

**ADDENDUM #1**  
**FOR**  
**RFP - Electrical Engineering Services –**  
**Annex Power System Study and Arc Flash Assessment**  
**(5/2/2023)**

**Clarifications:**

Please see the additional project drawings attached showing the Distributed Antenna System that was added to the Annex. (3 pages)

**Attachments:**

- 1) Attendance from the Virtual Pre-RFP meeting (1 page)
- 2) PCC Distributed Antenna System drawings (3 pages)

## RFP: Electrical Engineering Services – Annex Power System Study and Arc Flash Assessment

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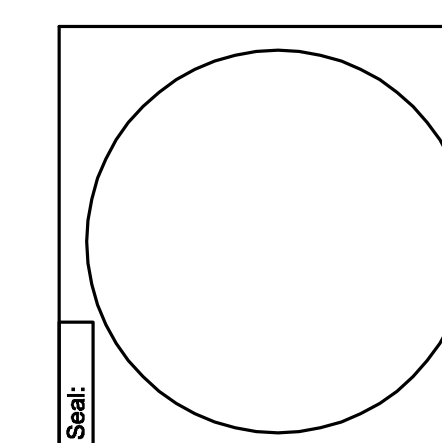


MARK ULRICK ENGINEERS, INC.

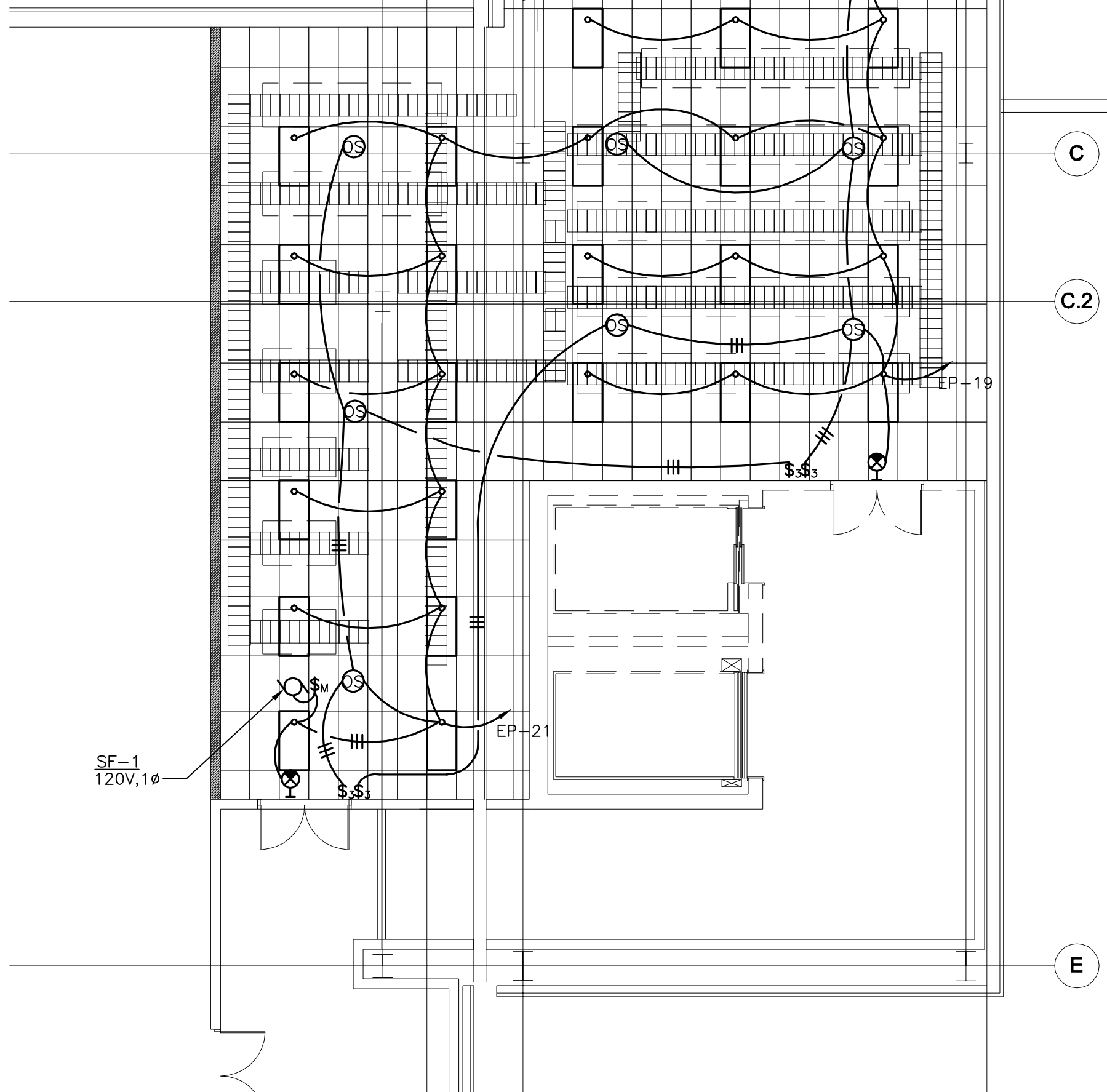
MEP: Mark Ulrick Engineers, Inc.  
622 Cooper Street, 2nd Floor  
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phone: 856-320-8100

Architect: Friday Architects/Planners, Inc.  
1420 Walnut Street, Suite 1502  
Philadelphia, PA 19102  
phone: 215-564-0814

