



Town of Simsbury

933 HOPMEADOW STREET

SIMSBURY, CONNECTICUT 06070

ADDENDUM #1 August 25, 2017

DOOR ACCESS SYSTEM REPLACEMENT WATER POLLUTION CONTROL FACILITY

This addendum form is part of the Invitation to Bid document for the above referenced project and modifies the original document as noted below. Please acknowledge receipt of addenda in the submitted Bid.

Simsbury Water Pollution Control staff has verified the system "glass break" sensors are currently wired into the system as shown on sheets 1 and 2 as part of this addendum.

DRAWINGS

1. Sheet 1
 - a. Security Access System Riser Diagram
2. Sheet 2
 - a. Security Access Control- Building 1
3. Sheet 3
 - a. Security Access Panels Buildings 2A, 6, and 10
4. Sheet 4-10
 - a. Buildings 1, 2A, 2B, 3, 6, 8, 9, and 10 equipment layout

END OF ADDENDUM NO. 1

SIMSBURY WASTEWATER TREATMENT FACILITY

PUMP CHAMBER
#1

PRETREATMENT
BLDG.

PUMP BLDG.

SLUDGE PROCESSING
BLDG.

SLUDGE STORAGE
BLDG.

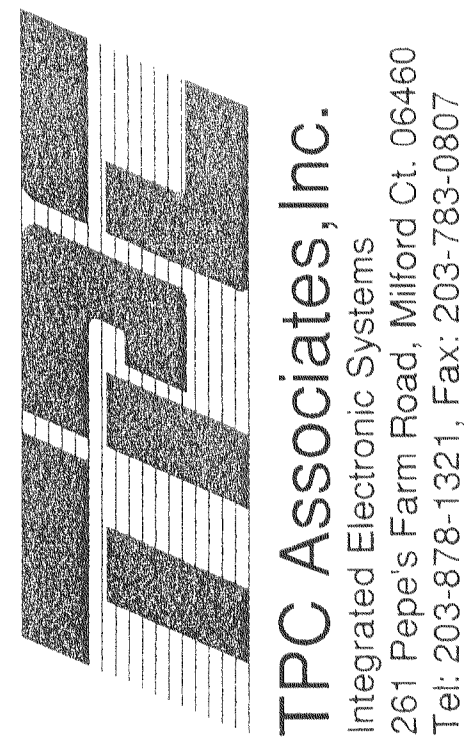
SECONDARY
BLDG.

ELECTRICAL
BLDG.

OUTFALL
PUMP STATION

- WIRING:
- A - RS-485 DATA WIRING BETWEEN PANELS USE BELDEN #9368
 - B - DOOR CONTACT USE BELDEN #9407
 - C - GLASS BREAK DETECTOR USE BELDEN #9407
 - D - GLASS BREAK DETECTOR POWER USE BELDEN #9409
 - E - CARD READER USE BELDEN #9514
 - F - REQUEST TO EXIT USE BELDEN #9407
 - G - REQUEST TO EXIT POWER IF USING PIR BELDEN #9409
 - H - DOOR LOCK POWER USE BELDEN #9409

NOTE:
SEE DRAWINGS SEC-2 AND SEC-3 FOR ADDITIONAL WIRING
OF DEVICES.



SIMSBURY WASTEWATER TREATMENT
SIMSBURY, CT

SECURITY/CARD ACCESS SYSTEM
RISER DIAGRAM

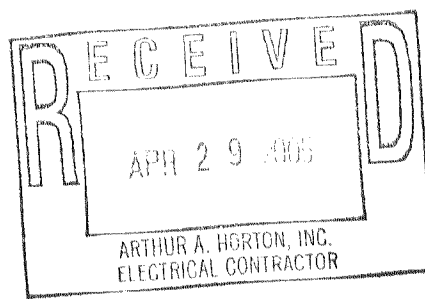
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ORIGINAL RELEASE	07/26/04
REV #	DESCRIPTION

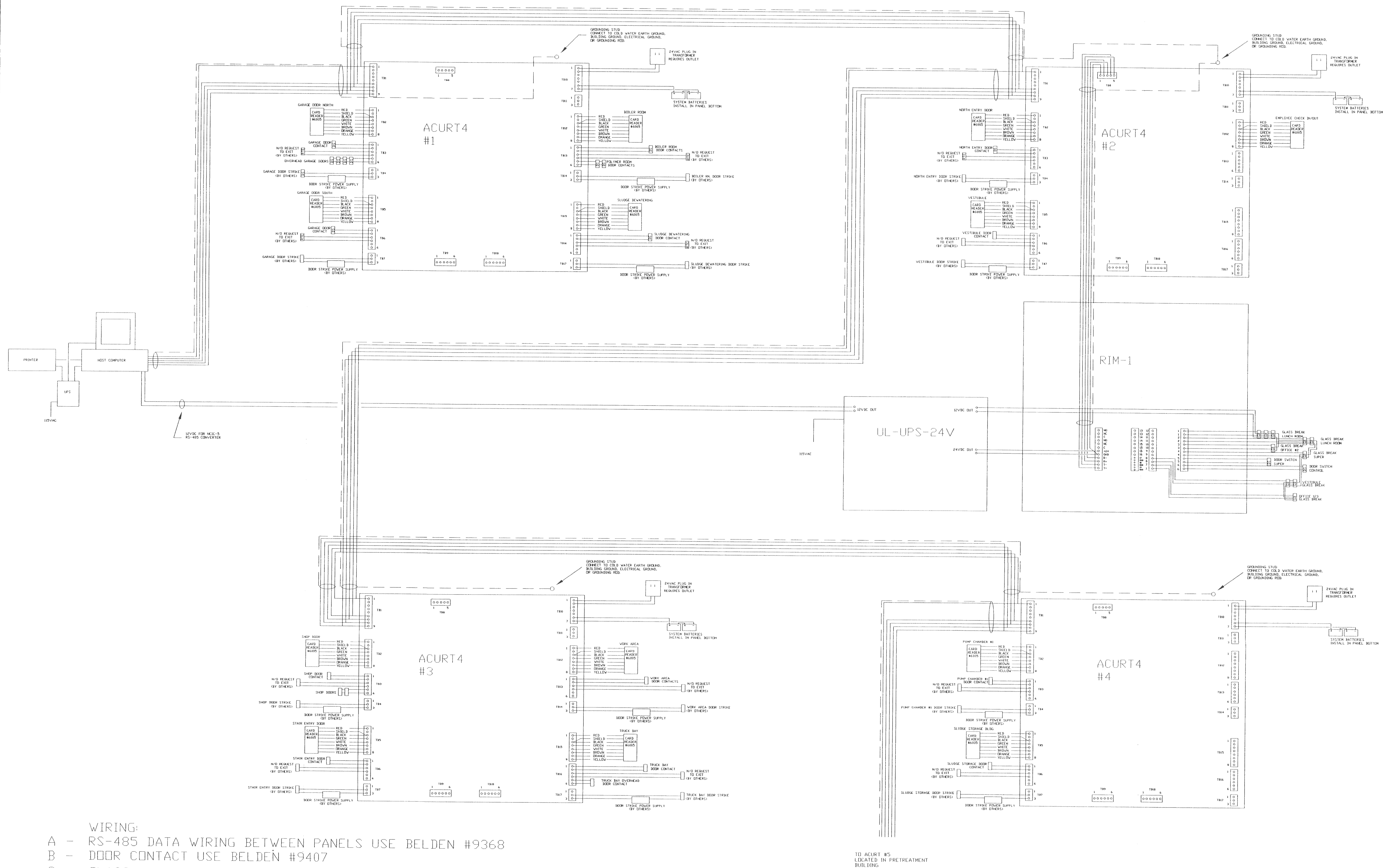
DRAWN: A. SULLIVAN
DATE: 07/26/04
SCALE: N/A

DWG. NUMBER

SEC-1

SHEET 1 OF 1 SHEETS





**WASTEWATER TREATMENT FACILITY
SIMSBURY, CT.**

**SECURITY ACCESS CONTROL
SLUDGE PROCESSING BUILDING**

ORIGINAL RELEASE 12/21/04
REV# DESCRIPTION DATE

DRAWN: AL SULLIVAN

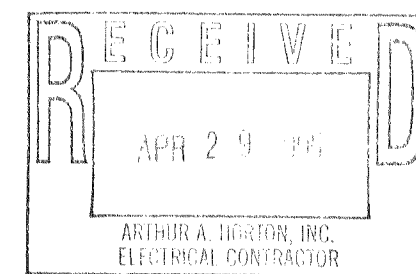
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SEC-2

