

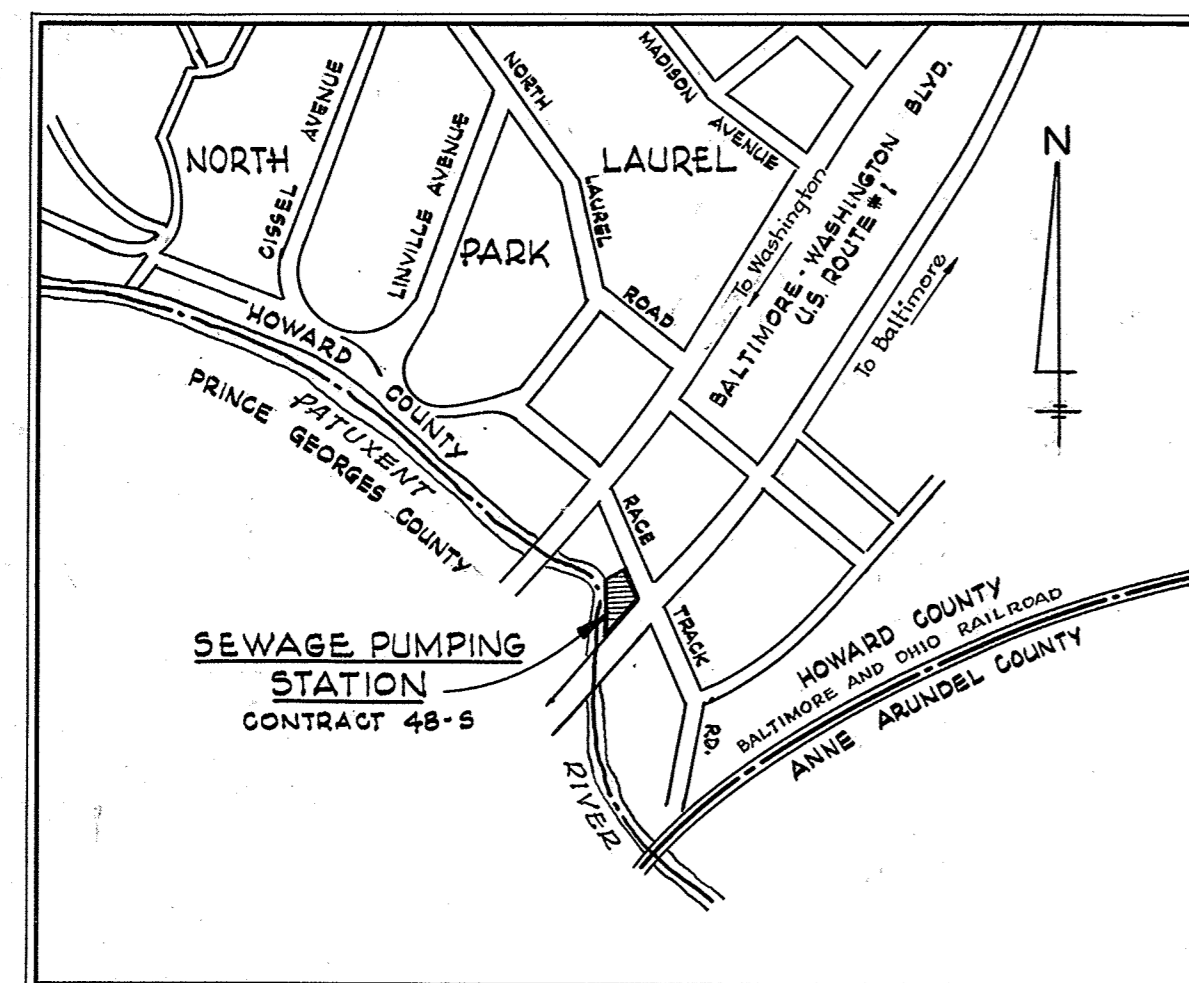
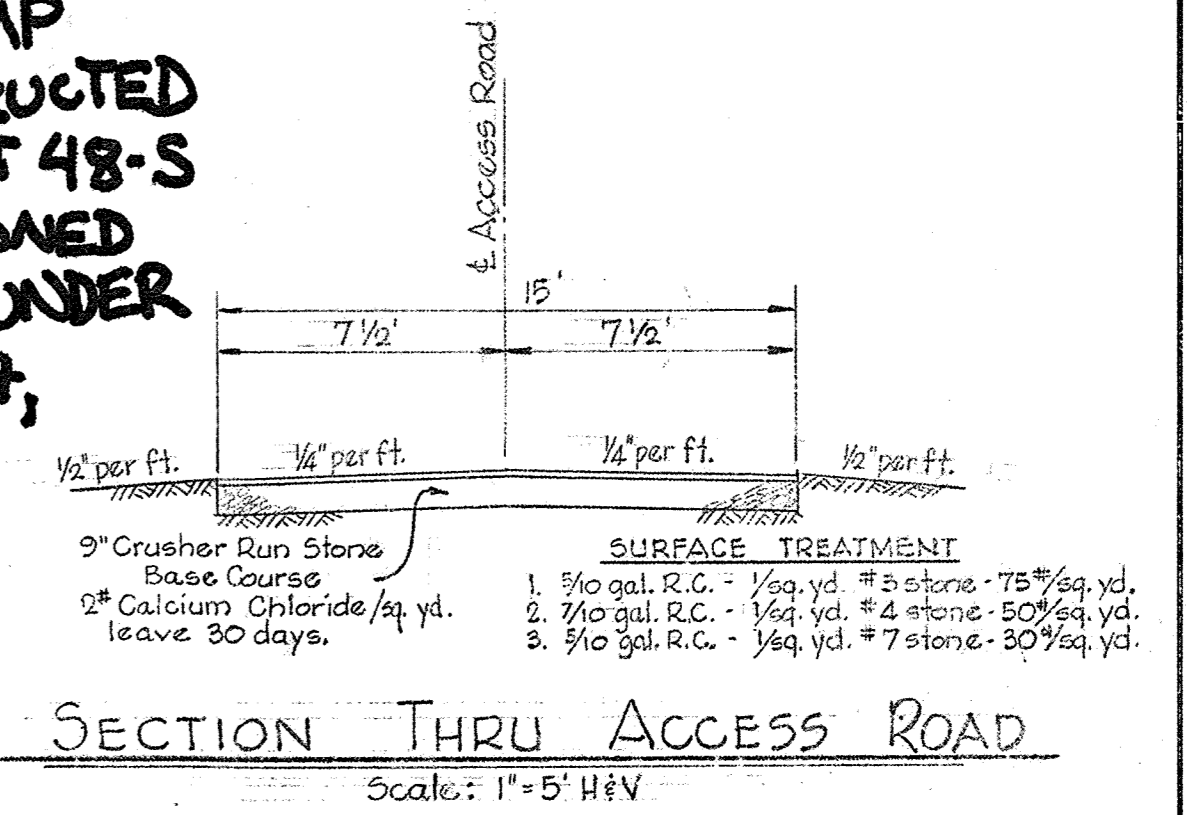
**GENERAL NOTES**

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. For all standard details see Standards bound in Specifications.
4. Build Manhole to existing ground unless otherwise directed by the Engineer.
5. 12" Overflow and 18" C.I.S. to be Class 23 C.I.P., 12" F.M. to be Class 23 C.I.P. unless otherwise noted.
6. 1 1/2" W to be Copper Type "K" and to have a minimum of 3 1/2" cover unless otherwise noted.

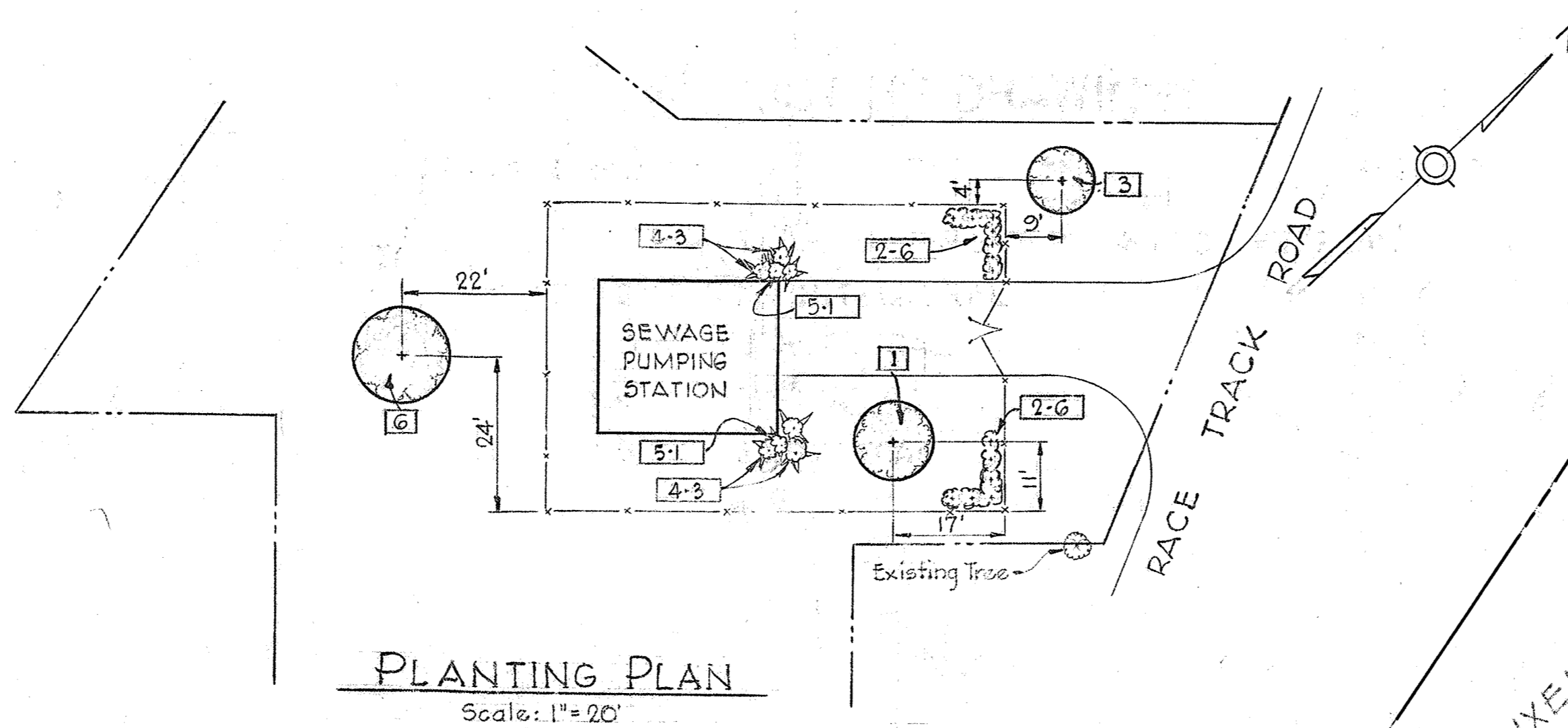
**CONTRACT 48-S\***  
**PATUXENT RIVER**  
**SEWAGE PUMPING STATION**

**HOWARD COUNTY METROPOLITAN COMMISSION**  
**PATUXENT SUB - DISTRICT**

**\*PLEASE NOTE, THIS ORIGINAL PUMP STATION CONSTRUCTED UNDER CONTRACT 48-S WAS DECOMMISSIONED AND DEMOLISHED UNDER CONTRACT 20-5047, IN JANUARY 2019.**



**LOCATION PLAN**  
 Scale: 1"=600'

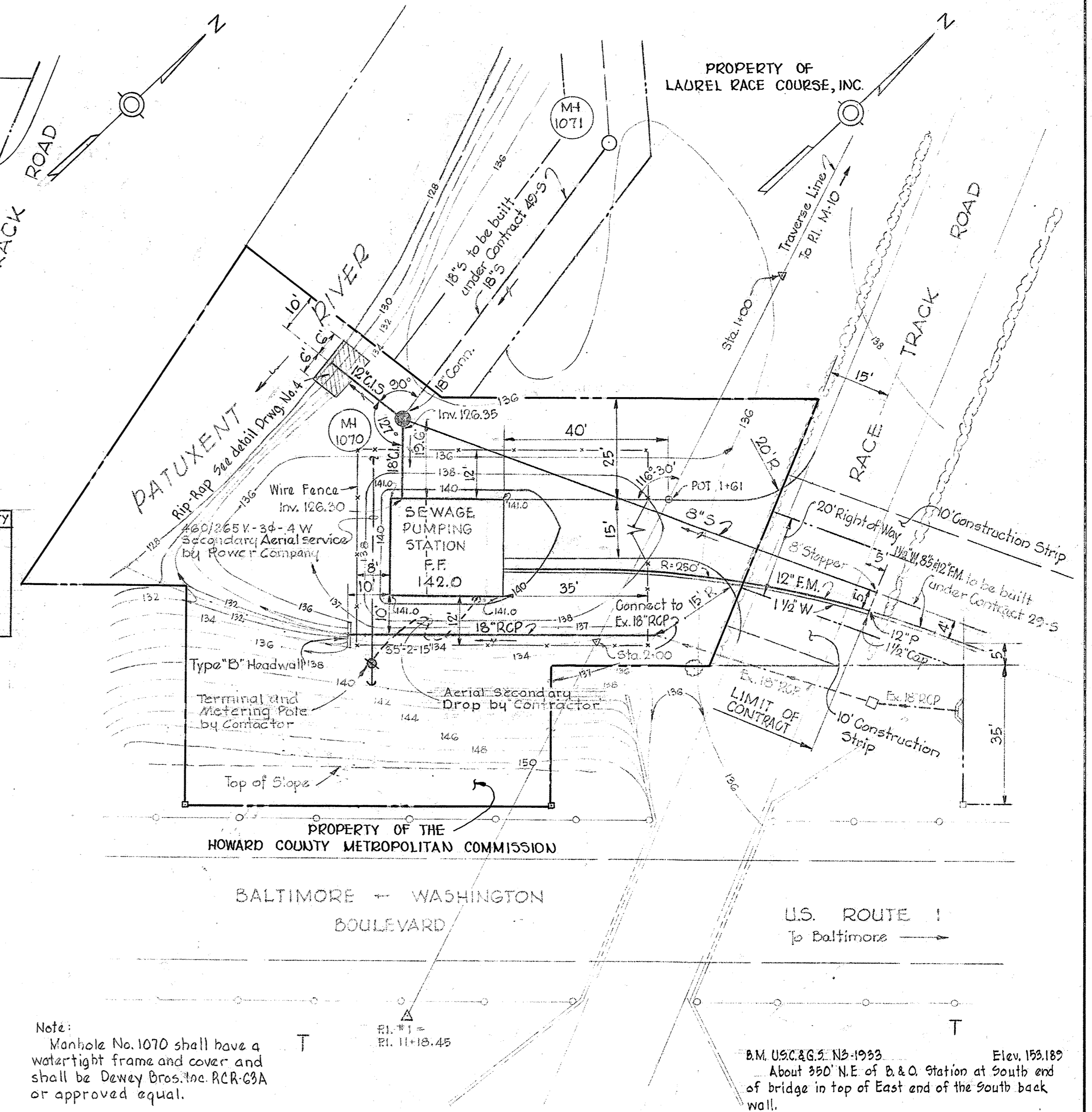


**PLANTING NOTES**

1. First number is type of plant; second 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 topsoil and 2 parts peat moss shall be used for each plant hole.

