

SURGE PROTECTIVE DEVICE							
TYPE	VOLTAGE	UL 1449 RATING	MIN. PROTECTION RATINGS PER MODE - AMPS PER #	MANUFACTURER & MODEL NO.			
SPD-1	480Y/277V	1000V L-N	300,000	150,000	150,000	150,000	CURRENT TECHNOLOGY T650-277/480-3BY-DH
SPD-2 - 10	208Y/120V	400V L-N	120,000	60,000	60,000	60,000	CURRENT TECHNOLOGY XN60-120/208-3BY

NOTES:
1. PROVIDE SURGE COUNTER ON SPD-1 AND STATUS LIGHTS ON EACH UNIT.

TRANSFORMER SCHEDULE					
TYPE	KVA	PRIMARY VOLTAGE	SECONDARY VOLTAGE	TAPS	MANUFACTURER & MODEL NO.
T-A	30	480V - 3Ø DELTA	208Y/120V 3Ø - WYE	4 2-1/2% FCBN 2 2-1/2% FCAN	GENERAL ELECTRIC 4T10A1002
T-B	45	480V - 3Ø DELTA	208Y/120V 3Ø - WYE	4 2-1/2% FCBN 2 2-1/2% FCAN	GENERAL ELECTRIC 4T10A1003
T-C T-F, T-H T-J, T-L	75	480V - 3Ø DELTA	208Y/120V 3Ø - WYE	4 2-1/2% FCBN 2 2-1/2% FCAN	GENERAL ELECTRIC 4T10A1004
T-D, T-K	112½	480V - 3Ø DELTA	208Y/120V 3Ø - WYE	4 2-1/2% FCBN 2 2-1/2% FCAN	GENERAL ELECTRIC 4T10A1005

PANELBOARD NOTES:

- 480Y/277V BRANCH CIRCUIT PANELS SHALL BE GENERAL ELECTRIC TYPE AE. 208Y/120V BRANCH CIRCUIT PANELS SHALL BE TYPE AG AS SHOWN.
- BRANCH CIRCUIT BREAKERS SHALL BE ARRANGED IN THE PANELS AS SHOWN.
- THO SECTION PANELS SHALL HAVE SECTIONS OF EQUAL HEIGHT.
- 6P1 CIRCUIT BREAKERS SERVING HEAT TRACE TAPS SHALL BE 30MA EQUIPMENT PROTECTION TYPE. ALL OTHER 6P1 CIRCUIT BREAKERS SHALL BE PERSONNEL PROTECTION TYPE.
- TWO POLE BREAKERS SERVING HAND DRYERS SHALL HAVE HANDLE LOCKING DEVICES.
- THE HORIZONTAL TO MULTIPLE POLE CIRCUIT BREAKERS SHALL HAVE A SINGLE NUMBER CORRESPONDING TO THE NUMBER OF THE FIRST POLE OF THE BREAKER IN THE PANEL.
- SERIES RATED MAIN AND BRANCH CIRCUIT BREAKERS SHALL BE ACCEPTABLE.
- ALL PANELBOARDS SHALL HAVE DOOR-IN-DOOR FRONT TRIM WHERE FRONT IS HINGED TO BOX.
- A TYPED DIRECTORY OF CIRCUIT NUMBERS SHALL BE INSTALLED UNDER CLEAR PLASTIC INSIDE EACH PANELBOARD DOOR. DIRECTORIES SHALL INDICATE THE TYPE OF LOAD SERVED (I.E. LIGHTS, RECEPTACLES, HVAC UNITS, ETC) AND THE ROOM NUMBER OF THE ROOMS SERVED BY THE CIRCUIT.
- TIGHTENING OF SWITCHGEAR COMPONENTS SHALL BE PERFORMED WITH A CALIBRATED TORQUE TOOL AS REQUIRED BY NEC SECTION 110.14 (D).

