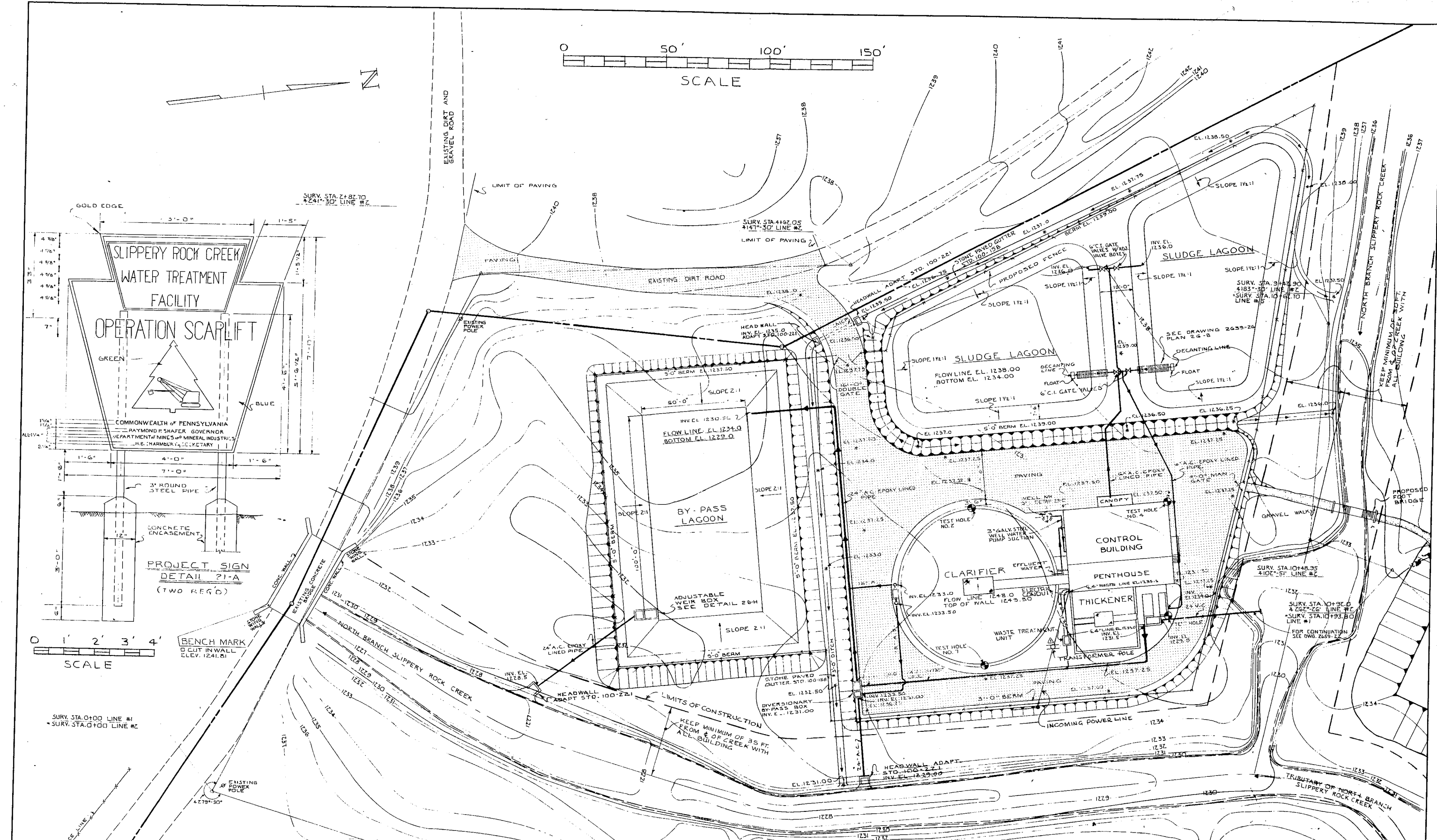


BENCH MARK  
CLUT IN WALL  
ELEV. 1241.81

SURV. STA. 0+00 LINE #1  
SURV. STA. 0+00 LINE #2



PROJECT NO. SL-104

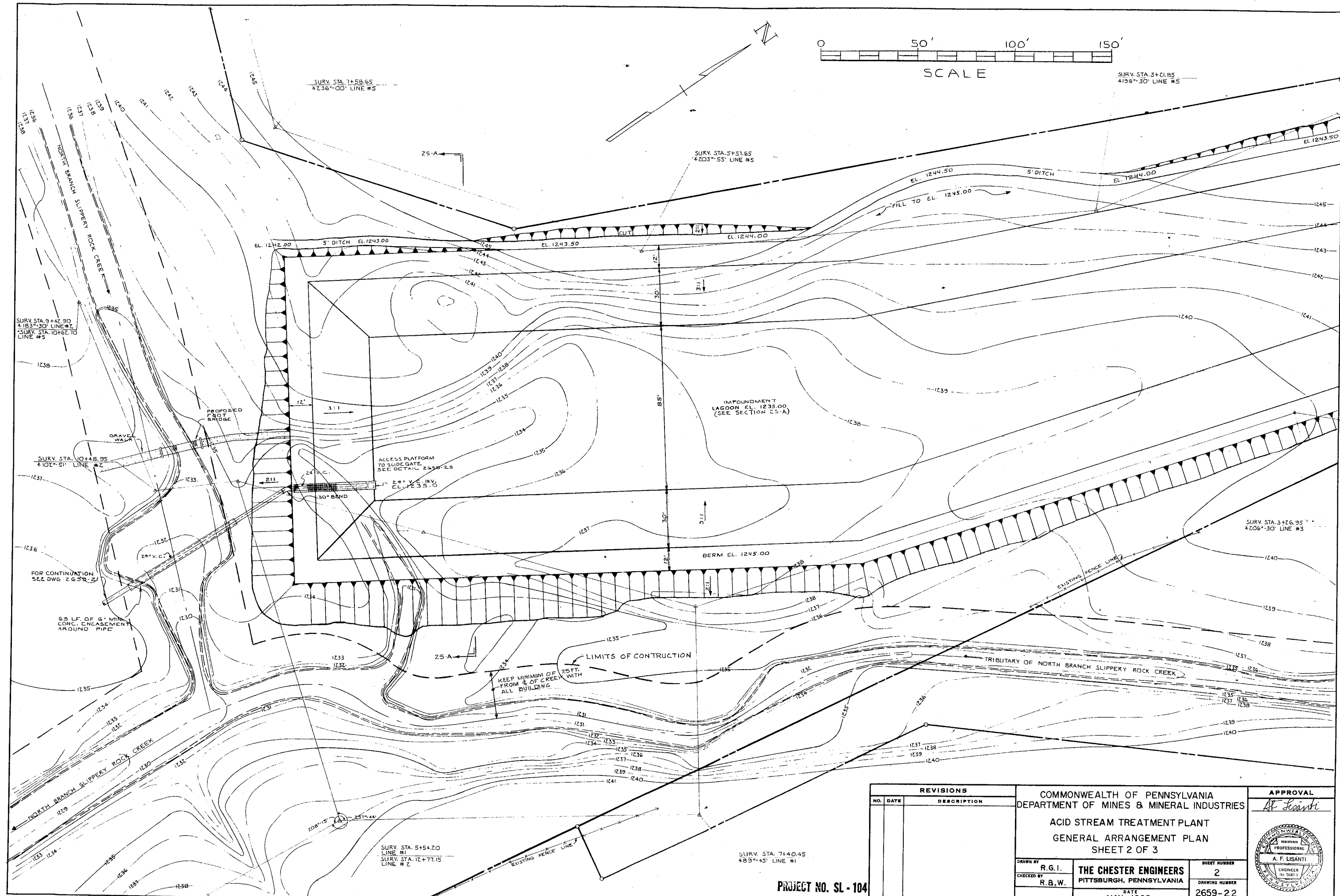
REVISIONS		
NO.	DATE	DESCRIPTION
1	3/29	ADDED WASTE TREATMENT UNIT

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES & MINERAL INDUSTRIES  
ACID STREAM TREATMENT PLANT  
GENERAL ARRANGEMENT PLAN  
SHEET 1 OF 3

DRAWN BY <b>P.K.L.</b>	<b>THE CHESTER ENGINEERS</b> PITTSBURGH, PENNSYLVANIA	SHEET NUMBER <b>1</b>
CHECKED BY <b>R.B.W.</b>		DRAWING NUMBER <b>2659-21</b>
DATE <b>MAY-1968</b>		

APPROVAL

*A. F. Lisanti*



REVISIONS	
NO.	DATE

COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF MINES & MINERAL INDUSTRIES  
 ACID STREAM TREATMENT PLANT  
 GENERAL ARRANGEMENT PLAN  
 SHEET 2 OF 3

DRAWN BY R.G.I.  
 CHECKED BY R.B.W.

**THE CHESTER ENGINEERS**  
 PITTSBURGH, PENNSYLVANIA

DATE  
 MAY - 1968

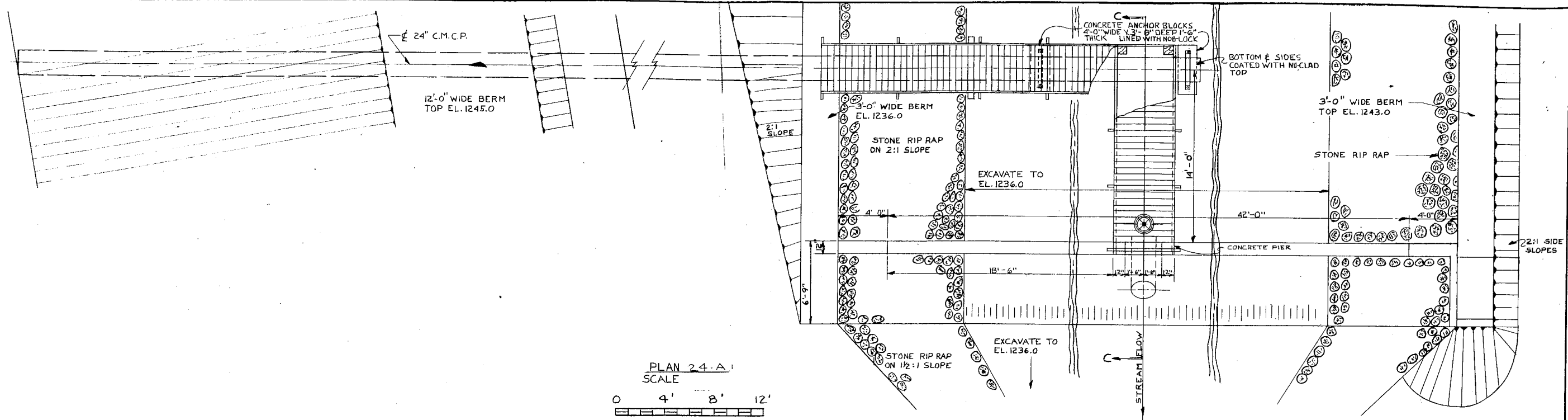
SHEET NUMBER  
 2  
 DRAWING NUMBER  
 2659-22

APPROVAL

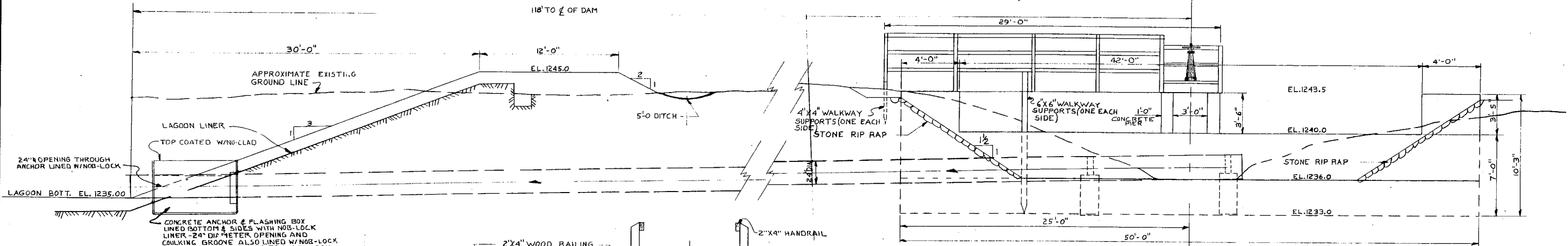
*A. F. Lisanti*

PROJECT NO. SL - 104

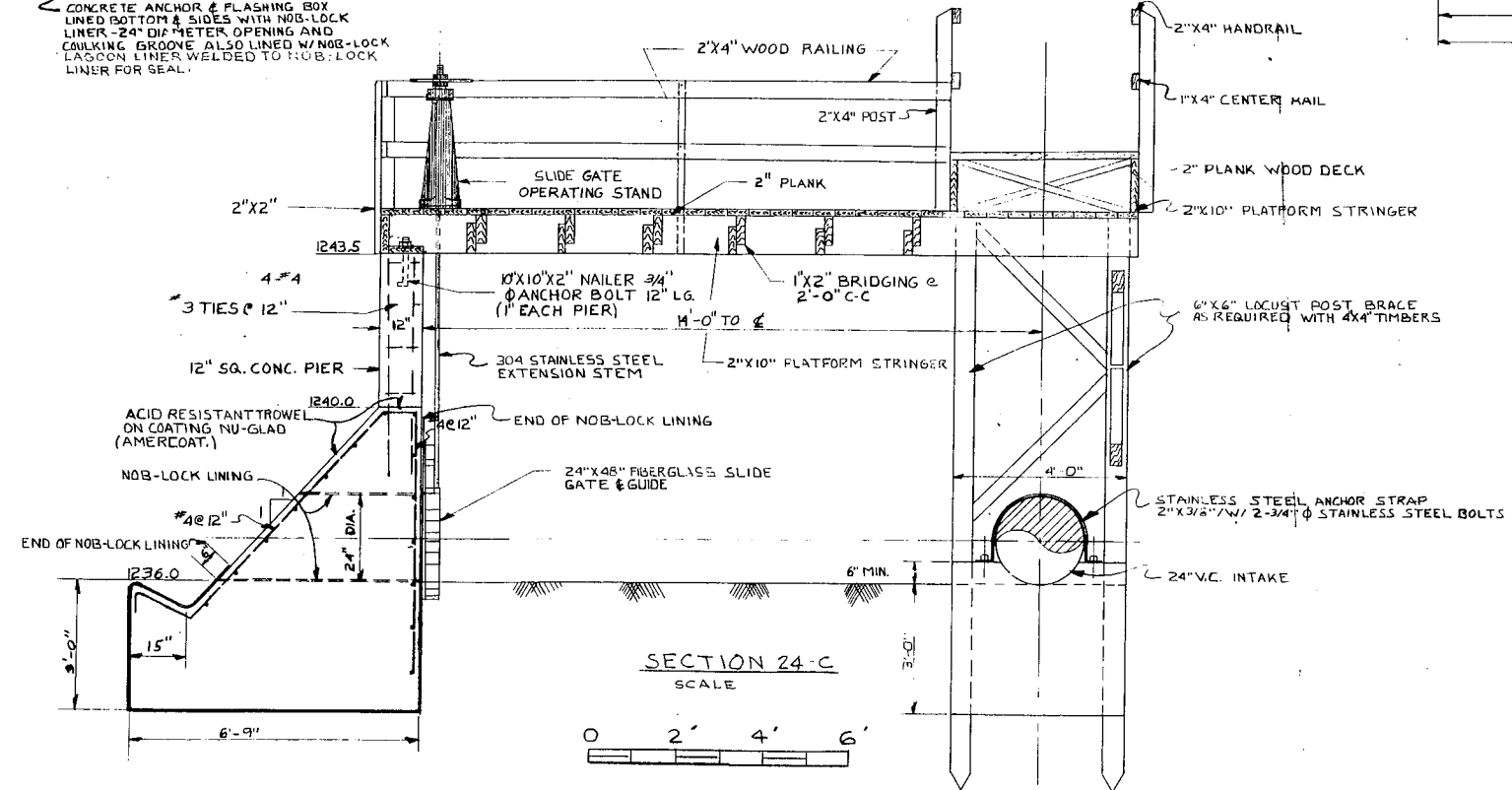




PLAN 24-A  
SCALE  
0 4' 8' 12'