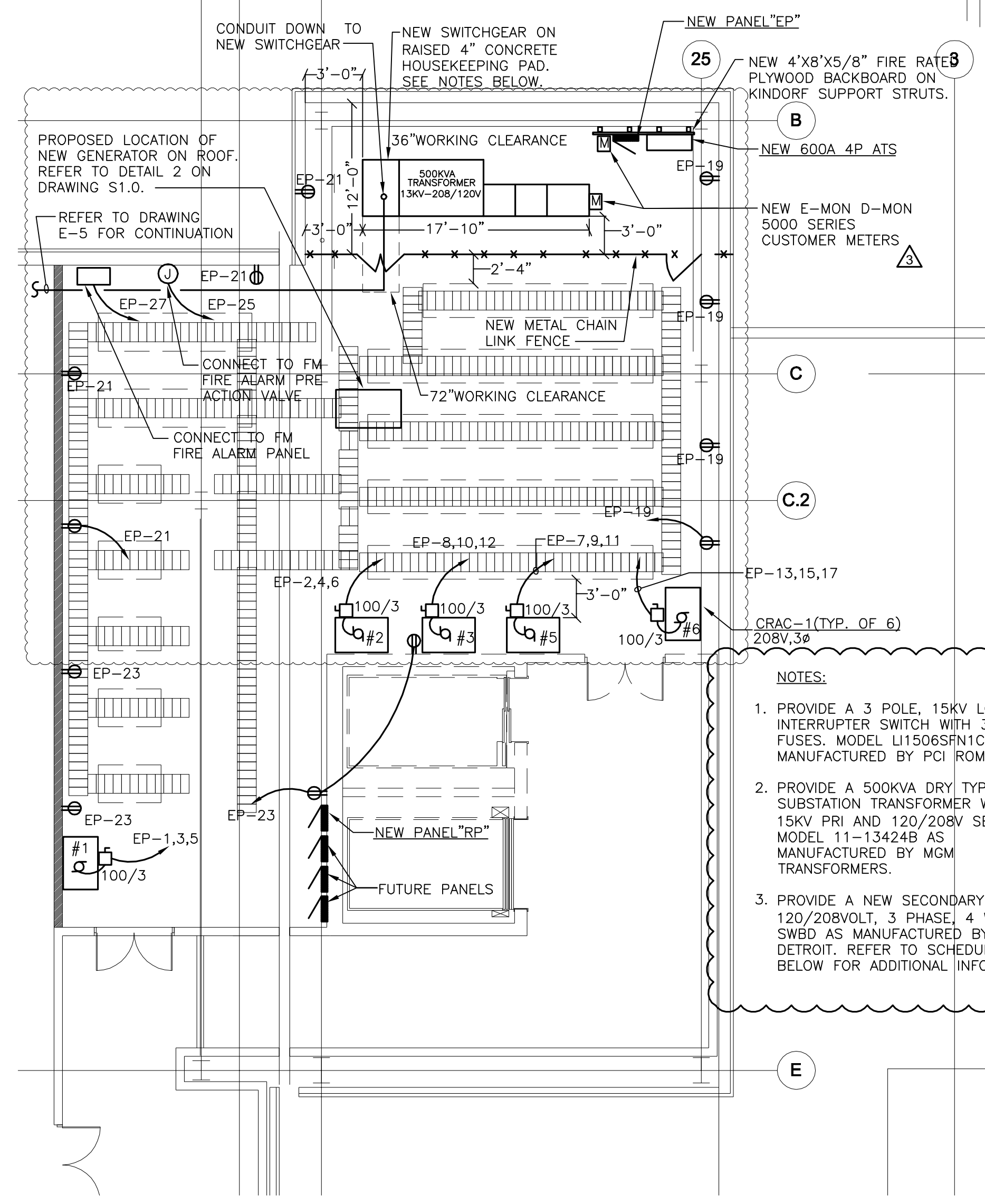
Structural: Omdorf & Associates, Inc.  
112 Cricket Avenue  
Ardmore, PA 19003  
phone: 610-896-4500



