switches wired to panel 'A' spare circuits.

KETCHIKAN BAR HARBOR
Valve Assembly Vault Heater &
Sump Pump Details

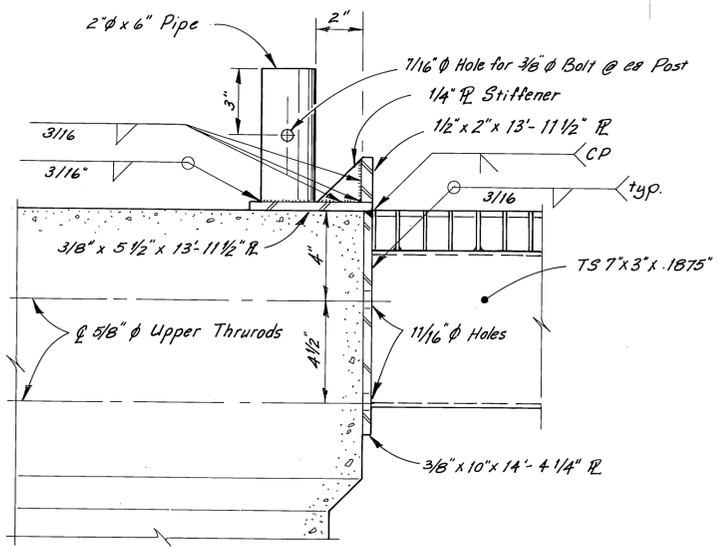
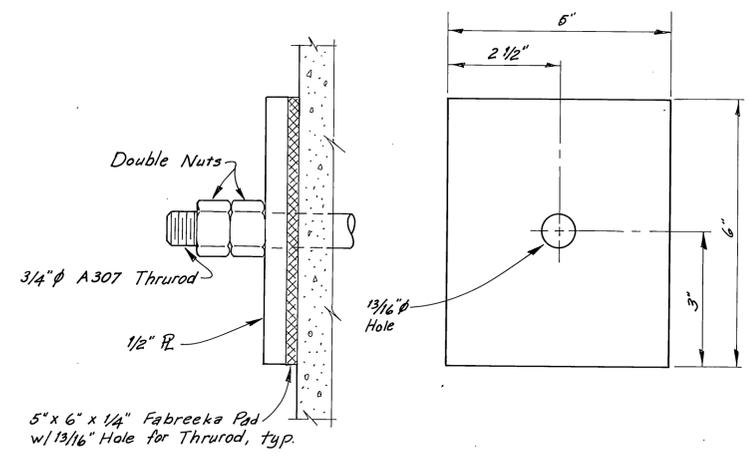
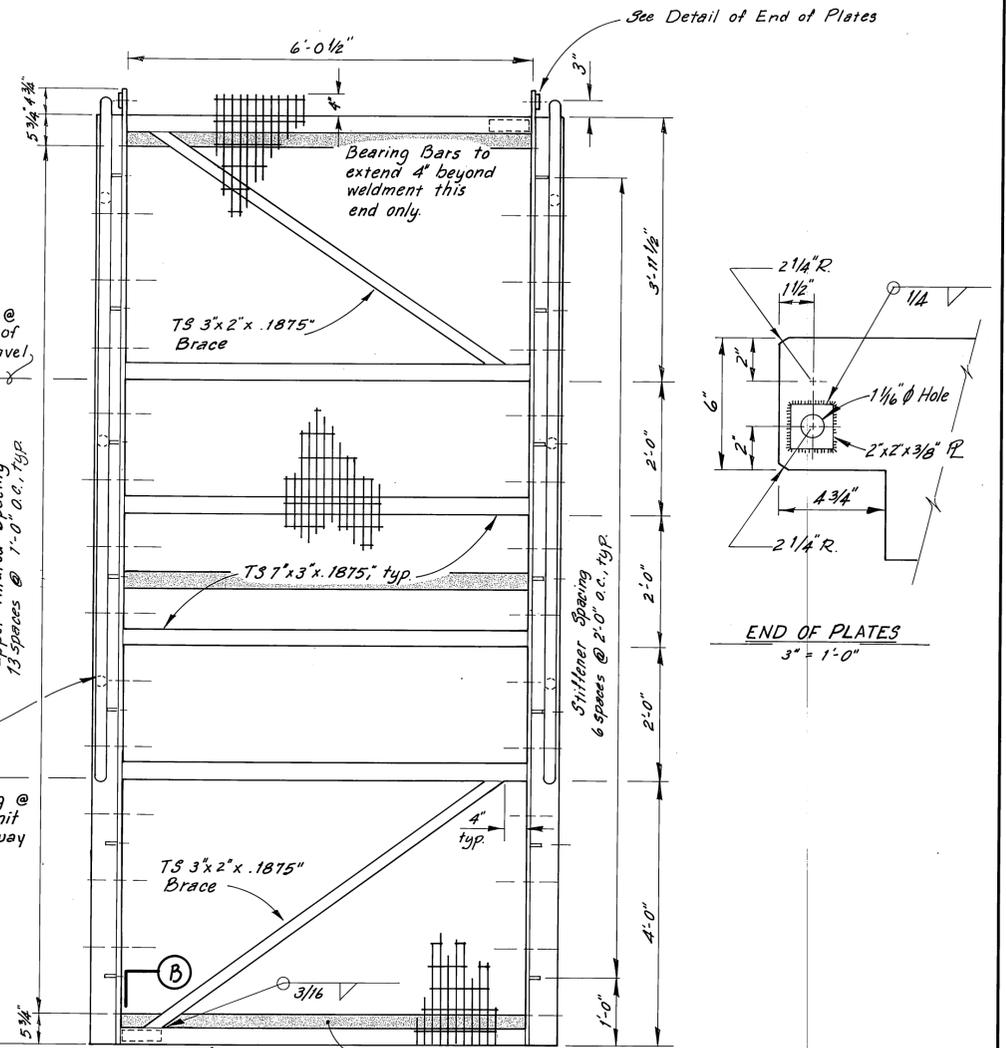
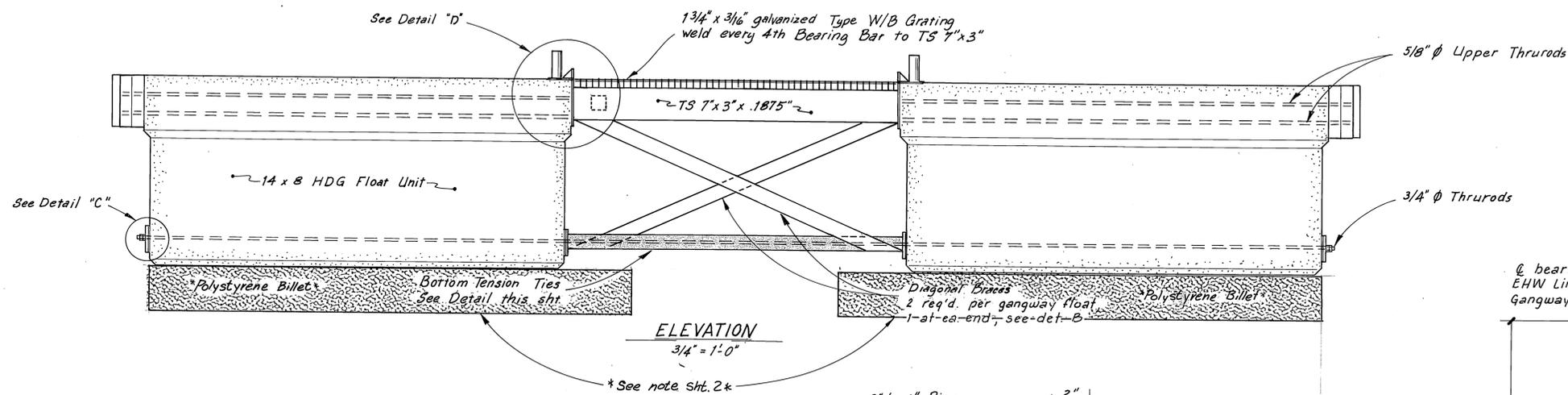
K-78153 Detail Section 35B



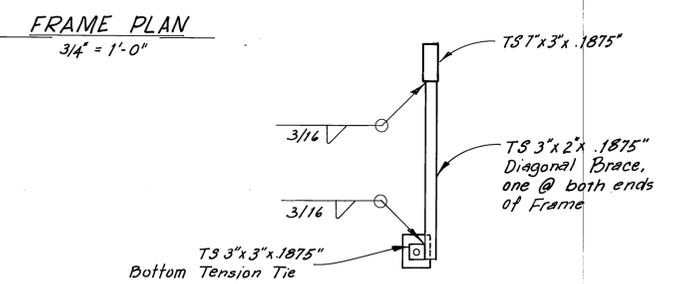
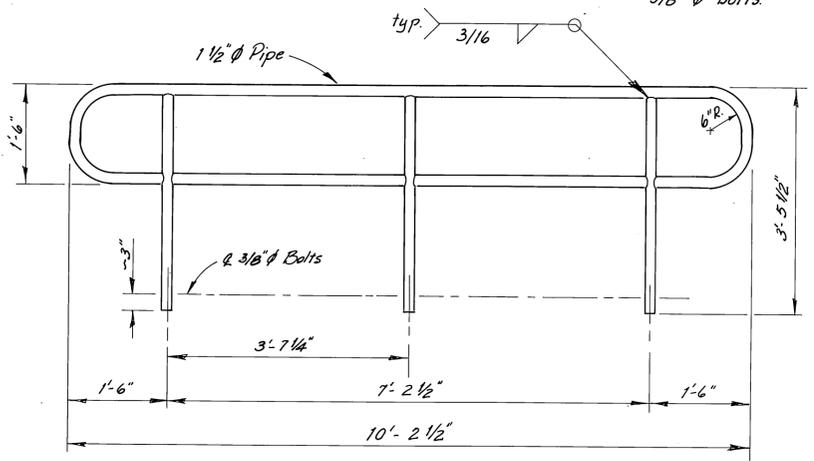
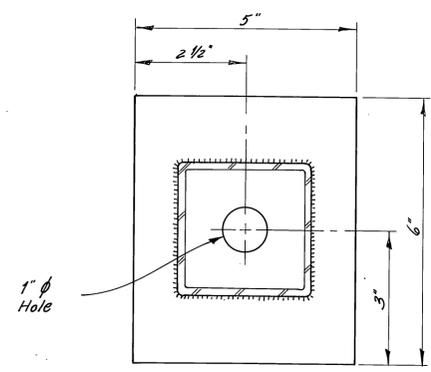
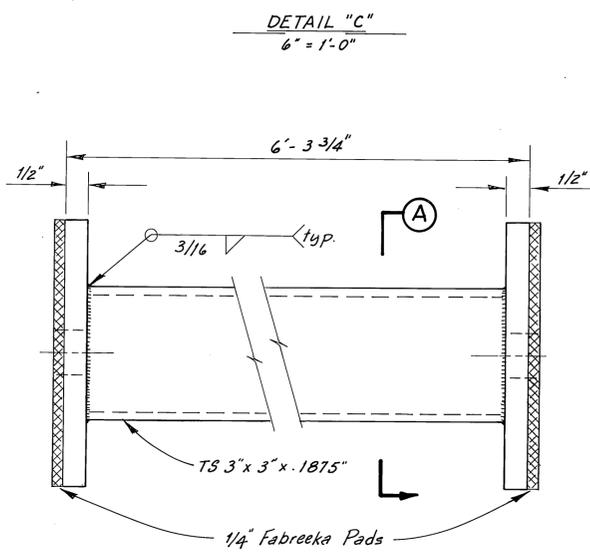
COVER BOARD DETAIL
3" = 1'-0"
(Hose assembly not shown)

KETCHIKAN BAR HARBOR
Substitute Water Service Assembly
for main finger float.
K-78153 Detail Section 36A

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES			
DESIGNED _____	CHECKED _____	DRAWN <u>DJM</u>	DATE <u>12-84</u>
PROJECT NUMBER <u>K-78153</u>	SHEET <u>11A</u>		OF <u>50</u>

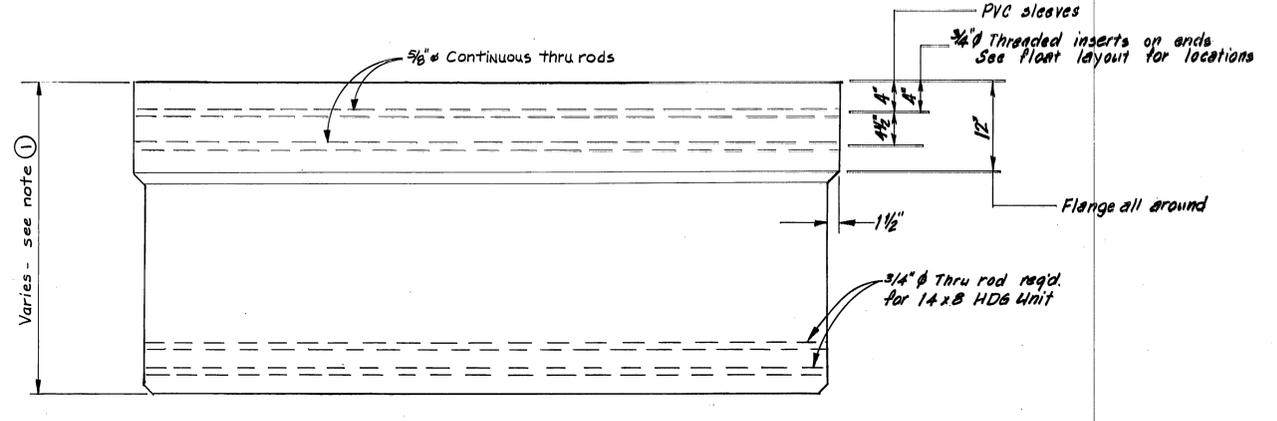
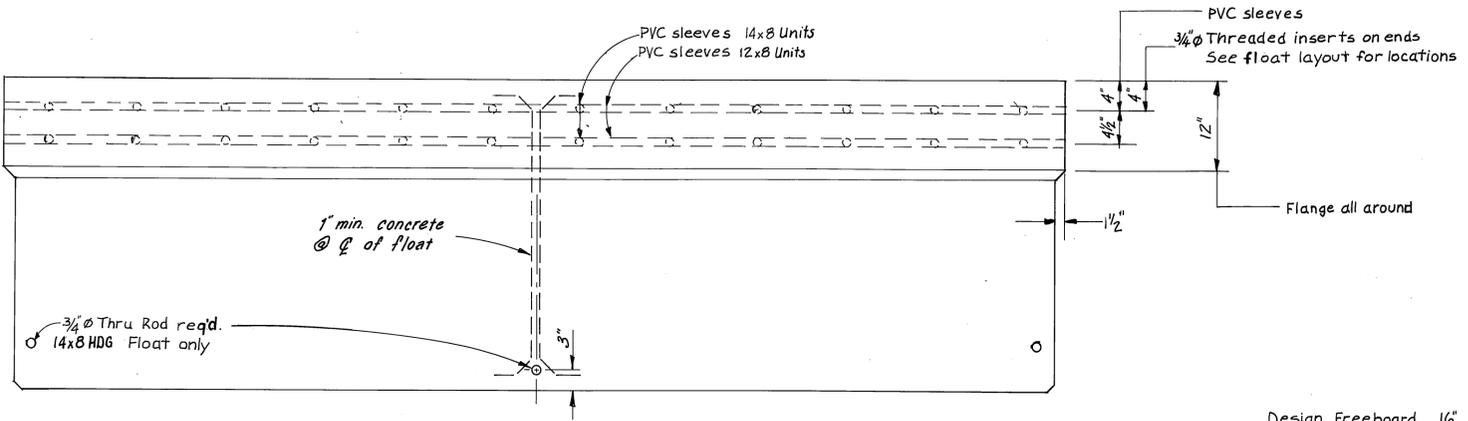


Note: Drill TS 7x3x.1875 min. two places this end only for securing 3x12 wales. Drill for 5/8 inch diameter bolts.



Note: All steel to be galvanized subsequent to fabrication

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
GANGWAY FLOAT DETAILS			
SCALE: As Noted	SURVEYED:	APPROVED: Robert P Beck	
DESIGNED: JDB	DRAWN: DLB	James A. Lowell	
CHECKED: B.S.	DATE: 12-82		
PROJECT NUMBER: K-78153	SHEET: 12	OF 50	



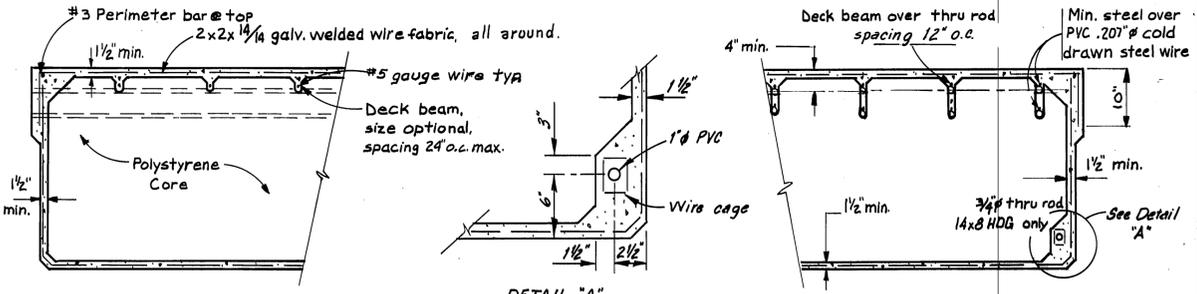
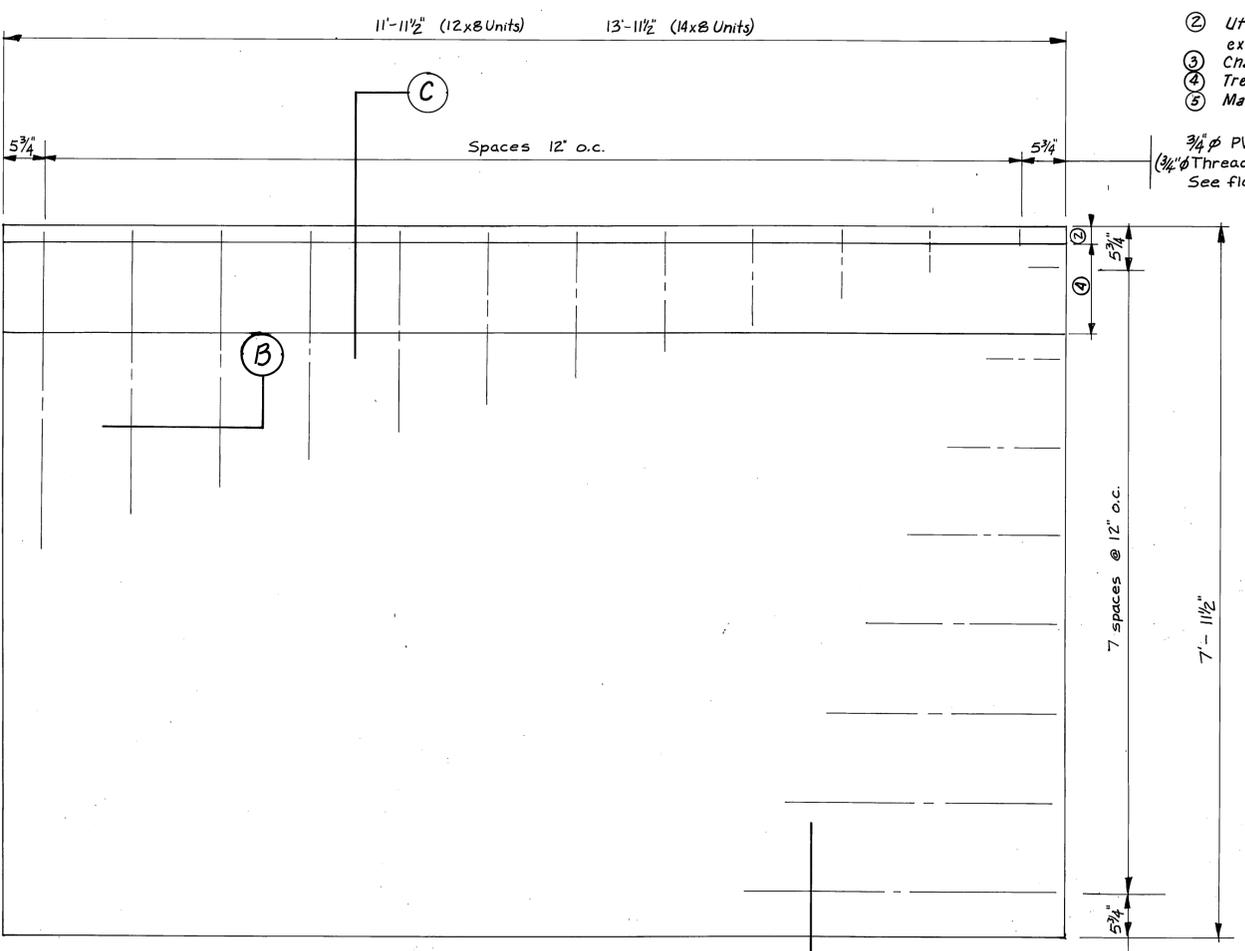
Design Freeboard 16"
Maximum Freeboard 18"
Minimum Freeboard 12"

Dimensions			Immersion Constant
Nominal Float	Width	Length	Lbs. Per linear ft.
12x8 HD	11'-11 1/2"	7'-11 1/2"	61.2
12x8 HDG	11'-11 1/2"	7'-11 1/2"	61.2
14x8 HD	7'-11 1/2"	13'-11 1/2"	40.8
14x8 HDG	7'-11 1/2"	13'-11 1/2"	40.8

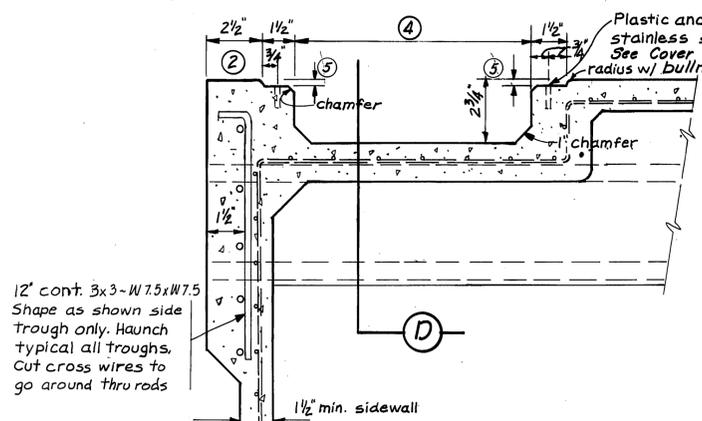
Notes

- Pontoon supplier to provide float unit w/ req'd. freeboard. Allow 35 lbs. per linear foot for wales, bumper & utilities on HD units. Allow 3300 lbs. per float unit for gangway on all HDG units.
- Utility raceway location. Section C typ. except where noted on layout.
- Chamfer corners of T & X trenches w/ 3" chamfer.
- Trench width varies, see float layouts.
- Match cover R thickness (see specs.)

3/4" ϕ PVC sleeve spacing 14x8 Units
3/4" ϕ Thru rod spacing 12x8 Units
See float layout for locations



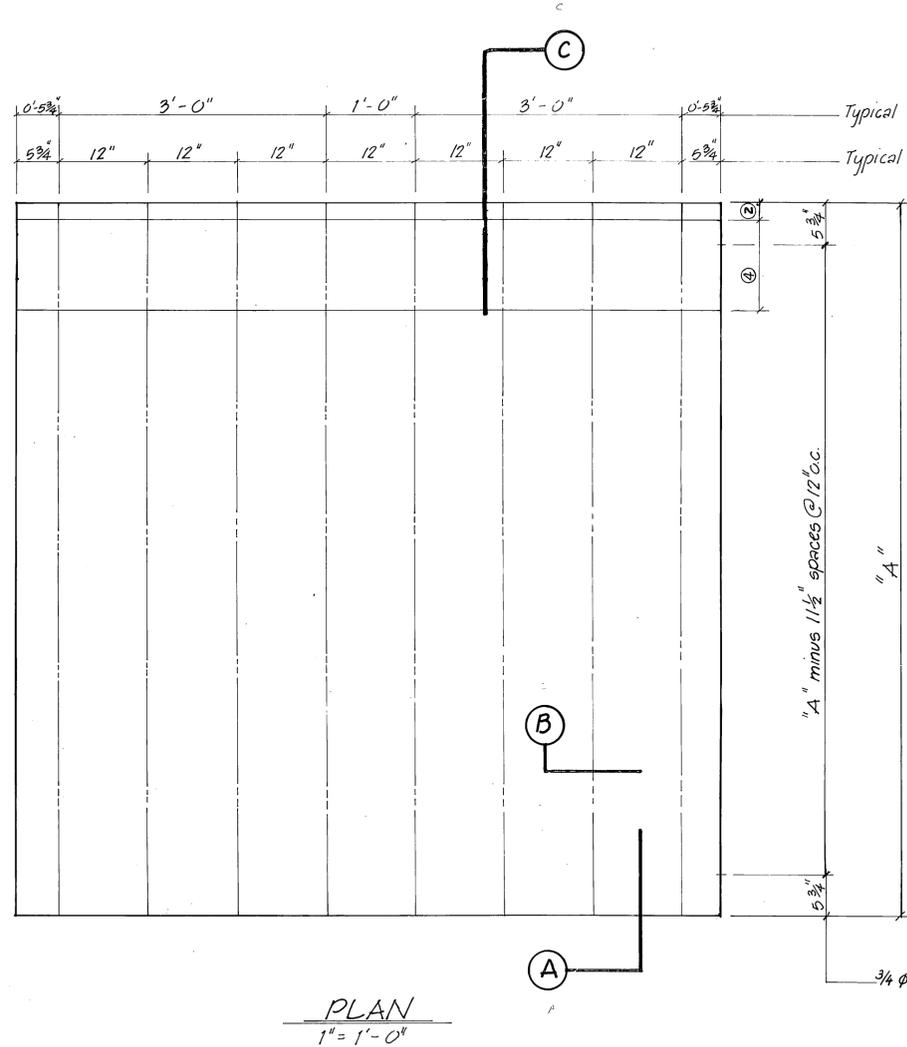
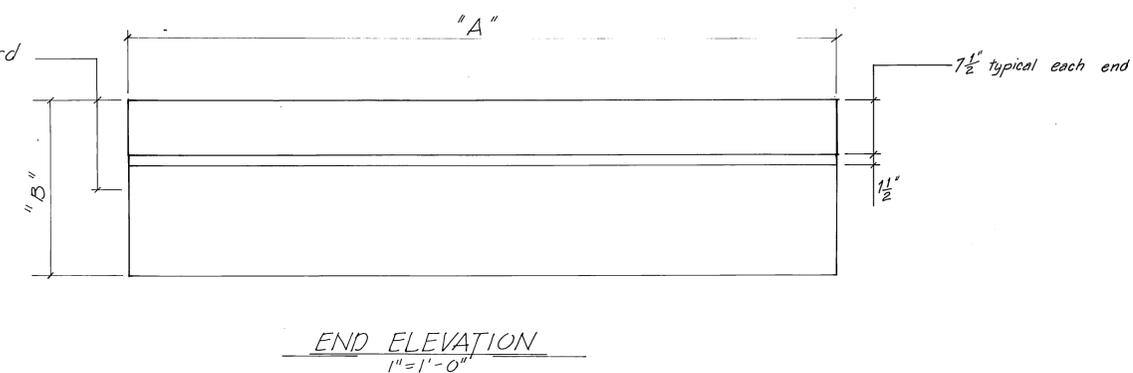
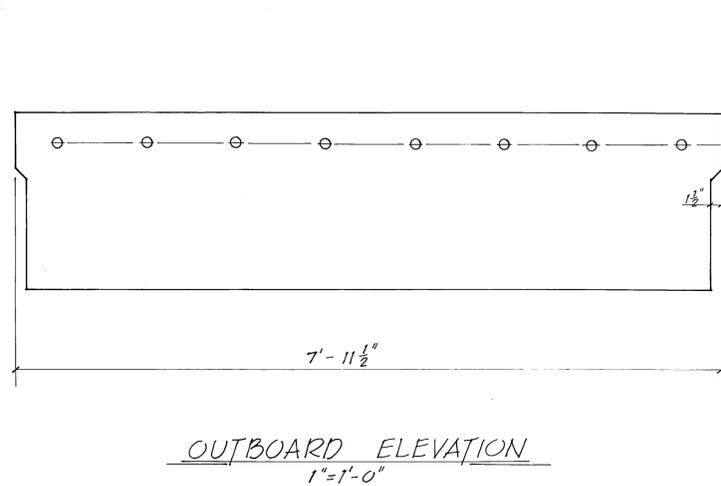
DETAIL "A"
1 1/2" = 1'-0"



* See sht. A7 for 6'x12' float unit layout w/ducts. *

3/4" ϕ Thru rod spacing 14x8 Units. See float layout for locations (3/4" ϕ PVC sleeve spacing 12x8 Units).

<p>STAMP</p>		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		<p>STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION</p> <p>Bar Harbor, Ketchikan Alaska</p> <p>HEAVY DUTY FLOAT UNITS</p>	
SCALE As noted	SURVEYED	APPROVED Robert P. Beck	
DESIGNED	DRAWN RJT/CV	James A. Lowell	
CHECKED JDB	DATE 1-83		
PROJECT NUMBER K-78153	SHEET 13 OF 50		

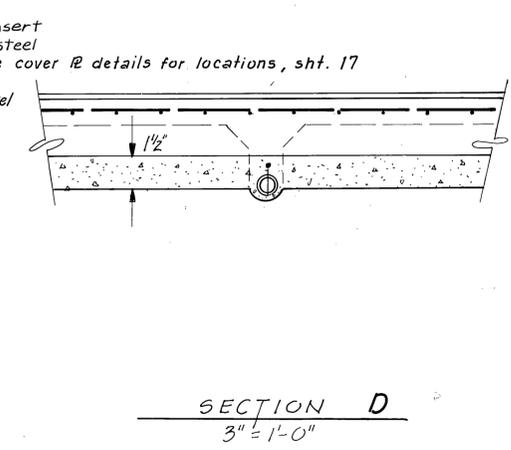
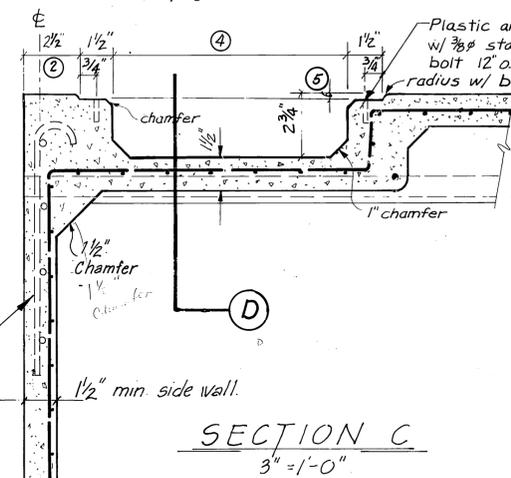
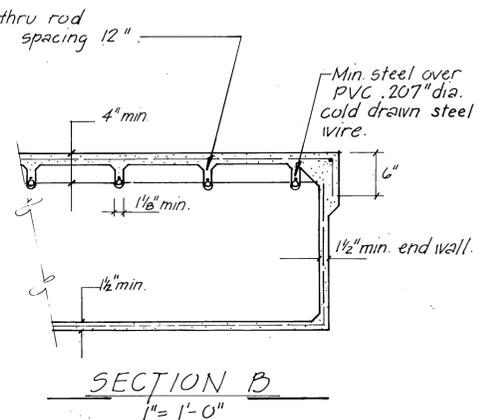
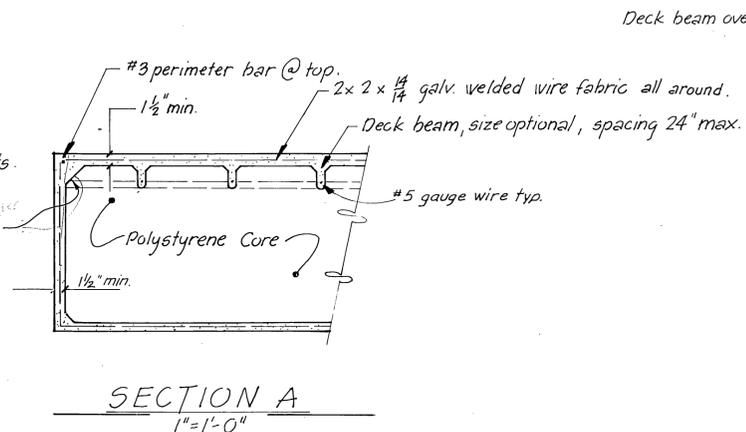


Design Freeboard 12" ①
Maximum Freeboard 14"
Minimum Freeboard 11"

DIMENSIONS		IMMERSION CONSTANT
Nominal Float	"A" "B"	Pounds per linear ft.
6 x 8	5' - 11 1/2" Note ①	30.6
8 x 8	7' - 11 1/2" " "	40.8
8 x 8 G	7' - 11 1/2" " "	40.8
10 x 8	9' - 11 1/2" " "	51.0
10 x 8 G	9' - 11 1/2" " "	51.0
12 x 8	11' - 11 1/2" " "	61.2

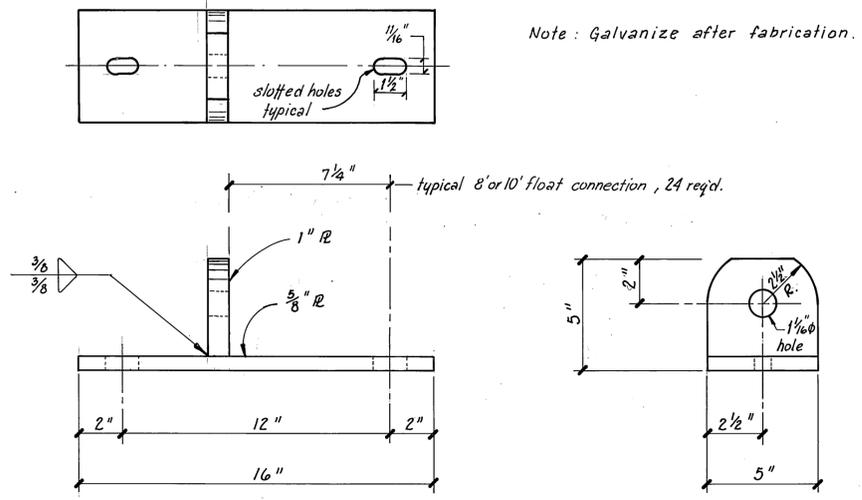
- General Notes:
- ① Pontoon supplier to provide float unit w/ required freeboard. Allow 35 lbs. per linear foot for wales, bumper & utilities.
 - ② Utility raceway location. Sect. C typ. except where noted on layouts.
 - ③ Chamfer corners of T and X trenches w/ 3" chamfer.
 - ④ Trench widths vary see float layouts.
 - ⑤ Match cover R thickness (see specs.)

12" cont. 3"x3" - W4xW4, shape as shown side trough only. Cut cross wires to go around thru rods.



* See sht. 45+46 for float unit layouts w/ducts & ducts w/trenches.*

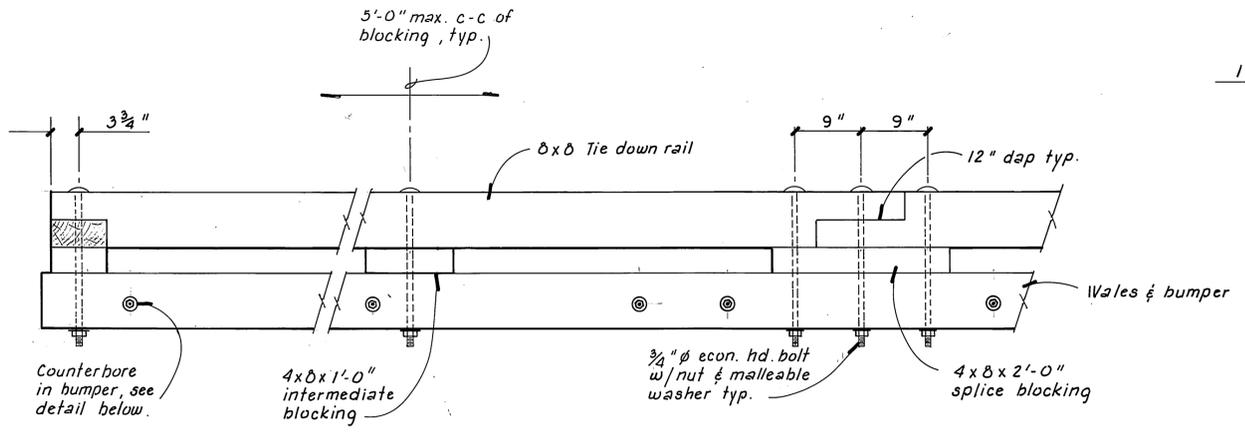
		DO NOT SCALE THIS DRAWING - USE DIMENSIONS		
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES DIVISION OF HARBOR DESIGN AND CONSTRUCTION Bar Harbor, Ketchikan Alaska		
TYPICAL FLOAT UNITS		SCALE As Shown DESIGNED: JDB CHECKED: JDB	SURVEYED: _____ DRAWN: JTM DATE: 11-80	APPROVED: Robert P. Beck James A. Lowell
PROJECT NUMBER K-78153		SHEET 14 OF 50		



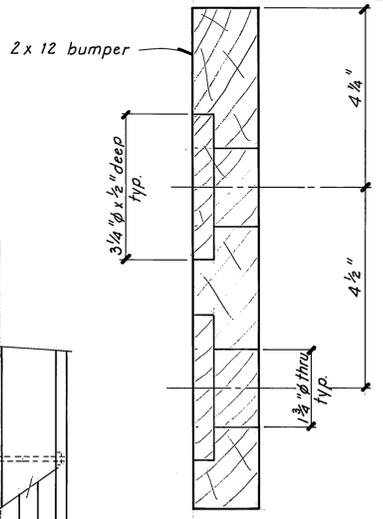
PLAN
 Note: For 8x12 HD float connection
 R see detail sht. 16

PROFILE
 Note: For 8x12 HD float connection
 R see detail sht. 16

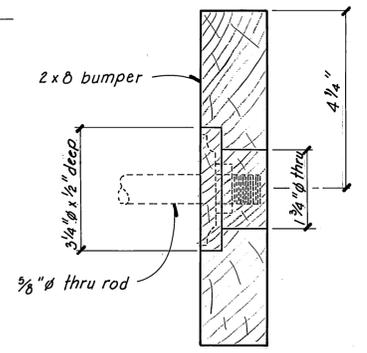
CONNECTION R DETAILS
 3" = 1'-0"



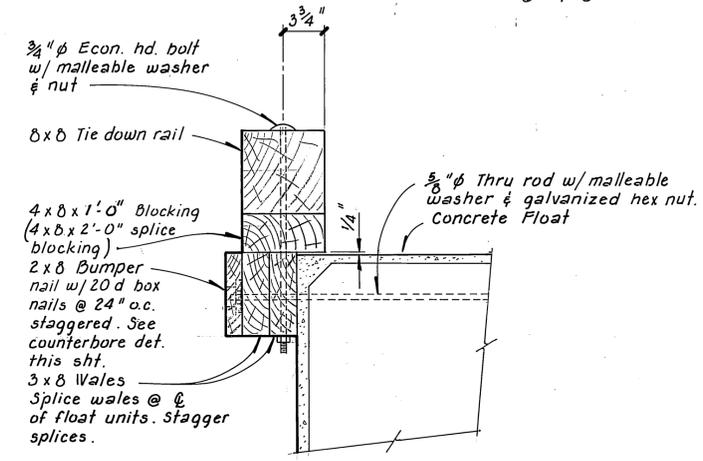
TIE DOWN RAIL DETAILS
 1" = 1'-0"



2x12 BUMPER COUNTERBORE DETAIL
 6" = 1'-0"

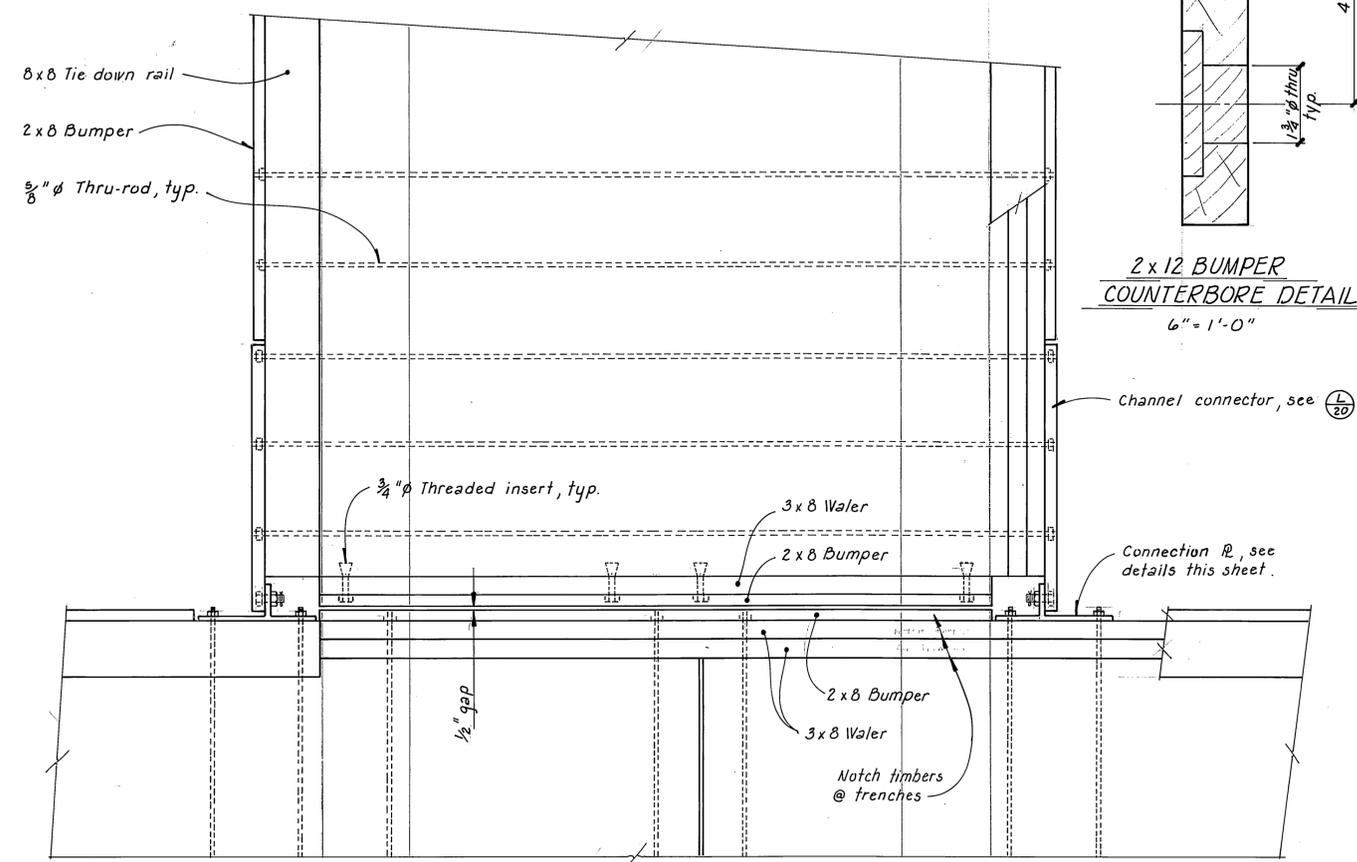


2x8 BUMPER COUNTERBORE DETAIL
 6" = 1'-0"



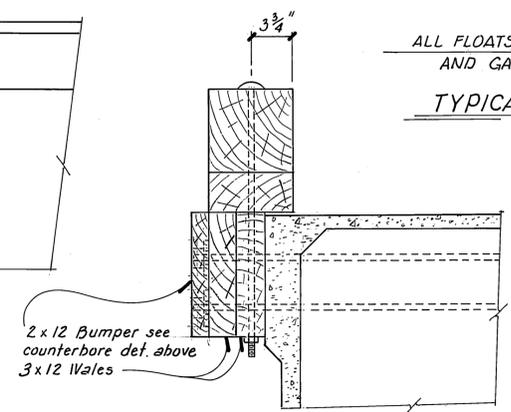
ALL FLOATS EXCEPT 12' WIDE (SEE DET. SHT. 16) AND GANGWAY FLOATS. (SEE DET. BELOW)

TYPICAL FLOAT TIMBER
 1 1/2" = 1'-0"



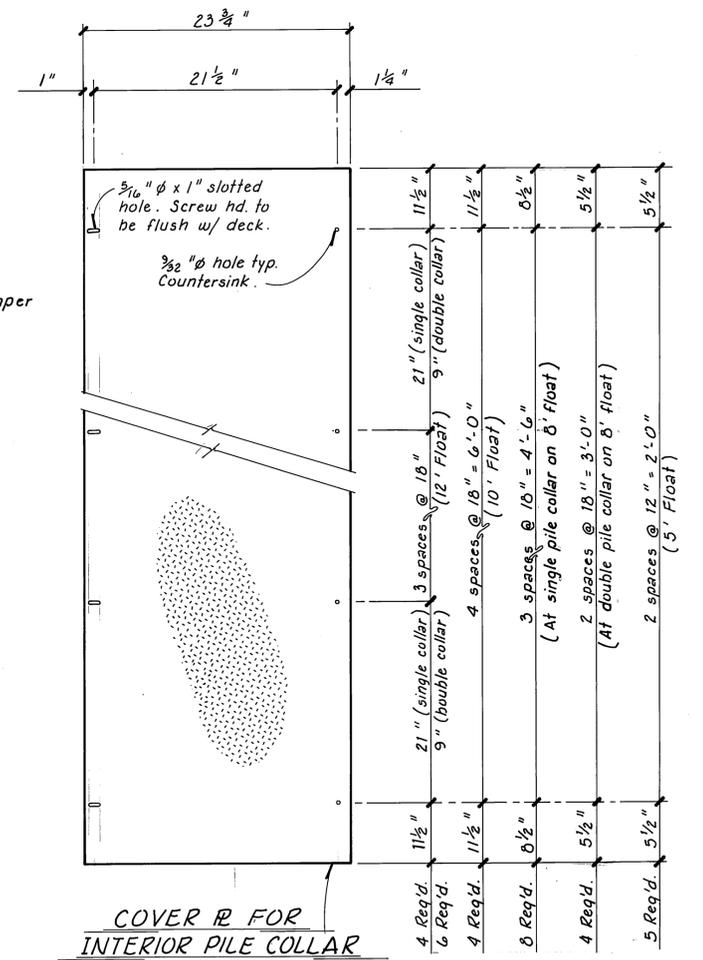
TYPICAL * FLOAT CONNECTION DETAIL
 1" = 1'-0"

* Except 10' Main Float to 12' wide float (A), see det. sht. 16 & 10' Main Float to Gangway Float, see det. sht. 11

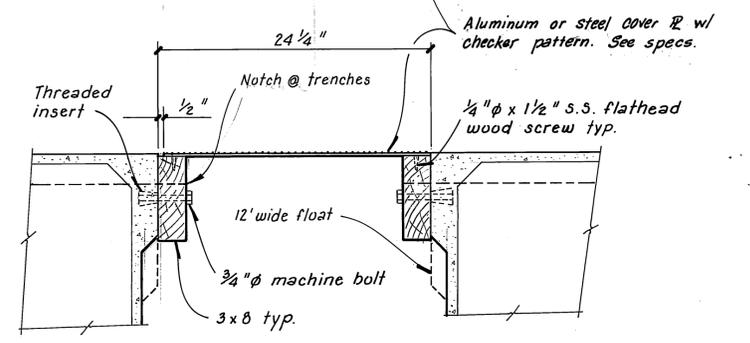


GANGWAY FLOAT

Note: Construction same as above except as noted.



