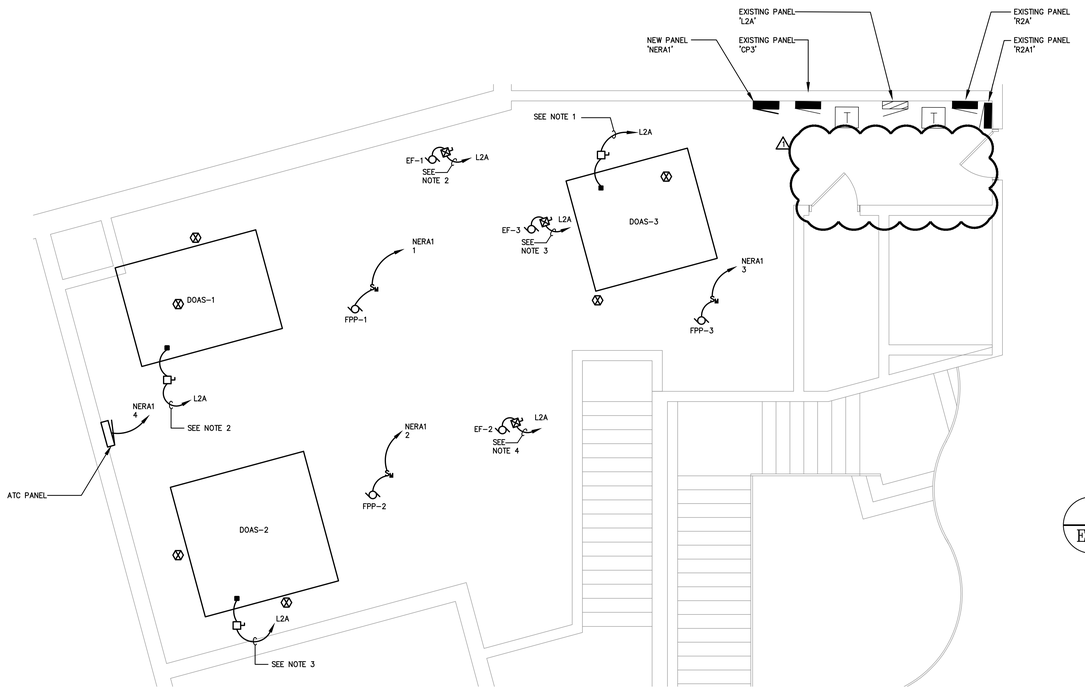
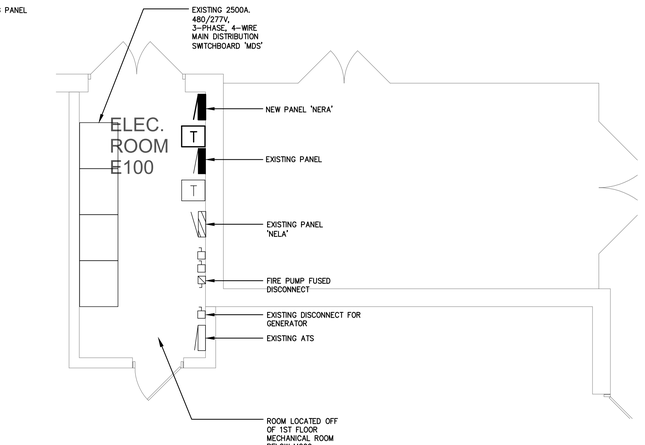


1 E1.1 — 2ND FLOOR MECHANICAL ROOM – 03 PLAN – ELECTRICAL BASEBID

SCALE 1/4" = 1'-0"

NOTES:

1. PROVIDE AND CONNECT TO NEW 20A/3P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 3 #12 & 1 #12 GRD – 3/4"C.
2. PROVIDE AND CONNECT TO NEW 30A/3P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 3 #10 & 1 #10 GRD – 3/4"C.
3. PROVIDE AND CONNECT TO NEW 40A/3P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 3 #8 & 1 #10 GRD – 1"C.
4. PROVIDE AND CONNECT TO NEW 50A/3P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 3 #6 & 1 #10 GRD – 1"C.



