

TYPICAL WEIR DETAILS, WEIRS 10-13, 16

TYPICAL WEIR DETAILS, WEIRS 33, 36-67

TYPICAL ALL WEIRS

NOTES

- 1. For General Notes see Sheet 22.
- 2. The weir number equals the weir crest elevation with the following exceptions:
 Weir 37 - crest elevation - 36.83
 Weir 67 - crest elevation - 66.83

For Information Only

AS CONSTRUCTED
CONTRACT No. DACW47-78-C-0076

REVISION	DATE	DESCRIPTION	BY
1	87SEP23	As constructed	
2	79JUL30	Corrected crest elevations of weirs 37 & 67	

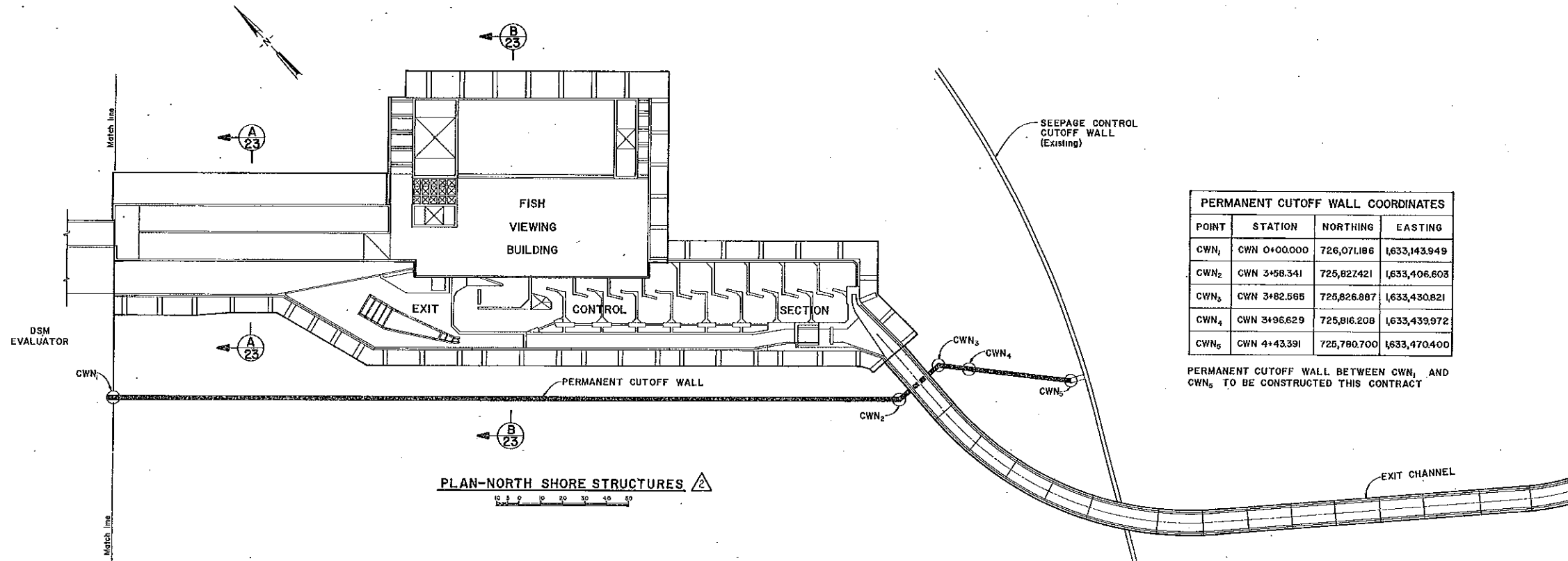
U. S. ARMY ENGINEER DISTRICT, PORTLAND

DESIGNED: D. Illies
 DRAWN: A. Binder
 CHECKED: D. Chambers

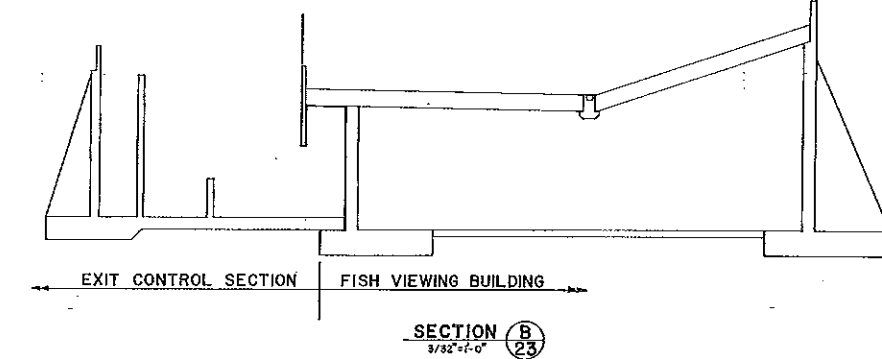
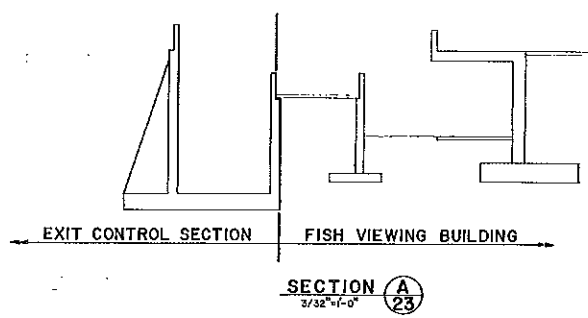
BONNEVILLE SECOND POWERHOUSE
 COLUMBIA RIVER OREGON-WASHINGTON
 FISH FACILITIES - FISHWAY ENTRANCE MONOLITHS
WEIRS - CONCRETE OUTLINES I

PREPARED: Robert Strom
 SUPERVISED: [Signature]

SUBMITTED: [Signature]
 DATE: 77 APR 27
 SHEET 53



PLAN-NORTH SHORE STRUCTURES



For Information Only

AS CONSTRUCTED
CONTRACT No. DACW57-78-C-0076

REVISION	DATE	DESCRIPTION	BY
1	17 Sep 78	As constructed	mm
2	18 Feb 78	Revised Fish Viewing Bldg., sheet redrawn	mm
3	17 Feb 78	Added sections A & B	mm

U. S. ARMY ENGINEER DISTRICT, PORTLAND

DESIGNED: *R. Strom*
DRAWN: *A. Binder*
CHECKED: *D. ILLIOS*
PREPARED: *Ralph Strom*
SUPERVISED: *Donald P. Smith*