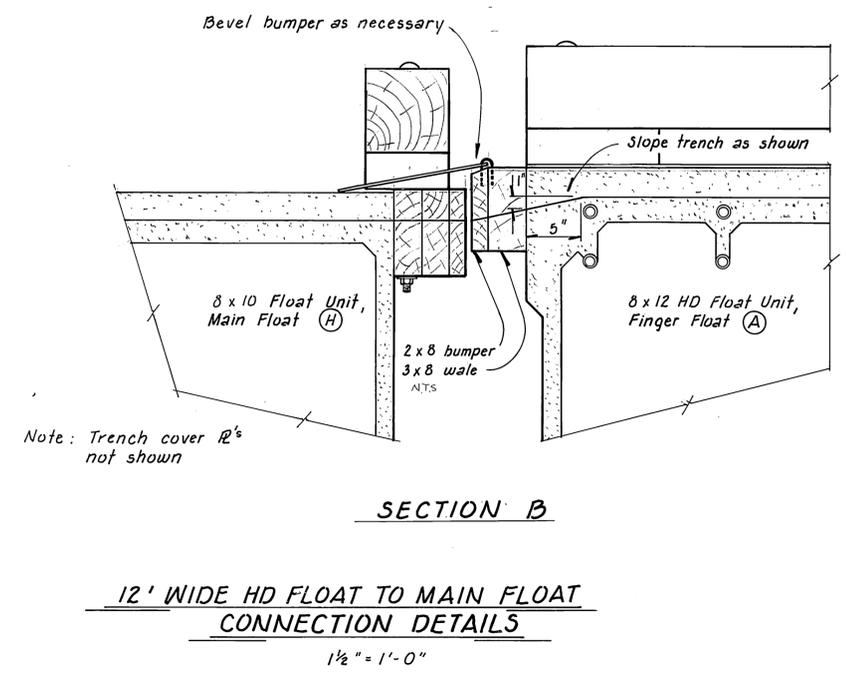
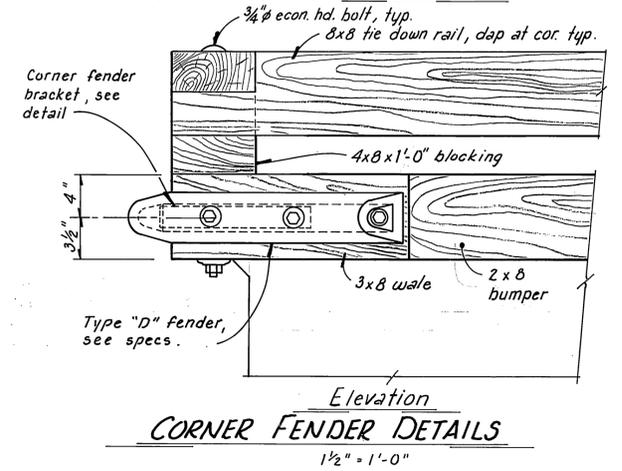
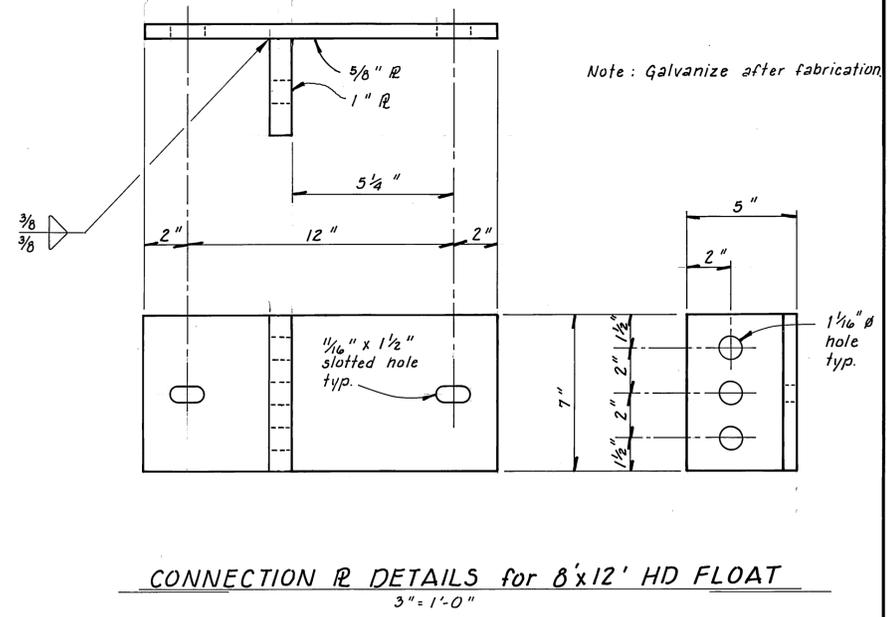
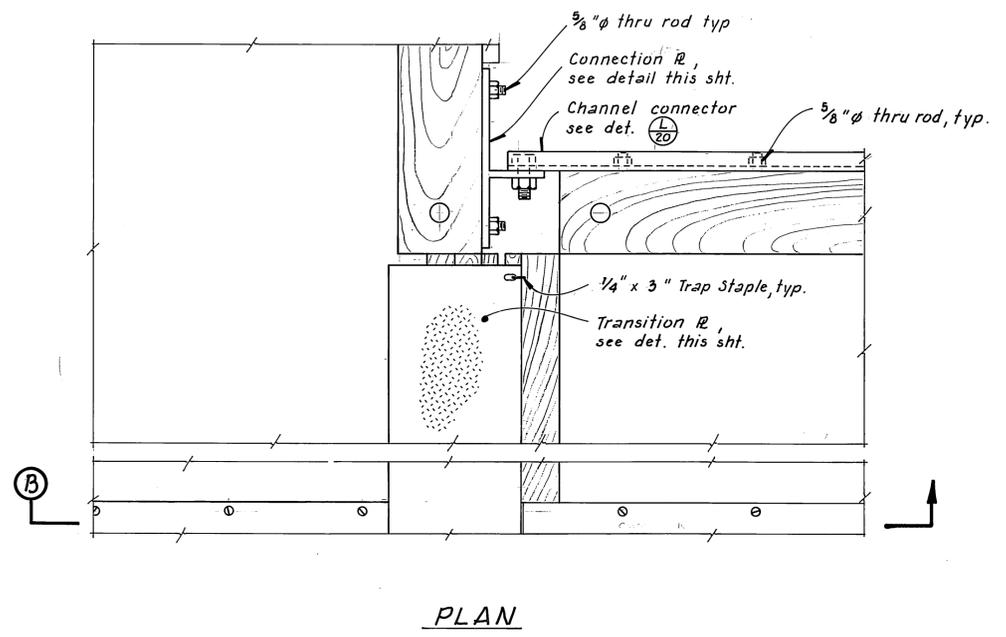
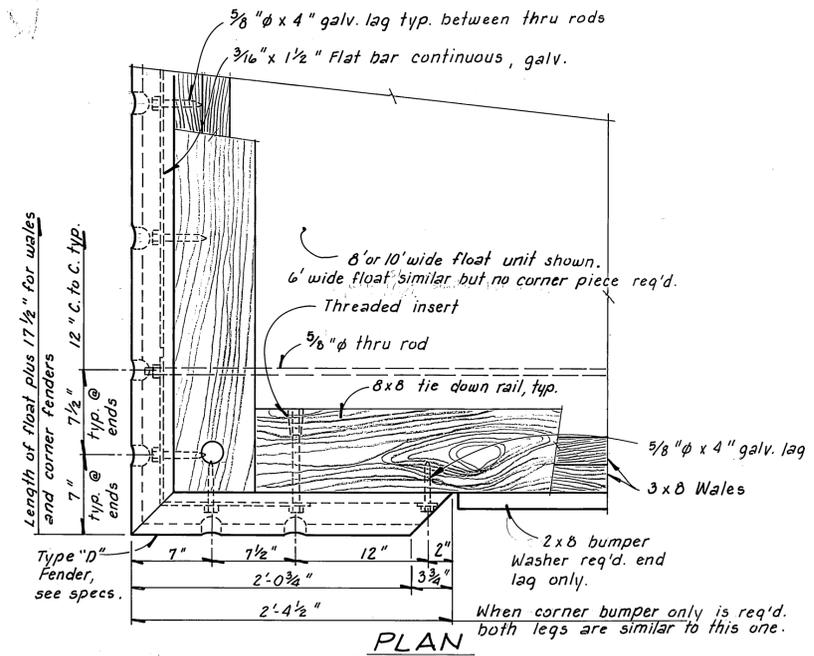
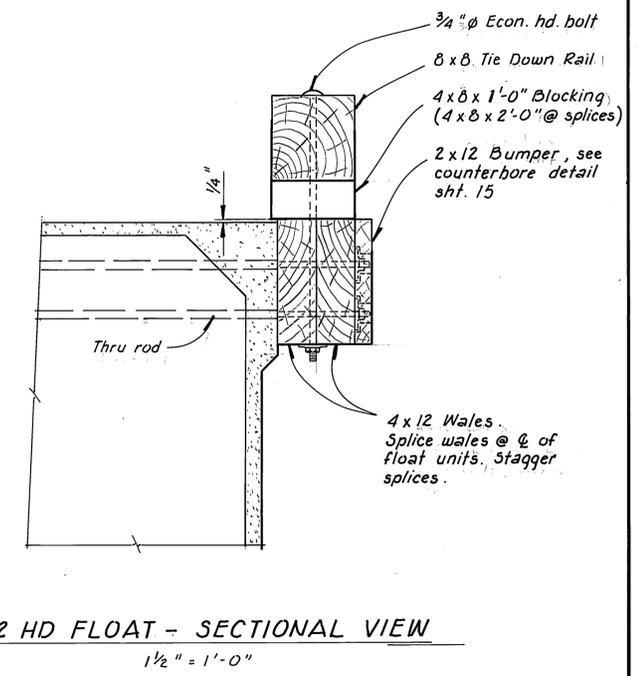
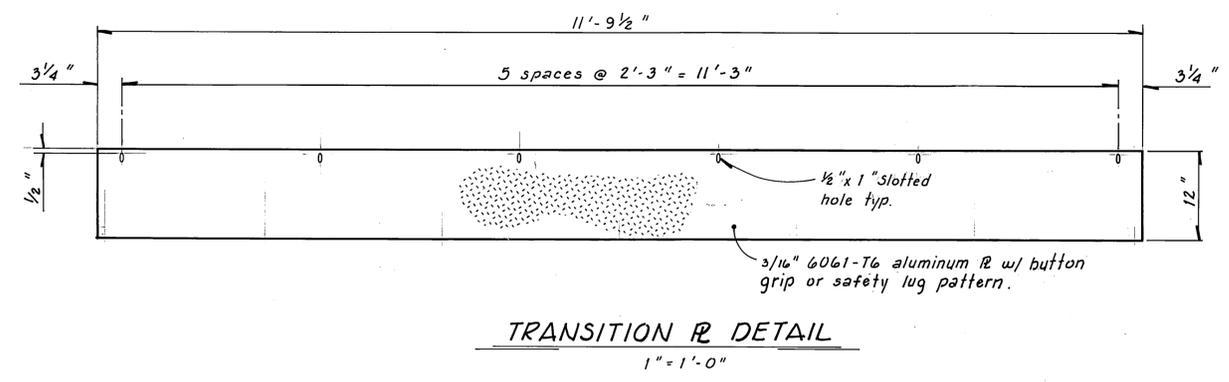
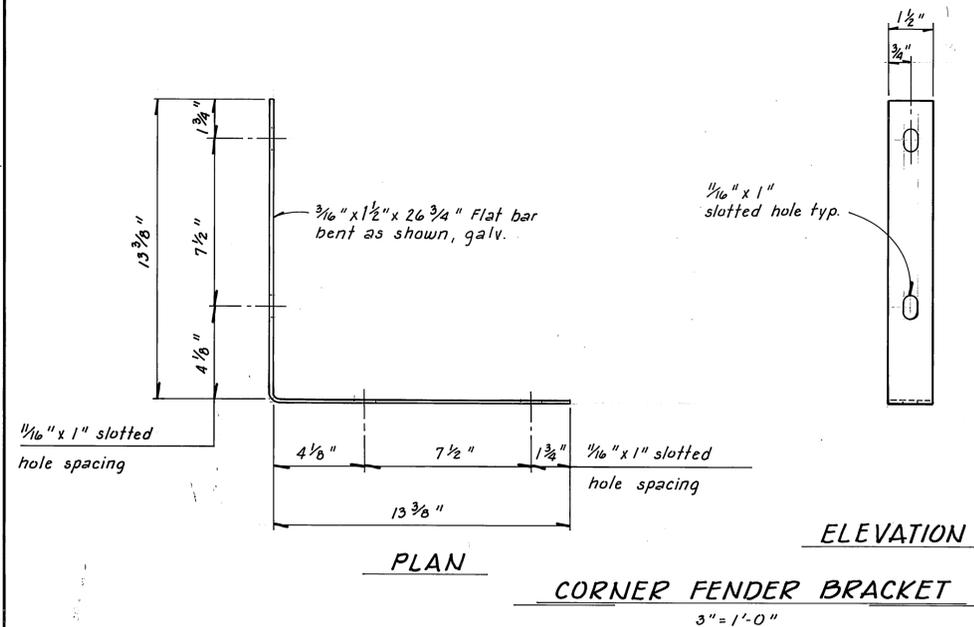
COVER R FOR INTERIOR PILE COLLAR
 1 1/2" = 1'-0"



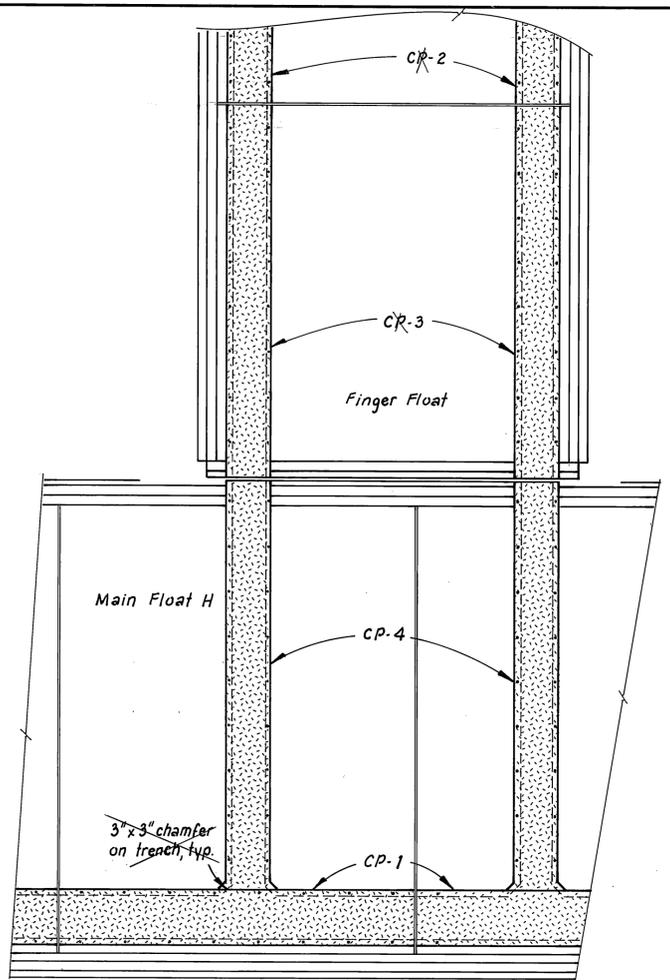
Note: 3/16" holes in 3x8 to be drilled so that top of R will match deck. End 3x8's to be bolted to wales & pile collar weldment.

SECTION A
 1 1/2" = 1'-0"
 (from layouts)

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION			
Bar Harbor, Ketchikan		Alaska	
MISC. FLOAT DETAILS SHT. A			
SCALE As Noted	SURVEYED	APPROVED Robert P. Beck	
DESIGNED T5	DRAWN T5	CHECKED James A. Lowell	
CHECKED JDB	DATE 8-82		
PROJECT NUMBER K-78153	SHEET 15 OF 50		

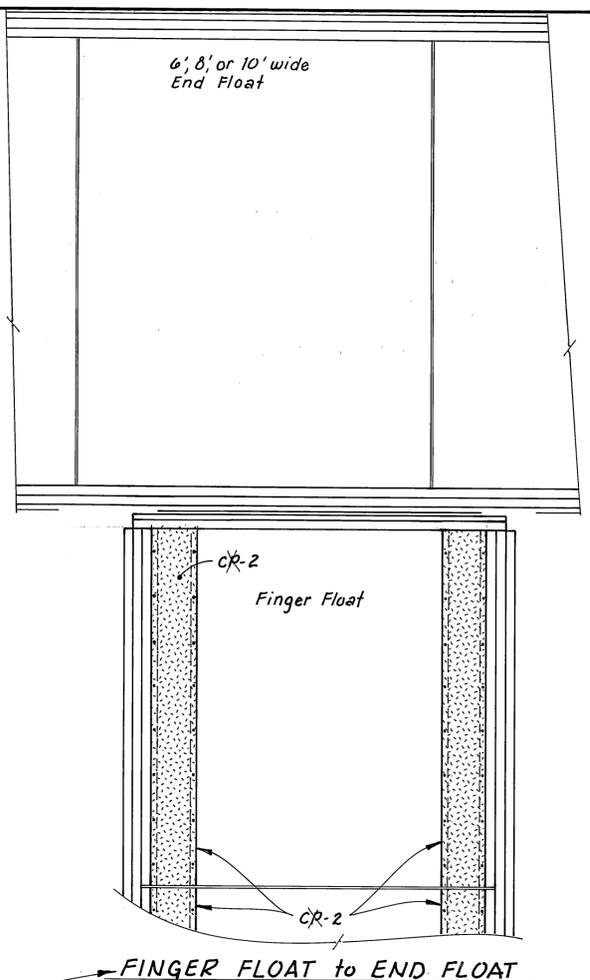


STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
MISC. FLOAT DETAILS			
SHT. B			
SCALE <i>As Noted</i>	SURVEYED _____	APPROVED _____	
DESIGNED <i>TS</i>	DRAWN <i>TS</i>	Robert P. Beck	
CHECKED <i>JDB</i>	DATE <i>9-82</i>	James A. Lowell	
PROJECT NUMBER <i>K-78153</i>	SHEET <i>16</i> OF <i>50</i>		



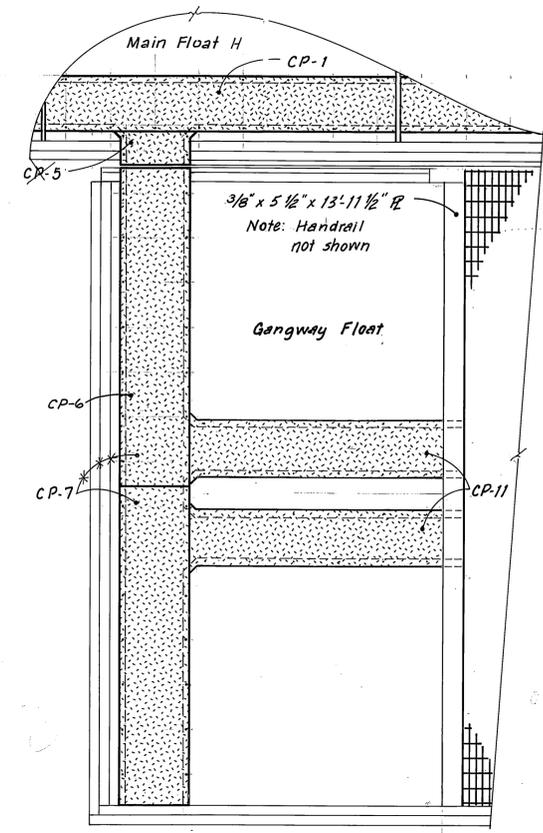
MAIN FLOAT to FINGER FLOAT

See sht. 49 for Intersection.



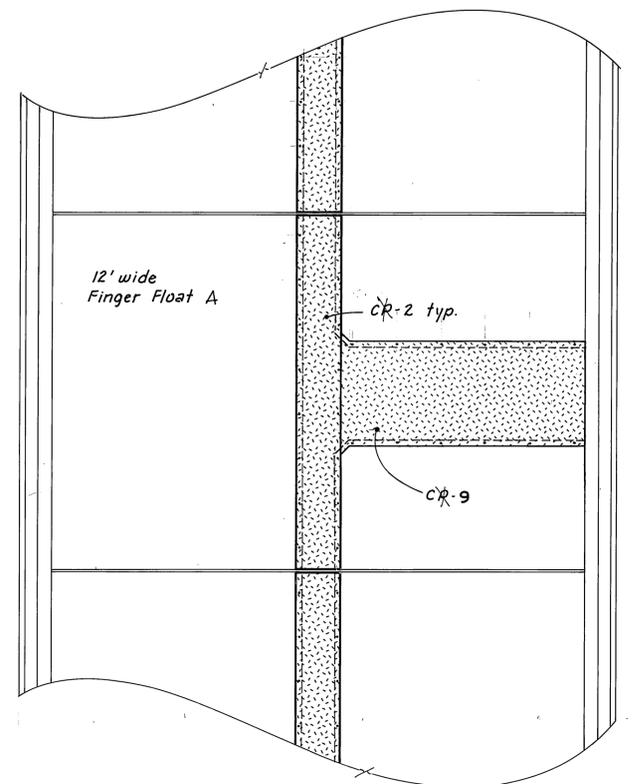
FINGER FLOAT to END FLOAT

NOT APPLICABLE



GANGWAY FLOAT to MAIN FLOAT

See sht. 48 & 50 for layout.



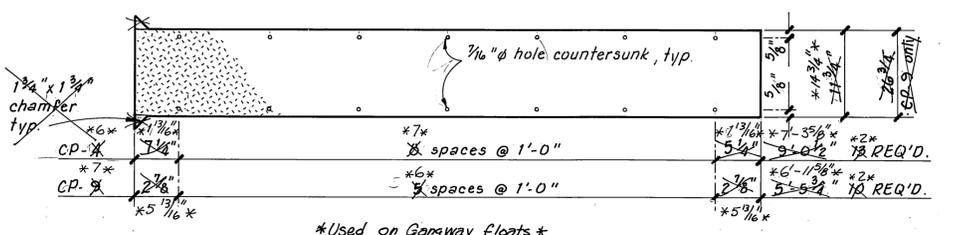
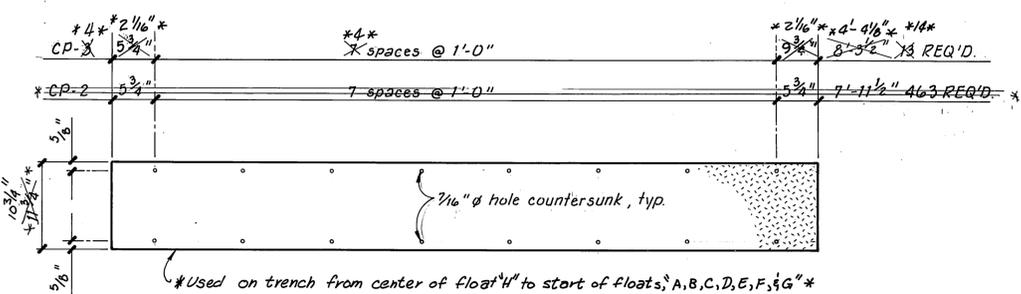
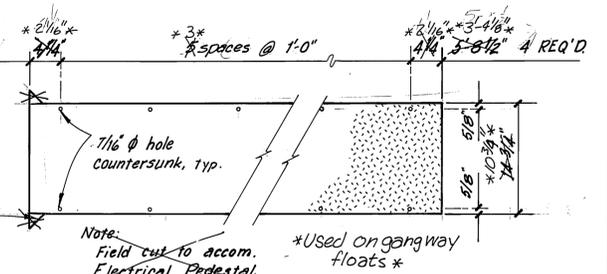
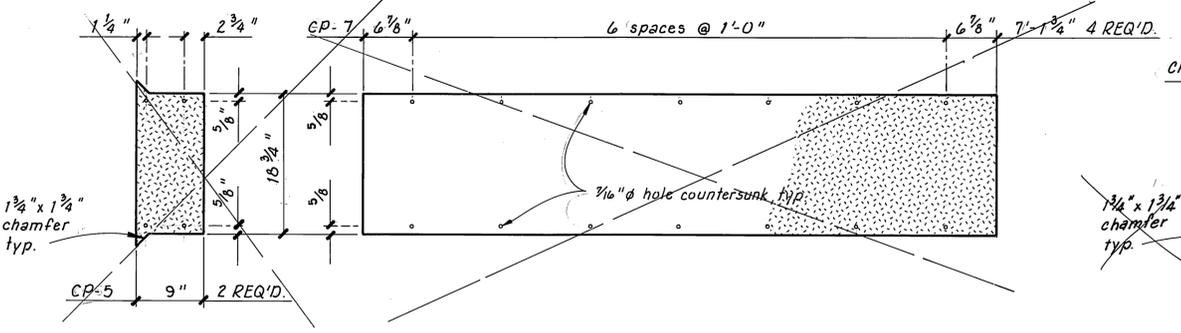
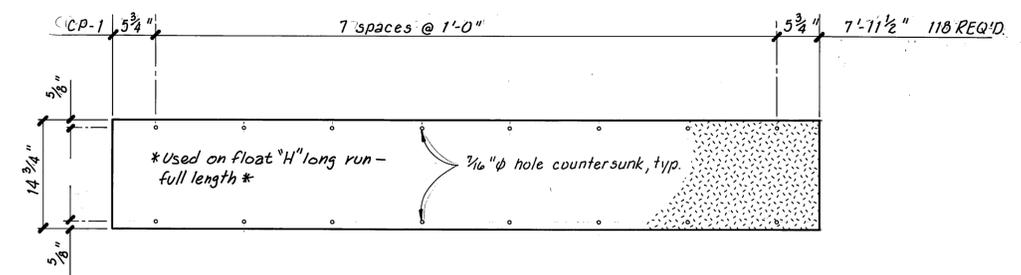
TEE in 12' WIDE FLOAT

See sht.s. 33,44,47, & 49 for layout

COVER PLATE CONFIGURATIONS

1/2" = 1'-0"

Secure cover plates with 3/8" ϕ flat head stainless steel machine screws, typical.



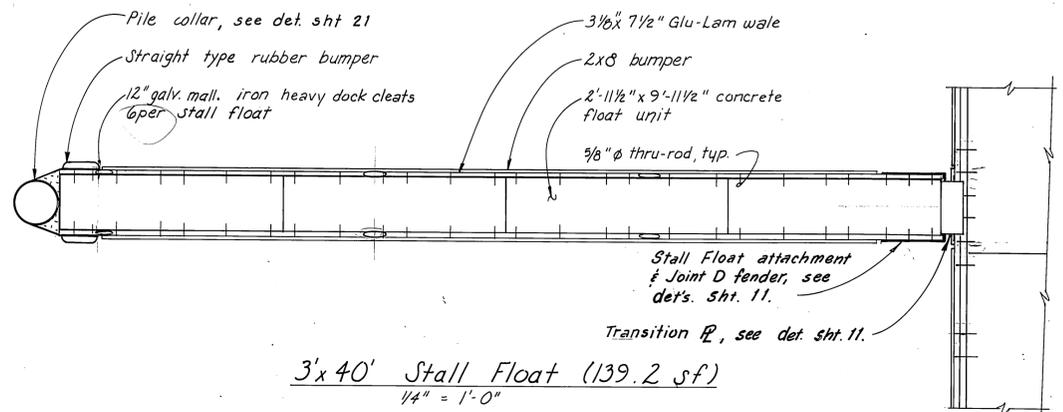
COVER PLATE DETAILS

1" = 1'-0"

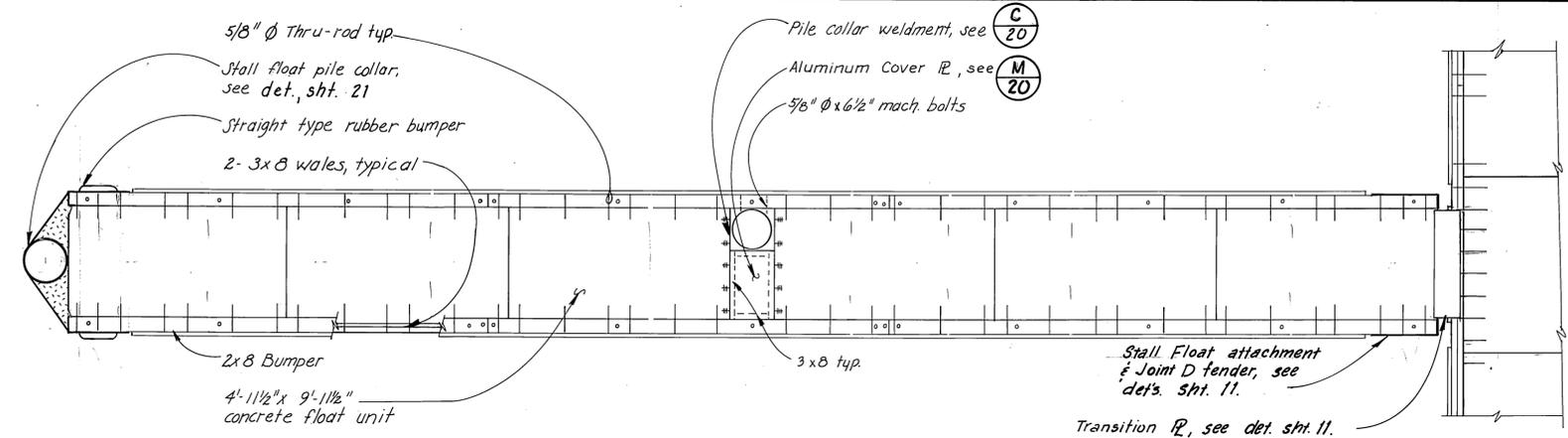
Used on Gangway Floats

- Notes:
1. Meter bases to be located @ ϕ of float unit nearest the midpoint between two stalls.
 2. Elec. access holes to be approved by Engineer prior to cutting.
 3. Cover plates to be 6061-T6 Alum. or galv. steel w/ checker pattern. See specs. for thickness.

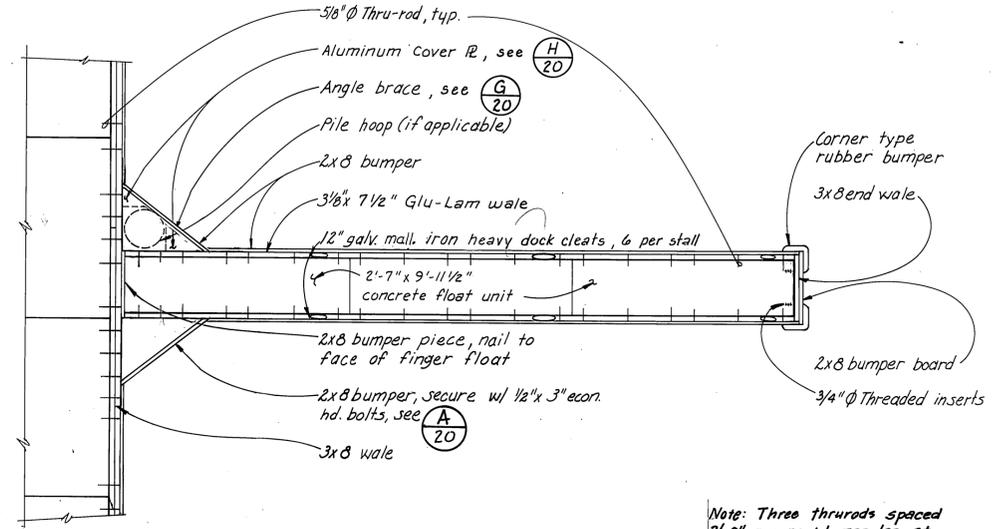
STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION			
Bar Harbor, Ketchikan		Alaska	
COVER PLATE DETAILS			
SCALE: As Noted	SURVEYED: _____	APPROVED: Robert P. Beck	
DESIGNED: TS	DRAWN: TS	CHECKED: JDB	DATE: 9-82
PROJECT NUMBER: K-78153	SHEET 17 OF 50		



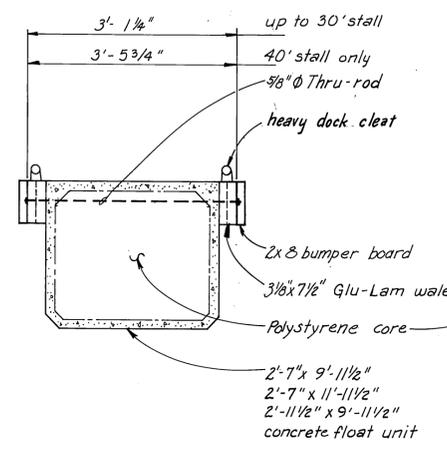
3' x 40' Stall Float (139.2 sf)
1/4" = 1'-0"



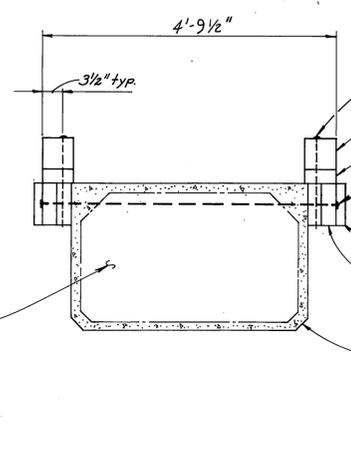
5' x 62' Stall Float (359.1 sf)
1/4" = 1'-0"



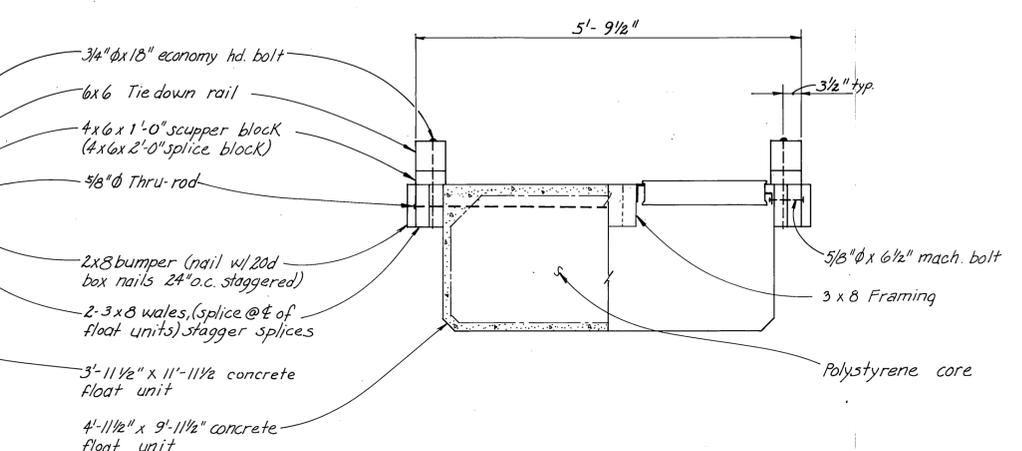
3' x 30' Stall Float (105.1 sf)
1/4" = 1'-0"



3' Stall Section
3/4" = 1'-0"

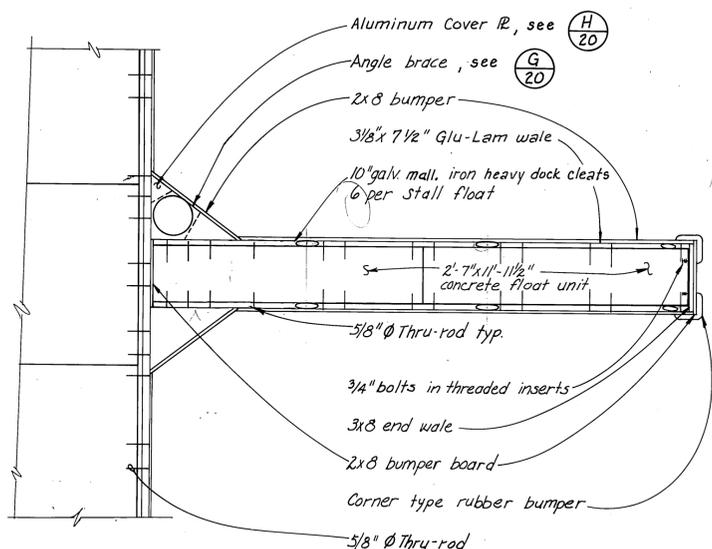


4' Stall Section
3/4" = 1'-0"

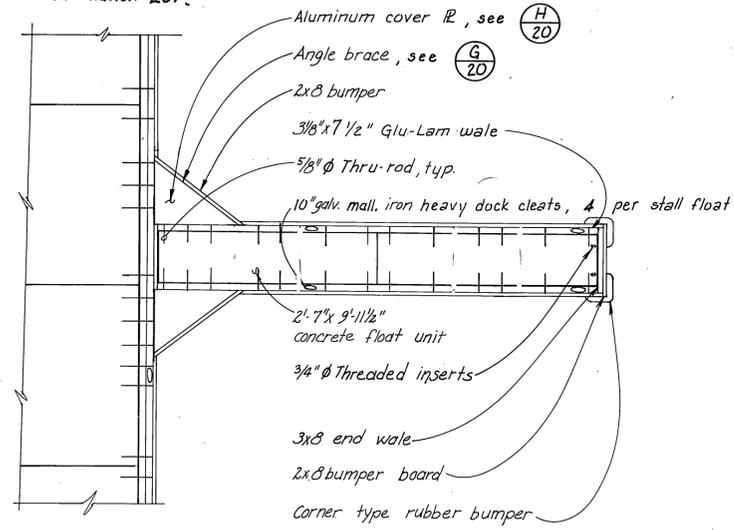


5' Stall Section
3/4" = 1'-0"

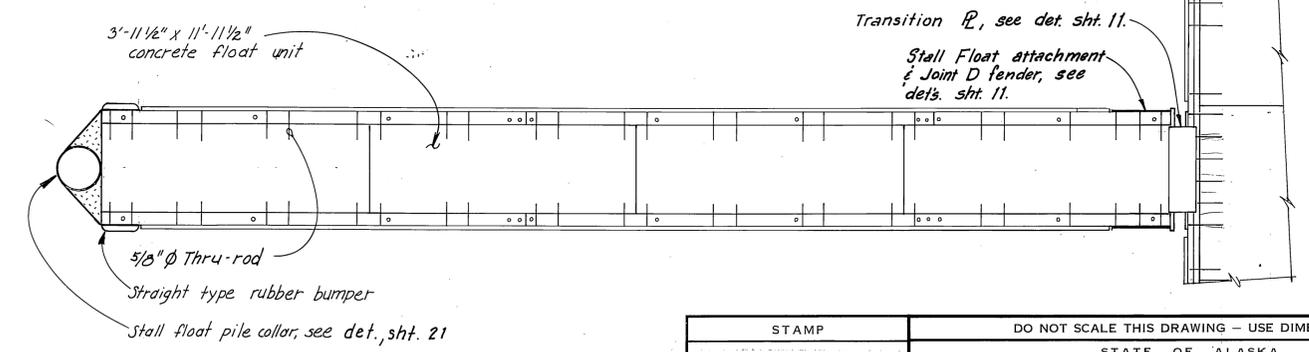
Note: Three thru-rods spaced 2'-0" are req'd. per leg at angle brace, typ. Install thru-rods as shown.
3 1/8 x 7 1/2 Glu-lam wales to be combination 20F.



3' x 24' Stall Floats (86.5 sf)
1/4" = 1'-0"



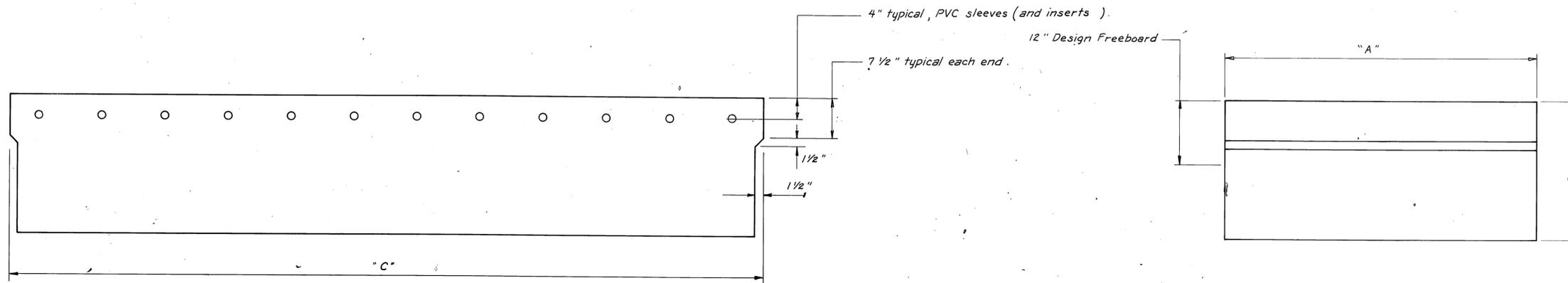
3' x 20' Stall Floats (74.1 sf)
1/4" = 1'-0"



4' x 48' Stall Floats (230.0 sf)
1/4" = 1'-0"

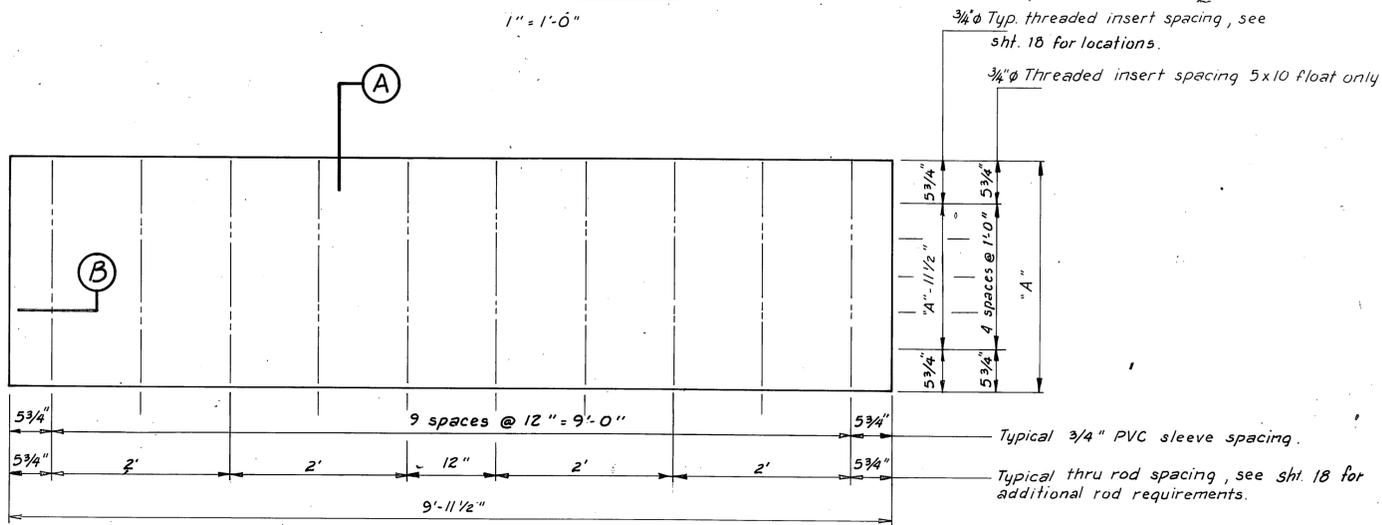
NOTE: Tie Down Rail on main float not shown.

	DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
	Bar Harbor, Ketchikan Alaska	
	TYPICAL STALL FLOATS	
SCALE: As Noted	SURVEYED: _____	APPROVED: Robert P. Beck
DESIGNED: _____	DRAWN: SJS	James A. Lowell
CHECKED: JDB	DATE: 1-83	
PROJECT NUMBER: K-78153	SHEET 18 OF 50	

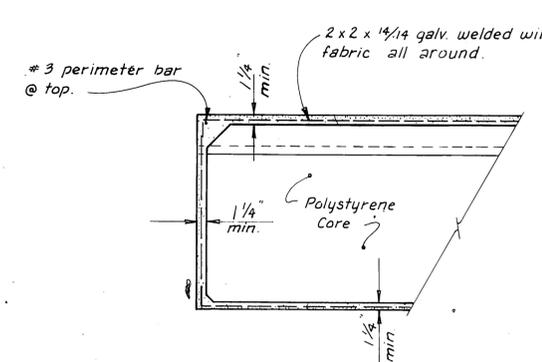


OUTBOARD ELEVATION
1" = 1'-0"

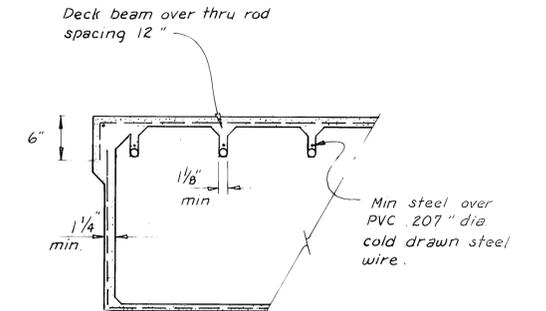
END ELEVATION
1" = 1'-0"



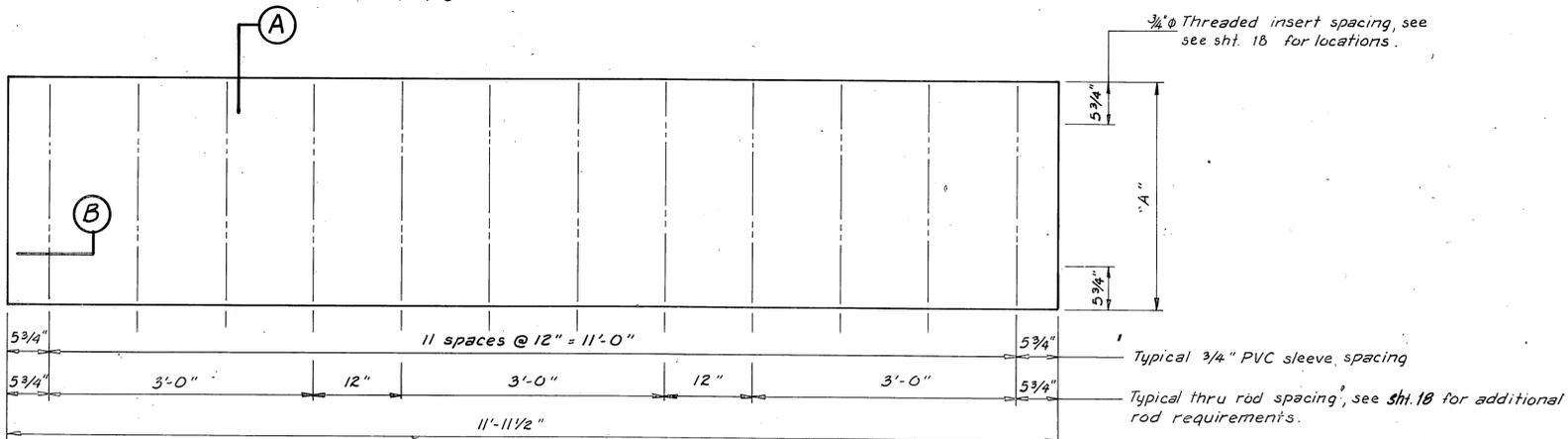
PLAN
1" = 1'-0"



SECTION A
1" = 1'-0"



SECTION B
1" = 1'-0"



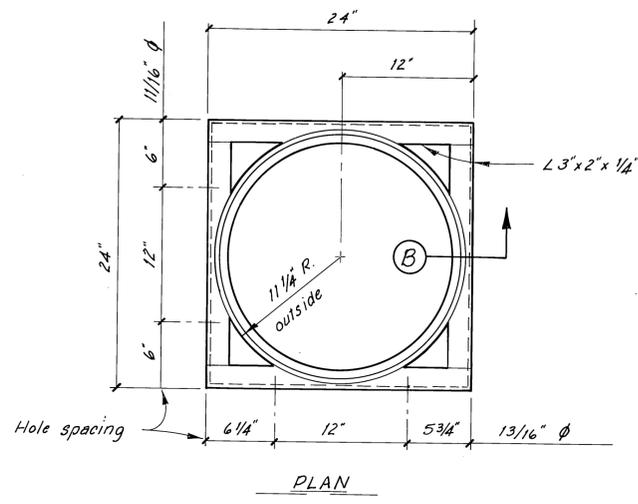
PLAN
1" = 1'-0"

- General Notes:**
- Pontoon supplier to provide float unit w/ required freeboard. Allow 16.4 lbs. per lin. ft. for 3' wide float and 26.0 lbs per lin ft. for 4' & 5' wide floats, for wales & bumpers.

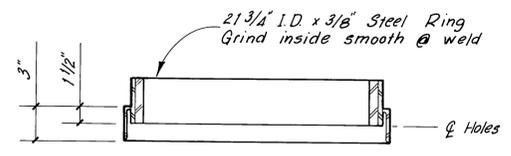
Nom. Float	DIMENSIONS			IMMERSION CONSTANT Pounds per linear ft.
	"A"	"B"	"C"	
3 x 10	2'-7"	Note ①	9'-11 1/2"	13.4
3 x 12	2'-7"	" ① ②	11'-11 1/2"	13.4
4 x 12	3'-11 1/2"	" ①	11'-11 1/2"	20.6
5 x 10	4'-11 1/2"	" "	9'-11 1/2"	21.4
3 x 10	2'-11 1/2"	" "	9'-11 1/2"	15.8
5 x 10 HD	4'-11 1/2"	Note ②	9'-11 1/2"	21.4

- Design Freeboard 12"
- Design Freeboard 16"
- Maximum Freeboard 14"
- Maximum Freeboard 18"
- Minimum Freeboard 11"
- Minimum Freeboard 12"

STAMP		DO NOT SCALE THIS DRAWING USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
TYPICAL STALL FLOAT UNITS			
SCALE As Noted	SURVEYED TS	APPROVED Robert P Beck	
DESIGNED JDB	DRAWN 10/80	CHECKED James A. Lowell	
PROJECT NUMBER K-78153	DATE	19	50



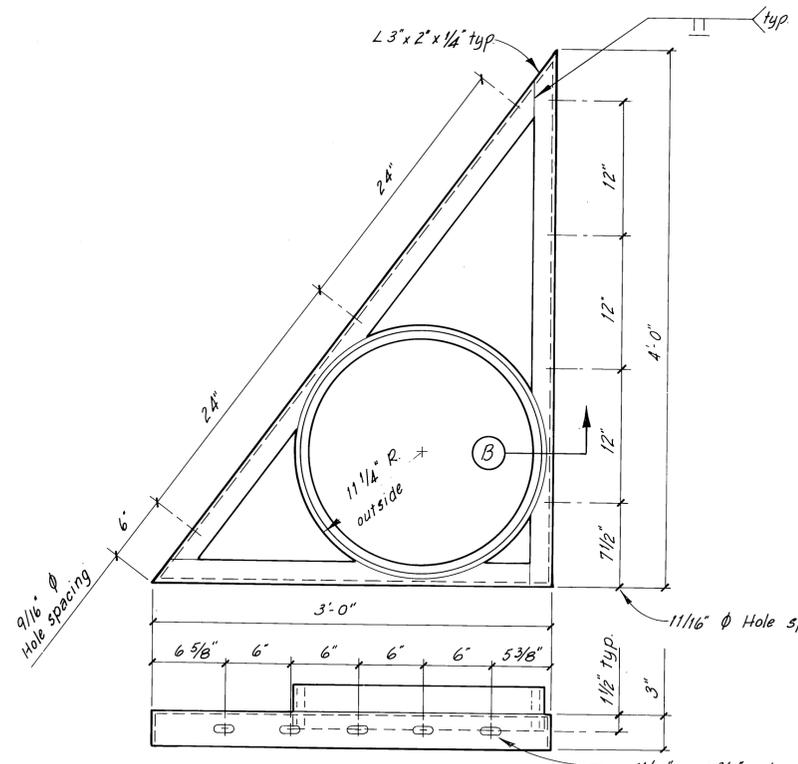
PLAN



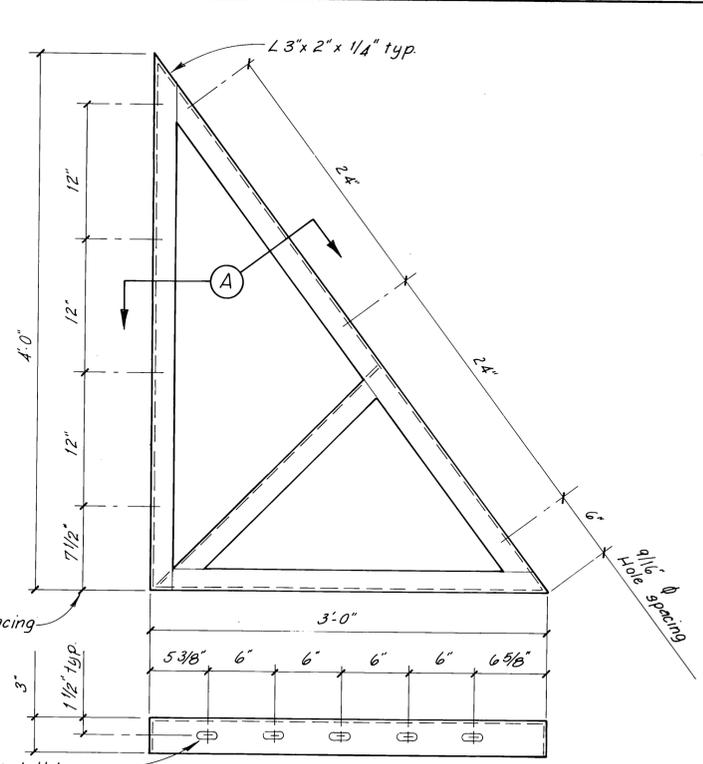
SECTION

PILE COLLAR WELDMENT DETAILS (C)
1 1/2" = 1'-0"

All material mild steel.
Hot dip galvanized
after fabrication.

