

November 11, 2015
BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA
Y16-713-CC / ADDENDUM #1
JOHN BRIDGES COMMUNITY CENTER BUILDINGS D & F HVAC REPLACEMENT

Bid Opening Date: December 3, 2015

This addendum is hereby incorporated into the bid documents of the project referenced above. The following items are clarifications, corrections, additions, deletions and / or revisions to and shall take precedence over the original documents. Underlining indicates additions, deletions are indicated by strikethrough.

A. The Bid Opening Date remains December 3, 2015 at 2:00p.m.

B. The attached drawing sheets have been revised as shown below:

- E-000 -Text font was made consistent,
-added Scope of Work as General Note 1,
-added abbreviation for EXISTING TO REMAIN.
- E-002 -Text font was made consistent,
-added Panel AC-2 to 1-Line Diagram,
-added notes clarifying design intent for new chiller FSS (I.E 25 ft. tap rule),
-deleted ground rods at chiller yard, deleted TVSS units at chiller and chiller pumps disconnect switches,
-clarified Sheet Notes and Keyed Notes.
- ED-101 -Text font was made consistent,
-clarified Sheet Notes and Keyed Notes.
- ED-102 -Text font was made consistent,
-clarified Sheet Notes and Keyed Notes.
- E-101 -Text font was made consistent,
-clarified Sheet Notes and Keyed Notes,
-revised load summaries for panels KC and KD
- E-102 -Text font was made consistent,
-clarified Sheet Notes and Keyed Notes.
- E-501 -Text font was made consistent,
-clarified Sheet Notes and Keyed Notes,
-updated panel AC-1 schedule,
-deleted panel AC-1 load summary table (included information in panel schedule)

C. All other terms and conditions of the IFB remain the same.

D. ACKNOWLEDGEMENT OF ADDENDA

- a. The Bidder/Proposer shall acknowledge receipt of this addendum by completing the applicable section in the solicitation or by completion of the acknowledgement information on the addendum. Either form of acknowledgement must be completed and returned not later than the date and time for receipt of the bid or proposal.
- b. All other terms and conditions of the IFB remain the same.
- c. **Receipt acknowledged by:**

Authorized Signature

Date Signed

Title

Name of Firm

CONSULTANT:

CLIENT:

PROJECT NAME:

Orange County John Bridges Community Center Buildings D & F HVAC Replacement

445 W 13th Street Apopka, FL 32703

100045176

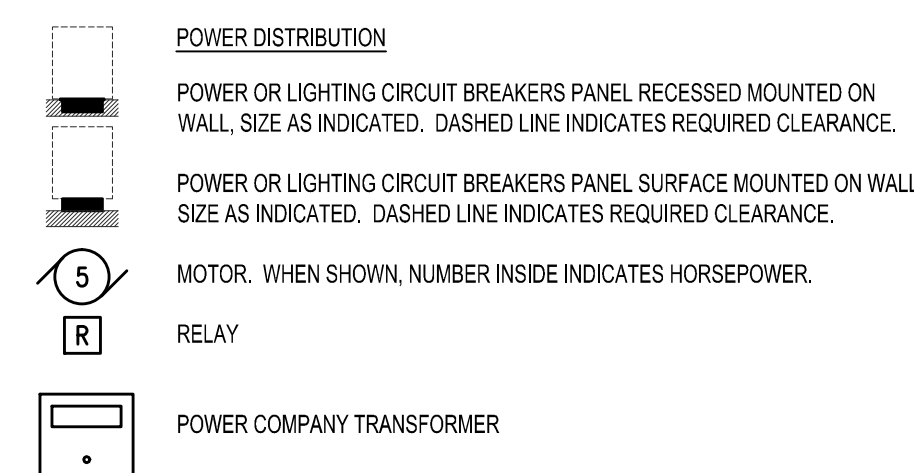
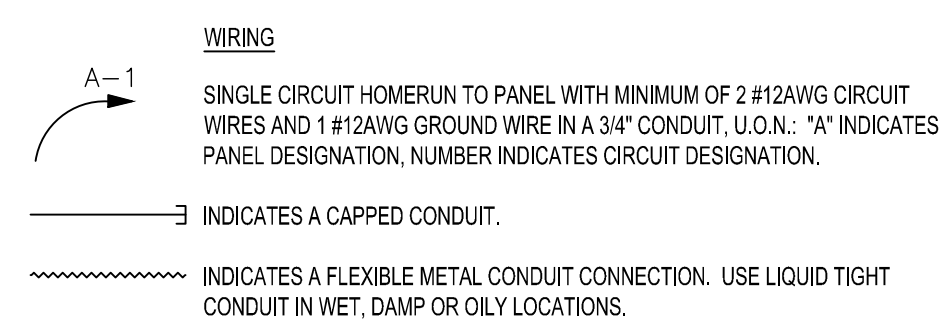
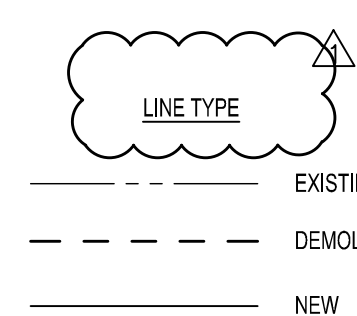
- BOXES AND FITTINGS**
- 60 NON-FUSED SAFETY SWITCH, 3 = NO. OF POLES, 60 = SWITCH SIZE, 600 V, UNLESS OTHERWISE NOTED.
 - 3 FUSED SAFETY SWITCH, 3 = NO. OF POLES, 60 = SWITCH SIZE, 50 = FUSES SIZE, 600 V, UNLESS OTHERWISE NOTED.
 - 3R FUSED SAFETY SWITCH COMBINATION STARTER, 3 = NO. OF POLES, 30 = MCP, 0 = NEMA STARTER SIZE, 3R = ENCLOSURE NEMA 1 UNLESS NOTED, 600V UNLESS OTHERWISE NOTED.
 - 3 INDIVIDUALLY MOUNTED ENCLOSED CIRCUIT BREAKER, 3 = NO. OF POLES, 100 = FRAME SIZE, 70 = TRIP RATING, 600 V, UNLESS OTHERWISE NOTED.
 - 20A MOTOR RATED SWITCH.
 - CEILING OR FLOOR MOUNTED JUNCTION BOX
 - WALL MOUNTED JUNCTION BOX

RECEPTACLES

- DUPLEX RECEPTACLE, 2P, 3W, GROUNDING TYPE, 20A, 125V, NEMA 5-20R, MOUNT 18" A.F.F. U.O.N.
- DUPLEX RECEPTACLE - SAME AS ABOVE EXCEPT WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER.
- DUPLEX CONVENIENCE RECEPTACLE - SAME AS ABOVE EXCEPT WITH 2-FLAP, SPRING-HINGED, GASKETED AND WEATHERPROOF COVER.
- DOUBLE DUPLEX RECEPTACLE IN ONE OUTLET BOX, 2P, 3W, GROUNDING TYPE, 20A, 125V, NEMA 5-20R, MOUNT 18" A.F.F. U.O.N.

SWITCHES

- SINGLE POLE TOGGLE SWITCH, 20A, 120/277 VAC, MOUNTED 4'-0" A.F.F. "N" = SWITCH LEG.
- THREE-WAY AND FOUR-WAY TOGGLE SWITCHES, 20A, 120/277 VAC, MOUNTED 4'-0" A.F.F.
- 20A MOTOR RATED SWITCH WITH OVERLOADS.