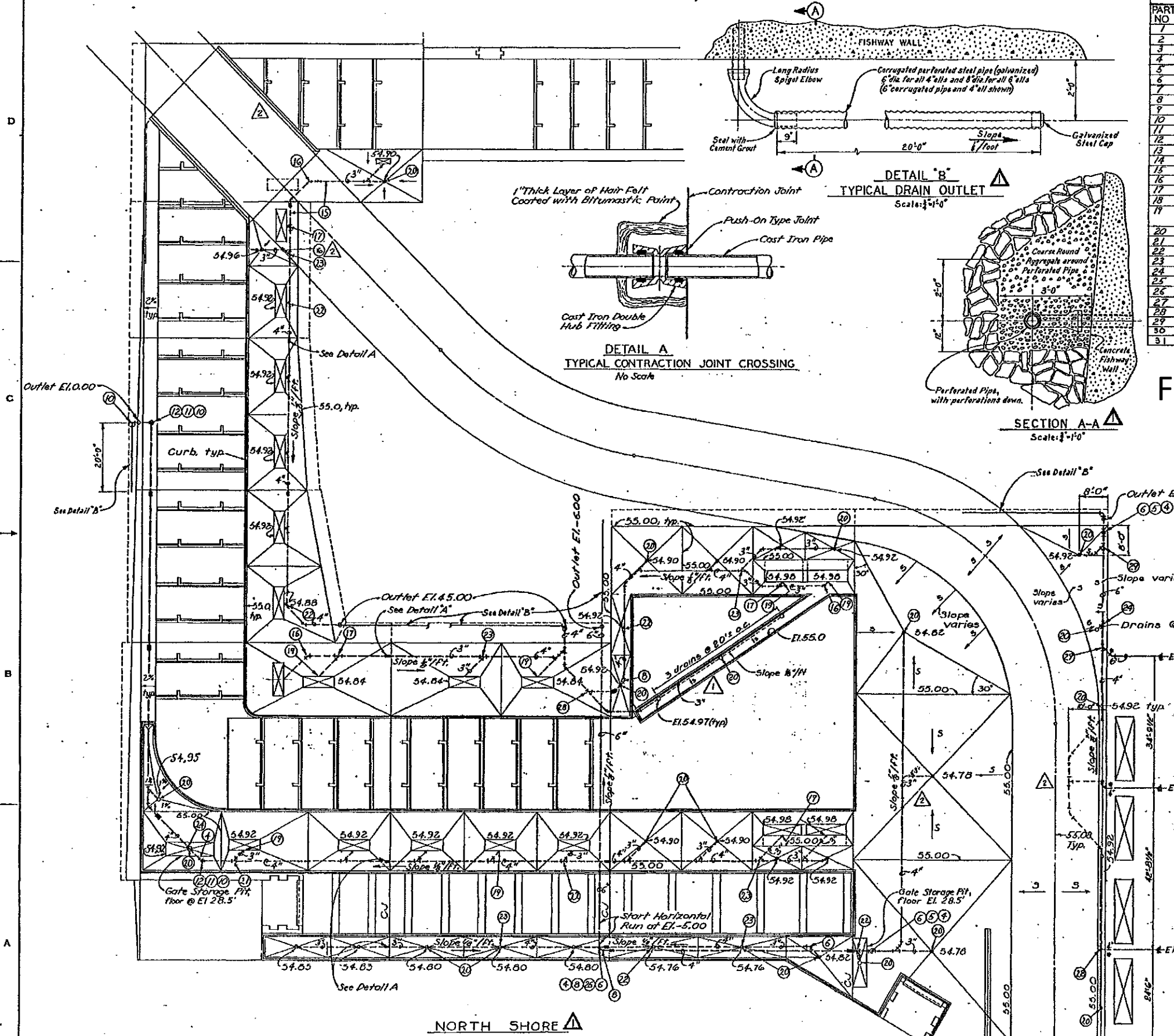
BONNEVILLE SECOND POWERHOUSE
COLUMBIA RIVER OREGON-WASHINGTON

FISH FACILITIES - FISHWAY ENTRANCE MONOLITHS

LAYOUT
NORTH SHORE FEATURES II

SUBMITTED: *Robert Hume* DATE: 27 NOV 78
DIRECTOR: *Robert Hume*

071-023
SHEET 23 OF 23
BDF-2-15/21
VOL. NO. V



MATERIAL LIST		
PART NO	MATERIAL	DESCRIPTION
1	CT	6" Soil Pipe Class 22 Hub-Type, Push-on Joints
2	CT	6" 1/4-Bend Soil Pipe Fitting (S.P.F.) Push-on Joints
3	CT	6" Single Y-Branch
4	CT	6" Long Radius 1/4-Bend (S.P.F.)
5	CT	6" Combination Y 1/4-Bend (S.P.F.)
6	CT	6" Clean-out Turn #2-1420 or equal
7	CT	4" Soil Pipe Class 22 Push-on Joints
8	CT	4" 1/4-Bend Soil Pipe Fitting, Push-on Joints
9	CT	4" Single Y-Branch (S.P.F.) " " "
10	CT	4" Long Radius 1/4-Bend (S.P.F.) " " "
11	CT	4" Combination Y 1/4-Bend (S.P.F.) Push-on Joints
12	CT	4" Clean-out Turn #2-1420 or approved equal
13	CT	4" Floor Drain Zurn #Z-505 or approved equal
14	CT	4x3" Double Y-Branch (S.P.F.) Push-on Joints
15	CT	3" Soil Pipe Class 22 Hub-Type, Push-on Joints
16	CT	3" 1/4-Bend Soil Pipe Fitting, Push-on Joints
17	CT	3" Single Y-Branch (S.P.F.) Push-on Joints
18	CT	3" Combination Y 1/4-Bend (S.P.F.) Push-on Joint
19	CT	3" 45° Threaded Elbow and Spigot Adaptor Zurn #1040 or approved equal
20	CT	3" Floor Drain Zurn #Z-505 or approved equal
21	CT	Single Y-Branch 4"x6"x3" (S.P.F.)
22	CT	" " " 4"x4"x3" " " "
23	CT	" " " 3"x4"x3" " " "
24	CT	6"x6"x3" Combination Y 1/4-Bend (S.P.F.)
25	CT	3"x6"x6" " " " " " " "
26	CT	6"x6"x4" " " " " " " "
27	CT	6"x6"x4" Single Y-Branch (S.P.F.)
28	CT	3"x4"x4" Combination Y 1/4-Bend (S.P.F.)
29	CT	4"x6"x6" " " " " " " "
30	CT	3" 1/4-Bend Soil Pipe Fitting
31	CT	3" Long Radius 1/4-Bend (S.P.F.)