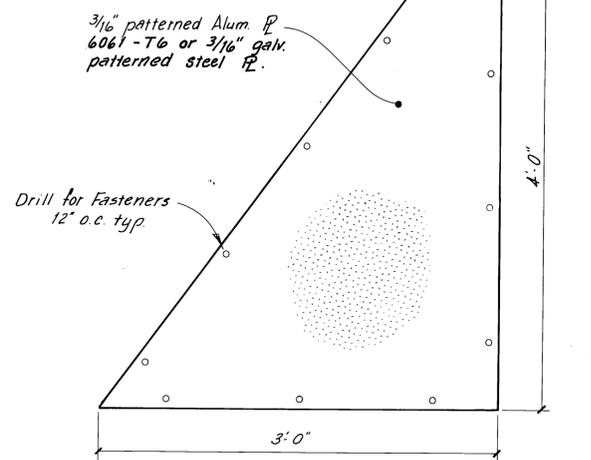


WITH PILE COLLAR

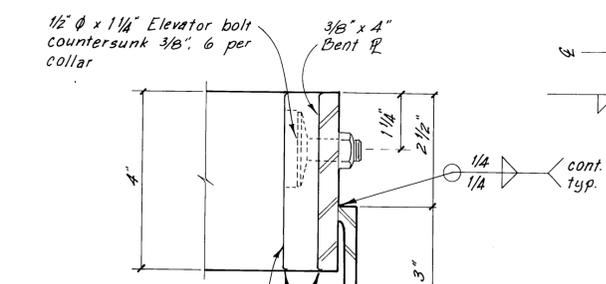


WITHOUT PILE COLLAR

ANGLE BRACE (G)
1 1/2" = 1'-0"



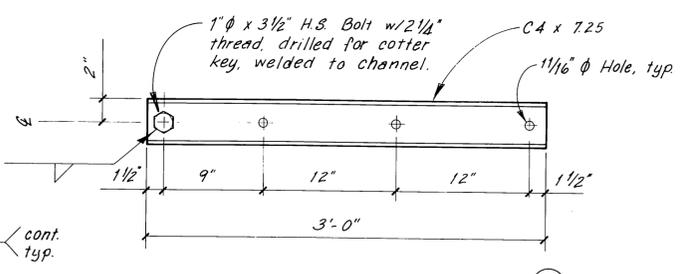
ANGLE BRACE COVER PLATE (H)
1 1/2" = 1'-0"



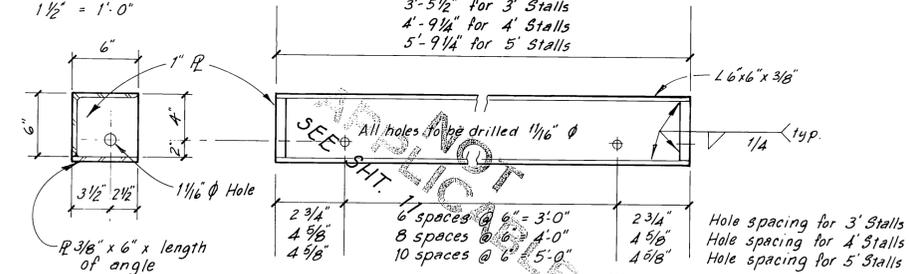
SECTION B

6" = 1'-0"

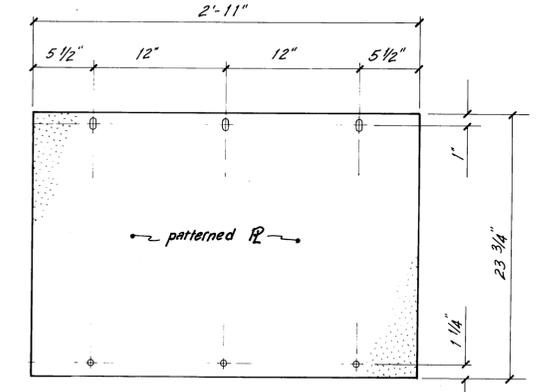
3/4" x 4" UHMW
Poly Liner, 2 half hoops.
Reqd. only for steel piles
Radius edges top & bottom



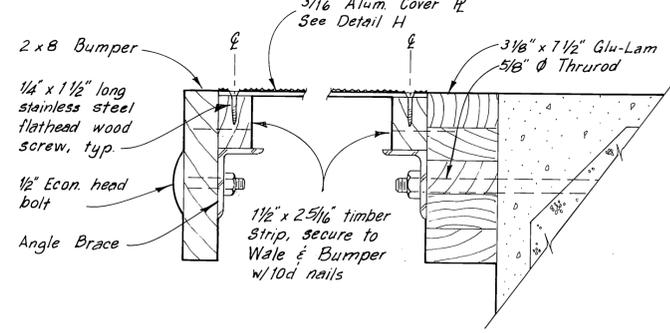
C4 x 7.25 CHANNEL CONNECTOR (L)
1 1/2" = 1'-0"



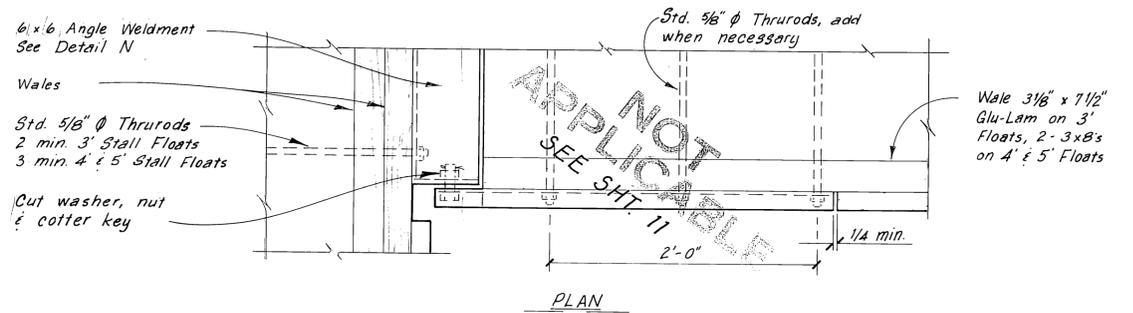
6 x 6 L STALL WELDMENT DETAIL (N)
1 1/2" = 1'-0"



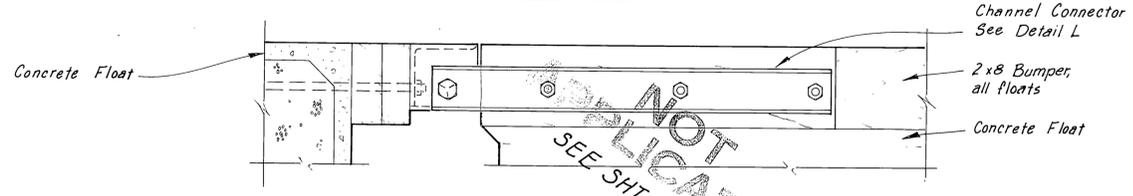
STALL FLOAT COVER PLATE (M)
1 1/2" = 1'-0"



ANGLE BRACE SECTION A
3" = 1'-0"

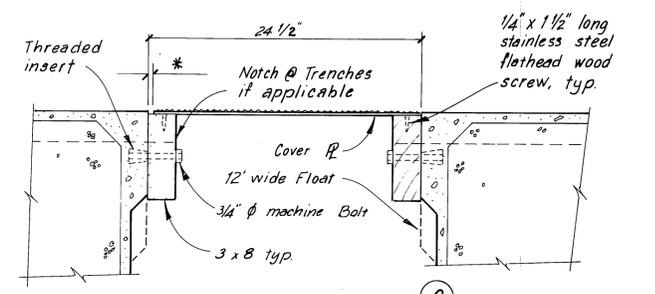


PLAN



ELEVATION

STALL FLOAT HINGE CONNECTION DETAIL (J)
1 1/2" = 1'-0"

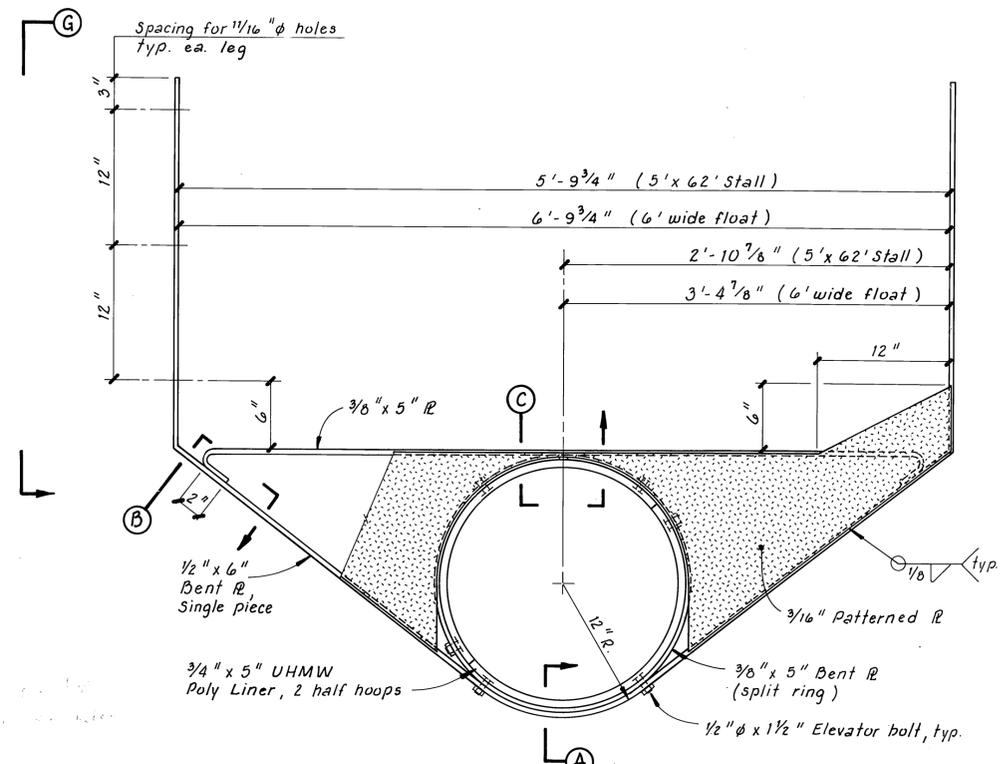


COVER PLATE DETAIL (O)
1 1/2" = 1'-0"

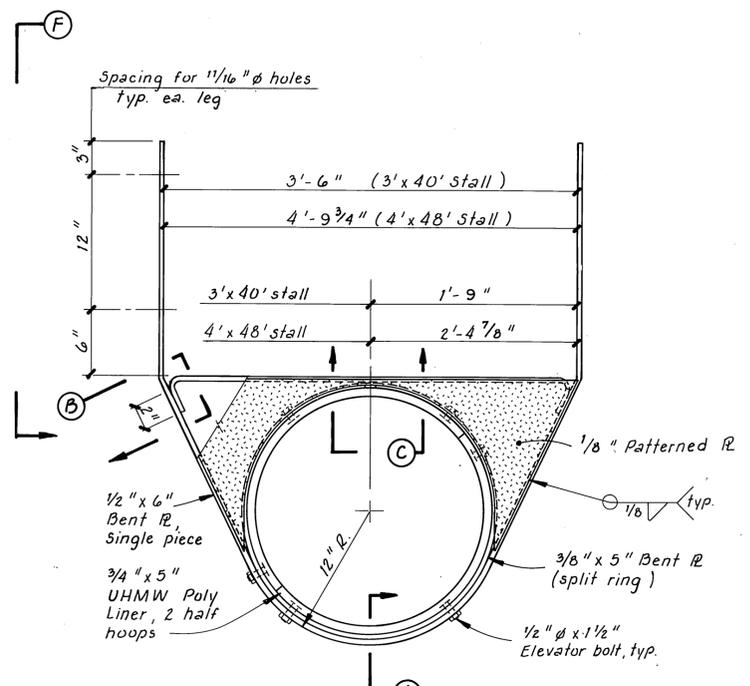
Note:
13/16" holes in 3 x 8
to be drilled so that
top of P will match
deck. End 3 x 8's
to be bolted to wales
& pile collar weldment.

STAMP		DO NOT SCALE THIS DRAWING USE DIMENSIONS	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION			
Bar Harbor, Ketchikan		Alaska	
CONCRETE STALL FLOAT WELDMENTS & MISCELLANEOUS DETAILS			
SCALE As Noted	SURVEYED	APPROVED	
DESIGNED JDB/JJS	DRAWN DLB	Robert P. Beck	
CHECKED JDB	DATE 1-83	James A. Lowell	
PROJECT NUMBER	K-78153	SHEET	20 OF 50

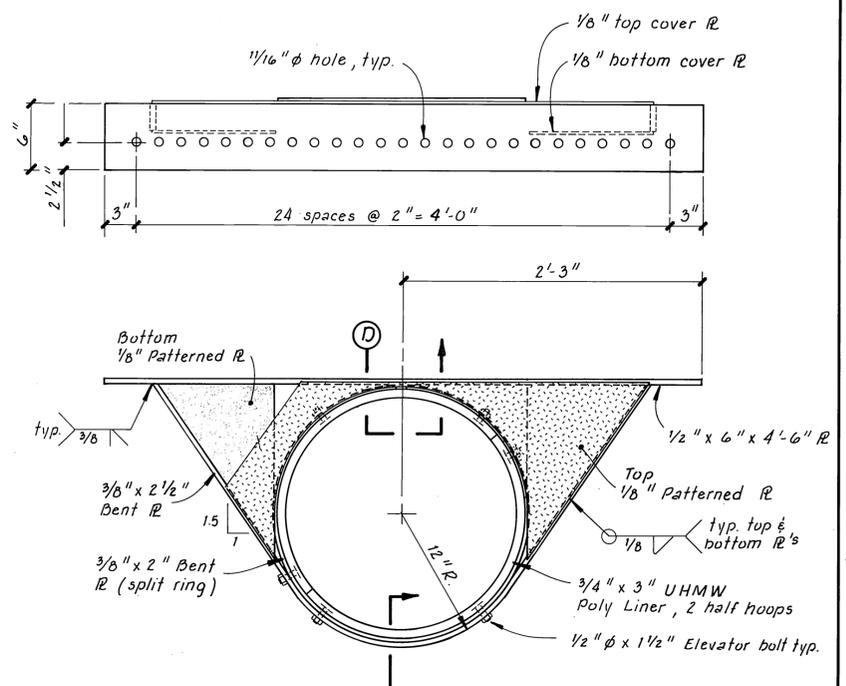




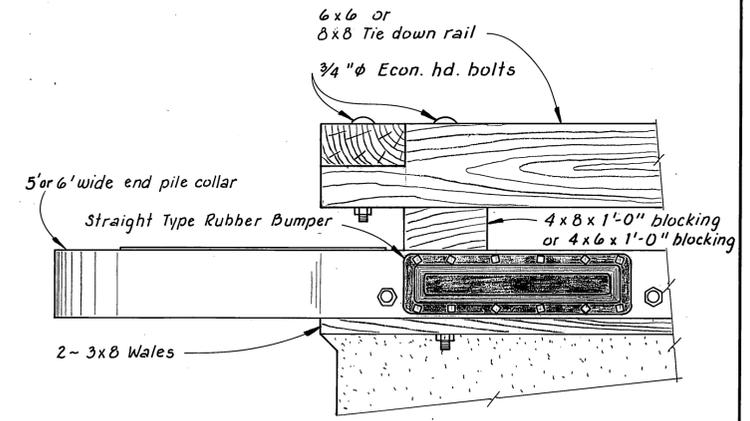
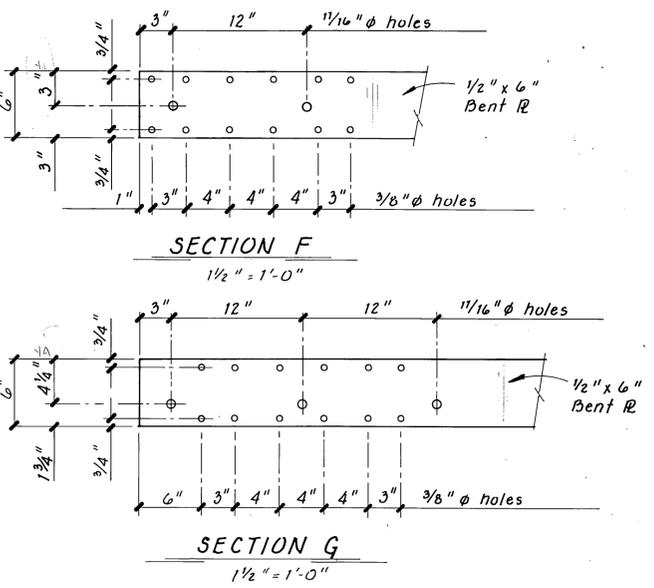
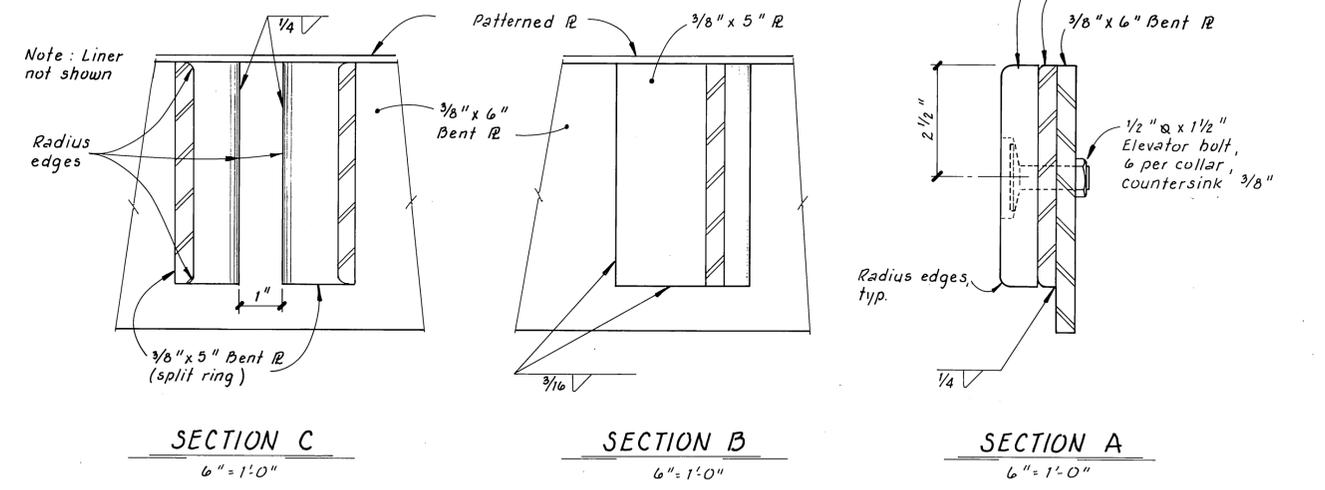
END PILE COLLAR FOR 5' & 6' WIDE FLOATS
1 1/2" = 1'-0"



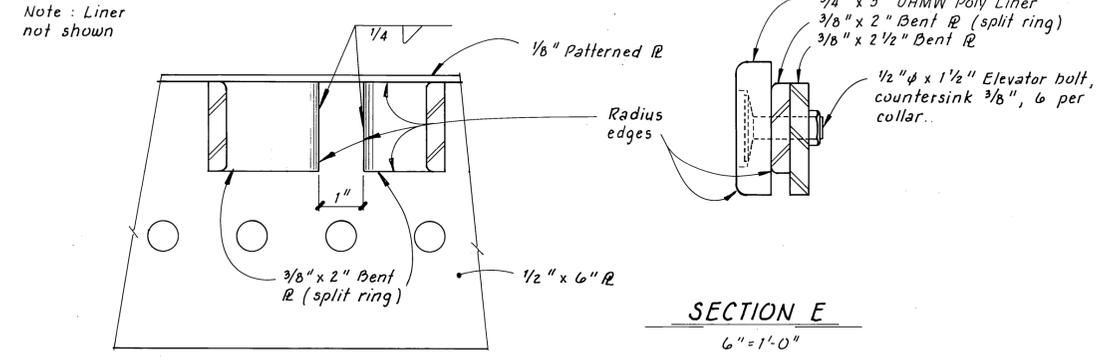
END PILE COLLAR FOR 3' & 4' WIDE FLOATS
1 1/2" = 1'-0"



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



TIE DOWN RAIL & 5' or 6' WIDE END PILE COLLAR
1 1/2" = 1'-0"



SECTION D
6" = 1'-0"

SECTION E
6" = 1'-0"

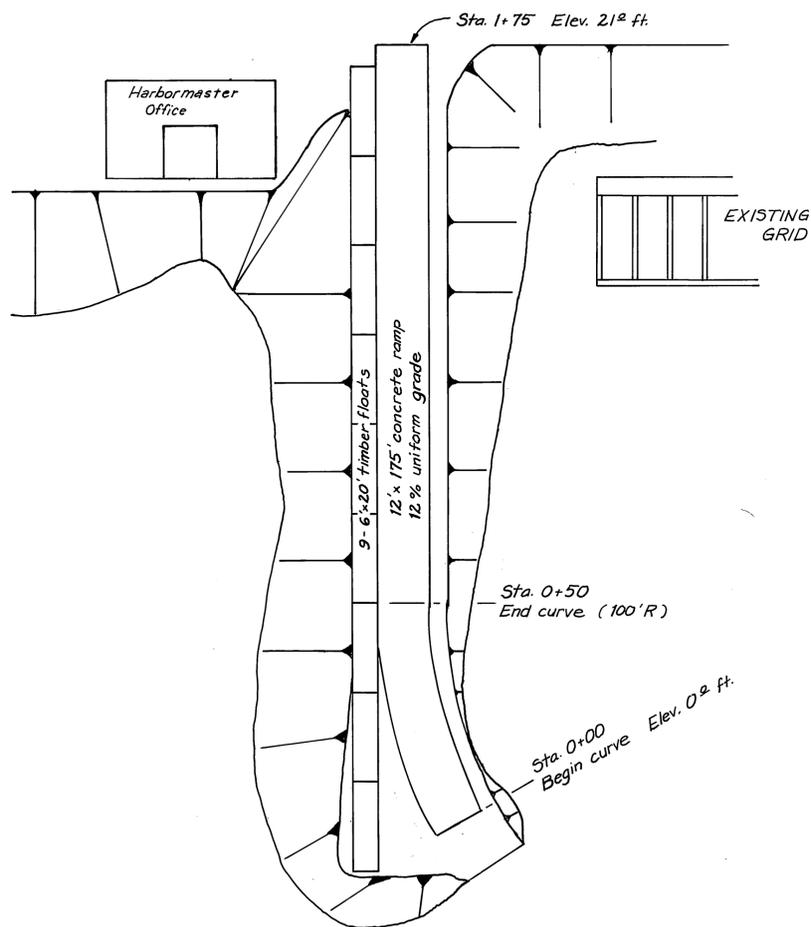
Note: UHMW Poly Liner req'd. @ steel piles only.
All R's 6061-T6 ALUM.

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION			
Bar Harbor, Ketchikan		Alaska	
PILE COLLAR DETAILS			
SCALE <i>As Noted</i>	SURVEYED	APPROVED <i>Robert P. Beck</i>	
DESIGNED <i>J5</i>	DRAWN <i>75</i>	<i>James A. Lowell</i>	
CHECKED <i>JDB</i>	DATE <i>12-82</i>		
PROJECT NUMBER <i>K-78153</i>	SHEET <i>21</i> OF <i>50</i>		



TONGASS AVE.

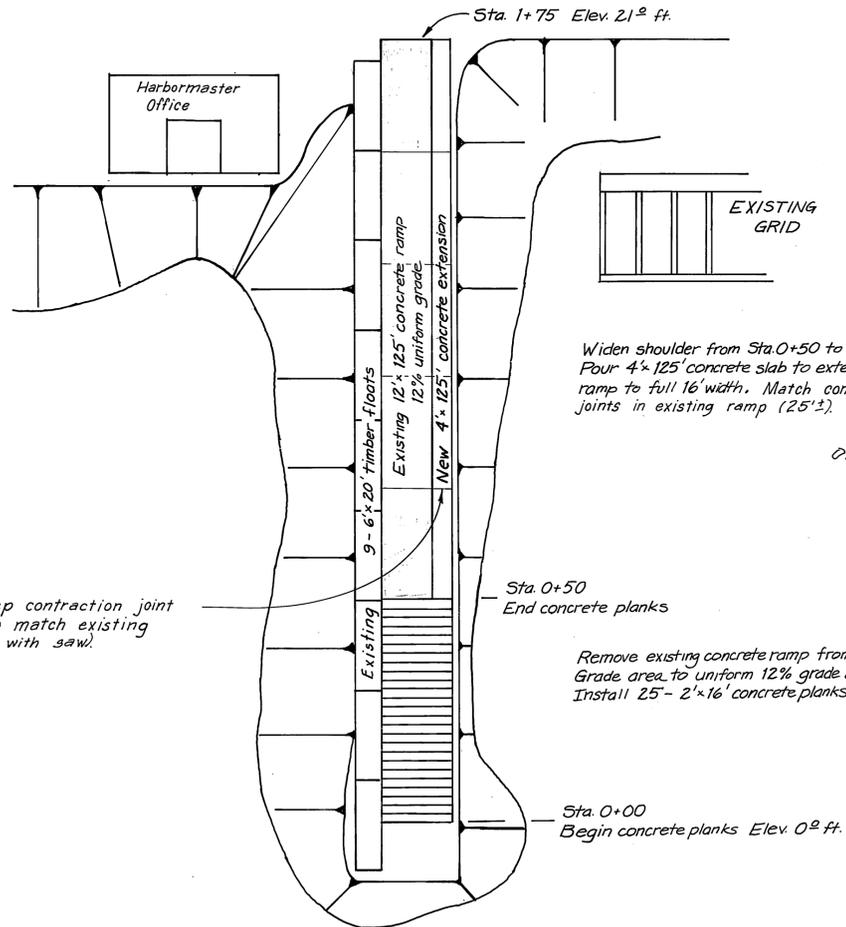
EXISTING PARKING AREA



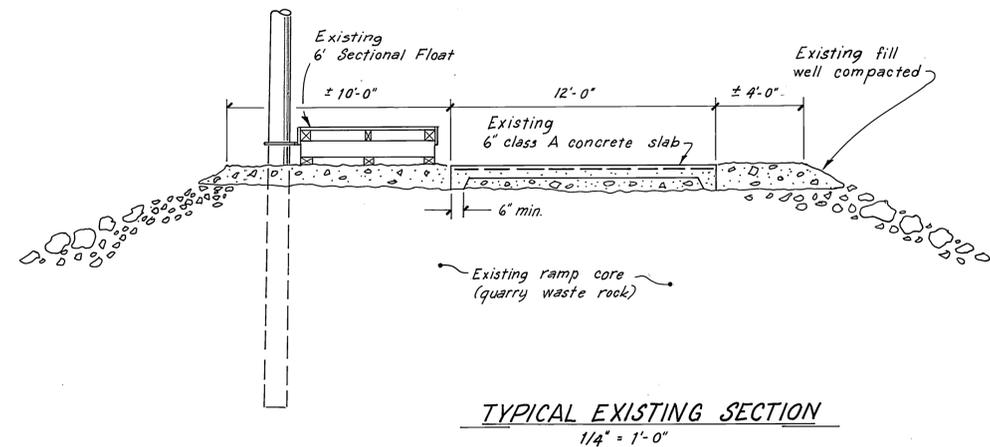
EXISTING
PLAN VIEW
(1" = 20')

TONGASS AVE.

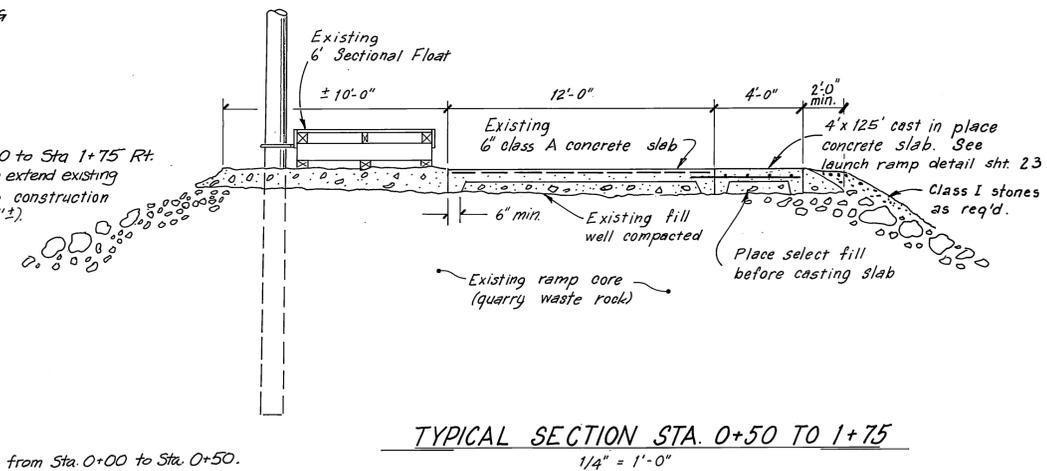
EXISTING PARKING AREA



PROPOSED
PLAN VIEW
(1" = 20')

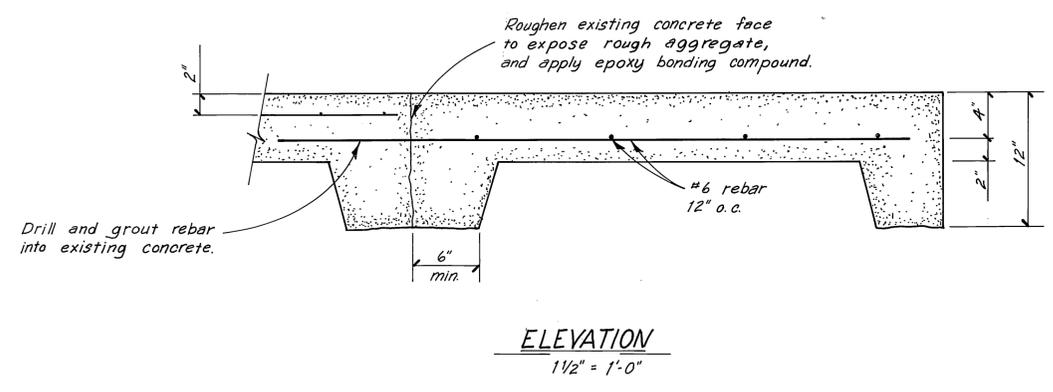
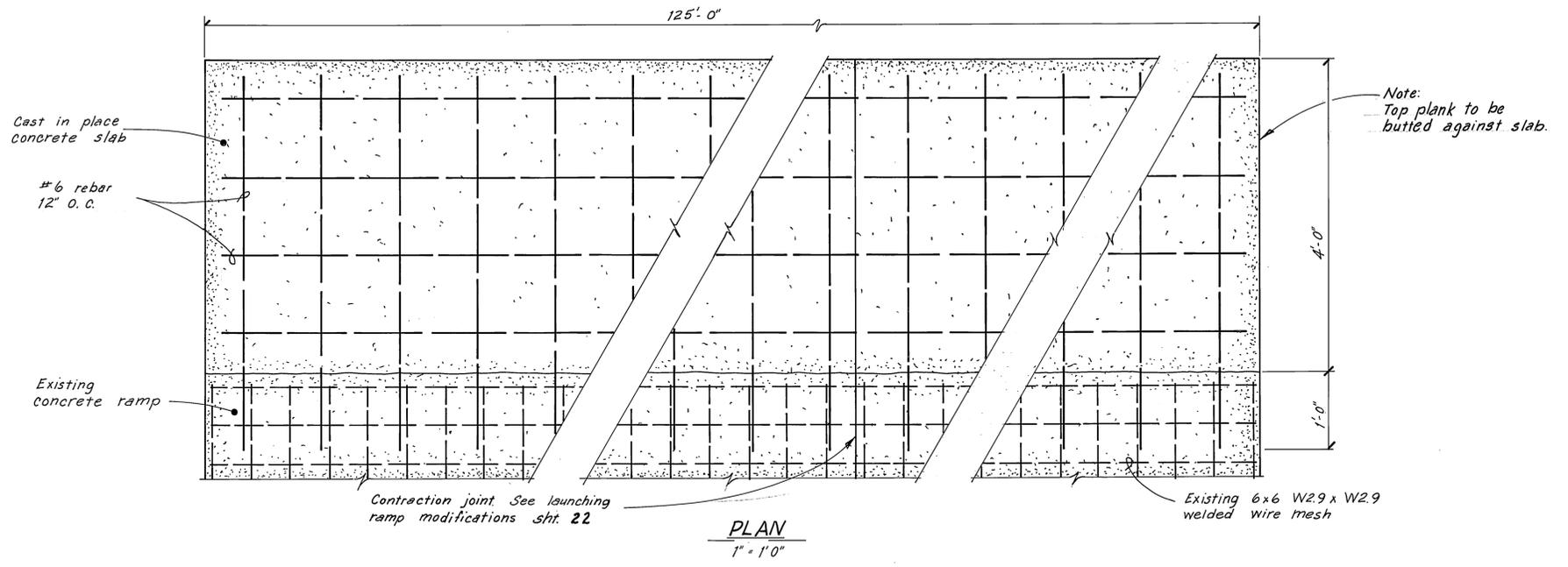
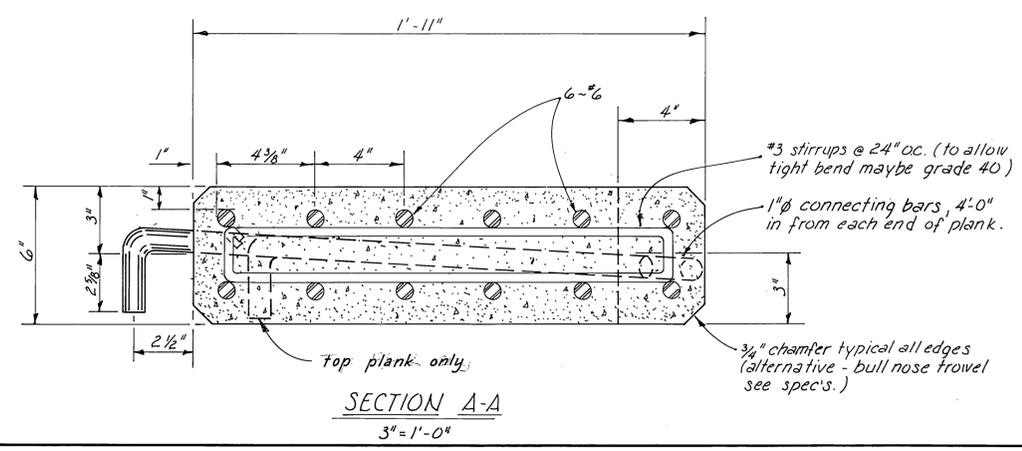
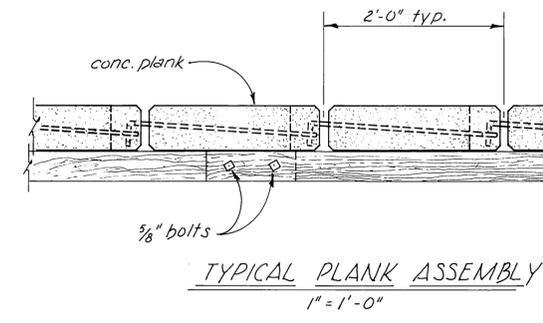
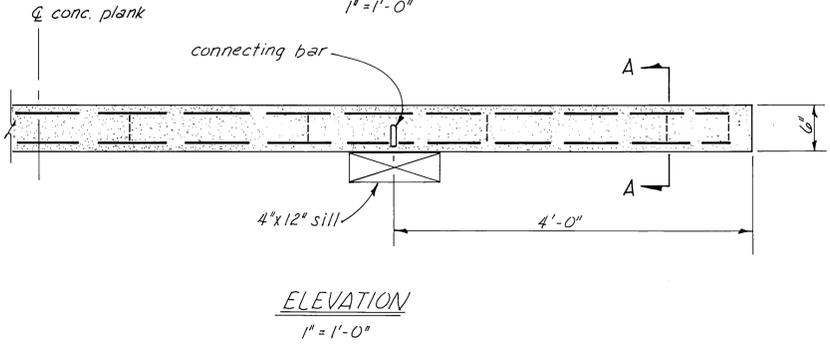
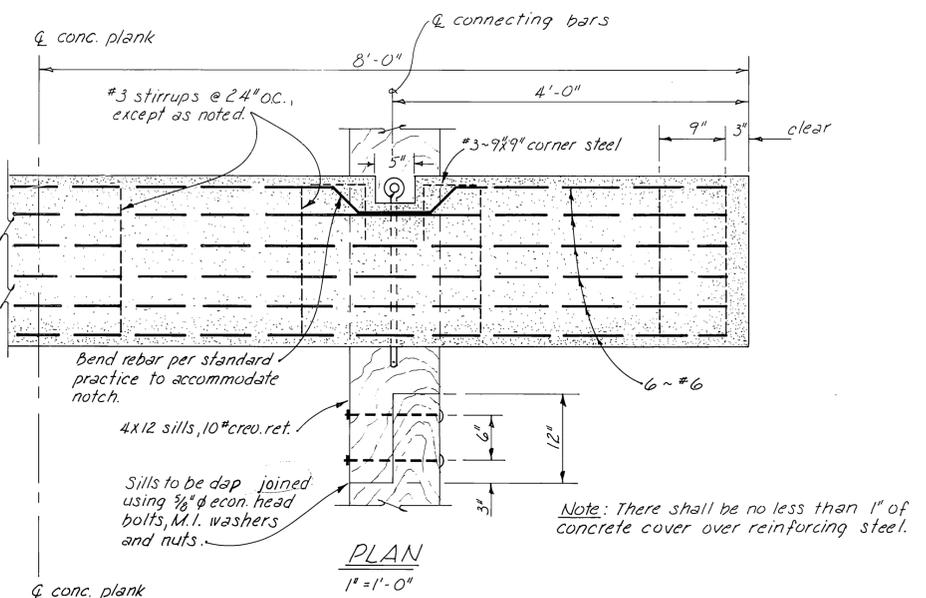


TYPICAL EXISTING SECTION
1/4" = 1'-0"

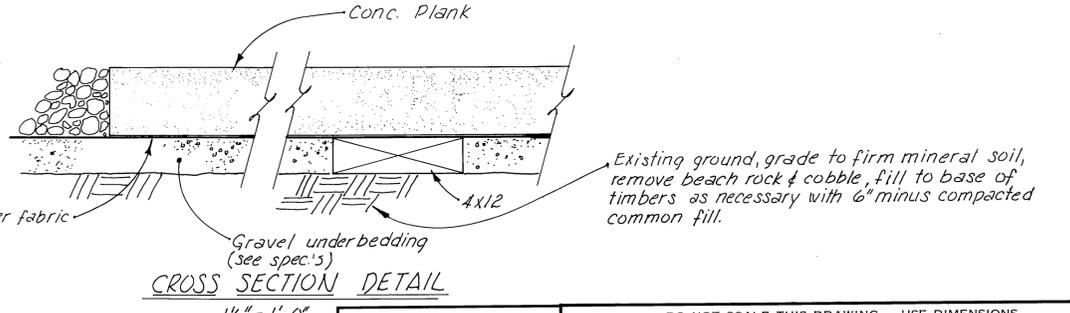
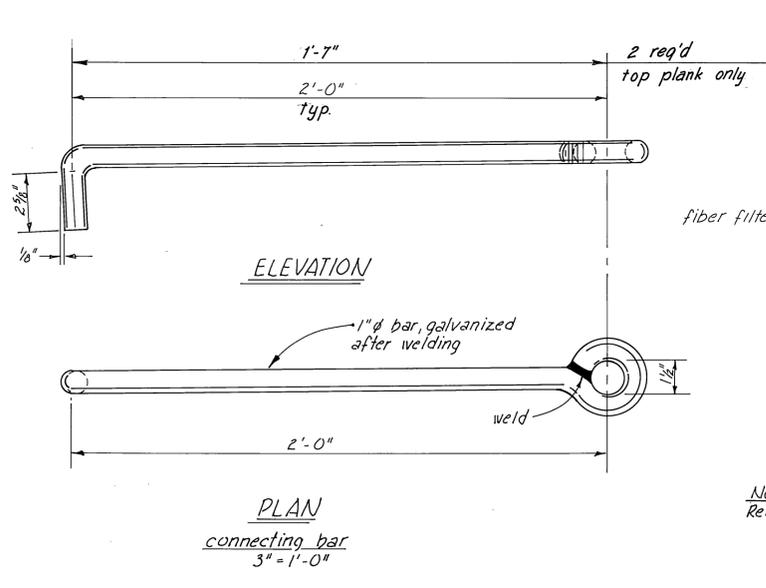


TYPICAL SECTION STA. 0+50 TO 1+75
1/4" = 1'-0"

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
LAUNCHING RAMP MODIFICATIONS			
SCALE <i>As Noted</i>	SURVEYED	APPROVED <u>Robert P. Beck</u>	
DESIGNED <u>B5</u>	DRAWN <u>B5 / DB</u>	CHECKED <u>James A. Lowell</u>	
CHECKED <u>JDB</u>	DATE <u>11-82</u>		
PROJECT NUMBER <u>K78153</u>	SHEET <u>22</u> OF <u>50</u>		



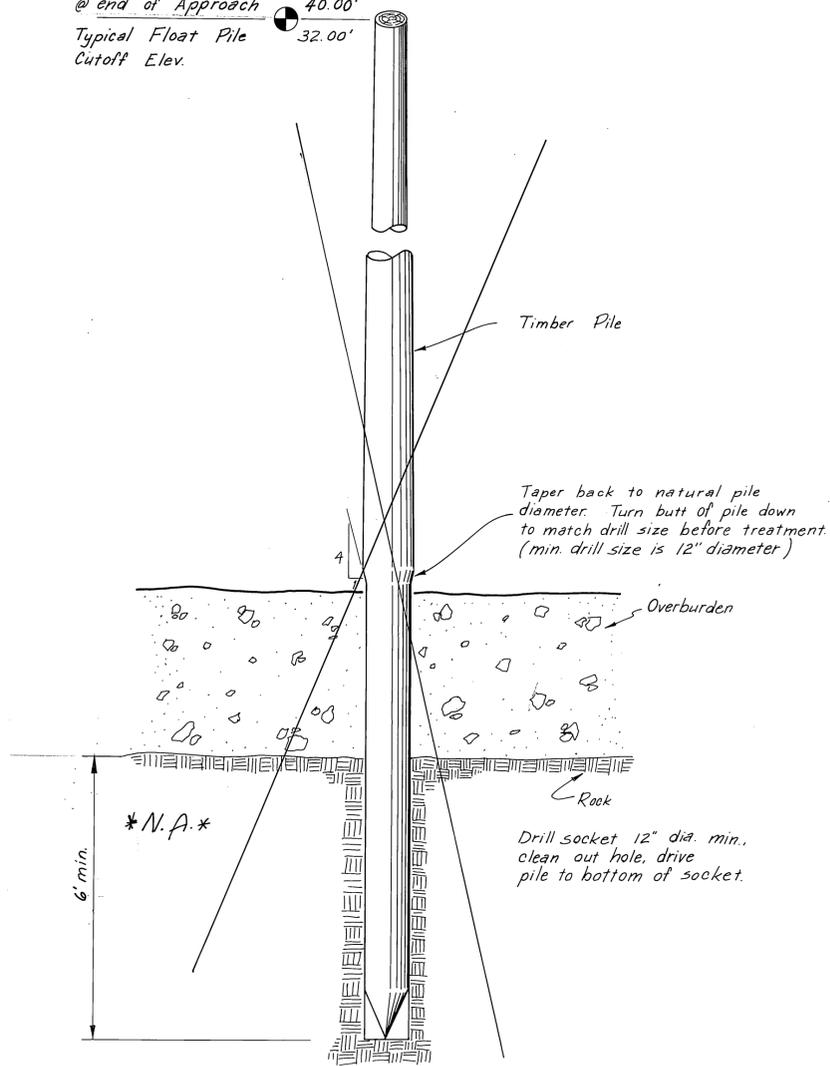
CONCRETE SLAB 4' x 125'



Note: Concrete $f_c \geq 5000$ psi
Reinforcing steel $f_y = 60,000$ psi

		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION Bar Harbor, Ketchikan Alaska LAUNCH RAMP DETAILS	
SCALE As Noted	SURVEYED	APPROVED	Robert P. Beck
DESIGNED JS	DRAWN DB	CHECKED JDB	DATE 11-82
PROJECT NUMBER K78153	SHEET 23 OF 50		James A. Lowell

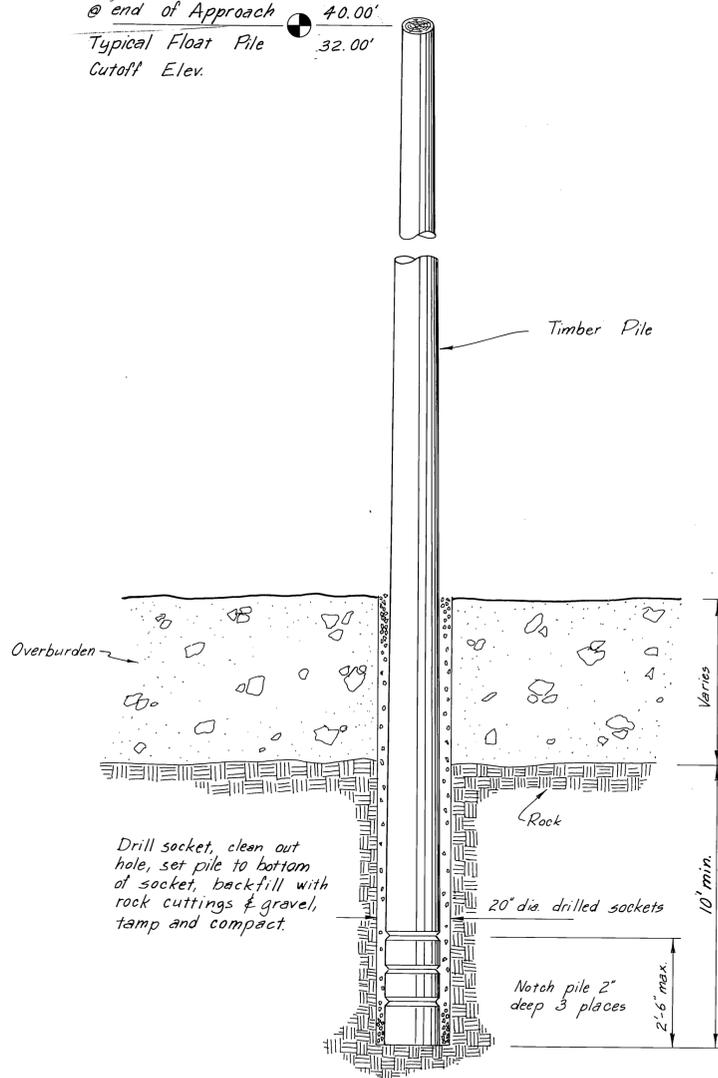
Pile Cutoff for Elec.
@ end of Approach 40.00'
Typical Float Pile
Cutoff Elev. 32.00'



ALTERNATE WOOD PILE SOCKET DETAILS

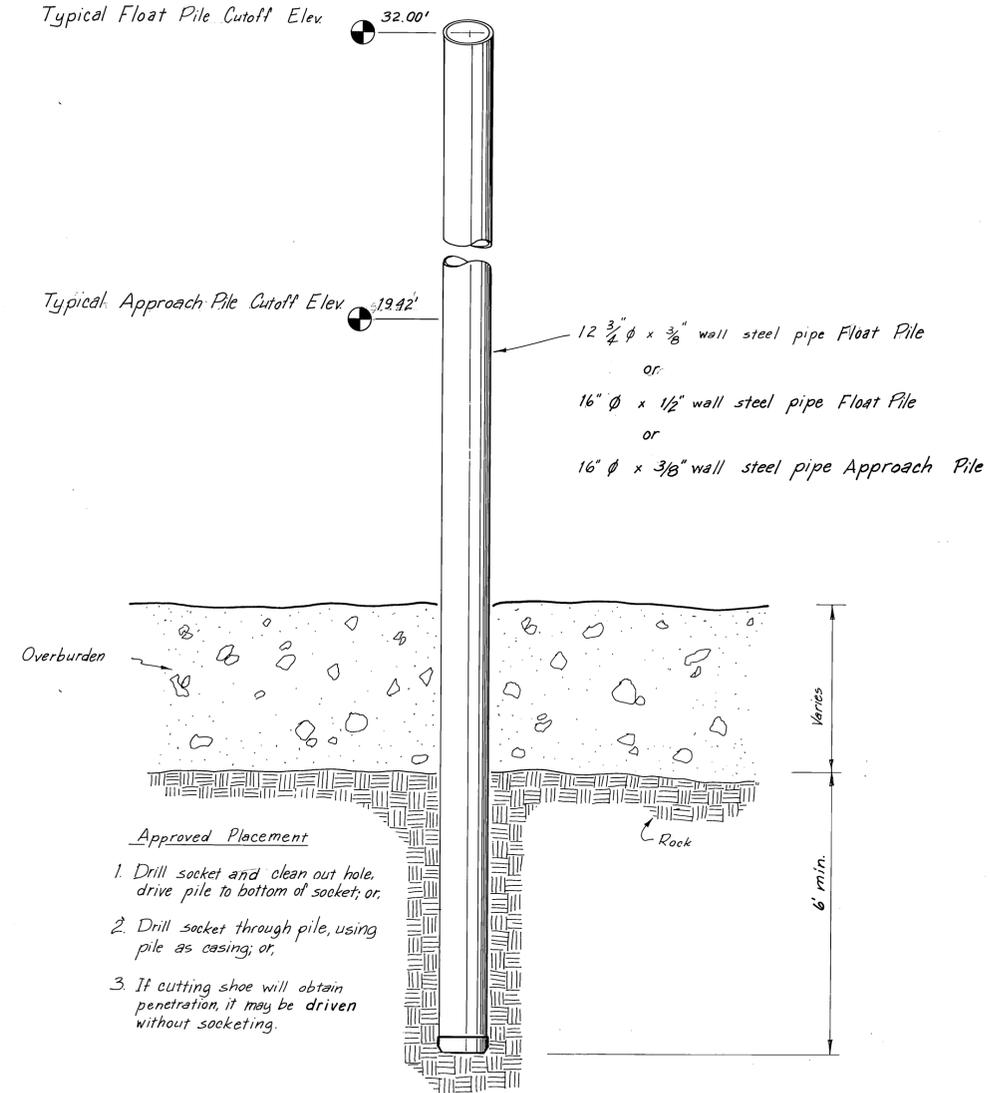
N.T.S.