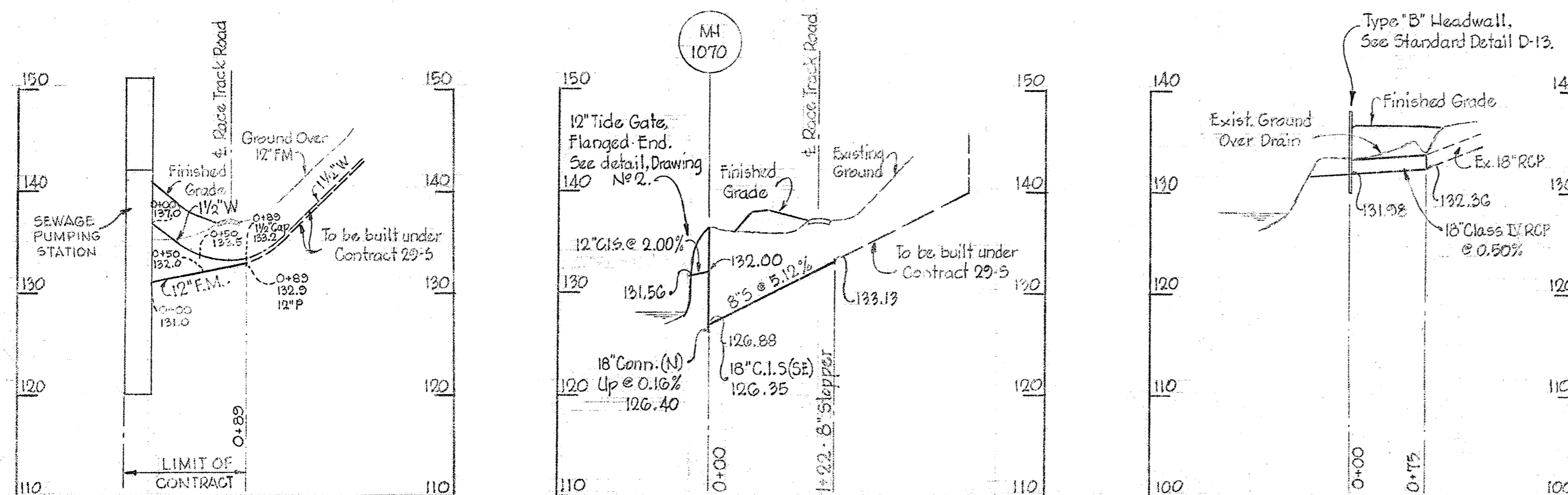
**PLANT LIST**

CODE	SCIENTIFIC NAME	COMMON NAME	SIZE	QUANTITY
1	Acer platanoides	Norway Maple	2'-2 1/2" cal.	1
2	Ligustrum lucidum	Glossy Privet	2 1/2'-3' Ht.	12
3	Pinus strobus	White Pine	8'-10' Ht.	1
4	Taxus cuspidata	Spreading Jap. Yew	2'-2 1/2" Spr.	6
5	Taxus capitata	Upright Jap. Yew	4'-5' Ht.	2
6	Salix babylonica	Weeping Willow	10'-12' Ht.	1



Note: Manhole No. 1070 shall have a watertight frame and cover and shall be Dewey Bros. Inc. RCR-63A or approved equal.

B.M. U.S.C. & G.S. N5-1933 Elev. 153.182  
 About 350' N.E. of B. & O. Station at South end of bridge in top of East end of the South back wall.



**SITE PLAN**  
 Scale: 1"=20'

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

HOWARD COUNTY METROPOLITAN COMMISSION  
 Jan. 21, 1963  
 DATE  
 Carl W. Meyer  
 CHIEF ENGINEER

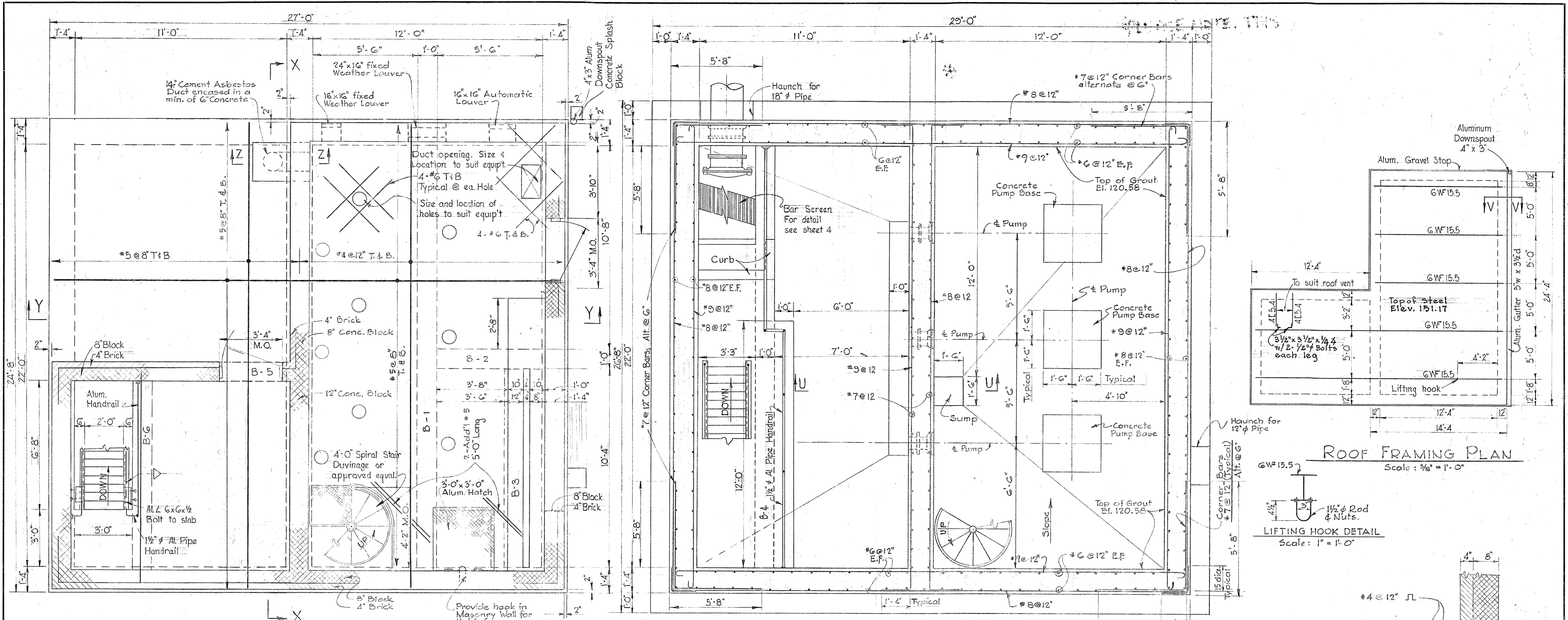
CONTRACT NO. 48-S

TITLE SHEET  
 SITE PLAN & PROFILES

PATUXENT SUB - DISTRICT

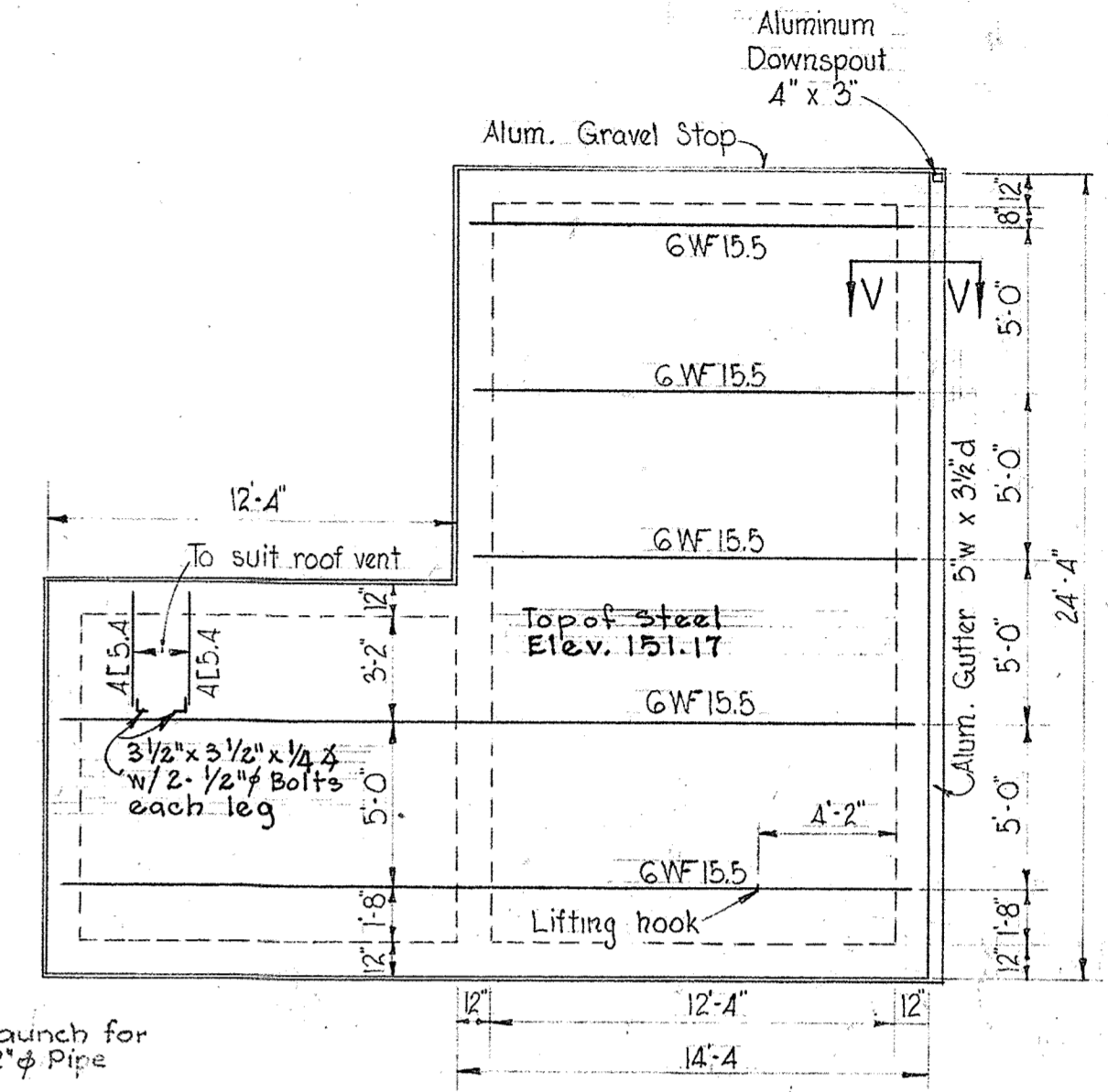
Contract 48-s  
 DRAWING NO. 1 OF 7  
 SCALE AS SHOWN

W. 48 S/1

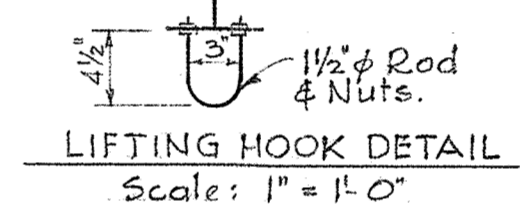


PLAN @ ELEV. 142.0  
Scale: 3/8" = 1'-0"

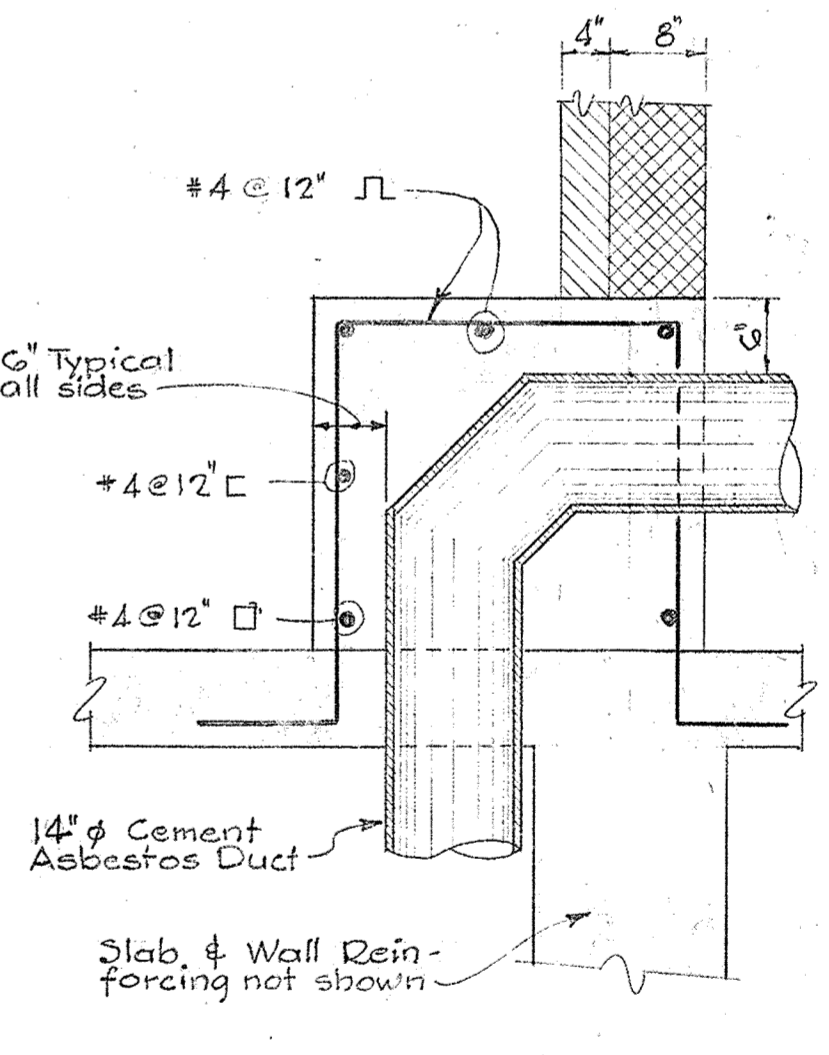
PLAN @ ELEV. 129.0  
Scale: 3/8" = 1'-0"



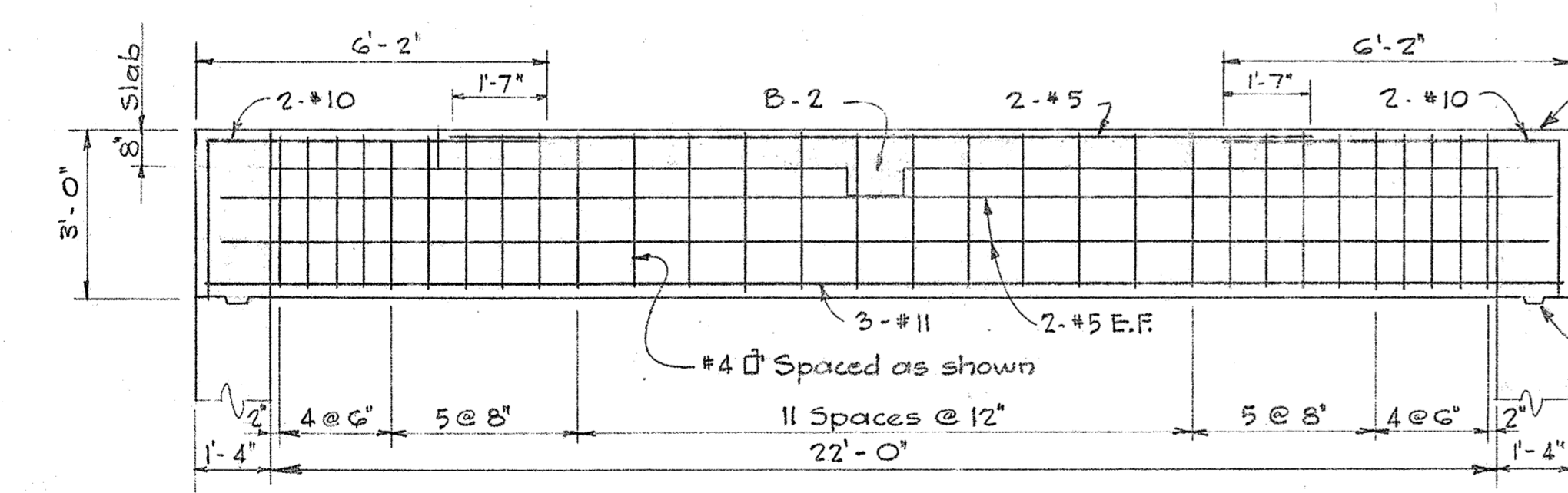
ROOF FRAMING PLAN  
Scale: 3/8" = 1'-0"



