

CONTRACT 67-W
WATER PUMPING STATION
HOWARD COUNTY METROPOLITAN COMMISSION
ELLICOTT CITY SUB-DISTRICT

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION Aug 31, 1964 <small>DATE</small>	 <small>CHIEF ENGINEER</small>	CONTRACT NO. 67-W	LOCATION MAP OF WATER PUMPING STATION	ELLICOTT CITY SUB-DISTRICT	DRAWING NO. 1 OF 6	SCALE 1"=800'
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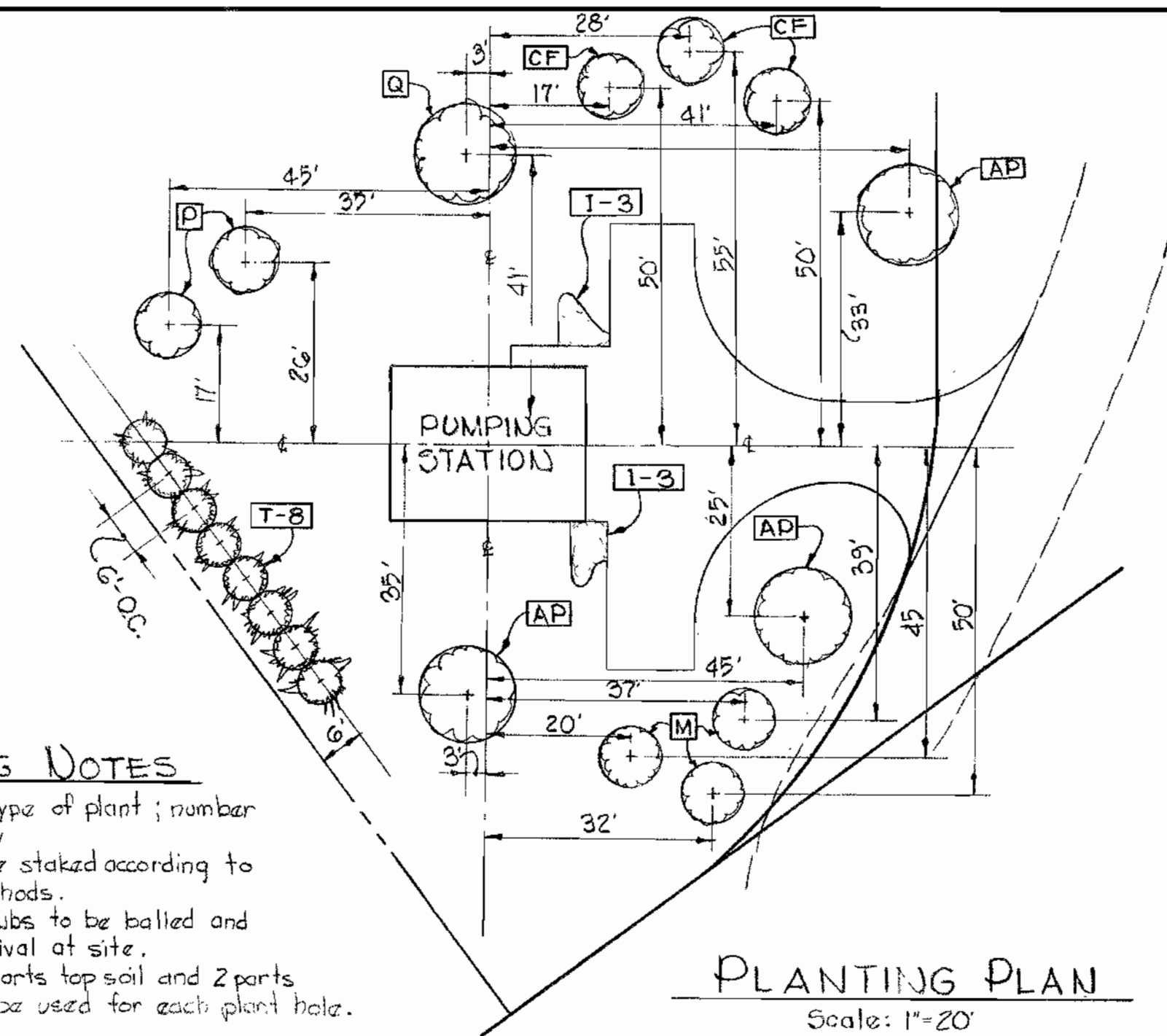
WS 67W/1

GENERAL NOTES

1. Approximate location of existing mains are shown. The Contractor shall take all necessary precautions to protect the existing mains and services and maintain uninterrupted supply; any damage incurred shall be repaired immediately.
2. All pipe elevations shown are invert elevations.
3. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities.
4. For all standard details, see Standards bound in Specifications.
5. Block all fittings with concrete, see Standards bound in Specifications.
6. Bury line elevation on Fire Hydrants shall be set the same as edge of paving or as directed by the engineer in field.
7. The location of all valves, fittings etc. have been located in plan and dimensions shall be strictly adhered to unless otherwise directed by the Engineer in writing.
8. Buttress Fire Hydrants with concrete; provide copper pipe at weep holes as required for positive drainage. For Buttress dimensions see Standard Detail W-8 Buttress For Caps.

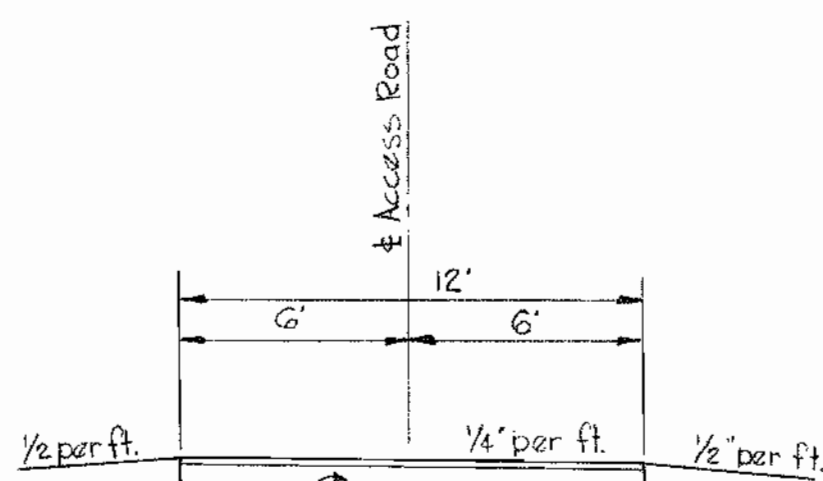
PLANTING NOTES

1. Letter indicates type of plant; number refers to quantity.
2. All trees shall be staked according to horticultural methods.
3. All trees and shrubs to be balled and burlapped on arrival at site.
4. A mixture of 5 parts top soil and 2 parts peat moss shall be used for each plant hole.



PLANT LIST

CODE	SCIENTIFIC NAME	COMMON NAME	SIZE	QUANTITY
I	Juniperus Pfitz	Pfitz Juniper	18"-24" Sp	6
AP	Acer Platanoides	Norway Maple	2" 2 1/2" Cal.	3
CF	Cornus Florida	Dogwood	8"-10" Ht.	3
Q	Quercus Borzalis	Northern Red Oak	2"-2 1/2" Cal.	1
P	Picea Abies	Norway Spruce	8"-10" Ht.	2
T	Tsuga Canadensis	Canadian Hemlock	6"-8" Ht.	3
M	Malus Sp.	Crabapple variety	5"-6" Ht.	3
		2 of 1 Species		

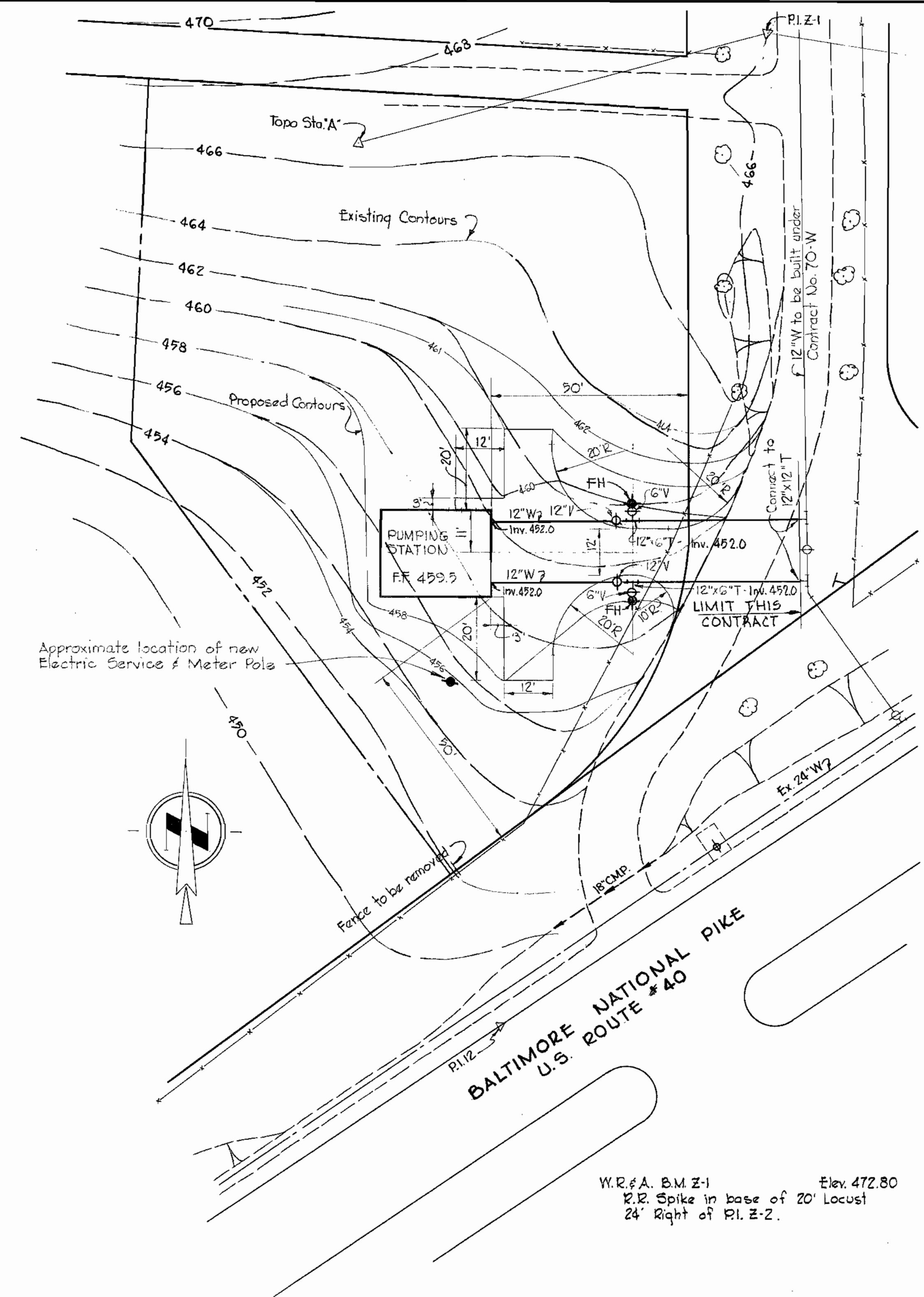


9" Crush Run Stone
Base Course
2" Calcium Chloride per sq. yd. leave 30 days

SURFACE TREATMENT
1. 3/10 gal. R.C. - 1/4 sq. yd. * 3 stone - 75*/sq. yd.
2. 7/10 gal. R.C. - 1/4 sq. yd. * 4 stone - 50*/sq. yd.
3. 3/10 gal. R.C. - 1/4 sq. yd. * 7 stone - 30*/sq. yd.

SECTION THRU ACCESS ROAD

Scale: 1"=5' H&V



SITE PLAN

Scale: 1"=20'

W.R.#A. B.M. Z-1 Elev. 472.80
R.R. Spike in base of 20' Locust
24' Right of P.I. Z-2.