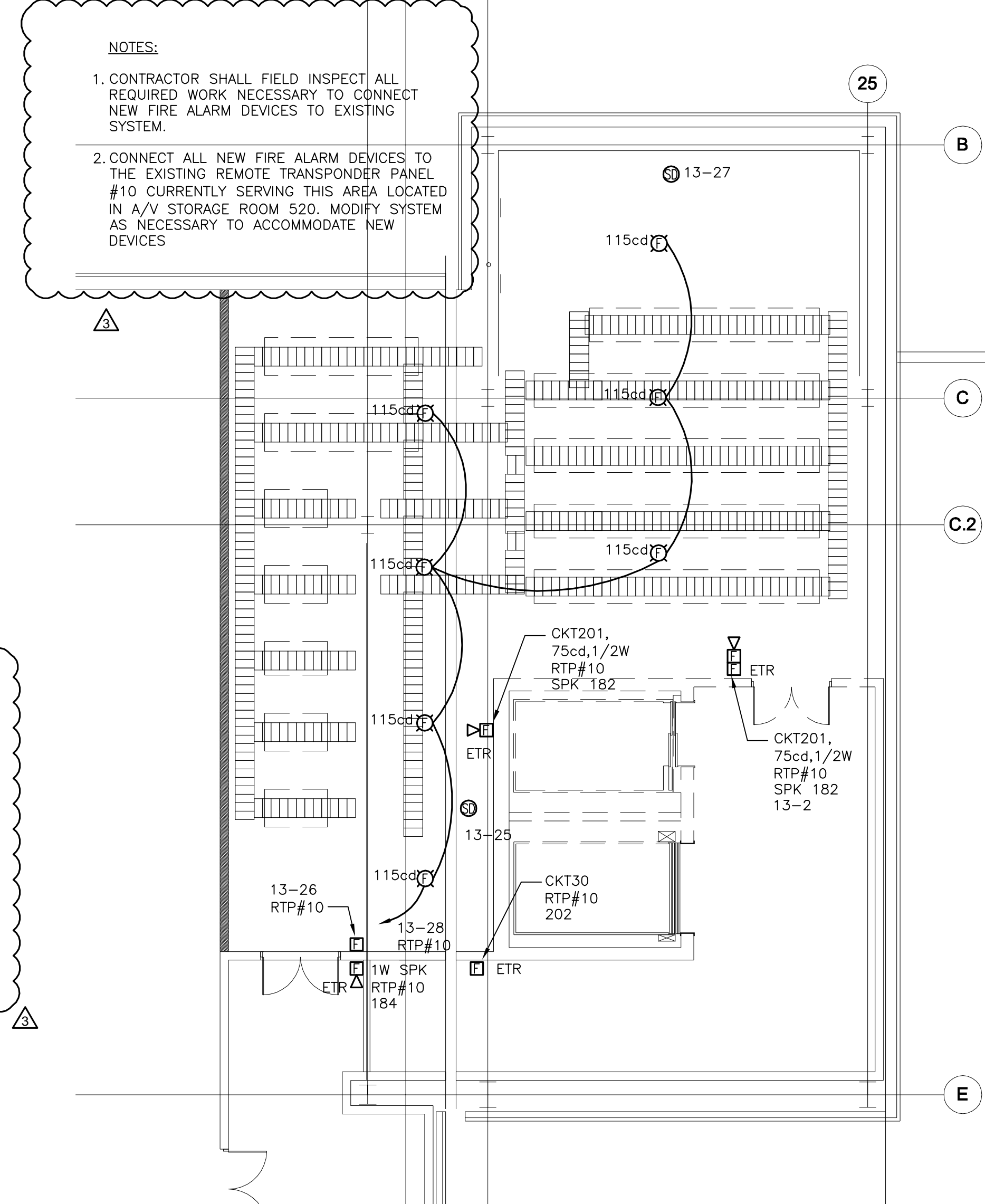
- NOTES:
- LIGHTS SHALL BE RECESSED LED FIXTURES, COLUMBIA HIGH LUMEN MODEL LJT24G35HLGFA12.
  - EXIT SIGNS SHALL BE UNIVERSAL MOUNTED WHITE THERMOPLASTIC HOUSING WITH LED LAMPS AND RED LETTERS, SURE LITES MODEL APX7R OR EQUAL.



1 FIFTH FLOOR PLAN - LIGHTING  
E-4 SCALE: 1/8" = 1'-0"



2 FIFTH FLOOR PLAN - POWER  
E-4 SCALE: 1/8" = 1'-0"



3 FIFTH FLOOR PLAN - FIRE ALARM  
E-4 SCALE: 1/8" = 1'-0"

PANEL "EP"													
VOLTAGE:		120/208		A.I.C.:		65k							
PHASE, WIRE:		3 PH, 4 W		MOUNTED:		SURFACE							
		600 AMP MAIN MLO											
CKT	SERVING	P	TRIP	QTY	AWG	KVA	PH	QTY	AWG	P	TRIP	SERVING	CKT
1	CRAC UNIT NO.1	3	90	3	3	8.6	A	8.6	3	3	90	CRAC UNIT NO.2	2
3	-	-	-	-	-	8.6	B	8.6	-	-	-	-	4
5	-	-	-	-	-	8.6	C	8.6	-	-	-	-	6
7	CRAC UNIT NO.3	3	90	3	3	8.6	A	8.6	3	3	90	CRAC UNIT NO.4	8
9	-	-	-	-	-	8.6	B	8.6	-	-	-	-	10
11	-	-	-	-	-	8.6	C	8.6	-	-	-	-	12
13	CRAC UNIT NO.5	3	90	3	3	8.6	A	8.6	3	3	90	CRAC UNIT NO.6	14
15	-	-	-	-	-	8.6	B	8.6	-	-	-	-	16
17	-	-	-	-	-	8.6	C	8.6	-	-	-	-	18
19	RECEPTACLES	1	20	2	12	0.7	A	1.6	2	12	1	20	20
21	RECEPTACLES	1	20	2	12	0.5	B	1.3	2	12	1	20	22
23	RECEPTACLES	1	20	2	12	0.7	C	0.6	2	12	1	20	24
25	FIRE ALARM VALVE	1	20	2	12	0.4	A	0.6	2	12	1	20	26
27	FIRE ALARM PANEL	1	20	2	12	0.4	B	0.6	2	12	1	20	28
29	SPACE						C						30
31	SPACE						A						32
33	SPACE						B						34
35	SPACE						C						36
37	SPACE						A	0.5	3	10	3	30	38
39	SPACE						B	0.5	-	-	-	-	40
41	SPACE						C	0.5	-	-	-	-	42
TOTAL DEMAND KVA (PER PHASE):		A:55.4		B:54.9		C:53.4		DESIGN KVA: 163.7				DESIGN AMPS: 455	

NOTE:  
1. CONTRACTOR SHALL FIELD COORDINATE ALL CIRCUIT BREAKERS FOR MECHANICAL EQUIPMENT PRIOR TO PURCHASE.

DISTRIBUTION PANEL "DP"									
VOLTAGE:		120 / 208		A.I.C.:		65k			
PHASE, WIRE:		3 , 4		MOUNTED:		WALL MOUNTED			
		1200 AMP MAIN CIRCUIT BREAKER							
CKT	SERVING	POLE	FRAME	TRIP	QTY	FEEDER SIZE PER SET	CONNECTED	LOAD (kVA)	COMMENTS
1	PANEL "EP"	3	600	600	2	350 1#1 3"	163.7		EMERGENCY PANEL
2	SPARE	3	400						
3	SPARE	3	400						
4	SPARE	3	400						
5	SPARE	3	400						
6	SPARE	3	200						
7	SPACE	3	200						
14	TVSS UNIT	3	70	30	1	3#10 1#10 3/4"	1.5		PROVIDE TVSS UNIT
TOTAL KVA =							165.2	TOTAL AMPS = 459	

NOTE:  
1. ALL CIRCUIT BREAKERS FOR PANEL FEEDERS SHALL BE FULLY RATED.  
2. CONTRACTOR SHALL FIELD COORDINATE ALL CIRCUIT BREAKERS FOR MECHANICAL EQUIPMENT PRIOR TO PURCHASE.