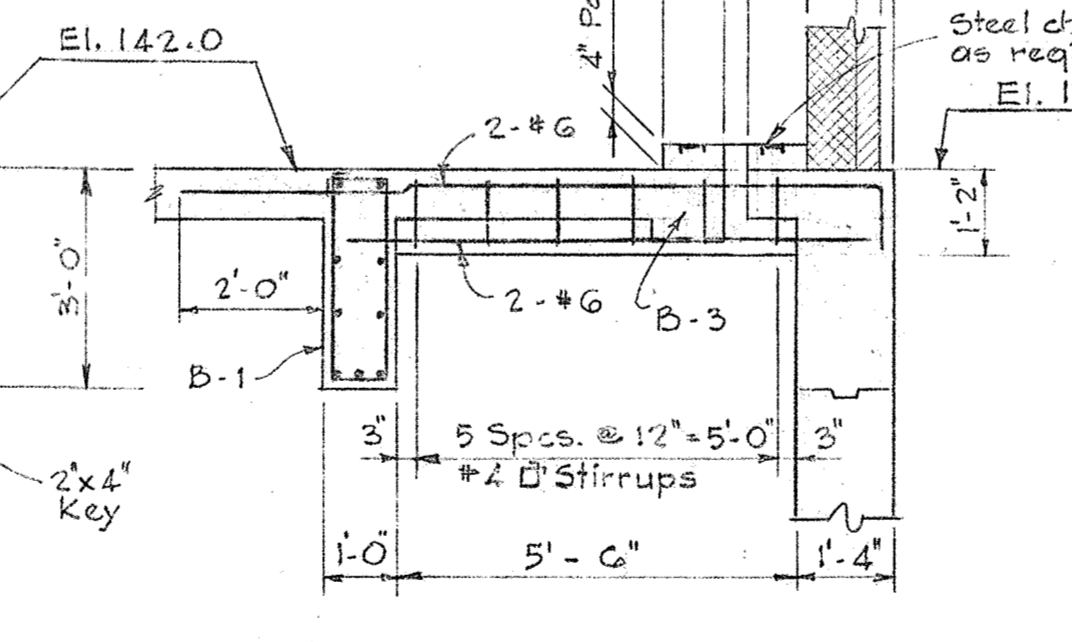
LIFTING HOOK DETAIL  
Scale: 1" = 1'-0"



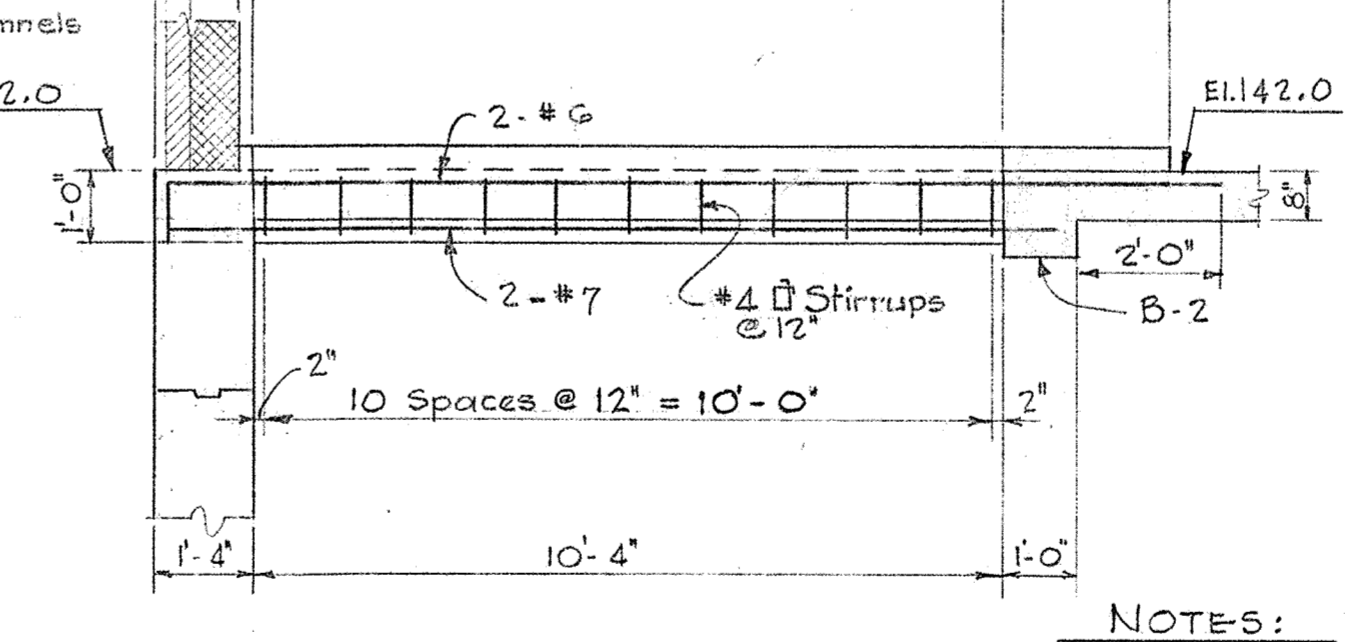
SECTION Z-Z  
Scale: 3/4" = 1'-0"



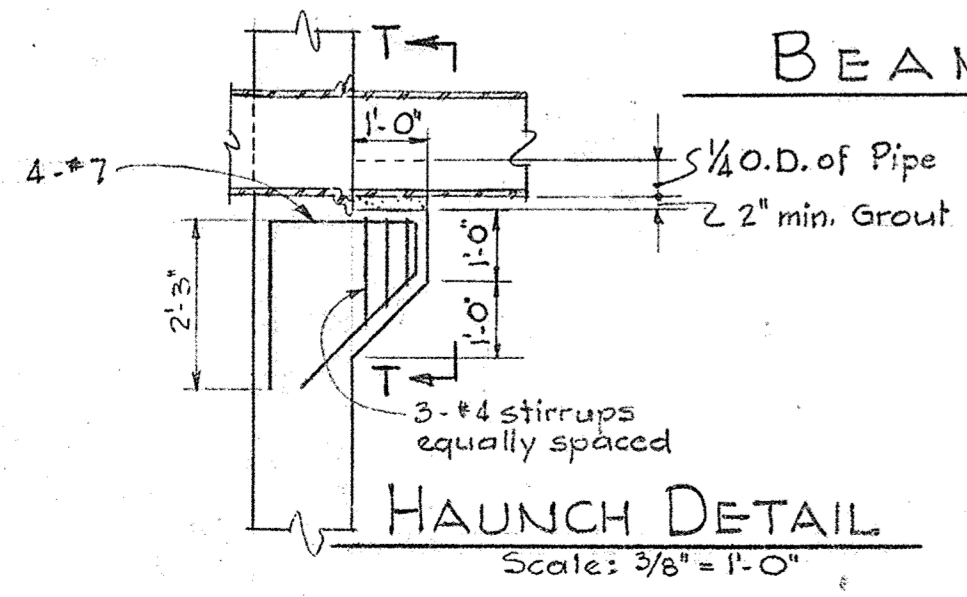
BEAM B-1 (12" x 36")  
Scale: 3/8" = 1'-0"



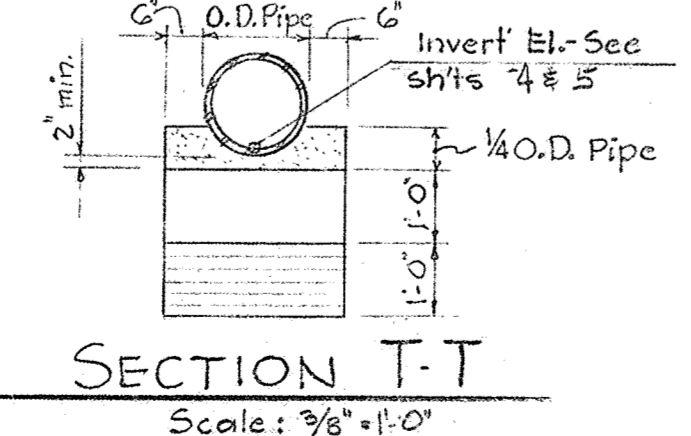
BEAM B-2 (12" x 14")  
Scale: 3/8" = 1'-0"



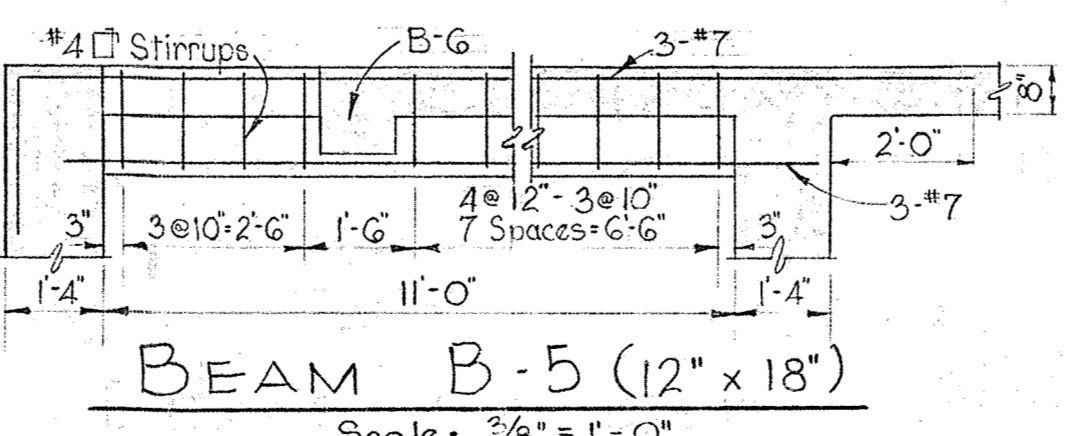
BEAM B-3 (12" x 12")  
Scale: 3/8" = 1'-0"



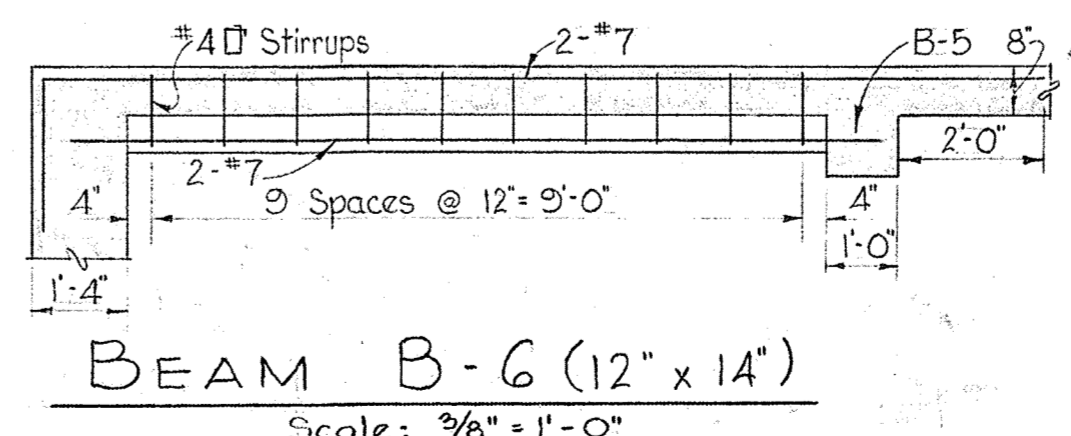
HAUNCH DETAIL  
Scale: 3/8" = 1'-0"



SECTION T-T  
Scale: 3/8" = 1'-0"



BEAM B-5 (12" x 18")  
Scale: 3/8" = 1'-0"



BEAM B-6 (12" x 14")  
Scale: 3/8" = 1'-0"

NOTES:

- Concrete shall have a strength of 3500 p.s.i. at 28 days. All exposed concrete edges shall have a chamfer of 3/4" min.
- All Reinforcing shall be of intermediate grade steel. Concrete cover on reinforcing shall be as follows: Uniformed concrete & bottom of base slab: 3"; walls, beams & slabs: 2". All reinforcing shall be lapped and/or embedded a min. of 30 dia.
- A minimum of 3 days shall elapse between adjacent concrete pours of walls & slabs.
- Concrete to contain 'Plastiment' admixture with an average content of 5% air. Slump to be 2" to 4". All concrete to have a minimum of 7 days curing time. Operating floor slab shall have a steel float finish. All concrete walls and base slab shall be finished smooth and in addition exposed vertical surface shall be rubbed with a Carborundum stone.
- Form Ties for use in forms shall be Watertight Snap-Ti Type SWS with linch break back as manufactured by the Richmond Screw Anchor Co., Inc., Brooklyn, New York, or approved equal.
- Contractor shall leave openings in wall during construction to prevent flotation.
- Aluminum hatches to be Bilco Type VA 20A1-100 or approved equal.
- Lintels in masonry to be 3" x 3" x 3/8" except where otherwise shown.

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

HOWARD COUNTY METROPOLITAN COMMISSION  
April 10, 1965  
DATE  
Carl W. Meyer  
CHIEF ENGINEER

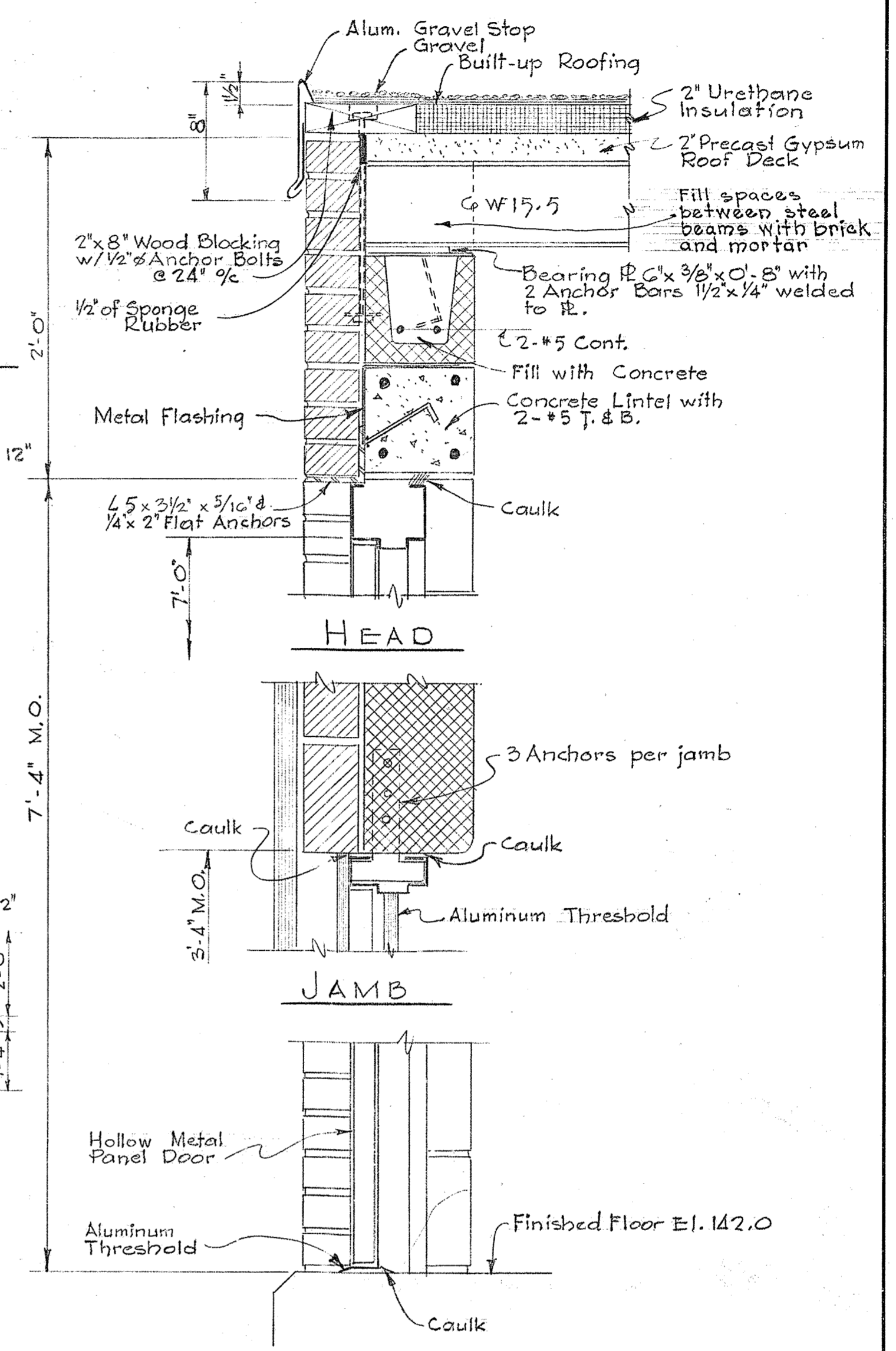
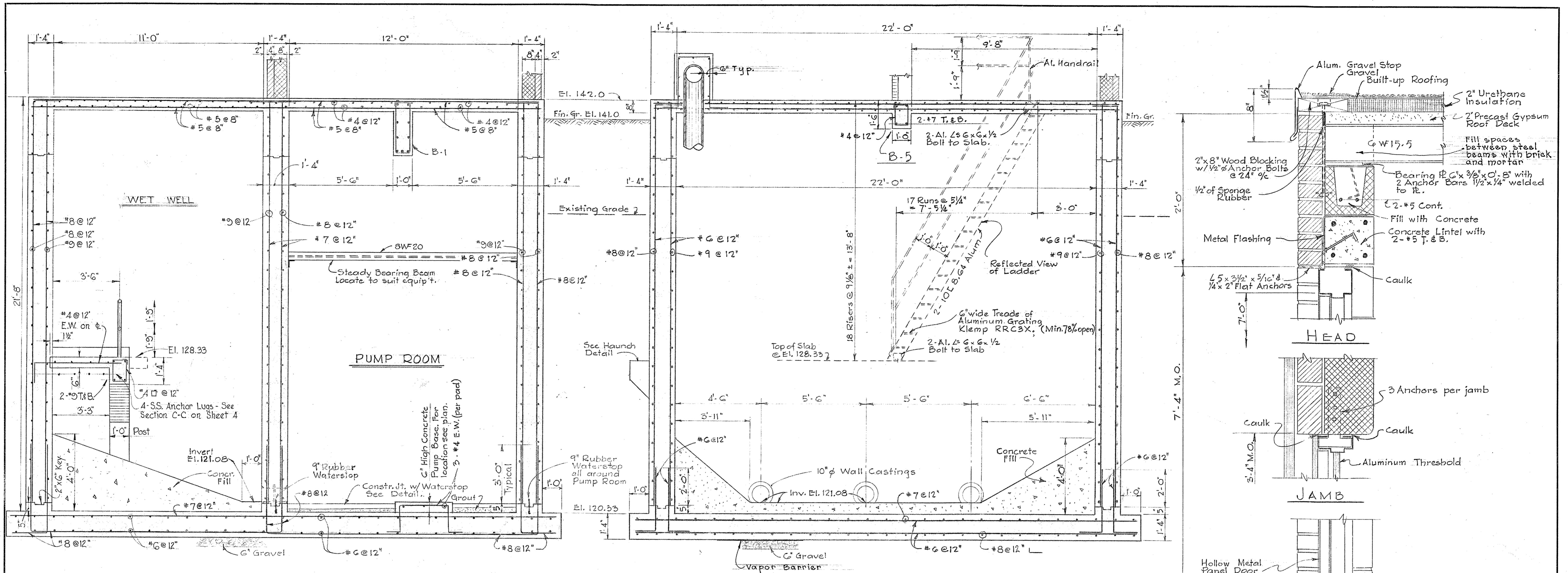
CONTRACT NO. 48-S