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION

Aug. 31, 1964
DATE

W. O. Libbert
CHIEF ENGINEER

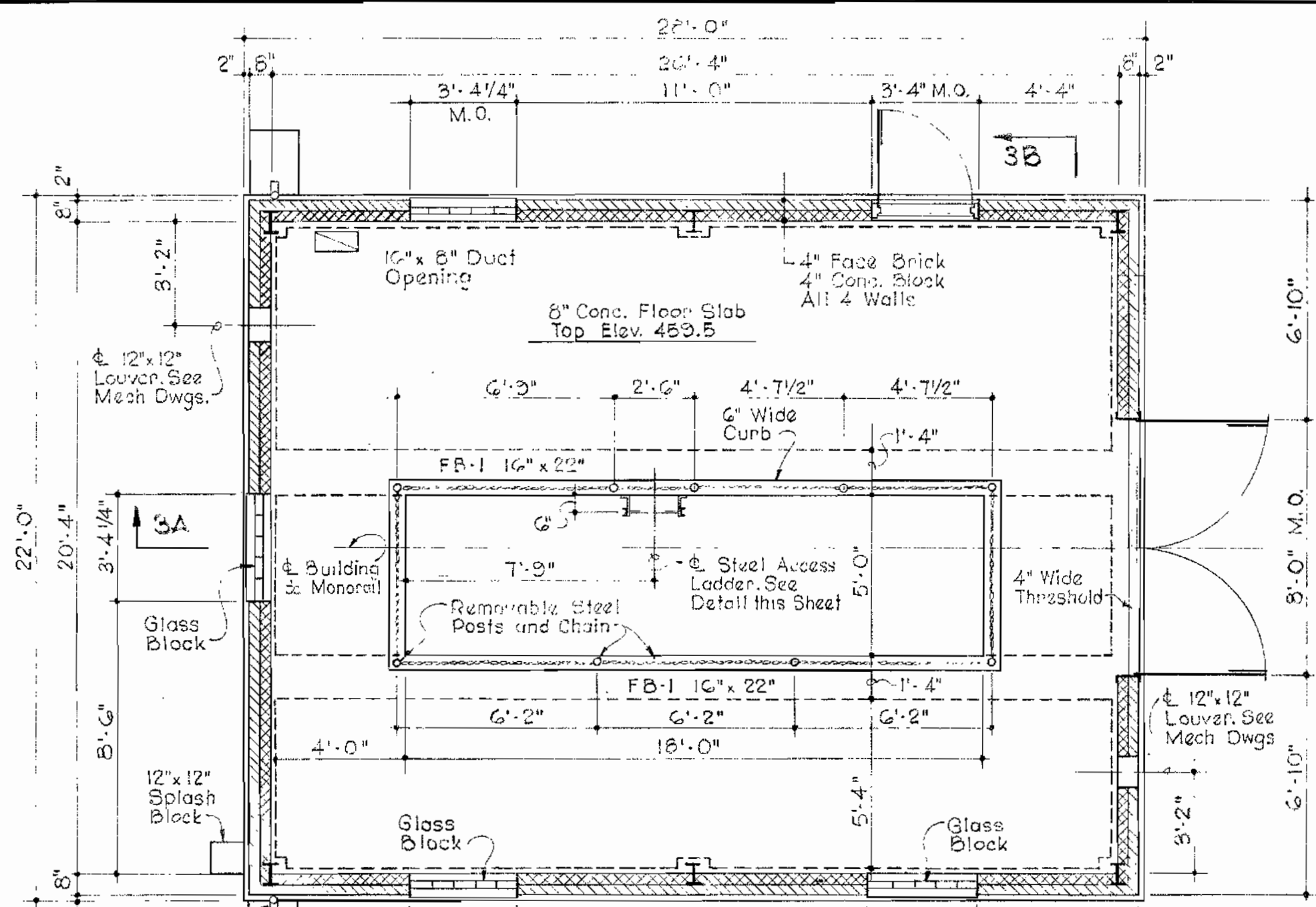
CONTRACT NO. 67-W

SITE PLAN & DETAILS

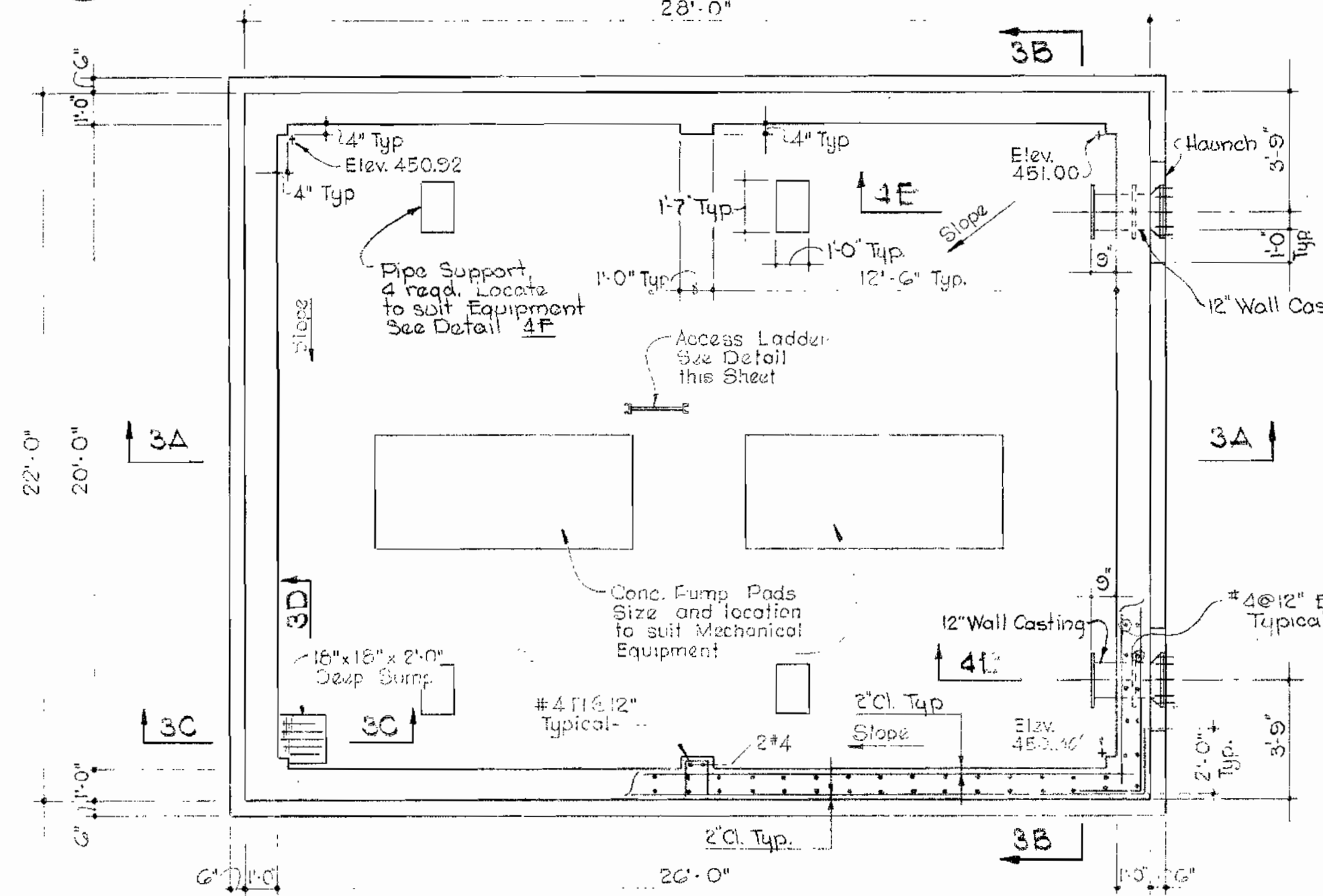
ELLICOTT CITY SUB-DISTRICT

DRAWING
NO. 2
OF 6

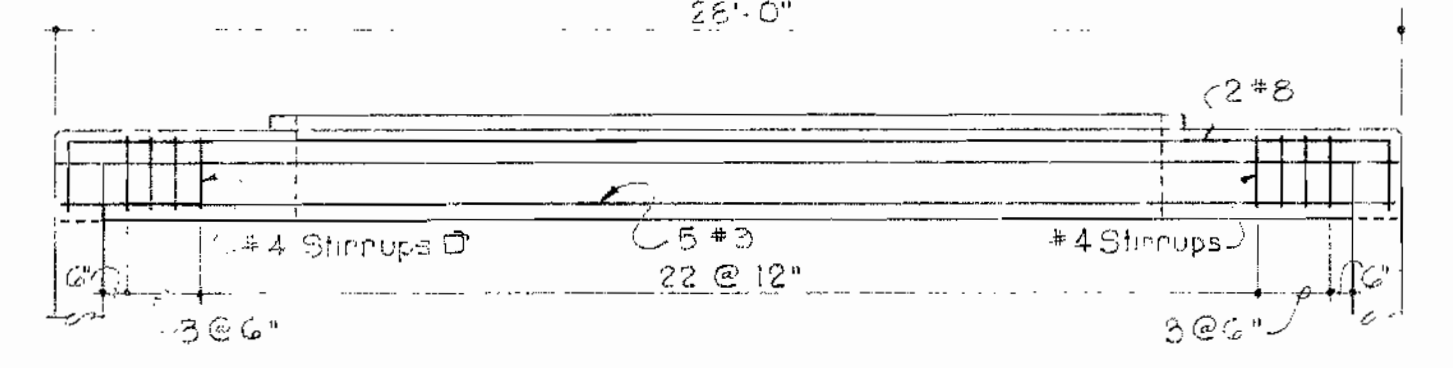
SCALE
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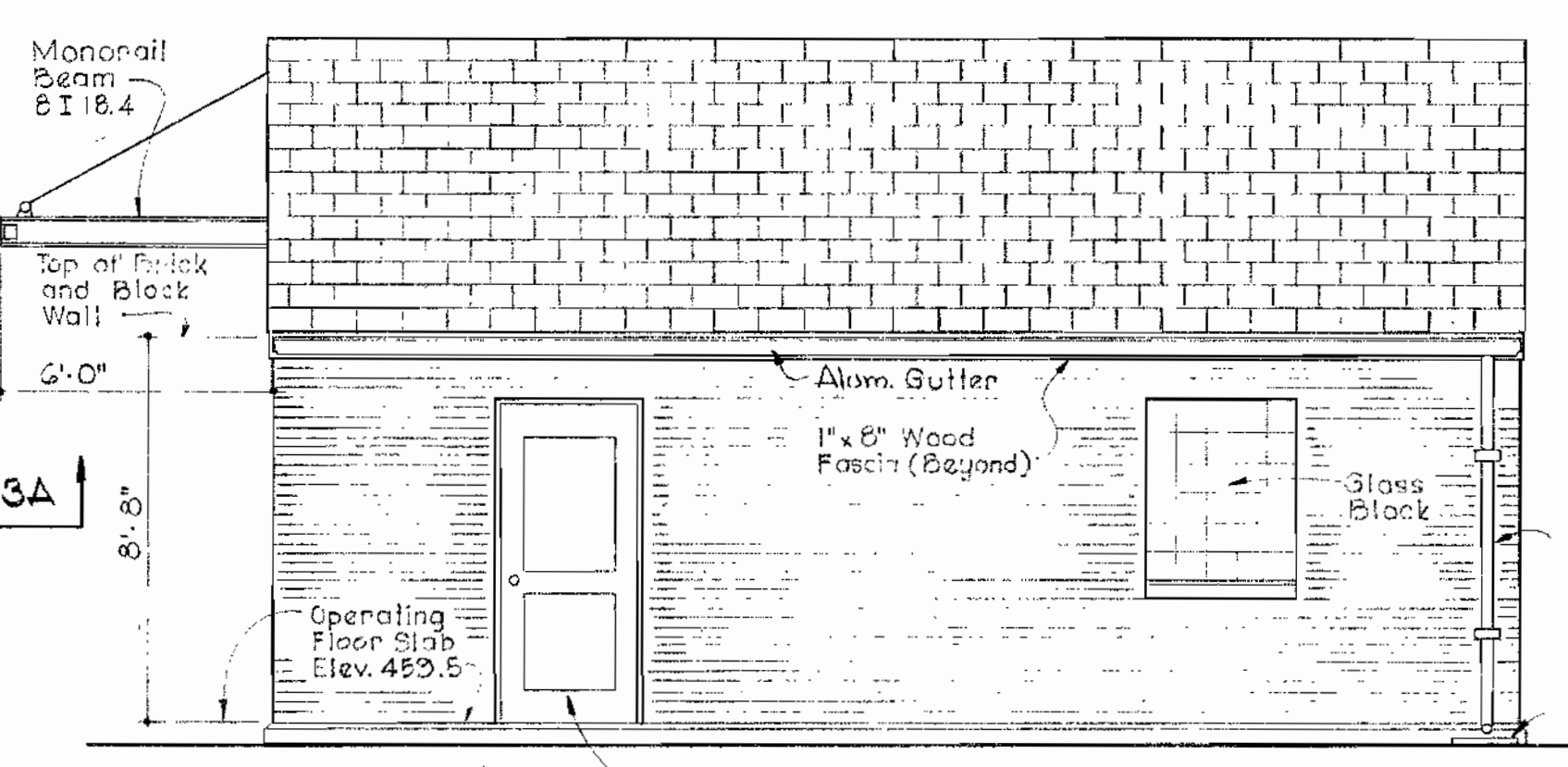
OPERATING FLOOR PLAN
Scale: 1/4" = 1'-0"



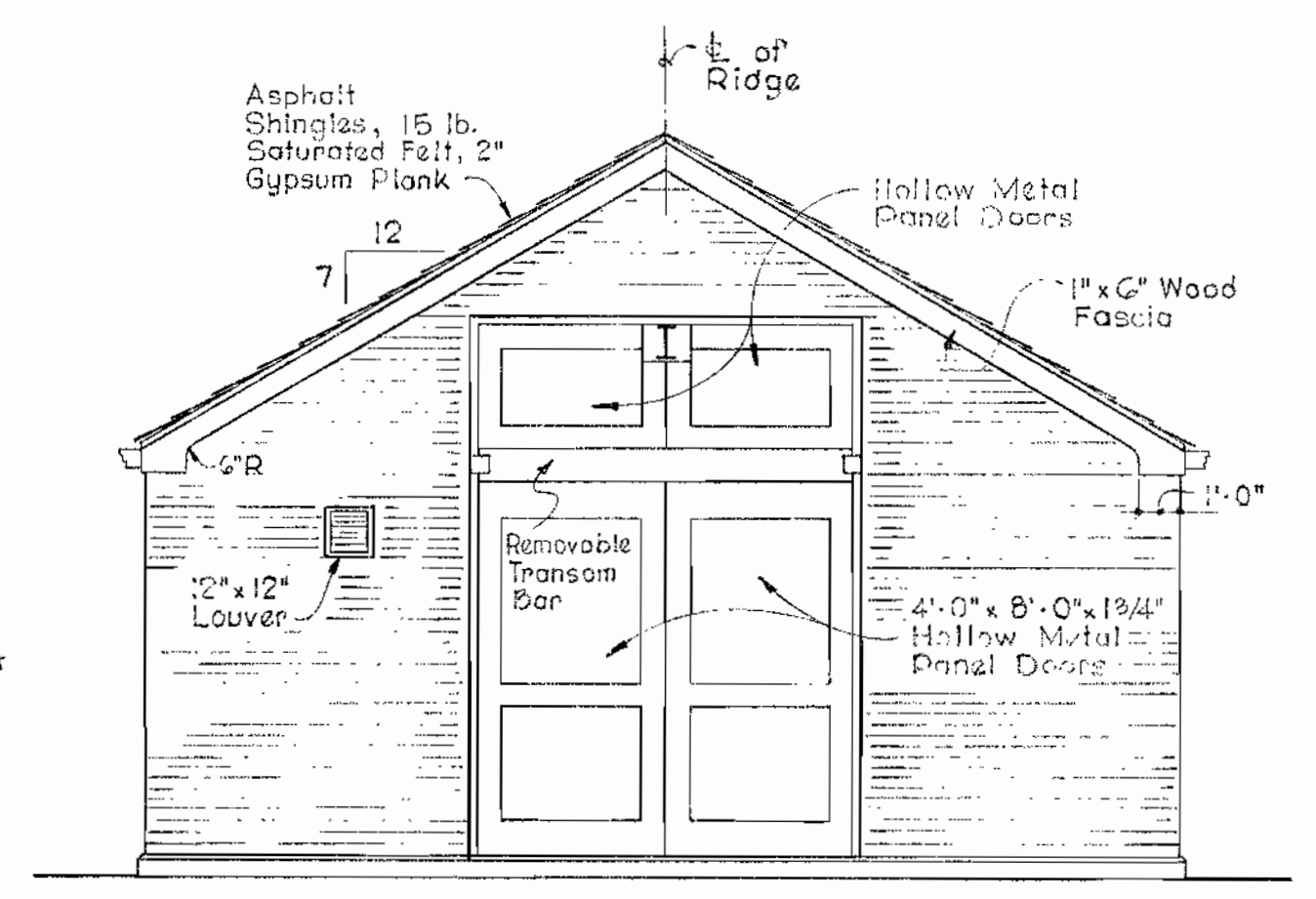
LOWER PLAN
Scale: 1/4" = 1'-0"



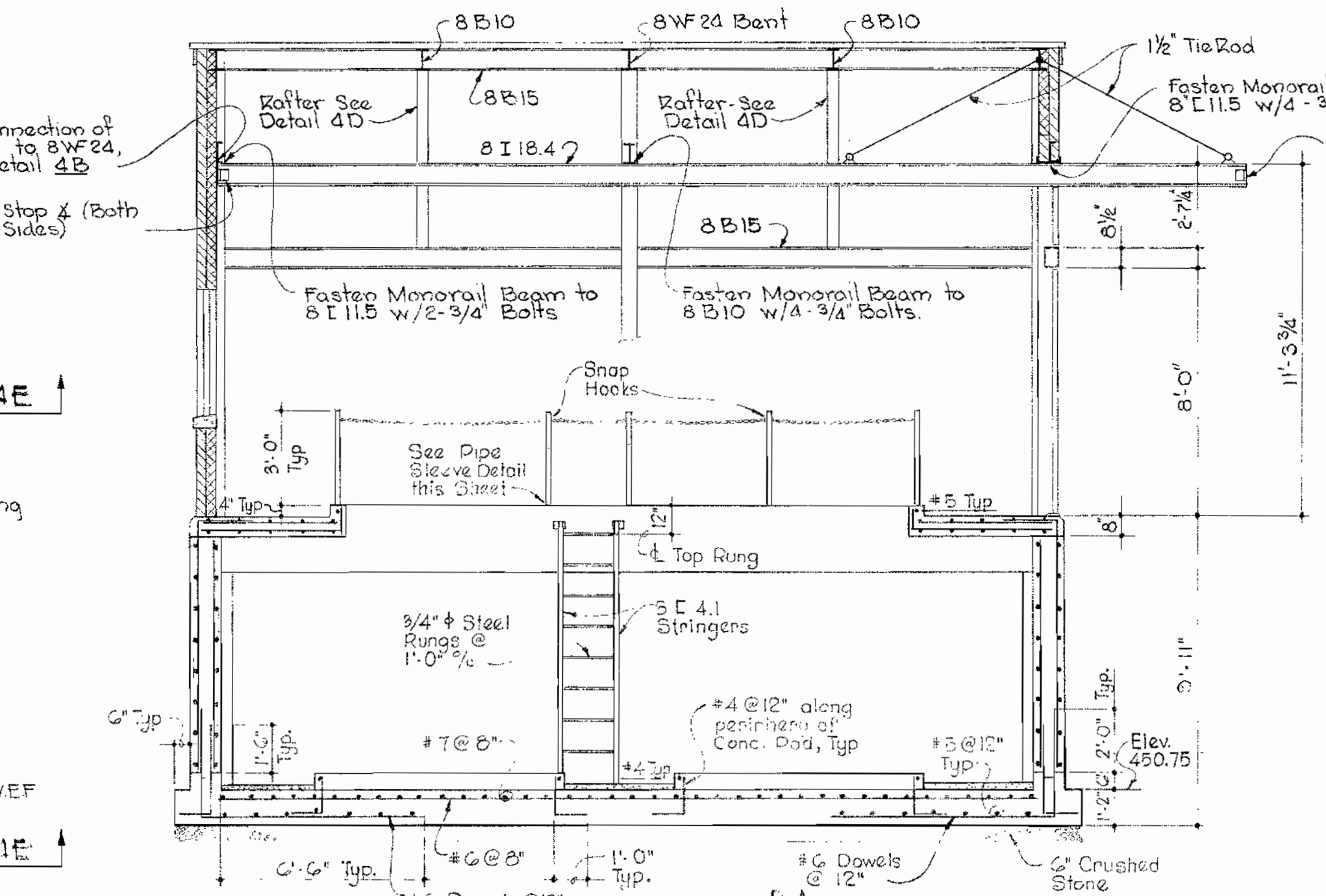
FR-1 (10" x 22")
Scale: 1/4" = 1'-0"