SHEET 1 OF 1 SHEETS



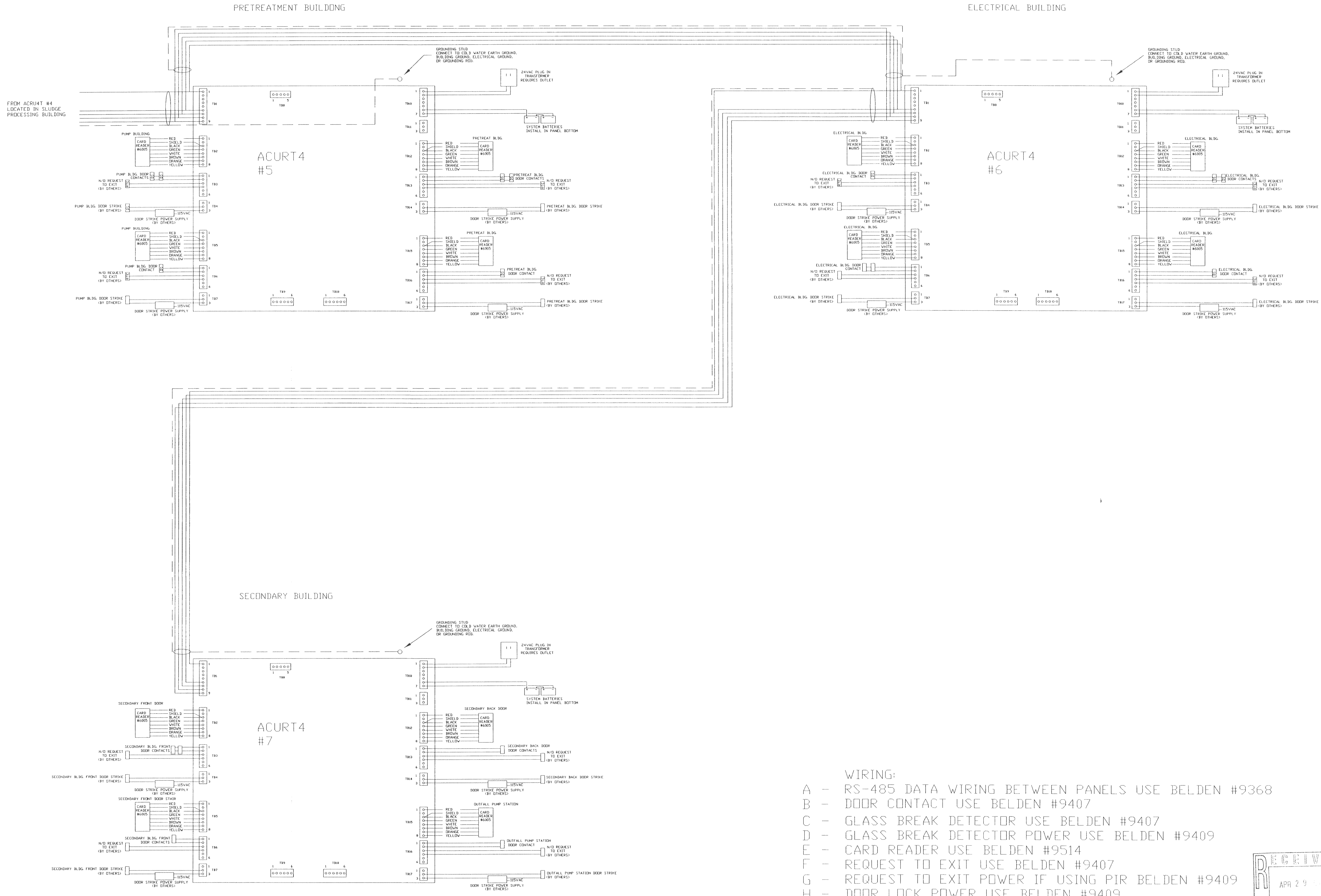
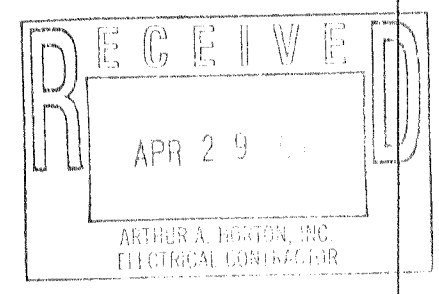
**WASTEWATER TREATMENT FACILITY
SIMSBURY, CT.**

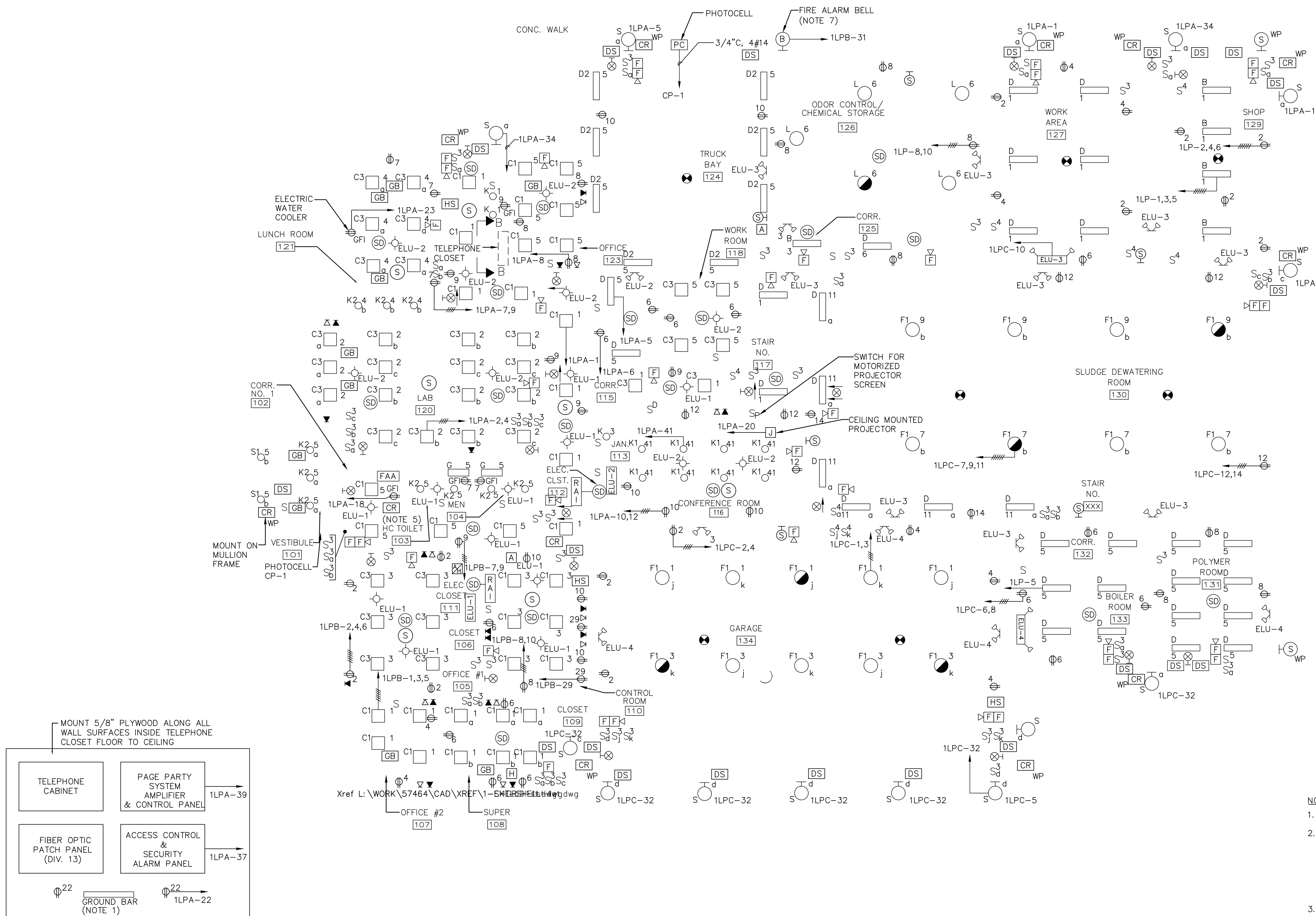
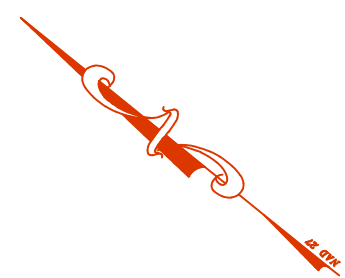
SECURITY CARD ACCESS
PRETREAT ELECTRICAL, SECONDARY BLDGS.

ORIGINAL RELEASE 12/21/04
REV# DESCRIPTION DATE

DRAWN: AL SULLIVAN
DATE: 12/21/04
SCALE: N/A

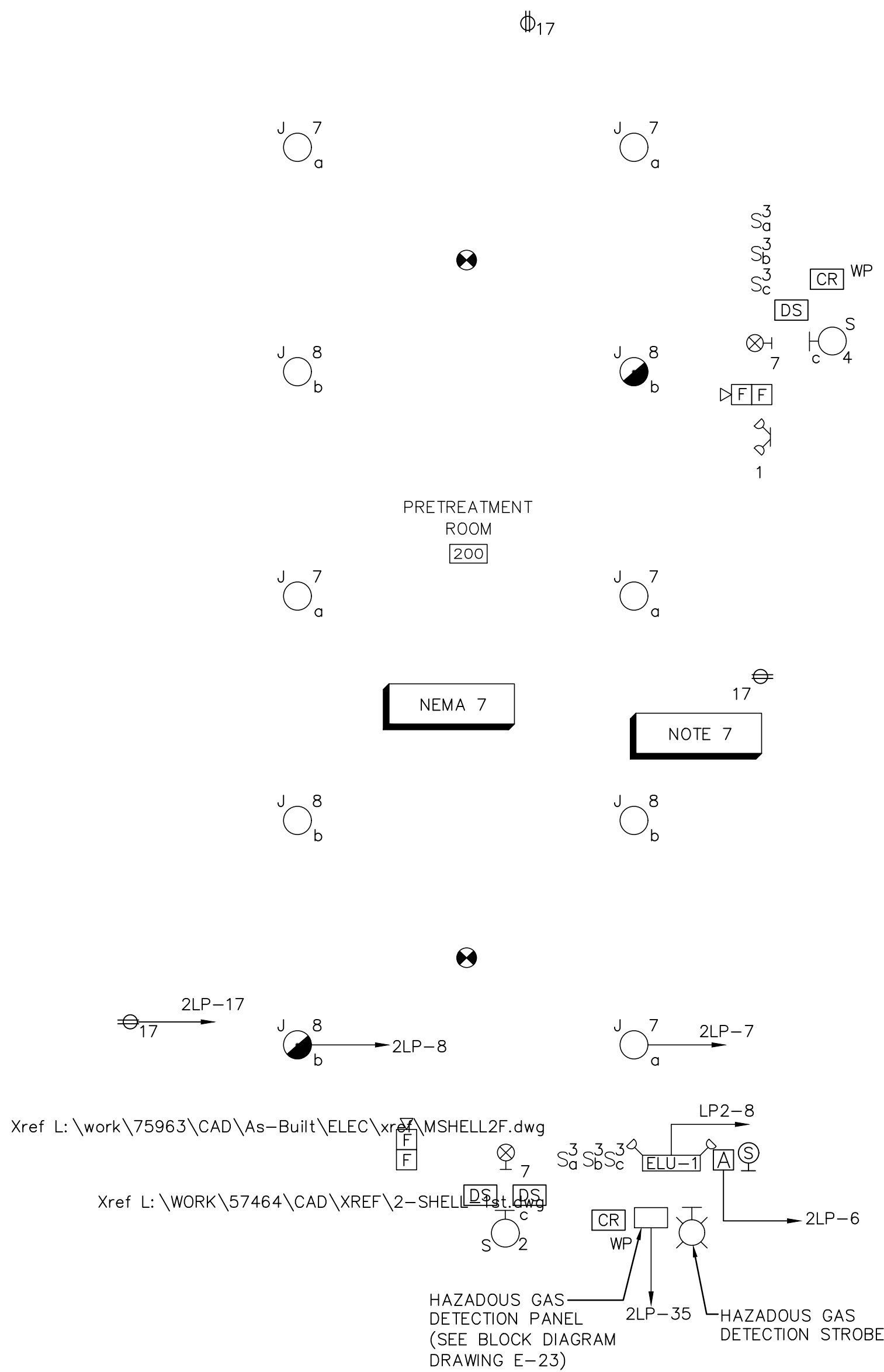
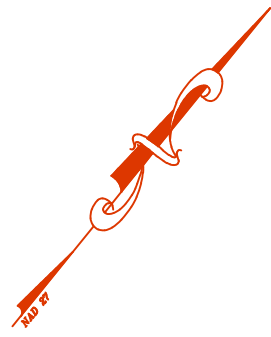
DWG. NUMBER
SEC-3
SHEET 1 OF 1 SHEETS