STRUCTURAL  
PLANS AND SECTIONS

PATUXENT SUB - DISTRICT

DRAWING NO. 2 OF 7  
SCALE AS SHOWN

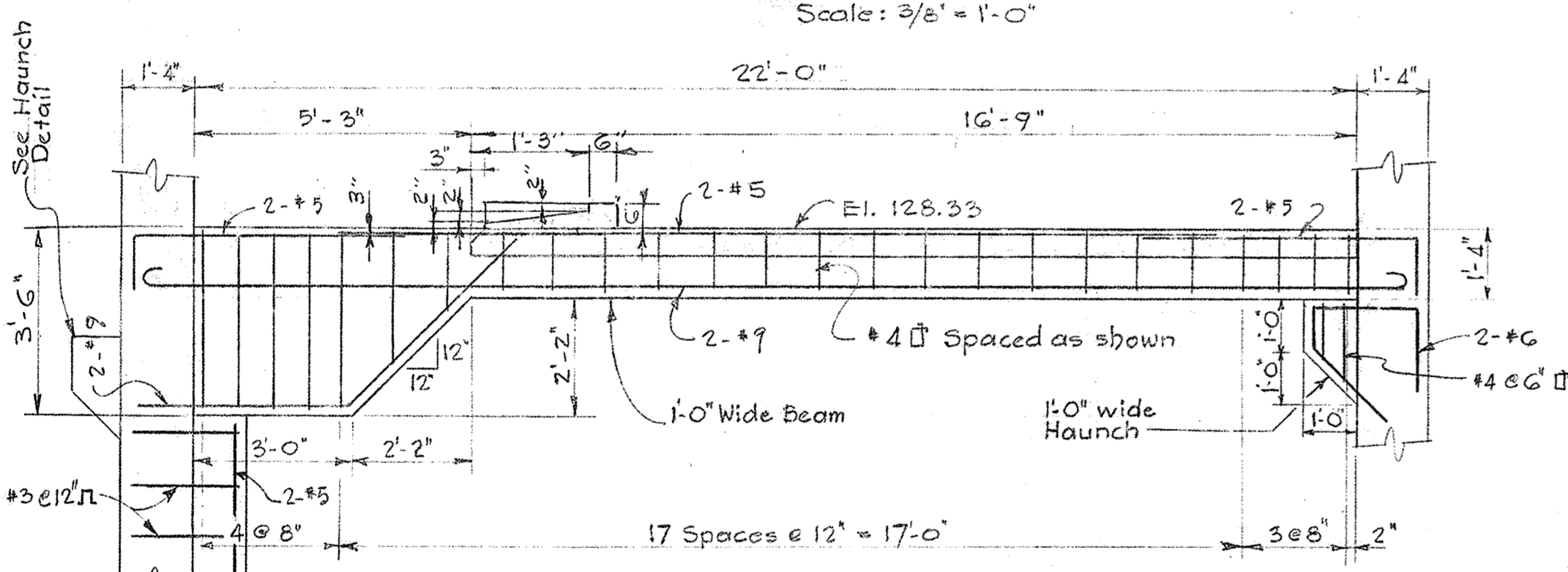
W. 48 S/12



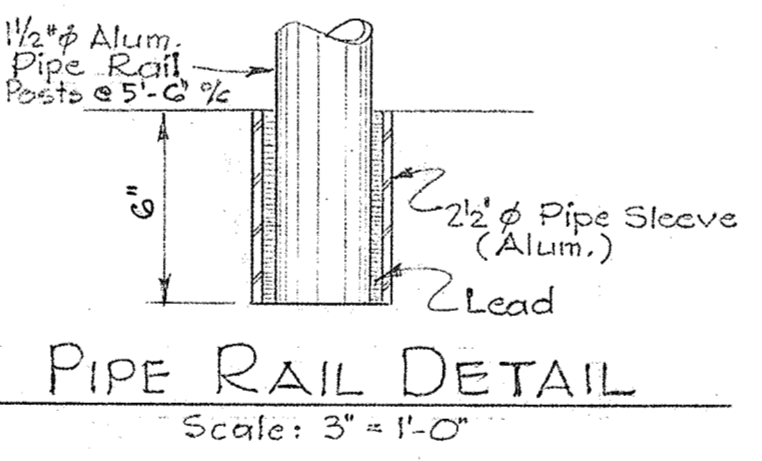
SECTION Y-Y  
Scale: 3/8" = 1'-0"

SECTION X-X  
Scale: 3/8" = 1'-0"

SECTION THROUGH DOOR  
Scale: 1/2" = 1'-0"

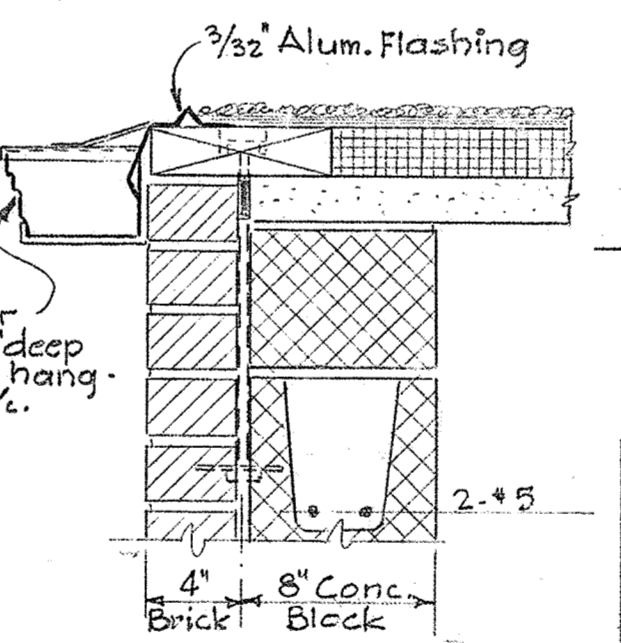


BEAM B-4 (12" WIDE)  
Scale: 3/8" = 1'-0"

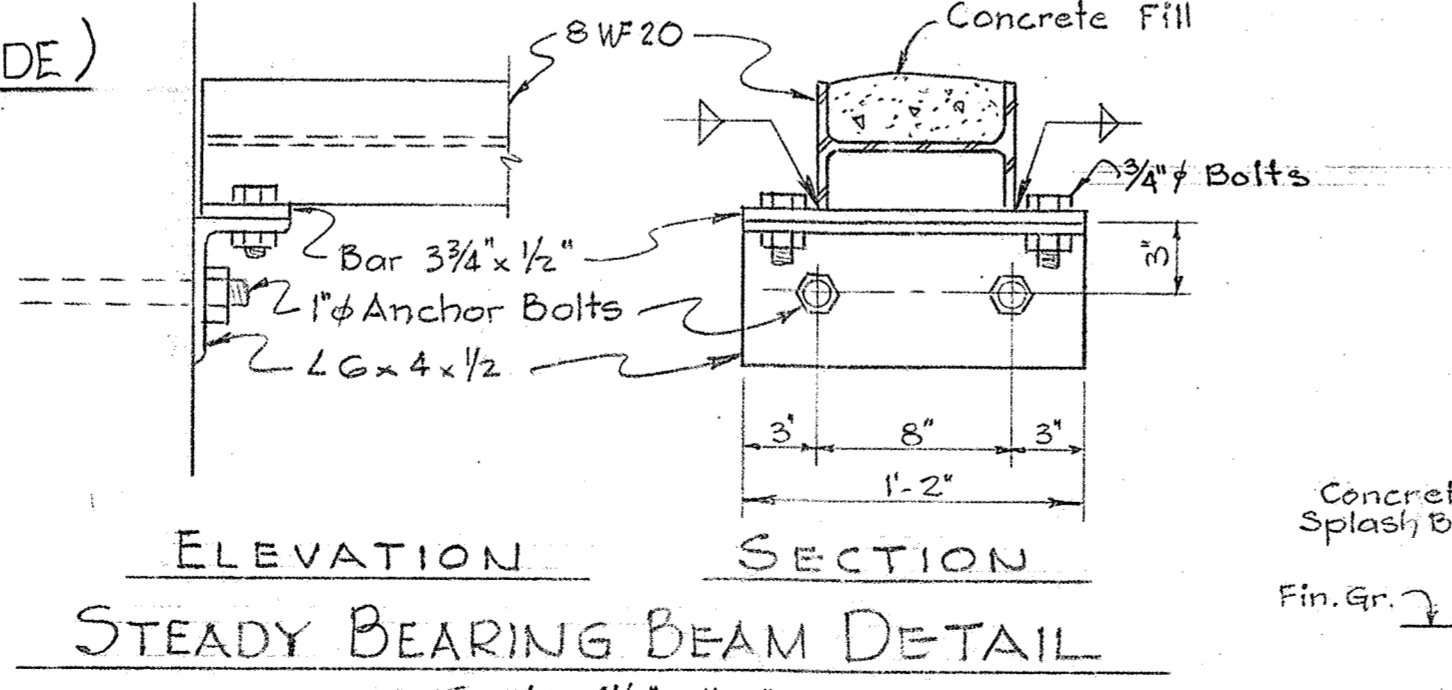


PIPE RAIL DETAIL  
Scale: 3" = 1'-0"

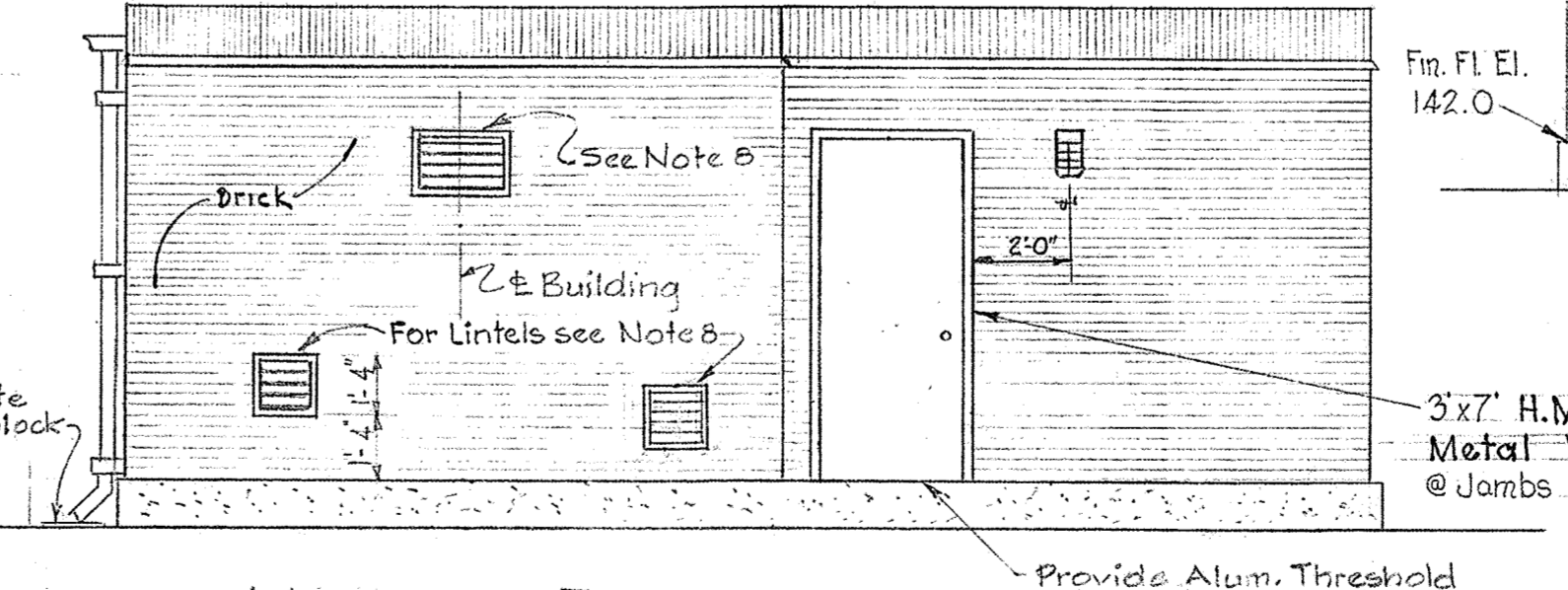
ADDITIONAL REINF.  
AROUND OPENINGS  
IN WALLS



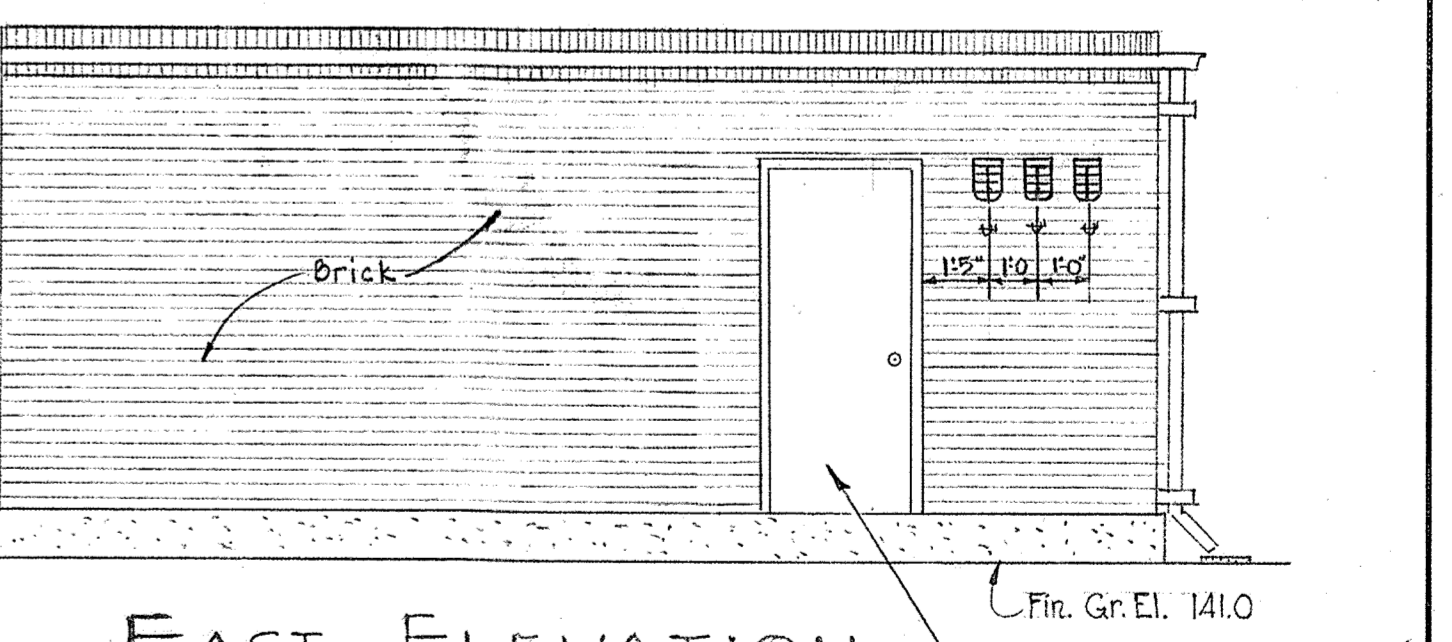
SECTION V-V  
Scale: 1/2" = 1'-0"



ELEVATION SECTION  
STEADY BEARING BEAM DETAIL  
Scale: 1/2" = 1'-0"



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



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

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

HOWARD COUNTY METROPOLITAN COMMISSION  
April 10, 1968  
DATE  
Chief Engineer

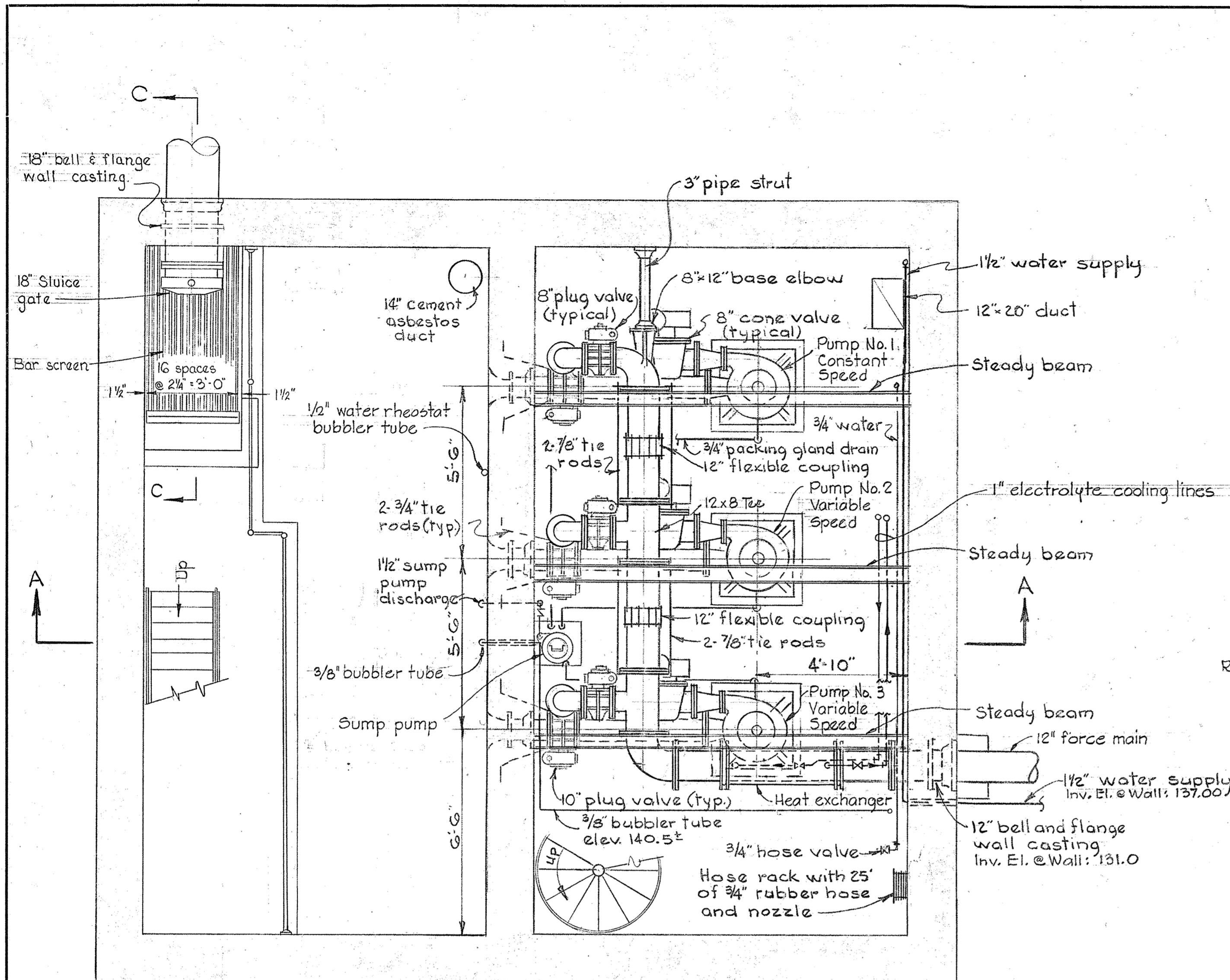
CONTRACT NO. 48-S

STRUCTURAL  
SECTIONS AND DETAILS

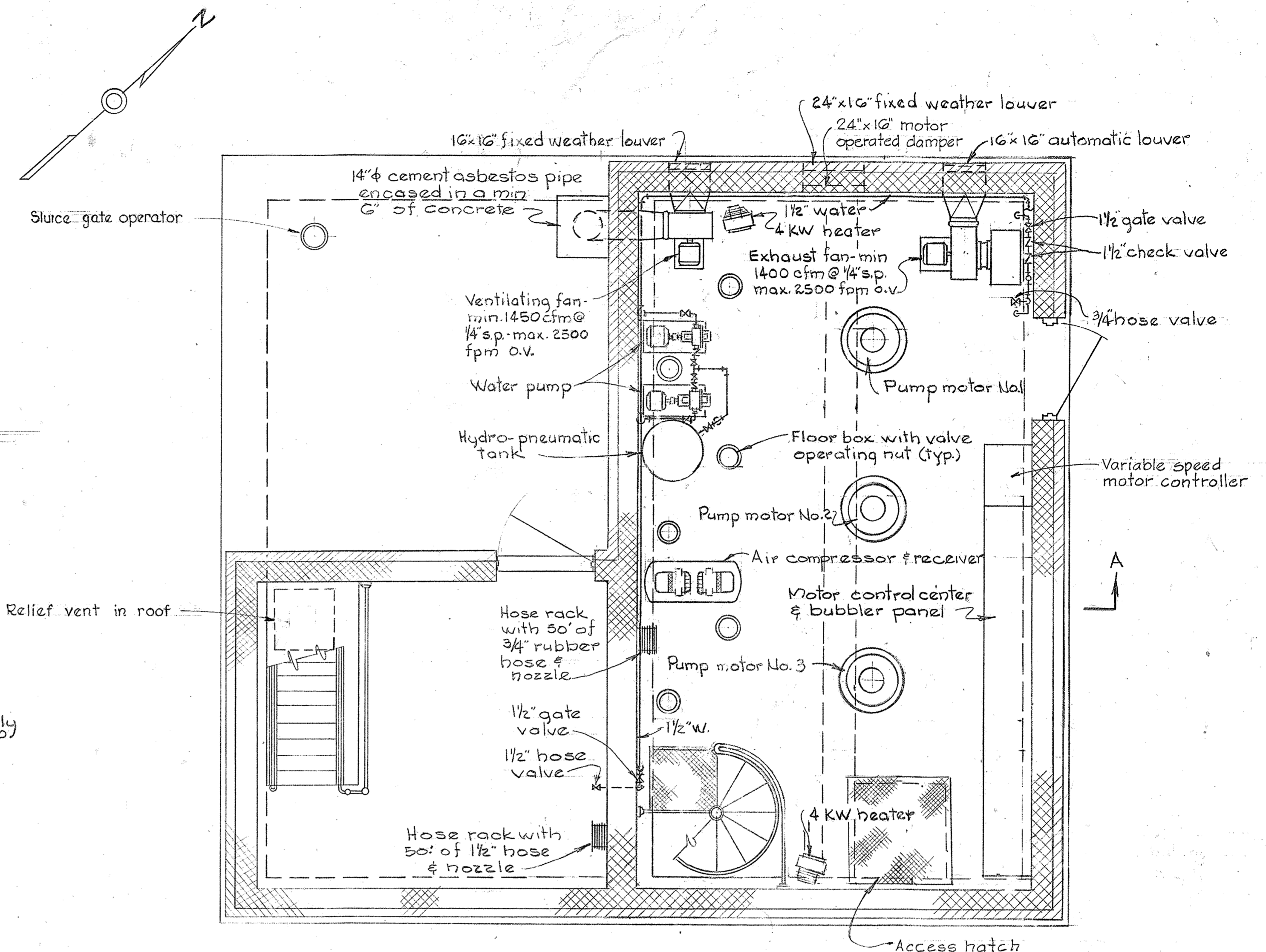
PATUXENT SUB-DISTRICT

DRAWING NO. 3 OF 7  
SCALE AS SHOWN

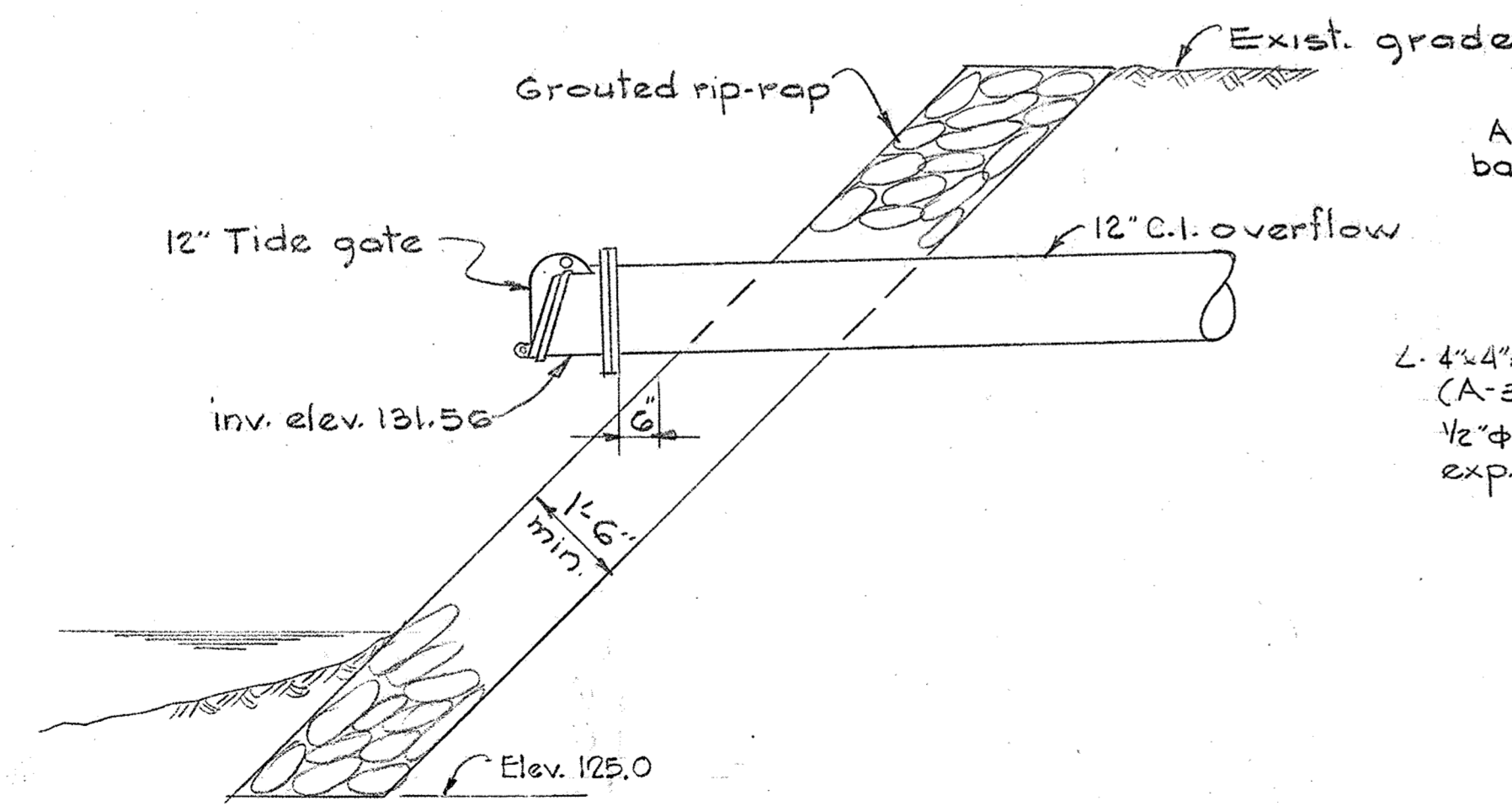
MS 485/3



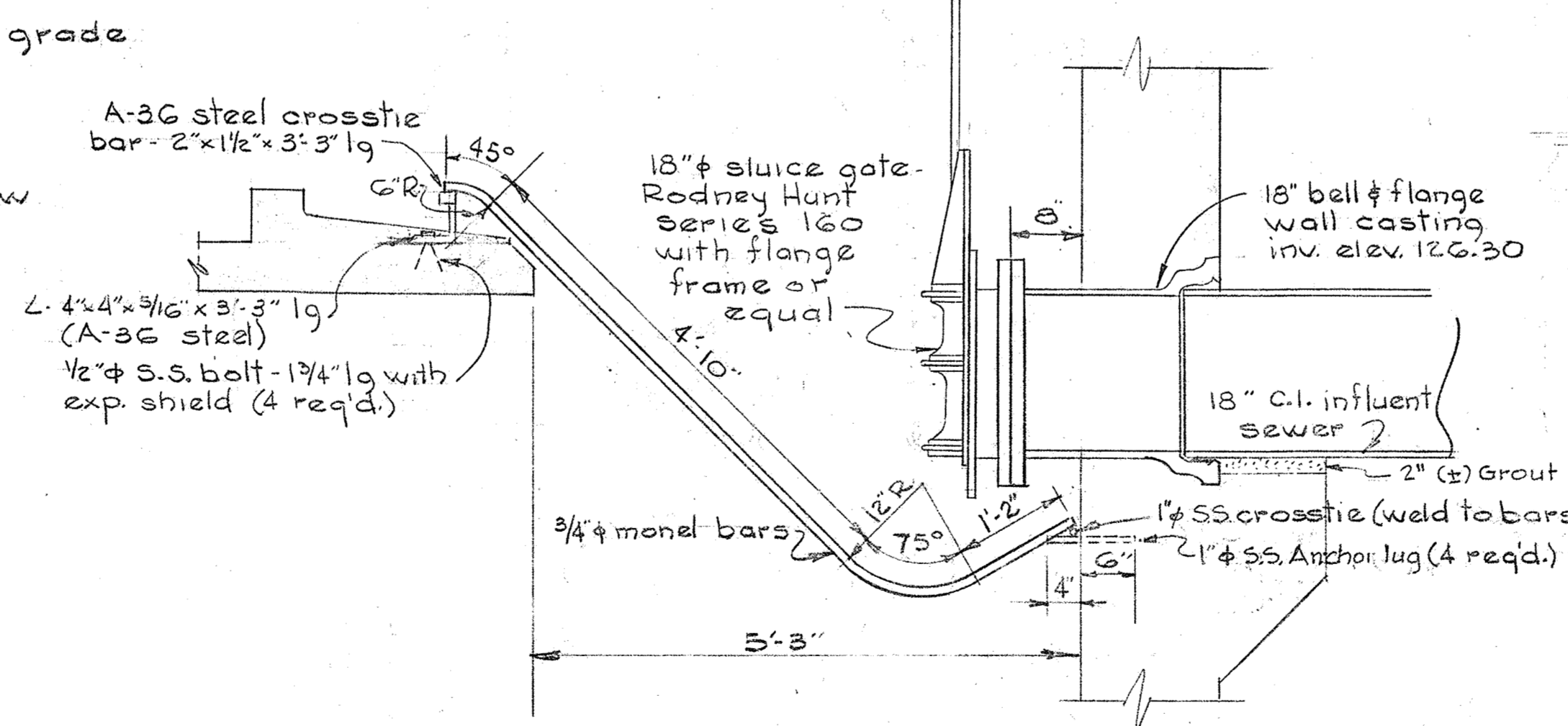
PLAN - PUMP ROOM  
Scale: 3/8" = 1'-0"



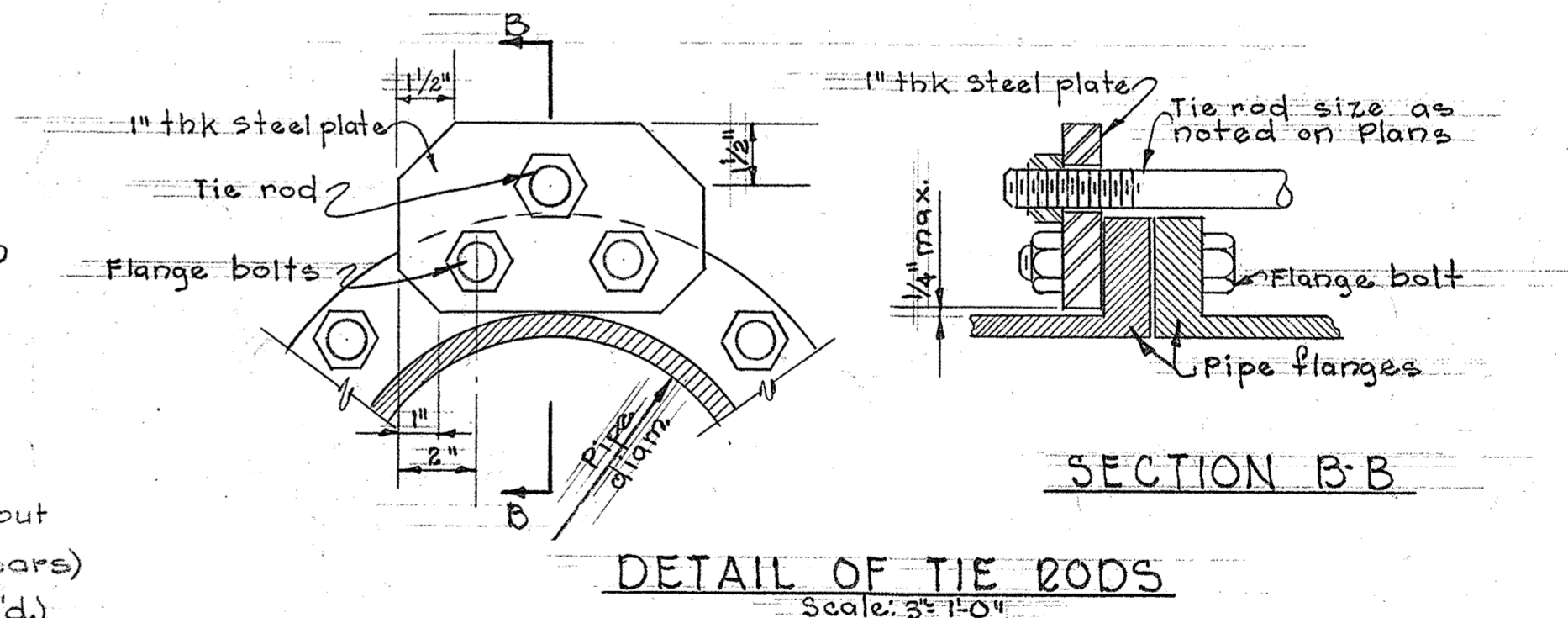
PLAN - MOTOR ROOM  
Scale: 3/8" = 1'-0"



DETAIL OF TIDE GATE  
Scale: 1/2" = 1'-0"



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



DETAIL OF TIE RODS  
Scale: 3/4" = 1'-0"

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

HOWARD COUNTY METROPOLITAN COMMISSION  
Jan. 21, 1963  
DATE  
Carl W. Meyer  
CHIEF ENGINEER

CONTRACT NO. 48-S

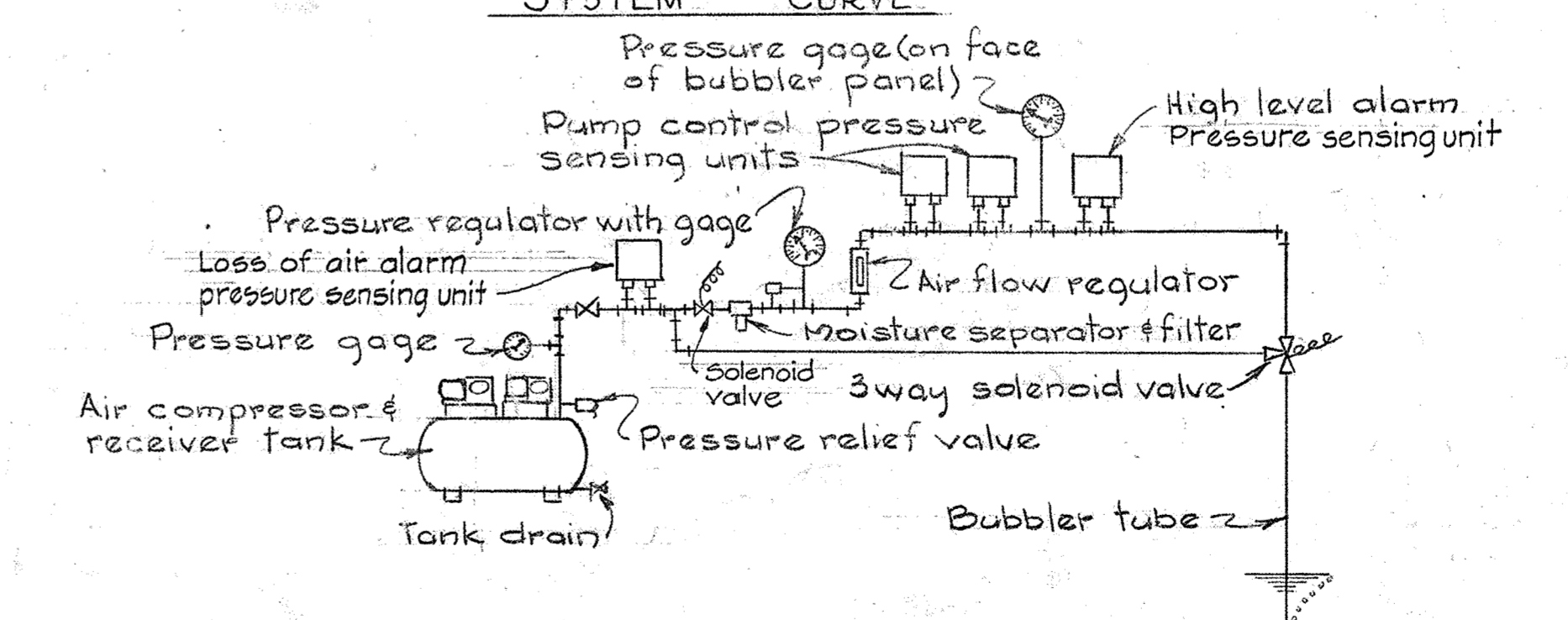
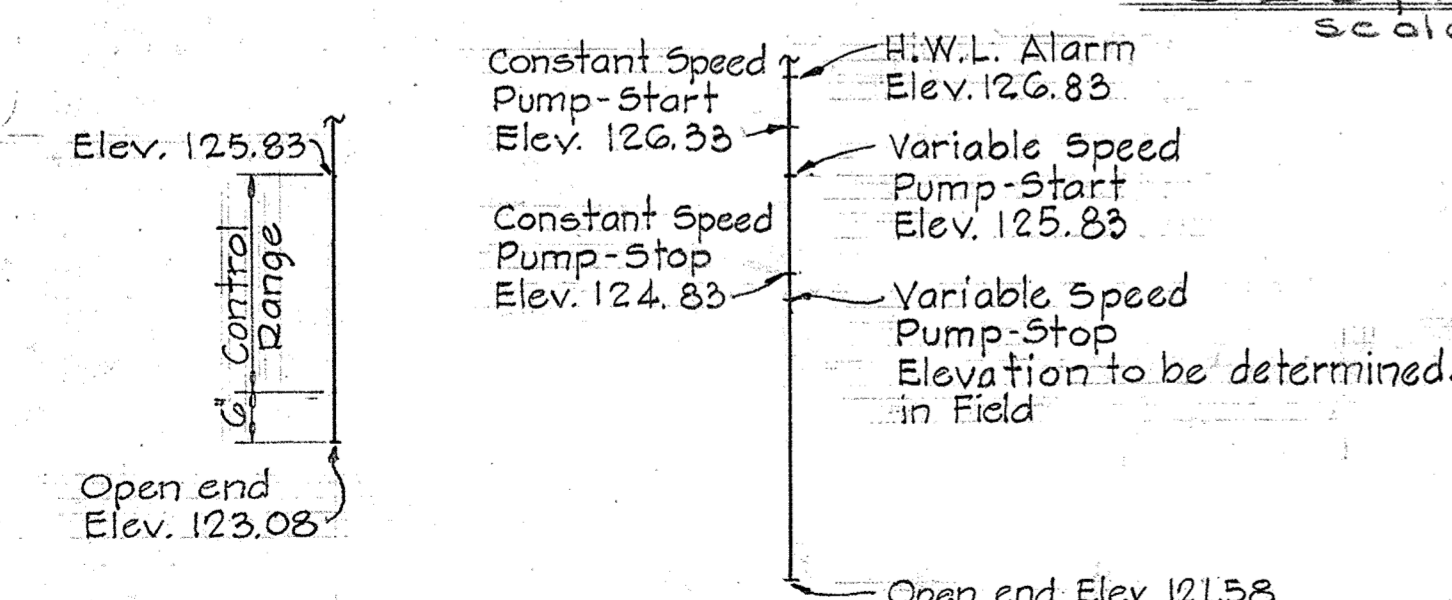
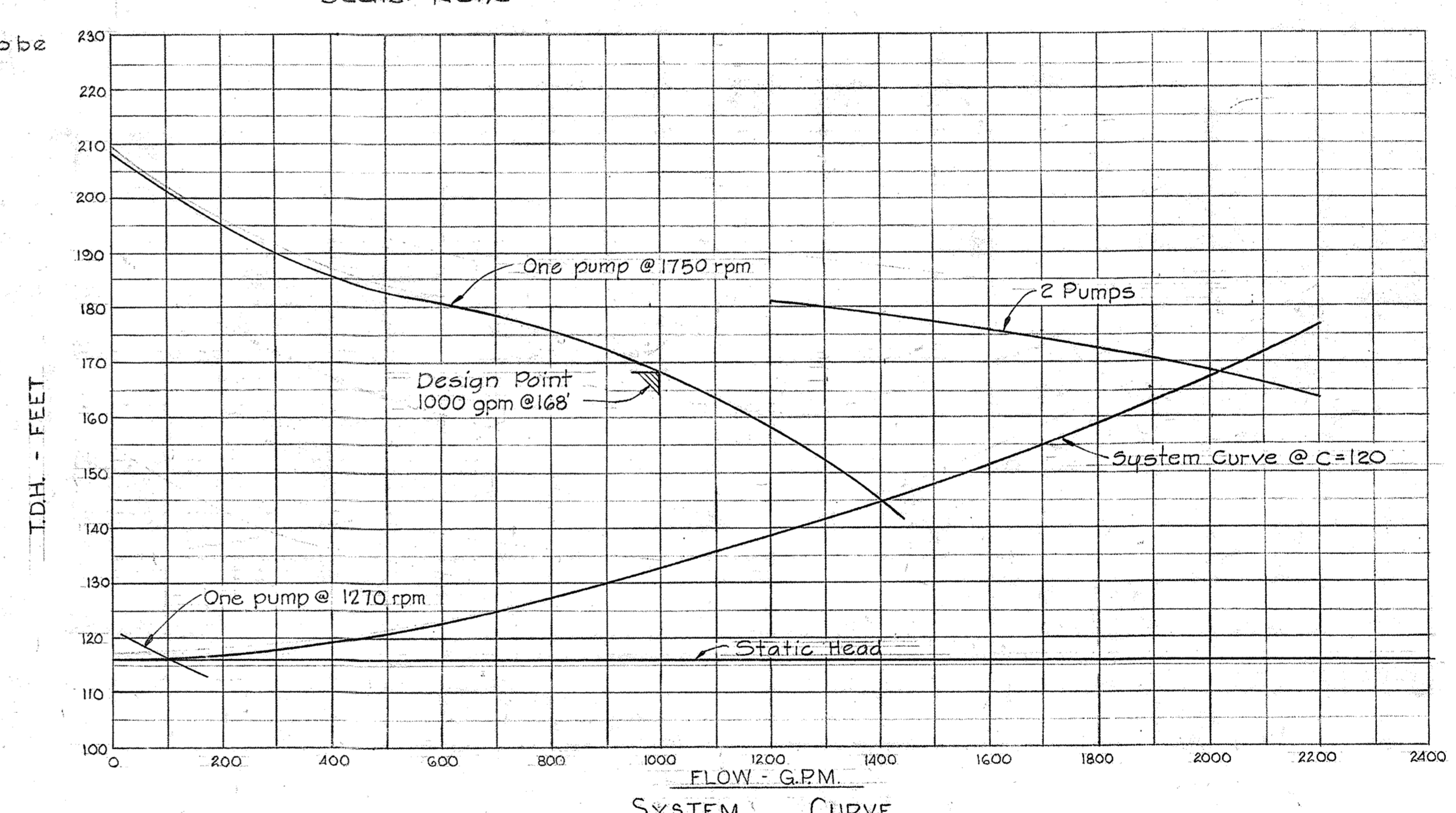
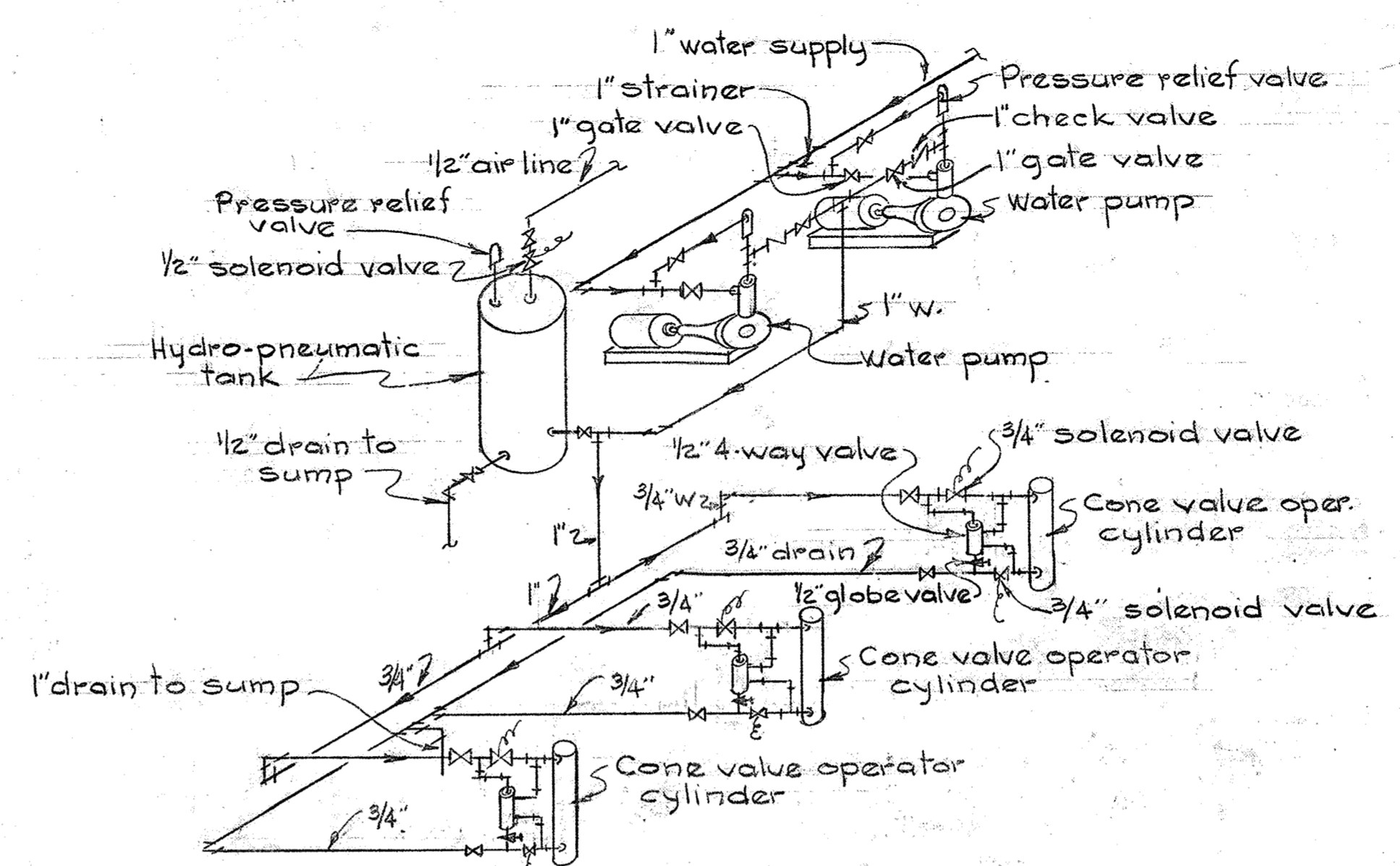
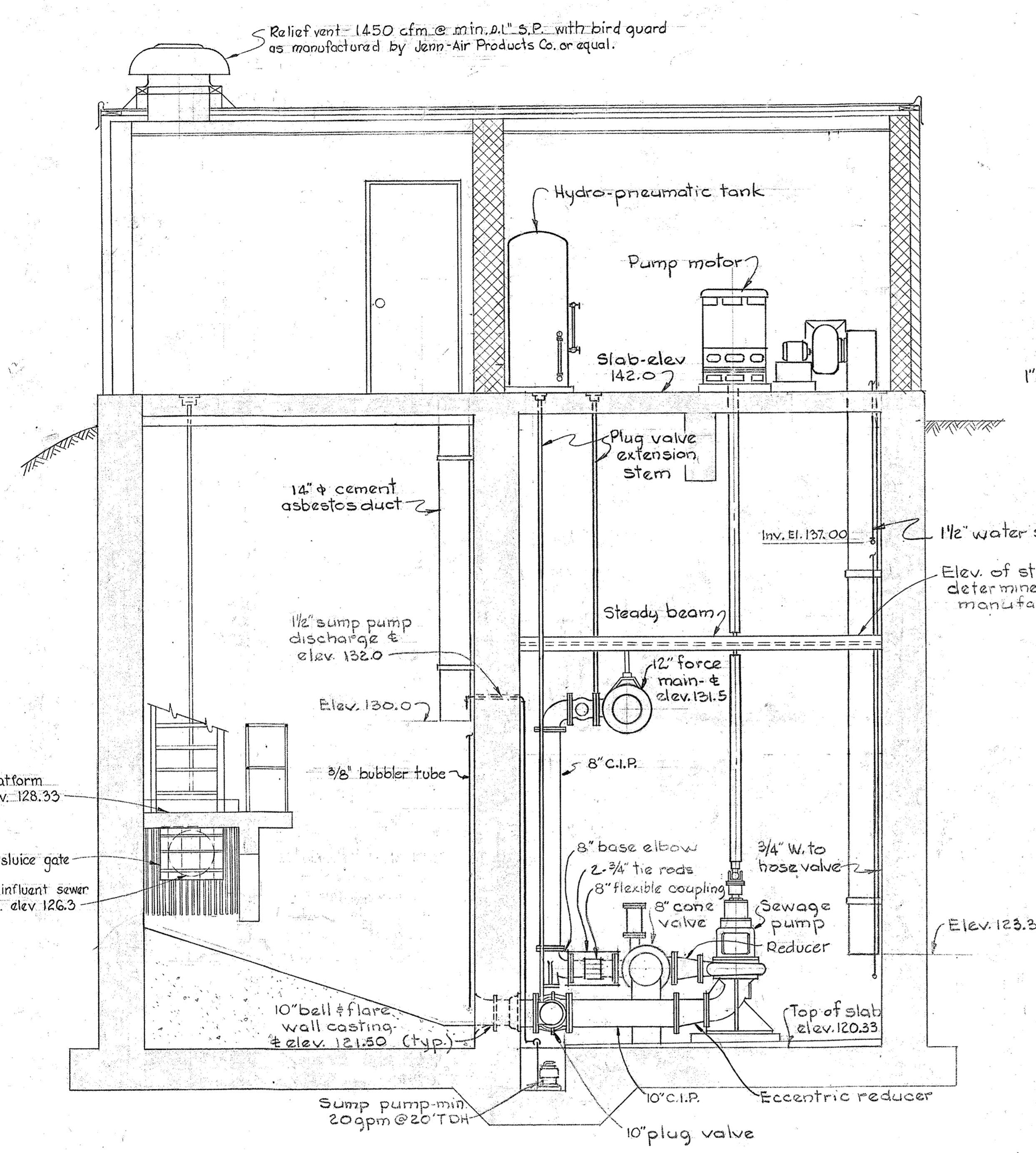
MECHANICAL  
PLANS AND DETAILS