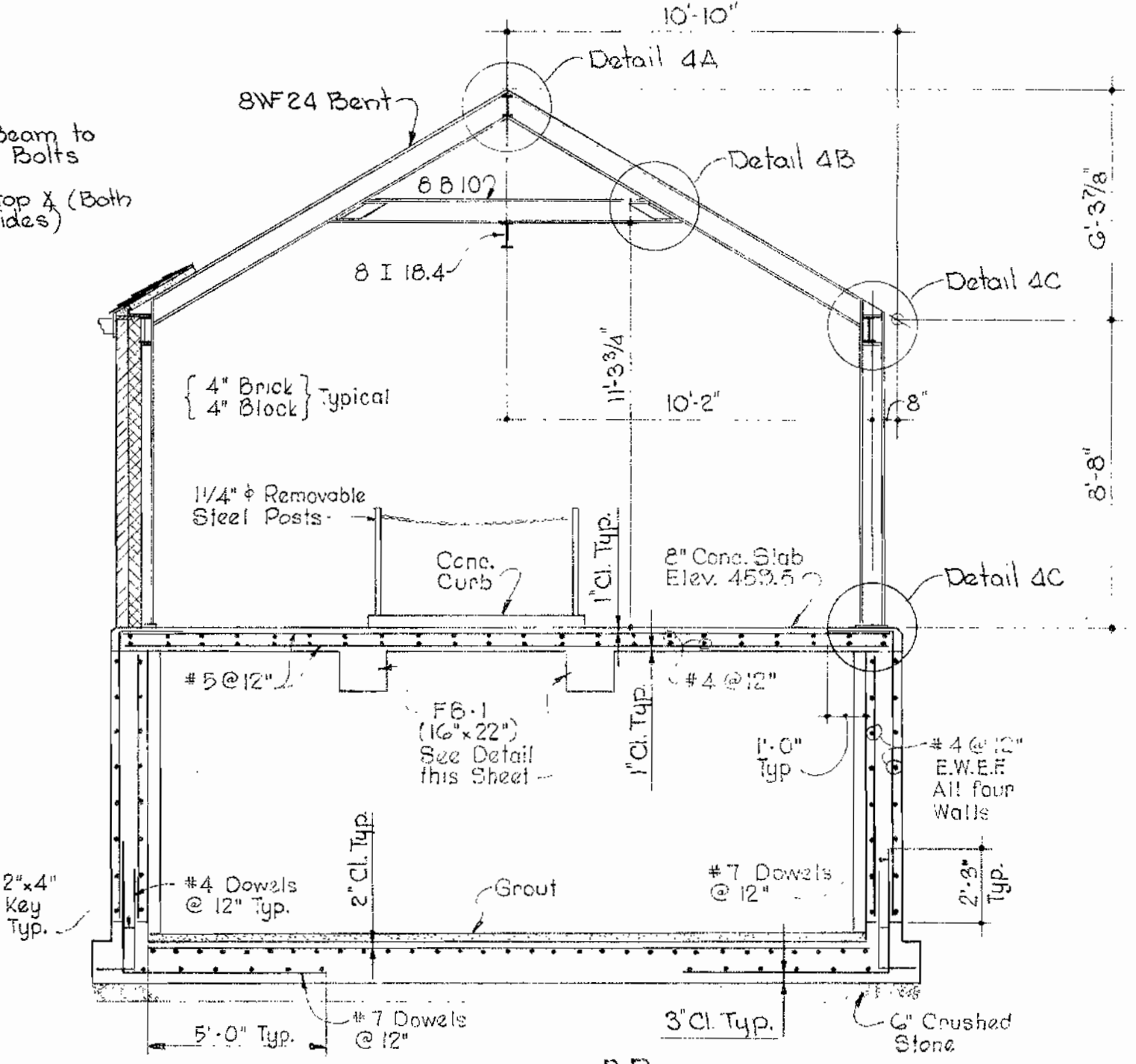
NORTH ELEVATION
Scale: 1/4" = 1'-0"



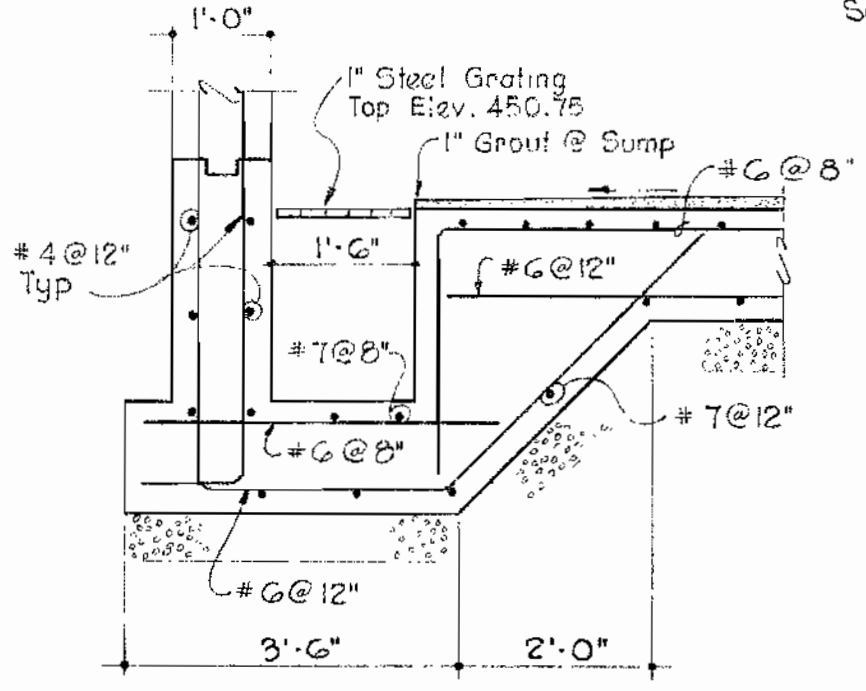
EAST ELEVATION II
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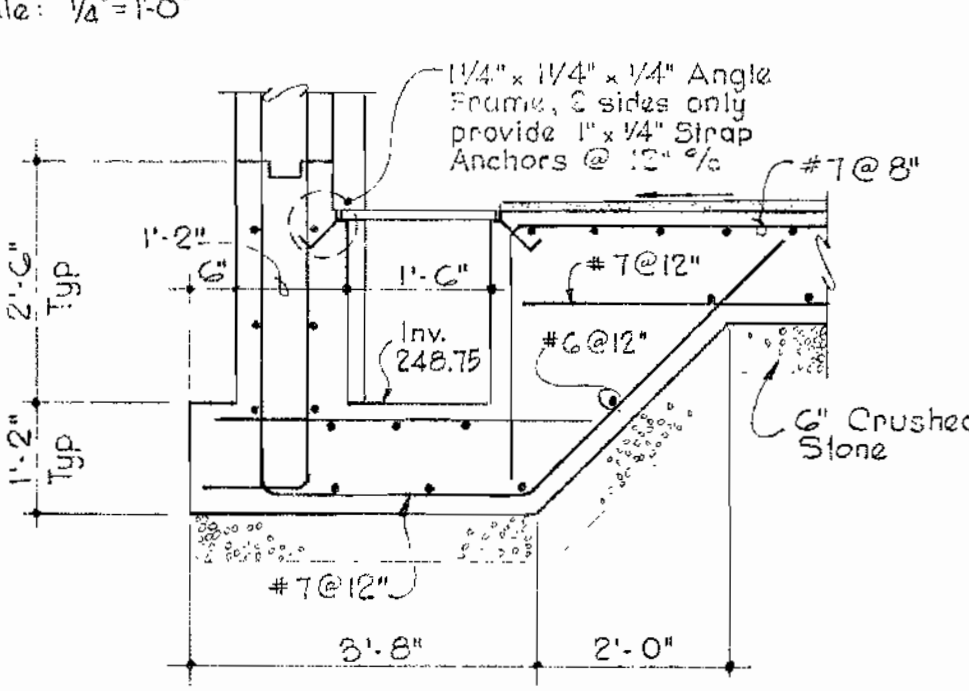
SECTION 3A
Scale: 1/4" = 1'-0"



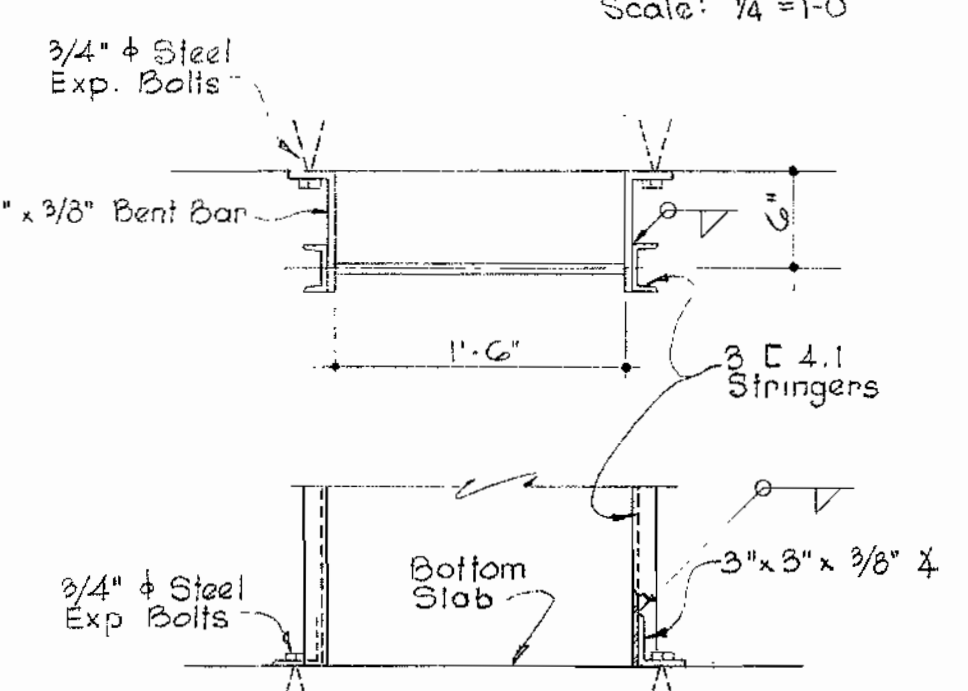
SECTION 3B
Scale: 1/4" = 1'-0"



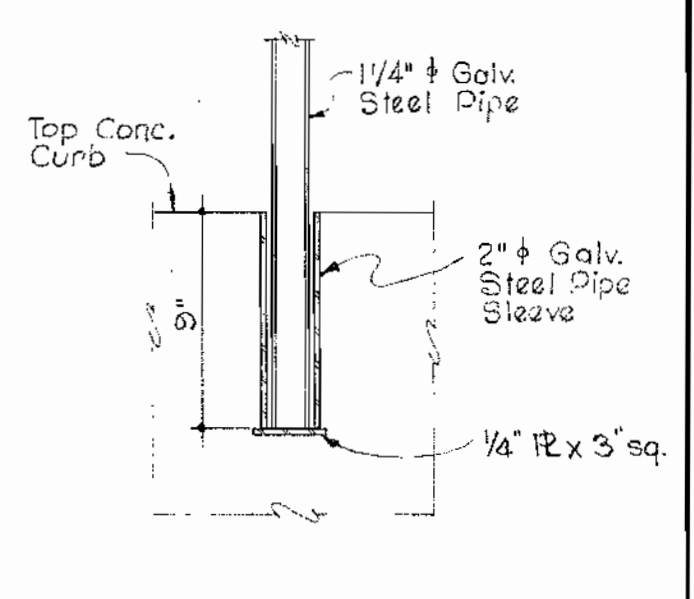
SECTION 3C
Scale: 1/2" = 1'-0"



SECTION 3D
Scale: 1/2" = 1'-0"



LADDER DETAIL
Scale: 1" = 1'-0"



PIPE SLEEVE DETAIL
Scale: 1/2" = 1'-0"

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CHIEF ENGINEER

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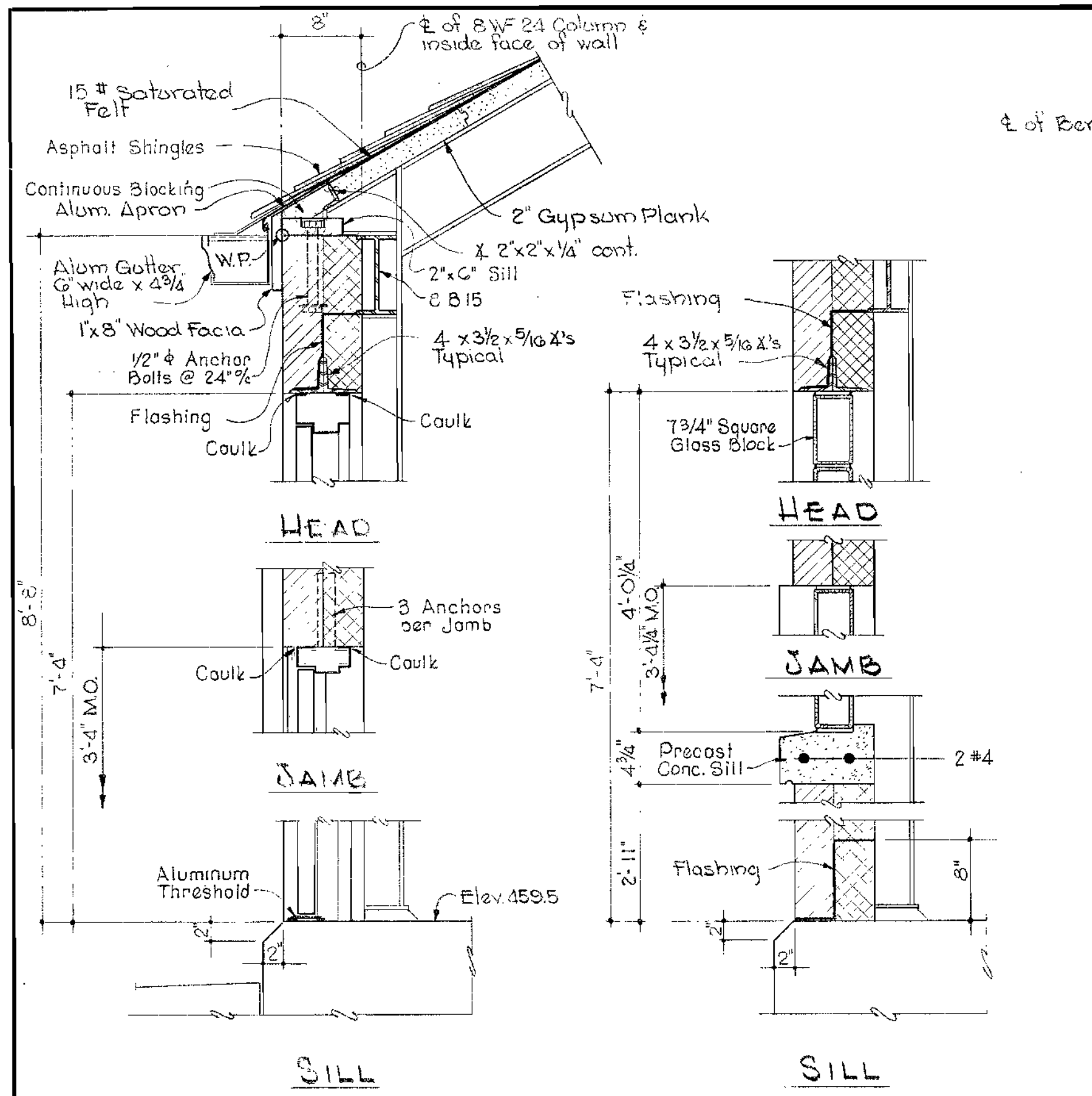
STRUCTURAL
PLANS, ELEVATIONS & SECTIONS

