

COUNTY OF ONONDAGA, NEW YORK

DEPARTMENT OF DRAINAGE AND SANITATION
JOHN J. HENNIGAN JR., P. E., COMMISSIONER

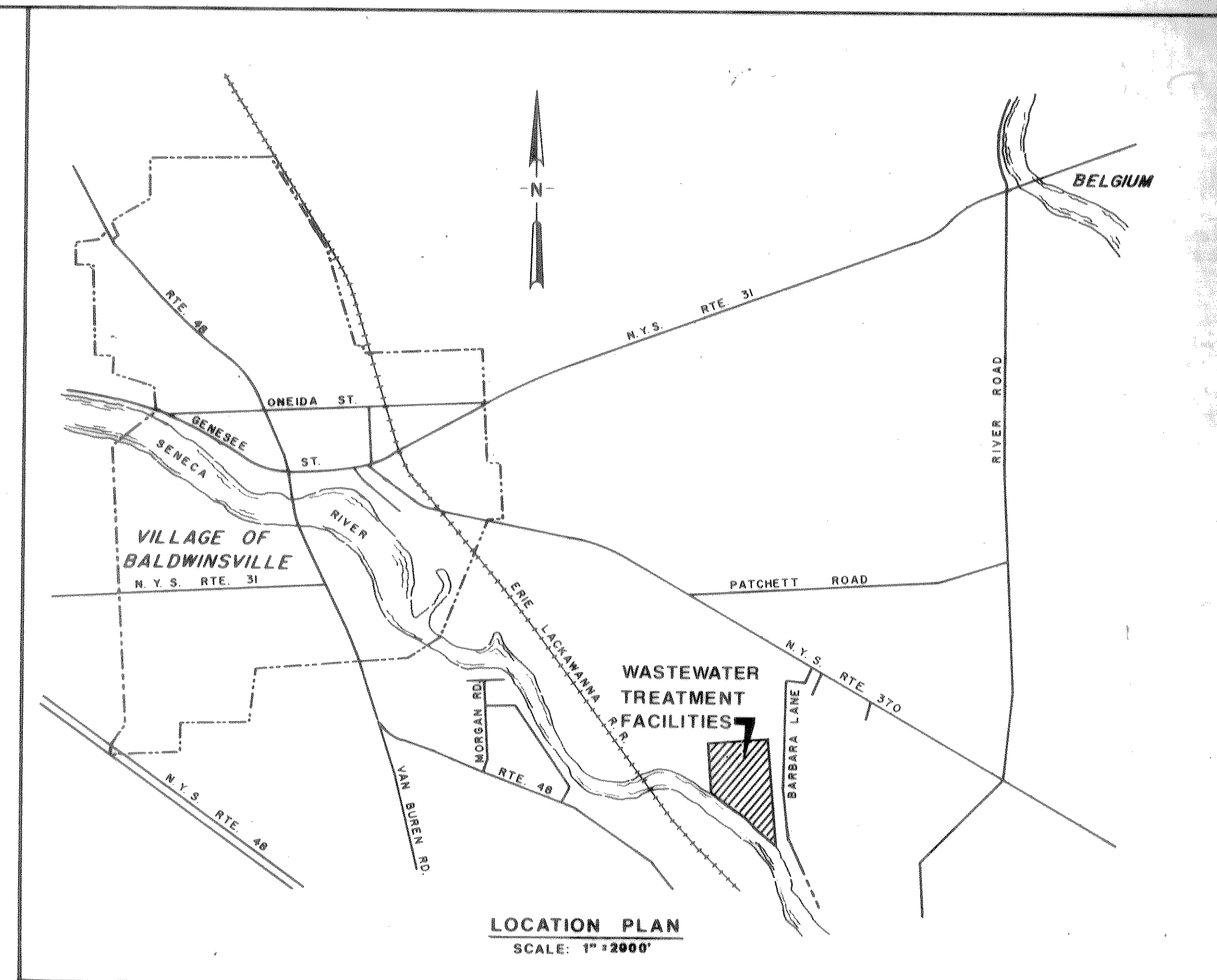
**BALDWINSVILLE-SENECA KNOLLS
SANITARY DISTRICT**

C 36-762

**CONTRACT DRAWINGS
WASTEWATER TREATMENT FACILITIES**

CONTRACT NO. 1 GENERAL
CONTRACT NO. 2 ELECTRICAL
CONTRACT NO. 3 HEATING & VENTILATING
CONTRACT NO. 4 PLUMBING

1976



APPROVED BY ONONDAGA COUNTY
DEPARTMENT OF DRAINAGE AND SANITATION

[Signature]
COMMISSIONER
3/26/76
DATE

Stearns & Wheeler
CIVIL AND SANITARY ENGINEERS
CAZENOVIA, NEW YORK NEW CANAAN, CONNECTICUT

Stirling G. Brisbin 31810
PROJECT PARTNER NYSPE LIC. NO.

Joel L. Swanson
PROJECT ASSOCIATE

Miller - Sizing, P. C.
Consulting Engineers
SYRACUSE, N. Y.

RECORD DRAWING

These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information furnished by Contractor.
Date 9-8-83 Per FLD

S.G. Brisbin 24 Feb 78
RELEASED FOR CONSTRUCTION DATE

CONTRACT NO. 1 - GENERAL

GENERAL

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 - E-27 ENTRANCE STRUCTURE & HEATING & VENTILATING EQUIPMENT - POWER
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 - E-45 RISER DIAGRAMS - MOTOR CONTROL CENTER VIII & IX
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 - E-47 ELECTRIC EQUIPMENT AND CONTROL SCHEDULE
 - E-48-**BP** ELEMENTARY DIAGRAMS - MOTOR CONTROL CENTER I & II
 - E-49-**BP** ELEMENTARY DIAGRAMS - MOTOR CONTROL CENTER III & IV
 - E-50-**BP** ELEMENTARY DIAGRAMS - MOTOR CONTROL CENTER V & VI
 - E-51-**BP** ELEMENTARY DIAGRAM - MOTOR CONTROL CENTER VII
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 - E-55 ELECTRICAL DIAGRAMS & DETAILS
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 - H-14 THICKENERS & GALLERY NO. 2 - PARTIAL FLOOR PLAN
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 - H-16 GALLERY NO. 3 AND NO. 4 - FLOOR PLAN
 - H-17 GALLERY NO. 6 - FLOOR PLAN
 - H-18 GALLERY NO. 7 - FLOOR PLAN
 - H-19 GALLERY NO. 8 - FLOOR PLAN
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 - H-22 PROCESS STRUCTURE ELEVATIONS AND SECTIONS
 - H-23 CONTROL SEQUENCE SCHEMATICS
 - H-24 EQUIPMENT SCHEDULES
 - H-25 MAIN CONTROL PANEL COMFORT CONTROL SECTION

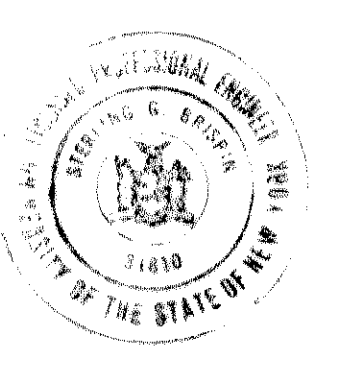
CONTRACT NO. 4 - PLUMBING

- P-1 PLUMBING SITE PLAN
- CONTROL BUILDING
- P-2 FIRST FLOOR PLAN
 - P-3 PARTIAL 1ST & 2ND FL. PLANS - GARAGE, LAB. & VACUUM FILTER AREAS
 - P-4 ROOF PLAN AND PARTIAL FLOOR PLANS
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- P-6 PLUMBING DETAILS AND SCHEDULES
- PROCESS STRUCTURE
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 - P-8 GRIT FACILITIES, DIGESTERS, THICK. & PRIMARY SET. TKS. - LOWER PLAN
 - P-9 OXYGEN GENERATION & PRIMARY SETTLING TANKS - UPPER PLAN
 - P-10 OXYGEN GENERATION & PRIMARY SETTLING TANKS - LOWER PLAN
 - P-11 FIRST AND SECOND STAGE AERATION TANKS - UPPER PLAN
 - P-12 FIRST AND SECOND STAGE AERATION TANKS - LOWER PLAN
 - P-13 GALLERY NOS. 5, 6 & 7, 1ST & 2ND STAGE SET. TKS. & CHLOR. - UPPER PLAN
 - P-14 GALLERY NOS. 5, 6 & 7, 1ST & 2ND STAGE SET. TKS. & CHLOR. - LOWER PLAN
 - P-15 ENTRANCE STRUCTURE - GALLERY NO. 5
 - P-16 GRIT BUILDING
 - P-17 CHLORINE BUILDING AND LIME BIN STORAGE

ALL CONTRACTORS ARE ISSUED A COMPLETE SET OF CONTRACT DRAWINGS. WHILE EVERY EFFORT HAS BEEN MADE TO CONCENTRATE THE WORK OF TRADES ON SPECIFIC SHEETS, AND LABELED APPROPRIATELY, THERE ARE NECESSARILY INSTANCES WHERE WORK IS SHOWN ON OR CROSS REFERENCED TO OTHER DRAWINGS. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO REVIEW ALL DRAWINGS AND COORDINATE HIS WORK WITH OTHERS.

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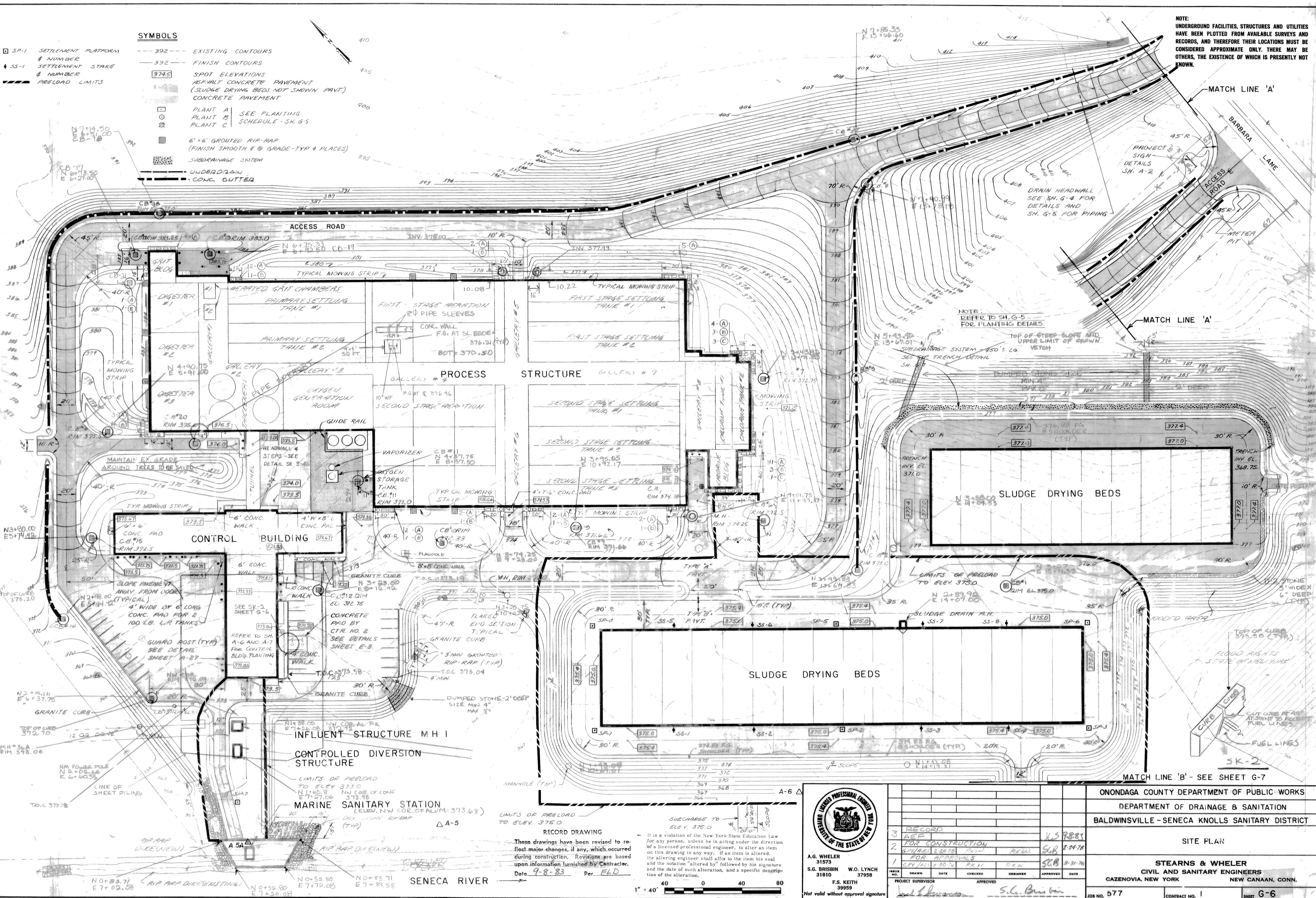
It is a violation of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter an item on this drawing in any way. If an item is altered, the altering engineer shall affix to the item his seal and the notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.

		ONONDAGA COUNTY, NEW YORK			
		DEPARTMENT OF DRAINAGE & SANITATION			
		BALDWINVILLE-SENECA KNOLLS SANITARY DISTRICT			
		LIST OF DRAWINGS			
		Stearns & Wheeler CIVIL AND SANITARY ENGINEERS CAZENOVIA, NEW YORK DARIEN, CONNECTICUT			
		JOB NO. 577		CONTRACT NO. 1, 2, 3, 4 SHEET G-1	
3	RECORD			JLS	9/8/83
2	FOR CONSTRUCTION			SOB	2-24-78
1	FOR APPROVALS			SOB	9/31/76
NO.	DRAWN	DATE	CHECKED	DESIGNER	APPROVED

- SYMBOLS**
- SP-1 SETTLEMENT PLATFORM & NUMBER
 - SS-1 SETTLEMENT STAKE & NUMBER
 - PRELOAD LIMITS

- 392 --- EXISTING CONTOURS
- 392 --- FINISH CONTOURS
- 374.5 SPOT ELEVATIONS
- ASPHALT CONCRETE PAVEMENT (SLUDGE DRYING BEDS NOT SHOWN PAVT)
- CONCRETE PAVEMENT
- PLANT A SEE PLANTING SCHEDULE - SH. G-5
- PLANT B
- PLANT C
- 6'x6' GROUTED RIP-RAP (FINISH SMOOTH @ GRADE-TYP 4 PLACES)
- SUBDRAINAGE SYSTEM
- UNDERDRAIN
- CONC. GUTTER

NOTE: UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.



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REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW YORK

A.G. WHEELER
 31573
 S.G. BRISBIN
 31810

W.O. LYNCH
 37958
 F.S. KEITH
 3985

Not valid without approval signature

NO.	DATE	CHECKED	DESIGNER	APPROVED	DATE
3	RECORD				
2	FOR CONSTRUCTION				8-24-78
1	FOR APPROVALS				9-21-76

ONONDAGA COUNTY DEPARTMENT OF PUBLIC WORKS
 DEPARTMENT OF DRAINAGE & SANITATION
 BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT

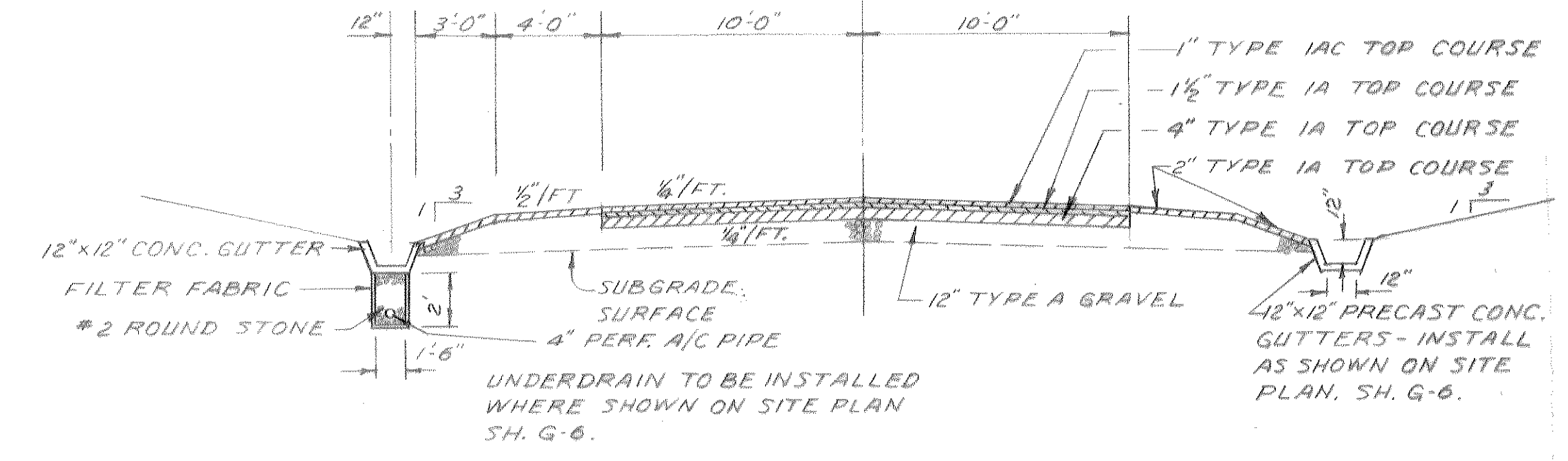
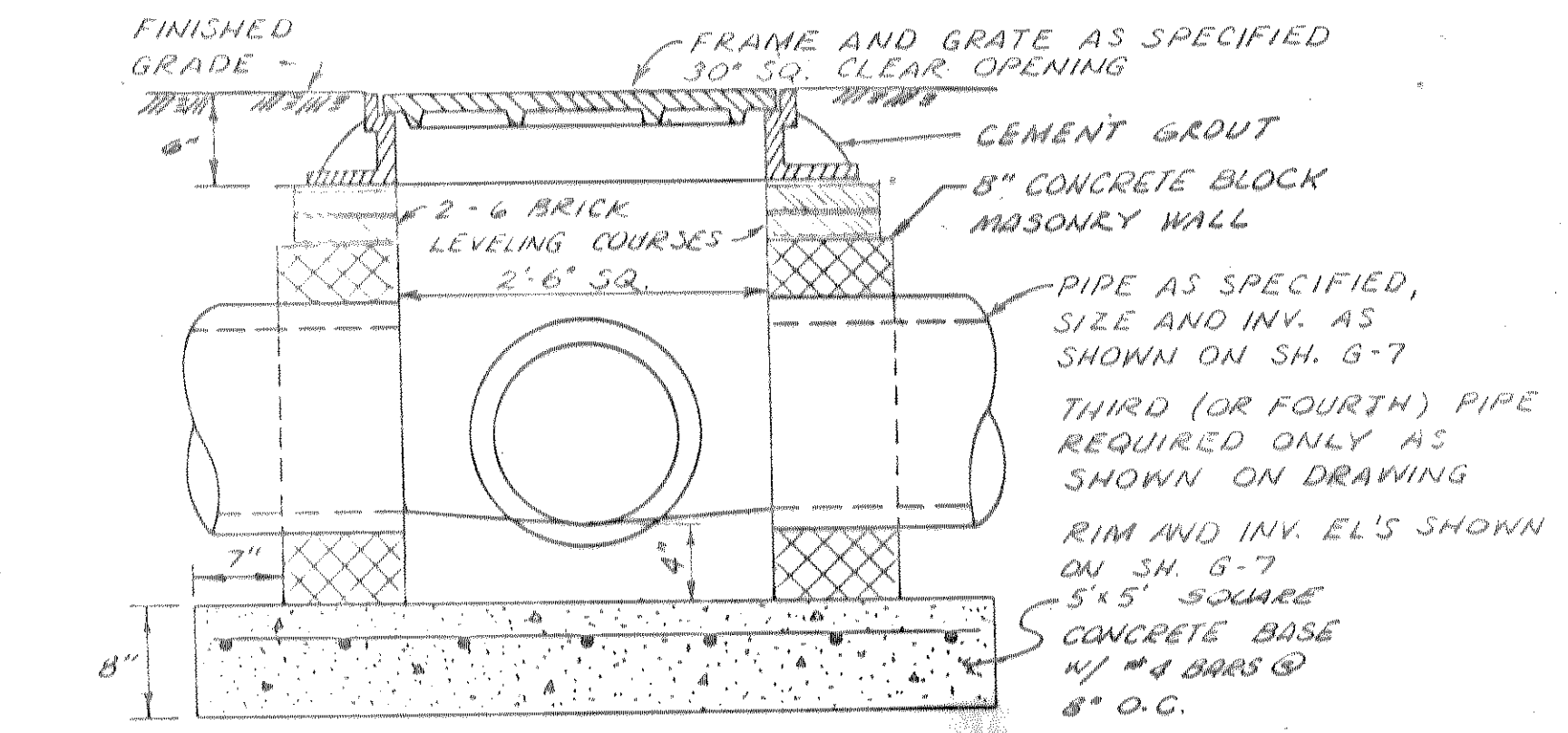
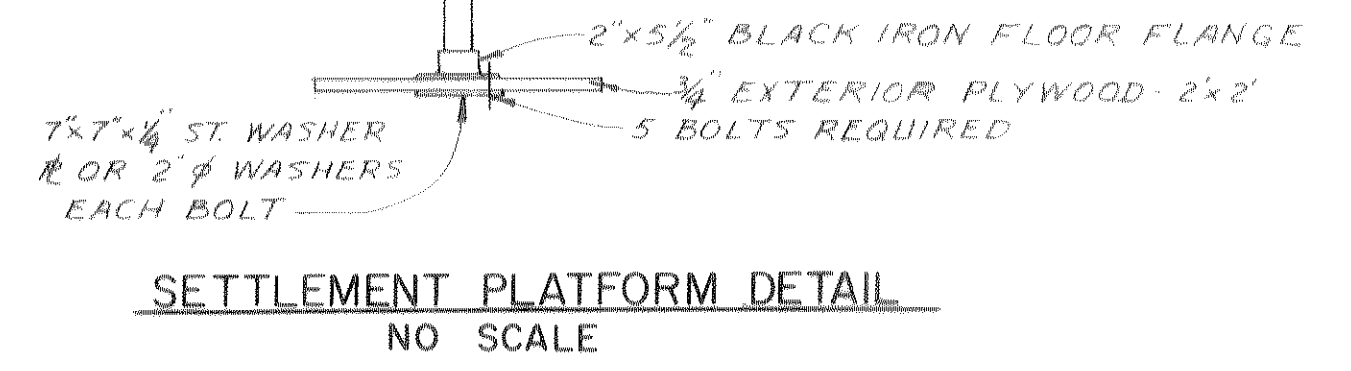
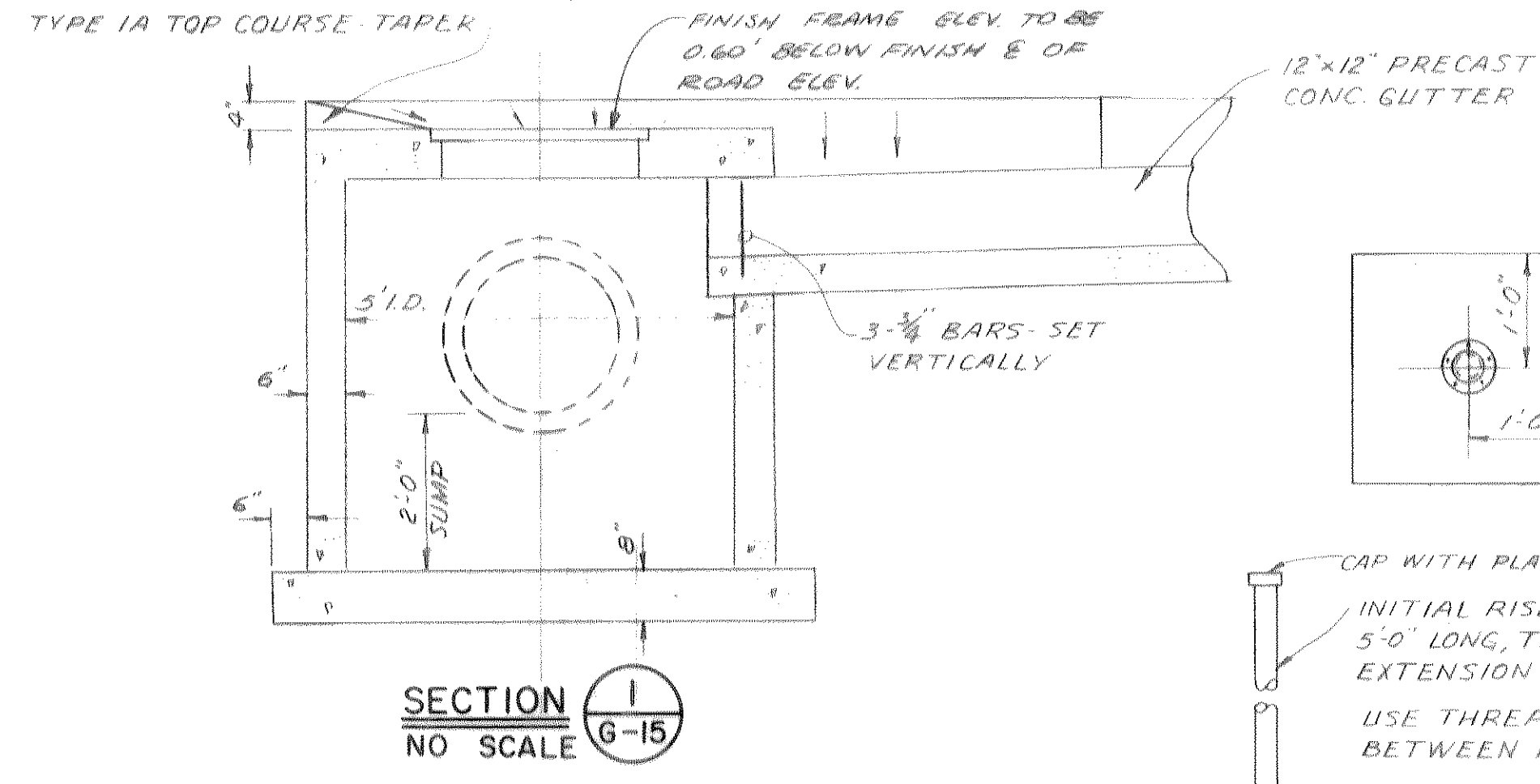
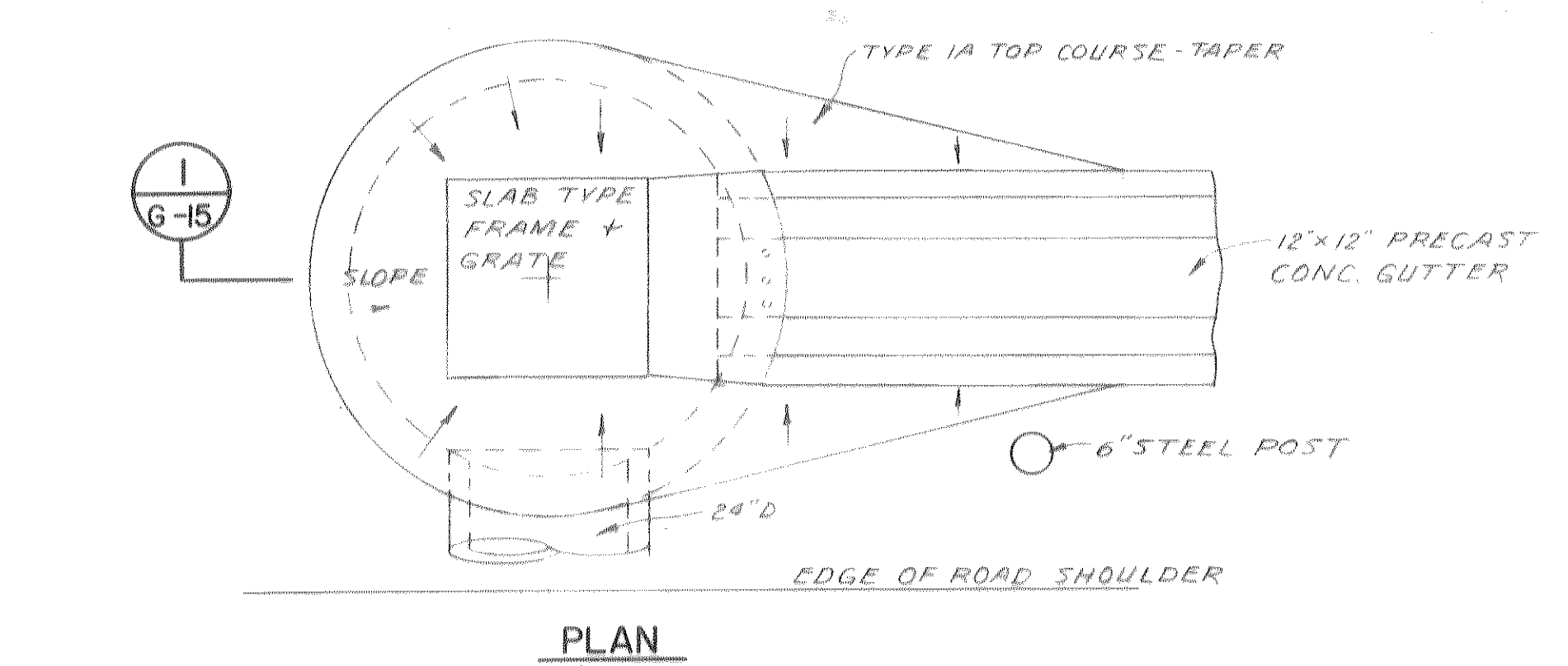
SITE PLAN

STEARNS & WHEELER
 CIVIL AND SANITARY ENGINEERS
 CAZENOVIA, NEW YORK
 NEW CANAAN, CONN.

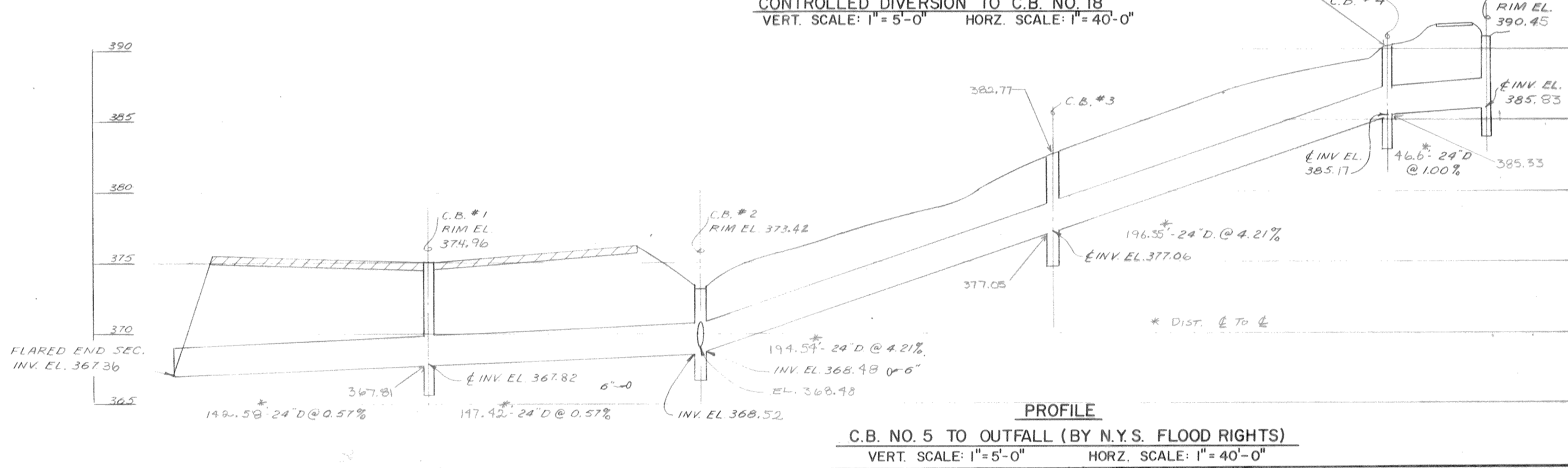
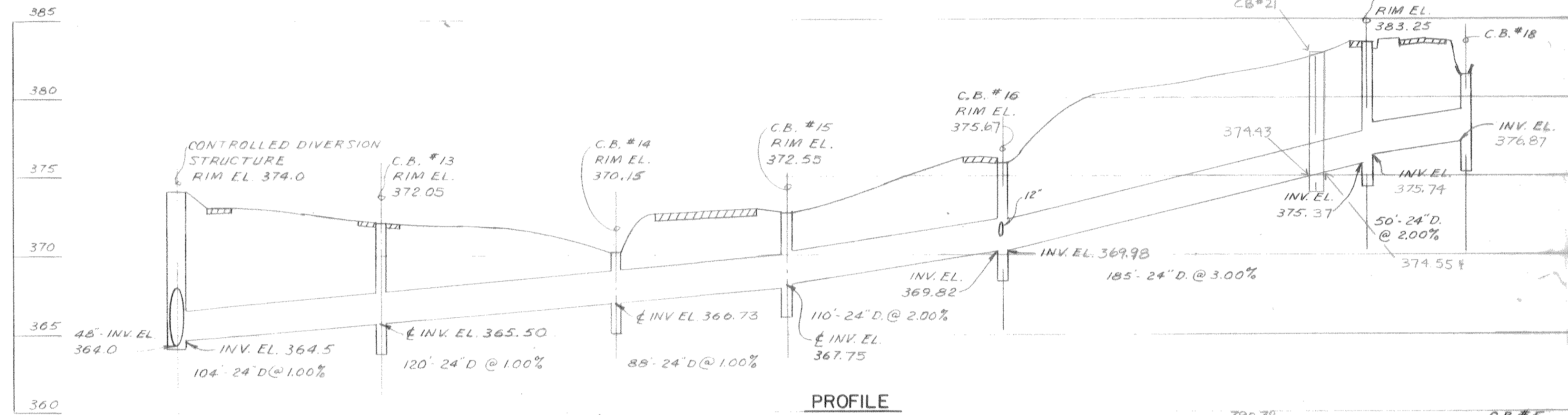
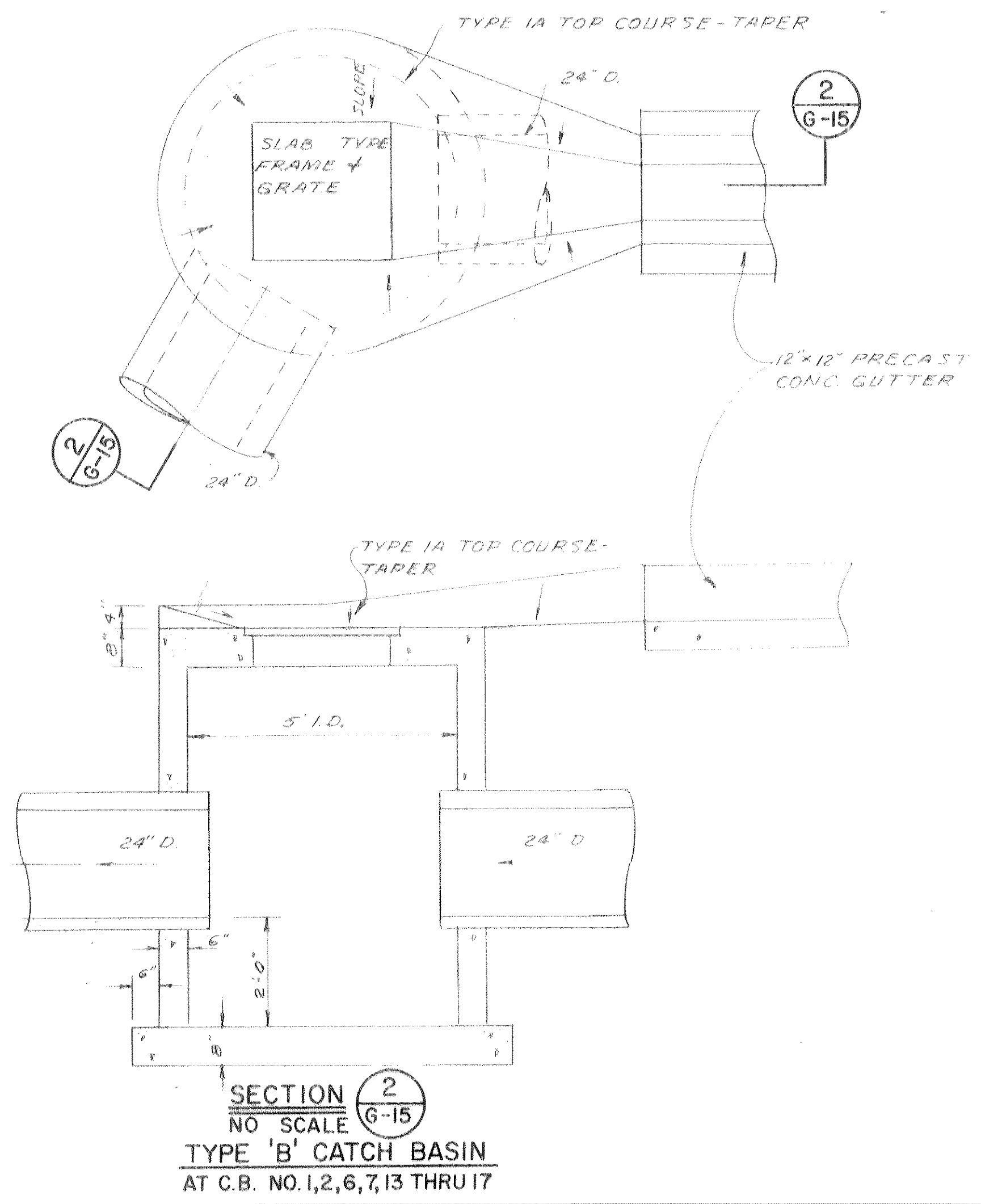
JOB NO. 577 CONTRACT NO. 1 SHEET G-6



NOTE:
UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES
HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND
RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE
CONSIDERED APPROXIMATE ONLY. THERE MAY BE
OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT
KNOWN.



NOTES:
1- PAVEMENT WIDTH AND SLOPES VARY PER SITE PLAN (SH. G-6).
2- FURNISH AND INSTALL TYPE 'A' PAVEMENT FOR ACCESS ROAD AND ALL OTHER PAVEMENTS EXCEPT SLUDGE DRYING BEDS AREA, ALSO SEE SPECIFICATIONS, SECTION 2H.



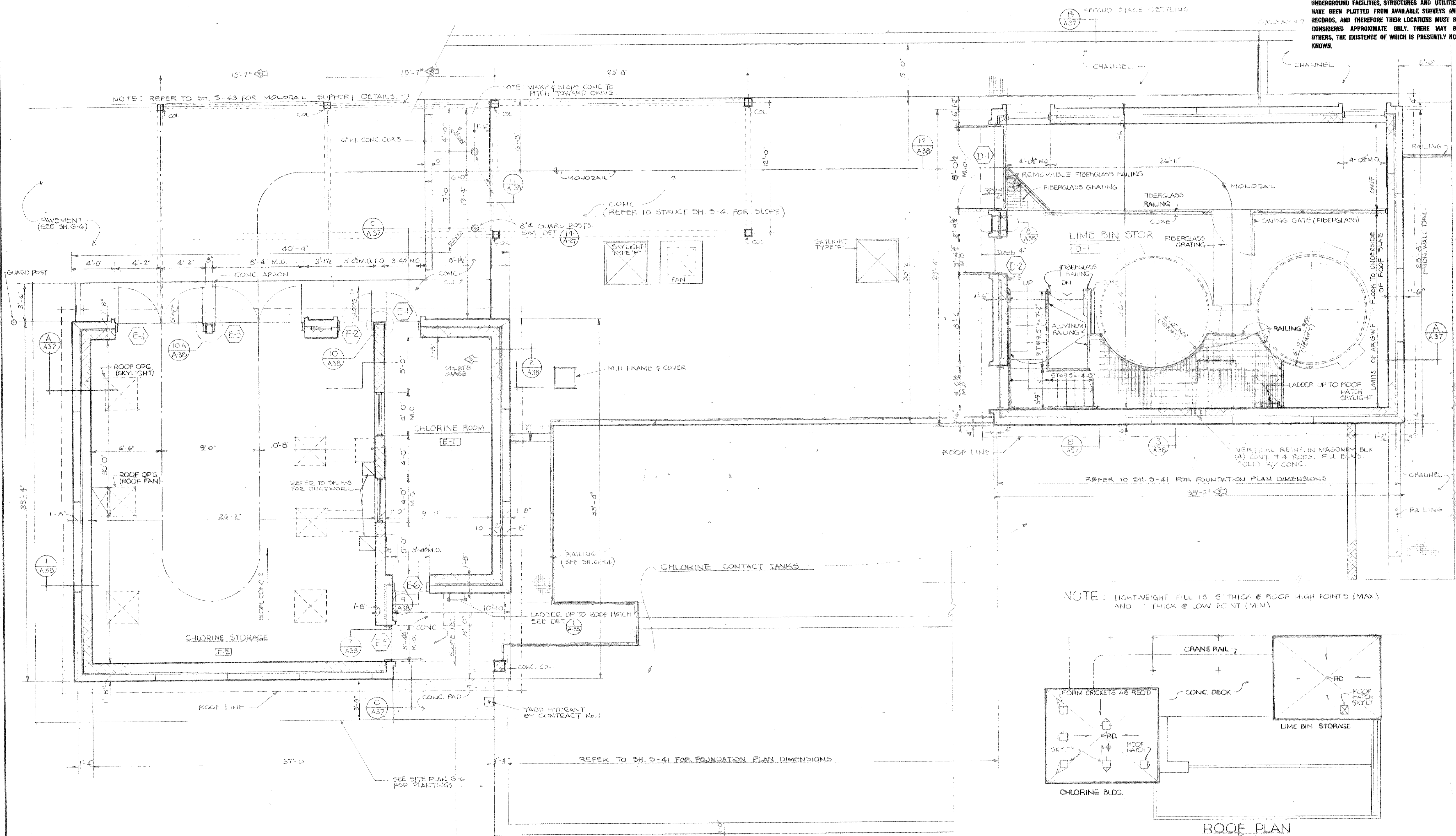
RECORD DRAWING
These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information furnished by Contractor.
Date: 9-8-83 Per: FLD

It is a violation of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter an item on this drawing in any way. If an item is altered, the altering engineer shall affix to the item his seal and the notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.

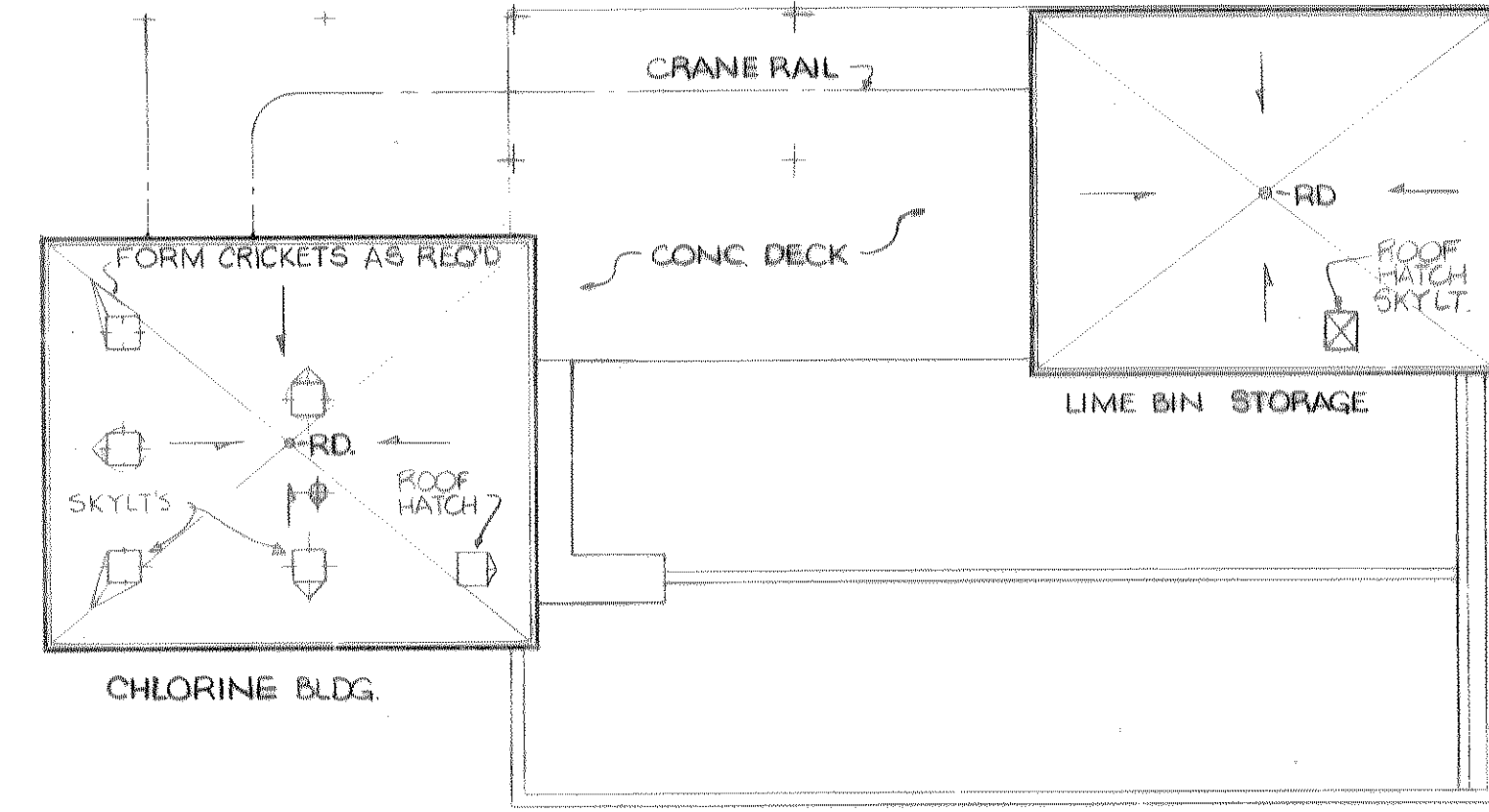
3		RECORD		
2		FOR CONSTRUCTION		VLS 9-8-83
1		FOR APPROVALS		
1		A.F.W. 2-3-78	R.K.W. 2/7/78	
1		A.F.W. 2-3-78	R.K.W. 2/7/78	
1		DATE	CHECKED	DESIGNER
1		DATE	CHECKED	DESIGNER
1		DATE	CHECKED	DESIGNER

ONONDAGA COUNTY, NEW YORK
DEPARTMENT OF DRAINAGE & SANITATION
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT
DETAILS - ROAD AND STORM SEWER
Stearns & Wheeler
CIVIL AND SANITARY ENGINEERS
CAZENOVIA, NEW YORK
NEW CANAAN, CONNECTICUT
JOB NO. 577 CONTRACT NO. 1 SHEET G-15

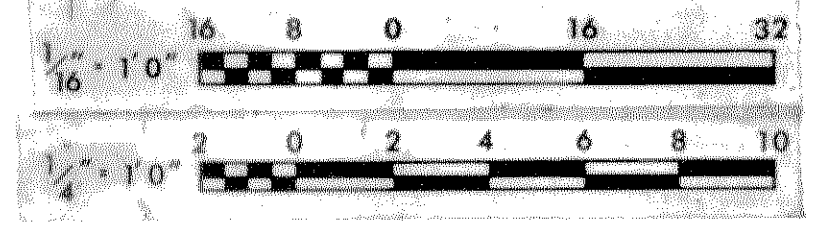
NOTE: UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.



NOTE: LIGHTWEIGHT FILL IS 5" THICK @ ROOF HIGH POINTS (MAX.) AND 1" THICK @ LOW POINT (MIN.)



ROOF PLAN
SCALE: 1/8" = 1'-0"



RECORD DRAWING
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Date: 9-8-83 Per: FLD

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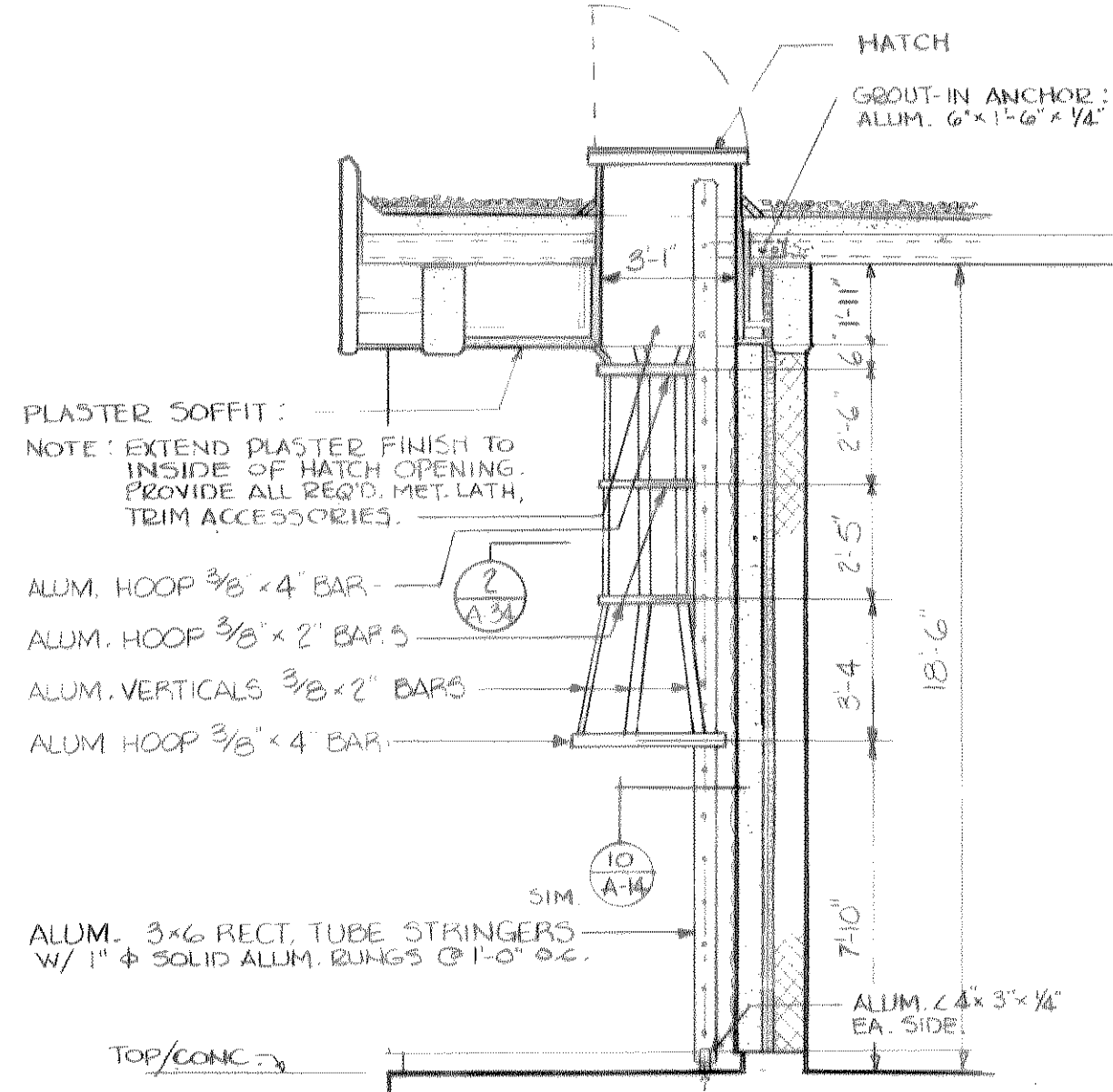
A.G. WHEELER
31573
S.G. BRISBIN W.O. LYNCH
31810 37958
F.S. KEITH
39959
Not valid without approval signature

NO.	DATE	BY	CHECKED	DESIGNER	APPROVED	DATE
3	RECORD	ASB	SFM		LS	9/8/83
2	APPROVED FOR CONSTRUCTION	VA	GSD	FAR	SGR	9/24/78
1	FOR APPROVALS	GSD, PMS	GSD	FAR	S.B.	9/31/76

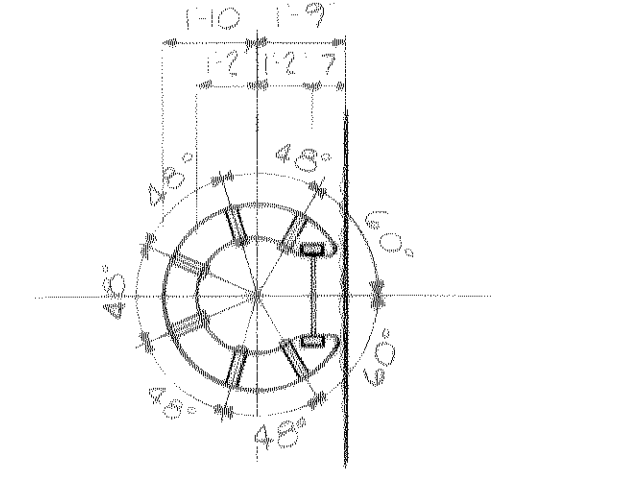
ONONDAGA COUNTY, NEW YORK	
DEPARTMENT OF DRAINAGE & SANITATION	
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT	
PROCESS STRUCTURE CHLORINE BUILDING & LIME BIN STORAGE GRADE LEVEL PLAN	
STEARNS & WHEELER CIVIL AND SANITARY ENGINEERS CAZENAVE, NEW YORK NEW CANAAN, CONN.	
JOB NO. 577	CONTRACT NO. 1
SHEET A-34	

NOTE: REFER TO SH. S-44 FOR CRANE RAIL FRAMING REQMT'S.

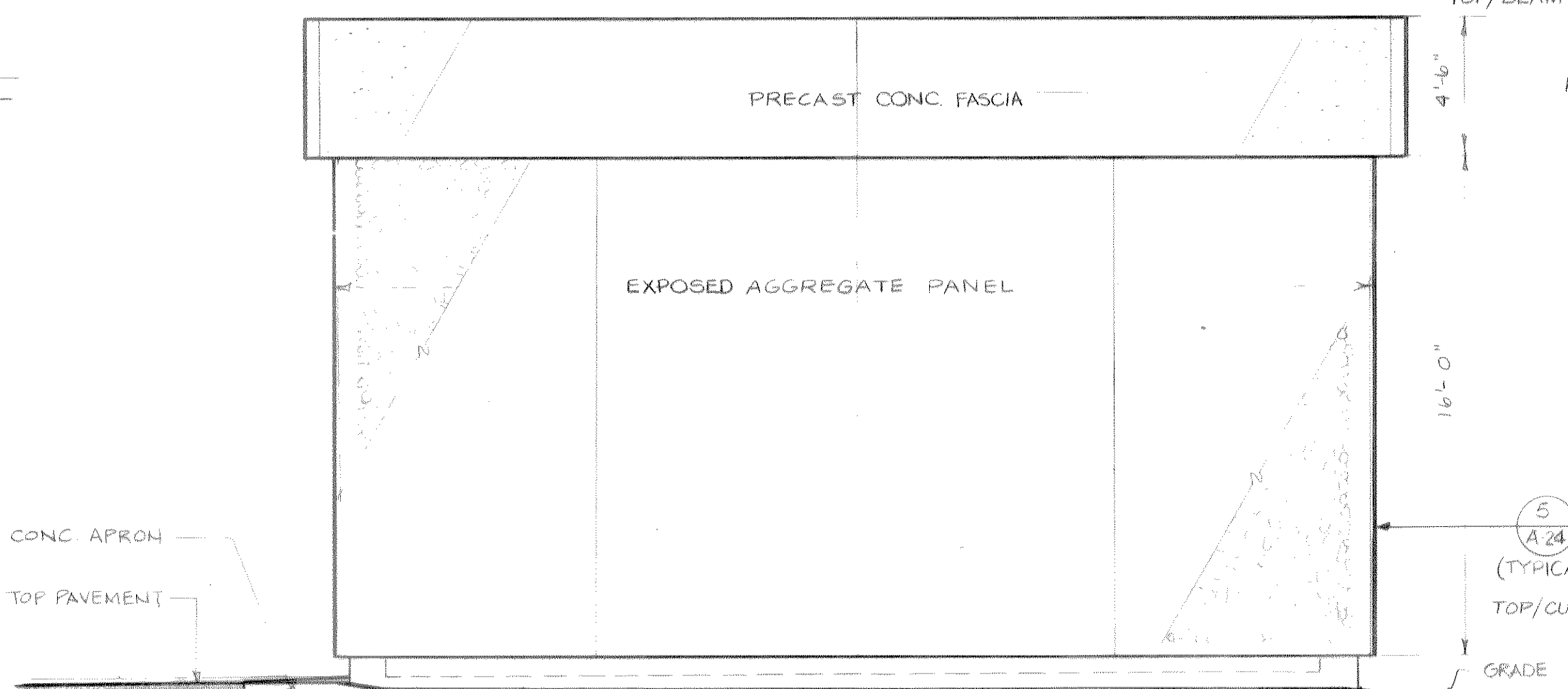
NOTE: UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.



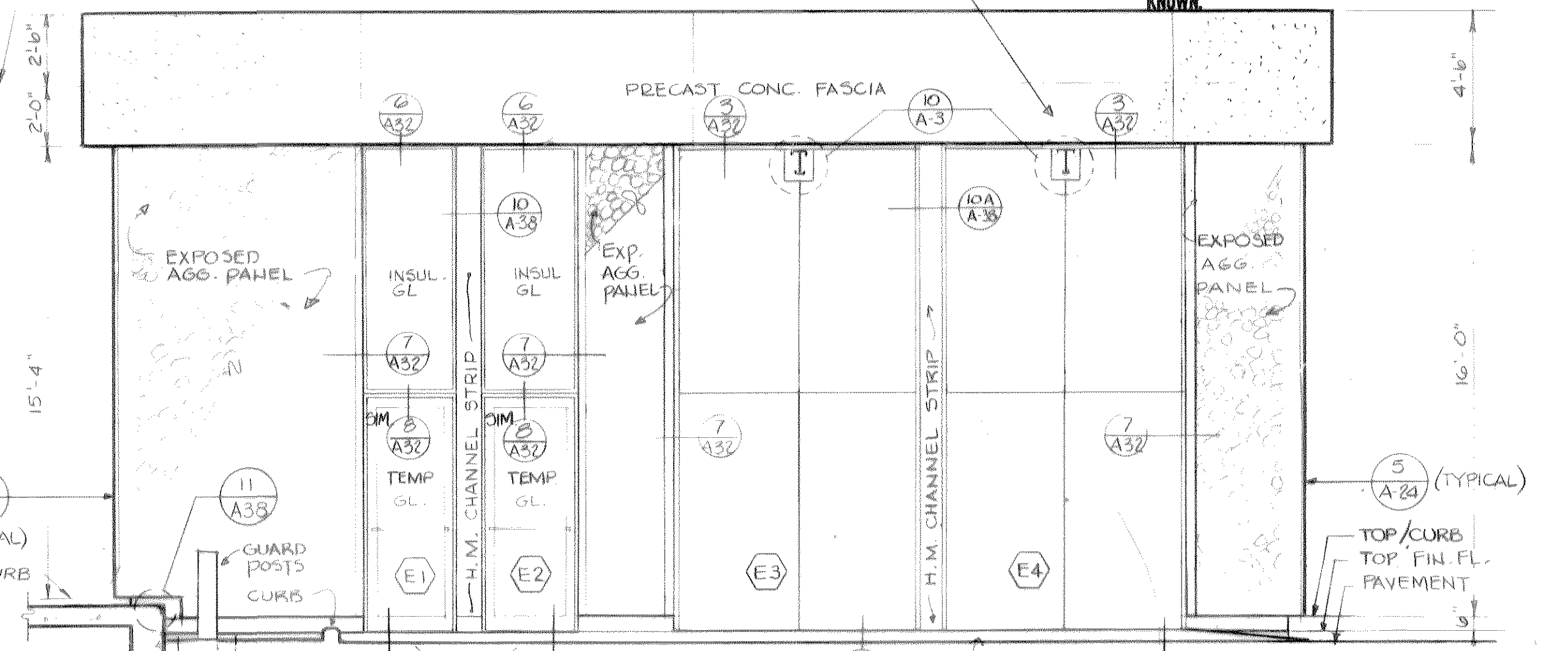
LADDER - SECT. DET 1
SCALE: 1/4" = 1'-0"
A-34



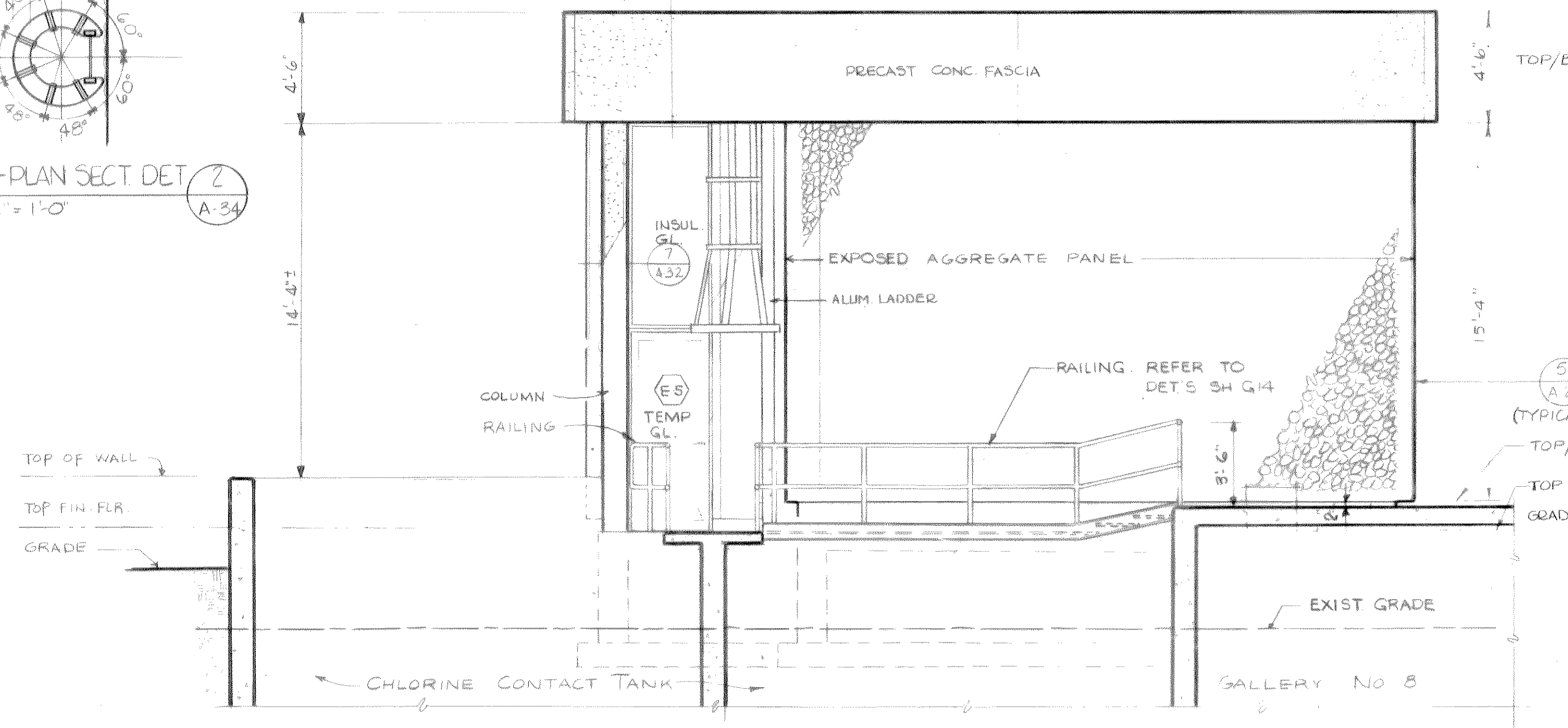
LADDER - PLAN SECT. DET 2
SCALE: 1/4" = 1'-0"
A-34



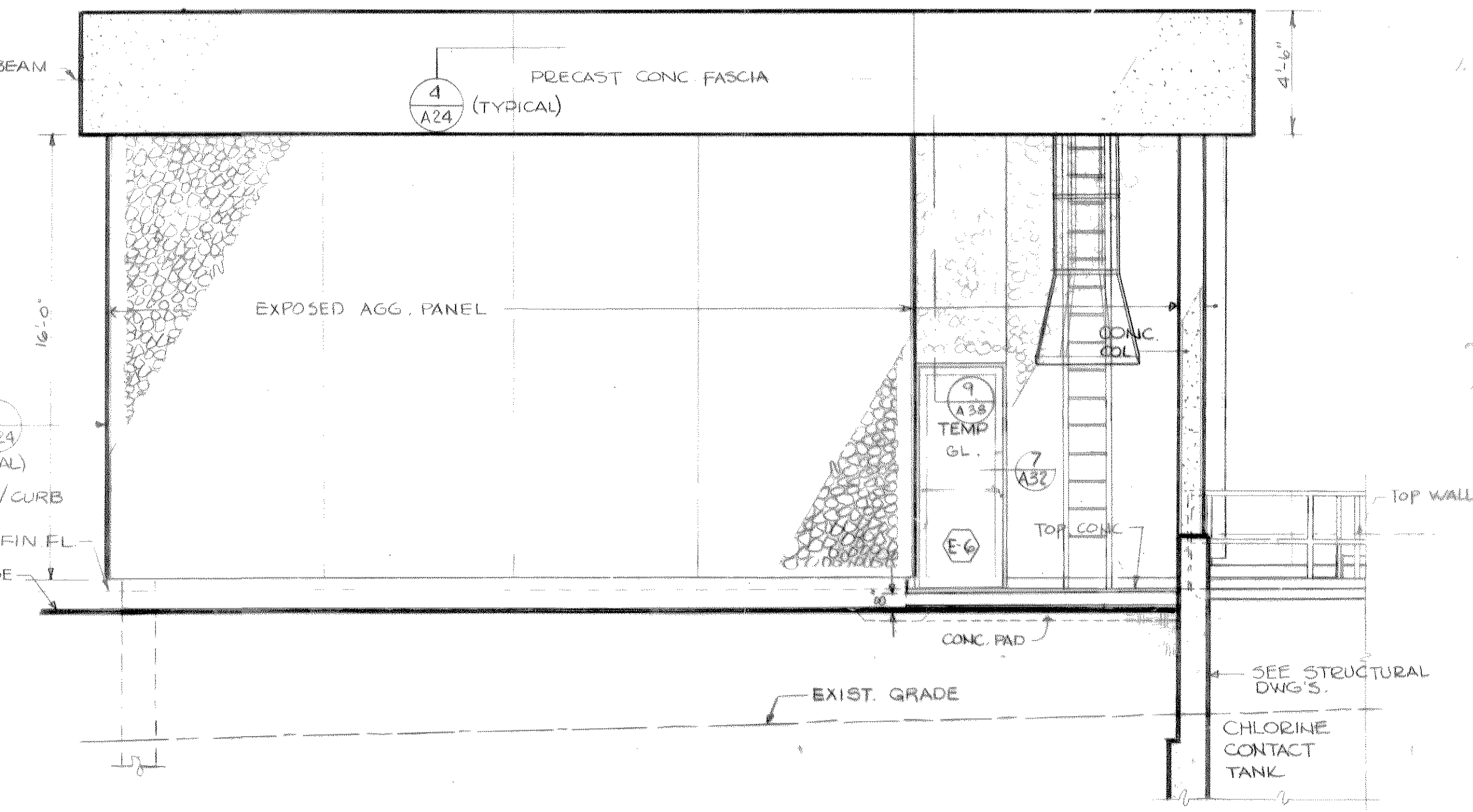
WEST ELEVATION



NORTH ELEVATION



EAST ELEVATION



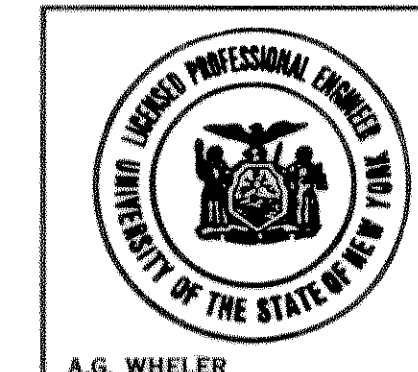
SOUTH ELEVATION

RECORD DRAWING
These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information furnished by Contractor.
Date 9-8-83 Per FLD

PRECAST AGGREGATE PANEL SUPPLIER NOTE: CO-ORDINATE PLACEMENT OF ALL ELECTRICAL FIXTURES & OUTLETS IN PRECAST W/ ELECTRICAL DWG'S.