ABBREVIATIONS

A	AMPERES
A.F.F.	ABOVE FINISHED FLOOR
A.F.C.	AVAILABLE FAULT CURRENT
A.H.J.	AUTHORITY HAVING JURISDICTION
A.I.C.	AMPERES INTERRUPTING CAPACITY, SYMMETRICAL
A.T.S.	AUTOMATIC TRANSFER SWITCH
CKT.	CIRCUIT
COND., C.	CONDUIT
DISC.	DISCONNECT
ENCL.	ENCLOSURE
ETR	EXISTING TO REMAIN
F.A.C.P.	FIRE ALARM CONTROL PANEL
GF	GROUND FAULT INTERRUPTER
GND, G.	GROUND
GRS	GALVANIZED RIGID STEEL CONDUIT
HAGR	HEATING, AIR CONDITIONING, AND REFRIGERATION
HP	HORSE POWER
IG	ISOLATED GROUND
KW	KILOWATT
MCC	MOTOR CONTROL CENTER
NEC	NATIONAL ELECTRICAL CODE
PNL.	PANELBOARD
PVC	POLYVINYL CHLORIDE CONDUIT
SSCP	SYSTEM SECURITY CONTROL PANEL
U.O.N.	UNLESS OTHERWISE NOTED
XFMR	TRANSFORMER
WP	INDICATES WEATHERPROOF EQUIPMENT

GENERAL NOTES

1. THE SCOPE OF WORK FOR THIS PROJECT CONSISTS OF THE ADDITION OF AN AIR-COOLED CHILLER TO SERVE BUILDINGS "D" AND "F" AND THE REPLACEMENT OF THE MAJORITY OF THE DX TYPE AIR HANDLING UNITS IN BUILDINGS "D" AND "F" WITH CHILLED WATER TYPE UNITS.
2. THE WORK PRACTICES EMPLOYED ON THIS PROJECT SHALL AT ALL TIMES COMPLY WITH OR EXCEED THE LATEST ADOPTED EDITION OF THE NEC (NATIONAL ELECTRICAL CODE). ELECTRICAL CONTRACTOR SHALL PROVIDE OR OBTAIN ALL REQUIRED LABOR, MATERIAL, EQUIPMENT, INSURANCE, TOOLS, PERMITS, INSPECTIONS, ETC. TO PERFORM THE PROJECT ELECTRICAL WORK AS PER NEC, LOCAL AGENCIES, AND OWNER REQUIREMENTS.
3. A COPPER EQUIPMENT GROUNDING CONDUCTOR, SIZED AS PER TABLE 250-122 OF THE 2008 OR LATEST ADOPTED NEC, SHALL BE INSTALLED IN EVERY RACEWAY AND EFFECTIVELY TERMINATED AT EACH DEVICE, UNLESS NOTED OTHERWISE. MINIMUM WIRES SIZE FOR PHASE, NEUTRAL AND GROUND SHALL BE #12AWG AND MINIMUM CONDUIT SIZE SHALL BE 3/4" CONDUIT INSULATION SHALL BE RATED FOR 600 VOLTS AND THW.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE REQUIRED RACEWAY FOR A/C CONTROLS AS REQUIRED. FIELD COORDINATE WITH OTHER TRADES.
5. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING REQUIRED TO PERFORM THE ELECTRICAL WORK. OWNER/GENERAL CONTRACTOR SHALL BE NOTIFIED BEFORE STARTING CUTTING AND PATCHING, AND SHALL BE DONE IN SUCH A MANNER THAT WILL NOT AFFECT THE BUILDING STRUCTURE. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE AS A RESULT OF THE CUTTING AND PATCHING AND SHALL PROVIDE A CODE COMPLIANCE SOLUTION TO RESTORE THE BROKEN SYSTEMS AT NO EXTRA CHARGE.
6. ELECTRICAL CONTRACTOR SHALL FOLLOW OWNER/GENERAL CONTRACTOR, NATIONAL AND LOCAL AGENCIES, ETC. SAFETY REGULATIONS PROCEDURES. ELECTRICAL CONTRACTOR SHALL PROVIDE ADEQUATE EQUIPMENT AND WORKING AREA PROTECTION TO PREVENT INJURIES TO PEOPLE AND DAMAGE TO PROPERTY.
7. ELECTRICAL CONTRACTOR SHALL FULLY TEST ELECTRICAL SYSTEMS UPON COMPLETION OF WORK.
8. LABEL EACH SWITCH, RECEPTACLE, PANEL AND JUNCTION BOXES WITH SOURCE PANEL AND CIRCUIT NUMBER.
9. VERIFY PHASE ROTATION ON THREE-PHASE EQUIPMENT (DISCONNECTS, RECEPTACLES, ETC.)
10. CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE. CIRCUIT BREAKERS PROTECTING POWER PANELS, TRANSFORMERS, AND MOTORS SHALL BE 100% CIRCUIT BREAKERS PROTECTING HEATING, AIR CONDITIONING AND REFRIGERATION EQUIPMENT SHALL BE HACR RATED.
11. POWER AND COMMUNICATION DISTRIBUTION CONDUITS AND HOME RUNS SHALL BE RUN ABOVE THE BOTTOM CHORD OR TRUSSES TO AVOID FIRE RATED WALL PENETRATIONS. IF A FIRE WALL PENETRATION IS REQUIRED, THE ELECTRICAL CONTRACTOR SHALL USE AND PROVIDE A WALL PENETRATION PROCEDURE AND INSTALLATION APPROVED BY THE A.H.J. FOR THE FIRE RATED WALL TO BE PENETRATED.
12. THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE CONDITIONS BEFORE SUBMITTING A BID. NO ADDITIONAL PAYMENT SHALL BE RECEIVED ABOVE BID PRICE FOR WORK THAT CAN BE INFERRED THROUGH OBSERVATION OF EXISTING CONDITIONS.
13. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES. THE CONTRACTOR SHALL TAKE INTO ACCOUNT SPECIAL OPERATING REQUIREMENTS WHICH MAY AFFECT NORMAL WORKING AND ACCESS CONDITIONS.
14. RACEWAY ON PLAN DRAWINGS ARE SHOWN DIAGRAMMATICALLY. CONTRACTOR TO SELECT THE MOST FEASIBLE ROUTING.
15. ELECTRICAL CONTRACTOR SHALL VERIFY LOCATION, SIZE, CONNECTION POINT AND LOAD OF ALL EQUIPMENT BEING FURNISHED BY GENERAL CONTRACTOR, OR OWNER BEFORE ROUGH-IN OF ANY CONDUIT, AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
16. CONDUCTORS FROM DISCONNECTS TO MOTORS SHALL BE OF THE SAME SIZE AS FROM STARTER TO DISCONNECT. GROUNDING CONDUCTORS SHALL BE SIZED AS PER N.E.C. (NATIONAL ELECTRICAL CODE) SECTION 250.