MAIN SWITCHBOARD M5B					
VOLTAGE	MAINS	BRANCH CIRCUIT NO.	BRANCH BREAKER	A.I.C.	SERVICE
480Y/277V 3Ø, 4 WIRE (1633 KVA)	2500A-3P SOLID STATE TRIP BREAKER WITH GROUND FAULT PROT.	DISTRIBUTION SECTION #1			
		12	100A-3P	42,000	PANEL EH # T-5
		3	5P	42,000	100A SPACE
		4	60A-3P	42,000	SPD-1
		5	3P	42,000	100A SPACE
		6	150A-3P	42,000	ELEVATOR
		7,8	200A-3P	42,000	PANEL HK # HF
		10	5P	42,000	225A SPACE
		11	250A-3P	42,000	PANEL HG
		12,13	300A-3P	42,000	PANELS HB # HD
		DISTRIBUTION SECTION #2			
		14	400A-3P	42,000	PANEL HA
		15,16	300A-3P	42,000	PANELS HI # HL
		17	600A-3P	42,000	PANEL HJ
		18	5P	42,000	600A SPACE

NOTES:

- SWITCHBOARD SHALL BE GENERAL ELECTRIC SPECTRA SERIES.
 - BUS BAR STRUCTURE SHALL BE BRACED FOR 65,000 AMPS.
 - PROVIDE UL SERVICE ENTRANCE LABEL.
 - PROVIDE ADJUSTABLE ELECTRONIC TRIP MAIN BREAKER WITH BUILT-IN AMPHETER AND VOLTMETER SETTINGS FOR THE SOLID STATE TRIP MAIN BREAKER SHALL BE AS FOLLOWS:
- | TRIP FUNCTION | TIMES RATED AMPERES | TIME DELAY SECONDS |
|-----------------|---------------------|--------------------|
| CURRENT SETTING | 1.0 | — |
| INSTANTANEOUS | 5 | — |
| LONG TIME | 1.1 | 10.0 |
| SHORT TIME | 4 | 0.35 |
| GROUND FAULT | 1200A MAX. | 0.35 |
- BRANCH CIRCUIT BREAKERS SHALL BE HORIZONTALLY NUMBERED AND ARRANGED IN THE ORDER SCHEDULED ABOVE. PROVIDE A PLASTIC NAMEPLATE FOR EACH.
 - PROVIDE A GROUND BUS IN EACH DISTRIBUTION SECTION.
 - PROVIDE FULL HEIGHT VERTICAL BUS IN EACH SECTION.
 - CIRCUIT BREAKERS SHALL BE SERIES RATED WITH PANELS SERVED.
 - PROVIDE GE PGMII POWER QUALITY METER WITH DRY CONTACTS AND MODBUS CONNECTION FOR BUILDING AUTOMATION SYSTEM MONITORING.

GENERAL NOTES: (ALL SHEETS)

- ALL PENETRATIONS THROUGH FIRE WALLS AND RATED FLOOR SLABS SHALL BE FIRE STOPPED WITH 3H FIRE BARRIERS OR EQUAL. PROVIDE MEETING UL 1479 OR ASTM E814 FIRE RATINGS IN ACCORDANCE WITH ARTICLE 900-21 OF THE NATIONAL ELECTRICAL CODE.
- ALL AREAS OF BUILDING HAVE RETURN AIR FLEANS ABOVE CEILING. ALL MATERIALS WITHIN FLEANS ARE REQUIRED TO BE NON-COMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 AS DETERMINED IN ACCORDANCE WITH ASTM E84.

SYMBOL	DISC. SKL	CONDUCTORS	VOLTS
W04 & W12	30/2/5 *	2#12	277 V
H10	30/2/5 *	2#12	277 V
H14	30/2/5 *	2#12	277 V
H20	30/2/20 *	2#12	277 V
H26	30/2/25 *	2#10	277 V
H42	30/3/5	3#12	480-3Ø
H48	30/3/5	3#12	480-3Ø
H60	30/3/20	3#12	480-3Ø
EH-12,14	BLT-IN	2#12	277 V