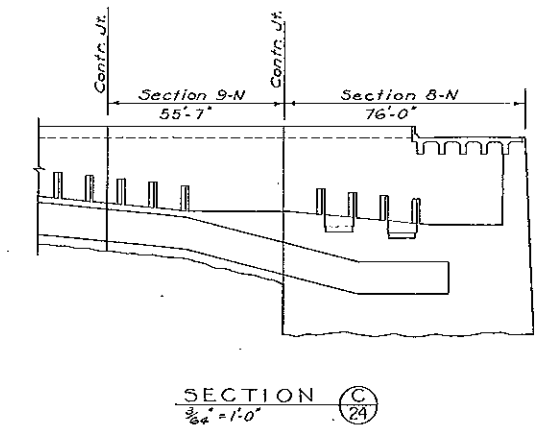
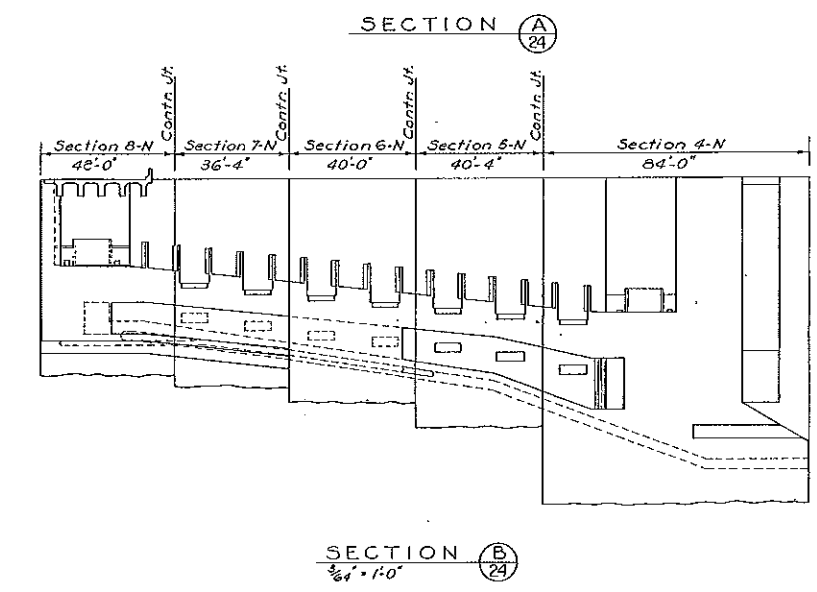
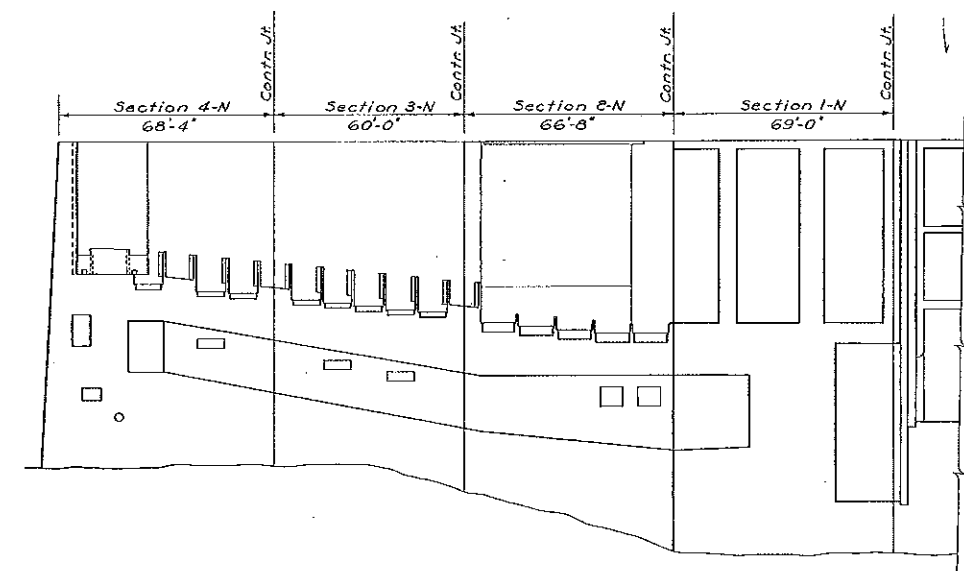
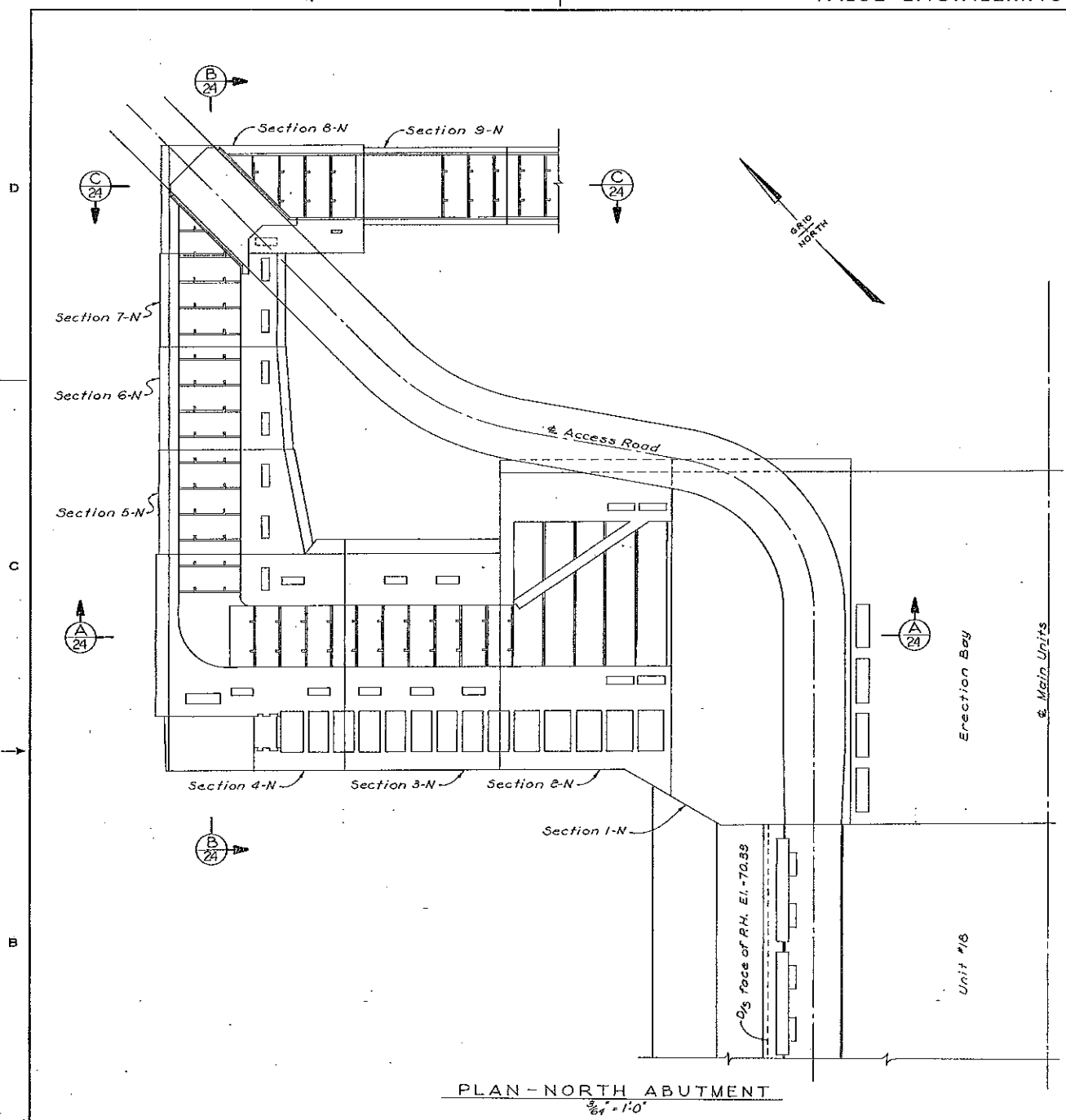
For Information Only

- NOTES**
1. For drain pipe connection to hatch frames see Sheet No's. B1482.
 2. Deck elevations, 55.00, are shown to indicate deck slope for drainage.
- * Continued on BDP-1-3-8/55

FOR INFORMATION ONLY

AS CONSTRUCTED
CONTRACT No. DACW42-78-C-0076

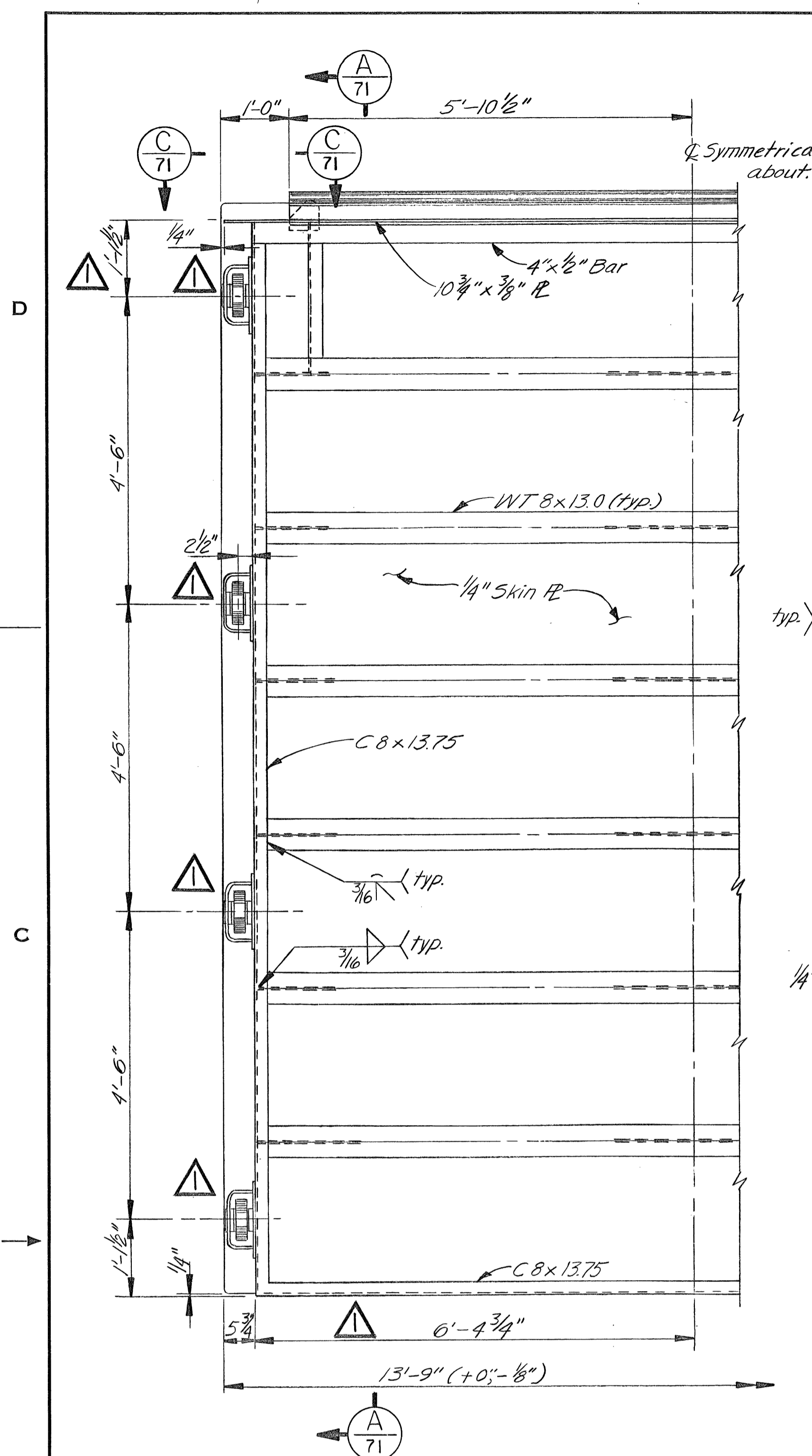
DESIGNED BY J. Siley	PROJECT BONNEVILLE SECOND POWERHOUSE COLUMBIA RIVER OREGON-WASHINGTON
DRAWN BY C. Roselli	DESCRIPTION FISH FACILITIES - FISHWAY ENTRANCE MONOLITHS DECK DRAINAGE-NORTH SHORE
CHECKED BY D. Chambers	
PREPARED BY Robert Strom	SUBMITTED BY Robert Strom
SUPERVISOR Steve R. Pender	DATE 27 MAR 78
SHEET 64 BDF-2-15/62	