No.	Date	Description
1	11/05/15	ADDENDUM NO. 1

ISSUE LOG
PROFESSIONAL SEALS:

SHEET TITLE:

ELECTRICAL SYMBOLS LEGEND AND GENERAL NOTES

SHEET INFORMATION:	
JOB No. 100045178	Date Issued: OCTOBER 25, 2015
Designed By: LF	Sheet Number:
Checked By: FL	E-000
QC Review: GFH	
Phase:	

CONSULTANT:

CLIENT:

PROJECT NAME:

Orange County John Bridges Community Center Buildings D & F HVAC Replacement

445 W 13th Street Apopka, FL 32703

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No.	Date	Description
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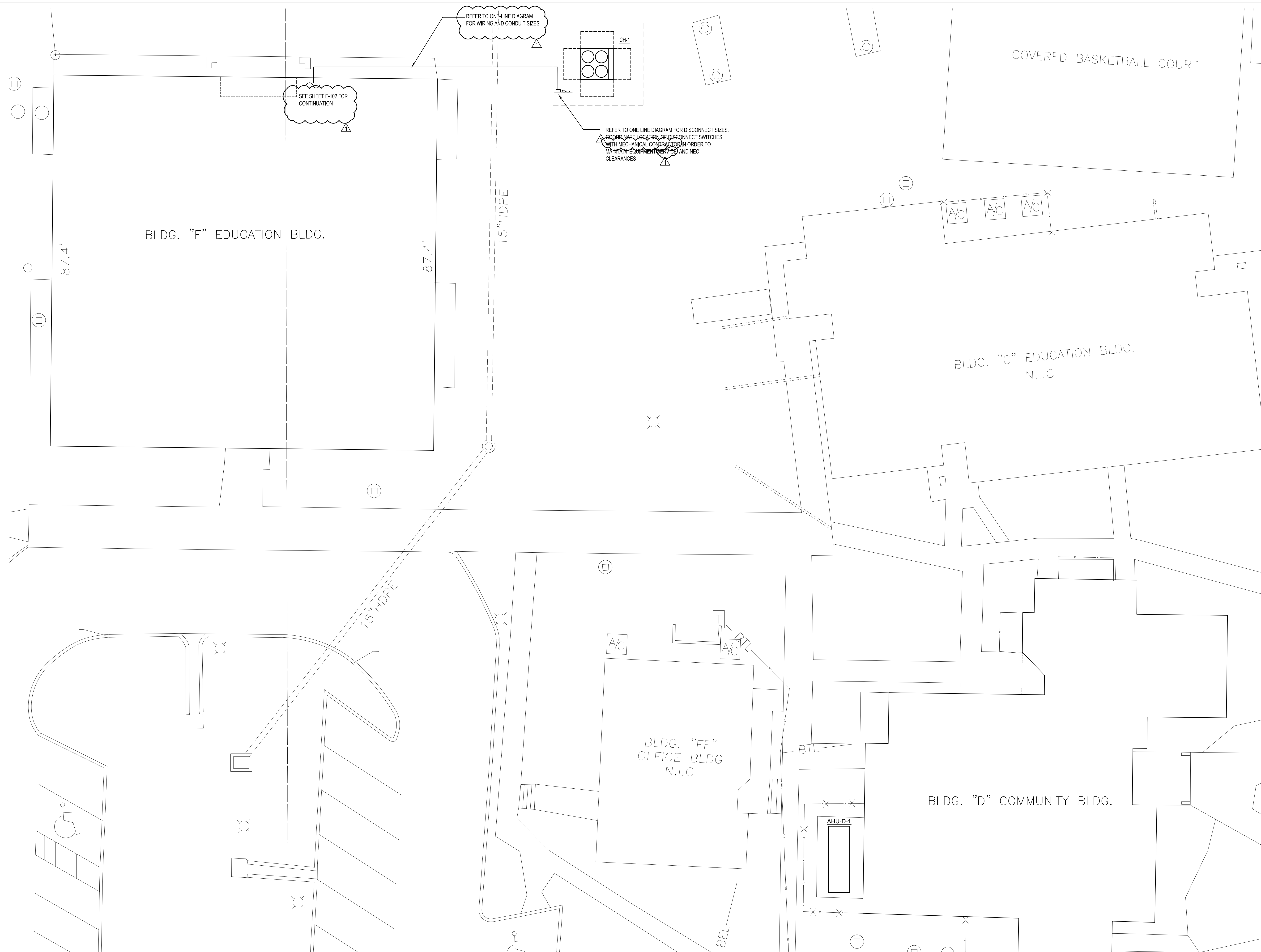
ISSUE LOG

PROFESSIONAL SEALS:

SHEET TITLE:

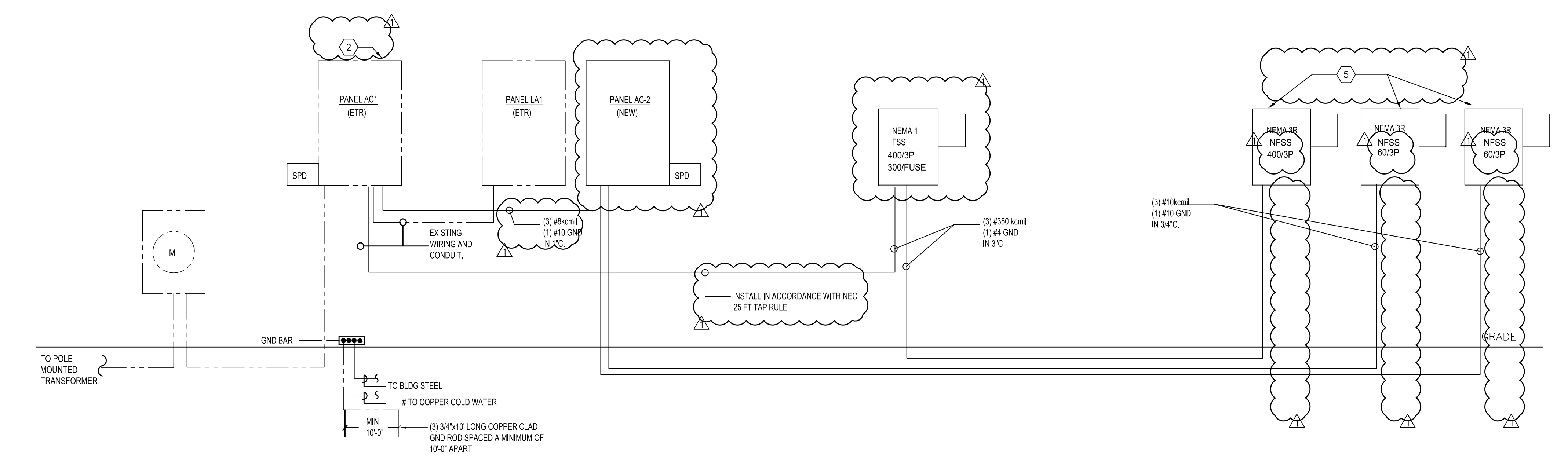
EXISTING ELECTRICAL SITE PLAN

SHEET INFORMATION:	
JOB No. 100045178	Date Issued: OCTOBER 25, 2015
Designed By: LF	Sheet Number:
Checked By: FL	
QC Review: GFH	
Phase:	E-002



A EXISTING ELECTRICAL SITE PLAN
SCALE: 3/32" = 1'-0"

PARTIAL EXISTING ONE-LINE BUILDING "F"



- SHEET NOTES**
- EXISTING EQUIPMENT IS SHOWN FOR INFORMATION PURPOSES ONLY AND SHALL REMAIN AS IS, UNLESS NOTED OTHERWISE.
 - ONE-LINE DRAWINGS ARE BASED ON EXISTING DRAWINGS FROM "PENINSULA ENGINEERING INC." DATED 05/15/2011. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND CONTACT CONTRACTING OFFICER IF DISCREPANCIES ARE FOUND.
- REVISIONS**
- PROVIDE POST AND RACKING SYSTEM FOR CH-1, CHWP-1 AND CHWP-2 DISCONNECTS.
 - THE DESIGN INTENT IS TO PROVIDE FEED THROUGH LUSS ON EXISTING PANEL AC1 BUS AND FEED THE NEW CHILLER DISCONNECT SWITCH USING THE NEC 25 FT TAP RULE. IF IT IS NOT POSSIBLE TO INSTALL NEW LUSS IN EXISTING PANEL AC1 IN ACCORDANCE WITH U.L. RULES AND REGULATIONS, REPLACE PANEL AC1 WITH A NEW LINE TYPE SERVICE-ENTRANCE PANELBOARD. TO INCLUDE A 300 AMP CIRCUIT BREAKER FOR THE CHILLER. UNDER THIS OPTION, EXISTING SPD UNIT MAYBE RE-USED, AND THE NEW 400 AMP CHILLER FSS MAY BE RE-USED.