ELLCOTT CITY SUB-DISTRICT

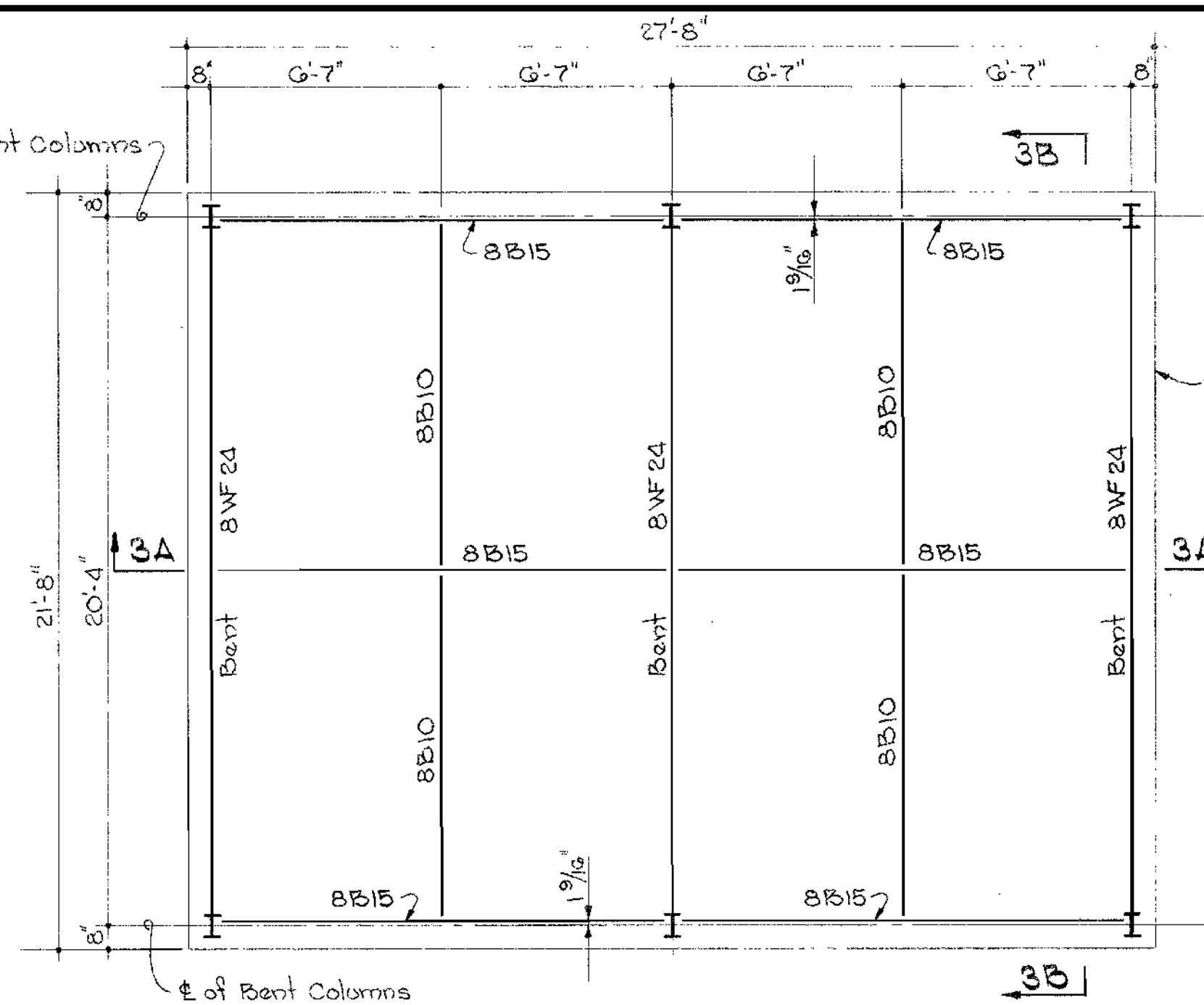
DRAWING
NO. 3
OF 6

SCALE
AS
SHOWN

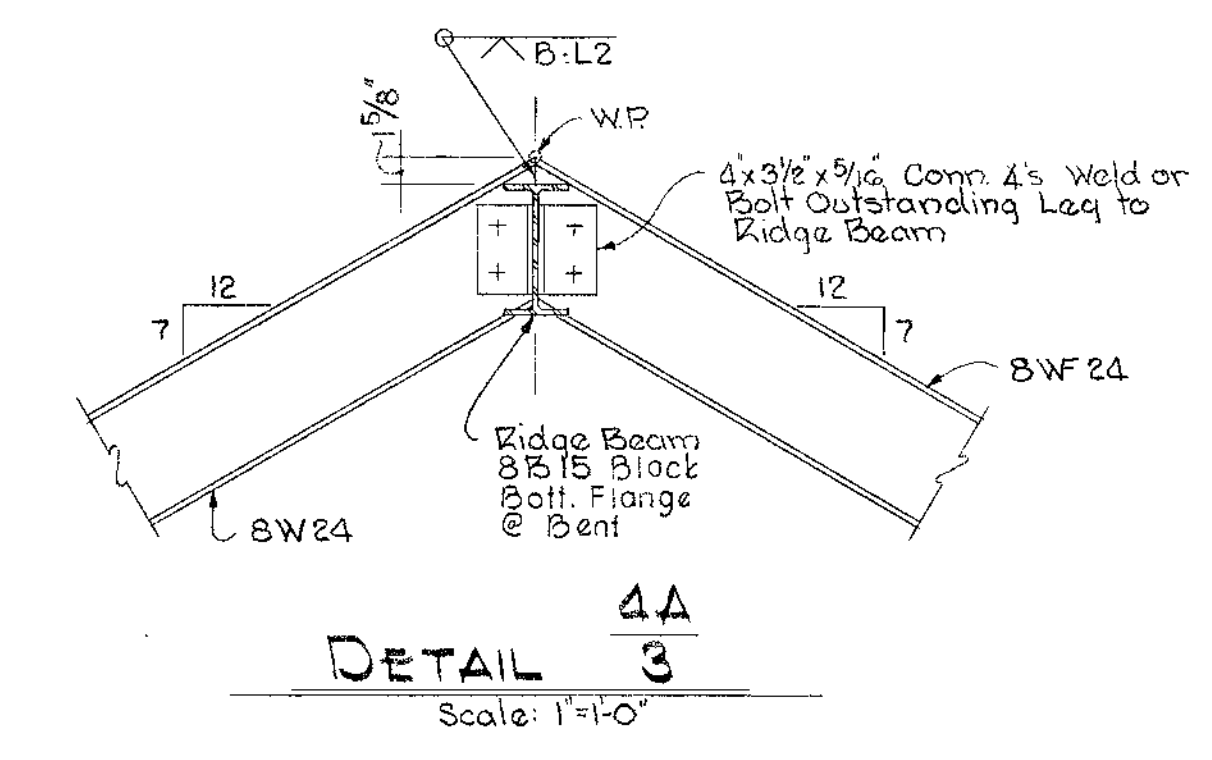
WS 67W/3



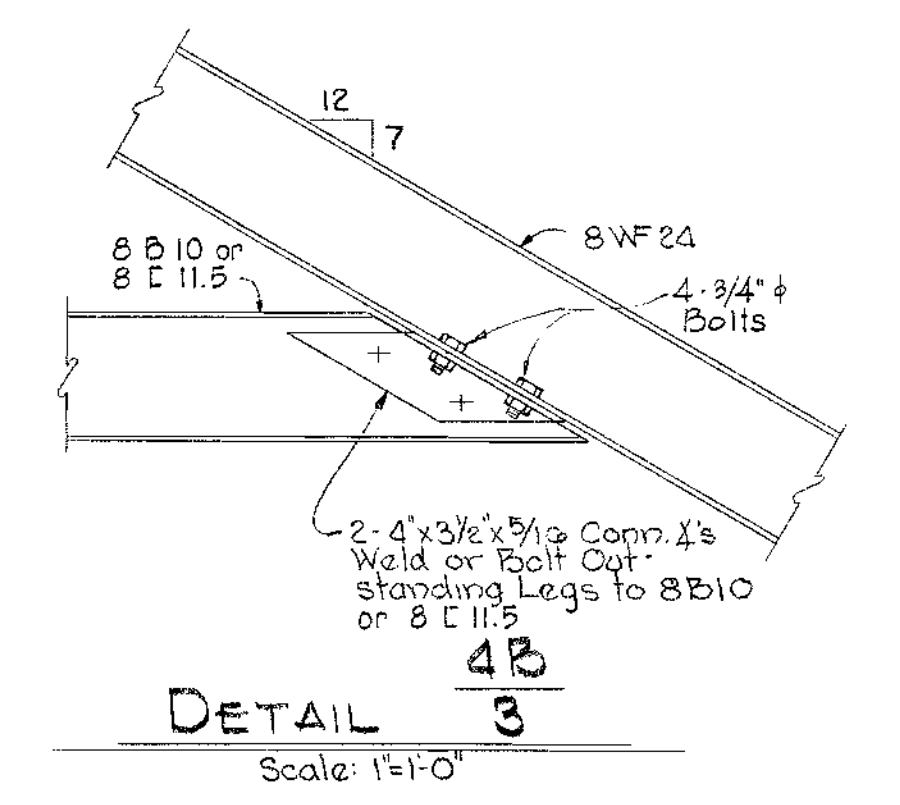
DOOR SECTION - NORTH WALL Scale: 1/4\"/>