ELEVATION 24-B  
SCALE  
0 4' 8' 12'



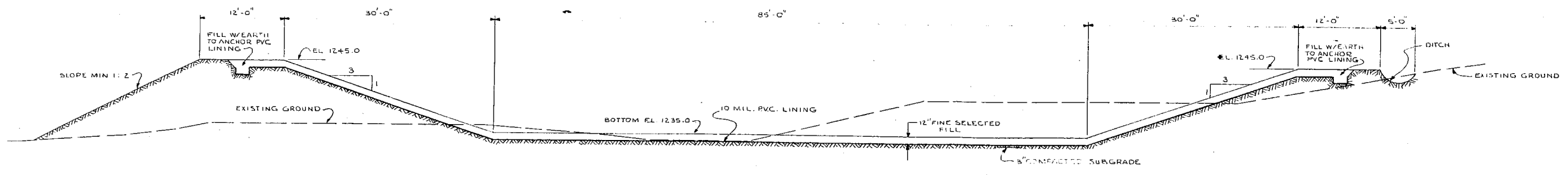
SECTION 24-C  
SCALE  
0 2' 4' 6'

REVISIONS		COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF MINES & MINERAL INDUSTRIES	APPROVAL <i>R.F. Lank</i>
NO.	DATE		

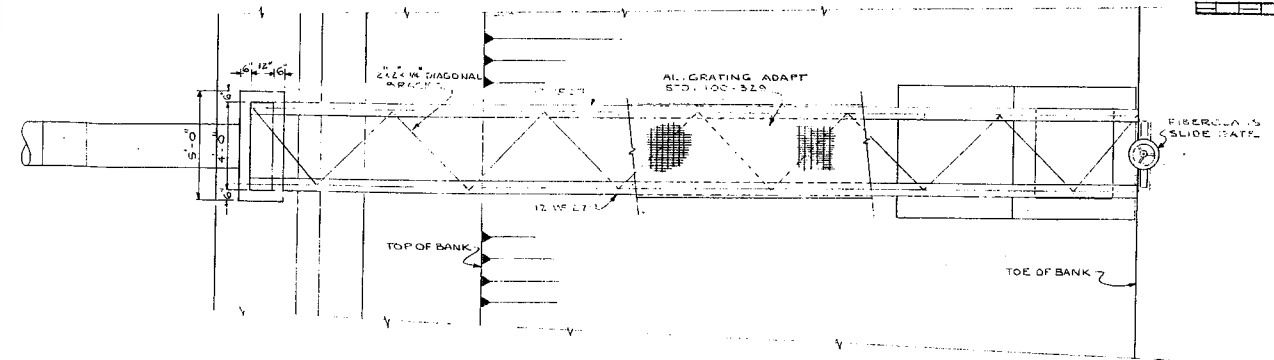
  

ACID STREAM TREATMENT PLANT SPILLWAY & PLANT INTAKE PLAN ELEVATION & SECTION		SHEET NUMBER 4
DRAWN BY R.L.S.	THE CHESTER ENGINEERS PITTSBURGH, PENNSYLVANIA	
CHECKED BY R.B.W.	DATE MAY - 1968	
SCALE AS SHOWN		

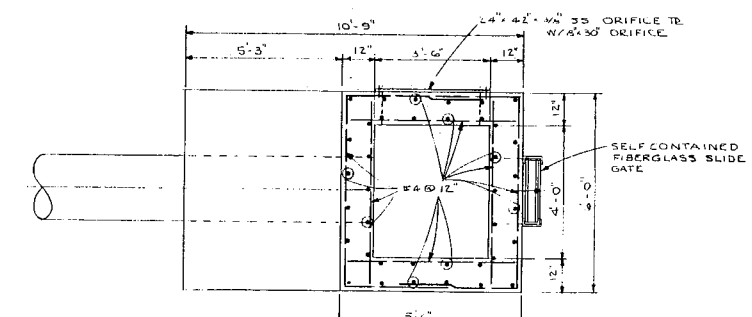
PROJECT NO. SL - 104



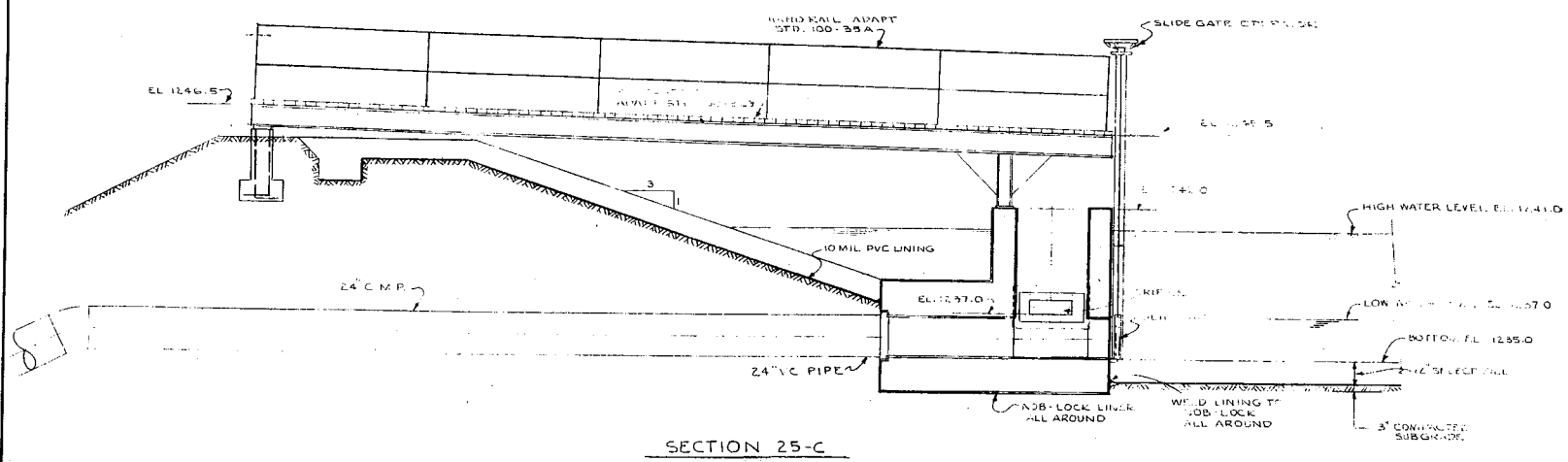
SECTION 25-A  
SCALE  
0 4' 8' 12' 16' 20'



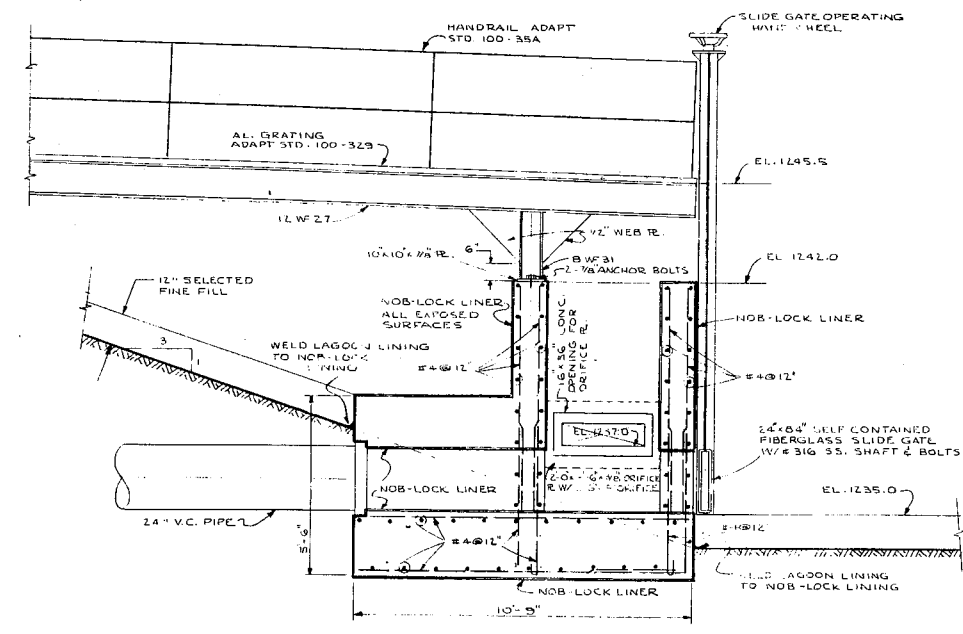
PLAN 25-B  
SCALE  
0 4' 8' 12'



PLAN 25-D  
SCALE  
0 2' 4' 6' 8'



SECTION 25-C  
SCALE  
0 4' 8' 12'



SECTION 25-E  
SCALE  
0 2' 4' 6' 8'

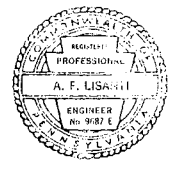
NOTE: (1) ALL EXPOSED SURFACE NOT INDICATED TO BE LINED W/ NOB-LOCK AND BELOW EL. 1242.0 SHALL BE COATED W/ 1/2" THICK NU-CLAD (AMERCOAT CORP) TROWEL ON COATING  
(2) ALL REINFORCING TO BE #4@12 EXCEPT AS SHOWN OTHERWISE.

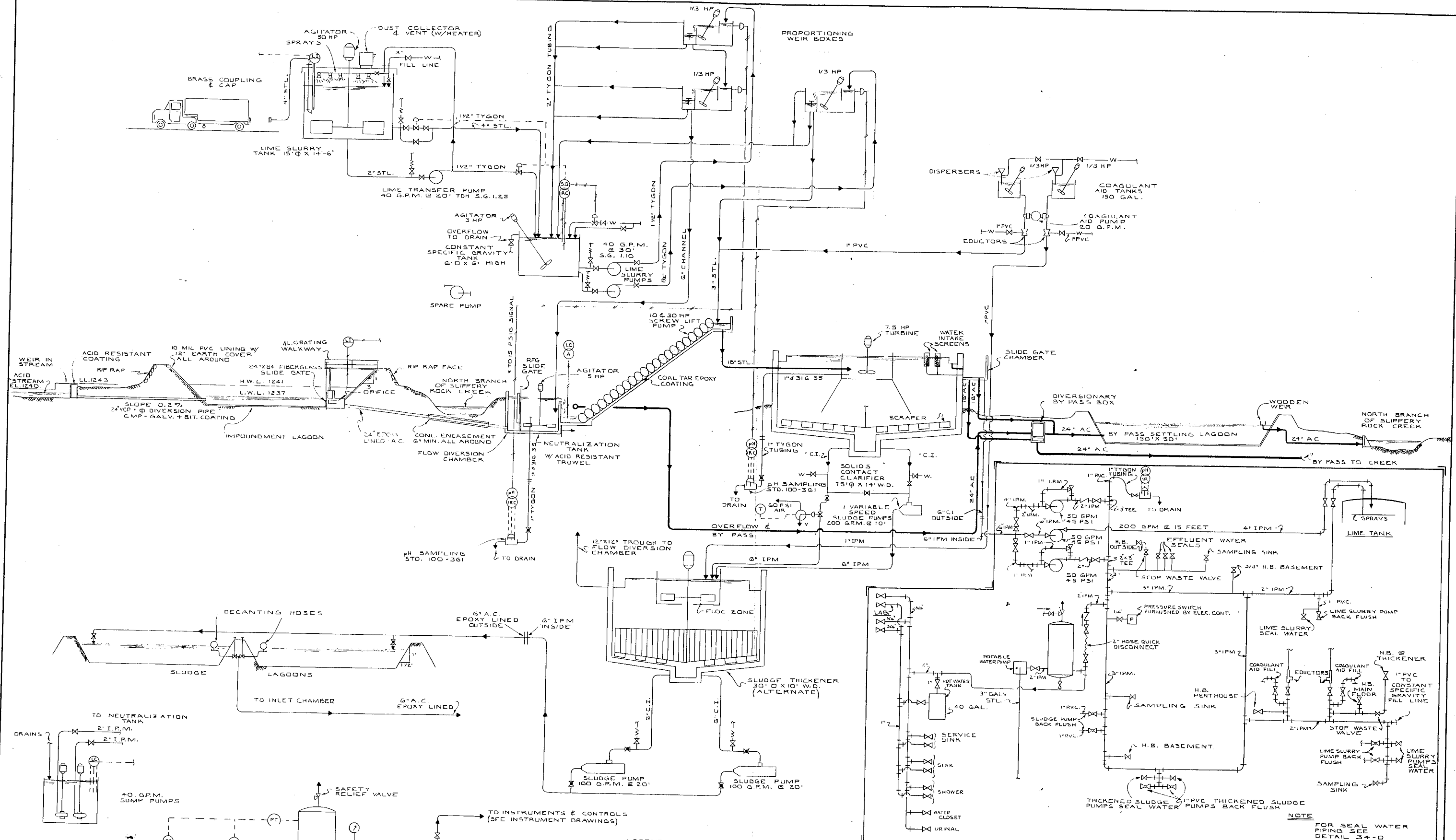
REVISIONS		COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF MINES & MINERAL INDUSTRIES	APPROVAL <i>A. F. Lisanti</i>
NO.	DATE		

DRAWN BY P.L.K.	THE CHESTER ENGINEERS PITTSBURGH, PENNSYLVANIA	SHEET NUMBER 5
CHECKED BY R.B.W.		DRAWING NUMBER 2659-25
SCALE AS SHOWN	DATE MAY - 1968	