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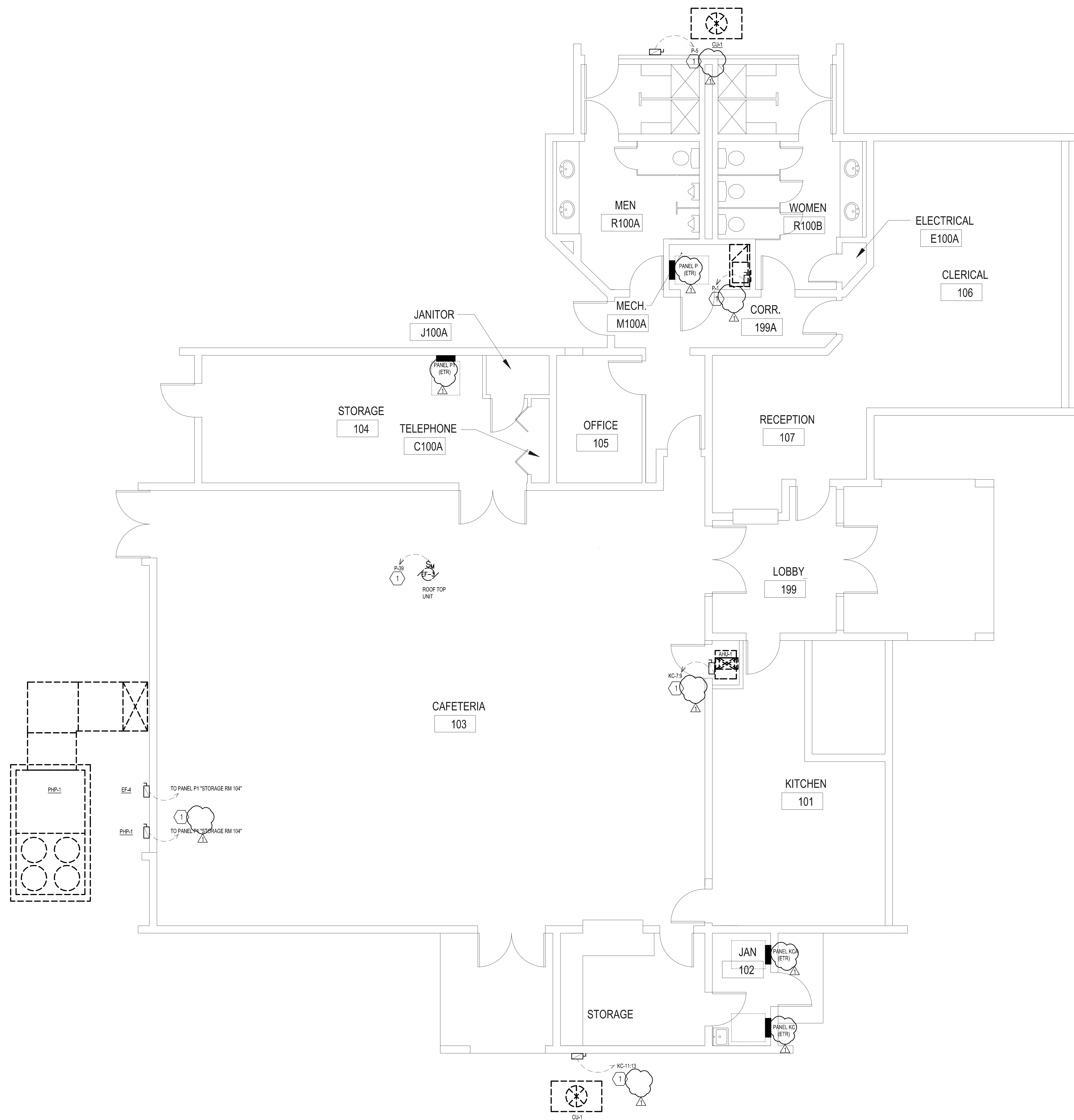
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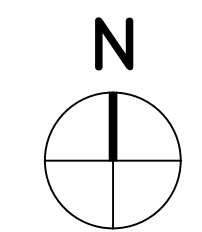
BLDG D ELECTRICAL DEMO PLAN

SHEET INFORMATION:	
JOB No. 100045178	Date Issued: OCTOBER 25, 2015
Designed By: LF	Sheet Number:
Checked By: FL	ED-101
QC Review: GFH	
Phase:	

- SHEET NOTES**
- ALL DEVICES AND EQUIPMENT SHOWN ON THIS PLAN ARE EXISTING.
 - EXISTING CONDITIONS SHOWN ON THESE DRAWINGS ARE BASED ON ORIGINAL DRAWINGS AND FIELD INVESTIGATION. EXISTING CONDITIONS SHALL BE CONFIRMED PRIOR TO BID. FIELD CONDITIONS SHALL GOVERN IN CASE OF DISCREPANCIES.
 - CONDUITS/RACEWAYS SERVING OTHER AREAS THAT RUN THROUGH THE PROJECT AREA SHALL REMAIN ACTIVE DURING THE CONSTRUCTION, SO AS NOT TO CAUSE ANY DISRUPTION TO THESE OTHER SPACES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL CONDUITS, NEW OR EXISTING, WITHIN THE PROJECT AREA ARE PROPERLY SUPPORTED AND PROVIDED WITH BONDING BUSHINGS IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
 - ITEMS REMOVED DURING THIS PROJECT SHALL BE DISPOSED OF OR TURNED OVER TO THE OWNER AT THE OWNER'S DISCRETION.
 - UPDATE EXISTING PANEL DIRECTORIES WITH NEW WORK PROVIDED UNDER THIS CONTRACT.
 - CIRCUIT NUMBERS ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM CIRCUITRY BY TRACING CIRCUITS BACK TO THEIR SOURCE PRIOR TO DEMOLITION.
- KEYED NOTES:**
- DEMOLISH THE CIRCUIT AND ASSOCIATED SAFETY SWITCH OR STARTER IN ITS ENTIRETY BACK TO THE SOURCE PANEL AND TO THE EQUIPMENT IT SERVES.