Pile Cutoff for Elec.
@ end of Approach 40.00'
Typical Float Pile
Cutoff Elev. 32.00'



Typical Float Pile Cutoff Elev. 32.00'

Typical Approach Pile Cutoff Elev. 19.92'

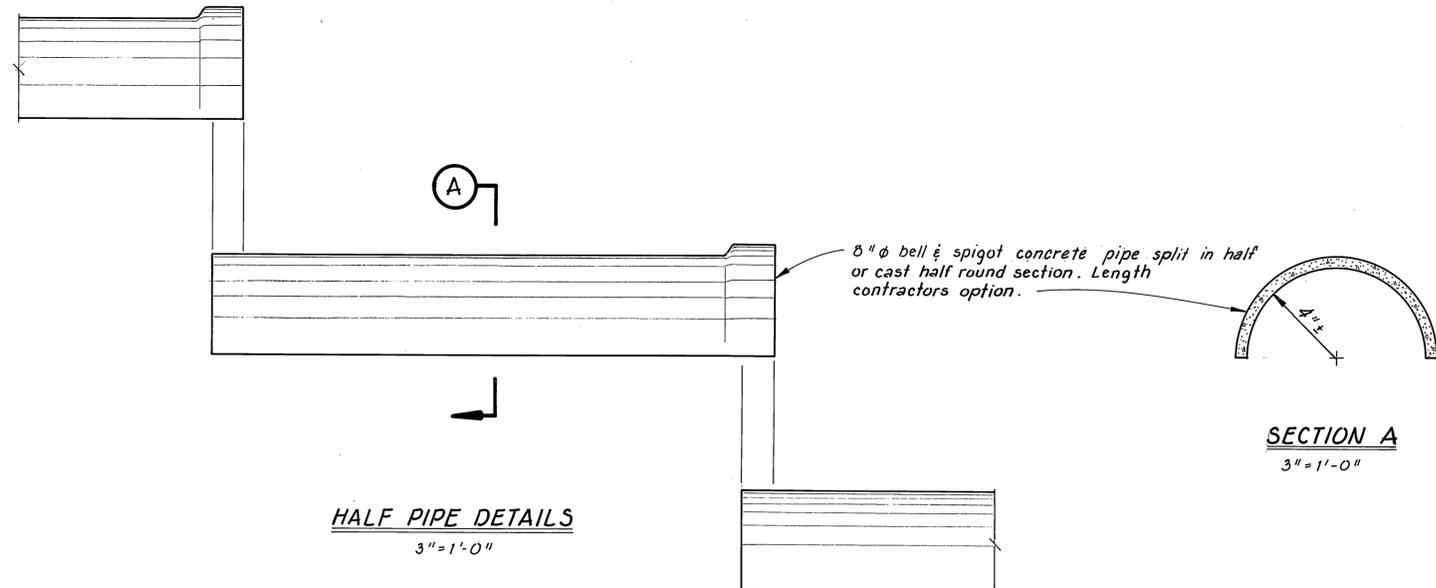
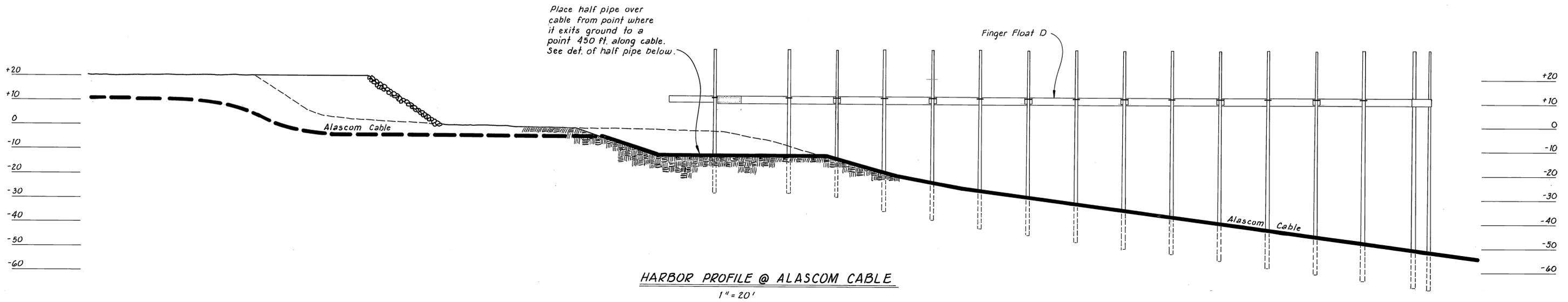


STEEL PILE SOCKET DETAIL

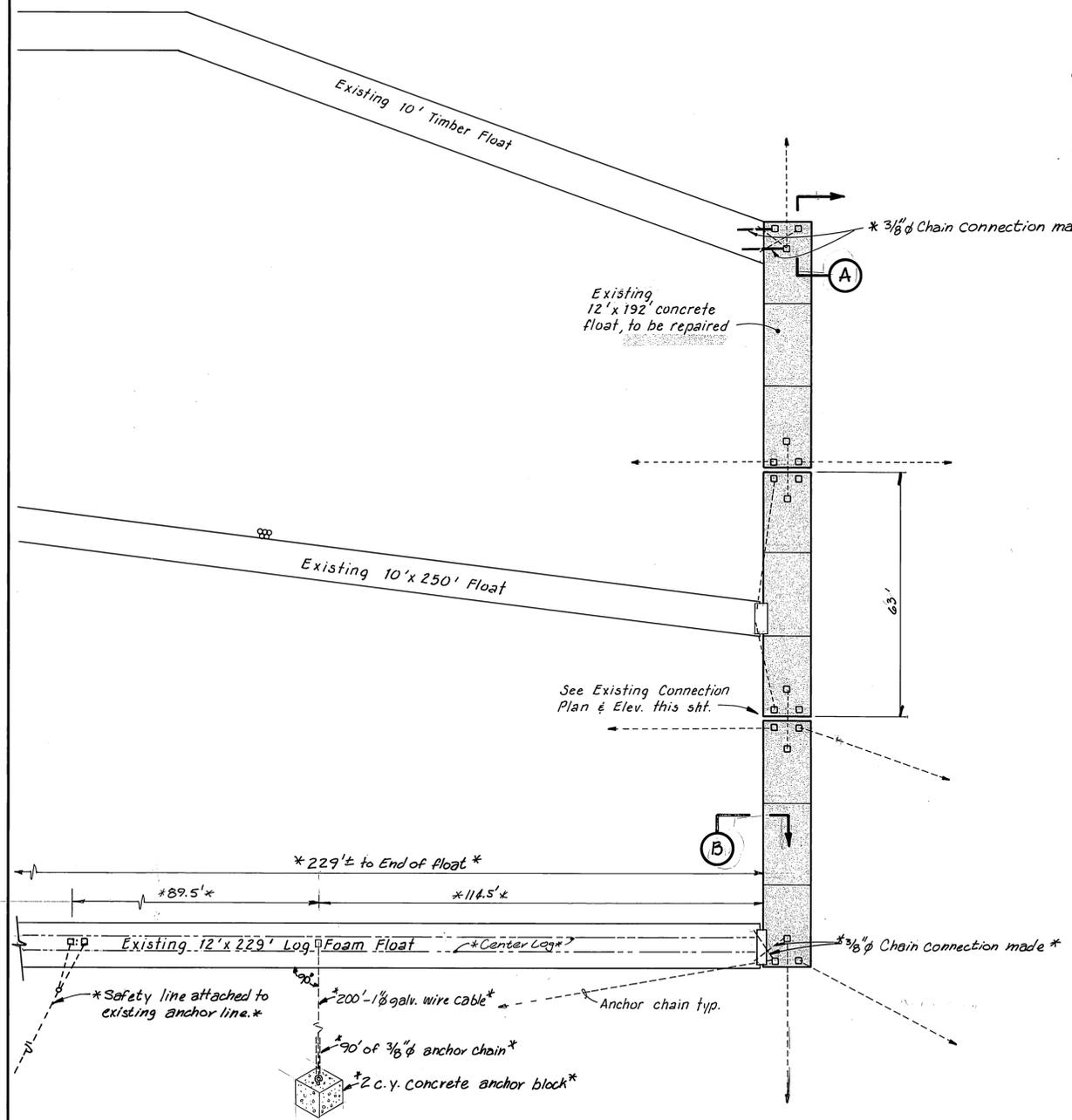
N.T.S.

- Approved Placement
1. Drill socket and clean out hole, drive pile to bottom of socket; or,
 2. Drill socket through pile, using pile as casing; or,
 3. If cutting shoe will obtain penetration, it may be driven without socketing.

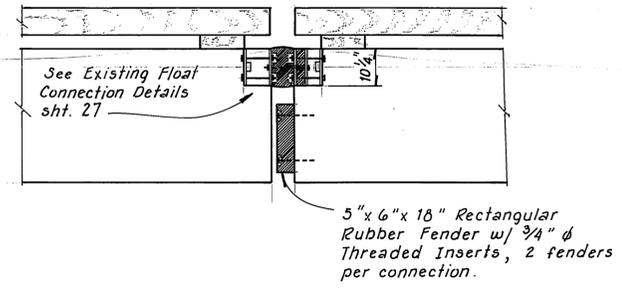
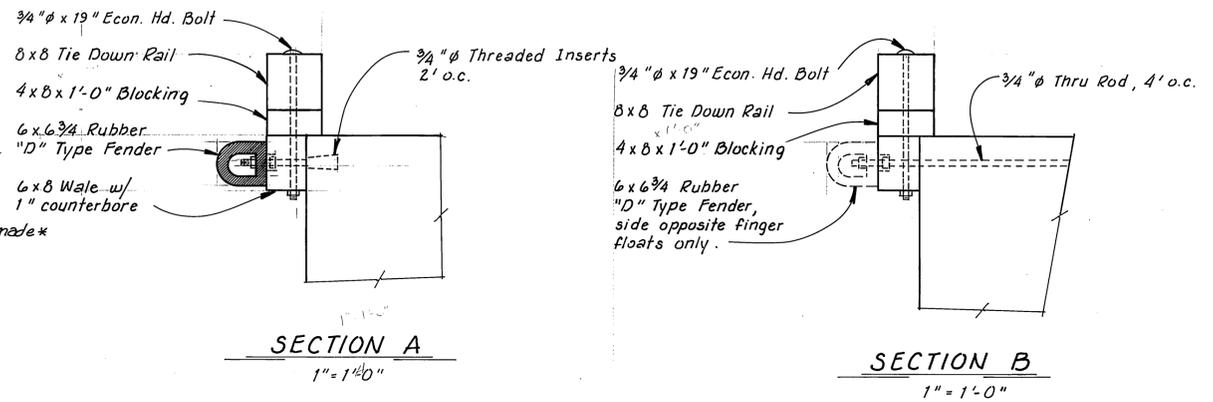
STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska PILE SOCKET DETAILS	
SCALE None	SURVEYED	APPROVED Robert P. Beck	
DESIGNED DW	DRAWN DB	James A. Lowell	
CHECKED JDB	DATE 1-83		
PROJECT NUMBER K78153	SHEET 24 OF 50		



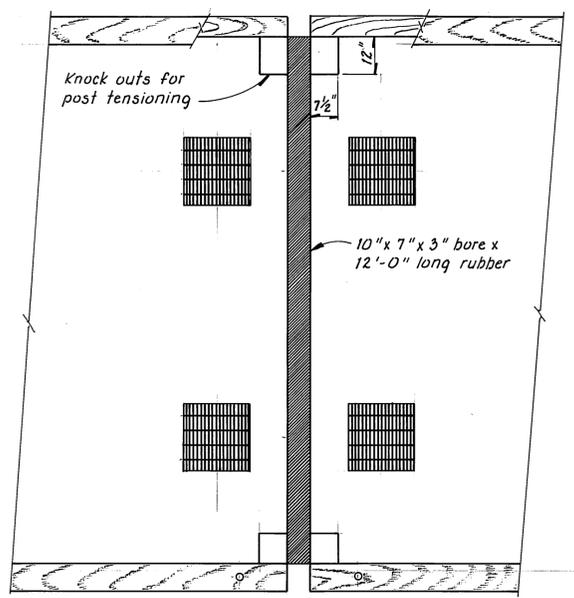
STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION			
Bar Harbor, Ketchikan		Alaska	
ALASCOM CABLE PROTECTION DETAILS			
SCALE: <i>As Noted</i>	SURVEYED: _____	APPROVED: <i>Robert P. Beck</i>	
DESIGNED: _____	DRAWN: <i>J</i>	CHECKED: <i>James A. Lowell</i>	
CHECKED: <i>JDB</i>	DATE: <i>11-82</i>	PROJECT NUMBER: <i>K-78153</i>	
PROJECT NUMBER: <i>K-78153</i>		SHEET: <i>25</i> OF <i>50</i>	



CITY FLOAT LAYOUT
1" = 20'



ELEVATION



PLAN

EXISTING CONNECTION
1/2" = 1'-0"

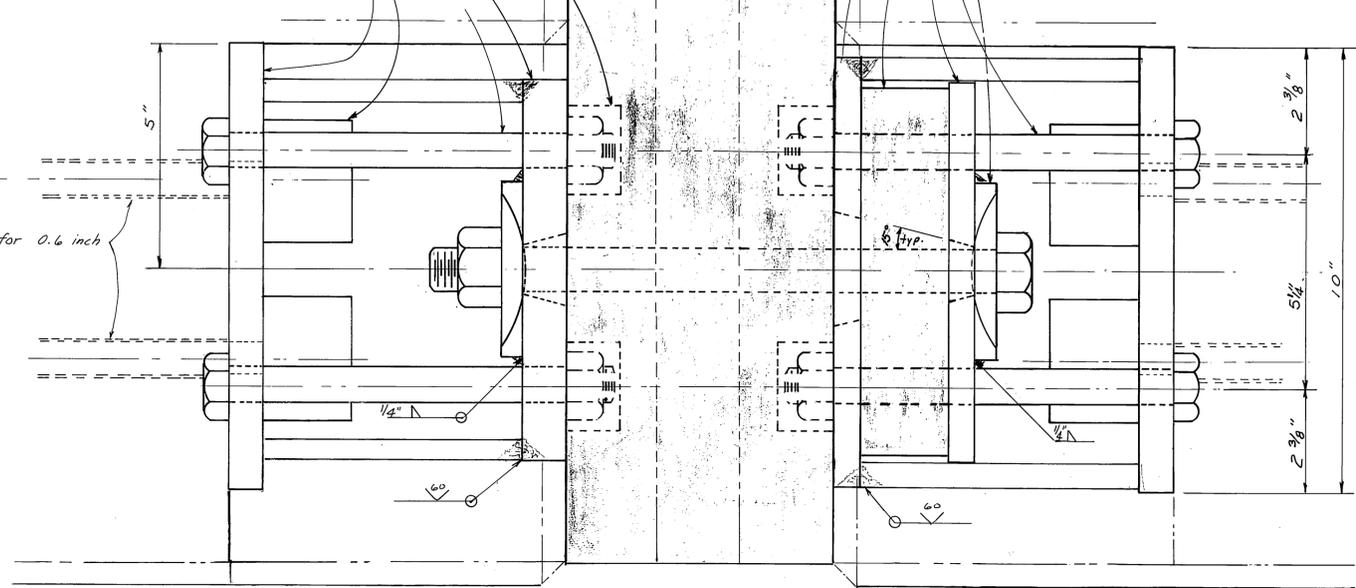
AS-BUILT
Date: 12-20-81 DIM for M.H.
Division of Harbor Design and Construction

<p>STAMP</p>	DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION Bar Harbor, Ketchikan Alaska	
EXISTING CITY FLOAT LAYOUT & DETAILS		
SCALE: <i>As Noted</i> DESIGNED: _____ CHECKED: _____	SURVEYED: _____ DRAWN: <i>TS</i> DATE: <i>9-82</i>	APPROVED: <i>Robert P. Beck</i> <i>James A. Lowell</i>
PROJECT NUMBER: <i>K-78153</i>	SHEET: <i>26</i> OF <i>50</i>	

Counterbored rubber 2" dia x 1 1/4" deep to receive nut & bolt
 8 1/2" x 9 3/4" x 1" plate
 3/4" x 8 1/2" A-325 bolt
 Steel tendon anchorage
 10" x 10" x 3/4" bearing plate

9 3/4" x 9 3/4" x 5/8" plate
 2 x 4 x 8 1/4" rubber
 8 1/2" x 9 1/4" x 5/8" plate
 3/4" x 8 1/2" A-325 bolt
 Radiused washer & plate see det. this sheet

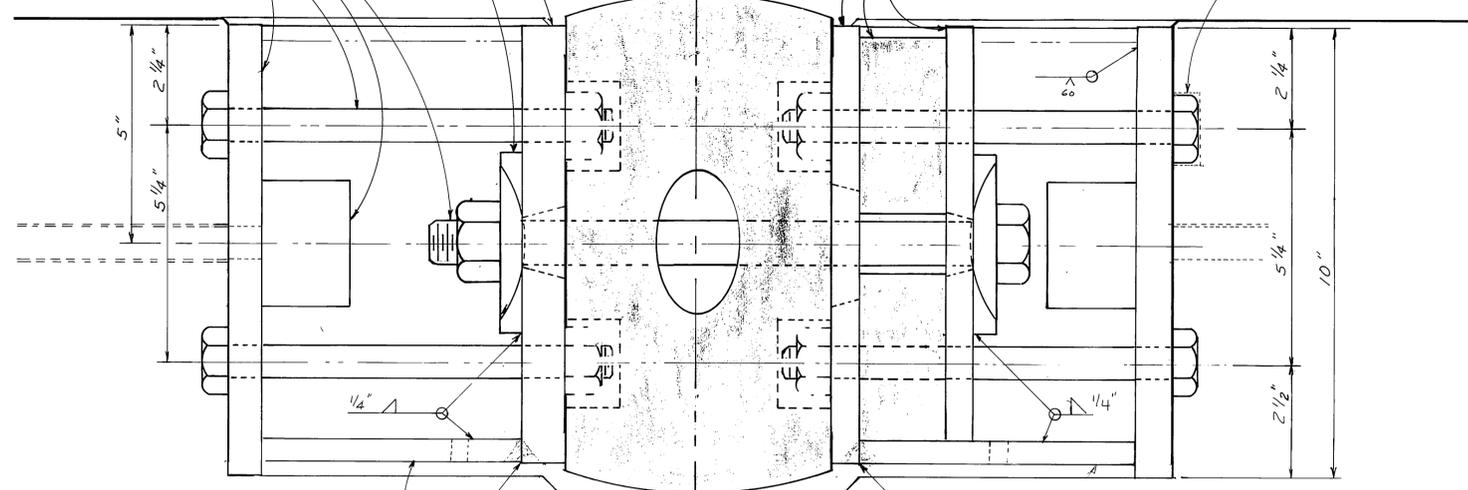
3/4" PVC for 0.6 inch steel tendon



Plan
half size

9 3/4" x 8 1/2" x 1" plate
 Radiused washer & plate, see det. this sht.
 1" x 12 1/2" A-325 bolt
 Steel tendon anchorage
 3/4" x 8 1/2" A-325 bolt
 10" x 10" x 3/4" bearing plate

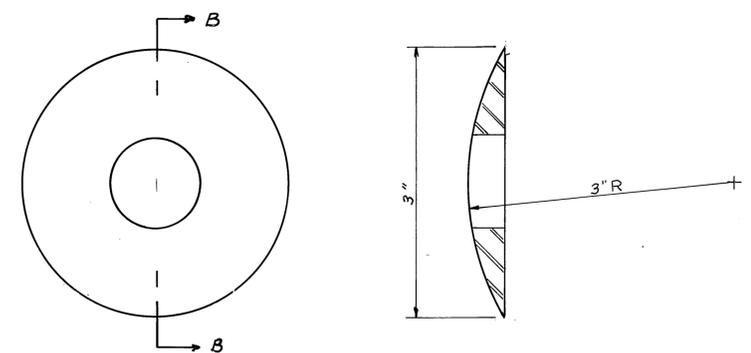
10" x 7" x 3" bare x 12'-0" long rubber
 9 3/4" x 9 3/4" x 5/8" plate
 2 x 4 x 8 1/4" rubber
 9 1/4" x 8 1/2" x 5/8" plate
 recess to accommodate bolt head or cast in place, plate and bolts



Elevation
half size

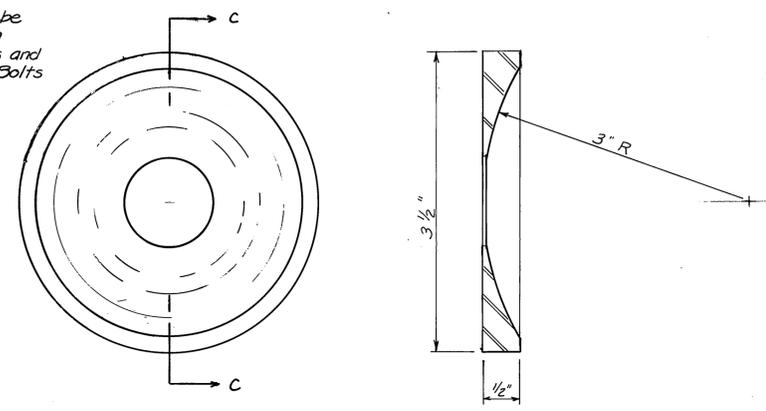
1/2" plate x 5 3/4" wide welded to plate on three sides.
 3/8" weep hole in bottom plate. Provide 1/8" thick lug pattern steel plate on top for cover

1/2" x 6 1/4" wide plate welded to plate on three sides.
 3/8" weep hole in bottom plate

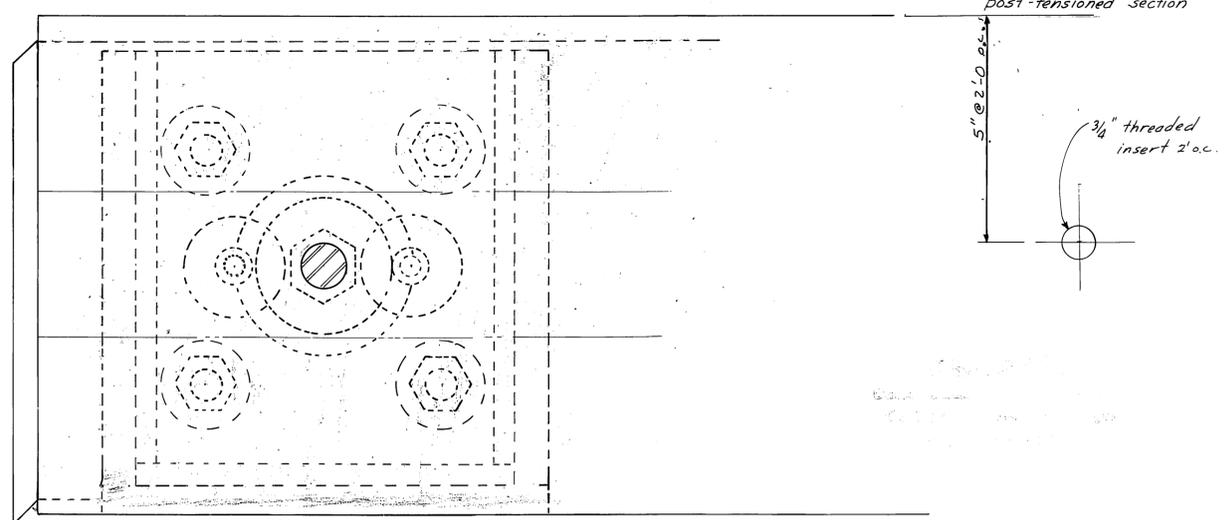


Radius Washer
Full Size

Note: All hardware shown to be removed except tendon anchors, bearing plates and 3/4" x 8 1/2" A-325 bolts. Bolts to be cut back 2 1/2".



Radius Bearing Plate
Full Size

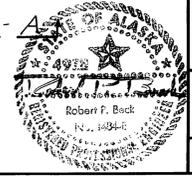


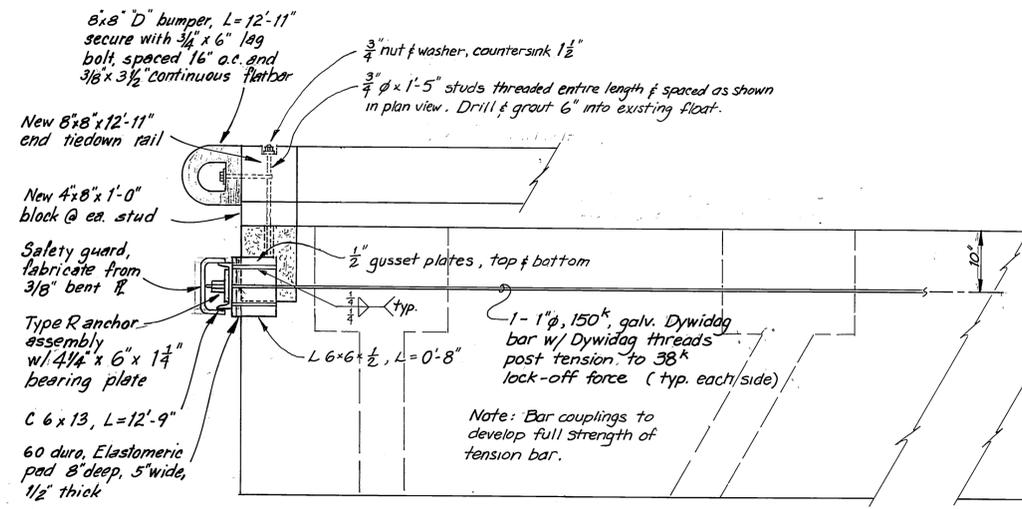
Section A-A
half size

3/4" inserts @ 2'-0" c. to attach 7'10" x 12' rubber to each end of middle post-tensioned section

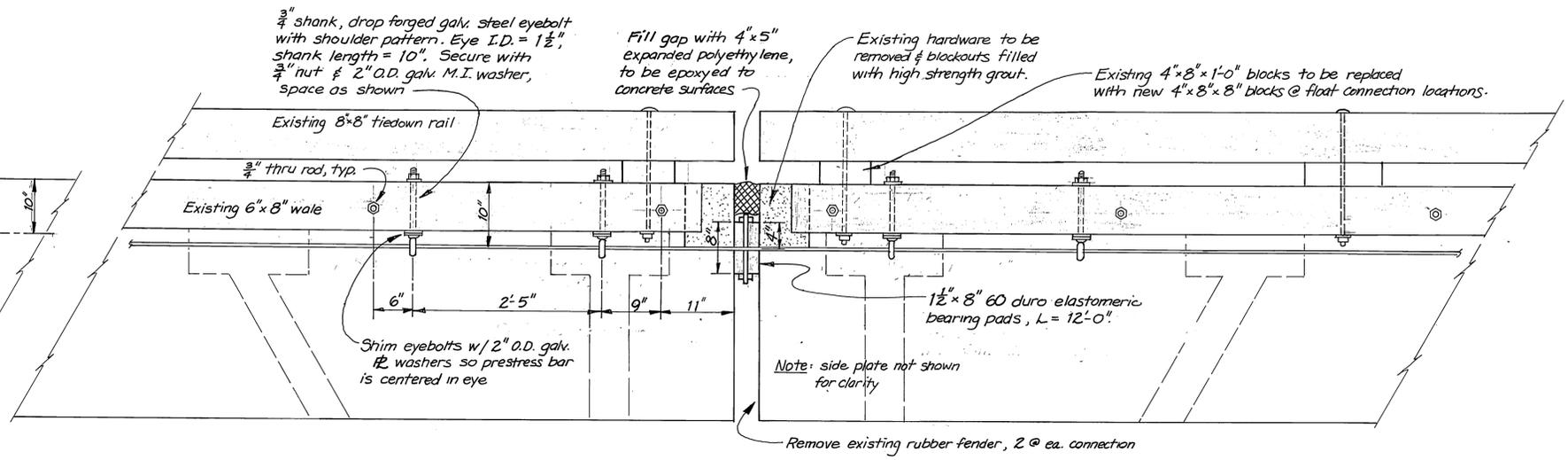
3/4" threaded insert 2'-0" c.

DO NOT SCALE THIS DRAWING - USE DIMENSIONS		
STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER AND HARBORS		
Bar Harbor, Ketchikan		Alaska
EXISTING CITY FLOAT CONNECTION DETAILS		
SCALE: As noted	SURVEYED:	APPROVED:
DESIGNED: HM	DRAWN: HM	Robert P. Beck
CHECKED: CC	DATE: 11-82	James A. Lowell
PROJECT NUMBER: K-78153	SHEET 27 OF 50	

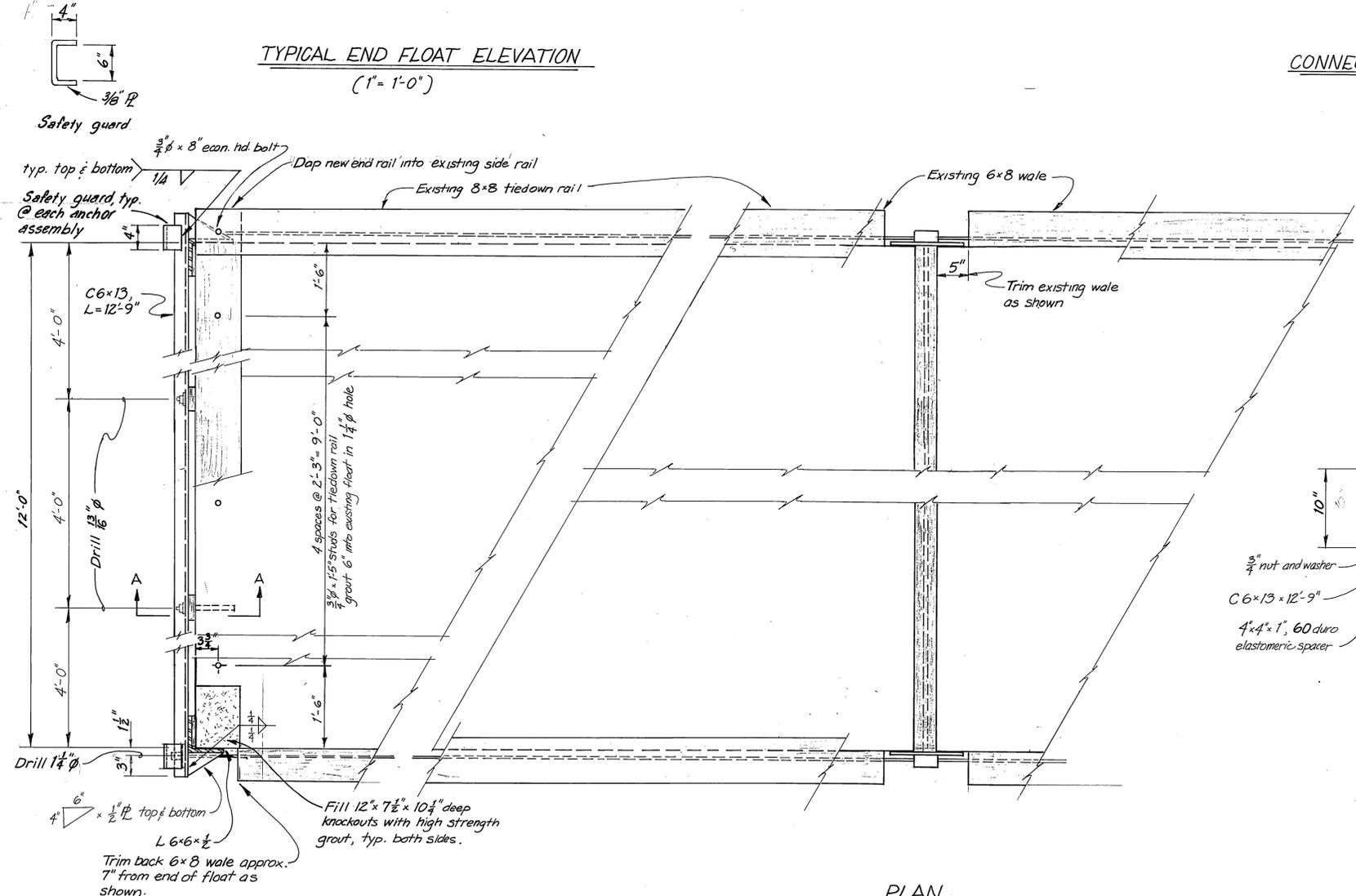




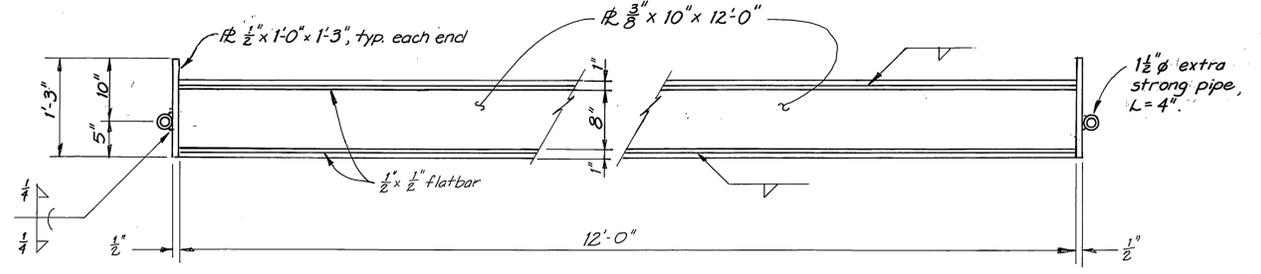
TYPICAL END FLOAT ELEVATION
(1" = 1'-0")



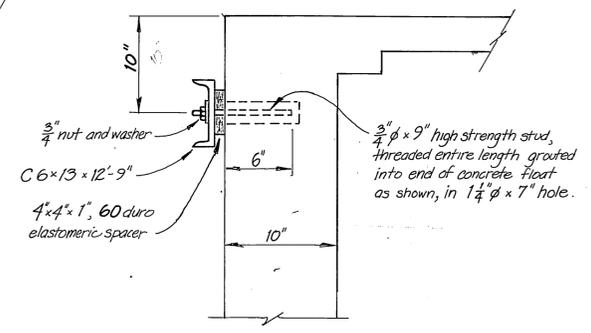
CONNECTION BETWEEN FLOAT UNITS
Typical, 2 connections



TYPICAL END FLOAT PLAN
(1" = 1'-0")



CONNECTION PLATE
2 Req'd.



ELEVATION A-A
(1 1/2" = 1'-0")

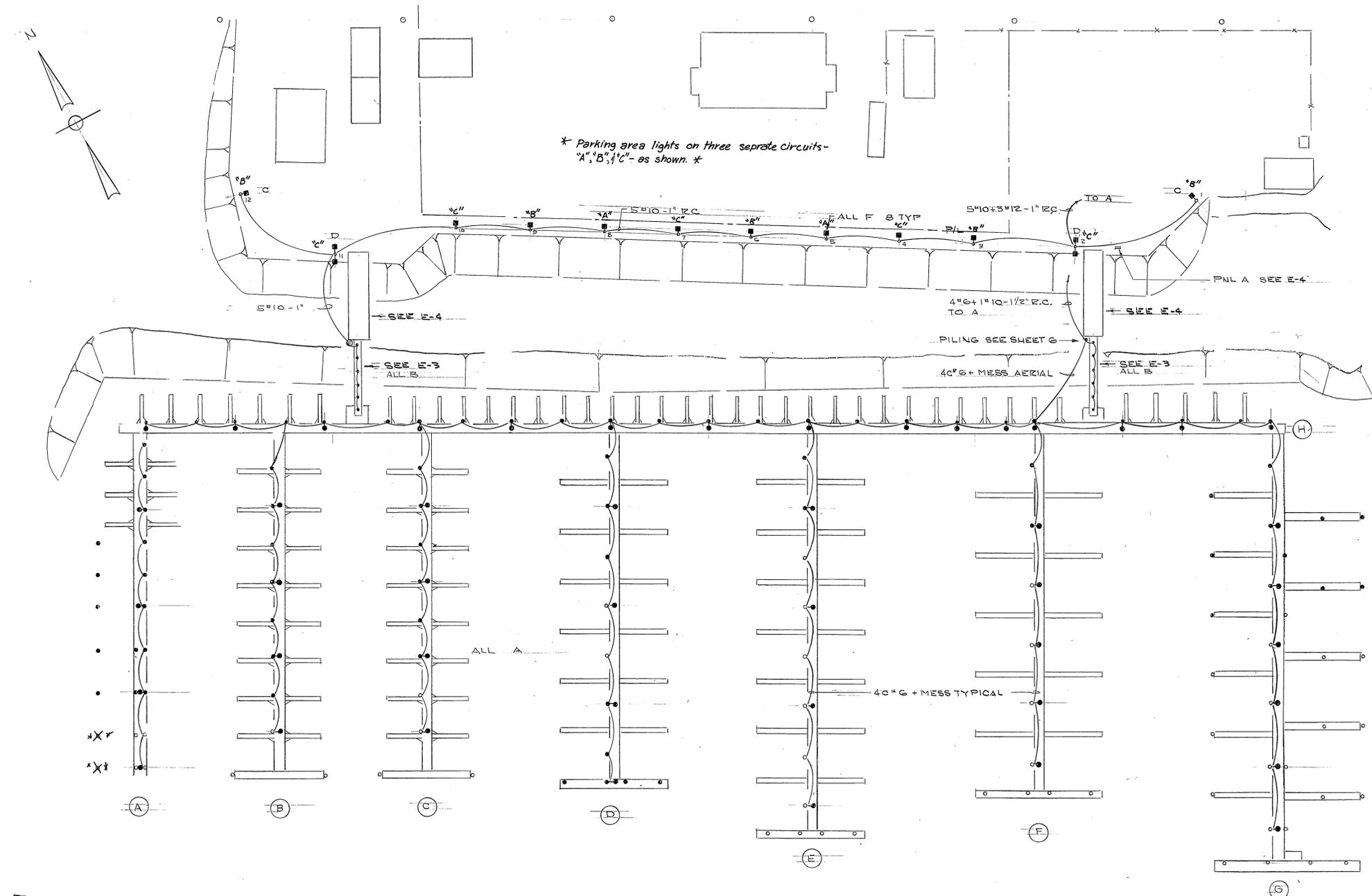
Note: All steel hardware, steel fittings, and prestress bars to be galvanized.

PLAN
CONNECTION BETWEEN FLOAT UNITS
(1" = 1'-0")

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
		CITY FLOAT REPAIRS	
SCALE: As Noted	DESIGNED: BS	SURVEYED: BS	APPROVED: Robert P. Beck
CHECKED: JDB	DATE: 12-82		James A. Lowell
PROJECT NUMBER: K 78153		SHEET: 28	OF 50

FIXTURE SCHEDULE			
TYPE	MFG	W	REMARKS
A	HOLOPHANE 216-C-HPS-120	100 HPS	SEE DETAIL E-3
B	KENALL 5636 & 9050	100	" " " "
C	MCPHILBEN 17B64-1D-120	250 HPS	" " " "
D	17B64-2D-120	2-250HPS	" " " "
E	KENALL 4400-CW-3800A-120	2-22	CEILING
F	MCPHILBEN 7A61-D-120	100 HPS	SEE DETAIL E-3

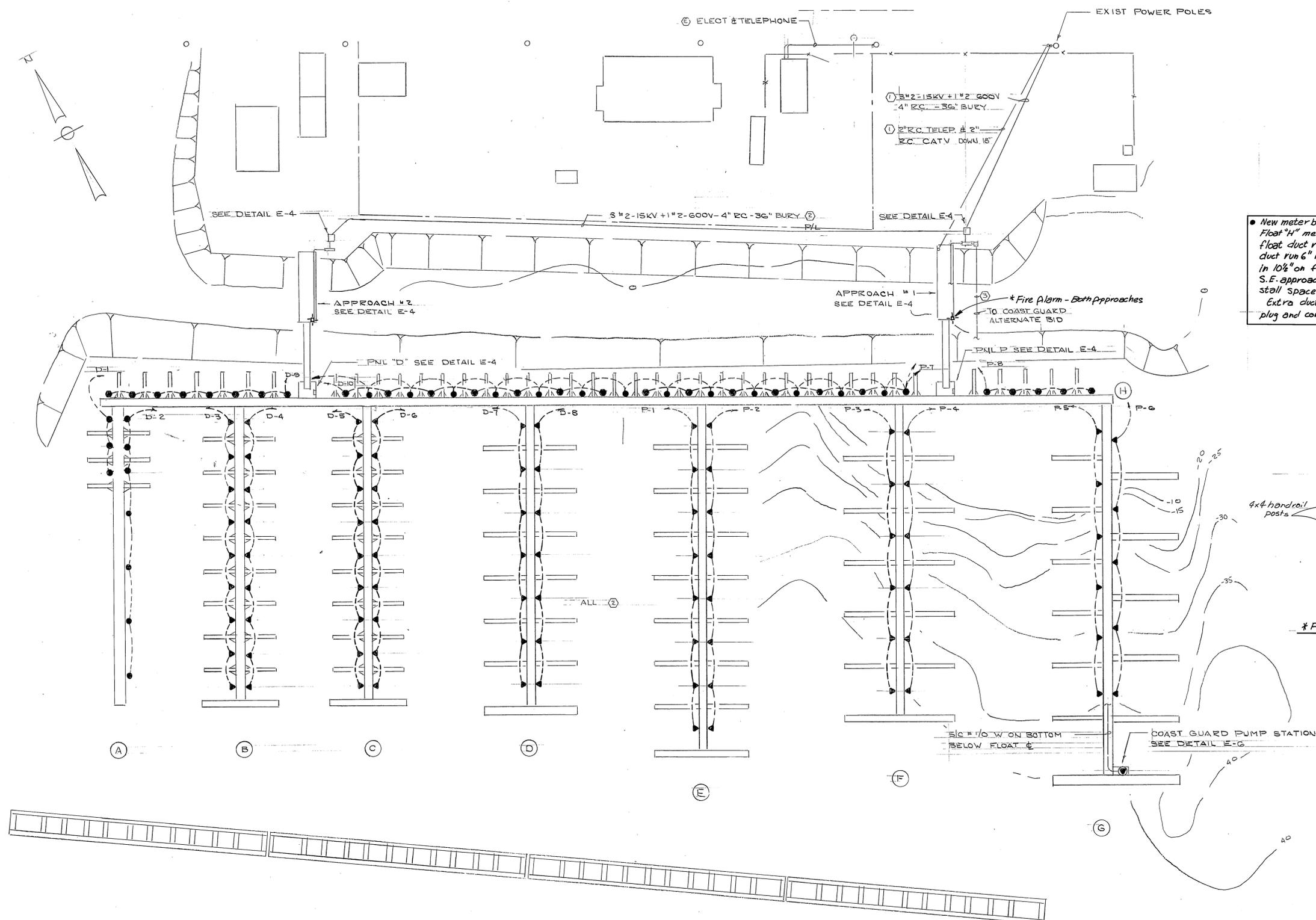
- SYMBOLS
- (M) METER
 - (PE) PHOTO ELECTRIC
 - (J) JUNCTION
 - (MOT) MOTOR
 - (S) SWITCH 48"
 - (R) RECEPTACLE
 - (T) THERMOSTAT
 - (SO) SPECIAL OUTLET
 - (V) " " "
 - (W) WIRING OVHD OR IN CONDUIT
 - (TREN) " " IN TRENCH
 - (BOT) " " ON BOTTOM
 - (LF) LIGHT FIXTURE
 - (MOT) MOTOR SIZE NOTED
 - (MS) MAGNETIC STARTER WITH PUMP INST BY ELEC.
 - (EX) EXISTING
 - HQA HAND OFF AUTOMATIC
 - S.W SALT WATER
 - (1) LIGHTING BID 501 (1)
 - (2) POWER " 501 (2)
 - (3) US COAST GUARD BID 501 (3)



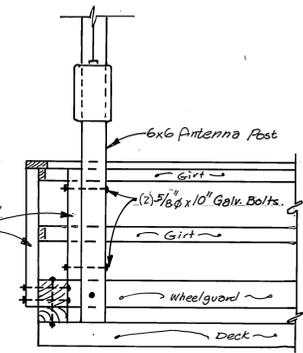
NOTE SEE SHEET 2 FOR TIMBER PILING VS STEEL PILING

① LIGHTING PLAN
1" = 50'

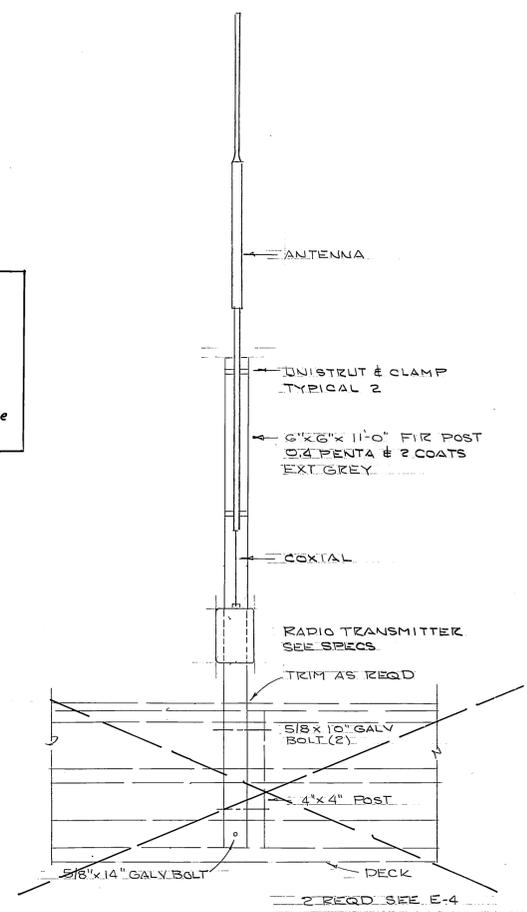
	DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES DIVISION OF HARBOR DESIGN AND CONSTRUCTION	
	Bar Harbor, Ketchikan Alaska	
	LIGHTING PLAN	
SCALE NOTED	SURVEYED	APPROVED Robert P. Beck
DESIGNED LPL	DRAWN	James A. Lowell
CHECKED	DATE 12-82	
PROJECT NUMBER K-78153	SHEET 29 OF 50	



• New meter base locations.
 Float "H" meter bases had to be moved to alternate float duct run 10 1/2" in from edge of float in lieu of duct run 6" in, due to supplier error in putting ducts in 10 1/2" on first meter base location N.W. of the S.E. approach; this moved all meter base locations one stall space to the S.E.
 Extra ducts 6" in not used, protected w/polystyrene plug and covered w/grout patch.