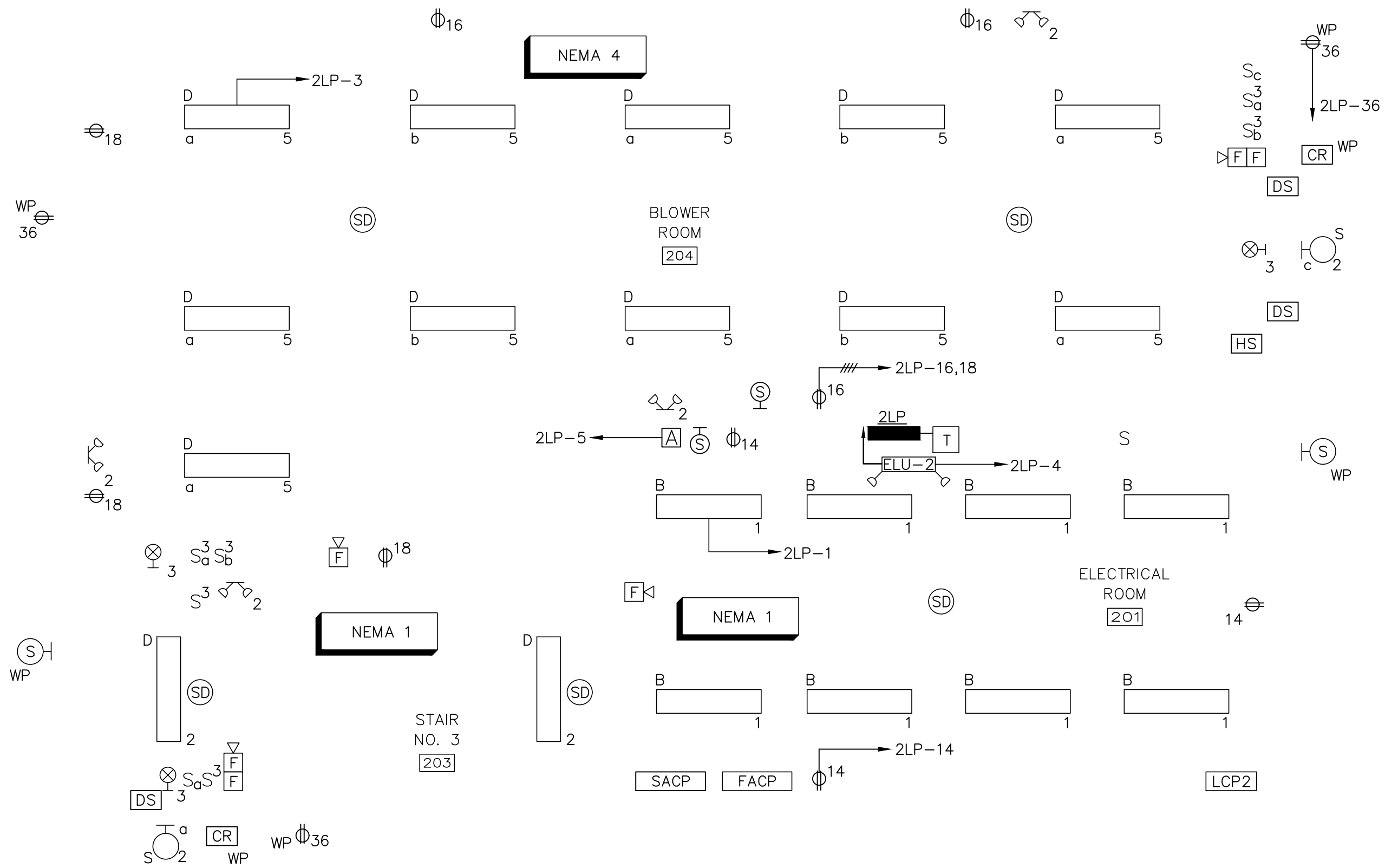


- NOTES:
- SEE DRAWING E-1 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
 - CONNECT REMOTE EMERGENCY HEADS IDENTIFIED WITH UNIQUE NUMBERS TO THE EMERGENCY LIGHTING UNITS (ELU) OF THE SAME NUMBER. MINIMUM WIRE SIZE SHALL BE #10 IN 1/2" CONDUIT, WITH RECEWAY TYPE AS REQUIRED BY THE NEMA CLASSIFICATION OF THE AREA SERVED. PROVIDE #8 WIRE TO REMOTE HEADS GREATER THAN 50 FEET CABLE DISTANCE FROM ELU. PROVIDE JUNCTION BOX ABOVE ELU TO SPLICE WIRING TO SIZE REQUIRED FOR ELU.
 - EXIT LIGHTS SHALL BE POWERED FROM UNSWITCHED LINE OF NEAREST LIGHTING CIRCUIT.
 - VERIFY CORRECT LIGHT SWITCH LOCATION, PRIOR TO INSTALLATION TO INSURE THAT THE SWITCHES ARE NOT INSTALLED BEHIND OPENED DOOR.
 - CARD READER FOR EMPLOYEE CHECK IN AND CHECK OUT.
 - SEE DRAWING 1E-5 FOR NEMA AREA CLASSIFICATIONS.
 - COORDINATE EXACT LOCATION OF FIRE ALARM BELL PRIOR TO INSTALLING CONDUIT AND WIRE.

DM
AS NOTED
DM
WS



PRETREATMENT BUILDING
LIGHTING AND MISC. SYSTEMS PLAN
SCALE: 1/4" = 1'-0"



PUMP BUILDING
LIGHTING AND MISC. SYSTEMS PLAN
SCALE: 1/4" = 1'-0"

NOTES

- SEE DRAWING E-1 FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES.
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- EXIT LIGHTS SHALL BE POWERED FROM UNSWITCHED LINE OF NEAREST LIGHTING CIRCUIT.
- VERIFY CORRECT LIGHT SWITCH LOCATION, PRIOR TO INSTALLATION TO ENSURE THAT THE SWITCHES ARE NOT INSTALLED BEHIND OPENED DOOR.
- SEE DRAWING E-15 FOR LIGHTING FIXTURE SCHEDULE.
- SEE DRAWING E-17 FOR PANELBOARD SCHEDULE.
- ALL 120V CIRCUITS IN PRETREATMENT BUILDING FED FROM PANELBOARD 2LP.

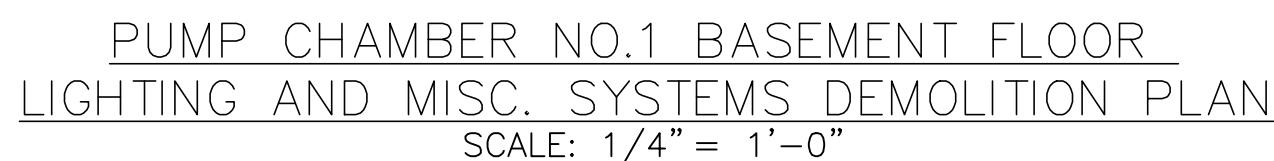
1 REVISED TO RECORD PLAN

PRETREATMENT/PUMP BUILDING FIRST FLOOR
LIGHTING AND MISC. SYSTEMS PLAN

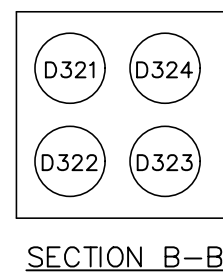
DM AS NOTED

DM

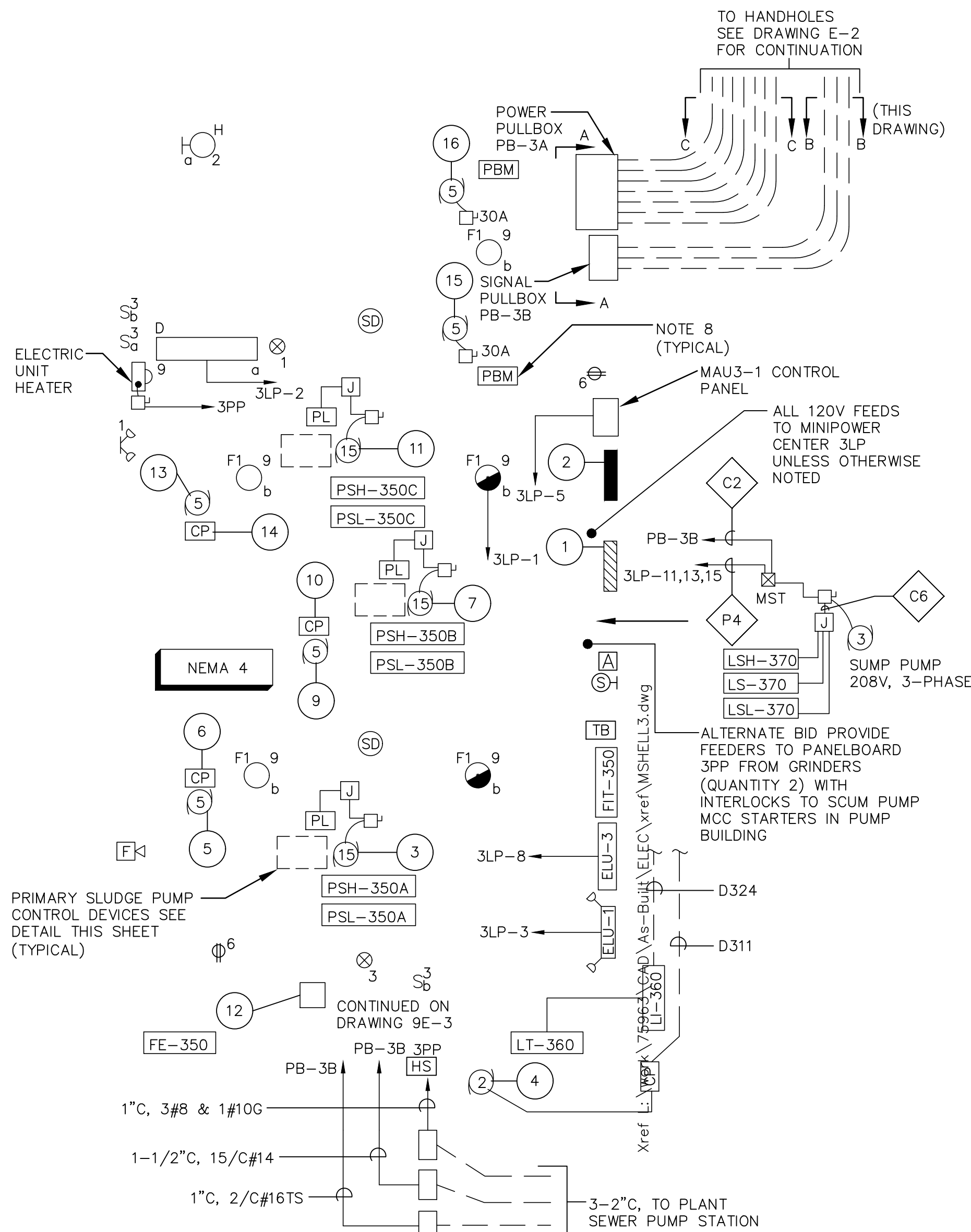
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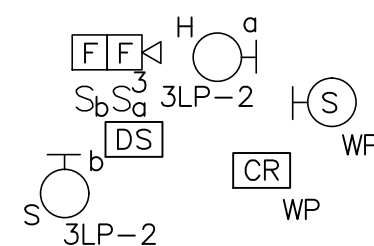
- D1. REMOVE ALL EXISTING ELECTRICAL EQUIPMENT IN IN THIS AREA UNLESS OTHERWISE NOTED TO REMAIN. INCLUDING LIGHTING FIXTURES, SWITCHES, RECEPTACLES, EXPOSED CONDUIT, SURFACE AND FLUSH DEVICES, BOXES, DEVICE PLATES, ETC. REMOVE ALL WIRING FROM EXISTING CONDUITS, CUT BACK AND ABANDON ALL CONCEALED CONDUITS AS REQUIRED.
- D2. MAINTAIN AND RESTORE IF INTERRUPTED, ALL CONDUITS AND FEEDERS PASSING THROUGH ALL RENOVATED AREAS AND SERVICING UNDISTURBED AREAS.
- D3. ALL MATERIAL SHALL BE REMOVED FROM THE JOB SITE UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR OWNER.