A BLDG D ELECTRICAL DEMO PLAN
SCALE: 1/4" = 1'-0"



CONSULTANT:

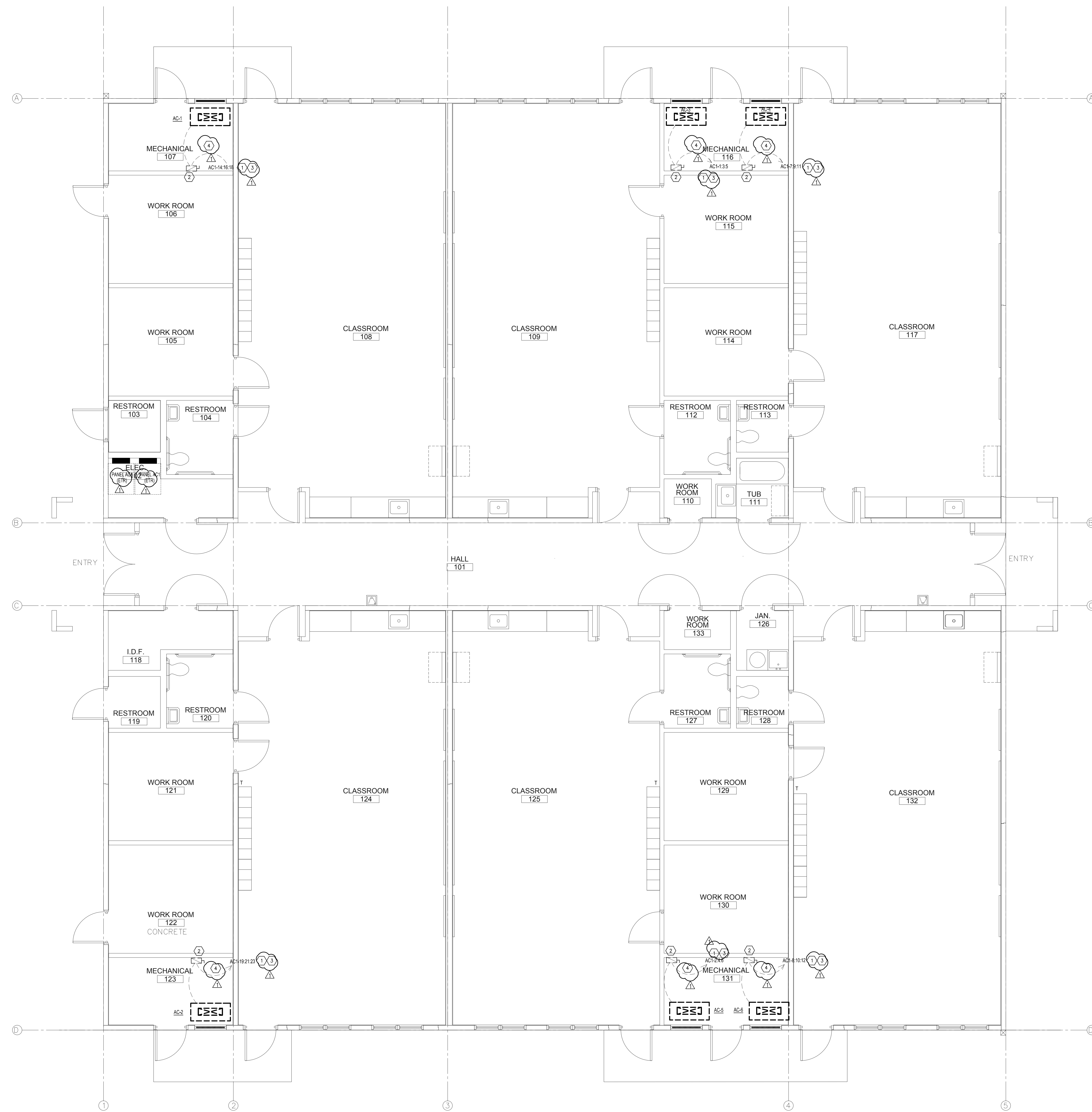
CLIENT:

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445 W 13th Street Apopka, FL 32703

100045176



- SHEET NOTES:**
1. ALL DEVICES AND EQUIPMENT SHOWN ON THIS PLAN ARE EXISTING.
 2. EXISTING CONDITIONS SHOWN ON THESE DRAWINGS ARE BASED ON ORIGINAL DRAWINGS AND FIELD INVESTIGATION. EXISTING CONDITIONS SHALL BE CONFIRMED PRIOR TO BID. FIELD CONDITIONS SHALL GOVERN IN CASE OF DISCREPANCIES.
 3. CONDUITS/RACEWAYS SERVING OTHER AREAS THAT RUN THROUGH THE PROJECT AREA SHALL REMAIN ACTIVE DURING THE CONSTRUCTION, SO AS NOT TO CAUSE ANY DISRUPTION TO THESE OTHER SPACES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL CONDUITS, NEW OR EXISTING, WITHIN THE PROJECT AREA ARE PROPERLY SUPPORTED AND PROVIDED WITH BONDING BUSHINGS IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
 4. ITEMS REMOVED DURING THIS PROJECT SHALL BE DISPOSED OF OR TURNED OVER TO THE OWNER AT THE OWNER'S DISCRETION.
 5. UPDATE EXISTING PANEL DIRECTORIES WITH NEW WORK PROVIDED UNDER THIS CONTRACT.
 6. CIRCUIT NUMBERS ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM CIRCUITRY BY TRACING CIRCUITS BACK TO THEIR SOURCE PRIOR TO DEMOLITION.
- KEYED NOTES:**
1. RE-USE BREAKER IN EXISTING PANEL AC1 LOCATED IN ELECTRICAL ROOM 102 REFER TO SHEET E-102 FOR MORE INFORMATION.
 2. DEMOLISH SAFETY SWITCH OR STARTER.
 3. DEMOLISH CONDUCTORS FOR ASSOCIATED CIRCUIT IN ITS ENTIRETY BACK TO THE SOURCE PANEL AND TO THE EQUIPMENT IT SERVES.
 4. RE-USE CONDUIT AND PROVIDE NEW CONDUCTORS REFER TO SHEET E-102 FOR MORE INFORMATION.

A BLDG F ELECTRICAL DEMO PLAN
SCALE: 1/4" = 1'-0"

No.	Date	Description
1	11/05/15	ADDENDUM NO. 1

ISSUE LOG
PROFESSIONAL SEALS:

SHEET TITLE:
BLDG F ELECTRICAL DEMO PLAN

SHEET INFORMATION:	
JOB No. 100045178	Date Issued: OCTOBER 25, 2015
Designed By: LF	Sheet Number:
Checked By: FL	ED-102
OC Review: GFH	
Phase:	

CONSULTANT:

CLIENT:

PROJECT NAME:

Orange County John Bridges Community Center Buildings D & F HVAC Replacement

445 W 13th Street Apopka, FL 32703

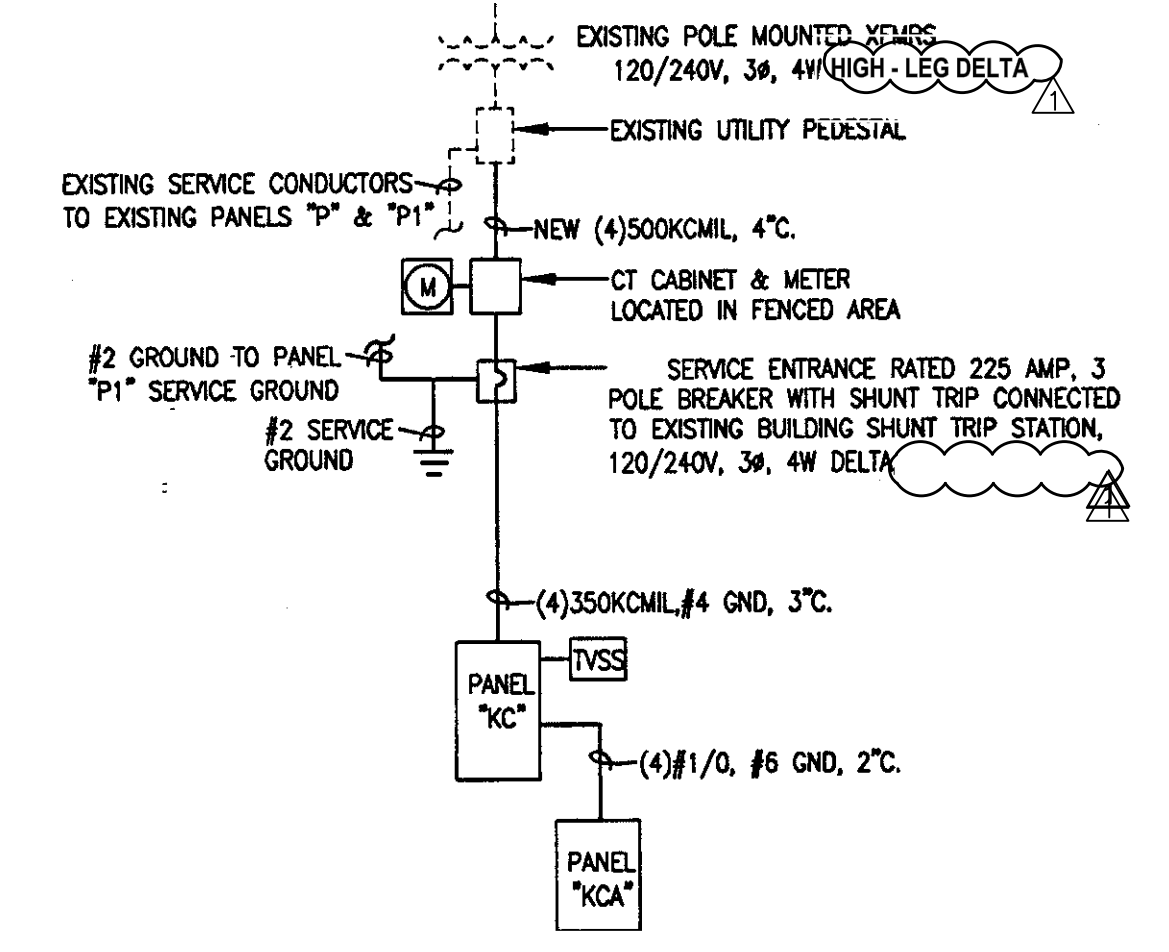
100045176

SHEET NOTES

1. UPDATE EXISTING PANEL DIRECTORIES WITH NEW WORK PROVIDED UNDER THIS CONTRACT.
2. ALL DISCONNECTS WITHIN MECHANICAL ROOM M100A SHALL BE RATED NEMA 3R.
3. EXISTING SERVICE IS 240V, 3-PHASE, 4W/3-LEG DELTA. CONTRACTOR SHALL EXERCISE CARE IN MAKING CONNECTIONS TO EXISTING PANELS AS THE AVAILABLE VOLTAGES CAN BE EITHER 120, 208 OR 240 V, 1-PHASE OR 240 V, 3-PHASE.
4. EXISTING EQUIPMENT IS SHOWN FOR INFORMATION PURPOSES ONLY AND SHALL REMAIN AS IS, UNLESS NOTED OTHERWISE.
5. DRAWINGS ARE BASED ON EXISTING DRAWINGS FROM "S.G.M. ENGINEERING, INC." DATED 09/03/2002. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND CONTACT CONTRACTING OFFICER IF DISCREPANCIES ARE FOUND.

KEYED NOTES

- ① DEMOLISH EXISTING CIRCUIT BREAKER AND GROUND NEW 60AMP, 2-POLE, 3-POLE CIRCUIT BREAKER IN EXISTING PANELBOARD KC LOCATED IN JANITOR ROOM. CIRCUIT BREAKERS SHALL HAVE AN AIC RATING GREATER OR EQUAL TO THE PANELBOARD.
- ② DEMOLISH EXISTING CIRCUIT BREAKER AND GROUND NEW 200AMP, 2-POLE, 3-POLE CIRCUIT BREAKER IN EXISTING 400AMP PANELBOARD P1 LOCATED IN STORAGE ROOM 104. CIRCUIT BREAKER SHALL HAVE AN AIC RATING GREATER OR EQUAL TO THE PANELBOARD.
- ③ PROVIDE NEW CONDUIT AND CONDUCTORS AS SHOWN.

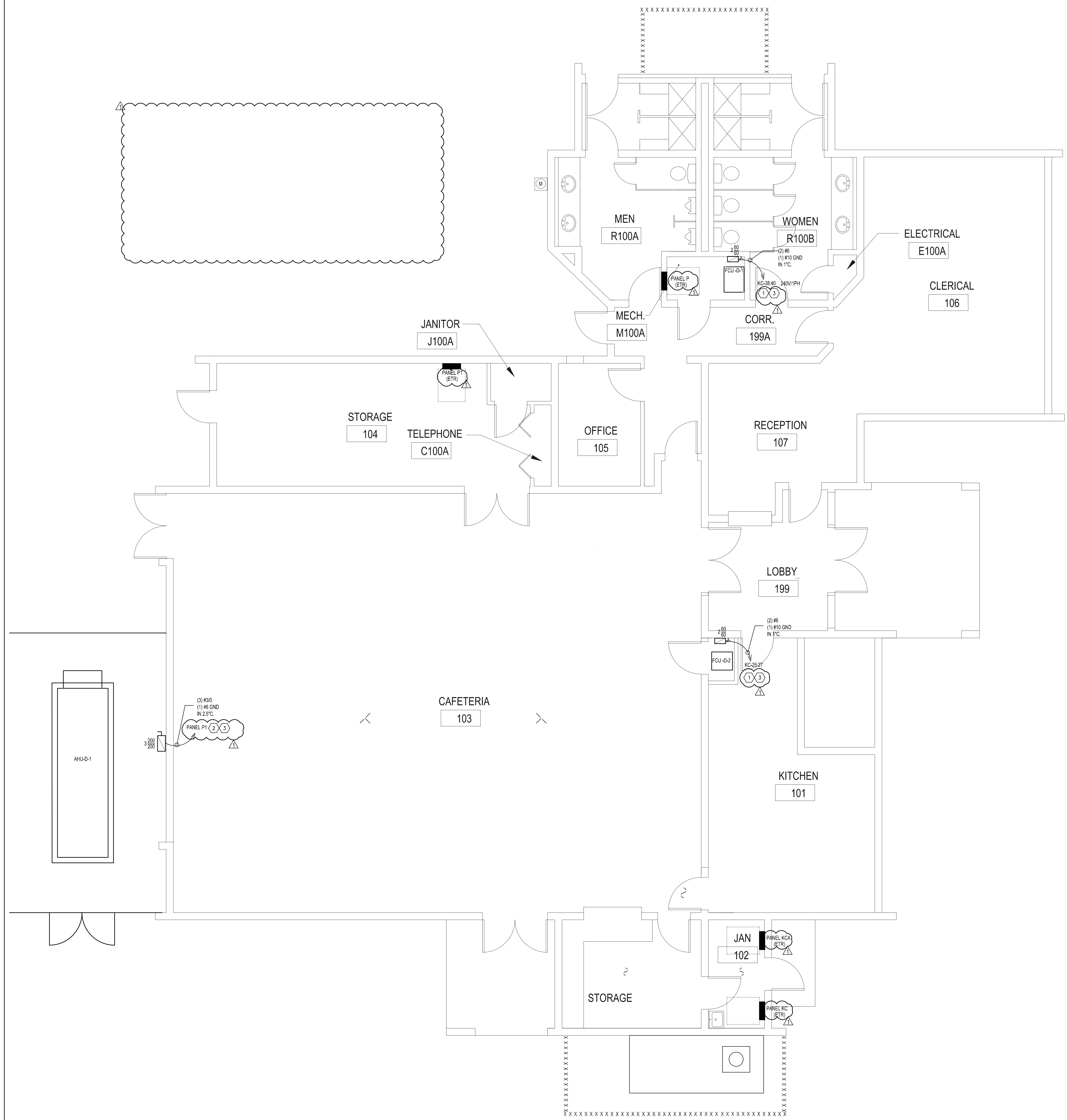


PANEL KC "BUILDING D"