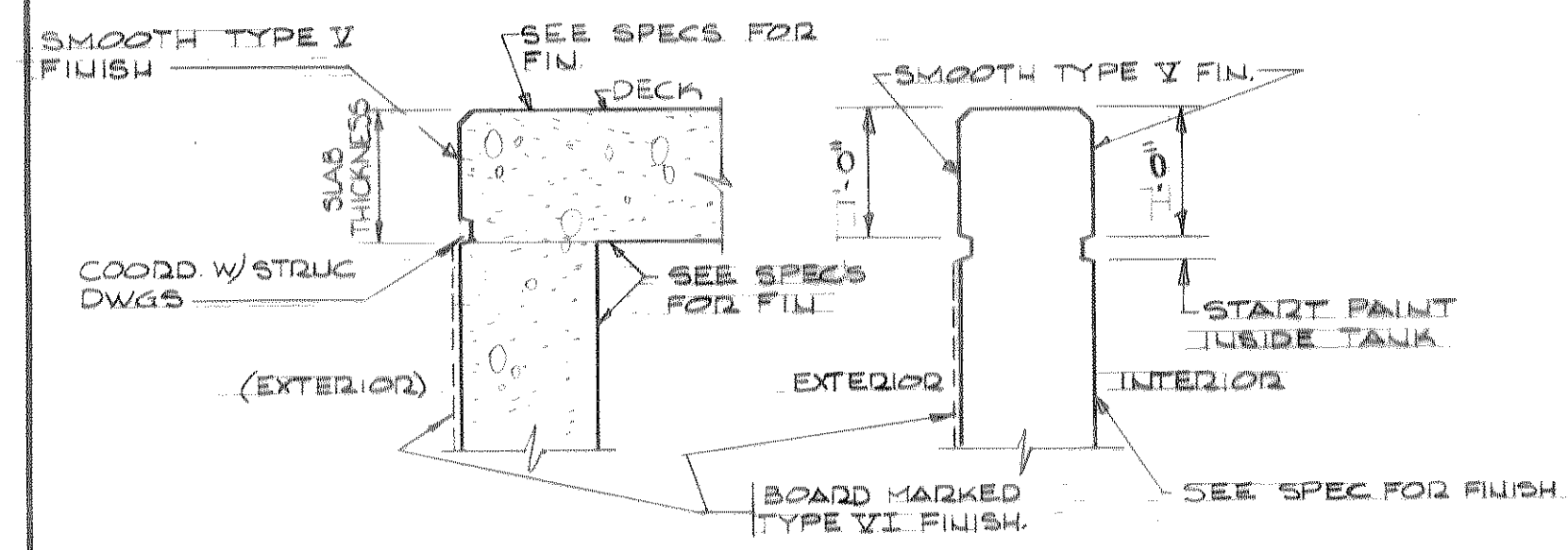
It is a violation of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter an item on this drawing in any way. If an item is altered, the altering engineer shall affix to the item his seal and notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.



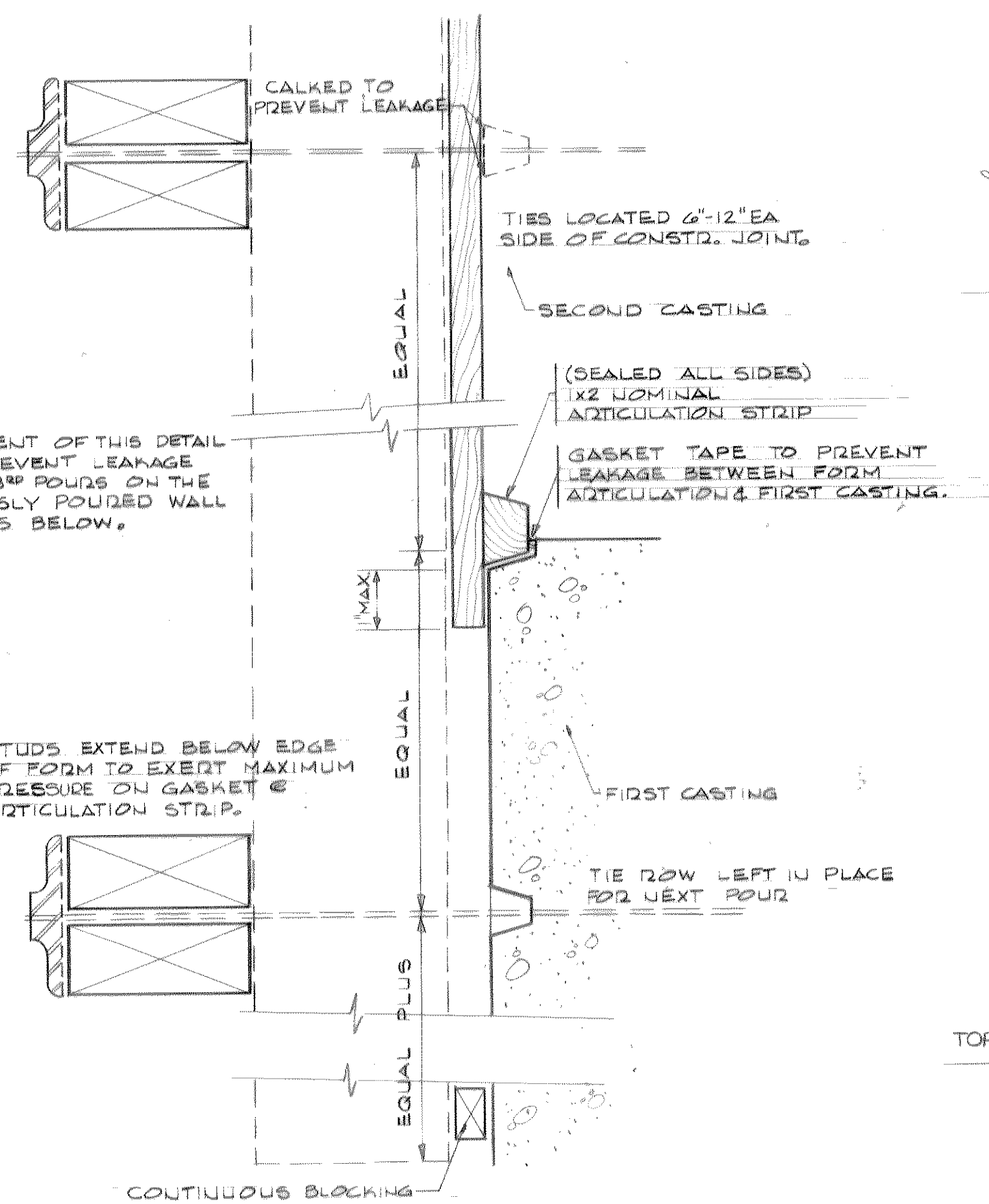
A.G. WHEELER
31573
S.G. BRISBIN W.O. LYNCH
31810 37958
F.S. KEITH
39958
Not valid without approval signature

3	RECORD						
2	APPROVED FOR CONSTRUCTION	VA	2/24/78	GSD	BAR	S&B	2/24/78
1	FOR APPROVALS	PMS, VA	3/30/76	GSD	BAR	S&B	3/31/76
	DRAWN	DATE	CHECKED	DESIGNER	APPROVED	DATE	
	PROJECT SUPERVISOR			APPROVED			

ONONDAGA COUNTY, NEW YORK	
DEPARTMENT OF DRAINAGE & SANITATION	
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT	
PROCESS STRUCTURE CHLORINE BUILDING ELEVATIONS	
STEARNS & WHEELER CIVIL AND SANITARY ENGINEERS CAZENOVIA, NEW YORK NEW CANAAN, CONN.	
JOB NO. 577	CONTRACT NO. 1
SHEET A-35	

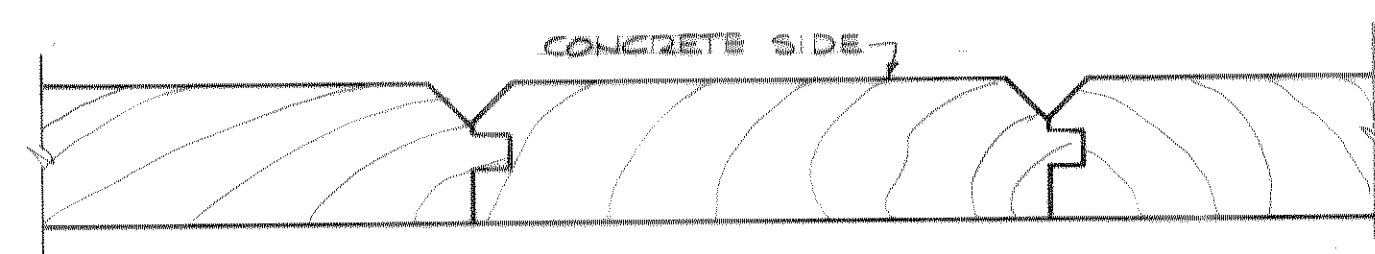


ARTICULATION STRIPS SECTION DETAIL
NOTE: FIRST STRIP SHALL START 12" DOWN FROM TOP OF WALL WHICH HAS A SMOOTH RUBBED TYPE VI FINISH. START TYPE VI BOARD MARKED FINISH JUST BELOW FIRST STRIP. NOTE THAT DEPENDING ON HEIGHT OF EXPOSED WALL, OTHER ARTICULATION STRIPS OCCUR @ 8'-0" INTERVALS (OR AS SHOWN) DOWN THE WALL. OTHERWISE FIRST STRIP SHALL OCCUR @ THE BOTTOM OF THE DECK POUR.

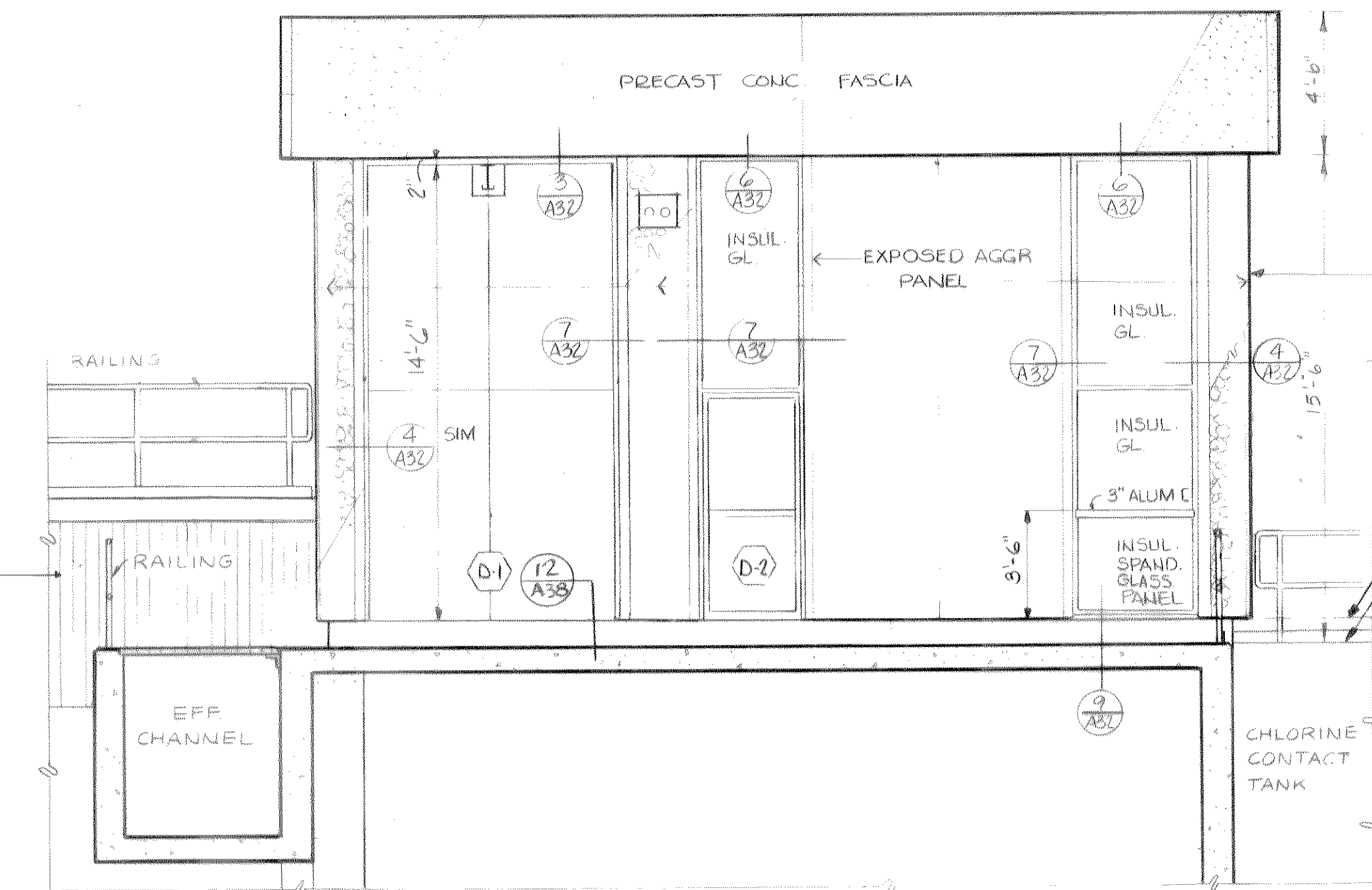


NOTE:
THE INTENT OF THIS DETAIL IS TO PREVENT LEAKAGE OF 2ND & 3RD POURS ON THE PREVIOUSLY Poured WALL SURFACES BELOW.

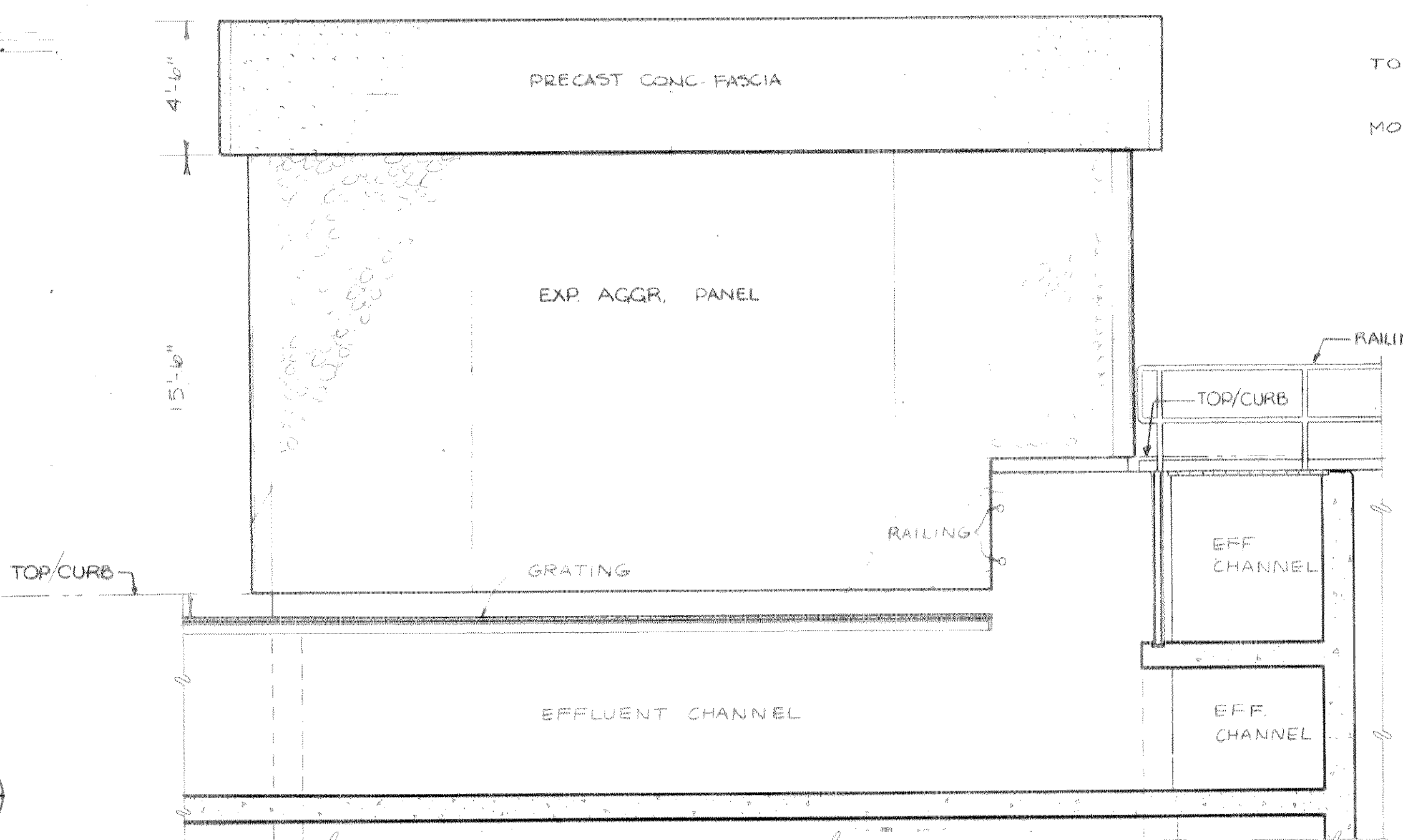
SECTION-CONSTRUCTION JOINT W/ ARTICULATION



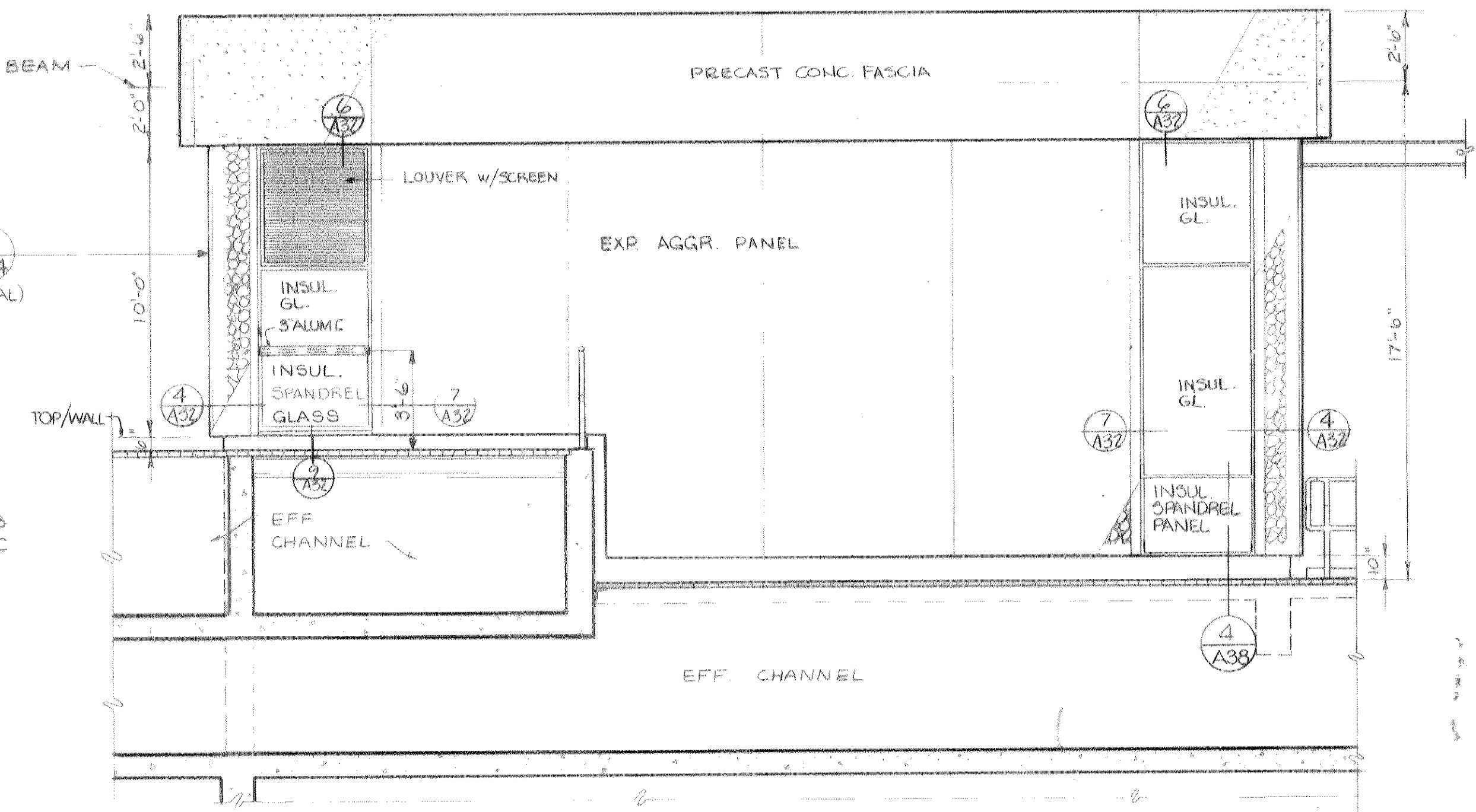
TYPICAL FORM-LINED FOR TYPE VI, BOARD-MARKED FIN.



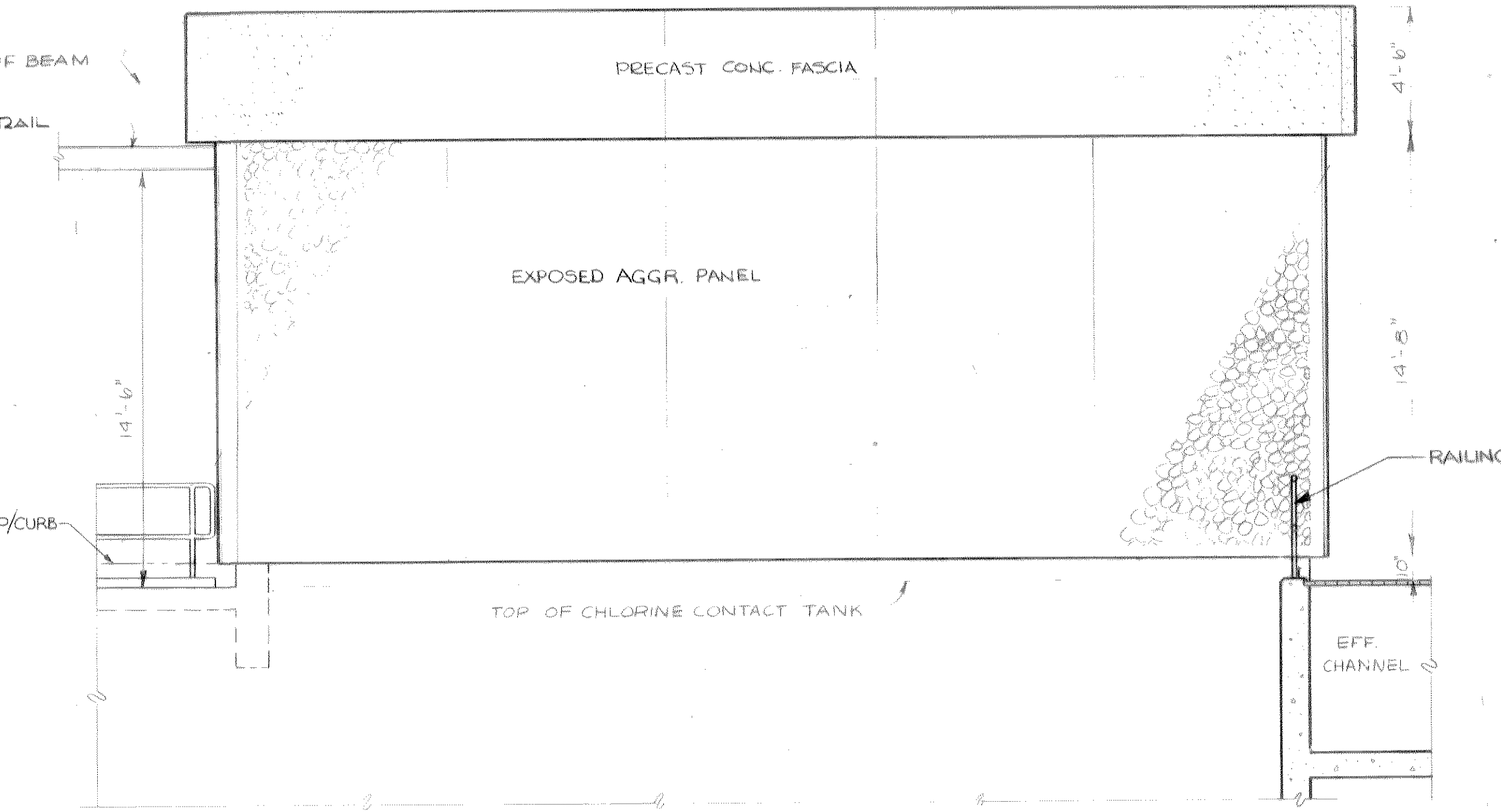
WEST ELEVATION



EAST ELEVATION



NORTH ELEVATION



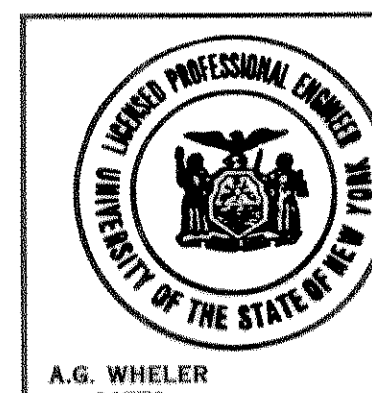
SOUTH ELEVATION

RECORD DRAWING
These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information furnished by Contractor.
Date: 7-8-83 Per: ELD

PRECAST AGGREGATE PANEL SUPPLIER NOTE: COORDINATE PLACEMENT OF ALL ELECTRICAL FIXTURES & OUTLETS IN PRECAST W/ ELECTRICAL DWGS.



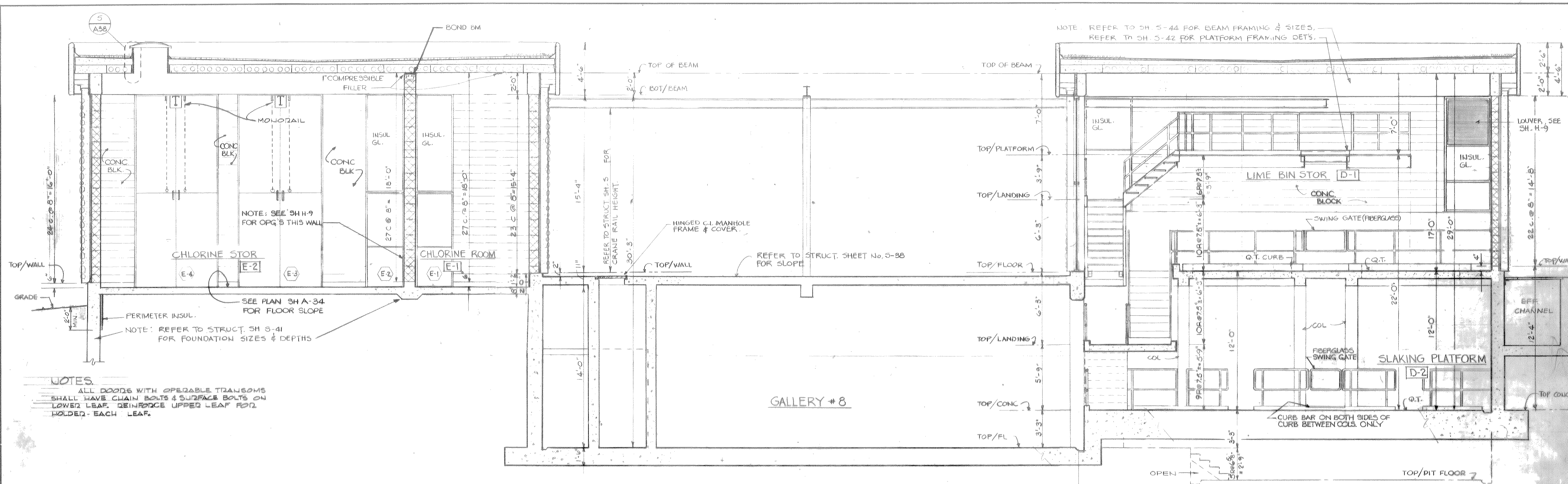
It is a violation of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to alter an item on this drawing in any way, or to cause it to be altered, the altering engineer shall affix his signature to the alteration, and a specific description of the alteration.



A.G. WHEELER
31573
S.G. BRISBIN 31810
W.O. LYNCH 37958
F.S. KEITH 39959

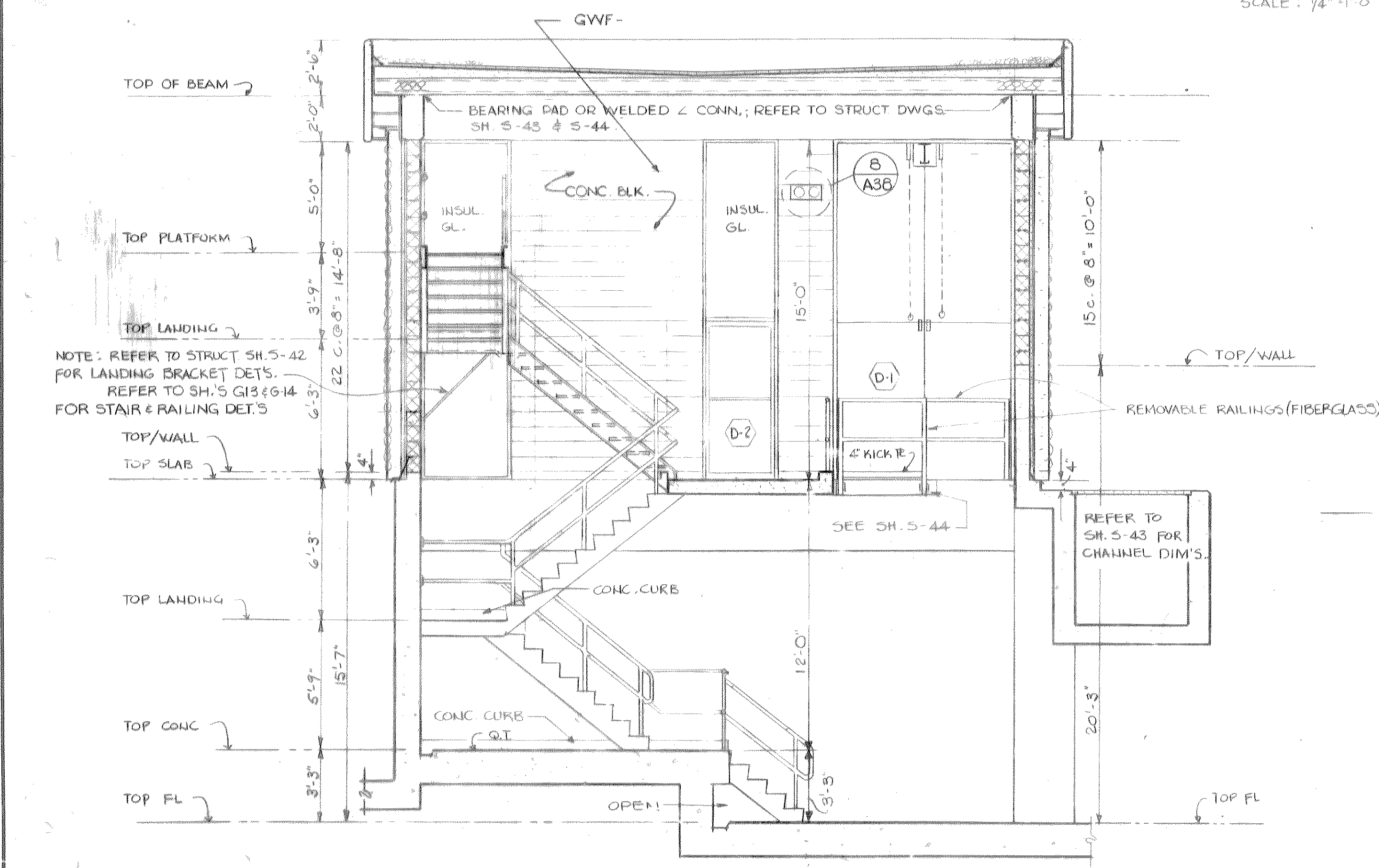
ISSUE NO.	DATE	DRAWN	CHECKED	DESIGNED	APPROVED
3	RECORD				
2	APPROVED FOR CONSTRUCTION				
1	FOR APPROVAL				

ONONDAGA COUNTY, NEW YORK		
DEPARTMENT OF DRAINAGE & SANITATION		
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT		
PROCESS STRUCTURE LIME BIN STORAGE ELEVATIONS		
STEARNS & WHEELER CIVIL AND SANITARY ENGINEERS CAZENOVIA, NEW YORK NEW CANAAN, CONN.		
JOB NO. 577	CONTRACT NO. 1	SHEET A-36

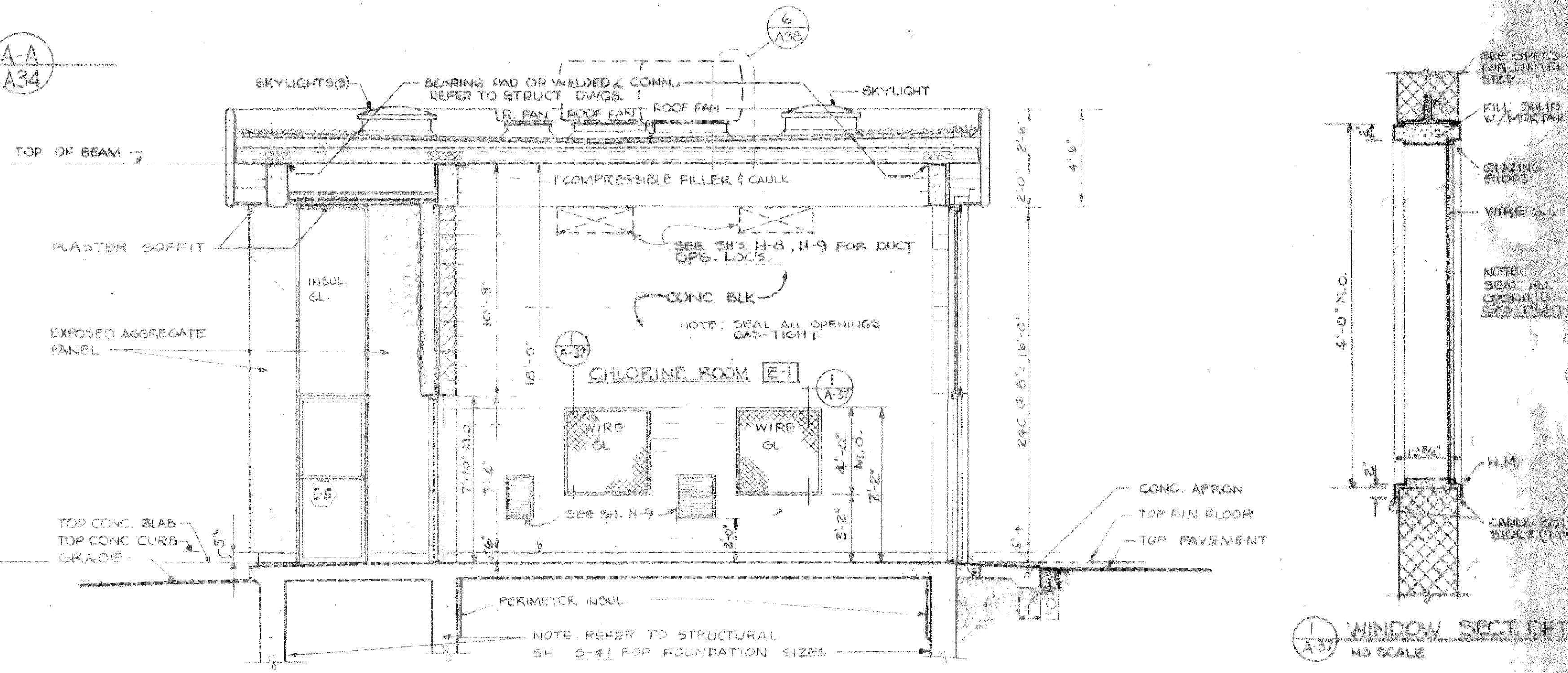


NOTES
 ALL DOORS WITH OPERABLE TRANSOMS SHALL HAVE CHAIN BOLTS & SURFACE BOLTS ON LOWER LEAF. REINFORCE UPPER LEAF FOR HOLDER. EACH LEAF.

SECTION A-A
 SCALE: 1/4" = 1'-0"



SECTION B-B
 SCALE: 1/4" = 1'-0"



SECTION C-C
 SCALE: 1/4" = 1'-0"

WINDOW SECT. DET. A-37
 NO SCALE



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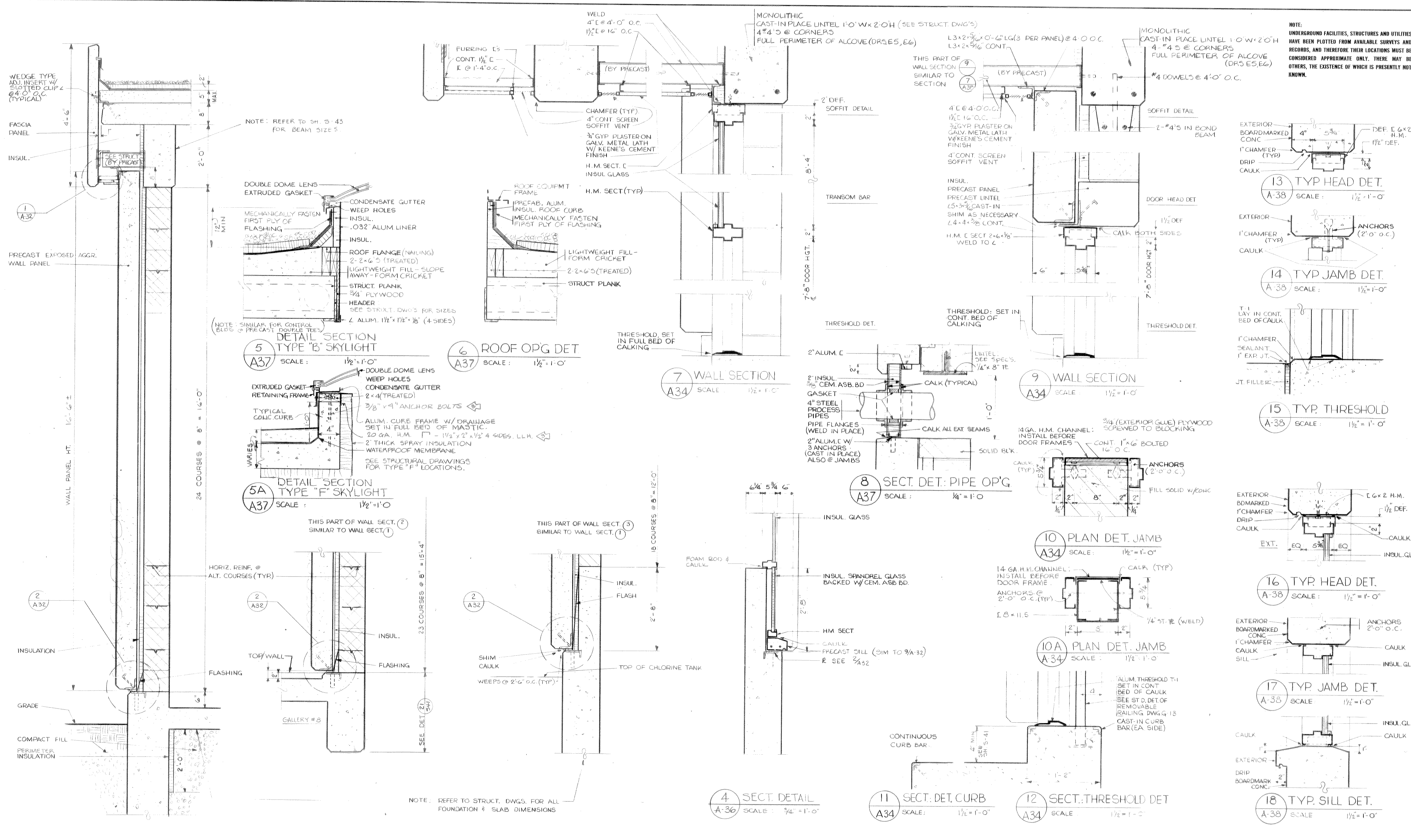
REGISTERED PROFESSIONAL ENGINEER
 STATE OF NEW YORK
 F.S. KEITH
 39959
 Not valid without approval signature

DATE	BY	FOR	APPROVED
3/24/78	W.A. GSD	FOR APPROVAL	S.G. BRISBIN
3/30/78	W.A. GSD	FOR APPROVAL	S.G. BRISBIN

ONONDAGA COUNTY, NEW YORK
 DEPARTMENT OF DRAINAGE & SANITATION
 BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT
 PROCESS STRUCTURE
 CHLORINE BUILDING & LIME BIN STORAGE
 BUILDING SECTIONS
 STEARNS & WHEELER
 CIVIL AND SANITARY ENGINEERS
 CAZENOVIA, NEW YORK
 NEW CANAAN, CONN.

JOB NO. 577
 CONTRACT NO. 1
 SHEET A-37

RECORD DRAWING
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 Date 9-8-83 Per. FLD



NOTE: UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.

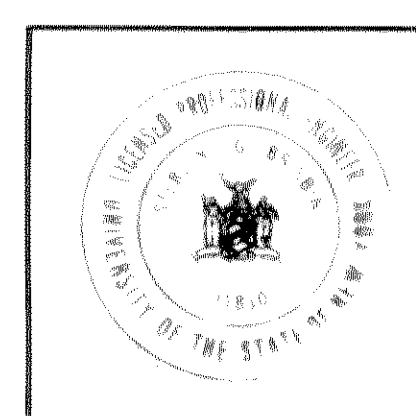
NOTE: REFER TO SH. S-43 FOR BEAM SIZES

NOTE: SIMILAR FOR CONTROL BLDG & PRECAST DOUBLE TEES

NOTE: REFER TO STRUCT. DWGS. FOR ALL FOUNDATION & SLAB DIMENSIONS

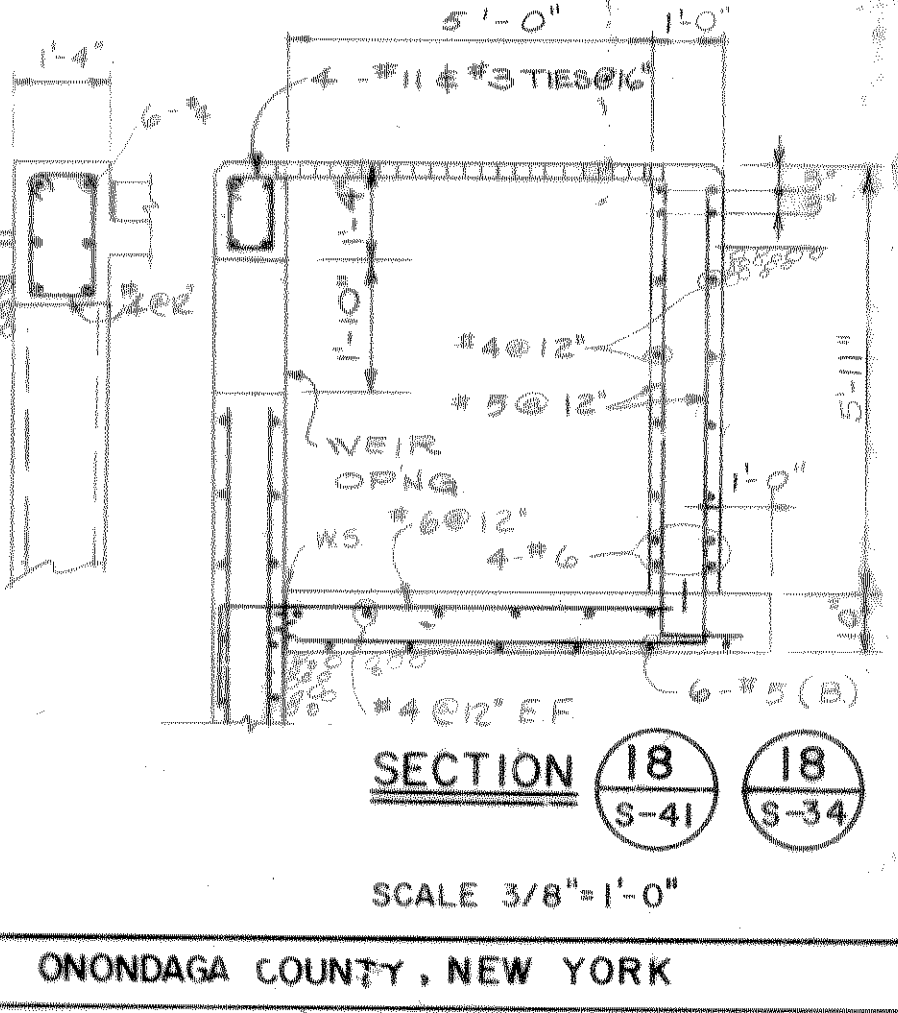
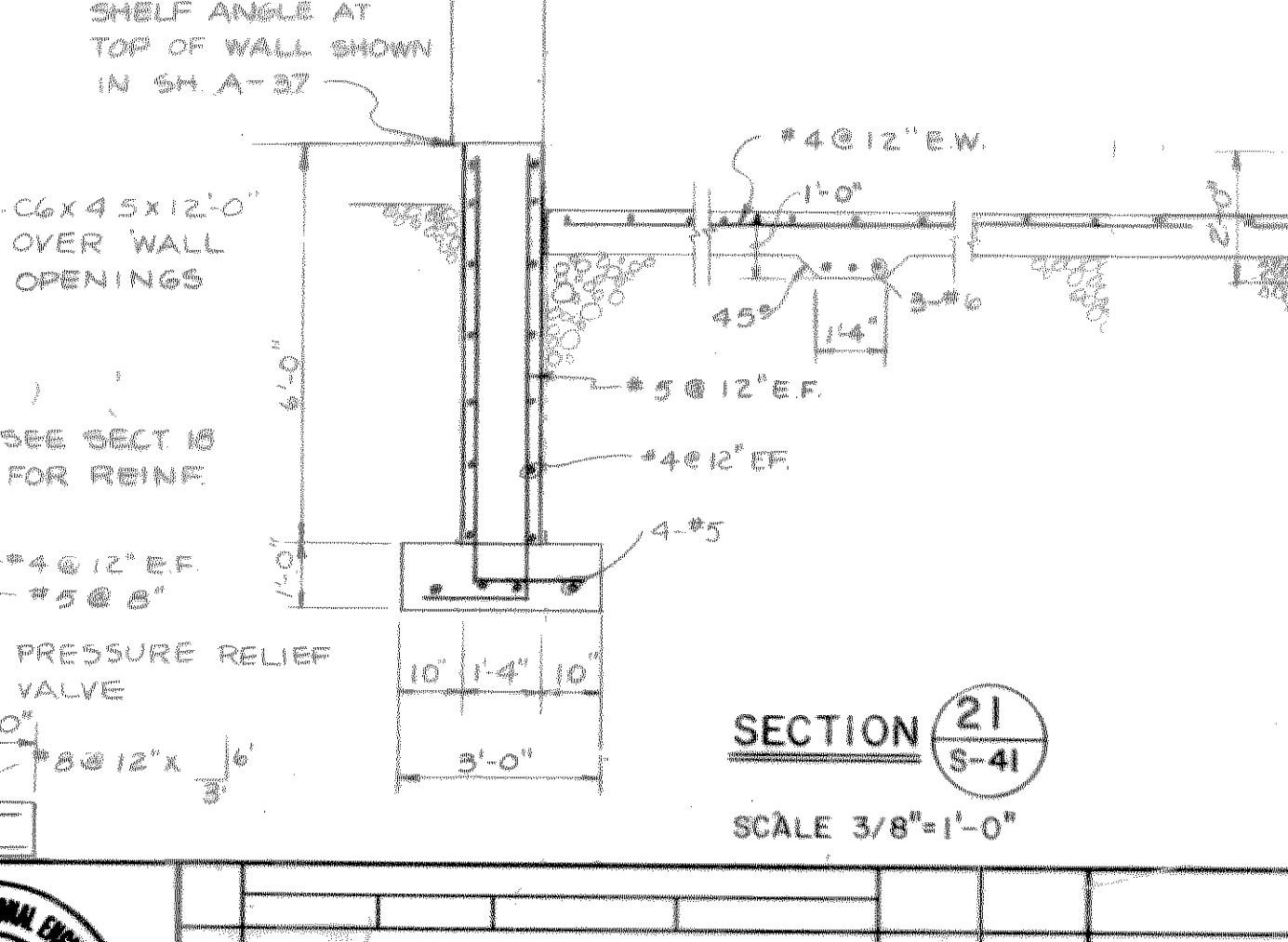
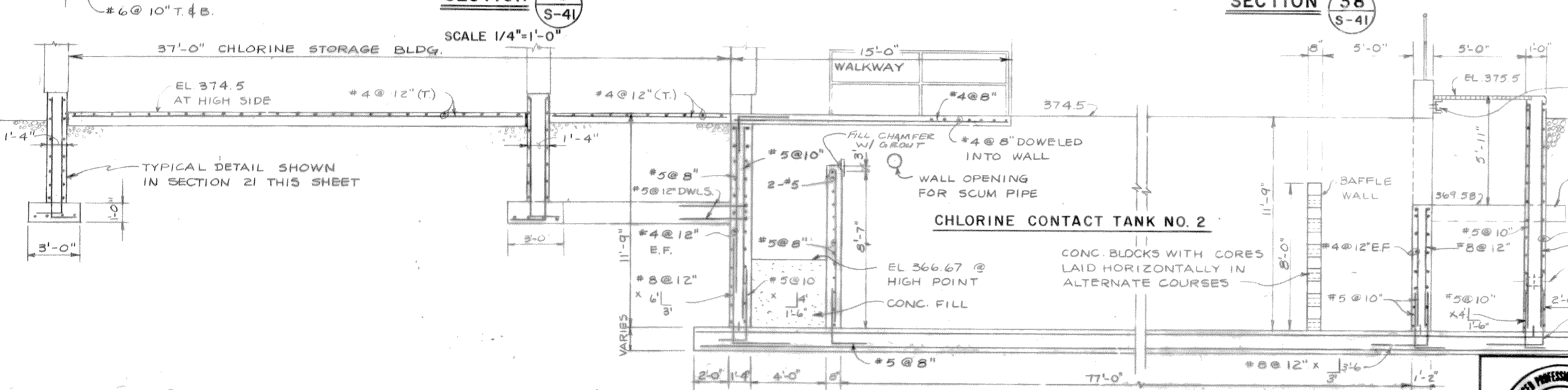
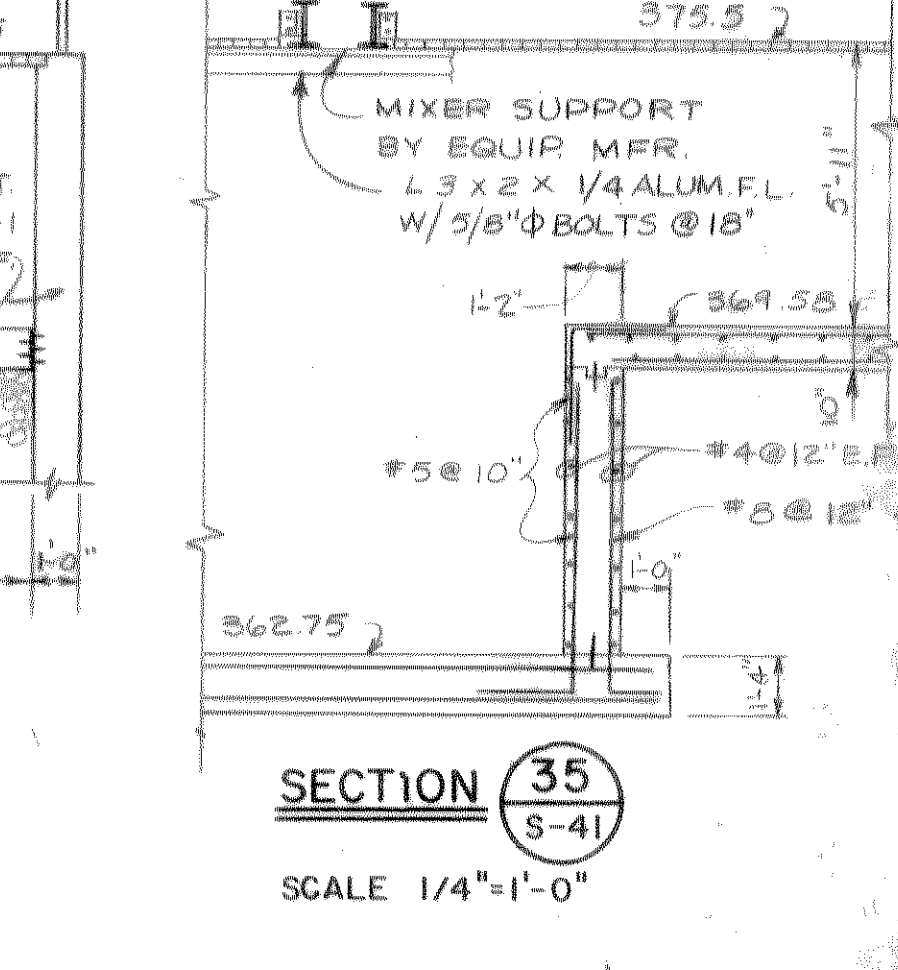
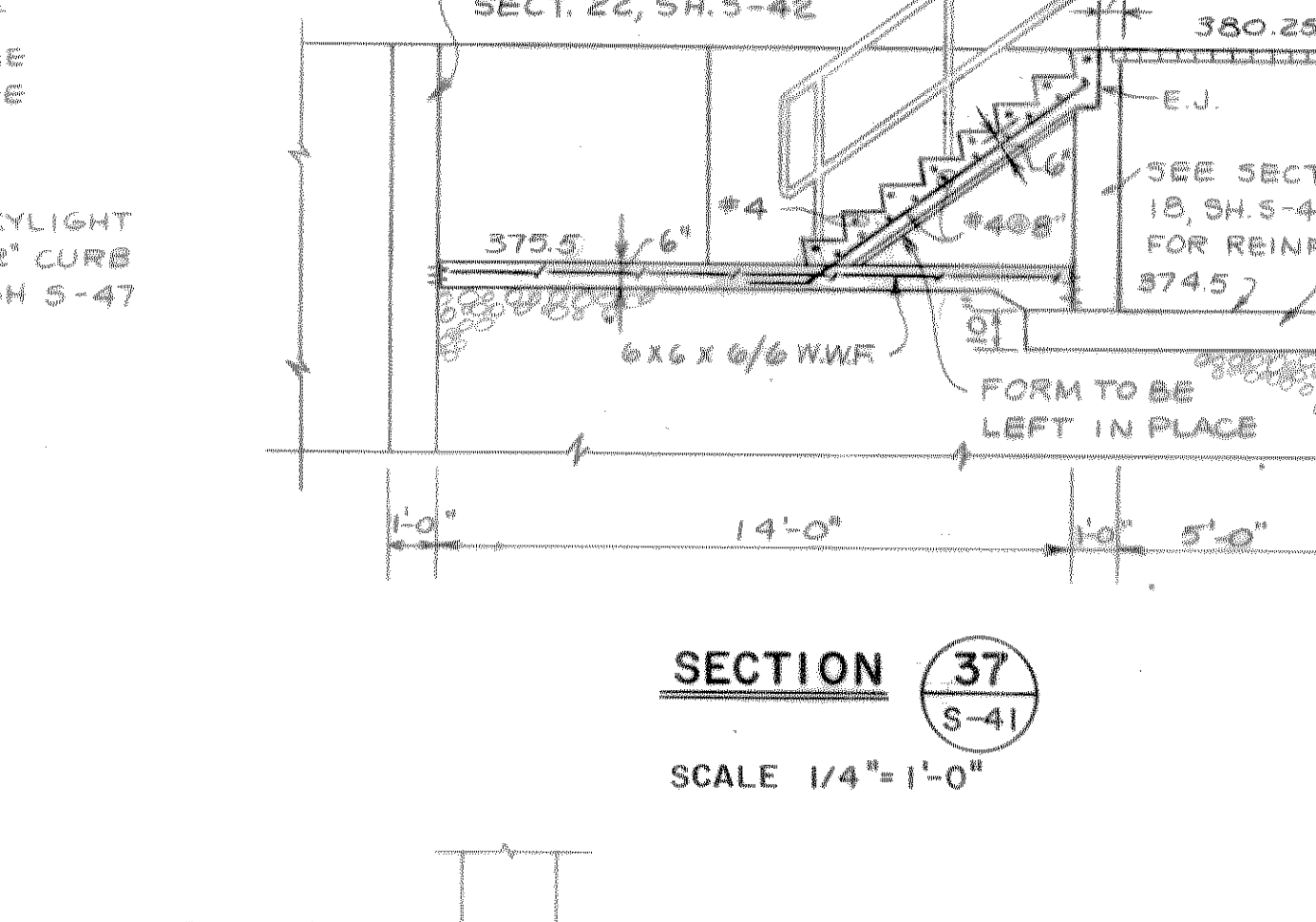
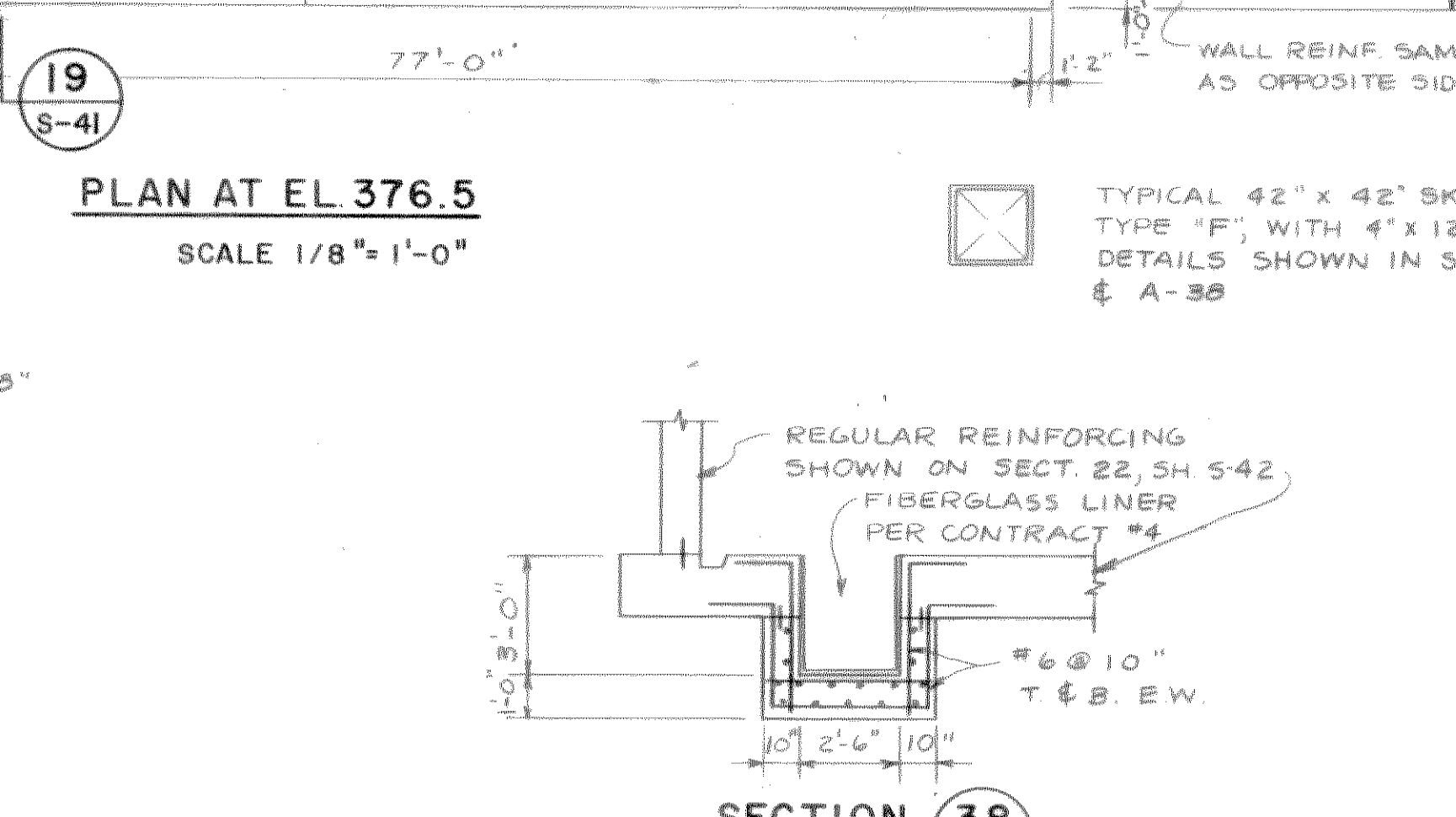
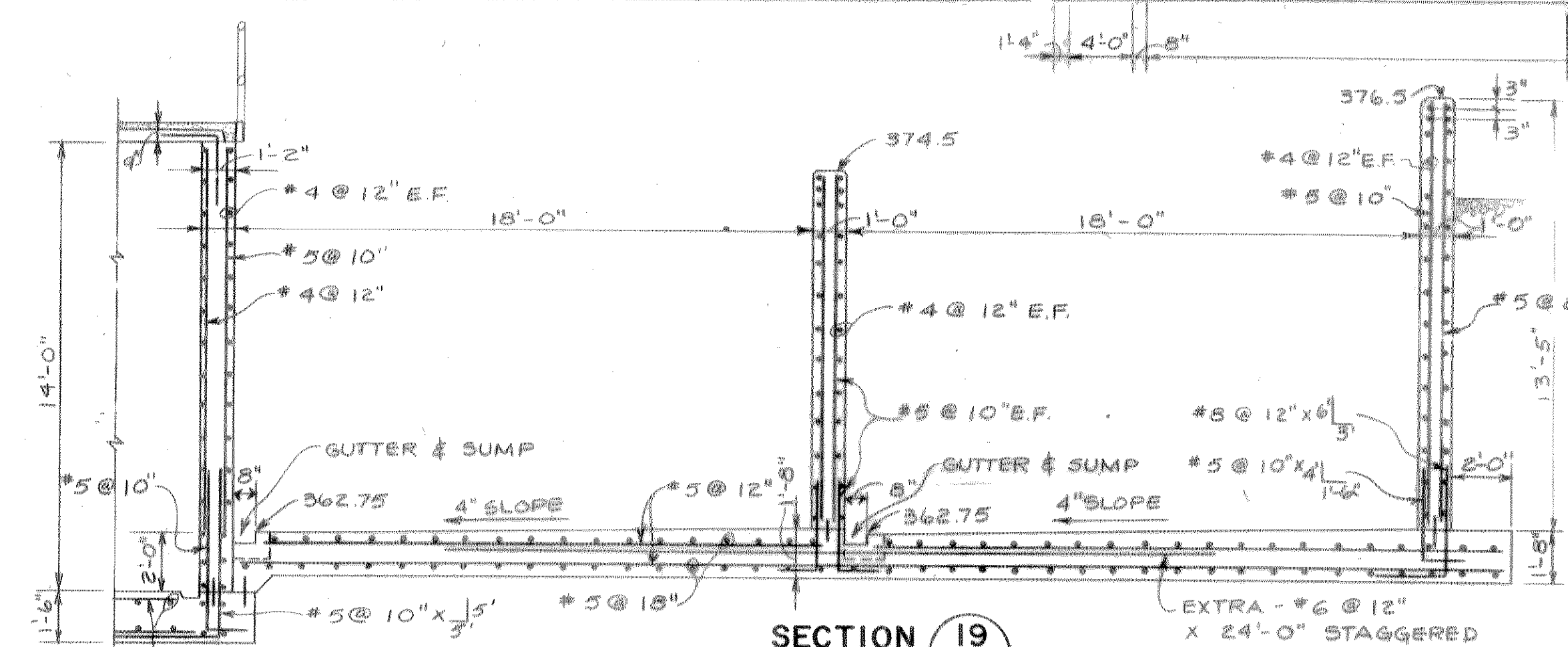
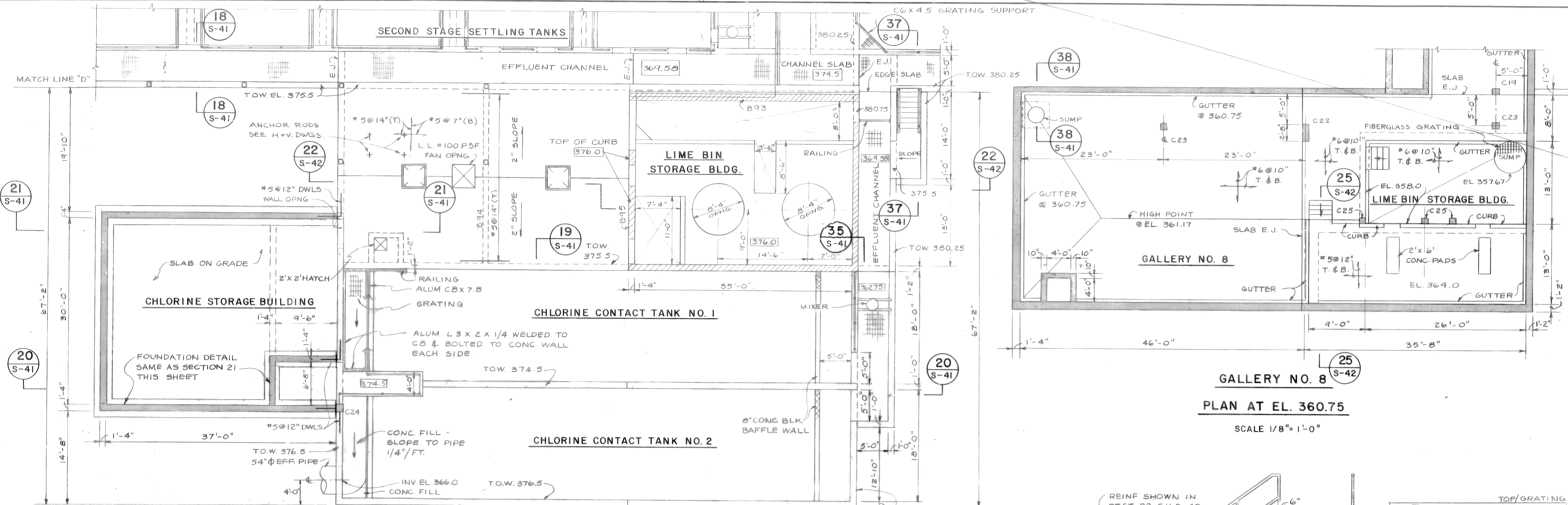
RECORD DRAWING
These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information furnished by Contractor.
Date 9-8-83 Per FLD

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3	RECORDED				
2	APPROVED FOR CONSTRUCTION	SFM	RS	8/28/83	
1	FOR APPROVALS	VA GD 8/24/78	GSD	BAR	SCB 2/24/78
	DRAWN	DATE	CHECKED	DESIGNER	APPROVED
	VA	8/30/78	GSD	BAR	SCB 3/31/78
	PROJECT SUPERVISOR			APPROVED	

ONONDAGA COUNTY, NEW YORK	
DEPARTMENT OF DRAINAGE & SANITATION	
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT	
PROCESS STRUCTURE CHLORINE BUILDING & LIME BIN STORAGE MISCELLANEOUS DETAILS	
Stearns & Wheeler CIVIL AND SANITARY ENGINEERS	
CAZENOVIA, NEW YORK	NEW CANAAN, CONNECTICUT
JOB NO. 577	CONTRACT NO. 1
SHEET A-38	



RECORD DRAWING

These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information furnished by Contractor.