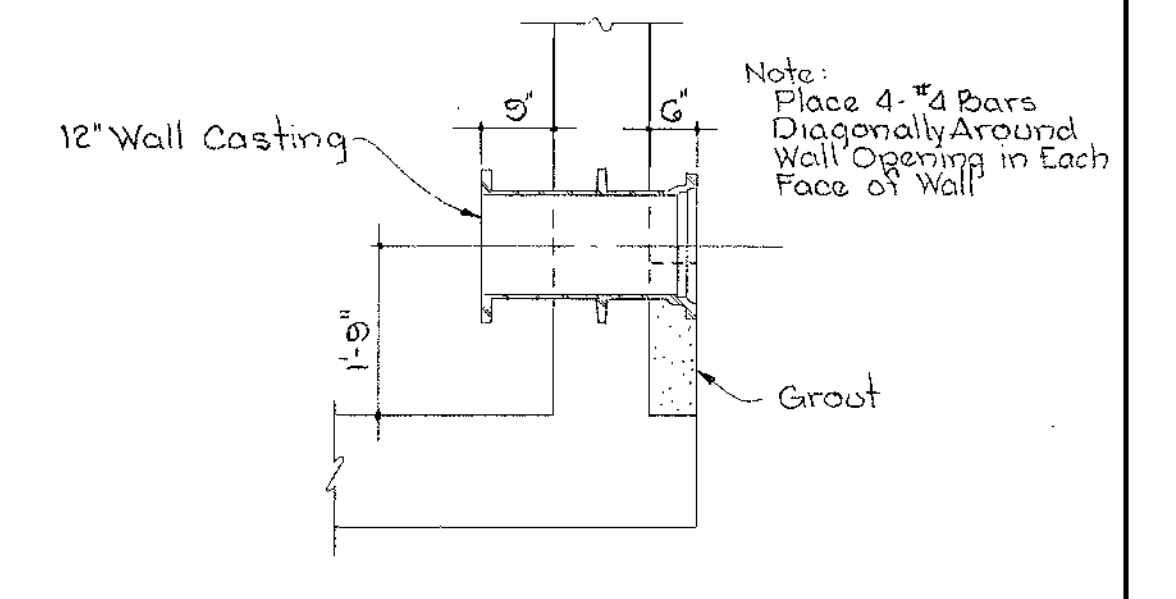
ROOF FRAMING PLAN Scale: 1/4\"/>



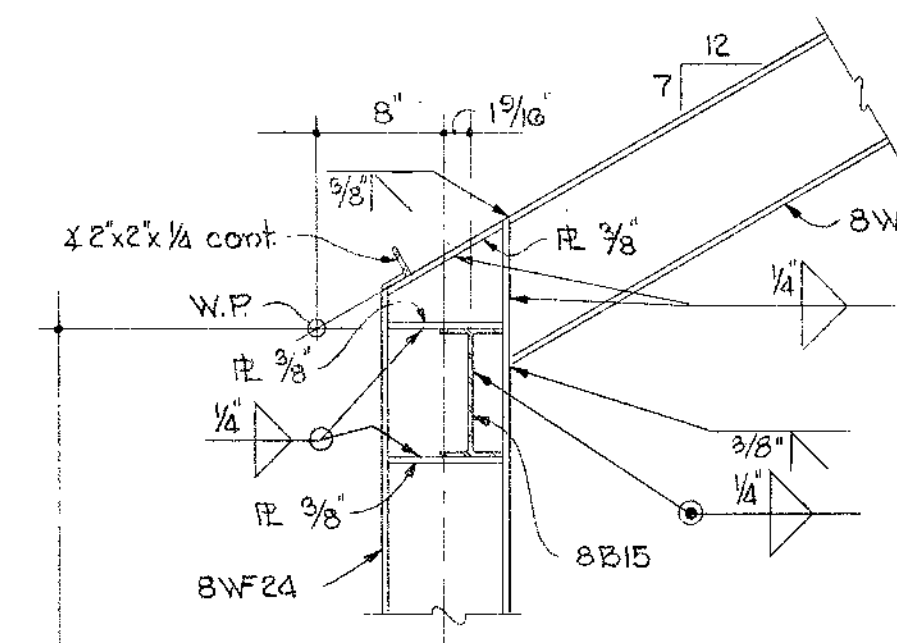
DETAIL 4A Scale: 1\"/>



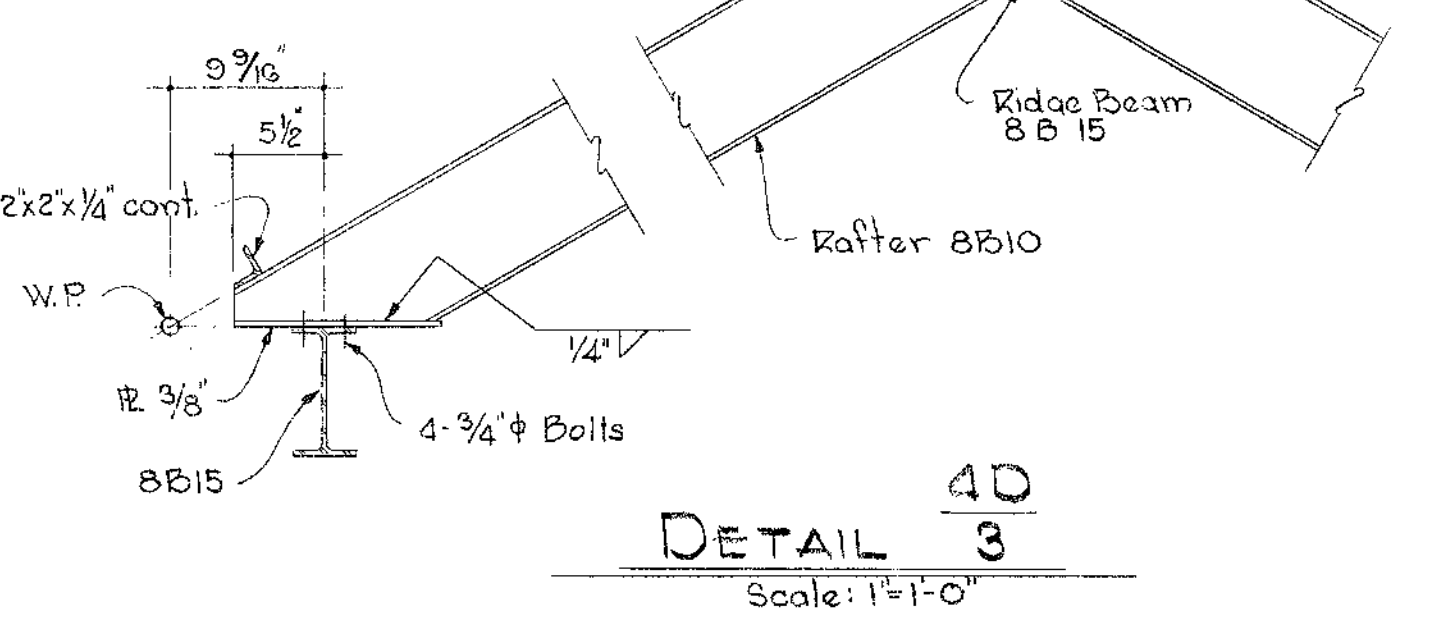
DETAIL 4B Scale: 1\"/>



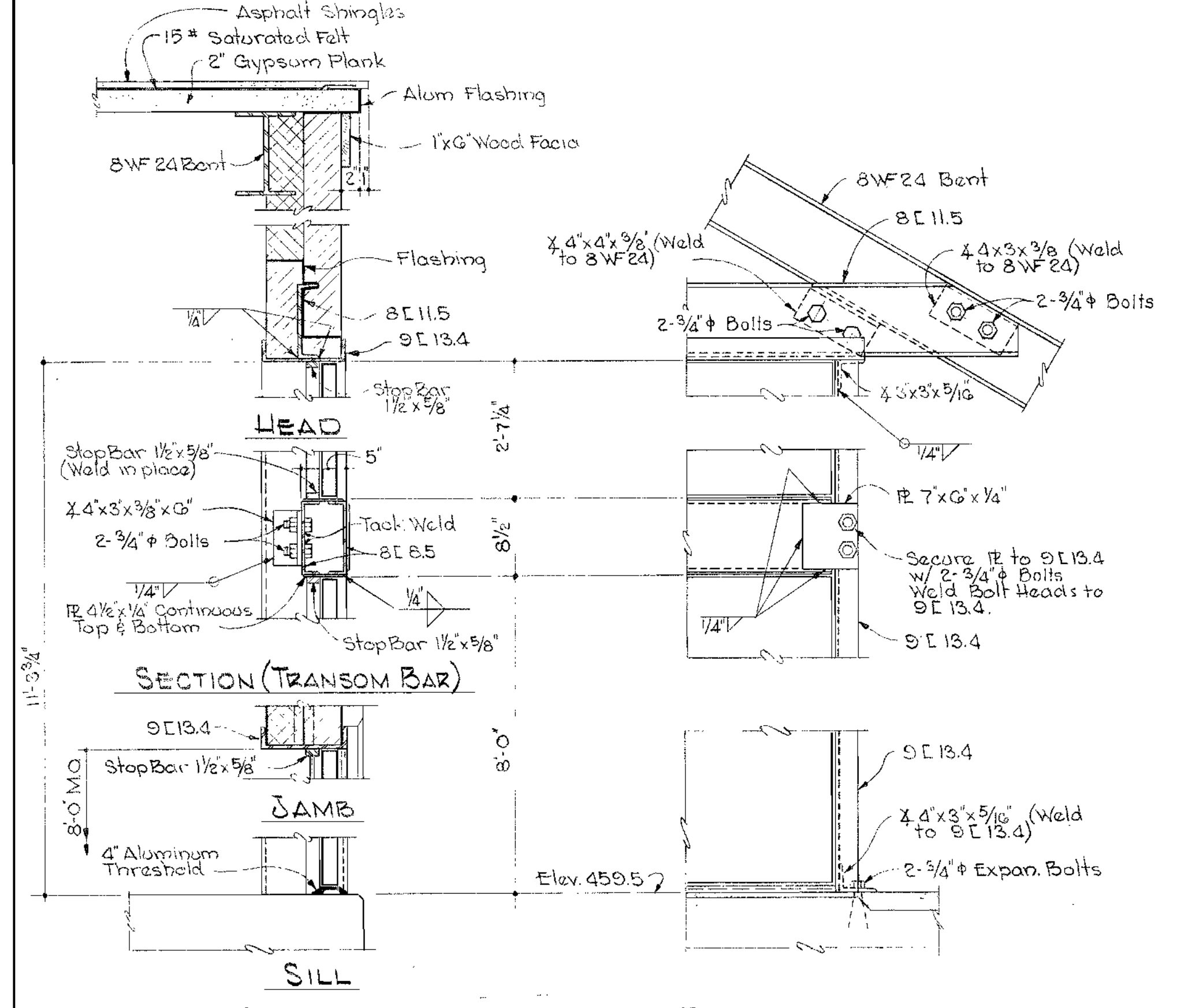
SECTION 4E Scale: 1/2\"/>



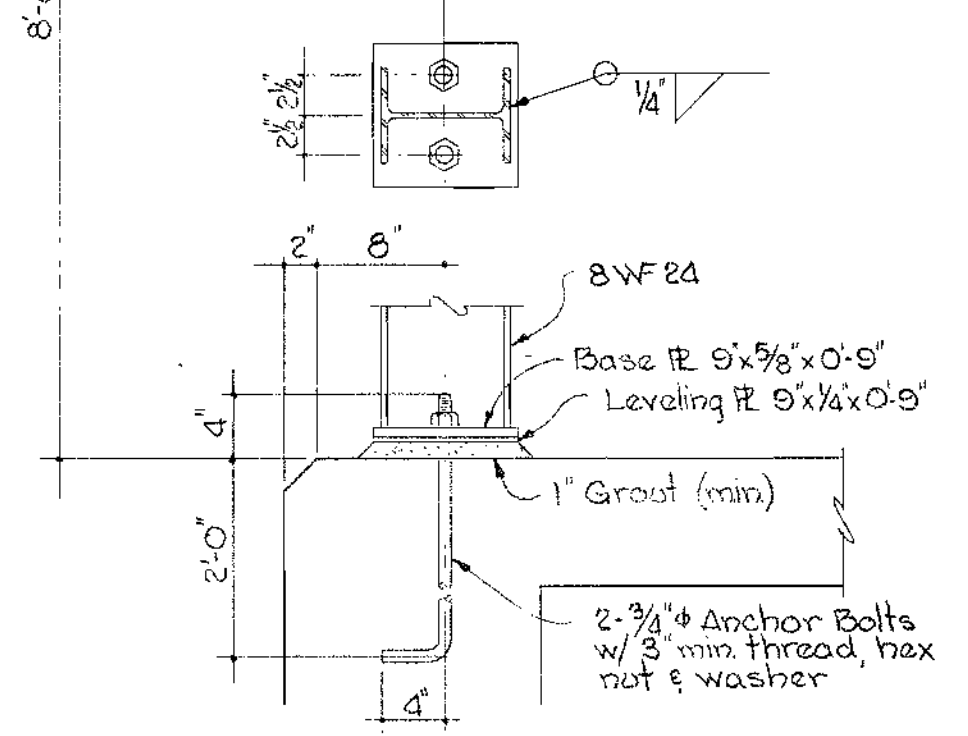
DETAIL 4C Scale: 1\"/>



DETAIL 4D Scale: 1\"/>



DOOR DETAIL - EAST WALL Scale: 1\"/>



DETAIL 4F Scale: 1/2\"/>

CONCRETE NOTES

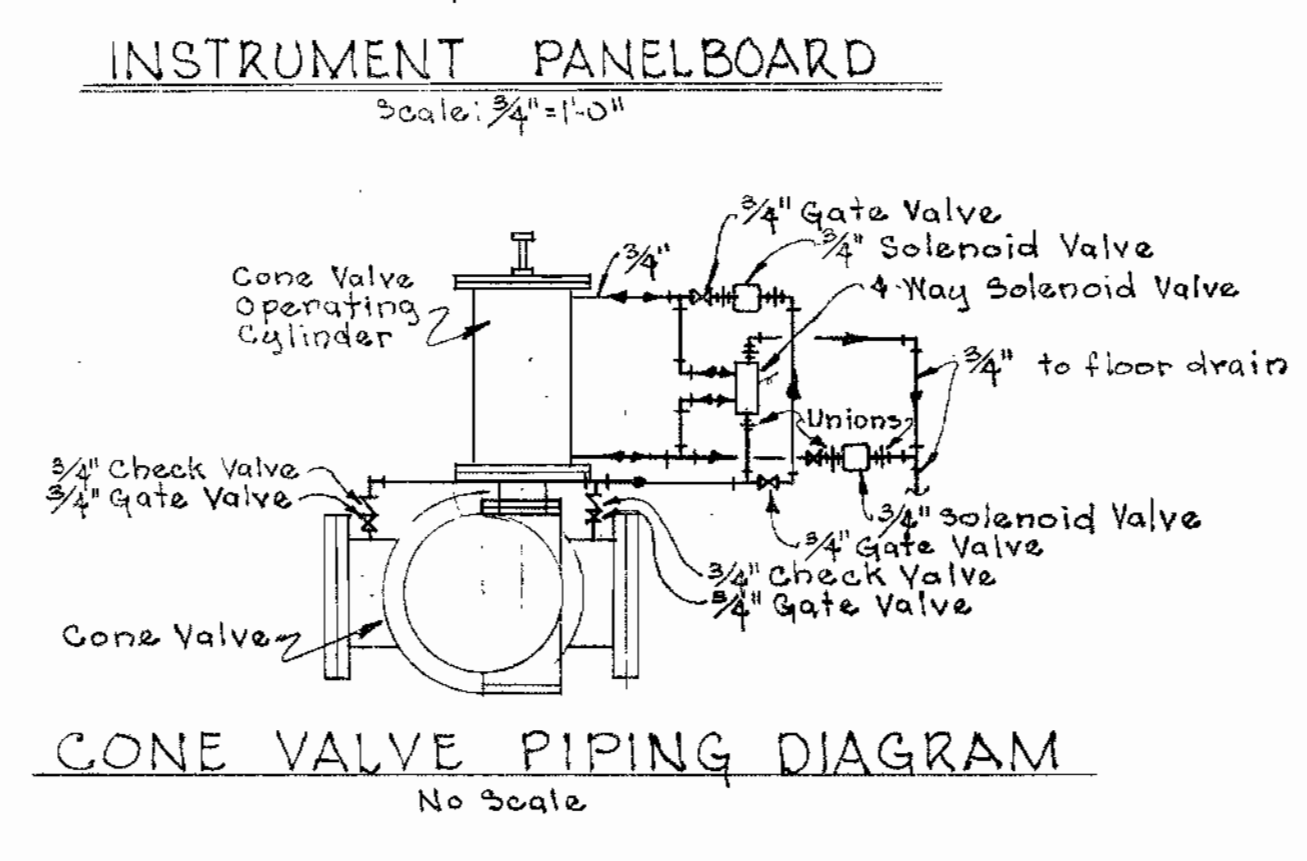
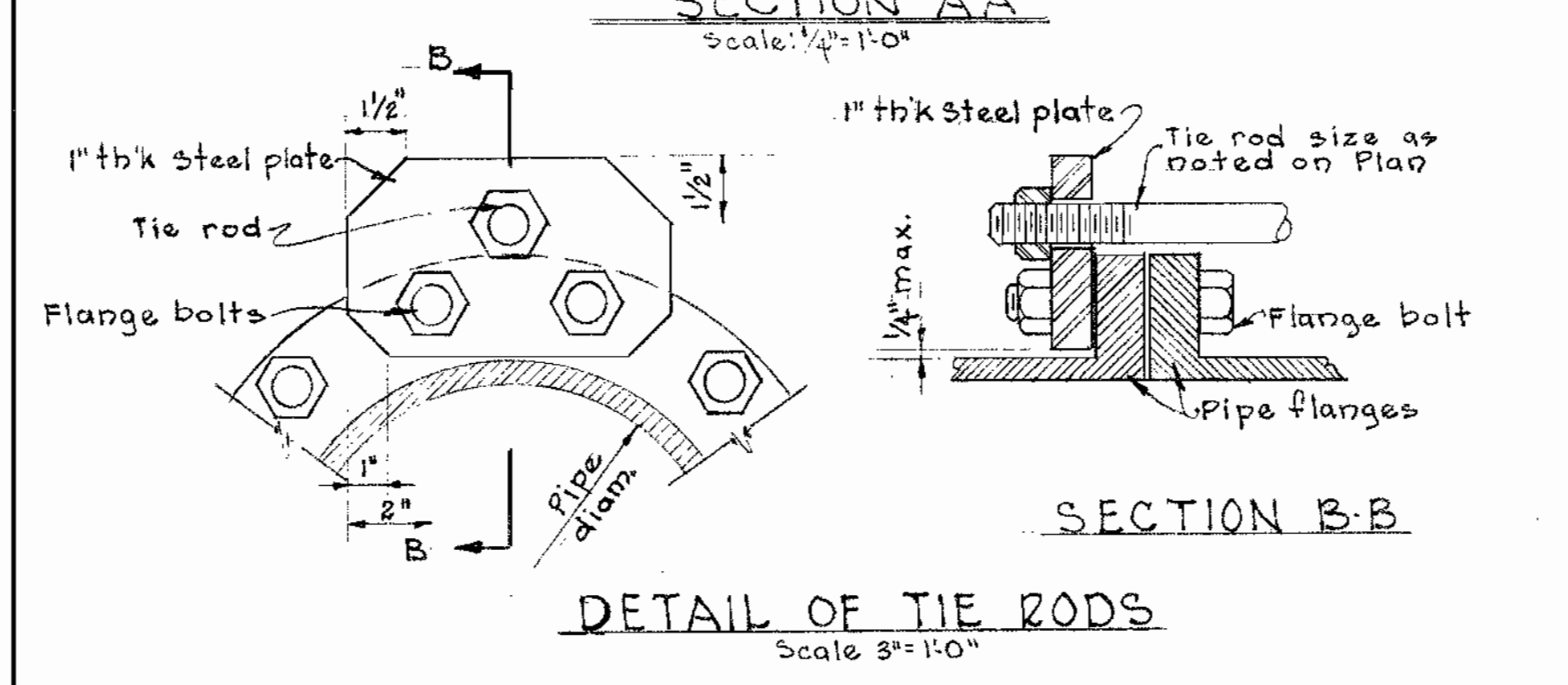
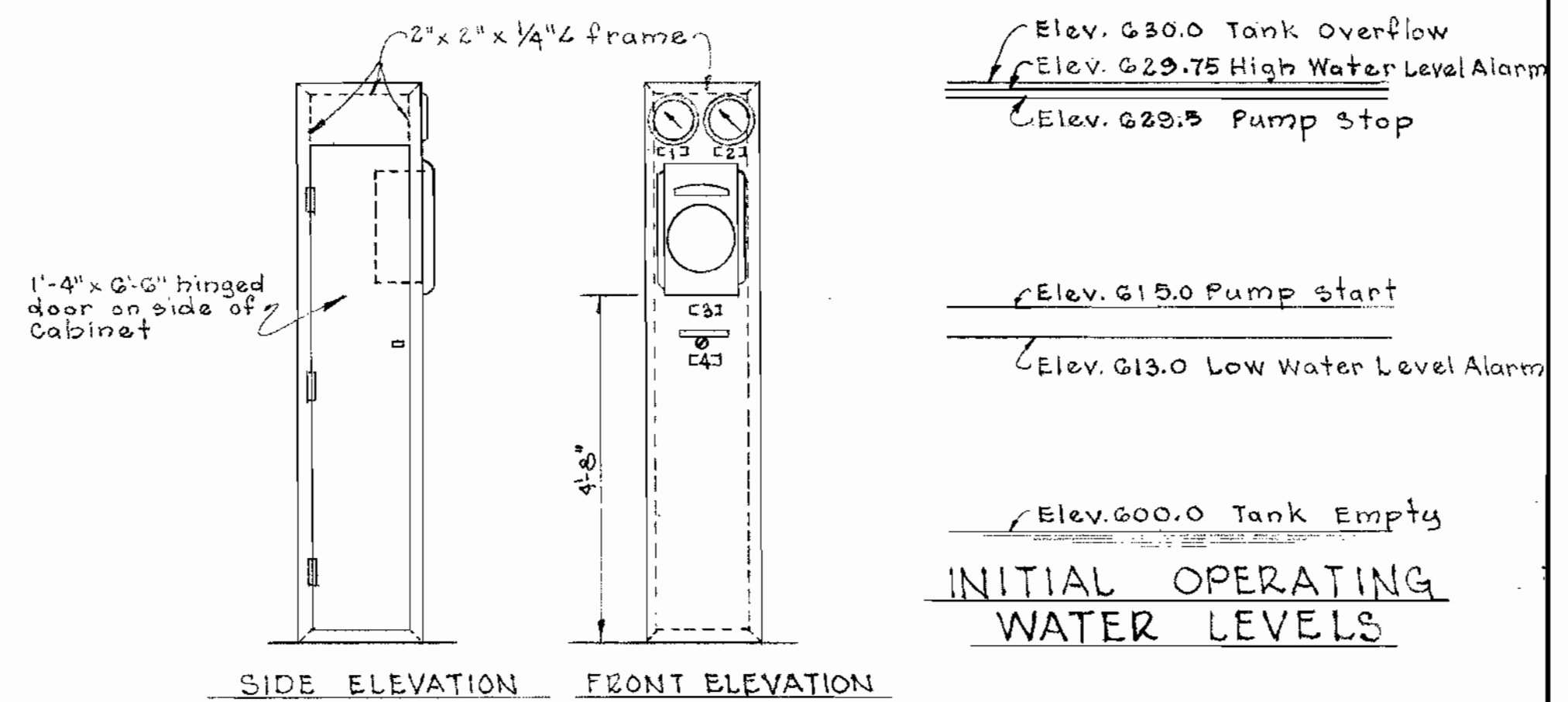