PROJECT NO. SL - 104

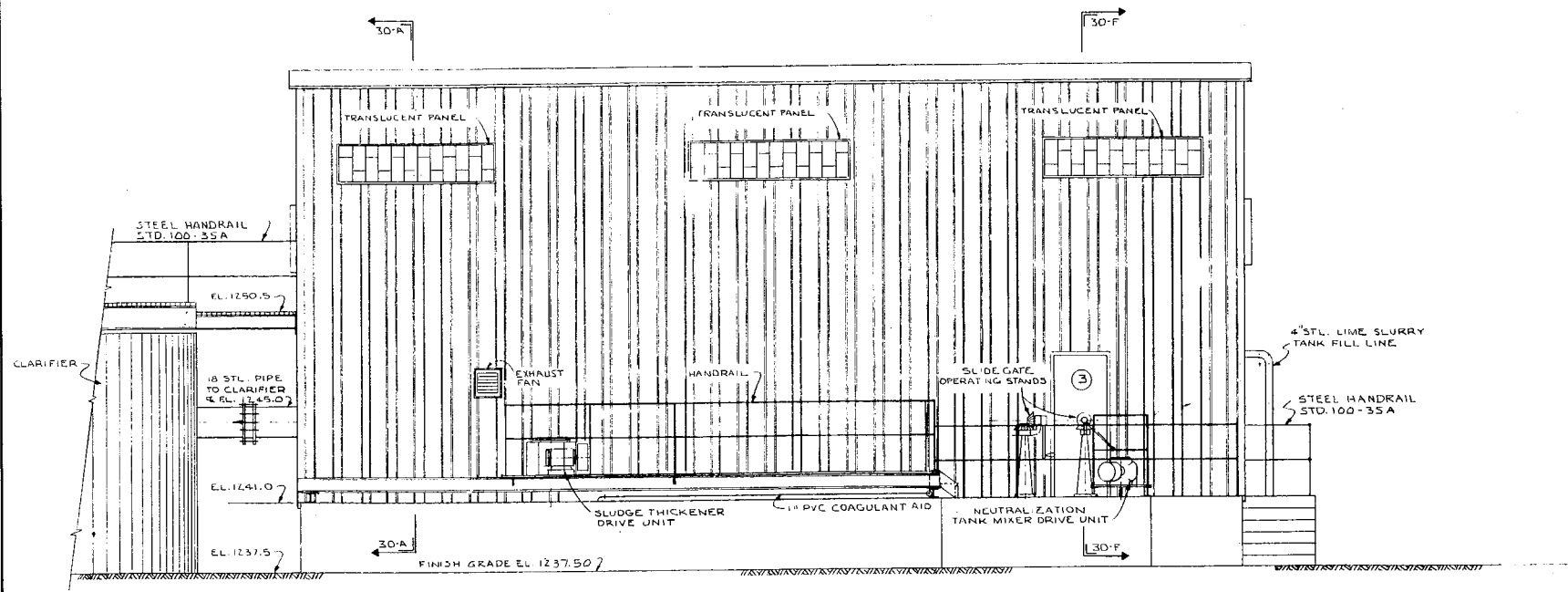




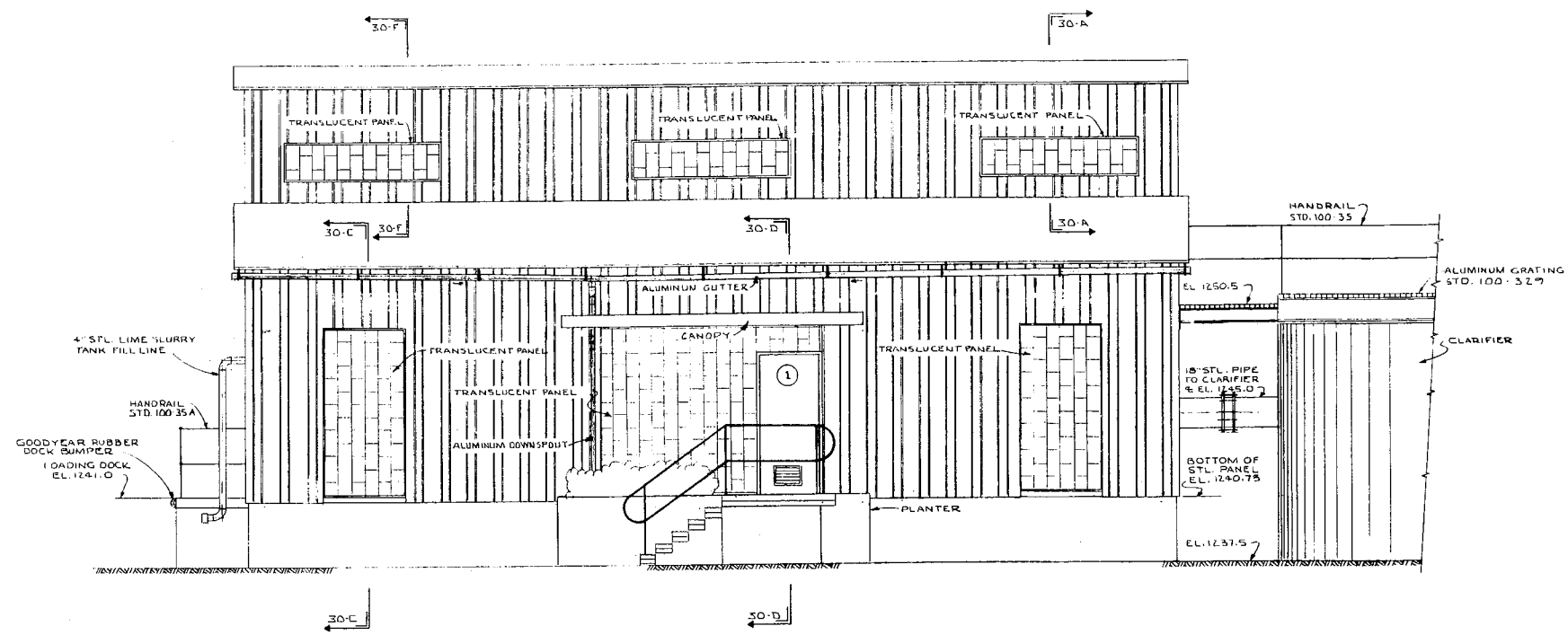
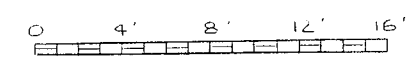
**PROJECT NO. SL - 104**

REVISIONS		COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF MINES & MINERAL INDUSTRIES	ACID STREAM TREATMENT PLANT FLOW DIAGRAM	APPROVAL <i>A. F. Libanti</i>
NO.	DATE			

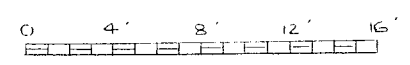
DRAWN BY <b>J.H.W.</b>	THE CHESTER ENGINEERS	SHEET NUMBER <b>7</b>	
CHECKED BY <b>R.B.W.</b>	PITTSBURGH, PENNSYLVANIA	DRAWING NUMBER <b>2659-27</b>	
SCALE <b>NONE</b>	DATE <b>MAY - 1968</b>		



EAST ELEVATION  
SCALE



WEST ELEVATION  
SCALE

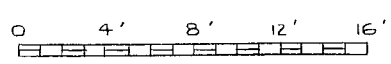
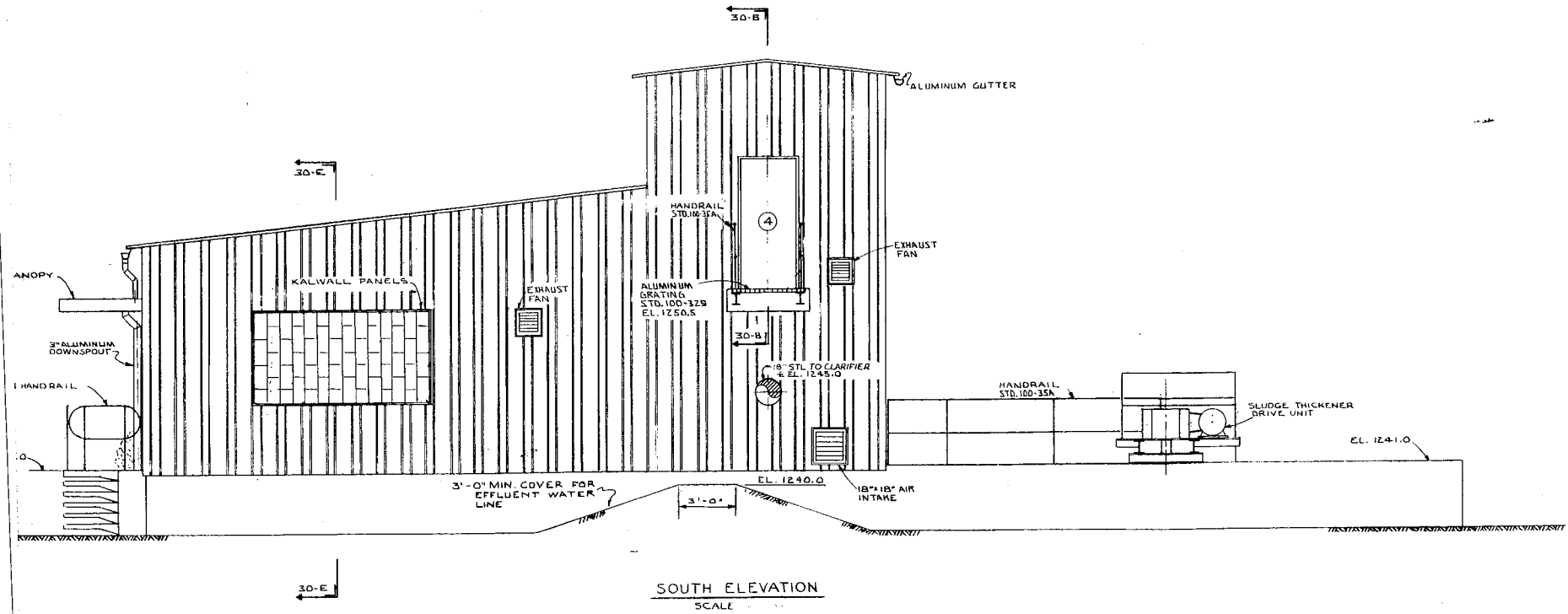
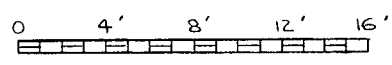
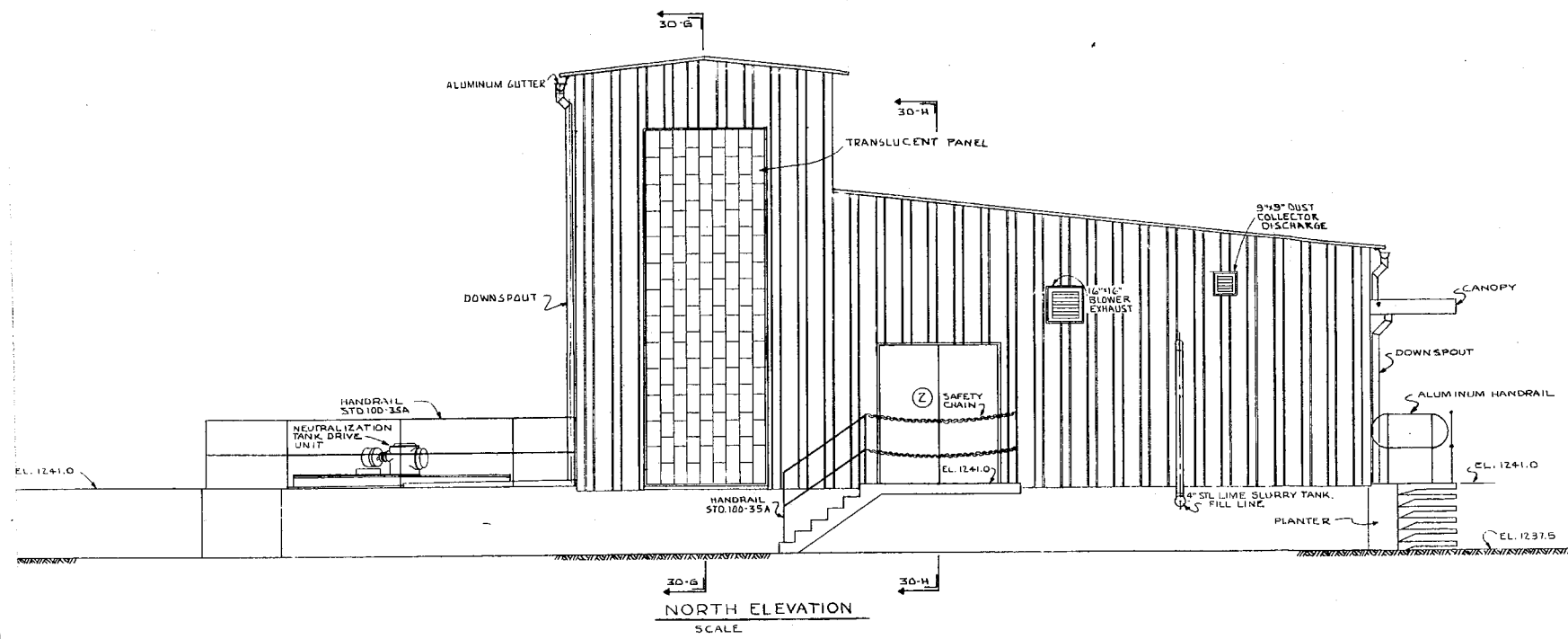


REVISIONS		COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF MINES & MINERAL INDUSTRIES	APPROVAL <i>A. F. Lisanti</i>
NO.	DATE		
DRAWN BY P.L.K.		THE CHESTER ENGINEERS PITTSBURGH, PENNSYLVANIA	SHEET NUMBER 8
CHECKED BY R.B.W.			DRAWING NUMBER 2659-28
DATE MAY 1968			



PROJECT NO. SL - 104





DOOR SCHEDULE									
DOOR NO.	LOCATION	DESCRIPTION	HINGES	LOCKSET	CLOSER	THRESHOLD	WEATHER STRIP	MISCELLANEOUS	
1	CONTROL BUILDING WEST ELEVATION	FF 3070	3-643A	9470	2554	2325	SPRING TYPE		
2	CONTROL BUILDING NORTH ELEVATION	FF-6070	6-643A	9470	ACTIVE LEAF 2554	2325	SPRING TYPE	LOSS HEAD AND FOOT STRIP ON ACTIVE LEAF	
3	CONTROL BUILDING EAST ELEVATION	FF-3070	3-643A	9470	2554	2325	SPRING TYPE		
4	ENTRANCE TO SCREW PUMP ROOM	FF 3068	3-643A	9471					
5	LAVATORY	FF 2868AC	3-643A	9471	2552				
6	CORRIDOR	FF 3068	3-643A	9471	2053				
7	LABORATORY	FF 3068AC	3-643A	9471	2053				
8	SCREW PUMP ROOM	SPECIAL	SLIDING DOOR 3070 WITH HARDWARE SET NO. 1333 AS MANUFACTURED BY REPUBLIC STEEL, YOUNGSTOWN, OHIO						
9	CONTROL BUILDING SOUTH ELEVATION	FF-3068	3-643A	9471	2554	2325	SPRING TYPE		