* Fire Alarm As Built *
 1/2" = 1'-0"



⊙ FIRE ALARM
 1/2" = 1'-0"

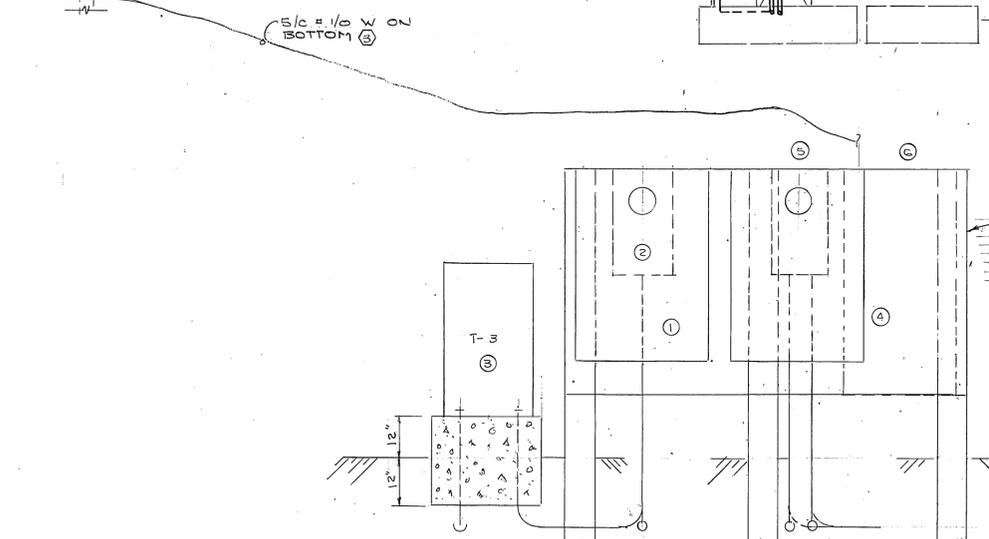
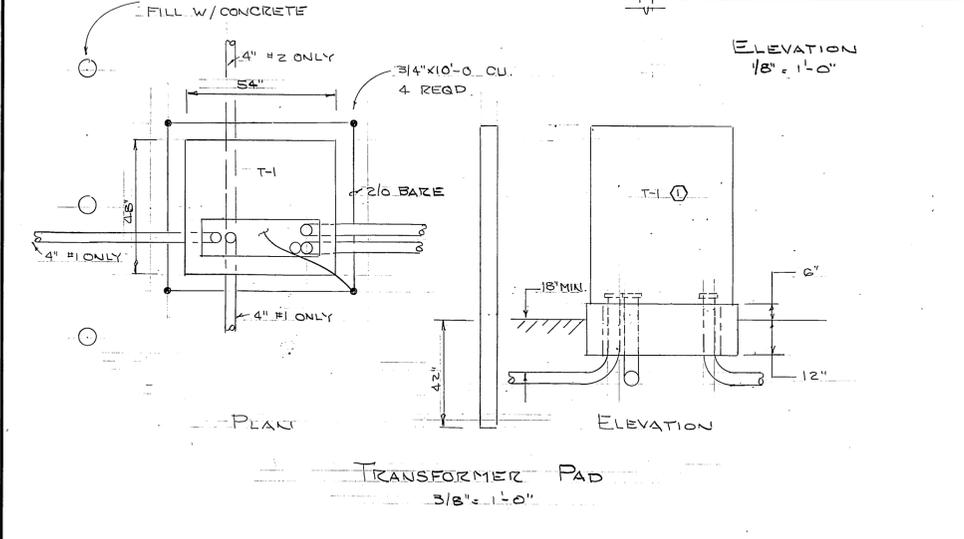
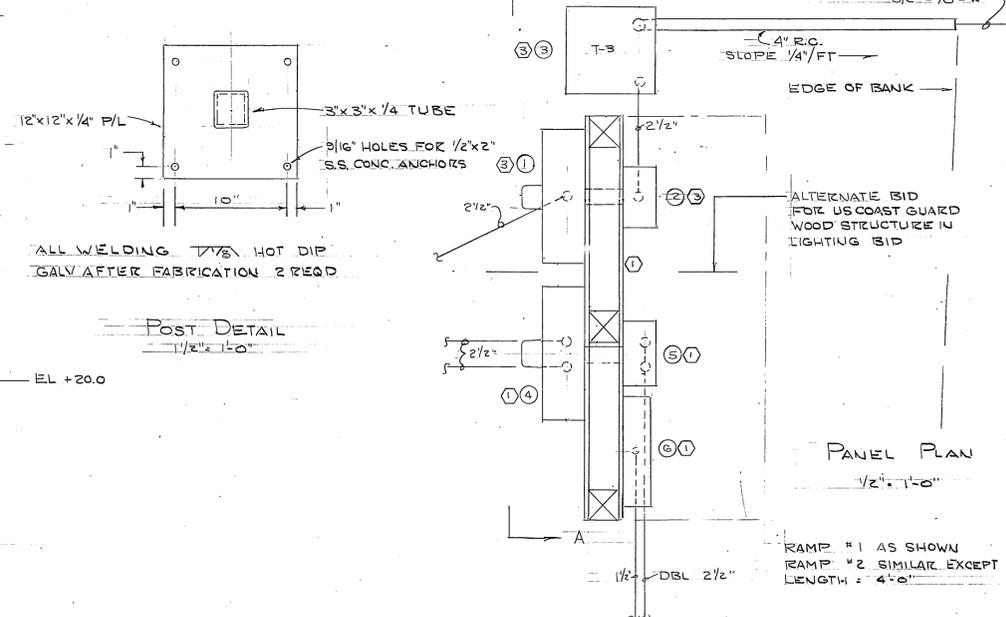
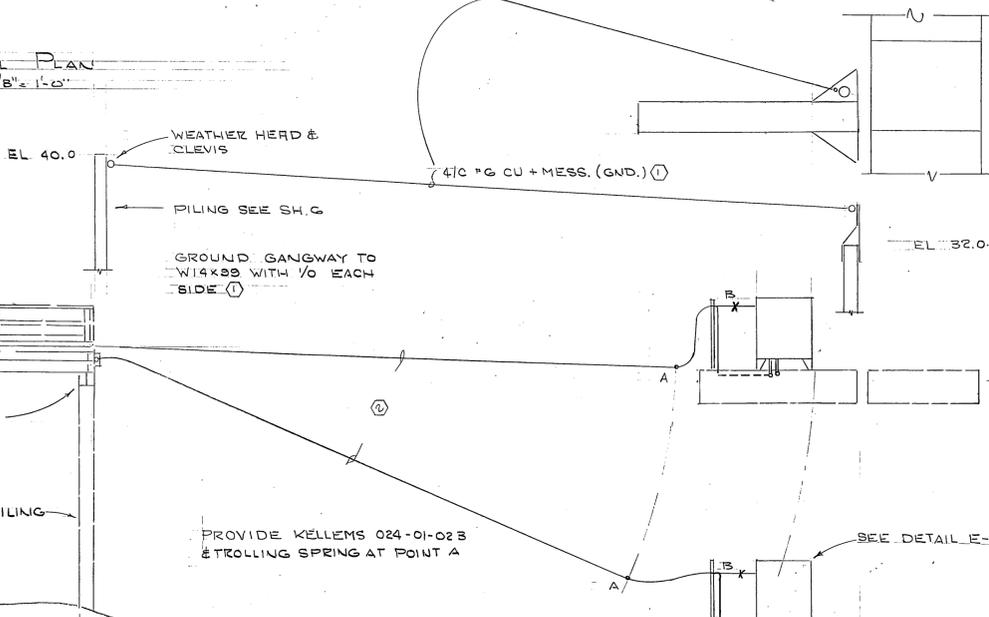
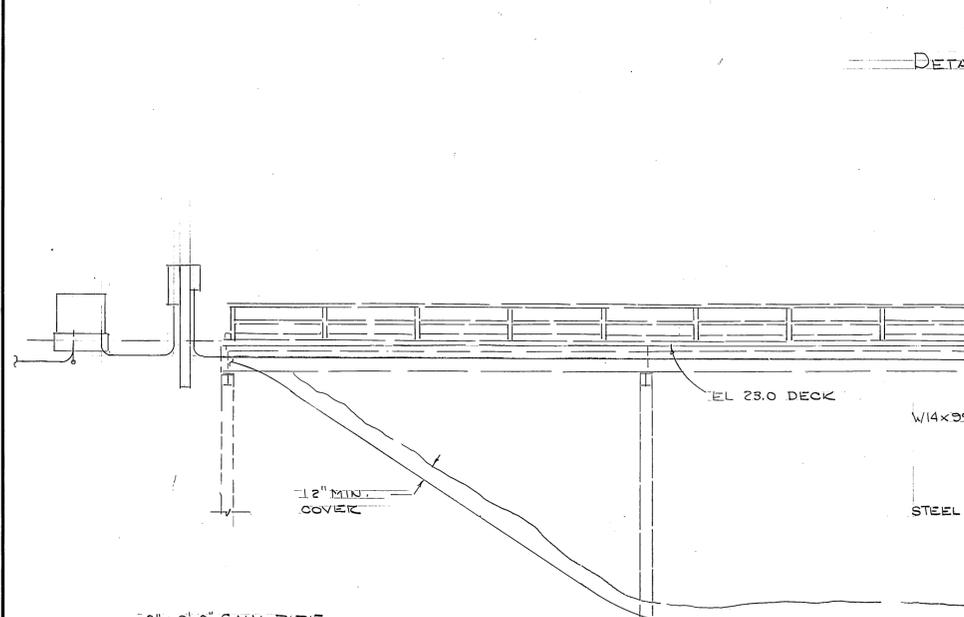
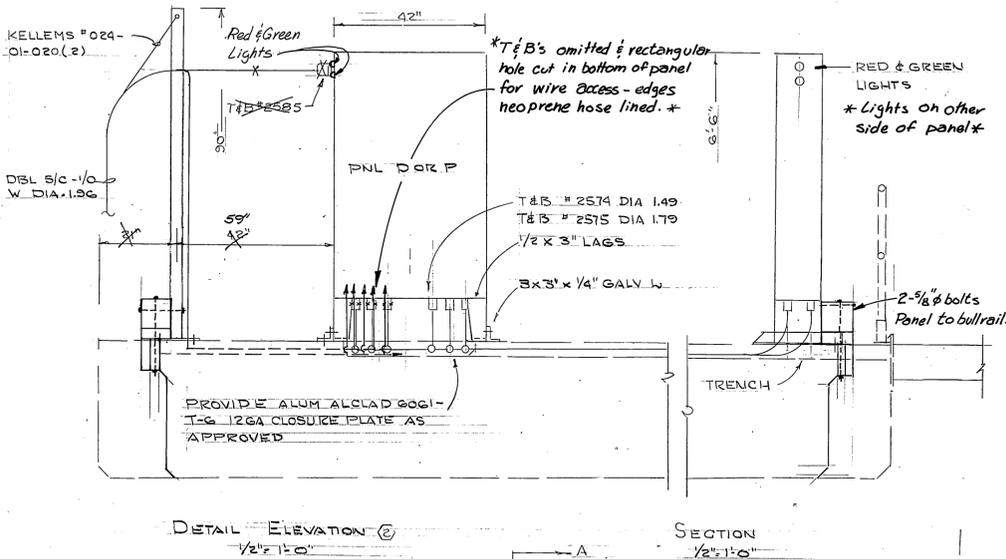
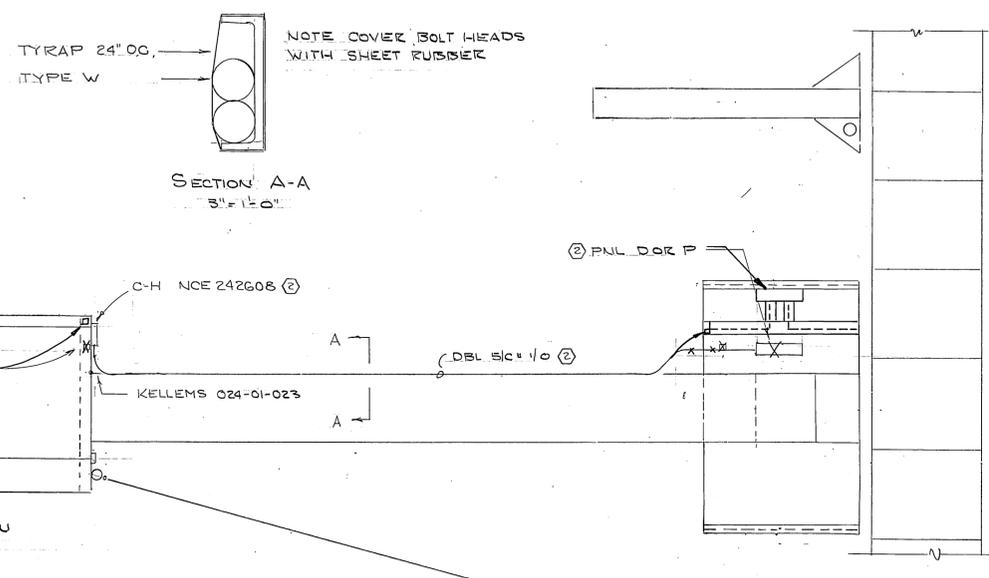
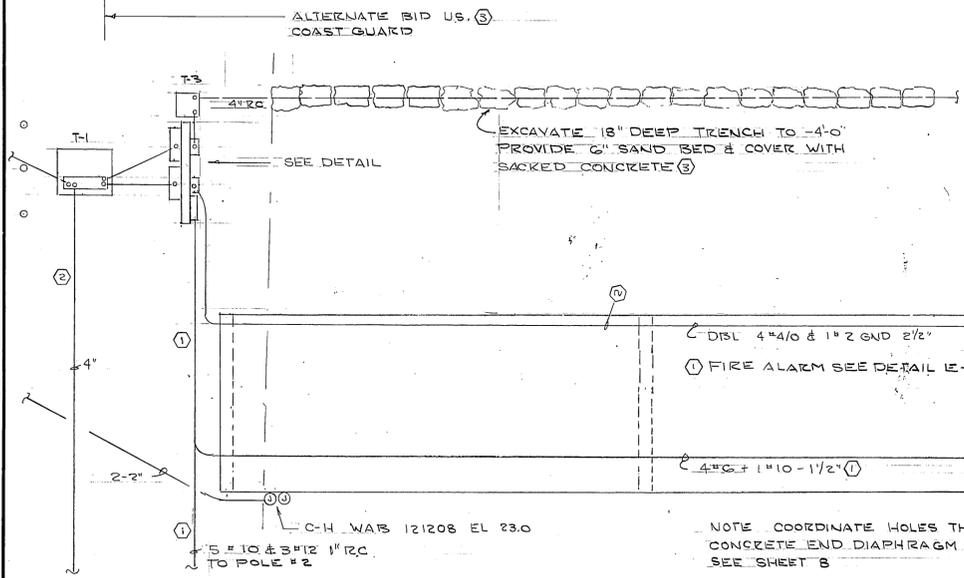
POWER PLAN
 1" = 50'

NOTE REFER TO SHEET 2 FOR PILING LOCATIONS

E-2

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
POWER PLAN			
SCALE: NOTED	SURVEYED	APPROVED	Robert P. Beck
DESIGNED: LPL	DRAWN	James A. Lowell	
CHECKED	DATE: 12-82		
PROJECT NUMBER: K-78153	SHEET 30 OF 50		

* Both main panels moved to outside east edge of gangway floats- Contractor got float section switched on assembly, putting the double trench on outside of float instead of inside next to gangway - Incoming wires for panels now enter from beneath instead of at the top - See Sht. 50 for additional layout. *



EQUIPMENT SCHEDULE				
NO	ITEM	RAMP 1	RAMP 2	REMARKS
1	01T CIRCLE AW U122013			W/ 3 250/5 CT & METER
2	250/3 SQD LA 400 DX			
3	T-3 TIERNEY AGL375-ST-20H-COT			
4	01T CIRCLE AW U122013			W/ 3 400/5 CT & METER
5	400/3 SQD LA 400 DX			
6	PNL A SEE SPECS			W/ METER

E-4

STAMP

DO NOT SCALE THIS DRAWING - USE DIMENSIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HARBOR DESIGN AND CONSTRUCTION

Bar Harbor, Ketchikan Alaska

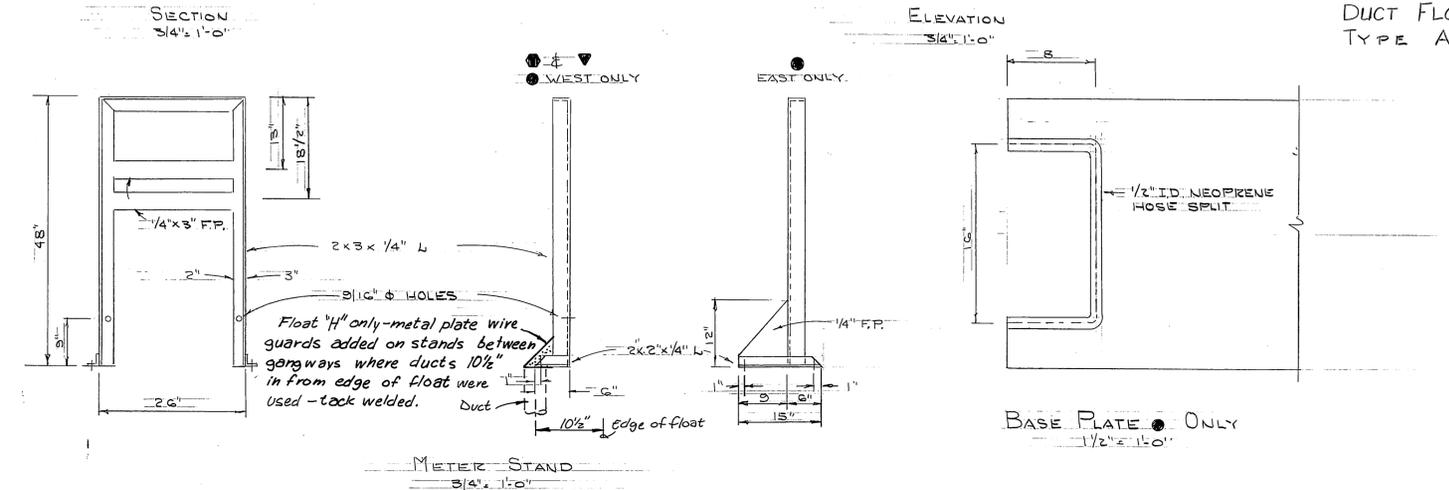
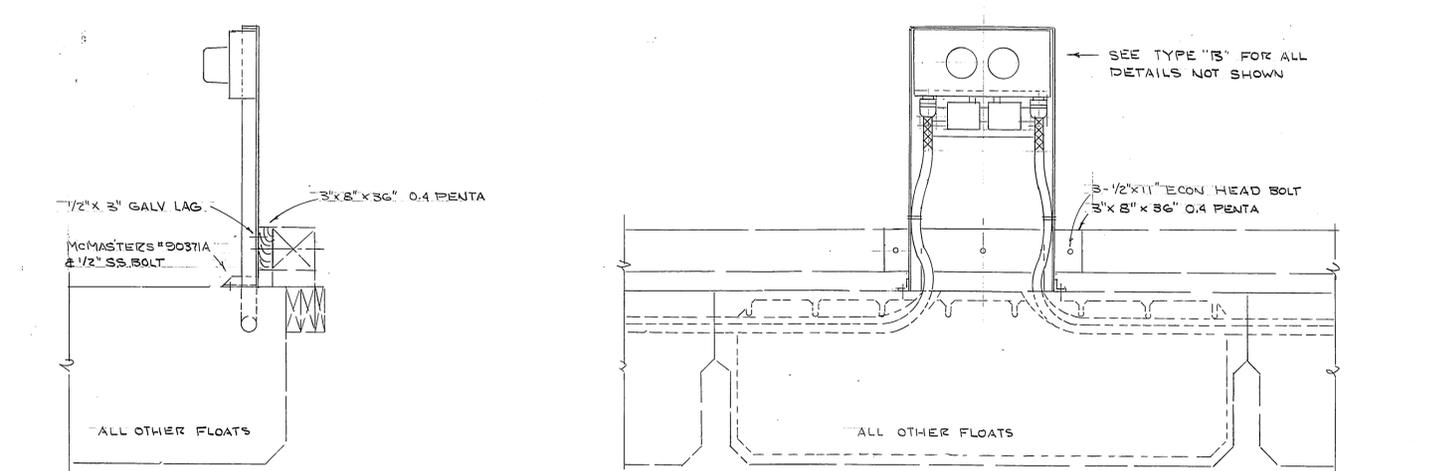
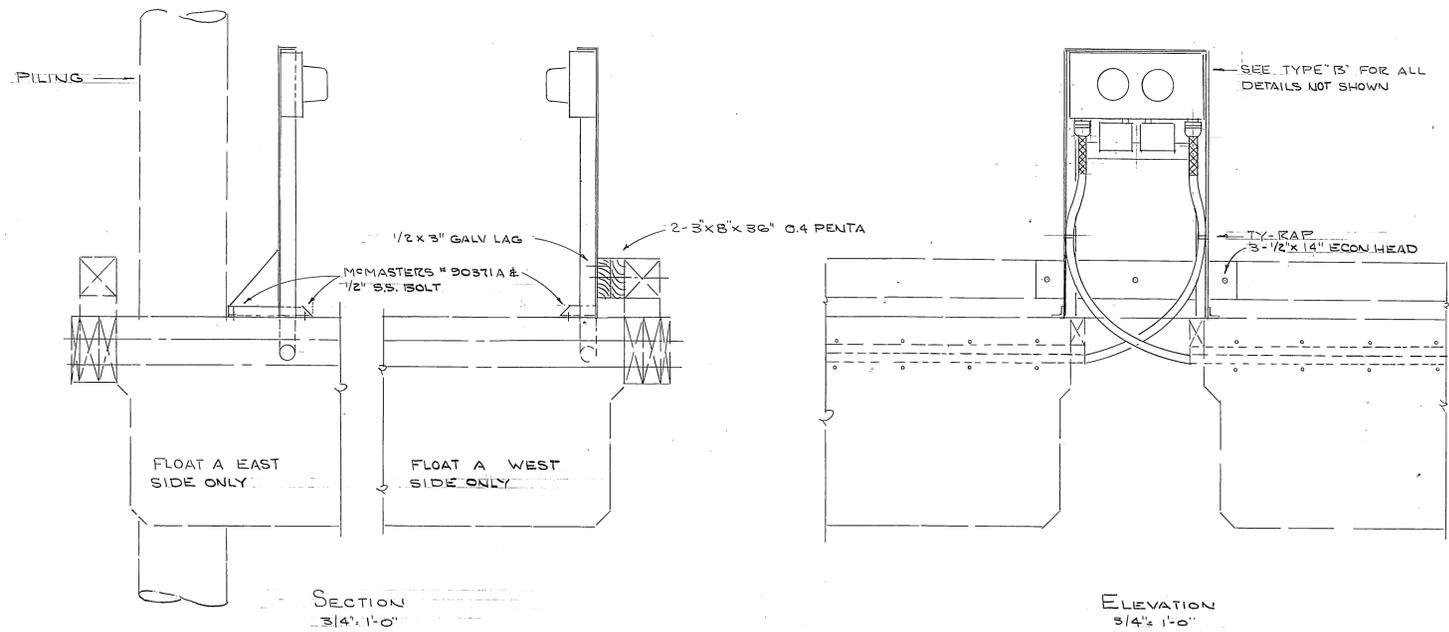
ELECTRICAL DETAILS

SCALE NOTED DESIGNED: LPL CHECKED: DRAWN: DATE: 12-82

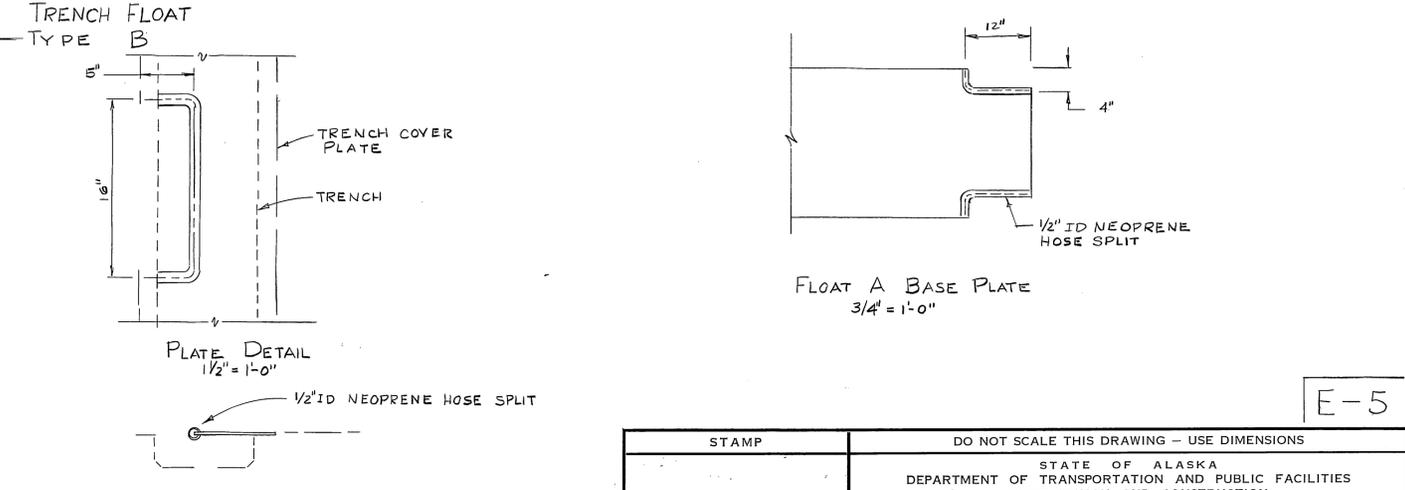
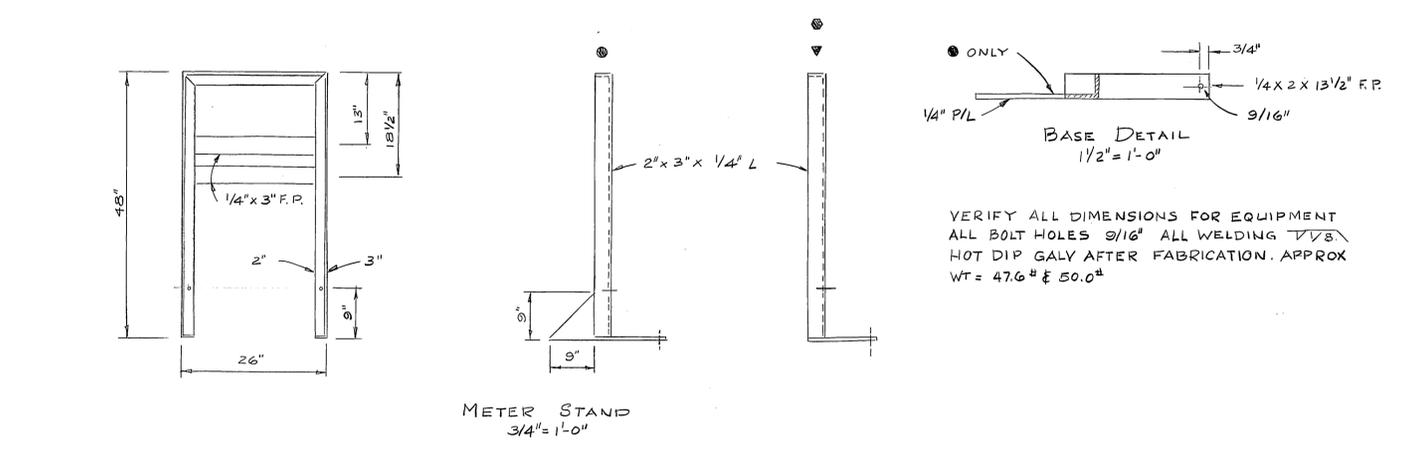
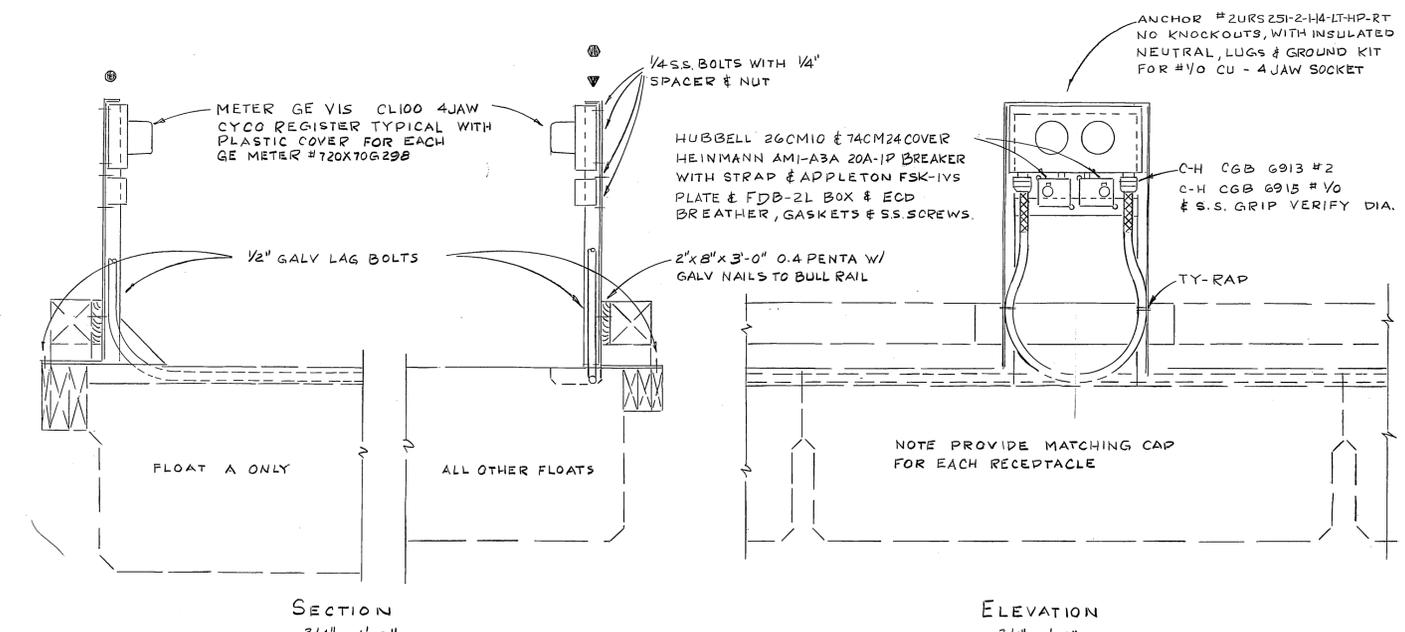
APPROVED: Robert P. Beck James A. Lowell

PROJECT NUMBER: K-78153 SHEET: 32 OF 50

STATE OF ALASKA
49th
Leonard P. Lowell
No. 553-E
REGISTERED PROFESSIONAL ENGINEER

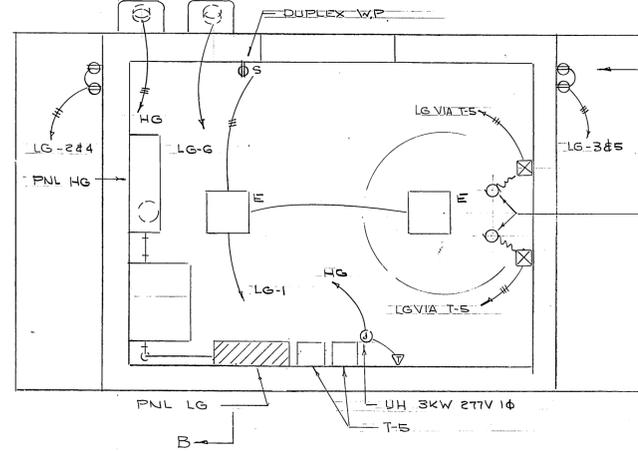
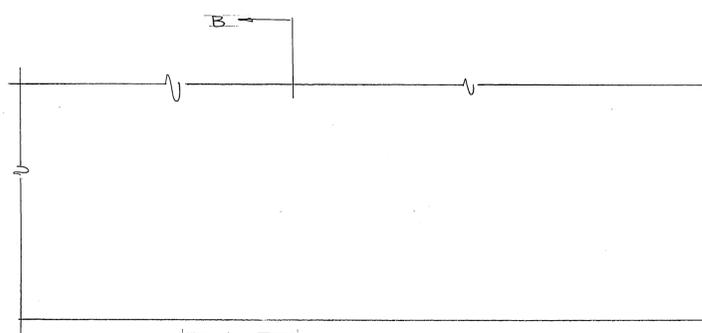


VERIFY ALL DIMENSION FOR EQUIPMENT
ALL BOLT HOLES 9/16\"/>

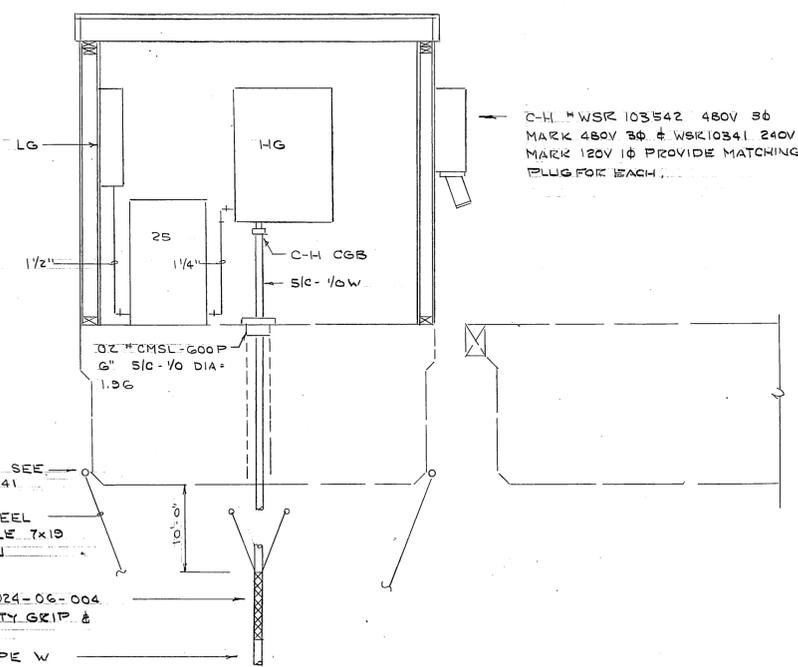


NOTE INTERNAL WIRING DIAGRAM WILL BE FURNISHED AFTER CONTRACT AWARD

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
		ELECTRICAL DETAILS	
SCALE NOTED	SURVEYED	APPROVED	Robert P. Beck
DESIGNED LPL	DRAWN	James A. Lowell	
CHECKED	DATE 12-82		
PROJECT NUMBER K-78153	SHEET 33		OF 50

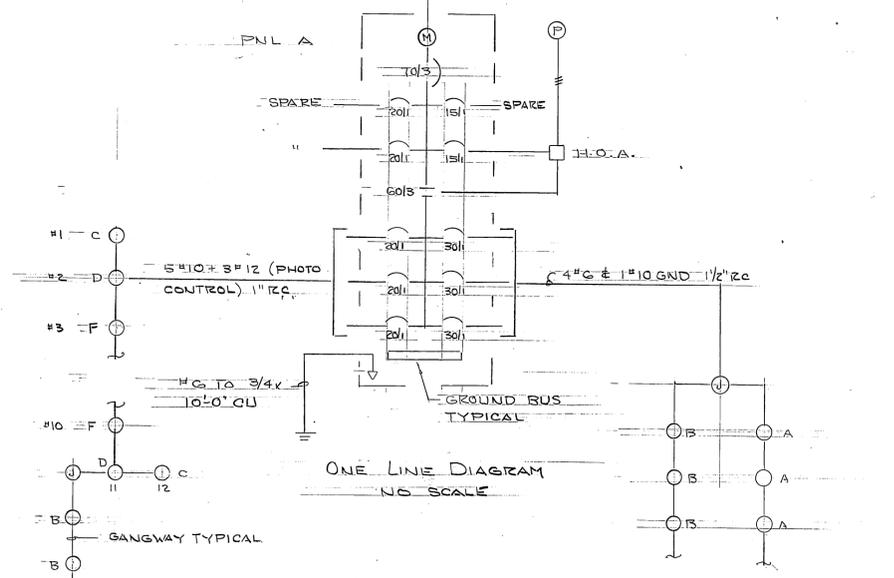
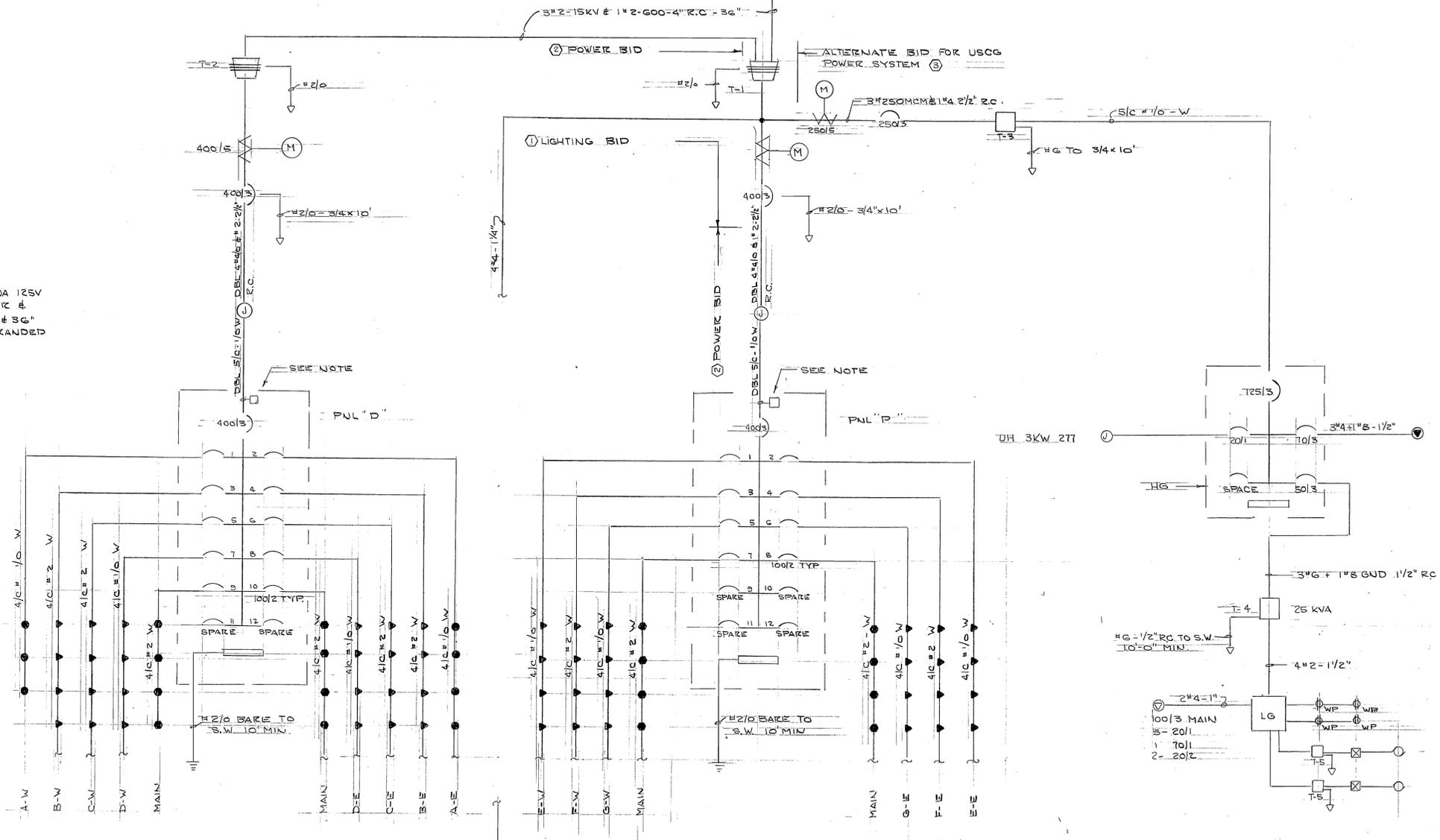


COAST GUARD PUMP STATION (3)
1/2" x 1'-0"



1/4" SS. CLIP SEE FLOAT SHEET 41
STAINLESS STEEL AIRCRAFT CABLE T-10 1/4" 6400 MIN
KELLEMS # 024-06-004 SS HEAVY DUTY GRIP & SS. CLAMPS
5/16" # 1/0 TYPE W

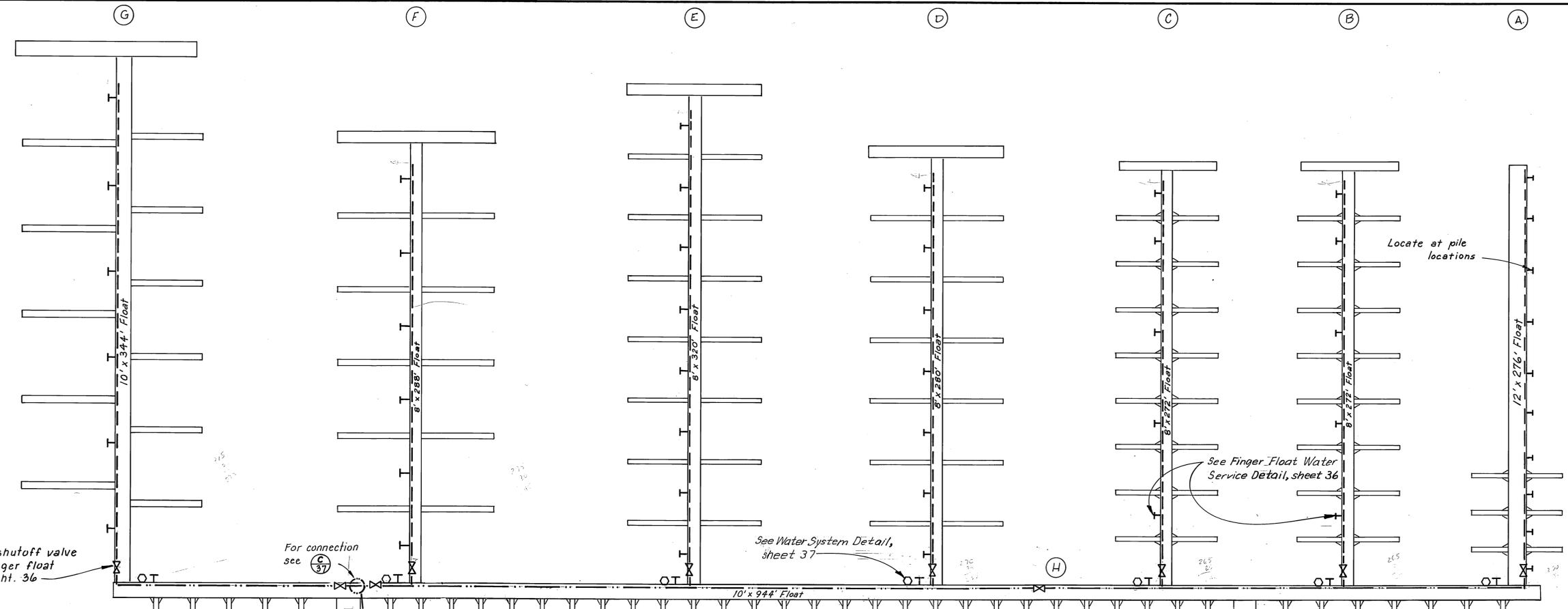
SECTION B-B
1/2" x 1'-0"



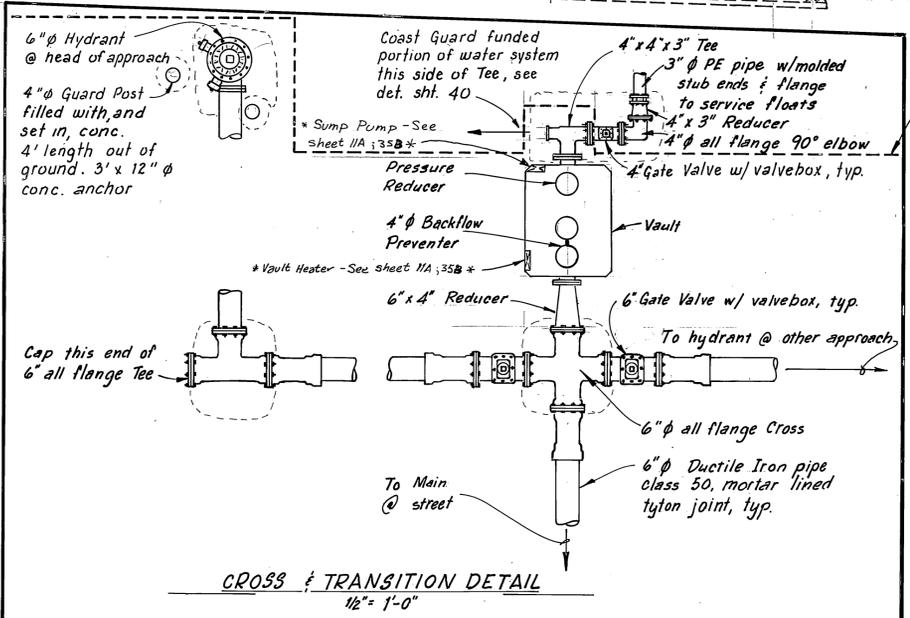
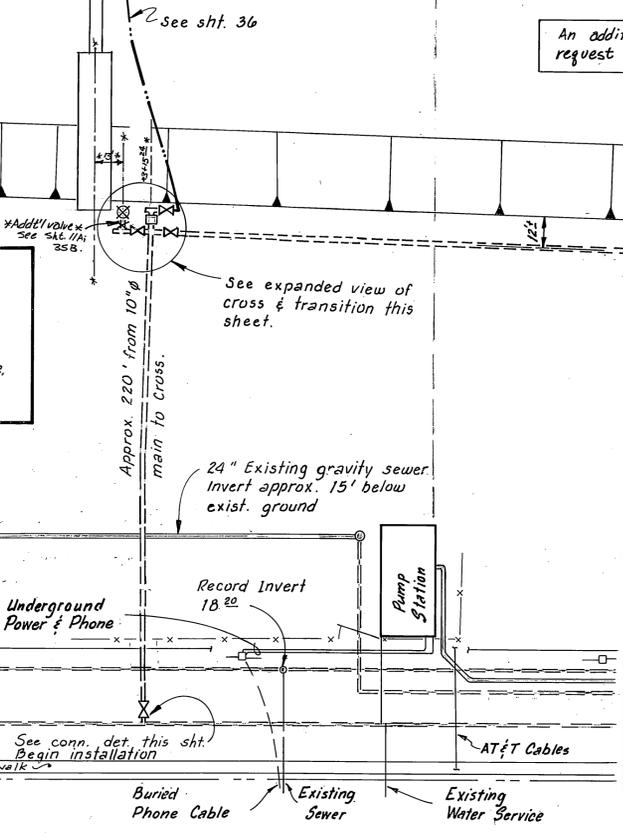
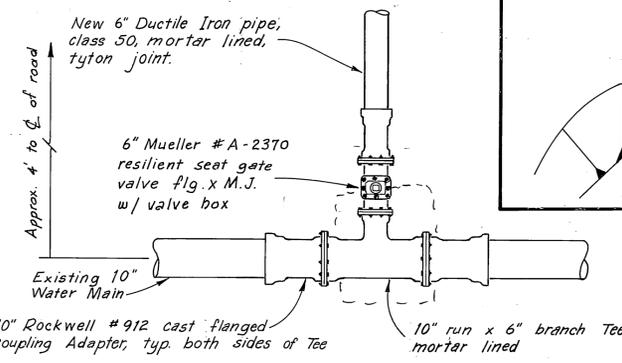
PANEL P&D TO INCLUDE S&D CLASS 8506 GROUND DETECTOR WITH GREEN LIGHT FOR NO FAULT & RED LIGHT FOR FAULT SET AT SA, CONNECT GROUND TO NEUTRAL AHEAD OF DETECTOR. PNLs TO INCLUDE MAIN CIRCUIT BREAKER WITH SHUNT TRIP BUT DO NOT CONNECT

T-3, T-4 & T-5 EPOXY ENCAPSULATED & COATED

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
DIAGRAMS & DETAILS			
SCALE NOTED	SURVEYED	APPROVED Robert P. Beck James A. Lowell	
DESIGNED LPL	DRAWN	DATE 12-82	
CHECKED	DATE	PROJECT NUMBER K-78153	
PROJECT NUMBER K-78153		SHEET 34 OF 50	

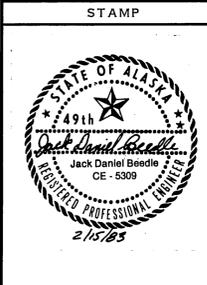


An additional 6" gate valve added at each fire hydrant at the request of the City P.U. - See sheet 11A, 35A

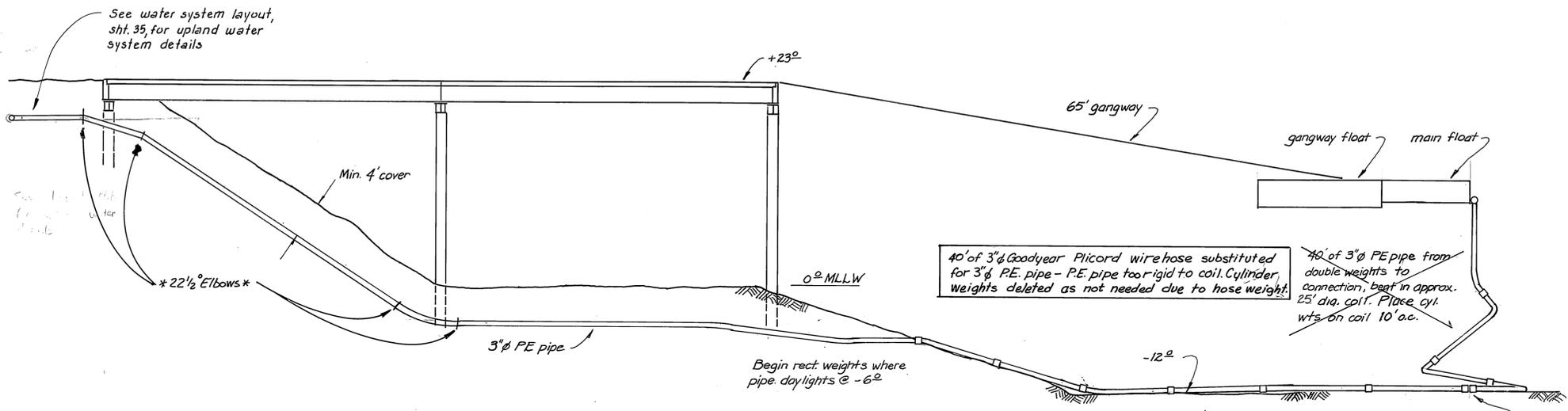


LEGEND		
□	Thrust Blocks	7 Req'd.
○	2" φ Hydrant	7 Req'd.
T	3/4" φ Water Service	54 Req'd.
---	3" φ Polyethylene Pipe or PolyGroove Pipe	1085' ±
---	2" φ Polyethylene Pipe or PolyGroove Pipe	35' ±
---	2" φ Polyethylene Pipe or PolyGroove Pipe	1745' ±
⊗	Valve (size varies)	225 ±
⊗	6" φ Hydrant	14 Req'd.
==	6" φ New Ductile Iron Pipe	860 ±

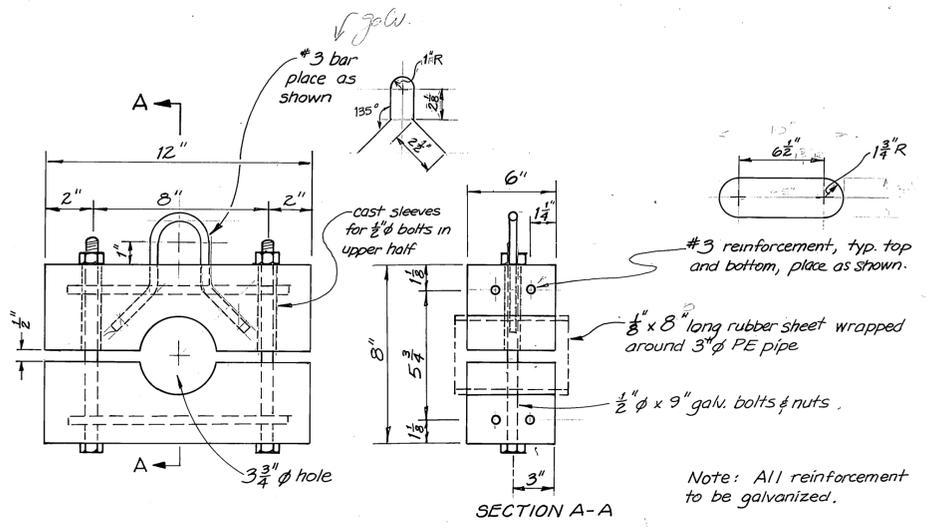
NOTE
The following shall be located on each gangway float:
1. One each wheeled 125# dry chemical fire extinguisher with a minimum rating of 40A: 240 B:C.