2 E1.1 — FIRST FLOOR MAIN ELECTRICAL ROOM – ELECTRICAL BASEBID

SCALE 1/4" = 1'-0"

PANELBOARD 'NERA'

208/120V, 3ø, 4W, S/N, SURFACE, 100A/3P MAIN CIRCUIT BREAKER, 22 KAIC

CKT. NO.	CIRCUIT BREAKER AMPS	CIRCUIT BREAKER POLES	LOAD KVA	LOAD HP	CIRCUIT DESCRIPTION	WIRE & CONDUIT
1	60	3	–	–	SUBPANEL NERA1 IN MECH 201	SEE SINGLE LINE DIAGRAM
2	20	1	–	–	BOILER 1	2 #12 & 1 #12 GRD – 3/4"C
3	20	1	–	–	BOILER 2	2 #12 & 1 #12 GRD – 3/4"C
4	20	1	–	–	BOILER 3	2 #12 & 1 #12 GRD – 3/4"C
5	20	1	–	–	BOILER SHUT DOWN PANEL	2 #12 & 1 #12 GRD – 3/4"C
6	20	1	–	–	FPP-4	2 #12 & 1 #12 GRD – 3/4"C
7	20	1	–	–	FPP-5	2 #12 & 1 #12 GRD – 3/4"C
8	20	1	–	–	FPP-6	2 #12 & 1 #12 GRD – 3/4"C
9	20	1	–	–	ATC CONTROL PANEL	2 #12 & 1 #12 GRD – 3/4"C
10	20	1	–	–	WATER TREATMENT CONTROLLER	2 #12 & 1 #12 GRD – 3/4"C
11	20	1	–	–	SPARE	–
12	20	1	–	–	SPARE	–
13	20	1	–	–	SPARE	–
14	–	1	–	–	SPACE	–
15	–	1	–	–	SPACE	–
16	–	1	–	–	SPACE	–
17	–	1	–	–	SPACE	–
18	–	1	–	–	SPACE	–
19	–	1	–	–	SPACE	–
20	–	1	–	–	SPACE	–
21	–	1	–	–	SPACE	–
22	–	1	–	–	SPACE	–
23	–	1	–	–	SPACE	–
24	–	1	–	–	SPACE	–
25	–	1	–	–	SPACE	–
26	–	1	–	–	SPACE	–
27	–	1	–	–	SPACE	–
28	–	1	–	–	SPACE	–
					TOTAL CONNECTED LOAD	

ALTERNATE 2

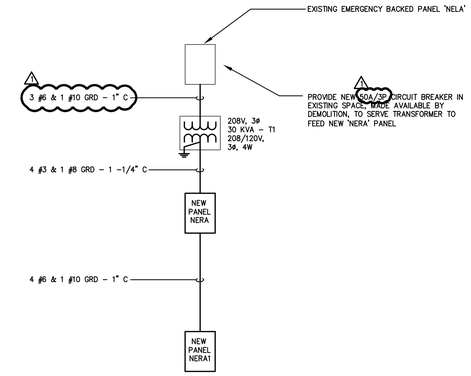
ALTERNATE 1

ALTERNATE 2

PANELBOARD 'NERA1'

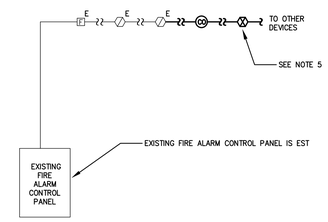
208/120V, 3ø, 4W, S/N, SURFACE, 60A MAIN LUGS ONLY, 22 KAIC