PATUXENT SUB - DISTRICT

DRAWING NO. 4 OF 7  
SCALE AS SHOWN

48 S/4

WS 48S/5



WATER DHEOSTAT BUBBLER TUBE

PUMP START, STOP & ALARM

SEWAGE LEVEL SETTINGS IN WET WELL

Not to Scale

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION Jan. 21, 1963 DATE Carl W. Meyer CHIEF ENGINEER	CONTRACT NO. 48-S	MECHANICAL SECTIONS AND DETAILS	PATUXENT SUB - DISTRICT	DRAWING NO. 5 OF 7	SCALE AS SHOWN
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LEGEND

- Outlet Incandescent Ceiling - Wall
- ⊞ Magnetic Starter Reduced Voltage
- ⊙ Junction Box
- ⊕ Outlet Duplex Convenience M.H. 3'-0" Weatherproof
- 3 - 3wp Switch - Single Pole - (Exp) Explosionproof
- 32 Switch - Double Pole
- Unit Heater
- ~ Flexible Conduit
- Pressure Switch
- Lockout Pushbutton - NEMA IV
- Conduit - In Or Under Floor
- Conduit - In Or On Ceiling Or Wall
- Service Drop - No & Size Of Wires As Indicated
- Weatherhead & Rack
- Home Run To Panelboard
- ⊙ Limit Switch - Solenoid
- ⊞ Magnetic Starter - Contactor
- ⊞ Alternator - Duotrol W/Alternator
- ⊞ Voltmeter - Ammeter
- ⊞ Selector Switch - Volt - Amp.
- ⊞ Timer
- ⊞ Thermostat
- ⊞ Pressure Operated Switch - Normally Open - Closes On Rise
- ⊞ Pressure Operated Switch - Normally Closed - Opens On Fall
- ⊞ Time Relay
- ⊞ TR - IC - Timer Relay Contacts - Time Closing
- ⊞ TR - TO - Timer Relay Contacts - Time Opening
- ⊞ Limit Switch #1

MCC AUXILIARY DESCRIPTION LEGEND

- X1 - Red & Green Indicating Lights
- X2 - Third Motor Overload
- X3 - Hand-Off-Auto Selector Switch
- X4 - White Indicating Light
- X5 - 480-120 Volt Control Transformer
- X6 - Start-Stop Pushbutton station
- X7 - Amber & Blue Indicating Lights

\* A.I.C. LEGEND

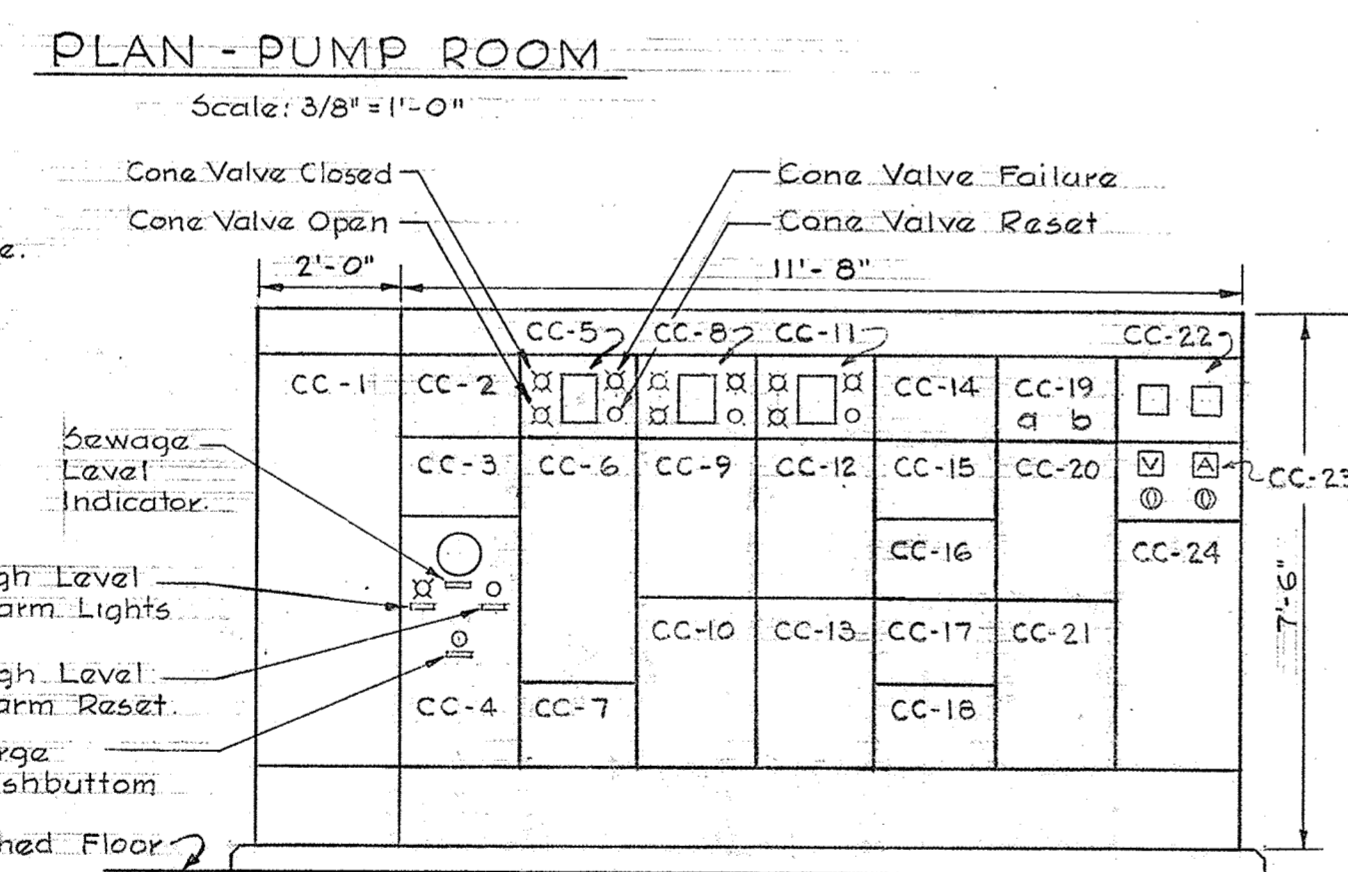
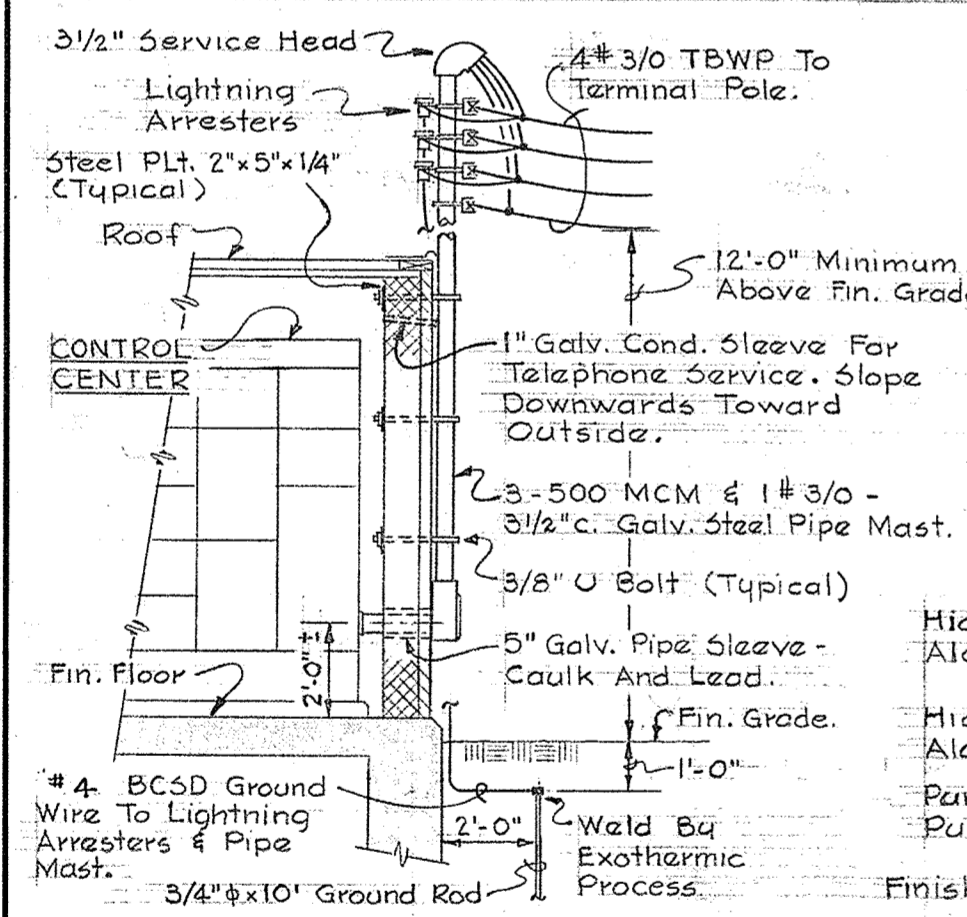
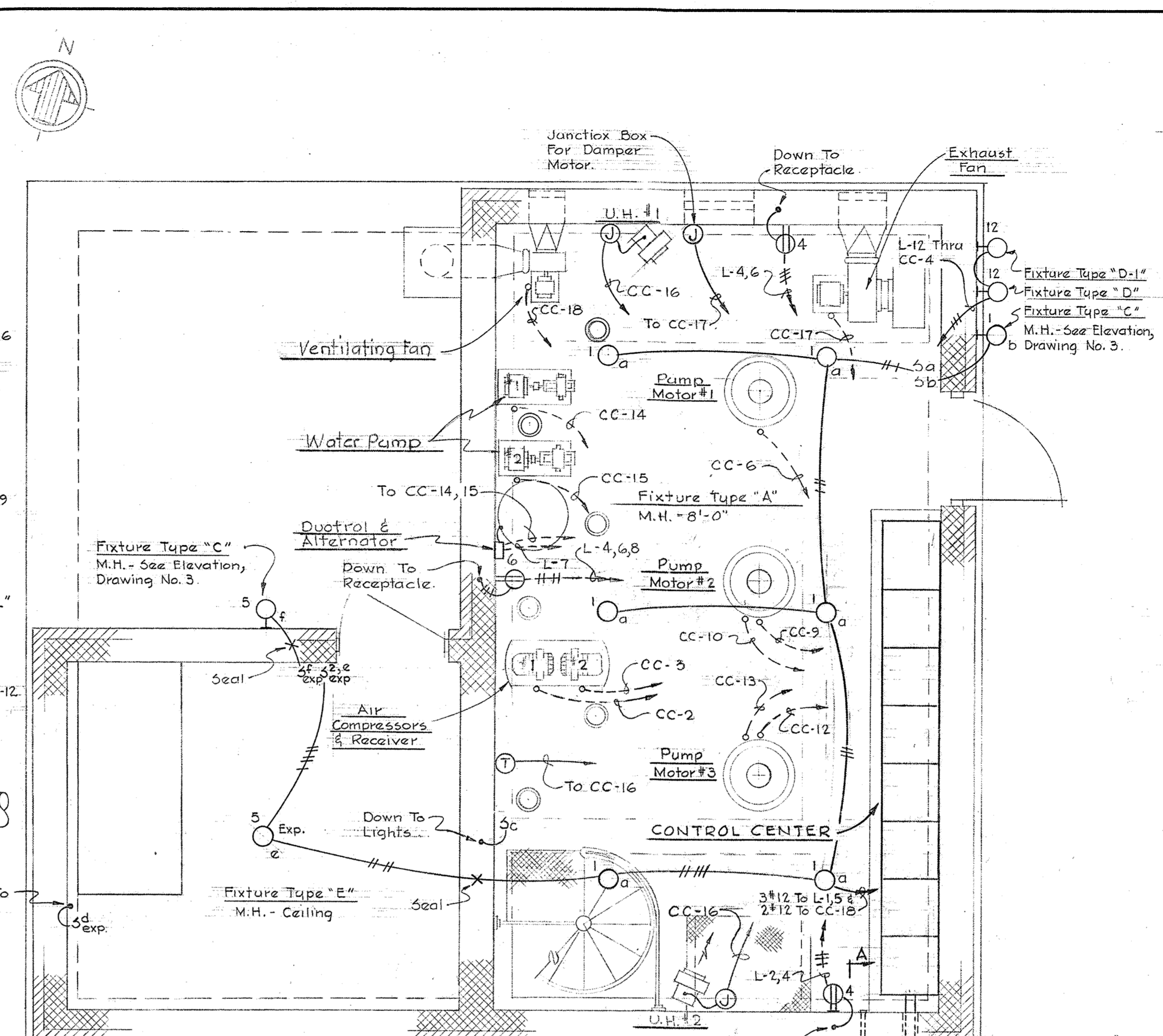
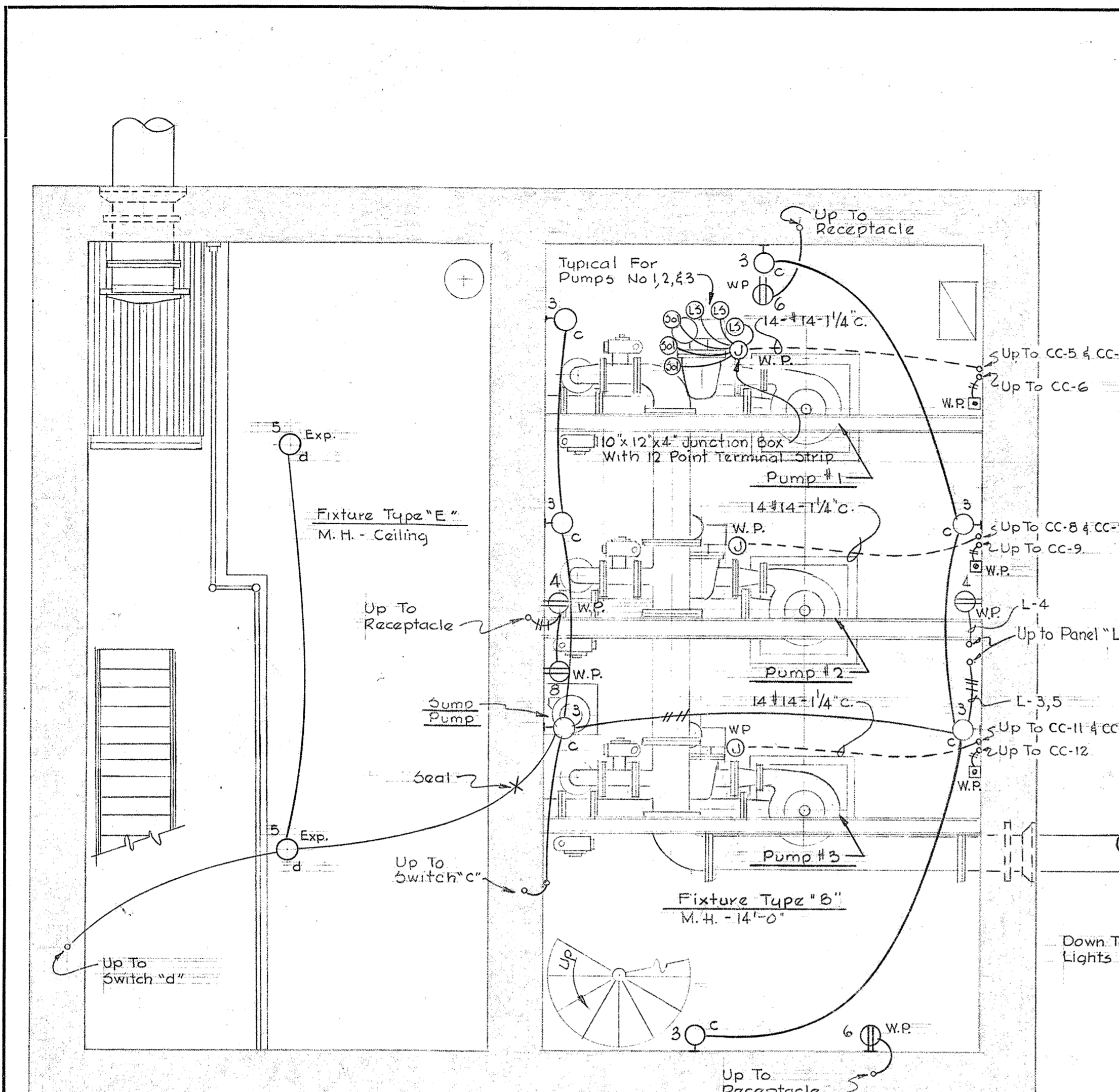
- 4 - 15,000
- 5 - 20,000
- 6 - 35,000