* ONLY ONE FUSE REQUIRED
** ALL DISCONNECTS INSTALLED OUTDOORS SHALL HAVE RAINTIGHT ENCLOSURES, NEMA 3R

PANEL EH									
SERVICE: 480Y/277V, 3Ø					MAIN: 100A-3P MAIN BREAKER				
PANEL A.I.C.: 22,000A					OPTIONS: EQUIP. GROUND BUS				
SERVES	VA	CIR. BKR. #	A B C	CIR. #	VA	SERVES	VA	CIR. BKR. #	A B C
LIGHTS	1730	20/1	1	16	—	SPACE			
CR. LTS.	705	20/1	2	17	—	SPACE			
LIGHTS	1160	20/1	3	18	—	SPACE			
CR. LTS.	620	20/1	4	19	—	SPACE			
LIGHTS	2060	20/1	5	20	—	SPACE			
CR. LTS.	660	20/1	6	21	—	SPACE			
LIGHTS	1800	20/1	7	22	—	SPACE			
CR. LTS.	420	20/1	8	23	—	SPACE			
LIGHTS	1525	20/1	9	24	—	SPACE			
CR. LTS.	375	20/1	10	25	—	SPACE			
SPARE	—	20/1	11	26	—	SPACE			
SPARE	—	20/1	12	27	—	SPACE			
SPARE	—	20/1	13	28	100/3	20/10	T-E		
SPARE	—	20/1	14	29	—	SPACE			
SPARE	—	20/1	15	30	—	SPACE			