REVISION #3 - 12-22-15

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All dimensions and relationships are to be verified in the field by the Contractor and the Architect notified of ANY discrepancies prior to proceeding with any work.

CONSTRUCTION DOCUMENTS

Job #: 2015030  
Scale: 1/8" = 1'-0"  
Date: December 9, 2015

PARTIAL FLOOR PLAN FIFTH

E-4



**PENNSYLVANIA CONVENTION CENTER DISTRIBUTED ANTENNA SYSTEM**

Address: Pennsylvania Convention Center  
1101 Arch Street  
Philadelphia, PA 19107

Client: InSite Wireless, LLC  
30 Winter Street, 10th Floor  
Boston, MA 02108  
phone:

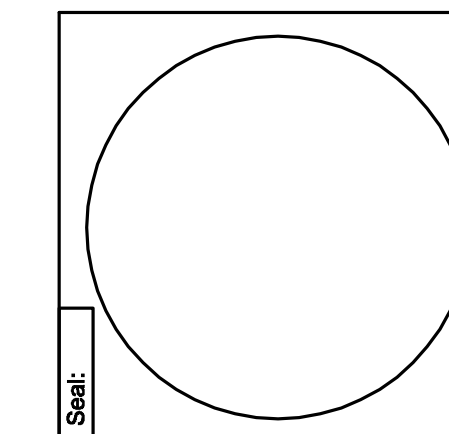


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MEP: Mark Ulrick Engineers, Inc.  
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phone: 856-320-8100

Architect: Friday Architects/Planners, Inc.  
1420 Walnut Street, Suite 1502  
Philadelphia, PA 19102  
phone: 215-564-0814

Structural: Omdorf & Associates, Inc.  
112 Cricket Avenue  
Ardmore, PA 19003  
phone: 610-896-4500



REVISION #1 - 12-14-15  
REVISION #1 - 12-22-15

Revised by:

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Note: All dimensions and relationships are to be verified in the field by the Contractor and the Architect notified of ANY discrepancies prior to proceeding with any work.