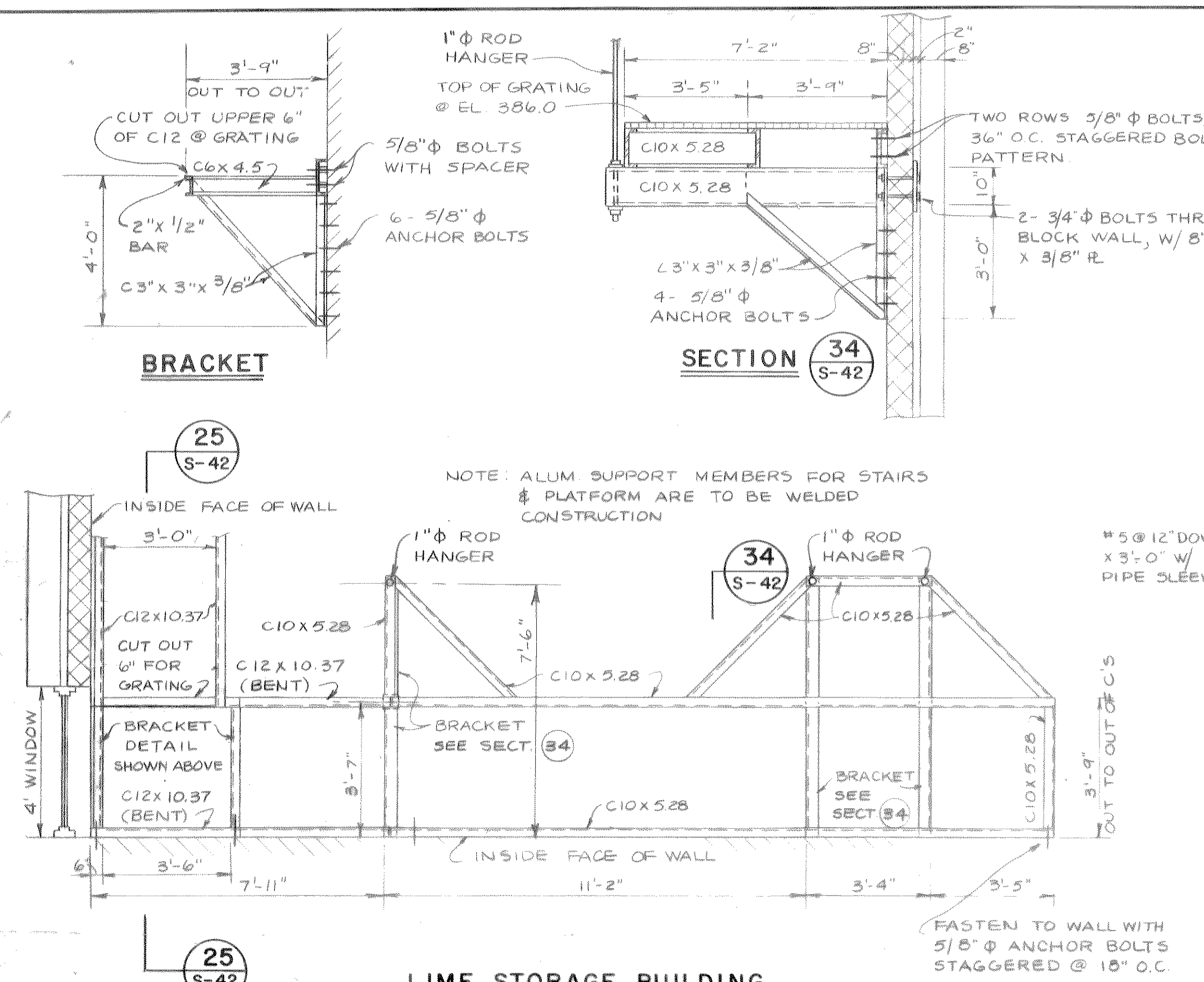
Date: 9-8-83 Per: FLD

FOR REINFORCING STEEL REVISIONS SEE - APPROVED INSTALLATION DRAWINGS

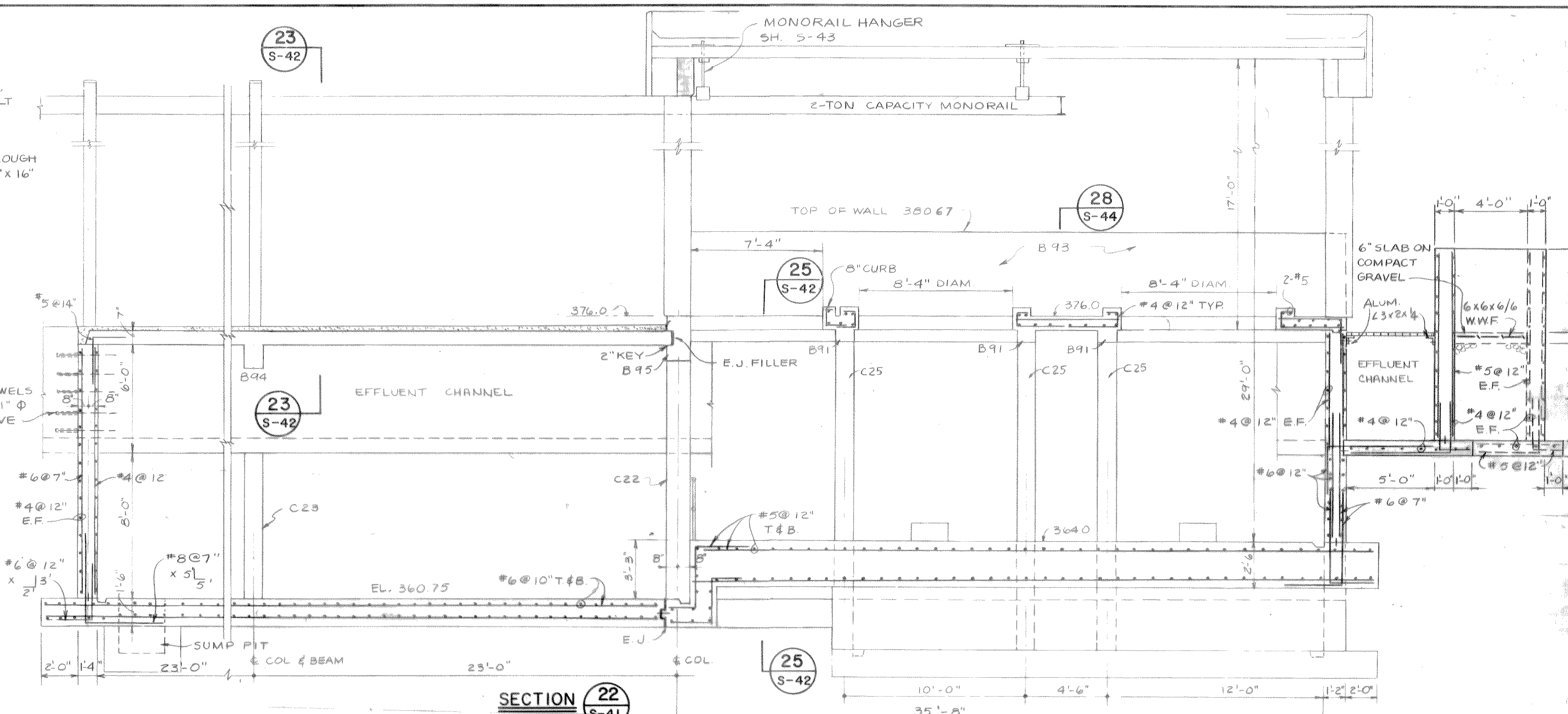
It is a violation of the New York State Education Law for any person, unless he is acting as a duly licensed professional engineer, to prepare or cause to be prepared any drawing or plan for the construction of any building or structure, or any part thereof, which shall be used for the construction of such building or structure, or any part thereof, unless such drawing or plan is signed and sealed by a duly licensed professional engineer.

SECTION 20
S-41
SCALE 1/4" = 1'-0"

ONONDAGA COUNTY, NEW YORK			
DEPARTMENT OF DRAINAGE & SANITATION			
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT			
PROCESS STRUCTURE CHLORINE TANKS & STORAGE BLDG. PLAN & SECTIONS			
STEARNS & WHEELER			
CIVIL AND SANITARY ENGINEERS			
CAZENOVIA, NEW YORK NEW CANAAN, CONN.			
A.G. WHEELER 31573 S.G. BRISBIN 31810 F.S. KEITH 39959 Not valid without approval signature		W.O. LYNCH 37958 PROJECT SUPERVISOR S.G. BRISBIN	
3 RECORD 2 APPROVED FOR CONSTRUCTION PS 11/27/83 BLT FOR APPROVALS CEA 8/30/83 VIG DATE CHECKED DESIGNER APPROVED DATE	3 2 1	3 2 1	JOB NO. 577 CONTRACT NO. 1 SHEET S-41

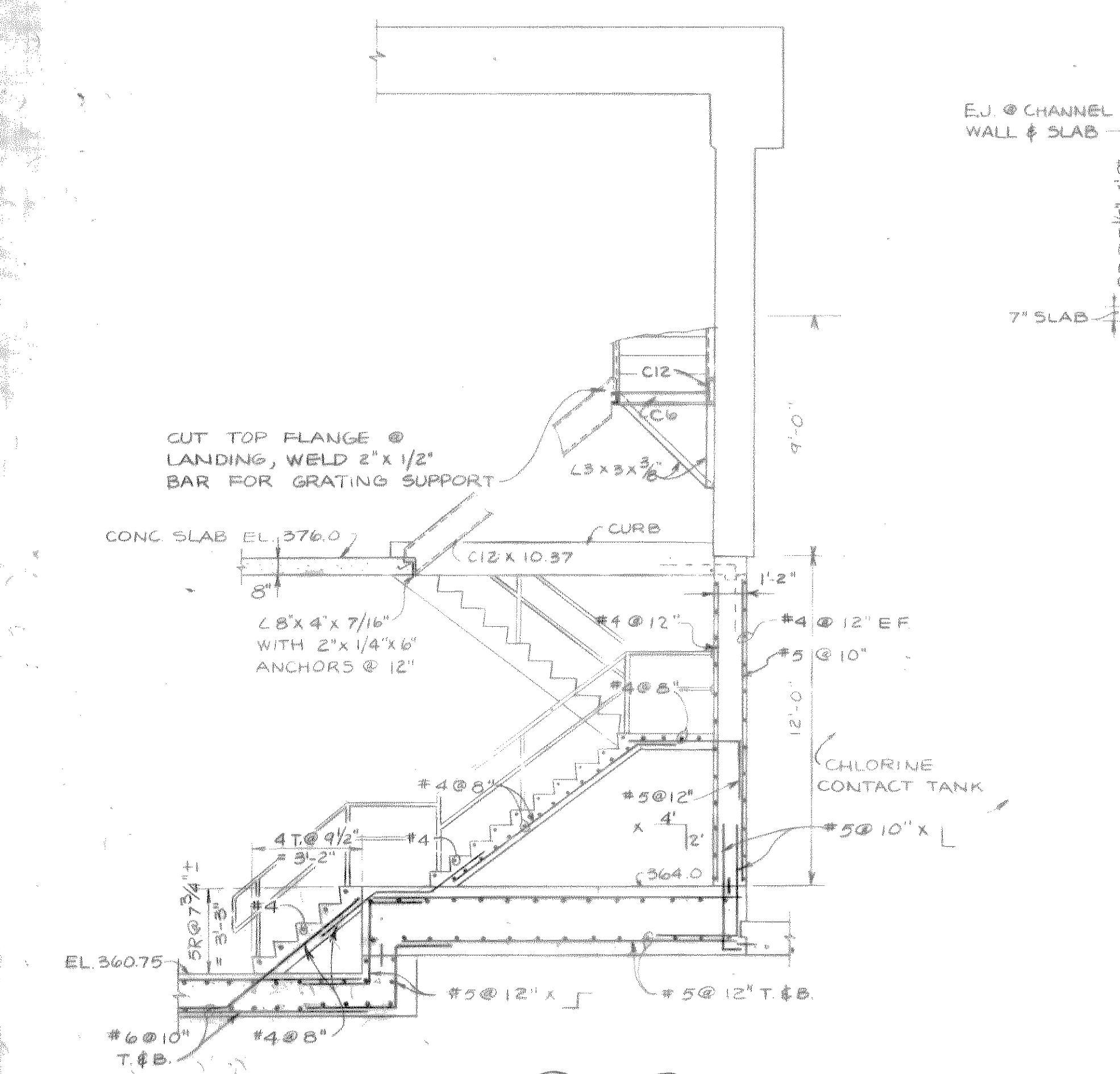


LIME STORAGE BUILDING
STAIRWAY & WALKWAY FRAMING PLAN
 SCALE 3/8"=1'-0"

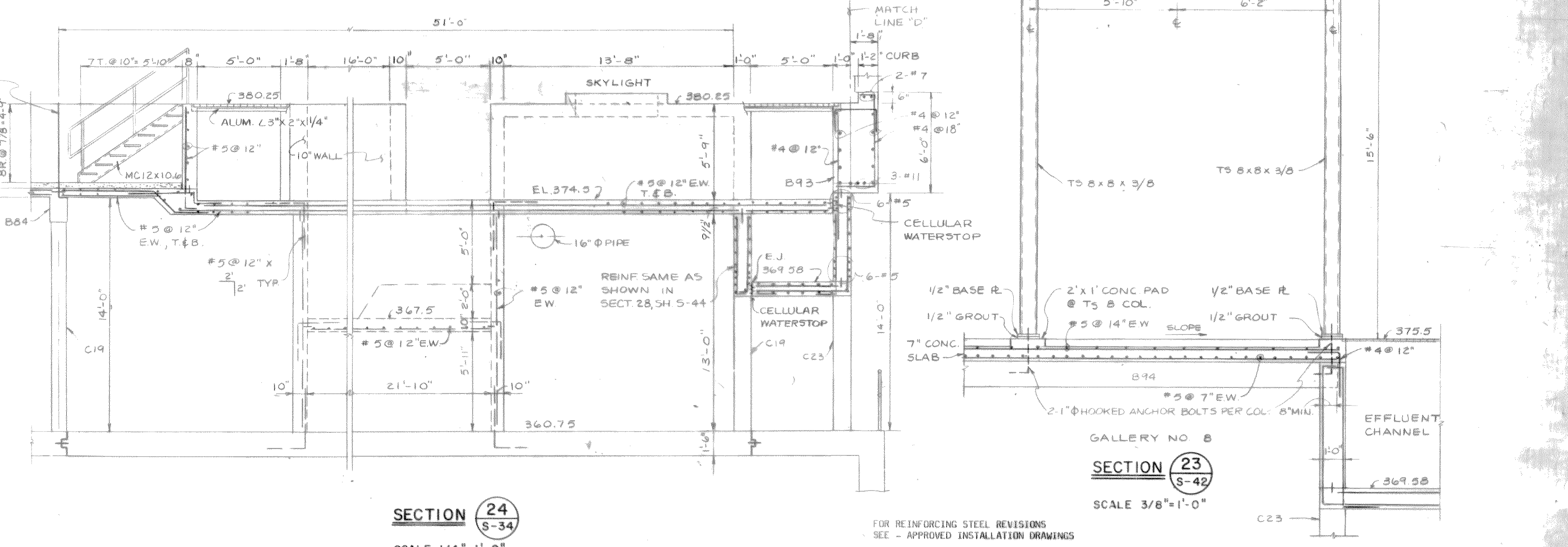


SECTION 22
 S-41
 SCALE 1/4"=1'-0"

SECTION 28
 S-44
 SCALE 3/8"=1'-0"



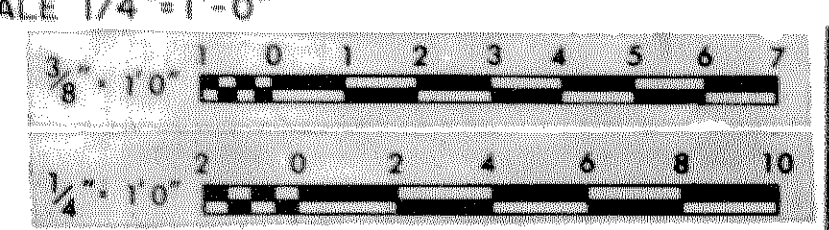
SECTION 25
 S-42
 SCALE 1/4"=1'-0"



SECTION 24
 S-34
 SCALE 1/4"=1'-0"

SECTION 23
 S-42
 SCALE 3/8"=1'-0"

RECORD DRAWING
 These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information furnished by Contractor.
 Date: 9-8-83 Per: FLD

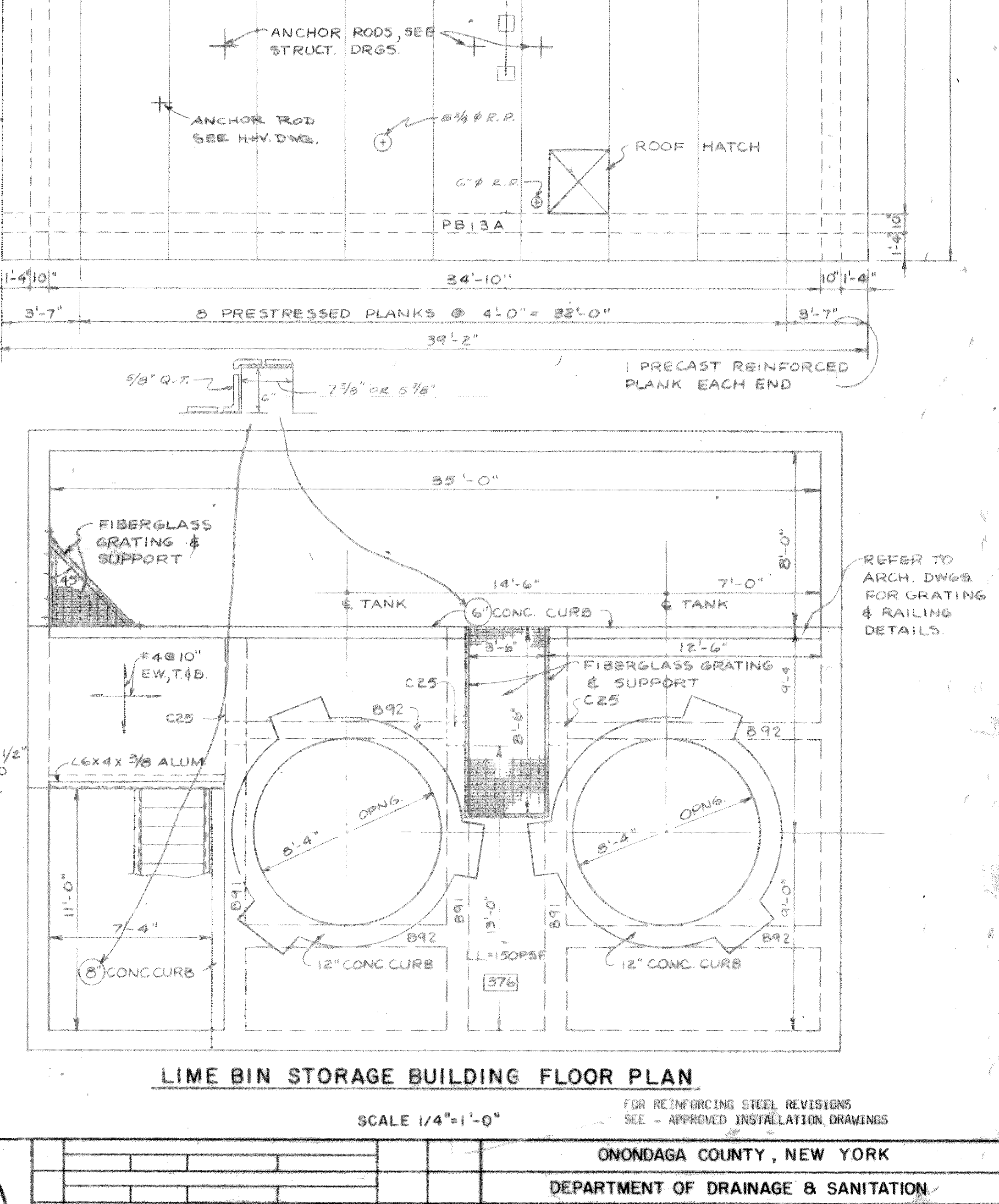
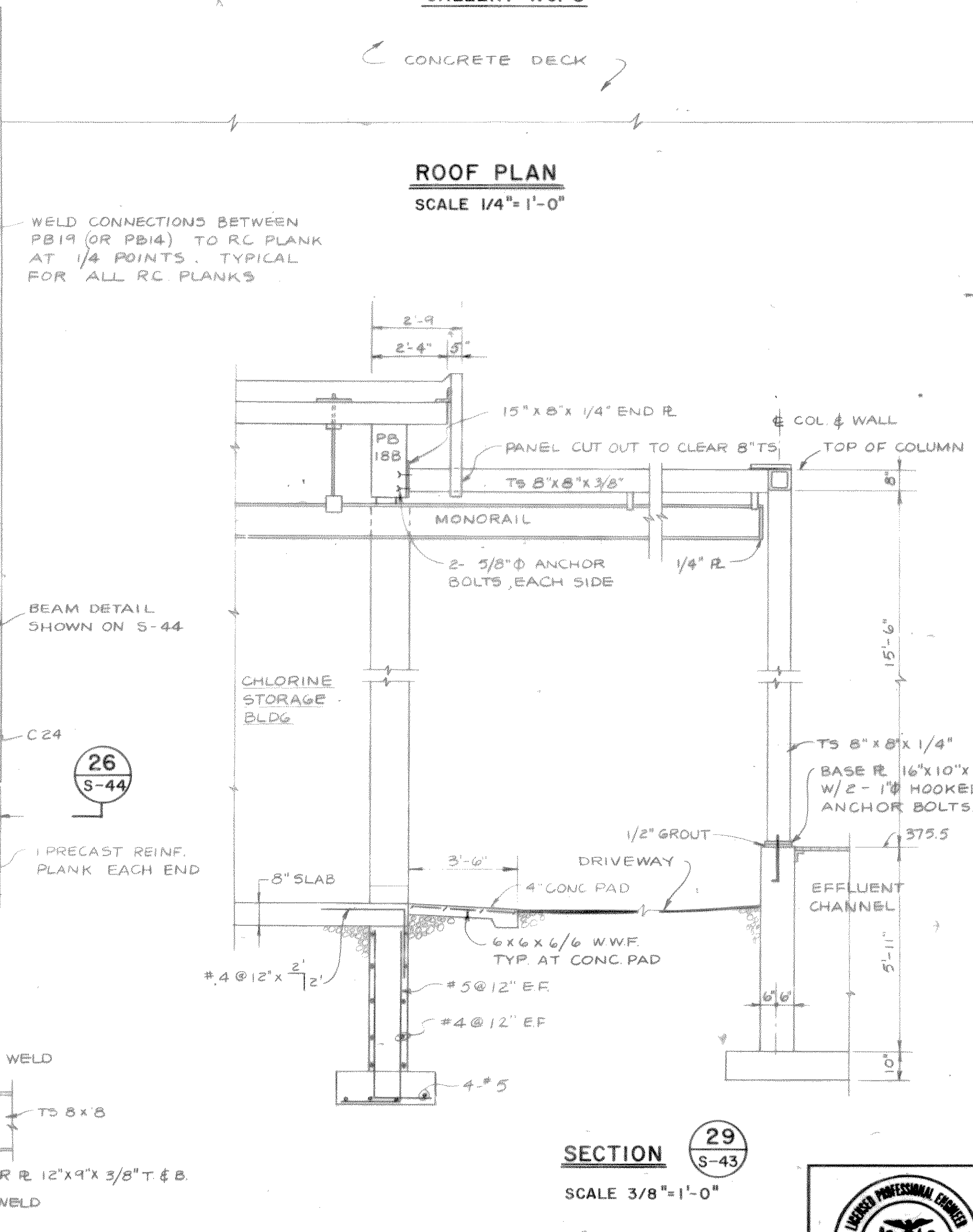
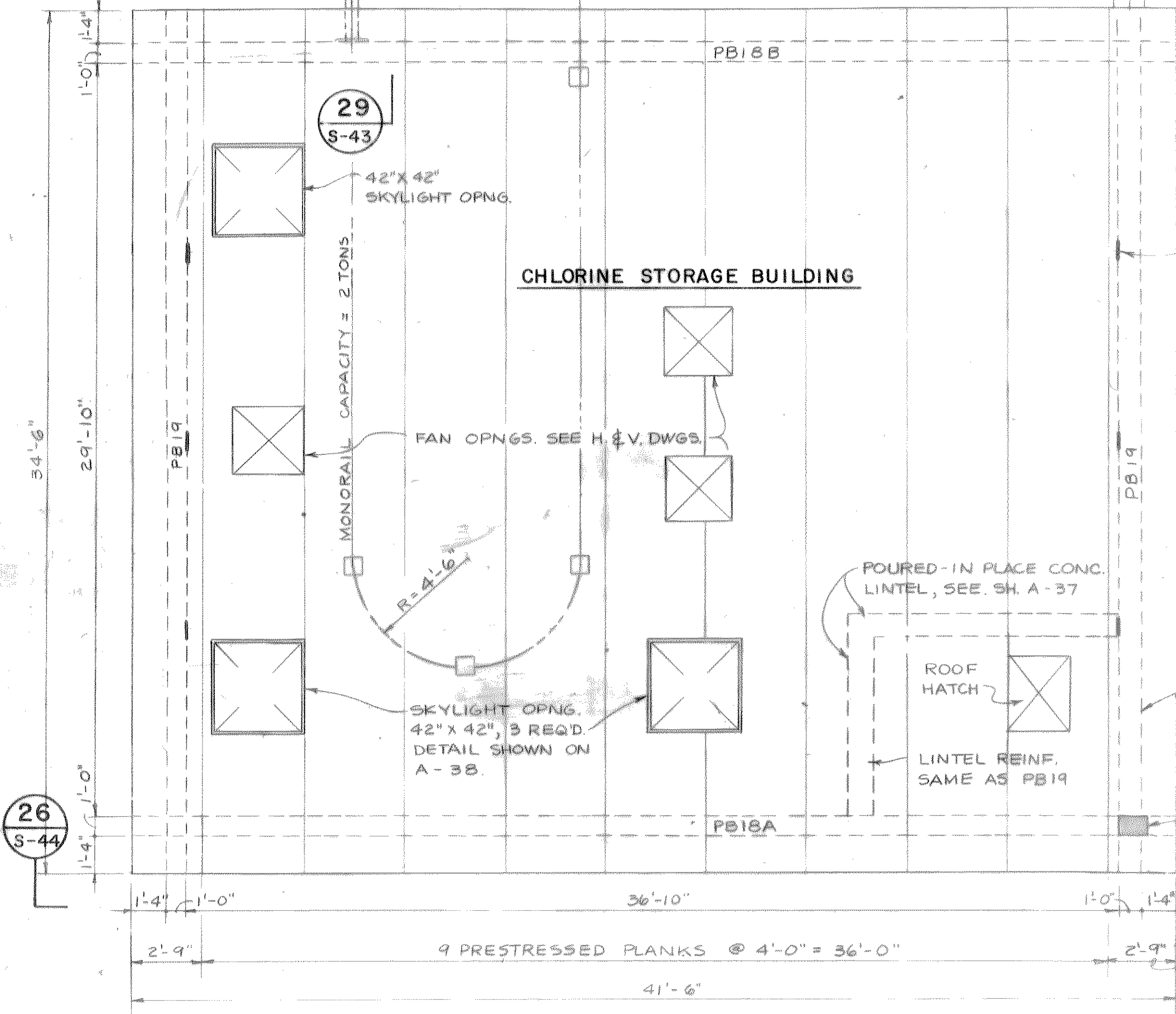
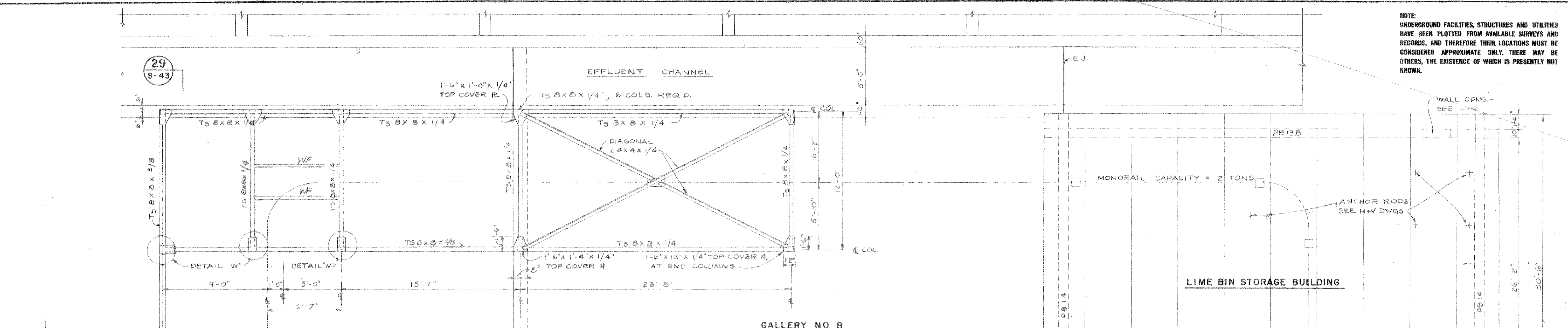


NO.	DATE	BY	CHKD.	APPROV.	DATE
1					
2	2/5/78	ALT	ALT	SIB	4/1/78
3					
4					

ONONDAGA COUNTY, NEW YORK	
DEPARTMENT OF DRAINAGE & SANITATION	
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT	
PROCESS STRUCTURE GALLERY NO. 7 & NO. 8 SECTIONS	
STEARNS & WHEELER	
CIVIL AND SANITARY ENGINEERS	
CAZENOVIA, NEW YORK NEW CANAAN, CONN.	
JOB NO. 577	CONTRACT NO. 1
SHEET 5-42	

FOR REINFORCING STEEL REVISIONS SEE - APPROVED INSTALLATION DRAWINGS

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RECORD DRAWING
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 Date: 9-8-83 Per: FLD

DETAIL "W"
 SCALE 1" = 1'-0"

1" = 1'-0"
 3/8" = 1'-0"
 1/4" = 1'-0"

SECTION 29 (S-43)
 SCALE 3/8" = 1'-0"

It is a violation of the New York State Education Law for any person, unless he is acting under the direction of a licensed professional engineer, to make or cause to be made any alteration, addition or deletion to these drawings or specifications without the written consent of the undersigned.

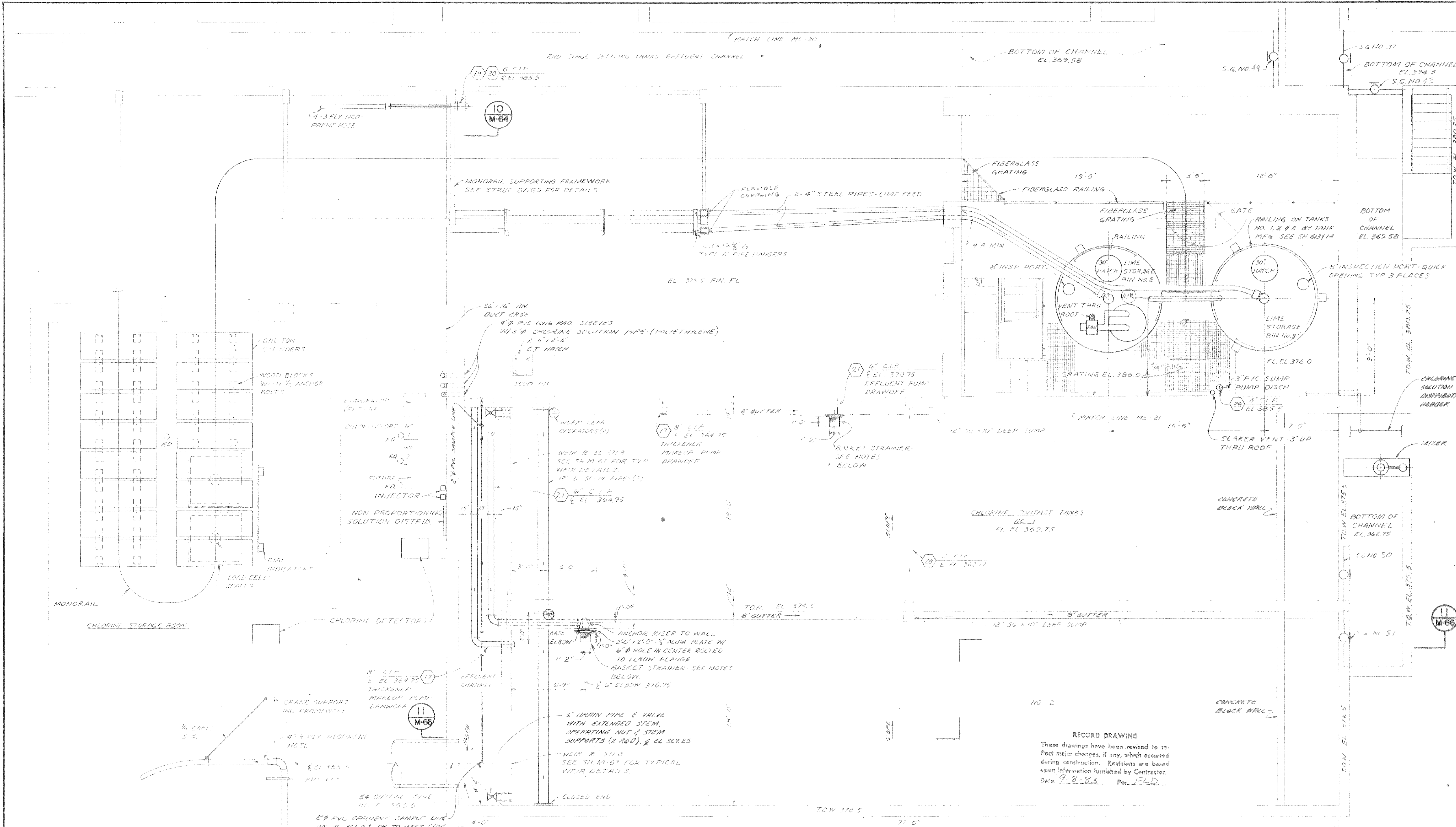
SECTION 26 (S-44)
 SCALE 3/8" = 1'-0"

FOR REINFORCING STEEL REVISIONS SEE - APPROVED INSTALLATION DRAWINGS

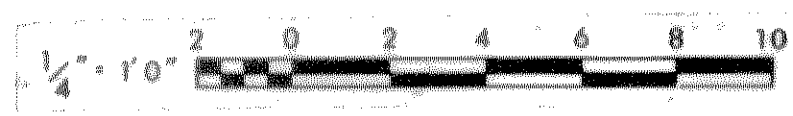
ONONDAGA COUNTY, NEW YORK
 DEPARTMENT OF DRAINAGE & SANITATION
 BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT
 PROCESS STRUCTURE
 CHLORINE & LIME BIN STORAGE BLDGS.
 PLAN

STEARNS & WHEELER
 CIVIL AND SANITARY ENGINEERS
 CAZENOVIA, NEW YORK NEW CANAAN, CONN.

JOB NO. 577 CONTRACT NO. 1 SHEET S-43



PLAN
SCALE 1/4" = 1'-0"



- BASKET STRAINERS**
1. FABRICATE THREE SIDES, TOP AND BOTTOM FROM 1/8" ALUMINUM PLATE WITH 1/8" HOLES AT 1/4" O.C. TWO EDGES OF OPEN SIDE TO BE FLANGED TO FIT EXTRUDED GUIDES.
 2. PROVIDE 3/8" S.S. BAIL HANDLE ON STRAINER WITH 3/16" DIA S.S. CABLE ATTACHED. CLAMP 2 1/2" S.S. RING TO LOOSE END OF CABLE.
 3. FOR EACH STRAINER INSTALL TWO EXTRUDED ALUMINUM GUIDES ON WALL OR ALUMINUM PLATE AND EDGE OF PLATFORM AS CASE APPLIES. LENGTH OF GUIDES - 4'-9". WELD STOP BAR BETWEEN BOTTOMS OF GUIDES.
 4. BASKET STRAINERS MAY BE PURCHASED FROM AVAILABLE STOCK.

RECORD DRAWING
These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information furnished by Contractor.
Date: 9-8-83 Per: FLD

PIPING LEGEND

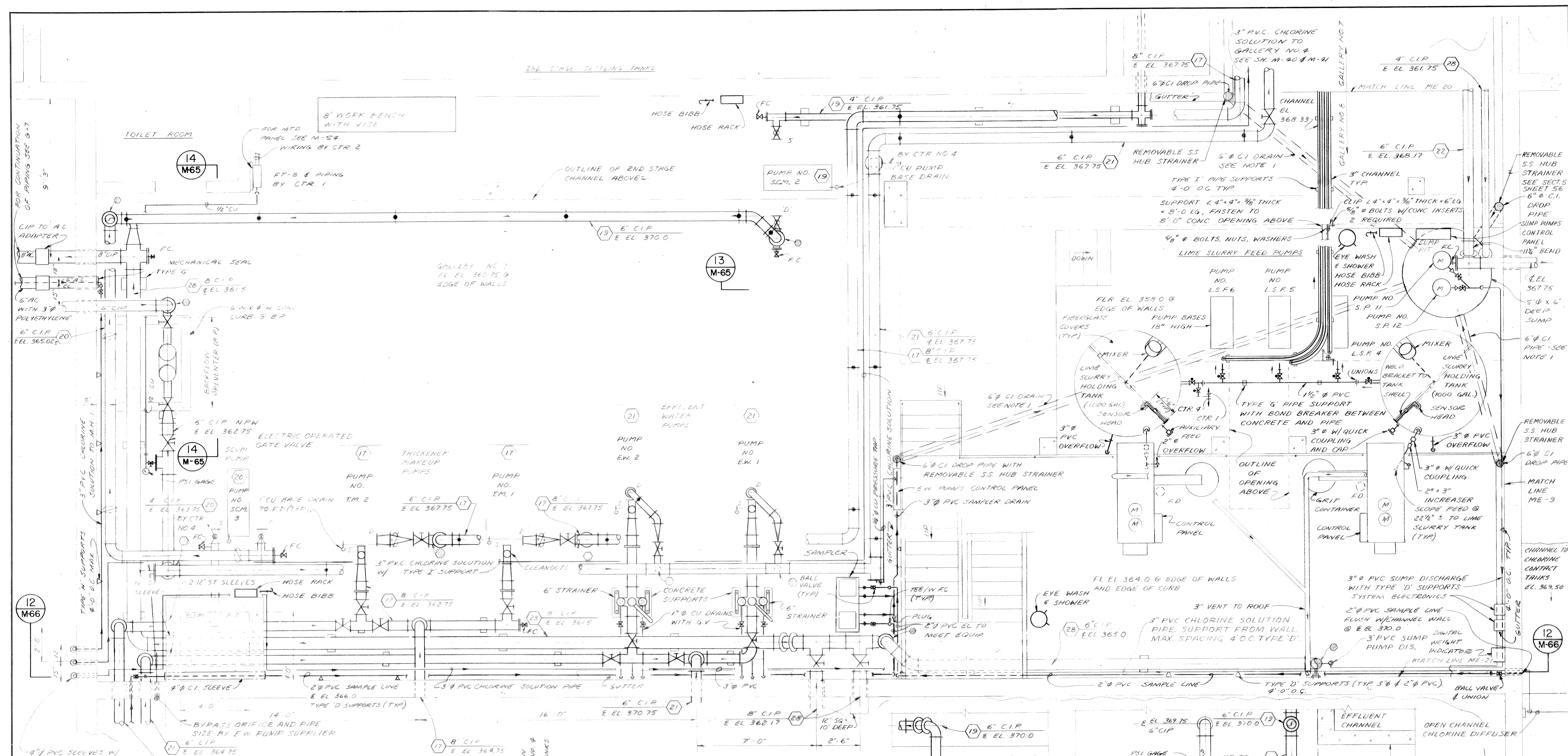
17	THICKENER MAKEUP
19	SECONDARY SCUM
20	CONTACT TANK SCUM
21	EFFLUENT WATER
22	DRAIN

SECTION
SCALE 1/4" = 1'-0"
10 M-64

FOR PIPING REVISIONS SEE - APPROVED INSTALLATION DRAWINGS

ONONDAGA COUNTY, NEW YORK		DEPARTMENT OF DRAINAGE & SANITATION	
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT			
PROCESS STRUCTURE			
GALLERY NO. 8 & CHLORINATION - UPPER PLAN			
Stearns & Wheeler			
CIVIL AND SANITARY ENGINEERS			
CAZENOVIA, NEW YORK		NEW CANAAN, CONNECTICUT	
PROJECT SUPERVISOR	APPROVED	JOB NO. 577	CONTRACT NO. 1
S.G. Bristol		SHEET M-64	

2ND STAGE SETTLING TANKS



PLAN
SCALE 3/8" = 1'-0"

LEGEND

- 1- HYDRAULIC LOAD CELL
- 2- CYLINDER VALVES
- 3- 3/8" SEAMLESS COPPER FLEX CONN'S.
- 4- CHLORINE HEADER VALVES
- 5- SCH 80 SEAMLESS CARBON STEEL PIPE
- 6- WEIGHT INDICATORS
- 7- AUTOMATIC SWITCH OVER SYSTEM
- 8- VALVES
- 9- STRAINERS
- 10- SWITCH OVER BYPASS DELETED
- 11- WATER SUPPLY
- 12- VENT TO ATMOSPHERE
- 13- NON-PROPORTIONING SOLUTION DISTRIBUTOR
- 14- INJECTORS

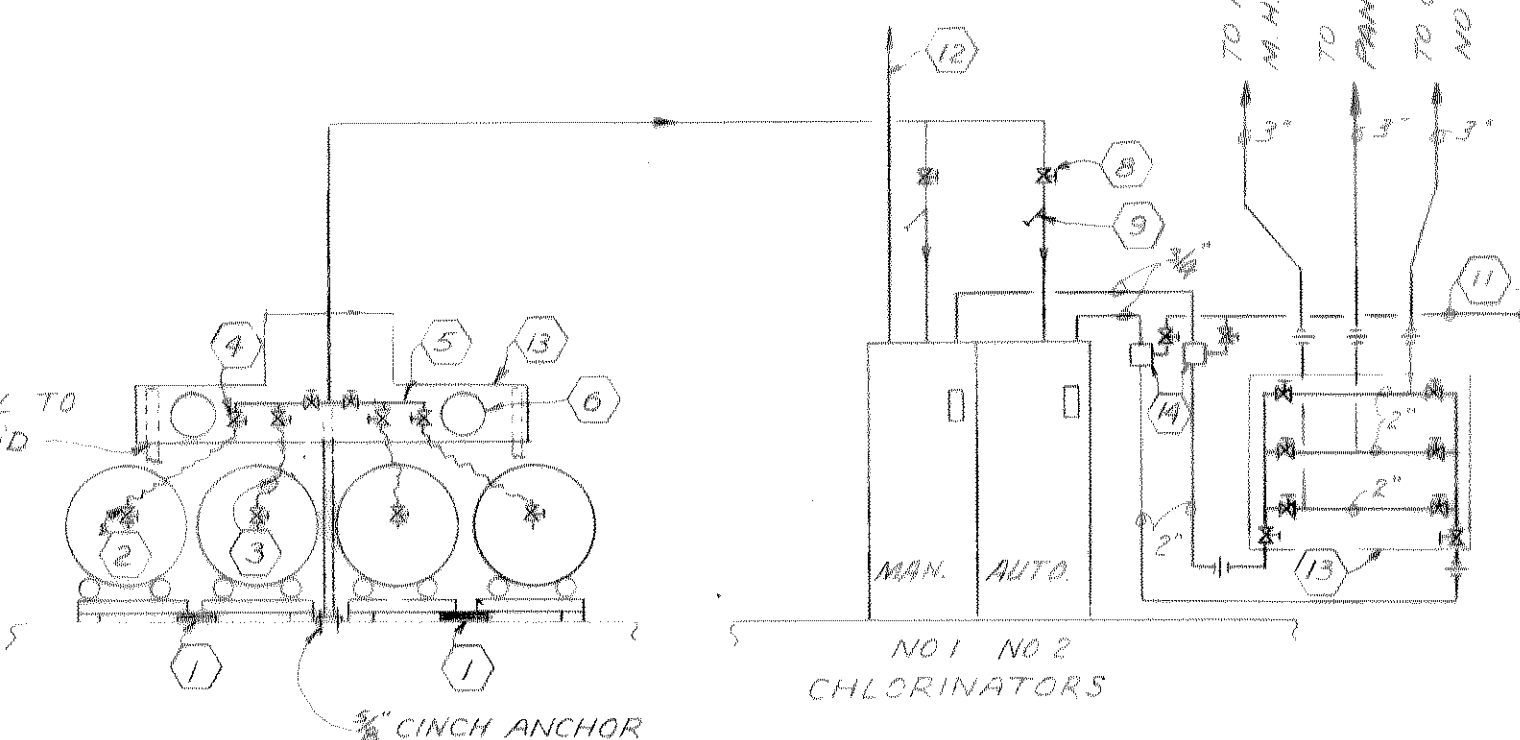
NOTES

- 1. 6" CI DROP PIPE FROM GUTTER TO SUMP - USE SWEEPING BENDS TO MEET ELEVATION & TYPE II CONC. ENCASUREMENT INV. EL. 6" CI @ SUMP 359.75 (TYP.)

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PIPING LEGEND

- 17 THICKENER MAKEUP SECONDARY SCUM CONTACT TANK SCUM
- 20 EFFLUENT WATER DRYING BED FEED DRAIN



CHLORINE PIPING DIAGRAM
NO SCALE

SECTION 13
SCALE 3/8" = 1'-0"

SECTION 14
SCALE 3/8" = 1'-0"

RECORD DRAWING
These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information furnished by Contractor.
Date 9-8-83 Per. FLD



PROJECT NO.	DATE	CHECKED	DESIGNER	APPROVED	DATE
1	3-30-76	RKM	AEN/RKM	SB	3-31-76
2	1/24/78	PKW	WPN/PRW	SB	2-24-78
3	RECORD				

ONONDAGA COUNTY, NEW YORK	
DEPARTMENT OF DRAINAGE & SANITATION	
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT	
PROCESS STRUCTURE	
GALLERY NO. 8 & LOWER PLAN & CHLORINE DIAGRAM	
Stearns & Wheeler CIVIL AND SANITARY ENGINEERS	
Cazenovia, New York	New Canaan, Connecticut
PROJECT SUPERVISOR John L. Swanson	APPROVED S.G. Brown
JOB NO. 577	CONTRACT NO. 1
SHEET M-65	

CHLORINE STORAGE ROOM

SCUM PIPE OFF RAILOR AND 4 3/8" ANCHOR BOLTS.

CLAMP S.S. SNAP TO RAILING ABOVE BASKET STRAINER

BASKET STRAINER - SEE NOTES, SH. M-64

2" PVC SAMPLE LINE E. EL. 366.0

8" CIP E. EL. 369.75

12" D SCUM PIPE

2'-0" x 2'-0" x 1/2" ALUM. PLATE

6" CIP E. EL. 369.75

SECTION 11 M-64
SCALE 1/4" = 1'-0"

MIXER WITH ANCHOR BOLTS, ETC. AS R.Q.D.

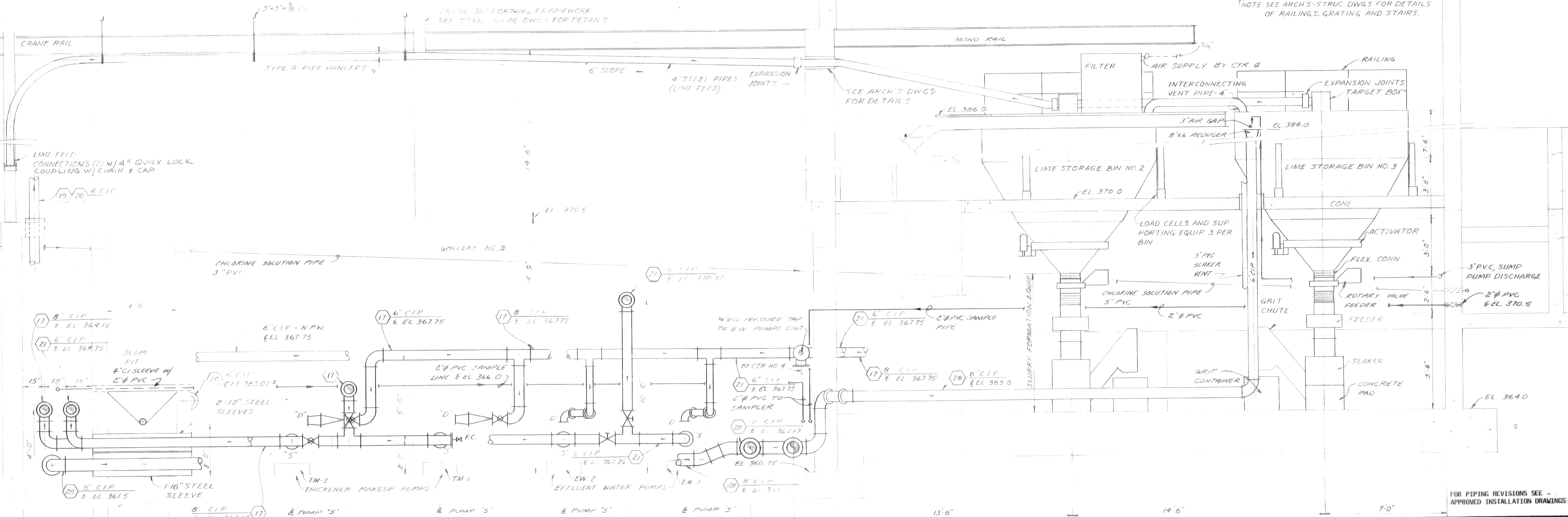
CONCRETE BLOCK WALL - LAY ALTERNATE BLOCKS WITH HOLES HORIZONTAL

2" GROUT
2 1/2" - 3/8" φ CONC. INSERTS

OPEN CHANNEL CHLORINE DIFFUSER

3" VENT RETURN BEND (SLAKER)

NOTE SEE ARCH'S-STRUC DWGS FOR DETAILS OF RAILINGS, GRATING AND STAIRS.



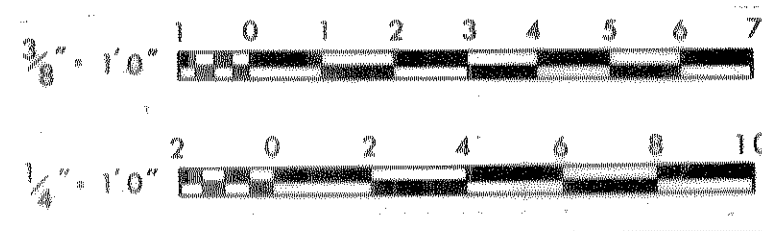
PIPING LEGEND

- 17 THICKENER MAKEUP
- 19 SECONDARY SCUM
- 20 CONTACT TANK SCUM
- 21 EFFLUENT WATER
- 22 DRYING BED FEED
- 23 DRAIN

RECORD DRAWING

These drawings have been revised to reflect major changes, if any, which occurred during construction. Revisions are based upon information furnished by Contractor.
Date 9-8-83 Per. FLD

SECTION 12 M-65
SCALE 3/8" = 1'-0"



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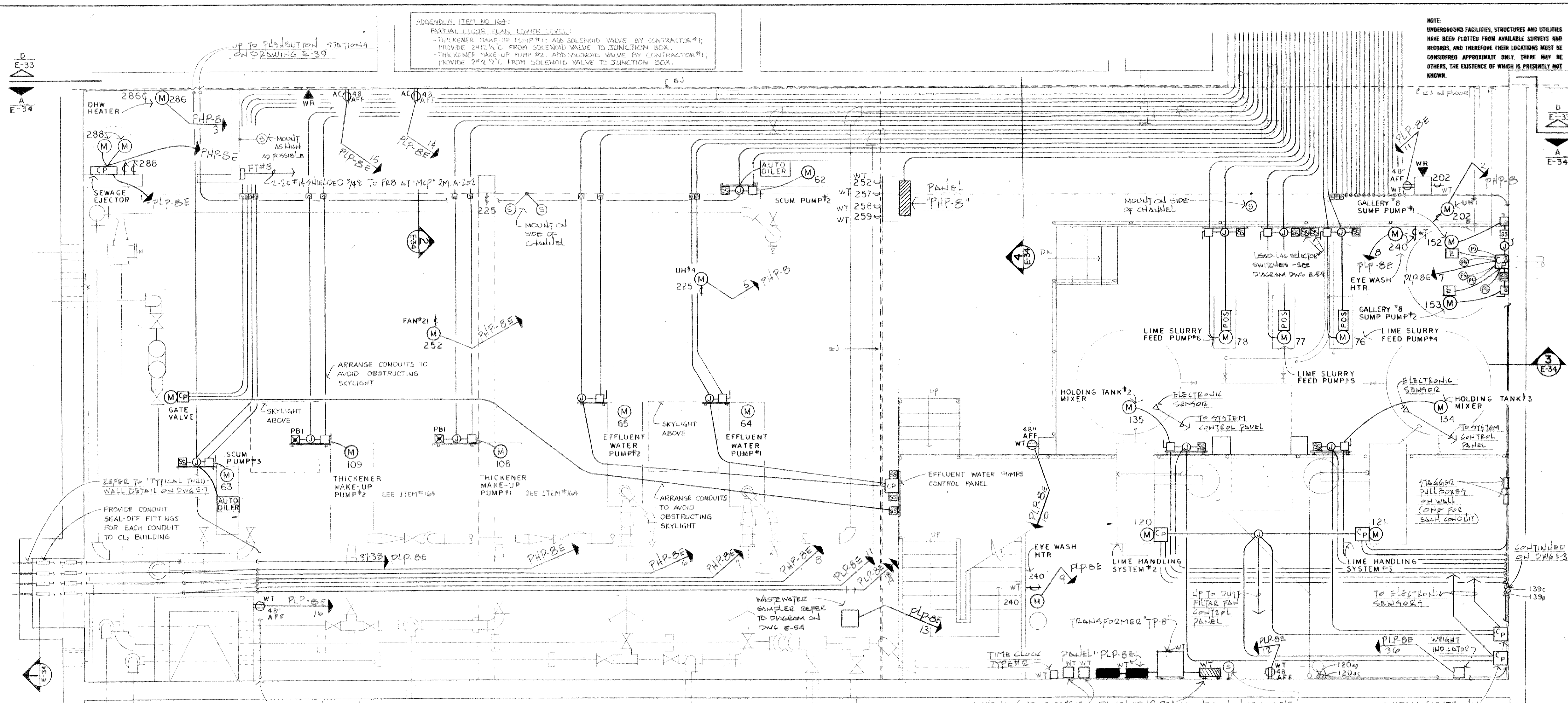
RECORDED	FILED	DATE	BY
FOR CONSTRUCTION		1/5 9/83	
APPROVED FOR CONSTRUCTION	AW/PKH	5/8 2-24-78	
FOR APPROVALS			
AW/MS 3-30-78	PKW	AW/PKH	5/8 3-31-76
DRAWN	DATE	CHECKED	DESIGNER
PROJECT SUPERVISOR	APPROVED		
	S.G. Brishman		

ONONDAGA COUNTY, NEW YORK	
DEPARTMENT OF DRAINAGE & SANITATION	
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT	
PROCESS STRUCTURE	
GALLERY NO.8 & CHLORINATION - SECTIONS	
Stearns & Wheeler	
CIVIL AND SANITARY ENGINEERS	
GAZENOVIA, NEW YORK	NEW CANAAN, CONNECTICUT
JOB NO. 577	CONTRACT NO. 1
SHEET M-66	

FOR PIPING REVISIONS SEE APPROVED INSTALLATION DRAWINGS

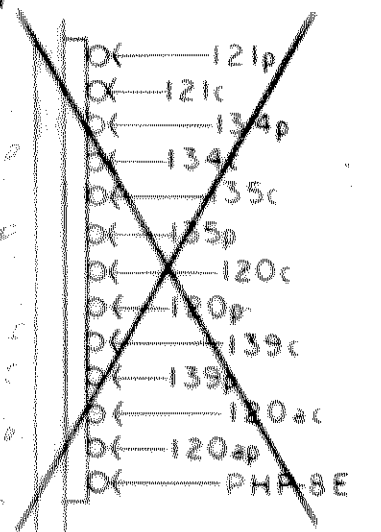
ADDENDUM ITEM NO 16A:
 PARTIAL FLOOR PLAN LOWER LEVEL:
 - THICKENER MAKE-UP PUMP #1: ADD SOLENOID VALVE BY CONTRACTOR #1;
 PROVIDE 2" 1/2" C FROM SOLENOID VALVE TO JUNCTION BOX;
 - THICKENER MAKE-UP PUMP #2: ADD SOLENOID VALVE BY CONTRACTOR #1;
 PROVIDE 2" 1/2" C FROM SOLENOID VALVE TO JUNCTION BOX.

NOTE:
 UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES
 HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND
 RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE
 CONSIDERED APPROXIMATE ONLY. THERE MAY BE
 OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT
 KNOWN.



PARTIAL FLOOR PLAN LOWER LEVEL

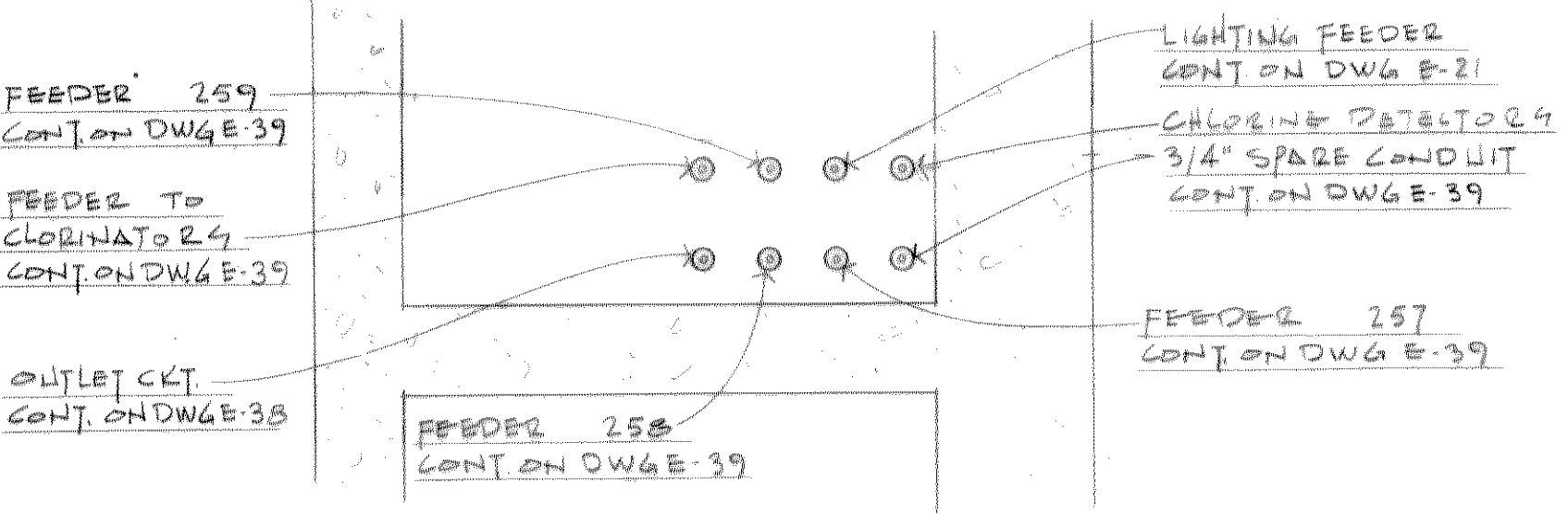
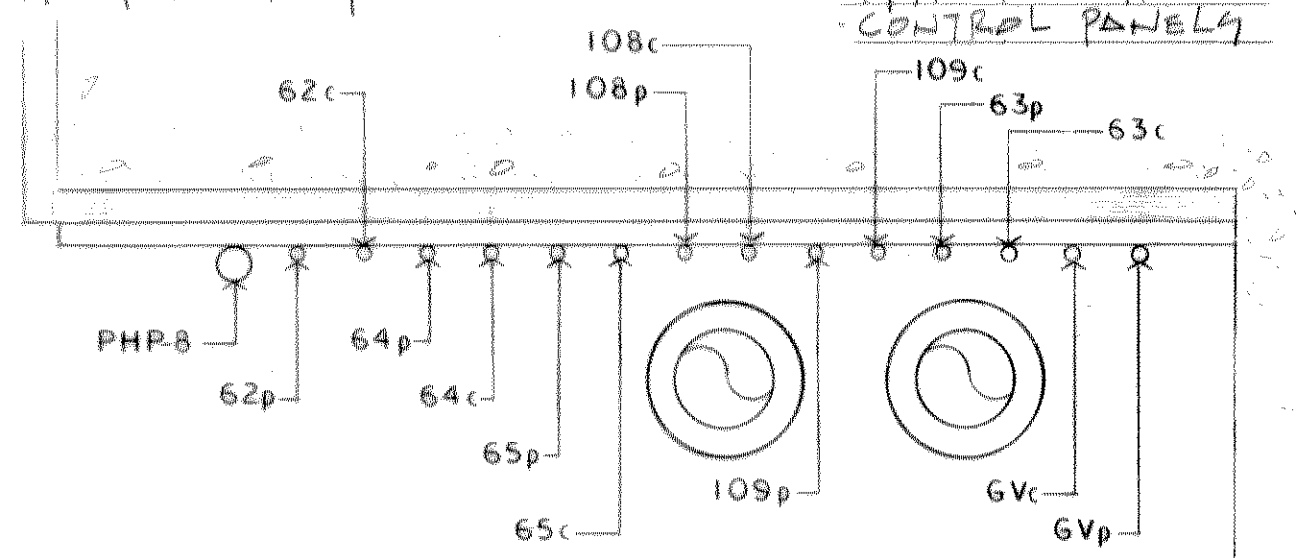
SCALE 3/8"=1'-0"



SECTION 3 NO SCALE E-34

VOID

SECTION 4 NO SCALE E-34



SECTION 2 NO SCALE E-34

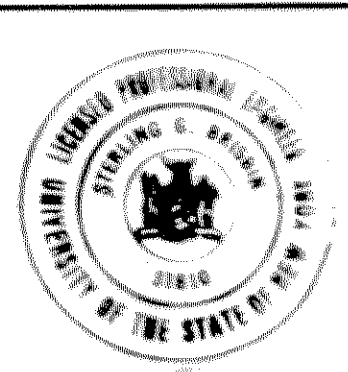
SECTION 1 NO SCALE E-34



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RECORD DRAWINGS: THESE DRAWINGS HAVE BEEN REVISED TO REFLECT MAJOR CHANGES, IF ANY, WHICH OCCURRED DURING CONSTRUCTION. REVISIONS ARE BASED ON INFORMATION FURNISHED BY CONTRACTOR.

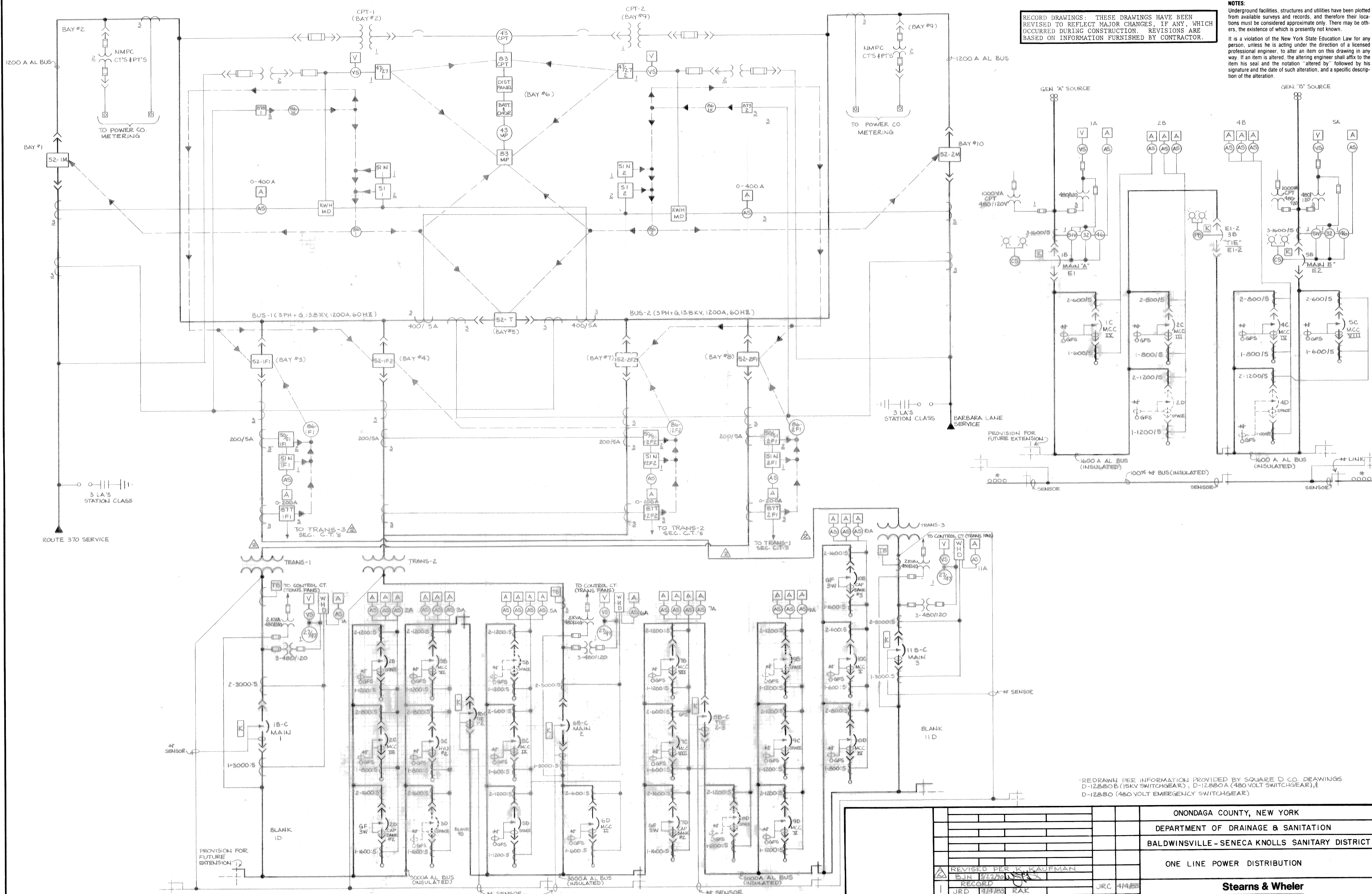
MILLER SIZING, P.C.
 consulting engineers
 409 SO. WARREN STREET
 SYRACUSE, NEW YORK 13202



3	RECORD	JRC	4/4/83
2	FOR CONSTRUCTION	JRC	5/24/78
1	FOR APPROVAL	TBA	5/21/76
DATE	DRAWN	DATE	CHECKED
PROJECT SUPERVISOR		APPROVED	
[Signature]		[Signature]	

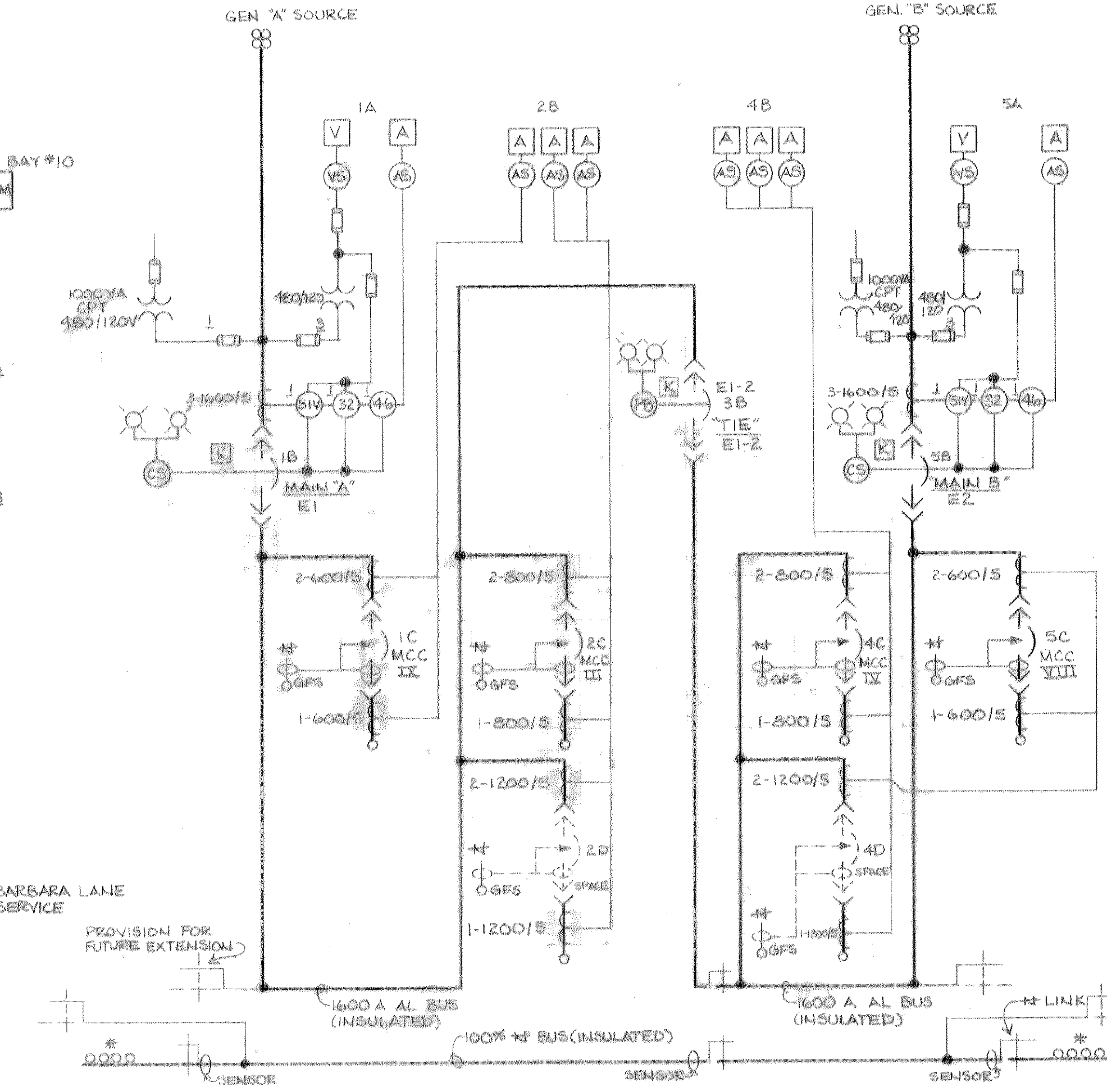
ONONDAGA COUNTY, NEW YORK	
DEPARTMENT OF DRAINAGE & SANITATION	
BALDWINSVILLE - SENECA KNOLLS SANITARY DISTRICT	
PROCESS STRUCTURE	
LOWER PLAN - GALLERY #78 - POWER	
Stearns & Wheler	
CIVIL AND SANITARY ENGINEERS	
CAZENOVIA, NEW YORK	NEW CANAAN, CONNECTICUT
JOB NO. 577	CONTRACT NO. 2
SHEET E 34	

KEY PLAN



RECORD DRAWINGS: THESE DRAWINGS HAVE BEEN REVISED TO REFLECT MAJOR CHANGES, IF ANY WHICH OCCURRED DURING CONSTRUCTION. REVISIONS ARE BASED ON INFORMATION FURNISHED BY CONTRACTOR.