D301	D302	D303
D305	D306	D307
D304	D308	D311

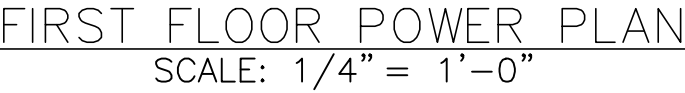
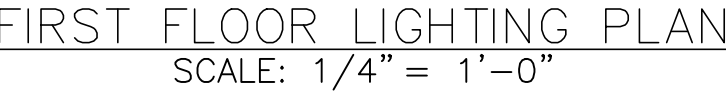


- 1 480 VOLT POWER PANELBOARD 3PP
- 2 MINI POWER CENTER 3LP
- 3 PRIMARY SLUDGE PUMP NO.1
- 4 PRIMARY SCUM MIXER
- 5 PRIMARY SLUDGE PUMP GRINDER NO.1
- 6 PRIMARY SLUDGE PUMP GRINDER NO.1 CONTROL PANEL
- 7 PRIMARY SLUDGE PUMP NO.2
- 8 NOT USED
- 9 PRIMARY SLUDGE PUMP GRINDER NO.2
- 10 PRIMARY SLUDGE PUMP GRINDER NO.2 CONTROL PANEL
- 11 PRIMARY SLUDGE PUMP NO.3
- 12 FIRE ALARM SYSTEM JUNCTION BOX
- 13 PRIMARY SLUDGE PUMP GRINDER NO.3
- 14 PRIMARY SLUDGE PUMP GRINDER NO.3 CONTROL PANEL
- 15 PRIMARY SCUM PUMP NO.1
- 16 PRIMARY SCUM PUMP NO.2



4. SEE DRAWING E-1 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
5. SEE DRAWING E-15 FOR CONDUIT AND CABLE SCHEDULE.
6. SEE DRAWING E-4 FOR DUCTBANK SECTIONS, CONDUIT AND CABLE SCHEDULES.
7. SEE DRAWING E-12 FOR ALL 480V POWER WIRING REQUIREMENTS NOT SHOWN.
8. CONNECT REMOTE EMERGENCY HEADS IDENTIFIED WITH UNIQUE NUMBERS TO THE EMERGENCY LIGHTING UNITS (ELU) OF THE SAME NUMBER. MINIMUM WIRE SIZE SHALL BE #10 IN 1/2" CONDUIT, WITH RACEWAY TYPE AS REQUIRED BY THE NEMA CLASSIFICATION OF THE AREA SERVED. PROVIDE #8 WIRE TO REMOTE HEADS GREATER THAN 50 FEET CABLE DISTANCE FROM ELU. PROVIDE JUNCTION BOX ABOVE ELU TO SPLICE WIRING TO SIZE REQUIRED FOR ELU.
9. EXIT LIGHTS SHALL BE POWERED FROM UNSWITCHED LINE OF NEAREST LIGHTING CIRCUIT.
10. VERIFY CORRECT LIGHT SWITCH LOCATION, PRIOR TO INSTALLATION TO INSURE THAT THE SWITCHES ARE NOT INSTALLED BEHIND OPENED DOOR.
11. FOR WIRING TO CONTROL DEVICES, SEE BLOCK DIAGRAMS ON DRAWING E-23.
12. GROUND ALL GRADE AND ROOF MOUNTED METALLIC STRUCTURES IN ACCORDANCE WITH NEC.
13. SEE DRAWING E-23 FOR INSTRUMENTATION BLOCK WIRING DIAGRAM.
14. CORE DRILL AND PROVIDE CONDUIT WALL SEALS AT ALL PENETRATIONS THROUGH EXTERIOR WALL BELOW GRADE, TYPICAL.

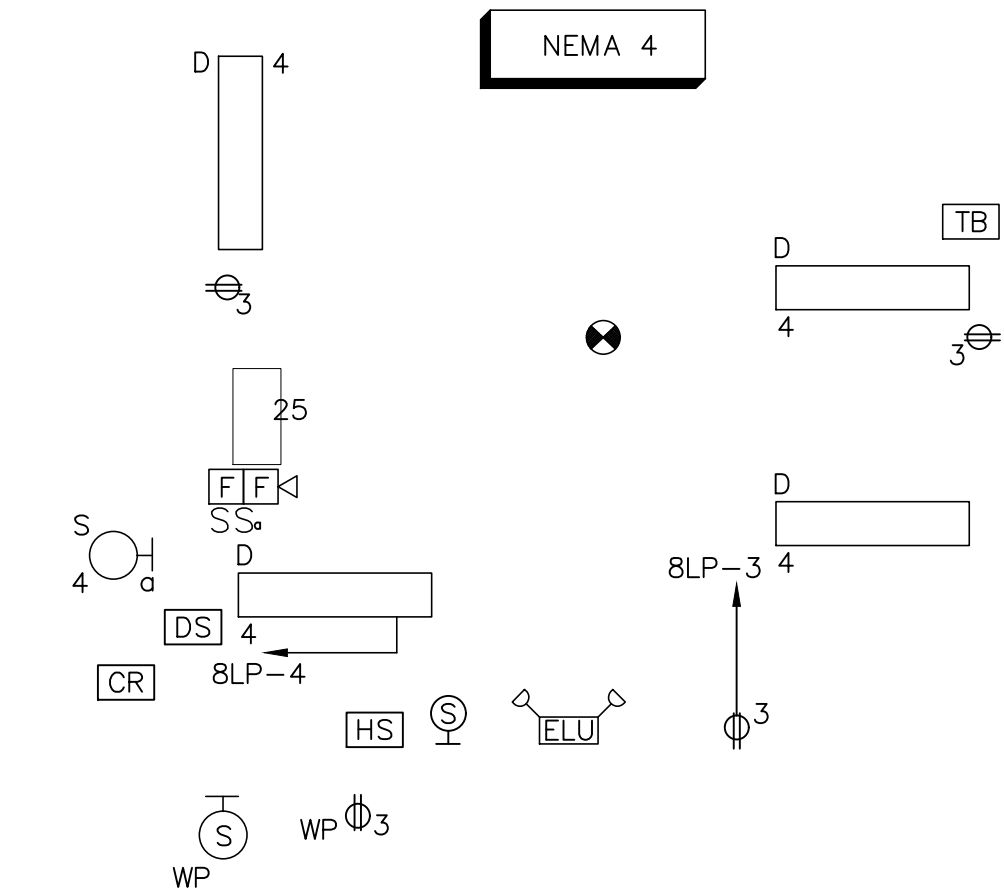
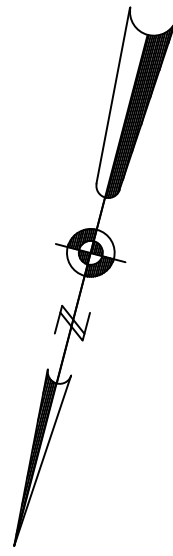
3E-1