Issue: CONSTRUCTION DOCUMENTS

Job #: 2015030  
Scale: NONE  
Date: DECEMBER 9, 2015

Title: PARTIAL ELECTRICAL RISE DIAGRAM

Sheet: E-5

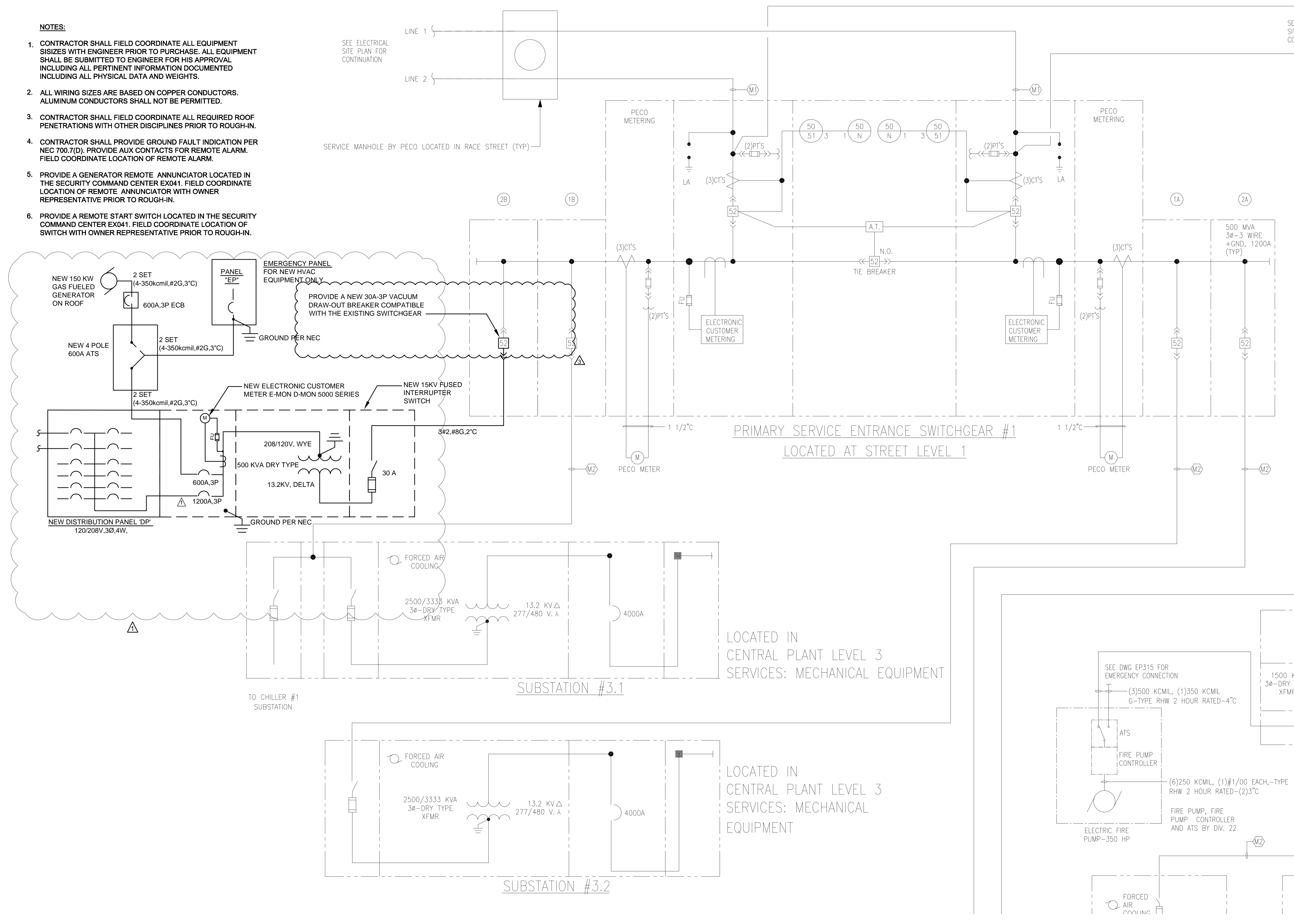
**NOTES:**

- CONTRACTOR SHALL FIELD COORDINATE ALL EQUIPMENT SIZES WITH ENGINEER PRIOR TO PURCHASE. ALL EQUIPMENT SHALL BE SUBMITTED TO ENGINEER FOR HIS APPROVAL INCLUDING ALL PERTINENT INFORMATION DOCUMENTED INCLUDING ALL PHYSICAL DATA AND WEIGHTS.
- ALL WIRING SIZES ARE BASED ON COPPER CONDUCTORS. ALUMINUM CONDUCTORS SHALL NOT BE PERMITTED.
- CONTRACTOR SHALL FIELD COORDINATE ALL REQUIRED ROOF PENETRATIONS WITH OTHER DISCIPLINES PRIOR TO ROUGH-IN.
- CONTRACTOR SHALL PROVIDE GROUND FAULT INDICATION PER NEC 700.7(D). PROVIDE AUX CONTACTS FOR REMOTE ALARM. FIELD COORDINATE LOCATION OF REMOTE ALARM.
- PROVIDE A GENERATOR REMOTE ANNUNCIATOR LOCATED IN THE SECURITY COMMAND CENTER EX041. FIELD COORDINATE LOCATION OF REMOTE ANNUNCIATOR WITH OWNER REPRESENTATIVE PRIOR TO ROUGH-IN.
- PROVIDE A REMOTE START SWITCH LOCATED IN THE SECURITY COMMAND CENTER EX041. FIELD COORDINATE LOCATION OF SWITCH WITH OWNER REPRESENTATIVE PRIOR TO ROUGH-IN.

SEE ELECTRICAL SITE PLAN FOR CONTINUATION

SERVICE MANHOLE BY PECO LOCATED IN RACE STREET (TYP)