CKT. NO.	CIRCUIT BREAKER AMPS	CIRCUIT BREAKER POLES	LOAD KVA	LOAD HP	CIRCUIT DESCRIPTION	WIRE & CONDUIT
1	20	1	–	–	FPP1	2 #12 & 1 #12 GRD – 3/4"C
2	20	1	–	–	FPP2	2 #12 & 1 #12 GRD – 3/4"C
3	20	1	–	–	FPP3	2 #12 & 1 #12 GRD – 3/4"C
4	20	1	–	–	ATC PANEL	2 #12 & 1 #12 GRD – 3/4"C
5	20	1	–	–	SPARE	–
6	20	1	–	–	SPARE	–
7	20	1	–	–	SPARE	–
8	20	1	–	–	SPARE	–
9	20	1	–	–	SPARE	–
10	–	1	–	–	SPACE	–
11	–	1	–	–	SPACE	–
12	–	1	–	–	SPACE	–
13	–	1	–	–	SPACE	–
14	–	1	–	–	SPACE	–
15	–	1	–	–	SPACE	–
16	–	1	–	–	SPACE	–
17	–	1	–	–	SPACE	–
18	–	1	–	–	SPACE	–
19	–	1	–	–	SPACE	–
20	–	1	–	–	SPACE	–
21	–	1	–	–	SPACE	–
22	–	1	–	–	SPACE	–
23	–	1	–	–	SPACE	–
24	–	1	–	–	SPACE	–
25	–	1	–	–	SPACE	–
26	–	1	–	–	SPACE	–
27	–	1	–	–	SPACE	–
28	–	1	–	–	SPACE	–
29	–	1	–	–	SPACE	–
30	–	1	–	–	SPACE	–
			–		TOTAL CONNECTED LOAD	



3 E1.1 — SINGLE LINE DIAGRAM

SCHEMATIC

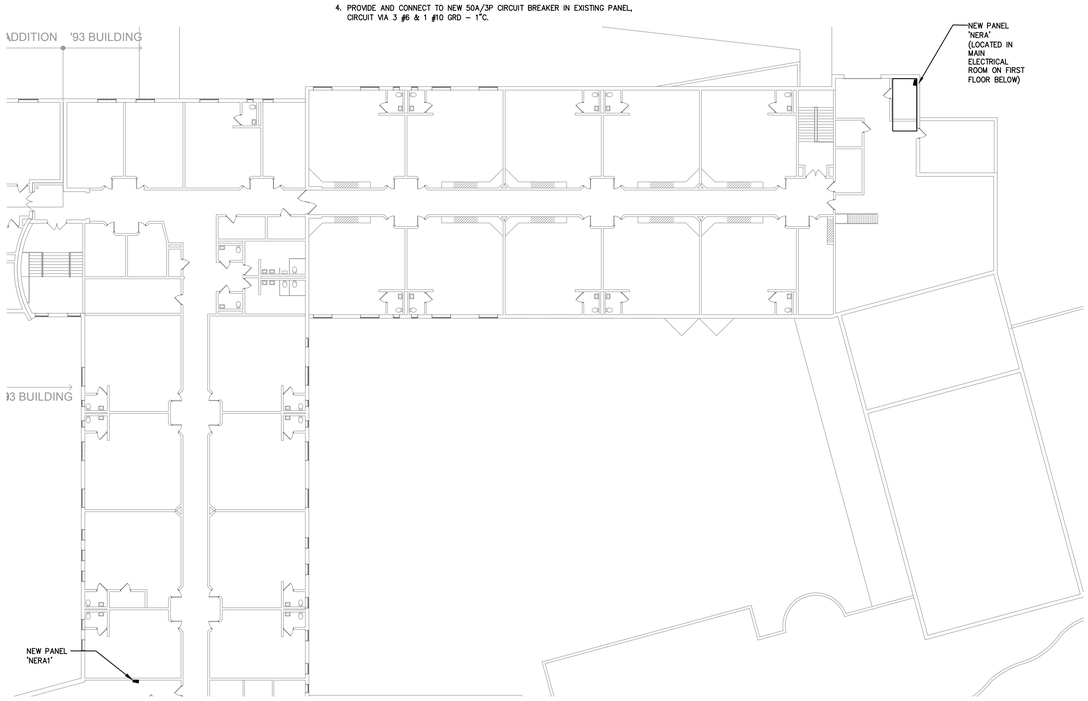


4 E1.1 — FIRE ALARM SYSTEM RISER DIAGRAM

SCHEMATIC

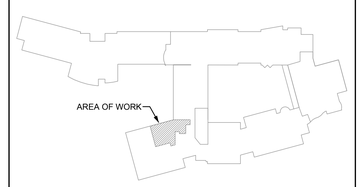
FIRE ALARM SYSTEM NOTES:

1. PROVIDE ALL WIRING AS RECOMMENDED BY MANUFACTURER. ALL WIRING SHALL BE IN CONDUIT. FIRE ALARM LABELED MC CABLE MAY BE USED IN CONCEALED LOCATIONS WHERE PERMITTED BY CODE.
2. CONTRACTOR IS RESPONSIBLE FOR INSURING THAT FIRE ALARM SYSTEM MODIFICATIONS MEET ALL APPLICABLE CODES AND FOR OBTAINING FINAL APPROVAL FROM LOCAL FIRE INSPECTOR(S).
3. PRIOR TO STARTING WORK, PREPARE SHOP DRAWINGS INCLUDING ALL INFORMATION REQUIRED UNDER IBC–2018, SECTION 907.1.2. SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW AND APPROVAL. ONCE APPROVED, SUBMIT SHOP DRAWINGS TO CODE REVIEWER/INSPECTOR(S) FOR APPROVAL.
4. EXPAND EXISTING FIRE ALARM SYSTEM AS REQUIRED TO CONNECT NEW DEVICES. PROVIDE ALL NEW HARDWARE, RELAYS, MODULES, WIRING, BATTERIES, ETC., AS NECESSARY FOR COMPLETE INSTALLATION.
5. CONTRACTOR IS RESPONSIBLE FOR COORDINATING QUANTITY AND LOCATION OF DUCT MOUNTED SMOKE DETECTORS, BASED ON APPROVED HVAC SHOP DRAWINGS.
6. PROVIDE INTERCONNECTION WIRING BETWEEN HVAC EQUIPMENT AND FIRE ALARM CONTROL PANEL AS REQUIRED FOR FAN SHUTDOWN.
7. PROVIDE ALL PROGRAMMING BY A FACTORY CERTIFIED VENDOR AS REQUIRED TO MAKE THE NECESSARY MODIFICATION TO THE SYSTEM. INCLUDE ANY HARDWARE, WIRING, OF COMPONENTS NECESSARY FOR CONTINUED REUSE.
8. ALL FIRE ALARM CONTROL PANELS, REMOTE ANNUNCIATORS, AND BOOSTER PANELS SHALL HAVE SMOKE DETECTORS COVERAGE ABOVE. PROVIDE DEVICES WHETHER SHOWN ON PLANS OR NOT.
9. UPON COMPLETION OF FIRE ALARM WORK, PROVIDE A RE–ACCEPTANCE TEST OF THE ENTIRE SYSTEM PER NFPA 72.



5 E1.1 — 2ND FLOOR PLAN – ELECTRICAL BASEBID

SCALE 1" = 20'-0"



KEY PLAN — NOT TO SCALE

November 05, 2021 – 11:13:21 am
Drawing: 2774.05 E1.1.dwg

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NJDOE SP #07-1770-160-21-1000