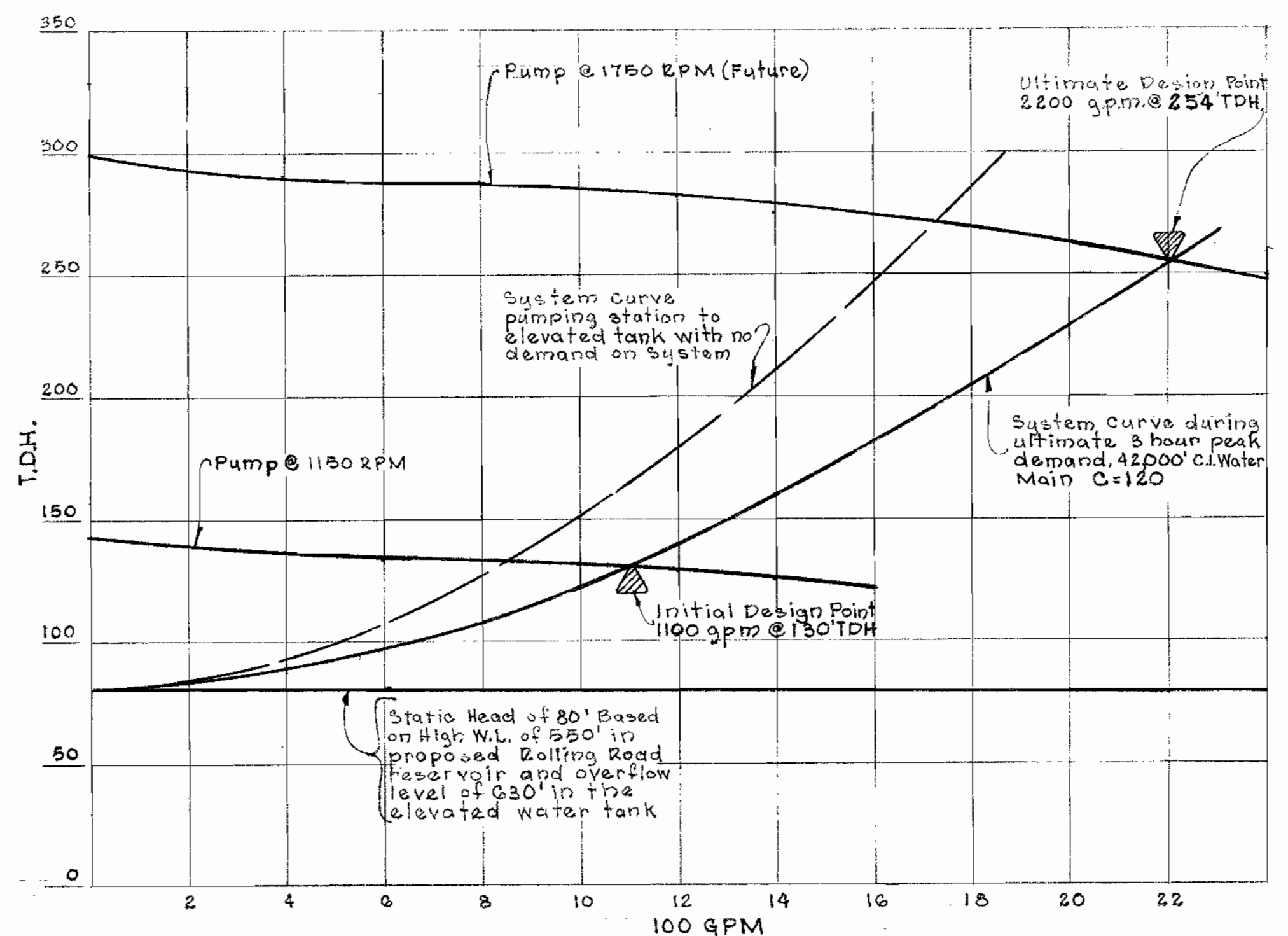
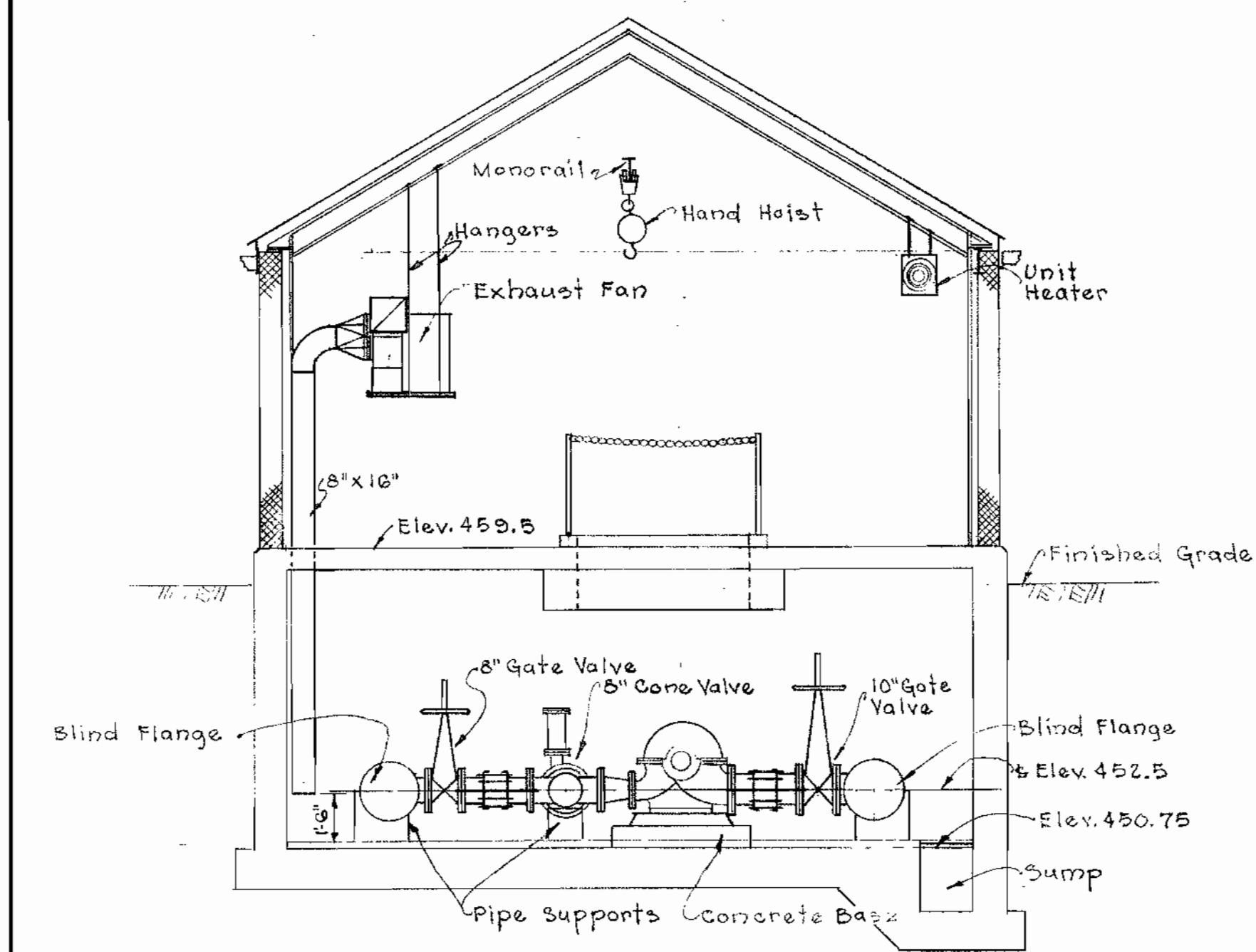
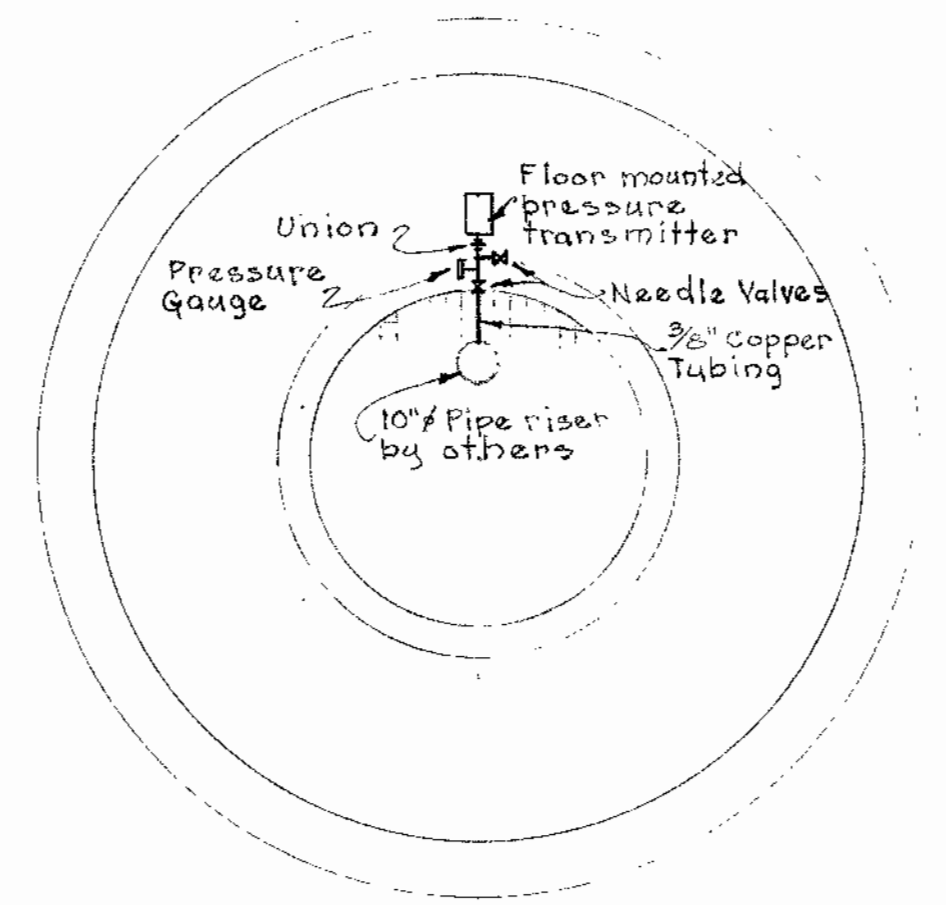
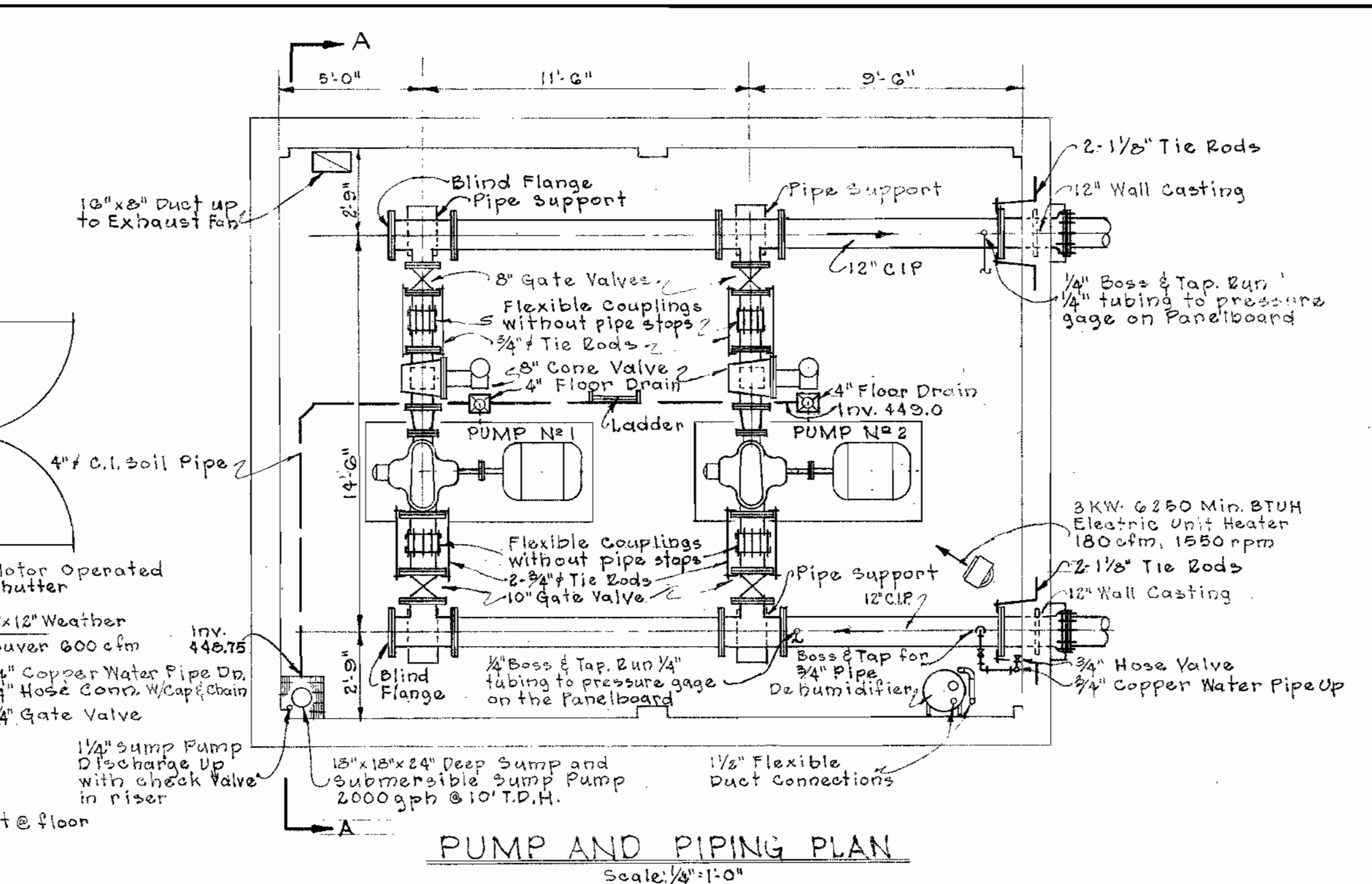
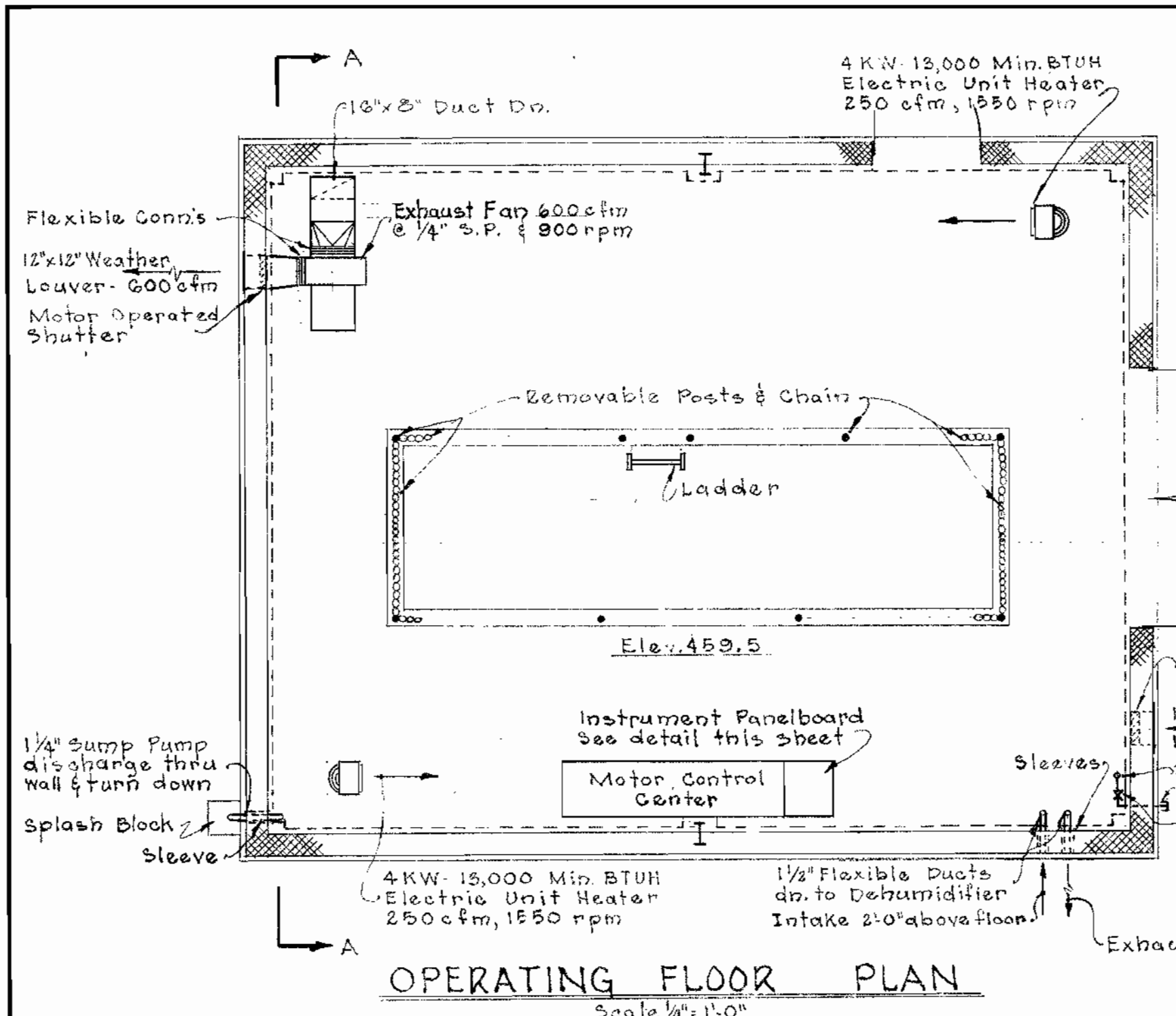
- All concrete shall have a minimum compressive strength of 3500 psi at 28 days. See Specifications for other requirements.
- Reinforcement shall be of intermediate grade steel conforming to ASTM-A15 with deformations conforming to ASTM-A505.
- Reinforcing Bars shall be embedded and/or lapped a minimum of 30 diameters.
- All exposed surfaces of Floor Slabs shall receive hardener.