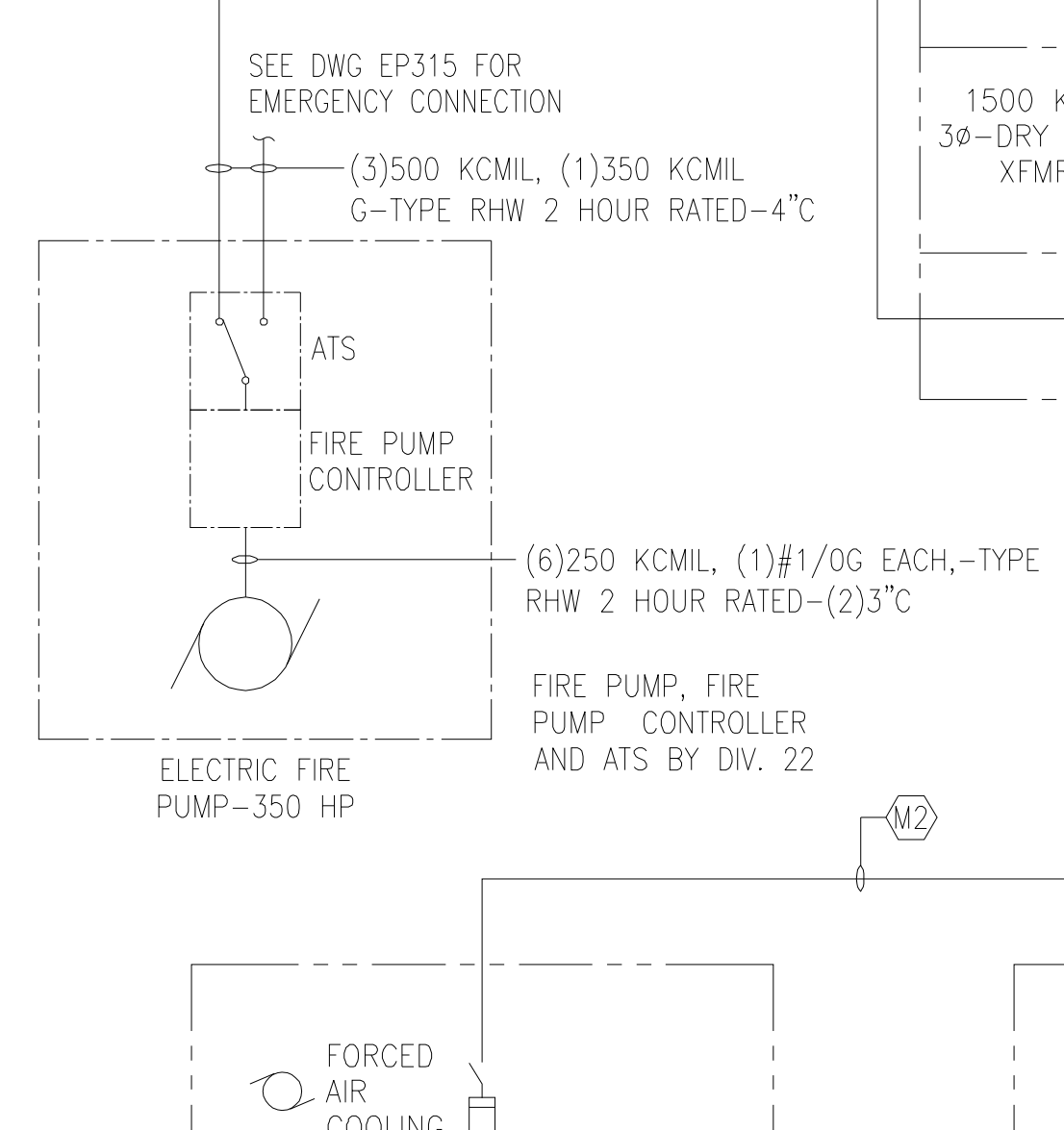
SE  
SIT  
CC



PRIMARY SERVICE ENTRANCE SWITCHGEAR #1  
LOCATED AT STREET LEVEL 1

LOCATED IN  
CENTRAL PLANT LEVEL 3  
SERVICES: MECHANICAL EQUIPMENT

LOCATED IN  
CENTRAL PLANT LEVEL 3  
SERVICES: MECHANICAL  
EQUIPMENT



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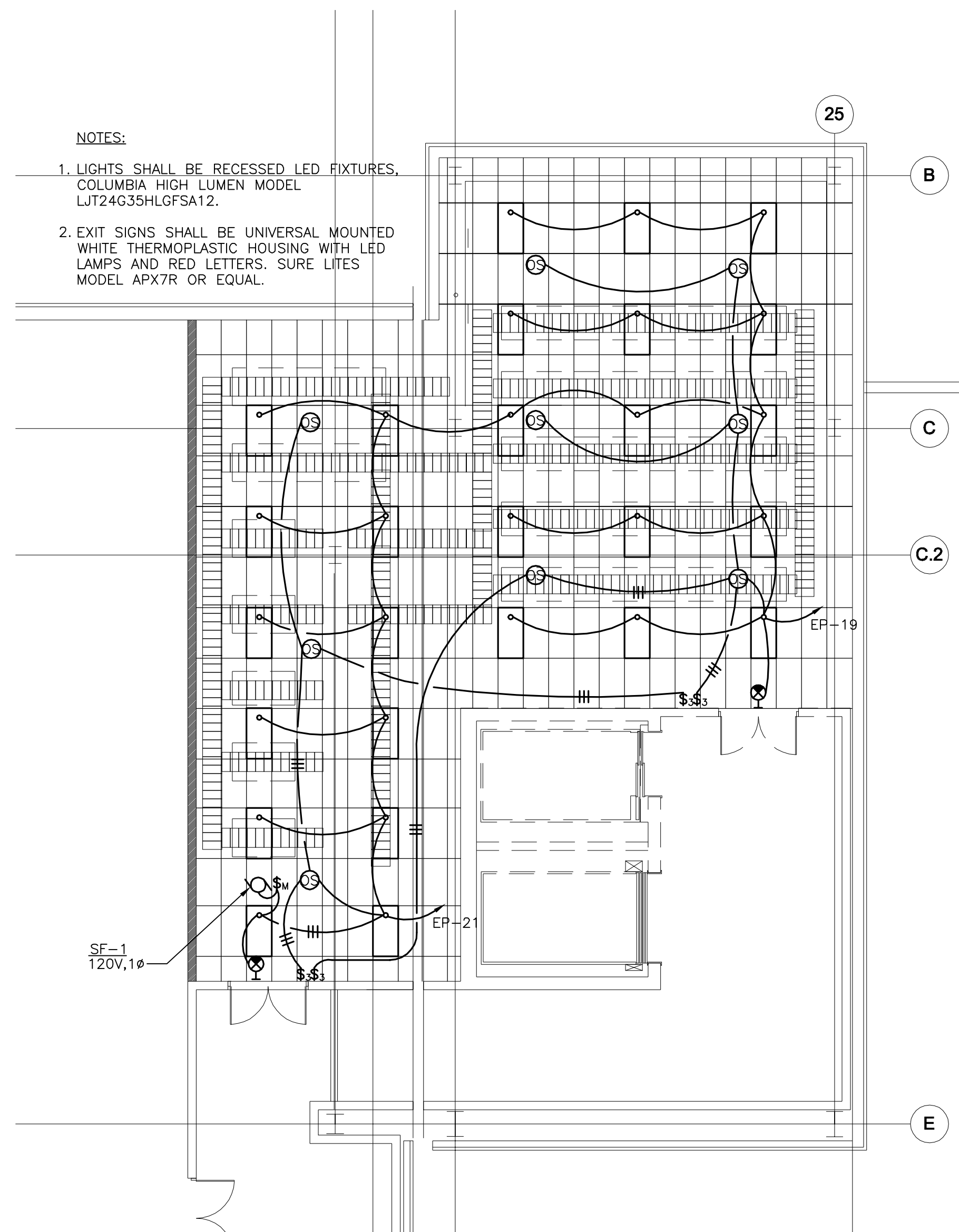
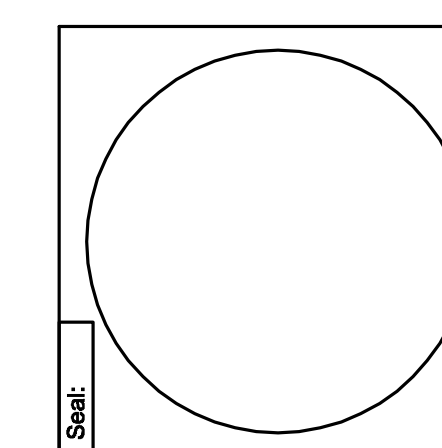