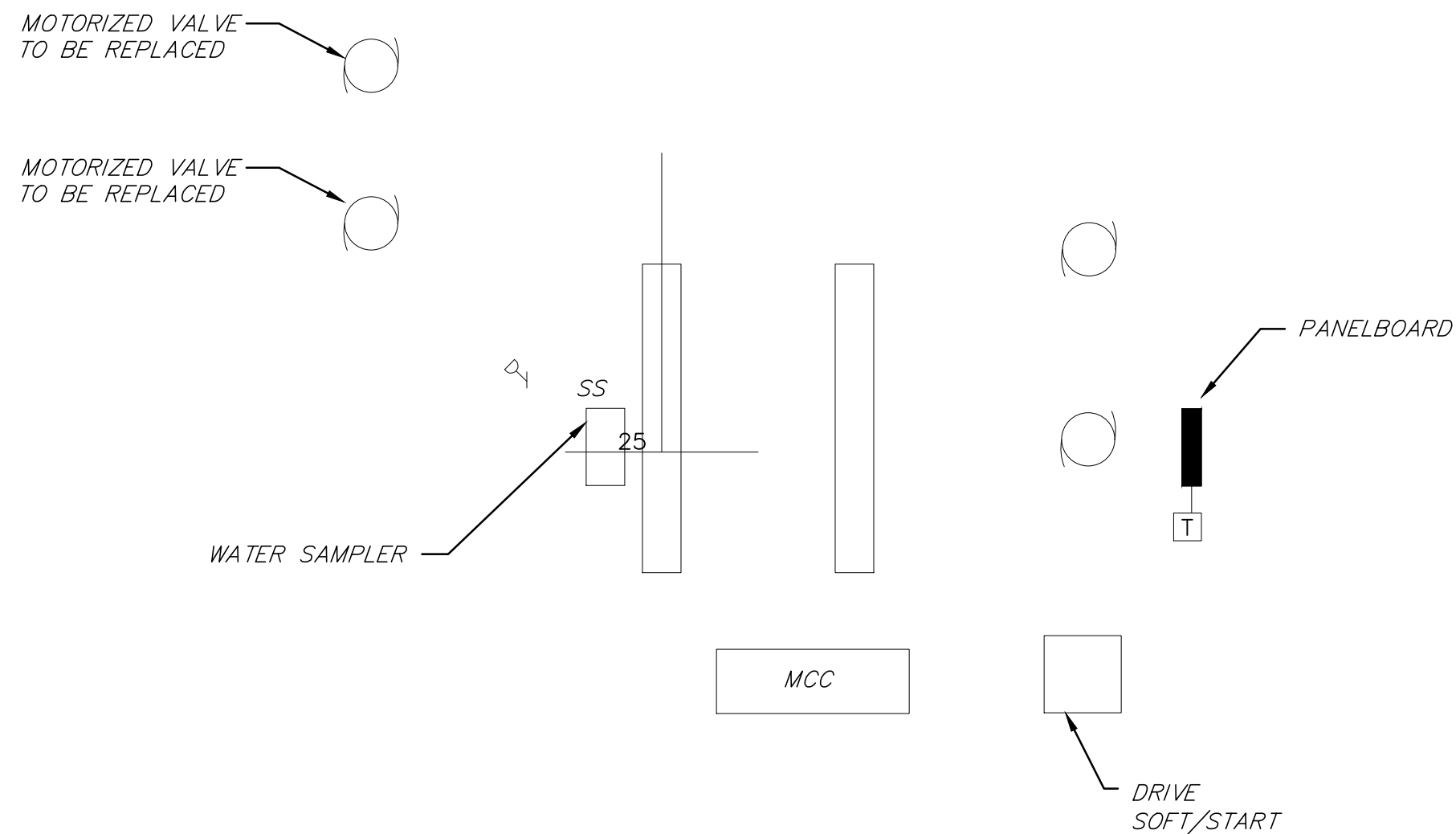
TESTS:

- SEE DRAWING E-1 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
- SEE DRAWING E-15 FOR CONDUIT AND CABLE SCHEDULE.
- SEE DRAWING E-4 FOR DUCTBANK SECTIONS, CONDUIT AND CABLE SCHEDULES.
- SEE DRAWING E-13 FOR ALL 480V POWER WIRING REQUIREMENTS NOT SHOWN.
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- PROVIDE SUFFICIENT NUMBER OF GROUND RODS TO ACHIEVE MINIMUM GROUND RESISTANCE REQUIRED BY SPECIFICATIONS.
- SEE DRAWING E-23 FOR INSTRUMENTATION BLOCK WIRING DIAGRAM.

D. PROVIDE GROUNDING CONDUCTOR FOR ALL METALLIC EQUIPMENT AND RAILINGS ON ROOF STRUCTURE PER NEC.



OUTFALL PUMP STATION
LIGHTING PLAN
SCALE: 1/4" = 1'-0"



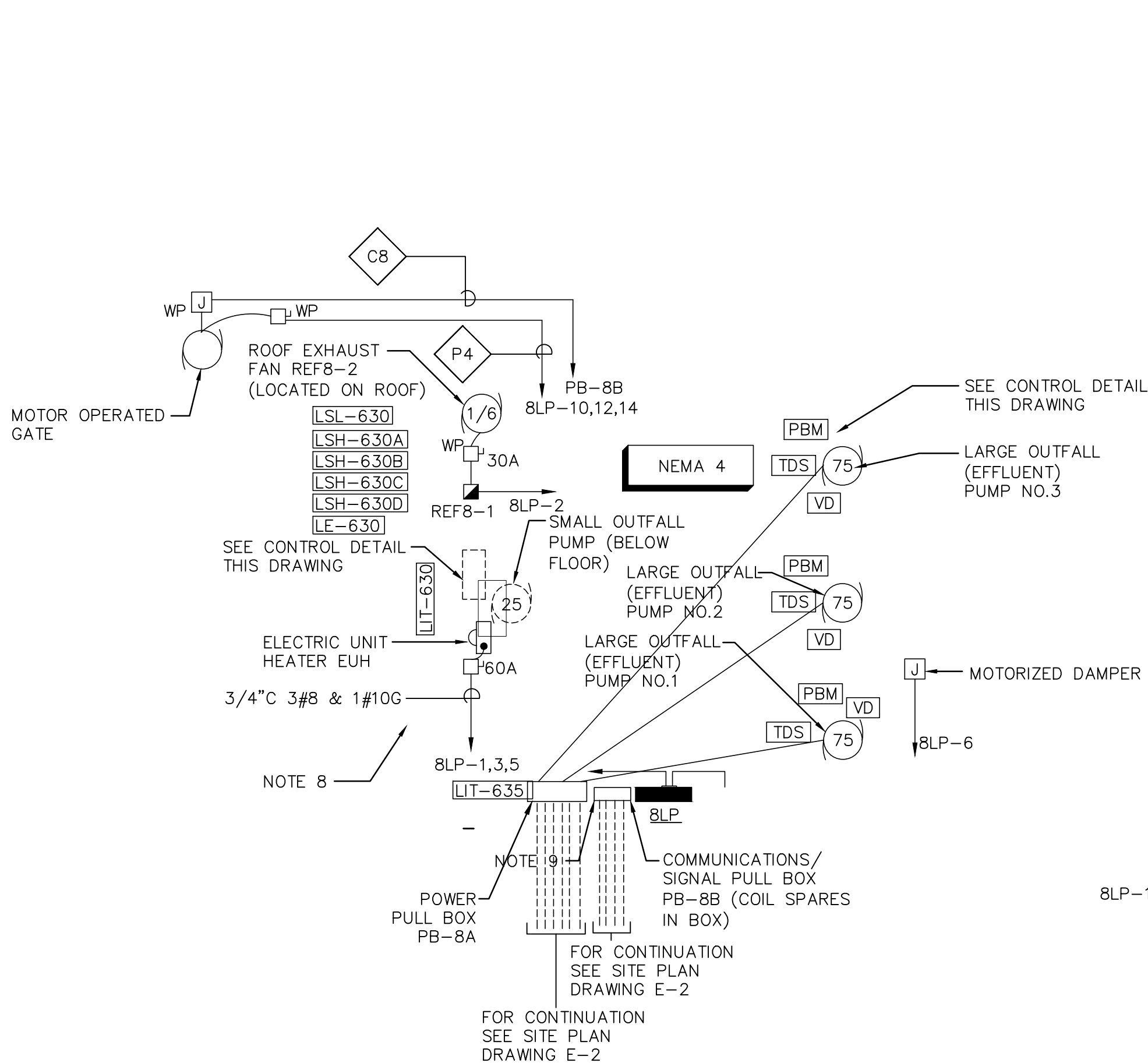
OUTFALL PUMP STATION
DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

GENERAL DEMOLITION NOTES

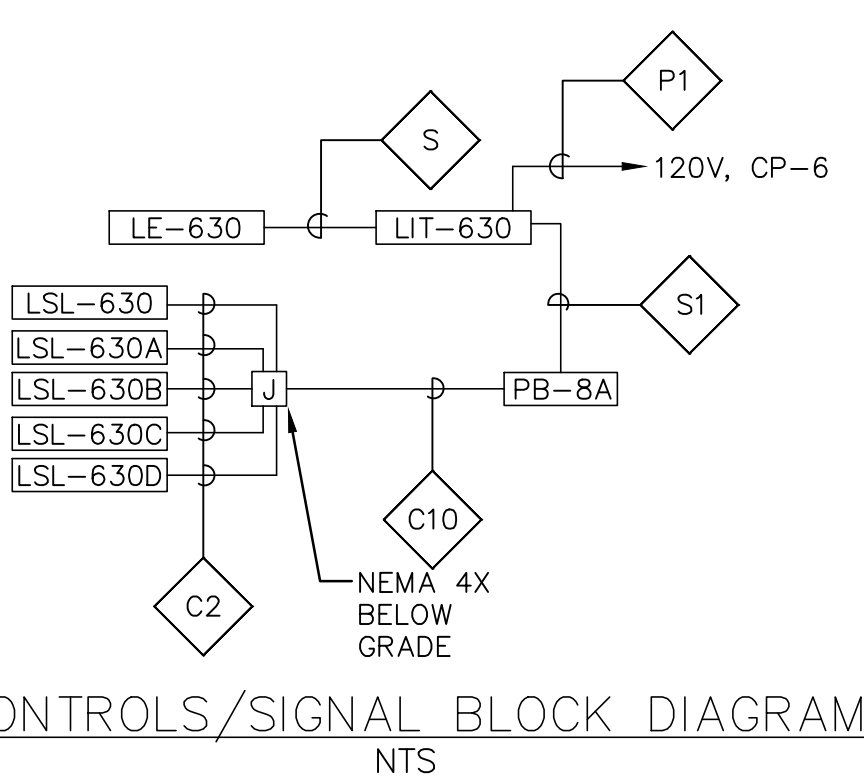
- D1. REMOVE ALL EXISTING ELECTRICAL EQUIPMENT IN IN THIS AREA UNLESS OTHERWISE NOTED TO REMAIN. INCLUDING LIGHTING FIXTURES, SWITCHES, RECEPTACLES, EXPOSED CONDUIT, SURFACE AND FLUSH DEVICES, BOXES, DEVICE PLATES, ETC. REMOVE ALL WIRING FROM EXISTING CONDUITS, CUT BACK AND ABANDON ALL CONCEALED CONDUITS AS REQUIRED.
- D2. MAINTAIN AND RESTORE IF INTERRUPTED, ALL CONDUITS AND FEEDERS PASSING THROUGH ALL RENOVATED AREAS AND SERVICING UNDISTURBED AREAS.
- D3. ALL MATERIAL SHALL BE REMOVED FROM THE JOB SITE UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR OWNER.

NOTES:

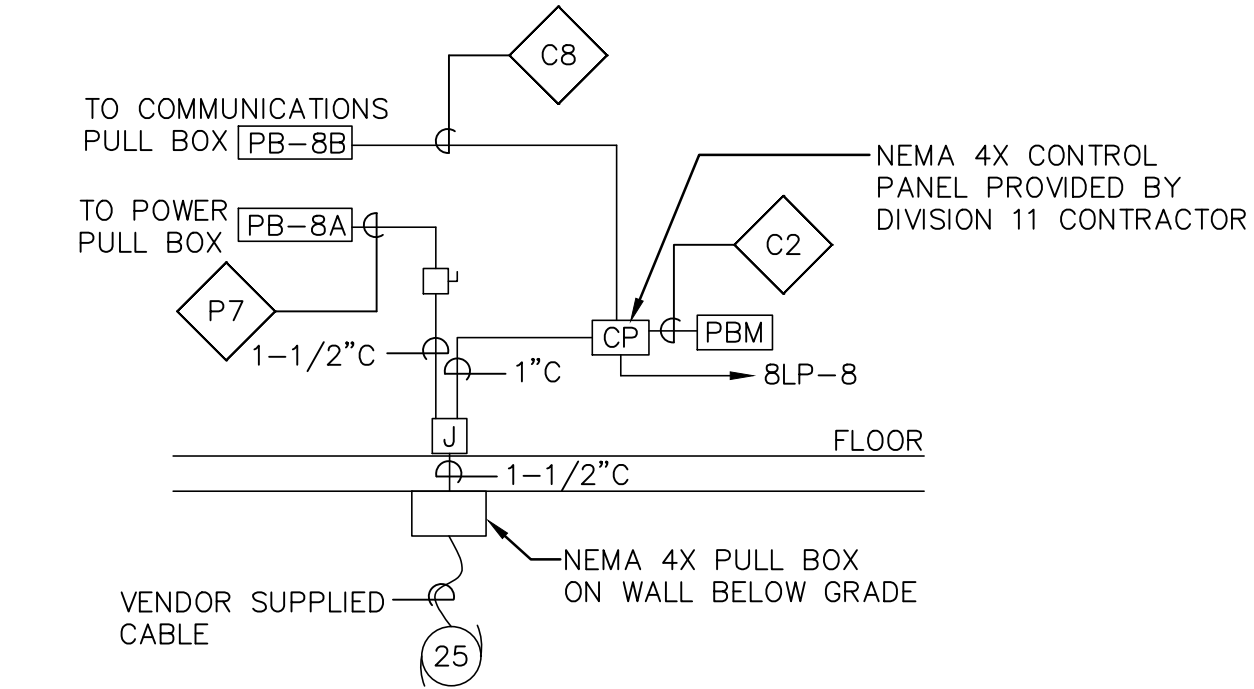
- SEE DRAWING E-1 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
- SEE DRAWING E-15 FOR CONDUIT AND CABLE SCHEDULE.
- SEE DRAWING E-4 FOR DUCTBANK SECTIONS, CONDUIT AND CABLE SCHEDULES.
- SEE DRAWING E-13 FOR ALL 480V POWER WIRING REQUIREMENTS NOT SHOWN.
- CONNECT REMOTE EMERGENCY HEADS IDENTIFIED WITH UNIQUE NUMBERS TO THE EMERGENCY LIGHTING UNITS (ELU) OF THE SAME NUMBER. MINIMUM WIRE SIZE SHALL BE #10 IN 1/2" CONDUIT, WITH RACEWAY TYPE AS REQUIRED BY THE NEMA CLASSIFICATION OF THE AREA SERVED. PROVIDE #8 WIRE TO REMOTE HEADS GREATER THAN 50 FEET CABLE DISTANCE FROM ELU. PROVIDE JUNCTION BOX ABOVE ELU TO SPLICE WIRING TO SIZE REQUIRED FOR ELU.
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- PROVIDE MINIMUM 6" X 12" METAL SIGN, RED BACKGROUND WHITE LETTERING, "TO DE-ENERGIZE POWER, OPEN BREAKERS SECONDARY BUILDING".
- EXTEND TELEPHONE WIRING TO REMOTE SITE TELEPHONE WIRING.
- SPLICE CABLES TO DISCONNECT SWITCH FOR EXISTING 2#3 & 1#4GND TO BOATHOUSE.



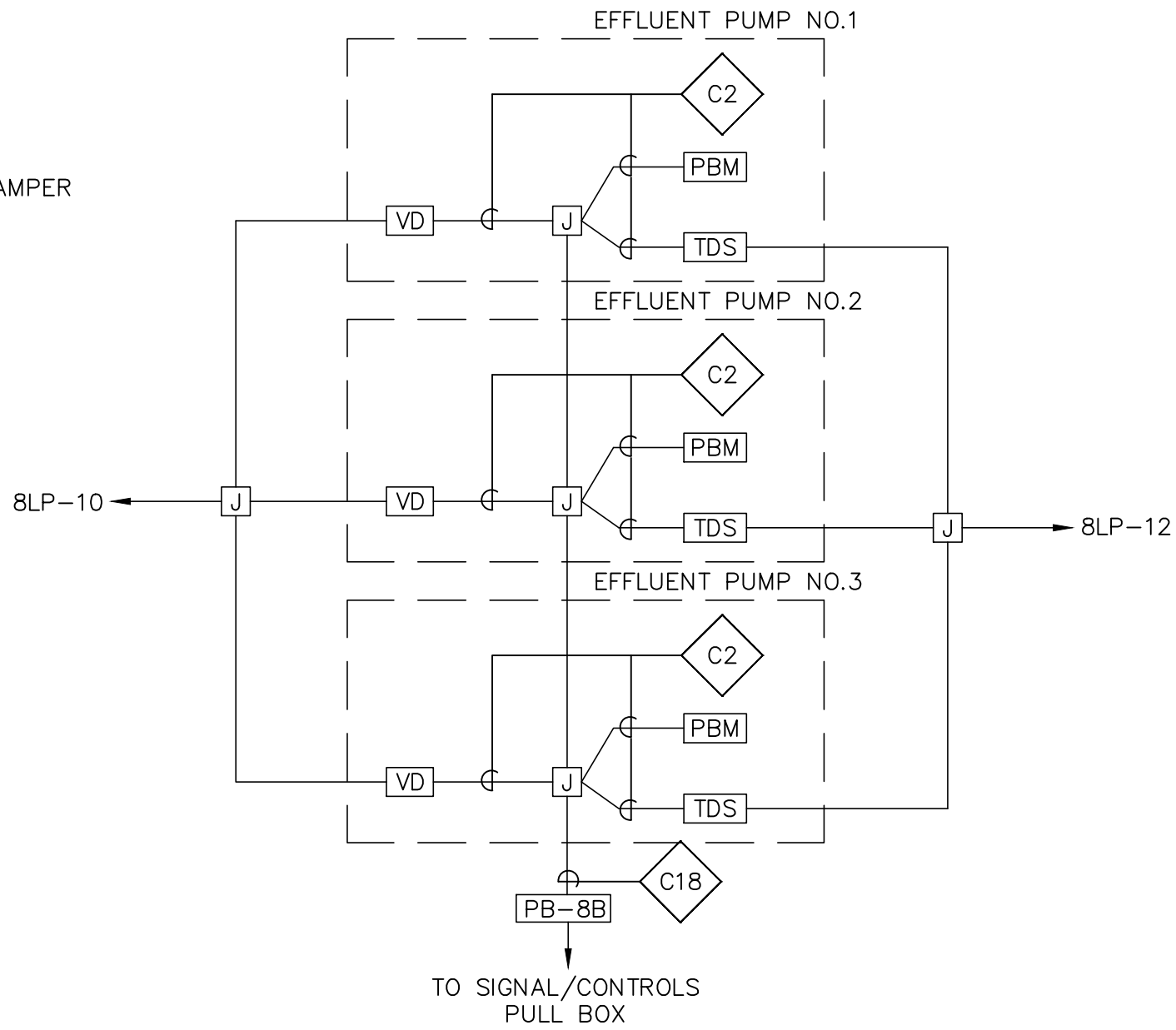
OUTFALL PUMP STATION
POWER PLAN
SCALE: 1/4" = 1'-0"



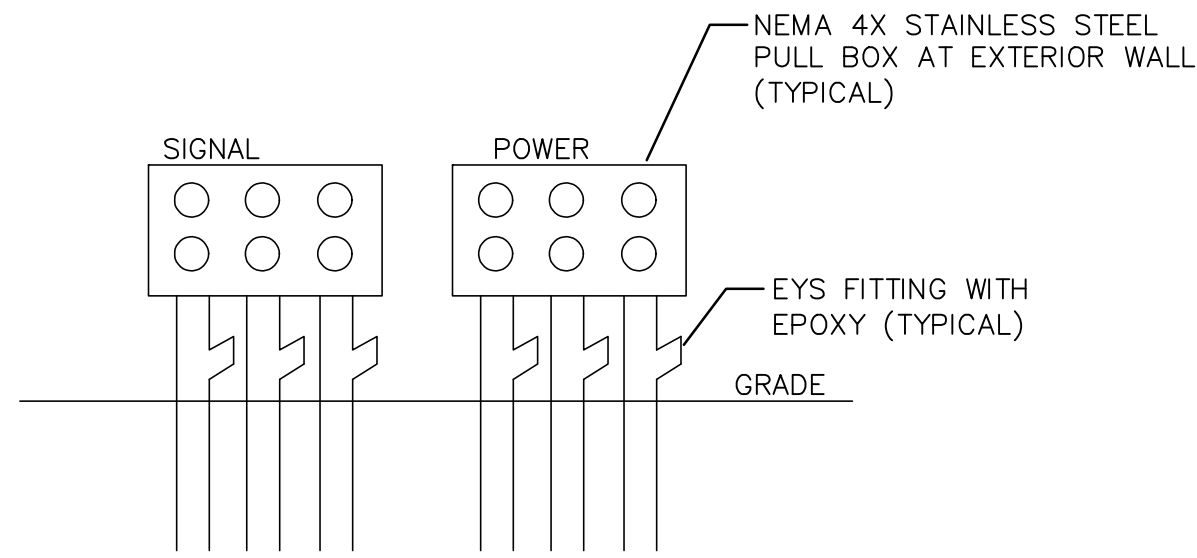
CONTROLS/SIGNAL BLOCK DIAGRAM
NTS



SMALL OUTFALL PUMP (SUBMERSIBLE)
CONTROL DETAIL
NTS



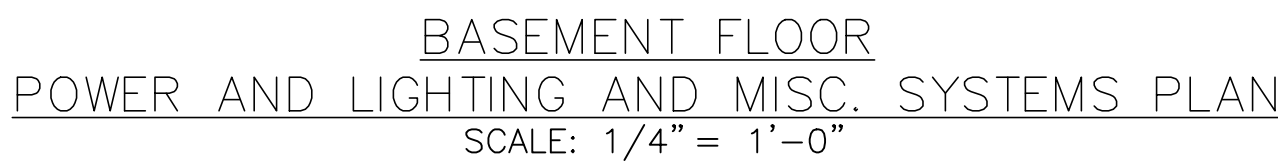
LARGE OUTFALL PUMPS NO.1, 2, 3
CONTROL DETAIL
NTS



DUCTBANK TO OUTFALL PUMP STATION
SECTION A-A
NOT TO SCALE

OUTFALL PUMP STATION
ELECTRICAL PLANS

DNM AS NOTED
DNM
WS

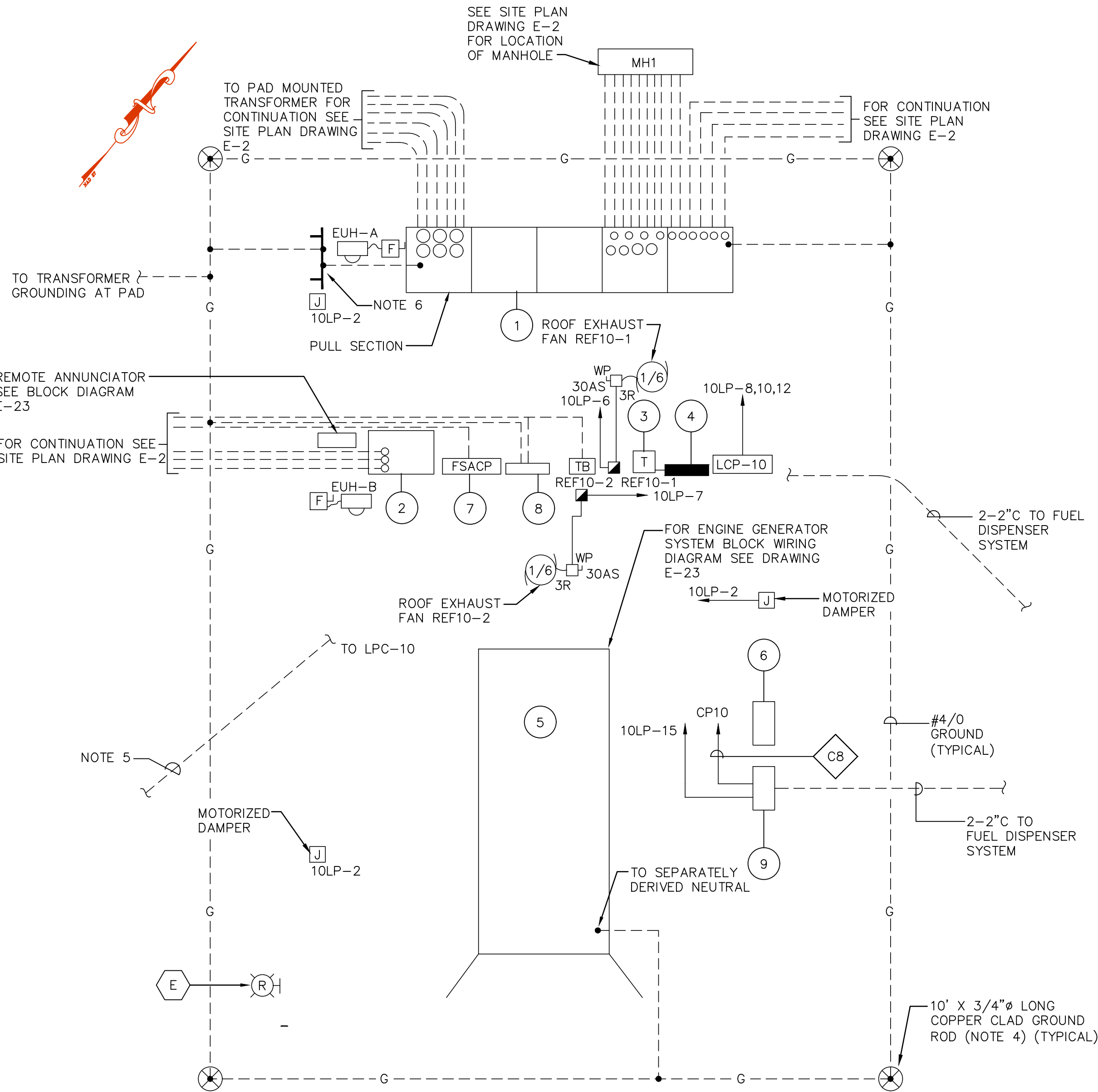


- | | |
|----|--|
| 17 | BELT FILTER PRESS GRINDER CONTROL PANEL NO.1 |
| 18 | BELT FILTER PRESS GRINDER PUMP NO.1 |
| 19 | BELT FILTER PRESS GRINDER CONTROL PANEL NO.2 |
| 20 | BELT FILTER PRESS GRINDER PUMP NO.2 |
| 21 | SCADA CONTROL PANEL CP-9 |
| 22 | SUMP PUMP MOTOR STARTER "MST" |



NOTES:

1. SEE DRAWING E-1 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
2. SEE DRAWING E-15 FOR CONDUIT AND CABLE SCHEDULE.
3. SEE DRAWING E-4 FOR DUCTBANK SECTIONS, CONDUIT AND CABLE SCHEDULES.
4. SEE DRAWING E-14 FOR ALL 480V POWER WIRING REQUIREMENTS NOT SHOWN.
5. CONNECT REMOTE EMERGENCY HEADS IDENTIFIED WITH UNIQUE NUMBERS TO THE EMERGENCY LIGHTING UNITS (ELU) OF THE SAME NUMBER. MINIMUM WIRE SIZE SHALL BE #10 IN 1/2" CONDUIT, WITH REWEAVEY TYPE AS REQUIRED BY THE NEMA CLASSIFICATION OF THE AREA SERVED. PROVIDE #8 WIRE TO REMOTE HEADS GREATER THAN 50 FEET CABLE DISTANCE FROM ELU. PROVIDE JUNCTION BOX ABOVE ELU TO SPLICE WIRING TO SIZE REQUIRED FOR ELU.
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8. PROVIDE SUFFICIENT NUMBER OF GROUND RODS TO ACHIEVE MINIMUM GROUND RESISTANCE REQUIRED BY SPECIFICATIONS.
9. SEE DRAWING E-23 FOR INSTRUMENTATION BLOCK WIRING DIAGRAM.
10. PROVIDE 24" X 2" COPPER GROUND BUS WITH INSULATORS AND IDENTIFY AS BUILDING GROUNDING POINT. PROVIDE GROUNDING CONDUCTORS TO GROUND BUSES, TRANSFORMER NEUTRALS, AND ROOF MOUNTED EQUIPMENT.



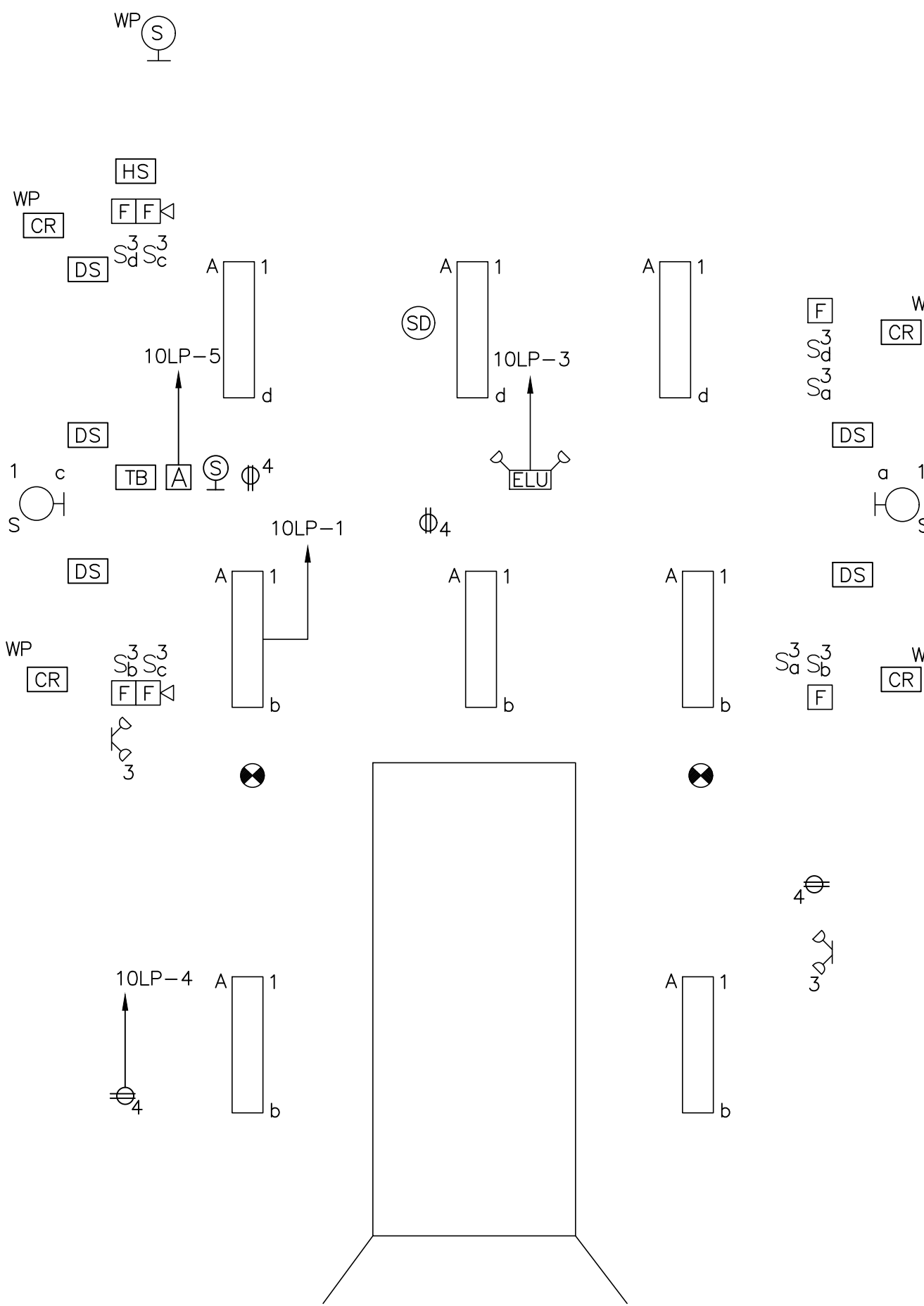
POWER PLAN
SCALE: 1/4" = 1'-0"