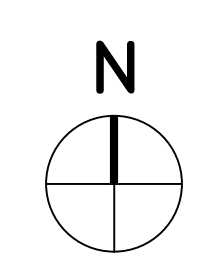
LOAD TYPE	CONNECTED (KVA)
PANEL LOAD 240V/3PH	63.00
PANEL LOAD 240V/1PH	19.90
REMOVED LOAD 240V/1PH	9.90
ADDED LOAD 240V/1PH	20.90
NEW TOTAL LOAD	93.90
PANEL CAPACITY	166.24
PANEL AMPACITY	400 AMPS

PANEL P "BUILDING D"

LOAD TYPE	CONNECTED (KVA)
PANEL LOAD 240V/3PH	67.00
PANEL LOAD 240V/1PH	66.90
REMOVED LOAD	53.90
ADDED LOAD	74.00
NEW TOTAL LOAD	74.00
PANEL CAPACITY	166.24
PANEL AMPACITY	400 AMPS



A BLDG D NEW WORK ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



No.	Date	Description
1	11/05/15	ADDENDUM NO. 1

ISSUE LOG
PROFESSIONAL SEALS:

SHEET TITLE:

BLDG D NEW WORK ELECTRICAL PLAN

SHEET INFORMATION:	
JOB No. 100045178	Date Issued: OCTOBER 25, 2015
Designed By: LF	Sheet Number:
Checked By: FL	
QC Review: GFH	
Phase:	E-101

CONSULTANT:

CLIENT:

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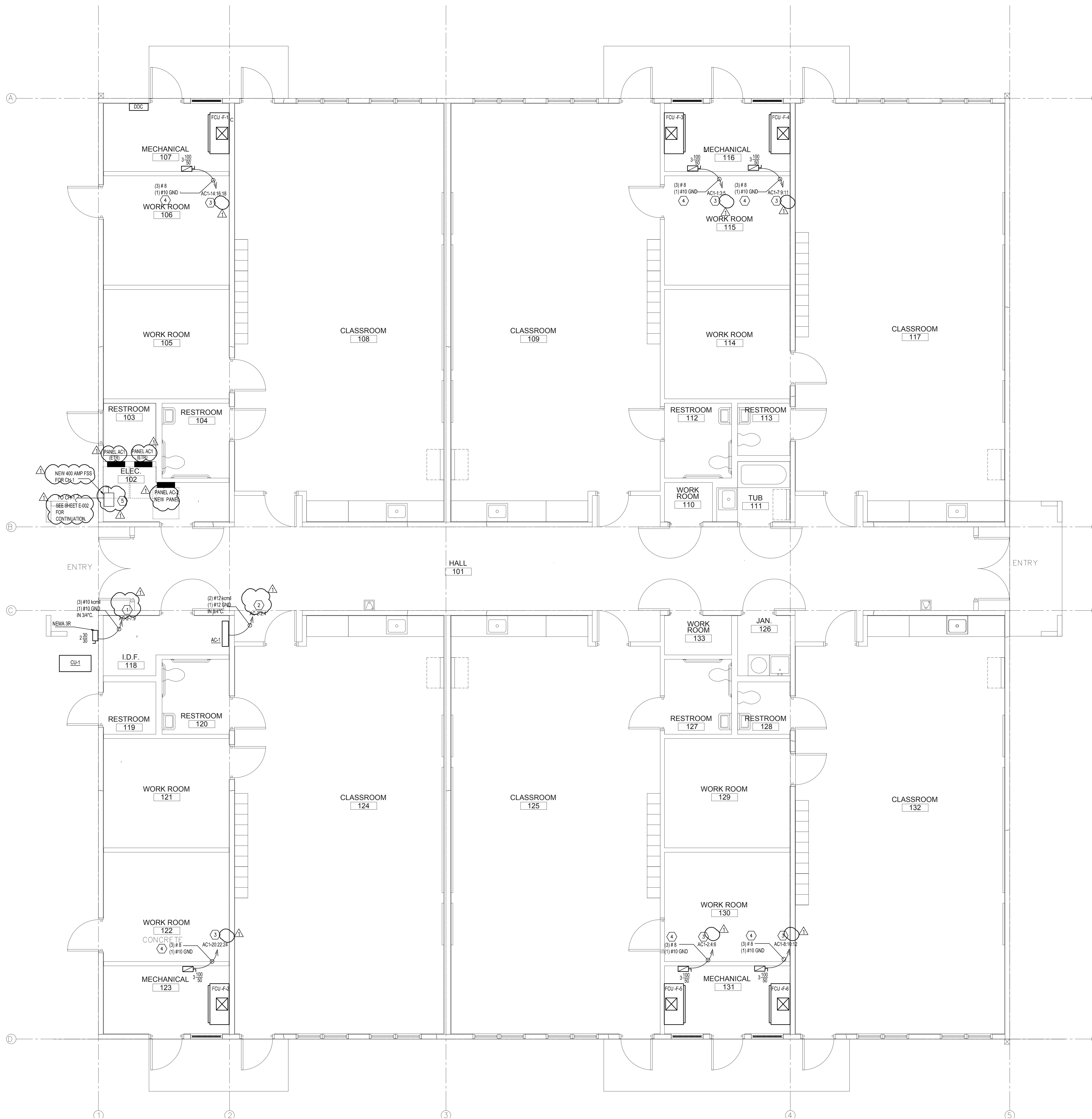
PROFESSIONAL SEALS:

SHEET TITLE:

BLDG F NEW WORK ELECTRICAL PLAN

SHEET INFORMATION:	
JOB No. 100045178	Date Issued: OCTOBER 25, 2015
Designed By: LF	Sheet Number:
Checked By: FL	E-102
OC Review: GFH	
Phase:	

- SHEET NOTES:**
- UPDATE EXISTING PANEL DIRECTORIES WITH NEW WORK PROVIDED UNDER THIS CONTRACT.
 - ALL DISCONNECTS WITHIN MECHANICAL ROOMS 107, 116, 123, 131 SHALL BE RATED NEMA 3R.
- KEYED NOTES:**
- PROVIDE 35 AMP, 240 V, 1-PHASE, 2-POLE CIRCUIT BREAKER IN NEW PANELBOARD AC2 LOCATED IN ELECTRICAL RM 102.
 - PROVIDE 20 AMP, 240 V, 1-PHASE, 2-POLE CIRCUIT BREAKER IN NEW PANELBOARD AC2 LOCATED IN ELECTRICAL RM 102.
 - REUSE EXISTING 50 AMP, 208 V, 3-POLES CIRCUIT BREAKER IN EXISTING 600AMP PANELBOARD AC1 LOCATED IN ELECTRICAL RM 102.
 - PROVIDE NEW CONDUCTORS (EXISTING PACEWAY).
 - INSTALL IN ACCORDANCE WITH THE NEC 25 FT TAP RULE.