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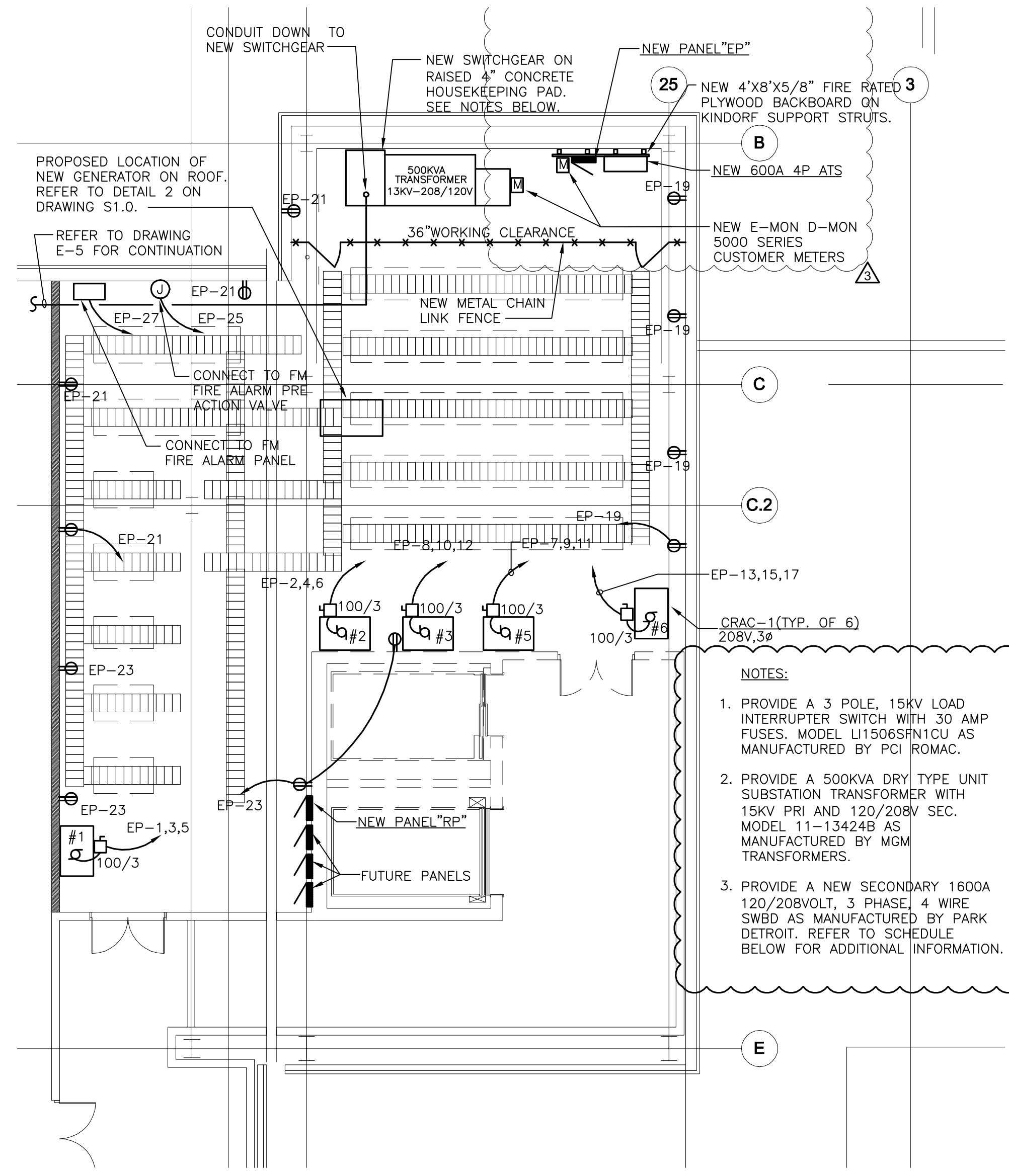
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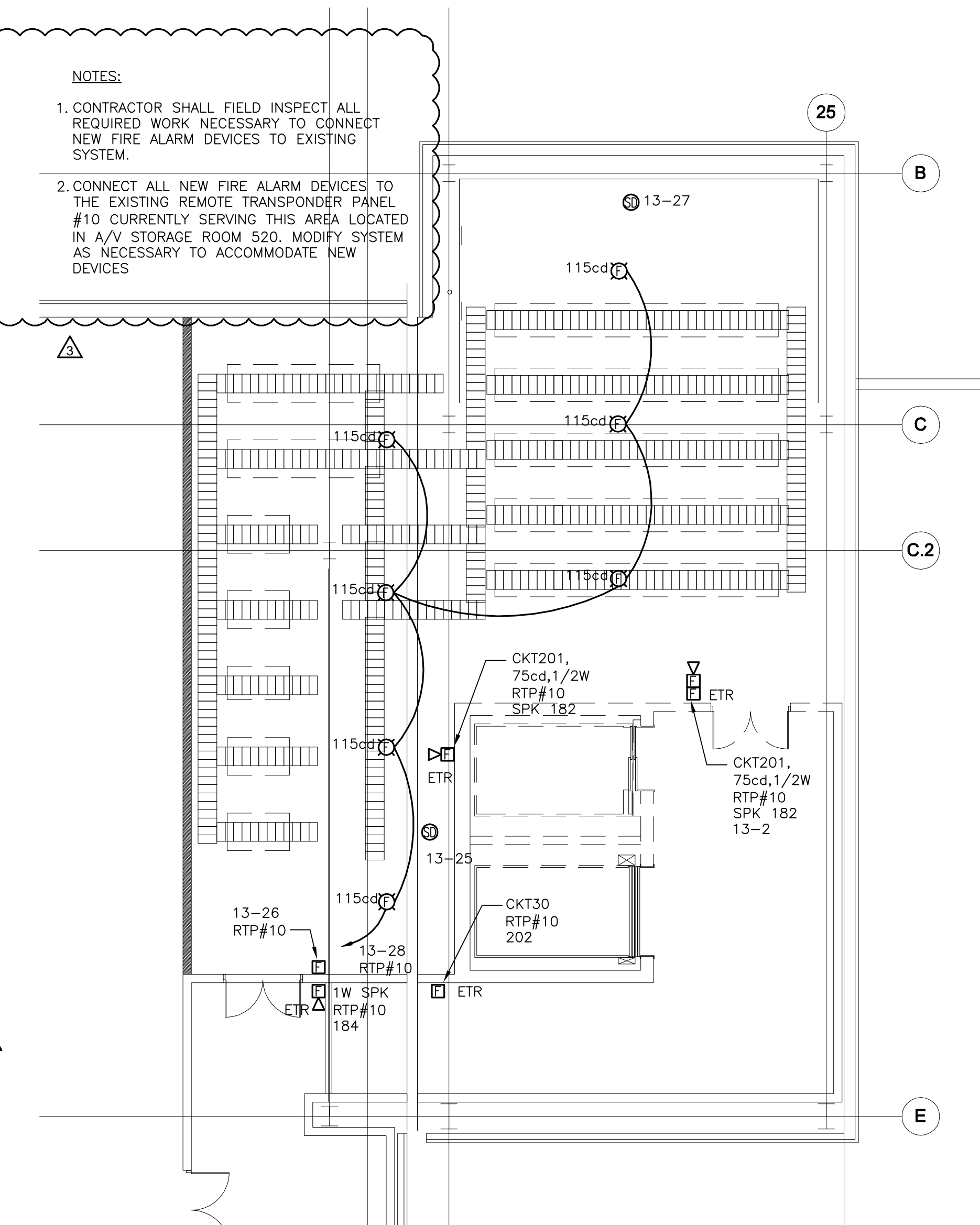
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**1 FIFTH FLOOR PLAN - LIGHTING**  
E-4 SCALE: 1/8" = 1'-0"