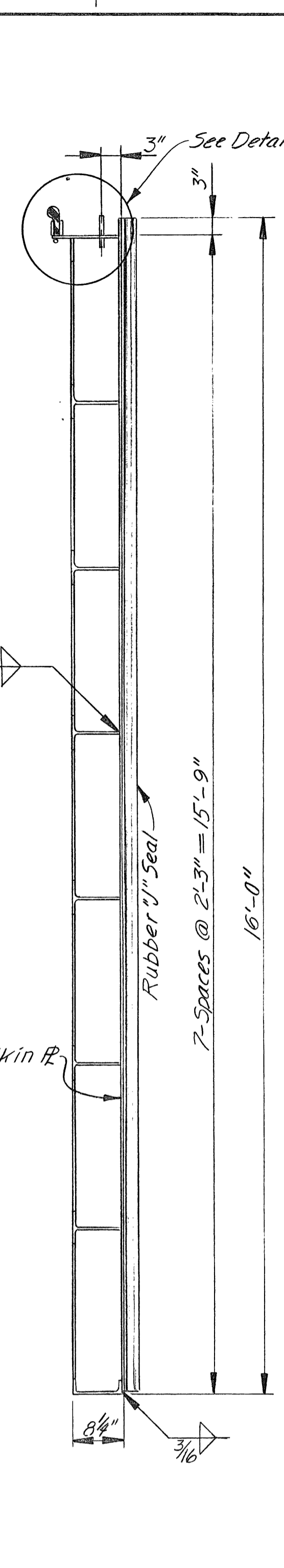
For Information Only

AS CONSTRUCTED CONTRACT NO. DACW37-78-G-2076			
REVISION	DATE	DESCRIPTION	BY
87SEP23		As constructed	
U. S. ARMY ENGINEER DISTRICT, PORTLAND			
DESIGNED:	BONNEVILLE SECOND POWERHOUSE COLUMBIA RIVER OREGON-WASHINGTON		
D. L. Liss	FISH FACILITIES - FISHWAY ENTRANCE MONOLITHS		
DRAWN:	NORTH SHORE FISHWAY PLAN		
L. Lee			
CHECKER:			
D. Chambers			
PREPARED:	Ralph Strom	SUBMITTED:	DATE: 77 Nov 21
SUPERVISED:	Heber Chinea	CHIEF ENGINEER	
GROUP ENGINEER		SHEET 24	BDF-2-15/22

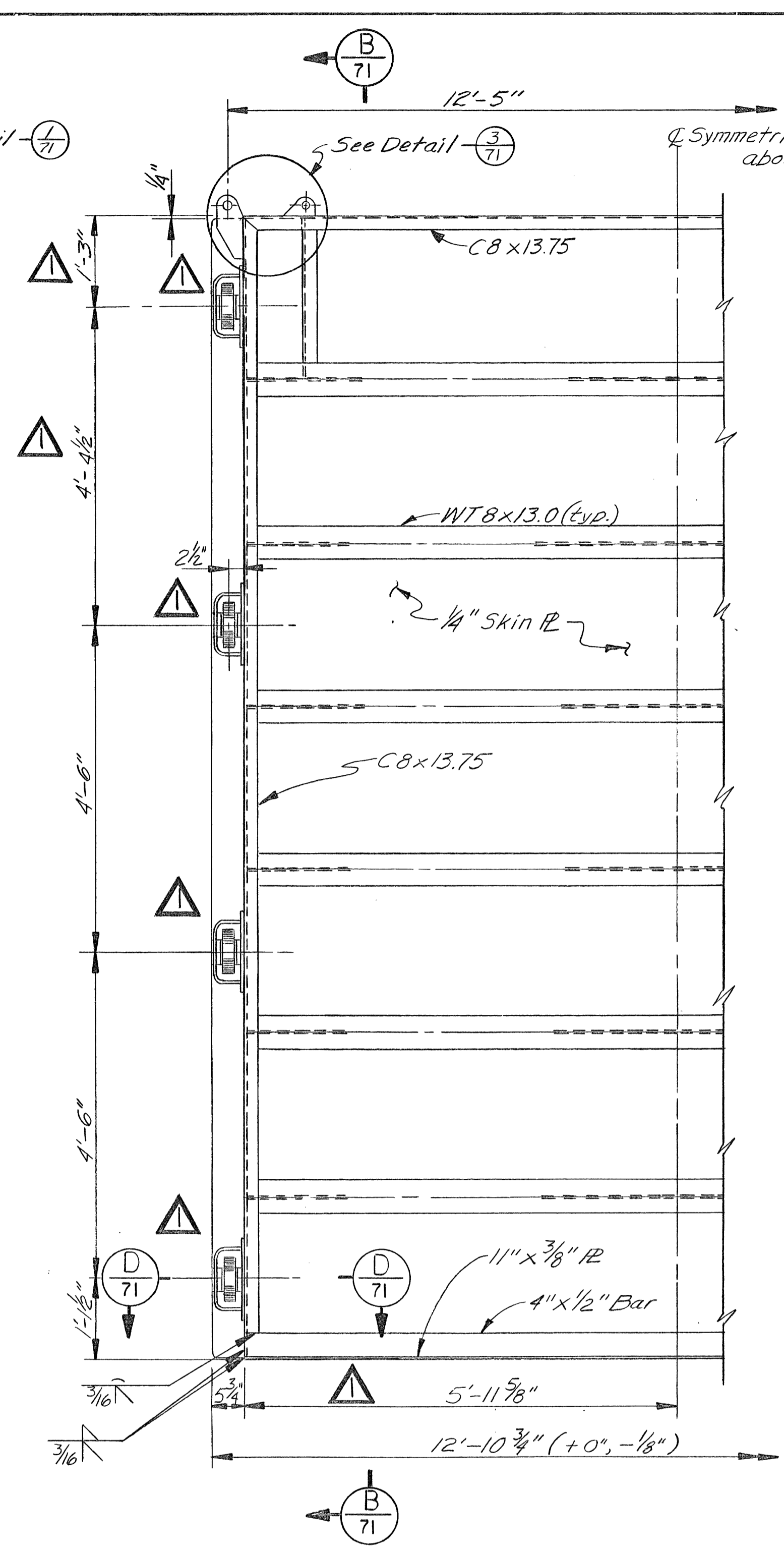
07-024



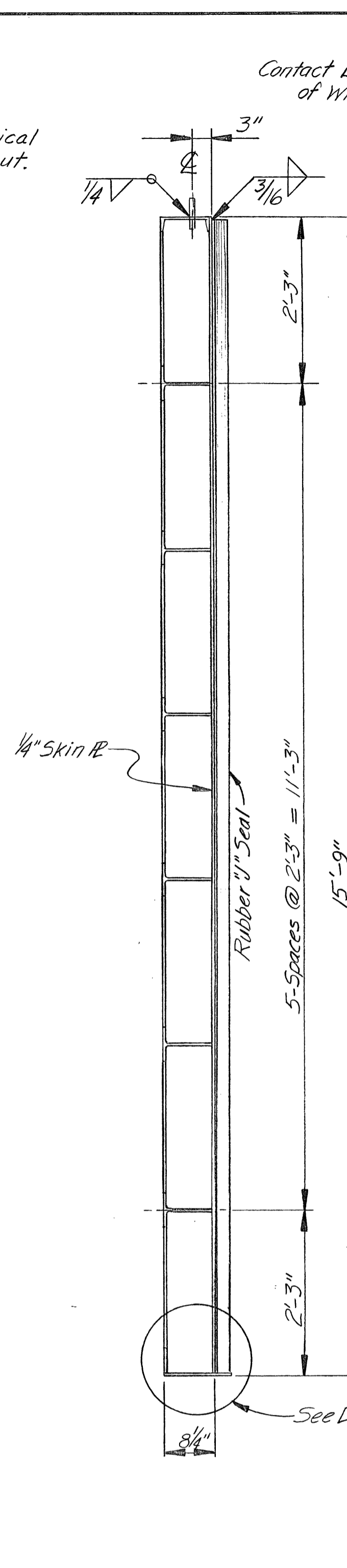
ELEVATION - BOTTOM LEAF
 3/4" = 1'-0"
 4 Req'd.