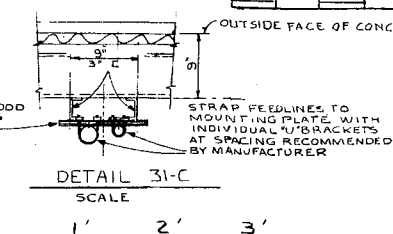
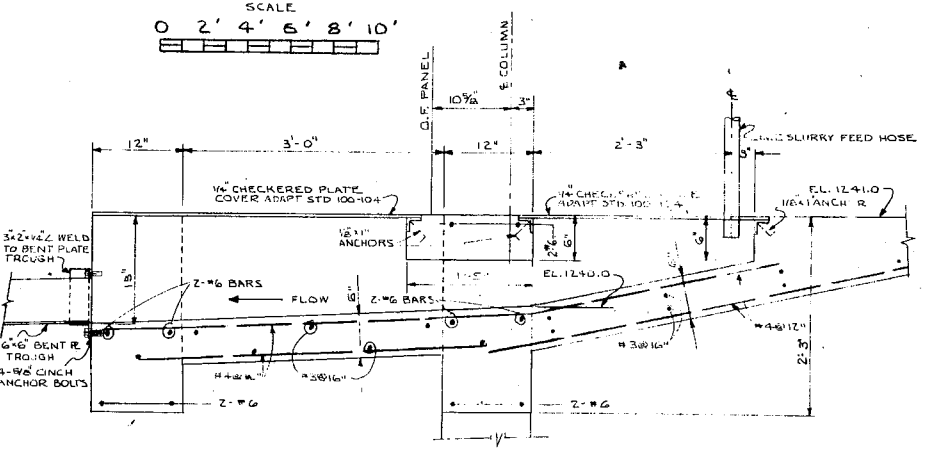
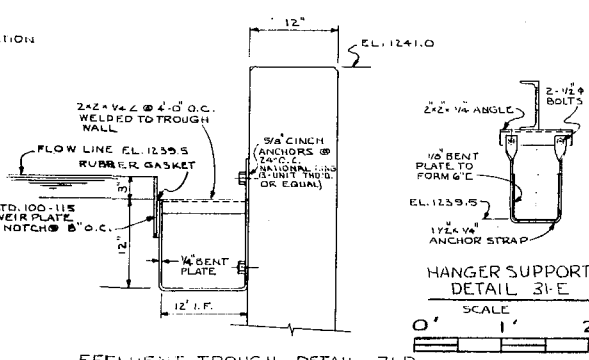
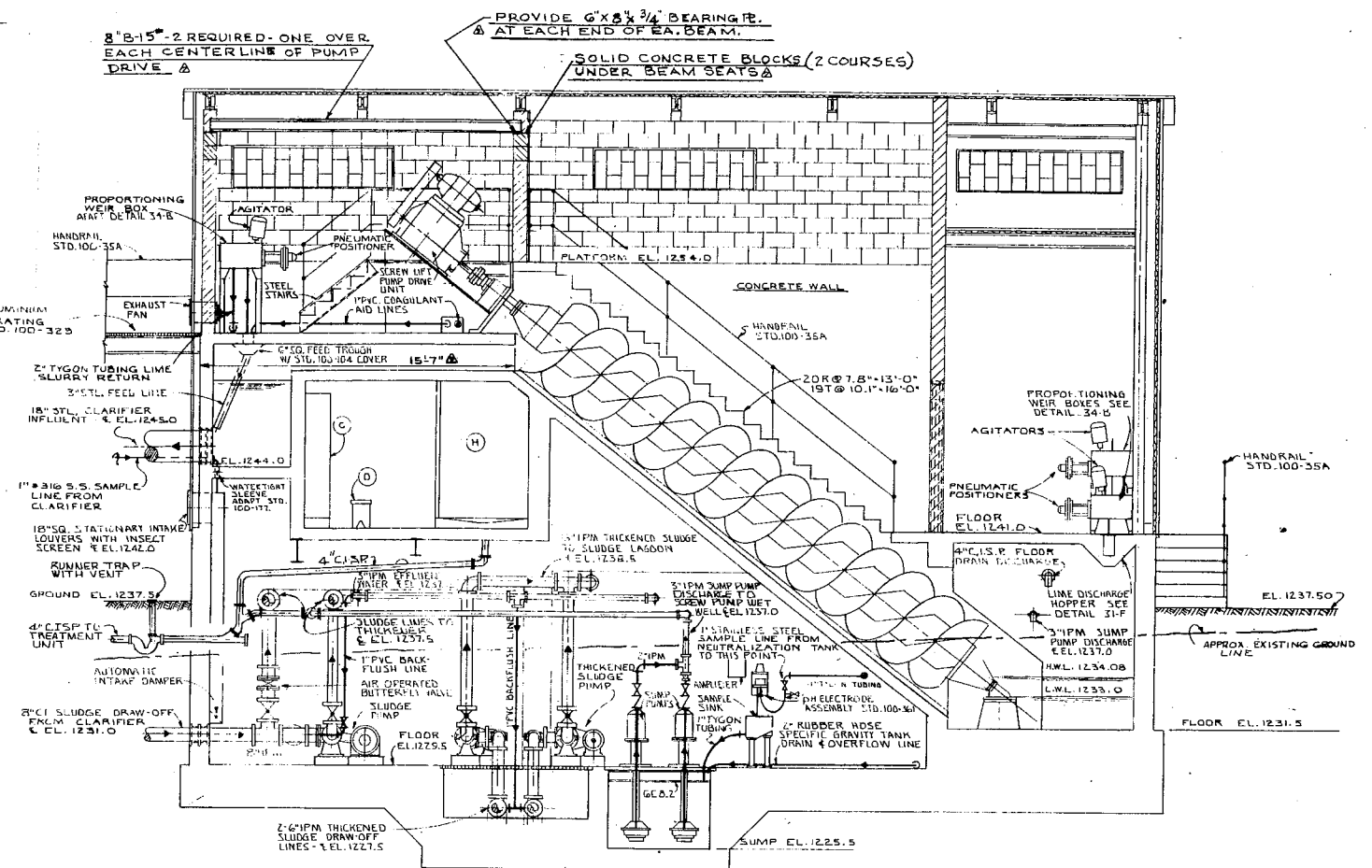
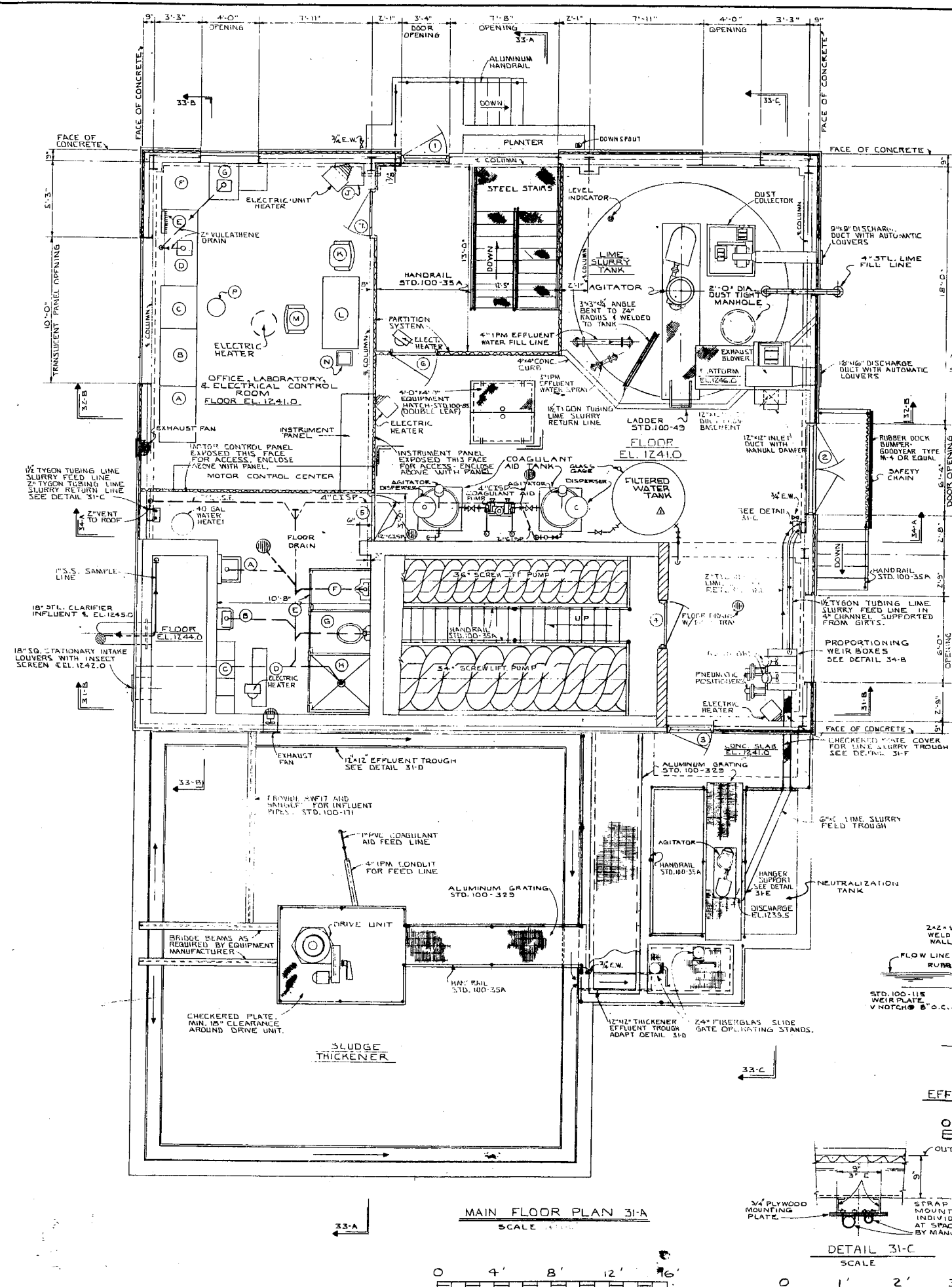
**NOTE:** DOOR AND HARDWARE DESIGNATIONS (EXCEPT DOOR NO. 8) REFER TO THOSE LISTED IN THE CATALOG OF FENESTRA - INC., DETROIT MICHIGAN. HARDWARE SHALL BE U.S. 28 (ANODIZED ALUMINUM). SPRING TYPE WEATHER STRIP SHALL BE CHAMBERLAIN SPRING BRONZE EQUIPMENT NO. 800 DS OR EQUAL. PROVIDE DUMMY KNOB AND PLATE FOR INACTIVE LEAF ON DOOR NO. 2. ALL DOORS TO BE FITTED WITH 1/2" THICK X 6" HIGH KICK PLATE. PROVIDE 3 KEYS FOR EACH DOOR AND 3 MASTER KEYS.

REVISIONS		APPROVAL	
NO.	DATE	DESCRIPTION	

**COMMONWEALTH OF PENNSYLVANIA**  
**DEPARTMENT OF MINES & MINERAL INDUSTRIES**  
**ACID STREAM TREATMENT PLANT**  
**CONTROL BUILDING**  
**ARCHITECTURAL ELEVATIONS**

DRAWN BY <b>P.L.K.</b>	<b>THE CHESTER ENGINEERS</b> PITTSBURGH, PENNSYLVANIA	SHEET NUMBER <b>9</b>
CHECKED BY <b>R.B.W.</b>	DATE <b>MAY - 1968</b>	DRAWING NUMBER <b>2659-29</b>





REVISIONS		
NO.	DATE	DESCRIPTION
1	3/1/69	ADDED WATER TANK
2	5/1/69	ADDED LIFT BEAMS & EACH SCREW LIFT DRIVES.

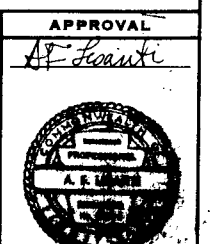
COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES & MINERAL INDUSTRIES

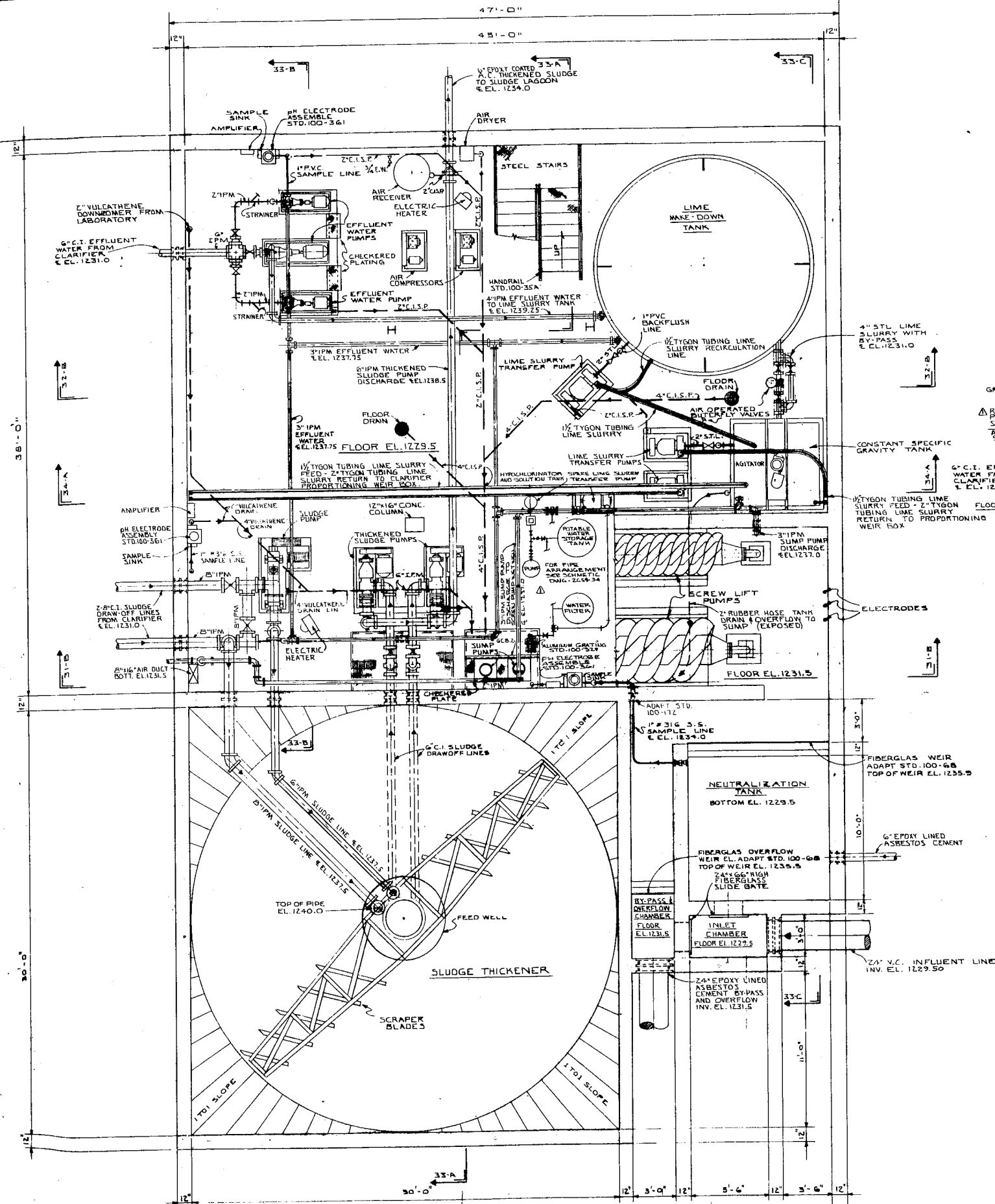
ACID STREAM TREATMENT PLANT  
CONTROL BUILDING MAIN FLOOR  
PLANS & SECTIONS

DRAWN BY: J.H.W. & P.L.K.  
CHECKED BY: R.B.W.