NOTES:
Underground facilities, structures and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.
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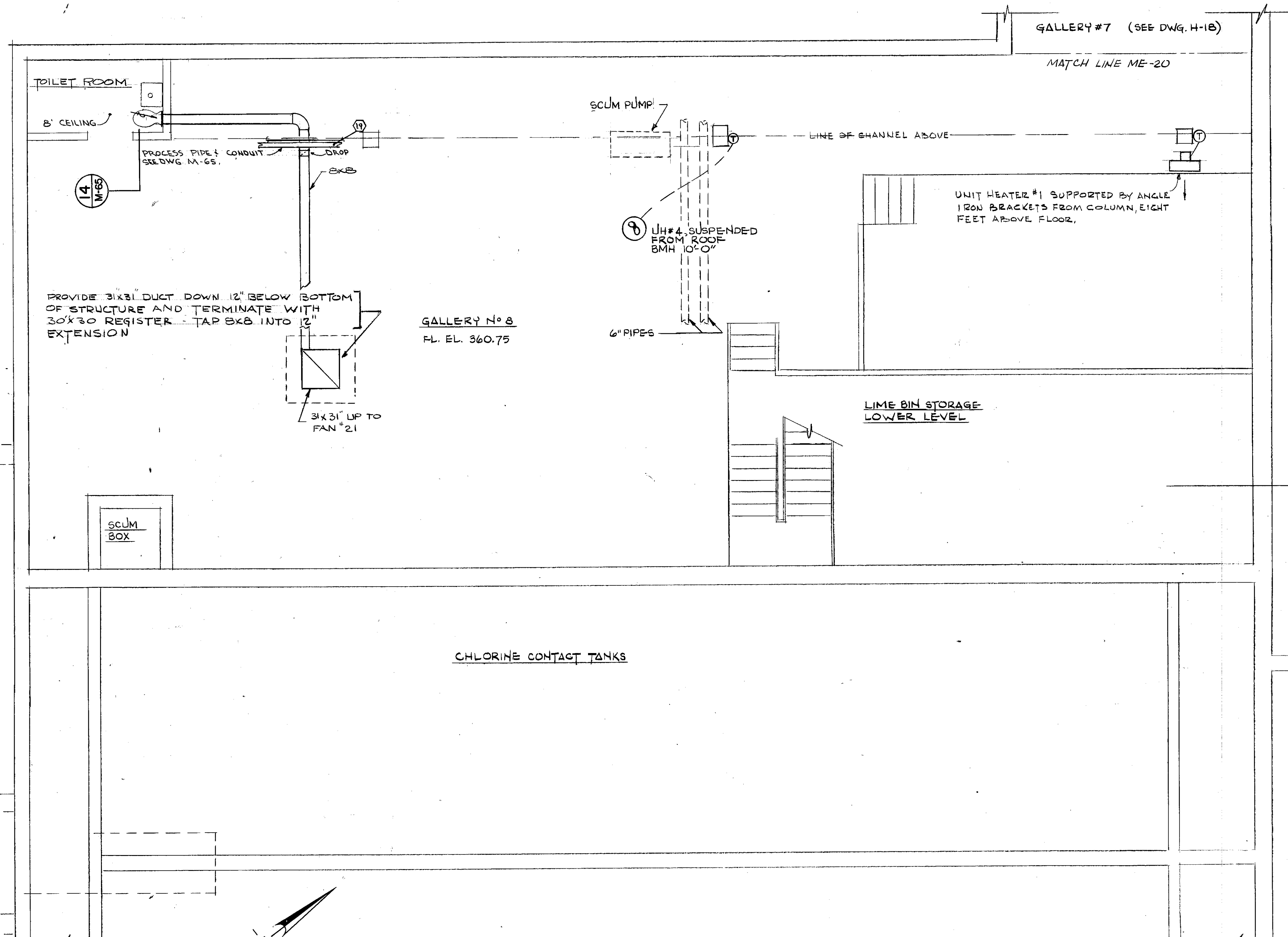


-REDRAWN PER INFORMATION PROVIDED BY SQUARE D CO. DRAWINGS D-12880B (15KV SWITCHGEAR), D-12880A (480 VOLT SWITCHGEAR), D-12880 (480 VOLT EMERGENCY SWITCHGEAR)

me MILLER ENGINEERS, P.C.
MECHANICAL - ELECTRICAL - STRUCTURAL
P.O. Box 126
Brewerton, N. Y. 13029

		ONONDAGA COUNTY, NEW YORK	
		DEPARTMENT OF DRAINAGE & SANITATION	
		BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT	
		ONE LINE POWER DISTRIBUTION	
		Stearns & Wheler ENGINEERS AND SCIENTISTS CAZENOVIA, NEW YORK DARIEN, CONNECTICUT	
ISSUE NO.	DRAWN	DATE	CHECKED
1	JRD	4/1/83	RAK
DESIGNER	APPROVED	DESIGNER	APPROVED
JRD	JRC	4/1/83	4/1/83
PROJECT SUPERVISOR	APPROVED		
		ISSUE NO.	CONTRACT NO.
		577	2
		PROJECT NO.	SHEET
			E-40

NOTE:
UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES
HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND
RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE
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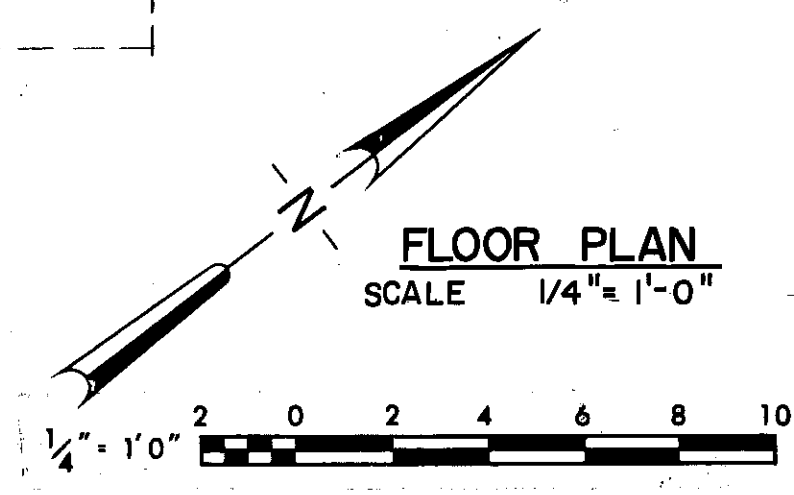


H-9


H-9

CHLORINE BUILDING ABOVE

CHLORINE CONTACT TANKS



FLOOR PLAN
SCALE 1/4" = 1'-0"


 R.J. Miller
MILLER · SIZING, P.C.
 consulting engineers
 499 SO. WARREN STREET
 SYRACUSE, NEW YORK 13202

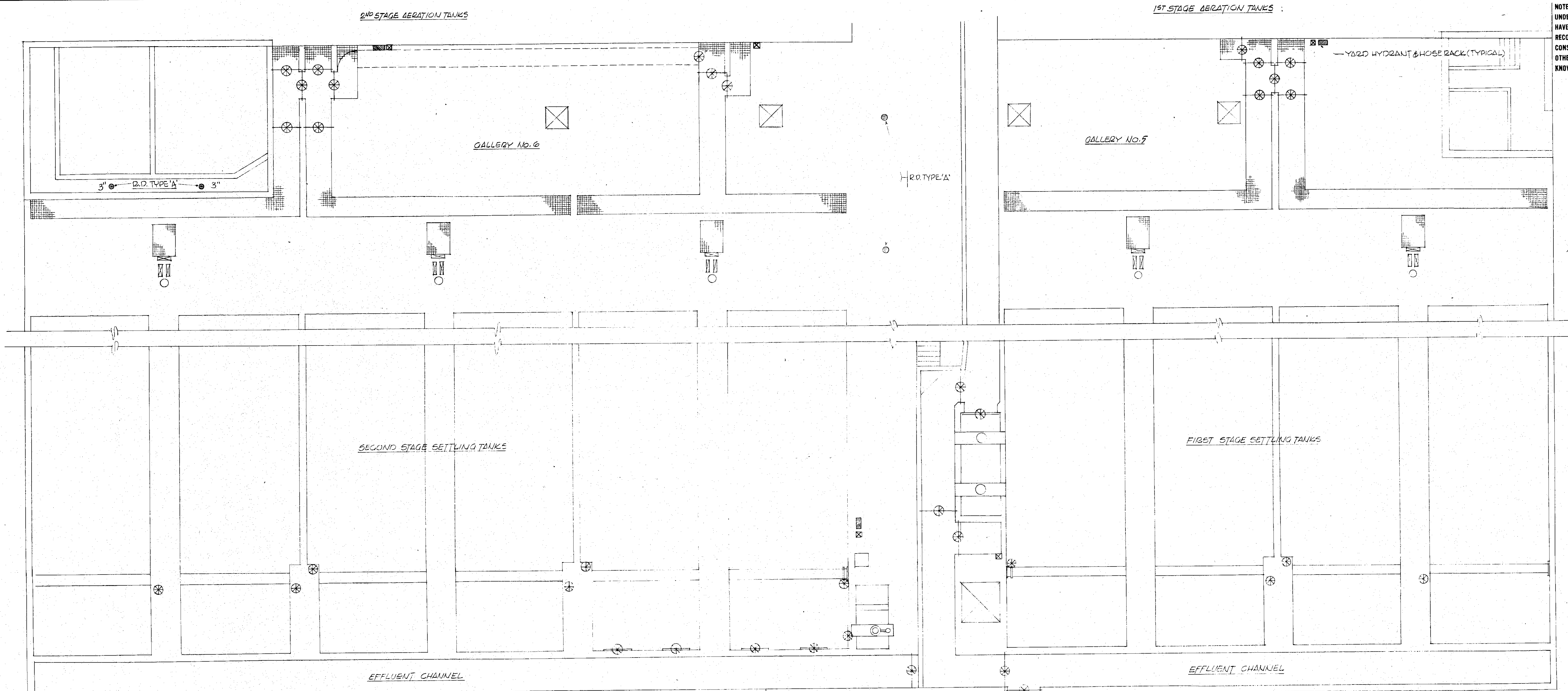


ISSUE NO.	DATE	CHECKED	DESIGNER	APPROVED	DATE
2	2/24/78	RJM	RJM	SGB	2/24/78
1	3/31/76	RJM	WTF	SGB	3/31/76

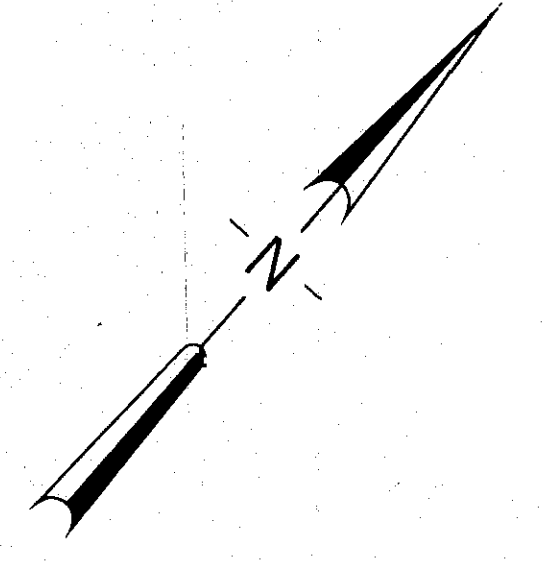
PROJECT SUPERVISOR: *[Signature]*
 APPROVED: *S.G. [Signature]*

ONONDAGA COUNTY, NEW YORK	
DEPARTMENT OF DRAINAGE & SANITATION	
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT	
PROCESS STRUCTURE GALLERY NO. 8 FLOOR PLAN	
Stearns & Wheeler CIVIL AND SANITARY ENGINEERS	
CAZENOVIA, NEW YORK	NEW CANAAN, CONNECTICUT
JOB NO. 577	CONTRACT NO. 3
SHEET H 19	

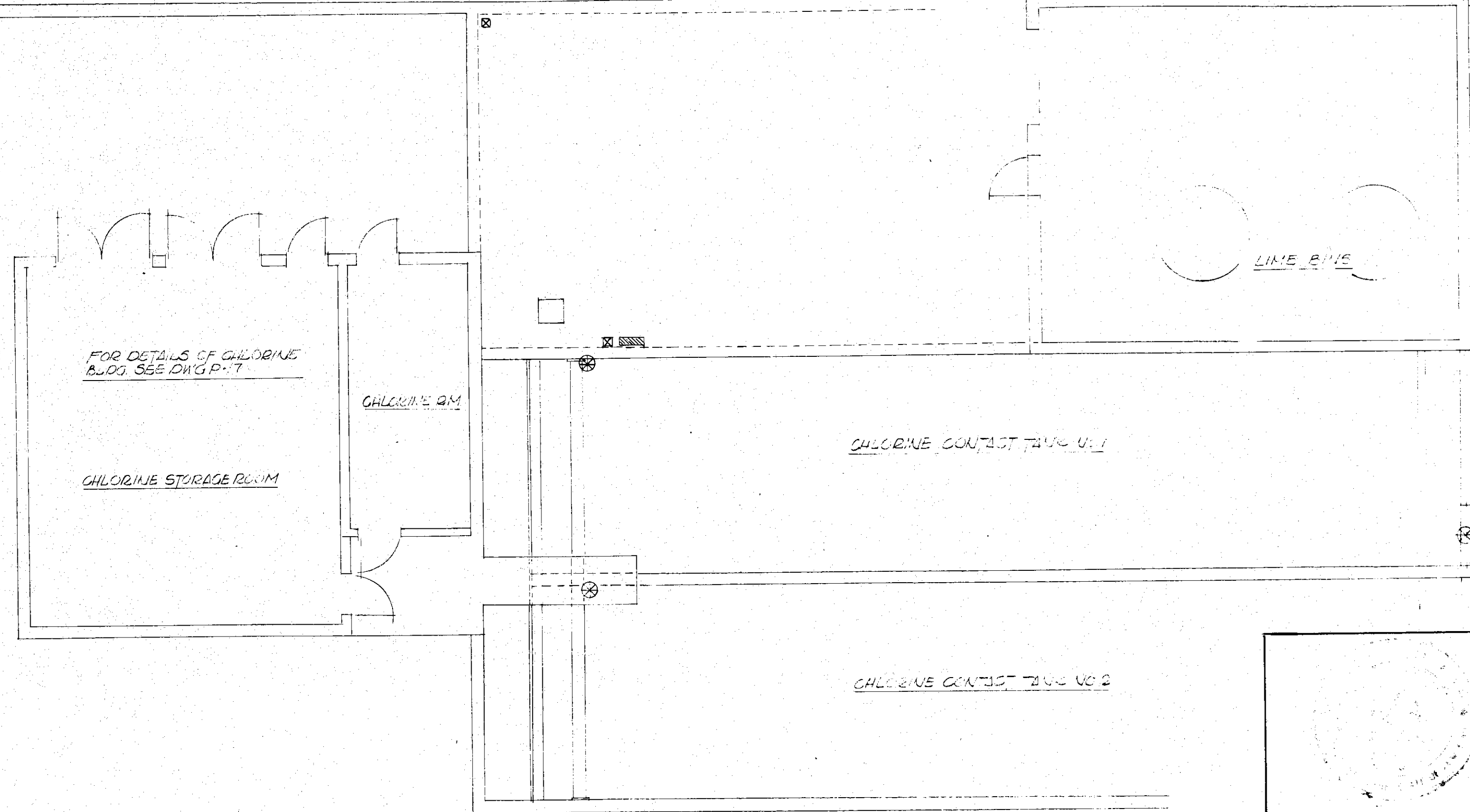
2-33



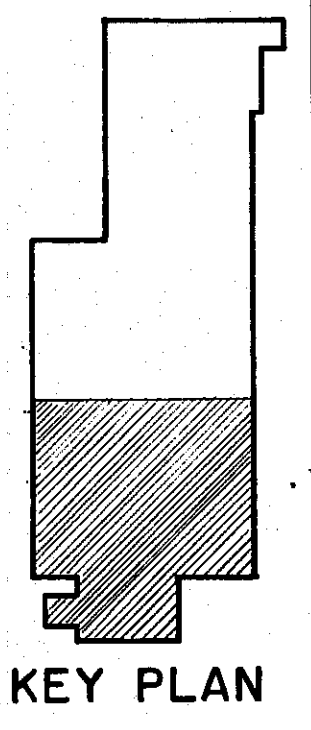
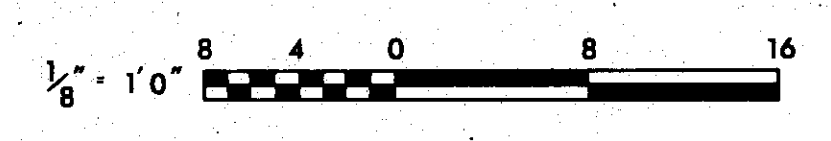
NOTE:
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PARTIAL FLOOR PLAN UPPER LEVEL
SCALE 1/8" = 1'-0"



RECORD DRAWINGS: THESE DRAWINGS HAVE BEEN
REVISED TO REFLECT MAJOR CHANGES, IF ANY, WHICH
OCCURRED DURING CONSTRUCTION. REVISIONS ARE
BASED ON INFORMATION FURNISHED BY CONTRACTOR.



MILLER - SIZING, P.C.
consulting engineers
499 SO WARREN STREET
SYRACUSE, NEW YORK 13202

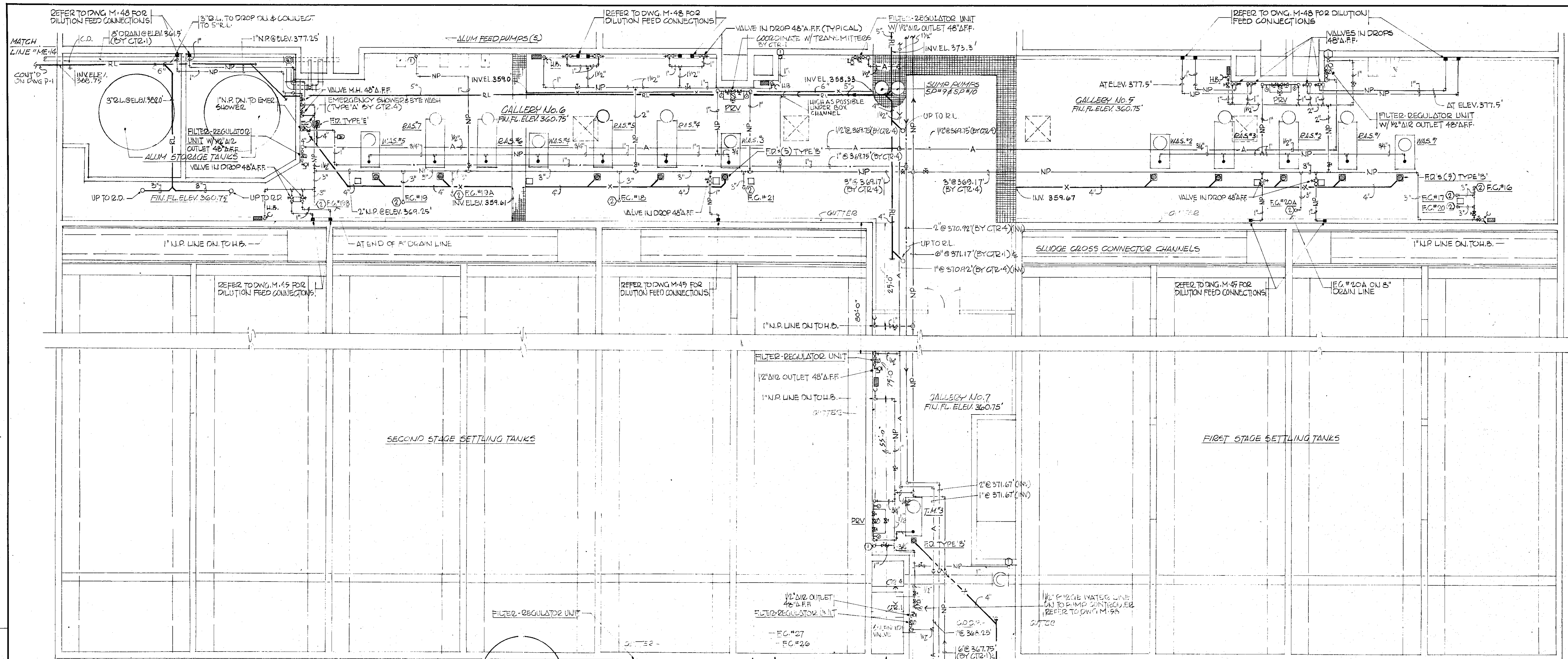
NO.	DATE	BY	FOR	APPROVED
3	6/83	RAK	FOR RECORD	EJM
2	2/24/78	DLG	FOR CONSTRUCTION	SLB
1	3/31/76	RMB	DESIGN	SLB

ONONDAGA COUNTY, NEW YORK
DEPARTMENT OF DRAINAGE & SANITATION
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT

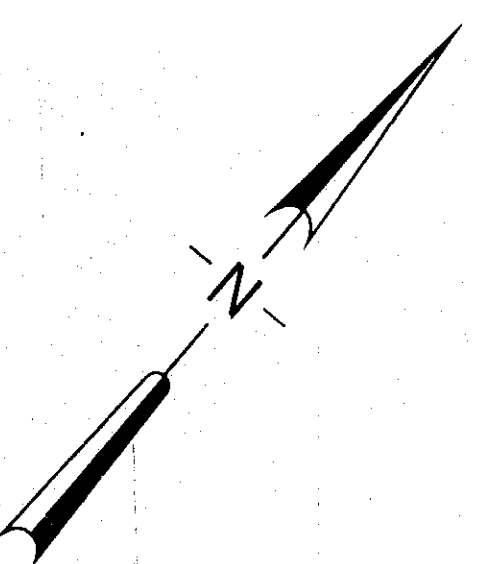
PROCESS STRUCTURE
GALLERY 5, 6 & 7, 1ST AND 2ND STAGE
SETTLING TANKS CHLORINATION - UPPER PLAN

Stearns & Wheeler
CIVIL AND SANITARY ENGINEERS
CAZENOVIA, NEW YORK NEW CANAAN, CONNECTICUT

JOB NO. 577 CONTRACT NO. 4 SHEET P 13

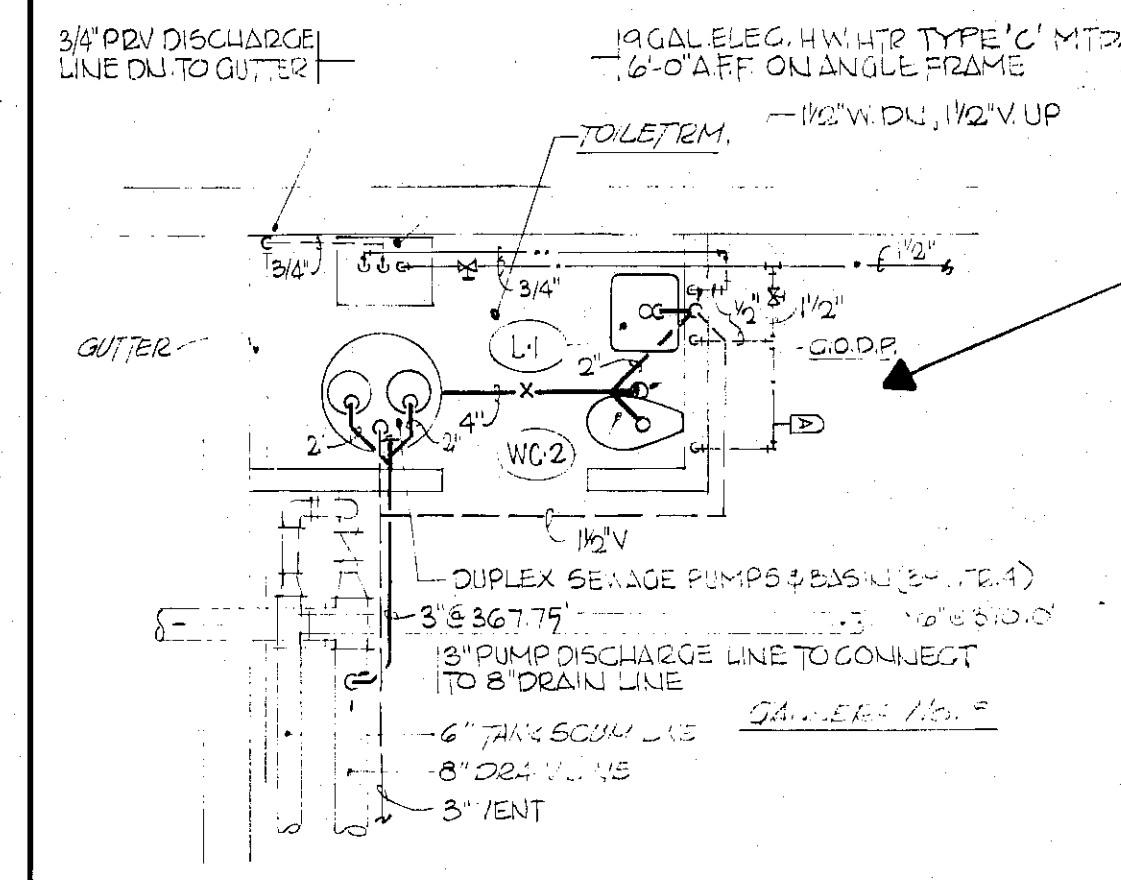


NOTE:
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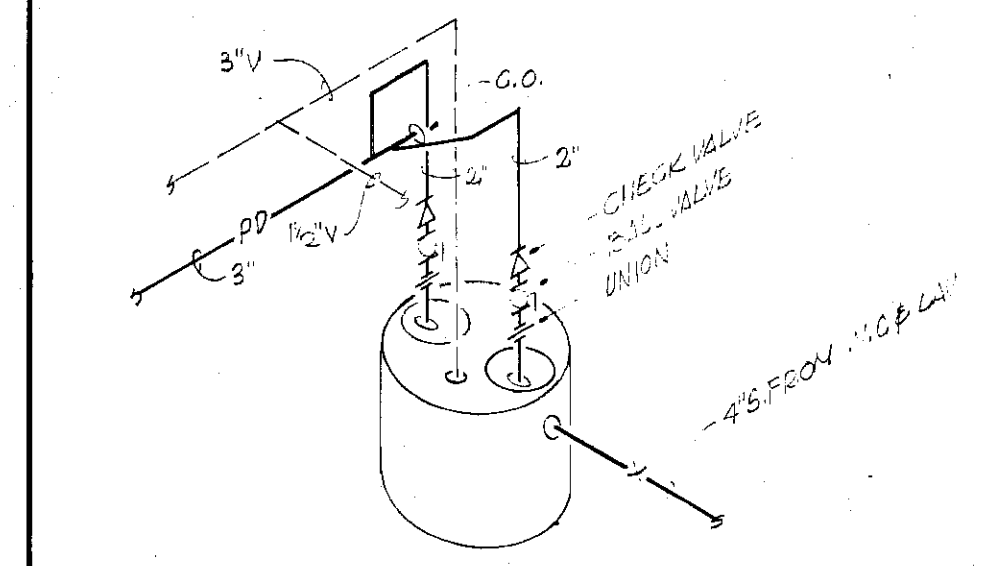
SECOND STAGE SETTLING TANKS

FIRST STAGE SETTLING TANKS



TOILET ROOM GALLERY NO. 8

SCALE 1/4" = 1'-0"



SEWAGE PUMP PIPING SCHEMATIC

NO SCALE

PARTIAL FLOOR PLAN LOWER LEVEL

SCALE 1/8" = 1'-0"

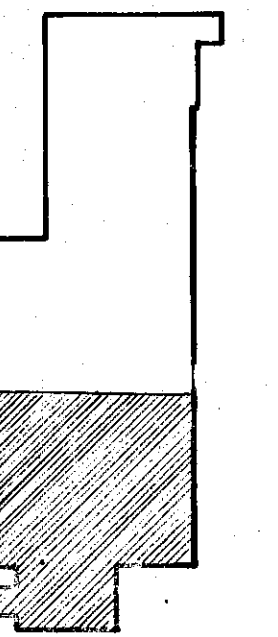
RECORD DRAWINGS: THESE DRAWINGS HAVE BEEN
REVISED TO REFLECT MAJOR CHANGES, IF ANY, WHICH
OCCURRED DURING CONSTRUCTION. REVISIONS ARE
BASED ON INFORMATION FURNISHED BY CONTRACTOR.

NOTES:

- ALL (2") N.P. PIPING SHOWN ON THIS DRAWING TO BE PROVIDED BY CTR. 4. ALL (1/2") PIPING (3" AND SMALLER) SUPPLYING PUMP SEALS, HOSE BIBBS, VALVE HYDRANTS & PLUMBING CONNECTIONS TO BE PROVIDED BY CTR. 4.
- ALL POTABLE WATER PIPING SHOWN TO BE BY CTR. 4. DUMP SEALS: CTR. 4 TO PROVIDE PIPING TO 48" AFF. CTR. 1 TO CONTINUE WATER SEAL PIPING FROM THIS POINT TO PUMP.
- FURNISH CONNECTIONS: CTR. 4 TO PROVIDE PIPING AND MAKE FINAL CONNECTION TO FLOOR IN CONNECTION VALVE VALVE BY CTR. 1. REFER TO THE FOLLOWING DRAWINGS FOR FINAL CONNECTIONS (ELEVATIONS) OF PLUMBING CONNECTIONS: M-45, M-47, M-48, M-49, M-50, M-51, M-52, M-53, M-54, M-55, M-56, M-57, M-58, M-59, M-60, M-61, M-62, M-63, M-64, M-65.
- ALL COMPRESSED AIR PIPING BY CTR. 4. ALL AIR SUPPLIES TO INDIVIDUAL OUTLETS AND PIECES OF EQUIP. BY CTR. 4. ALL AIR INCLUDING FILTER-REGULATOR UNITS (AS REQUIRED) AND BALL VALVES, CTR. 4 TO PROVIDE QUICK CONNECT AIR COUPLINGS, HOSE, ETC. & FINAL CONNECTIONS TO EQUIP.

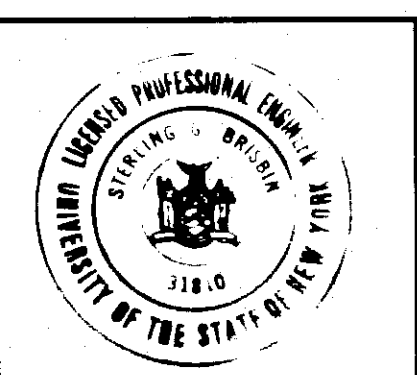
1/4" = 1'-0" 0 2 4 6 8 10

1/8" = 1'-0" 0 4 8 16



KEY PLAN

MILLER - SIZING, P.C.
CONSULTING ENGINEERS
499 SO. WARREN STREET
SYRACUSE, NEW YORK 13202



ISSUE NO.	DRAWN	DATE	CHECKED	DESIGNER	APPROVED	DATE
3	FOR RECORD	6/83	RAK	RAK	RJM	6/83
2	FOR CONSTRUCTION	12/24/78	RMB	DLD	SGB	2/24/78
1	REVISED	3/31/76	ZMB	DLD	SGB	3/31/76

ONONDAGA COUNTY, NEW YORK	
DEPARTMENT OF DRAINAGE & SANITATION	
BALDWINVILLE - SENECA KNOLLS SANITARY DISTRICT	
PROCESS STRUCTURE	
GALLERY 5, 6 & 7, 1ST & 2ND STAGE	
SETTLING TANKS CHLORINATION - LOWER PLAN	
Stearns & Wheeler	
CIVIL AND SANITARY ENGINEERS	
CAZENOVIA, NEW YORK	NEW CANAAN, CONNECTICUT
PROJECT SUPERVISOR J. J. ...	APPROVED S. C. ...
JOB NO. 577	CONTRACT NO. 4 SHEET P 14

Contract Drawings

CHEMICAL FEED EQUIPMENT CONVERSIONS FOR SODIUM HYPOCHLORITE DISINFECTION

Project #587346

Contract No. 5 - General

General Notes:

1. The Contractor shall provide all labor, materials and equipment required to complete the work specified in these contract documents.
2. All work shall be completed in accordance with all applicable local, state, and federal regulations, including the most recent addendum to these regulations.
3. All work shall be completed in accordance with the requirements of these project documents. Any discrepancies or errors in the contract documents shall be resolved by this Department's representative prior to proceeding with the work in question.
4. All work is to be completed in a first class manner by qualified and skilled tradespersons.
5. The Contractor shall be responsible for familiarizing him and/or herself with each project location, and coordinating all work necessary to complete the work scheduled in these documents in a timely manner. All work scheduled as part of this project shall be scheduled so as to minimize the interference with the normal operations of the facilities. The Contractor shall notify this Department a minimum of 48 hours prior to performing any work which may affect or disrupt the operations of the existing facilities.
6. The contract drawings herein are to provide information regarding existing conditions and the configuration for the new work. For sake of clarity, these drawings may not include all existing conditions. The contractor is responsible for verifying all dimensions and existing conditions in the field.
7. The Contractor shall be responsible for protecting and securing the site of the work from trespass, unauthorized entry, malicious mischief and vandalism. The Contractor shall maintain the site in a safe, neat and orderly condition, and shall promptly remove on a regular basis all dirt, rubbish and debris resulting from their work.
8. All materials and equipment removed as part of this contract shall become the property of the Contractor and removed immediately from the project site unless otherwise notified by this Department. All material removed from site shall be disposed of in accordance with all applicable local, state, and federal regulations at the Contractor's expense.
9. All materials, equipment and workmanship shall be subject to inspection and testing by this Department's representative, including work already completed but not finally accepted. No work shall be covered or otherwise concealed without this Department's representative being afforded the opportunity to inspect same.
10. The Contractor shall, at their own expense, sustain in their places and permanently protect from direct or indirect injury any and all utilities, structures and property in the vicinity of their work, whether over or underground, or which appear within the trench or excavations. The Contractor shall assume all costs and expenses for direct or indirect damage which may be occasioned by injury to any of them.

Project Locations:

1. **Brewerton Water Pollution Control Plant (WPCP)**
2. **Baldwinsville - Seneca Knolls Water Pollution Control Plant**
3. **Wetzel Road Sewage Treatment Plant (STP)**
4. **Oak Orchard Water Pollution Control Plant**

June 1999

**County of Onondaga
Department of Drainage and Sanitation
Syracuse, New York**

Drawing Index:

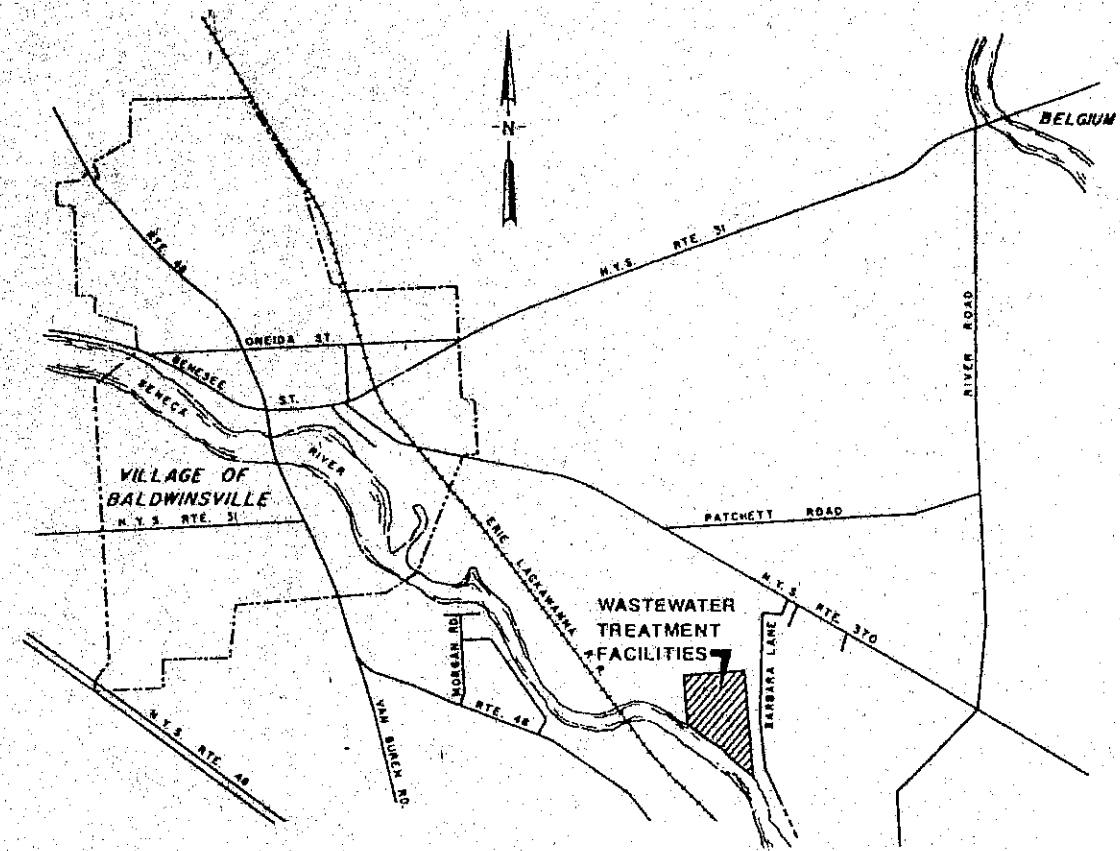
Cover Sheet

1. Chemical Feed Equipment Conversions: Brewerton WPCP
2. Chemical Feed Equipment Conversions: Brewerton WPCP - New Chemical Feed and Water Lines
3. Chemical Feed Equipment Conversions: Baldwinsville-Seneca Knolls WPCP
4. Chemical Feed Equipment Conversions: Wetzel Road STP
5. Chemical Feed Equipment Conversions: Baldwinsville-Seneca Knolls and Wetzel Road
6. Chemical Feed Equipment Conversions: Oak Orchard WPCP
7. Chemical Feed Equipment Conversions: Oak Orchard WPCP
8. Chemical Feed Equipment Conversions: Details
9. Chemical Feed Equipment Conversions: Electrical
10. Chemical Feed Equipment Conversions: Electrical

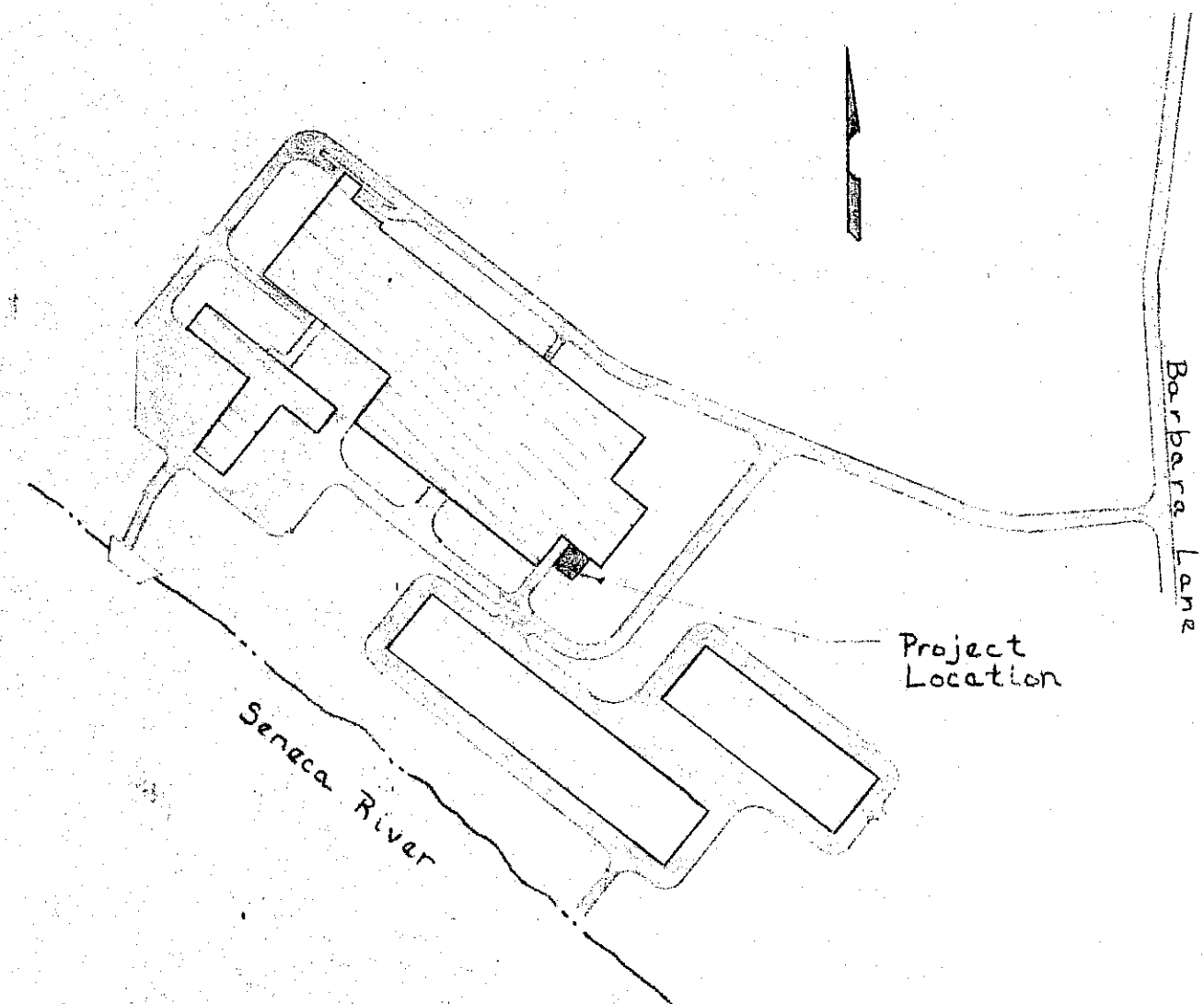


K. Karanik
John M. Karanik
Commissioner

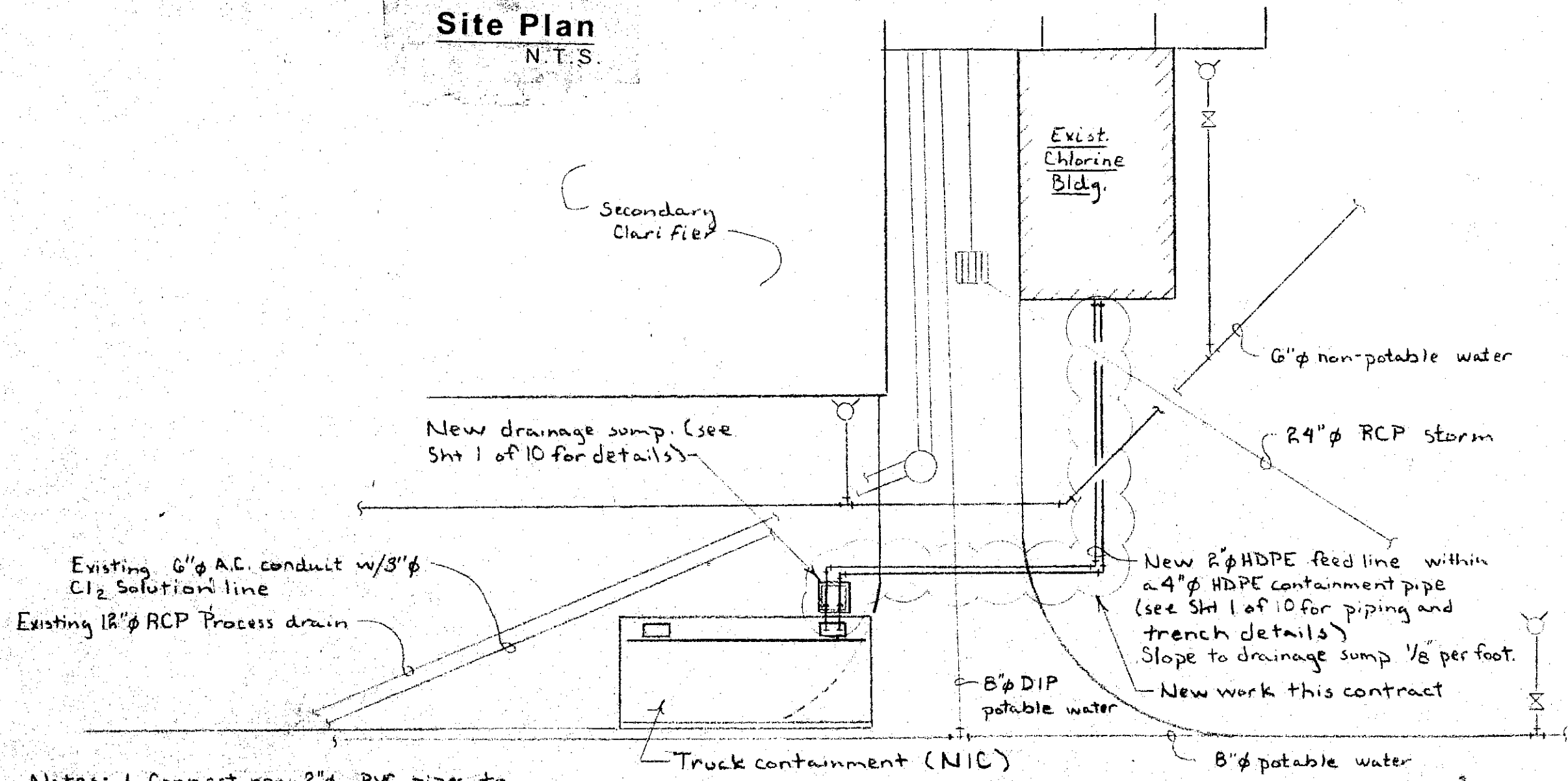
Date



LOCATION MAP

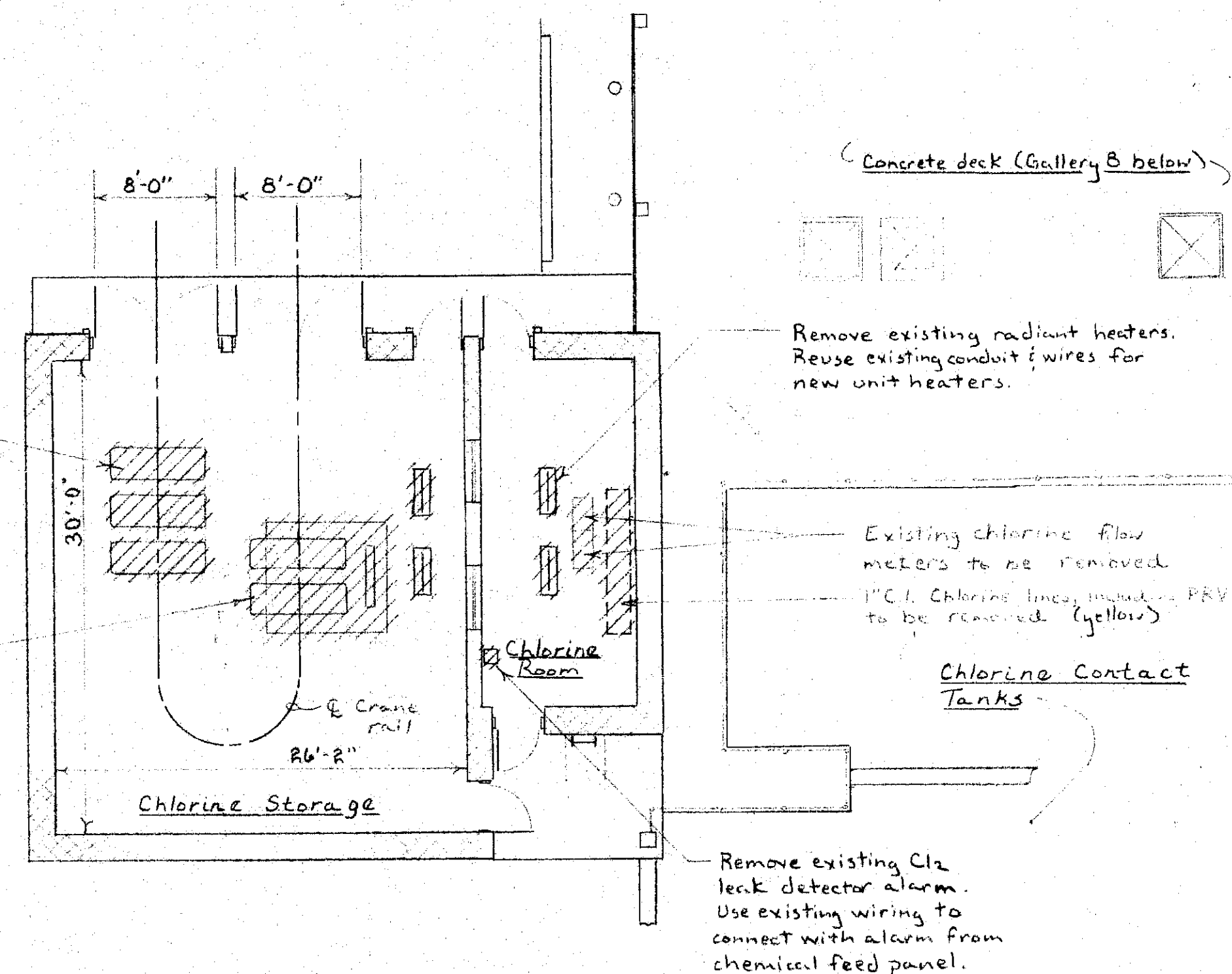


Site Plan
N.T.S.

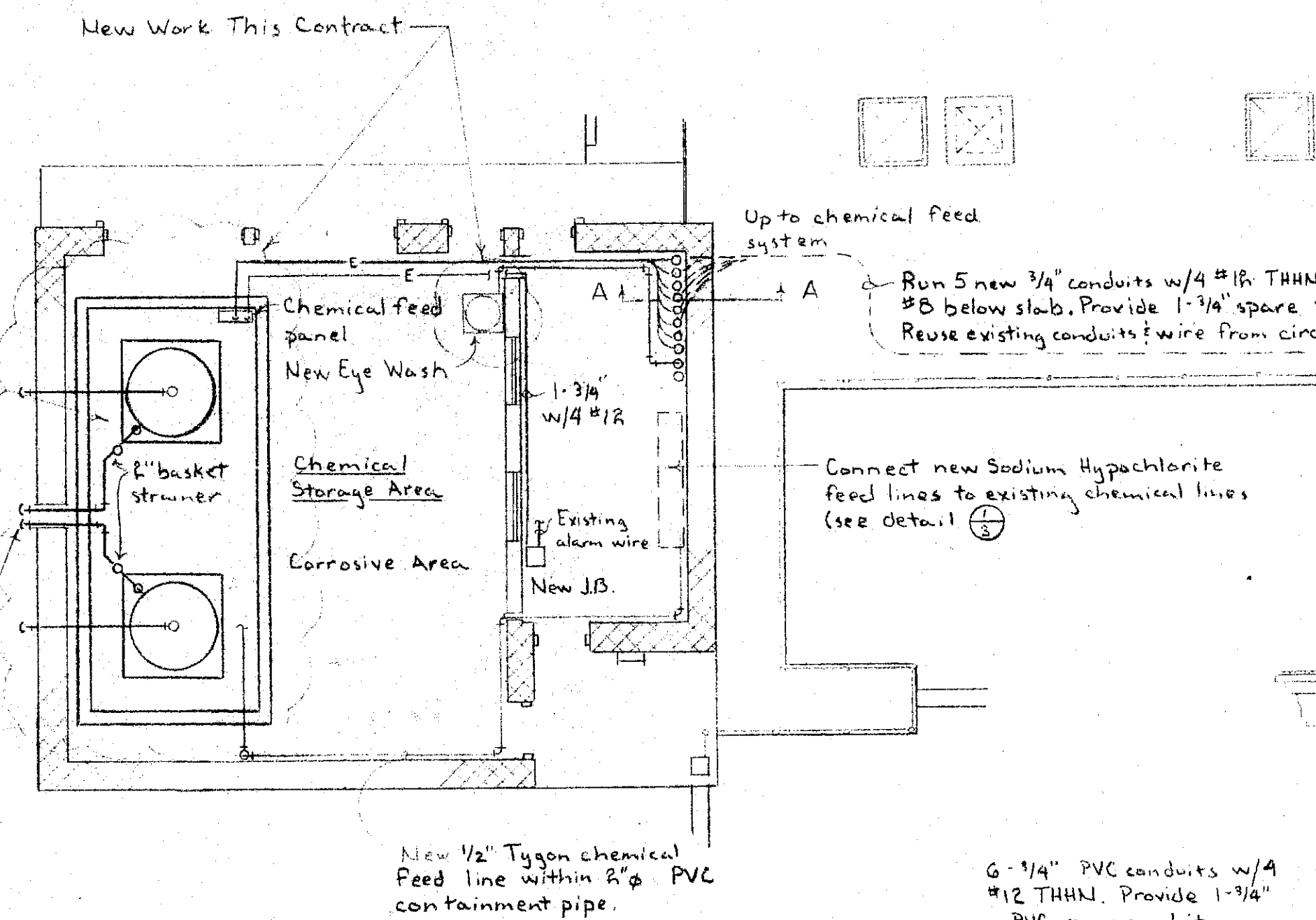


Yard Piping Plan
Scale: 1" = 20'

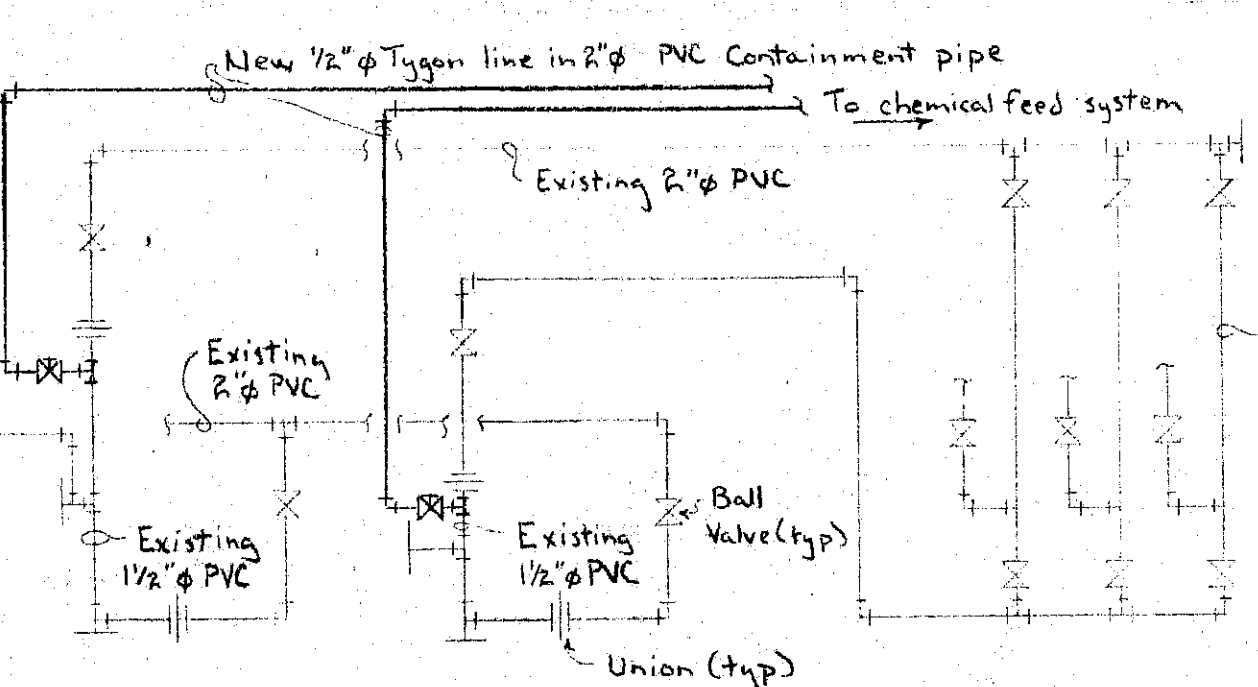
Notes: 1. Connect new 2" PVC pipes to existing fill station. Provide new valves and quick connects.
2. Verify exact locations of new and existing items in field. (Typical all locations)



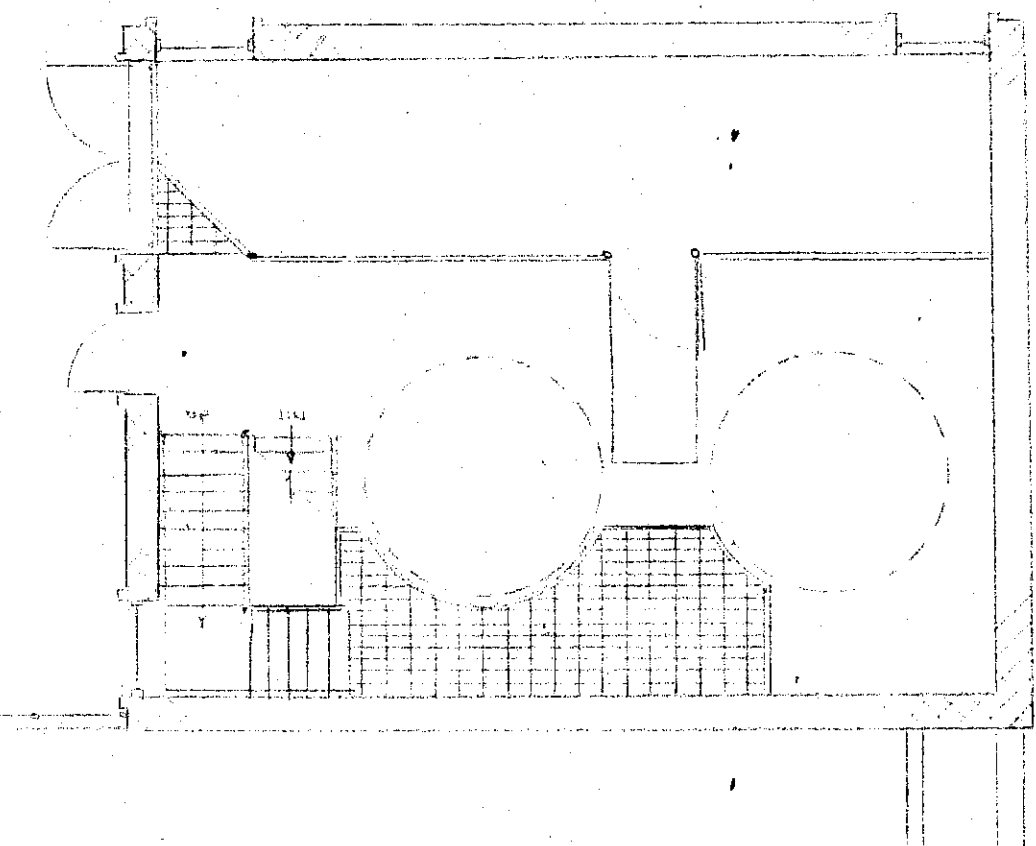
Existing Chlorine Feed System
N.T.S.



Proposed Sodium Hypochlorite Feed System
N.T.S.

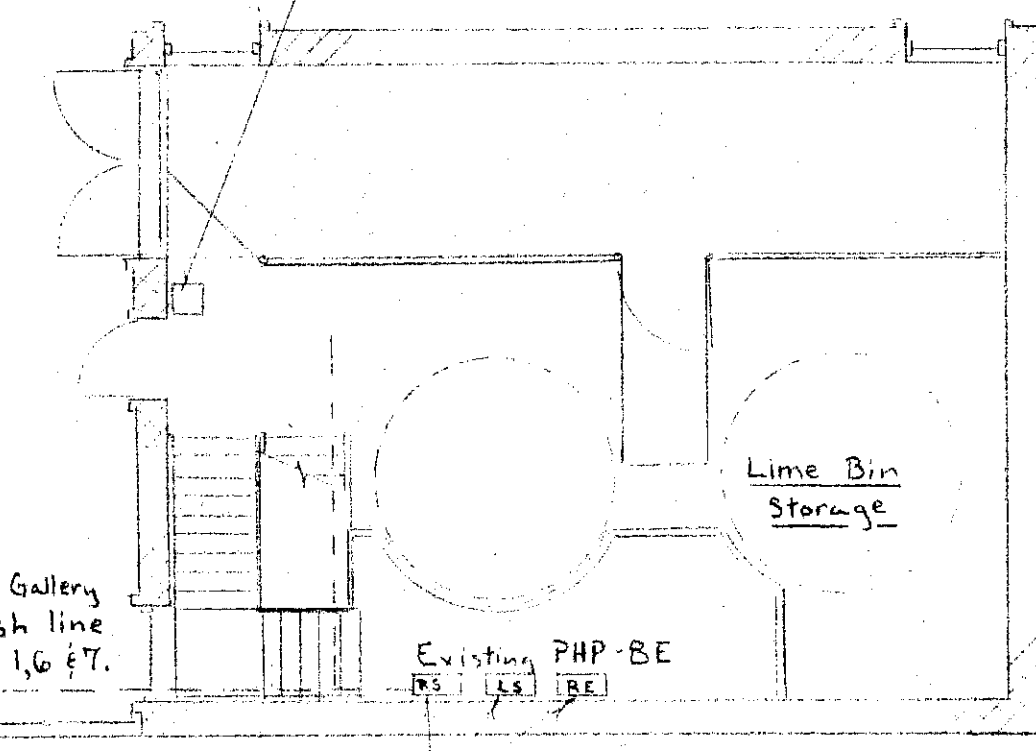


New Chemical Feed Connection Detail
N.T.S.

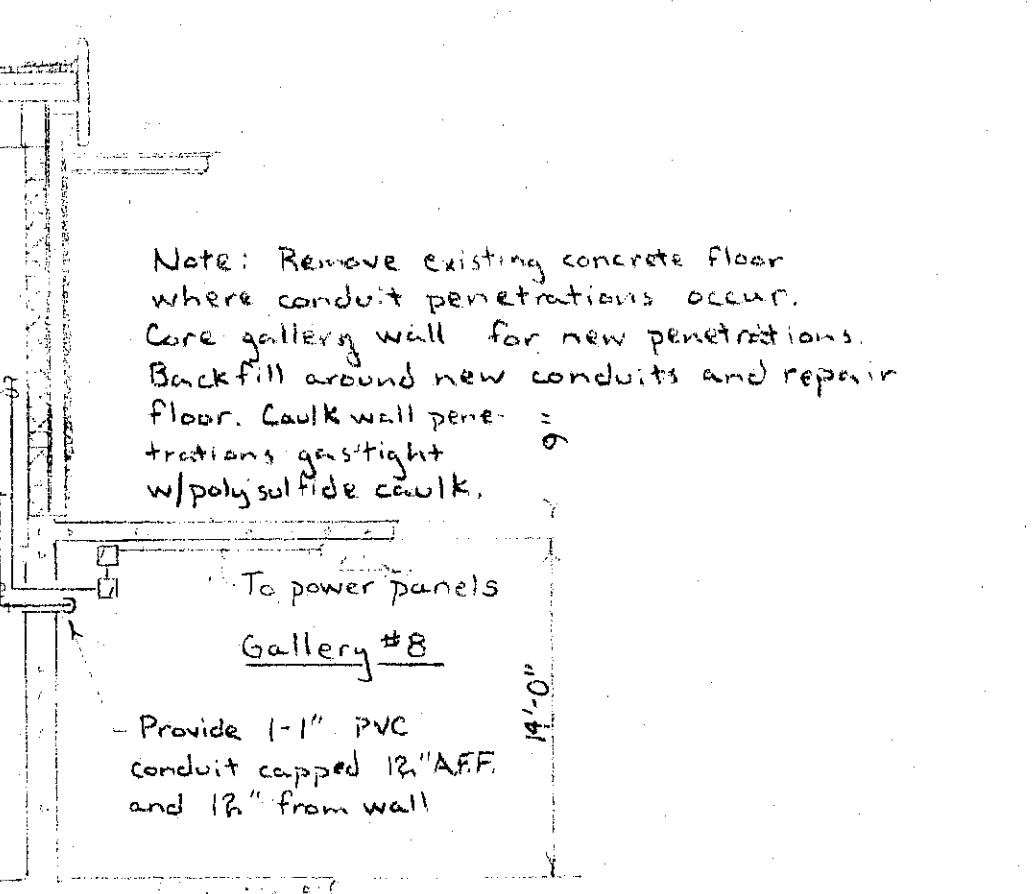


Note: Purge existing Cl₂ chlorine line w/air to blow out any residual chlorine in pipe. (To be done by County personnel)

Existing PHP-8: use circuits 8 for UH-1 480V, 3φ - 5 KW
2-20 amp, 3φ circuit 9 for UH-2, 3 480V, 3φ - 7.5 KW
reconnect from radiant heaters.



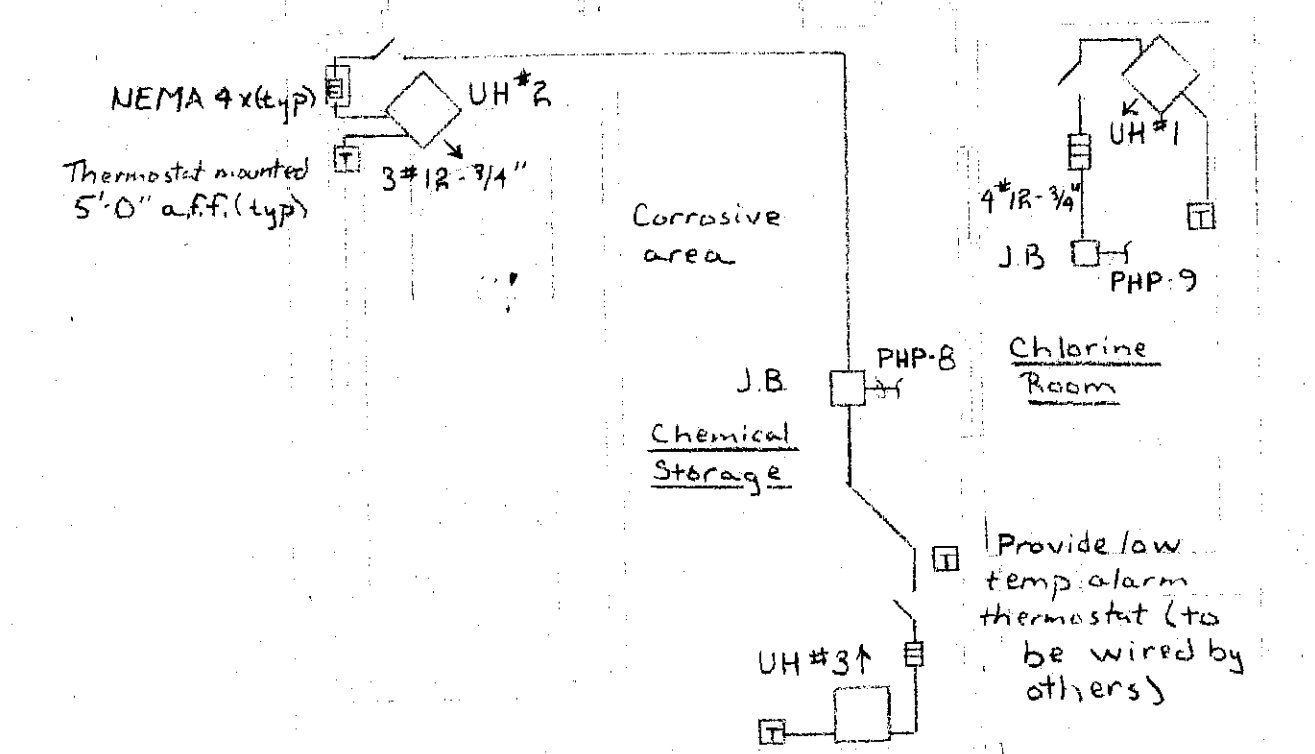
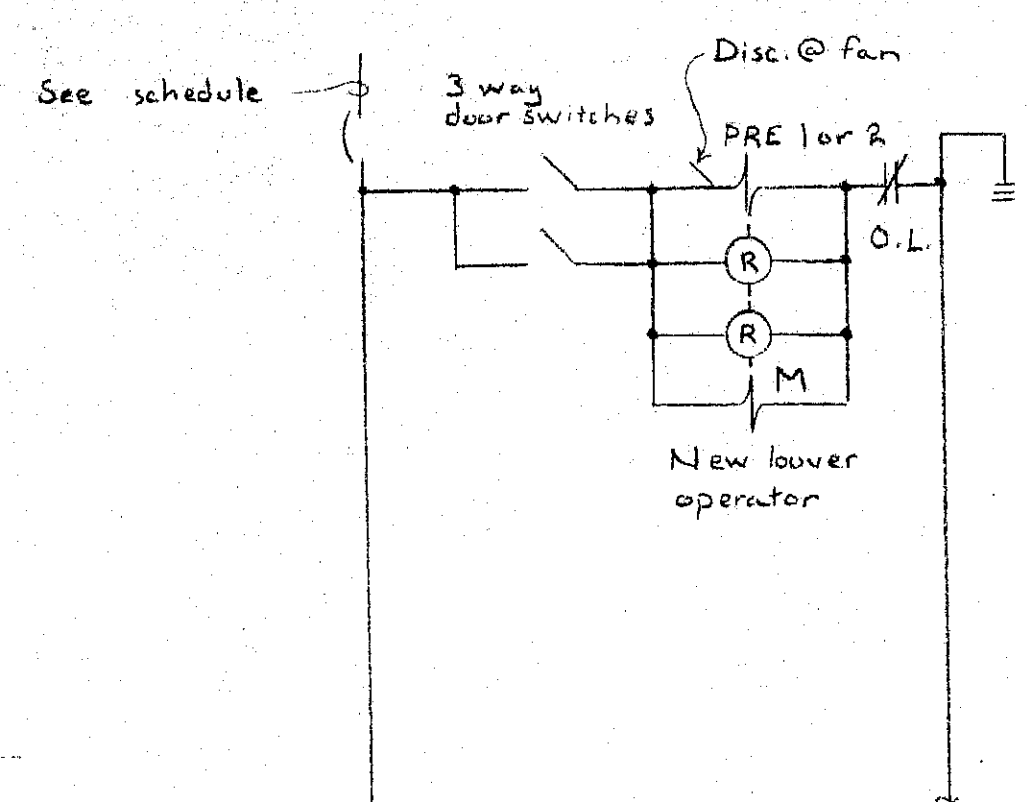
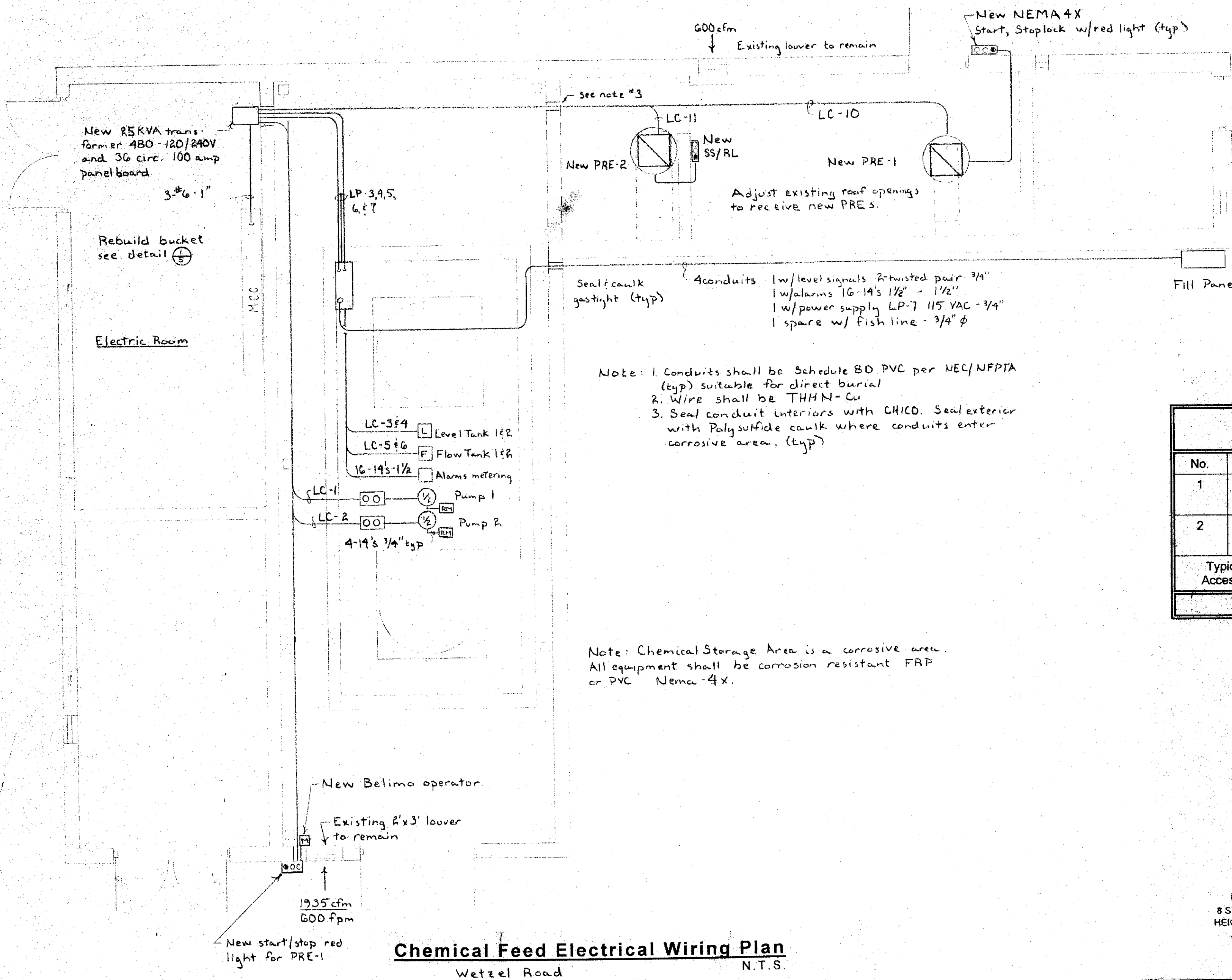
PHP - Power panels R5E, L5, circuits 6, 7, 8 may be reused after removals.
#6 - disconnect Cl₂ leak detector
#7 - chlorinator
#1 - EFF. panel control
Provide 4-20 amp breakers in empty spaces as required. 4RC panel R4 used.