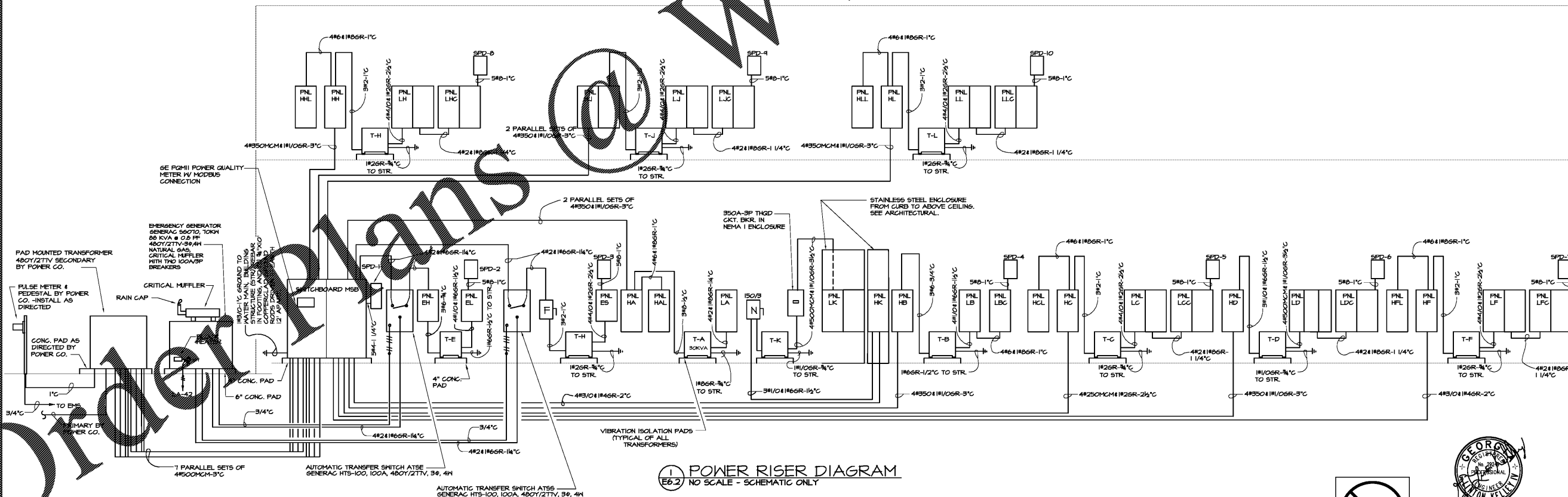
TOTAL CONNECTED LOAD: 31,045 VA

PANEL EG									
SERVICE: 208Y/120V, 3Ø					MAIN: 150A-3P MAIN BREAKER				
PANEL A.I.C.: 10,000A					OPTIONS: EQUIP. GROUND BUS				
SERVES	VA	CIR. BKR. #	A B C	CIR. #	VA	SERVES	VA	CIR. BKR. #	A B C
GLR. EVAP	20/1	1	22	—	SPACE				
MLK CLR	20/1	2	23	—	SPACE				
MLK CLR	20/1	3	24	—	SPACE				
MLK CLR	1788	4	25	—	SPACE				
MLK CLR	870	5	26	—	SPACE				
MLK CLR	860	6	27	—	SPACE				
RECEPT	900	20/1	28	—	SPACE				
RECEPT	180	20/1	29	—	SPACE				
RECEPT	180	20/1	30	—	SPACE				
RECEPT	180	20/1	31	30/3	—	SPD-3			
RECEPT	180	20/1	32	—	SPACE				
RECEPT	360	20/1	33	—	SPACE				
RECEPT	360	20/1	34	30/3	42/2	COOLER			
RECEPT	720	20/1	35	—	SPACE				
RECEPT	180	20/1	36	—	SPACE				
RECEPT	180	20/1	37	60/3	13430	W. FREEZ.			
RECEPT	180	20/1	38	—	SPACE				
IDF	1000	20/1	39	—	SPACE				
FC/GU-1 (FC/GU-30)	1350	20/1	40	60/3	13430	W. FREEZ.			
SPARE	—	20/1	41	—	SPACE				
SPARE	—	20/1	42	—	SPACE				

TOTAL CONNECTED LOAD: 41,774 VA

PANEL EL									
SERVICE: 208Y/120V, 3Ø					MAIN: 150A-3P MAIN BREAKER				
PANEL A.I.C.: 10,000A					OPTIONS: EQUIP. GROUND BUS				
SERVES	VA	CIR. BKR. #	A B C	CIR. #	VA	SERVES	VA	CIR. BKR. #	A B C
TEL. REC.	720	20/1	1	22	30/1	1500	MDF		
INTERCOM	500	20/1	2	23	30/1	1500	MDF		
MDF	500	20/1	3	24	30/1	1500	MDF		
ELEV.	1000	20/1	4	25	20/1	500	ERRCS		
EMS	500	20/1	5	26	20/1	—	SPACE		
RECEPT	720	20/1	6	27	20/1	—	SPACE		
SECURITY	250	20/1	7	28	—	SPACE			
FXP-1#2	1000	20/1	8	29	—	SPACE			
FXP-3#4	1000	20/1	9	30	—	SPACE			
FXP-5 & VER	1000	20/1	10	31	—	SPACE			
FXP-6	500	20/1	11	32	—	SPACE			
FXP-7	500	20/1	12	33	—	SPACE			
SPARE	—	20/1	13	34	—	SPACE			
SPARE	—	20/1	14	35	—	SPACE			
CAFE S.S.	500	20/1	15	36	—	SPACE			
GYM AMP	1000	20/1	16	37	—	SPACE			
FAP	500	20/1	17	38	—	SPACE			
HG DOOR	1000	20/1	18	39	20/1	1000	DOORS		
DOORS	1000	20/1	19	40	30/3	—	SPD-2		
DOORS	1000	20/1	20	41	—	SPACE			
DOORS	1000	20/1	21	42	—	SPACE			

TOTAL CONNECTED LOAD: 20,190 VA



cunningham forehand matthews moore

cunningham, forehand, matthews & moore, architects, inc. - 2011 manchester street, n.e. - atlanta, georgia 30324 - phone (404) 873-2152

E6.2

DRAWING ISSUE RECORD		
DATE	REVISIONS	NO.
11-1-8	ISSUE TO BID	

HARMONY LELAND-CITY SCHOOL
REPLACEMENT ELEMENTARY SCHOOL
6526 FACTORY SQUARES BLVD., NW
MABLETON, GA 30126
FOR CORN COUNTY SCHOOL DISTRICT
CORN COUNTY, GA
CCSD PROJECT NO. AUGA / DDE FACILITY CODE
DATE: JUL 16, 2019
DRAWN BY: G.S.H.
CHECKED BY: G.L.K.