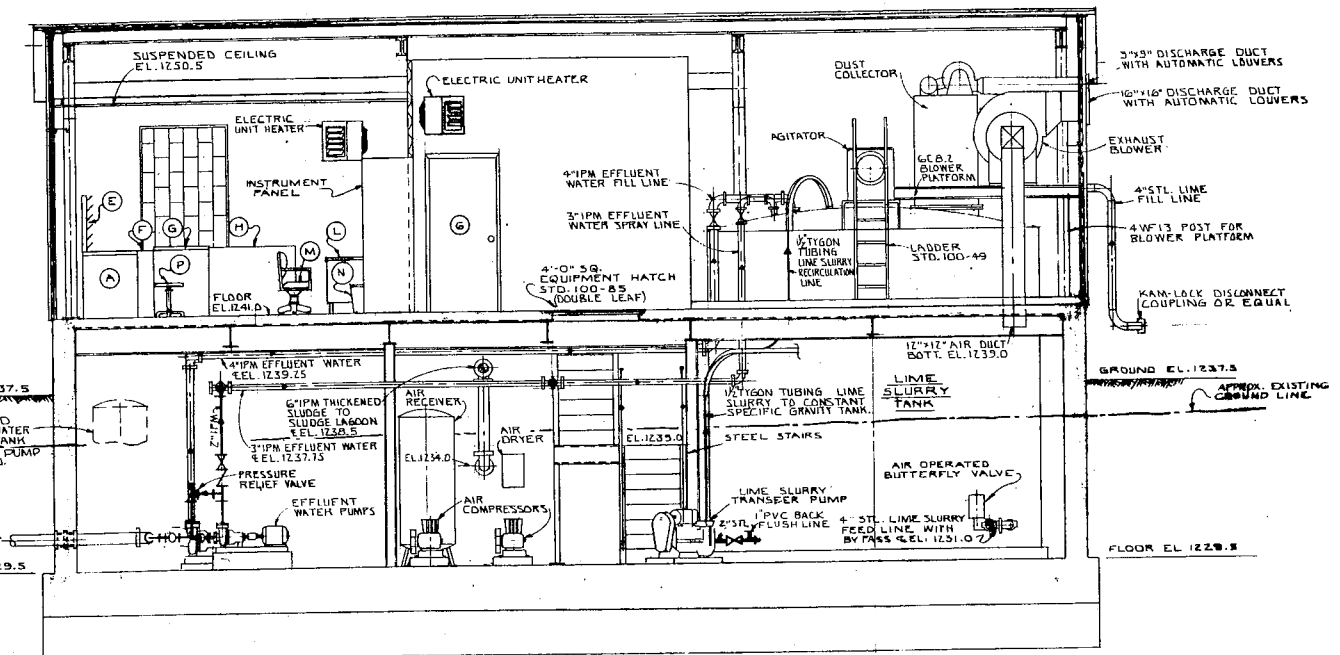
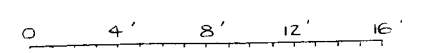
THE CHESTER ENGINEERS  
PITTSBURGH, PENNSYLVANIA

DATE: 2650-31

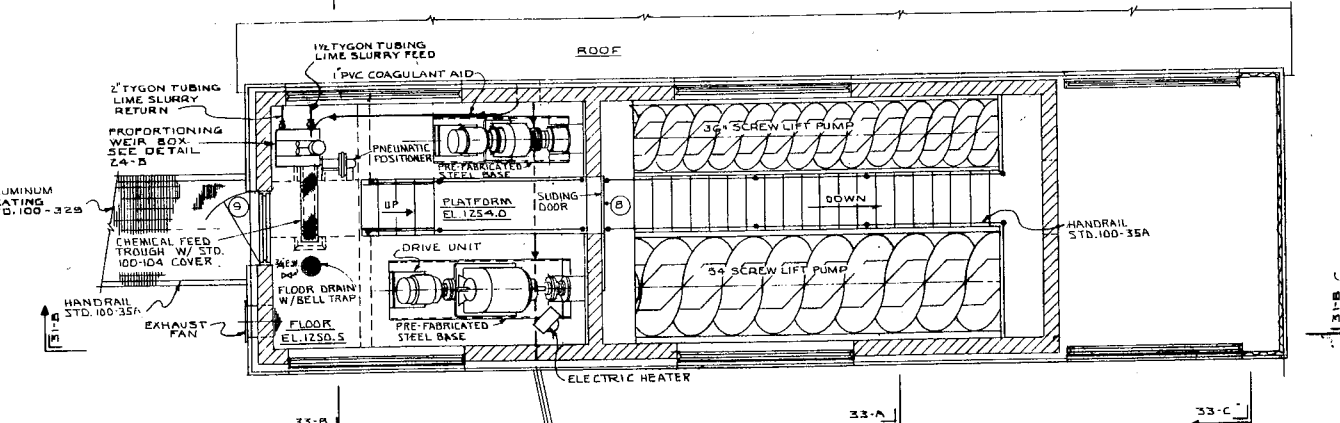
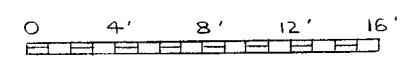




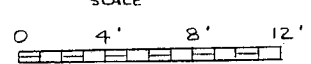
BASEMENT FLOOR PLAN 32-A  
SCALE



SECTION 32-B  
SCALE



PENTHOUSE PLAN 32-C  
SCALE



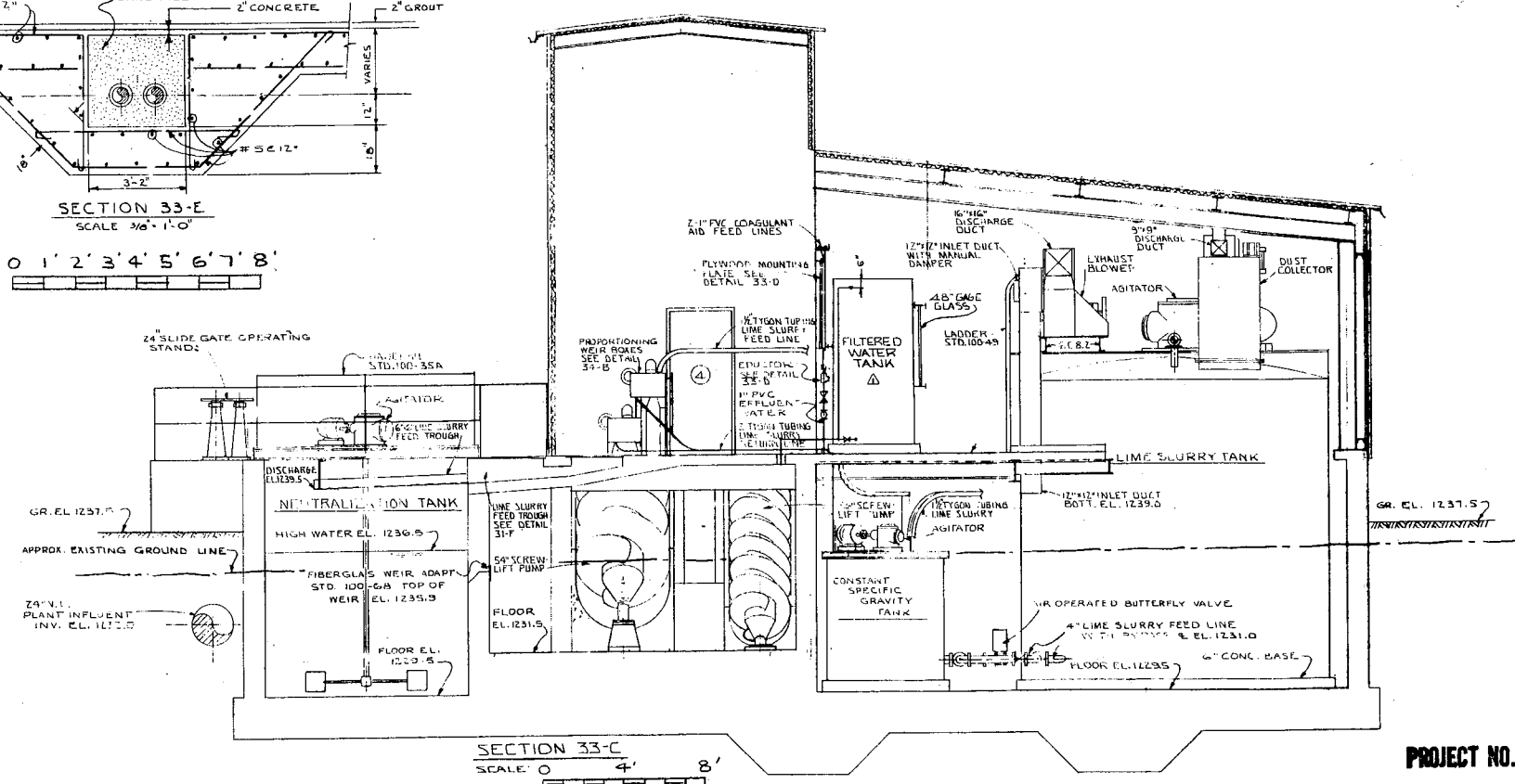
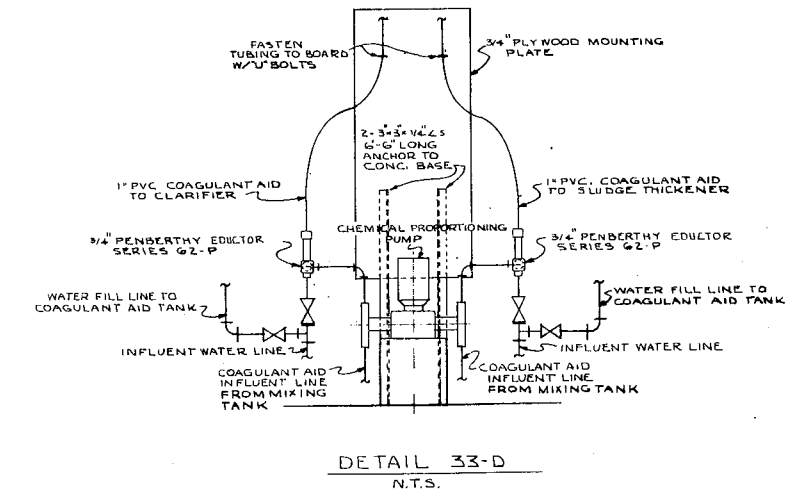
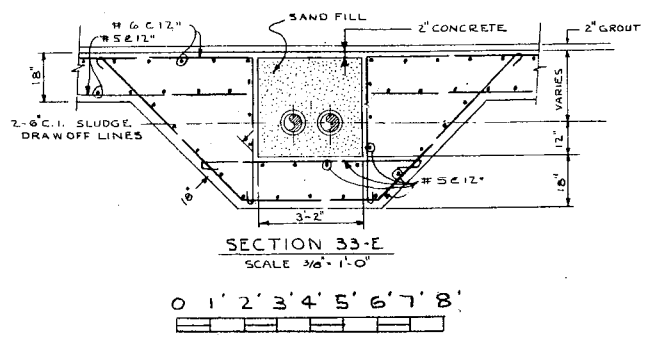
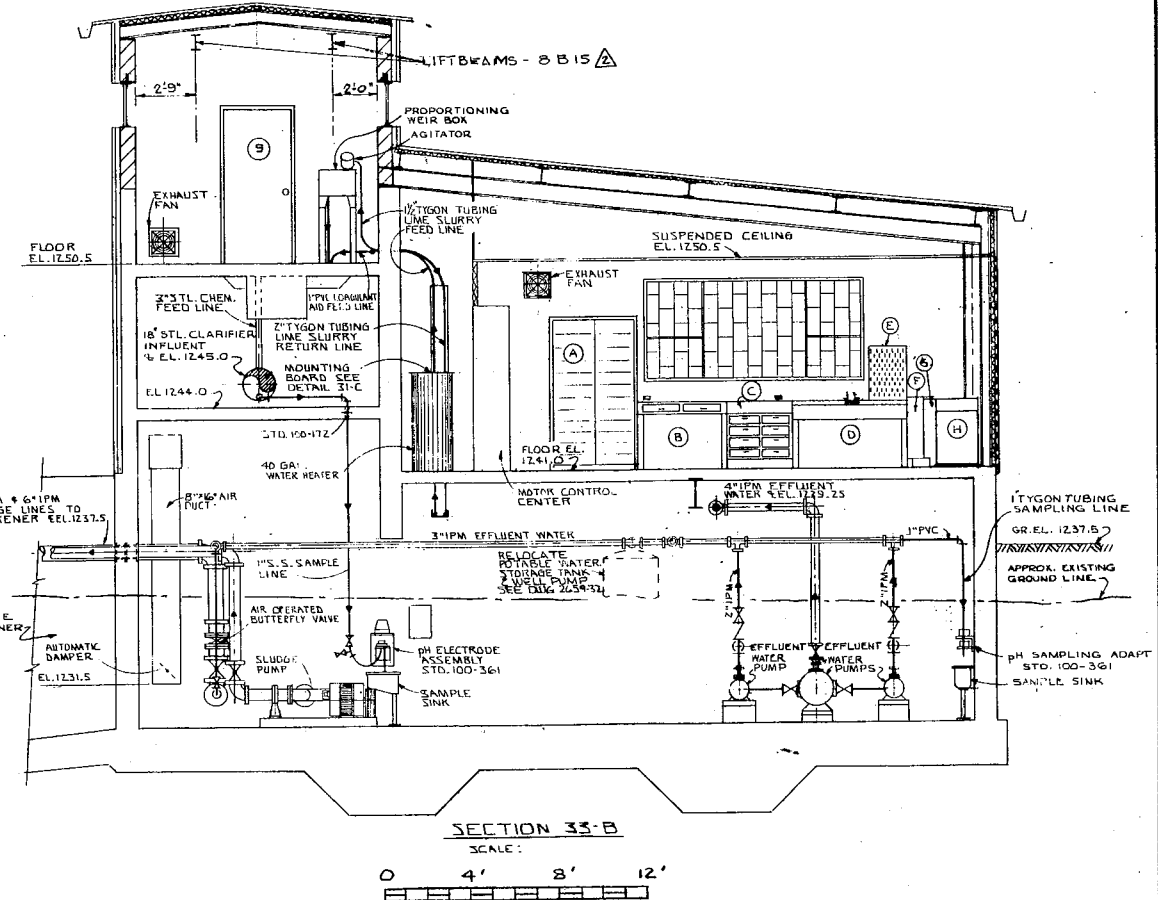
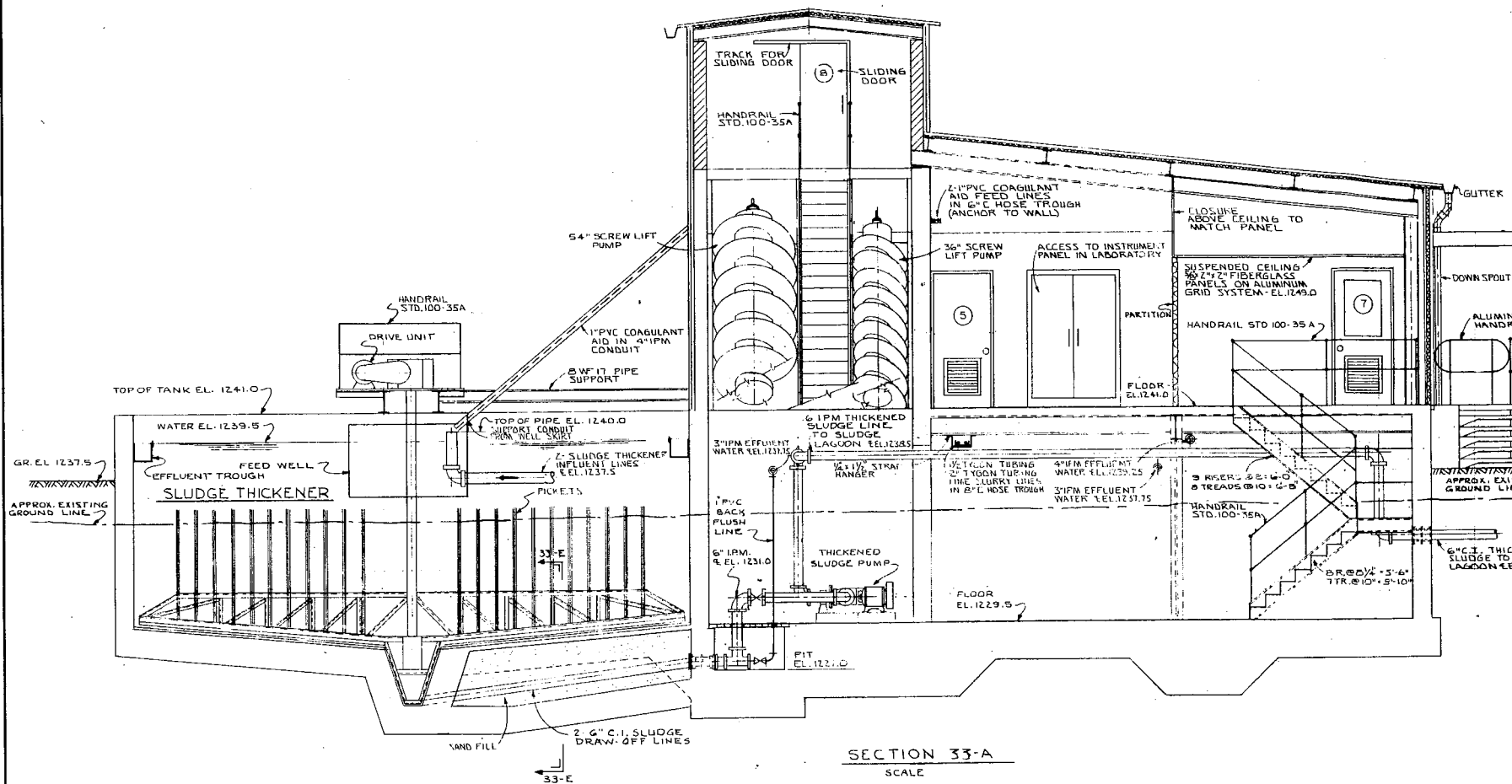
- NOTES:
1. ALL LIME SLURRY HOSES TO BE CONTINUOUSLY SUPPORTED WITH CHANNEL TYPE CONDUIT TRAY. ALL CHANNEL SUPPORTS LOCATED IN BASEMENT TO HAVE A BOTTOM E.L. OF 1239.0
  2. ALL WATER SEAL PUMPS TO HAVE DRAINAGE TROUGH AND FLOOR DRAIN AS SHOWN ON DETAIL

REVISIONS	
NO.	DATE
3169	

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF MINES & MINERAL INDUSTRIES	
ACID STREAM TREATMENT PLANT CONTROL BUILDING PLANS & SECTIONS	
DRAWN BY P.L.K. & J.H.W.	CHECKED BY R.B.W.
THE CHESTER ENGINEERS PITTSBURGH, PENNSYLVANIA	DATE
SHEET NUMBER 12	DRAWING NUMBER 2659-32

APPROVAL

*[Signature]*

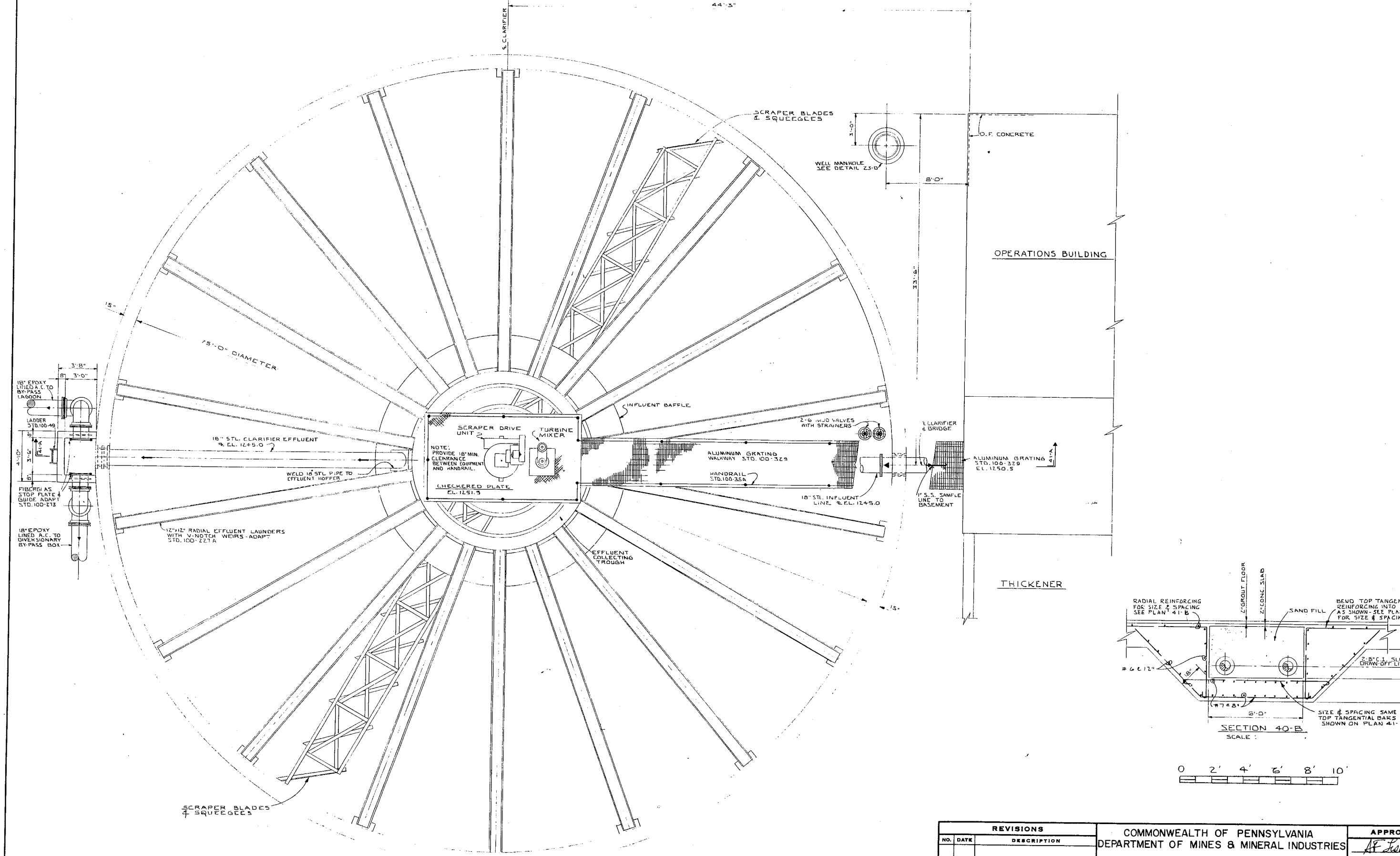


PROJECT NO. SL - 104

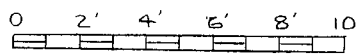
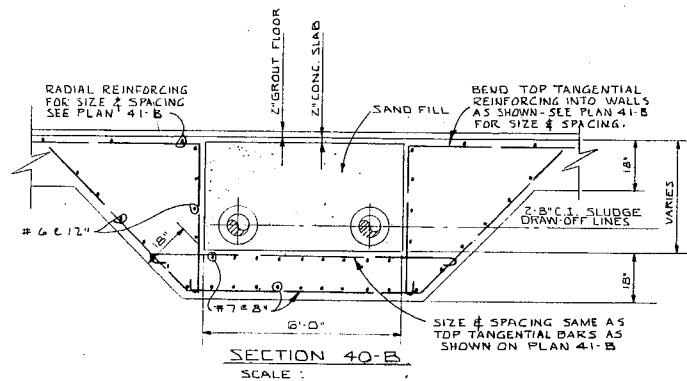
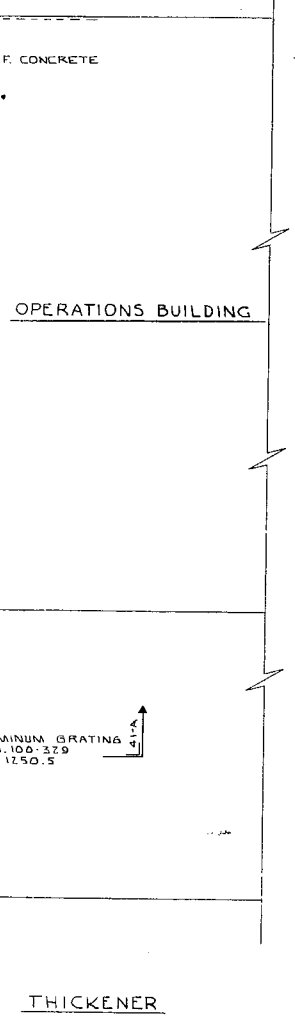
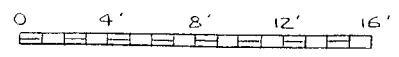
REVISIONS		
NO.	DATE	DESCRIPTION
Δ 5/1/68		ADDED WATER TANK AND RELATED POTABLE WATER TANK AND WELL PUMP
Δ 5/1/68		ADDED SCREW LIFT BEAMS

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF MINES & MINERAL INDUSTRIES		APPROVAL <i>[Signature]</i>	
ACID STREAM TREATMENT PLANT CONTROL BUILDING SECTIONS			
DRAWN BY P.L.K.	THE CHESTER ENGINEERS PITTSBURGH, PENNSYLVANIA	SHEET NUMBER 13	DRAWING NUMBER 2659-33
CHECKED BY R.B.W.		DATE MAY - 1968	





PLAN 40-A  
SOLIDS CONTACT CLARIFIER  
SCALE



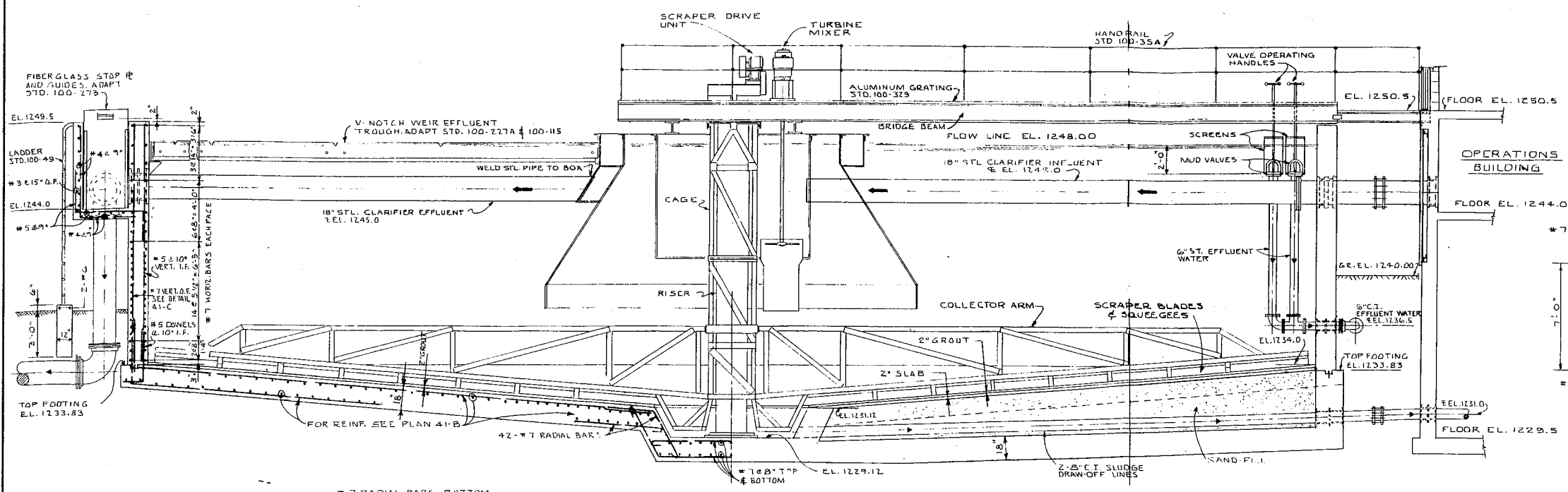
REVISIONS		COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF MINES & MINERAL INDUSTRIES ACID STREAM TREATMENT PLANT SOLIDS CONTACT CLARIFIER PLAN	APPROVAL <i>A. L. L...</i>
NO.	DATE		