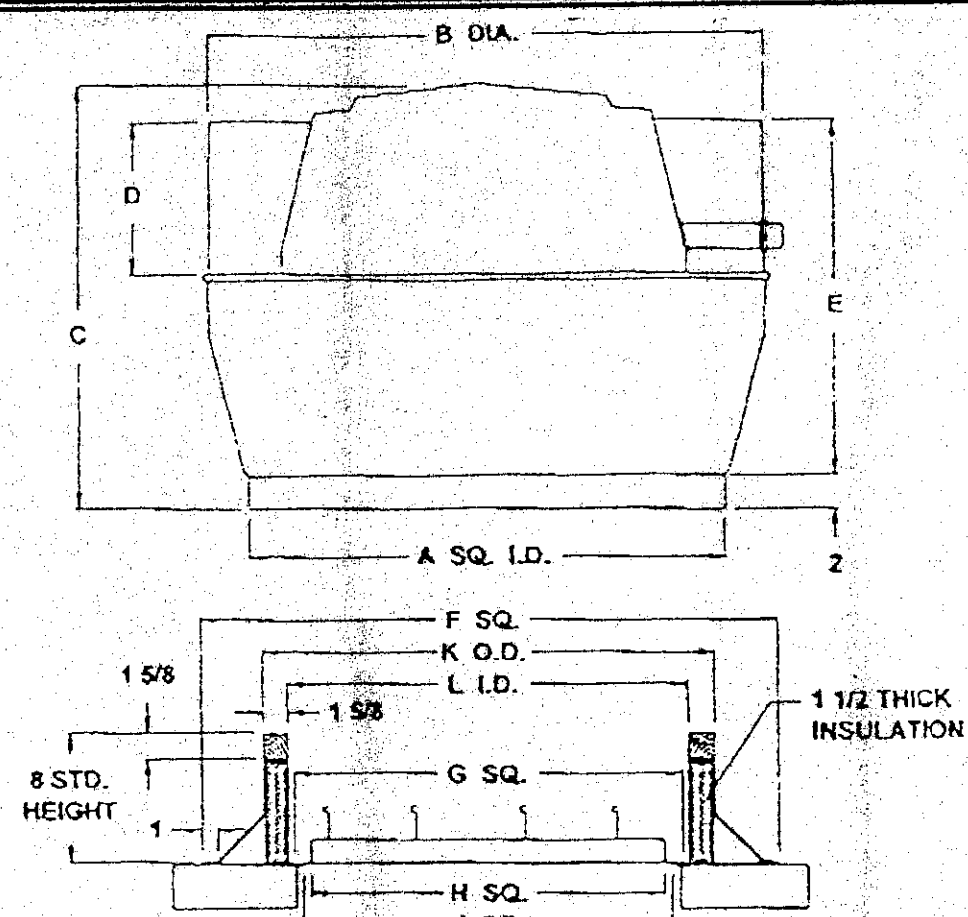
Section A-A
N.T.S.



Onondaga County Department of Drainage and Sanitation		
SCALE: N.T.S.	APPROVED BY:	DRAWN BY: RP
DATE: 11-4-98		
Chemical Feed Equipment Conversion Baldwinsville-Seneca Knolls WPCP		
	DRAWING NUMBER	3 of 10

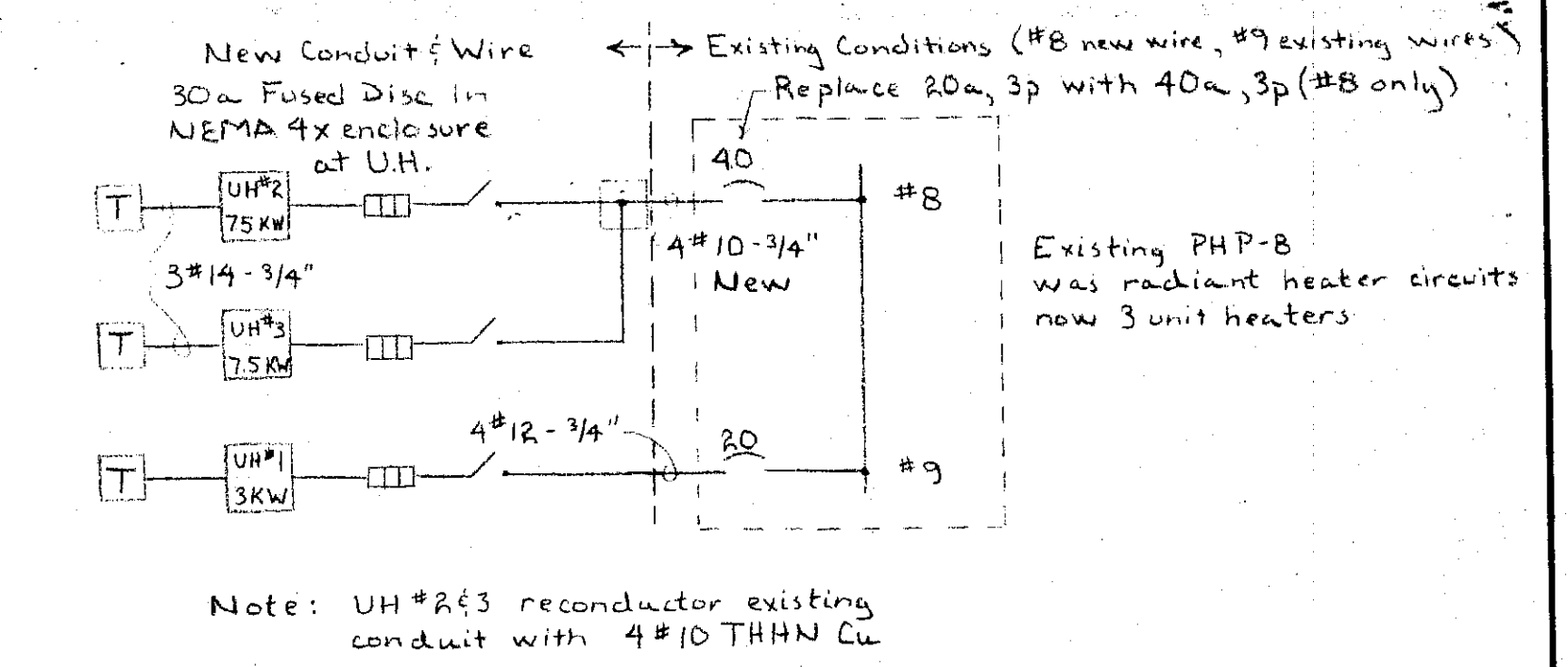
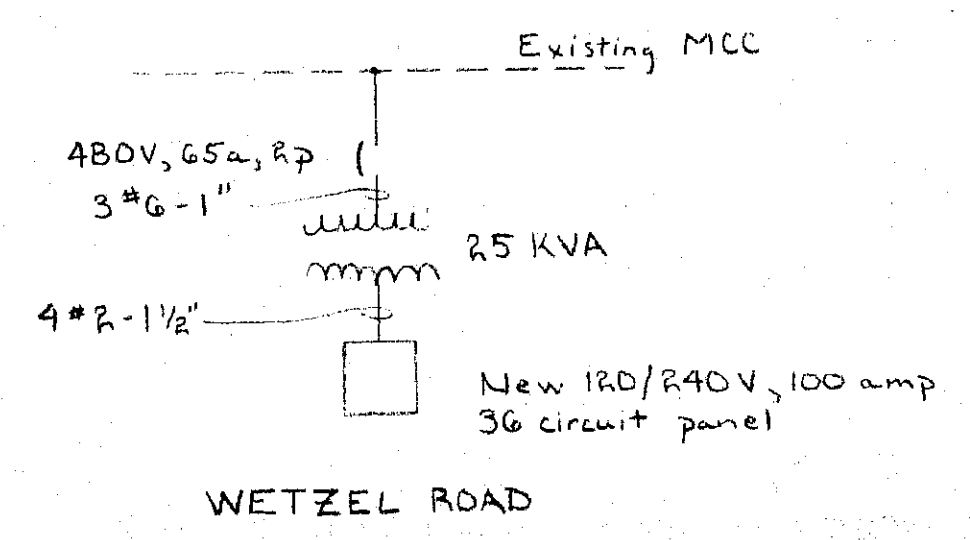
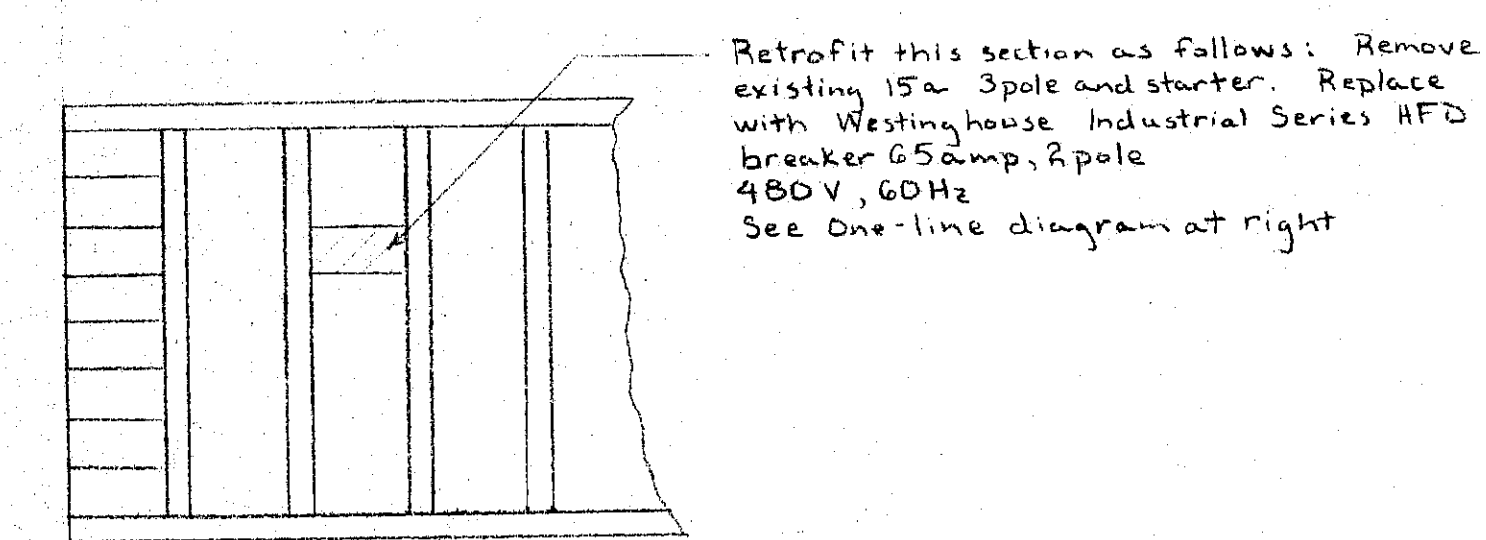


NEW FAN SCHEDULE POWERED ROOF EXHAUSTERS (PRE)					
No.	Location	CFM	SP	Hp	Voltage
1	Chlorine Room	600	0.50	1/4	120 VAC existing circuit
2	Chlorine Storage	2000	0.375	1/3	120 VAC existing circuit
Typical All Accessories		Heresite coating, Roof curb with backdraft damper, Safety disconnect at fan, Static shaft.			
PRE shall be ILG-CUBA Belt drive or approved equal					



Unit	Ventilator Dimensions					Roof Cut and Damper Dimensions					
	A	B	C	D	E	F	G	H	J	K	L
PRE 1 & 2	28	29 1/4	24 1/8	10 1/8	22	32 1/4	20 1/4	18	19 1/4	24 1/4	21 1/4

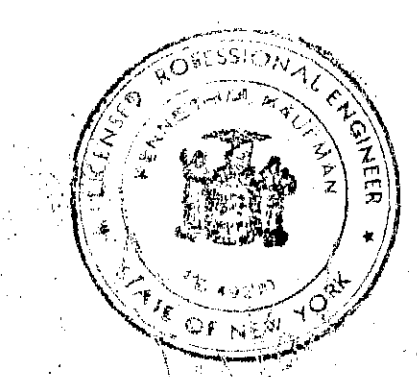
- NOTES:
- Utilize/adjust existing roof openings in 6" concrete deck to accommodate PREs #1 and #2.
 - Place new curbs over existing openings and repair roof leaktight.
 - New flashing for PREs #1 and #2 shall be either non-metallic or heresite coated.



Schedule of Unit Heaters - Electric						
No.	Volts	Phase	BTU/Hr	CFM	Mt. Ht.	Fluid
1	480	3	17,100	570	8'	Ethylene Glycol
2	480	3	25,600	570	8'	Ethylene Glycol
3	480	3	25,600	570	8'	Ethylene Glycol

Note: Electric unit heaters shall be corrosion resistant utilizing liquid to air heat exchanger equal to RUFFNECK XL3

Existing Westinghouse Motor Control Center (MCC)
WETZEL ROAD
N.T.S.

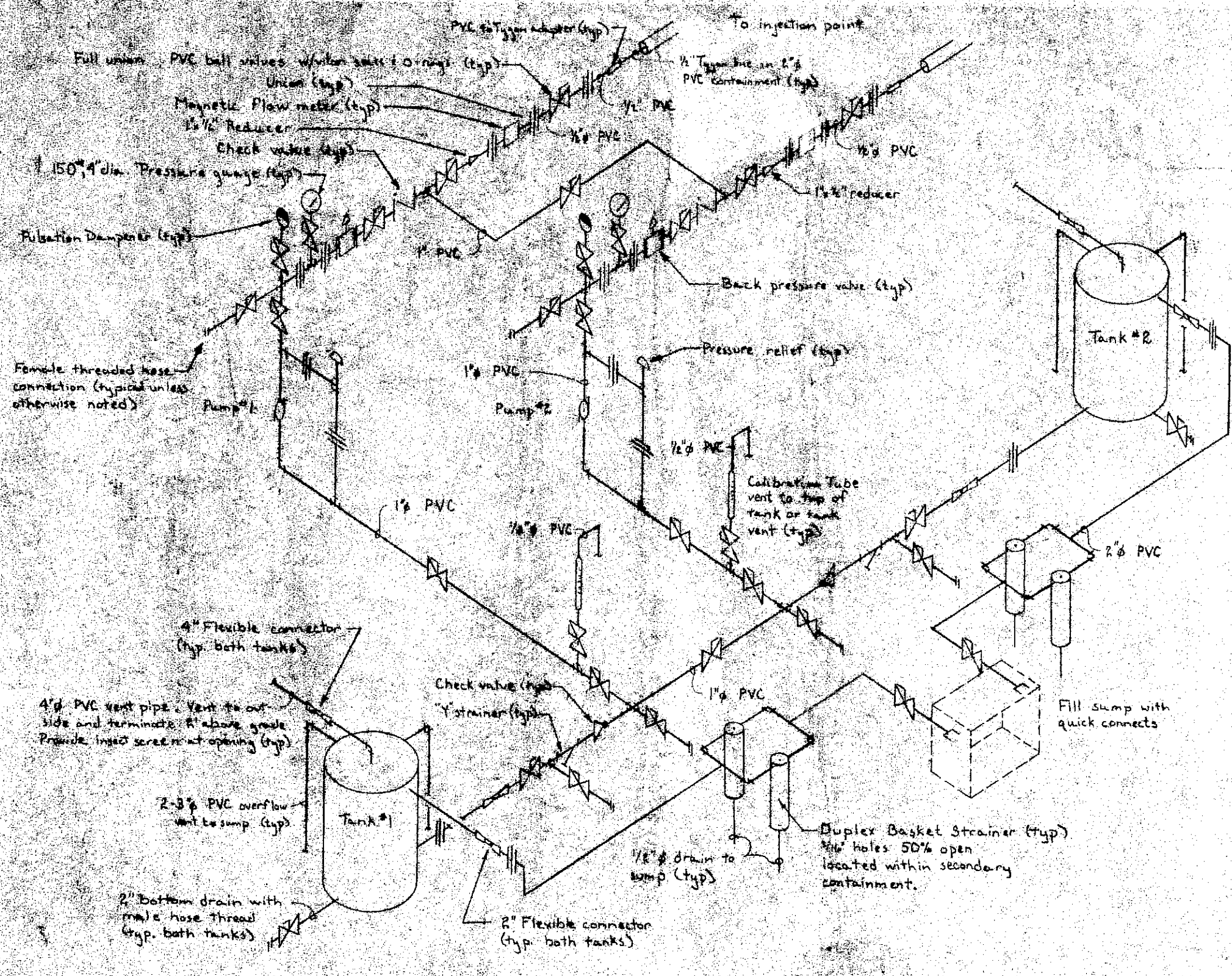


Onondaga County Department of Drainage and Sanitation

SCALE: N.T.S. APPROVED BY: DATE: 10-28-78 DRAWN BY: R.P.

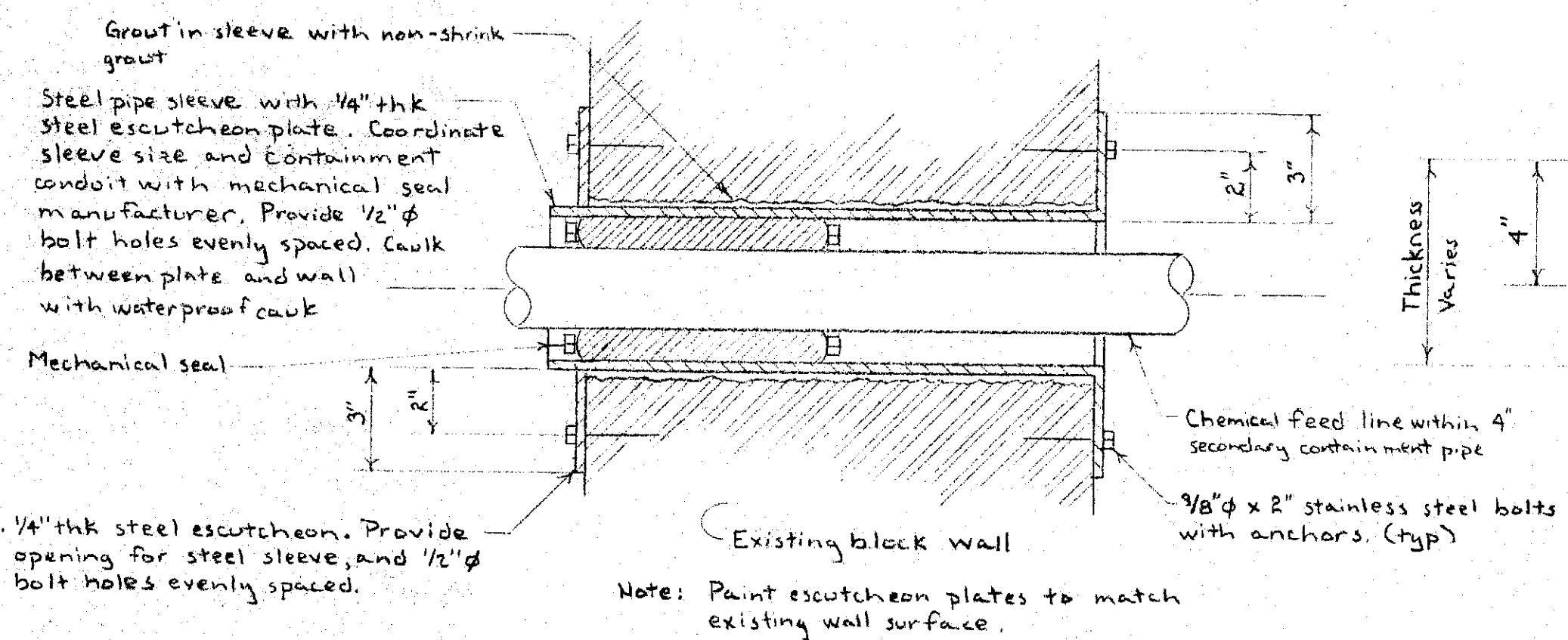
Chemical Feed Equipment Conversion
Baldwinsville - Seneca Knolls & Wetzel Road

DRAWING NUMBER: 5 of 10



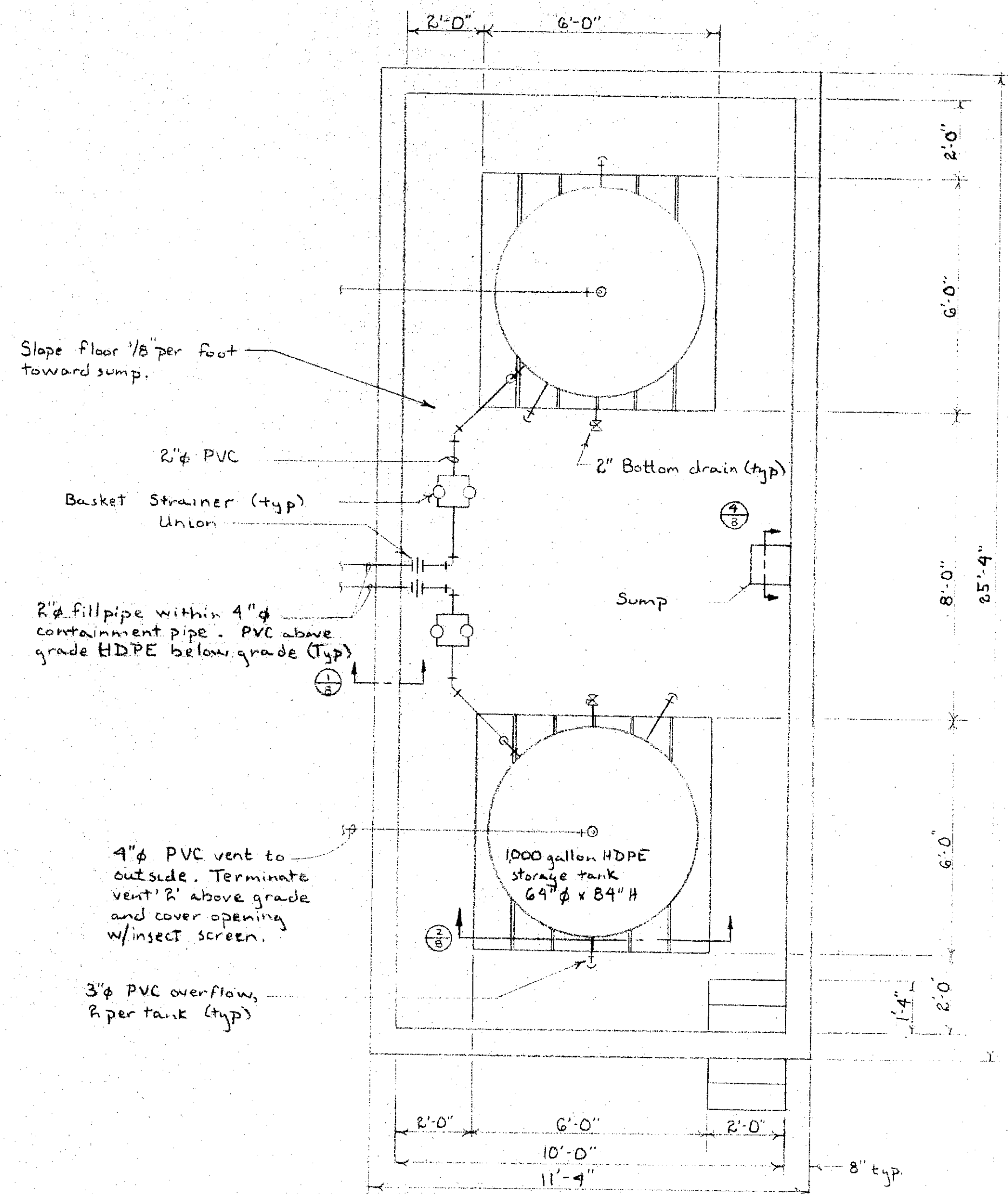
Chemical Feed System Schematic
N.T.S.

- Notes:**
1. Provide double wall piping outside of containment in accordance with NYCRR Part 599. Buried piping is to be HDPE, above grade is to be PVC.
 2. Provide a ball valve and check valve where product lines connect to solution lines.
 3. All ball valves shall be PVC with Viton seats and Viton O-rings.
 4. All hardware shall be HDPE, PVC, FRP, or nylon. This includes, but is not limited to, nuts, bolts, washers, straps, and hangers.
 5. Tanks shall be HDPE, 1,000 gallon with a 950 gallon working capacity (Top side fill).
 6. Coordinate location of Fill Panel and Control Panel with Site Plans.
 7. Basket strainers shall be Hayward Simplex or equal with 3/16" openings 50% open.
 8. All electrical conduits and fittings shall be Schedule 80 PVC installed in accordance with the National Electric Code.
 9. Vent pipe shall terminate two feet above grade with a plastic insect screen.
 10. All piping shall be braced and secured every 3 feet. All devices shall be braced and strapped on both ends.
 11. Product lines shall be Tygon, nylon, or polyethylene within a two inch PVC containment pipe. Containment pipe shall slope as indicated.
 12. PVC containment shall begin within the chemical containment area and shall extend to chemical injection point. Slope containment pipe, 1/8 inch per foot, to containment area when possible.



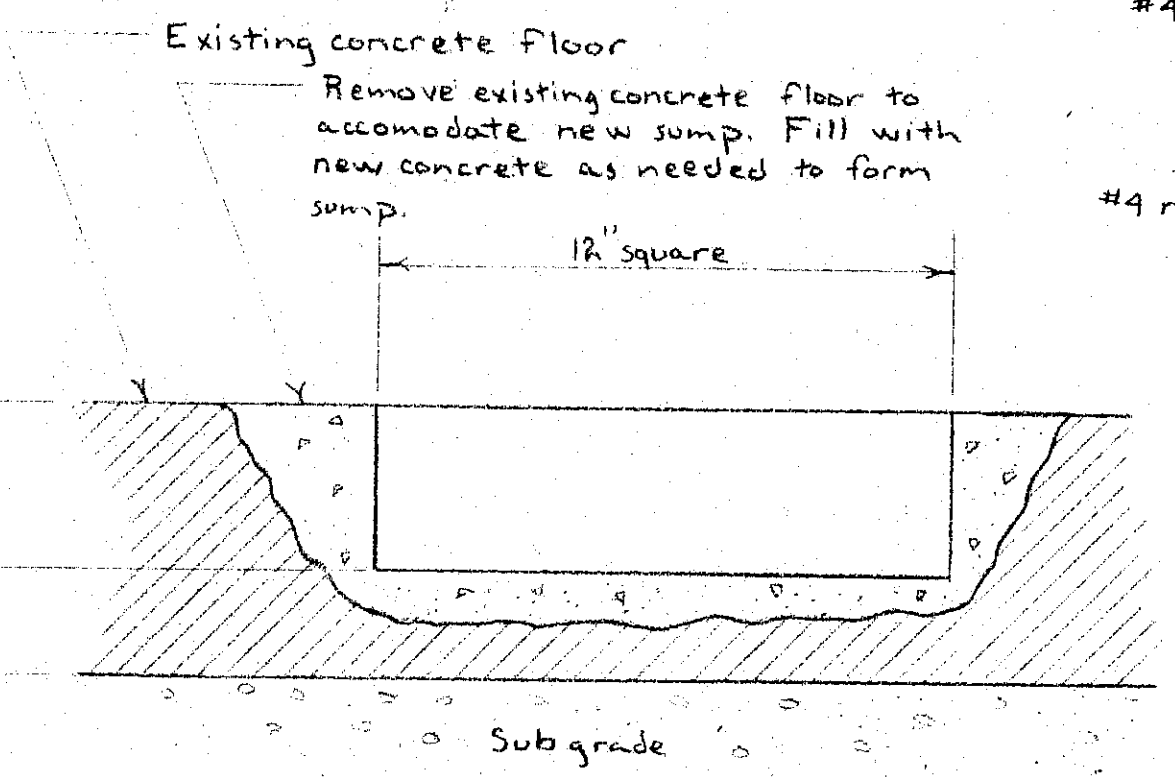
Typical Wall Penetration
NTS

Note: For penetrations in new or existing concrete core a smooth hole for new pipe. Pipes less than 2" diameter caulk around pipe gas tight with a polysulfide caulk. Pipes greater than or equal to 2" diameter seal around pipe with an elastic-mechanical seal. Coordinate hole size with seal manufacturer.

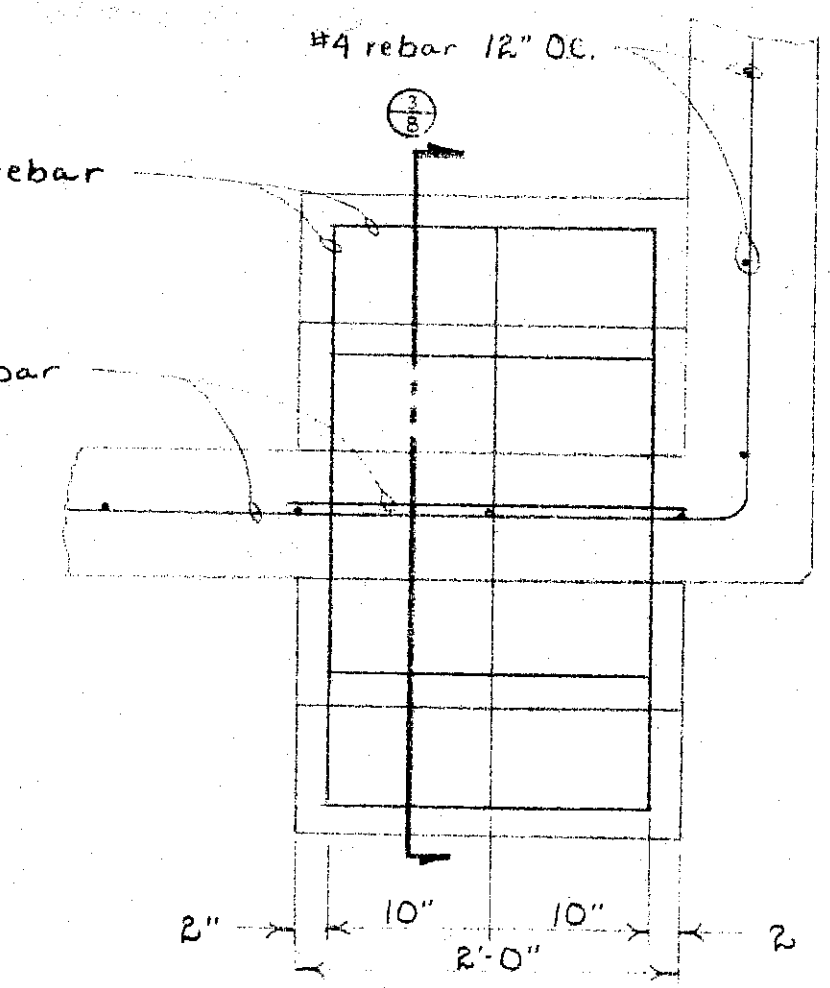


Secondary Containment Plan
Scale: 3/8" = 1' - 0"

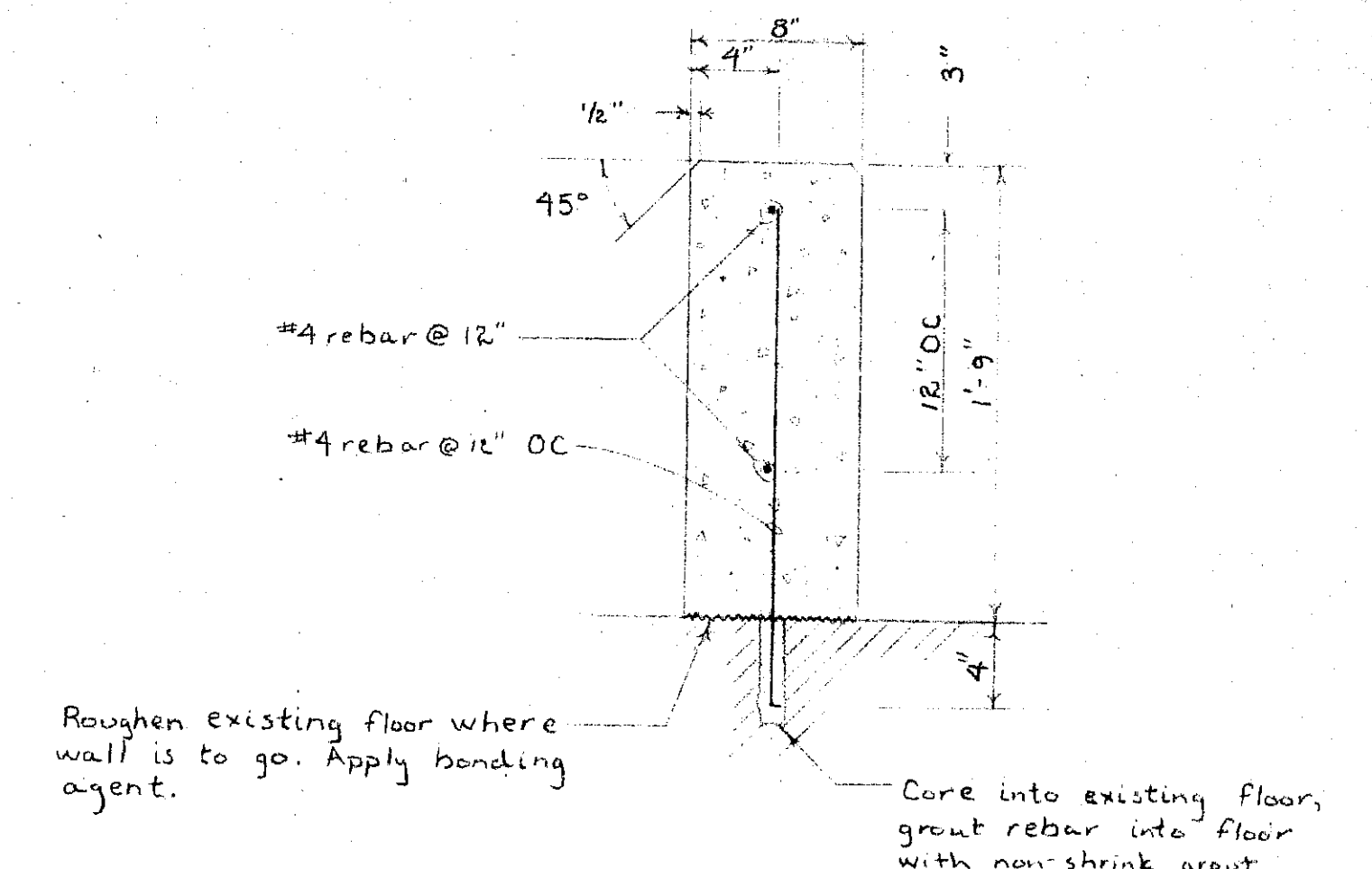
- Notes:**
1. All chemical piping and secondary piping outside of the containment wall shall be PVC or HDPE unless otherwise noted.
 2. Exact piping, step, and sump locations to be determined in the field.
 3. All piping not shown for clarity. See "Chemical Feed System Schematic".



Containment Sump Section
NTS

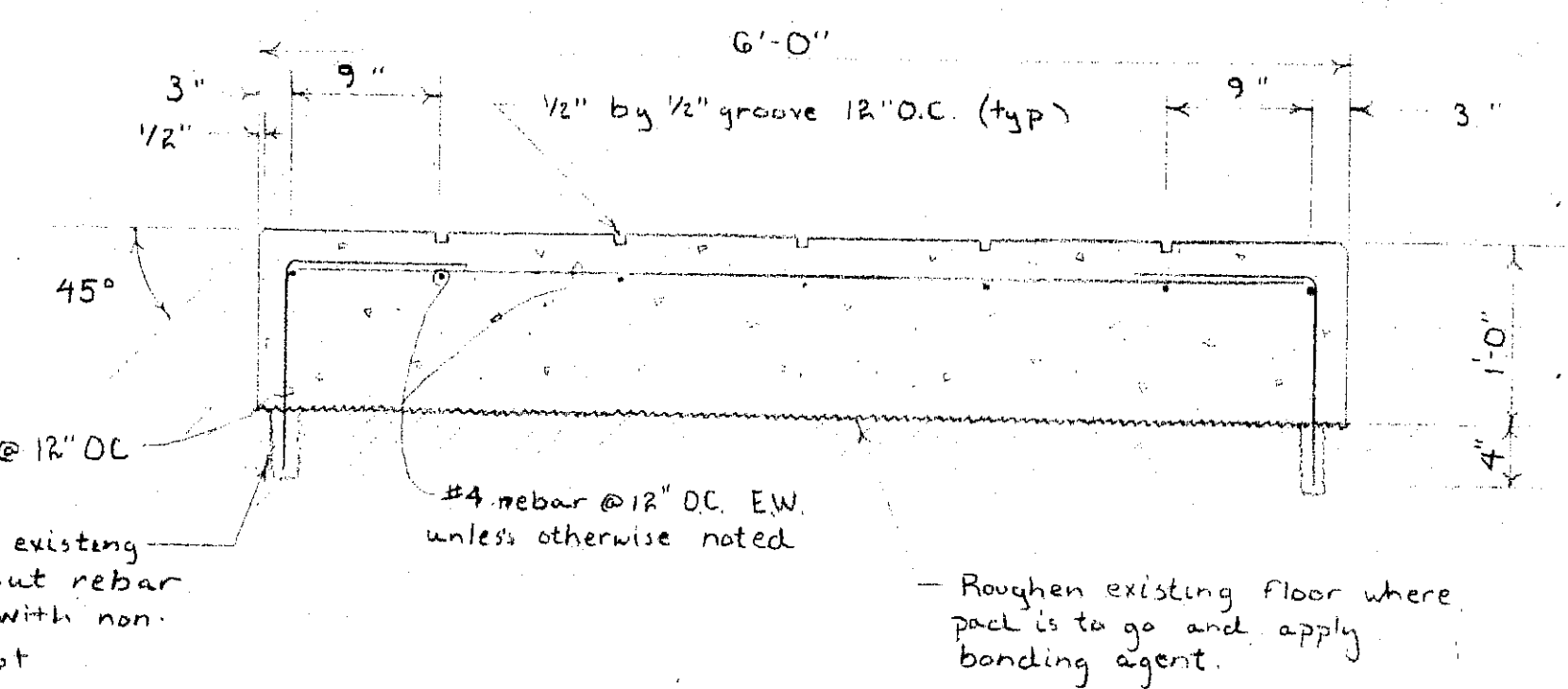


Concrete Step and Wall Detail
Scale: 1" = 1' - 0"



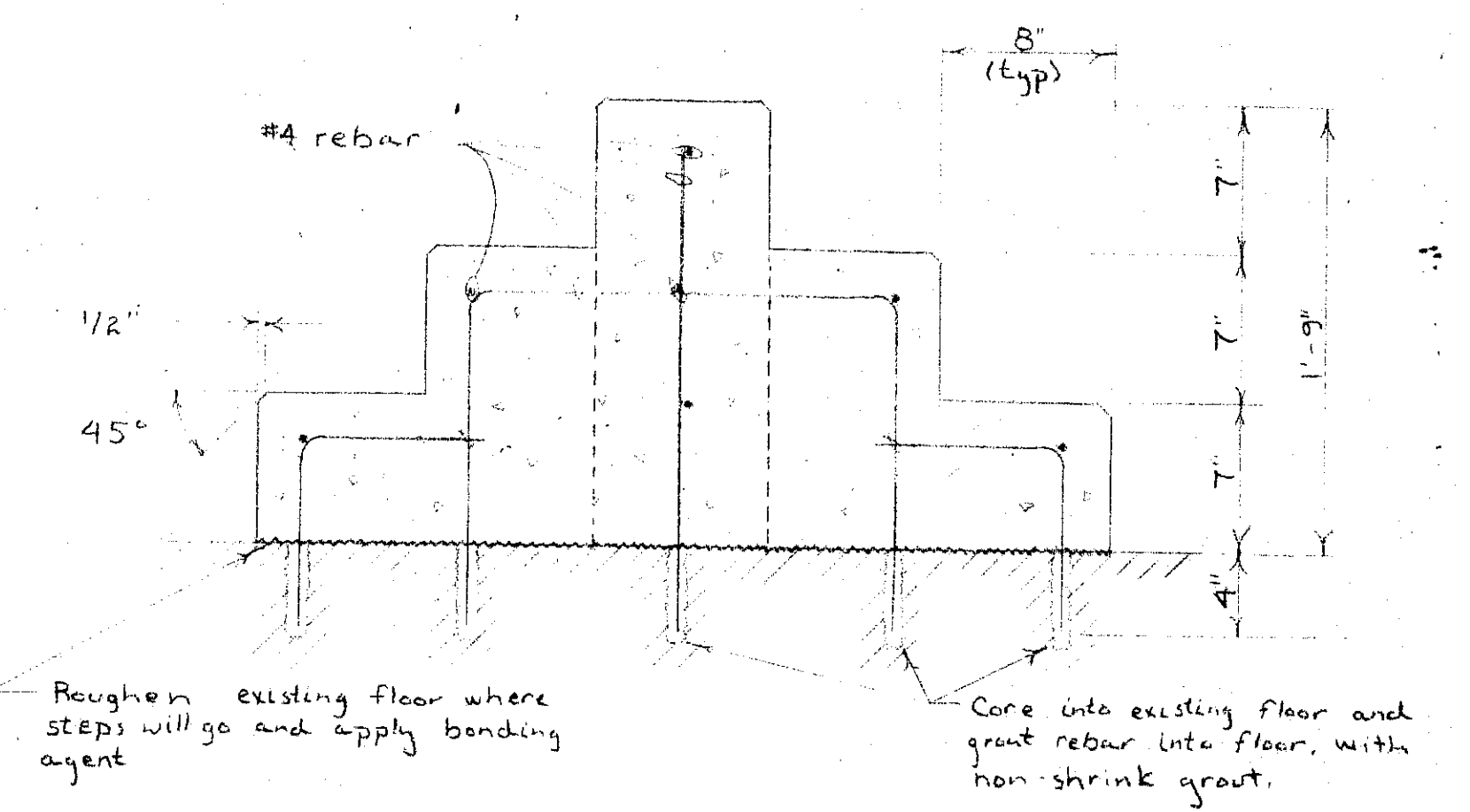
Containment Wall Section
Scale: 1 1/2" = 1' - 0"

Roughen existing floor where wall is to go. Apply bonding agent.
Core into existing floor, grout rebar into floor with non-shrink grout.



Concrete Tank Pad Section
Scale: 1" = 1' - 0"

Core into existing floor & grout rebar into floor with non-shrink grout.
Roughen existing floor where pad is to go and apply bonding agent.

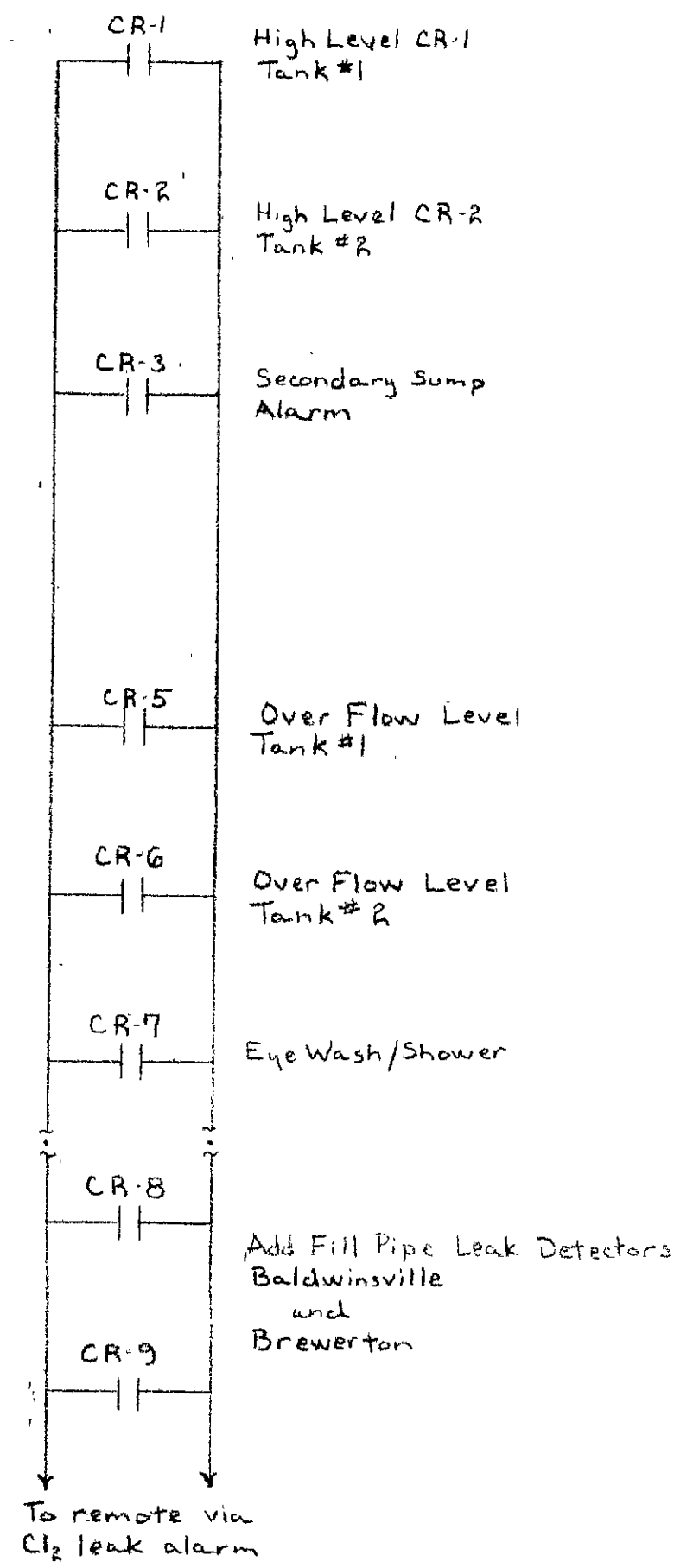


Concrete Step Section
Scale: 1 1/2" = 1' - 0"

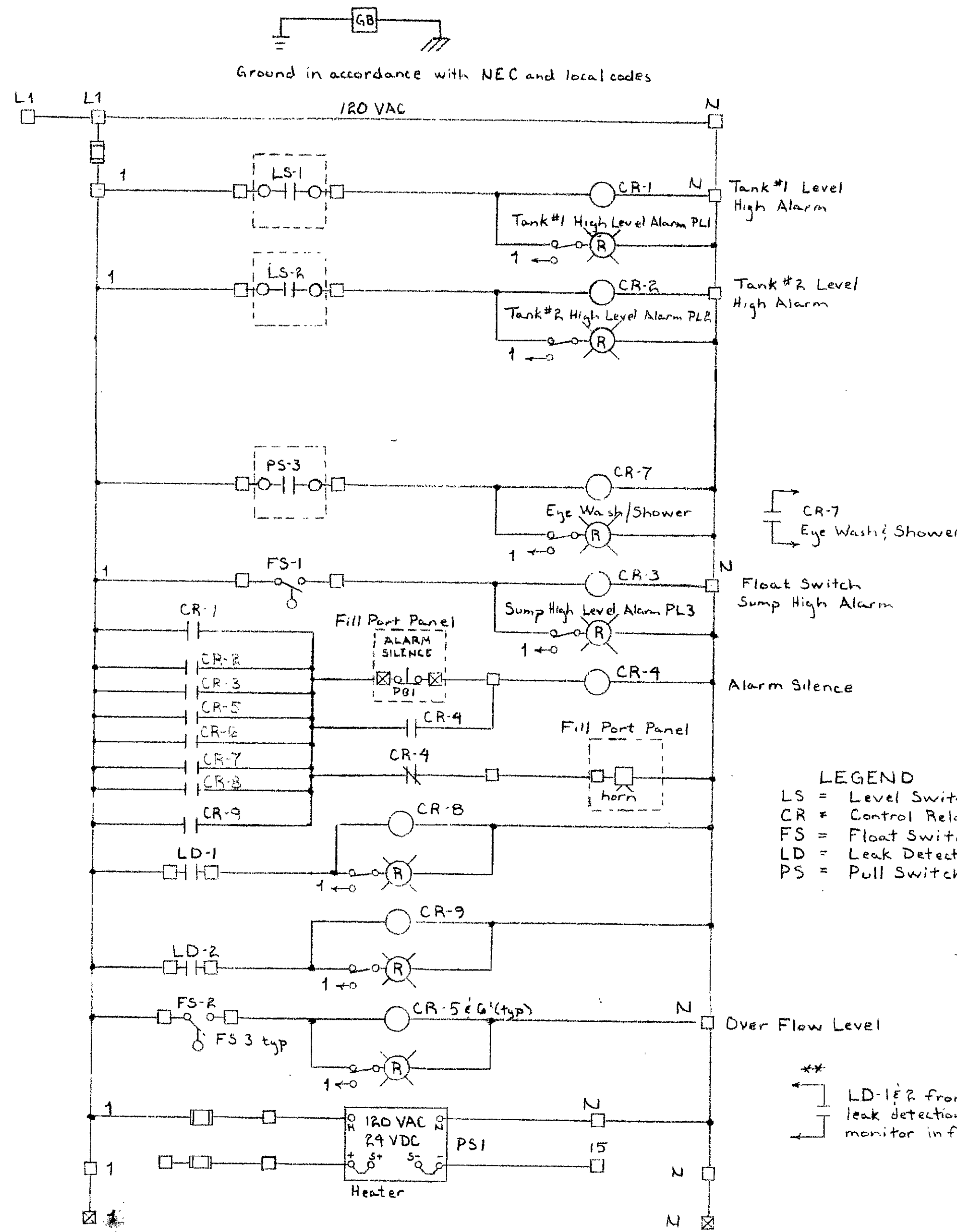
Roughen existing floor where steps will go and apply bonding agent.
Core into existing floor and grout rebar into floor, with non-shrink grout.



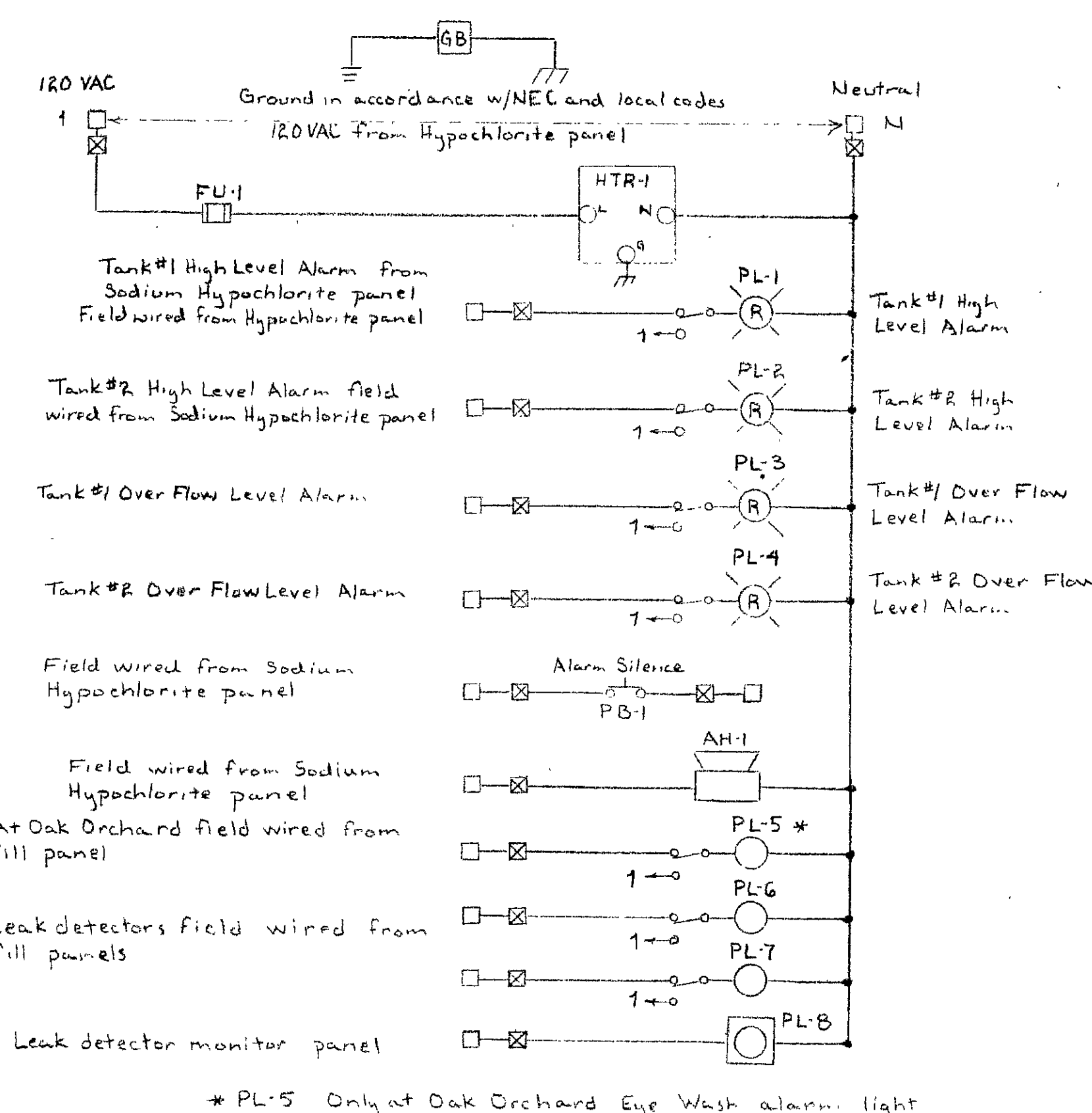
Onondaga County Department of Drainage and Sanitation		
SCALE: As shown	APPROVED BY:	DRAWN BY: RP
DATE: 10-21-98		
Chemical Feed Equipment Conversion Details		
		DRAWING NUMBER: 8 of 10



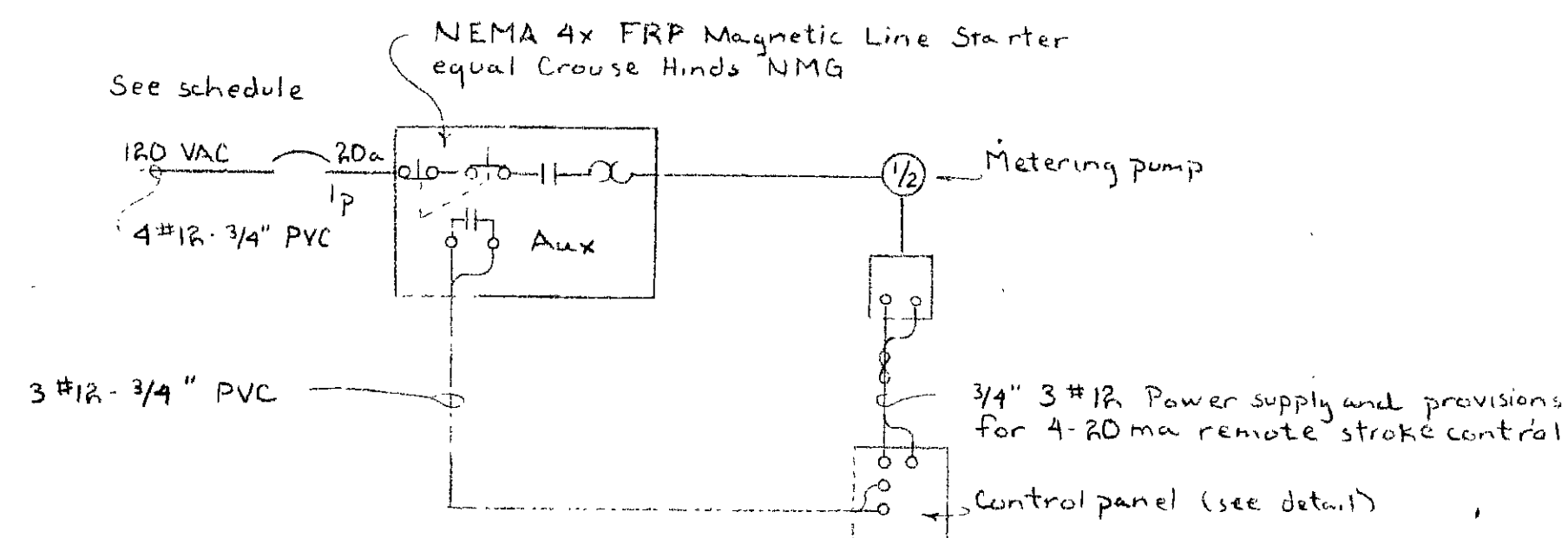
Alarm Contacts
N.T.S.



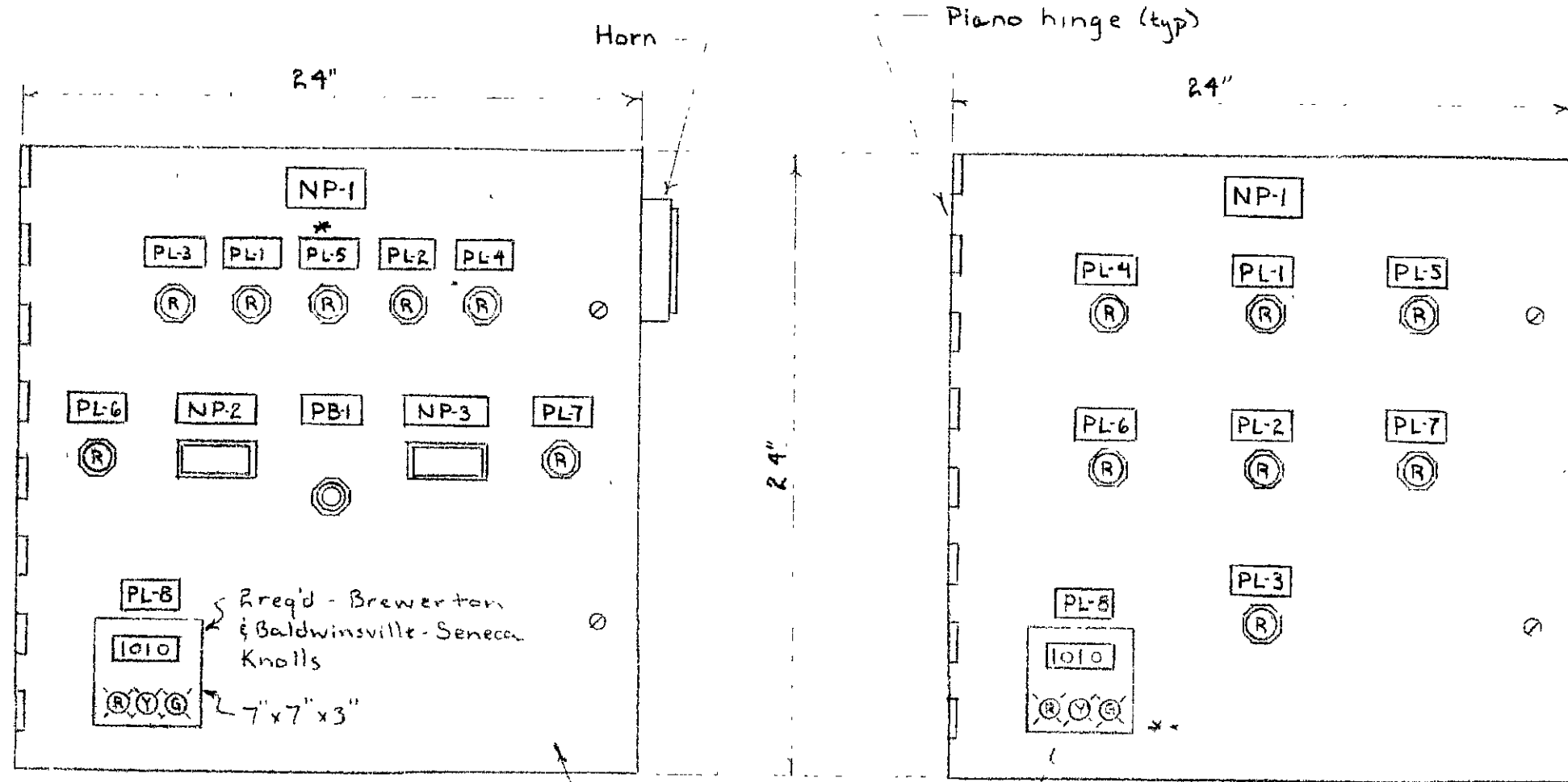
Chemical Control Elementary
N.T.S.



Fill Port Elementary
N.T.S.



Metering Pump One Line Diagram
N.T.S.

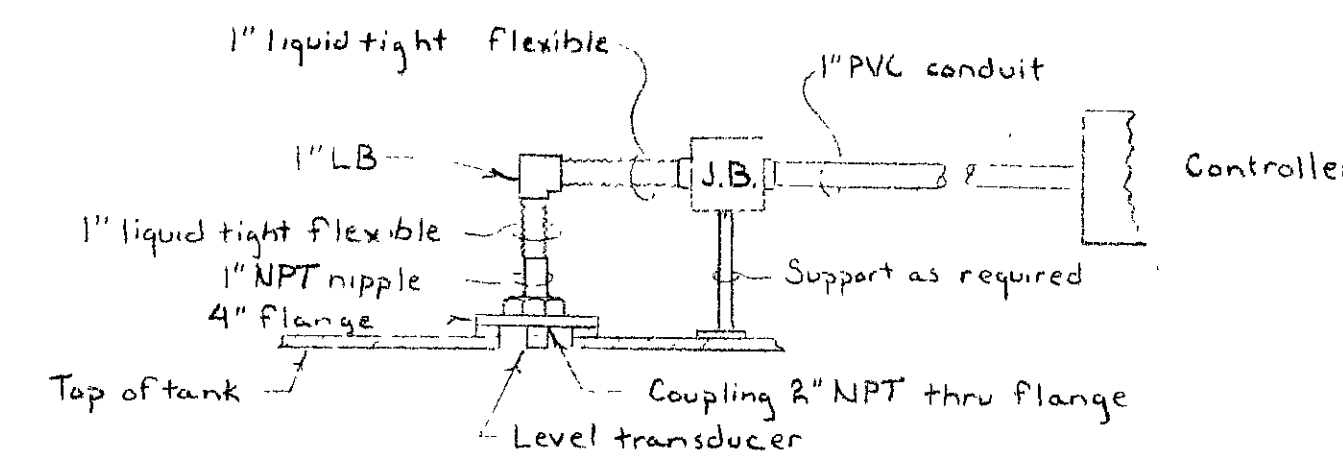


Chemical Feed And Fill Panels
N.T.S.

FILL PANEL NAMEPLATE SCHEDULE		
ITEM	LINE 1	LINE 2
NP-1	FILL PANEL	ALARM PANEL
PB-1	ALARM SILENCE	ALARM PANEL
NP-2	CHEMICAL TANK 1	LEVEL (IN GALLONS)
PL-1	TANK 1	HIGH LEVEL
NP-3	CHEMICAL TANK 2	LEVEL (IN GALLONS)
PL-2	TANK 2	HIGH LEVEL
PL-3	TANK 1	OVERFLOW LEVEL
PL-4	TANK 2	OVERFLOW LEVEL
PL-5*	EYE WASH	
PL-6	FILL PIPE LEAK	
PL-7	FILL PIPE LEAK	
PL-8**	LEAK DETECTION	MONITOR

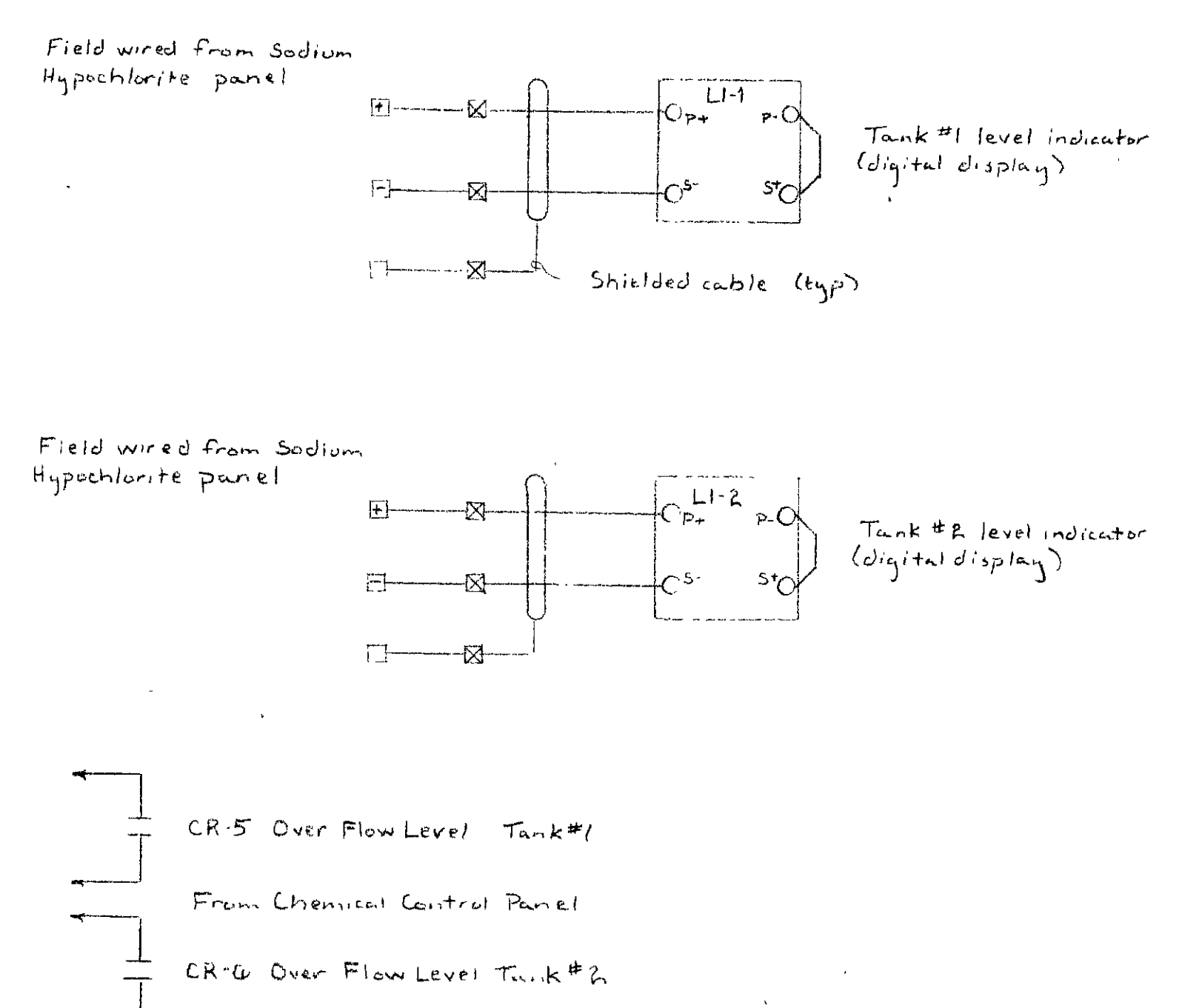
CHEMICAL FEED PANEL NAMEPLATE SCHEDULE		
ITEM	LINE 1	LINE 2
NP-1	SODIUM HYPOCHLORITE	CONTROL PANEL
PL-1	TANK 1	HIGH LEVEL
PL-2	TANK 2	HIGH LEVEL
PL-3	SUMP	HIGH LEVEL
PL-4	TANK 1	OVERFLOW LEVEL
PL-5	TANK 2	OVERFLOW LEVEL
PL-6	FILL PIPE LEAK	
PL-7	FILL PIPE LEAK	
PL-8	MONITOR PANEL	

Note: Leak detection fill pipes only required at Baldwinsville - Seneca Knolls and Brewerton wastewater treatment facility locations.



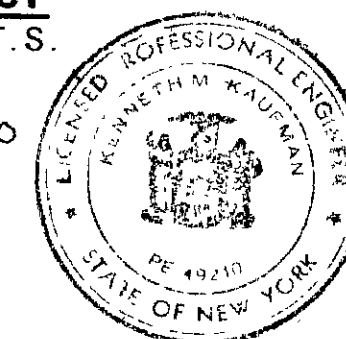
Chemical Storage Tank Level Transmitter
N.T.S.

Note: All conduits and fittings shall be Schedule 80 PVC with ground which may not be scheduled. Install per latest NEC.

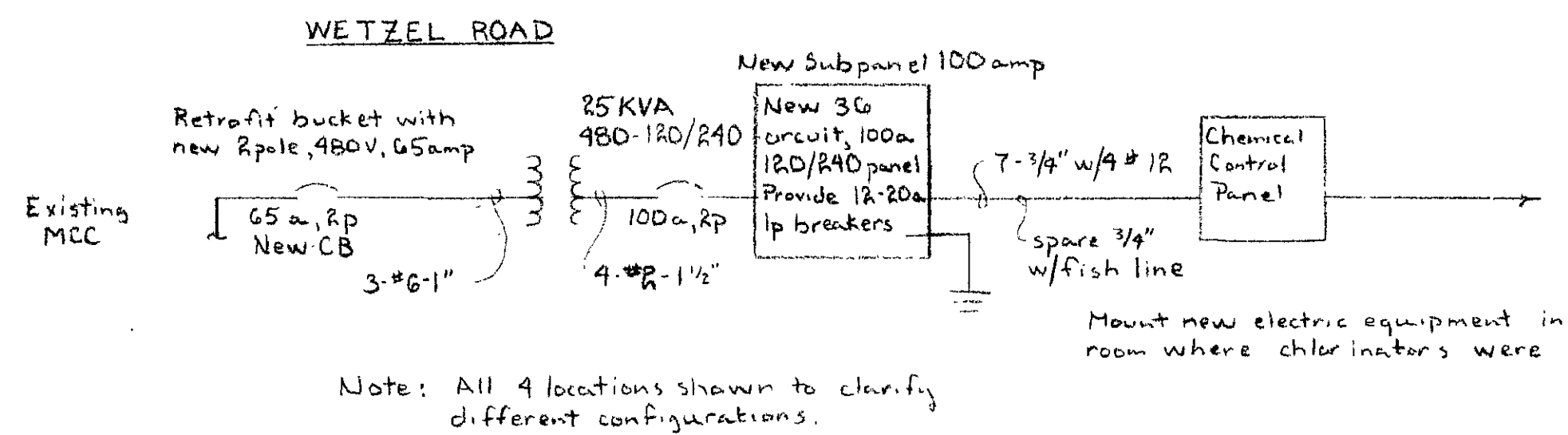
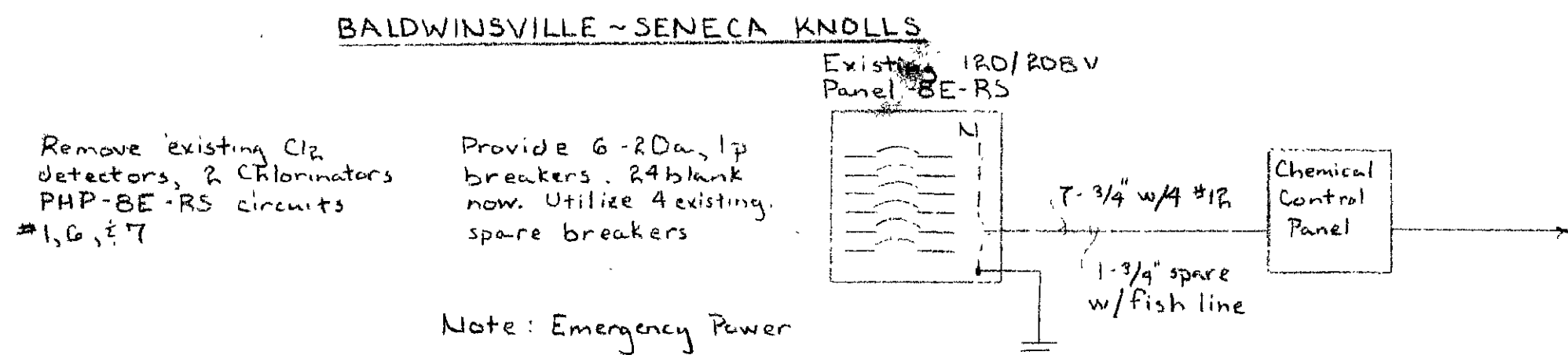
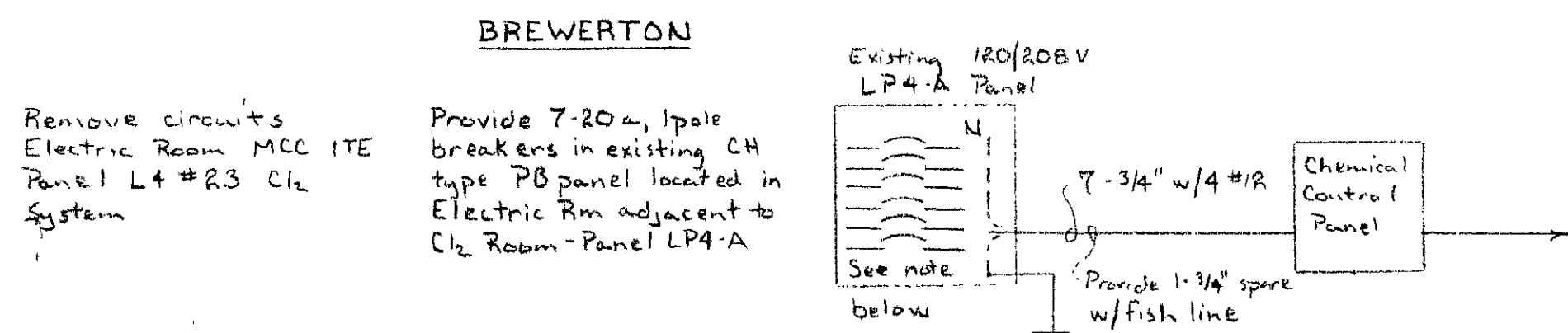
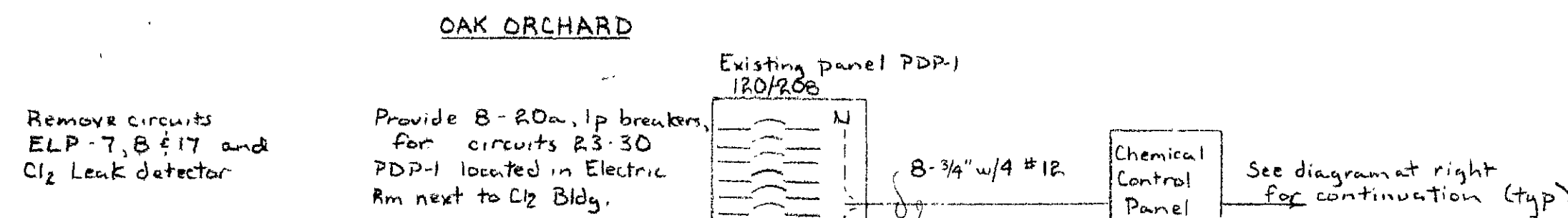


CR-5 Over Flow Level Tank #1
From Chemical Control Panel
CR-6 Over Flow Level Tank #2

- GENERAL NOTES**
- Level and Flow signal cables shall be equal to Belden twisted pair shielded, and be furnished by transmitter manufacturer to the contractor for installation.
 - This contract includes 4 locations. Panels shown are typical, slight variations are shown.
- Locations: Baldwinsville Seneca Knolls
Brewerton
Oak Orchard
Wetzel Road

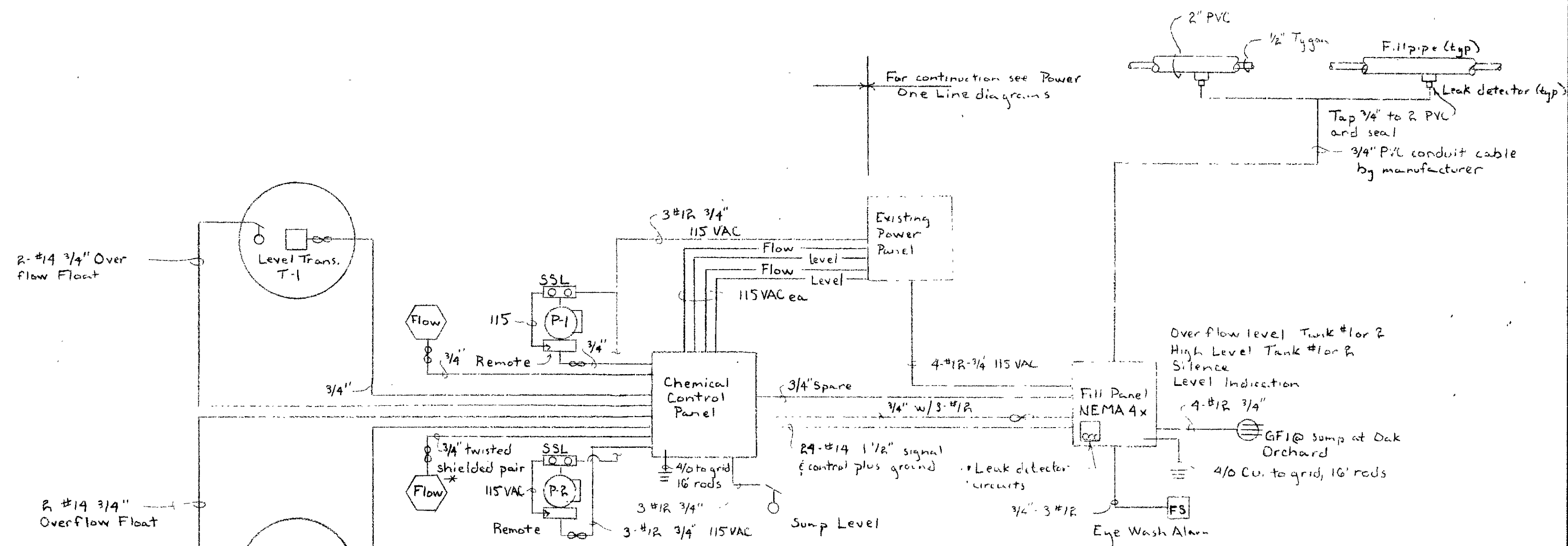


Onondaga County Drainage and Sewer		
SCALE: N.T.S.	APPROVED BY:	DRAWN BY: RP
DATE: 11-4-98		
Chemical Feed Equipment Conversion Electrical		
		DRAWING NUMBER 9 of 10



Power One Line Diagram
N.T.S.

TYPICAL PANELBOARD SCHEDULE NEW OR EXISTING		
CIRCUIT	FUNCTION	BREAKER
1	Pump #1 and Remote Positioner	20a, 1p
2	Pump #2 and Remote Positioner	20a, 1p
3	Tank #1 Level	20a, 1p
4	Tank #2 Level	20a, 1p
5	Tank #1 Flow	20a, 1p
6	Tank #2 Flow	20a, 1p
7	Chemical Control Panel & Fill Panel	20a, 1p
8-12	Spare	
Except @ Wetzel Road		
8	PRE-1, 1/4 Hp	20a, 1p
9	PRE-2, 1/3 Hp	20a, 1p
10	Spare	
11	Spare	
12	Spare	
13-36	Spaces Only	

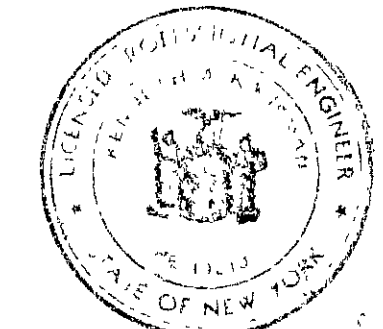


* Level and flow system cables by manufacturer
 ** Leak detection - Fill pipes underground - coaxial cable by mfg

Note: 1. Provide spare alarm contacts for future scanner transmission
 2. All plants disconnect Cl₂ leak detection and reconnect to obvious chain new alarms
 3. Leak detectors for Baldwinsville and Brewerton only

Instrumentation And Control Conduit And Cable
N.T.S.

SYMBOLS					
	M - MOTOR STARTER		COIL - SOLENOID		FLLOAT SWITCH N.O. CONTACT
	CR - CONTROL RELAY		CONTACT - NORMALLY OPEN		FLLOAT SWITCH N.C. CONTACT
	TR - TIMING RELAY		CONTACT - NORMALLY CLOSED		FUSE
	UNIT SWITCH - NORM. OPEN		PUSH BUTTON - NORM. OPEN		RESISTOR
	UNIT SWITCH - NORM. CLOSED		PUSH BUTTON - NORM. CLOSED		DIODE
	UNIT SW - N.O. HELD CLOSED		VACUUM SWITCH - HELD OPERATED WITHOUT VACUUM		CAPACITOR
	UNIT SW - N.C. HELD OPEN		FLOW SWITCH - NO FLOW		CONNECTOR - PLUG & SOCKET
	TIMER CONT. NORM. OPEN		INDICATOR LIGHT - COLOR		MOV - METAL OXIDE VARISTOR
	TIMER CONT. NORM. CLOSED		1 CIRCUIT WIRES NOT CONNECTED		
	TIMER CONT. NORM. CLOSED TIMED TO OPEN ON ENERG.		2 CIRCUIT WIRES ARE CONNECTED		
	TIMER CONT. NORM. OPEN TIMED TO OPEN ON DE-ENERG.				
	TIMER CONT. NORM. CLOSED TIMED TO CLOSE ON DE-ENERG.				
	CONTINUES ON LINE XXX				
	MULT. POS. SELECTOR SWITCH				
	X INDICATES CLOSED CONTACT POSITION				

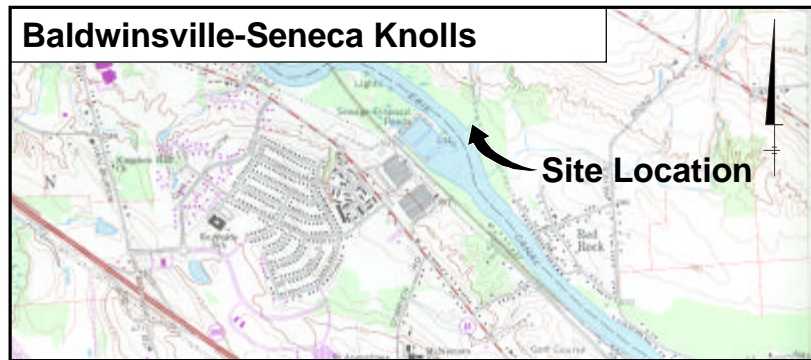


Onondaga County Department of Drainage and Sanitation			
SCALE: N.T.S.	APPROVED BY:	DRAWN BY: R.P.	
DATE: 11-1-98			
Chemical Feed Equipment Conversion Electrical			
			DRAWING NUMBER: 10 of 10

RECORD DRAWINGS

CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINSVILLE-SENECA KNOLLS, BREWERTON, WETZEL ROAD, AND BURNET AVENUE

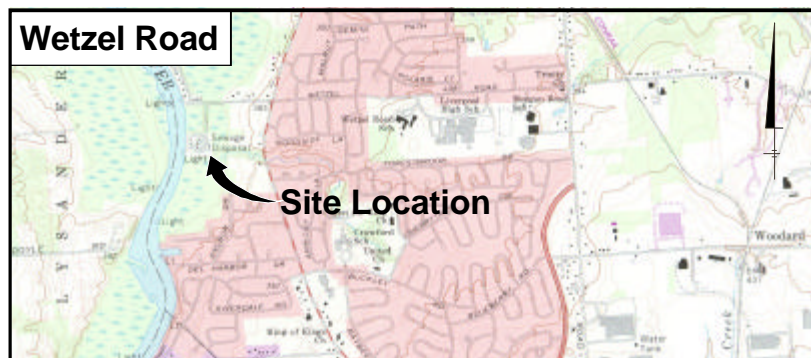
PROJECT NO. 587346



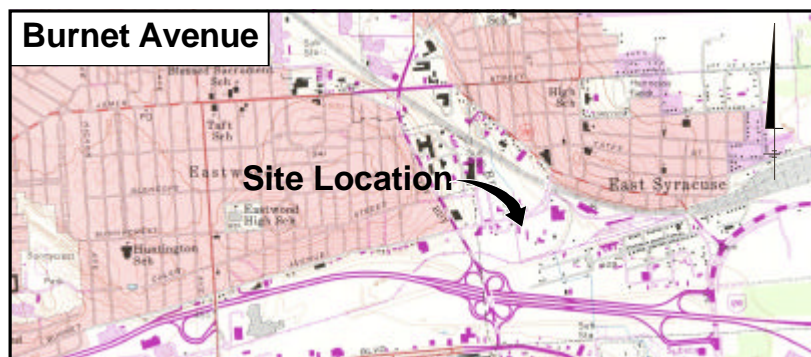
REFERENCE: Base Map Source, USGS 7.5 Min. Topo. Quad., Baldwinsville, New York, 1973, photorevised 1978.



REFERENCE: Base Map Source, USGS 7.5 Min. Topo. Quad., Brewerton, New York, 1973, photorevised 1978.



REFERENCE: Base Map Source, USGS 7.5 Min. Topo. Quad., Brewerton, New York, 1973, photorevised 1978.



REFERENCE: Base Map Source, USGS 7.5 Min. Topo. Quad., Syracuse, East, New York, 1957, photorevised 1978.

CONTRACT NO. 4A GENERAL
 CONTRACT NO. 4B ELECTRICAL
 CONTRACT NO. 4C HEATING AND VENTILATION
 CONTRACT NO. 4D PLUMBING

**COUNTY OF ONONDAGA
 DEPARTMENT OF DRAINAGE AND SANITATION
 SYRACUSE, NEW YORK**

MAY 2001

RECORD DRAWINGS
 TO THE BEST OF OUR KNOWLEDGE,
 INFORMATION AND BELIEF, THESE RECORD
 DRAWINGS SUBSTANTIALLY REPRESENT
 THE PROJECT AS CONSTRUCTED
BLASLAND, BOUCK & LEE, INC.

DATE _____ BY _____

**APPROVED BY ONONDAGA COUNTY
 DEPARTMENT OF DRAINAGE AND SANITATION**

RICHARD L. ELANDER, PE, COMMISSIONER

DATE _____

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- G-3 BALDWINSVILLE-SENECA KNOLLS WPCP - OUTSIDE PIPING AND PARTIAL SITE PLAN
- G-4 BALDWINSVILLE-SENECA KNOLLS WPCP - DEMOLITION PLAN AND ELEVATION
- G-5 BREWERTON WPCP - OUTSIDE PIPING AND PARTIAL SITE PLAN
- G-6 BREWERTON WPCP - DEMOLITION PLAN AND SECTION
- G-7 BREWERTON WPCP - DEMOLITION PLAN
- G-8 BURNET AVENUE CHEMICAL FEED STATION - OUTSIDE PIPING AND PARTIAL SITE PLAN
- G-9 MISCELLANEOUS DETAILS I
- G-10 MISCELLANEOUS DETAILS II

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- A-2 BURNET AVE CHEMICAL FEED STATION - PLANS AND SECTIONS
- A-3 BURNET AVE CHEMICAL FEED STATION - ELEVATION AND SECTION
- A-4 BURNET AVE CHEMICAL FEED STATION - MISCELLANEOUS DETAILS

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- S-1 BURNET AVE CHEMICAL FEED STATION - FOUNDATION PLAN AND SECTIONS
- S-2 BURNET AVE CHEMICAL FEED STATION - TRANSFER STATION AND ROOF FRAMING PLANS
- S-3 BURNET AVE CHEMICAL FEED STATION - DETAILS AND SECTIONS
- S-4 BREWERTON WPCP - STRUCTURAL PLAN AND SECTIONS
- S-5 BALDWINSVILLE-SENECA KNOLLS WPCP - ROOF PLAN, SECTION AND DETAILS
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- S-7 MISCELLANEOUS DETAILS

MECHANICAL

- M-1 WETZEL ROAD WPCP - SECTION, PARTIAL ELEVATION AND PLAN
- M-2 BALDWINSVILLE-SENECA KNOLLS WPCP - PIPING PLAN AND SECTION
- M-3 BREWERTON WPCP - PLAN, SECTION AND PARTIAL ELEVATION
- M-4 BREWERTON WPCP - PLANS AND PARTIAL ELEVATION
- M-5 BURNET AVE CHEMICAL FEED STATION - PIPING PLAN AND SECTIONS
- M-6 MISCELLANEOUS DETAILS
- M-7 TYPICAL CHEMICAL FEED SYSTEM PROCESS SCHEMATIC
- RD-1 WETZEL ROAD WPCP CHEMICAL FEED SYSTEM PROCESS SCHEMATIC
- RD-2 BALDWINSVILLE-SENECA KNOLLS WPCP CHEMICAL FEED SYSTEM PROCESS SCHEMATIC
- RD-3 BREWERTON WPCP CHEMICAL FEED SYSTEM PROCESS SCHEMATIC
- RD-4 BURNET AVE CHEMICAL FEED STATION CHEMICAL FEED SYSTEM PROCESS SCHEMATIC

INSTRUMENTATION

- I-1 CONTROL CABINET LAYOUT AND ELEVATION
- I-2 WETZEL ROAD WPCP - PROCESS AND INSTRUMENTATION DIAGRAM
- I-3 BURNET AVE CHEMICAL FEED STATION - PROCESS AND INSTRUMENTATION DIAGRAM
- I-4 BALDWINSVILLE-SENECA KNOLLS WPCP - PROCESS AND INSTRUMENTATION DIAGRAM
- I-5 BREWERTON WPCP - PROCESS AND INSTRUMENTATION DIAGRAM
- I-6 LADDER DIAGRAMS

ELECTRICAL

- E-1 WETZEL ROAD WPCP - LIGHTING, POWER AND INST. PLANS
- E-2 BALDWINSVILLE-SENECA KNOLLS WPCP - LIGHTING, POWER AND INST. PLANS
- E-3 BREWERTON WPCP POWER AND INST. PLANS
- E-4 BURNET AVE CHEMICAL FEED STATION - LIGHTING, POWER AND INST. PLANS
- E-5 ONE-LINE DIAGRAM AND DETAILS
- E-6 PANEL SCHEDULES
- E-7 CONDUIT SCHEDULES
- E-8 ELEMENTARY DIAGRAMS

HEATING & VENTILATION

- H-1 BURNET AVE CHEMICAL FEED STATION - PLANS
- H-2 BURNET AVE CHEMICAL FEED STATION - DETAILS AND SCHEDULES

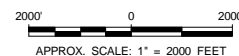
PLUMBING

- P-1 BURNET AVE CHEMICAL FEED STATION - PLAN, RISER DIAGRAM AND DETAIL

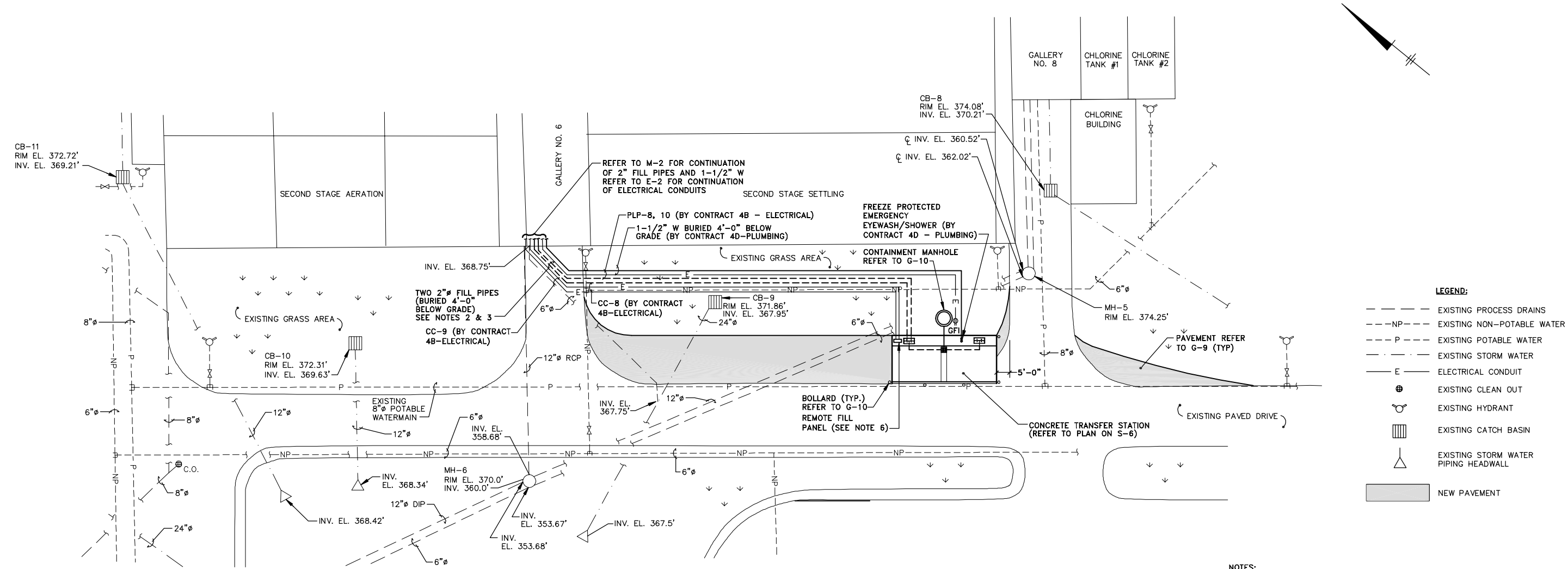
NOTE:

WORK REQUIRED BY CONTRACT NUMBERS 4A, 4B, 4C, AND 4D MAY BE SHOWN OR REFERENCED ON DRAWINGS OTHER THAN THEIR APPLICABLE DISCIPLINE.

LOCATION MAPS



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PARTIAL SITE PLAN

SCALE: 1"=20'

- NOTES:**
- THIS DRAWING DIGITIZED FROM STEARNS & WHEELER JOB NO. 577, DRAWING NO. G-7; RECORD DRAWING DATED 9/8/83.
 - UNDERGROUND FILL PIPES SHALL BE A 2" SDR 11 HDPE PRIMARY PIPE WITH A 5" SDR 17 HDPE CONTAINMENT PIPE. PRE-FABRICATED DUAL CONTAINMENT FITTINGS SHALL BE USED AT ALL TRANSITIONS.
 - FILL PIPES SHALL SLOPE 1/8" PER FOOT TO SLOPE TO GALLERY NO. 6.
 - ELECTRICAL CONDUIT (BY CONTRACT 4B-ELECTRICAL) SHALL FOLLOW CHEMICAL PIPES INTO GALLERY 6 INTO THE CHEMICAL STORAGE AREA. COORDINATE WITH CONTRACT 4A-GENERAL.
 - FURNISH AND INSTALL 2" FRP STRUCTURAL SQUARE TUBE FOR MOUNTING OF GFI RECEPTACLE (BY CONTRACT 4B-ELECTRICAL) AT CONTAINMENT MANHOLE. COORDINATE LOCATION WITH CONTRACT 4B-ELECTRICAL. REFER TO G-10.
 - REFER TO E-5 FOR MOUNTING DETAILS. COORDINATE LOCATION WITH CONTRACT 4B-ELECTRICAL.
 - REFER TO E-7 FOR ELECTRICAL CONDUIT SCHEDULES.
 - CONTRACT 4B-ELECTRICAL SHALL PROVIDE CIRCUITS FOR POWER TO HEAT TRACE ON FREEZE-PROTECTED EMERGENCY EYE/SHOWER.

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BLASLAND, BOUCK & LEE, INC.

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Drawn by --- DCC ---
Checked by --- WFF/MEE ---
Prof. Eng. --- DONALD GEISSER ---
PE License --- N.Y. 57879 ---



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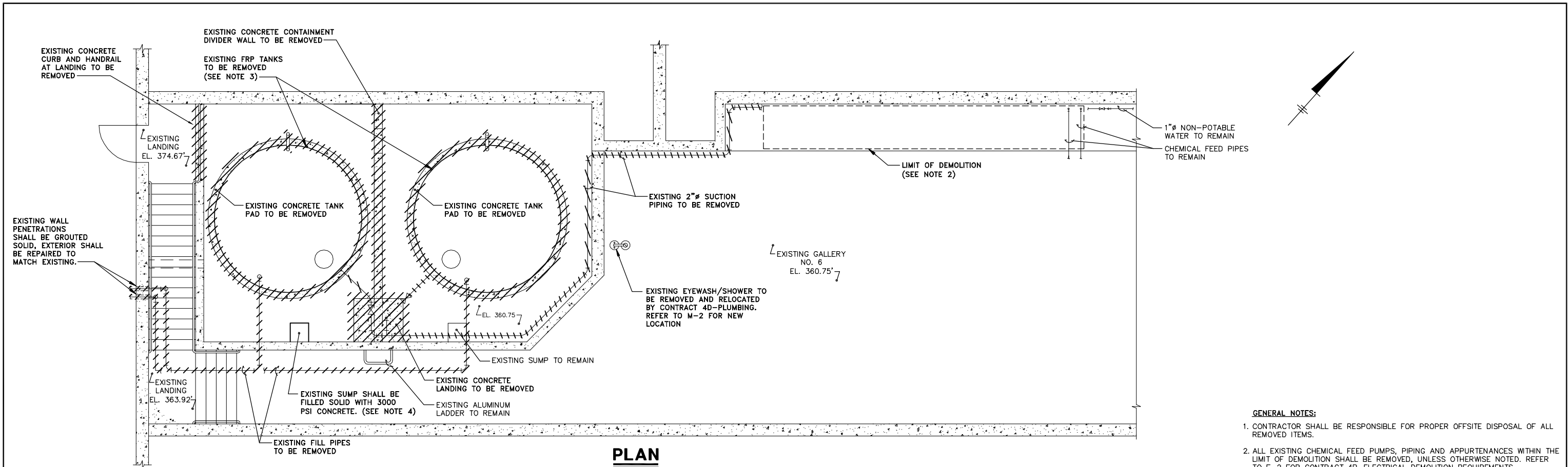
COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
BREWERTON, WETZEL ROAD AND BURNET AVENUE

**BALDWINVILLE - SENECA KNOLLS WPCP
OUTSIDE PIPING AND PARTIAL SITE PLAN**

GENERAL

File Number
003.64.62F
Date
MAY 2001
Blasland, Bouck & Lee, Inc.
Corporate Headquarters
6723 Towpath Road
Syracuse, NY 13214
315-446-9120

G-3

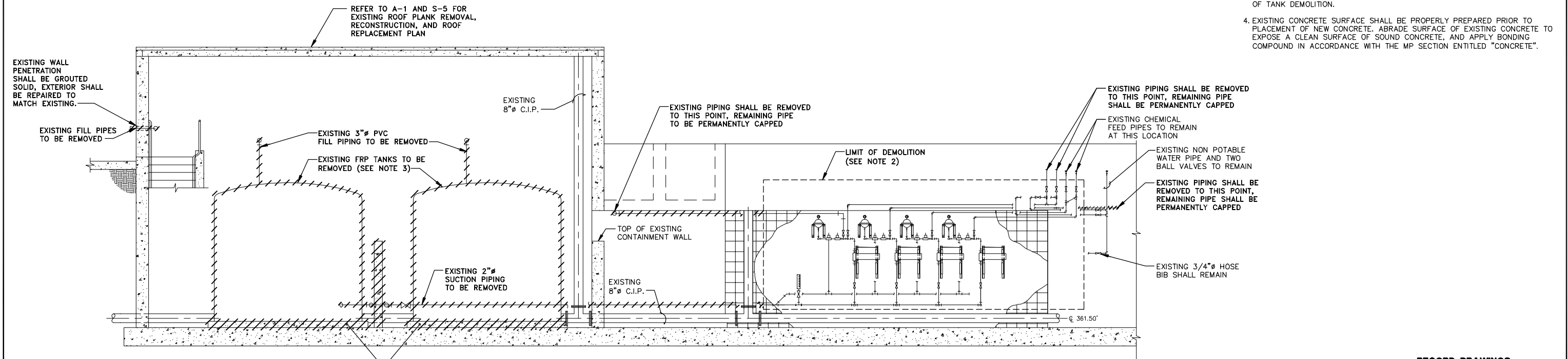


PLAN

SCALE: 1/4"=1'-0"

GENERAL NOTES:

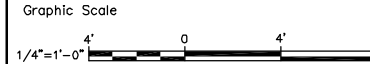
1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER OFFSITE DISPOSAL OF ALL REMOVED ITEMS.
2. ALL EXISTING CHEMICAL FEED PUMPS, PIPING AND APPURTENANCES WITHIN THE LIMIT OF DEMOLITION SHALL BE REMOVED, UNLESS OTHERWISE NOTED. REFER TO E-2 FOR CONTRACT 4B-ELECTRICAL DEMOLITION REQUIREMENTS.
3. CONTRACTOR SHALL SUBMIT, FOR ENGINEERS REVIEW, THE PROPOSED METHOD OF TANK DEMOLITION.
4. EXISTING CONCRETE SURFACE SHALL BE PROPERLY PREPARED PRIOR TO PLACEMENT OF NEW CONCRETE. ABRASE SURFACE OF EXISTING CONCRETE TO EXPOSE A CLEAN SURFACE OF SOUND CONCRETE, AND APPLY BONDING COMPOUND IN ACCORDANCE WITH THE MP SECTION ENTITLED "CONCRETE".



ELEVATION

SCALE: 1/4"=1'-0"

X: 00364X00.DWG
 L: ON=1, OFF=REF
 P: CONT-D/D/CONT-MVB
 S/01 SYR-54-DCC
 00364026/RECORD/00364GD4.DWG



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 Checked by --- WFF ---
 Prof. Eng. --- DONALD GEISSER ---
 PE License --- N.Y. 57879 ---



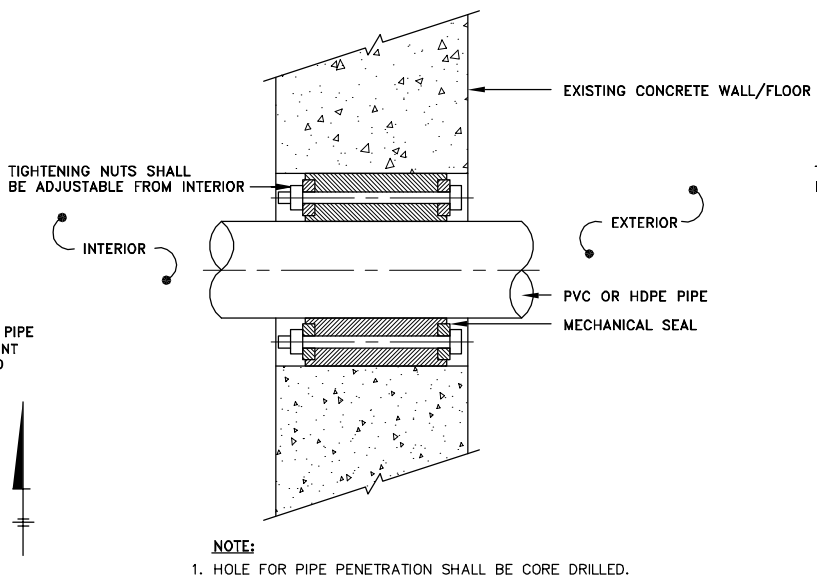
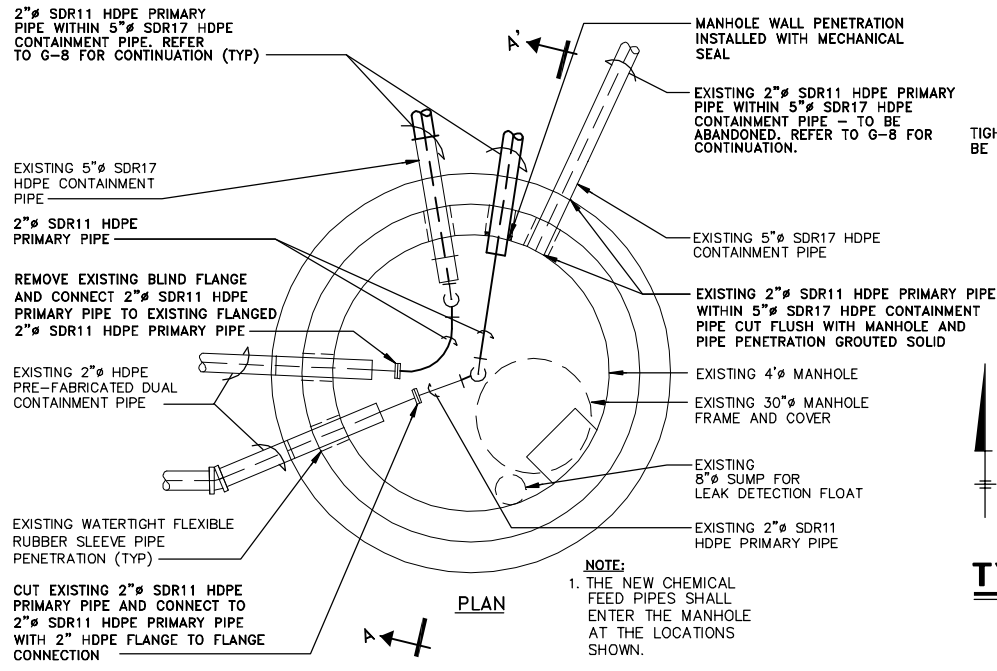
COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
 CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
 BREWERTON, WETZEL ROAD AND BURNET AVENUE
BALDWINVILLE - SENECA KNOLLS WPCP
DEMOLITION PLAN AND ELEVATION
 GENERAL

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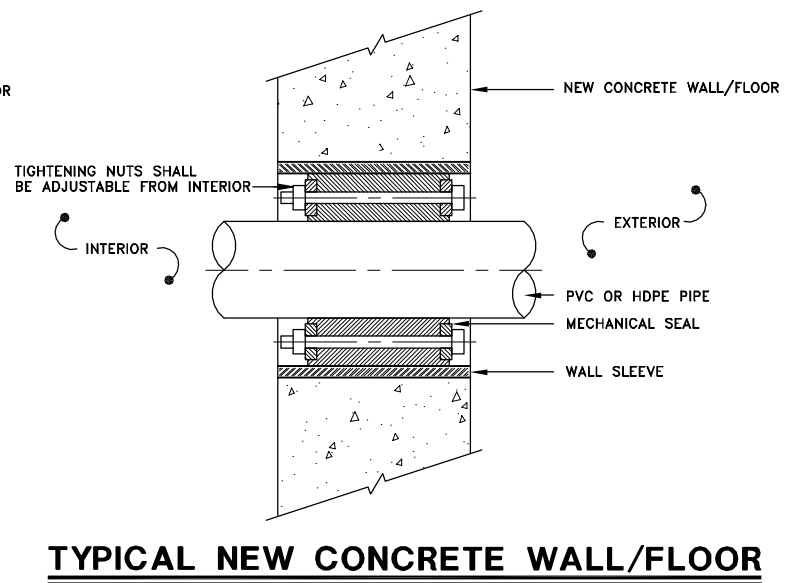
File Number
 003.64.63F
 Date
 MAY 2001
 Blasland, Bouck & Lee, Inc.
 Corporate Headquarters
 6723 Towpath Road
 Syracuse, NY 13214
 315-446-9120

G-4

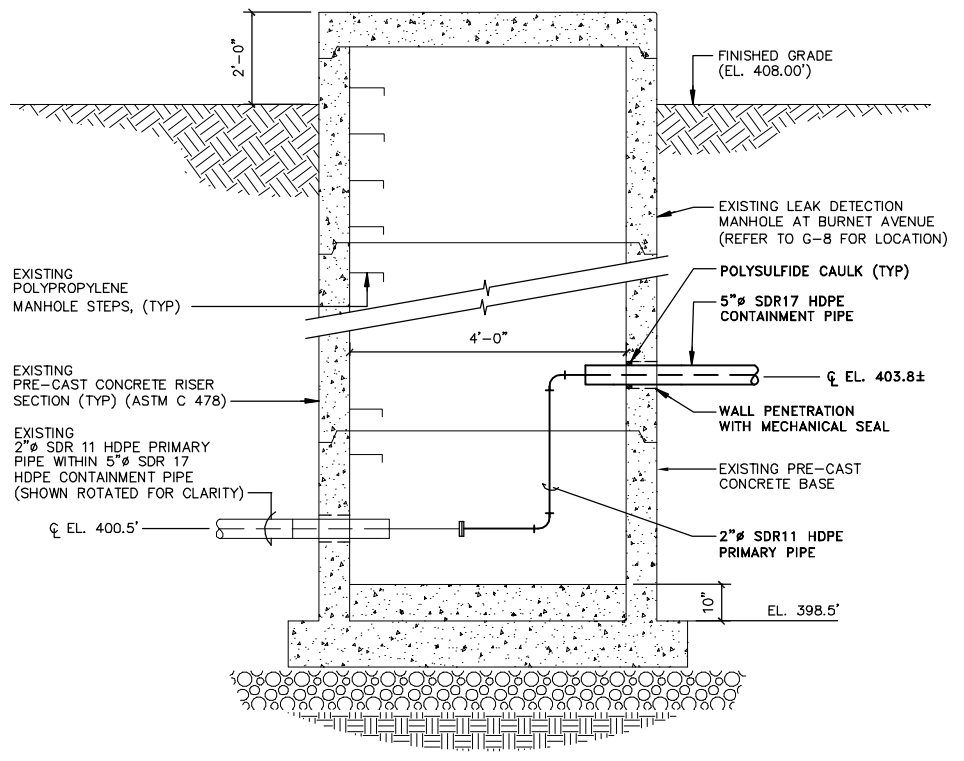
(RECORD DRAWING: MADE FROM DRAWING NO. G-4, FILE NO. 003.64.04F, DATED 1/99) DATE _____ BY _____



TYPICAL EXISTING CONCRETE WALL/FLOOR PIPE PENETRATION DETAIL
NOT TO SCALE

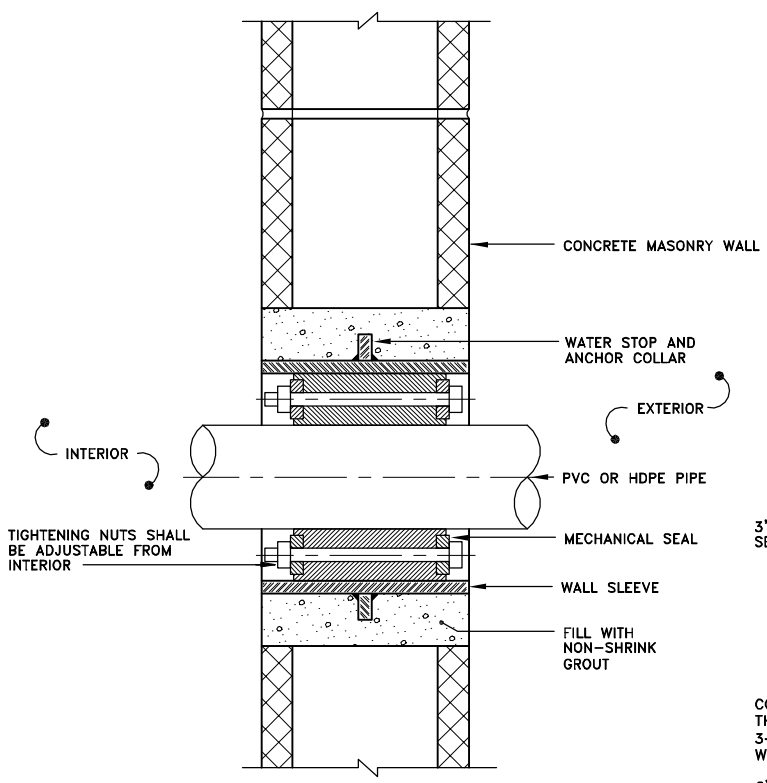


TYPICAL NEW CONCRETE WALL/FLOOR PIPE PENETRATION DETAIL
NOT TO SCALE

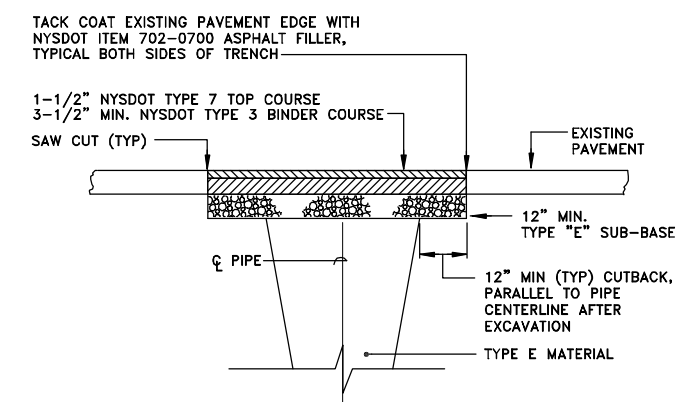


NOTE:
1. FLANGE GASKETS SHALL BE 1/8" THICK VITON.

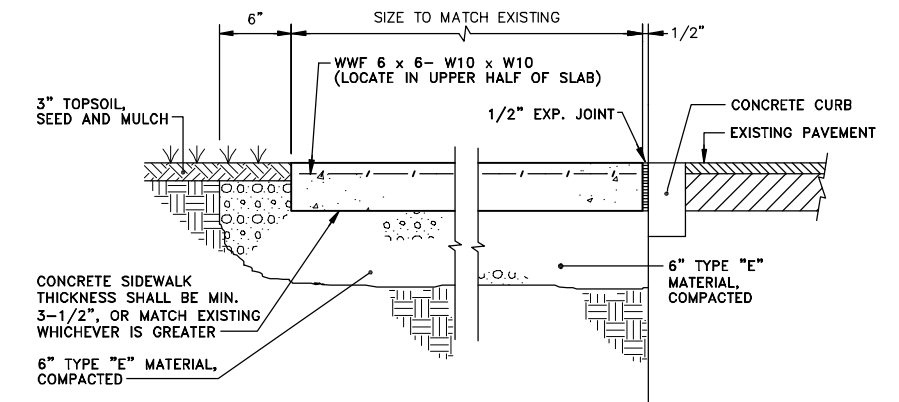
BURNET AVENUE CHEMICAL FEED PIPE CONNECTION
NOT TO SCALE



TYPICAL MASONRY BLOCK WALL PIPE PENETRATION DETAIL
NOT TO SCALE



BITUMINOUS PAVEMENT REPLACEMENT DETAIL
NOT TO SCALE



CONCRETE SIDEWALK RESTORATION DETAIL
NOT TO SCALE

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BLASLAND, BOUCK & LEE, INC.

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00364026/RECORD/00364G09.DWG

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Project Mgr. --- C.J.L. ---
Designed by --- W.F.F. ---
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Checked by --- C.J.L./W.F.F. ---
Prof. Eng. --- DONALD GEISSER ---
PE License --- N.Y. 57879 ---

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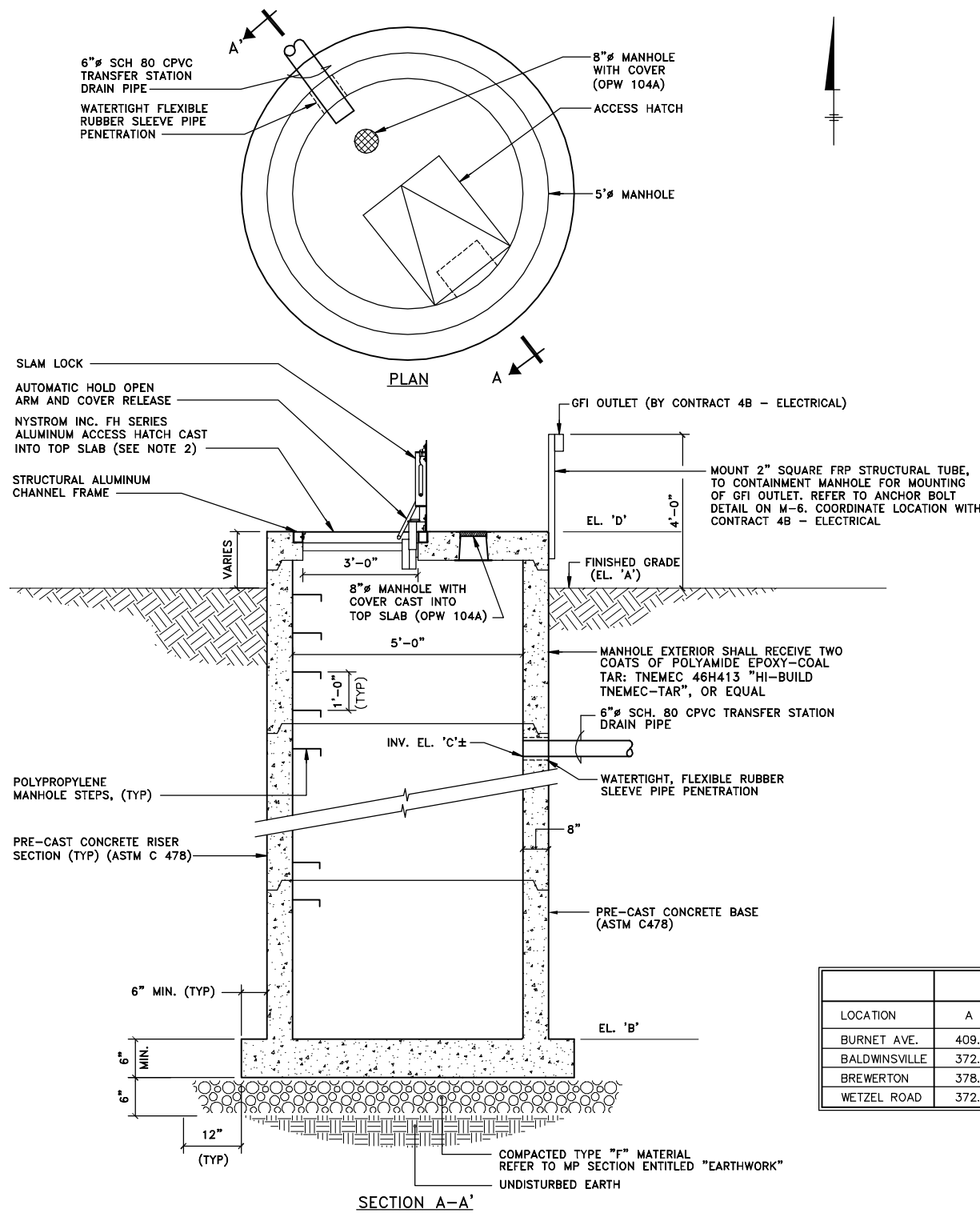
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CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS, BREWERTON, WETZEL ROAD AND BURNET AVENUE

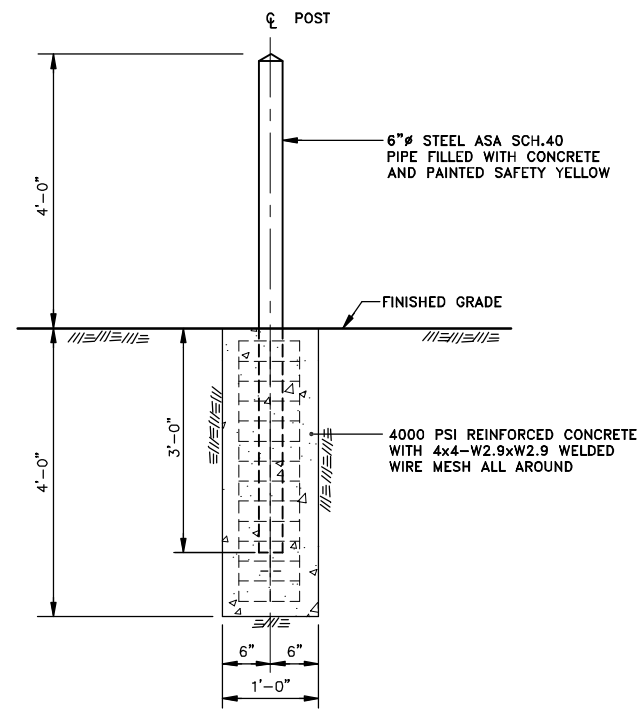
MISCELLANEOUS DETAILS I

GENERAL

File Number 003.64.68F
Date MAY 2001
Blasland, Bouck & Lee, Inc.
Corporate Headquarters
6723 Towpath Road
Syracuse, NY 13214
315-446-9120



LOCATION	ELEVATION			
	A	B	C	D
BURNET AVE.	409.0	401.3	404.3	411.7
BALDWINVILLE	372.0	364.0	367.2	372.0
BREWERTON	378.1	370.9	374.0	379.1
WETZEL ROAD	372.1	365.7	369.1	373.6



PIPE BOLLARD DETAIL
NOT TO SCALE

- NOTES:**
- REFER TO MP SECTION ENTITLED "PRECAST CONCRETE MANHOLES" FOR FURTHER DETAILS.
 - ACCESS HATCH SHALL HAVE 3'-0"X3'-0" CLEAR INSIDE OPENING AND BE DESIGNED TO WITHSTAND H2O LOADING. REFER TO MP SECTION ENTITLED "MISCELLANEOUS METALS".
 - REFER TO PLANS ON G-1, S-2 AND S-6 FOR ACTUAL LOCATION AND ORIENTATION.

CONTAINMENT MANHOLE DETAIL

NOT TO SCALE

X: 00364X00.DWG
L: ON=*, OFF=REF
P: CONT-DJD/CONT-MVB
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Graphic Scale

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Checked by --- C.J.L./W.F.F. ---
Prof. Eng. --- DONALD GEISSER ---
PE License --- N.Y. 57879 ---

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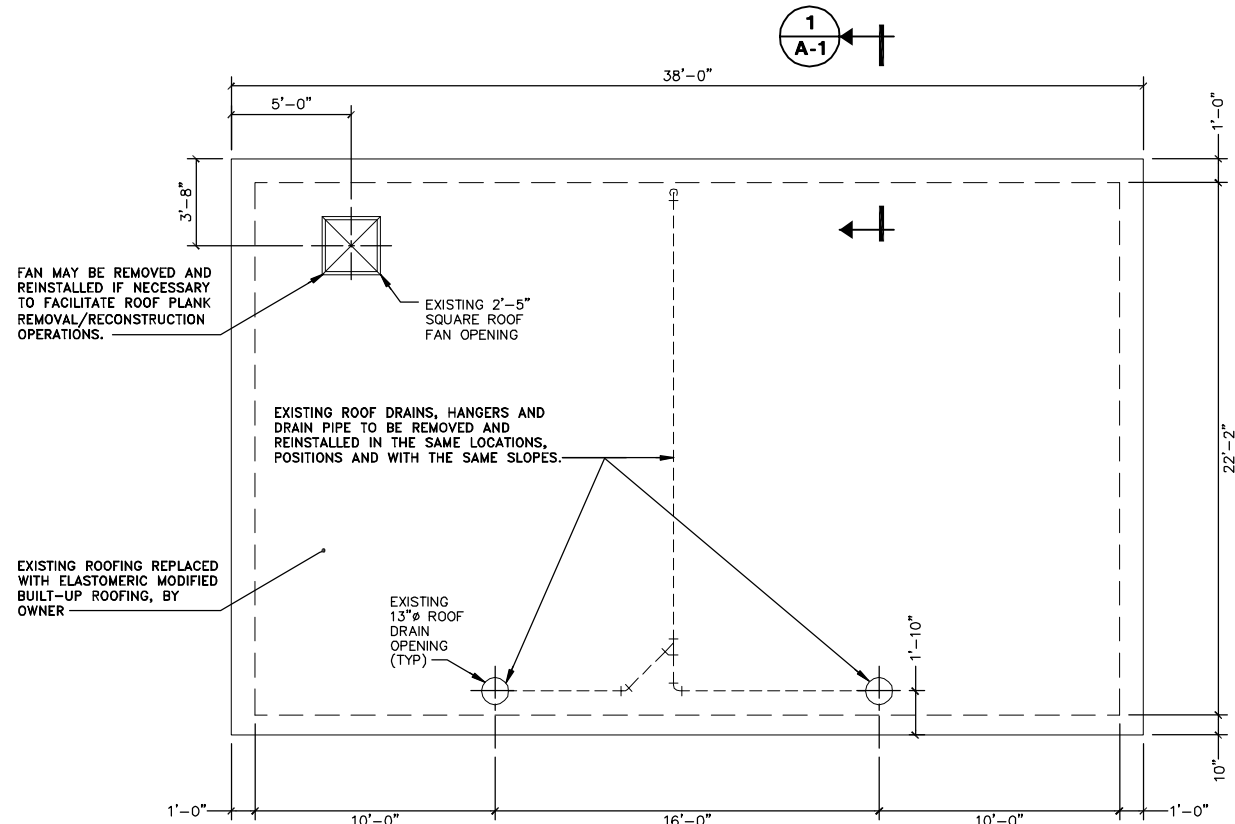
COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
BREWERTON, WETZEL ROAD AND BURNET AVENUE

MISCELLANEOUS DETAILS II

GENERAL

File Number
003.64.69F
Date
MAY 2001
Blasland, Bouck & Lee, Inc.
Corporate Headquarters
6723 Towpath Road
Syracuse, NY 13214
315-446-9120

G-10

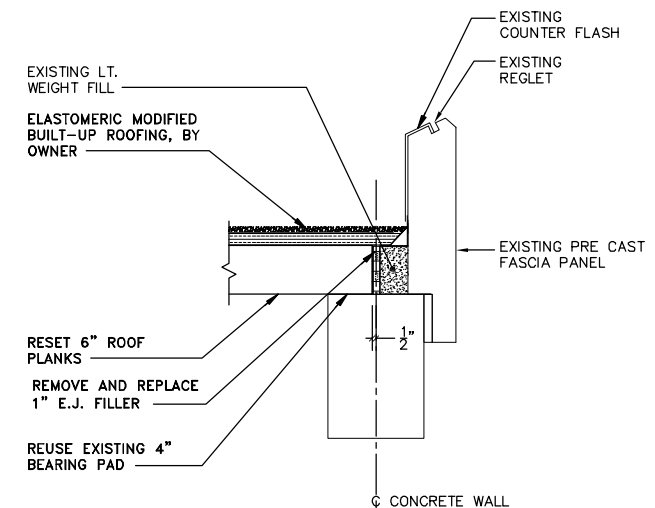


**STORAGE TANK AREA
ROOF REPLACEMENT PLAN**

SCALE 1/4" = 1'-0"

NOTES:

1. REFER TO S-5 FOR STORAGE TANK AREA EXISTING ROOF PLANK REMOVAL/RECONSTRUCTION PLAN.
2. CONTRACTOR SHALL REPLACE PIPING, DRAINS, FANS OR ANY OTHER EQUIPMENT DAMAGED DURING ROOF PLANK REMOVAL/RECONSTRUCTION.



**SECTION 1
SCALE: 1"=1'-0"**

GENERAL NOTE:

- 1.1 ELEVATIONS INDICATED ON "A" DRAWINGS FOR EXISTING FEATURES AND NEW WORK ARE APPROXIMATE AND HAVE NOT BEEN VERIFIED BY SURVEY.

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L: ON=*, OFF=REF
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00364026/RECORD/00364A01.DWG

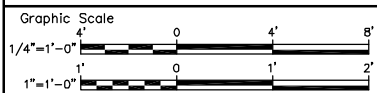
LEGEND:

- | | |
|-----|-------------------------------|
| CMU | CONCRETE MASONRY UNIT |
| EJ | EXPANSION JOINT |
| FRP | FIBERGLASS REINFORCED PLASTIC |
| MO | MASONRY OPENING |
| RD | ROOF DRAIN |
| TOM | TOP OF MASONRY |

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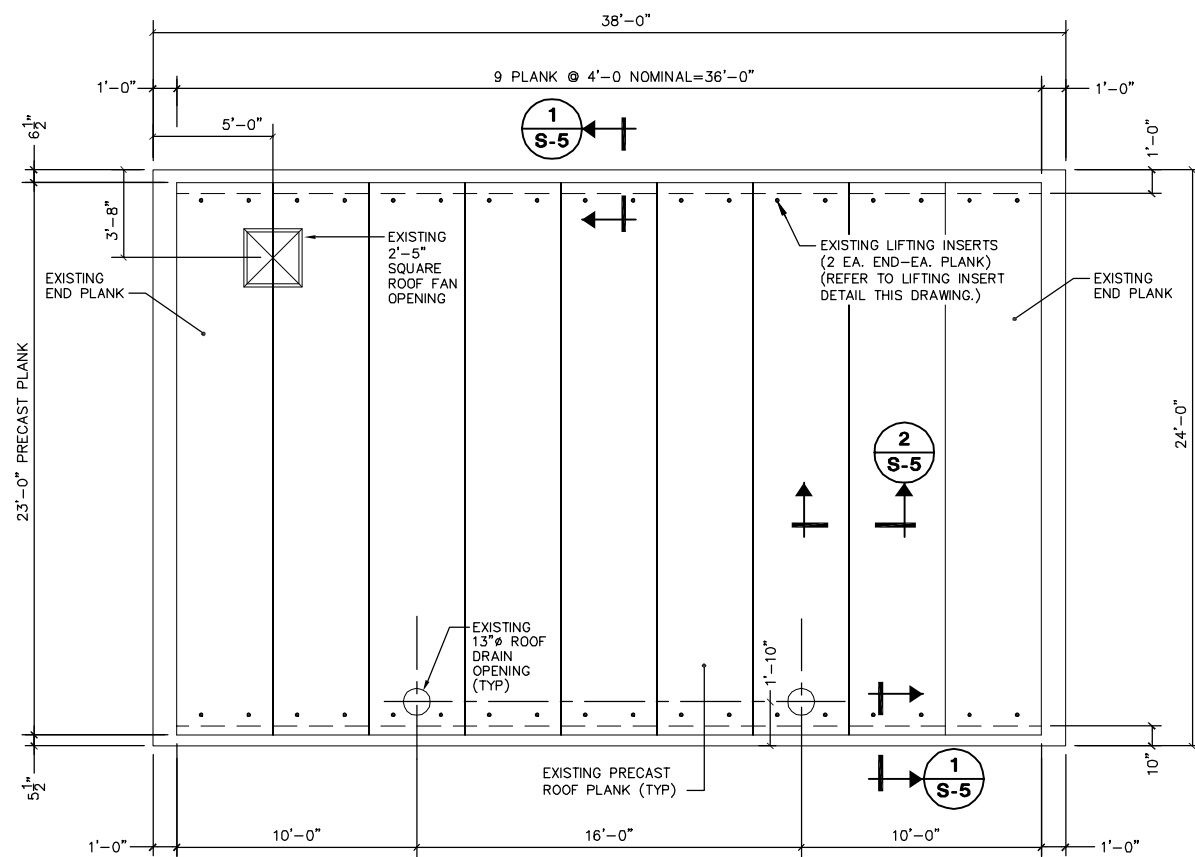
Project Mgr.	CJL
Designed by	WRH/JDS
Drawn by	RJM
Checked by	CJL/WFF
Prof. Eng.	DONALD GEISSER
PE License	N.Y. 57879

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COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE – SENECA KNOLLS,
BREWERTON, WETZEL ROAD AND BURNET AVENUE
**BALDWINVILLE - SENECA KNOLLS WPCP
ROOF PLAN AND DETAIL**
ARCHITECTURAL

File Number	003.64.70F
Date	MAY 2001
Blasland, Bouck & Lee, Inc. Corporate Headquarters 6723 Towpath Road Syracuse, NY 13214 315-446-9120	

A-1

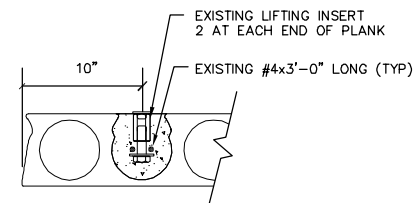


**STORAGE TANK AREA EXISTING ROOF PLANK
REMOVAL/RECONSTRUCTION PLAN**

SCALE 1/4" = 1'-0"

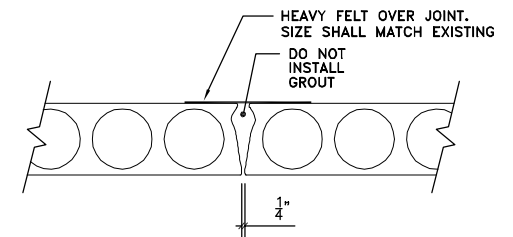
NOTES:

- EXISTING PRECAST PLANKS SHALL BE LIFTED AT LIFTING INSERT LOCATIONS ONLY.
- EXISTING PRECAST PLANKS SHALL BE STORED ON SUPPORTS LOCATED WITHIN 1'-6" FROM ENDS. PLANKS SHALL NOT BE STACKED.
- EXISTING PRECAST PLANKS SHALL BE REINSTALLED IN THE SAME LOCATION AND POSITION FROM WHICH THEY WERE REMOVED.
- NO CUTTING OR DRILLING THROUGH THE EXISTING PRECAST CONCRETE PLANKS IS ALLOWED.
- CONSTRUCTION LOADS SHALL NOT EXCEED DESIGN LOADS OF EXISTING PRECAST CONCRETE PLANK SUPERIMPOSED LOADS:
LIVE LOAD 40 P.S.F.
DEAD LOAD 28 P.S.F.
- CONTRACTOR MAY REMOVE A MAXIMUM OF FIVE ROOF PLANKS FOR INSTALLATION OF CHEMICAL STORAGE TANKS. END PLANKS SHALL NOT BE REMOVED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY ROOFING PLANKS DAMAGED OR DESTROYED DURING REMOVAL AND RECONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY PROTECTION AGAINST DAMAGE FROM WEATHER INCLUDING BUT NOT LIMITED TO: RAIN, HAIL, SLEET, SNOW, SUN, AND OTHER NATURALLY OCCURRING EVENTS.



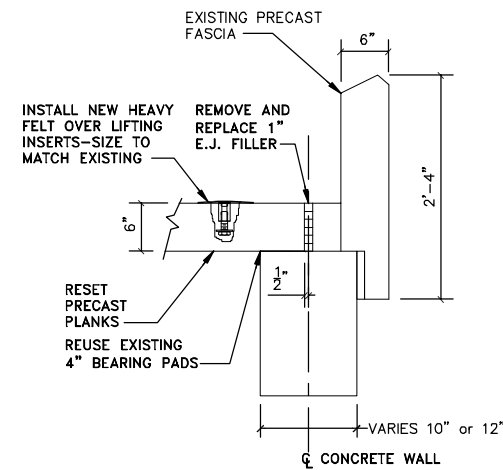
LIFTING INSERT DETAIL

SCALE: 1-1/2"=1'-0"



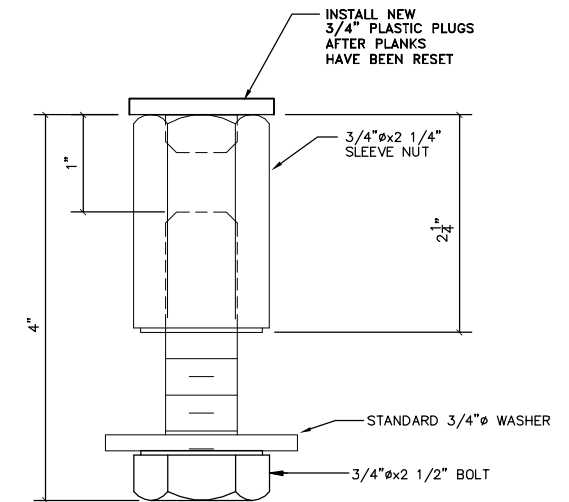
TYPICAL JOINT

SCALE: 1-1/2"=1'-0"



SECTION 1

SCALE: 1"=1'-0"



LIFTING INSERT DETAIL

SCALE: 1"=1"

X: 00364X00.DWG
L: ON=*, OFF=REF
P: CONT-D,JD/CONT-MVB
5/01 SYR-54-DCC
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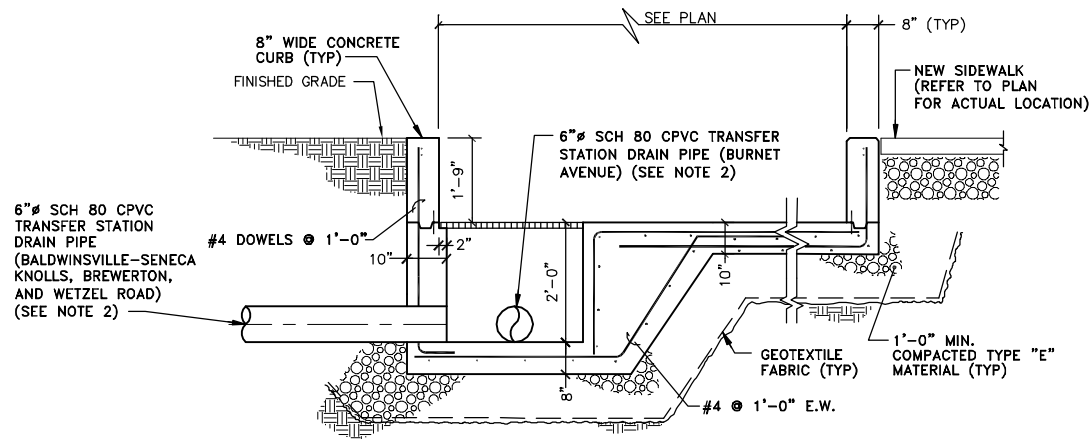
COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
BREWERTON, WETZEL ROAD AND BURNET AVENUE
**BALDWINVILLE - SENECA KNOLLS WPCP
ROOF PLAN, SECTION AND DETAILS**
STRUCTURAL

File Number
003.64.78F
Date
MAY 2001
Blasland, Bouck & Lee, Inc.
Corporate Headquarters
6723 Towpath Road
Syracuse, NY 13214
315-446-9120

S-5

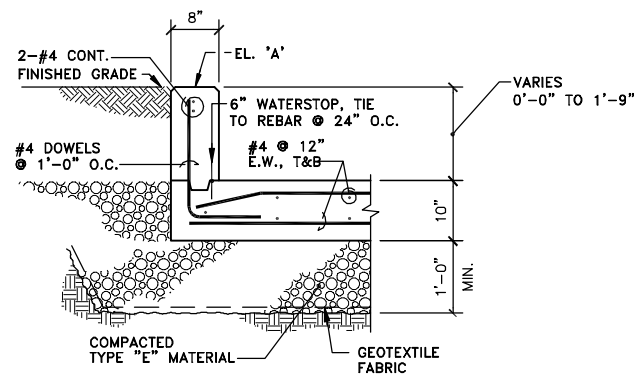
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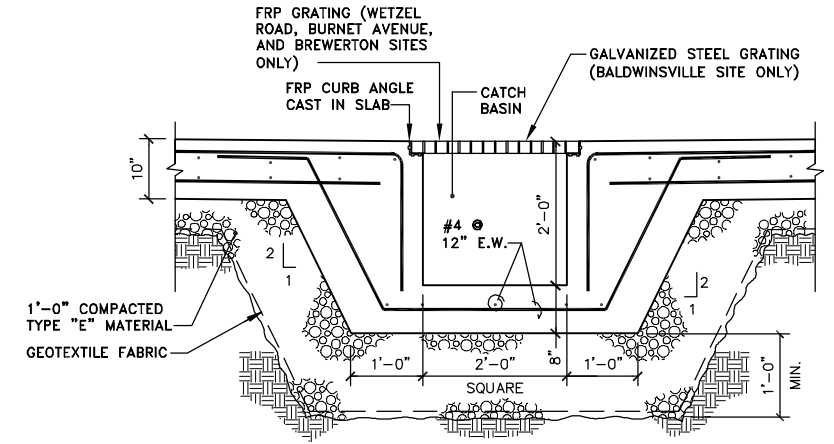


- NOTES:**
1. SIDEWALK SHOWN LOCATED ON OPPOSITE SIDE OF TRANSFER STATION FOR SECTION 1 ON S-6.
 2. TRANSFER STATION DRAIN PIPE SHALL BE SLOPED 1/8" PER FOOT TO CONTAINMENT MANHOLE.

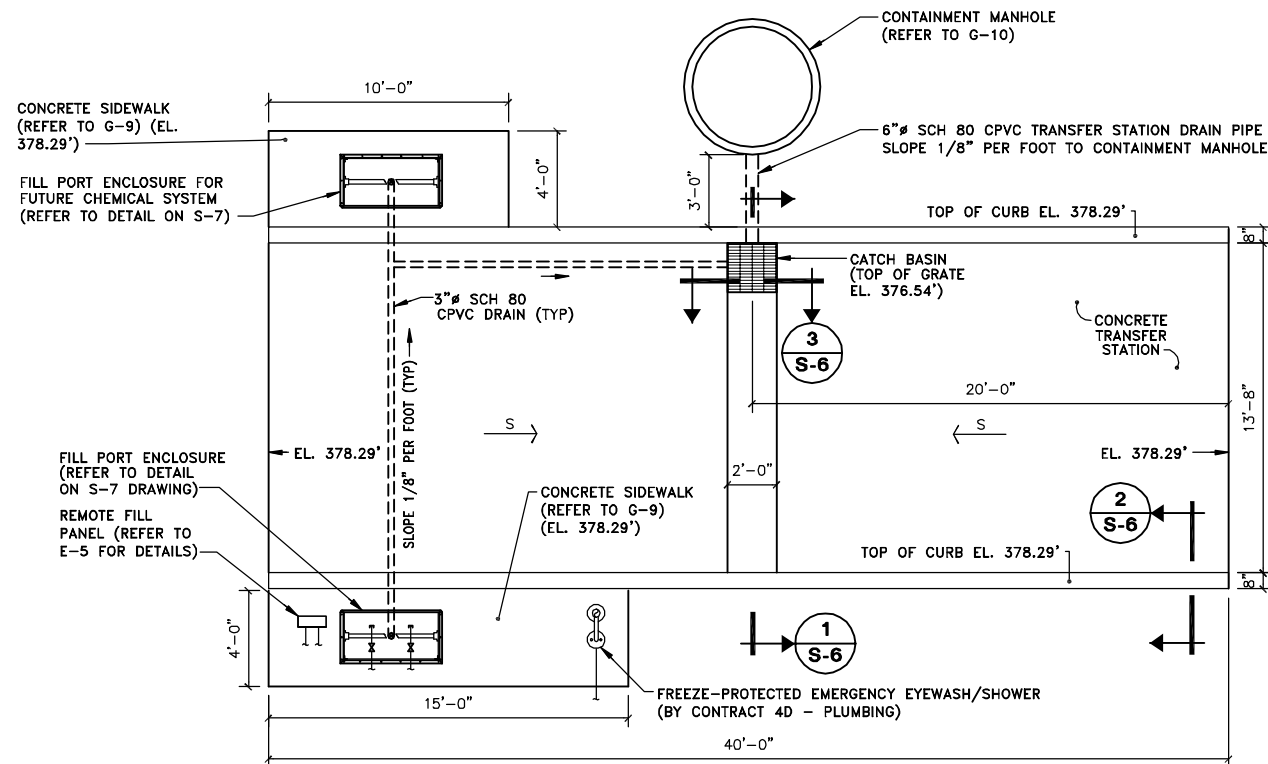
SECTION 1
SCALE: 3/4"=1'-0"
S-2 S-6 G-1
NOT TO SCALE



SECTION 2
SCALE: 3/4"=1'-0"
S-2 S-6 G-1

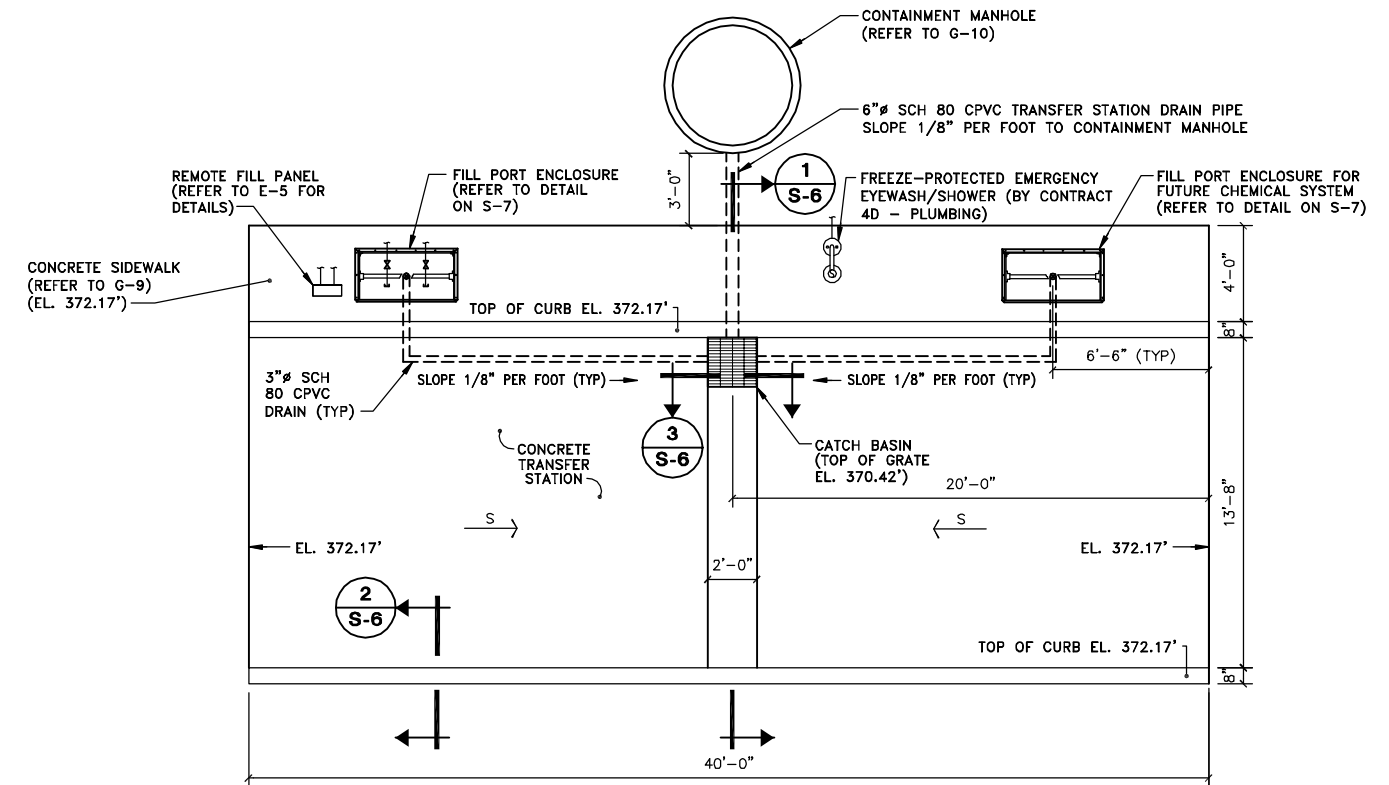


SECTION 3
SCALE: 3/4"=1'-0"
S-2 S-6 G-1



BREWERTON TRANSFER STATION PLAN
SCALE: 1/4"=1'-0"

- NOTES:**
1. ALL CONCRETE SHALL BE CLASS 'B' AND HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI.
 2. REFER TO G-9 FOR CONCRETE SIDEWALK DETAILS.
 3. REFER TO G-3 FOR LOCATION OF BALDWINVILLE-SENECA KNOLLS TRANSFER STATION AND CONTINUATION OF FILL PIPES, ELECTRICAL CONDUITS AND WATER SERVICE TO EYEWASH/SHOWER. REFER TO G-5 FOR LOCATION OF BREWERTON TRANSFER STATION AND CONTINUATION OF FILL PIPES, ELECTRICAL CONDUITS AND WATER SERVICE TO EYEWASH/SHOWER.
 4. BOLLARDS, ELECTRICAL CONDUIT AND GFI RECEPTACLES NOT SHOWN FOR CLARITY. REFER TO G-3 AND G-5 FOR LOCATIONS.



BALDWINVILLE-SENECA KNOLLS TRANSFER STATION PLAN
SCALE: 1/4"=1'-0"

X: 00364X00.DWG
L: ON=*, OFF=*REF*
P: CONT-DJD/CONT-MVB
5/01 SYR-54 DCC
00364026/RECORD/00364506.DWG

Graphic Scale	0	4'	8'
1/4"=1'-0"	0	2'	4'
3/4"=1'-0"	0	1'	2'

NO ALTERATIONS PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

No.	Date	Revisions	Init

Project Mgr. --- C.J.L. ---
Designed by --- WRH/JDS ---
Drawn by --- R.J.M. ---
Checked by --- C.J.L./W.F.F. ---
Prof. Eng. --- DONALD GEISSER ---
PE License --- N.Y. 57879 ---

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BLASLAND, BOUCK & LEE, INC.
engineers & scientists

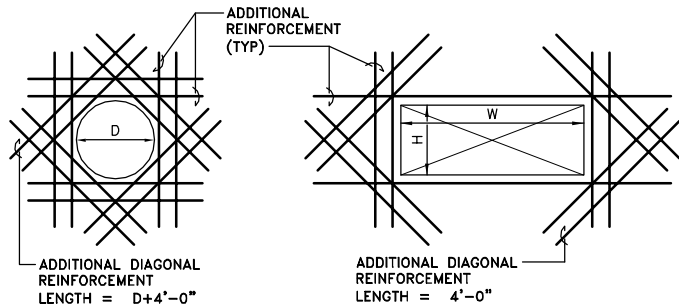
(RECORD DRAWING: MADE FROM DRAWING NO. S-6, FILE NO. 003.64.19F, DATED 1/99)
COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
BREWERTON, WETZEL ROAD AND BURNET AVENUE

**TRANSFER STATIONS
PLANS AND SECTIONS**
STRUCTURAL

RECORD DRAWINGS
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BLASLAND, BOUCK & LEE, INC.

File Number 003.64.79F
Date MAY 2001
Blasland, Bouck & Lee, Inc. Corporate Headquarters 6723 Towpath Road Syracuse, NY 13214 315-446-9120

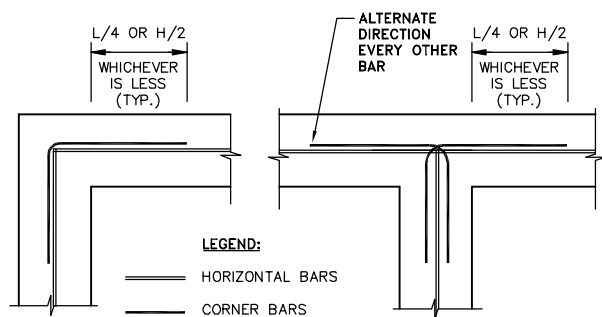
S-6



- NOTES:**
- PROVIDE ADDITIONAL REINFORCEMENT WHEN OPENING SIZE (D, W, OR H) IS EQUAL TO OR GREATER THAN SPECIFIED BAR SPACING.
 - EXTEND REINFORCEMENT A MINIMUM OF 48 BAR DIAMETERS BEYOND THE FACE OF THE OPENING
 - PROVIDE ON HALF THE AREA OF CUT BARS, EACH SIDE, MINIMUM 2 #4 @ 6" E.F.
 - PROVIDE ADDITIONAL DIAGONAL REINFORCEMENT AT ALL OPENINGS.
 - OPENINGS (D, H, OR W) UP TO 1'-0": 2 #4 @ 6" E.F.
 - OPENINGS (D, H, OR W) UP TO 2'-0": 2 #5 @ 6" E.F.
 - OPENINGS (D, H, OR W) UP TO 4'-0": 2 #6 @ 6" E.F.
 - OPENINGS (D, H, OR W) GREATER THAN 4'-0": PROVIDE ONE HALF THE AREA OF CUT BARS, EACH CORNER, MINIMUM 2 #6 @ 6" E.F.

ADDITIONAL REINFORCING AT WALL & SLAB OPENINGS

NOT TO SCALE

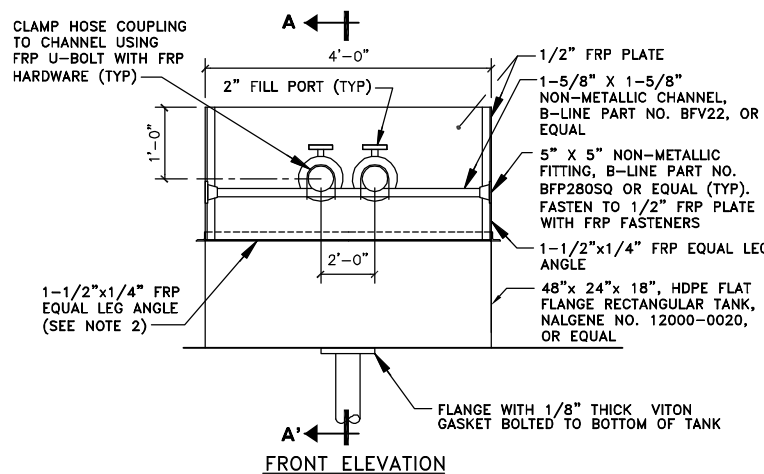
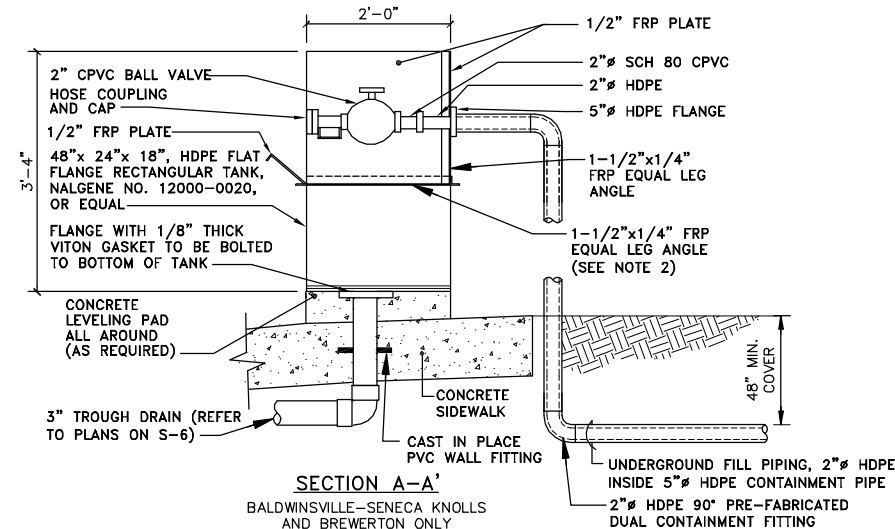
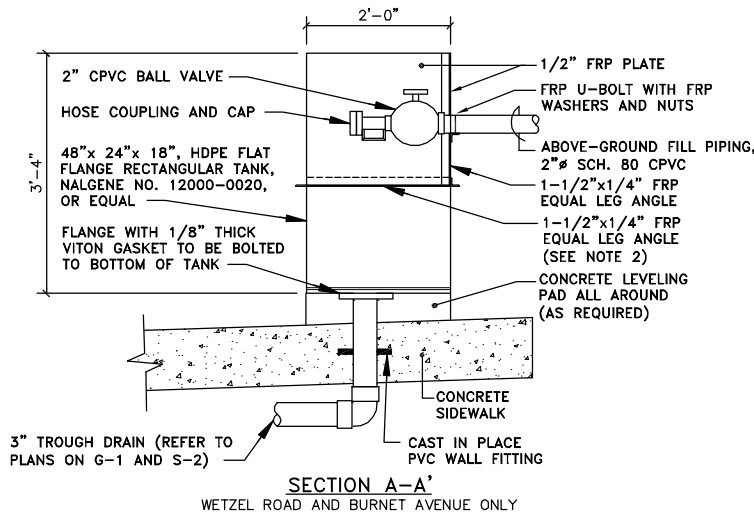


NOTES:

- L = DISTANCE TO ADJACENT CORNER OR INTERSECTION
- H = WALL HEIGHT
- VERTICAL BARS NOT SHOWN
- AT CONSTRUCTION JOINTS LAP BARS A MIN. 48 BAR DIA.

WALL REINFORCING AT INTERSECTIONS

SCALE: 1/2" = 1'-0"

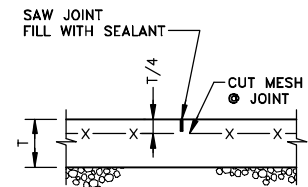


NOTES:

- CONTRACTOR SHALL FABRICATE A THREE SIDED SHIELD BY BONDING 1/2" FRP PLATE TO 1-1/2"x 1/4" FRP ANGLES.
- THREE SIDED SHIELD SHALL THEN BE FASTENED TO THE FLAT-FLANGE RECTANGULAR TANK USING FRP FASTENERS AT 8" O.C. WITH A 1/8" THICK VITON GASKET.
- FILL PIPES SHALL NOT BE PROVIDED FOR FILL PORT ENCLOSURES WHICH ARE DESIGNATED FOR FUTURE CHEMICAL SYSTEMS.

FILL PORT ENCLOSURE DETAIL

NOT TO SCALE

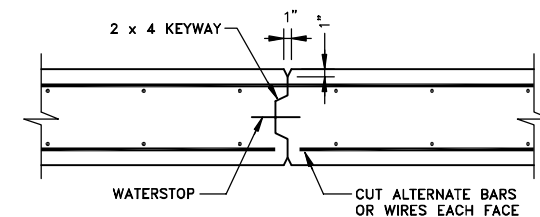


NOTE:

SAW JOINT WITHIN 24 HOURS AFTER CONCRETE PLACEMENT. SEE PLAN FOR SLAB THICKNESS (T).

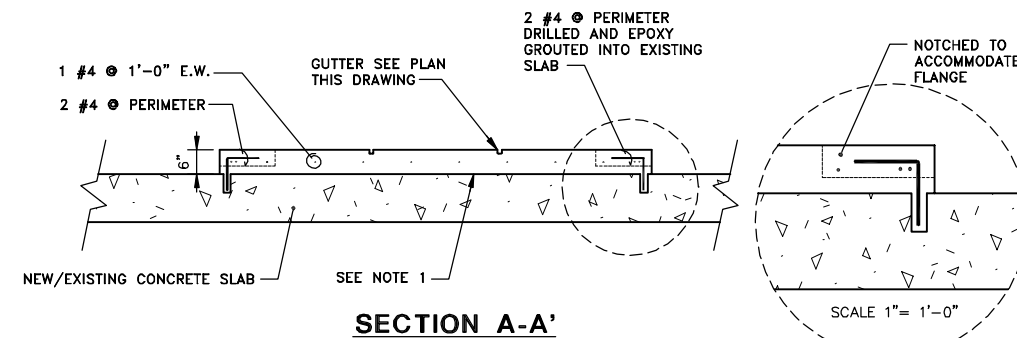
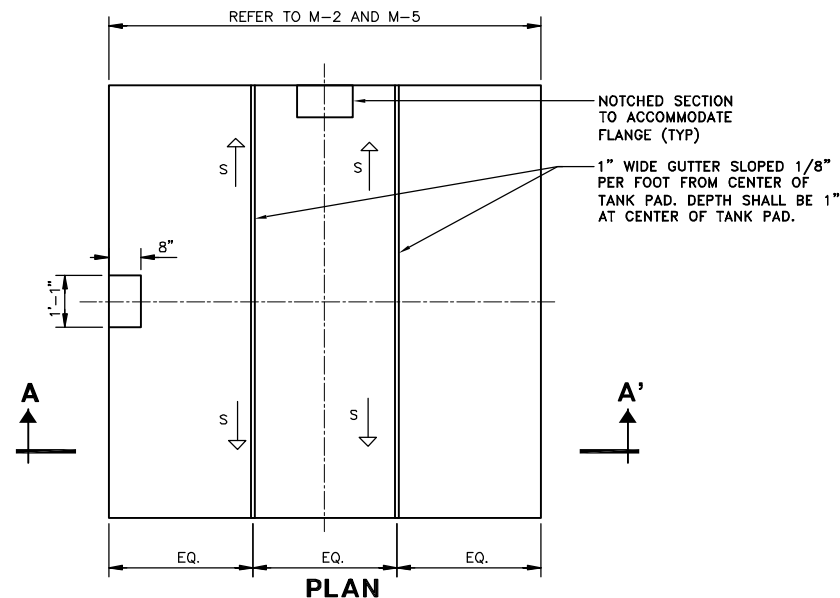
TYPICAL SLAB CONTROL JOINT

SCALE: 1" = 1'-0"



TYPICAL FLOOR CONSTRUCTION JOINT

SCALE: 1" = 1'-0"



NOTE:

- EXISTING CONCRETE SLAB SHALL BE PROPERLY PREPARED PRIOR TO PLACEMENT OF NEW CONCRETE. ABRASE SURFACE OF EXISTING CONCRETE TO EXPOSE A CLEAN SURFACE OF SOUND CONCRETE, AND APPLY BONDING COMPOUND IN ACCORDANCE WITH THE MP SECTION ENTITLED "CONCRETE".

TYPICAL CONCRETE TANK PAD DETAIL

SCALE 1/2" = 1'-0"

RECORD DRAWINGS
TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, THESE RECORD DRAWINGS SUBSTANTIALLY REPRESENT THE PROJECT AS CONSTRUCTED.
BLASLAND, BOUCK & LEE, INC.

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00364026/RECORD/00364S07.DWG

Graphic Scale	No.	Date	Revisions	Init
1/2"=1'-0"				
1"=1'-0"				

Project Mgr. --- C_J_L ---
Designed by --- W_F_F ---
Drawn by --- R_J_M ---
Checked by --- W_R_H/J_D_S ---
Prof. Eng. --- D_O_N_A_L_D G_E_I_S_S_E_R ---
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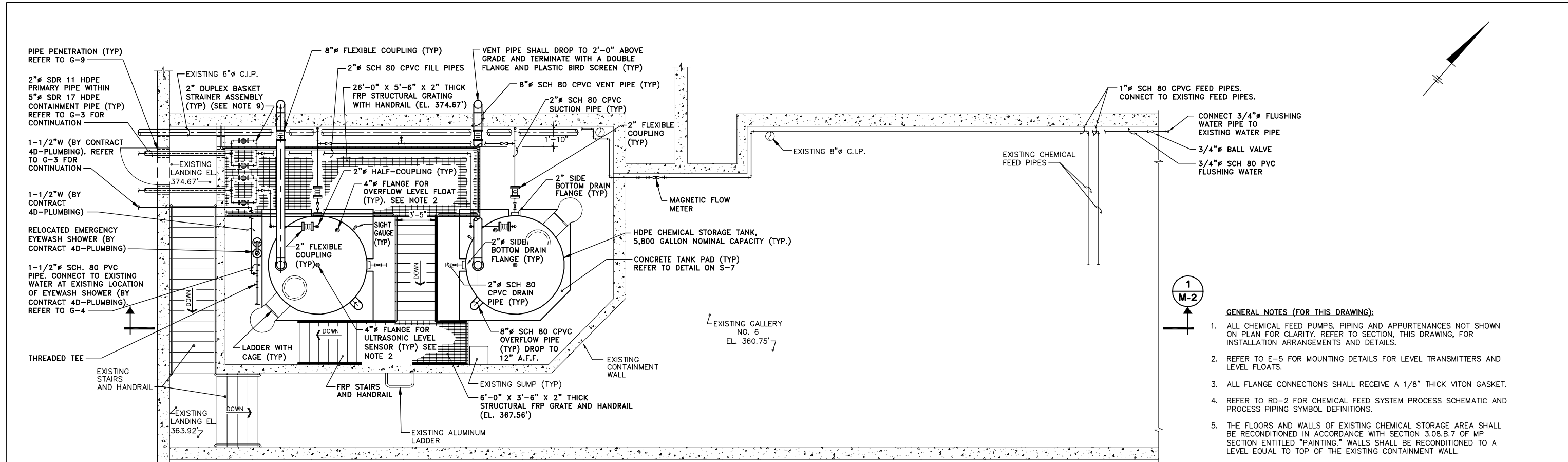
COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE – SENECA KNOLLS, BREWERTON, WETZEL ROAD AND BURNET AVENUE

MISCELLANEOUS DETAILS

STRUCTURAL

File Number 003.64.80F
Date MAY 2001
Blasland, Bouck & Lee, Inc. Corporate Headquarters 6723 Towpath Road Syracuse, NY 13214 315-446-9120

S-7

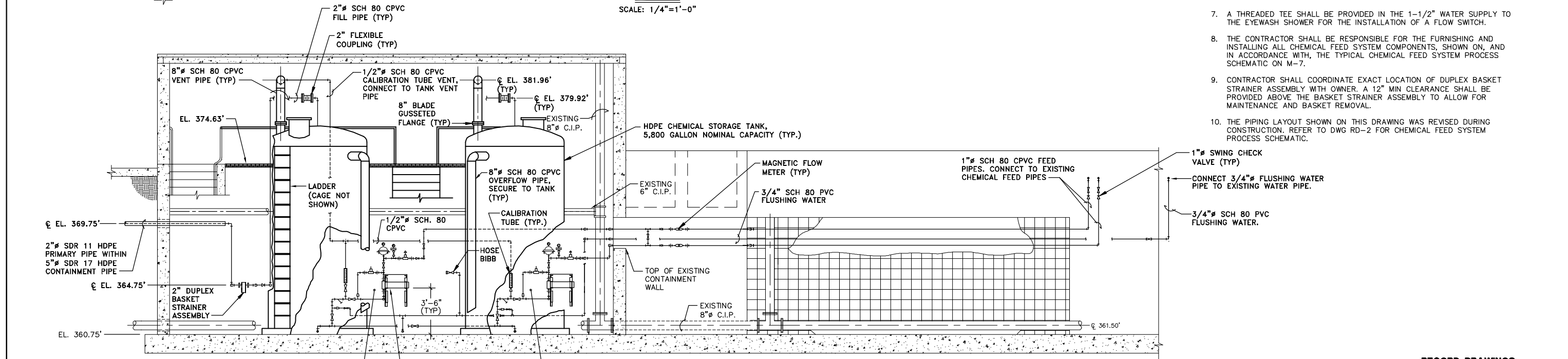


PLAN

SCALE: 1/4"=1'-0"

GENERAL NOTES (FOR THIS DRAWING):

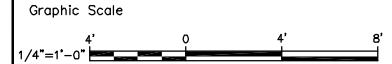
1. ALL CHEMICAL FEED PUMPS, PIPING AND APPURTENANCES NOT SHOWN ON PLAN FOR CLARITY. REFER TO SECTION, THIS DRAWING, FOR INSTALLATION ARRANGEMENTS AND DETAILS.
2. REFER TO E-5 FOR MOUNTING DETAILS FOR LEVEL TRANSMITTERS AND LEVEL FLOATS.
3. ALL FLANGE CONNECTIONS SHALL RECEIVE A 1/8" THICK VITON GASKET.
4. REFER TO RD-2 FOR CHEMICAL FEED SYSTEM PROCESS SCHEMATIC AND PROCESS PIPING SYMBOL DEFINITIONS.
5. THE FLOORS AND WALLS OF EXISTING CHEMICAL STORAGE AREA SHALL BE RECONDITIONED IN ACCORDANCE WITH SECTION 3.08.B.7 OF MP SECTION ENTITLED "PAINTING." WALLS SHALL BE RECONDITIONED TO A LEVEL EQUAL TO TOP OF THE EXISTING CONTAINMENT WALL.
6. CONTRACT 4D-PLUMBING SHALL FURNISH AND INSTALL 1-1/2" SCH 80 PVC WATER SUPPLY PIPING TO THE EMERGENCY EYEWASH SHOWER AT THE NEW LOCATION.
7. A THREADED TEE SHALL BE PROVIDED IN THE 1-1/2" WATER SUPPLY TO THE EYEWASH SHOWER FOR THE INSTALLATION OF A FLOW SWITCH.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FURNISHING AND INSTALLING ALL CHEMICAL FEED SYSTEM COMPONENTS, SHOWN ON, AND IN ACCORDANCE WITH, THE TYPICAL CHEMICAL FEED SYSTEM PROCESS SCHEMATIC ON M-7.
9. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF DUPLEX BASKET STRAINER ASSEMBLY WITH OWNER. A 12" MIN CLEARANCE SHALL BE PROVIDED ABOVE THE BASKET STRAINER ASSEMBLY TO ALLOW FOR MAINTENANCE AND BASKET REMOVAL.
10. THE PIPING LAYOUT SHOWN ON THIS DRAWING WAS REVISED DURING CONSTRUCTION. REFER TO DWG RD-2 FOR CHEMICAL FEED SYSTEM PROCESS SCHEMATIC.



SECTION 1

SCALE: 1/4"=1'-0"

X: 00364X00.DWG
 L: ON=*, OFF=REF
 P: CONT-D,JD/CONT-MVB
 5/01 SYR-54-DCC
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No.	Date	Revisions	Init

Project Mgr. --- CJL ---
 Designed by --- WFF ---
 Drawn by --- GMS/RJM ---
 Checked by --- CJL/WFF ---
 Prof. Eng. --- DONALD GEISSER ---
 PE License --- N.Y. 57879 ---



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COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
 CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
 BREWERTON, WETZEL ROAD AND BURNET AVENUE

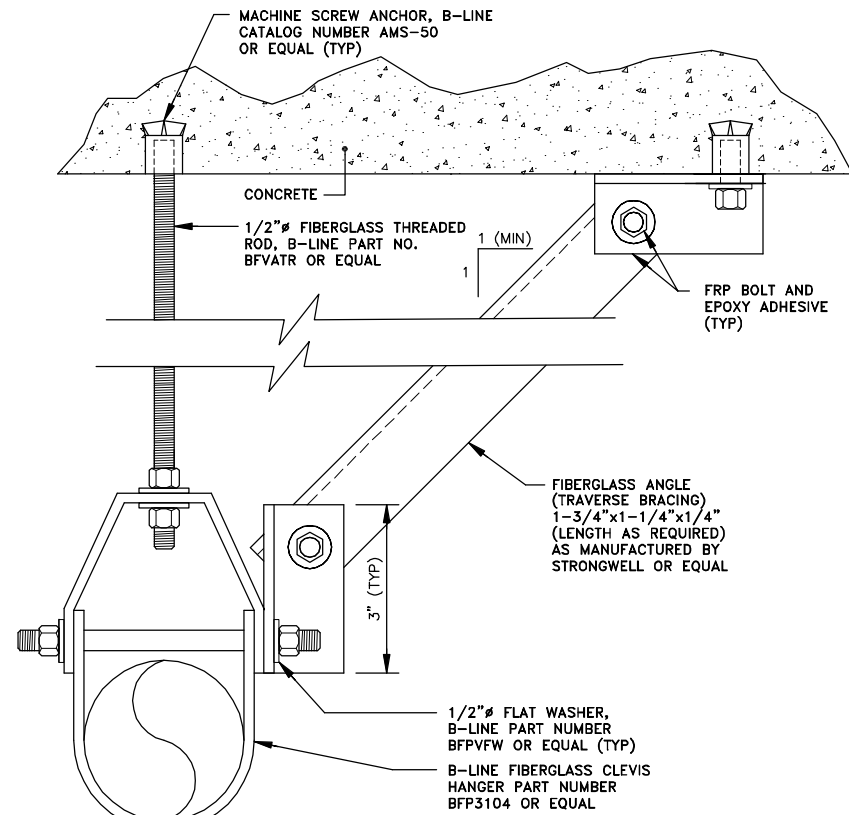
**BALDWINVILLE - SENECA KNOLLS WPCP
 PIPING PLAN AND SECTION**

MECHANICAL

RECORD DRAWINGS
 TO THE BEST OF OUR KNOWLEDGE,
 INFORMATION AND BELIEF, THESE RECORD
 DRAWINGS SUBSTANTIALLY REPRESENT
 THE PROJECT AS CONSTRUCTED.
BLASLAND, BOUCK & LEE, INC.

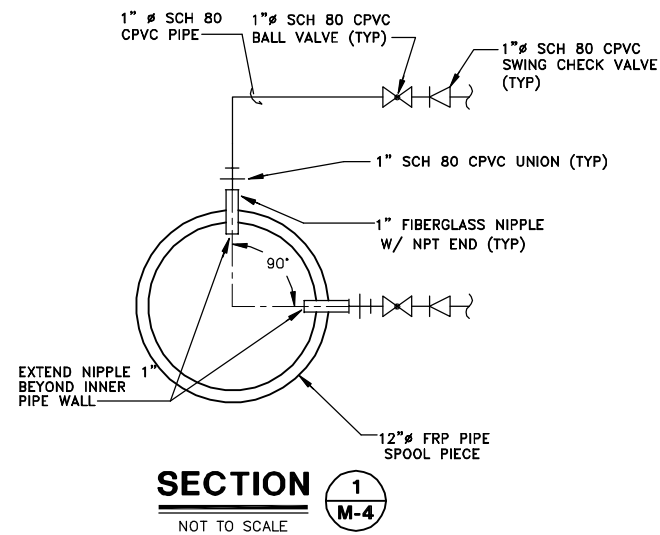
File Number
003.64.82F
 Date
MAY 2001
 Blasland, Bouck & Lee, Inc.
 Corporate Headquarters
 6723 Towpath Road
 Syracuse, NY 13214
 315-446-9120

M-2

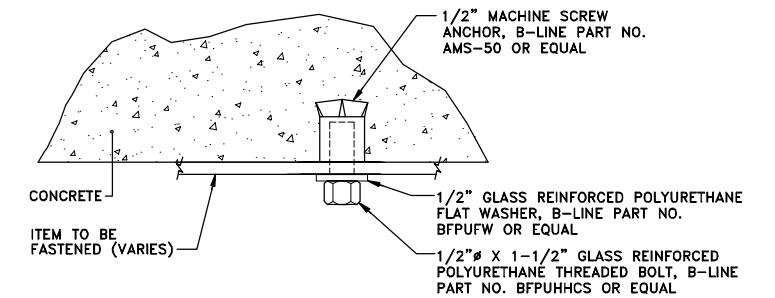


NOTE:
1. TRAVERSE BRACING SHALL BE USED ON THE 2"Ø FILL LINES.

PIPE HANGER DETAIL
NOT TO SCALE

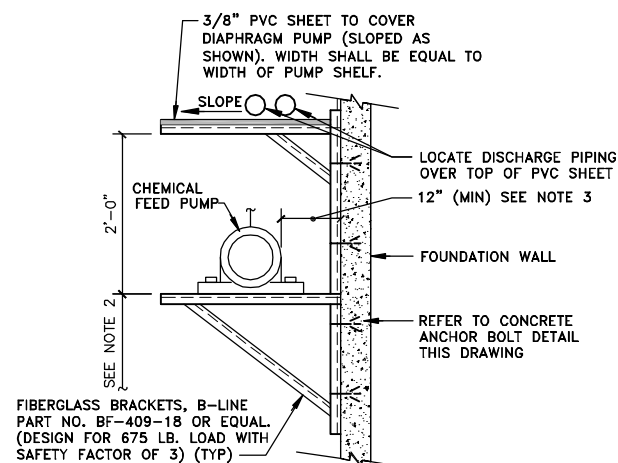


SECTION 1 M-4
NOT TO SCALE



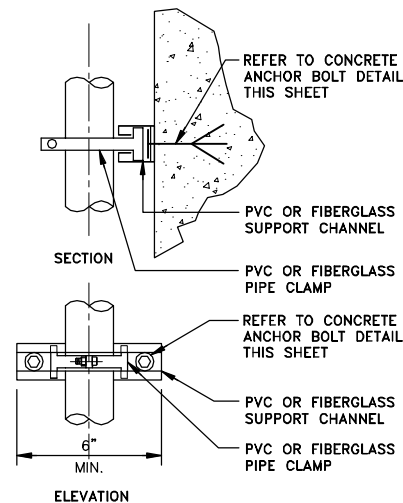
CONCRETE ANCHOR BOLT DETAIL
NOT TO SCALE

GENERAL NOTES:
1.1 PROPOSED PIPE HANGERS ARE FOR REFERENCE ONLY. HANGERS SHALL BE LOCATED EVERY 3'-0" O.C., HORIZONTAL, AND VERTICAL, AND AT ALL CHANGES IN DIRECTION.



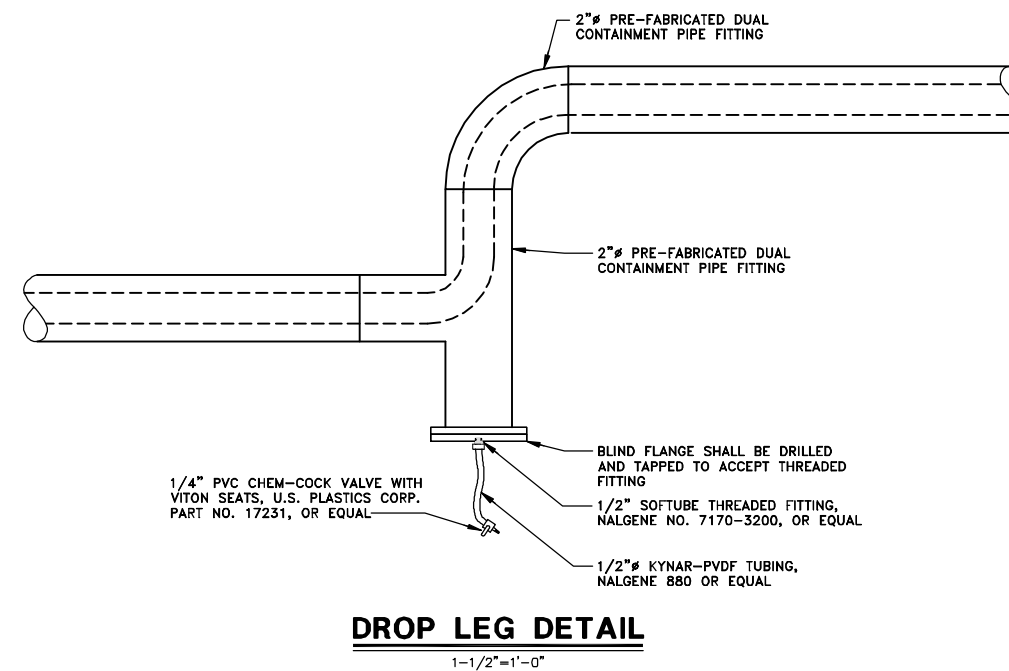
NOTES:
1. PUMP SHELF SHALL BE SECURED TO FRP PANEL WITH FRP FASTENERS AT BREWERTON WPCP. REFER TO M-3
2. PUMP SHALL BE MOUNTED 3'-6" A.F.F. OR FRP GRATING PLATFORM, AS APPLICABLE, TO TOP OF PUMP SHELF.
3. PUMP SHALL BE MOUNTED SUCH THAT A 12" MIN CLEARANCE IS MAINTAINED BETWEEN ALL PUMP COMPONENTS AND THE WALL OR PANEL ON WHICH THE PUMP SHELF IS MOUNTED.

PUMP SHELF DETAIL
NOT TO SCALE



NOTES:
1. CHANNEL SHALL BE SECURED TO EXISTING CONCRETE WALL USING CONCRETE ANCHORS AND NON-METALLIC FASTENERS AS INDICATED. SEE DETAIL THIS SHEET.

SMALL PIPE DETAIL
NOT TO SCALE



DROP LEG DETAIL
1-1/2"=1'-0"

RECORD DRAWINGS
TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, THESE RECORD DRAWINGS SUBSTANTIALLY REPRESENT THE PROJECT AS CONSTRUCTED.
BLASLAND, BOUCK & LEE, INC.

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00364026/RECORD/00364M06.DWG



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No.	Date	Revisions	Init

Project Mgr. --- C.J.L. ---
Designed by --- W.F.F. ---
Drawn by --- R.J.M./K.L.N. ---
Checked by --- C.J.L./W.F.F. ---
Prof. Eng. --- DONALD GEISSER ---
PE License --- N.Y. 57879 ---

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COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
BREWERTON, WETZEL ROAD AND BURNET AVENUE

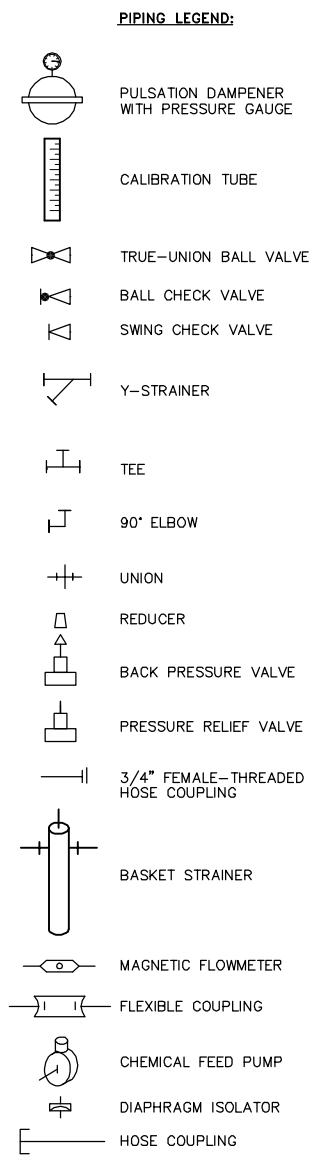
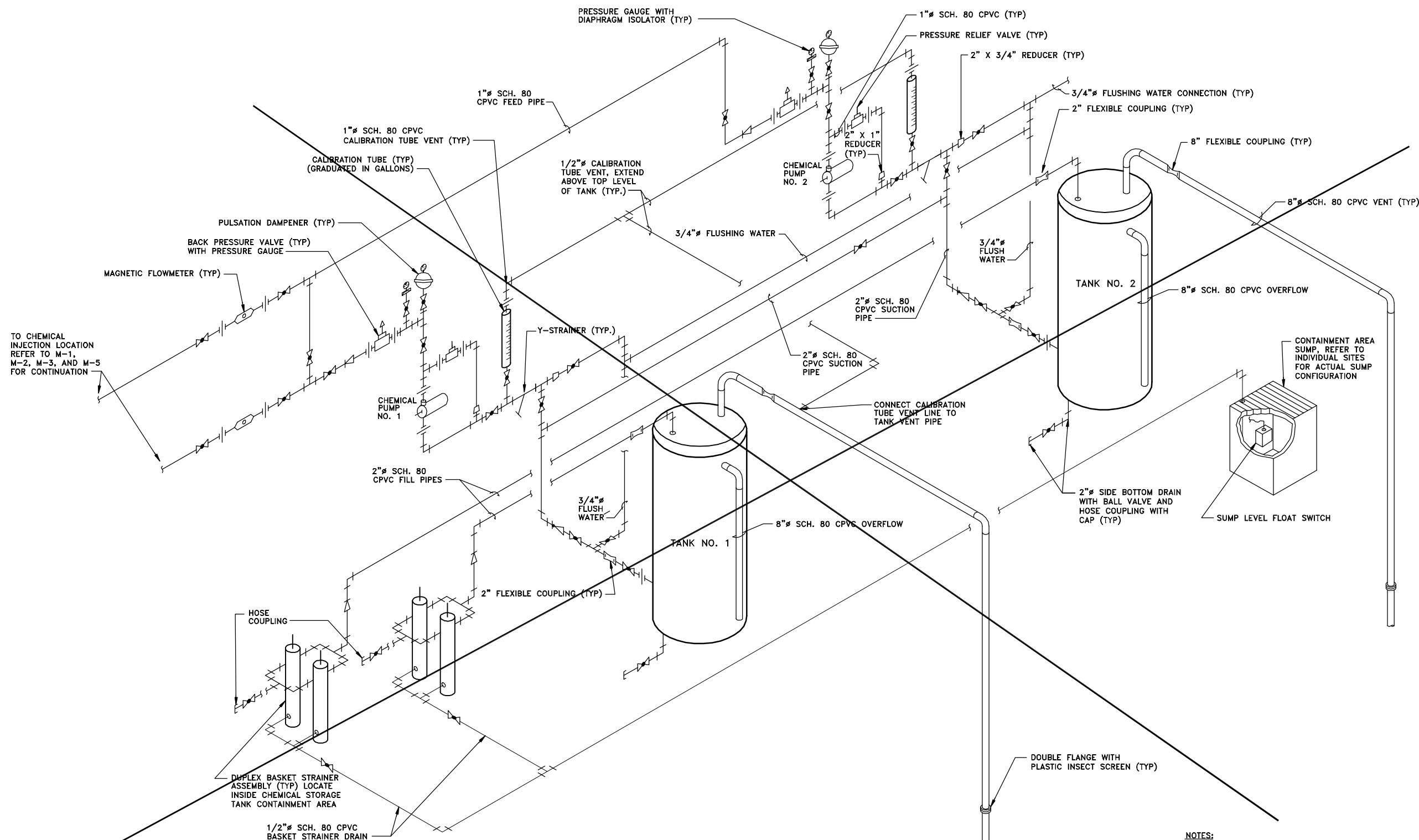
MISCELLANEOUS DETAILS

MECHANICAL

File Number 003.64.86F
Date MAY 2001
Blasland, Bouck & Lee, Inc. Corporate Headquarters 6723 Towpath Road Syracuse, NY 13214 315-446-9120

M-6

(RECORD DRAWING: MADE FROM DRAWING NO. M-6, FILE NO. 003.64.26F, DATED 1/99) DATE _____ BY _____



GENERAL NOTE:
 1.1 THIS DRAWING SUPERSEDED, REFER TO DRAWING RD-1, RD-2, RD-3, AND RD-4 FOR CHEMICAL FEED SYSTEM PROCESS SCHEMATICS FOR EACH SITE.

- NOTES:**
1. ALL SUCTION SIDE PROCESS PIPING SHALL BE 2" SCH. 80 CPVC, UNLESS OTHERWISE INDICATED.
 2. ALL DISCHARGE SIDE PROCESS PIPING SHALL BE 1" SCH. 80 CPVC, UNLESS OTHERWISE INDICATED.
 3. CHEMICAL PUMPS SHALL BE MOUNTED 3'-6" A.F.F. OR FRP GRATING PLATFORM, AS APPLICABLE, TO TOP OF PUMP SHELF.
 4. ALL FLUSHING WATER PIPING SHALL BE 3/4" SCH. 80 PVC, UNLESS OTHERWISE INDICATED.

RECORD DRAWINGS
 TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, THESE RECORD DRAWINGS SUBSTANTIALLY REPRESENT THE PROJECT AS CONSTRUCTED.
BLASLAND, BOUCK & LEE, INC.

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Graphic Scale

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 Checked by --- W.F.F. ---
 Prof. Eng. --- DONALD GEISSER ---
 PE License --- N.Y. 57879 ---



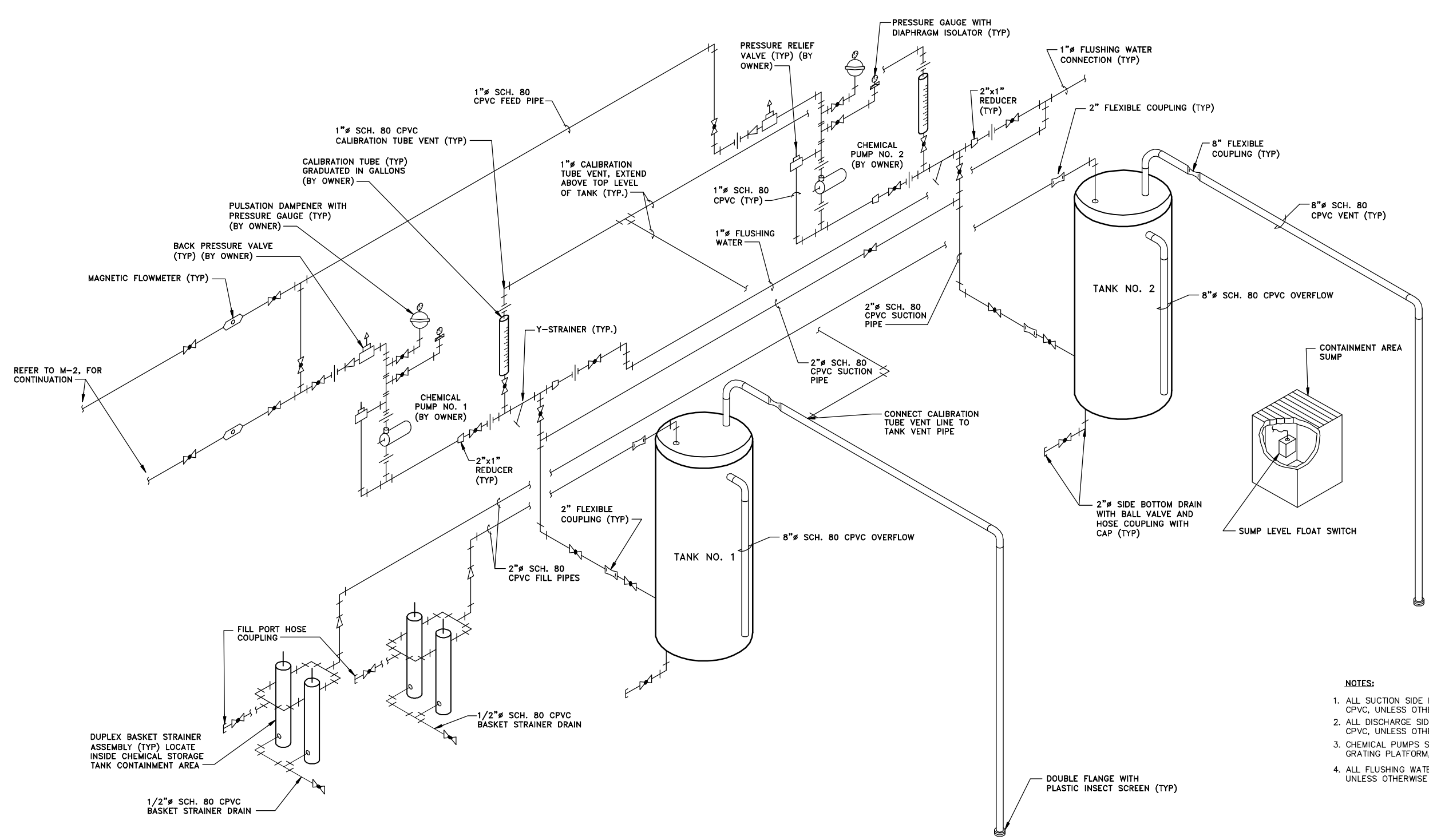
(RECORD DRAWING: MADE FROM DRAWING NO. M-7, FILE NO. 003.64.27F, DATED 1/99)

COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
 CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS, BREWERTON, WETZEL ROAD AND BURNET AVENUE

**TYPICAL CHEMICAL FEED SYSTEM
 PROCESS SCHEMATIC**

MECHANICAL

File Number 003.64.87F	M-7
Date MAY 2001	
Blasland, Bouck & Lee, Inc. Corporate Headquarters 6723 Towpath Road Syracuse, NY 13214 315-446-9120	



PIPING LEGEND:

	PULSATION DAMPENER WITH PRESSURE GAUGE
	CALIBRATION TUBE
	TRUE-UNION BALL VALVE
	SWING CHECK VALVE
	Y-STRAINER
	CROSS
	TEE
	90° ELBOW
	UNION
	REDUCER
	BACK PRESSURE VALVE
	PRESSURE RELIEF VALVE
	3/4" FEMALE-THREADED HOSE COUPLING
	BASKET STRAINER
	MAGNETIC FLOWMETER
	FLEXIBLE COUPLING
	CHEMICAL FEED PUMP
	DIAPHRAGM ISOLATOR
	HOSE COUPLING

- NOTES:**
1. ALL SUCTION SIDE PROCESS PIPING SHALL BE 2" SCH. 80 CPVC, UNLESS OTHERWISE INDICATED.
 2. ALL DISCHARGE SIDE PROCESS PIPING SHALL BE 1" SCH. 80 CPVC, UNLESS OTHERWISE INDICATED.
 3. CHEMICAL PUMPS SHALL BE MOUNTED 3'-6" A.F.F. OR FRP GRATING PLATFORM, AS APPLICABLE, TO TOP OF PUMP SHELF.
 4. ALL FLUSHING WATER PIPING SHALL BE 1" SCH. 80 CPVC, UNLESS OTHERWISE INDICATED.

X: 00364X00.DWG
 L: ON=*, OFF=REF
 P: CONT-D,JD/CONT-MVB
 5/01 SYR-54-DCC
 00364026/RECORD/00364RD2.DWG

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 BLASLAND, BOUCK & LEE, INC.
 engineers & scientists

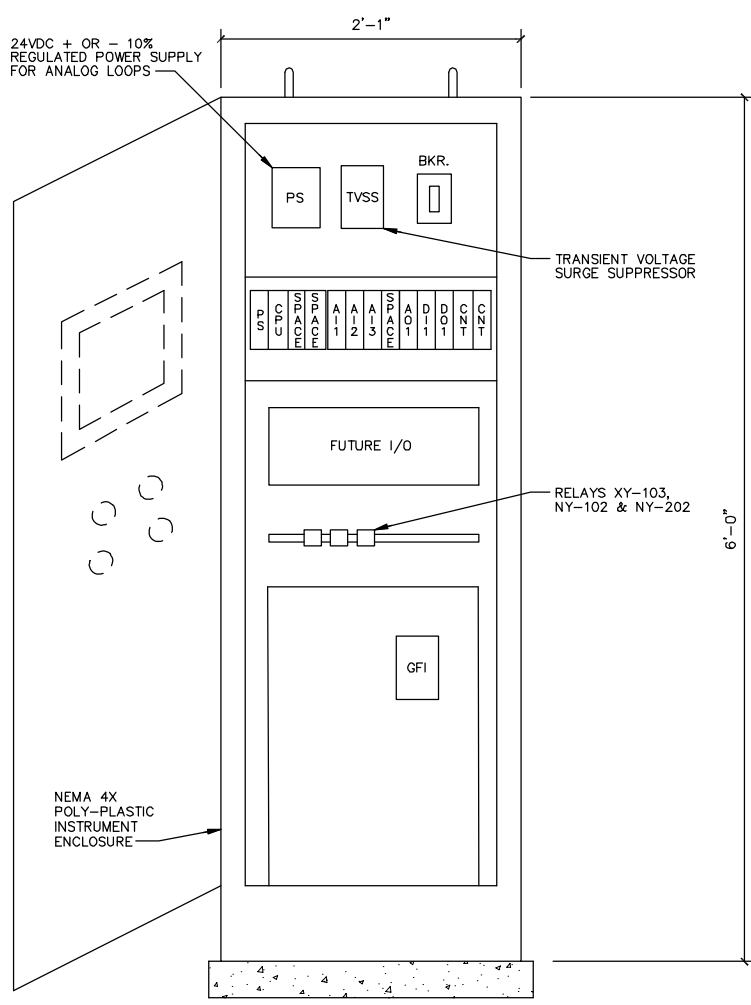
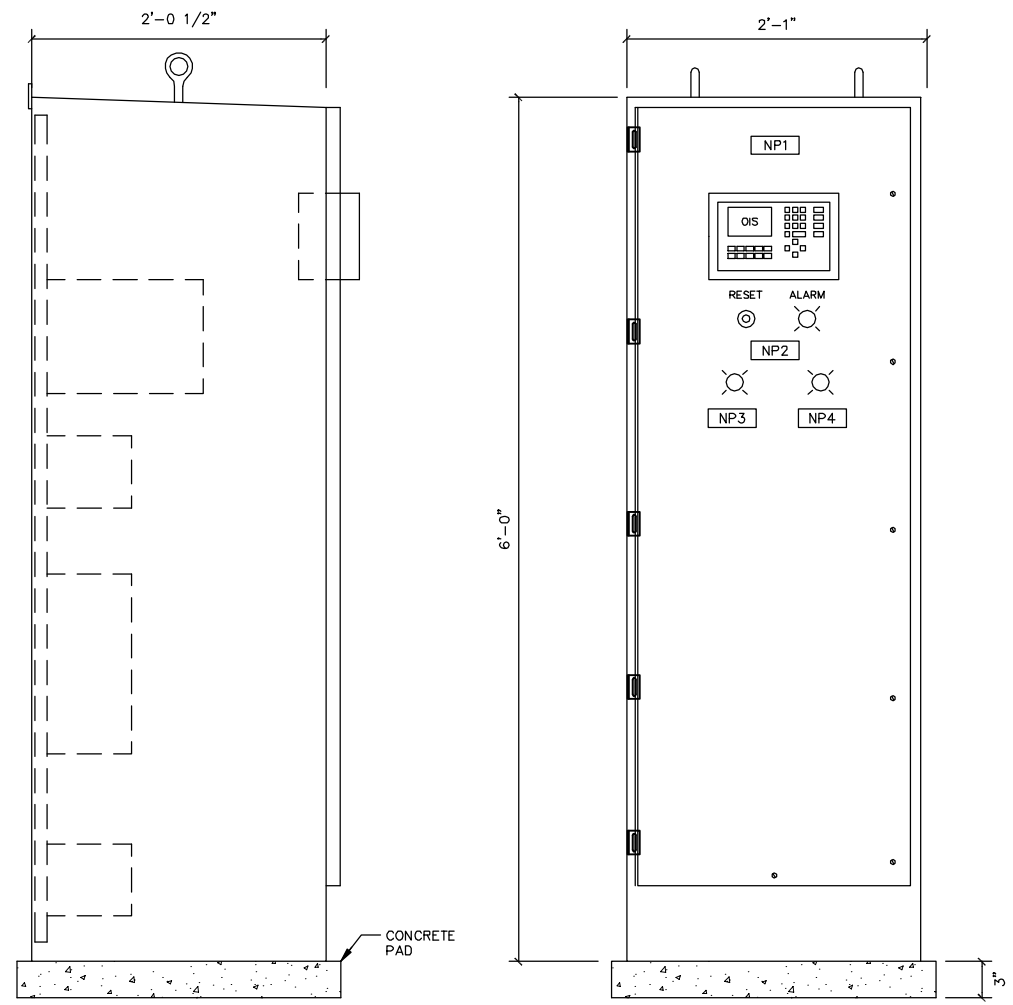
COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
 CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
 BREWERTON, WETZEL ROAD AND BURNET AVENUE
BALDWINVILLE - SENECA KNOLLS WPCP
CHEMICAL FEED SYSTEM PROCESS SCHEMATIC
 MECHANICAL

File Number
 003.64.89F
 Date
 MAY 2001
 Blasland, Bouck & Lee, Inc.
 Corporate Headquarters
 6723 Towpath Road
 Syracuse, NY 13214
 315-446-9120

RD-2

(RECORD DRAWING: MADE FROM DRAWING NO. M-7, FILE NO. 003.64.27F, DATED JANUARY 1999) DATE _____ BY _____

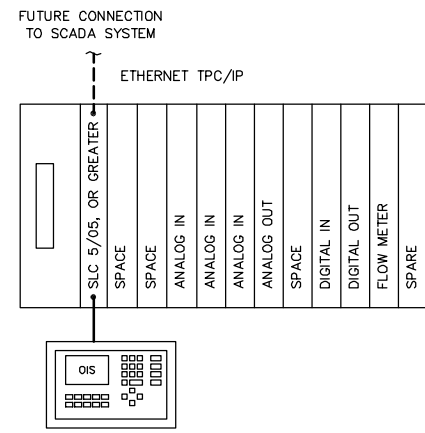
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BLASLAND, BOUCK & LEE, INC.



- LEGEND**
- PROCESS PIPING
 - BALL VALVE
 - CHECK VALVE
 - PRESSURE REDUCING VALVE
 - GAUGE VALVE
 - PRESSURE RELIEF VALVE
 - DIAPHRAGM PUMP
 - PULSATION DAMPENER WITH PRESSURE GAUGE
 - CALIBRATION TUBE
 - DIAPHRAGM ISOLATOR
 - MAGNETIC FLOWMETER
 - FLOAT SWITCH
 - TO BE ACCESSED THRU OPERATORS INTERFACE STATION (OIS)
 - PLC INTERLOCK
 - ES ELECTRIC POWER SUPPLY
 - FT EXISTING DEVICE

CHEMICAL FEED CONTROL PANEL

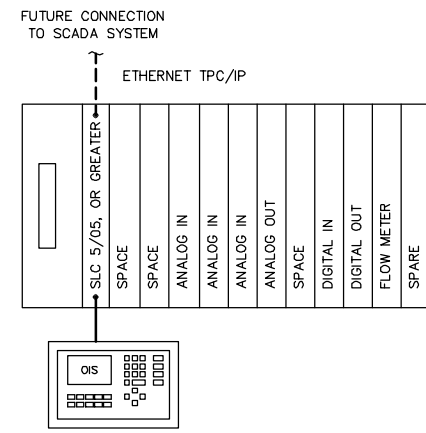
NOT TO SCALE



NOTE:
1. THE PLC SHALL BE FURNISHED WITH THE REQUIRED COMMUNICATION/INTERFACE MODULES AND DEVICES FOR CONFIGURATION OF THREE PORTS TO SUPPORT CONNECTION OF ETHERNET, OPERATOR INTERFACE, AND PROGRAMMING COMPUTER.

CONTROL SYSTEM DIAGRAM

(BURNET AVENUE ONLY)
NOT TO SCALE



NOTE:
1. THE PLC SHALL BE FURNISHED WITH THE REQUIRED COMMUNICATION/INTERFACE MODULES AND DEVICES FOR CONFIGURATION OF THREE PORTS TO SUPPORT CONNECTION OF ETHERNET, OPERATOR INTERFACE, AND PROGRAMMING COMPUTER.

CONTROL SYSTEM DIAGRAM

(BALDWINSVILLE - BREWERTON - WETZEL ROAD)
NOT TO SCALE

NAMEPLATE SCHEDULE

ITEM	LINE 1	LINE 2	LINE 3	LTR. SIZE	PLATE SIZE
NP1	CHEMICAL FEED	CONTROL PANEL	-	.25	1 X 6
NP2	ALARM	RESET	-	.19	.75 X 2.25
NP3	CHEMICAL FEED	PUMP NO. 1	RUNNING	.19	.75 X 2.25
NP4	CHEMICAL FEED	PUMP NO. 2	RUNNING	.19	.75 X 2.25

INSTRUMENTATION LEGEND	TRANSMITTER	SWITCH (H) (L) LOW	PRIMARY SENSOR	CONTROL	INDICATOR	ALARM
FLOW	FT	FS			FI	PA
TOTAL FLOW	OT				FO	
LEVEL	LT	LSH	LE		LI	LAH
PRESSURE	PT					
TEMPERATURE	TT					TAL
SPEED					SC	
STROKE					..ZC	ZI
HAND		HS			HC	
ALARM SW.						XSA
RELAY		XY			NY	

** MAY BE PRECEDED BY "E" FOR ELECTRIC OR "H" FOR HAND.

NOTES:
1. CONTRACT 4A - GENERAL SHALL PROVIDE INSTRUMENTATION AND CONTROL PANELS. CONTRACT 4B - ELECTRICAL SHALL PROVIDE WIRES, CONDUIT AND MAKE INTERCONNECTIONS.

XX-XXX INSTRUMENT FUNCTION SEE CHART FOR FUNCTION INSTRUMENT TAG NUMBER.

RECORD DRAWINGS
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BLASLAND, BOUCK & LEE, INC.

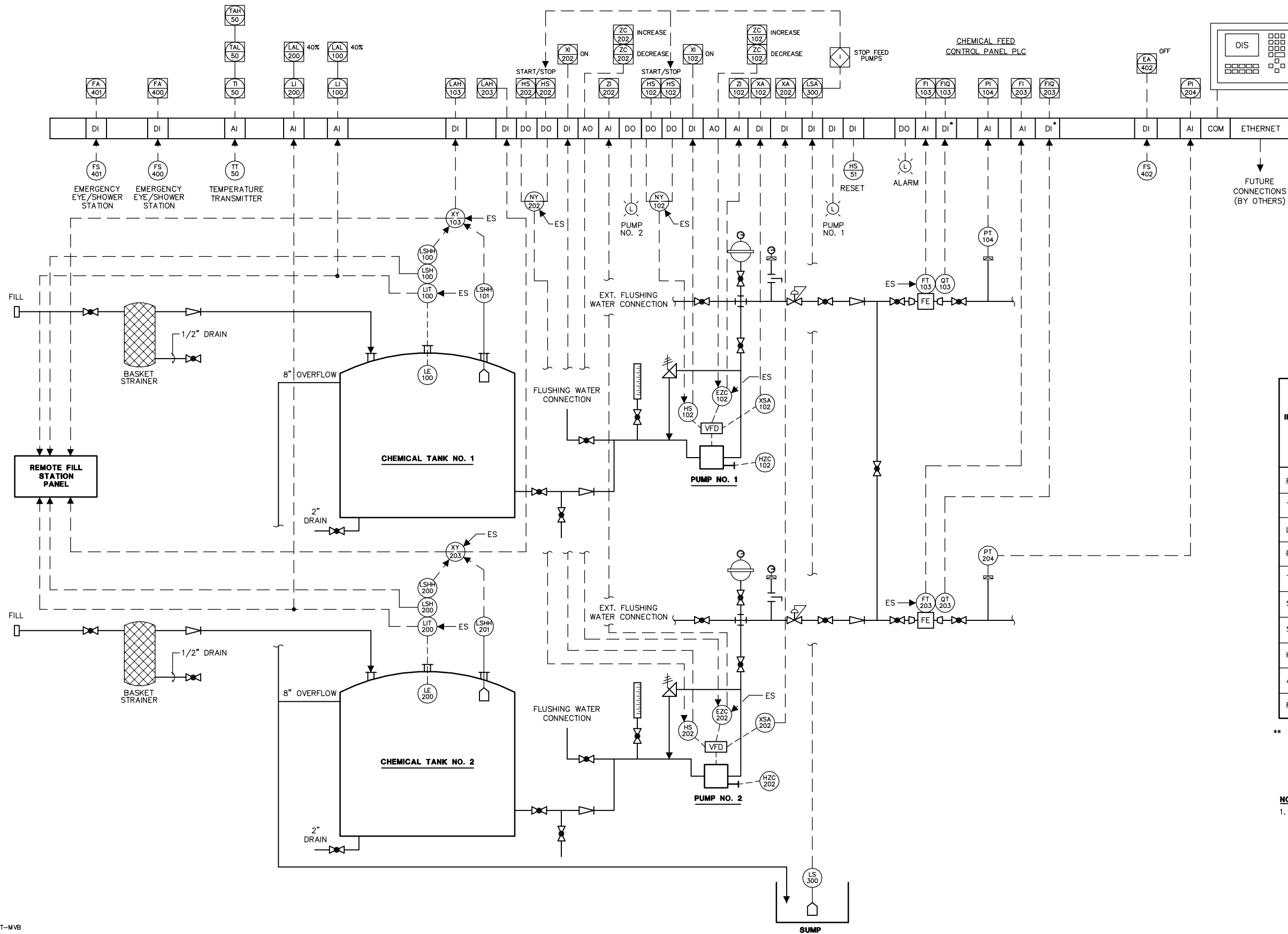
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00364026/RECORD/00364101.DWG

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					CJL	WGS	DCC	WGS	DONALD GEISSER	N.Y. 57879

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COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINSVILLE - SENECA KNOLLS, BREWERTON, WETZEL ROAD AND BURNET AVENUE
CONTROL CABINET LAYOUT AND ELEVATION
INSTRUMENTATION

File Number 003.64.94F
Date MAY 2001
Blasland, Bouck & Lee, Inc. Corporate Headquarters 6723 Towpath Road Syracuse, NY 13214 315-446-9120



* NOTE: I/O TERMINAL ON FLOW METER MODULE

INSTRUMENTATION LEGEND	TRANSMITTER		SWITCH (H) HIGH (L) LOW		PRIMARY SENSOR	CONTROL	INDICATOR	ALARM
	FT	FS	HS	LS				
FLOW	FT	FS					FI	PA
TOTAL FLOW	QT						FQ	
LEVEL	LT	LSH		LE			LI	LAH
PRESSURE	PT							
TEMPERATURE	TT							TAL
SPEED							SC	
STROKE							ZC	ZI
HAND			HS				HC	
ALARM SW.								XSA
RELAY			XY				NY	

** MAY BE PRECEDED BY "E" FOR ELECTRIC OR "H" FOR HAND.

XXX
INSTRUMENT FUNCTION
SEE CHART FOR FUNCTION
INSTRUMENT TAG NUMBER,

NOTE:
1. CONTRACT 4A - GENERAL SHALL PROVIDE INSTRUMENTATION AND CONTROL PANELS. CONTRACT 4B - ELECTRICAL SHALL PROVIDE WIRES, CONDUIT AND MAKE INTERCONNECTIONS.