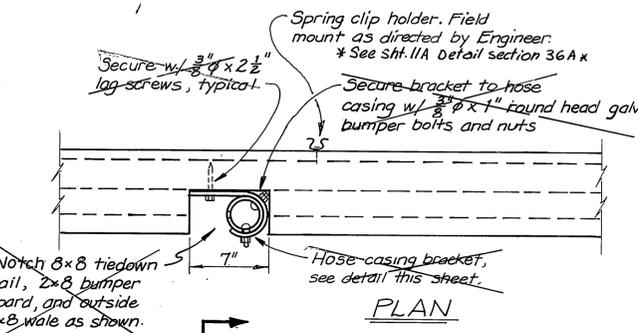
DO NOT SCALE THIS DRAWING - USE DIMENSIONS		
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION		
Bar Harbor, Ketchikan		Alaska
WATER SYSTEM LAYOUT		
SCALE 1" = 40'	SURVEYED	APPROVED
DESIGNED JDB	DRAWN Ts	Robert P. Beck
CHECKED JDB	DATE 12-82	James A. Lowell
PROJECT NUMBER K-78153	SHEET 35 OF 50	



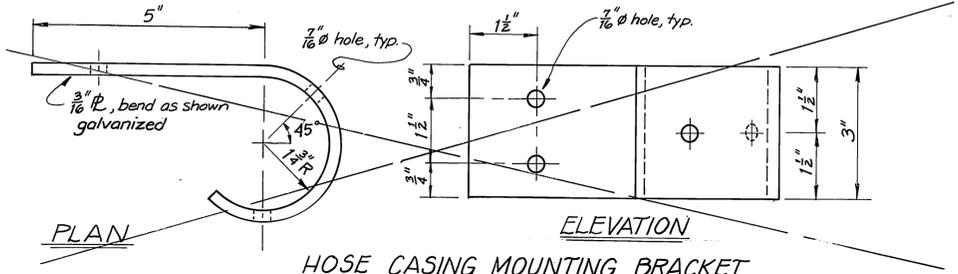
WATER MAIN ELEVATION
(1/8" = 1'-0")



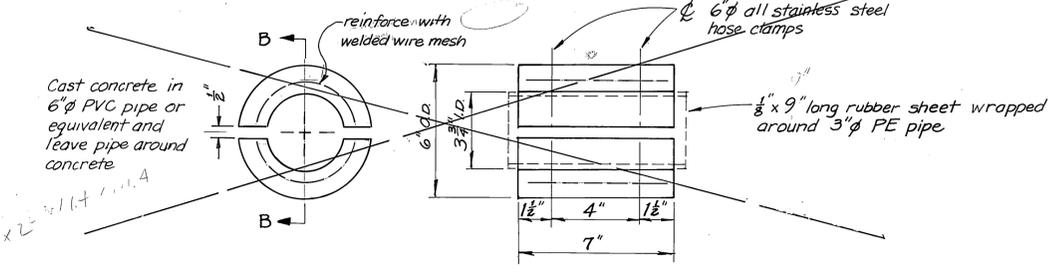
RECTANGULAR WEIGHT
(3" = 1'-0")



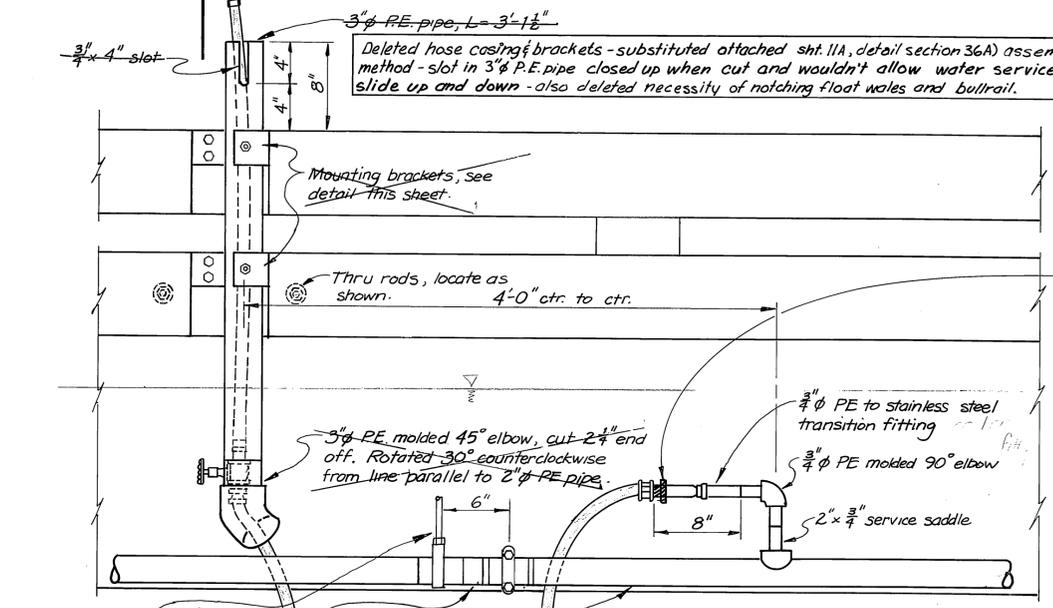
PLAN



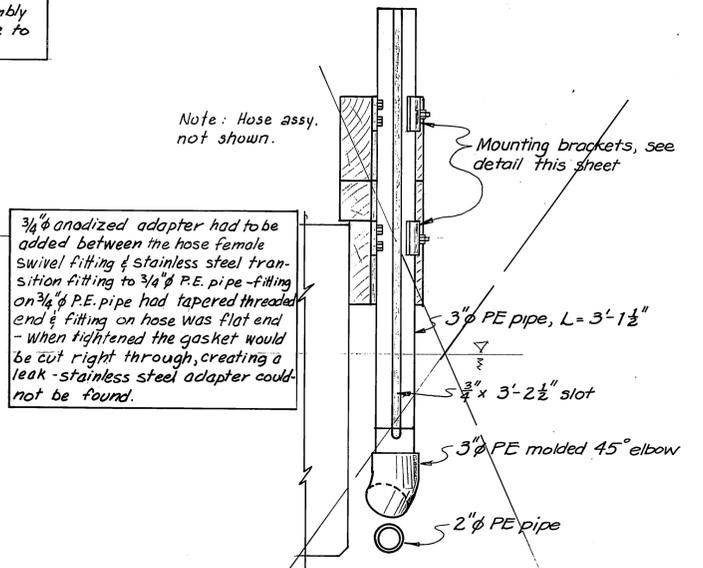
HOSE CASING MOUNTING BRACKET
(6" = 1'-0")



CYLINDRICAL WEIGHT
(3" = 1'-0")

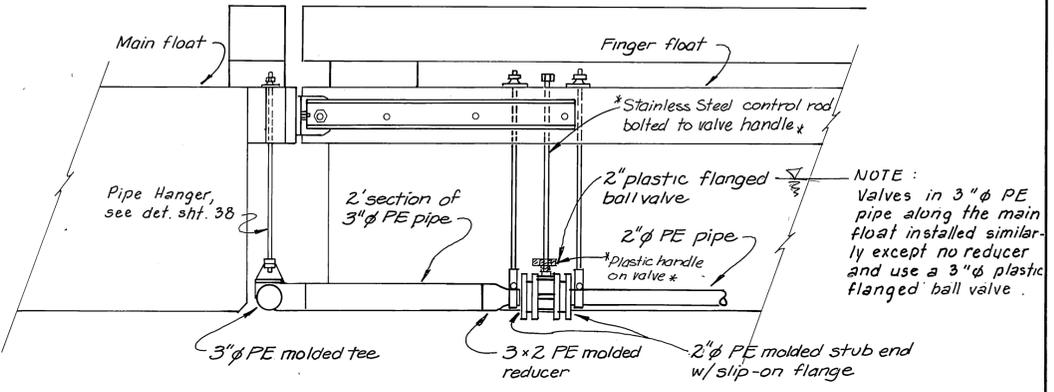


SIDE ELEVATION

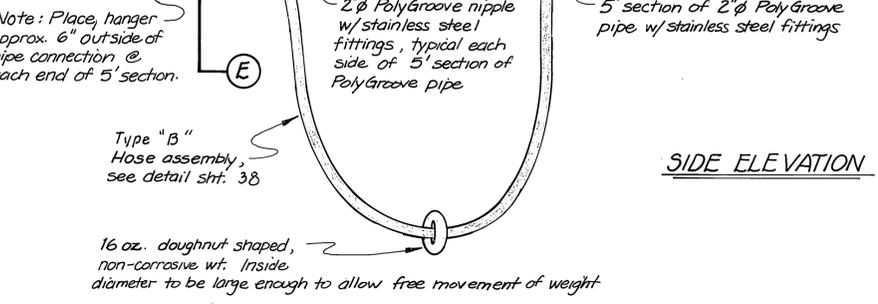


ELEVATION 'E'

FINGER FLOAT WATER SERVICE DETAILS
(1 1/2" = 1'-0")



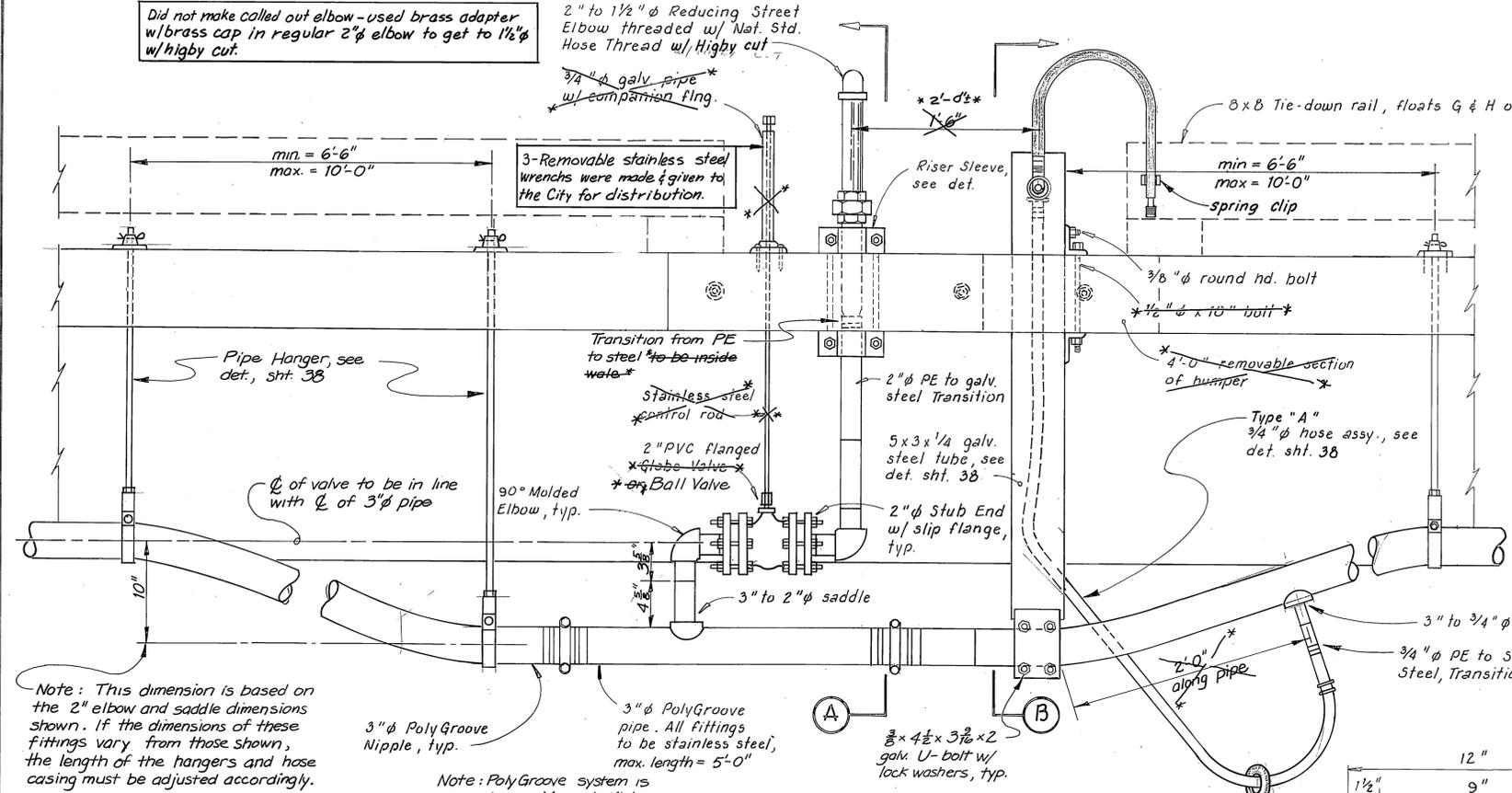
SHUTOFF VALVE @ FINGER FLOATS
(1" = 1'-0")



STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
WATER MAIN TO FLOATS			
SCALE As Noted	SURVEYED BS	APPROVED Robert P. Beck	
DESIGNED BS	DRAWN BS	James A. Lowell	
CHECKED JDB	DATE		
PROJECT NUMBER K. 78153	SHEET 36 OF 50		

Did not make called out elbow - used brass adapter w/ brass cap in regular 2" elbow to get to 1 1/2" w/ highby cut.

2" to 1 1/2" Reducing Street Elbow threaded w/ Nat. Std. Hose Thread w/ Highby cut



Note: This dimension is based on the 2" elbow and saddle dimensions shown. If the dimensions of these fittings vary from those shown, the length of the hangers and hose casing must be adjusted accordingly.

3" PolyGroove Nipple, typ.

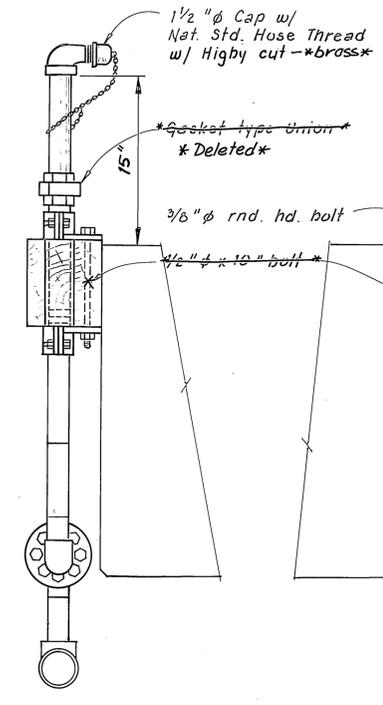
Note: PolyGroove system is shown. May substitute alternate systems per specifications.

* Poly Groove system was used *

FIRE HYDRANT AND WATER SERVICE

1 1/2" = 1'-0"

See sht. 37A for new layout & dimensions - dimensions & notes shown on this sht. also used.



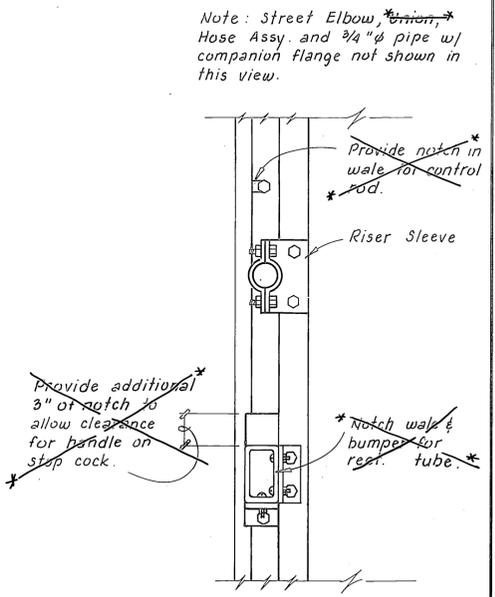
SECTION A

SECTION B

1 1/2" = 1'-0"

* See sht. 37A *

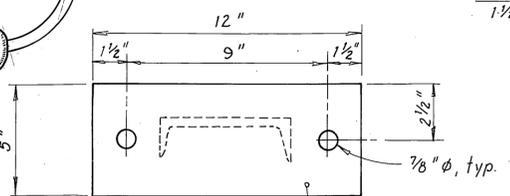
1 1/2" = 1'-0"



PLAN VIEW

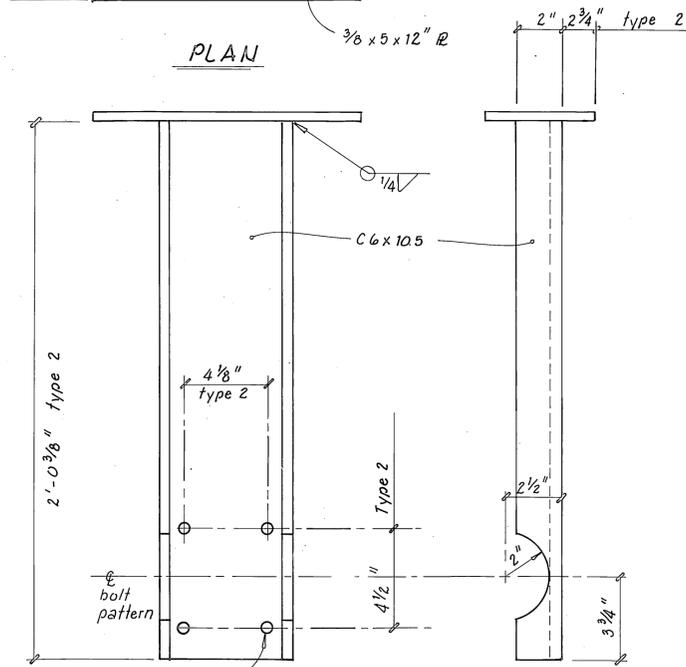
1 1/2" = 1'-0"

* See sht. 37A *



PLAN

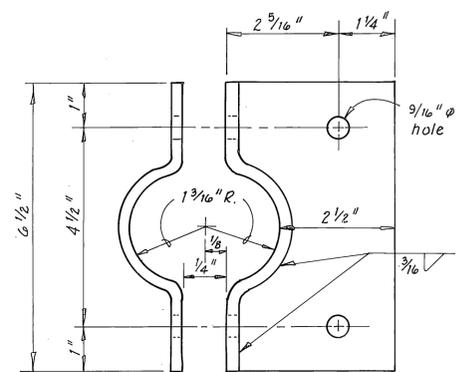
3/8 x 5 x 12" PL



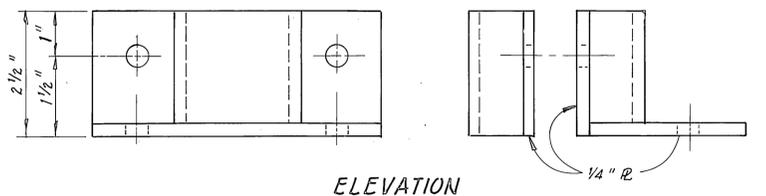
ELEVATIONS

HANGER WELDMENT

3" = 1'-0"



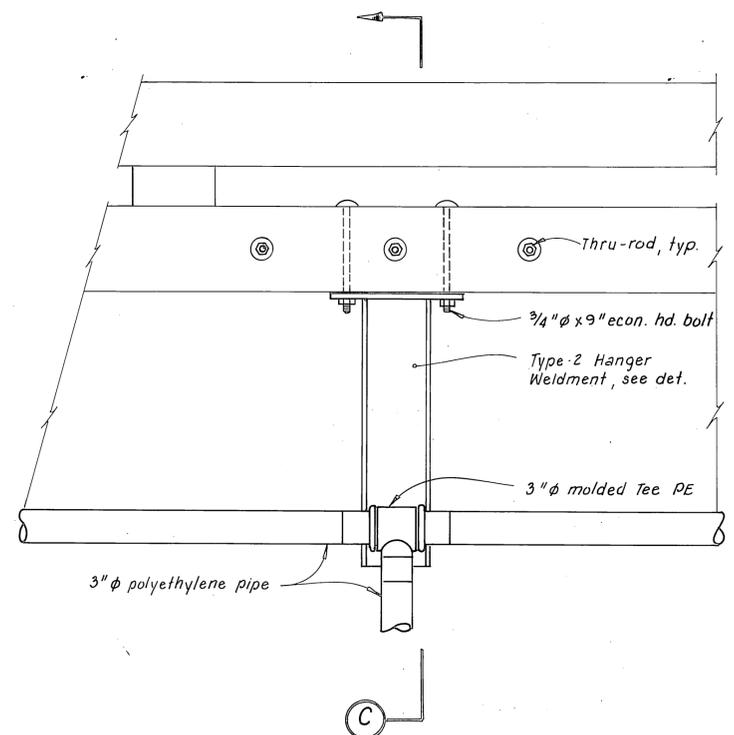
PLAN



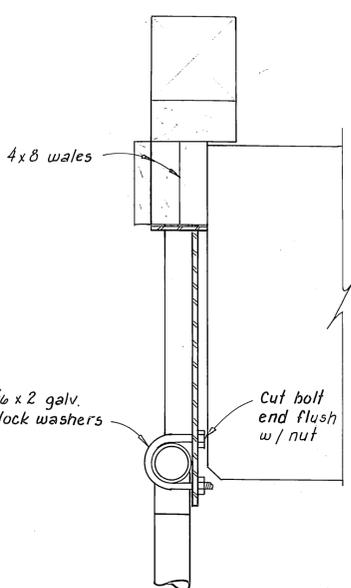
ELEVATION

RISER SLEEVE DETAILS

6" = 1'-0"

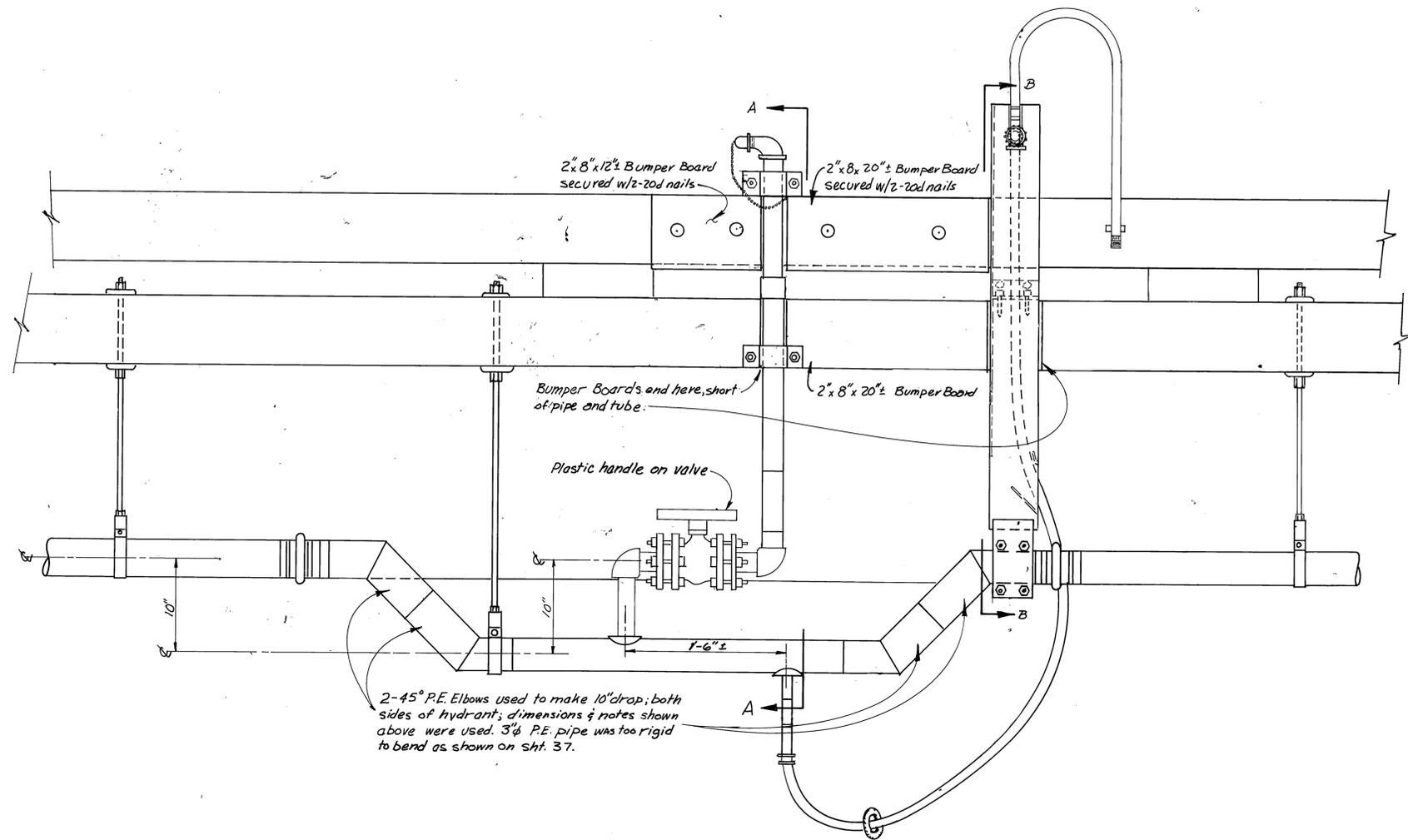


WATER CONNECTION TO FLOAT

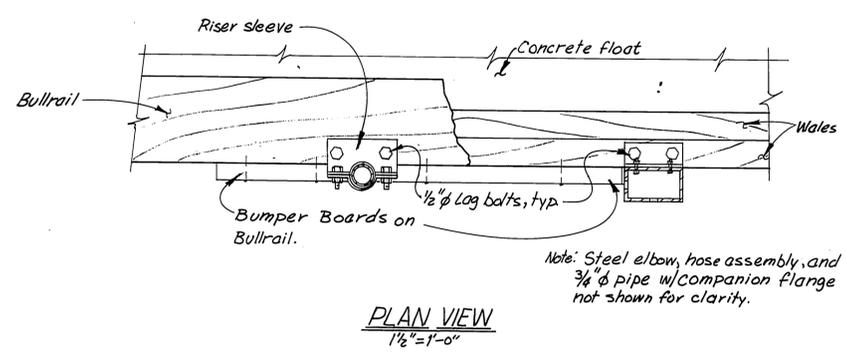
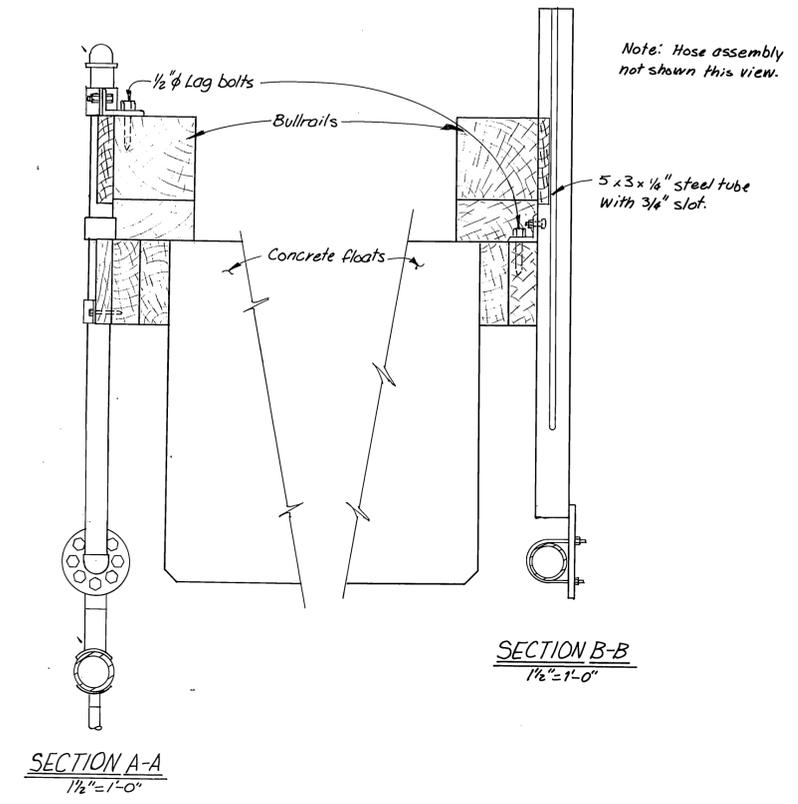


SECTION C

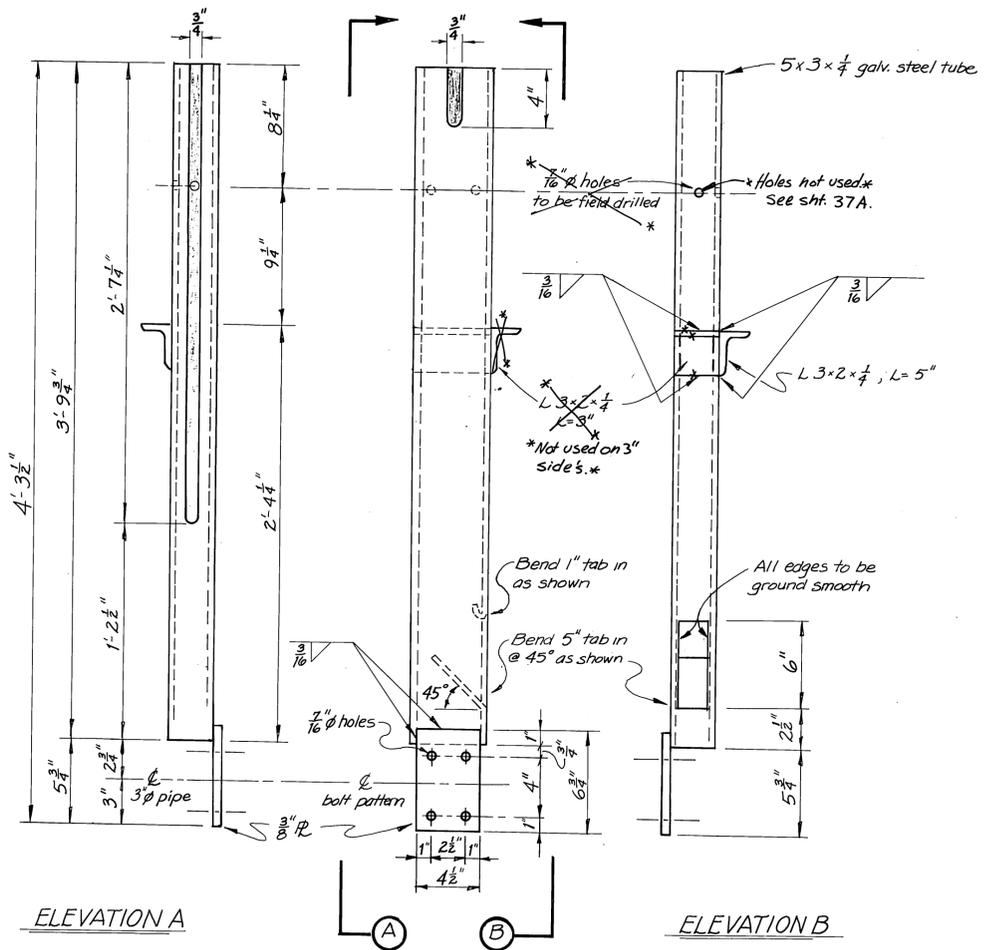
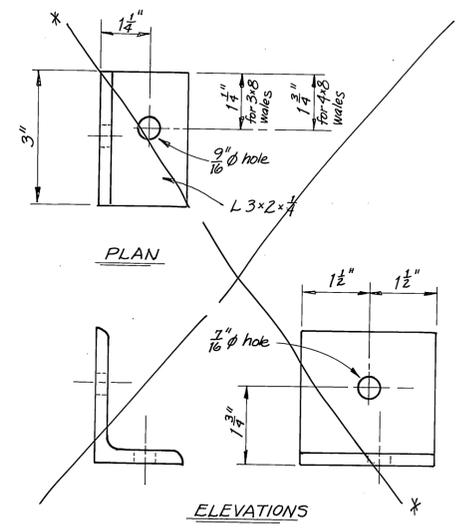
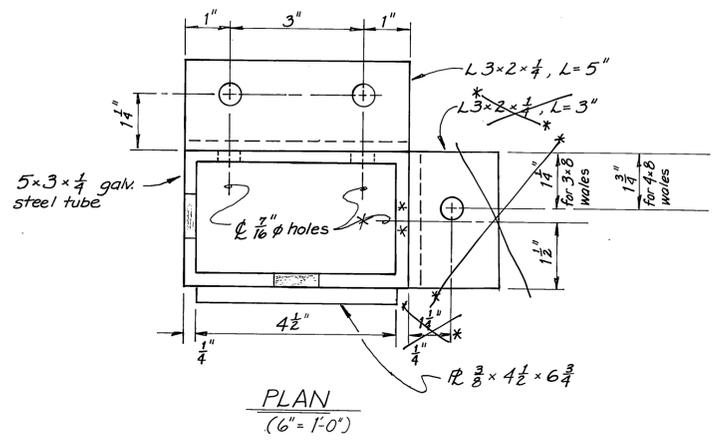
STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
SCALE As Noted DESIGNED B5 CHECKED JDB		WATER SYSTEM DETAILS SHT. A	
		SURVEYED _____ DRAWN TS/B5 DATE 12-82	
PROJECT NUMBER K-78153		APPROVED Robert P. Beck James A. Lowell	
SHEET 37 OF 50		SHEET 37 OF 50	



FIRE HYDRANT AND WATER SERVICE
1/2" = 1'-0"

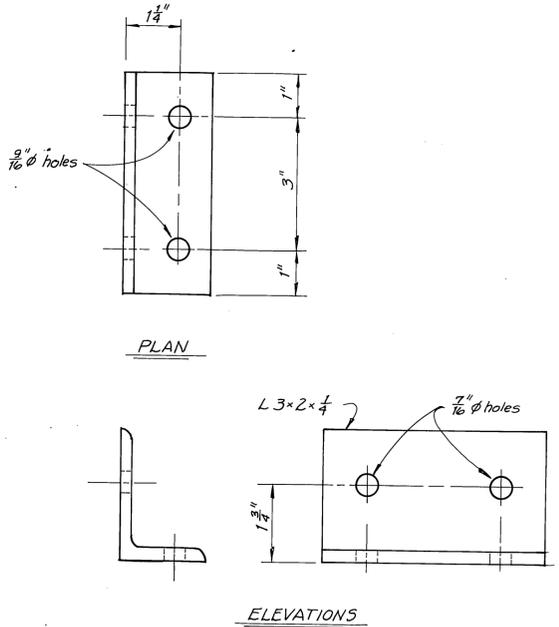


STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES			
Bar Harbor, Ketchikan		ALASKA	
<i>As Built of WATER SYSTEM DETAILS</i>			
DESIGNED _____	CHECKED _____	DRAWN <i>DJM</i>	DATE <i>12-88</i>
PROJECT NUMBER <i>K-78153</i>	SHEET <i>37A</i> OF <i>50</i>		

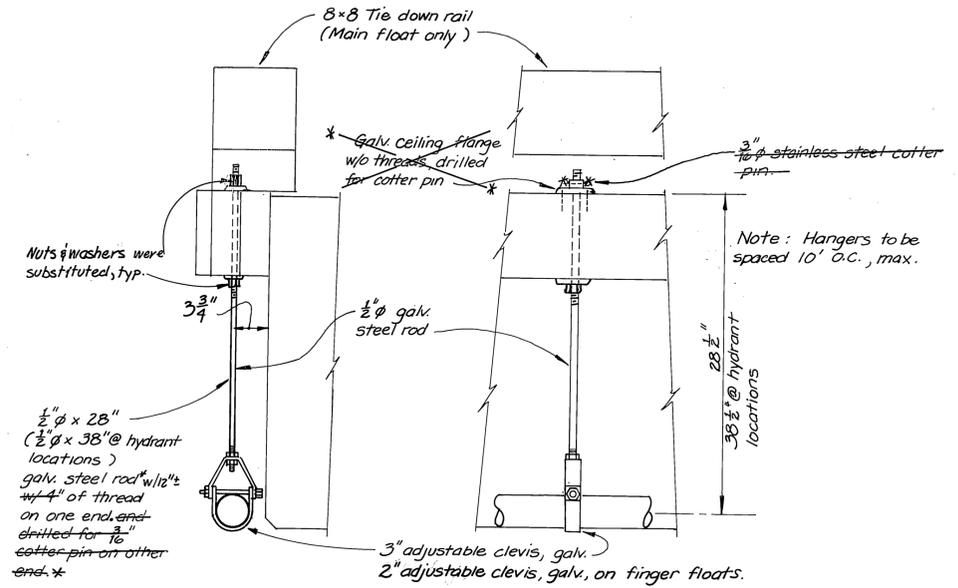


HOSE CASING DETAIL
(2" = 1'-0")

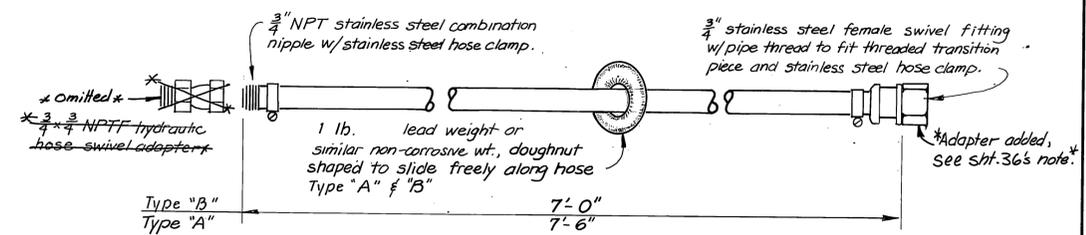
Note: All cuts and welds made prior to galvanizing.



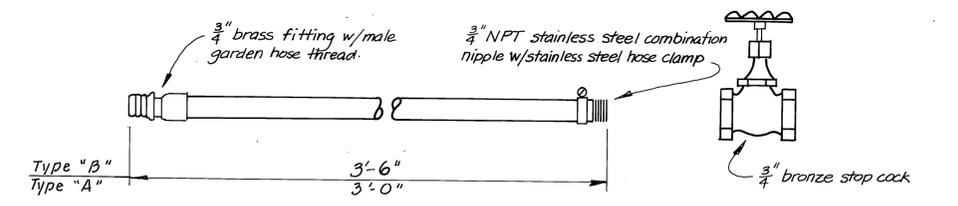
TOP HOSE CASING MOUNTING BRACKETS
(6" = 1'-0")



PIPE HANGER ELEVATIONS
(1 1/2" = 1'-0")



All hose to be 3/4" Goodyear Arctic Ortac or equivalent

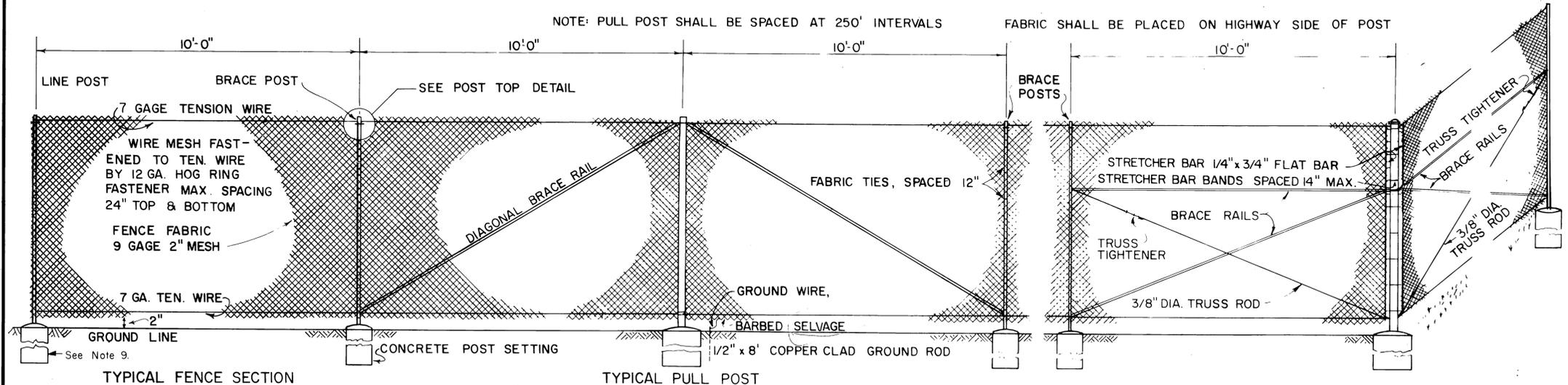


HOSE ASSEMBLY DETAIL
(No Scale)

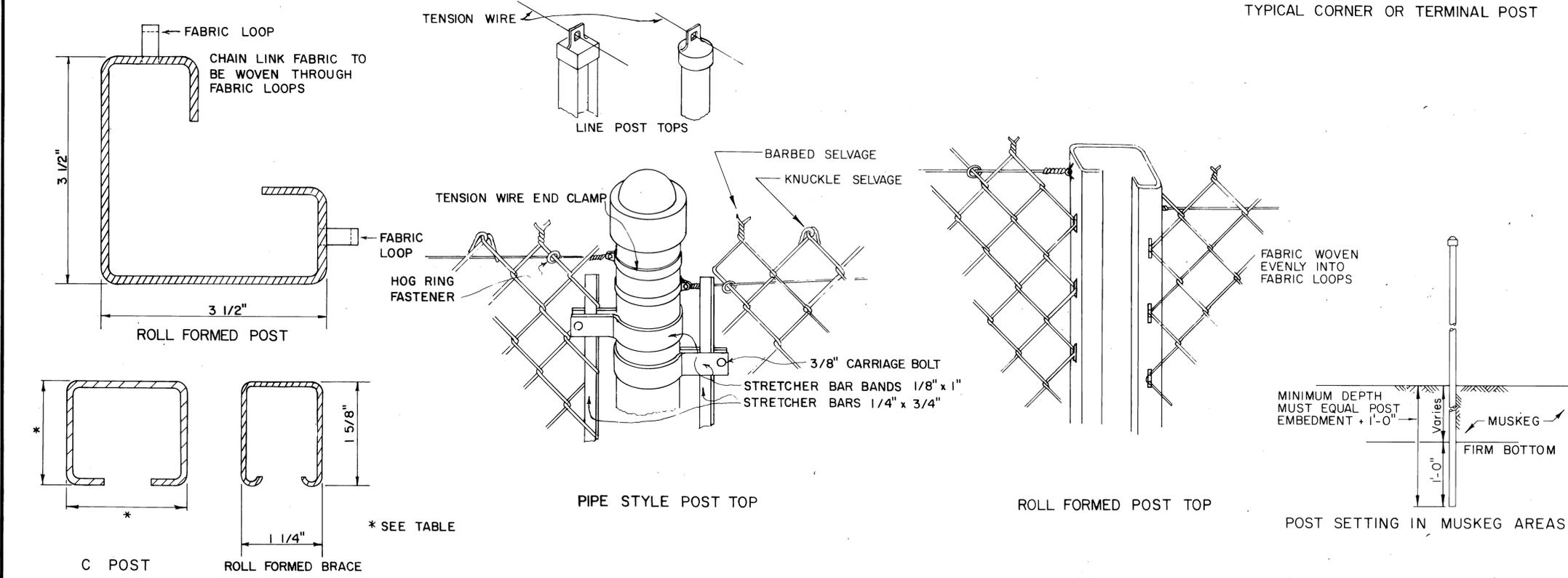
STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
WATER SYSTEM DETAILS SHT. B			
SCALE <i>As shown</i>	SURVEYED	APPROVED	
DESIGNED <i>BS</i>	DRAWN <i>BS</i>	<i>Robert P. Beck</i> <i>James A. Lowell</i>	
CHECKED <i>JDB</i>	DATE		
PROJECT NUMBER <i>K 78153</i>	SHEET <i>38</i> OF <i>50</i>		

METRIC CONVERSION
 1" = exactly 25.4mm (millimeters)
 1'-0" = exactly 0.3048m (meters)

F-01.00

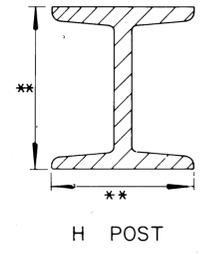


- ### GENERAL NOTES
1. Posts shall be spaced equal distances apart. Maximum spacing shall be 10 feet unless directed otherwise by the engineer.
 2. Post tops shall be securely fastened to post.
 3. Brace rails and truss rods shall be securely fastened to post with brace bands with threaded take-up adaptor for truss rods.
 4. Ground wire shall be attached to fence fabric by means of a split bolt.
 5. Fabric shall be stretched to a smooth uniform appearance.
 6. Details shown indicate general design and dimensions may vary among manufacturers.
 7. For fence gate details see Standard Plan Chain Link Fence Gate.
 8. Fencing fabrication and construction shall conform to AASHTO M181 except as noted on this drawing or Section 607 of Alaska Standard Specifications.
 9. Line post shall be set in concrete.



NOTE: Approx. 130' Req'd., see location, sht. 2.