FAN COIL, AIR HANDLER & BOILER REPLAC'TS
COLD SPRINGS SCHOOL
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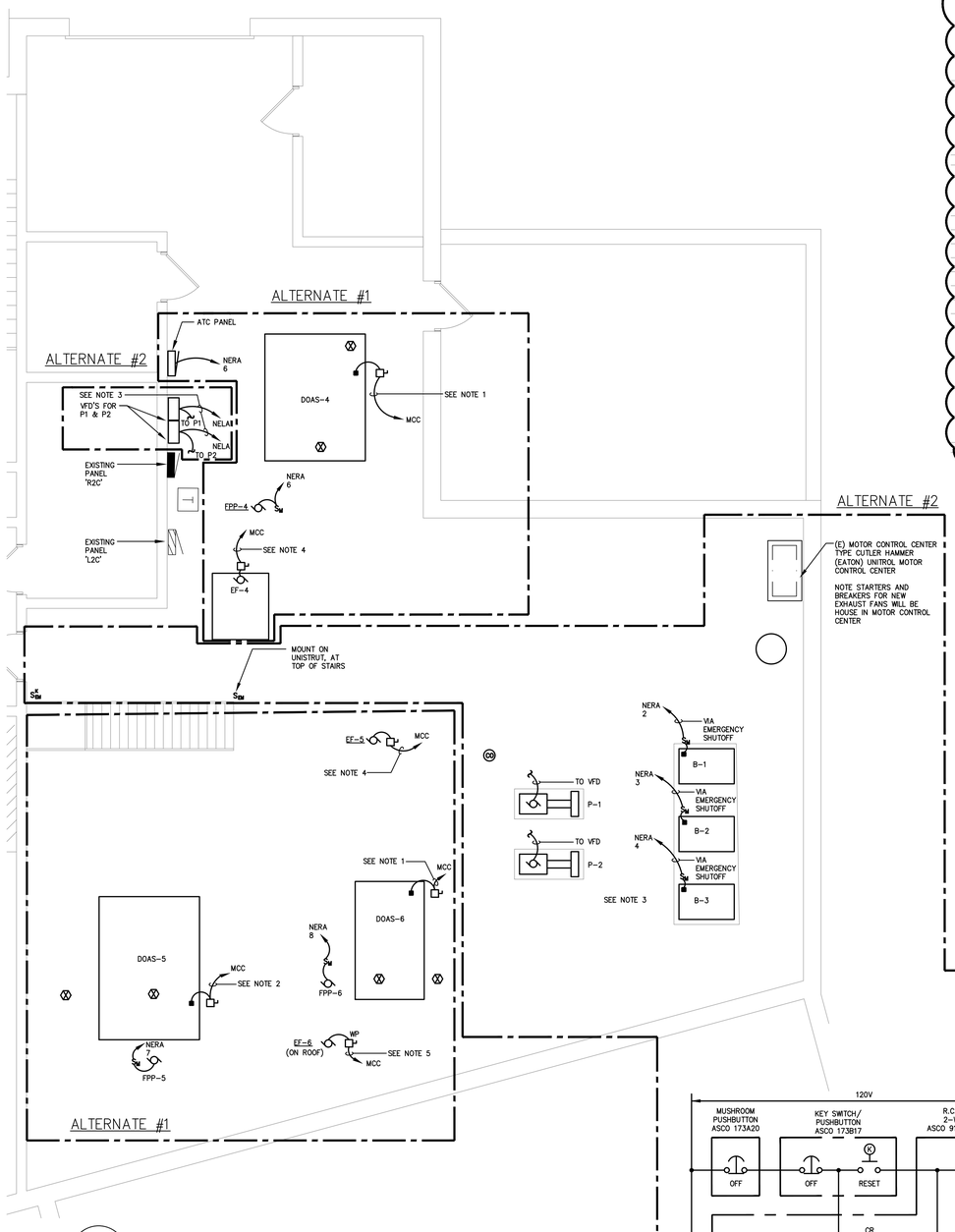
TITLE: BASE BID - ELECTRICAL

DRAWING DATE: 24 SEP 21
REVISION DATE: 1 NOV 5 21
DRAWN BY: LA
COMMISSION NO.: 5642F

E1.1

5 OF 8

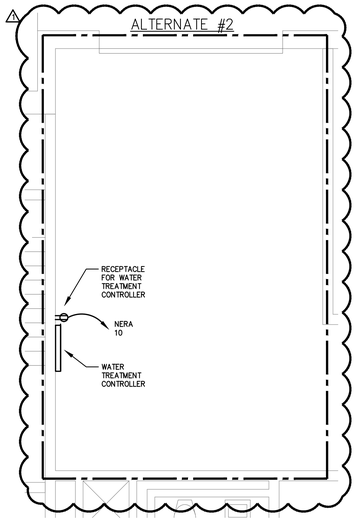


1 E1.2 2ND FLOOR MECHANICAL ROOM – 02 – ELECTRICAL

SCALE 1/4" = 1'-0"

NOTES:

1. PROVIDE AND CONNECT TO NEW 15A/3P CIRCUIT BREAKER IN EXISTING PANEL VIA 3 #12 & 3 #12 – 3/4"C.
2. PROVIDE AND CONNECT TO NEW 30A/3P CIRCUIT BREAKER IN EXISTING PANEL VIA 3 #10 & 3 #10 – 3/4"C.
3. PROVIDE AND CONNECT TO NEW 50A/3P CIRCUIT BREAKER IN EXISTING PANEL, VIA 3 #8 & 1 #10 GRD – 1"C.
4. PROVIDE AND CONNECT TO NEW 30A/3P CIRCUIT BREAKER AND STARTER IN MOTOR CONTROL CENTER, CIRCUIT VIA 3 #10 & 1 #10 GRD – 3/4"C.
5. PROVIDE AND CONNECT TO NEW 15A/3P CIRCUIT BREAKER AND STARTER IN MOTOR CONTROL CETNER, CIRCUIT VIA 3 #12 & 1 #12 GRD – 3/4"C.



4 E1.2 1ST FLOOR MECHANICAL ROOM – 01 – ELECTRICAL

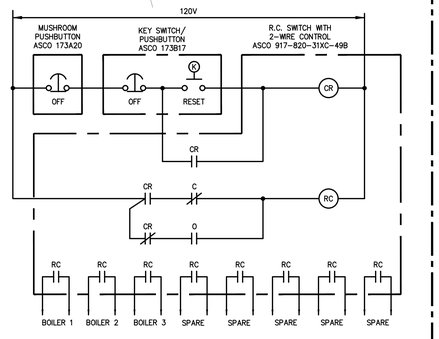
SCALE 1/4" = 1'-0"

2 E1.2 PARTIAL FIRST FLOOR PLAN – ELECTRICAL

SCALE 1/8" = 1'-0"

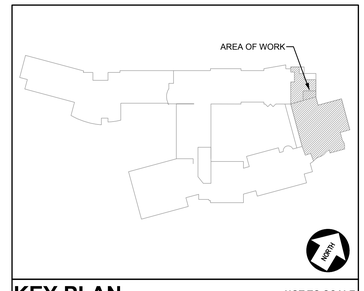
NOTES:

1. PROVIDE AND CONNECT TO NEW 20A/1P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 2 #12 & 1 #12 GRD – 3/4" C.
2. PROVIDE AND CONNECT TO NEW 30A/1P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 2 #12 & 1 #12 GRD – 3/4" C.



3 E1.2 WIRING DIAGRAM FOR BOILER ROOM EMERGENCY SHUT DOWN

SCHEMATIC



KEY PLAN NOT TO SCALE

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TITLE: ALTERNATE 01 & ALTERNATE 02 - ELECTRICAL

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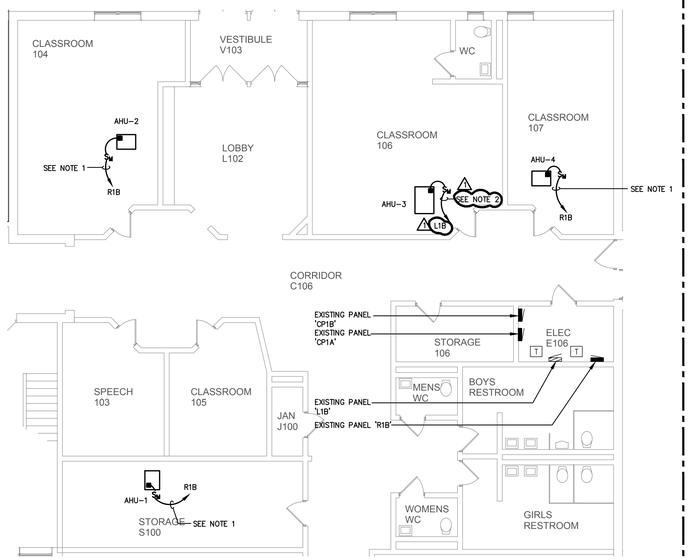
E1.2
6 OF 8

