

TREATMENT PLANT DESIGN DATA

Pumping Capacity:
 Existing 1-Pump - 6 MGD (variable speed)
 2-Pumps - 12 MGD (variable speed)
 3-Pumps - 18 MGD (Existing + 6 MGD constant speed)

Chlorinator Capacity:
 Existing *1-Chlorinator 700#/day
 2-Chlorinators 1400#/day
 *Can be increased to 1000#/day each

CONTRACT 447-S

SAVAGE SEWAGE

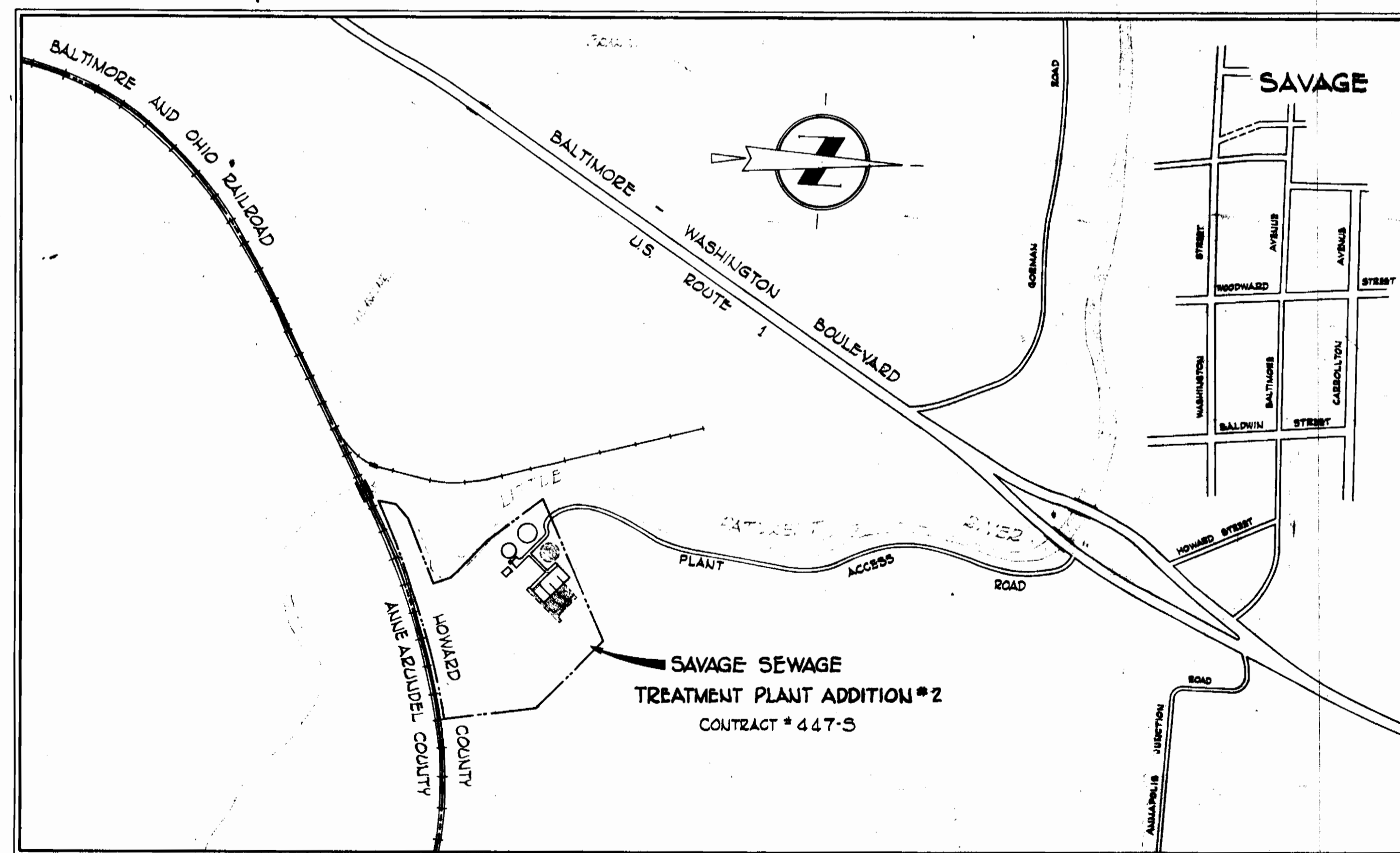
TREATMENT PLANT ADDITION NO. 2

HOWARD COUNTY DEPT. OF PUBLIC WORKS

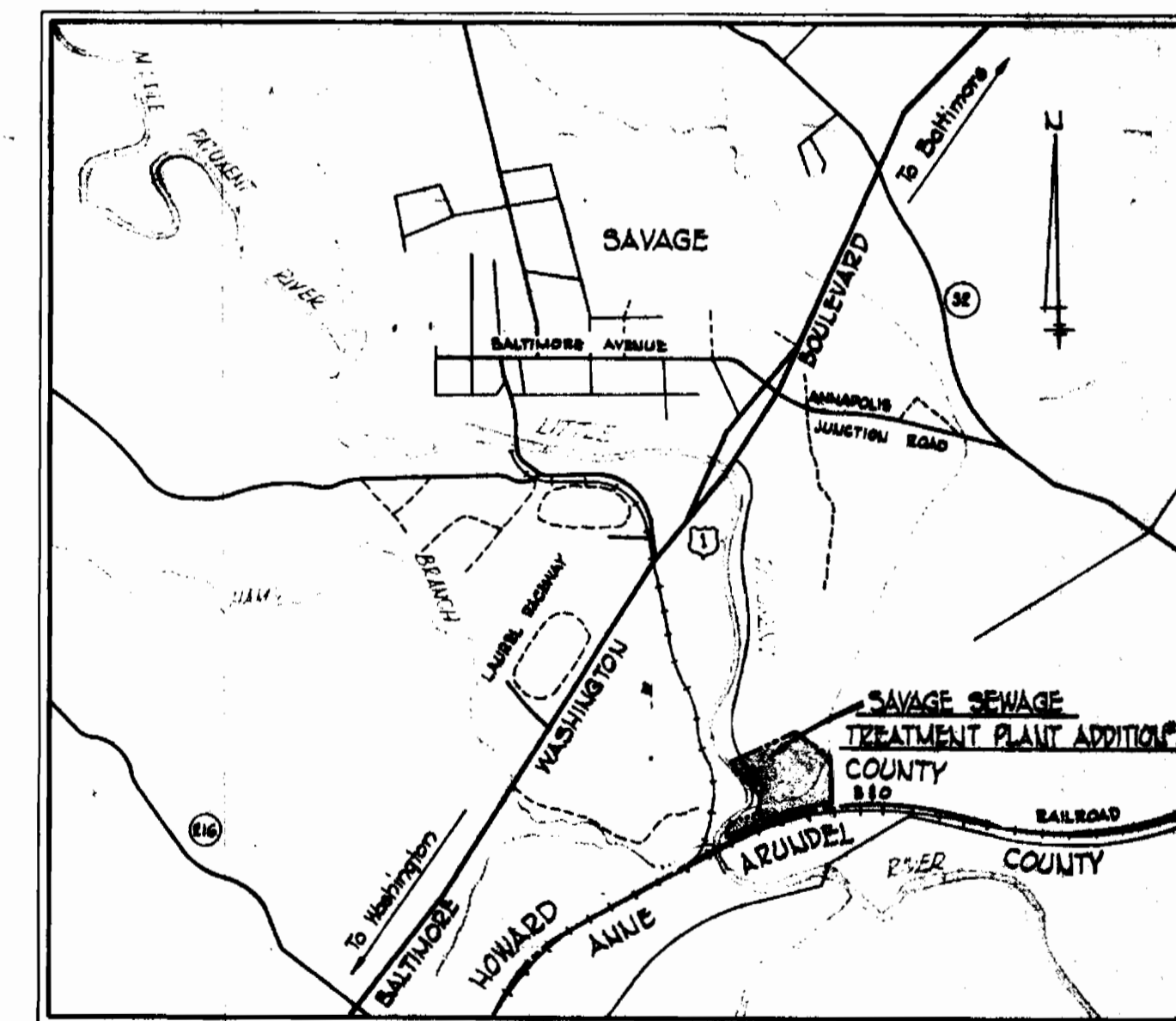
TREATMENT PLANT DESIGN DATA

	Unit #1	Unit #2	Unit #3	Composite
Design Population	10,000	20,000	20,000	50,000
Design Flow-Avg. Daily (mg)	1.0	2.0	2.0	5.0
Type of Treatment	Walker	Dravo	Dravo	Contact Stabilization
BOD Loading (#/day)	2000	4000	4000	10,000
Setting Zone				
Detention Time (hrs)	4.25	2.51	2.51	2.75
Surface Rate (gpd/sf)	680	785	785	750
Aeration & Reaeration				
Volume (cf/* B.O.D./day)	29	30	30	30
Air (cf/* B.O.D./day)	1100	1152	1152	3400
Digester Zone				
Volume (cf/capita)	2.5	2.0	2.0	2.1 (Avg)
Air (cf/* B.O.D./day)	500	500	500	1500
Total Air for Plant Operation (cfm)	2380	4760	4760	11,900
Blower Capacity (Existing)	2000	4000	4000	*16,000
Chlorine Contact-Detention (min)	30.0	30.3	30.3	30.2 (Avg)
Chlorine Demand (10ppm dosage)	84	168	168	420
Sludge Drying Beds Area (sf/capita)	0.5	1.0	1.0	0.9

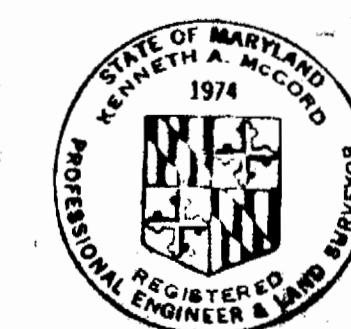
*10,000 cfm existing-6,000 cfm added under this contract for increased B.O.D. loading and reserve.



LOCATION MAP
Scale: 1"=600'

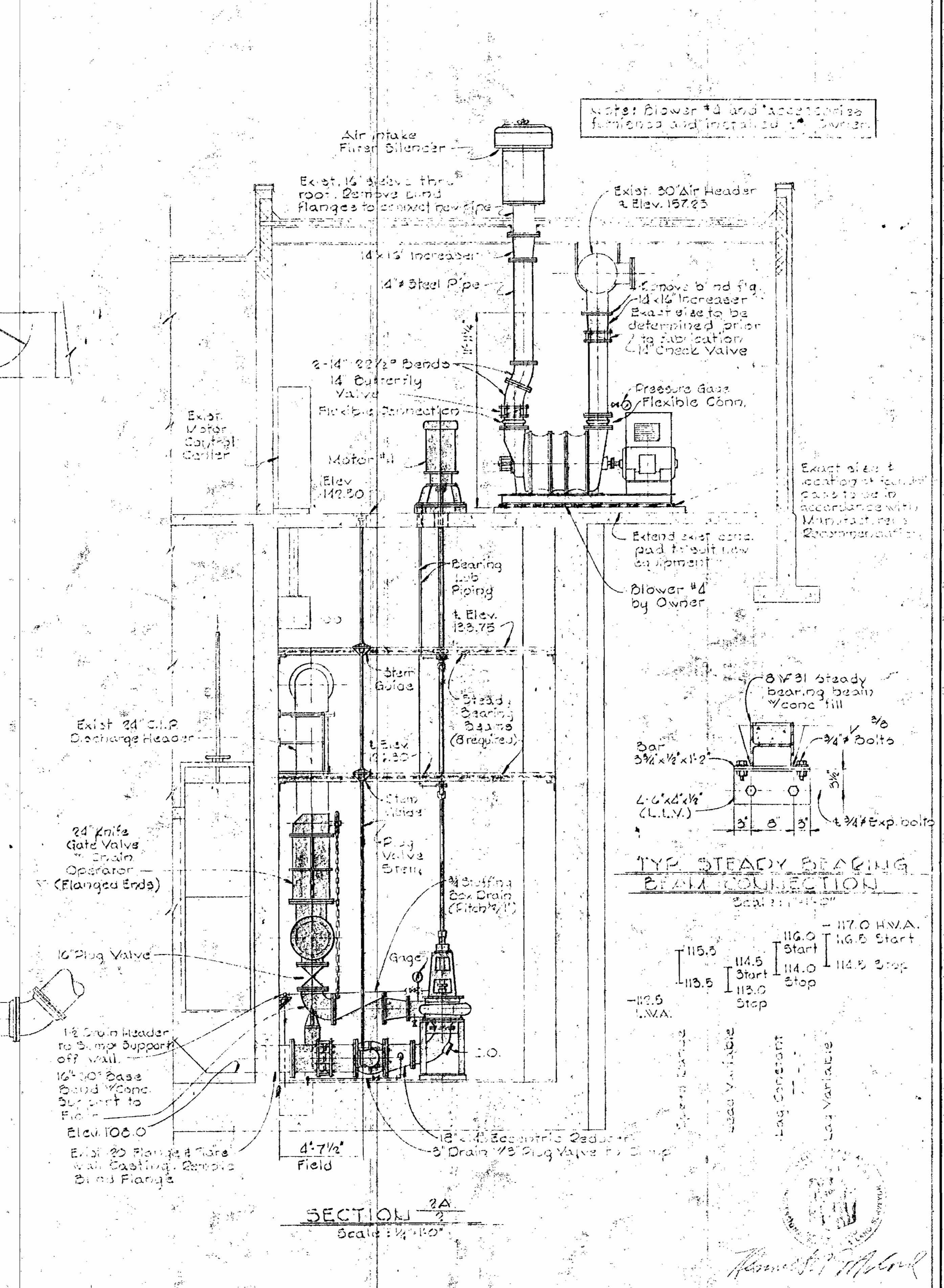
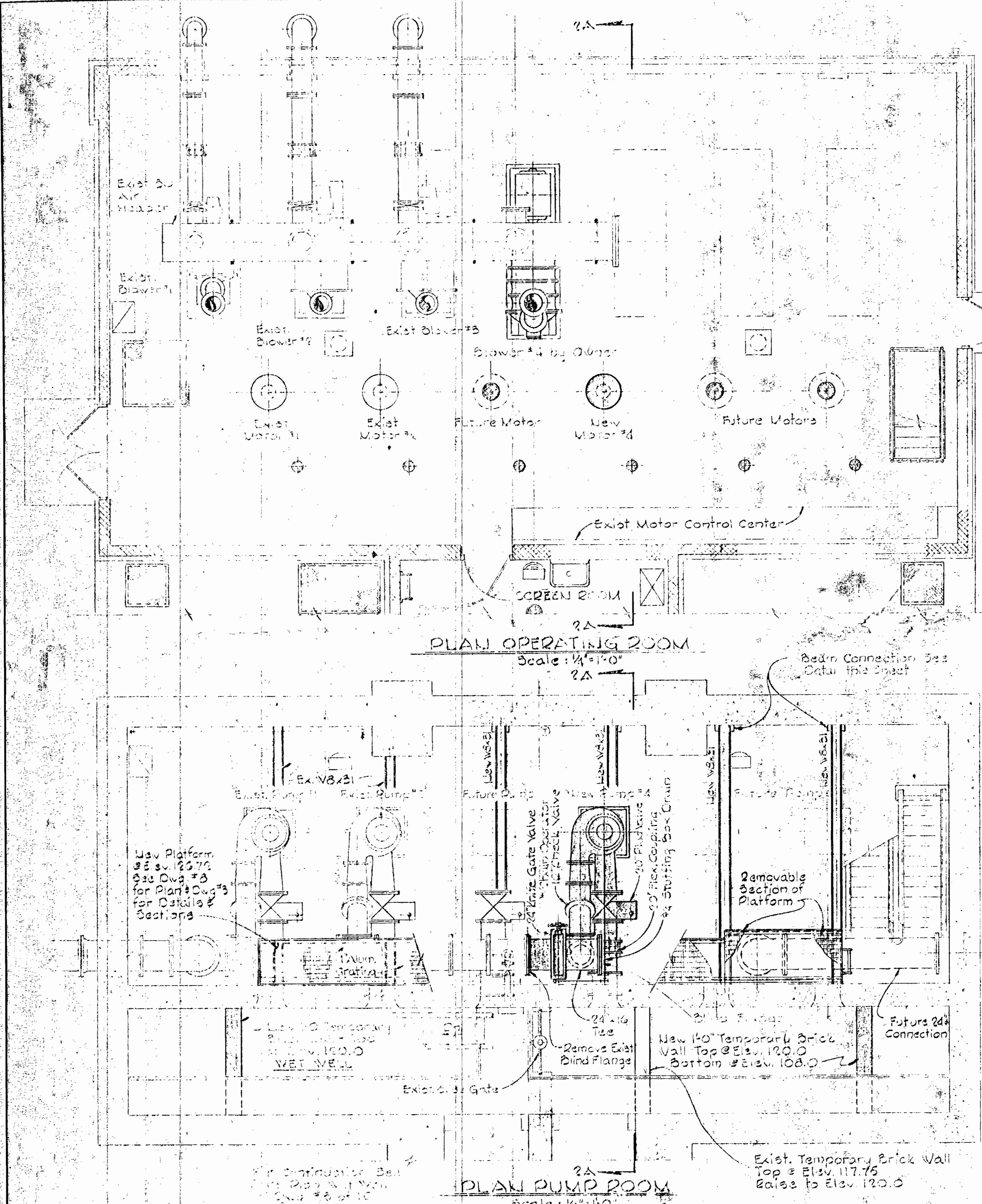


VICINITY MAP
Scale: 1"=2000'



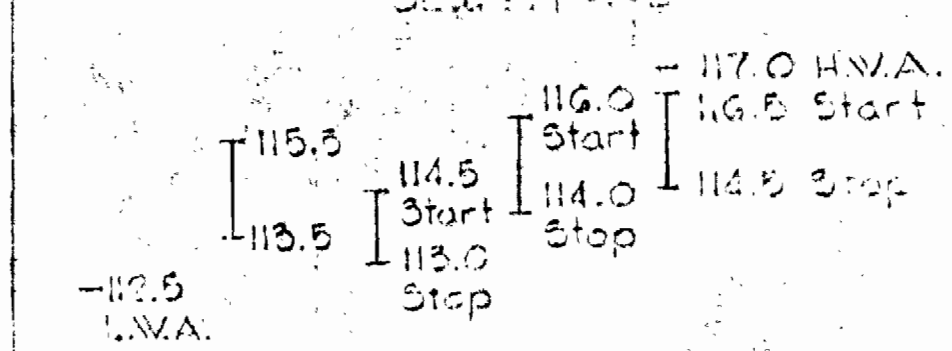
Kenneth A. McCord

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY DEPT. OF PUBLIC WORKS DATE: 6-5-71 W. O. Gilbert CHIEF ENGINEER	CONTRACT NO. 447-S	LOCATION MAP AND VICINITY MAP	SAVAGE SEWAGE TREATMENT PLANT ADDITION NO. 2	DRAWING NO. 1 OF 9	SCALE AS SHOWN	Revised Map
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Note: Blower #4 and accessories furnished and installed by Owner.

TYP. STEADY BEARING BEAM CONNECTION



115.5
113.5
112.5 L.W.A.

116.0 Start
114.0 Stop

117.0 H.V.A.
116.5 Start
114.5 Stop

12\"/>

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

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
6-5-72
DATE

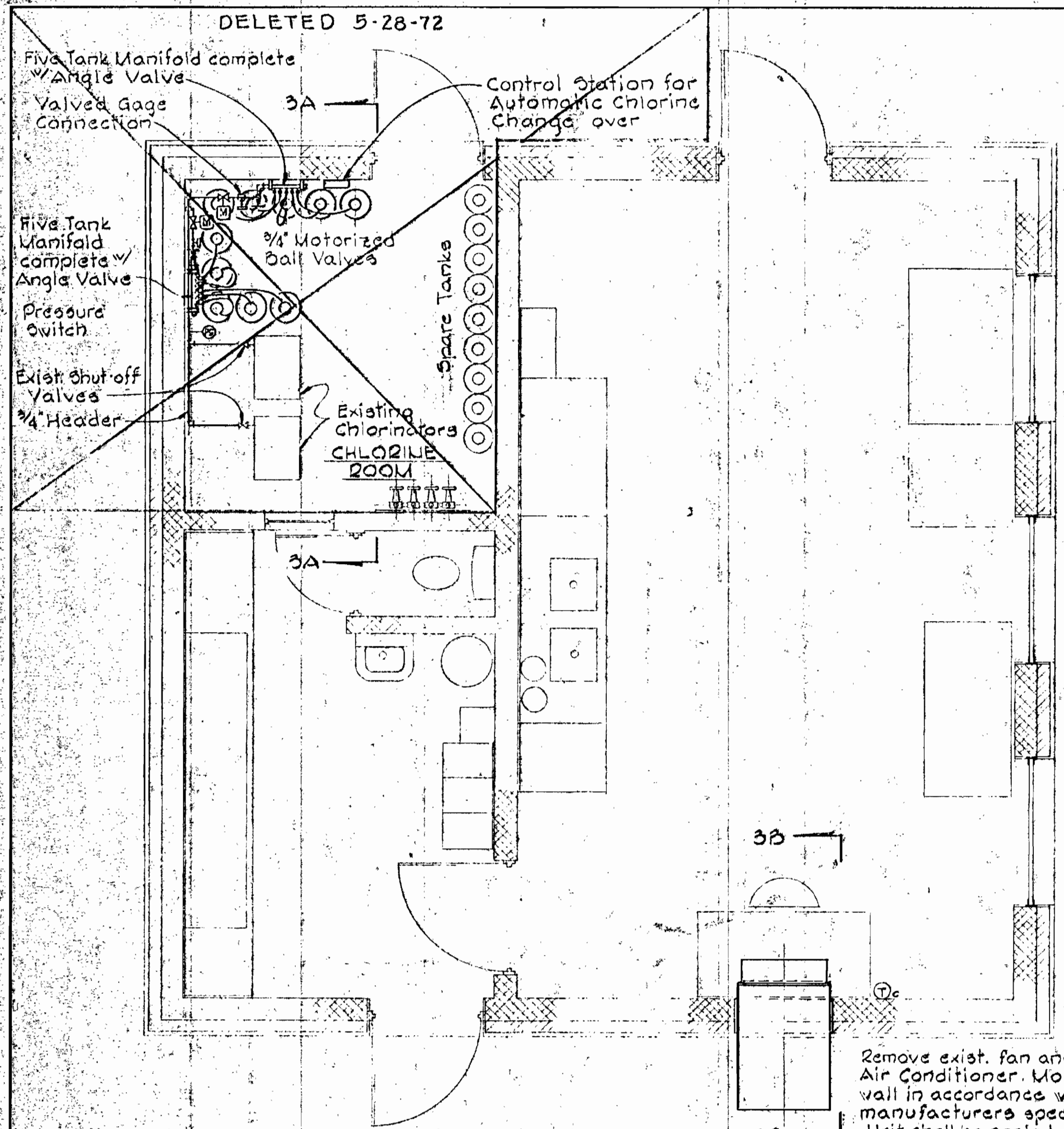
CONTRACT NO. 447-S

MECHANICAL
PLANS & SECTION
& DETAILS

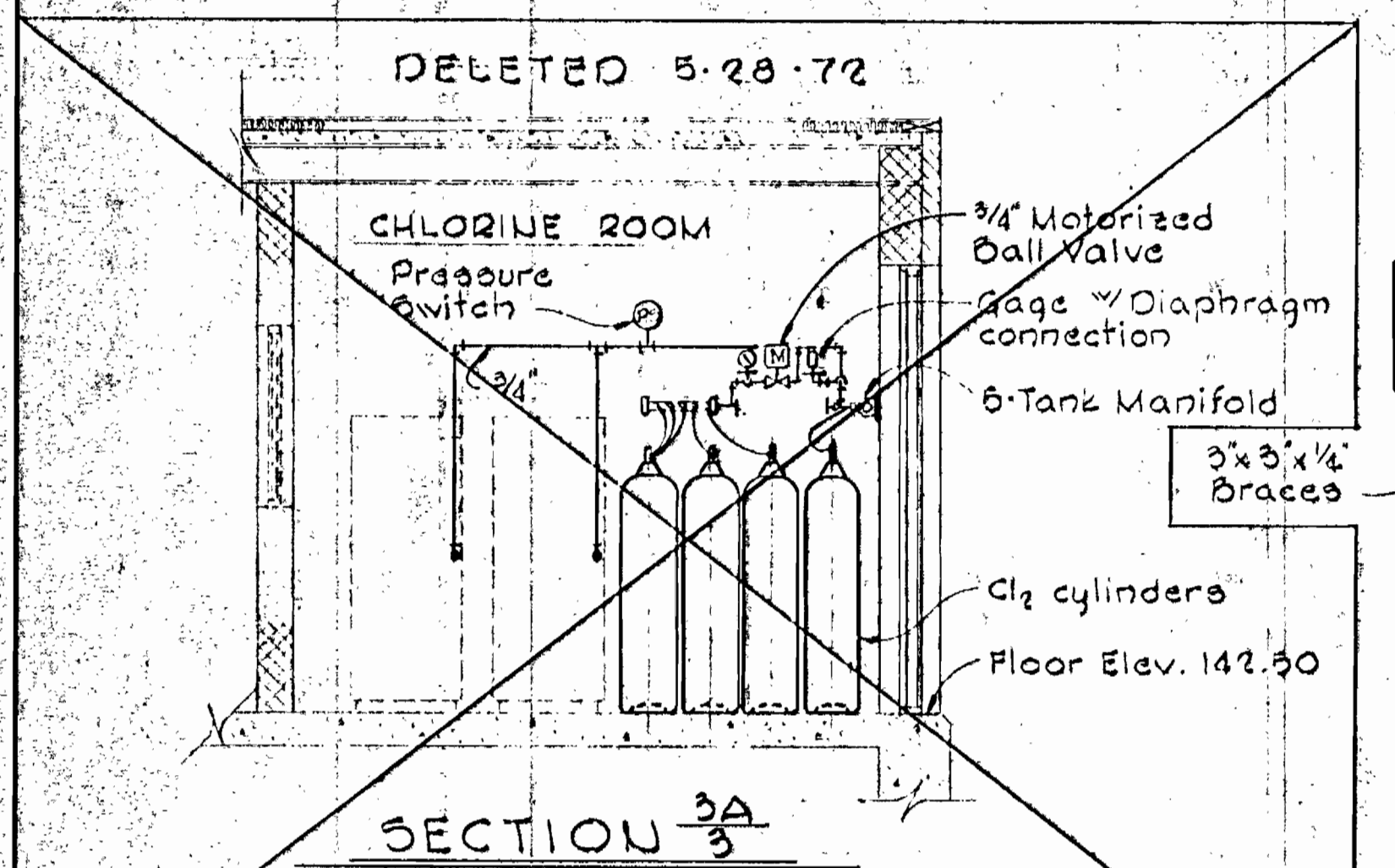
SAVAGE SEWAGE
TREATMENT PLANT ADDITION NO. 2

DRAWING
NO. 2
OF 9
SCALE
AS
SHOWN

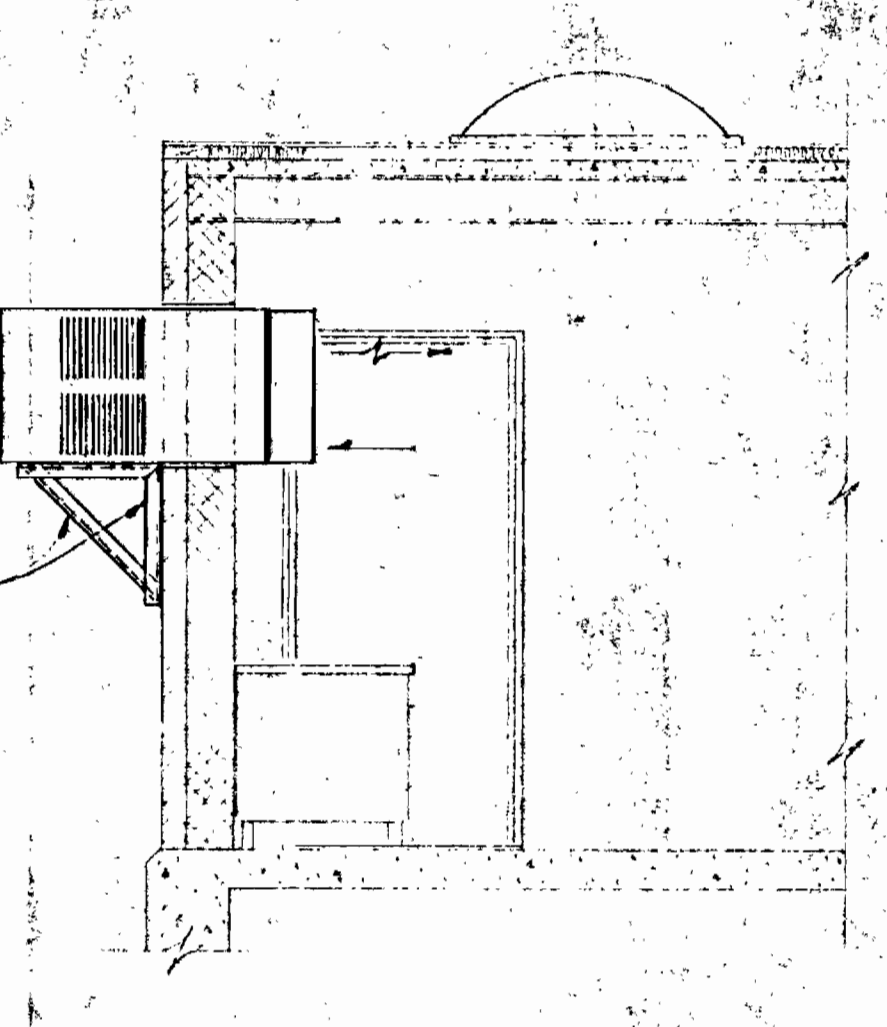
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FLOOR PLAN - EXISTING LAB BUILDING
Scale: 3/8"=1'-0"



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

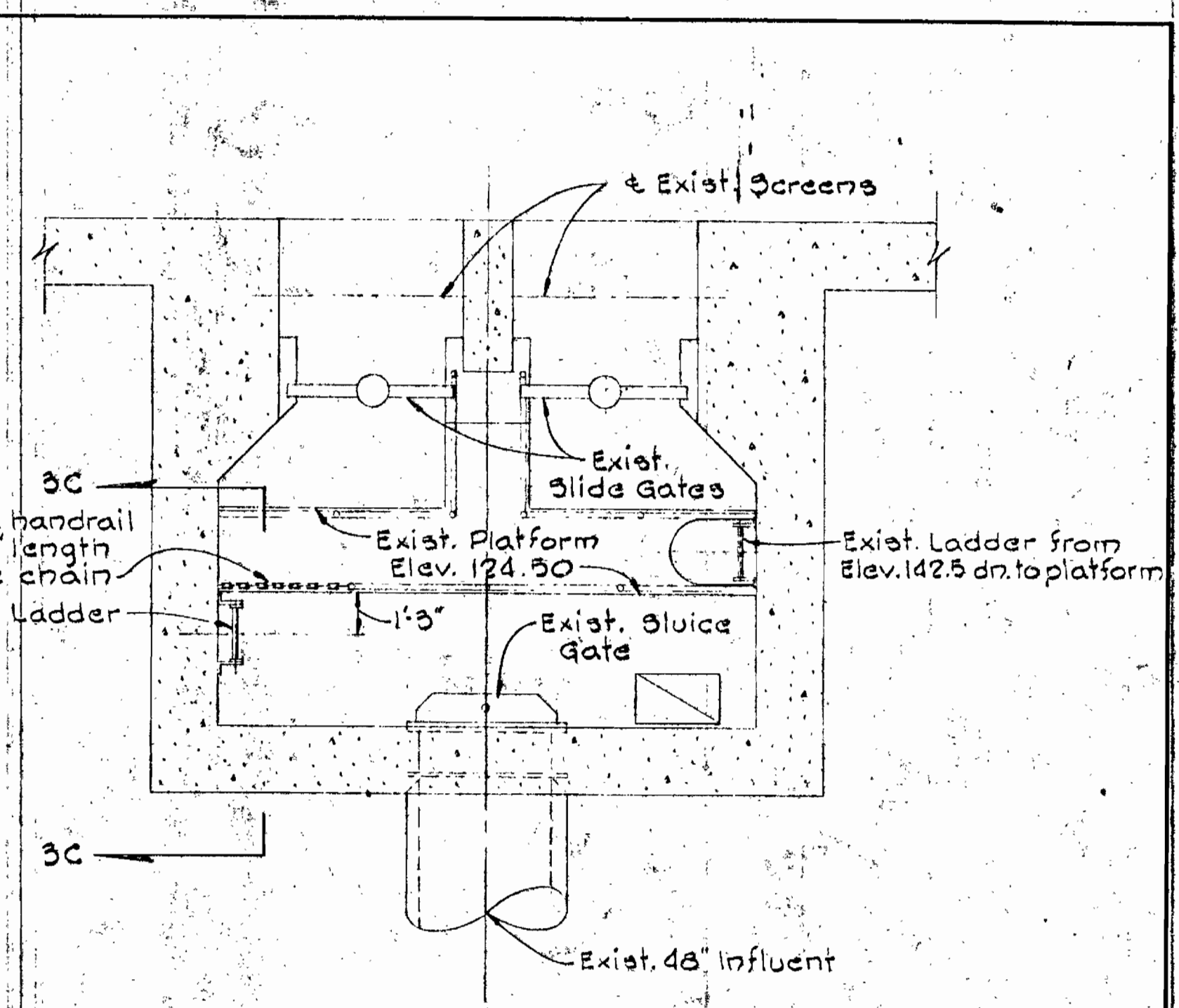


SECTION 3B
Scale: 3/8"=1'-0"

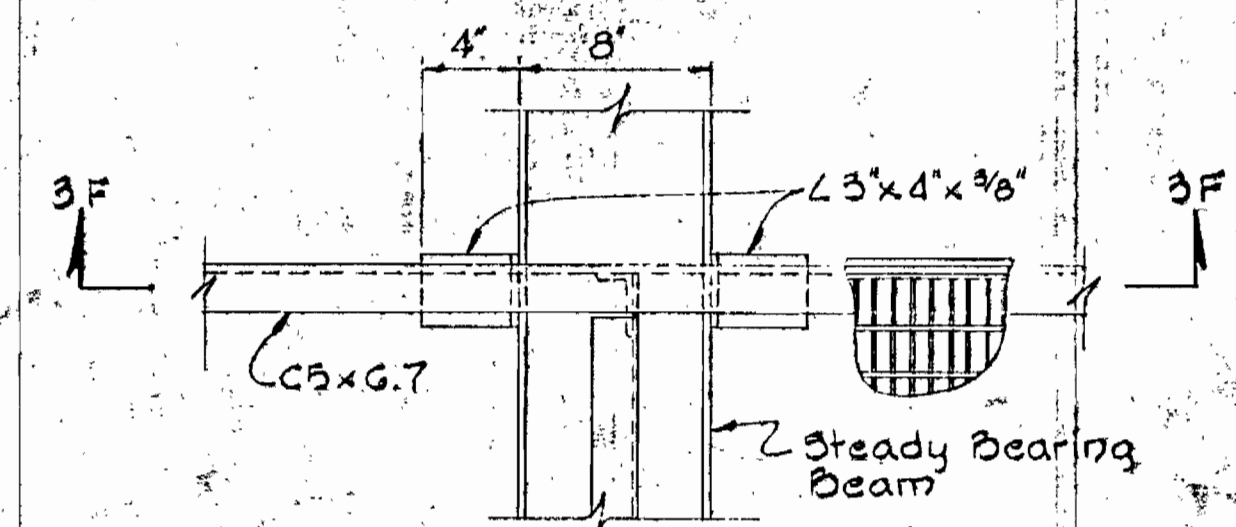
DELETED 5-28-72

CHLORINE HANDLING REVISIONS

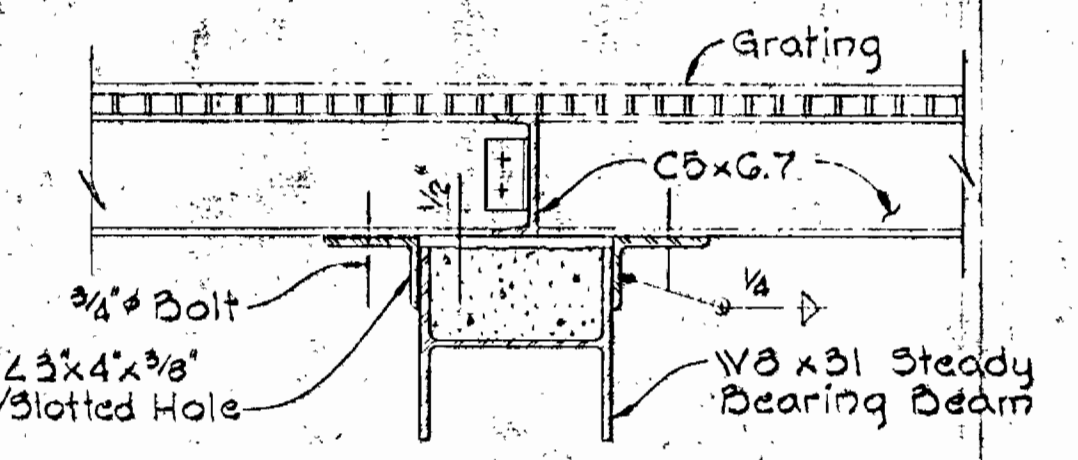
1. Remove exist. scale to arrange cylinders as shown.
2. Provide and install 2 new wall mounted 5-tank manifolds as provided by Fisher Porter Co., Wallace & Tiernan Division of Pennwalt or approved equal.
3. Header piping shall be 3/4" Schedule 80 seamless steel pipe with forged steel fittings.
4. Line valves shall be 3/4" Jamesbury Model AC-22-71-MT.
5. Pressure gages and switches shall be protected by diaphragm seals. Diaphragm material shall be Monel. Gages and seals shall be as manufactured or provided by Fisher Porter Co., Wallace & Tiernan Division of Pennwalt or approved equal.
6. Provide and install complete automatic chlorine gas change over system including 2 Hills McCanna Model 5 CO₂-CS-T-MO/3B-P3 motorized ball valves, pressure switch and change over operator complete with all wiring and piping connections. System shall be as provided by Fisher Porter Co. or approved equal.



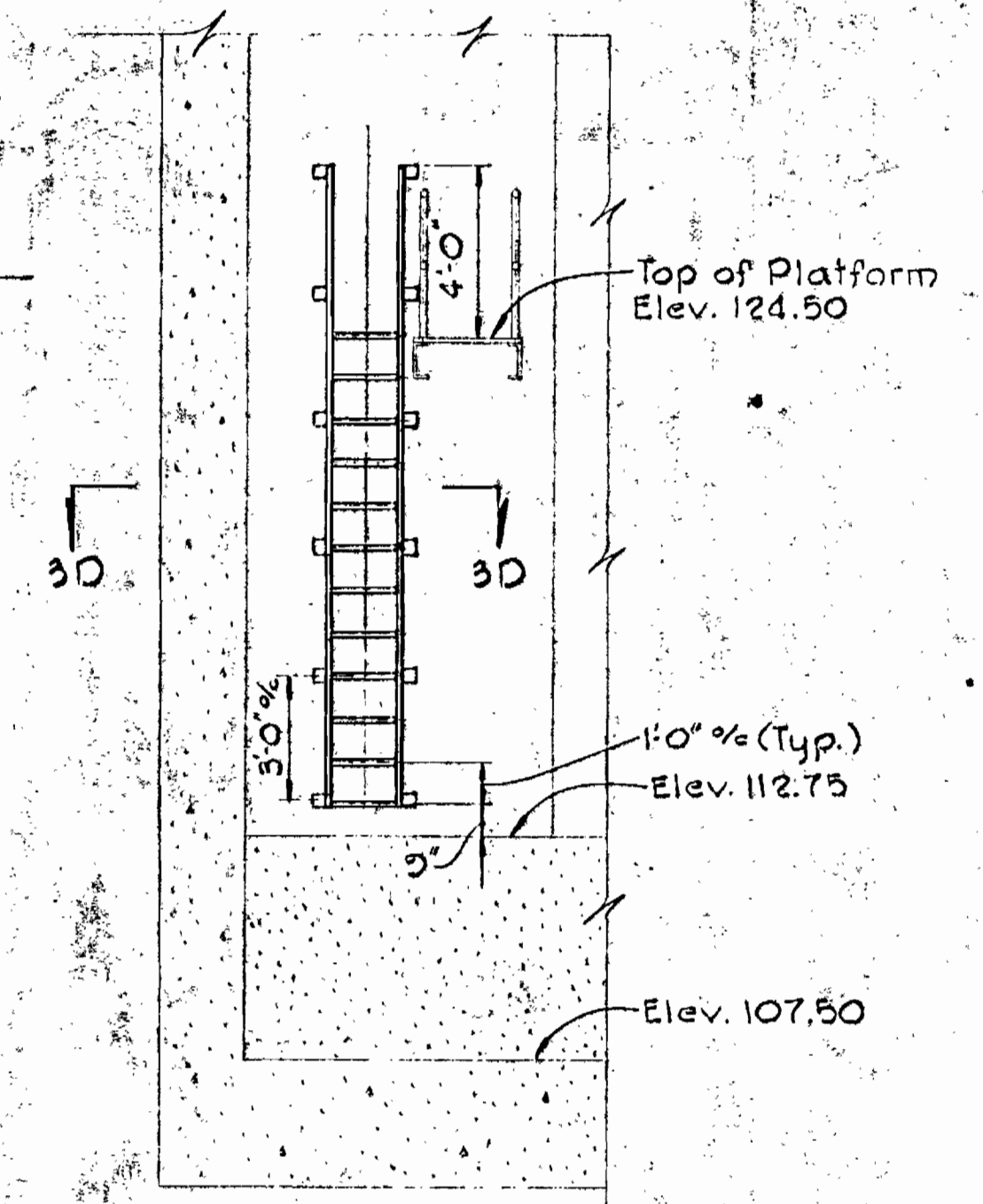
PART PLAN WET WELL
AT ELEV. 124.50
Scale: 1/4"=1'-0"



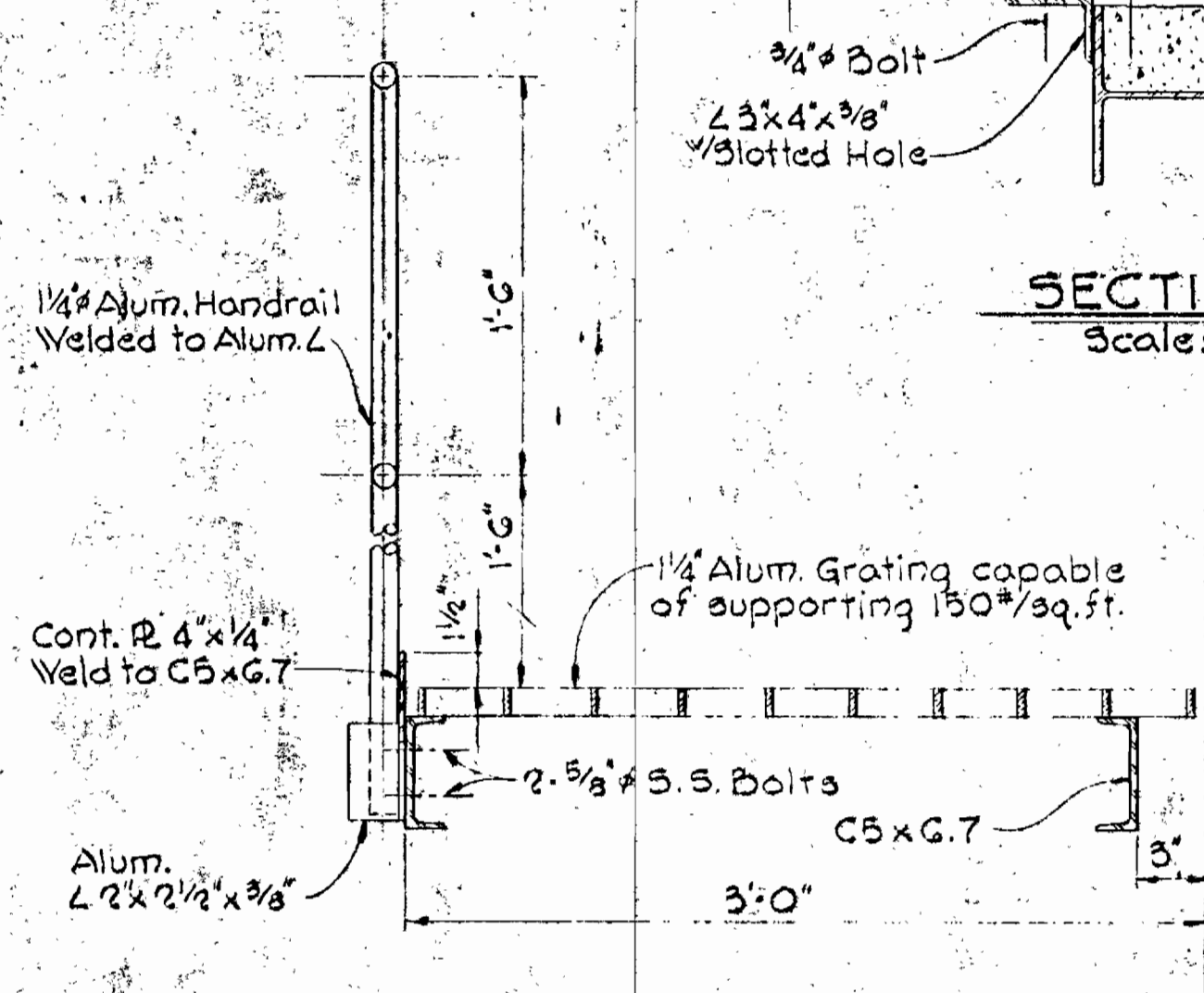
TYP. CATWALK CONNECTION DETAIL
Scale: 1 1/2"=1'-0"



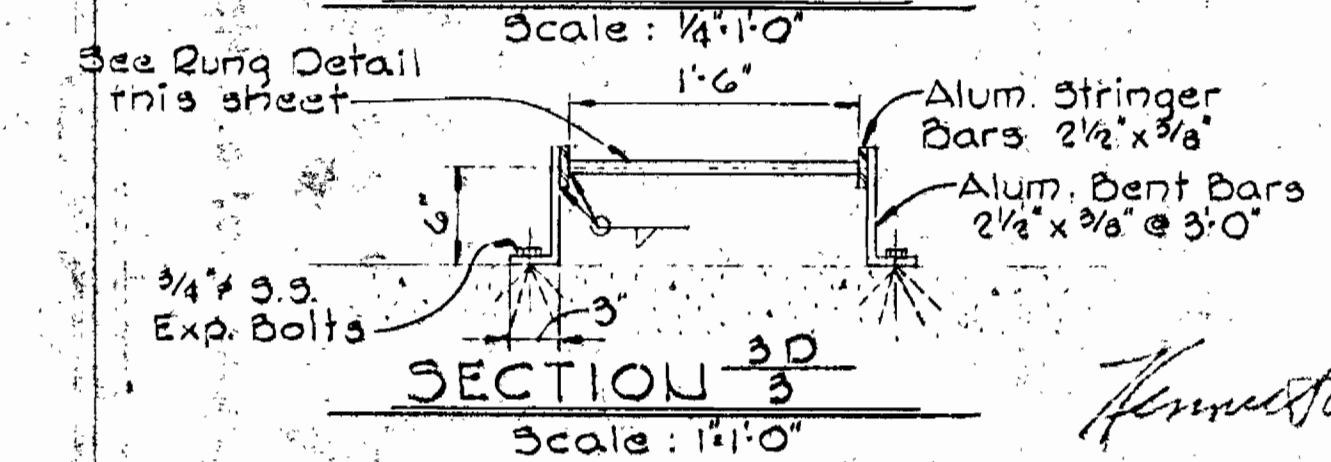
SECTION 3F
Scale: 1 1/2"=1'-0"



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



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



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



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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
6-5-72
W. O. Felbert
CHIEF - BUREAU OF WATER AND SEWER

CONTRACT NO. 447-S

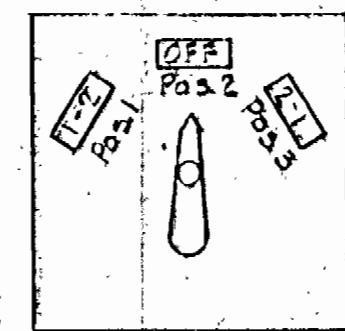
MECHANICAL & STRUCTURAL
PLANS, SECTIONS
& DETAILS

SAVAGE SEWAGE
TREATMENT PLANT ADDITION NO. 2

DRAWING
NO. 3
OF 9
SCALE
AS
SHOWN

GENERAL ELECTRICAL NOTES

1. For Electrical Legend, See Drawing No. 6
2. For Lighting Fixture Types, See Specifications, Detailed Electrical Requirements.
3. Mounting Heights For Lighting Fixtures shall be From Finished Floor to Bottom of Fixture Unless Otherwise Noted.
4. For Panelboard Schedules, See Specifications, Detailed Electrical Requirements.

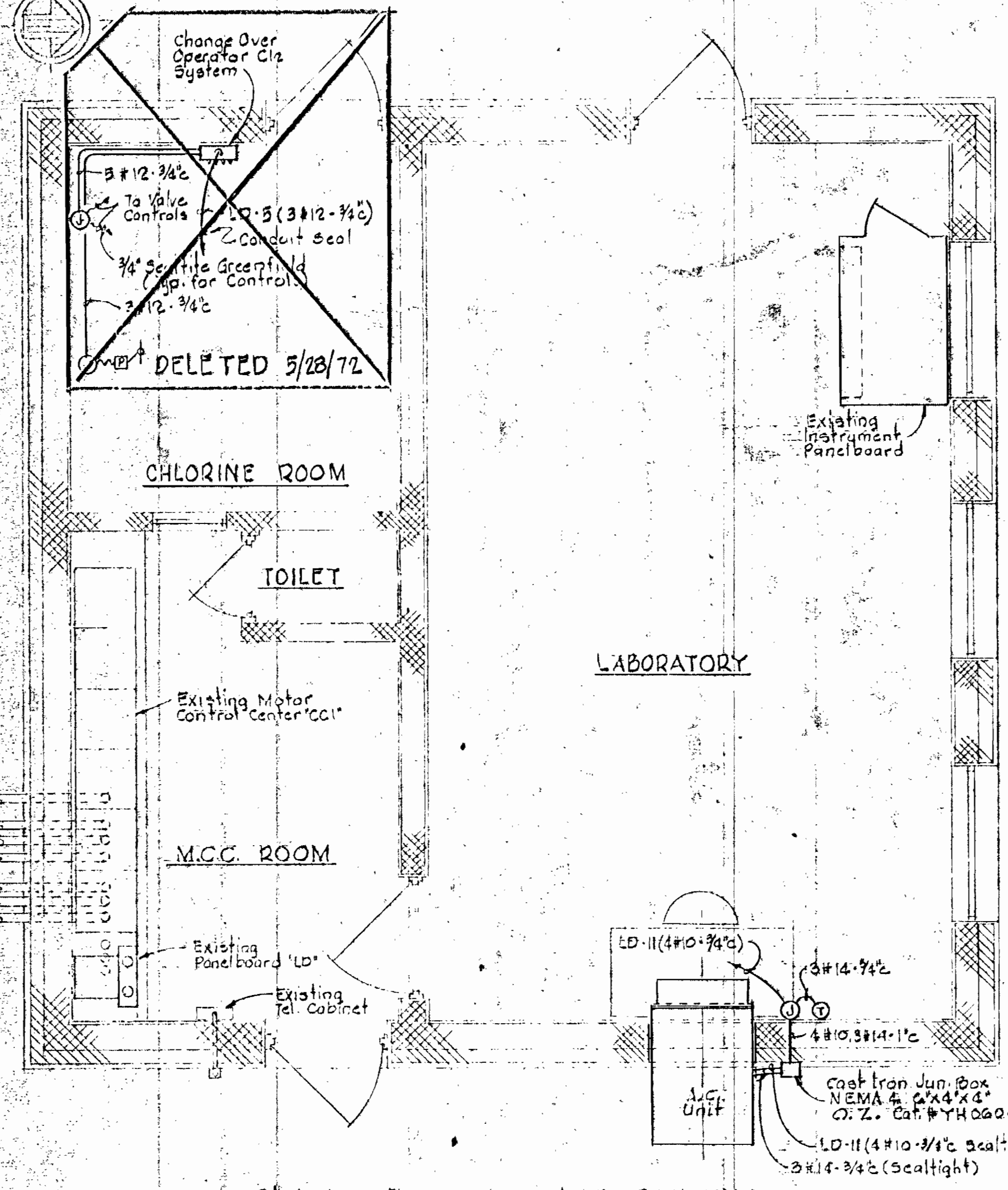


CONTACTS	POSITIONS		
	1	2	3
1 - 11	X		
2 - 11			
3 - 11			X
4 - 11	X		
5 - 11			
6 - 11			X

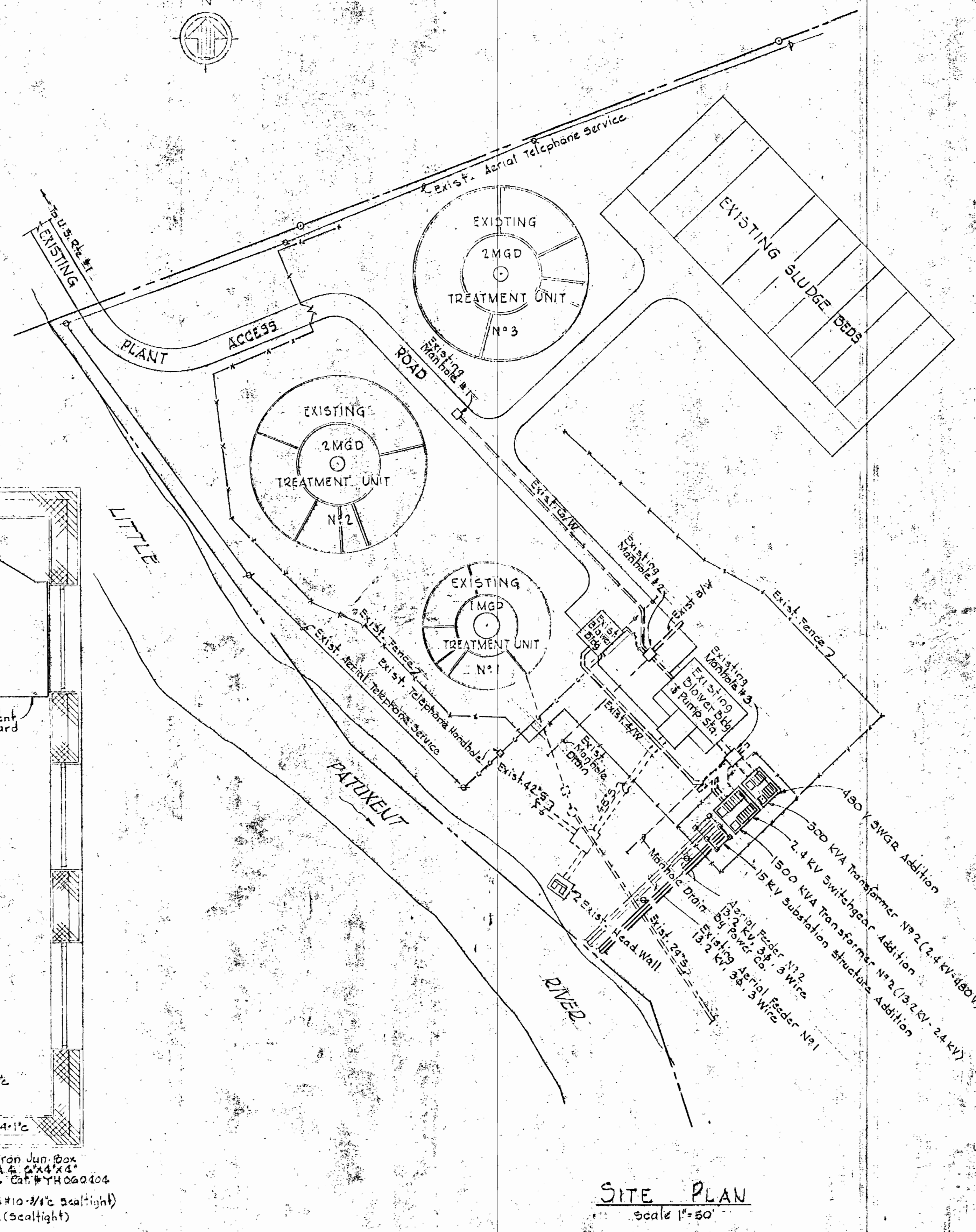
X=contacts closed

POSITIONS	PUMP SEQUENCE
No. 1	1 - 2
No. 2	OFF
No. 3	2 - 1

LEAD PUMP SELECTOR SWITCH "S2"
FOR SEWAGE PUMPS N^os 3 & 4
No Scale



PLAN - EXISTING LAB BUILDING
Scale 3/8" = 1'-0"



SITE PLAN
Scale 1" = 50'



Kenneth A. McLeod

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE: 6-5-72
W. O. Fall...
CHIEF - BUREAU OF WATER AND SEWER

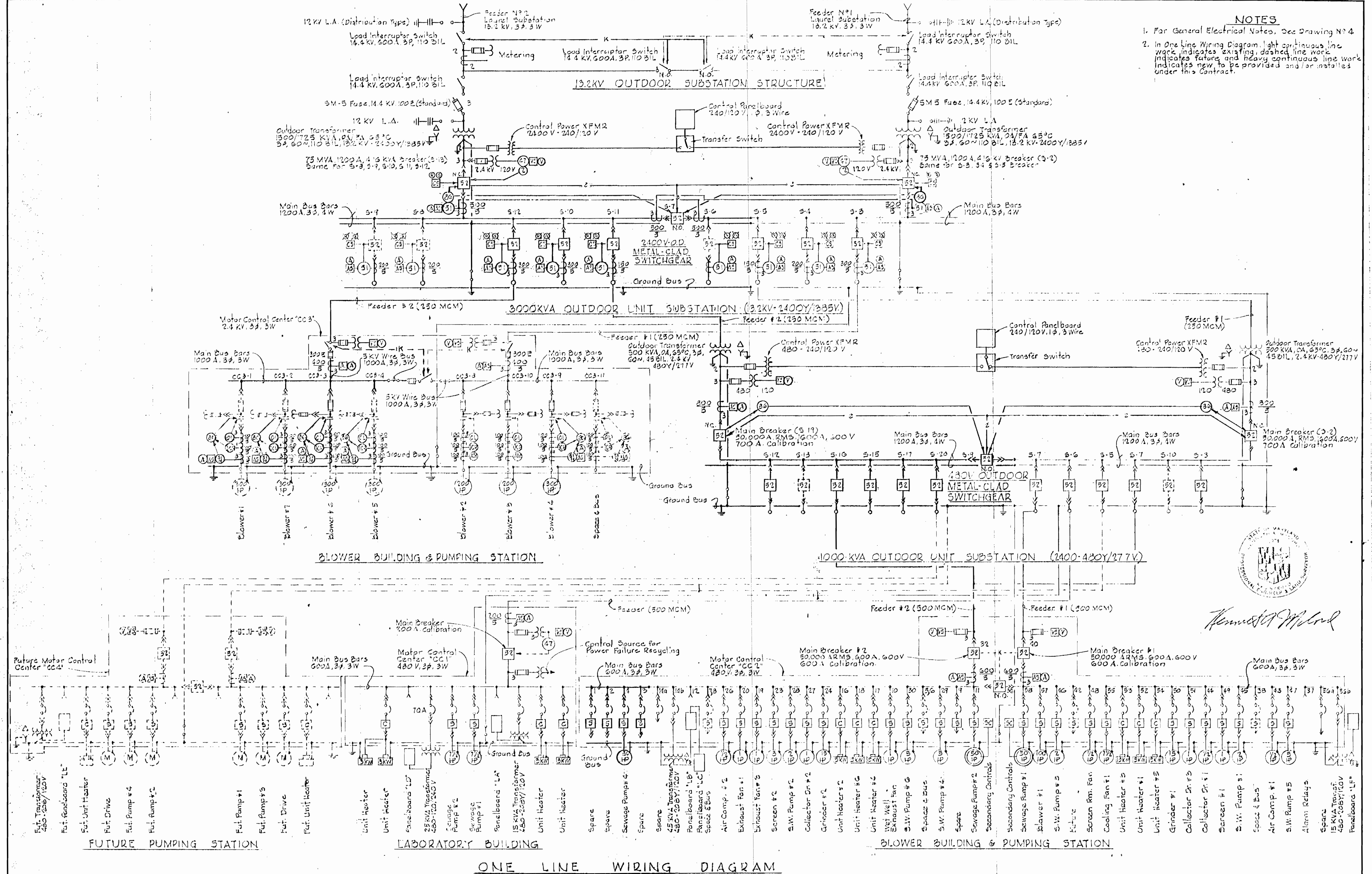
CONTRACT NO. 447-S

ELECTRICAL
SITE PLAN, DETAILS &
GENERAL ELECTRICAL NOTES

SAVAGE SEWAGE
TREATMENT PLANT ADDITION NO. 2

DRAWING	SCALE
NO. 4	AS
OF 9	SHOWN

- NOTES**
1. For General Electrical Notes, See Drawing No. 4
 2. In One Line Wiring Diagram, light continuous line work indicates existing, dashed line work indicates future and heavy continuous line work indicates new to be provided and/or installed under this contract.



Kenneth M. Wood

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 6-5-72 <i>W. O. Pellett</i> CHIEF - BUREAU OF WATER AND SEWER	CONTRACT NO. 447-S	ELECTRICAL ONE LINE WIRING DIAGRAM	SAVAGE SEWAGE TREATMENT PLANT ADDITION NO. 2	DRAWING NO. 5 OF 9 SCALE AS SHOWN
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INTERIOR

- □ ○ Outlet-Incandescent-Ceiling-Recessed-Wall
- ⊙ ⊙ Outlet-Incandescent-Emergency-Ceiling-Wall
- ⊙ ⊙ Outlet-Block-Single-Face-Ceiling-Wall
- ⊙ ⊙ Outlet-Block-Double-Face-Ceiling-Wall
- ⊙ ⊙ Outlet-Fluorescent-4-Foot
- ⊙ ⊙ Outlet-Fluorescent-4-Foot-With-Kindorf-Wiring-Channel
- ⊙ ⊙ Outlet-Fluorescent-4-Foot-With-Kindorf-Support-&-Conduit
- ⊙ ⊙ Outlet-Fluorescent-2-Foot
- ⊙ ⊙ Outlet-Exit-Light-Ceiling-Wall-With-Or-Without-Directional-Arrows
- ⊙ ⊙ Outlet-Mercury-Ceiling-Wall
- ⊙ ⊙ Outlet-Duplex-Convenience
- ⊙ ⊙ Outlet-Special-Purpose-Floor
- ⊙ ⊙ Outlet-20A-250V-Receptacle-Polarized
- ⊙ ⊙ Outlet-30A-250V-Receptacle-&-Plug-Polarized
- ⊙ ⊙ Outlet-Telephone-Wall-Desk-Extension
- ⊙ ⊙ Outlet-Intercommunication
- ⊙ ⊙ Junction-Box
- EXP WP Explosion-proof-Weatherproof-Where-Indicated
- S S₂ S Switch-Single-Pole-Double-Pole-With-Nil-Light
- S₃ S₄ Switch-Three-Way-Four-Way
- S_K S₀ Switch-Key-Operated-Door-Operated
- S_{MC} S_{RC} Switch-Momentary-Contact-Remote-Control
- ⊙ ⊙ Contactor-Number-As-Indicated
- ⊙ ⊙ Thermostat-Heating-Cooling-Freeze-Stat
- A Aquastat
- ⊙ ⊙ Unit-Heater
- ⊙ ⊙ Generator
- ⊙ ⊙ Motor-Constant-Speed-Variable-Speed
- M ⊙ Starter-Manual-Combination
- S ⊙ Starter-Magnetic[FVNR]-Magnetic[FVR]
- S ⊙ Starter-Magnetic[FVNR-2S(Two-Speed)]
- F ⊙ Disconnect-Switch-Fuses-Unfused
- ⊙ ⊙ Selector-Switch-Two-Position
- ⊙ ⊙ Secondary-Motor-Controls
- ⊙ ⊙ Pull-Box-Size-As-Noted
- ⊙ ⊙ Telemetry-Transmitter
- ⊙ ⊙ Lighting-Panel
- ⊙ ⊙ Power-Panel
- ⊙ ⊙ Telephone-Or-Signal-Cabinet
- ⊙ ⊙ Contactor-Cabinet
- ⊙ ⊙ Home-run-To-Panelboard-Number-Of-Arrows-Indicates-Number-Of-Circuits-Number-Of-Cross-Lines-Indicates-Number-Of-Wires-Where-No-Cross-Lines-Appear-Two-Conductors-Are-Implied
- Conduit-In-Or-On-Ceiling-Or-Wall
- Conduit-In-Or-Under-Floor
- T- Conduit-Telephone
- PT- Conduit-Private-Telephone
- FA- Conduit-Fire-Alarm
- C- Conduit-Communication
- E- Conduit-Emergency
- * Conduit-Stub-Up-Stub-Down
- X Conduit-Seal
- ⊙ ⊙ Disconnect-Circuit-Breaker
- ⊙ ⊙ Outlet-Incandescent-Flourescent
- ⊙ ⊙ Pushbutton-Station-One-Two-&-Three-Pushbutton
- ⊙ ⊙ Horn
- ⊙ ⊙ Bell
- CCSA-2 Motor-Control-Center-Wire-&-Cable-Run-Number
- SS1 Switchgear-Wire-&-Cable-Run-Number
- SS14 Unit-Substation-Wire-&-Cable-Run-Number
- CCS Control-Cable-Wire-&-Cable-Run-Number

UNDERGROUND

- 1/W Ductbank-Number-Of-Ducts-As-Indicated
- 2" C Existing-Conduit-Size-As-Indicated
- DB-2#4 Existing-Direct-Buried-Cable-Number-&-Size-As-Indicated
- DB-2#4 Direct-Buried-Cable-Number-&-Size-As-Indicated
- C Conduit-Size-As-Indicated

CIRCUIT BREAKER S.I.C. LEGEND

- 10 10,000 Amperes At Operating Voltage
- 14 14,000 Amperes At Operating Voltage
- 22 22,000 Amperes At Operating Voltage
- 30 30,000 Amperes At Operating Voltage
- 50 50,000 Amperes At Operating Voltage
- 60 60,000 Amperes At Operating Voltage
- 65 65,000 Amperes At Operating Voltage

LOCATION SYMBOLS FOR ELEMENTARY CONTROL DIAGRAMS

- ⊙ Device located in respective Motor Control Center
- ⊙ Device located at respective unit
- ▲ Device located at respective motor
- ⊙ Device located in Starter
- ⊙ Device located on Large Panelboard
- ⊙ Device located in Respective Power Center
- ⊙ Device located in Blower Control Panel
- ⊙ Device located in Existing Motor Control Center 'CC1'
- ⊙ Device located in Existing Power Centers 'PC1' & 'PC2'
- Δ Device located in Existing Motor Control Center

MOTOR CONTROL CENTERS, POWER CENTERS & UNIT SUBSTATIONS AUXILIARY DESCRIPTION

- a - Red & Green Indicating Lights
- b - Third Overload Relay
- c - Running Time Meter
- d - Hand-Off-Automatic Selector Switch
- e - Start-Stop Pushbutton Station
- f - Key Interlock
- g - 480-120 Volt Control Transformer
- h - Slow-Fast-Stop Pushbutton Station
- j - Forward-Reverse-Stop Pushbutton Station
- k - Open Close Control Switch

ONE LINE/ELEMENTARY

- ⊙ Molded Case Circuit Breaker
- ⊙ Oil Circuit Breaker
- ⊙ Selector Switch
- ⊙ Disconnecting Switch
- ⊙ Interrupter Switch
- ⊙ Selector Interrupter Switch
- ⊙ Knife Switch
- ⊙ Contacts-Normally Open
- ⊙ Contacts-Normally Closed
- ⊙ Current Transformer
- ⊙ Potential Transformer
- ⊙ Power Transformer
- ⊙ Ground
- ⊙ Resistor
- ⊙ Fuse
- ⊙ Pathhead
- ⊙ Pushbutton
- ⊙ Pressure Switch
- ⊙ Float Switch
- ⊙ Flow Switch
- ⊙ Limit Switch
- ⊙ Thermostat
- ⊙ Disconnect Link
- ⊙ Lightning Arrestor
- ⊙ Incoming Line
- ⊙ Outgoing Line
- ⊙ Tie Line
- ⊙ Capacitor
- ⊙ Rectifier
- ⊙ Mechanical Interlock
- ⊙ Electrical Interlock
- ⊙ Key Interlock
- ⊙ Overcurrent Trip Thermal Type
- ⊙ Relay-Instantaneous Overcurrent
- ⊙ Relay-Time Overcurrent
- ⊙ A.C. Power Circuit Breaker
- ⊙ Motor(Three-Phase) Constant Speed-Variable Speed
- ⊙ Starter-Magnetic(FVNR) Magnetic (FVR)
- ⊙ Starter-Magnetic[FVNR-2S(Two-Speed)]
- ⊙ Running Time Meter
- ⊙ Indicating-Light-Color-As-Indicated-By-Letter
- ⊙ Solenoid-Motor(Single-Phase)
- ⊙ Contactor-Coil-Starter-Coil-Number-As-Indicated
- ⊙ Ammeter-Ammeter Switch
- ⊙ Voltmeter-Voltmeter Switch
- ⊙ Wattmeter-Kilowatt Meter
- ⊙ Test Block-Test Switch
- ⊙ Recording-Recording Demand Meter
- ⊙ Relay-Number-As-Indicated
- ⊙ Instrument Switch-Control Switch
- ⊙ Ground Lamps
- ⊙ Power Factor Meter
- ⊙ Timer-Number-As-Indicated
- ⊙ Watt-Hour Meter-Watthour Meter
- ⊙ Phase Sequence Voltage Relay
- ⊙ Tripping Relay Lock-out Type-Differential Relay
- ⊙ Automatic Transfer Switch
- ⊙ Electric Radiant Heaters
- ⊙ Contactor
- ⊙ Relay-Time Overcurrent w/Instantaneous Trip
- ⊙ Ground Overcurrent Relay
- ⊙ Tripping Relay
- ⊙ Demand Meter
- ⊙ Frequency Meter
- ⊙ Phase Meter
- ⊙ Position Indicator
- ⊙ Ground Sensing Relay
- ⊙ A.C. Power Circuit Breaker With Solid State Trip & Ground Device
- ⊙ Receptacle & Plug-Polarized
- ⊙ Horsepower Meter
- ⊙ Permissive Control Switch
- ⊙ Reverse-Phase, Or Phase-Balance Current Relay
- ⊙ Time Delay Relay
- ⊙ Voltage Unbalance Relay
- ⊙ Liquid or Gas Pressure Relay

NOTES

1. For General Electrical Notes, See Drawing No. 4

EXTERIOR

- ⊙ Mercury Area Light
- ⊙ Incandescent Area Light
- ⊙ Existing Pole
- ⊙ Pole-Length & Class As Indicated
- ⊙ Pole With Down Guy & Anchor-Length, Class & Lead As Indicated
- ⊙ Pole With Street Light-Length & Class As Indicated
- ⊙ Primary Distribution Line-KV-Number & Size Of Wires As Indicated
- ⊙ Secondary Distribution Line-3P-Number & Size Of Wires As Indicated
- ⊙ Service Prop-Number & Size Of Wires As Indicated
- ⊙ Weatherhead & Rack



Handwritten signature: Kenneth M. Lord

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

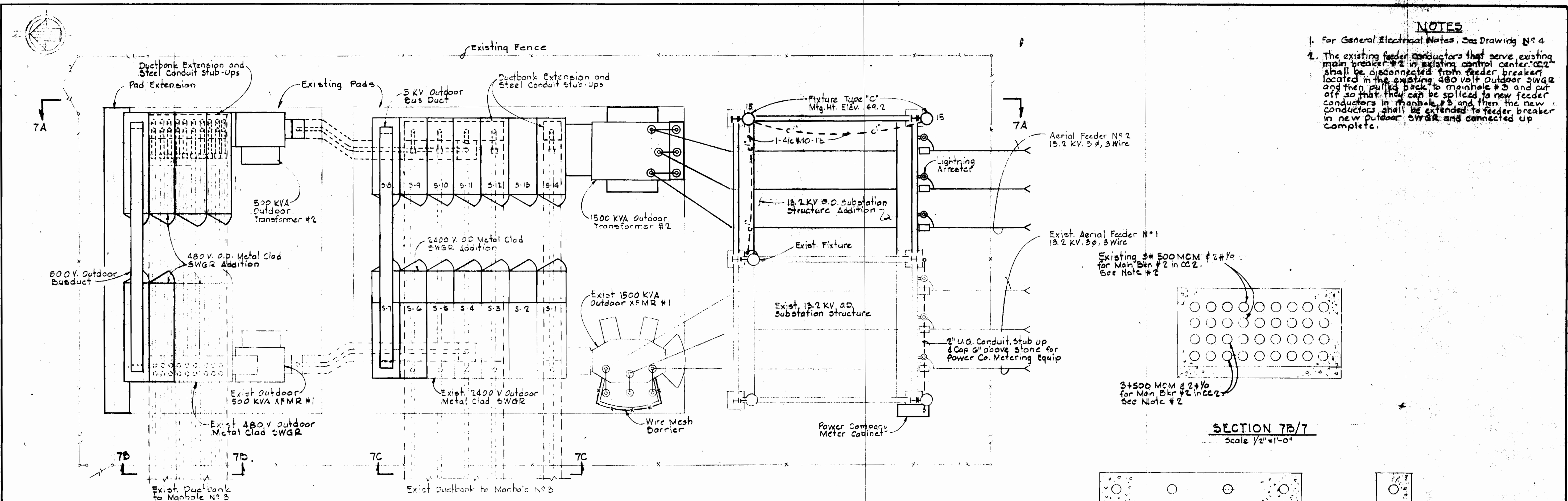
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
6-5-72 DATE
W.D. Piller CHIEF - BUREAU OF WATER AND SEWER

CONTRACT NO. 447-S

ELECTRICAL
LEGEND

SAVAGE SEWAGE
TREATMENT PLANT ADDITION NO. 2

DRAWING
NO. 6
OF 9
SCALE
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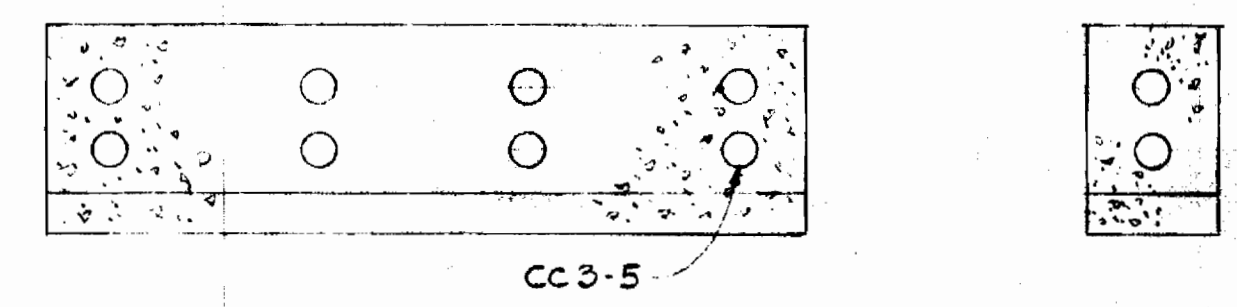
PLAN - OUTDOOR UNIT SUBSTATION
Scale 1/4" = 1'-0"

NOTES

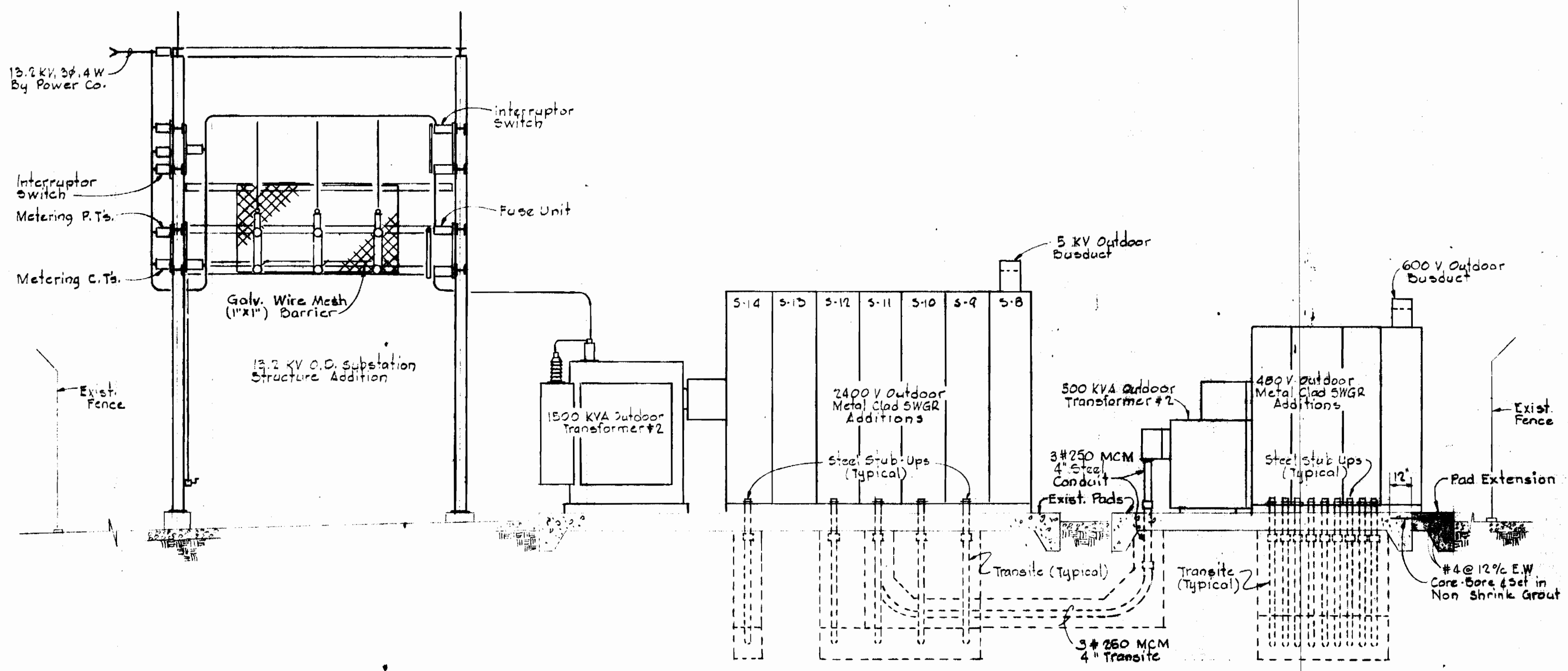
1. For General Electrical Notes, See Drawing N° 4

2. The existing feeder conductors that serve existing main breaker #2 in existing control center, CC2, shall be disconnected from feeder breaker located in the existing 480 volt Outdoor SWGR and then pulled back to mainhole #3 and cut off so that they can be spliced to new feeder conductors in manhole #3 and then the new conductors shall be extended to feeder breaker in new Outdoor SWGR and connected up complete.

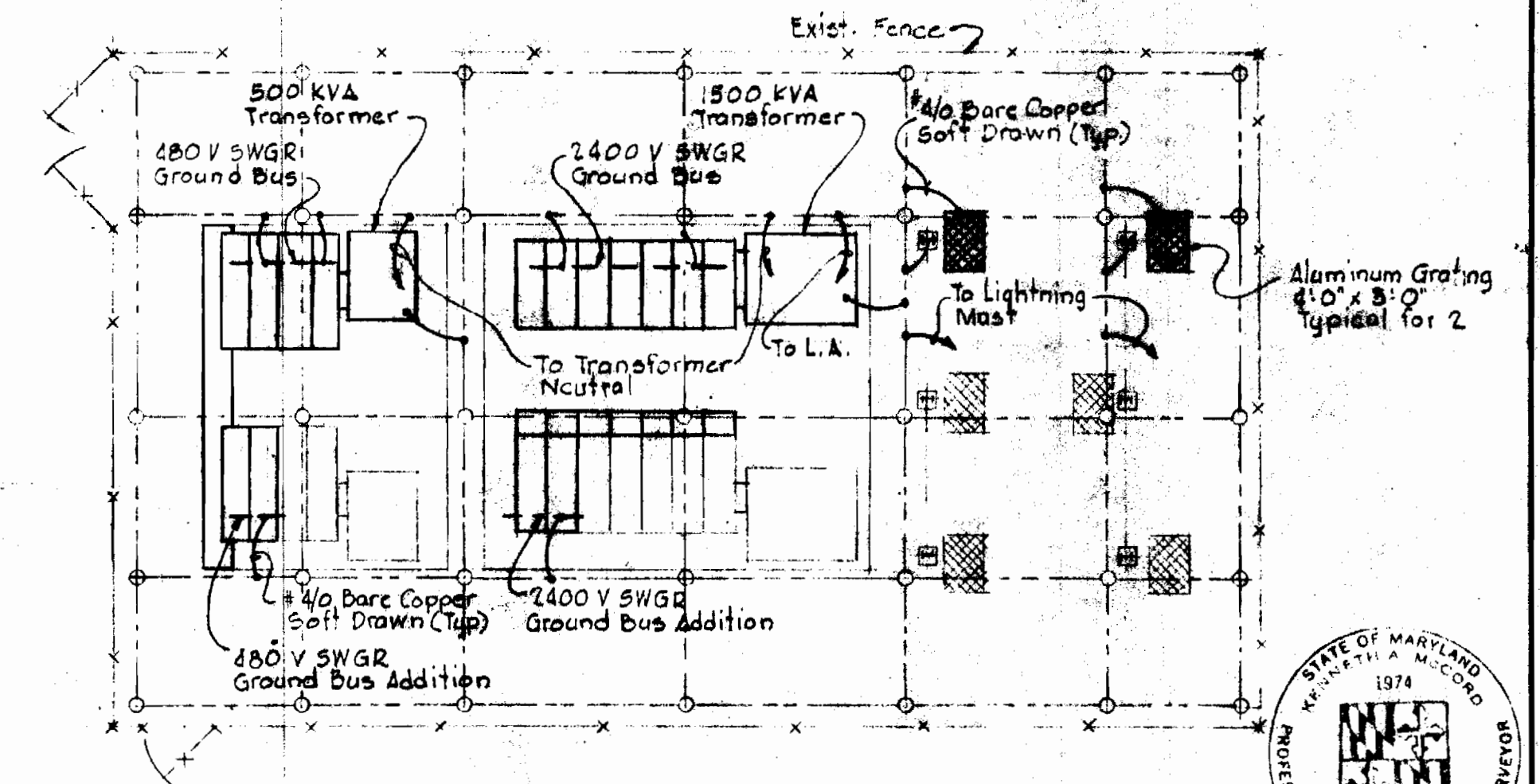
SECTION 7B/7
Scale 1/2" = 1'-0"



SECTION 7C/7
Scale 1/2" = 1'-0"

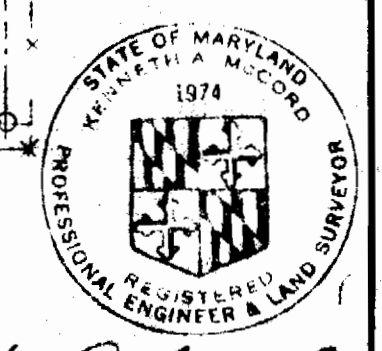


SECTION 7A/7
Scale 1/2" = 1'-0"

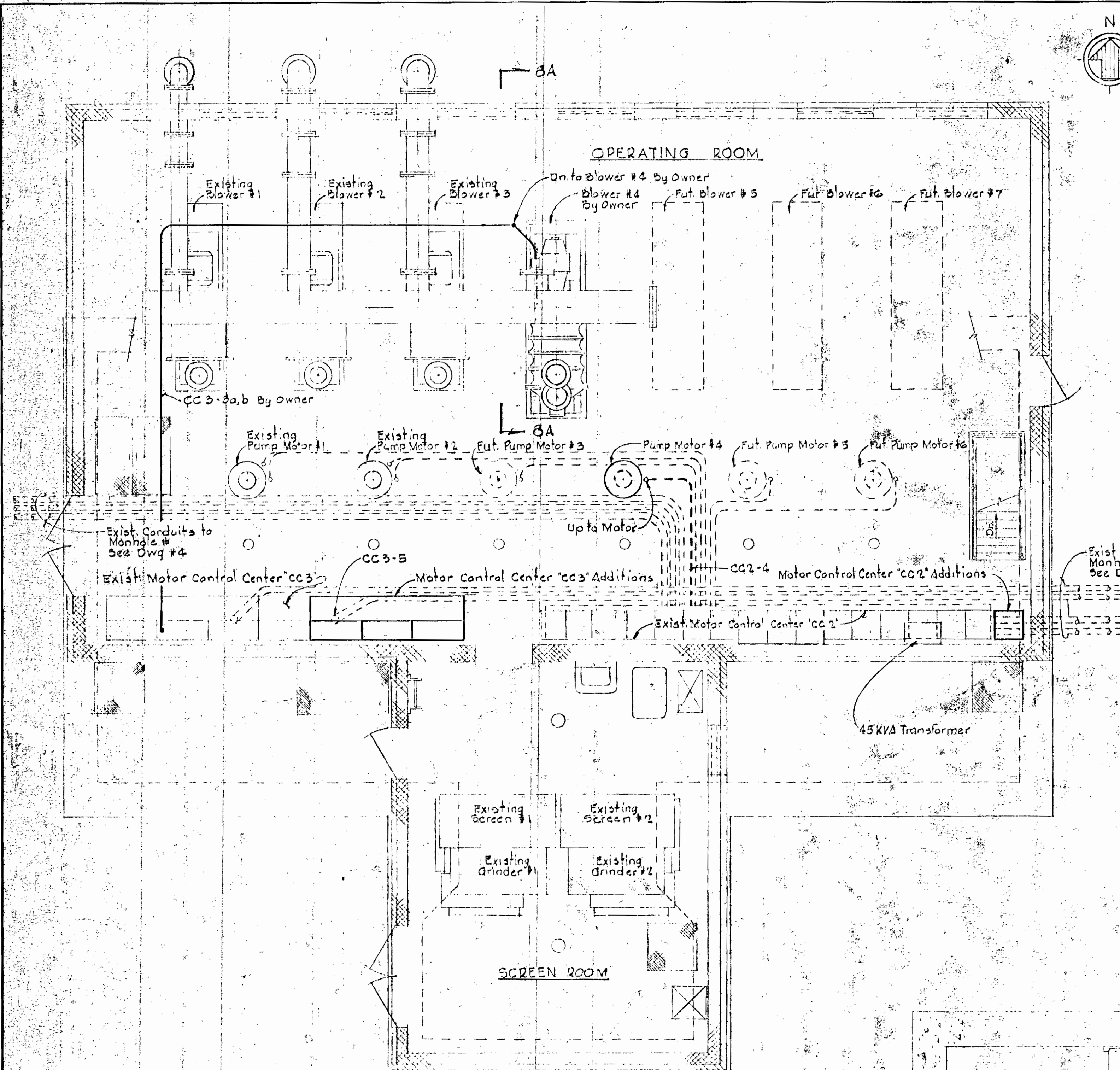


GROUNDING PLAN FOR OUTDOOR SUBSTATION ADDITIONS
Scale 3/32" = 1'-0"

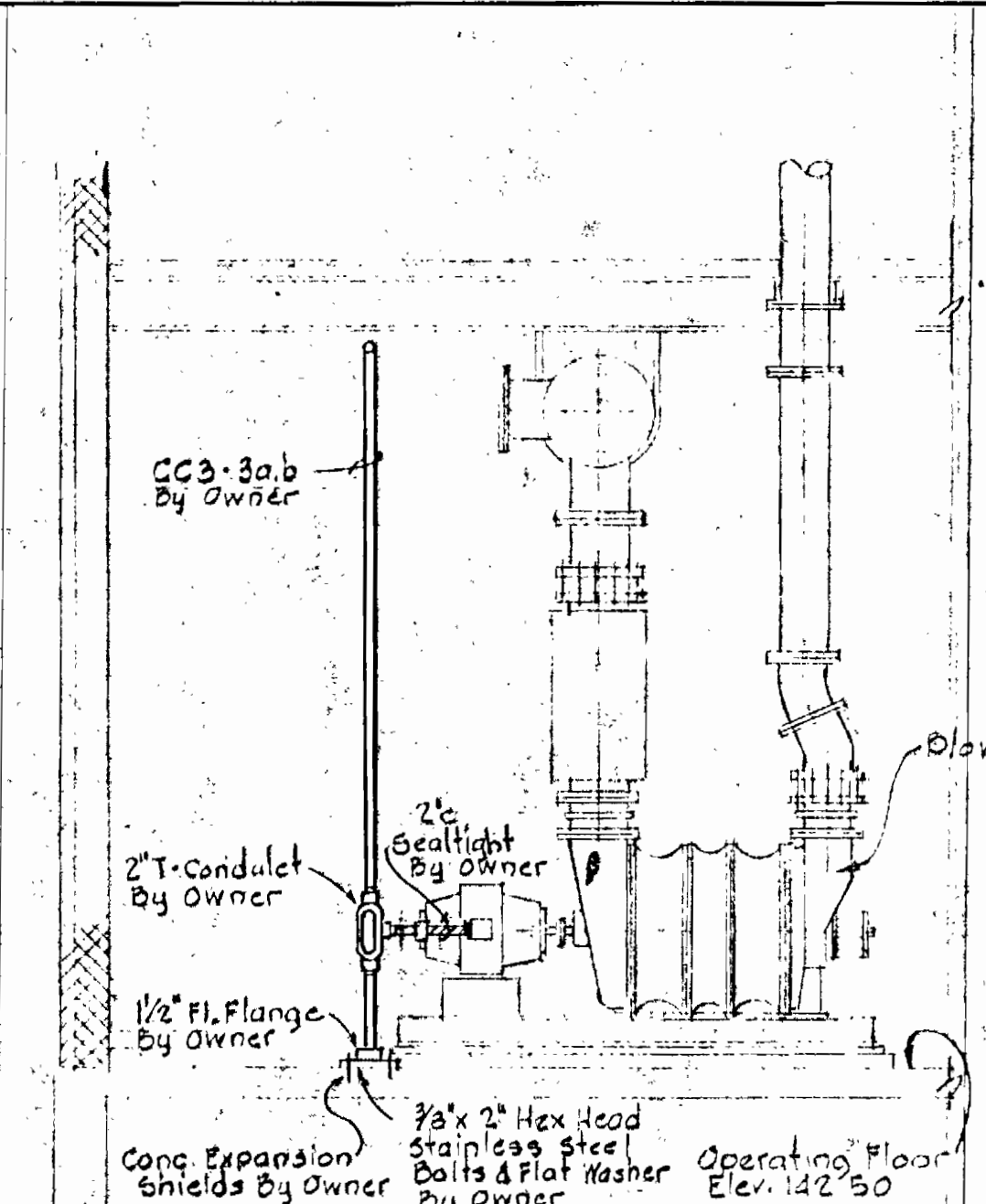
Kenneth M. Land



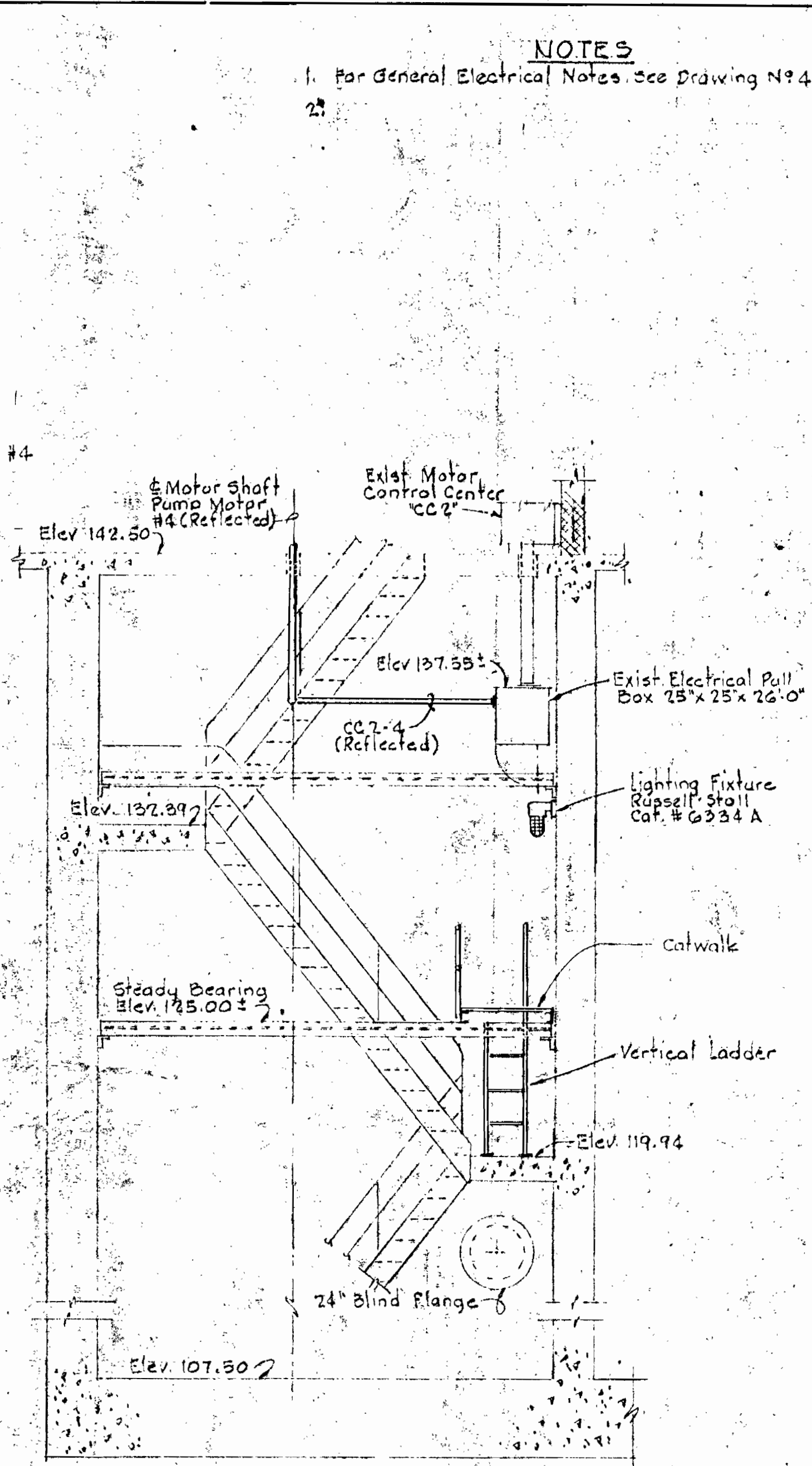
<p>WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND</p>	<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 65-72 DATE <i>W.D. Gilbert</i> CHIEF - BUREAU OF WATER AND SEWER</p>	<p>CONTRACT NO. 447-S</p>	<p>ELECTRICAL OUTDOOR UNIT SUBSTATIONS PLAN & DETAILS</p>	<p>SAVAGE, SEWAGE TREATMENT PLANT ADDITION NO. 2</p>	<p>DRAWING NO. 7 OF 9</p>	<p>SCALE AS SHOWN</p>
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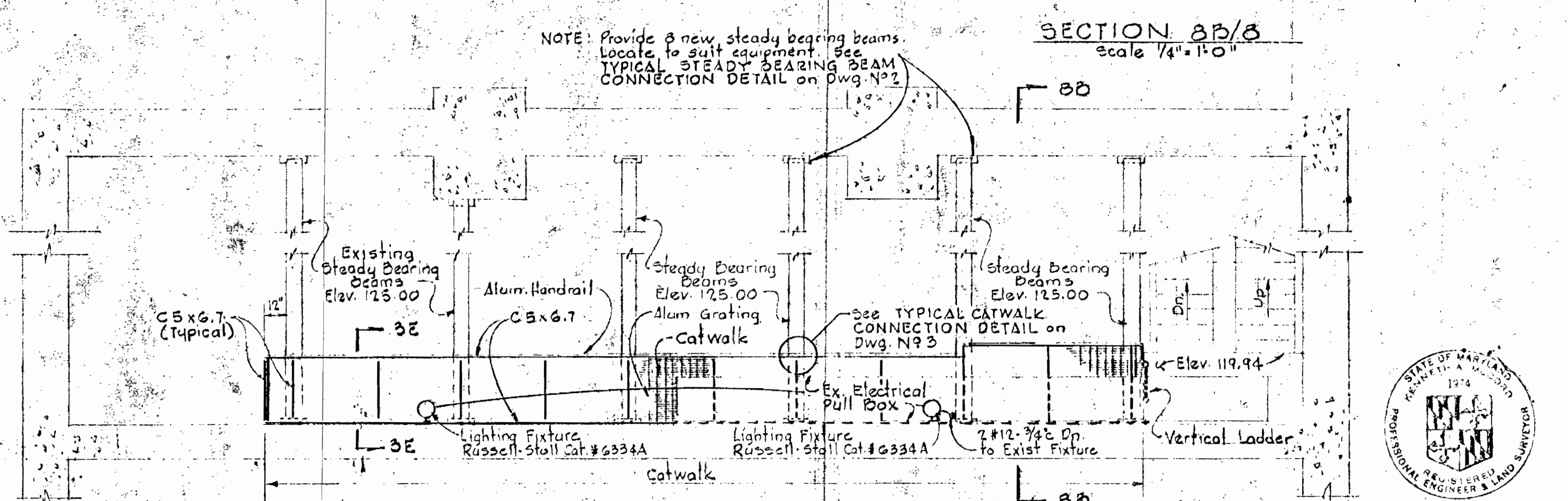
OPERATING FLOOR PLAN
Scale 1/4" = 1'-0"



SECTION BA/B
Scale 1/4" = 1'-0"



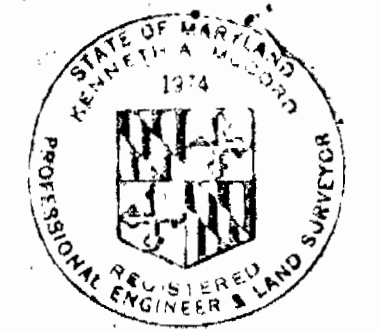
SECTION BB/B
Scale 1/4" = 1'-0"



PLAN - PUMP ROOM BELOW ELEV. 138.0
Scale 1/4" = 1'-0"

- NOTES
- For General Electrical Notes See Drawing No. 4
 -

NOTE: Provide a new steady bearing beams. Locate to suit equipment. See TYPICAL STEADY BEARING BEAM CONNECTION DETAIL on Dwg. No. 2



Kenneth A. Meland

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BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE 6-5-72
W. O. Llab
CHIEF - BUREAU OF WATER AND SEWER

CONTRACT NO. 447-S

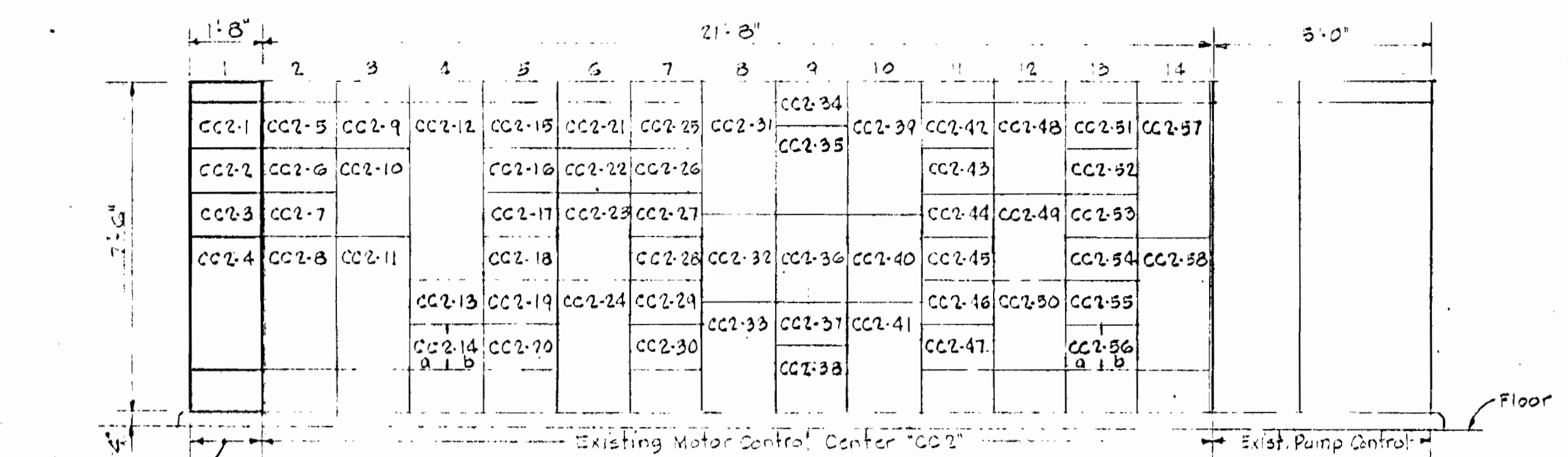
ELECTRICAL
BLOWER BLDG & PUMPING STA.
PLANS & DETAILS

SAVAGE SEWAGE
TREATMENT PLANT ADDITION NO. 2

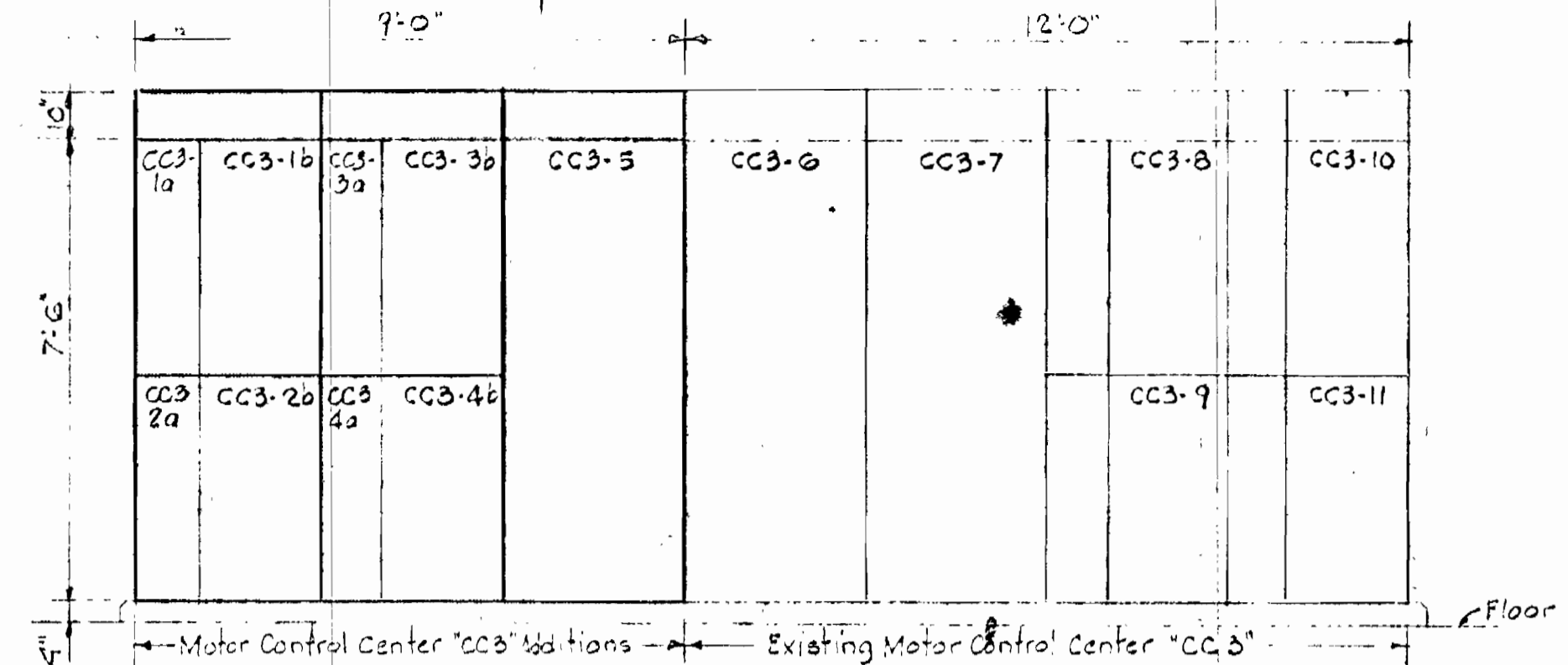
DRAWING NO. 8 OF 9 SCALE AS SHOWN

NOTES

- For General Electrical Notes, See Drawing N14
- In Elementary Control Wiring Diagrams, light continuous line work indicates existing, dashed line work indicates future, and heavy continuous line work indicates new to be provided and/or installed under this contract.



ELEVATION MOTOR CONTROL CENTER 'CC2'
Scale: 3/8" = 1'-0"



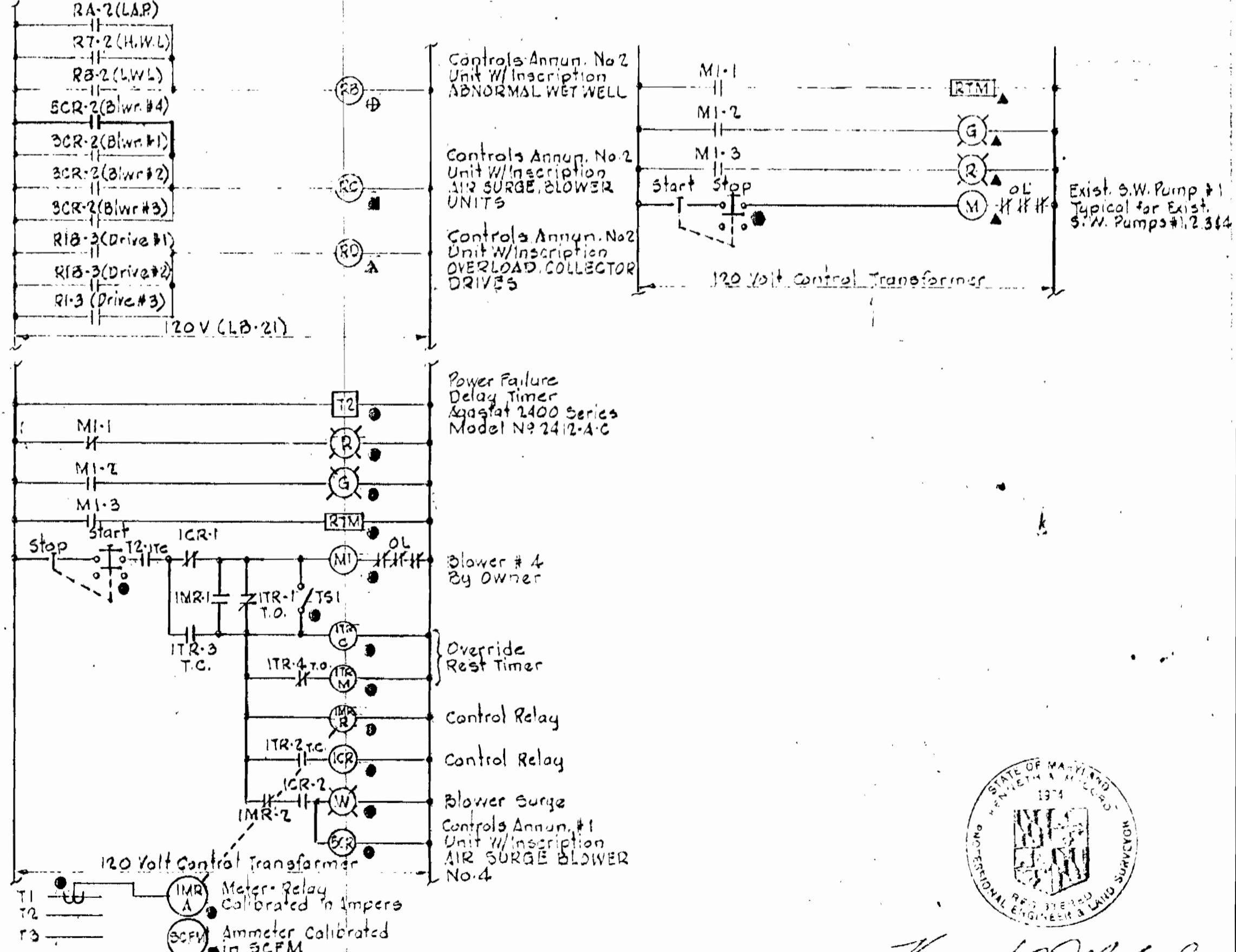
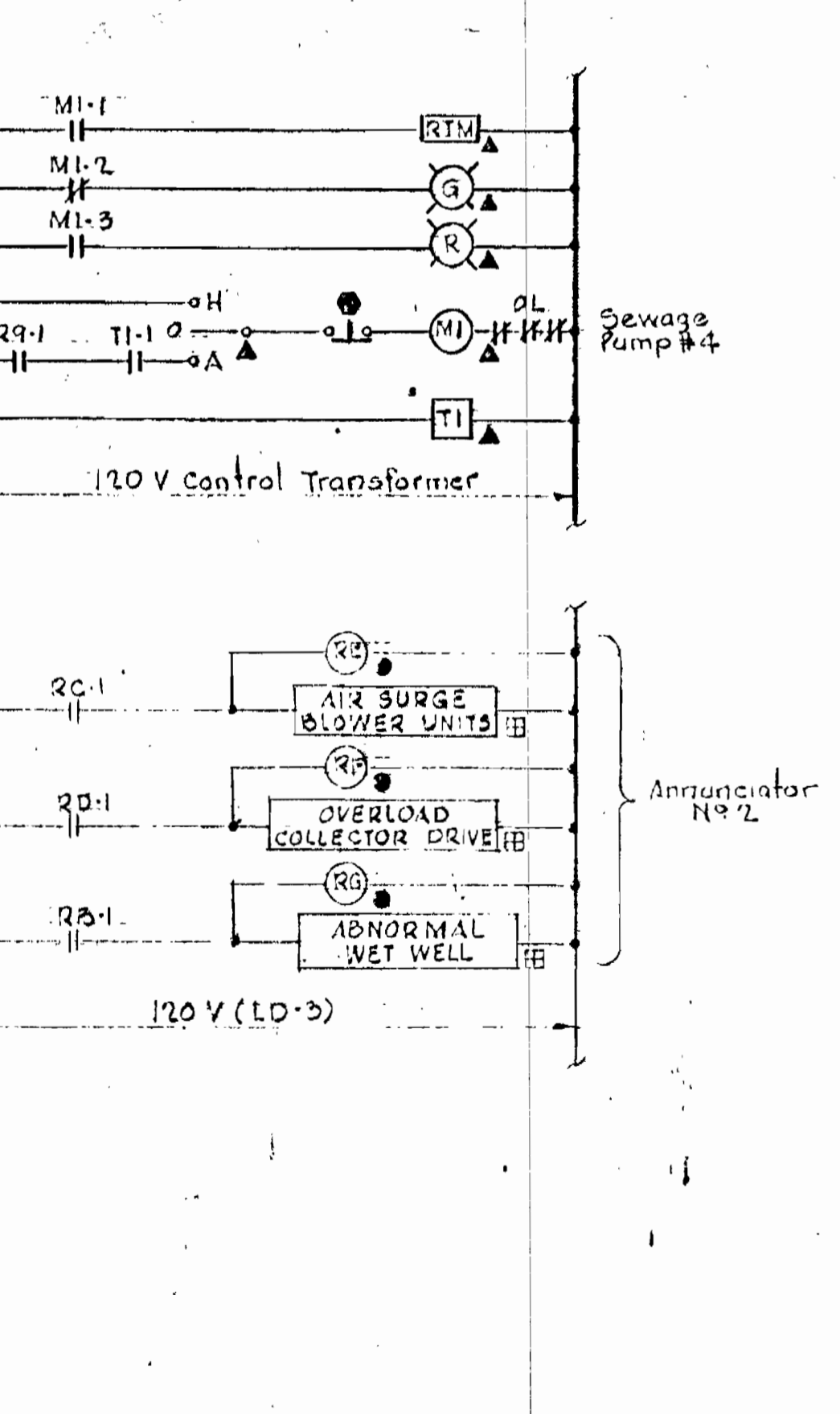
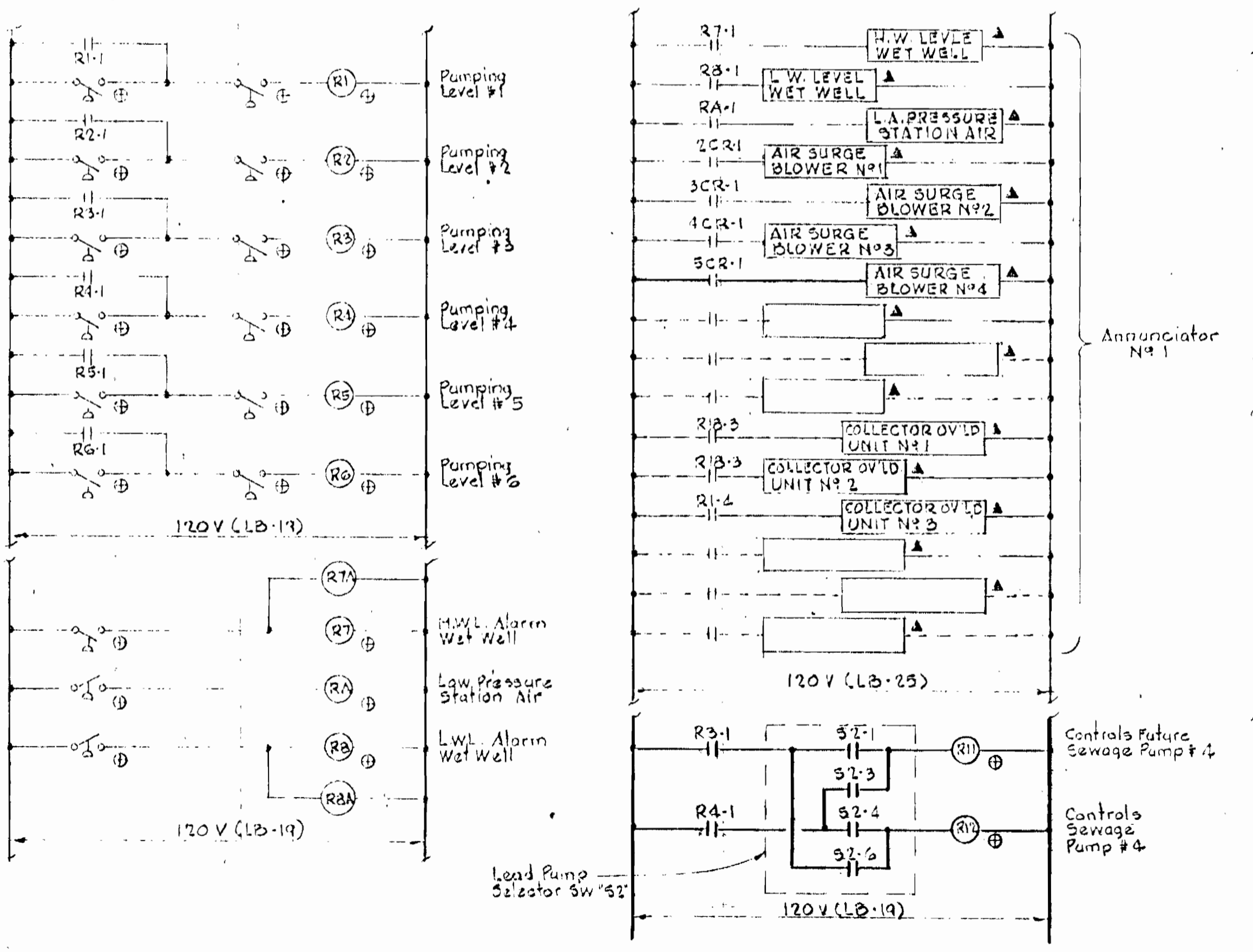
FRONT ELEVATION
2400 VOLT MOTOR CONTROL CENTER (CC3)
Scale: 3/8" = 1'-0"

MOTOR CONTROL CENTER SCHEDULE 'CC2'														
Unit # Run Number	NAME PLATE DATA	DEVICE DESCRIPTION	HP or KVA	Aux. Descn	BREAKER				WIRE				Ground Wire Size	Conduit
					Frame	Poles	Colls	A.I.C.	No.	Size	Type	For		
CC2-1	Blank (Spare)	Combination Starter Size 1, FVNR	5	a,b,c d,f	F	3	15	14	-	-	-	-	-	-
CC2-2	Blank (Spare)	Combination Starter Size 1, FVNR	10	a,b,c d,f	F	3	20	14	-	-	-	-	-	-
CC2-3	Blank (Spare)	Combination Starter Size 1, FVNR	10	a,b,c d,f	F	3	20	14	-	-	-	-	-	-
CC2-4	Sewage Pump #1	Combination Starter Size 4, FVNR	50	a,b,c d,f	JA	3	150	22	3	2	THW	Power	2	2"

MOTOR CONTROL CENTER SCHEDULE 'CC3' (2400V)															
Unit # Run Number	NAME PLATE DATA	DEVICE DESCRIPTION	HP or KVA	Aux. Descn	SWITCH		FUSE		WIRE				Ground Wire Size	Conduit	
					Frame	Poles	Rating	Type	No.	Size	Type	For			
CC3-1a	Blank	Space for Future Blower Control Device	-	-	-	-	-	-	-	-	-	-	-	-	
CC3-1b	Blank	Spare # Bus for fut. Comb. Controller 400 IP Size FVNR	300	a,c,e f,h	-	-	-	-	-	-	-	-	-	-	
CC3-2a	Blank	Space for Future Blower Control Device	-	-	-	-	-	-	-	-	-	-	-	-	
CC3-2b	Blank	Spare # Bus for fut. Comb. Controller 400 IP Size FVNR	300	a,c,e f,h	-	-	-	-	-	-	-	-	-	-	
CC3-3a	Blower #4	CFM Meter, CT's, etc. Timers, Control Relays	-	See Spec	-	-	-	-	-	-	-	-	-	-	
CC3-3b	Blower #4	Combination Controller 400 IP Size FVNR	300	a,c,e f,h	-	-	-	Current Limity	3	2	5KV	Power	2	2"	
CC3-4a	Blower #5	Space for future Blower Control Device	-	-	-	-	-	-	-	-	-	-	-	-	
CC3-4b	Blower #5	Spare # Bus for fut. Comb. Controller 400 IP Size FVNR	300	a,c,e f,h	-	-	-	-	-	-	-	-	-	-	
CC3-5	Main Switch Feeder #2	Interrupter Sw Sing. Throw Gang Operated, 5KV, 20 BIL	-	See Spec	600A	3	300	Current Limity	3/2	250	MCM	5KV	Power	4	See Dwg.

LOCATION SYMBOLS FOR ELEMENTARY CONTROL WIRING DIAGRAMS

- Device located in Motor Control Center 'CC3'
- ▲ Device located in Motor Control Center 'CC2'
- Device located in Motor Control Center 'CC1'
- ⊙ Device located at Motor and/or unit.
- ⊕ Device located in 'CC2' Pump Control Section.
- ⊞ Device located on Instrument Panelboard.



ELEMENTARY CONTROL WIRING DIAGRAMS

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ELECTRICAL
MOTOR CONT. CENTER SCHEDULES
& WIRING DIAGRAMS

SAVAGE SEWAGE
TREATMENT PLANT ADDITION NO.2

DRAWING NO. 9 OF 9
SCALE AS SHOWN