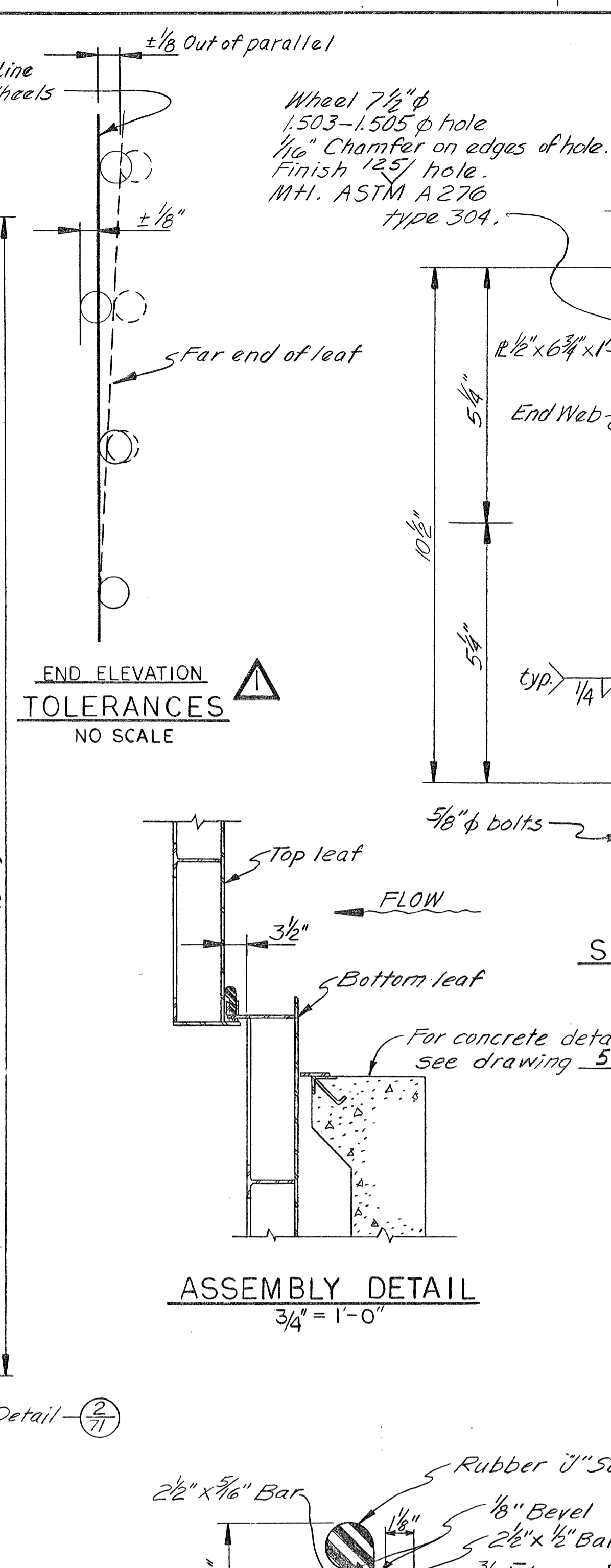
SECTION A-A
 3/4" = 1'-0"



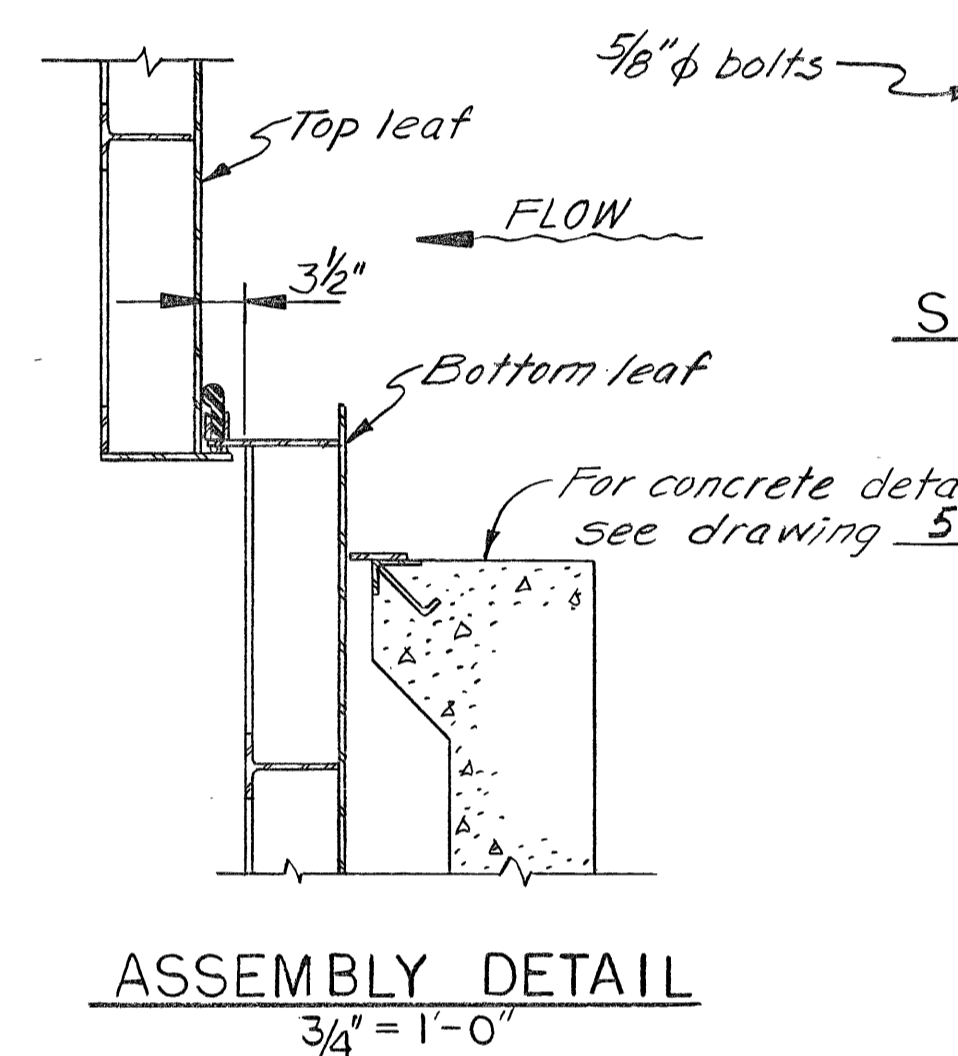
ELEVATION - TOP LEAF
 3/4" = 1'-0"
 4 Req'd.



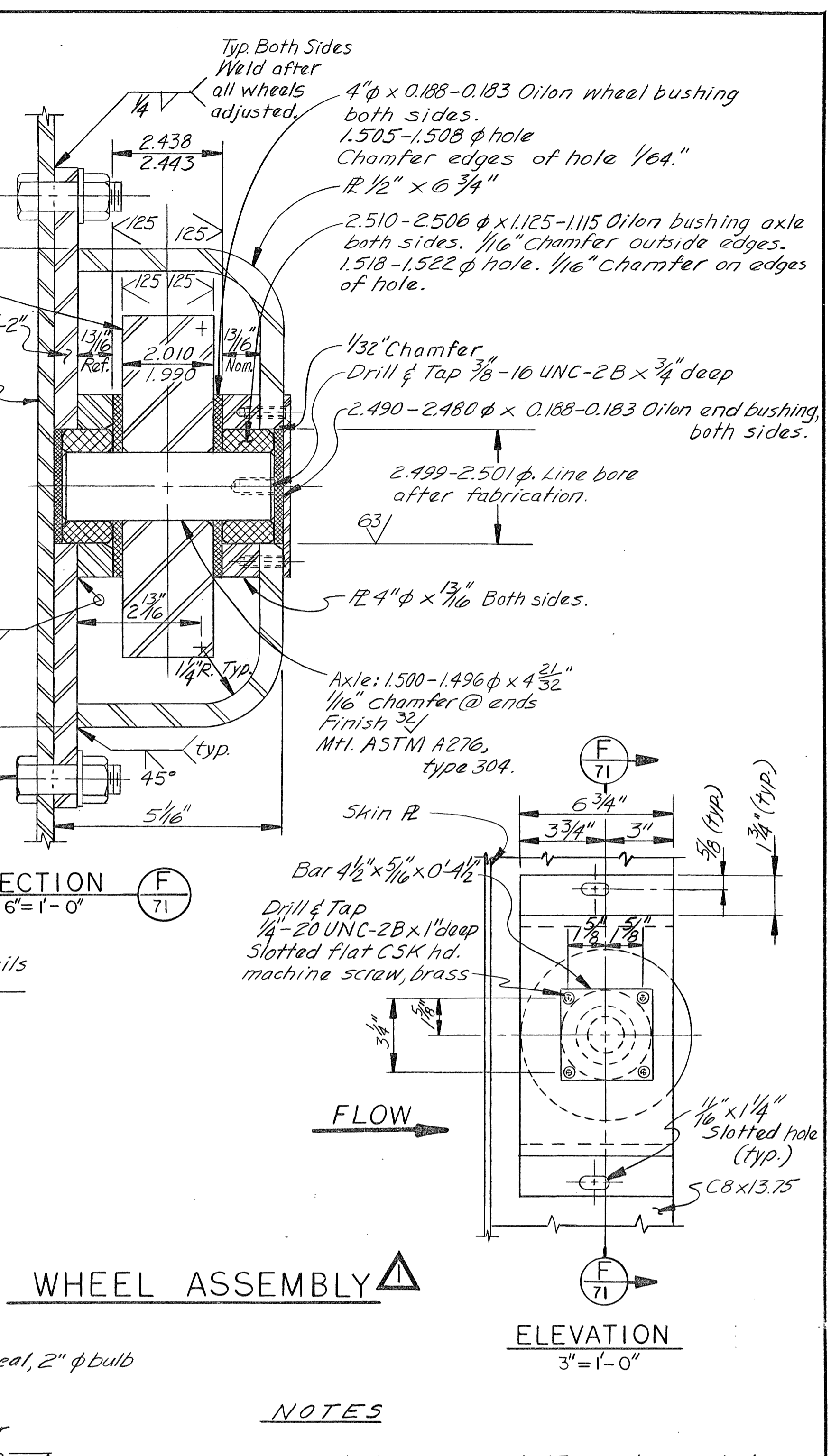
SECTION B-B
 3/4" = 1'-0"