**2 FIFTH FLOOR PLAN - POWER**  
E-4 SCALE: 1/8" = 1'-0"



**3 FIFTH FLOOR PLAN - FIRE ALARM**  
E-4 SCALE: 1/8" = 1'-0"

PANEL "EP"													
VOLTAGE:		120/208		A.I.C.:		65k							
PHASE, WIRE:		3 PH, 4 W		600 AMP MAIN MLO		MOUNTED:		SURFACE					
CKT	SERVING	C/B		WIRE		KVA		PH		SERVING	CKT		
		P	TRIP	QTY	AWG	KVA	PH	QTY	AWG				
1	CRAC UNIT NO.1	3	90	3	3	8.6	A	8.6	3	3	90	CRAC UNIT NO.2	2
3	-	-	-	-	-	8.6	B	8.6	-	-	-	-	4
5	-	-	-	-	-	8.6	C	8.6	-	-	-	-	6
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11	-	-	-	-	-	8.6	C	8.6	-	-	-	-	12
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15	-	-	-	-	-	8.6	B	8.6	-	-	-	-	16
17	-	-	-	-	-	8.6	C	8.6	-	-	-	-	18
19	RECEPTACLES	1	20	2	12	0.7	A	1.6	2	12	1	20	LIGHTING
21	RECEPTACLES	1	20	2	12	0.5	B	1.3	2	12	1	20	LIGHTING
23	RECEPTACLES	1	20	2	12	0.7	C	0.6	2	12	1	20	SPACE
25	FIRE ALARM VALVE	1	20	2	12	0.4	A	0.6	2	12	1	20	SPACE
27	FIRE ALARM PANEL	1	20	2	12	0.4	B	0.6	2	12	1	20	SPACE
29	SPACE						C						SPACE
31	SPACE						A						SPACE
33	SPACE						B						SPACE
35	SPACE						C						SPACE
37	SPACE						A	0.5	3	10	3	30	TVSS UNIT
39	SPACE						B	0.5	-	-	-	-	-
41	SPACE						C	0.5	-	-	-	-	-
TOTAL DEMAND KVA (PER PHASE):		A:55.4		B:54.9		C:53.4		DESIGN KVA: 163.7		DESIGN AMPS: 455			

NOTE:  
1. CONTRACTOR SHALL FIELD COORDINATE ALL CIRCUIT BREAKERS FOR MECHANICAL EQUIPMENT PRIOR TO PURCHASE.

DISTRIBUTION PANEL "DP"											
VOLTAGE:		120 / 208		A.I.C.:		65k					
PHASE, WIRE:		3, 4		1200 AMP MAIN CIRCUIT BREAKER		MOUNTED:		WALL MOUNTED			
CKT	SERVING	BREAKER			QTY	FEEDER SIZE PER SET			CONNECTED LOAD (kVA)	COMMENTS	
		POLE	FRAME	TRIP		SETS	WIRE	GND			CDT
1	PANEL "EP"	3	600	600	2	350	1#1	3"	163.7	EMERGENCY PANEL	
2	SPARE	3	400								
3	SPARE	3	400								
4	SPARE	3	400								
5	SPARE	3	400								
6	SPARE	3	200								
7	SPACE	3	200								
14	TVSS UNIT	3	70	30	1	3#10	1#10	3/4"	1.5	PROVIDE TVSS UNIT	
NOTE:		TOTAL KVA =		165.2		TOTAL AMPS =		459			

NOTE:  
1. ALL CIRCUIT BREAKERS FOR PANEL FEEDERS SHALL BE FULLY RATED.  
2. CONTRACTOR SHALL FIELD COORDINATE ALL CIRCUIT BREAKERS FOR MECHANICAL EQUIPMENT PRIOR TO PURCHASE.

REVISION #3 - 12-22-15

Revision:

Notice: All dimensions and relationships are to be verified in the field by the Contractor and the Architect notified of ANY discrepancies prior to proceeding with any work.

Issue: CONSTRUCTION DOCUMENTS

Job #: 2015030  
Scale: 1/8" = 1'-0"  
Date: December 9, 2015

Partial Floor Plan Fifth

Title

Sheet:

**E-4**