RECORD DRAWINGS
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00364026/RECORD/00364104.DWG

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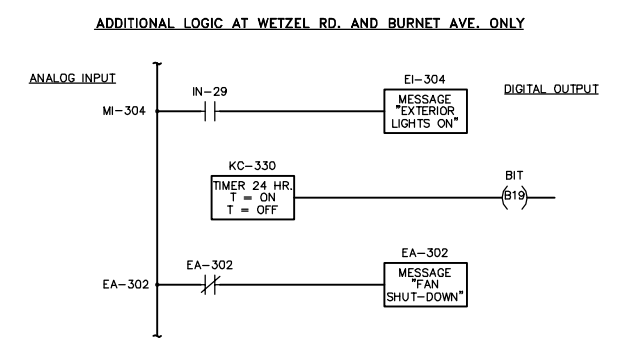
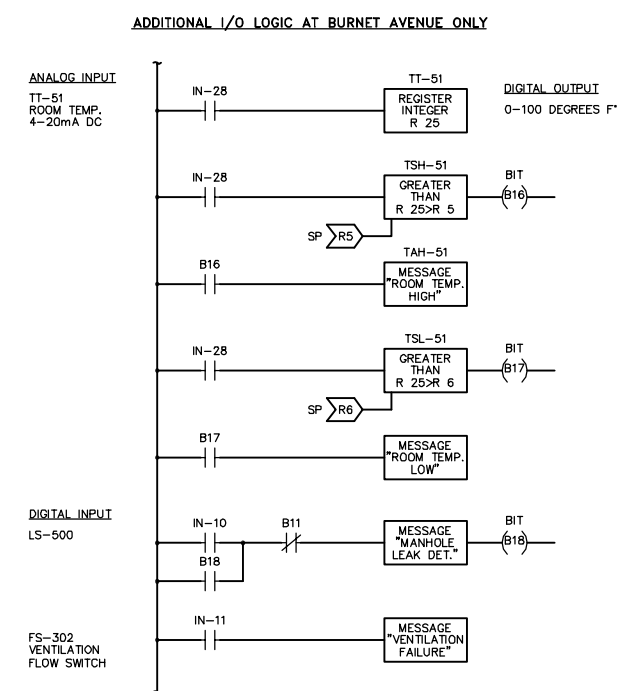
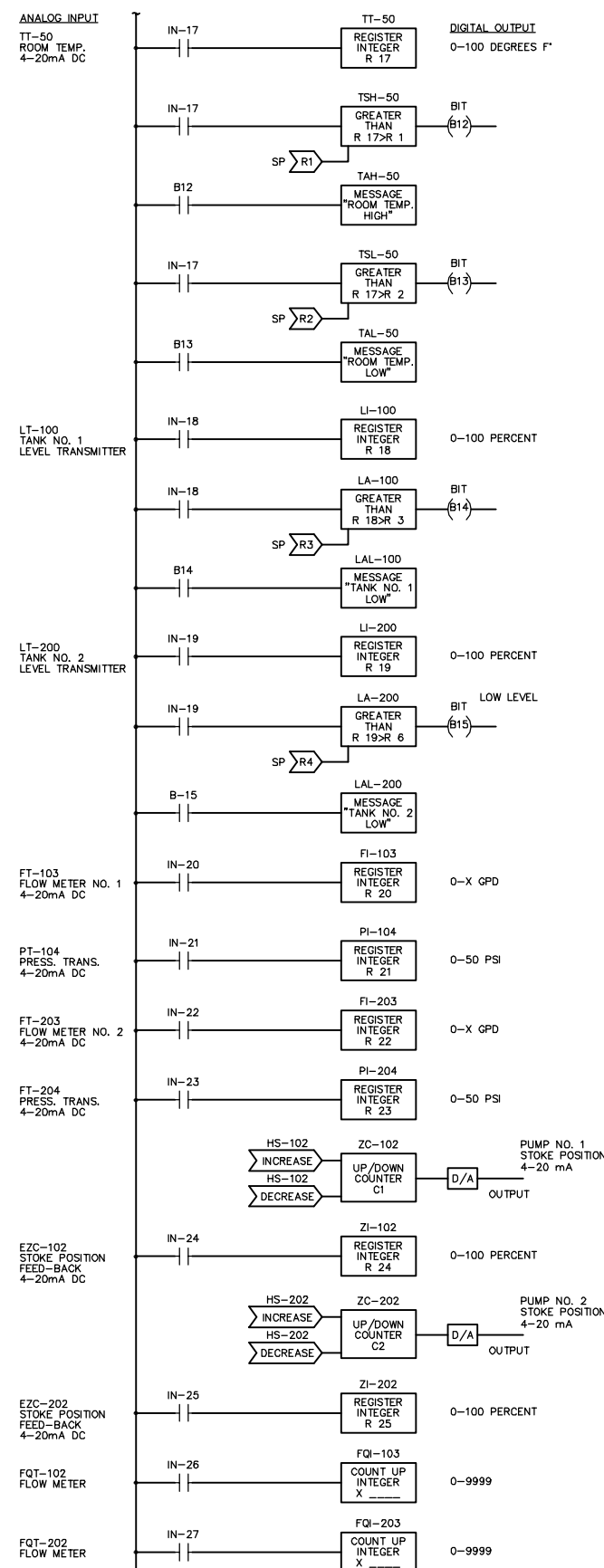
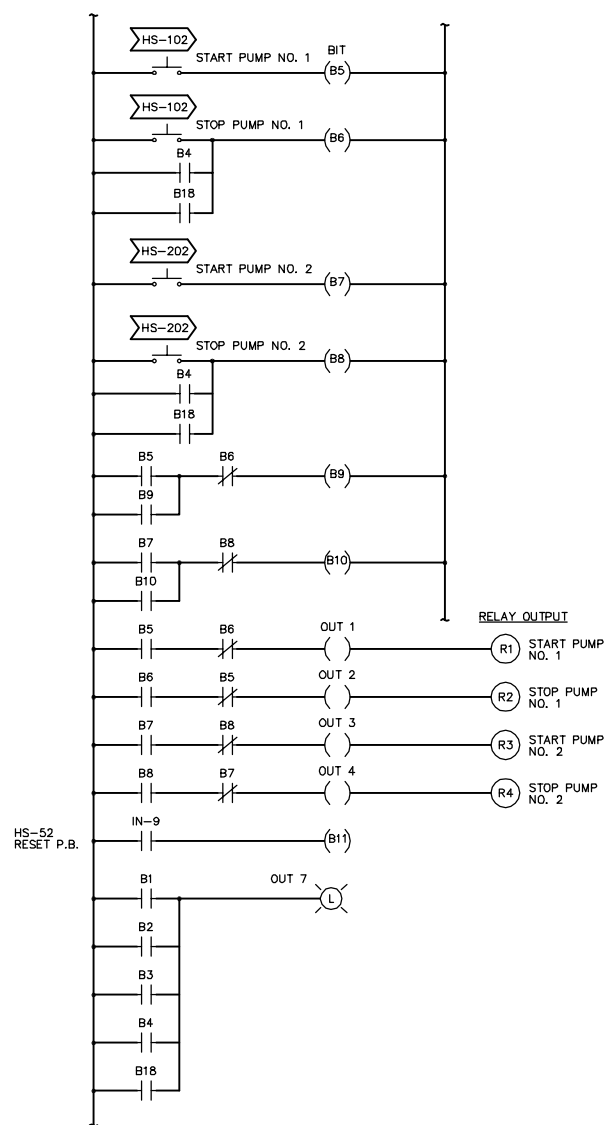
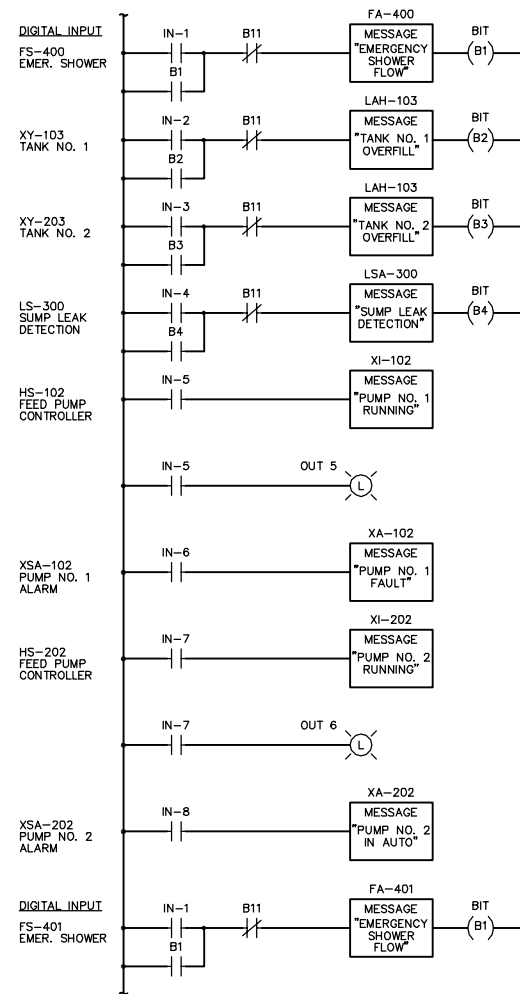
Project Mgr. - C.J.L.
Designed by - WGS/MEE
Drawn by - DCC
Checked by - WGS/MEE
Prof. Eng. - DONALD GEISSER
PE License - N.Y. 57879

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COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
BREWERTON, WETZEL ROAD AND BURNET AVENUE
BALDWINVILLE - SENECA KNOLLS WPCP
PROCESS AND INSTRUMENTATION DIAGRAM
INSTRUMENTATION

File Number
003.64.97F
Date
MAY 2001
Blasland, Bouck & Lee, Inc.
Corporate Headquarters
6723 Towpath Road
Syracuse, NY 13214
315-446-9120

(RECORD DRAWING: MADE FROM DRAWING NO. I-4, FILE NO. 003.64.39F, DATED 1/99) DATE _____ BY _____



NOTE:
THE LOGIC SHOWN IS A GENERAL DESCRIPTION OF REQUIRED FUNCTIONS, AND IS NOT A COMPLETE PROGRAM. THE PLC SHALL BE PROVIDED WITH THE NECESSARY HARDWARE, SOFTWARE AND PROGRAMMING TO PROVIDE THE INDICATED FUNCTIONS.

◁ INDICATES INPUT THRU OIS KEYPAD.

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Prof. Eng. --- DONALD GEISSER ---
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COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
BREWERTON, WETZEL ROAD AND BURNET AVENUE

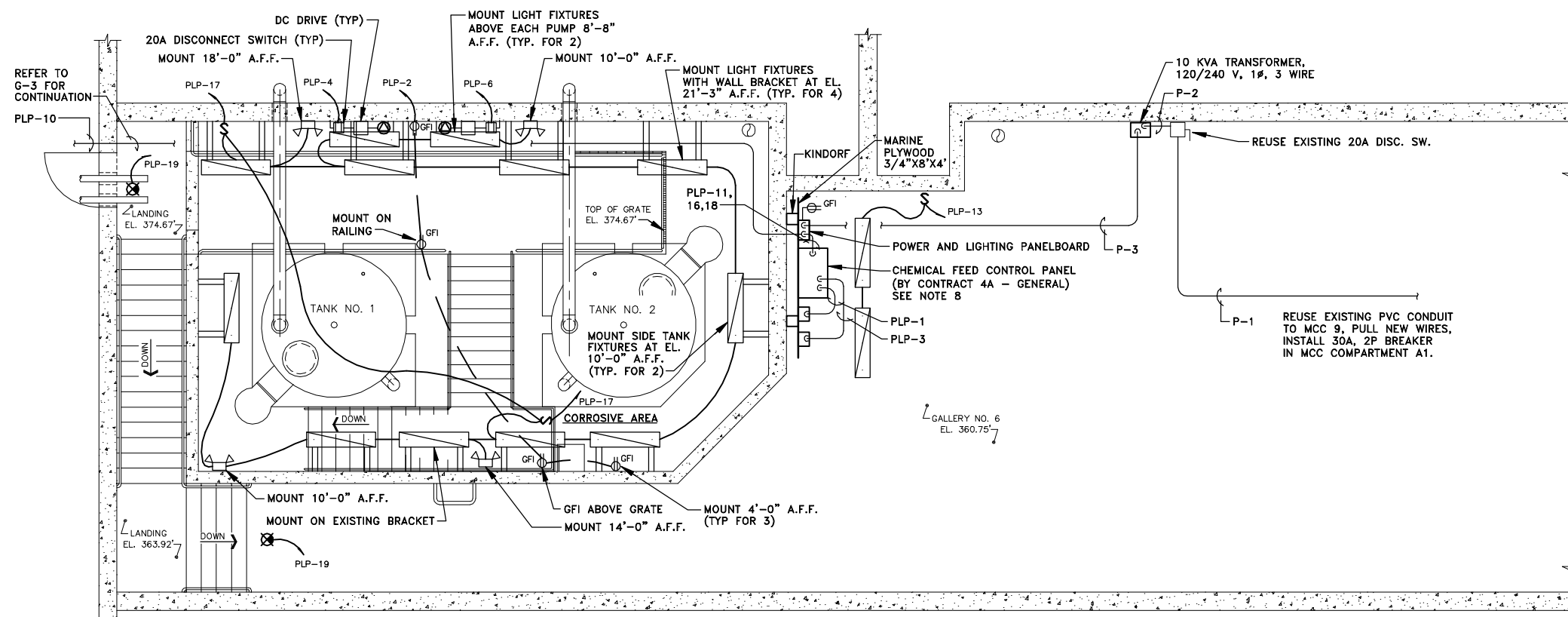
LADDER DIAGRAMS

INSTRUMENTATION

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BLASLAND, BOUCK & LEE, INC.

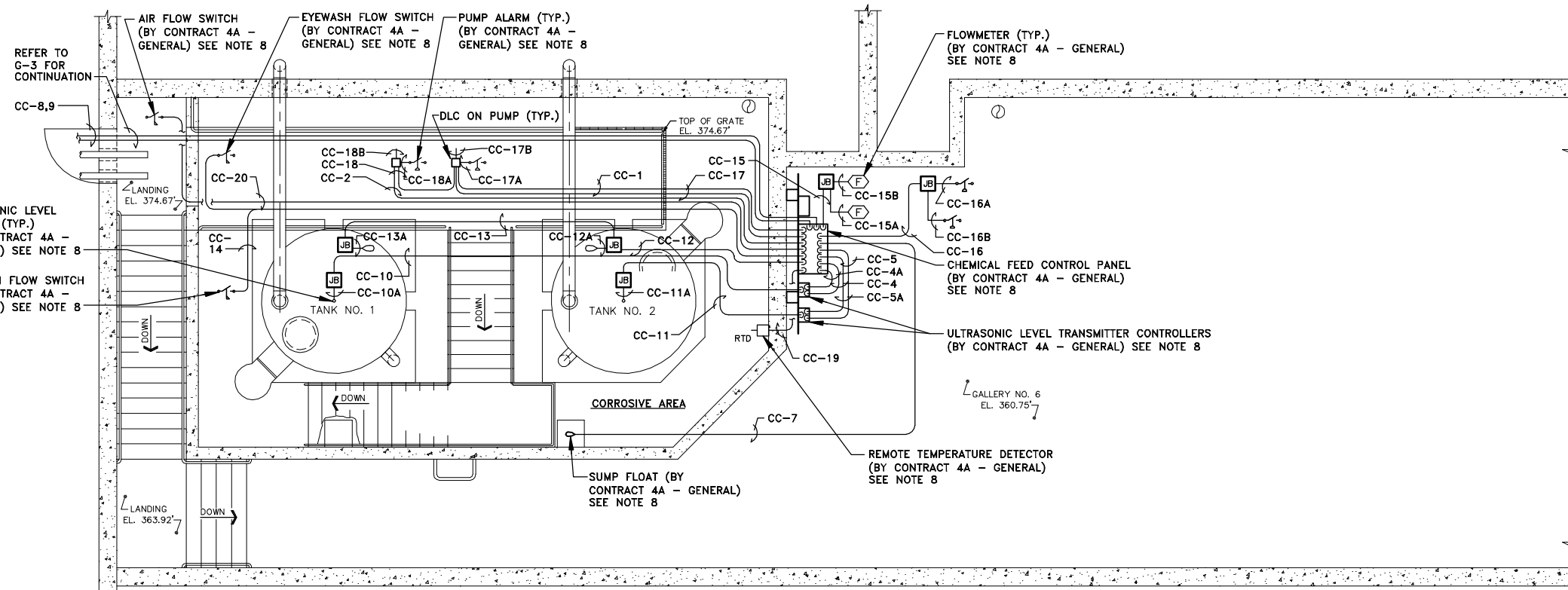
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Blasland, Bouck & Lee, Inc.
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Syracuse, NY 13214
315-446-9120

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LIGHTING AND POWER PLAN

SCALE: 1/4"=1'-0"



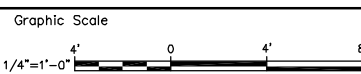
INSTRUMENTATION PLAN

SCALE: 1/4"=1'-0"

- NOTES:**
- CONTRACTOR SHALL REUSE EXISTING 3/4" PVC CONDUIT TO MCC 9 FOR POWERING NEW LOADS. PULL NEW WIRES, APPROXIMATELY 600 FEET TO MCC. REMOVE EXISTING STARTER AND BREAKER IN SECTION A1 AND REPLACE WITH NEW 30A, 2P BREAKER.
 - REMOVE WIRES FROM PVC CONDUIT LEADING TO EXISTING CHEMICAL FEED PUMPS. LEAVE CONDUIT AS-IS. REMOVE MCC ENGRAVED NAMEPLATES ON ALL FIVE EXISTING "ALUM" FEED PUMPS. REPLACE NAMEPLATE ONLY ON SECTION A1 TO REFLECT NEW FEED TO CHEMICAL BUILDING.
 - CONTRACTOR SHALL DELIVER OLD STARTER AND BREAKER TO OWNER.
 - NO CONDUITS SHALL PENETRATE CHEMICAL STORAGE AREA FLOOR OR CONTAINMENT WALL.
 - MOUNT ALL GFI OUTLETS 4'-0" A.F.F.
 - REFER TO E-6 AND E-7 FOR CONDUIT AND PANELBOARD SCHEDULES.
 - SUPPORT ALL LIGHT FIXTURES CONDUIT, ETC. FROM WALLS. ROOF OVER CHEMICAL TANKS IS REMOVABLE.
 - CONTRACT 4A - GENERAL SHALL PROVIDE INSTRUMENTATION AND CONTROL PANELS. CONTRACT 4B - ELECTRICAL SHALL PROVIDE WIRES, CONDUIT MAKE INTERCONNECTIONS.
 - PROVIDE CIRCUIT TO POWER HEAT TRACE AT FREEZE PROTECTED EMERGENCY EYE/SHOWER, PLP-8, REFER TO G-3.
 - REFER TO SYMBOL LEGEND ON E-1.

RECORD DRAWINGS
TO THE BEST OF OUR KNOWLEDGE,
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BLASLAND, BOUCK & LEE, INC.

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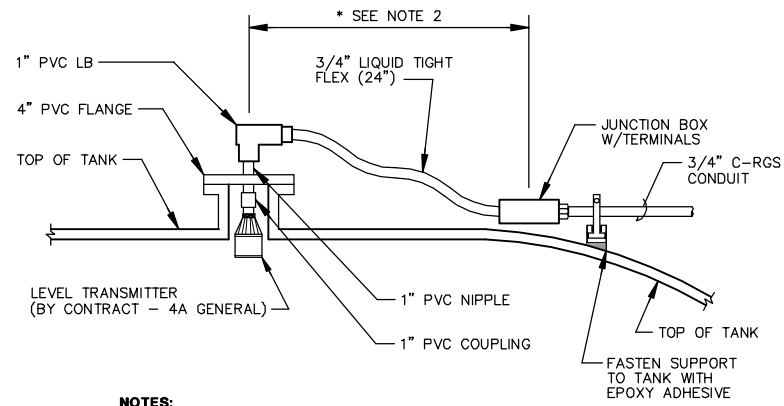
No.	Date	Revisions	Init

Project Mgr. --- C.J.L. ---
Designed by --- TEL/MEE ---
Drawn by --- DCC ---
Checked by --- TEL/MEE ---
Prof. Eng. --- DONALD GEISSER ---
PE License --- N.Y. 57879 ---

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(RECORD DRAWING: MADE FROM DRAWING NO. E-2, FILE NO. 003.64.29F, DATED 1/99) DATE _____ BY _____
COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
BREWERTON, WETZEL ROAD AND BURNET AVENUE
BALDWINVILLE - SENECA KNOLLS WPCP
LIGHTING, POWER AND INST. PLANS
ELECTRICAL

File Number
003.64.101F
Date
MAY 2001
Blasland, Bouck & Lee, Inc.
Corporate Headquarters
6723 Towpath Road
Syracuse, NY 13214
315-446-9120

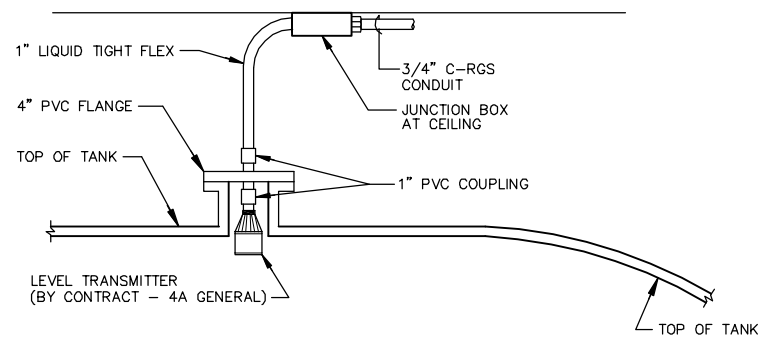


NOTES:

1. PROVIDE INSTALLATION FOR ULTRASONIC LEVEL SENSOR AS DETAILED.
- * 2. LOCATE JUNCTION BOX WITH TERMINALS WITHIN REACH OF LADDER ON SIDE OF TANK.

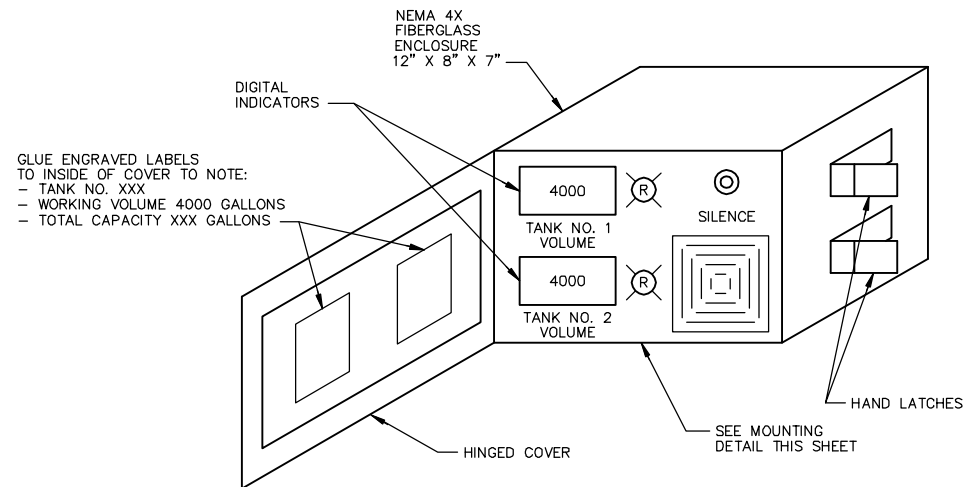
CHEMICAL STORAGE TANK LEVEL TRANSMITTER DETAIL

NOT TO SCALE



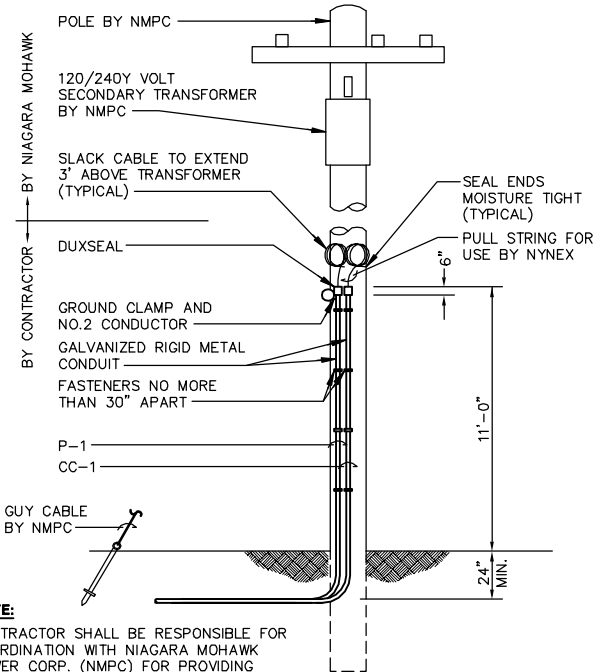
CHEMICAL STORAGE TANK LEVEL TRANSMITTER DETAIL

(BALDWINVILLE ONLY)
NOT TO SCALE



REMOTE FILL STATION PANEL

NOT TO SCALE

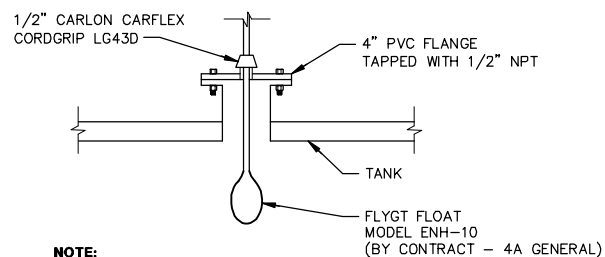


NOTE:

CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH NIAGARA MOHAWK POWER CORP. (NMPC) FOR PROVIDING INCOMING SERVICES.

SERVICE ENTRANCE POLE DETAIL

(BURNET AVENUE ONLY)
NOT TO SCALE

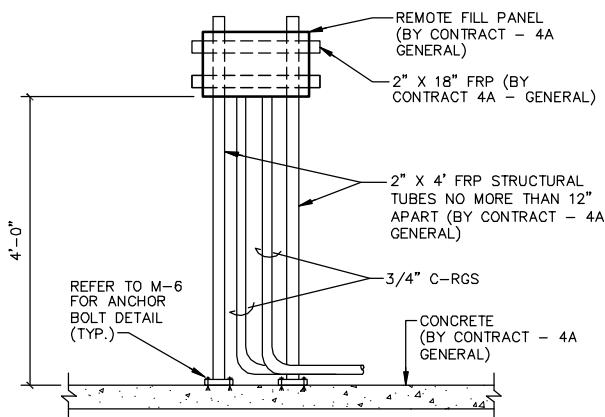


NOTE:

TANK OVERFILL ALARM FLOAT SHALL BE A NON-MERCURY, MECHANICAL FLOAT SWITCH.

TANK OVERFILL ALARM FLOAT DETAIL

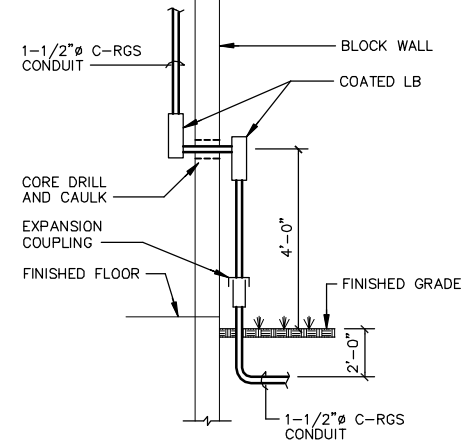
NOT TO SCALE



MOUNTING DETAIL

NOT TO SCALE

INTERIOR



NOTE:

CONTRACTOR TO FIELD VERIFY LOCATIONS OF EXISTING UTILITIES.

DETAIL A

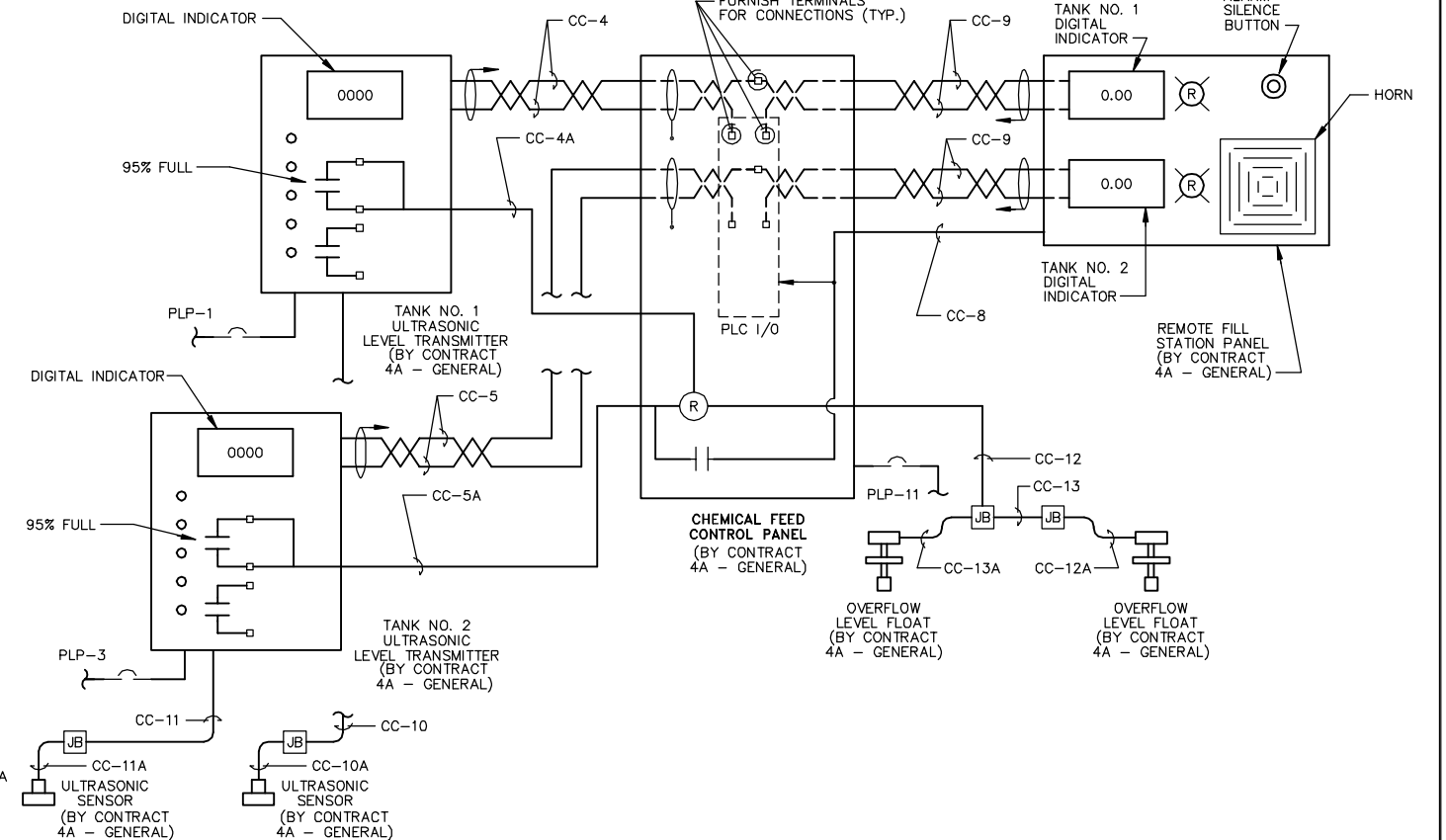
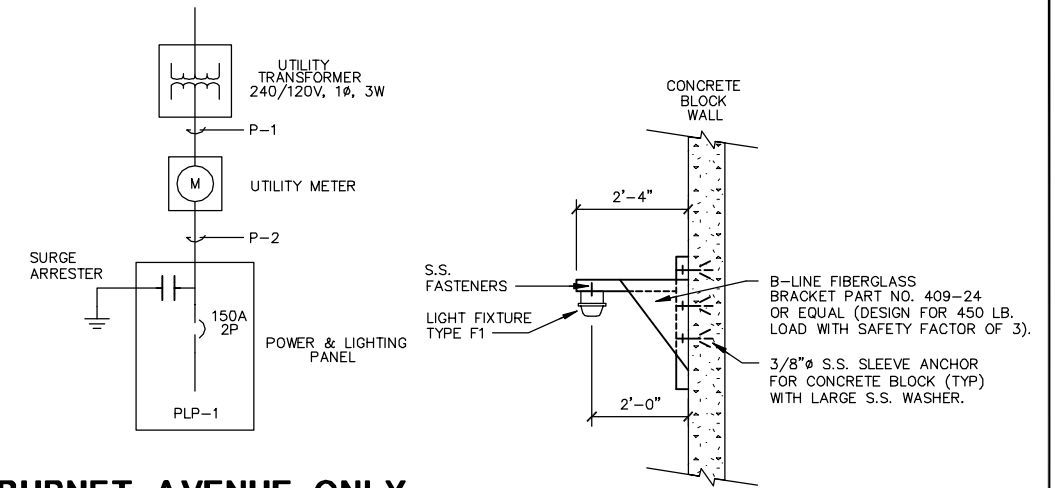
NOT TO SCALE

BURNET AVENUE ONLY ONE-LINE DIAGRAM

NOT TO SCALE

LIGHT SUPPORT DETAIL

NOT TO SCALE



STORAGE TANK NO. 1 LEVEL MONITORING DIAGRAM

(TYPICAL FOR TANK NO. 2)
NOT TO SCALE

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BLASLAND, BOUCK & LEE, INC.

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NO ALTERATIONS PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

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Project Mgr. --- C.J.L. ---
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Drawn by --- DCC ---
Checked by --- TEL/MEE ---
Prof. Eng. --- DONALD GEISSER ---
PE License --- N.Y. 57879 ---

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COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
BREWERTON, WETZEL ROAD AND BURNET AVENUE

ONE-LINE DIAGRAM AND DETAILS

ELECTRICAL

File Number
003.64.104F
Date
MAY 2001
Blasland, Bouck & Lee, Inc.
Corporate Headquarters
6723 Towpath Road
Syracuse, NY 13214
315-446-9120

E-5

(RECORD DRAWING: MADE FROM DRAWING NO. E-5, FILE NO. 003.64.32F, DATED 1/99)

DATE _____ BY _____

CIRCUIT BREAKER PANELBOARD - PLP										SCHEDULE			
LOCATION:		BURNET AVE, SOUTH WALL, ELEC. RM.						FEED FROM		UTILITY			
MAIN BUS RATING:		225 AMPERES						120/240 VOLTS		1 PHASE, 3 WIRE			
MINIMUM SHORTCIRCUIT:		10,000 AMPERES						FEEDER CABLE		3 # 1/0, 1 #6 G, 1 1/2" CRGS			
MAIN BREAKER TRIP:		150 AMPERES						SURFACE MTD					
ESTIMATED CONNECTED LOAD:		11.92 KVA											
CKT. NO.	DESCRIPTION	C/B AMPS/POLES	LOAD TYPE	KVA	PH-A	PH-B	KVA	LOAD TYPE	C/B AMPS/POLES	DESCRIPTION	CKT. NO.		
1	GAS DUCT FURNACE	20/1P	HEAT	0.180	0.900		0.720	RECPT.	20/1P	CHEM. ROOM. RECPT.	2		
3	STRIP HEATER SH-1	20A	HEAT	1.500		1.500			20/1P	SPARE	4		
5		2P	HEAT	1.500	1.500				20/1P	SPARE	6		
7	SUPPLY FAN SF-1 (1/3 HP)	20/1P	MOTOR	0.865		0.945	0.080	MOTOR	20/1P	EXH. FAN EF-1 (1/50 HP)	8		
9	EYEWASH HEAT TRACE, GFCI	20/1P	HEAT	0.180	0.540		0.360	RECPT.	20/1P	EXTERIOR RECPT.	10		
11	CHEM FEED PANEL	20/1P	INST.	0.180		0.360	0.180	RECPT.	20/1P	ELECTRIC ROOM RECPT.	12		
13	ELECTRIC ROOM LTS.	20/1P	LIGHTS	0.359	0.539		0.180	RECPT.	20/1P	TELEPHONE BOARD RECPT.	14		
15	EXTERIOR LIGHTS	20/1P	LIGHTS	0.525		0.705	0.180	INST.	20/1P	FLOW METER NO. 1	16		
17	CHEM. STORAGE LTS.	20/1P	LIGHTS	0.849	1.029		0.180	INST.	20/1P	FLOW METER NO. 2	18		
19	EXIT LIGHT	20/1P	LIGHTS	0.040		0.786	0.746	MOTOR	20A	EXH. FAN EF-2 (2 HP)	20		
21	ULTRASONIC LEVEL TANK 1	20/1P	INST.	0.015	0.761		0.746	MOTOR	2P		22		
23	ULTRASONIC LEVEL TANK 2	20/1P	INST.	0.015		0.015			20/1P		24		
25		20/1P			0.000				20/1P		26		
27		20/1P				0.000			20/1P		28		
29		20/1P			0.588		0.588	MOTOR	20A	CHEM. PUMP NO. 2	30		
31	CHEM. PUMP NO. 1	20A	MOTOR	0.588		1.160	0.588	MOTOR	2P		32		
33		2P	MOTOR	0.588	0.588				20/1P		34		
35		20/1P				0.000			20/1P		36		
37		20/1P			0.000				20/1P		38		
39		20/1P				0.000			20/1P		40		
41		20/1P			0.000				20/1P		42		
LOAD SUMMARY				7.376	6.437	5.471	4.548						

* ALL CONDUCTORS TO BE #12 IN 3/4 INCH CONDUIT UNLESS OTHERWISE INDICATED ON ONE LINE DIAGRAM

CIRCUIT BREAKER PANELBOARD - PLP										SCHEDULE			
LOCATION:		BREWERTON CHEMICAL FEED BLDG						FEED FROM		10 KVA TRANSFORMER/MCC			
MAIN BUS RATING:		100 AMPERES						120/240 VOLTS		1 PHASE, 3 WIRE			
MINIMUM SHORTCIRCUIT:		10,000 AMPERES						FEEDER CABLE		3 # 8, 1 #10 G, 3/4" CRGS			
MAIN BREAKER TRIP:		50 AMPERES						SURFACE MTD					
ESTIMATED CONNECTED LOAD:		3.56 KVA											
CKT. NO.	DESCRIPTION	C/B AMPS/POLES	LOAD TYPE	KVA	PH-A	PH-B	KVA	LOAD TYPE	C/B AMPS/POLES	DESCRIPTION	CKT. NO.		
1	ULTRASONIC LEVEL TANK 1	20/1P	INST.	0.015	0.735		0.720	RECPT.	20/1P	CHEM. ROOM. RECPT.	2		
3	ULTRASONIC LEVEL TANK 2	20/1P	INST.	0.015		0.880	0.865	MOTOR	20/1P	CHEM. PUMP NO. 1 (1/3 HP)	4		
5	SPARE	20/1P			0.865		0.865	MOTOR	20/1P	CHEM. PUMP NO. 2 (1/3 HP)	6		
7	SPARE	20/1P				0.000			20/1P	SPARE	8		
9	SPARE	20/1P			0.360		0.360	RECPT.	20/1P	EXTERIOR RECPT.	10		
11	CHEM FEED PANEL	20/1P	INST.	0.180		0.360	0.180	HEAT	20/1P	EYEWASH HEAT TRACE, GFCI	12		
13	SPARE	20/1P			0.000				20/1P	SPARE	14		
15	SPARE	20/1P				0.000	0.180	INST.	20/1P	FLOW METER NO. 1	16		
17	SPARE	20/1P			0.180		0.180	INST.	20/1P	FLOW METER NO. 2	18		
19	SPARE	20/1P				0.000			20/1P	SPARE	20		
LOAD SUMMARY				0.210	2.140	1.240	3.350						

* ALL CONDUCTORS TO BE #12 IN 3/4 INCH CONDUIT UNLESS OTHERWISE INDICATED ON ONE LINE DIAGRAM

CIRCUIT BREAKER PANELBOARD - PLP										SCHEDULE			
LOCATION:		BALDWINVILLE GALLERY 6						FEED FROM		10 KVA TRANSFORMER/MCC 9			
MAIN BUS RATING:		100 AMPERES						120/240 VOLTS		1 PHASE, 3 WIRE			
MINIMUM SHORTCIRCUIT:		10,000 AMPERES						FEEDER CABLE		3 # 8, 1 #10 G, 3/4" CRGS			
MAIN BREAKER TRIP:		50 AMPERES						SURFACE MTD					
ESTIMATED CONNECTED LOAD:		4.82 KVA											
CKT. NO.	DESCRIPTION	C/B AMPS/POLES	LOAD TYPE	KVA	PH-A	PH-B	KVA	LOAD TYPE	C/B AMPS/POLES	DESCRIPTION	CKT. NO.		
1	ULTRASONIC LEVEL TANK 1	20/1P	INST.	0.015	0.735		0.720	RECPT.	20/1P	CHEM. ROOM. RECPT.	2		
3	ULTRASONIC LEVEL TANK 2	20/1P	INST.	0.015		0.880	0.865	MOTOR	20/1P	CHEM. PUMP NO. 1 (1/3 HP)	4		
5	SPARE	20/1P			0.825		0.865	MOTOR	20/1P	CHEM. PUMP NO. 2 (1/3 HP)	6		
7	SPARE	20/1P				0.180	0.180	HEAT	20/1P	EYEWASH HEAT TRACE, GFCI	8		
9	SPARE	20/1P			0.360		0.360	RECPT.	20/1P	EXTERIOR RECPT.	10		
11	CHEM FEED PANEL	20/1P	INST.	0.180		0.360	0.180	RECPT.	20/1P	RECPT. AT PLP	12		
13	CHEM. FEED LTS.	20/1P		0.192	0.192				20/1P	SPARE	14		
15	SPARE	20/1P				0.000	0.180	INST.	20/1P	FLOW METER NO. 1	16		
17	CHEM. STORAGE LTS.	20/1P	LIGHTS	0.849	1.029		0.180	INST.	20/1P	FLOW METER NO. 2	18		
19	EXIT LIGHT	20/1P	LIGHTS	0.040		0.040			20/1P	SPARE	20		
LOAD SUMMARY				1.291	3.141	1.460	3.530						

* ALL CONDUCTORS TO BE #12 IN 3/4 INCH CONDUIT UNLESS OTHERWISE INDICATED ON ONE LINE DIAGRAM

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Checked by --- TEL/MEE ---
Prof. Eng. --- DONALD GEISSER ---
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engineers & scientists

COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE - SENECA KNOLLS,
BREWERTON, WETZEL ROAD AND BURNET AVENUE

PANEL SCHEDULES

ELECTRICAL

DATE _____ BY _____
File Number
003.64.105F
Date
MAY 2001
Blasland, Bouck & Lee, Inc.
Corporate Headquarters
6723 Towpath Road
Syracuse, NY 13214
315-446-9120

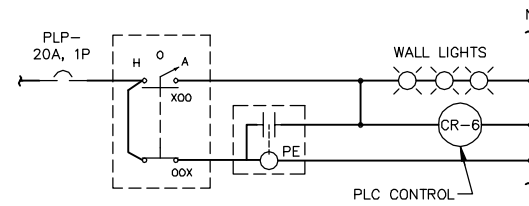
E-6

BURNET AVE. CHEMICAL FEED STATION / CONDUIT SCHEDULE				
OKT. NO.	CONDUIT SIZE	NO./SIZE CONDUCTORS	FROM	TO
P-1	1 1/2" CRGS	3 # 1/0	RISER POLE	UTILITY METER
P-2	1 1/2" CRGS	3 # 1/0, 1 # 6 G	UTILITY METER	PLP
PLP - 1	3/4" CRGS	2 # 12, 1 # 12 G	PLP	GAS DUCT FURNACE
PLP - 2	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEM. RM. RECPT.
PLP - 3,5	3/4" CRGS	2 # 12, 1 # 12 G	PLP	STRIP HEATER SH-1
PLP - 4	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEMICAL PUMP 1
PLP - 6	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEMICAL PUMP 2
PLP - 7	3/4" CRGS	2 # 12, 1 # 12 G	PLP	SUPPLY FAN SF-1
PLP - 8	3/4" CRGS	2 # 12, 1 # 12 G	PLP	EXHAUST FAN EF-1
PLP - 9	3/4" CRGS	2 # 12, 1 # 12 G	PLP, GFCI	EYEWASH HEAT TRACE
PLP - 10	3/4" CRGS	2 # 12, 1 # 12 G	PLP	EXTERIOR RECPT.
PLP - 11	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEM FEED PANEL
PLP - 12	3/4" CRGS	2 # 12, 1 # 12 G	PLP	ELEC. RM. RECPT.
PLP - 13	3/4" CRGS	2 # 12, 1 # 12 G	PLP	ELEC. RM. LIGHTS
PLP - 14	3/4" CRGS	2 # 12, 1 # 12 G	PLP	TELEPHONE BOARD
PLP - 15	3/4" CRGS	2 # 12, 1 # 12 G	PLP	EXTERIOR LIGHTS
PLP - 16	3/4" CRGS	2 # 12, 1 # 12 G	PLP	FLOW METER 1
PLP - 17	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEM. STG. LTS.
PLP - 18	3/4" CRGS	2 # 12, 1 # 12 G	PLP	FLOW METER 2
PLP - 19	3/4" CRGS	2 # 12, 1 # 12 G	PLP	EXIT LIGHT
PLP - 20,22	3/4" CRGS	2 # 12, 1 # 12 G	PLP	EXHAUST FAN EF-2
PLP - 21	3/4" CRGS	2 # 12, 1 # 12 G	PLP	TANK LEVEL 1
PLP - 23	3/4" CRGS	2 # 12, 1 # 12 G	PLP	TANK LEVEL 2
PLP - 24				NOT USED
PLP - 25				NOT USED
CC - 1	1 1/2" CRGS	PULL STRING	RISER POLE	TELEPHONE BOARD
CC - 2	3/4" CRGS	4 # 22 TELEPHONE	TELEPHONE BOARD	WALL PHONE
CC - 3	3/4" CRGS	4 # 22 TELEPHONE	TELEPHONE BOARD	CHEM FEED PANEL
CC - 4	3/4" CRGS	TSP # 16	CHEM FEED PANEL	TANK 1 LEVEL TRANS
CC - 4A	3/4" CRGS	6 # 14, TSP # 16	CHEM FEED PANEL	TANK 1 LEVEL TRANS
CC - 5	3/4" CRGS	TSP # 16	CHEM FEED PANEL	TANK 2 LEVEL TRANS
CC - 5A	3/4" CRGS	6 # 14, TSP # 16	CHEM FEED PANEL	TANK 2 LEVEL TRANS
CC - 6	3/4" CRGS	TSP # 16	CHEM FEED PANEL	ELECT RM. TEMP. TRANS.
CC - 7	3/4" CRGS	2 # 14	CHEM FEED PANEL	SUMP HIGH LEVEL
CC - 8	3/4" CRGS	12 # 14, 1 # 14 G	CHEM FEED PANEL	REMOTE FILL PANEL
CC - 9	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	REMOTE FILL PANEL
CC - 10	3/4" CRGS	RG 62A/U	TANK 1 LEVEL TRANS	JB ABOVE TANK 1
CC - 10A	1" LIQUID TITE	MANUF. CABLE	JB ABOVE TANK 1	TK LEVEL TRANS.
CC - 11	3/4" CRGS	RG 62A/U	TANK 2 LEVEL TRANS	JB ABOVE TANK 2
CC - 11A	1" LIQUID TITE	MANUF. CABLE	JB ABOVE TANK 2	TK LEVEL TRANS.
CC - 12	3/4" CRGS	4 # 14	CHEM FEED PANEL	JB ABOVE TANK 2
CC - 12A	3/4" CRGS	2 # 14	JB ABOVE TANK 2	TANK 2 LEVEL FLOAT
CC - 13	3/4" CRGS	2 # 14	JB ABOVE TANK 2	JB ABOVE TANK 1
CC - 13A	3/4" CRGS	2 # 14	JB ABOVE TANK 1	TANK 1 LEVEL FLOAT
CC - 14	3/4" CRGS	2 # 14	CHEM FEED PANEL	EYE WASH FLOW SW.
CC - 15	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	JB AT FLOW METERS
CC - 15A	3/4" LIQUID TITE	2 TSP # 16	JB AT FLOW METERS	FLOW METER 2
CC - 15B	3/4" LIQUID TITE	2 TSP # 16	JB AT FLOW METERS	FLOW METER 1
CC - 16	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	JB AT PRESS. SW
CC - 16A	3/4" LIQUID TITE	TSP # 16	JB AT PRESS. SW	PRESS SW 1
CC - 16B	3/4" LIQUID TITE	TSP # 16	JB AT PRESS. SW	PRESS SW 2
CC - 17	3/4" CRGS	8 # 14	CHEM FEED PANEL	JB AT PUMP 2
CC - 17A	3/4" CRGS	TSP # 16	JB AT PUMP 2	PUMP 2 LEAK ALARM
CC - 18	3/4" CRGS	2 # 14	JB AT PUMP 2	JB AT PUMP 1
CC - 18A	3/4" CRGS	TSP # 16	JB AT PUMP 1	PUMP 1 LEAK ALARM
CC - 19	3/4" CRGS	TSP # 16	CHEM FEED PANEL	CHEM RM. TEMP. TRANS.
CC - 20	3/4" CRGS	2 # 14	CHEM FEED PANEL	VENT AIR FLOW SW.
CC - 21	3/4" CRGS	4 # 14	EF-2 STARTER	DAMP. MOT. & END SW.
CC - 22	3/4" CRGS	4 # 14	EF-2 STARTER	START/STOP SWITCH
CC - 23	3/4" CRGS	4 # 14	EF-2 STARTER	START/STOP SWITCH
CC - 24	3/4" CRGS	2 TSP # 16	CHEM. FEED PANEL	PUMP 1
CC - 25	3/4" CRGS	2 TSP # 16	CHEM. FEED PANEL	PUMP 2
CC - 26	1-1/2" CRGS	2 # 14	CHEM. FEED PANEL	CHEMICAL MANHOLE
CC - 27	3/4" CRGS	4 # 14	CHEM. FEED PANEL	EXTERIOR LIGHTS
CC - 28	3/4" CRGS	8 # 14	CHEM. FEED PANEL	EXTERIOR EYE/SHOWER

WETZEL ROAD CHEMICAL FEED AREA / CONDUIT SCHEDULE				
OKT. NO.	CONDUIT SIZE	NO./SIZE CONDUCTORS	FROM	TO
LVP - 1				NOT USED
LVP - 2				NOT USED
LVP - 3				NOT USED
LVP - 4				NOT USED
LVP - 5				NOT USED
LVP - 6				NOT USED
LVP - 7				NOT USED
LVP - 8				NOT USED
LVP - 9				NOT USED
LVP - 10	3/4" CRGS	2 # 12, 1 # 12 G	LVP	TANK LEVEL 1
LVP - 11				NOT USED
LVP - 12	3/4" CRGS	2 # 12, 1 # 12 G	LVP	TANK LEVEL 2
LVP - 13				NOT USED
LVP - 14	3/4" CRGS	2 # 12, 1 # 12 G	LVP	EXTERIOR RECPT.
LVP - 15	3/4" CRGS	2 # 12, 1 # 12 G	LVP	CHEM FEED PANEL
LVP - 16	3/4" CRGS	2 # 12, 1 # 12 G	LVP	FLOW METER 1
LVP - 17	3/4" CRGS	2 # 12, 1 # 12 G	LVP	FLOW METER 2
LVP - 18	3/4" CRGS	2 # 12, 1 # 12 G	LVP	LIGHTS IN TANK BLDG.
LVP - 19	3/4" CRGS	2 # 12, 1 # 12 G	LVP	EXTERIOR LIGHT
LVP - 20				NOT USED
LVP - 21	3/4" CRGS	2 # 12, 1 # 12 G	LVP	CHEMICAL PUMP 1
LVP - 22	3/4" CRGS	2 # 12, 1 # 12 G	LVP	CHEM. RM. RECPT.
LVP - 23	3/4" CRGS	2 # 12, 1 # 12 G	LVP	CHEMICAL PUMP 2
LVP - 24				NOT USED
CC - 1	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	PUMP #1 DLC
CC - 2	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	PUMP #2 DLC
CC - 3				NOT USED
CC - 4	3/4" CRGS	TSP # 16	CHEM FEED PANEL	TANK 1 LEVEL TRANS
CC - 4A	3/4" CRGS	6 # 14, TSP # 16	CHEM FEED PANEL	TANK 1 LEVEL TRANS
CC - 5	3/4" CRGS	TSP # 16	CHEM FEED PANEL	TANK 2 LEVEL TRANS
CC - 5A	3/4" CRGS	6 # 14, TSP # 16	CHEM FEED PANEL	TANK 2 LEVEL TRANS
CC - 6				NOT USED
CC - 7	3/4" CRGS	2 # 14	CHEM FEED PANEL	SUMP HIGH LEVEL
CC - 8	3/4" CRGS	12 # 14, 1 # 14 G	CHEM FEED PANEL	REMOTE FILL PANEL
CC - 9	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	REMOTE FILL PANEL
CC - 10	3/4" CRGS	RG 62A/U	TANK 1 LEVEL TRANS	JB ABOVE TANK 1
CC - 10A	1" LIQUID TITE	MANUF. CABLE	JB ABOVE TANK 1	TK LEVEL TRANS.
CC - 11	3/4" CRGS	RG 62A/U	TANK 2 LEVEL TRANS	JB ABOVE TANK 2
CC - 11A	1" LIQUID TITE	MANUF. CABLE	JB ABOVE TANK 2	TK LEVEL TRANS.
CC - 12	3/4" CRGS	4 # 14	CHEM FEED PANEL	JB ABOVE TANK 2
CC - 12A	3/4" CRGS	2 # 14	JB ABOVE TANK 2	TANK 2 LEVEL FLOAT
CC - 13	3/4" CRGS	2 # 14	JB ABOVE TANK 2	JB ABOVE TANK 1
CC - 13A	3/4" CRGS	2 # 14	JB ABOVE TANK 1	TANK 1 LEVEL FLOAT
CC - 14	3/4" CRGS	2 # 14	CHEM FEED PANEL	EYE WASH FLOW SW.
CC - 15	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	JB AT FLOW METERS
CC - 15A	3/4" LIQUID TITE	2 TSP # 16	JB AT FLOW METERS	FLOW METER 2
CC - 15B	3/4" LIQUID TITE	2 TSP # 16	JB AT FLOW METERS	FLOW METER 1
CC - 16	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	JB AT PRESS. SW
CC - 16A	3/4" LIQUID TITE	TSP # 16	JB AT PRESS. SW	PRESS SW 1
CC - 16B	3/4" LIQUID TITE	TSP # 16	JB AT PRESS. SW	PRESS SW 2
CC - 17	3/4" CRGS	4 # 14	CHEM FEED PANEL	JB AT PUMP 2
CC - 17A	3/4" CRGS	TSP # 16	JB AT PUMP 2	PUMP 2 LEAK ALARM
CC - 17B	3/4" CRGS	4 # 14	JB AT PUMP 2	DLC
CC - 18	3/4" CRGS	2 # 14	JB AT PUMP 2	JB AT PUMP 1
CC - 18A	3/4" CRGS	TSP # 16	JB AT PUMP 1	PUMP 1 LEAK ALARM
CC - 18B	3/4" CRGS	4 # 14	JB AT PUMP 1	DLC
CC - 19	3/4" CRGS	TSP # 16	CHEM FEED PANEL	CHEM RM. TEMP. TRANS.
CC - 20	3/4" CRGS	2 # 14	CHEM FEED PANEL	VENT. AIR FLOW SW.
CC - 21	3/4" CRGS	2 # 14	CHEM FEED PANEL	EYEWASH FLOW SWITCH
CC - 22	3/4" CRGS	14 # 14	CHEM FEED PANEL	EXTERIOR LIGHTS

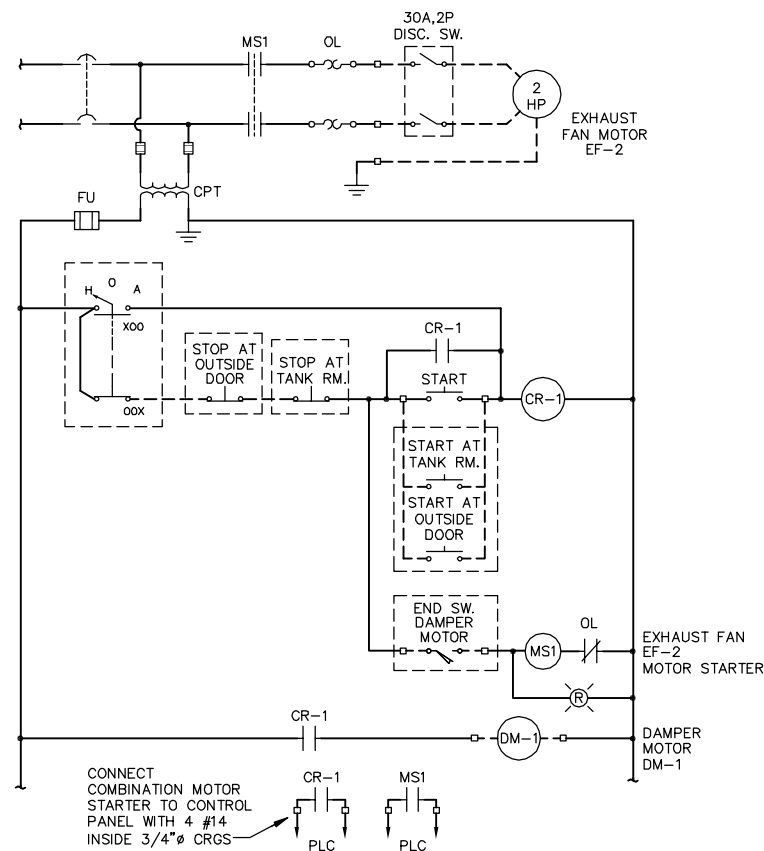
BREWERTON CHEMICAL FEED AREA / CONDUIT SCHEDULE				
OKT. NO.	CONDUIT SIZE	NO./SIZE CONDUCTORS	FROM	TO
P-1	3/4" CRGS	3 # 10, 1 # 10 G	MCC	DISC. SW.
P-2	3/4" CRGS	3 # 10, 1 # 10 G	DISC. SW.	TRANSFORMER
P-3	3/4" CRGS	3 # 8, 1 # 8 G	TRANSFORMER	PLP
PLP - 1	3/4" CRGS	2 # 12, 1 # 12 G	PLP	TANK LEVEL 1
PLP - 2	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEM. RM. RECPT.
PLP - 3	3/4" CRGS	2 # 12, 1 # 12 G	PLP	TANK LEVEL 2
PLP - 4	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEMICAL PUMP 1
PLP - 5				NOT USED
PLP - 6	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEMICAL PUMP 2
PLP - 7				NOT USED
PLP - 8				NOT USED
PLP - 9				NOT USED
PLP - 10,12	3/4" CRGS	4 # 12, 2 # 12 G	PLP-12, GFCI	EXTERIOR RECPT. & H.T.
PLP - 11	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEM FEED PANEL
PLP - 13				NOT USED
PLP - 14				NOT USED
PLP - 15				NOT USED
PLP - 16	3/4" CRGS	2 # 12, 1 # 12 G	PLP	FLOW METER 1
PLP - 17				NOT USED
PLP - 18	3/4" CRGS	2 # 12, 1 # 12 G	PLP	FLOW METER 2
PLP - 19				NOT USED
PLP - 20				NOT USED
CC - 1	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	PUMP #1 DLC
CC - 2	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	PUMP #2 DLC
CC - 3				NOT USED
CC - 4	3/4" CRGS	TSP # 16	CHEM FEED PANEL	TANK 1 LEVEL TRANS
CC - 4A	3/4" CRGS	6 # 14, TSP # 16	CHEM FEED PANEL	TANK 1 LEVEL TRANS
CC - 5	3/4" CRGS	TSP # 16	CHEM FEED PANEL	TANK 2 LEVEL TRANS
CC - 5A	3/4" CRGS	6 # 14, TSP # 16	CHEM FEED PANEL	TANK 2 LEVEL TRANS
CC - 6				NOT USED
CC - 7	3/4" CRGS	2 # 14	CHEM FEED PANEL	SUMP HIGH LEVEL
CC - 8	3/4" CRGS	12 # 14, 1 # 14 G	CHEM FEED PANEL	REMOTE FILL PANEL
CC - 9	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	REMOTE FILL PANEL
CC - 10	3/4" CRGS	RG 62A/U	CHEM FEED PANEL	JB ABOVE TANK 1
CC - 10A	1" LIQUID TITE	MANUF. CABLE	JB ABOVE TANK 1	TK LEVEL TRANS.
CC - 11	3/4" CRGS	RG 62A/U	CHEM FEED PANEL	JB ABOVE TANK 2
CC - 11A	1" LIQUID TITE	MANUF. CABLE	JB ABOVE TANK 2	TK LEVEL TRANS.
CC - 12	3/4" CRGS	4 # 14	CHEM FEED PANEL	JB ABOVE TANK 2
CC - 12A	3/4" CRGS	2 # 14	JB ABOVE TANK 2	TANK 2 LEVEL FLOAT
CC - 13	3/4" CRGS	2 # 14	JB ABOVE TANK 2	JB ABOVE TANK 1
CC - 13A	3/4" CRGS	2 # 14	JB ABOVE TANK 1	TANK 1 LEVEL FLOAT
CC - 14	3/4" CRGS	2 # 14	CHEM FEED PANEL	EYE WASH FLOW SW.
CC - 15	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	JB AT FLOW METERS
CC - 15A	3/4" LIQUID TITE	2 TSP # 16	JB AT FLOW METERS	FLOW METER 2
CC - 15B	3/4" LIQUID TITE	2 TSP # 16	JB AT FLOW METERS	FLOW METER 1
CC - 16	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	JB AT PRESS. SW
CC - 16A	3/4" LIQUID TITE	TSP # 16	JB AT PRESS. SW	PRESS SW 1
CC - 16B	3/4" LIQUID TITE	TSP # 16	JB AT PRESS. SW	PRESS SW 2
CC - 17	3/4" CRGS	4 # 14	CHEM FEED PANEL	JB AT PUMP 2
CC - 17A	3/4" CRGS	TSP # 16	JB AT PUMP 2	PUMP 2 LEAK ALARM
CC - 17B	3/4" CRGS	4 # 14	JB AT PUMP 2	DLC
CC - 18	3/4" CRGS	2 # 14	JB AT PUMP 2	JB AT PUMP 1
CC - 18A	3/4" CRGS	TSP # 16	JB AT PUMP 1	PUMP 1 LEAK ALARM
CC - 18B	3/4" CRGS	4 # 14	JB AT PUMP 1	DLC
CC - 19	3/4" CRGS	TSP # 16	CHEM FEED PANEL	CHEM RM. TEMP. TRANS.
CC - 20	3/4" CRGS	2 # 14	CHEM FEED PANEL	VENT. AIR FLOW SW.
CC - 21	3/4" CRGS	2 # 14	CHEM FEED PANEL	EYEWASH FLOW SWITCH

BALDWINVILLE CHEMICAL FEED AREA / CONDUIT SCHEDULE				
OKT. NO.	CONDUIT SIZE	NO./SIZE CONDUCTORS	FROM	TO
P-1	3/4" PVC	3 # 10, 1 # 10 G	MCC	DISC. SW.
P-2	3/4" CRGS	3 # 10, 1 # 10 G	DISC. SW.	TRANSFORMER
P-3	3/4" CRGS	3 # 8, 1 # 8 G	TRANSFORMER	PLP
PLP - 1	3/4" CRGS	2 # 12, 1 # 12 G	PLP	TANK LEVEL 1
PLP - 2	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEM. RM. RECPT.
PLP - 3	3/4" CRGS	2 # 12, 1 # 12 G	PLP	TANK LEVEL 2
PLP - 4	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEMICAL PUMP 1
PLP - 5				NOT USED
PLP - 6	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEMICAL PUMP 2
PLP - 7				NOT USED
PLP - 8				NOT USED
PLP - 9				NOT USED
PLP - 8,10	3/4" CRGS	4 # 12, 2 # 12 G	PLP-8, GFCI	EXTERIOR RECPT. & H.T.
PLP - 11	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEM FEED PANEL
PLP - 12	3/4" CRGS	2 # 12, 1 # 12 G	PLP	RECPT. AT PLP
PLP - 13	3/4" CRGS	2 # 12, 1 # 12 G	PLP	FEED PANEL LIGHTS
PLP - 14				NOT USED
PLP - 15				NOT USED
PLP - 16	3/4" CRGS	2 # 12, 1 # 12 G	PLP	FLOW METER 1
PLP - 17	3/4" CRGS	2 # 12, 1 # 12 G	PLP	CHEM. STORAGE LIGHTS
PLP - 18	3/4" CRGS	2 # 12, 1 # 12 G	PLP	FLOW METER 2
PLP - 19	3/4" CRGS	2 # 12, 1 # 12 G	PLP	EXIT SIGN
PLP - 20				NOT USED
CC - 1	3/4" CRGS	TWO TSP # 16	CHEM FEED PANEL	PUMP #1 DLC
CC - 2	3/4" CRGS	TWO TSP # 16	CHEM FEED PANEL	PUMP #2 DLC
CC - 3				NOT USED
CC - 4	3/4" CRGS	TSP # 16	CHEM FEED PANEL	TANK 1 LEVEL TRANS
CC - 4A	3/4" CRGS	6 # 14, TSP # 16	CHEM FEED PANEL	TANK 1 LEVEL TRANS
CC - 5	3/4" CRGS	TSP # 16	CHEM FEED PANEL	TANK 2 LEVEL TRANS
CC - 5A	3/4" CRGS	6 # 14, TSP # 16	CHEM FEED PANEL	TANK 2 LEVEL TRANS
CC - 6				NOT USED
CC - 7	3/4" CRGS	2 # 14	CHEM FEED PANEL	SUMP HIGH LEVEL
CC - 8	3/4" CRGS	12 # 14, 1 # 14 G	CHEM FEED PANEL	REMOTE FILL PANEL
CC - 9	3/4" CRGS	2 TSP # 16	CHEM FEED PANEL	REMOTE FILL PANEL



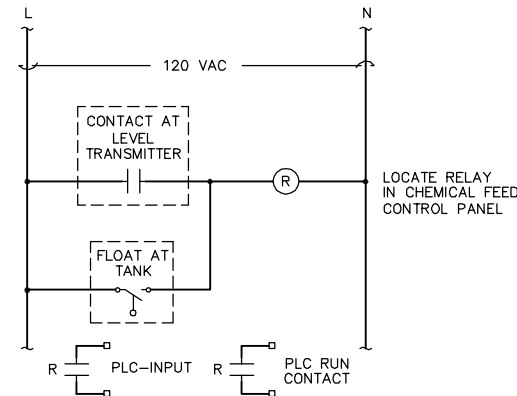
EXTERIOR LIGHTS

NOT TO SCALE



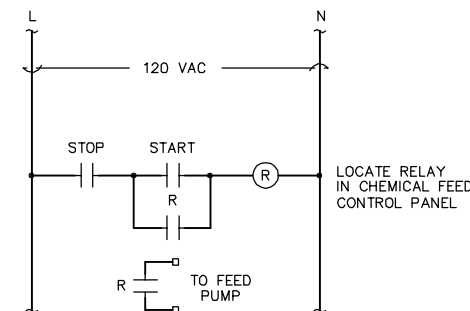
EXHAUST FAN NO. 2

NOT TO SCALE



TANK HIGH LEVEL ALARM

NOT TO SCALE



CHEMICAL FEED PUMP START-STOP

NOT TO SCALE

NOTES:

1. THIS DIAGRAM WAS REVISED DURING CONSTRUCTION. REFER TO ELECTRICAL INTERCONNECTION DATA SHEETS AND CHEMICAL METERING PUMP MANUFACTURER'S OPERATION AND MAINTENANCE MANUAL FOR ADDITIONAL INFORMATION.
2. BURNET AVENUE CHEMICAL FEED PUMPS ARE 240 VOLT.

X: 00364X00.DWG
 L: ON=*, OFF=REF
 P: CONT-D.D/CONT-MVB
 5/01 SYR-54-DCC
 00364026/RECORD/00364E08.DWG

RECORD DRAWINGS
 TO THE BEST OF OUR KNOWLEDGE,
 INFORMATION AND BELIEF, THESE RECORD
 DRAWINGS SUBSTANTIALLY REPRESENT
 THE PROJECT AS CONSTRUCTED.
BLASLAND, BOUCK & LEE, INC.

(RECORD DRAWING: MADE FROM DRAWING NO. E-8, FILE NO. 003.64.35F, DATED 1/99) DATE _____ BY _____

No.	Date	Revisions	Init

Project Mgr. --- C.J.L. ---
 Designed by --- TEL/MEE ---
 Drawn by --- DCC ---
 Checked by --- TEL/MEE ---
 Prof. Eng. --- DONALD GEISSER ---
 PE License --- N.Y. 57879 ---



COUNTY OF ONONDAGA, DEPARTMENT OF DRAINAGE AND SANITATION • SYRACUSE, N.Y.
 CHEMICAL STORAGE AND FEED FACILITIES AT BALDWINVILLE – SENECA KNOLLS,
 BREWERTON, WETZEL ROAD AND BURNET AVENUE

ELEMENTARY DIAGRAMS

ELECTRICAL

File Number
 003.64.107F
 Date
 MAY 2001
 Blasland, Bouck & Lee, Inc.
 Corporate Headquarters
 6723 Towpath Road
 Syracuse, NY 13214
 315-446-9120

NO ALTERATIONS PERMITTED HEREON EXCEPT
 AS PROVIDED UNDER SECTION 7209 SUBDIVISION
 2 OF THE NEW YORK STATE EDUCATION LAW