STRUCTURAL STEEL NOTES

- All Structural Steel shall be ASTM-A36 and shall be detailed, fabricated and erected in accordance with the current AISC Code for Buildings. See Specifications for other requirements. All Bolted Connections shall be made with 3/4\"/>

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION Aug. 31, 1964 <i>W. O. S. 1964</i> CHIEF ENGINEER	CONTRACT NO. 67-W	STRUCTURAL ROOF FRAMING PLAN & DETAILS	ELLCOTT CITY SUB-DISTRICT	DRAWING NO. 4 OF 6	SCALE AS SHOWN
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WS 67W/4



WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION Aug. 31, 1964 DATE <i>W. O. Libert</i> CHIEF ENGINEER	CONTRACT NO. 67-W	MECHANICAL PLANS, SECTIONS & DETAILS	ELLICOTT CITY SUB-DISTRICT	DRAWING NO. 5 OF 6	SCALE AS SHOWN
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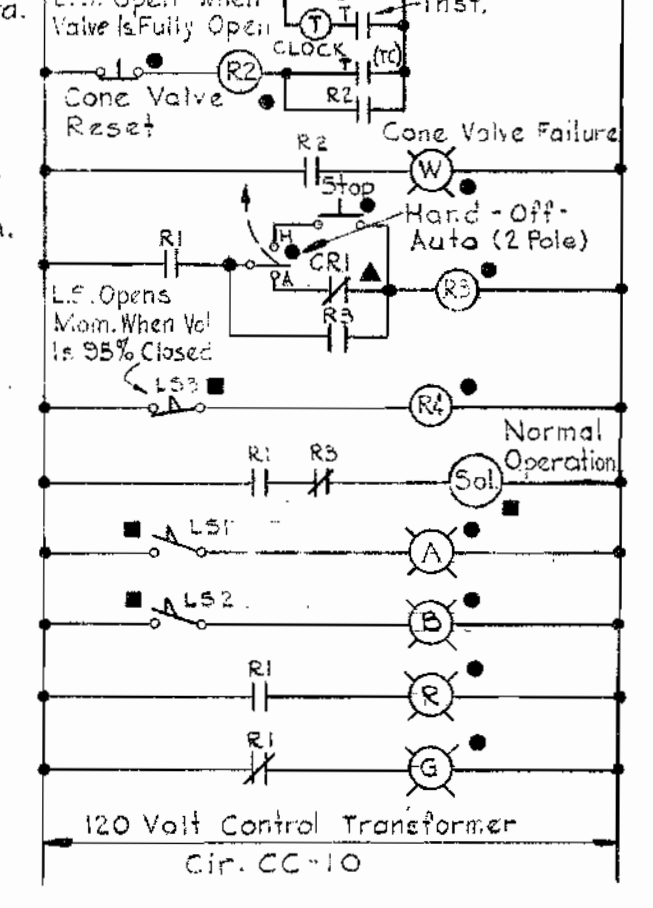
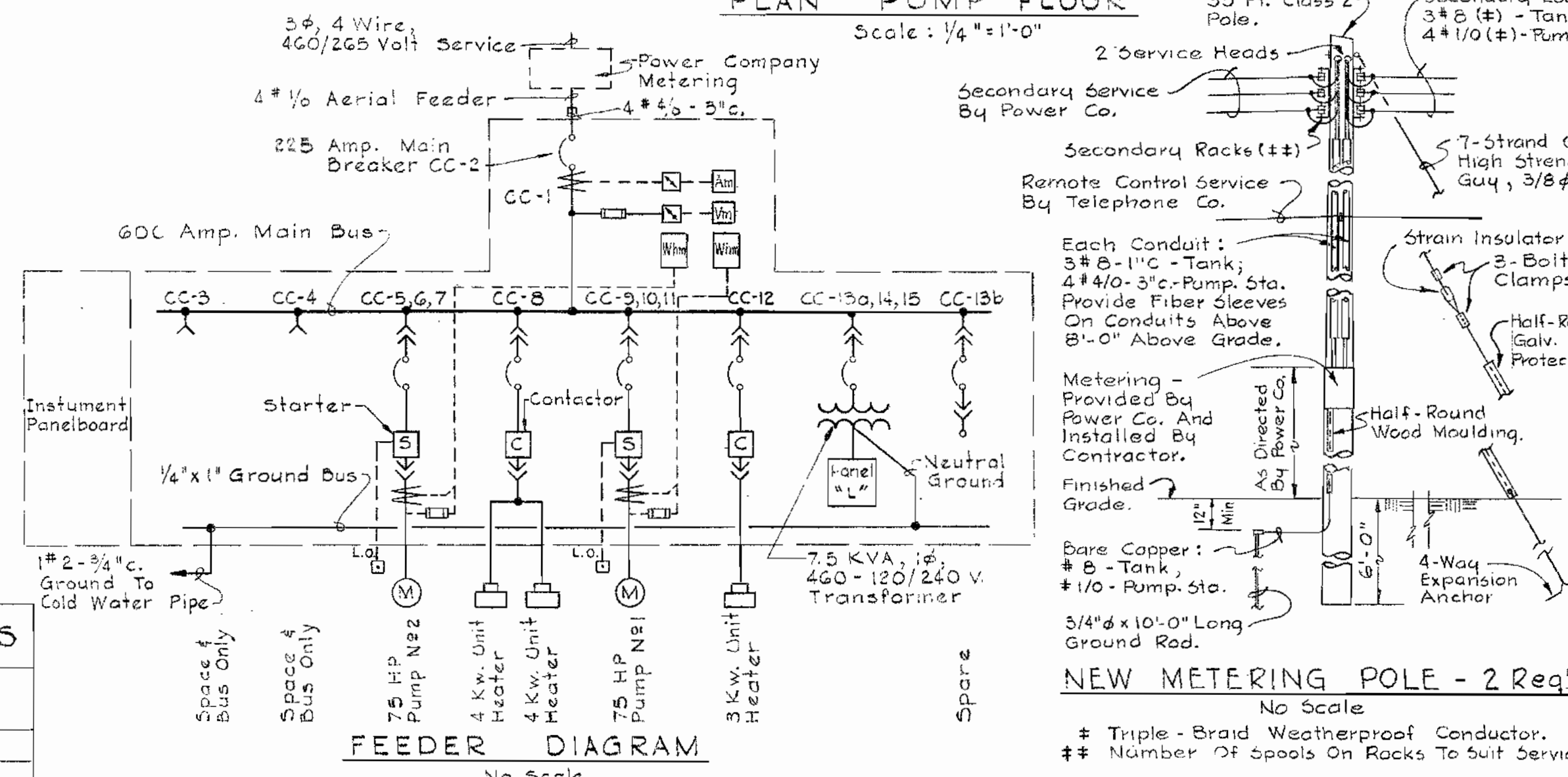
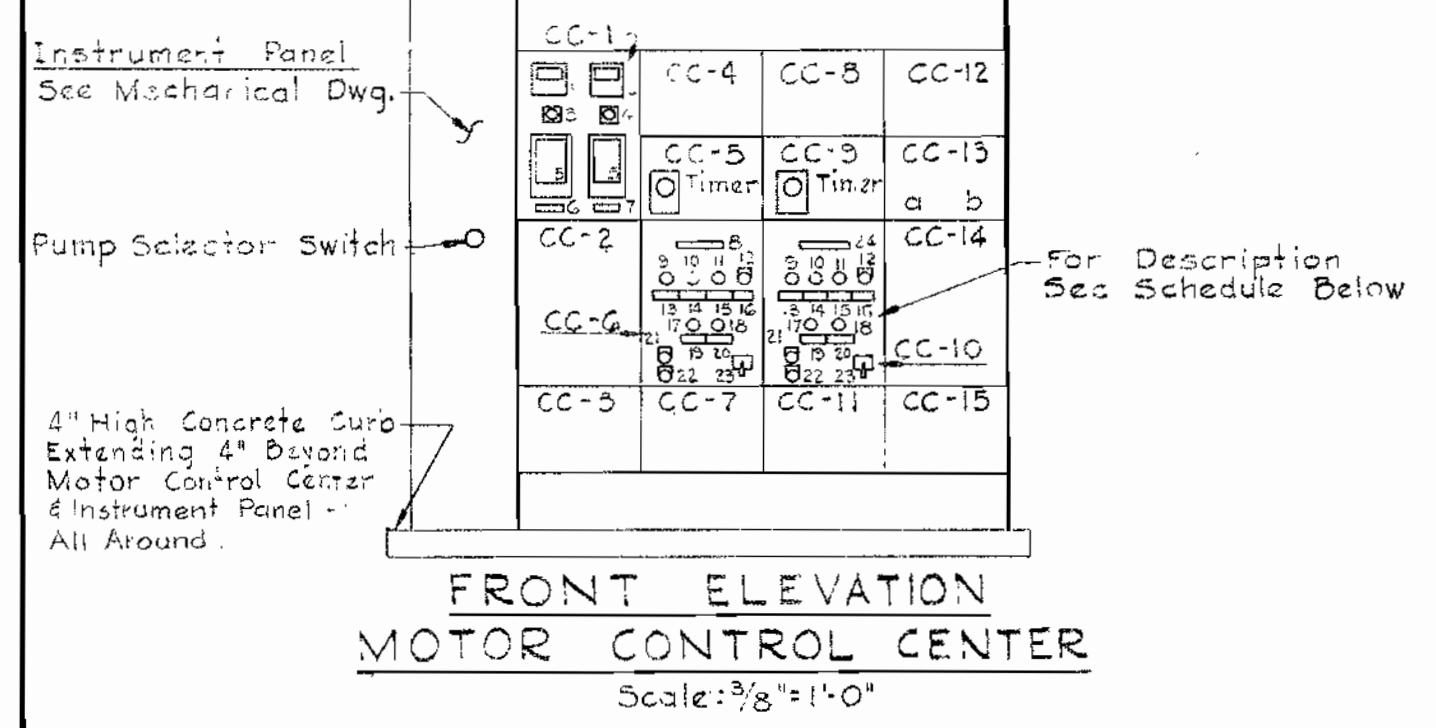
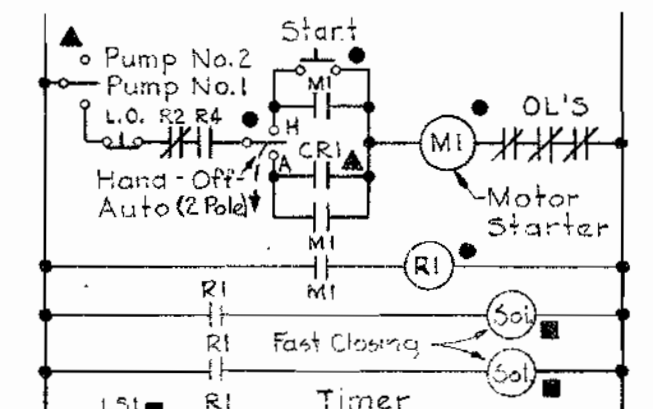
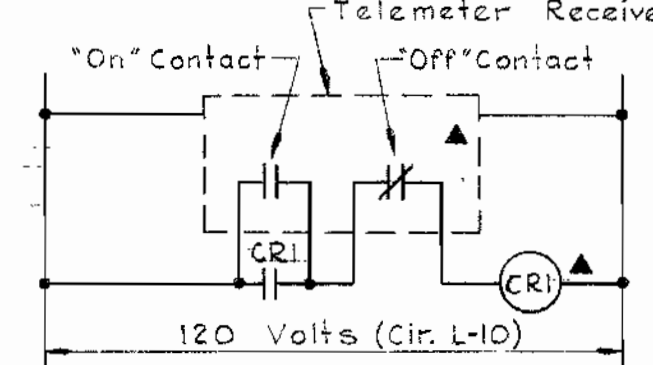
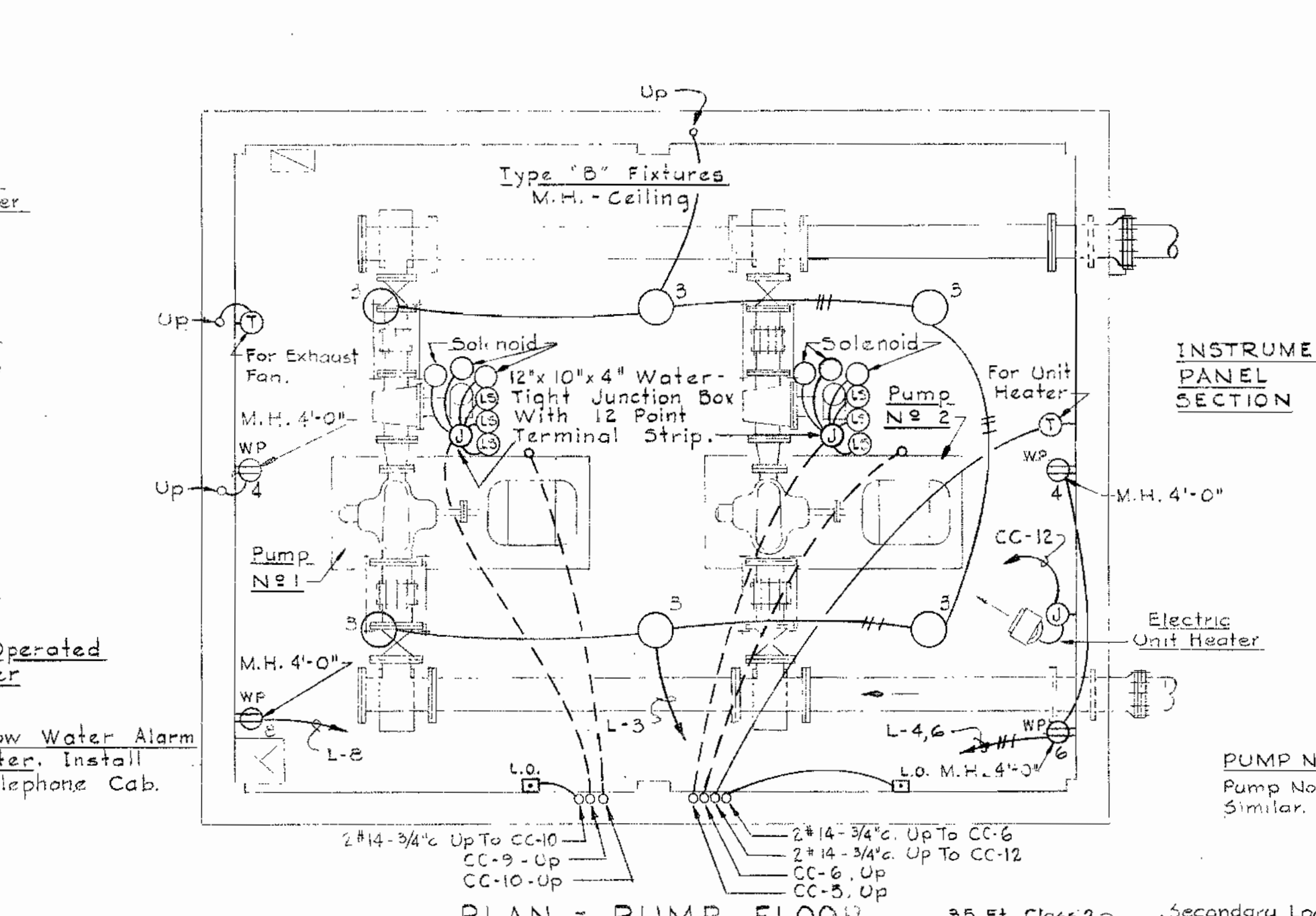
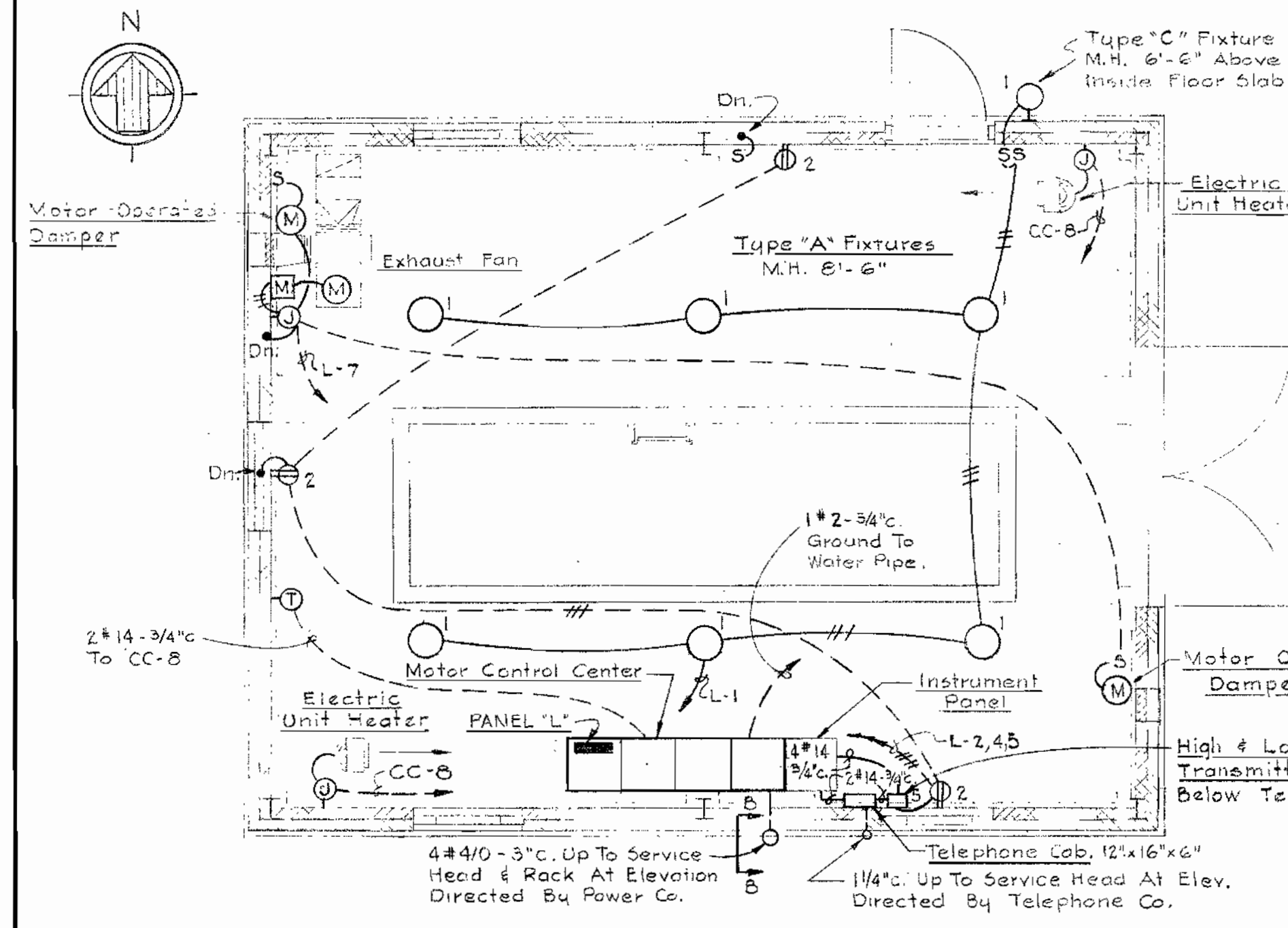
W.O. 318-2