END ELEVATION
TOLERANCES
 NO SCALE

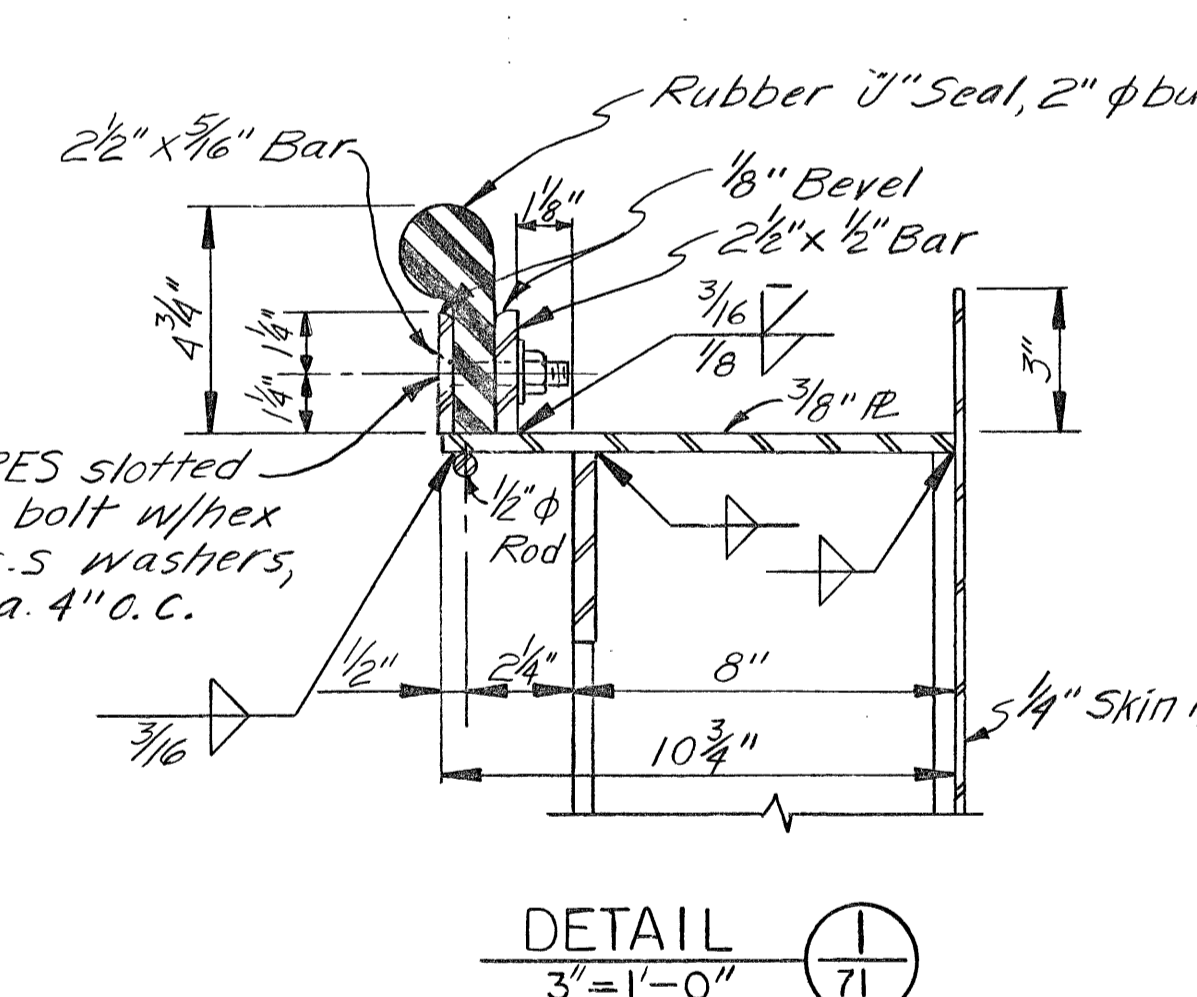


ASSEMBLY DETAIL
 3/4" = 1'-0"

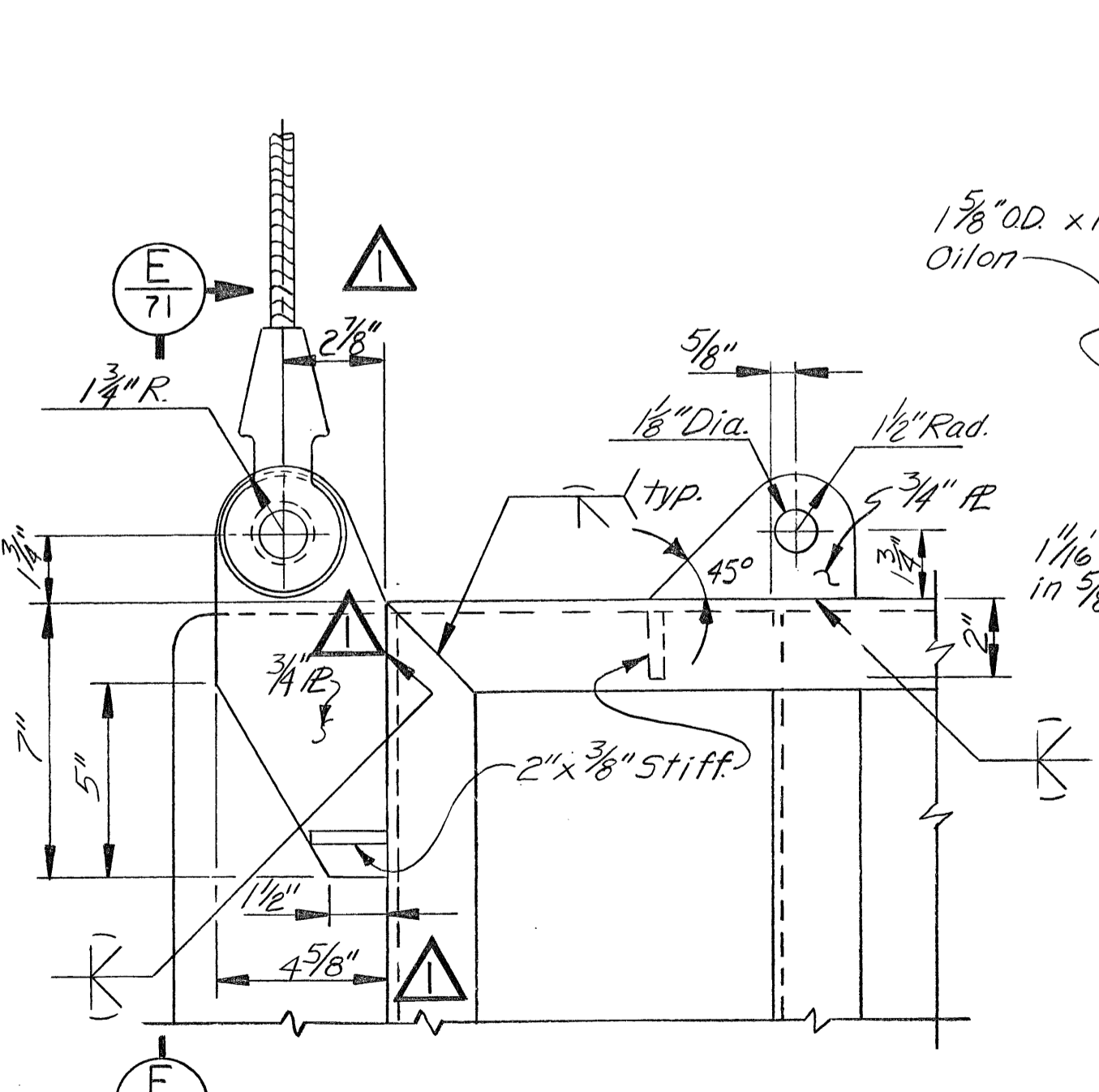


WHEEL ASSEMBLY
 SECTION F-F
 6" = 1'-0"