LOCATION SYMBOLS

- Equipment Located in M.C.C.
- Equipment Located At Motor
- ▲ Equipment Located in Bubbler Section
- ⊙ Equipment Located At Pump
- ⊕ Equipment Located in Duotrol
- ⊞ Equipment Located At Flow Matcher

NOTES

1. For Outside Electrical Distribution See Drawing No 1
2. For One Line Wiring Diagram And Elementary Control Wiring Diagrams See Drawing No 7.



CONTROL CENTER - 460/265V-3φ-4W.

RUN NUMBER	NAME PLATE DATA	DEVICE DESCRIPTION	AUXILIARY DESCRIPTION	BREAKER FRAME/POLE/CALIB.	A.I.C.	WIRE			COND. SIZE	GRND. WIRE SIZE
						NO.	SIZE	TYPE		
CC-1	Flow Matcher Section	See Specifications	See Specifications			See Specifications				
CC-2	Air Compressor No. 1	Combination Starter NEMA Size 1 FVNR	X1, X2, X3, X5	100 3 15	4	3 5 12	RHW	Pwr.	1"	14
CC-3	Air Compressor No. 2	Combination Starter NEMA Size 1 FVNR	X1, X2, X3, X5	100 3 15	4	3 5 12	RHW	Pwr.	3/4"	14
CC-4	Air Compressor Alternator Bubbler Control Panel	2-Circuit Alternator See Specifications	See Specifications	See Specifications		Bq Manufacturer				
CC-5	Timer & Relays - Pump No. 1	See Specifications				Bq Manufacturer				
CC-6	Sewage Pump No. 1	Combination Starter NEMA Size 4 FVNR	X1, X2, X3, X4, X5, X6, X7	225 3 225	5	3 2 14	RHW	Pwr.	2"	4
CC-7	Spare	Combination Starter NEMA Size 1 FVNR	X1, X2, X3, X5	100 3 20	4					
CC-8	Timer & Relays - Pump No. 2	See Specifications				Bq Manufacturer				
CC-9	Sewage Pump No. 2 - Primary	Combination Starter NEMA Size 4 FVNR	X1, X2, X3, X4, X5, X6, X7	225 3 200	5	3 2 14	RHW	Pwr.	2"	4
CC-10	Sewage Pump No. 2 - Secondary	3P, 150A, 460V. Contactor. 120V, 60 Cycle Control.	X1			3	2/0	RHW	Pwr.	2"
CC-11	Timer & Relays - Pump No. 3	See Specifications				Bq Manufacturer				
CC-12	Sewage Pump No. 3 - Primary	Combination Starter NEMA Size 4 FVNR	X1, X2, X3, X4, X5, X6, X7	225 3 200	5	3 2 14	RHW	Pwr.	2"	4
CC-13	Sewage Pump No. 3 - Secondary	3P, 150A, 460V. Contactor. 120V, 60 Cycle Control.	X1			3	2/0	RHW	Pwr.	2"
CC-14	Water Pump No. 1	Combination Starter NEMA Size 1 FVNR	X1, X2, X3, X5	100 3 15	4	3 5 12	RHW	Pwr.	3/4"	14
CC-15	Water Pump No. 2	Combination Starter NEMA Size 1 FVNR	X1, X2, X3, X5	100 3 15	4	3 5 12	RHW	Pwr.	3/4"	14
CC-16	Unit Heaters Nos. 1 & 2	Combination Contactor NEMA Size 1	X3, X5	100 3 20	4	3 4 12	RHW	Pwr.	1"	14
CC-17	Exhaust Fan	Combination Starter NEMA Size 1 FVNR	X1, X2, X3, X5	100 3 15	4	3 5 12	RHW	Pwr.	3/4"	14
CC-18	Ventilating Fan	Combination Starter NEMA Size 1 FVNR	X1, X2, X3, X5	100 3 15	4	3 5 12	RHW	Pwr.	3/4"	14
CC-19a	Transformer Primary Breaker	Circuit Breaker		100 3 30	4					
CC-19b	Spare	Circuit Breaker		100 3 20	4					

CONTROL CENTER - 460/265V-3φ-4W.

RUN NUMBER	NAME PLATE DATA	DEVICE DESCRIPTION	AUXILIARY DESCRIPTION	BREAKER FRAME/POLE/CALIB.	A.I.C.	WIRE			COND. SIZE	GRND. WIRE SIZE
						NO.	SIZE	TYPE		
CC-20	Panel "L"	Circuit Panelboard - See Panel Schedule				Bq Manufacturer				
CC-21	9 KVA Transformer	Transformer, 3φ, 60 Cycle, 460 - 208/120 Volts.				Bq Manufacturer				
CC-22	Exhaust Fan Timer Ventilating Fan Timer	Recycle Timer Recycle Timer				Bq Manufacturer				
CC-23	Meter Panel	Voltmeter, Ammeter & Selector Switches.	See Specifications			Bq Manufacturer				
CC-24	Main Breaker	Circuit Breaker		600 3 400	8	3 500MCM 3/0	RHW	Pwr.	3 1/2"	

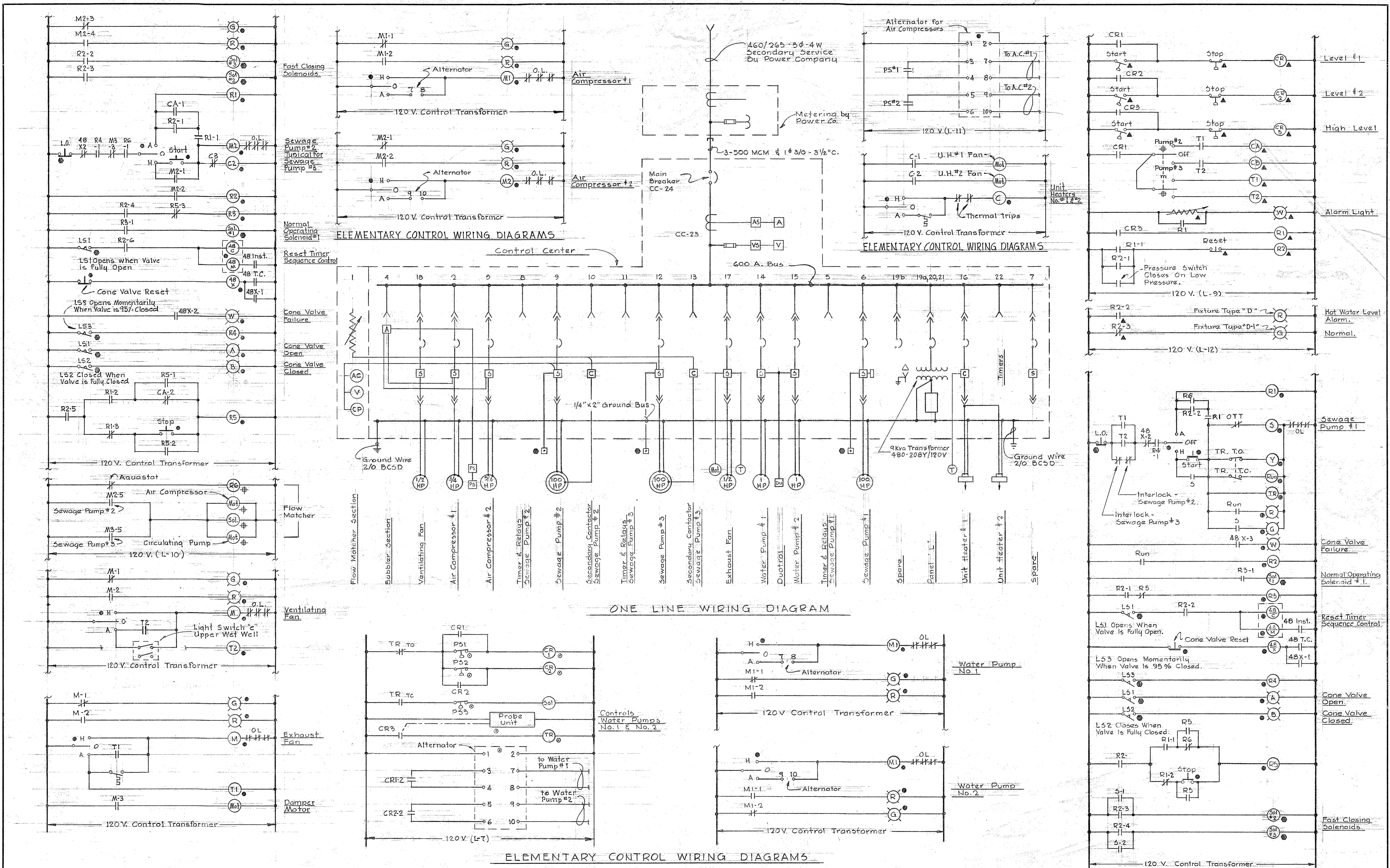
WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION April 10, 1963 DATE <i>Carl W. Meyer</i> CHIEF ENGINEER	CONTRACT NO. 48-S	ELECTRICAL PLAN AND DETAILS	PATUXENT SUB - DISTRICT	DRAWING NO. 6 OF 7	SCALE AS SHOWN
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W.O. 4955-2

18 August 64

48 5/6

WS 485/A



ELEMENTARY CONTROL WIRING DIAGRAMS

**NOTES**

1. For Electrical Plans, Legend, Location Symbols And Control Center Elevation & Schedule, See Dwg. No. 6.

ELEMENTARY CONTROL WIRING DIAGRAMS

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION April 10, 1963 DATE <i>Carl W. Meyer</i> CHIEF ENGINEER	CONTRACT NO. 48-S	ELECTRICAL WIRING DIAGRAMS	PATUXENT SUB-DISTRICT	DRAWING NO. 7 OF 7	SCALE AS SHOWN
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W. O. 4955-2

18 August 64