AUG 31, 1964

WS 67W/5

LEGEND

- Incandescent Lighting Fixture, Ceiling - Wall
- S Single Pole Toggle Switch, M.H. 4'-6" Unless Noted.
- ⊖ Duplex Receptacle, M.H. 18" Unless Noted.
- Ⓜ Motor
- Ⓛ Lockout Pushbutton
- Ⓜ Manual Motor Starter
- Ⓣ Thermostat - M.H. 6'-0"
- WP Weatherproof
- Conduit in Or On Ceiling Or Wall, See Specifications
- Conduit Concealed in Or Under Floor.
- Home Run To Panelboard, Number Of Arrows Indicates Number Of Circuits; Number Of Cross Marks Indicates Number Of Conductors.
- Home Run To Motor Control Center, See Schedule, For Number And Size Of Conductors And Conduit.
- Ⓢ Limit Switch
- Ⓜ Ground Rod
- Ⓜ Junction Box



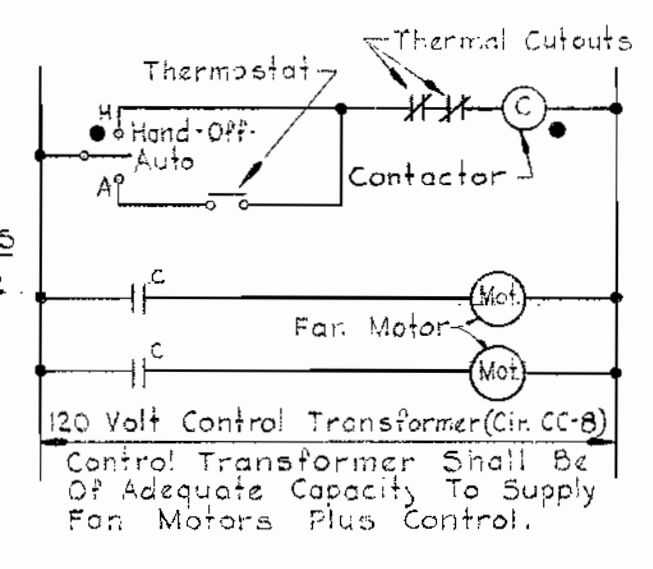
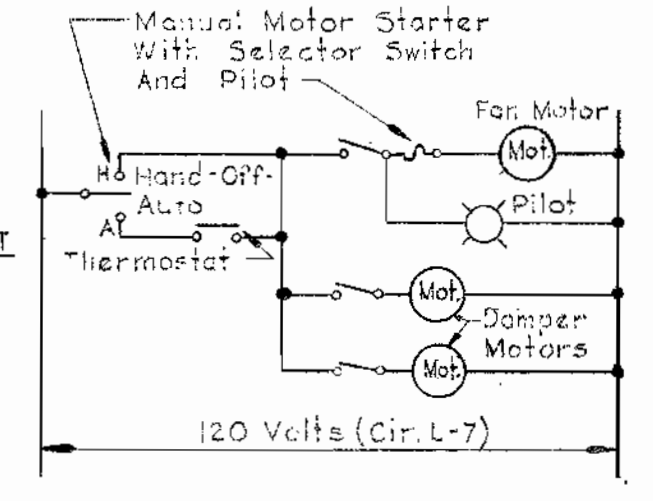
SCHEDULE - CONTROLS, METERS, LEGEND PLATES

ITEM NO.	DESCRIPTION	LEGEND
1	Voltmeter, Scale 0-600 Volts	
2	Ammeter, Scale 0-250 Amperes	
3	Voltmeter Switch - Four Position	Off - 1-2 - 2-3 - 3-1
4	Ammeter Switch - Four Position	Off - 1-2-3
5	Watthour Meter	
6	Legend Plate	Pump Motor No. 2
7	Legend Plate	Pump Motor No. 1
8	Legend Plate	Cone Valve No. 2 & Pump Motor No. 2
9	Blue Indicating Light	
10	White Indicating Light	
11	Amber Indicating Light	
12	N.C. Momentary Contact Pushbutton	Reset
13	Legend Plate	Cone Valve Closed
14	Legend Plate	Cone Valve Failure
15	Legend Plate	Cone Valve Open
16	Legend Plate	Cone Valve Reset
17	Red Indicating Light	
18	Green Indicating Light	
19	Legend Plate	Pump Motor On
20	Legend Plate	Pump Motor Off
21	N.O. Momentary Contact Pushbutton	Start
22	N.O. Momentary Contact Pushbutton	Stop
23	Two-Pole, 3-Position Selector Switch	Hand - Off - Auto
24	Legend Plate	Cone Valve No. 1 & Pump Motor No. 1

MOTOR CONTROL CENTER SCHEDULE

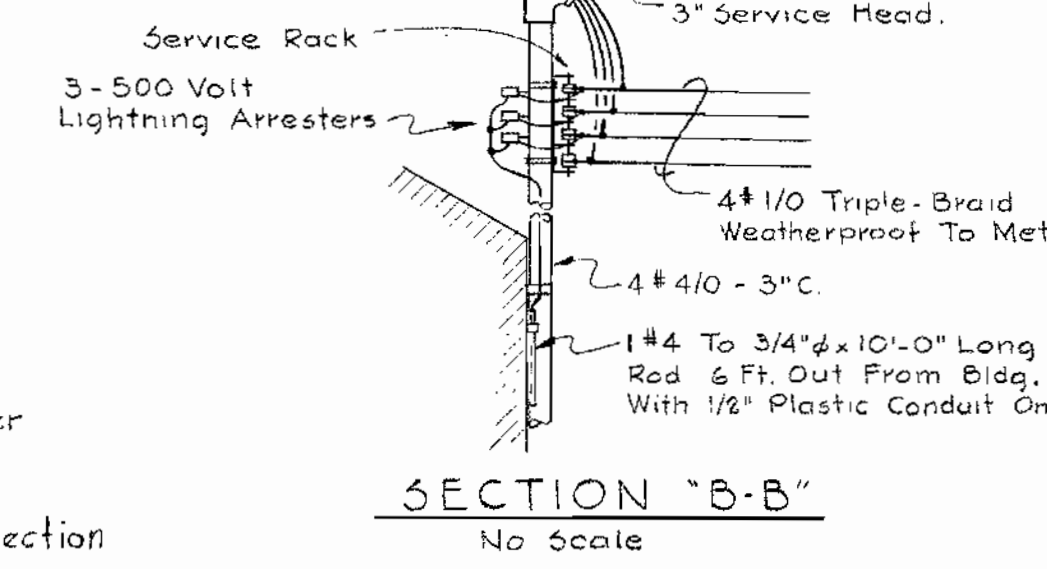
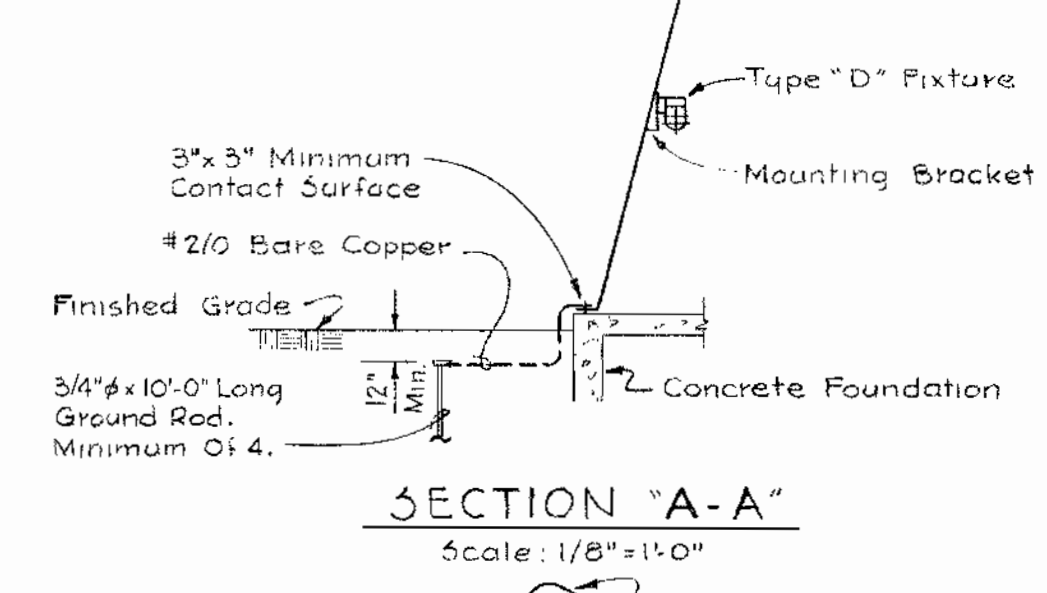
CIR. NO.	EQUIPMENT DESCRIPTION	HP	BASIC DEVICE	AUXILIARY DESCRIPTION	CIRCUIT BREAKER Frame	POLES	CALIB.	WIRE No.	COND. SIZE	GRND. WIRE SIZE
CC-1	Meter Section		Meters, Switches, Etc.	See Front Elev.						
CC-2	Main Breaker	*	Circuit Breaker		225	3	225			
CC-3	Space & Bus Only	**	Future Size 1 Starter							
CC-4	Space & Bus Only	**	Future Size 1 Starter							
CC-5	Cone Valve Relays, Pump No. 2		Relays, Timers, Etc.					10	14	1 1/2"
CC-6	Pump No. 2	75	Comb. Starter Size 4, FVNR	See Front Elev.	225	3	175	3	1/4"	2 1/4"
CC-7	Current Transformers	*	Metering CT's & Fuses							
CC-8	Unit Heaters	*264kw	Comb. Contactor Size 1	a	100	3	20	5	12	1"
CC-9	Cone Valve Relays, Pump No. 1		Relays, Timer, Etc.					10	14	1 1/2"
CC-10	Pump No. 1	75	Comb. Starter Size 4, FVNR	See Front Elev.	225	3	175	3	1/4"	2 1/4"
CC-11	Current Transformers	*	Metering CT's & Fuses							
CC-12	Unit Heater	*3kw	Comb. Contactor Size 1	a	100	3	15	5	12	1"
CC-13a	Transformer Primary Breaker		Circuit Breaker		100	2	20	By Mfg.		
CC-13b	Spare	**	Circuit Breaker		100	3	30	By Mfg.		
CC-14	Panel "L"	*	12 Cir. Panelbd., 16, 3W, 120/240 V.					By Mfg.		
CC-15	7.5 KVA Transformer	*	18, 60~ Transf. 460 - 120/240 V.					By Mfg.		

AUXILIARY DESCRIPTION
 a. HAND-OFF-AUTO Selector Switch
 * Provide Engraved Legend Plate With Wording As Shown.
 ** Provide Blank Legend Plate.



CONTROL DIAGRAMS

- Device Located At Motor Control Center
- Device Located At Cone Valve
- ▲ Device Located In Instrument Panel Section



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WS 67W/6