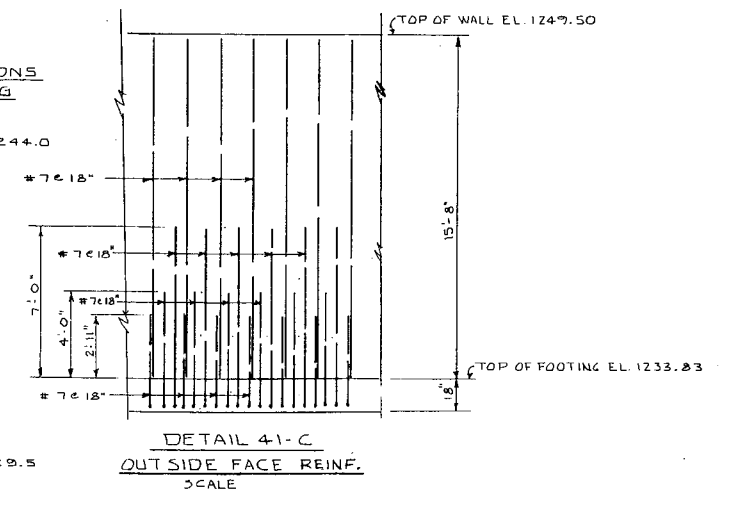
DRAWN BY P.L.K. & J.H.W.	THE CHESTER ENGINEERS PITTSBURGH, PENNSYLVANIA	SHEET NUMBER 20
CHECKED BY R.B.W.		DRAWING NUMBER 2659-40
DATE MAY - 1968		

PROJECT NO. SL - 104

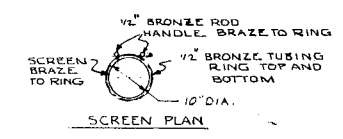




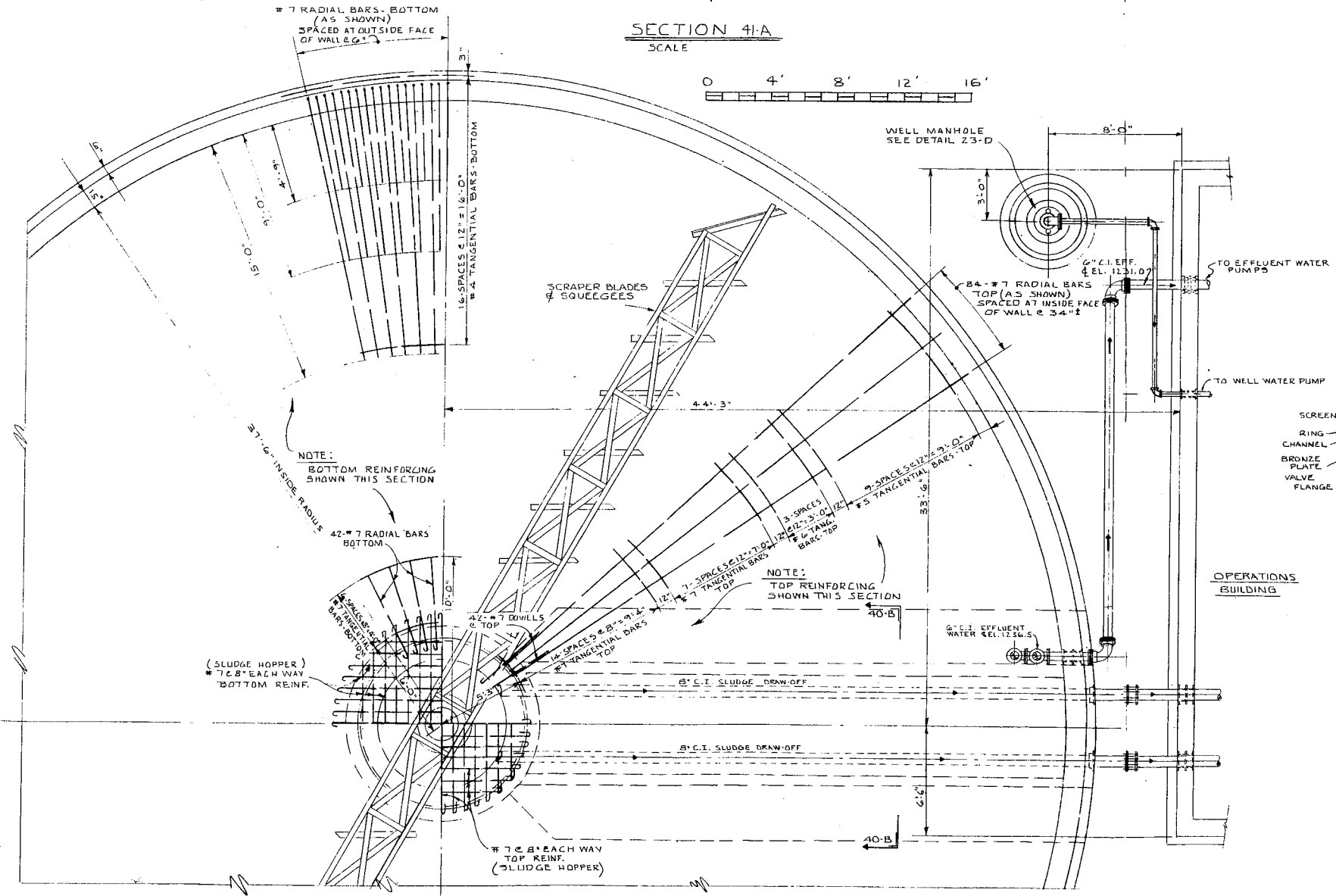
SECTION 41-A  
SCALE  
0 4' 8' 12' 16'



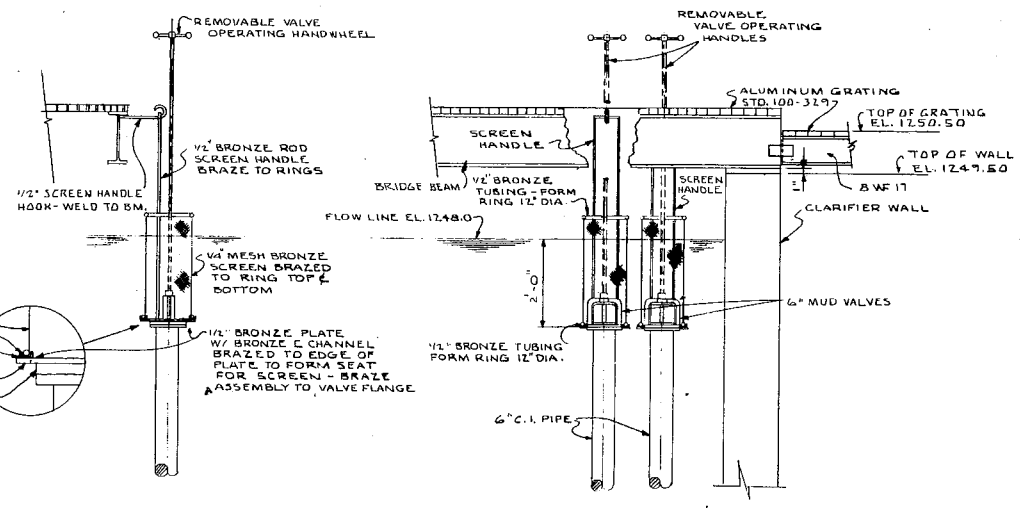
DETAIL 41-C  
OUTSIDE FACE REINF.  
SCALE  
0 4' 8' 12' 16'



SCREEN PLAN



PLAN 41-B  
SCALE  
0 4' 8' 12' 16'



SECTION A-A  
SCREEN DETAIL 41-D  
SCALE  
0 2' 4' 6' 8'

REVISIONS	
NO.	DATE

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES & MINERAL INDUSTRIES  
ACID STREAM TREATMENT PLANT  
SOLIDS CONTACT CLARIFIER PLAN  
SECTIONS & DETAILS

DRAWN BY P.L.K. & J.H.W.	THE CHESTER ENGINEERS PITTSBURGH, PENNSYLVANIA	SHEET NUMBER 21
CHECKED BY R.B.W.	DATE MAY 1968	DRAWING NUMBER 2659-41

APPROVAL

*R. Washburn*

RAYMOND B. WASHBURN  
PROFESSIONAL ENGINEER  
PA 1922

A. F. LEANER  
PROFESSIONAL ENGINEER  
PA 1922

PROJECT NO. SL - 104

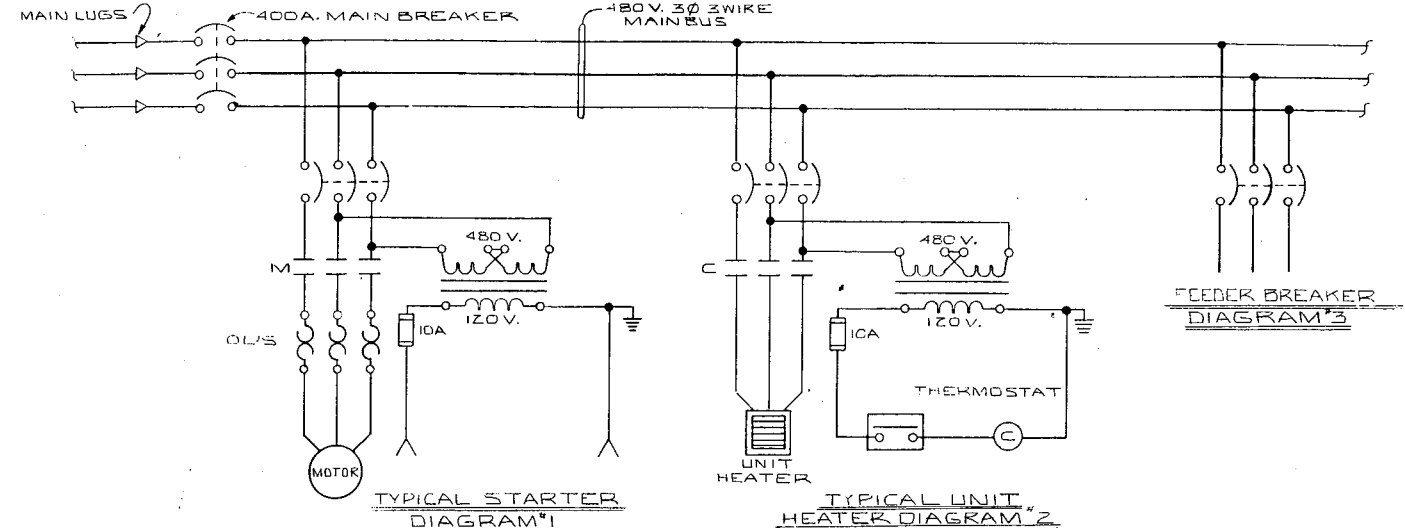


MOTOR CONTROL CENTER SCHEDULE

UNIT NO.	MOTOR OR LOAD	HORSE POWER	BKR. SIZE	MOTOR CIRCUIT		WIRING DIAGRAM NO.
				NEMA STR. SIZE	WIRE CONDUIT	
1A	UNIT HEATER	10KW	20	12	3/4"	3
1B	UNIT HEATER	3KW	15	12	3/4"	2
1C	UNIT HEATER	7 1/2 KW	15	12	3/4"	Z
1D	UNIT HEATER	7 1/2 KW	15	12	3/4"	Z
1E	UNIT HEATER	3KW	15	12	3/4"	Z
2A	UNIT HEATER	7 1/2 KW	15	12	3/4"	Z
2B	UNIT HEATER	7 1/2 KW	15	12	3/4"	Z
2C	UNIT HEATER	3KW	15	12	3/4"	Z
2D	(BLANK)					
2E	(BLANK)					
3A	VENT FAN	1	15	12	3/4"	1A
3B	(BLANK)					
3C	WELL PUMP	3	15	12	3/4"	1B
3D	SLUDGE PUMP	5	20	12	3/4"	1D
3E	SPAKE STARTER		20	1		
3F	THICKENER SLUDGE PUMP #1	5	20	12	3/4"	1D
3G	THICKENER SLUDGE PUMP #2	5	20	12	3/4"	1D
3H	COAGULANT A/D PUMP	1/2	15	12	3/4"	1E
4A	SUMP PUMP NO.1	1	15	12	3/4"	1F
4B	SUMP PUMP NO.2	1	15	12	3/4"	1F
4C	AIR COMPRESSOR NO.1	5	20	12	3/4"	1G
4D	AIR COMPRESSOR NO.2	5	20	12	3/4"	1G
4E	CLARIFIER COLLECTOR	1/2	15	12	3/4"	1J
4F	CLARIFIER TURBINE	7 1/2	20	12	3/4"	1E
4G	SLUDGE THICKENER DRIVE	1/2	15	12	3/4"	1J
5A	FLASH MIXER	5	20	12	3/4"	1E
5B	EFFLUENT WATER PUMP NO.1	5	20	12	3/4"	1C
5C	EFFLUENT WATER PUMP NO.2	5	20	12	3/4"	1D
5D	EFFLUENT WATER PUMP NO.3	5	20	12	3/4"	1C
5E	LIME PUMP NO.1	3	15	12	3/4"	1E
5F	LIME PUMP NO.2	3	15	12	3/4"	1E
5G	LIME PUMP NO.3	3	15	12	3/4"	1E
5H	DUST COLLECTOR BLOWER	1/2	15	12	3/4"	1K
6A	LIME STORAGE AGITATOR	50	100	3	1 1/4"	1E
6B	SCREW LIFT PUMP NO.1	15	50	2	1 1/4"	1H
6C	SCREW LIFT PUMP NO.2	40	90	2	1 1/4"	1H
6D	(BLANK)					
6E	SPLIFIC GRAVITY AGIT.	1/2	15	12	3/4"	1E
7A	MAIN BREAKER		400		500MCM 3"	
7B	LIGHTING FEEDER	30KVA	50		6 1"	3
7C	(BLANK)					
7D	(BLANK)					
7E	(BLANK)					
7F	(BLANK)					

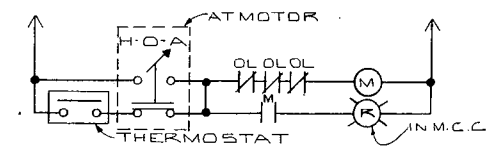
1A	2A	3A	4A	5A	6A	7A
1B	2B	3B	4B	5B	6B	
1C	2C	3C	4C	5C	6C	7B
1D	2D	3D	4D	5D	6D	7D
1E	2E	3E	4E	5E	6E	7E
		3F	4F	5F	6F	
		3G	4G	5G	6G	7F
		3H		5H	6H	