FABRIC HEIGHT	POST														TOP OR BRACE RAIL						ALTERNATE POST	
	END-CORNER-PULL				LINE-BRACE				TOP OR BRACE RAIL						ALTERNATE POST							
	PIPE SIZE	WT./FT.	SQUARE TUBE SIZE	WT./FT.	ROLL FORMED SIZE	WT./FT.	FOOTING DEPTH	DIA.	PIPE SIZE	WT./FT.	C POST SIZE	WT./FT.	FOOTING DEPTH	DIA.	PIPE SIZE	WT./FT.	ROLL FORMED SIZE	WT./FT.	H POST SIZE	WT./FT.	LINE-BRACE H POST SIZE	WT./FT.
3'	2"	3.65#	2" x 2"	4.31#	3-1/2" x 3-1/2"	4.84#	40"	10"	1-1/2"	2.72#	1-7/8" x 1-5/8"	2.28#	28"	10"	1-1/4"	2.27#	1-5/8"	1.35#	1-1/2" x 1-5/16"	2.27#	1-7/8" x 1-5/8"	2.72#
4'	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
5'	2"	3.65#	2" x 2"	4.31#	3-1/2" x 3-1/2"	4.84#	40"	10"	1-1/2"	2.72#	1-7/8" x 1-5/8"	2.28#	28"	10"	"	"	"	"	"	"	1-7/8" x 1-5/8"	2.72#
6'	2 1/2"	5.79#	2-1/2" x 2-1/2"	5.59#	3-1/2" x 3-1/2"	4.84#	48"	15"	2"	3.65#	2-1/4" x 1-45/64	2.64#	40"	12"	"	"	"	"	"	"	2-1/4" x 2"	4.1#
7'	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
8'	2-1/2"	5.79#	2-1/2" x 2-1/2"	5.59#	3-1/2" x 3-1/2"	4.84#	48"	15"	2"	3.65#	2-1/4" x 1-45/64	2.64#	40"	12"	"	"	"	"	"	"	2-1/4" x 2"	4.1#



REVISIONS		
Date	Description	By

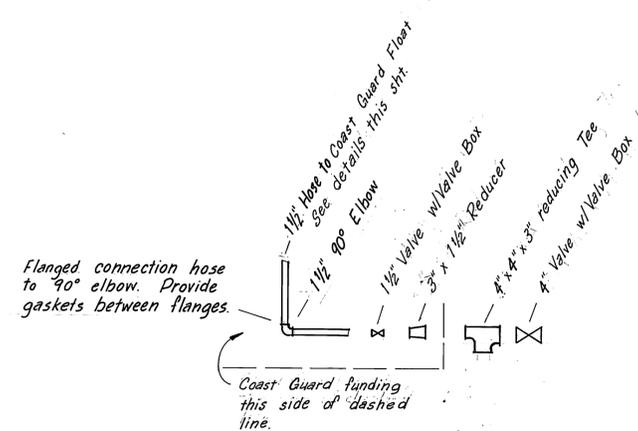
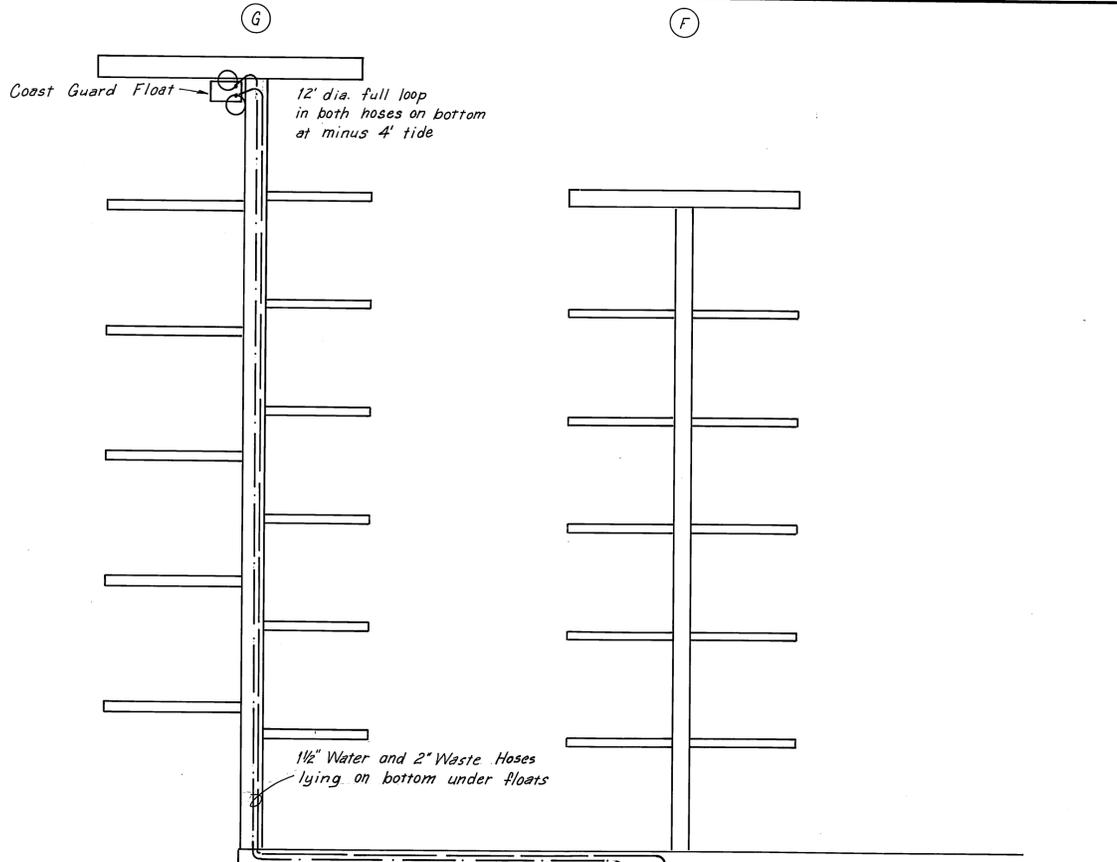
* FENCE DELETED AT REQUEST OF CITY - Materials stored by City *

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

CHAIN LINK FENCE
 DELETED

SHEET 39 OF 50

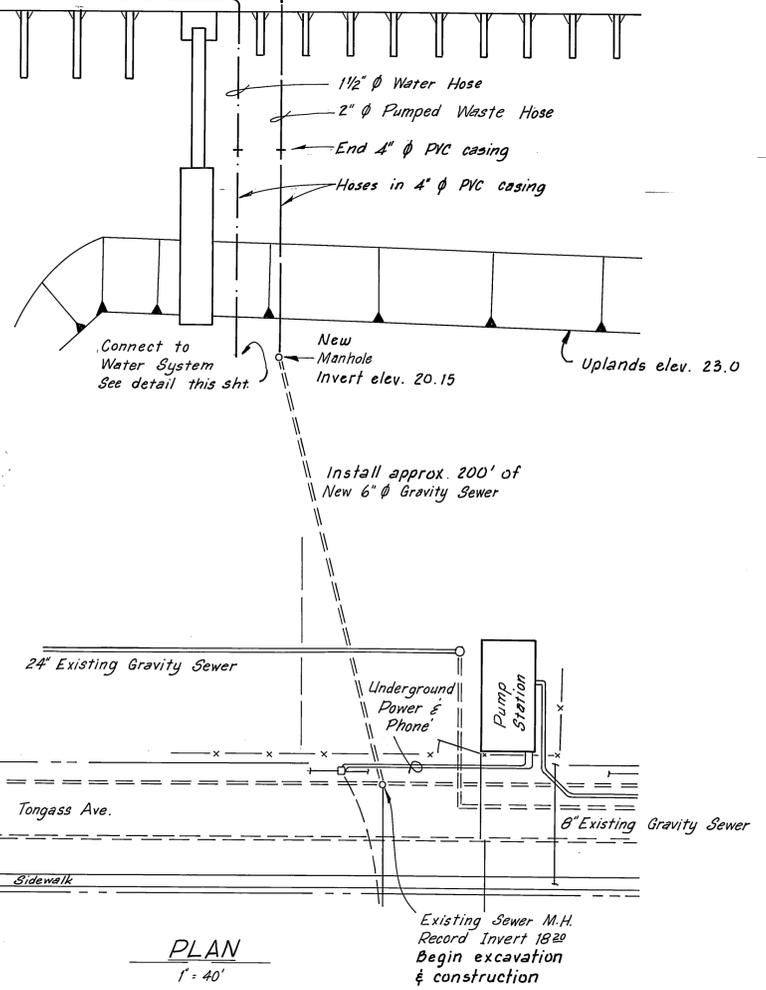
Date: 7/15/82



Note: See Cross & Transition Detail, sht. 35

WATER SYSTEM CONNECTION DETAIL

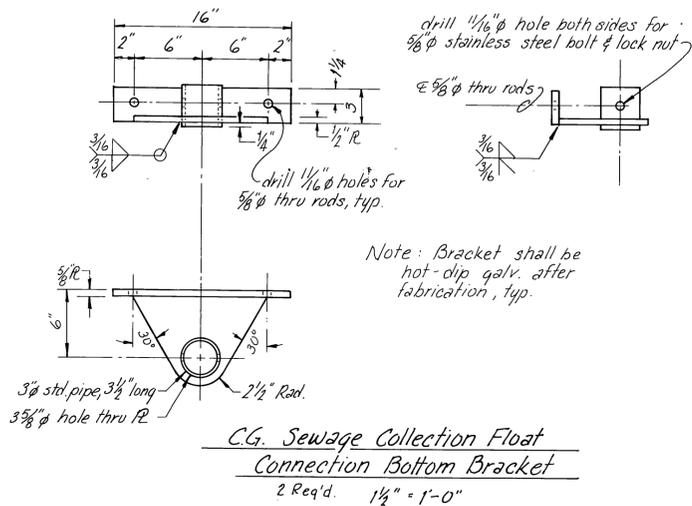
NTS



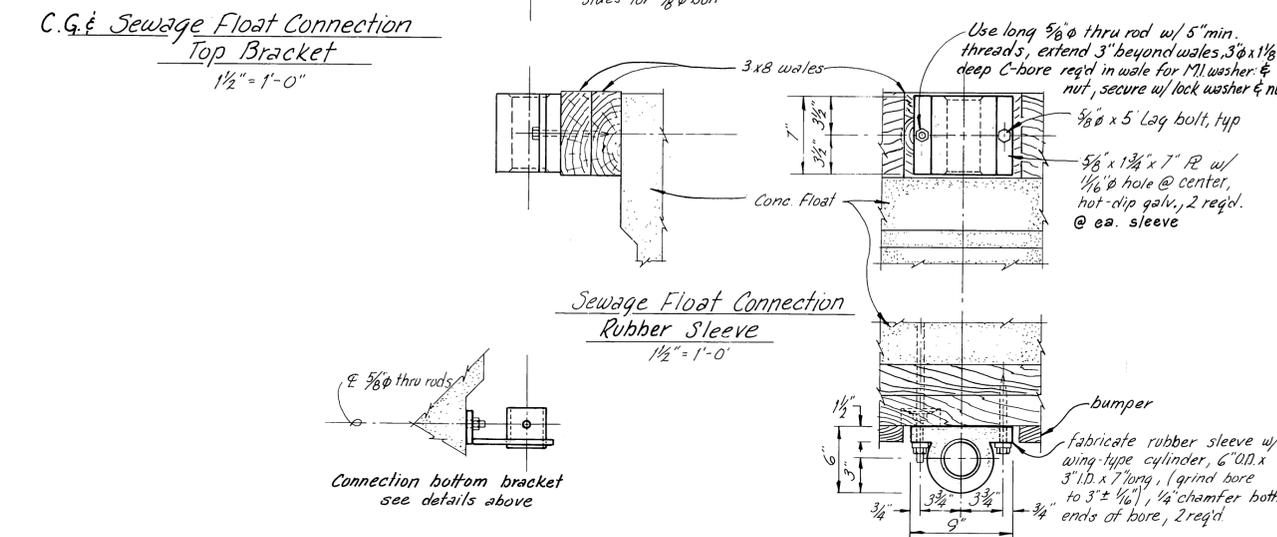
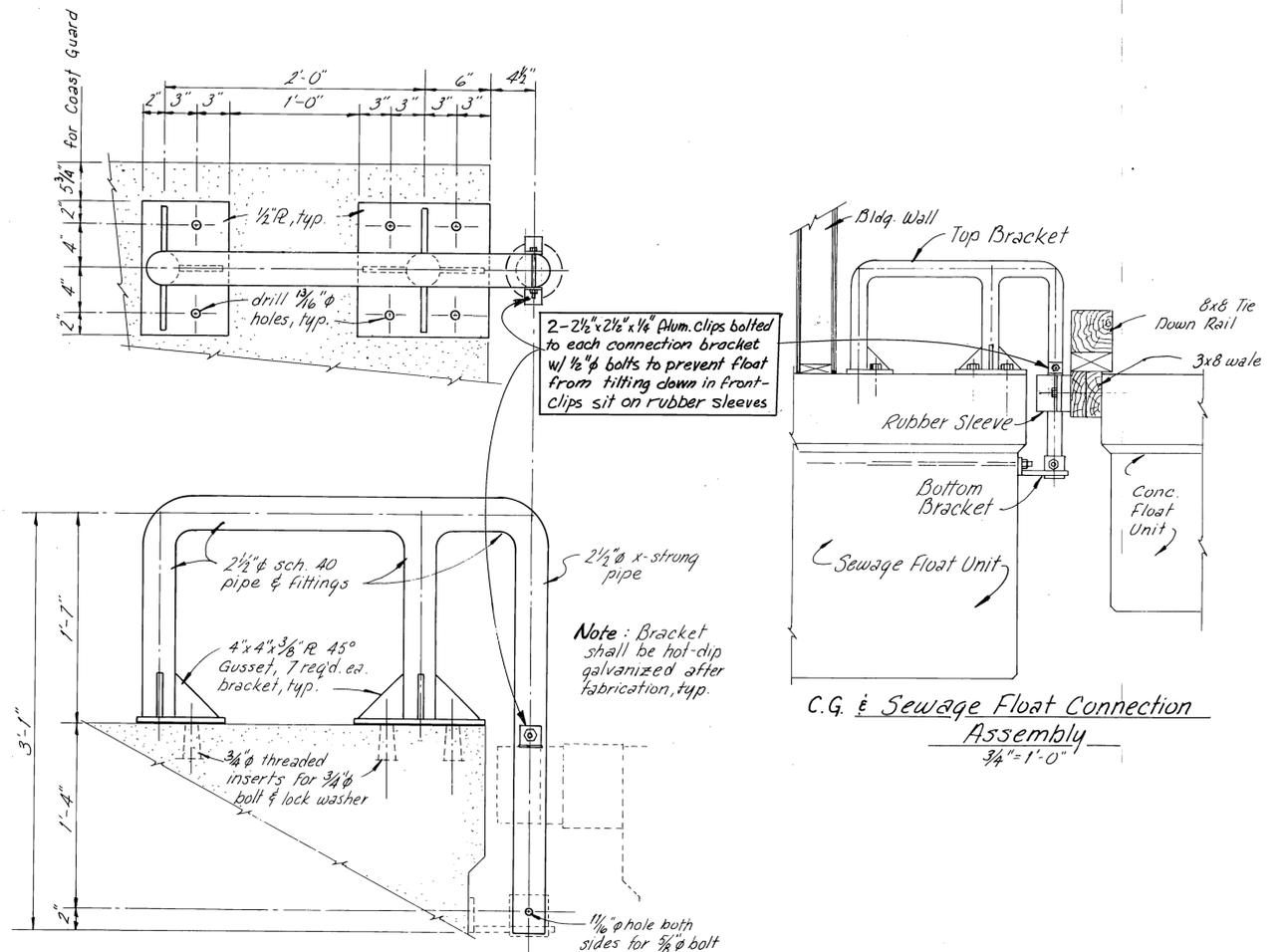
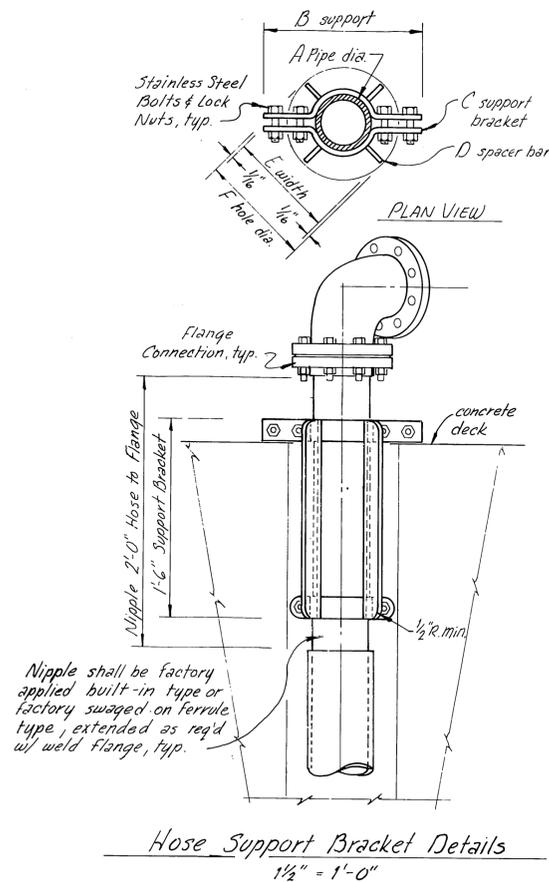
PLAN
1" = 40'

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION			
Bar Harbor, Ketchikan		Alaska	
USCG WATER & SEWER LAYOUT			
SCALE <i>As Noted</i>	SURVEYED _____	APPROVED <i>Robert P. Beck</i>	
DESIGNED <i>J.D.B.</i>	DRAWN <i>DB</i>	<i>James A. Lowell</i>	
CHECKED _____	DATE <i>11-82</i>		
PROJECT NUMBER <i>K78153</i>	SHEET <i>40</i> OF <i>50</i>		

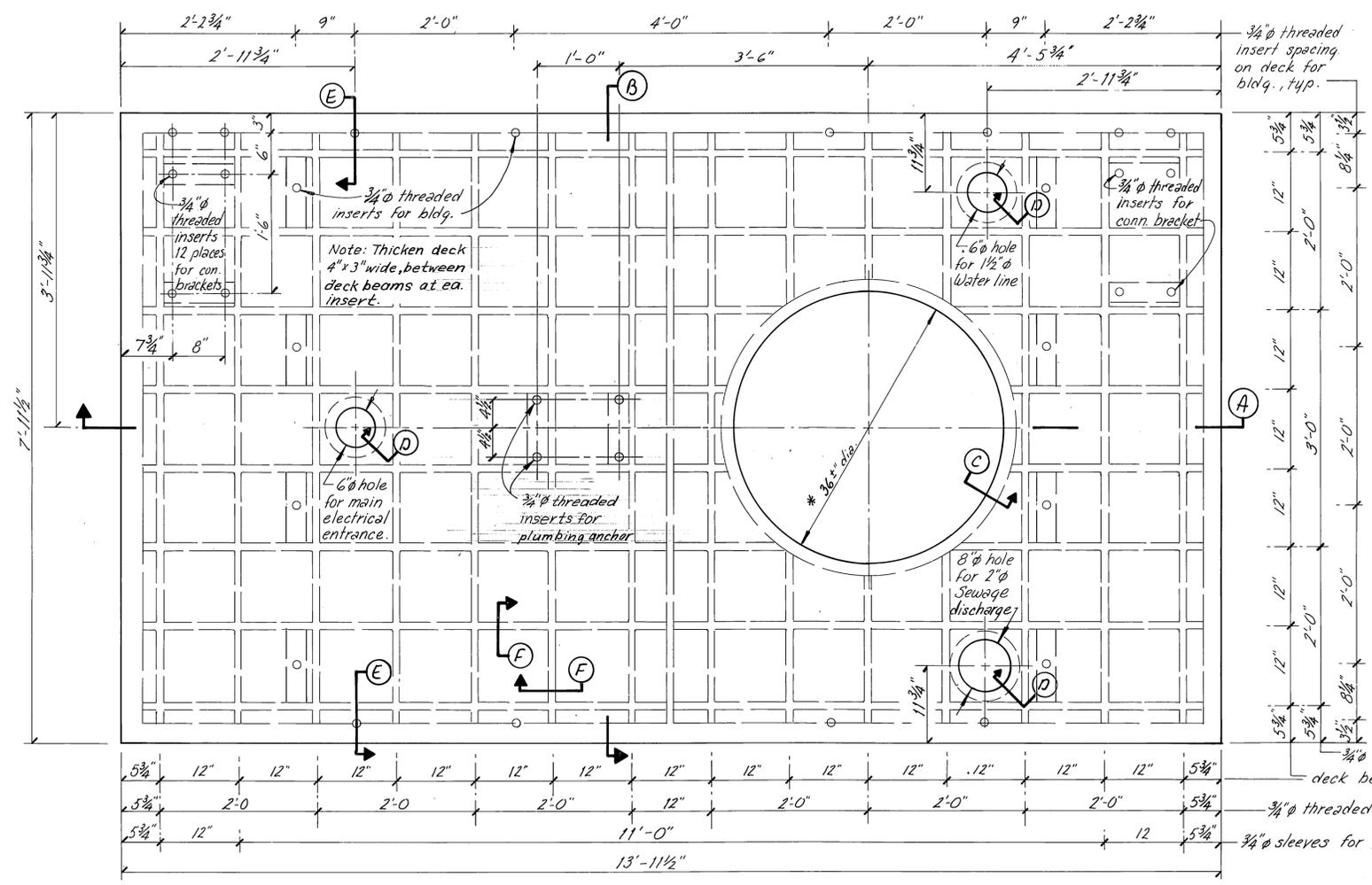




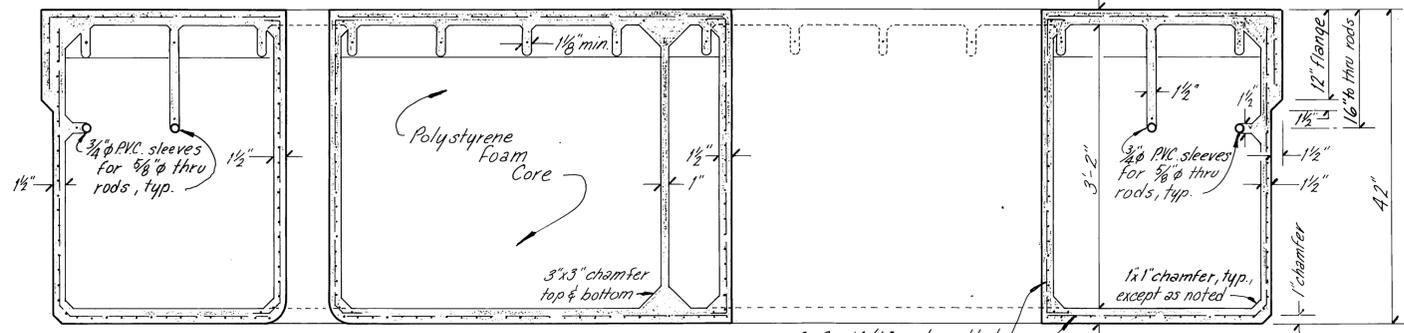
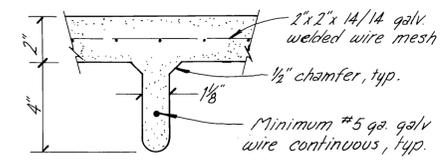
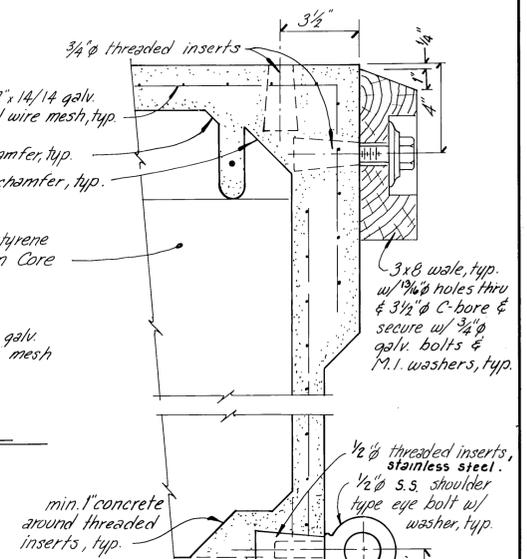
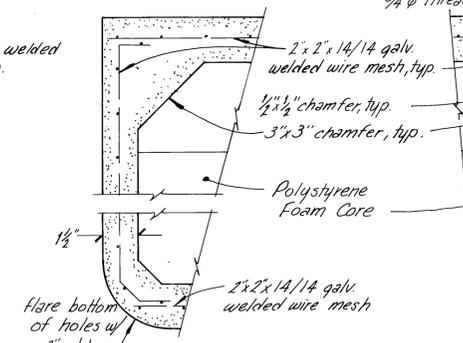
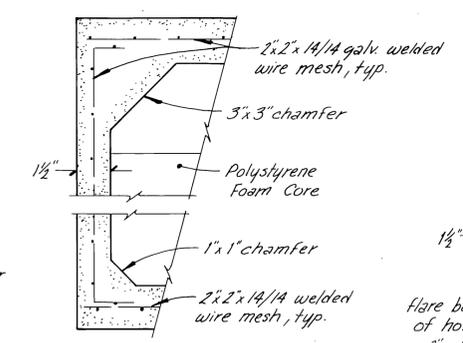
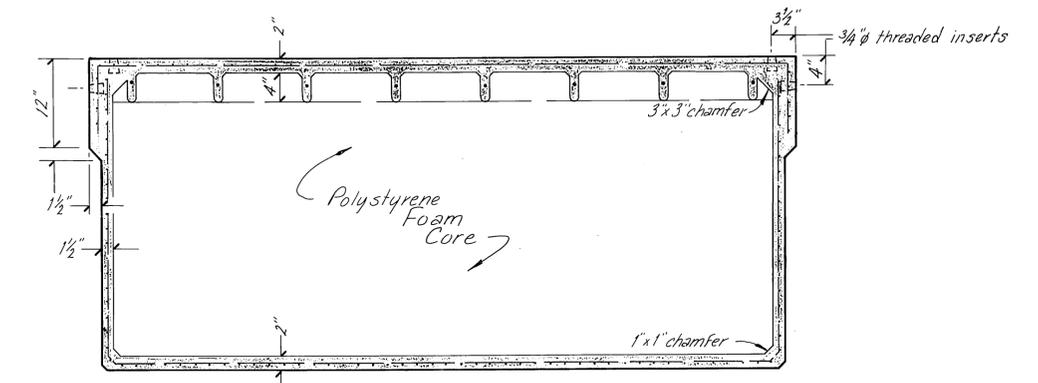
Hose Support Bracket Schedule									
No. Req'd.	A Pipe		Support Bracket Data				Spacer Bar D	Bracket Width E	Access Hole Dia. F
	Nom.	O.D.	B Top	B Bottom	C Bar	Bolt Size			
1	1 1/2"	1.90"	14"	5 1/2"	1 1/2" x 2"	1/2" x 2"	3/8" x 1 7/16"	5 7/8"	6"
1	2"	2.38"	15 1/2"	7 1/2"	1 1/2" x 2"	1/2" x 2"	3/8" x 2 3/16"	7 7/8"	8"
0	4"	4.50"	17 1/2"	9 1/2"	5/8" x 2 1/2"	5/8" x 3"	3/8" x 1"	9 7/8"	10"



	DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
Bar Harbor, Ketchikan Alaska		
FLOAT CONNECTION & MISC. DETAILS		
SCALE As Shown	SURVEYED	APPROVED Robert P. Beck
DESIGNED WJN	DRAWN WJN	James A. Lowell
CHECKED JDB	DATE 3/82	
PROJECT NUMBER K78153	SHEET 41 OF 50	



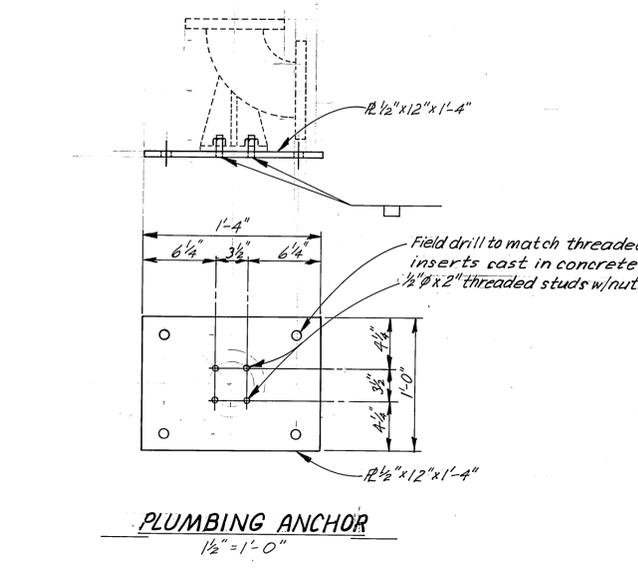
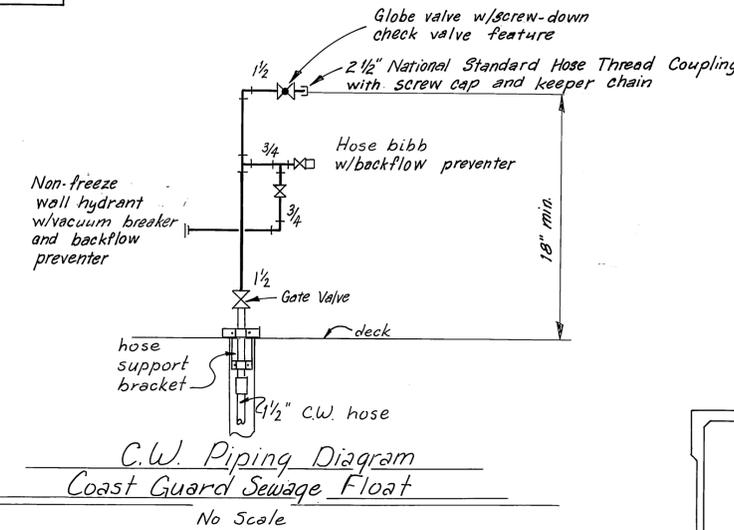
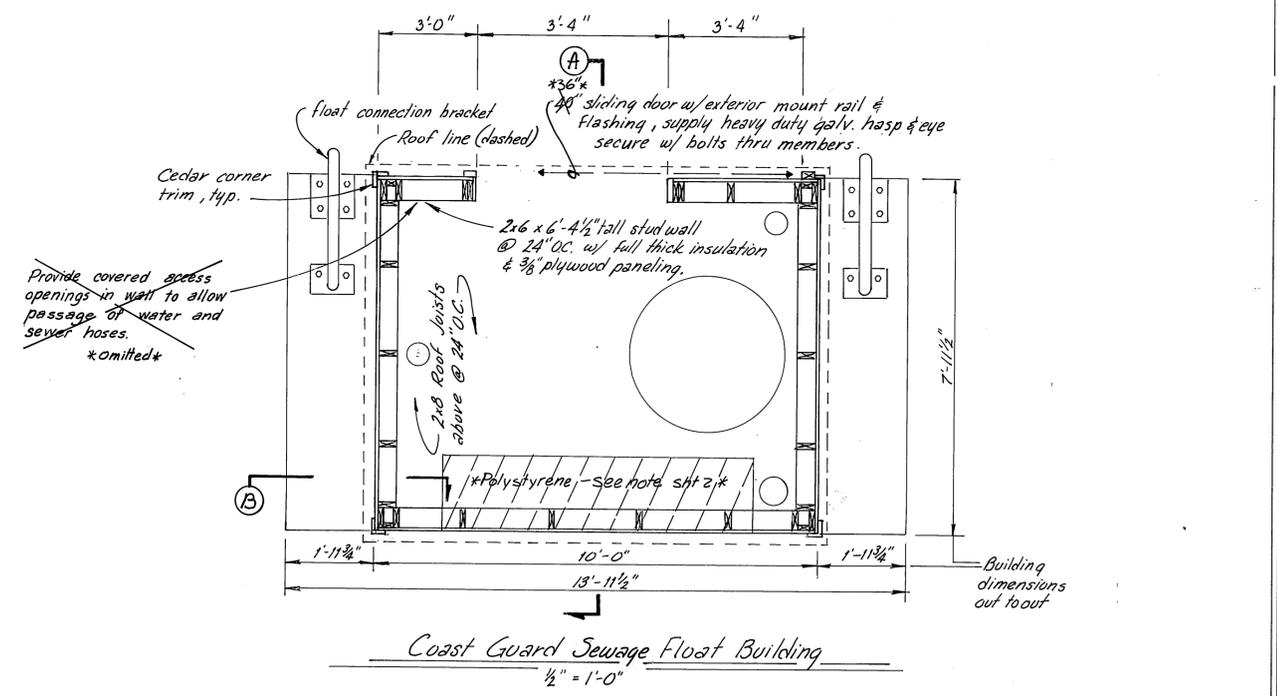
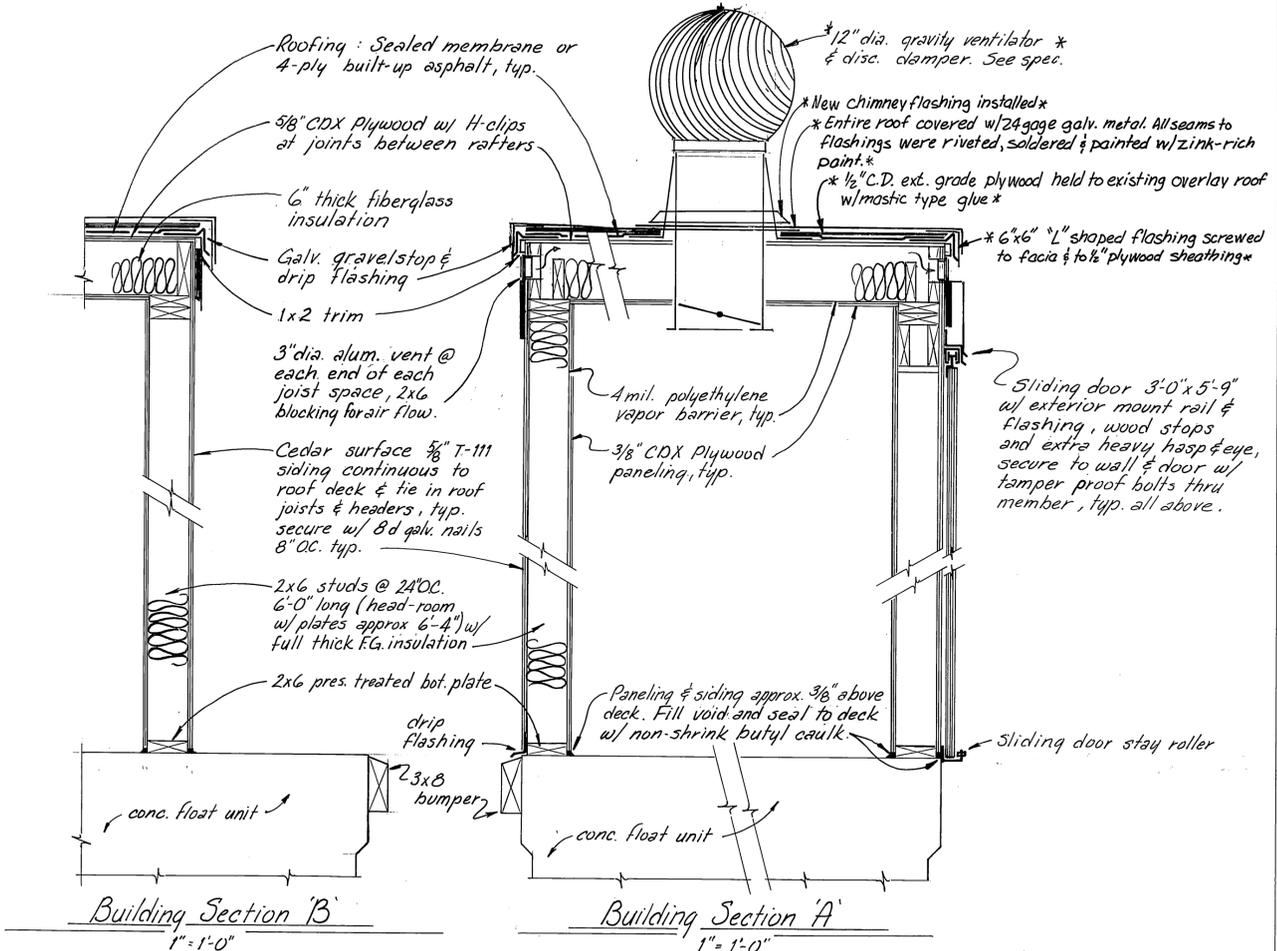
* To coordinate pump installation contractor and float fabricator to verify this dimension, prior to fabrication with sewage pump supplier.



- NOTES:
- Alternate deck and deck beam sections may be submitted to engineer for review and approval.
 - Deck and Sidewall inserts to be 3/4" Ø, F-A2 Loop Ferrule inserts, unless otherwise noted. (Dayton Sure Grip & Shore Co.) with 2,500 lbs. safe tension load.

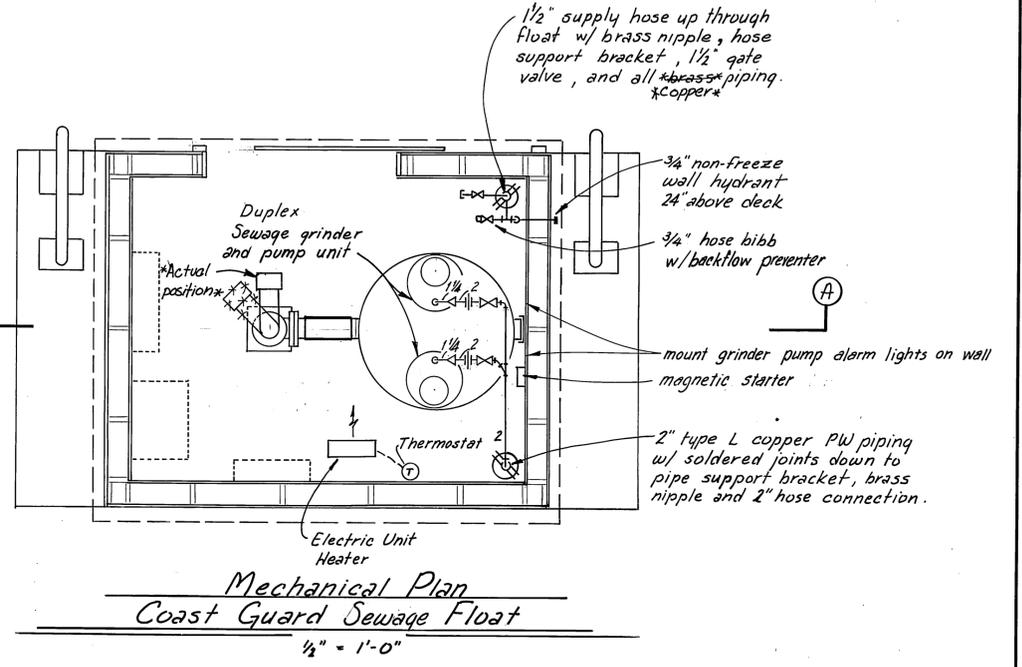
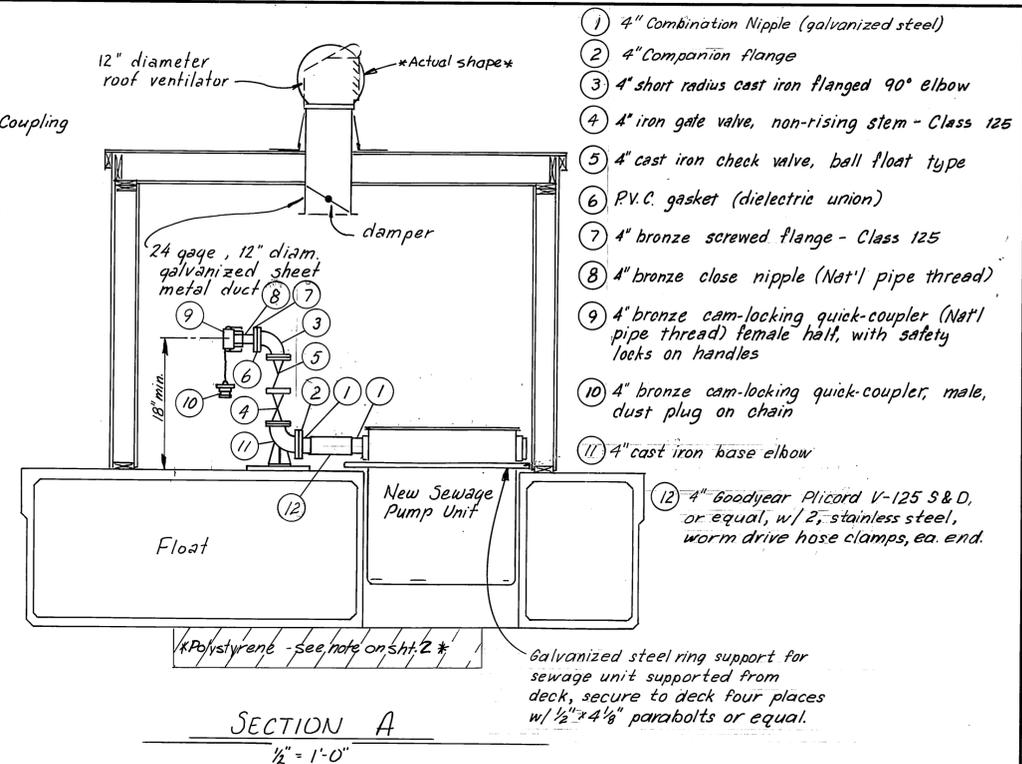
	DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION Bar Harbor, Ketchikan Alaska COAST GUARD SEWAGE COLLECTION FLOAT	
SCALE <i>As Shown</i> DESIGNED <i>WIN</i> CHECKED <i>DOB</i>	SURVEYED DRAWN <i>WIN</i> DATE <i>3/82</i>	APPROVED <i>Robert P. Beck</i> <i>James A. Lowell</i>
PROJECT NUMBER K78153	SHEET 42 OF 50	

Original designed roof covered w/ sheet metal roof; as it was, it was deteriorating - poor design.

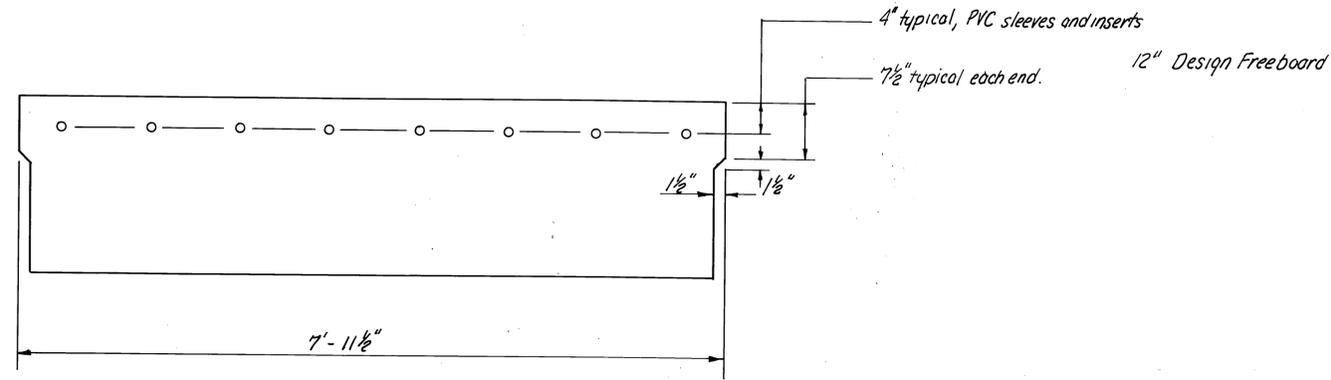


SYMBOLS

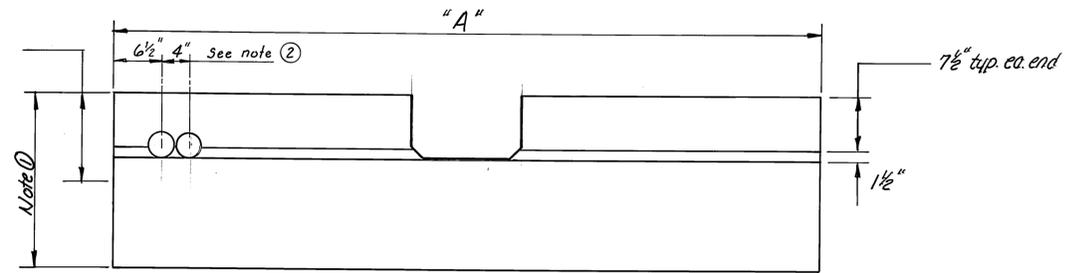
	CW	Cold water
	PW	Pumped waste
	Union	
	Gate valve	
	Globe valve	
	Reducer	
	Check valve	



STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska COAST GUARD SEWAGE COLLECTION FLOAT BUILDING & MECHANICAL	
SCALE <i>As Shown</i>	SURVEYED _____	APPROVED <i>Robert P. Beck</i>	
DESIGNED <i>WIN</i>	DRAWN <i>WIN</i>	<i>James A. Lowell</i>	
CHECKED <i>JD</i>	DATE <i>8/82</i>		
PROJECT NUMBER <i>K 78153</i>	SHEET <i>43</i> OF <i>50</i>		



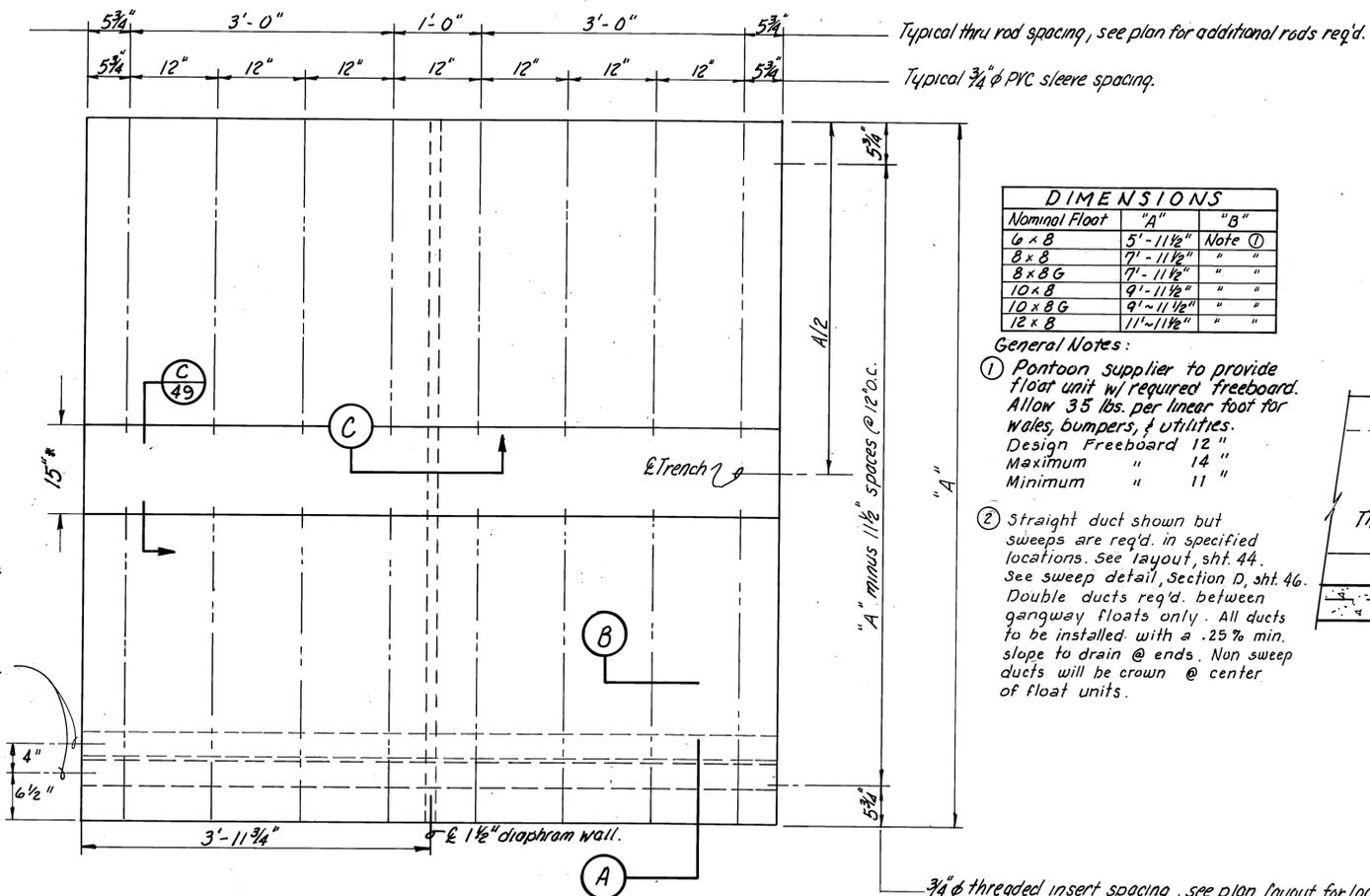
OUTBOARD ELEVATION
1"=1'-0"



END ELEVATION
1"=1'-0"

Note ~ Cover Plates

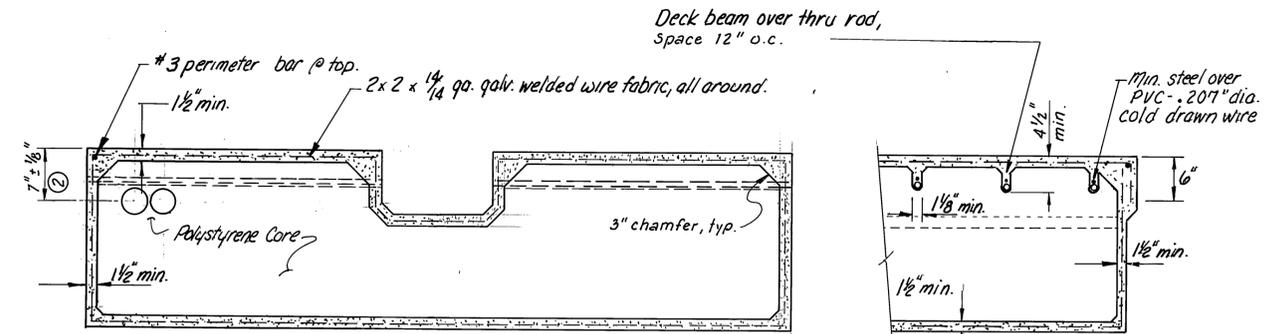
Cover \varnothing width varies depending on width of trench (i.e. cross trench). Provide $1/8$ " gap between edge of trench and edge of plate ea. side. Length will be contractors option but in all cases plates will terminate at edge of bumper or float unit end whichever applies. Secure \varnothing s to ledger w/ $3/16$ " \varnothing S.S. CSK wood screws @ 12" centers. For \varnothing material and thickness requirements see specs (Sec. 309-2.01)



DIMENSIONS		
Nominal Float	"A"	"B"
6 x 8	5'-11 1/2"	Note ①
8 x 8	7'-11 1/2"	" "
10 x 8	9'-11 1/2"	" "
12 x 8	11'-11 1/2"	" "

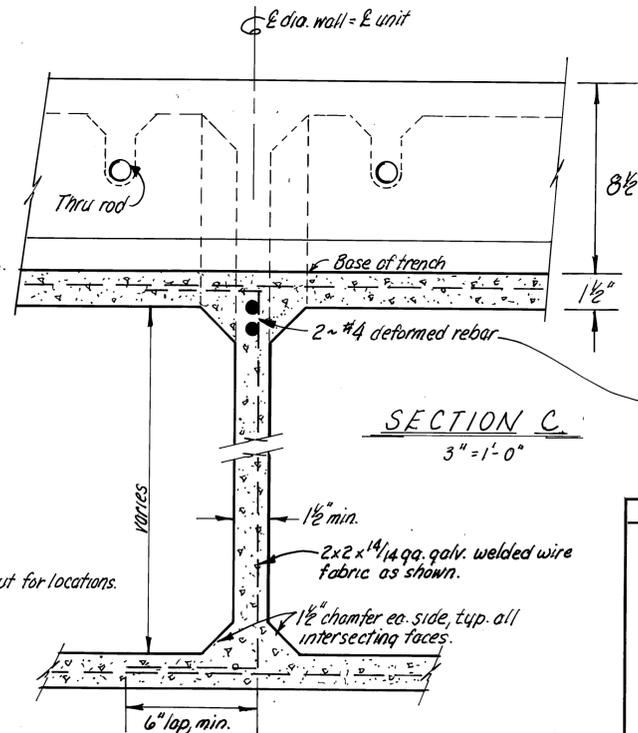
General Notes:

- ① Pontoon supplier to provide float unit w/ required freeboard. Allow 35 lbs. per linear foot for wales, bumpers, & utilities. Design Freeboard 12" Maximum " 14" Minimum " 11"
- ② Straight duct shown but sweeps are req'd. in specified locations. See layout, sht. 44. See sweep detail, Section D, sht. 46. Double ducts req'd. between gangway floats only. All ducts to be installed with a .25% min. slope to drain @ ends. Non sweep ducts will be crown @ center of float units.



SECTION A
1"=1'-0"

SECTION B
1"=1'-0"



SECTION C
3"=1'-0"

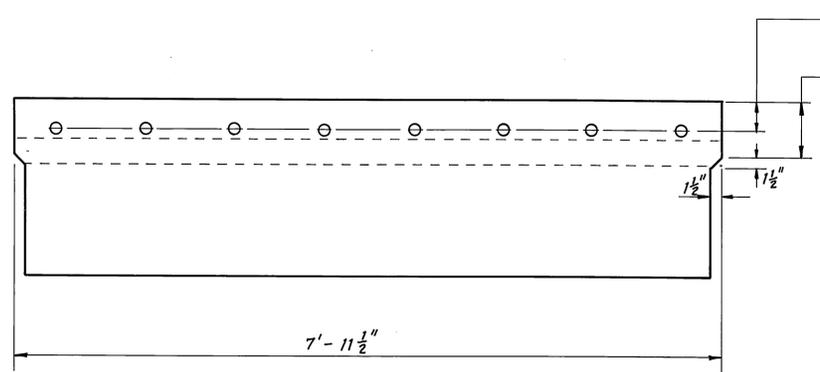
Note: Ledger board and cover \varnothing not shown for purpose of clarity.

* 2x6 ledgers not shown.

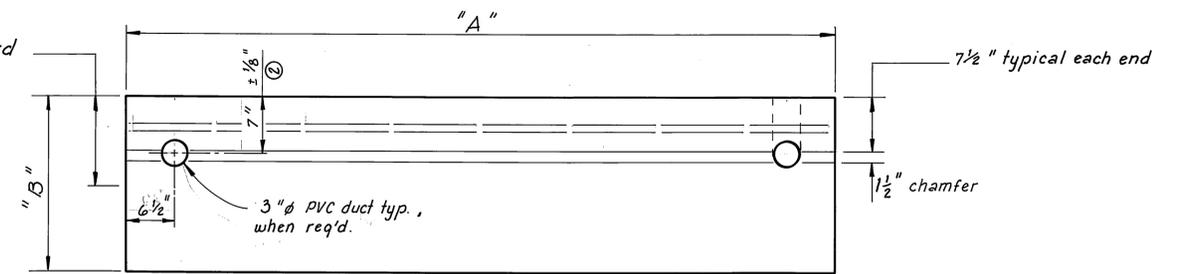
\varnothing 3" \varnothing PVC duct. See note ②. Ream ends.