ALTERNATE #3



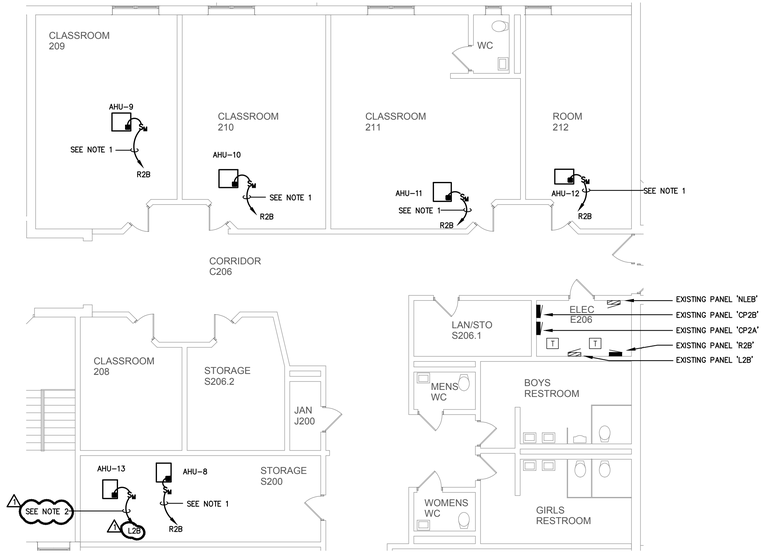
1 / E1.3 PARTIAL FIRST FLOOR PLAN – ELECTRICAL

SCALE 1/8" = 1'-0"

NOTES:

1. PROVIDE AND CONNECT TO NEW 20A/1P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 2 #12 & 1 #12 GRD – 3/4" C.
2. PROVIDE AND CONNECT TO NEW 15A/3P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 3 #12 & 1 #12 GRD – 3/4" C.

ALTERNATE #4

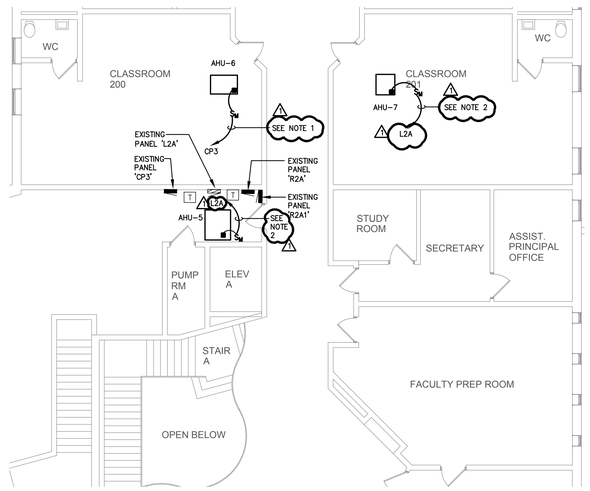


2 / E1.3 PARTIAL SECOND FLOOR PLAN – ELECTRICAL

SCALE 1/8" = 1'-0"

NOTES:

1. PROVIDE AND CONNECT TO NEW 20A/1P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 2 #12 & 1 #12 GRD – 3/4" C.
2. PROVIDE AND CONNECT TO NEW 15A/3P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 3 #12 & 1 #12 GRD – 3/4" C.

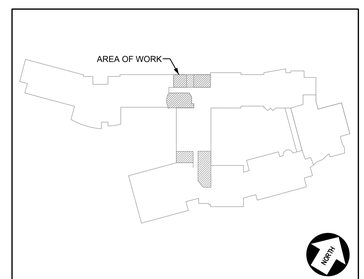


3 / E1.3 PARTIAL SECOND FLOOR PLAN – ELECTRICAL

SCALE 1/8" = 1'-0"

NOTES:

1. PROVIDE AND CONNECT TO NEW 20A/1P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 2 #12 & 1 #12 GRD – 3/4"C.
2. PROVIDE AND CONNECT TO NEW 15A/3P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 3 #12 & 1 #12 GRD – 3/4"C.