MOTOR CONTROL CENTER LAY-OUT

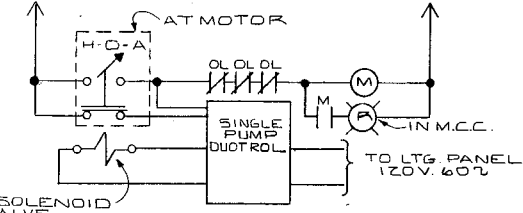


TYPICAL STARTER DIAGRAM #1

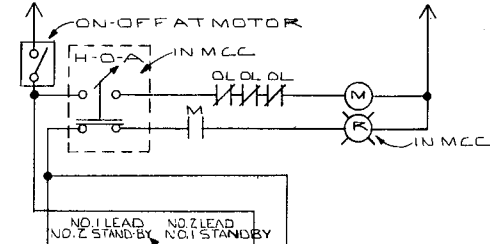
TYPICAL UNIT HEATER DIAGRAM #2



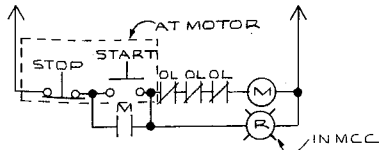
CONTROL DIAGRAM "A"



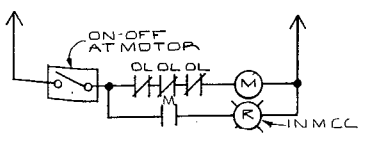
CONTROL DIAGRAM "B"



CONTROL DIAGRAM "C"

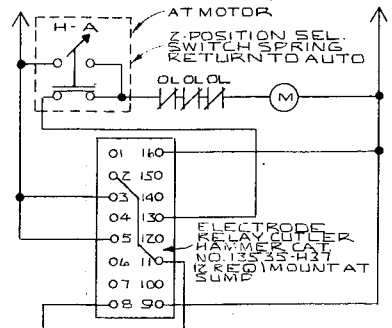


CONTROL DIAGRAM "D"

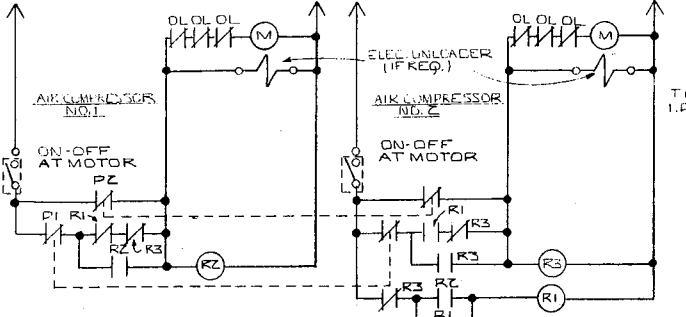


CONTROL DIAGRAM "E"

WESTINGHOUSE Z-POSITION SEL. SW. CAT. NO. DT251 WITH 2 NO. CONTACT BLOCKS DT2M & C.N.C. CONTACT BLOCKS DT2N IN HOFFMAN ENG. CO. EXTRA DEEP ENCLOSURE CAT. NO. E-1PBX.



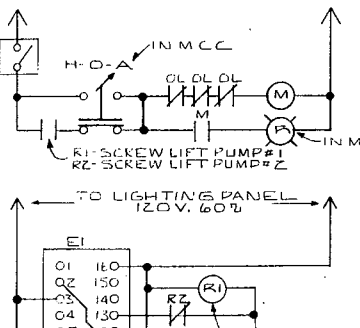
CONTROL DIAGRAM "F"



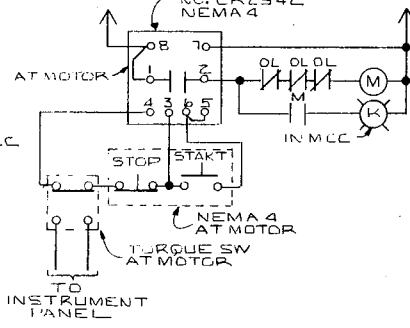
CONTROL DIAGRAM "G"

PI	PZ
OPEN 90 85	
CLOSE 65 40	

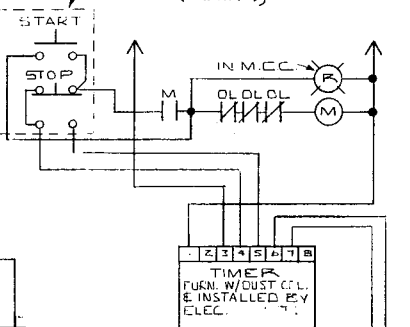
R1, R2, R3 ARE IN ALTERNATOR ENCLOSURE AT MOTOR, ELEC. CONT. SHALL FURNISH & INSTALL SQUARE D CO. ALTERNATOR CLASS 9039 TYPE PG-1. PRESSURE SWITCHES PI & PZ FURNISHED BY GEN. CONTRACTOR.



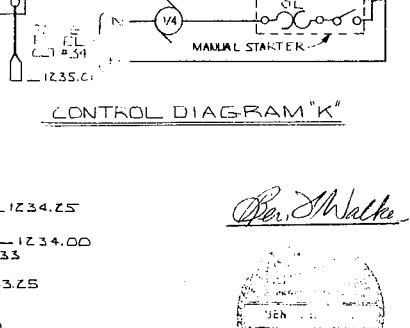
CONTROL DIAGRAM "H"



CONTROL DIAGRAM "I"



CONTROL DIAGRAM "J"



CONTROL DIAGRAM "K"

REVISIONS	
NO.	DATE

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES & MINERAL INDUSTRIES

ACID STREAM TREATMENT PLANT  
MOTOR CONTROL CENTER

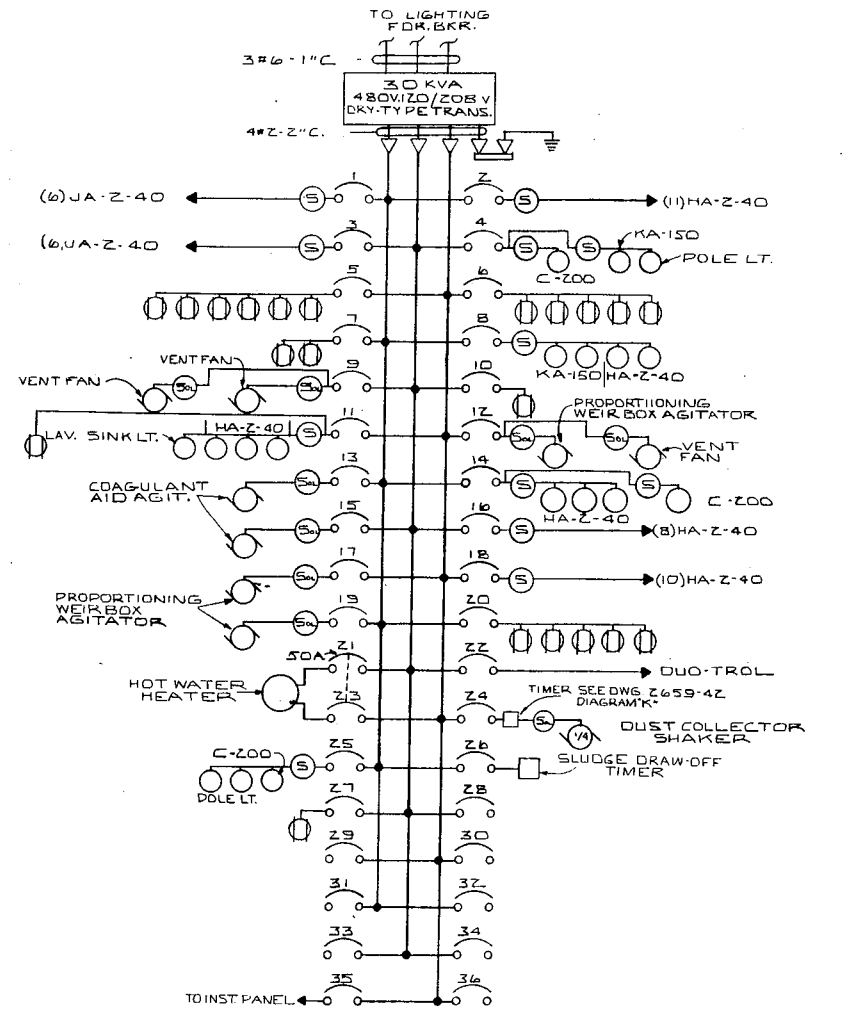
APPROVAL: *A. F. Rankin*

DRAWN BY: P.E.H.  
CHECKED BY: B.F.W.  
SCALE: AS SHOWN

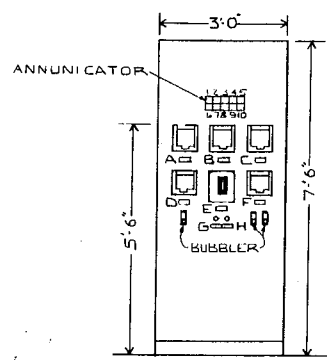
THE CHESTER ENGINEERS  
PITTSBURGH, PENNSYLVANIA

SHEET NUMBER: 22  
DRAWING NUMBER: 2659-42

DATE: MAY, 1968



LIGHTING PANEL

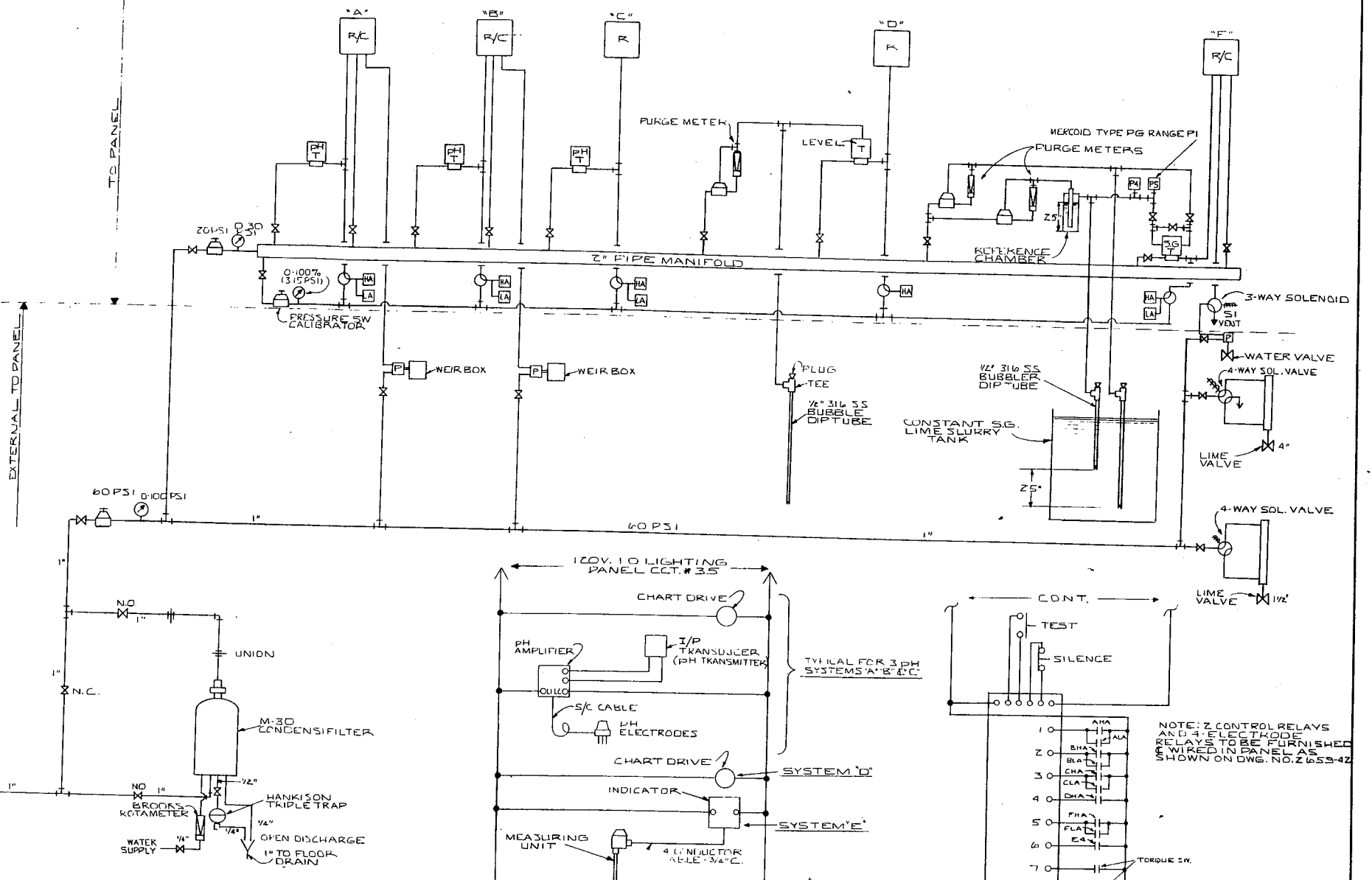


NAMEPLATE SCHEDULE

A	NEUTRALIZATION TANK PH
B	CLARIFIER PH
C	EFFLUENT PH
D	LAGOON LEVEL
E	LIME SLURRY TANK LEVEL
F	SPECIFIC GRAVITY LIME SLURRY
G	ALARM SILENCE
H	LAMP TEST

ANNUNCIATOR SCHEDULE

1	NEUTRALIZATION TANK PH
2	CLARIFIER PH
3	EFFLUENT PH
4	LAGOON LEVEL
5	SPECIFIC GRAVITY
6	PUMP WELL LEVEL
7	CLARIFIER COLLECTOR
8	SLUDGE THICKENER DRIVE
9	(BLANK)
10	(BLANK)



- LEGEND
- SHUT-OFF VALVE
  - 1/4" HOKE NEEDLE VALVE
  - 1/2" BALL VALVE
  - MANUAL PRESSURE REDUCING VALVE
  - PNEUMATIC TRANSMITTER
  - STRIP CHART RECORDER
  - STRIP CHART RECORDER WITH PNEUMATIC CONTROLLER
  - PNEUMATIC POSITIONER
  - 3-WAY MANUAL AIR SWITCH

NOTE: ALL TUBING SHALL BE 1/4" OD. HARD COPPER UNLESS OTHERWISE NOTED.  
ALL TUBING FITTINGS, VALVES, PRESSURE REDUCING VALVES, BALL VALVES, ETC. FURNISHED IN PANEL SHALL BE FURNISHED IN STALLEY GENERAL CONTRACTOR.

REVISIONS

NO.	DATE	DESCRIPTION

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES & MINERAL INDUSTRIES

ACID STREAM TREATMENT PLANT  
LIGHTING PANEL &  
INSTRUMENT DIAGRAMS

DRAWN BY P.E.H.  
CHECKED BY B.F.W.  
SCALE AS SHOWN

THE CHESTER ENGINEERS  
PITTSBURGH, PENNSYLVANIA

SHEET NUMBER 23  
DRAWING NUMBER 2659-43  
DATE MAY, 1968

APPROVAL

*A. F. Lisatti*

PROFESSIONAL ENGINEER  
A. F. LISATTI

PROJECT NO. SL-104