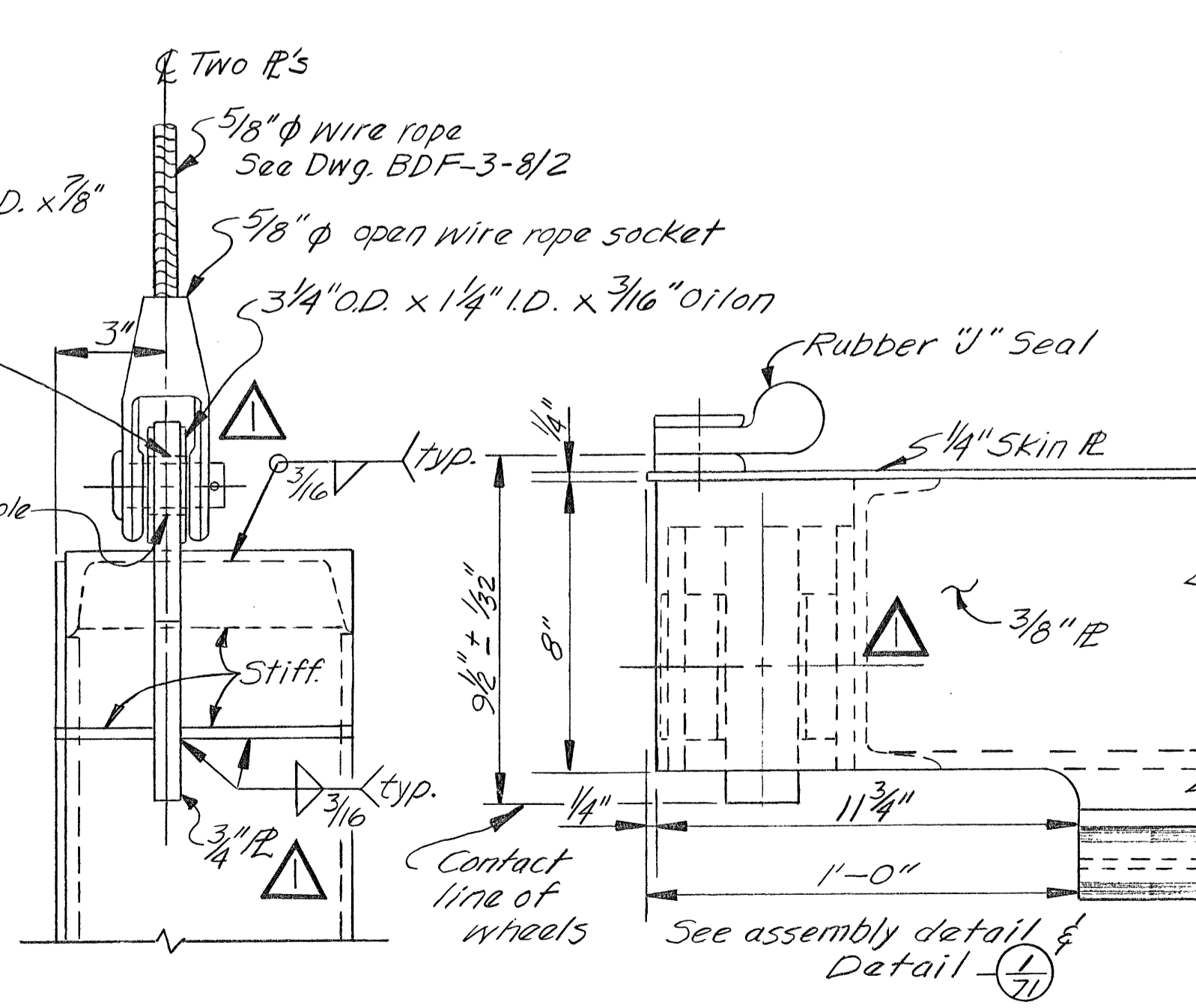
ELEVATION
 3" = 1'-0"



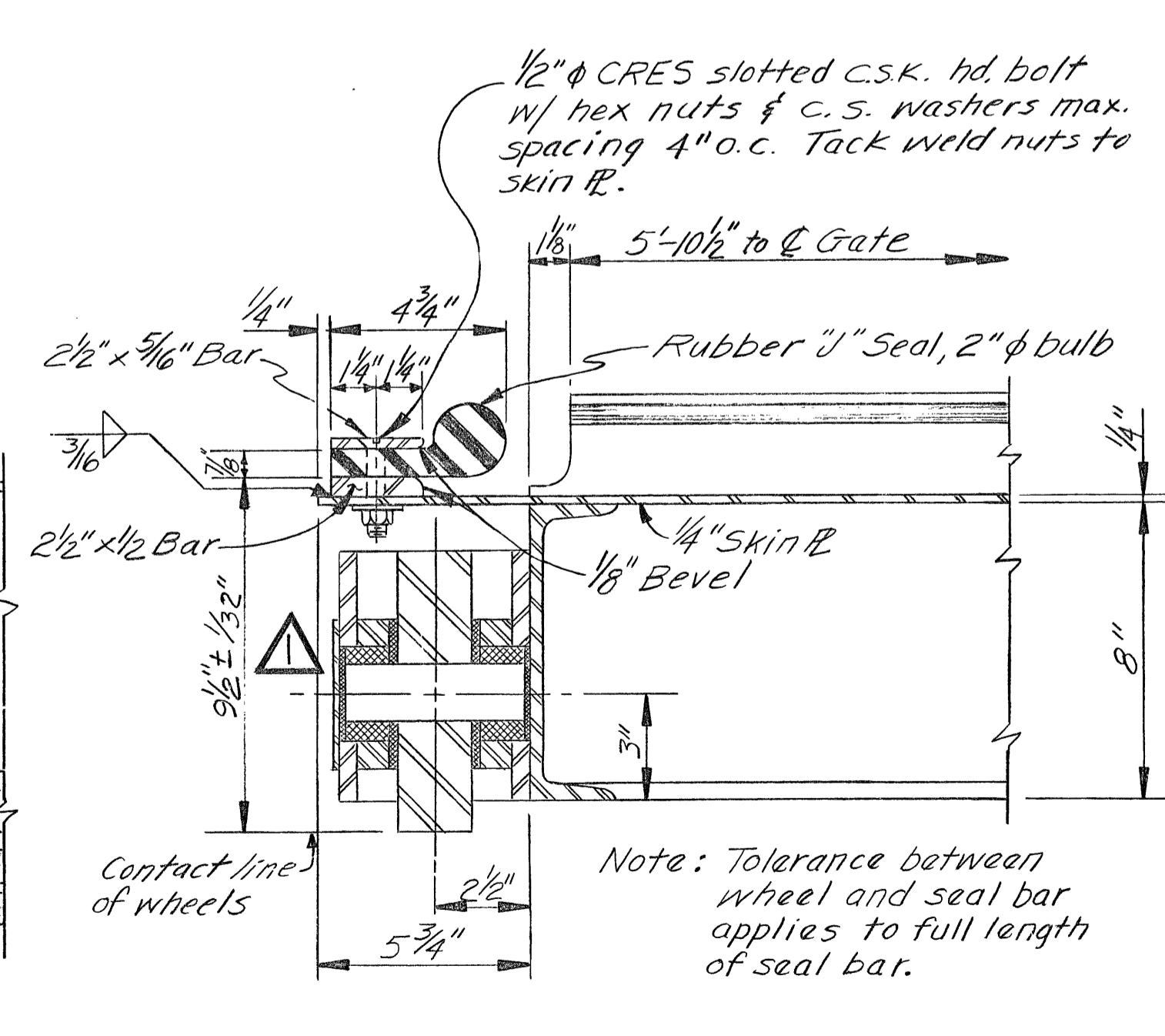
DETAIL 1-1
 3" = 1'-0"