PLAN
1"=1'-0"

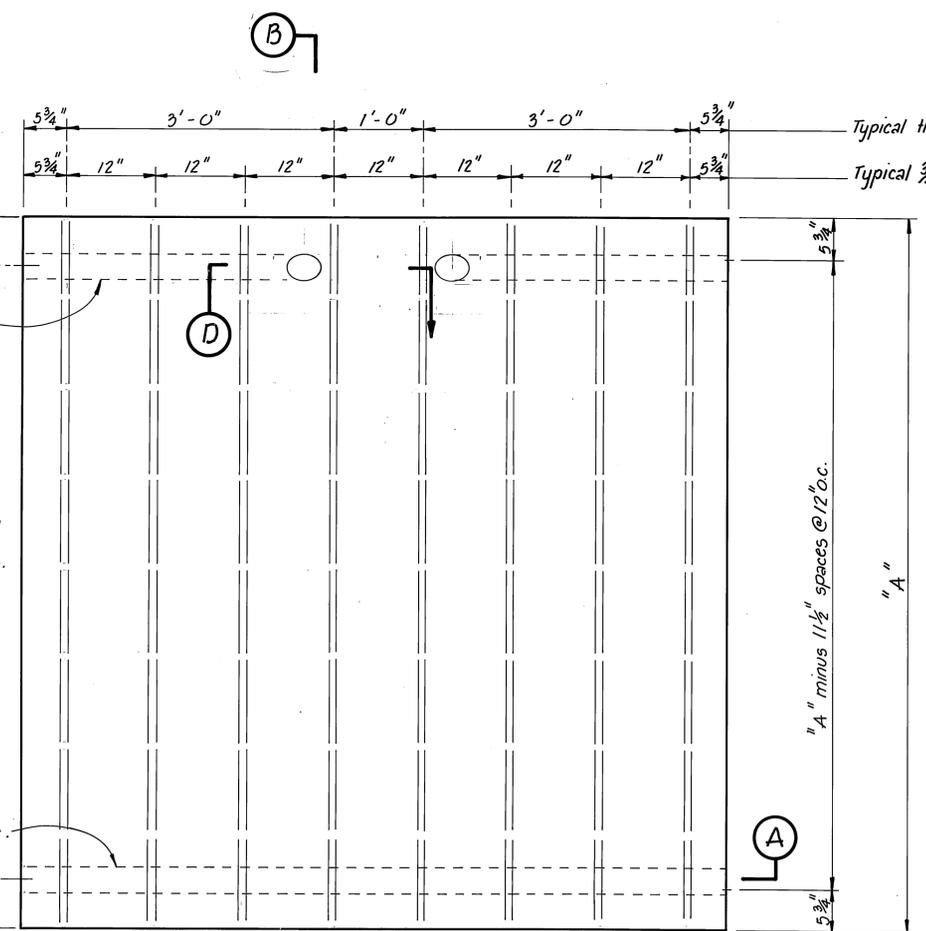
	DO NOT SCALE THIS DRAWING - USE DIMENSIONS		
	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION		
	Bar Harbor, Ketchikan		Alaska
	TYPICAL TRENCH W/ DUCT FLOAT UNIT		
SCALE: As shown	SURVEYED: _____	APPROVED: Robert P. Beck	
DESIGNED: JAL	DRAWN: JAL	James A. Lowell	
CHECKED: JS	DATE: 1/83		
PROJECT NUMBER: K-78153	SHEET: 45		OF: 50



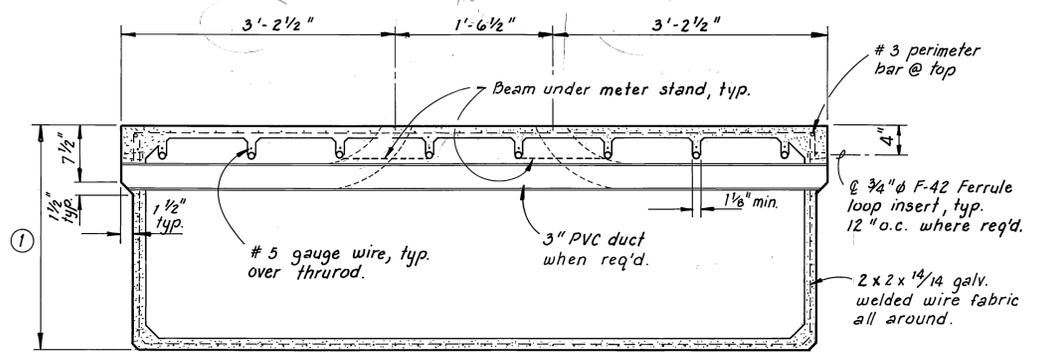
OUTBOARD ELEVATION
 1" = 1'-0"



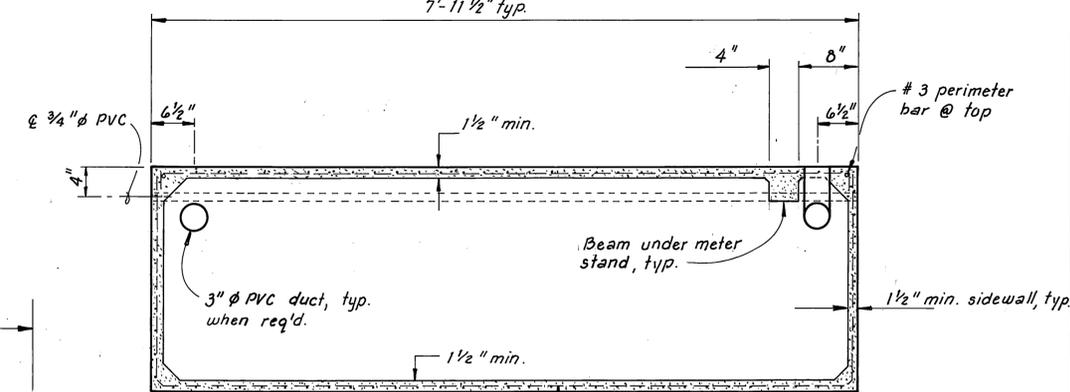
END ELEVATION
 1" = 1'-0"



PLAN
 1" = 1'-0"



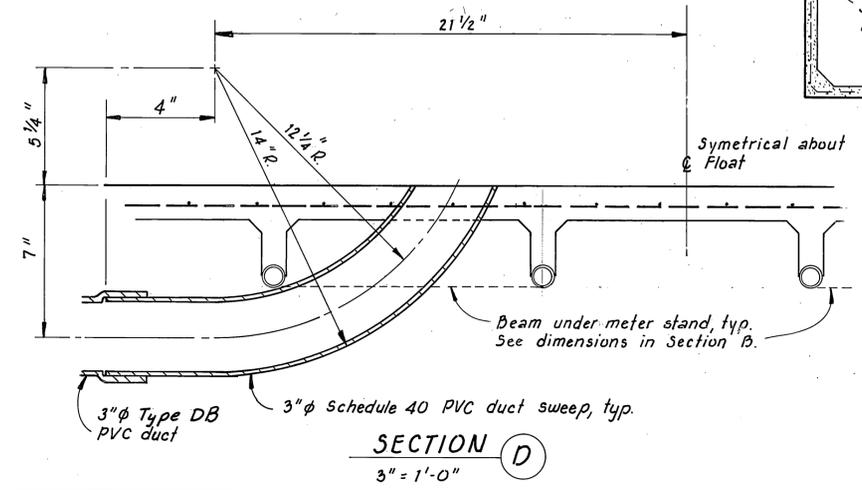
SECTION A
 1" = 1'-0"



SECTION B
 1" = 1'-0"

DIMENSIONS		
Nominal Float	"A"	"B"
6 x B	5' - 11 1/2"	Note 1
8 x B	7' - 11 1/2"	" "
8 x B G	7' - 11 1/2"	" "
10 x B	9' - 11 1/2"	" "
10 x B G	9' - 11 1/2"	" "
12 x B	11' - 11 1/2"	" "

- General Notes:**
 1 Pontoon supplier to provide float unit w/ required freeboard. Allow 35 lbs. per linear foot for wales, bumper & utilities. Design Freeboard 12" Maximum Freeboard 14" Minimum Freeboard 11"
 2 All ducts to be installed with a .25% min. slope to drain @ ends. Non sweep ducts will be crowned @ center of float unit.



SECTION D
 3" = 1'-0"

STAMP

DO NOT SCALE THIS DRAWING - USE DIMENSIONS

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
 HARBOR DESIGN AND CONSTRUCTION

Bar Harbor, Ketchikan Alaska

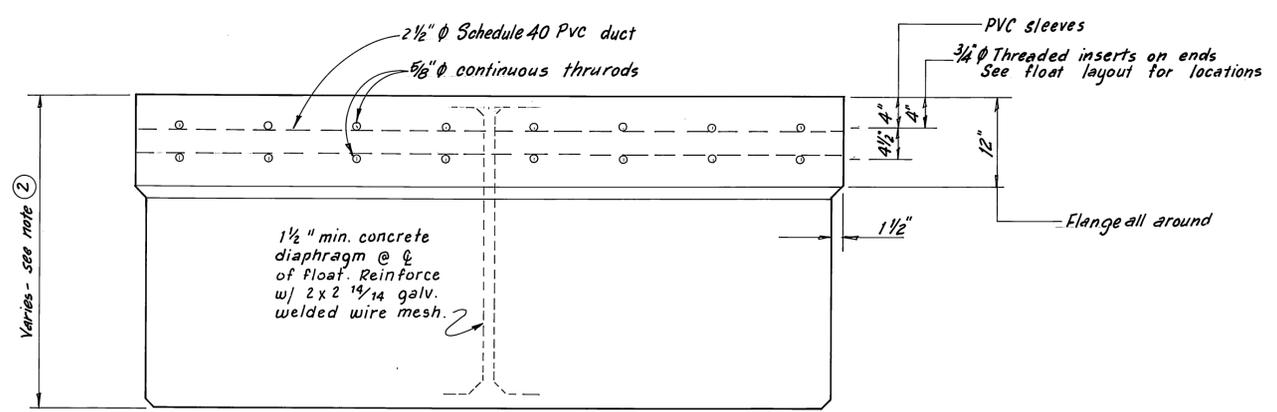
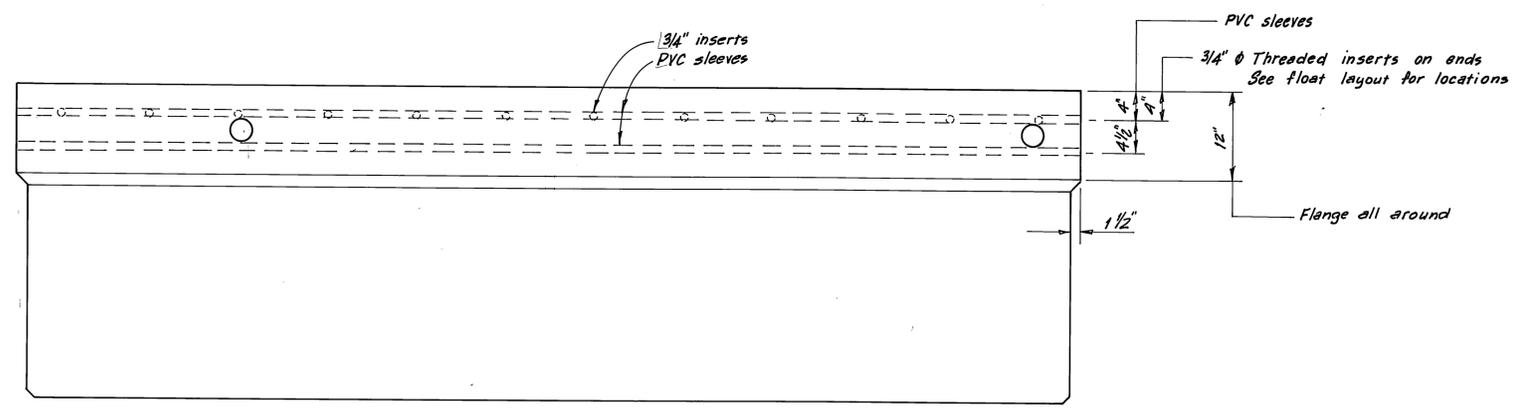
TYPICAL FLOAT UNITS

SCALE: As Noted
 DESIGNED JS
 CHECKED JDB

SURVEYED
 DRAWN TS
 DATE 1-83

APPROVED
 Robert P. Beck
 James A. Lowell

PROJECT NUMBER K-78153
 SHEET 46 OF 50

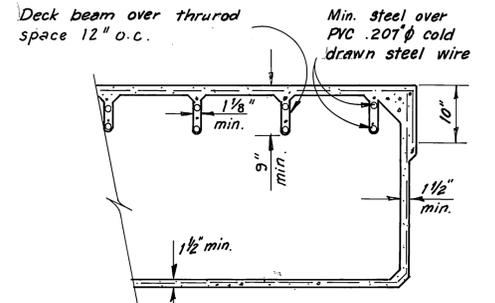
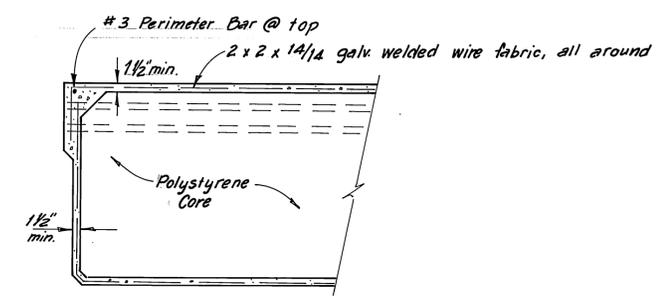


OUTBOARD ELEVATION
1" = 1'-0"

END ELEVATION
1" = 1'-0"

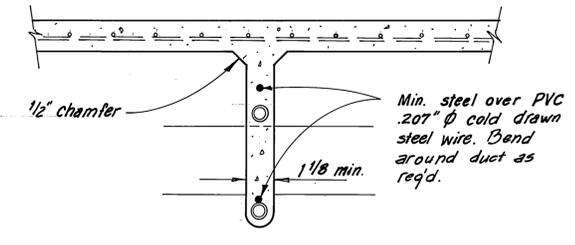
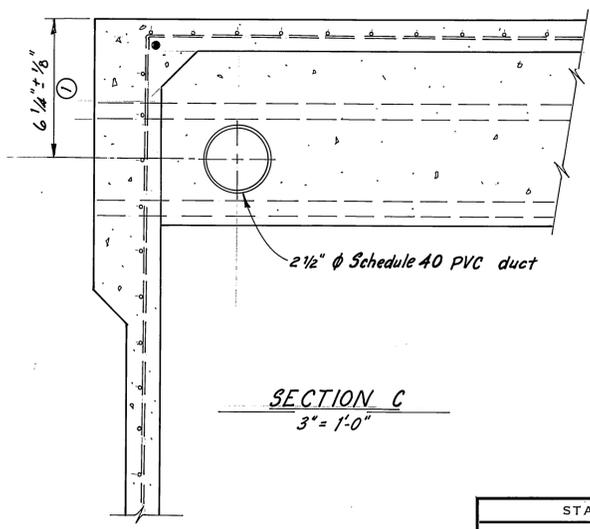
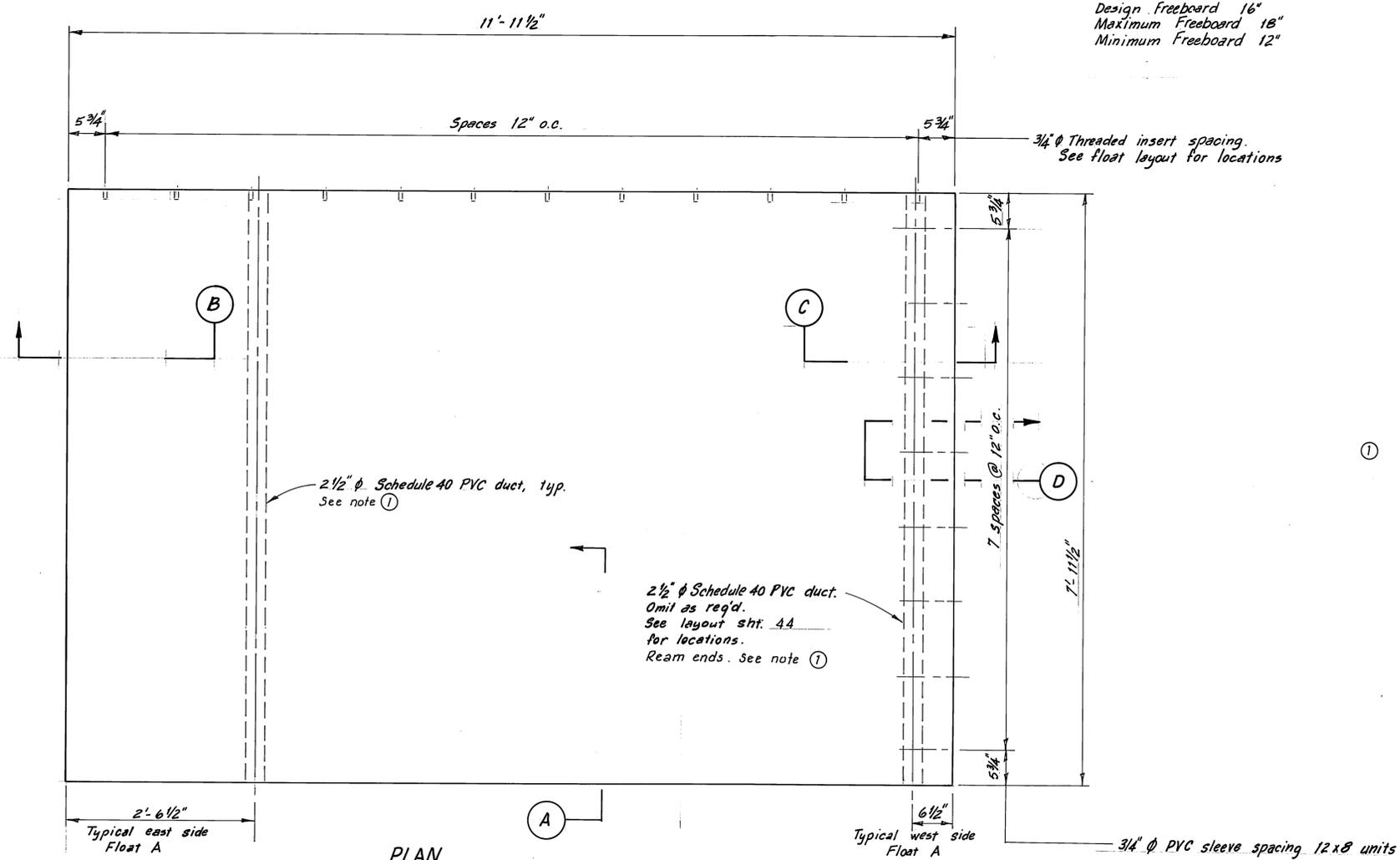
- NOTES:
- ① All ducts to be installed with a .25% min. slope to drain @ ends. Non sweep ducts will be crowned @ center of float units.
 - ② Pontoon supplier to provide float unit w/ req'd. freeboard. Allow 35 lbs per linear foot for wales, bumper & utilities.

Design Freeboard 16"
Maximum Freeboard 18"
Minimum Freeboard 12"



SECTION B
3/4" = 1'-0"

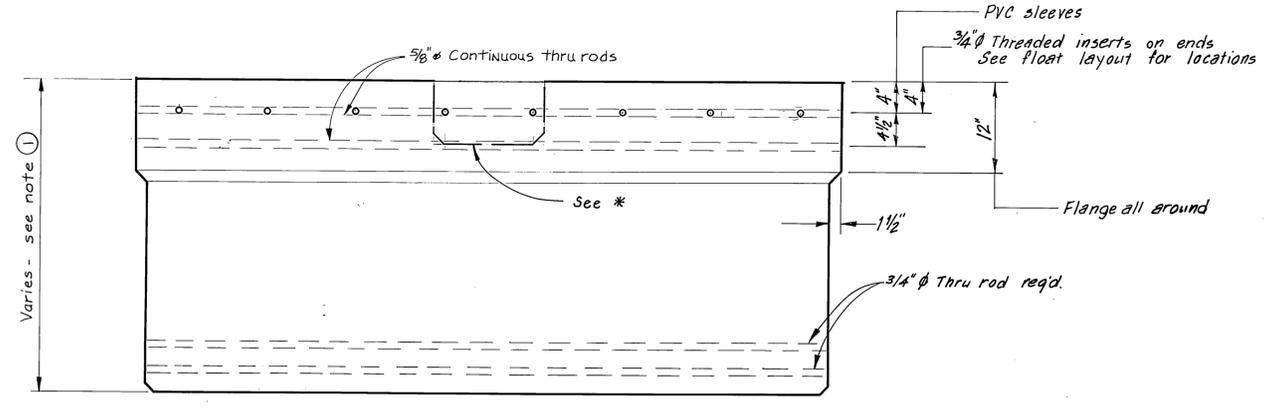
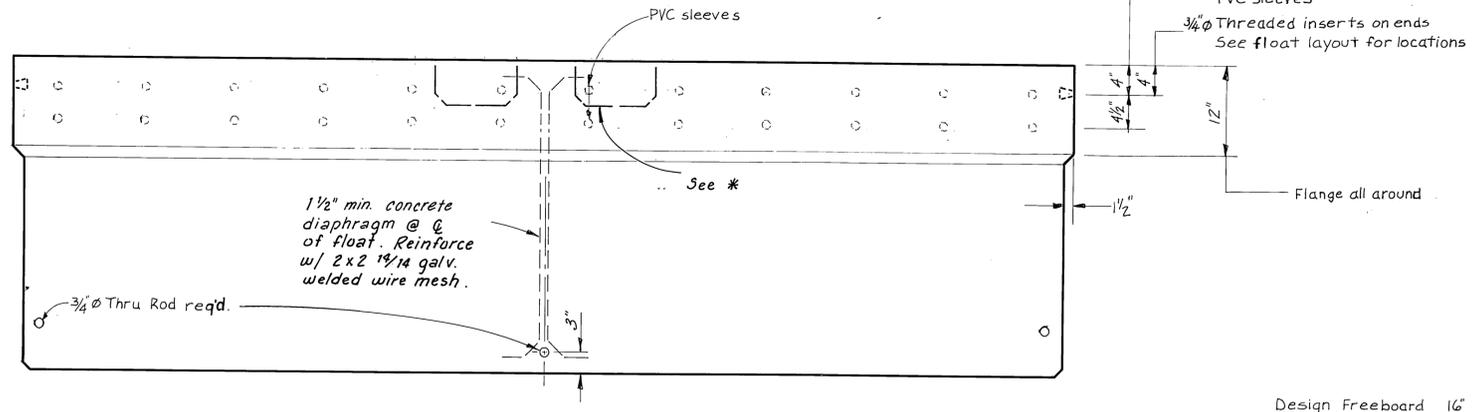
SECTION A
3/4" = 1'-0"



SECTION C
3" = 1'-0"

SECTION D
3" = 1'-0"

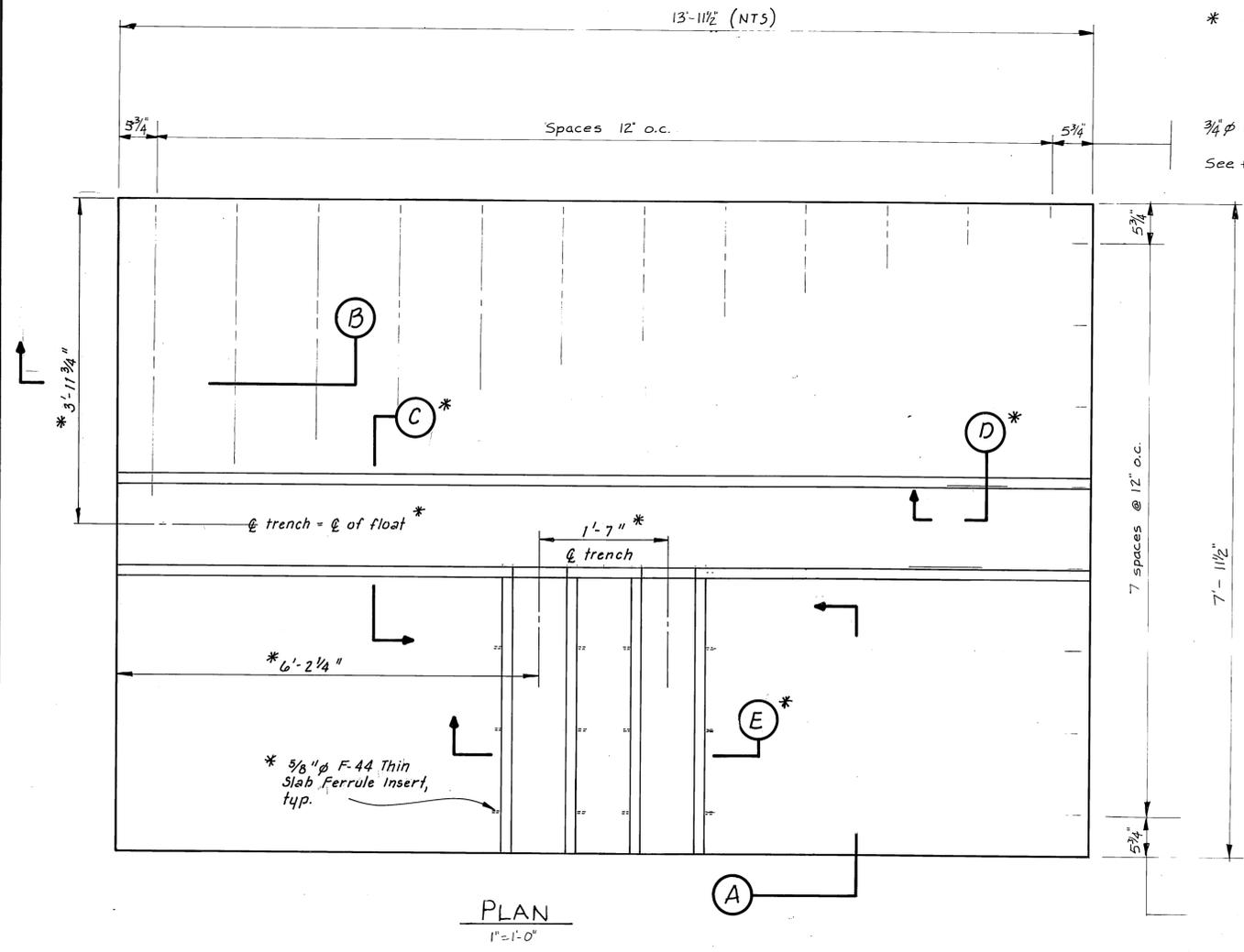
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		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
12' x 8' HEAVY DUTY FLOAT UNITS			
SCALE <i>As Noted</i>	SURVEYED _____	APPROVED Robert P. Beck	
DESIGNED JDB	DRAWN DB	Checked James A. Lowell	
CHECKED _____	DATE 2-83		
PROJECT NUMBER K-78153	SHEET 47 OF 50		



Design Freeboard 16'
Maximum Freeboard 18'
Minimum Freeboard 12'

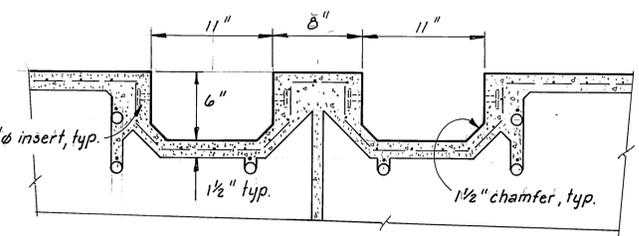
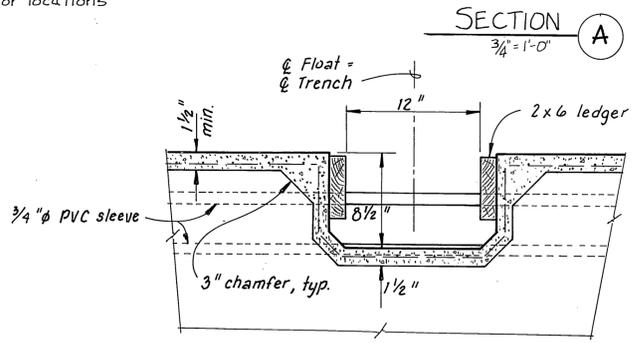
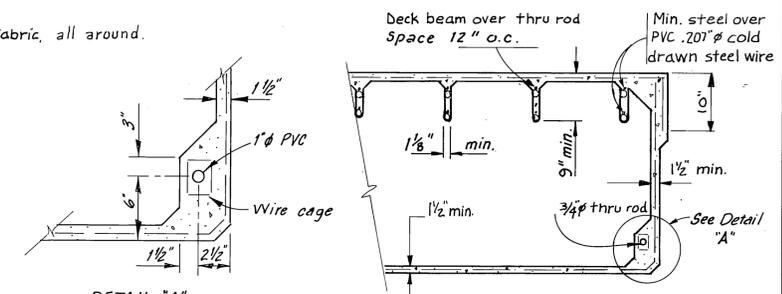
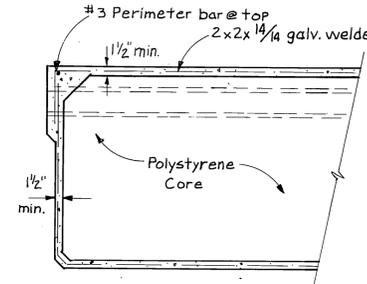
OUTBOARD ELEVATION
1" = 1'-0"

END ELEVATION
1" = 1'-0"

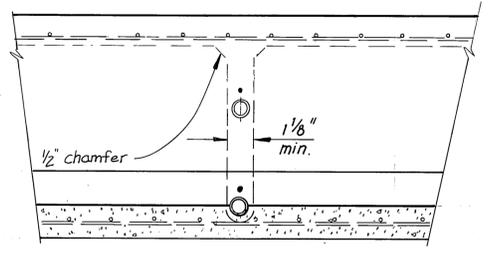


- Notes
- ① Pontoon supplier to provide float unit w/ reqd. freeboard. Allow 35 Lbs. per linear foot for wales, bumper & utilities on HD units. Allow 3300 lbs. per float unit for gangway.
 - * Section, dimension or note applies to trench float only, not standard float unit.

3/4" PVC sleeve spacing
See float layout for locations

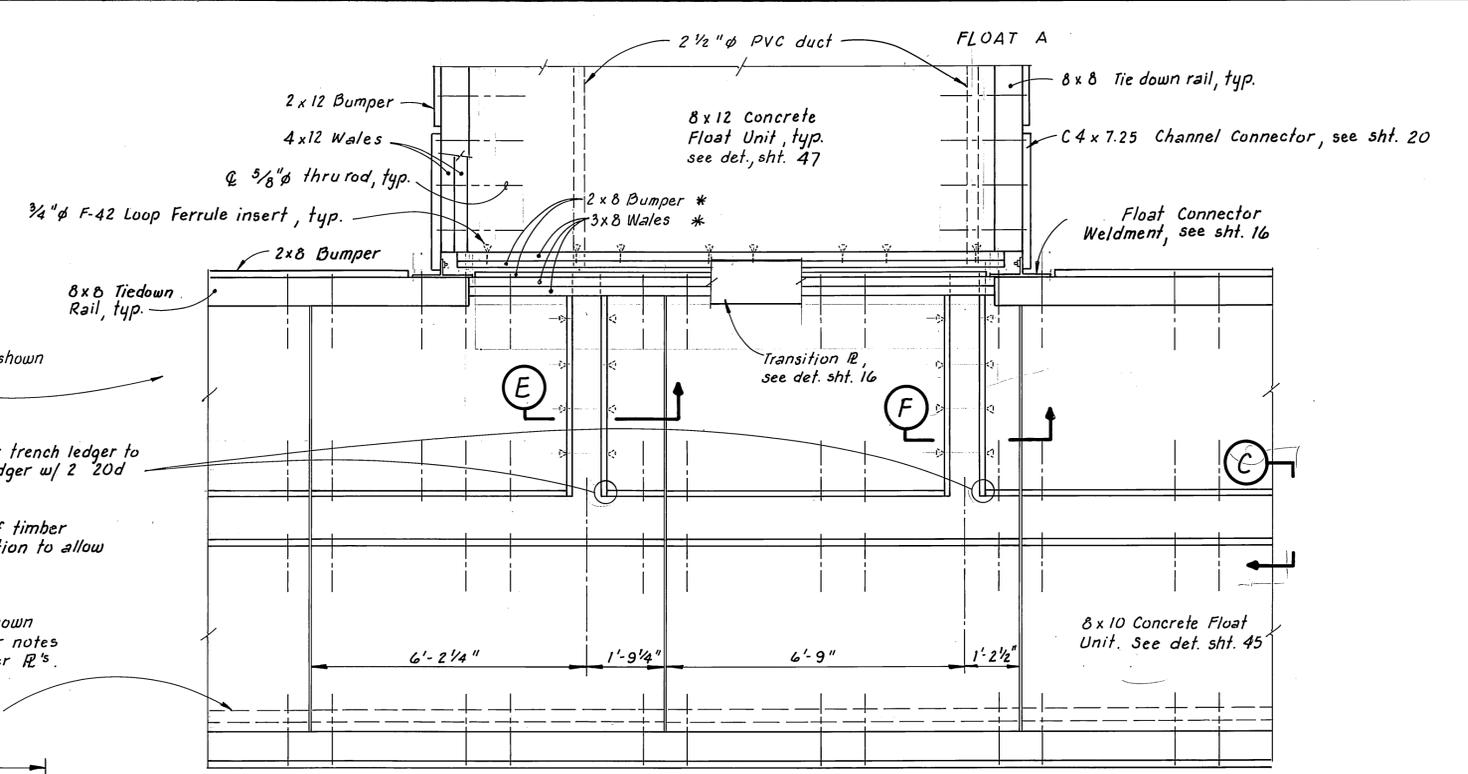
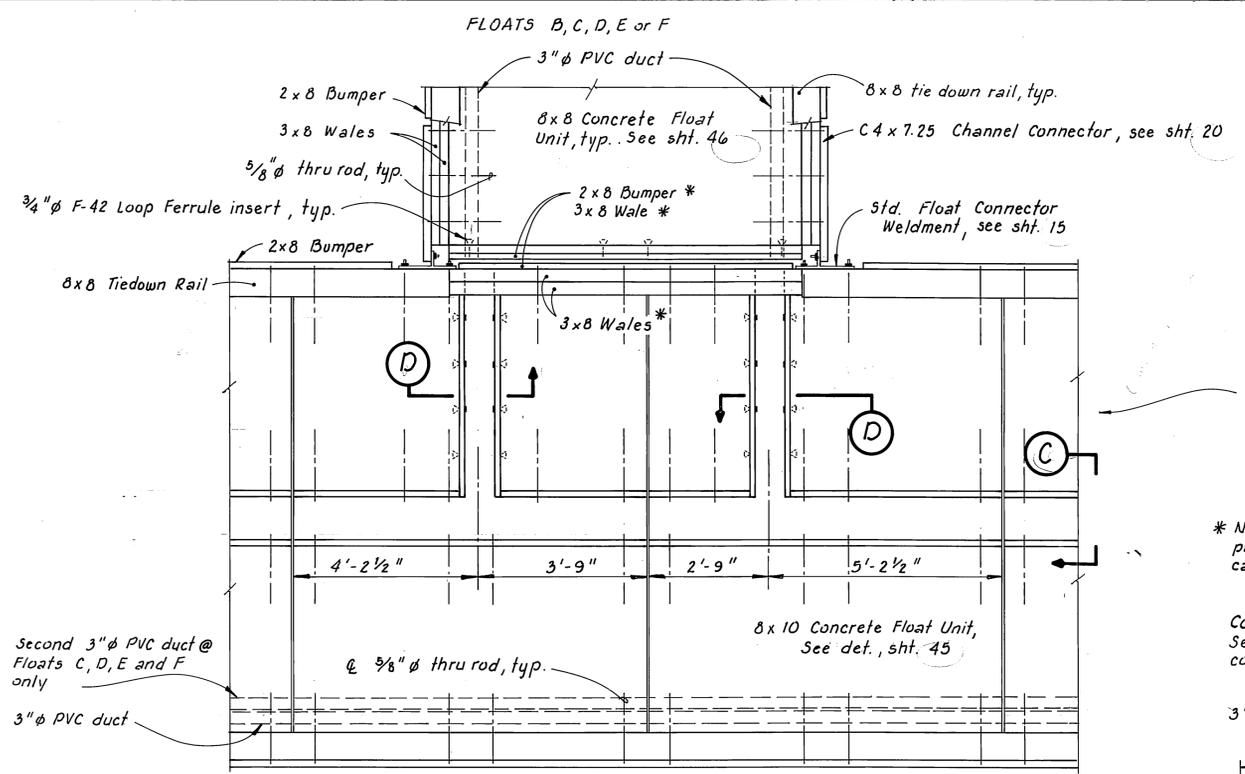


Note:
Ledgers not shown



Note:
Ledgers not shown.

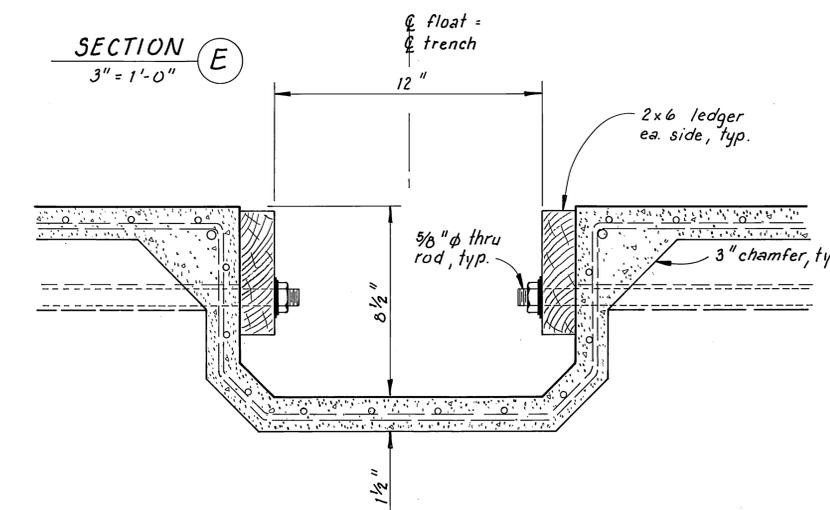
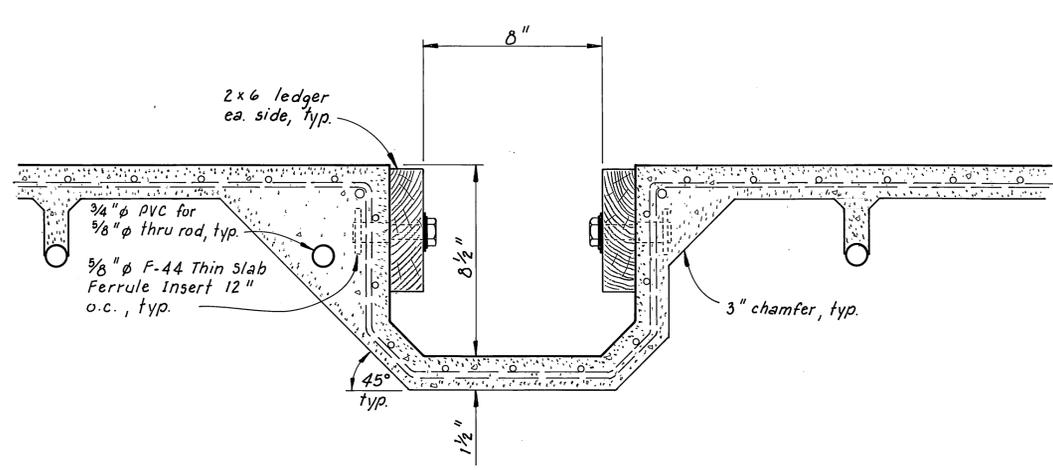
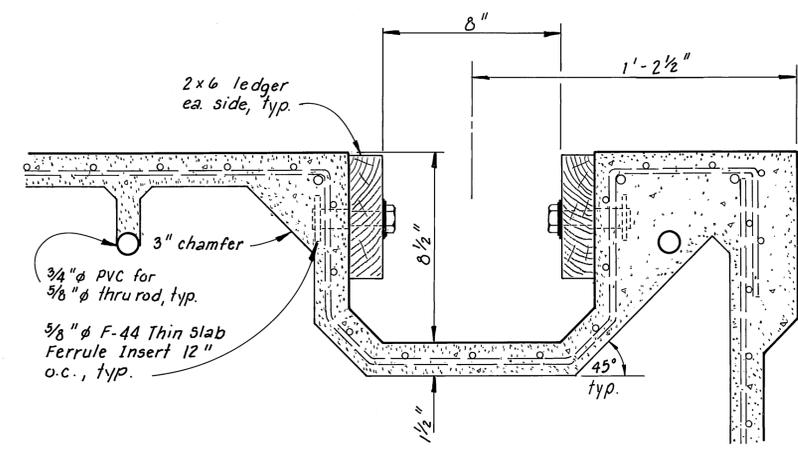
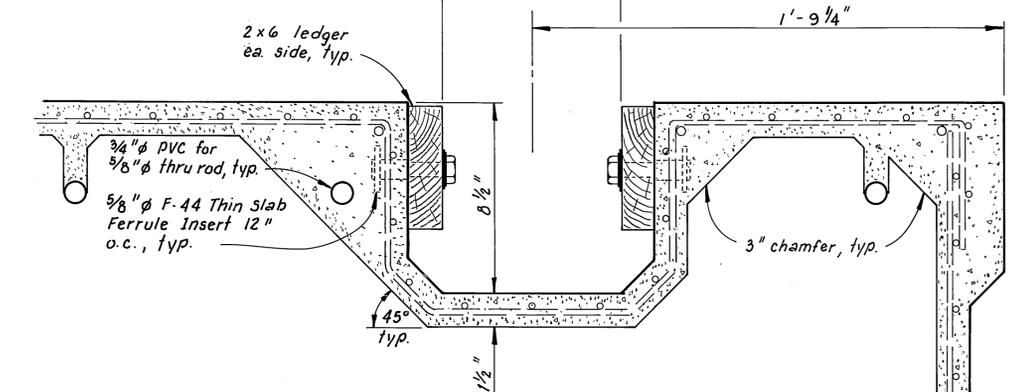
STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan, Alaska GANGWAY FLOAT UNITS	
SCALE As noted	DESIGNED JS	SURVEYED RJT/CV	APPROVED Robert P. Beck
CHECKED JDB	DRAWN	DATE	James A. Lowell
PROJECT NUMBER K-78153	SHEET 48 OF 50		



Cover R's not shown
 FLOAT H
 Secure center trench ledger to side trench ledger w/ 2 20d nails (typ.)
 * Notch bottom of timber prior to installation to allow cable passage.
 Cover R's not shown
 See sheet for notes concerning cover R's.

DETAIL B
 1/2" = 1'-0"

DETAIL A
 1/2" = 1'-0"



SECTION D
 3" = 1'-0"

SECTION C
 3" = 1'-0"

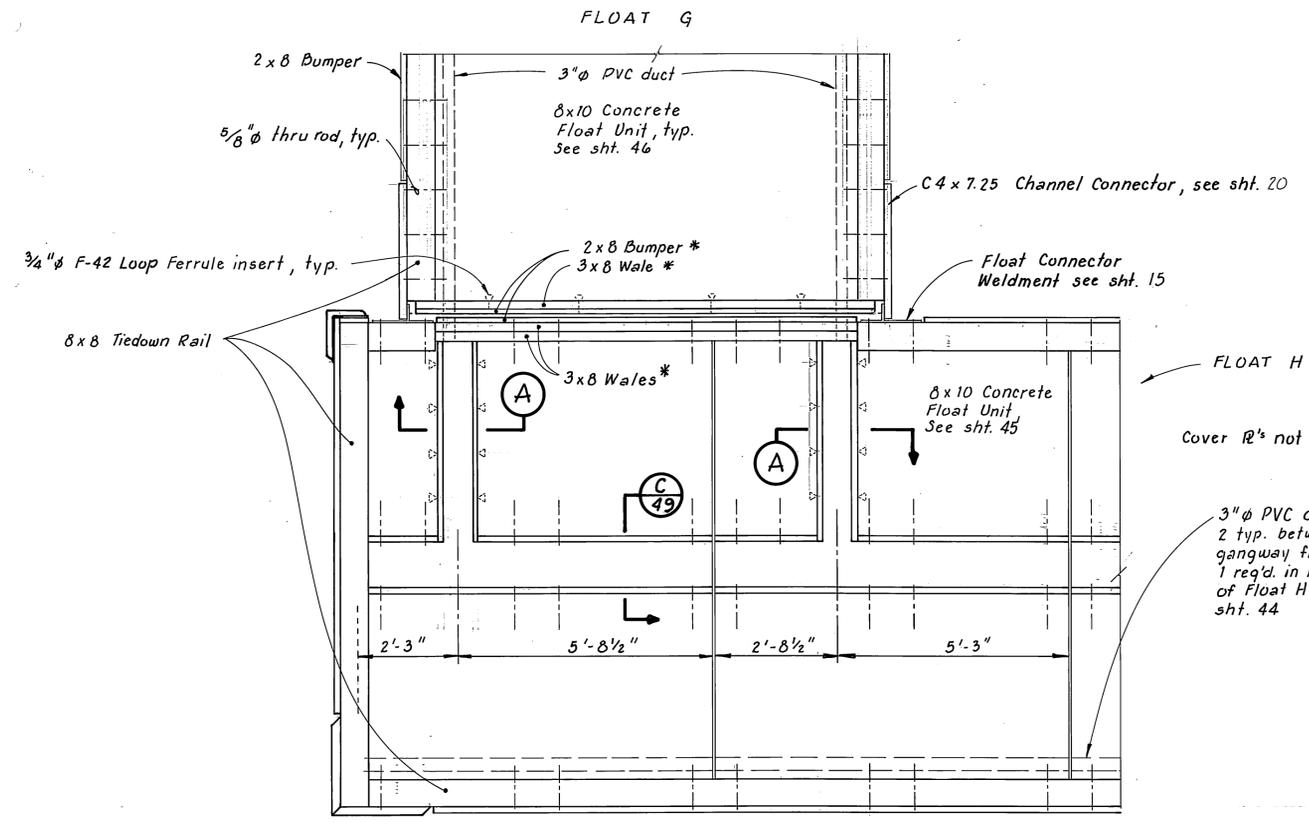
SECTION F
 3" = 1'-0"

Cover R not shown

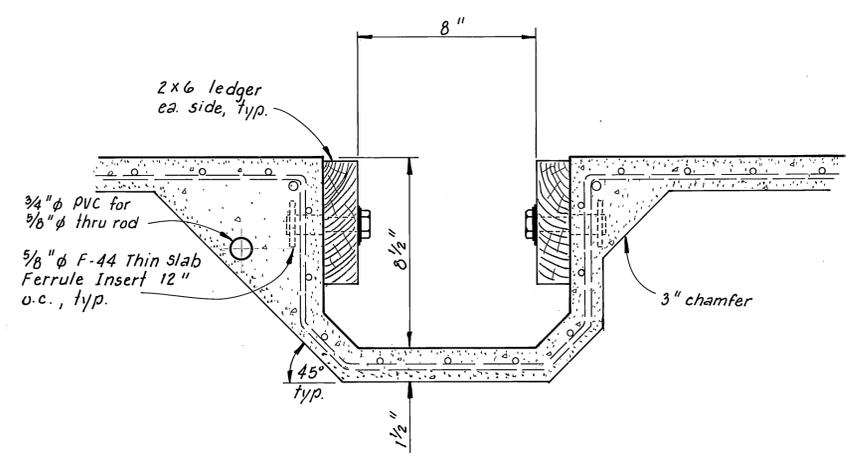
Cover R not shown

Cover R not shown

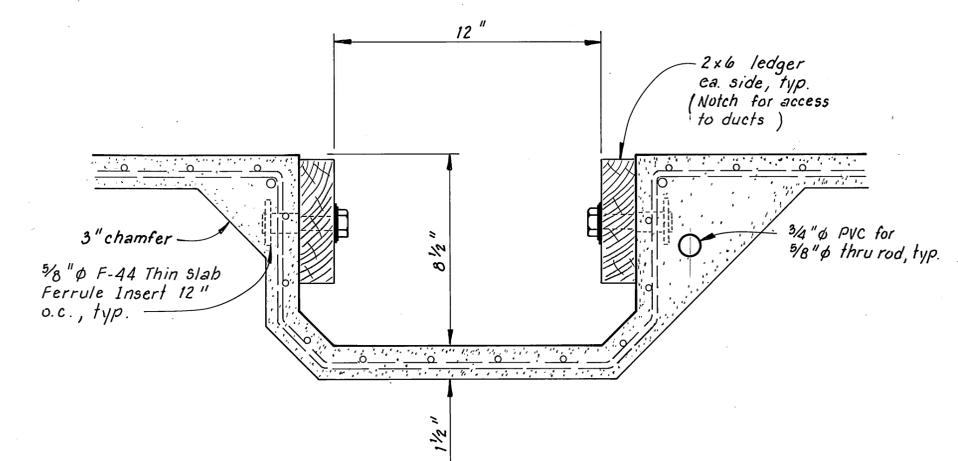
STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
TRENCH FLOAT INTERSECTION DETAILS A & B			
SCALE <i>As Noted</i>	SURVEYED _____	APPROVED <i>Robert P. Beck</i>	
DESIGNED <i>JS</i>	DRAWN <i>TS</i>	James A. Lowell	
CHECKED <i>JDB</i>	DATE <i>2-83</i>		
PROJECT NUMBER <i>K-78153</i>	SHEET <i>49</i> OF <i>50</i>		



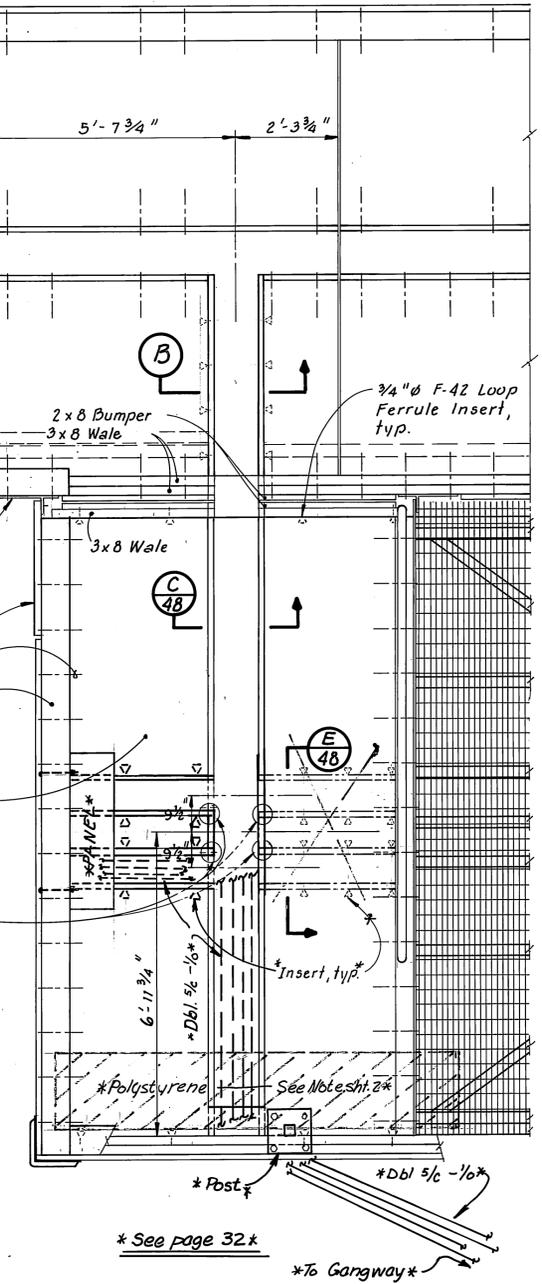
DETAIL C
1/2" = 1'-0"



Cover \mathcal{R} not shown



Cover \mathcal{R} not shown



DETAIL D
1/2" = 1'-0"

* Note: This float was changed; trenches on right hand side are shown as phantom lines; (as designed) trenches were built on left side, and shown as solid lines.*

STAMP		DO NOT SCALE THIS DRAWING - USE DIMENSIONS	
		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HARBOR DESIGN AND CONSTRUCTION	
		Bar Harbor, Ketchikan Alaska	
TRENCH FLOAT INTERSECTION DETAILS C & D			
SCALE <i>As Noted</i>	SURVEYED	APPROVED <i>Robert P. Beck</i>	
DESIGNED <i>JDB</i>	DRAWN <i>TS</i>	CHECKED <i>JDB</i>	
CHECKED <i>JDB</i>	DATE <i>2-83</i>	PROJECT NUMBER <i>K-78153</i>	
PROJECT NUMBER <i>K-78153</i>		SHEET <i>50</i> OF <i>50</i>	