EQUIPMENT LEGEND

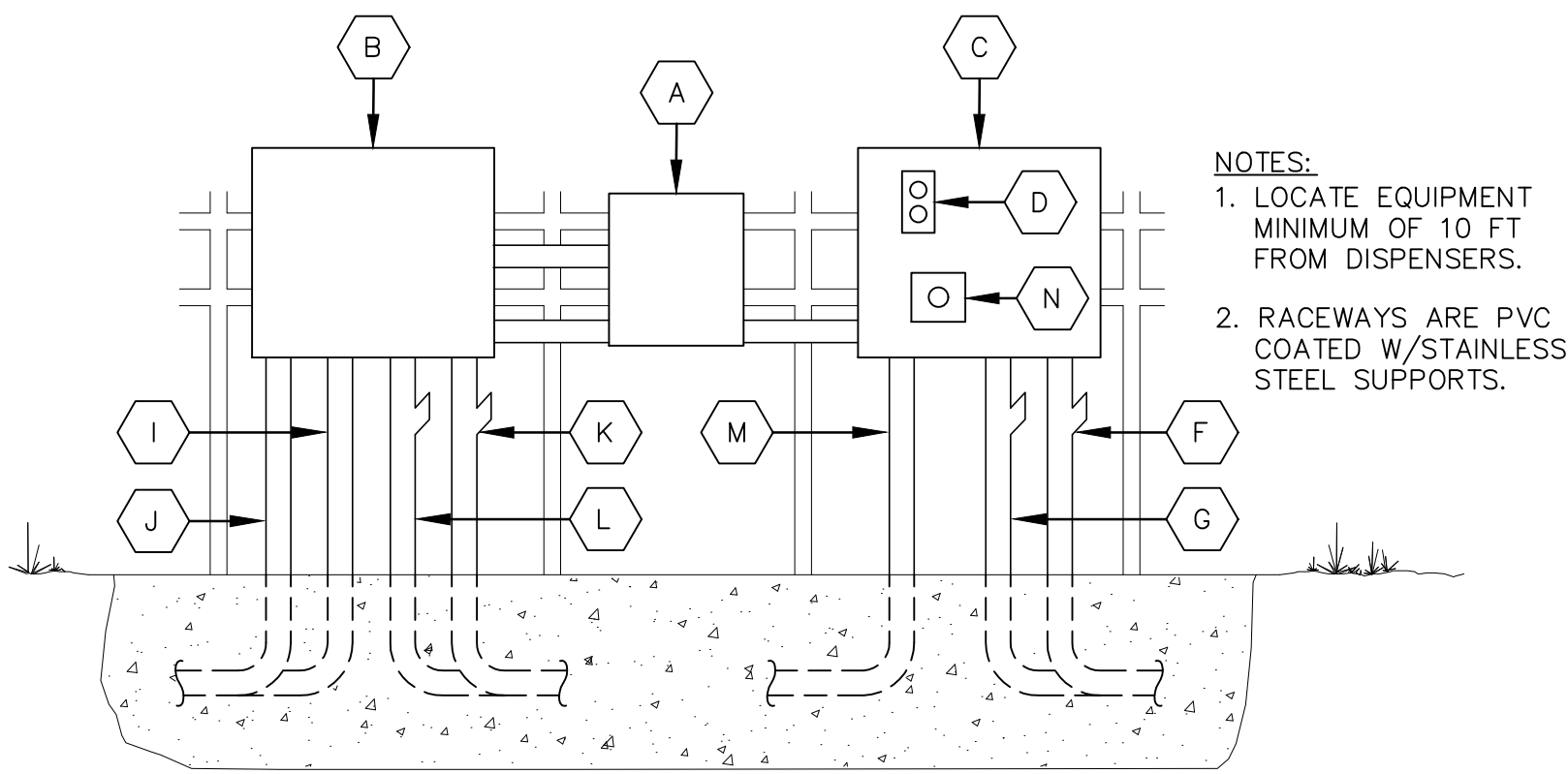
- 1 MAIN SWITCHBOARD SWBD-1
- 2 SCADA CONTROL PANEL CP-10
- 3 75KVA 480V-120/208V, 3PH, 4W TRANSFORMER
- 4 PANELBOARD 10LP
- 5 750KW GENERATOR
- 6 GENERATOR BATTERY CHARGER
- 7 FIRE/SECURITY ALARM CONTROL PANEL (FSACP)
- 8 2' X 2' TELEPHONE BACKBOARD
- 9 FUEL OIL SYSTEM PANEL

NOTES:

- SEE DRAWING E-1 FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES.
- SEE TO DRAWING E-15 FOR CONDUIT AND CABLE SCHEDULE.
- SEE DRAWING E-4 FOR DUCTBANK SECTIONS, CONDUIT AND CABLE SCHEDULES.
- SEE DRAWING E-9 FOR ALL 480V POWER WIRING REQUIREMENTS NOT SHOWN.
- PROVIDE SUFFICIENT NUMBER OF GROUND RODS TO ACHIEVE MINIMUM GROUND RESISTANCE REQUIRED BY SPECIFICATIONS.
- 2"C FOR SITE LIGHTING TO LCP-10. SEE DRAWING E-3.
- PROVIDE 24" X 2" COPPER GROUND BUS WITH INSULATORS AND IDENTIFY AS BUILDING GROUNDING POINT. PROVIDE GROUNDING CONDUCTORS TO GROUND BUSES, TRANSFORMER NEUTRALS, AND ROOF MOUNTED EQUIPMENT.



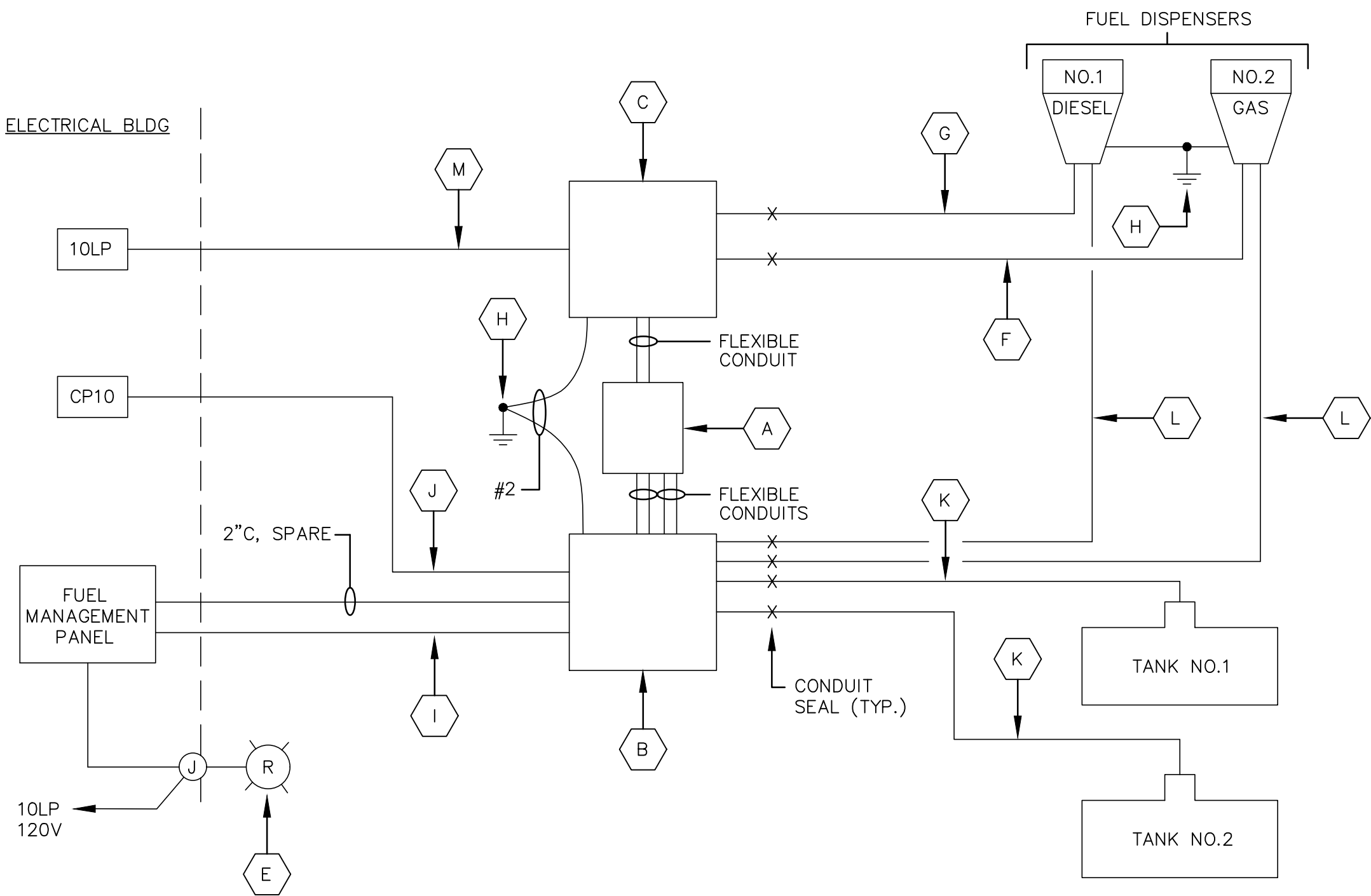
LIGHTING PLAN
SCALE: 1/4" = 1'-0"



JUNCTION BOX AND CARD READER MOUNTING
NOT TO SCALE

DISPENSER SYSTEM KEY NOTES

- A CARD READER
- B SIGNAL JUNCTION BOX, NEMA 4X, 12"x12"x12" DP
- C POWER JUNCTION BOX, NEMA 4X, 12"x12"x12" DP
- D WEATHER PROOF DUPLEX RECEPTACLE
- E FUEL SYSTEM ALARM BEACON, NEMA 4X
- F 1"C, 3#10, #10GND FROM 10LP
- G 1"C, 3#10, #10GND FROM 10LP
- H 10' GROUND ROD
- I 2"C, TANK PROBES WIRING
- J 2"C, COMMUNICATIONS CABLE FROM CARD READER
- K 1"C, TANK PROBE WIRING
- L 1"C, DISPENSER CONTROL WIRING
- M 2"C, 6#10, 2#10GND (FUEL DISPENSERS)
2#12, #12GND (CARD READER)
2#10, #12GND (RECEPTACLE)
2#12, #12GND (ESTOP SWITCH TO SHUNT TRIP BREAKERS)
- N "E-STOP"-
PULL TO TRIP SHUNT BREAKERS,
MUSHROOM SWITCH, SQUARE D 9001 SKR5B
W/SK25RH13 OPERATOR



FUEL SYSTEM BLOCK DIAGRAM
NOT TO SCALE