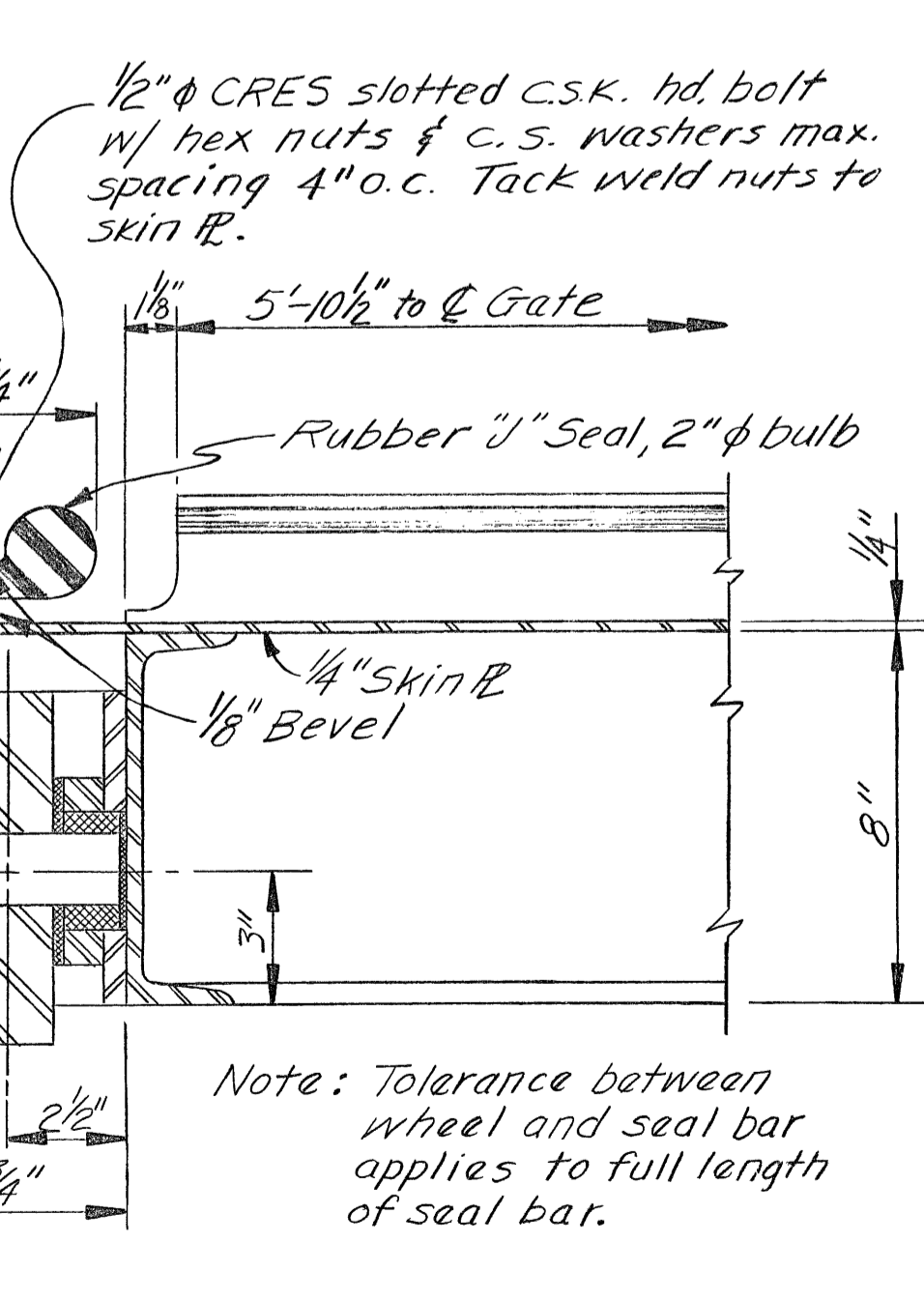
DETAIL 3-3
 3" = 1'-0"



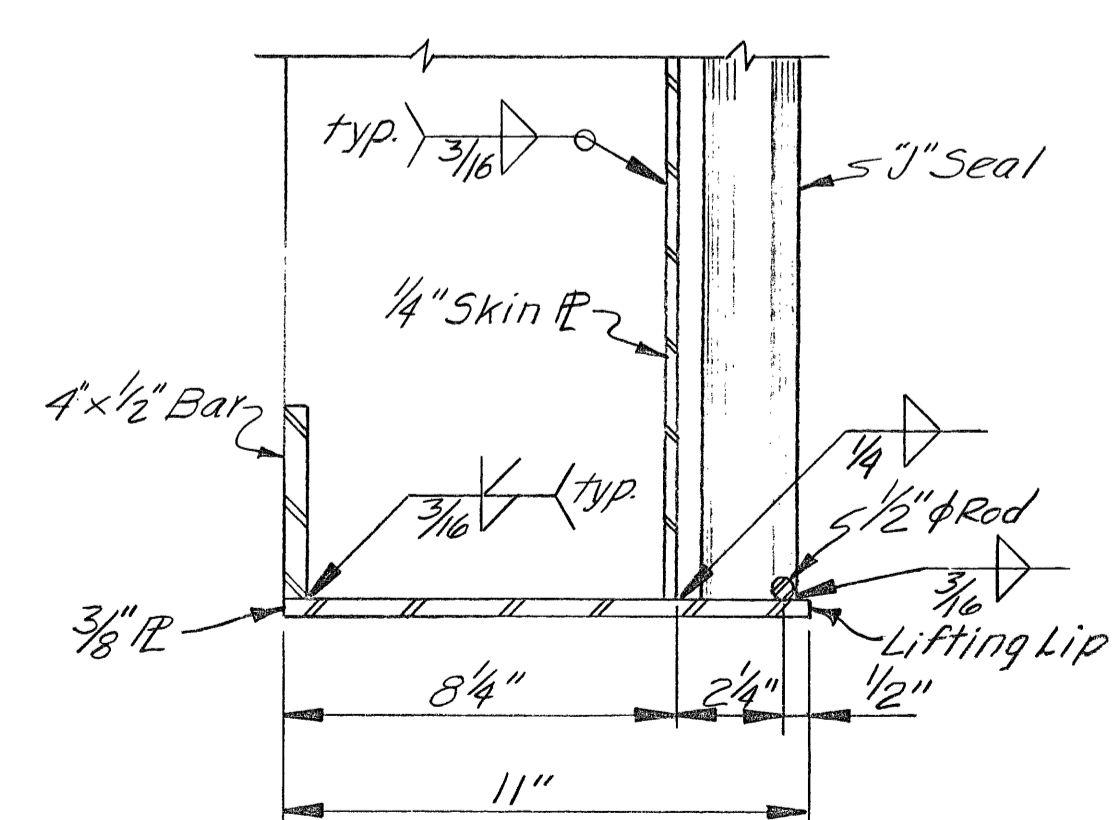
VIEW E-E
 3" = 1'-0"



VIEW C-C
 3" = 1'-0"



SECTION D-D
 3" = 1'-0"



DETAIL 2-2
 3" = 1'-0"

- NOTES**
1. Steel shall be ASTM A36 unless noted otherwise.
 2. Seal bars shall be line drilled 13/32 for 3/8" C.S.K. Head bolts.
 3. Rubber seals shall be drilled at assembly to assure tight fit on bolts.
 4. Painting: Paint System No. 3, see specification. Paint all steel surfaces except corrosion resisting.
 5. Four complete gates shall be furnished and installed under Pay Item (N230).
 6. "Oilon" shall be OILON PV 80 as manufactured by Cadillac Plastic and Chemical Co. or approved equal.

AS CONSTRUCTED
 CONTRACT NO. DACW57-78-C-0076

DESIGNED: W. Wheeler	DRAWN: G. Seagrist	CHECKED: J. Gniewosz	PREPARED: H. J. Wheeler	SUBMITTED: Heber Heine	DATE: 17 Nov 22
U. S. ARMY ENGINEER DISTRICT, PORTLAND			BONNEVILLE SECOND POWERHOUSE COLUMBIA RIVER OREGON - WASHINGTON		
FISH FACILITIES - FISHWAY ENTRANCE MONOLITHS			ENTRANCE GATES		
SUPERVISED: H. Vanell P. Smith			SHEET 71		