KEY PLAN — NOT TO SCALE

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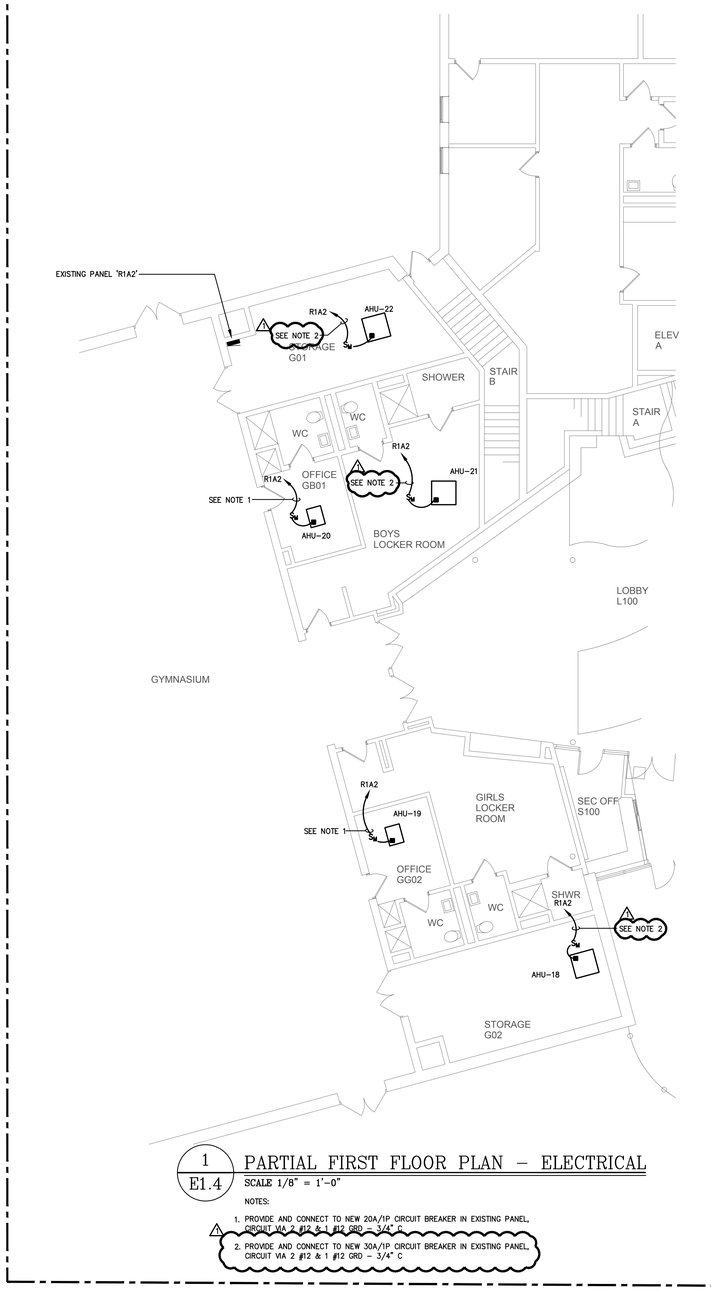
E1.3

7 OF 8

ALTERNATE #5



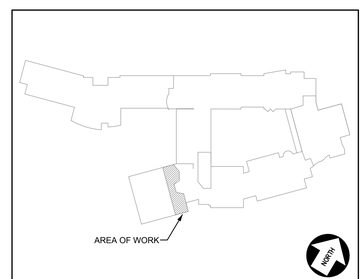
1
E1.4

PARTIAL FIRST FLOOR PLAN – ELECTRICAL

SCALE 1/8" = 1'-0"

NOTES:

1. PROVIDE AND CONNECT TO NEW 20A/1P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 2 #12 & 1 #12 GRD – 3/4" C
2. PROVIDE AND CONNECT TO NEW 30A/1P CIRCUIT BREAKER IN EXISTING PANEL, CIRCUIT VIA 2 #12 & 1 #12 GRD – 3/4" C



KEY PLAN — NOT TO SCALE

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Drawing: 2772.03 E1.4.dwg

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E1.4

8 OF 8