A BLDG F NEW WORK ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"

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1	11/05/15	ADDENDUM NO. 1

ISSUE LOG

PROFESSIONAL SEALS:

SHEET TITLE:

ELECTRICAL SCHEDULES

SHEET INFORMATION:

JOB No. **100045178** Date Issued: OCTOBER 25, 2015

Designed By: LF Sheet Number:

Checked By: FL

QC Review: GFH

Phase:

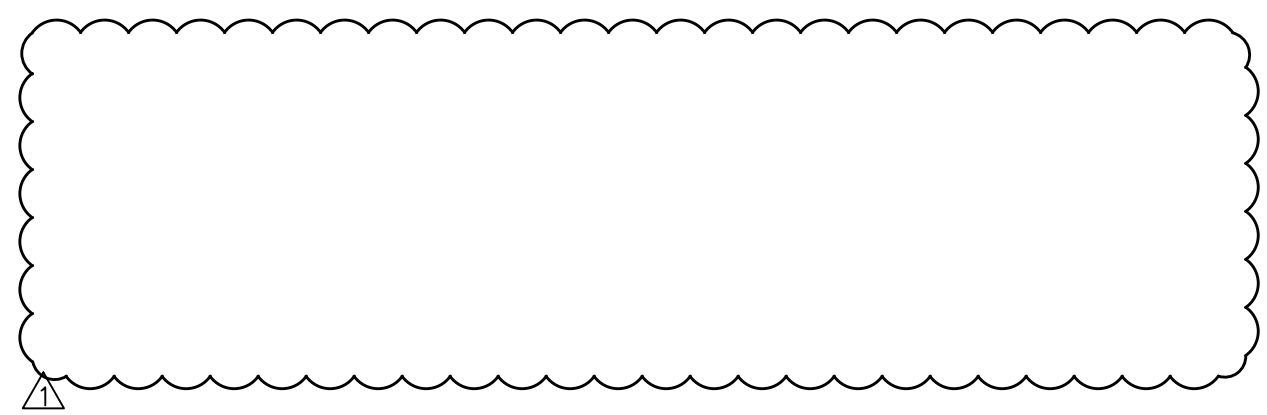
E-501

MAIN DISTRIBUTION BOARD												Name: AC1 (EXISTING)					
MAIN BREAKER: 600 AMPS 3 POLE 3 PHASE						Project Name: _____											
MAIN LUGS: 4 AMPS						Project Number: _____											
A.I.C.: 4 AMPS						Fed From: _____											
SURFACE MTD: X						208Y/120V											
FLUSH MTD: _____						480Y/277V											
						240/120V											
C K T N O	I D E N T I F I C A T I O N	C O D E	LOAD/PHASE (KVA)			CIRCUIT BREAKER			LOAD/PHASE (KVA)			C O D E	I D E N T I F I C A T I O N	C K T N O	N O T E S		
			A	B	C	TRIP	POLES	TRIP	A	B	C						
2	1	FCU-F-3	H	3.8			50	3	3	50	3.8			H	FCU-F-5	2	
	3		H		3.8							3.8		H		4	
	5		H			3.8							3.8	H		6	
2	7	FCU-F-4	H	3.8			50	3	3	50	3.8			H	FCU-F-6	8	2
	9		H		3.8							3.8		H		10	
	11		H			3.8							3.8	H		12	
	13	AC-2	M	4.2			45	3	3	50	3.8			H	FCU-F-1	14	
	15		M		4.2							3.8		H		16	
	17		M			2.1							3.8	H		18	
2	19	FCU-F-2	H	3.8			50	3	1	125	8.6			O	PANEL LA1	20	
	21		H		3.8						8.6			O		22	
	23		H			3.8			3			8.6		O		24	
	25	TVSS							3	3	80	5.7		O	LIFT STATION	26	
	27											5.7		O		28	
	29												5.7	O		30	
	31																
	33																
	35									3	300	32.8		C	CH-1	38	
	37												32.8	C		40	
	39												32.8	C		42	
	41				15.6	15.6	13.5				58.5	58.5	58.5				

CONN. LOAD (KVA)	CONT. LOAD/NEC FACTOR	DEMAND LOAD (KVA)	
LIGHTING (L)	0.0	1.25	0.0
RECEPTACLES (R)	0.0	NEC	0.0
LARGEST MOTOR (M)	0.0	1.25	0.0
ALL OTHER MOTORS (M)	10.4	1.00	10.4
HEATING (H)	68.4	1.00	68.4
COOLING (C)	98.4	0.75	73.8
OTHER (O)	43.0	1.00	43.0
ELEVATOR (V)	0.0	1.00	0.0
SPARES (S)	0.0	1.00	0.0
DRYERS (D)	0.0	1.00	0.0
KITCHEN (K)	0.0	1.00	0.0

PANEL CONNECTED LOAD: 220.2 KVA
PANEL DEMAND LOAD: 195.6 KVA
PANEL DEMAND LOAD: 543.7 AMPS

NOTES:
1. SUBFEED NEW 400AMP FBS FOR CH-1 BY TAPPING THE BUS ON PANEL AC1. FIELD VERIFY PANEL PRIOR TO ANY WORK AND VERIFY WITH PANEL MANUFACTURER BEFORE PROCEEDING TO TAP THE BUS. ARRANGE WITH UL INSPECTOR TO REVIEW / APPROVE BUS TAP. SEE KEYED NOTE 2 ON E-002.
2. REUSE EXISTING 50 AMP, 208 VOLT, 3 PHASE CIRCUIT BREAKER IN EXISTING PANELBOARD



A EXISTING PANEL AC1

SCALE: N.T.S.

Name: AC-2																	
MAIN BREAKER: 100 AMPS 3 POLE 3 PHASE						Project Name: _____											
MAIN LUGS: 100 AMPS						Project Number: _____											
A.I.C.: 10,000 AMPS						Fed From: AC1											
SURFACE MTD: _____						208Y/120V											
FLUSH MTD: _____						480Y/277V											
						240/120V											
C K T N O	I D E N T I F I C A T I O N	C O D E	LOAD/PHASE (KVA)			CIRCUIT BREAKER			LOAD/PHASE (KVA)			C O D E	I D E N T I F I C A T I O N	C K T N O	N O T E S		
			A	B	C	TRIP	POLES	TRIP	A	B	C						
1	CHWP-2 (REDUNDANT PUMP)	M	0.0			35	3	2	20	0.2			O	AC-1	2		
	3		M		0.0							0.2		O		4	
	5		M			0.0								O		6	
	7	CU-1	O	1.9			30	2	1	20				O		8	
	9		O		1.9				1	20				O		10	
	11						20	1	1	20				O		12	
	13	CHWP-1	M	2.1			35	3	1	20				O		14	
	15		M		2.1					1	20			O		16	
	17		M			2.1				1	20			O		18	
	19						20	1	1	20				O		20	
	21						20	1	1	20				O		22	
	23						20	1	1	20			0.2	0.2	0.0	24	

CONN. LOAD (KVA)	CONT. LOAD/NEC FACTOR	NEC REQ'D (KVA)	
LIGHTING (L)	0.0	1.25	0.0
RECEPTACLES (R)	0.0	NEC	0.0
LARGEST MOTOR (M)	0.0	1.25	0.0
ALL OTHER MOTORS (M)	6.3	1.00	6.3
HEATING (H)	0.0	1.00	0.0
COOLING (C)	0.0	1.00	0.0
OTHER (O)	4.1	1.00	4.1
ELEVATOR (V)	0.0	1.00	0.0
SPARES (S)	0.0	1.00	0.0
DRYERS (D)	0.0	1.00	0.0
KITCHEN (K)	0.0	1.00	0.0

PANEL CONNECTED LOAD: 10.4 KVA
PANEL CAPACITY PER NEC: 10.4 KVA
SPARE CAPACITY: 0.0 KVA
TOTAL PANEL CAPACITY: 10.4 KVA
TOTAL PANEL AMPACITY: 28.0 AMPS

NOTES: