

PANEL PANE B	EL EMS A/6	•
	DMARC FLOOR LINE	
DUPLEX RECEPTACLE DEDICATE CIRCUIT	FLOOR LINE	
TELEPHONE CONDUIT STU THROUGH WALL. SEE ELEC SPECIFICATION NOTE 'E' AI ELECTRICAL 3 PANEL ELEVA	CTRICAL ND 'H'.	

A/26 A/22

₩ A/26

2 ENLARGED OFFICE PLAN

E1 SCALE: N.T.S.

DEDICATED QUAD-

RECEPT. @6'-0" FOR

VSAT, D-LINK EQUIP.

DED. DUPLEX RECEPT-

@48" FOR INTERFACE.

A/26

LOCATED ALL CONDUIT TO

OFFICE IN THIS WALL.

SECURITY OUTLET

AT 7'-0" AFF

REGISTER ELECTRICAL COMPONENTS QTY VENDOR PART NUMBER DESCRIPTION DUAL CIRCUIT POWER KIT WITH ISOLATED GROUND 747DGS023B D&P 747DGS023R DUAL CIRCUIT POWER KIT 12' 2CH REGULAR POLE W/2-C & 1-D CONNECTOR DRW #2004-12 10' CABLE KIT (SET OF 4 WHIPS)

> REGISTER
> 4 ELECTRICAL DETAIL 、E1 ∕SCALE: N.T.S.

*NOTE: BEFORE ORDERING AND INSTALLATION OF ELECTRICAL COMPONENTS FOR REGISTERS, CONSULT FINAL FIXTURE PLAN FOR NUMBER AND LOCATION.

MAXIMUM CIRCUITS FOR REGISTERS: CIRCUITS AT MAIN REGISTER - (9) 110V

CIRCUITS AT ISLAND REGISTER - (3) 110V

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696 1ST AVE AVE N, STE 308 ST. PETERSBURG, FL 3370 PH: 352-238-6366 FL CA #31946 GA CA #PEF00717

ELECTRICAL SPECIFICATIONS

PROFESSIONAL ENGINEER

696 1ST AVE N, STE 200

ST. PETERSBURG, FL 33701

PE #76961

ETH W. HL

LICENSE

No. 76961

ate 2021 05 05 1404

igitally signed by

en**L**eth W Hunter

SSIONAL

- A. ALL WIRING SHALL SHALL BE CONTAINED IN CONDUIT OF PROPER SIZE
- B. ALL WIRING SHALL CONFORM TO LOCAL, STATE AND FEDERAL CODES.
- SERVICE IS TO BE A MINIMUM 400 AMP, 3 PHASE (PREFERRED), 600 AMP, 1 PHASE OR LARGER IF REQUIRED BY CODE OR ELECTRICAL LOAD.
- REQUIRED CUSTOM BUILT POWER POLE ASSEMBLIES AVAILABLE FROM D&P CUSTOM LIGHTS & PRODUCTS INC., PHONE: (800) 251-2200 OR (615) 350-7800, 7111 COCKRILL BEND INDUSTRIAL ROAD,
- EXTERIOR EXPOSED PHONE LINES TO BE INSTALLED IN RIGID CONDUIT. PROVIDE EMERSON 3/4" X 5-FT.
- ELECTRICAL PANEL TO BE LABELED CORRECTLY WITH LEGIBLE PRINT.

METALLIC CABLE U-GUARD #755, OR EQUAL.

- G. LOW VOLTAGE VENDOR TO PROVIDE AND INSTALL ONE (1) 24 GA., 4 TWISTED-PAIR, CATEGORY-FIVE (CAT5) DATA CABLE WITH MODULAR COMBO RJ-11/RJ-45 JACK AT MANAGER'S OFFICE. CABLE TO BE RUN FROM JACK TO DATA HUB LOCATION WITH 6'-0" LEFT COILED FOR INSTALLATION TO DATA HUB. A RJ-45 MALE FITTING SHOULD BE CRIMPED ON THIS END. DOLLAR GENERAL STORE OPENING TEAM WILL MAKE FINAL CONNECTION INTO THE DATA HUB.
- PROVIDE 1 1/2" EMT CONDUIT TO ACT AS ACCESS SLEEVE TO ALLOW PHONE COMPANY TO TERMINATE AT DMARC. CONTRACTOR TO PROVIDE AND INSTALL PHONE WIRING & RJ-11 PHONE JACK FOR COMPLETED WORKING SYSTEM PRIOR TO PHONE COMPANY FINAL HOOK UP.
- ALL 120 VOLT OUTDOOR RECEPTACLES TO HAVE "WET LOCATION IN USE" COVERS.
- ALL CONDUCTORS TO BE COPPER, #12 AWG MINIMUM SIZE, OR AS REQUIRED BY LOAD AND OVER
- SEE EMS SHEETS EMS1 AND EMS2 FOR ENERGY MANAGEMENT SYMBOLS AND INFORMATION.
- ELECTRICIAN TO PROVIDE 1 1/2" CONDUIT WITH PULL STRINGS FOR SATELLITE LOCATION.
- M. ALL POWER AND DATA TO BE ROUTED OVERHEAD. UNDER SLAB NOT ALLOWED.
- WITHIN 30 DAYS OF SYSTEM ACCEPTANCE, RECORD DRAWINGS OF THE INSTALLATION SHALL BE PROVIDED TO THE BUILDING OWNER, INCLUDING:
- N.A. A SINGLE-LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM.
- N.B. FLOOR PLANS INDICATING LOCATION AND AREA SERVED FOR ALL DISTRIBUTION. O. OPERATING AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER, AND SHALL
- O.A. SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE, EACH PIECE OF LIGHTING EQUIPMENT, AND ALL LIGHTING
- O.B. OPERATIONS MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE AND EACH PIECE OF LIGHTING EQUIPMENT. REQUIRED ROUTINE MAINTENANCE,
- CLEANING, AND RELAMPING ACTIONS SHALL BE CLEARLY IDENTIFIED. O.C. A NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING RECOMMENDED
- O.D. A SCHEDULE FOR INSPECTING AND RECALIBRATING ALL LIGHTING CONTROLS.

CERTIFICATE OF OCCUPANCY. REPORT SHALL INCLUDE THE FOLLOWING:

- O.E. NAMES AND ADDRESSES OF AT LEAST ONE QUALIFIED SERVICE AGENCY. A REGISTERED DESIGN PROFESSIONAL SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEMS HAVE BEEN TESTED IN ACCORDANCE WITH FBC C408.3.1.1-3.1.3. DOCUMENTATION SHALL BE PROVIDED TO THE BUILDING OWNER OR AUTHORIZED AGENT WITHIN 90 DAYS OF RECEIPT OF THE
- P.A. RESULTS OF FUNCTIONAL PERFORMANCE TESTS.

INCLUDE THE FOLLOWING AT A MINIMUM:

P.B. DISPOSITION OF DEFICIENCIES FOUND DURING TESTING, INCLUDING DETAILS OF CORRECTIVE MEASURES USED OR PROPOSED.

ELECTRICAL KEYED NOTES

- CONTROL STATION FOR STAND ALONE DUCT DETECTOR. ONE FOR EACH DEVICE, SEE KEY NOTE 5 ON THIS SHEET. SIMPLEX #4098-9842 IS SPECIFIED. WITH PIEZO AND LED INDICATOR
- MECHANICAL THERMOSTAT AT 8'-0" A.F.F.
- LOCATIONS SHOWN FOR MECHANICAL UNITS ARE ONLY APPROXIMATE, CONTRACTOR MUST CONSULT MECHANICAL OR STRUCTURAL DRAWINGS TO DETERMINE ACTUAL UNIT LOCATIONS. PROVIDE 1/2"C. PENETRATION THRU ROOF WITHIN FOOTPRINT OF UNIT FOR USE WITH CONTROL WIRING TO UNIT BY OTHERS. PROVIDE PROPER WATERSEAL. (TYPICAL)
- COORDINATE CONVENIENCE OUTLET LOCATION WITH MECHANICAL.
- PHOTOELECTRIC DUCT DETECTOR WITH HOUSING. TIE TO LED READOUT RECESSED IN DUCT. STAND ALONE DEVICE, 120V. SIMPLEX #4098-9687 IS SPECIFIED WITH 4098-9842 CONTROL STATION. PROVIDE ONE DEVICE PER UNIT. MOUNT DEVICE IN SUPPLY AIR DUCTWORK. DEVICE SHALL BE PROVIDED AND WIRED TO THE CONTROL STATION BY THE ELECTRICAL CONTRACTOR. HIRE THE MECHANICAL CONTRACTOR FOR INSTALLATION IN DUCTWORK & CONNECTION TO SHUTDOWN CONTROLS. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED RELAYS AND 120V POWER, DO NOT POWER DUCT DETECTORS FROM HVAC UNIT LOW VOLTAGE. SUBMIT SHOP DRAWINGS FOR APPROVAL. PLACE ANY REQUIRED LABELING ON CEILING TILE DIRECTLY BELOW UNIT. RUN CONDUIT & WIRE UNDERGROUND FROM UNIT TO INSIDE OF SPACE.
- THREE 2 AWG THWN CU & ONE 8 AWG CU GND IN 1-1/4"C. PROVIDE 100A/3P, NEMA 3R DISCONNECT. MOUNT DISCONNECT SWITCH AT UNIT. ALL DISCONNECTS TO BE HEAVY DUTY. FUSES TO BE RK-5 TYPE, BUSSMANN FRN-R-(AMP) IS SPECIFIED. SEE EQUIPMENT SCHEDULE ON E3.
- PROVIDE 208V, 1 PHASE CONNECTION TO A J-BOX AT 100" AFF WITH (3)#12 CU. & #12 GROUND IN 3/4"C. REFRIGERATION CONTRACTOR TO PROVIDE AND INSTALL 30A/2NF DISCONNECT SWITCH AND WIRE FROM DISCONNECT SWITCH TO EQUIPMENT CONNECTIONS.
- PROVIDE 208V, 1 PHASE CONNECTION TO A J-BOX AT 100" AFF WITH (3)#8 CU. & #10 GROUND IN 1"C. REFRIGERATION CONTRACTOR TO PROVIDE AND INSTALL 60A/2NF DISCONNECT SWITCH AND WIRE FROM DISCONNECT SWITCH TO EQUIPMENT CONNECTIONS.
- PROVIDE 208V, 1 PHASE CONNECTION TO A J-BOX AT 100" AFF WITH (3)#10 CU. & #10 GROUND IN 3/4"C. REFRIGERATION CONTRACTOR TO PROVIDE AND INSTALL 30A/2NF DISCONNECT SWITCH AND WIRE FROM DISCONNECT SWITCH TO EQUIPMENT CONNECTIONS.
- 10. MOUNT J-BOX 11" FROM THE RIGHT SIDE OF EACH UNIT. CONFIRM EXACT LOCATION WITH REFRIGERATION VENDOR PRIOR TO WORK (TYPICAL).
- 11. SO WHITE ELECTRICAL CORD IS NEEDED. SEE SHEET A1, NOTE 26.
- 12. CONFIRM THE FINAL NUMBER AND LOCATION OF OUTLETS IN SALES AREA WITH THE FINAL DG FIXTURE PLAN.

Kenneth W. Hunter, P.E. on 3/5/21 using a Digital Signature.

1/12/2021 - KWH REVISION DATE: / REVISED BY: PROJECT NUMBER:

DRAWING DATE: / DRAWN BY

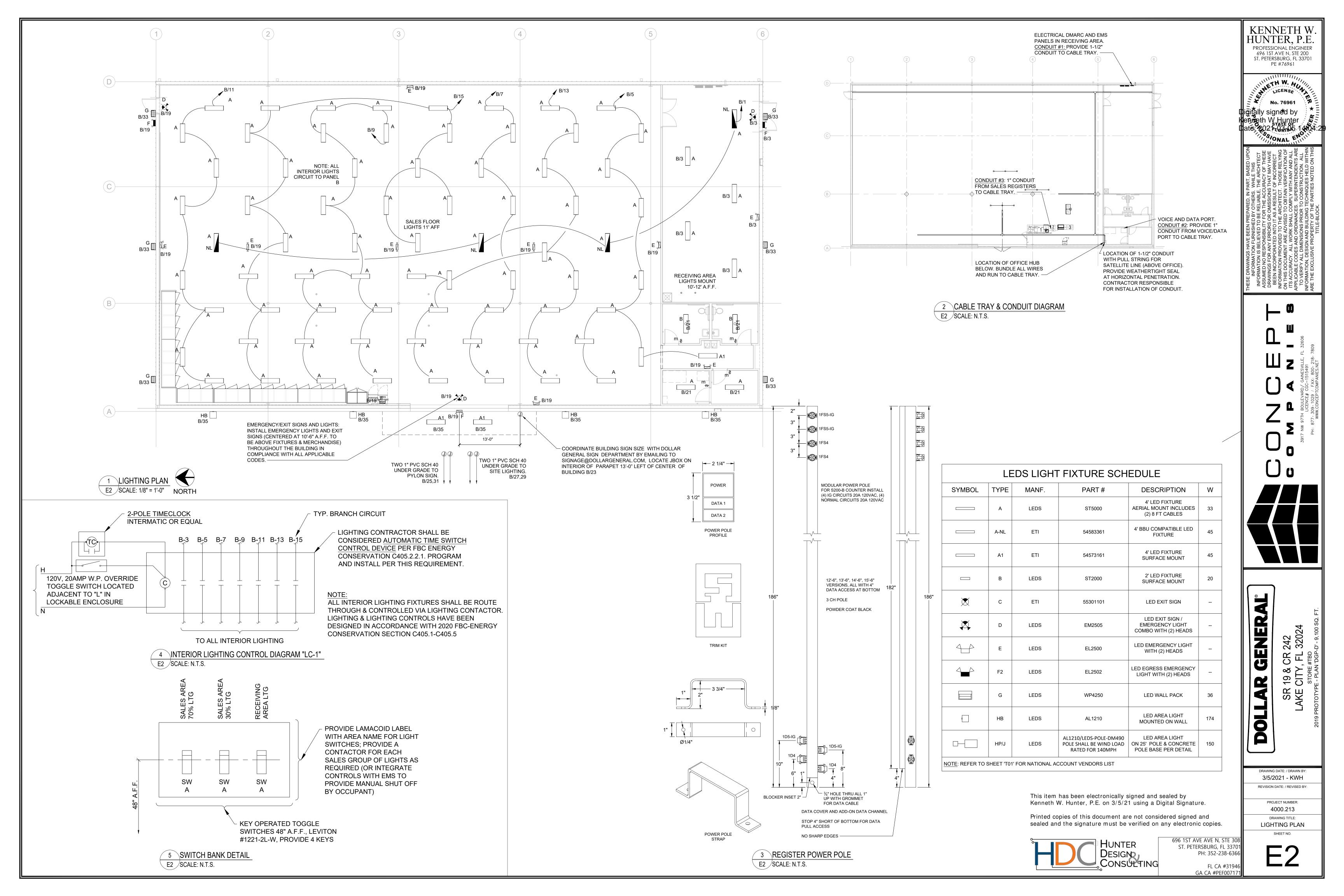
CHESTER RD EE, FL 32907

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4000.207 DRAWING TITLE: POWER PLAN SHEET NO.

GENE

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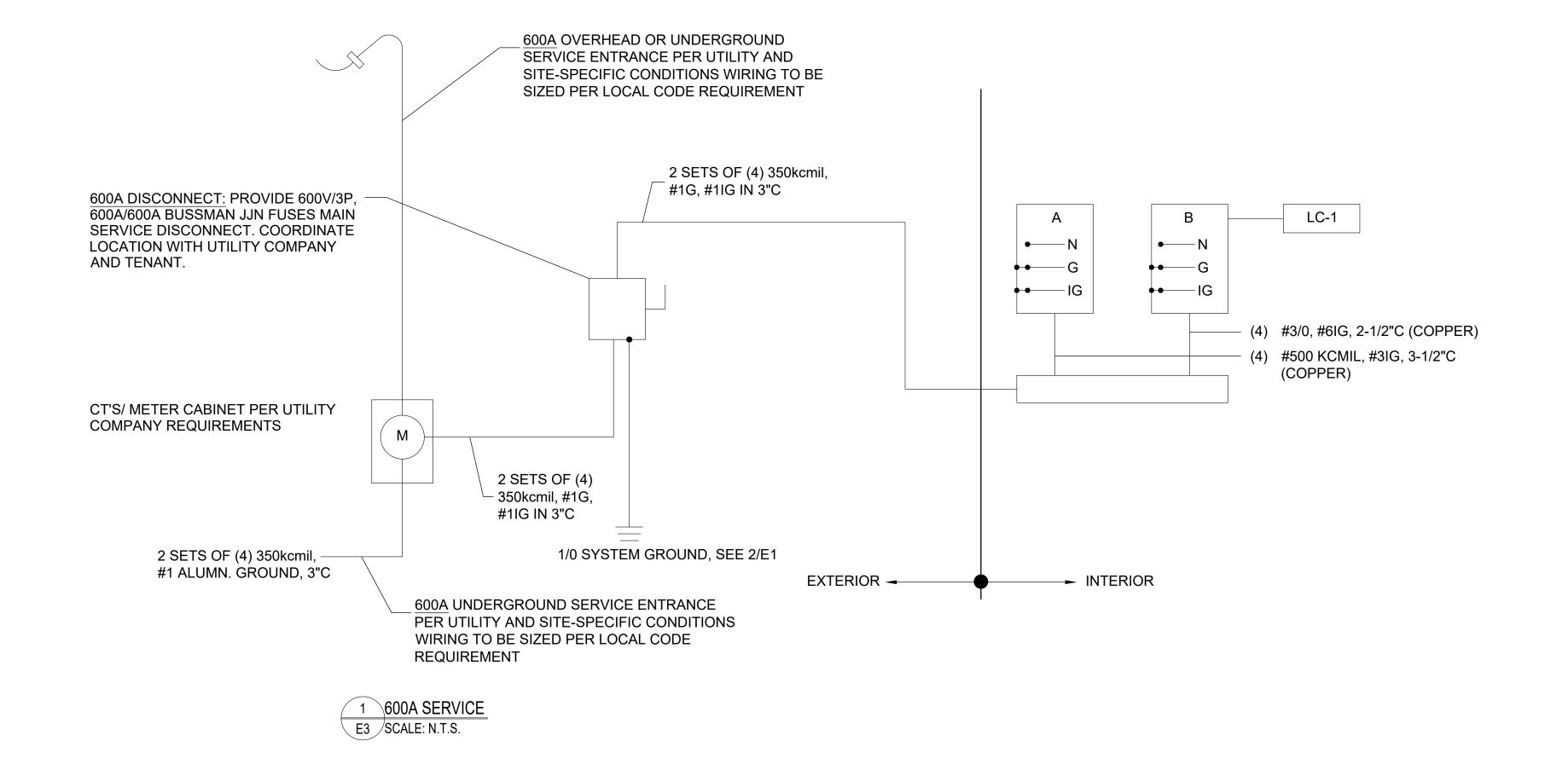
S	M	DUNT:	SURF	ACE	120/	208	3-PHASE, 4W	P	ANEL		-	4	CAPACITY:	400A		INT	CAP:	200KA	4	NOTES
NOTES	LOCA	TION:	BACK	OF BL	.DG.			LU	JGS:		MCI	3	DEMAND LOAD:	275A		AV. F.	AULT:	40 KA	ı	[[
Z	СКТ	LTG	REC	HVAC	MISC	NP	DESCRIPTION	AMP	POLE	ф	AMP	POLE	DESCRIPTION	LTG	REC	HVAC	MISC	NP	CKT	~
	1			12.3						Α	20	1	AUTOMATIC DOOR				0.1		2	С
	3			12.3			RTU1	150	3	В	20	1	PHONE BOARD/BUZZER				0.4		4	C
	5			12.3					0		20	1	ENERGY MANAGEMENT				0.2		6	С
	7			12.3						Α	20	1	COOLER				0.7		8	С
	9			12.3			RTU 2	150	3	В	20	1	OUTDOOR HVAC REC		0.4				10	
	11			12.3]			C	20 1		OUTDOOR DRINK VEND		0.2				12	
	13						SPARE	20	1	Α	20	2	FREEZER				1.0		14	С
	15						SPARE	20	1	В	20	_	TREEZER				1.0		16	С
	17						SPARE	20	1	U	20	1	INTERFACE EQUIP				0.5		18	
С	19				1.7		SPARE	20	1	Α	20	1	VSAT SATA HUB EQUIP				0.5		20	
С	21				1.7		WATER HEATER	20	1	В	20	1	CCTV EQUIP				1.0		22	
	23				0.2		DRINKING FOUNTAIN	20	1	С	20	1	SECURITY REC		0.2				24	С
С	25		0.2				OUTDOOR ICE REC	20	1	Α	20	1	OFFICE REC		0.9				26	С
С	27				1.3		COOLER	15	2	В	20	1	BREAK ROOM REC		0.5				28	
•	29				1.3		COOLER	'~	_	Ç	20	2	PRODUCE COOLER				1.7		30	С
С	31				1.3		COOLER	15	2	Α	20	4	I RODGE GOOLLIK				1.7		32	Ľ
•	33				1.3		OOOLLIN	'~		В	20	1	ICE CREAM FREEZER		0.2				34	С
С	35				1.3		COOLER	15	2	C	20	1	GATORADE		0.8				36	С
•	37				1.3		OOOLLIN			Α	20	1	SPARE						38	
	39				1.6		SODA COOLERS	20	1	В	20	1	SPARE						40	
	41						SPARE	20	1	С	20	1	SPARE						42	
	ந	IACE	BALAN	CE.	LOAD	TYPE	CONNECTED		DEMA	ND)	DEM.	AND FORMULA				TOTAL	LOAE)	
	"	IASE	DALAIN	CE	LIGH	TING	0.0 KVA		0.0 K	VA		LOAD	X 125% NEC 210.19 CON	TINUOU	S	CONN	ECTED	DEN	IAND	1
	ф	LC	AD	%	RECEP	TACLE	3.4 KVA		3.4 KVA 10I		10KV	A + 50% REMAINDER NEC	220.44		98.9	KVA	98.9	KVA	1	
	Α	34.0	KVA	34%	HV	AC	73.8 KVA		73.8 k	VΑ		LOAD	X 100%			274	.6A	274	1.6A	1
	В	34.0	KVA	34%	MIS	sc	21.7 KVA		21.7 K	VΑ	ı	LOAD	X 100% NEC 210.19 NON	-CONT.			FILEN	AME:		
	С	31.0	KVA	31%	N	Р	0.0 KVA		0.0 K			0 NOI	NCOINCIDENTAL LOADS N	0 NONCOINCIDENTAL LOADS NEC 220.60			#VALUE!			

A. AIC RATING: SERIES RATED AT 200,000 AMPS WITH BUSSMANN JJN FUSES.

. BREAKER LOCK. D. ISOLATED GROUND BUS.

. BREAKERS FOR HVAC UNITS SHALL BE SIZED PER MANUFACTURER REQUIREMENTS.

S	M	OUNT:	SURF	ACE	120	208	3-PHASE, 4W	P.	ANEL		E	3	CAPACITY:	200A		INT	CAP:	200KA		ď
NOTES	LOCA	TION:	BACK	OF BL	DG.			Ll	JGS:		MCE	3	DEMAND LOAD: 146A			AV. FAULT: 40KA				6
Z	СКТ	LTG	REC	HVAC	MISC	NP	DESCRIPTION	AMP	POLE	Φ	AMP	POLE	DESCRIPTION	LTG	REC	HVAC	MISC	NP	СКТ	2
3,C	1	0.2					NIGHT LTS	20	1	Α	20	1	PWR TERM BROWN				1.2		2	П
3,C	3	0.2					RECEIVING LTS	20	1	В	20	1	PWR TERM BROWN				1.2		4	
В	5	0.5					70% SALES LTS	20	1	С	20	1	PWR TERM GREEN				1.2		6	Γ
В	7	0.5					70% SALES LTS	20	1	Α	20	1	PWR TERM GREEN				1.2		8	Γ
В	9	0.8					70% SALES LTS	20	1	В	20	1	PWR TERM GREEN				1.6		10	
В	11	0.4					70% SALES LTS	20	1	С	20	1	PWR TERM GREEN				1.6		12	Γ
В	13	0.3					30% SALES LTS	20	1	Α	20	1	COOLER				0.7		14	
В	15	0.5					30% SALES LTS	20	1	В	20	2	FREEZER				1.0		16	
	17						SPARE	20	1	С	20		FREEZER				0.6		18	
С	19	0.1					EMERGENCY/EXIT LTS	20	1	Α	20	1	DRINK COOLERS				1.6		20	Г
С	21	0.2		0.1			BREAK/OFFICE LTS/EF'S	20	1	В	40	2	FREEZER				3.9		22	Γ
В	23	1.2					BUILDING SIGN	20	1	С	70	40 2					3.9		24	
В	25	0.9					PYLON SIGN	20	1	Α	40	40 2	FREEZER				3.2		26	Г
В	27	0.4					SITE LIGHTING	20	1	В	70	_					3.2		28	l
В	29	0.4					SITE LIGHTING	20	1	С	40	2	FREEZER				3.2		30	Γ
В	31	0.9					PYLON SIGN	20	1	Α	70	_					3.2		32	
В	33	0.2					EXTERIOR LTS	20	1	В	20	1	SODA COOLERS				1.6		34	
В	35	0.9					FRNT WALL/CANPY LTG	20	1	С	25	2	FREEZER				2.6		36	Γ
	37						SPARE	20	1	Α	_ 23		INCLECIA				2.6		38	
	39						SPARE	20	1	В	15	2	COOLER				1.3		40	Γ
	41						SPARE	20	1	С			COOLLIN				1.3		42	
	DL	JAČE	BALAN	7	LOAD	TYPE	CONNECTED		DEMA	ND)	DEM.	AND FORMULA			-	TOTAL	LOAD)	
	F 1	TASE	DALAN	CE	LIGH	TING	8.6 KVA		10.7 H	ſVΑ		LOAD	X 125% NEC 210.19 CONT	INUOU	S	CONN	ECTED	DEM	AND	
	Φ	LC)AD	%	RECEP	TACLE	0.0 KVA		0.0 K	VA		10KV	A + 50% REMAINDER NEC	220.44		50.5	KVA	52.7	KVA	
	Α	16.6	KVA	33%	HV	AC	0.1 KVA	0.1 KVA				LOAD	X 80% (USED MCA IN CAL	CULAT	ION)	140	.3A	146	.1A	
	В	16.2	KVA	32%	MI	sc	41.9 KVA	41.9 KVA LOAD X 100% NEC 210.19 NON-CONT. FILENAME:												
	Ç	17.7	KVA	35%	N	Р	0.0 KVA	0.0 KVA 0 NONCOINCIDENTAL LOADS NEC 220.60 #VALUE!												
	NOTE	S:			•															1



C. BREAKER LOCK.

D. ISOLATED GROUND BUS.

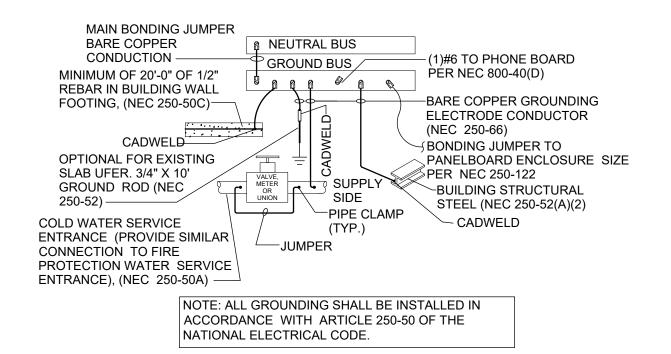
120/208	3-PHASE, 4W	PANEL LC	DAD	CAPACITY: 600A		
LOAD TYPE	CONNECTED	DEMAND	DEM	AND FORMULA	TOTAL	LOAD
LIGHTING	8.6 KVA	10.7 KVA	LOAD	X 125% NEC 210.19 CONTINUOUS	CONNECTED	DEMAND
RECEPTACLE	3.4 KVA	3.4 KVA	10KV	A + 50% REMAINDER NEC 220.44	149.5 KVA	151.6KVA
HVAC	73.9 KVA	73.9 KVA	LOAD	X 100%	414.8A	420.7A
MISC	63.6 KVA	63.6 KVA	LOAD	X 100% NEC 210.19 NON-CONT.	FILEN	AME:
NP	0.0 KVA	0.0 KVA	O NOM	NCOINCIDENTAL LOADS NEC 220.60	DGTP-9100-CI	D-208.xlsx

			EQI	JIPN	/IEN	T SC	HEDU	LE	
PLAN MARK	EQUIPMENT SERVED	LOAD	VOLT/ PHASE	FED BY	DISC BY	MCA	MOCPD	FEEDER	REMARKS
RTU 1	ROOF TOP UNIT	36.89KVA	208/3	Α	EC	128.0A	150A	(3)#1/0,#6G 1-1/2"C	PROVIDE 200A/3P NF DISCONNECT
RTŲ 2	ROOF TOP UNIT	36.89KVA	208/3	Α	EC	128.0A	150A	(3)#1/0,#6G 1-1/2"C	PROVIDE 200A/3P NF DISCONNECT
	FILENAME:	DGTP-910	0-CD-208.	xlsx					

UTILITY TRANSFORMER FAULT CALCULATION							
SERVICE E	NTRANCE	CALCULAT	TON				
VOLTAGE (L-L):	208V	I-FLA=[RATED K\	/A * 1000]/				
PHASE (PH):	3	[V-LL*SQR	T(PHASE)]				
AMPS:	600A	I-FLA=	COEA				
FULL LOAD KVA:	216KVA		025A				
TRANSFORMER:	225KVA	M=100/%Z=	89.3				
IMPEDANCE (%Z):	1.1%Z	I-SC=I-FLA*M=	56 KA				
BUSSMANN SPD. CO	NTRACTOR SHALL NDARY OF TRANSI	D TRANSFORMER SIZE WI' CONTACT UTILITY AND VI FORMER. CONTACT ENGIN	ERIFY I-SC				

STARTING I-SC:	56 KA	CALCULATION
MOTOR LOAD (KVA):	74KVA	I-SC(ML)=I-ML*6= 1,231A
MOTOR LOAD (A):	205A	I-SC=I-SC+I-SC(ML)= 57 KA

FEEDE	R FAULT CALCU	ILATION				
STARTING I-SC:	57 KA	IMPEDANCE BASED ON 3 SINGLE				
VOLTAGE (L-L):	208V	CONDUCTORS IN NON-MAGNETIC				
PHASE (PH):	3	CONDUIT				
FEEDER SIZE:	350	CALCULAT	ION			
FEEDER MATERIAL:	CU	*f=[SQRT(PHASE)*L*IS-C	; _] /			
PARALLEL SETS (Q):	2	Q*C*V-LL]				
FEEDER LENGTH (L):	40FT	f=	0.417			
FEET PER OHMS (C):	22,737 FT/OHMS	M=1/(1+f)=	0.705			
	·	I-SC=I-SC*M=	40 KA			
*f FOR SINGLE PHASE	SYSTEMS, FEEDER	R LENGTH IS DOUBLED A	ND VOLTAGE IS			
LINE-NEUTRAL (OR V*L	.L/2)					

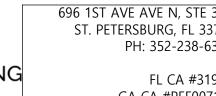


2 GROUNDING DETAIL E3 SCALE: N.T.S.

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PROFESSIONAL ÉNGINEER 696 1ST AVE N, STE 200 ST. PETERSBURG, FL 33701 PE #76961

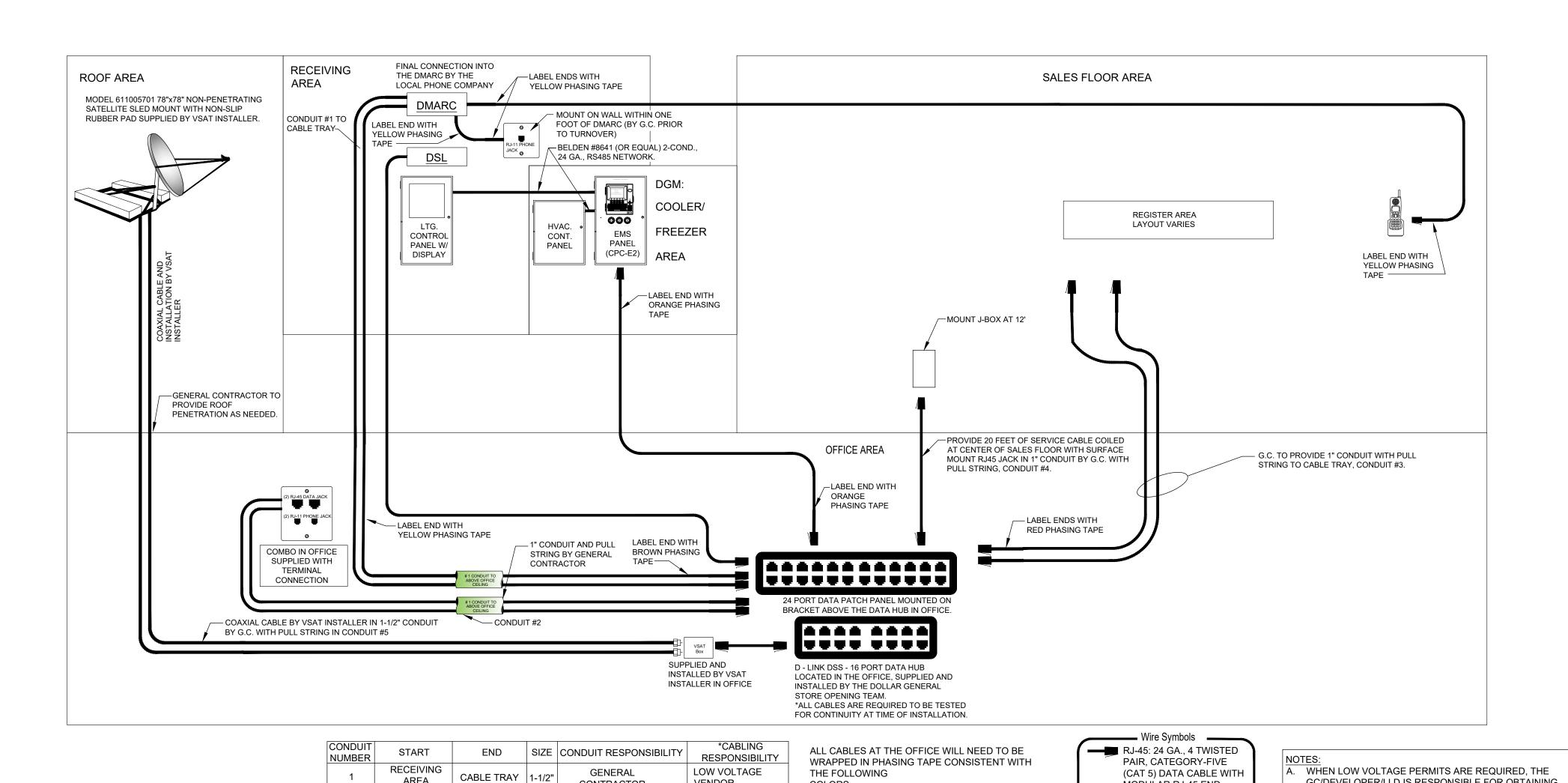
Uo

GENERAL® 19 & CR 242 : CITY, FL 32024 STORE #TBD PE - PLAN 'DGP-D' - 9,100 SC SR AKE

DRAWING DATE: / DRAWN BY: 3/5/2021 - KWH REVISION DATE: / REVISED BY: PROJECT NUMBER:

> 4000.213 DRAWING TITLE: PANEL SCHEDULE 3-PH

> > SHEET NO.



VENDOR

VENDOR

VENDOR

VENDOR

VENDOR

LOW VOLTAGE

LOW VOLTAGE

LOW VOLTAGE

LOW VOLTAGE

RED TAPE CASH REGISTER DATA

BROWN TAPE

ORANGE TAPE

YELLOW TAPE

ELEC. EMS DATA

OFFICE DATA

COOLER/FREEZER EMS DATA

PHONE CABLE TO DMARC

*UNLESS OTHERWISE NOTED, ALL RESPONSIBILITIES SHOULD FOLLOW THIS CHART.

CONTRACTOR

GENERAL

CONTRACTOR

GENERAL

CONTRACTOR

GENERAL

CONTRACTOR

GENERAL

CONTRACTOR

AREA

VOICE / DATA

PORT

CENTER OF

SALES

FLOOR

CONNECTION

OFFICE (HUB) | CABLE TRAY

OFFICE (HUB)

OFFICE (HUB)

OFFICE (HUB) 1-1/2"

Kenneth W. Hunter, P.E. on 3/5/21 using a Digital Signature.

This item has been electronically signed and sealed by

GC/DEVELOPER/LLD IS RESPONSIBLE FOR OBTAINING

LOW VOLTAGE VENDOR RESPONSIBLE FOR ALL WIRE

GC TO PROVIDE AND INSTALL CABLE TRAY AND ALL

ALL LOW VOLTAGE PERMITS.

MANAGEMENT IN CABLE TRAY.

CONDUIT.

MODULAR RJ-45 END.

5) DATA CABLE WITH

PAIR, CATEGORY-FIVE (CAT

MODULAR RJ-11 END. USE

ONLY THE BLUE & WHITE

AND SOLID BLUE WIRES.

ALL OTHER WIRES TO BE

FOLDED BACK AND TAPED

RJ-11: 24 GA., 4 TWISTED

TO THE CABLE.

COAXIAL CABLE WITH RF

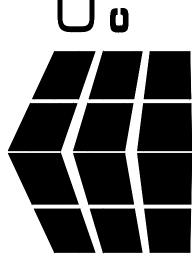
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PROFESSIONAL ENGINEER 696 1ST AVE N, STE 200 ST. PETERSBURG, FL 33701 PE #76961 ETH W. HU

LICENSE



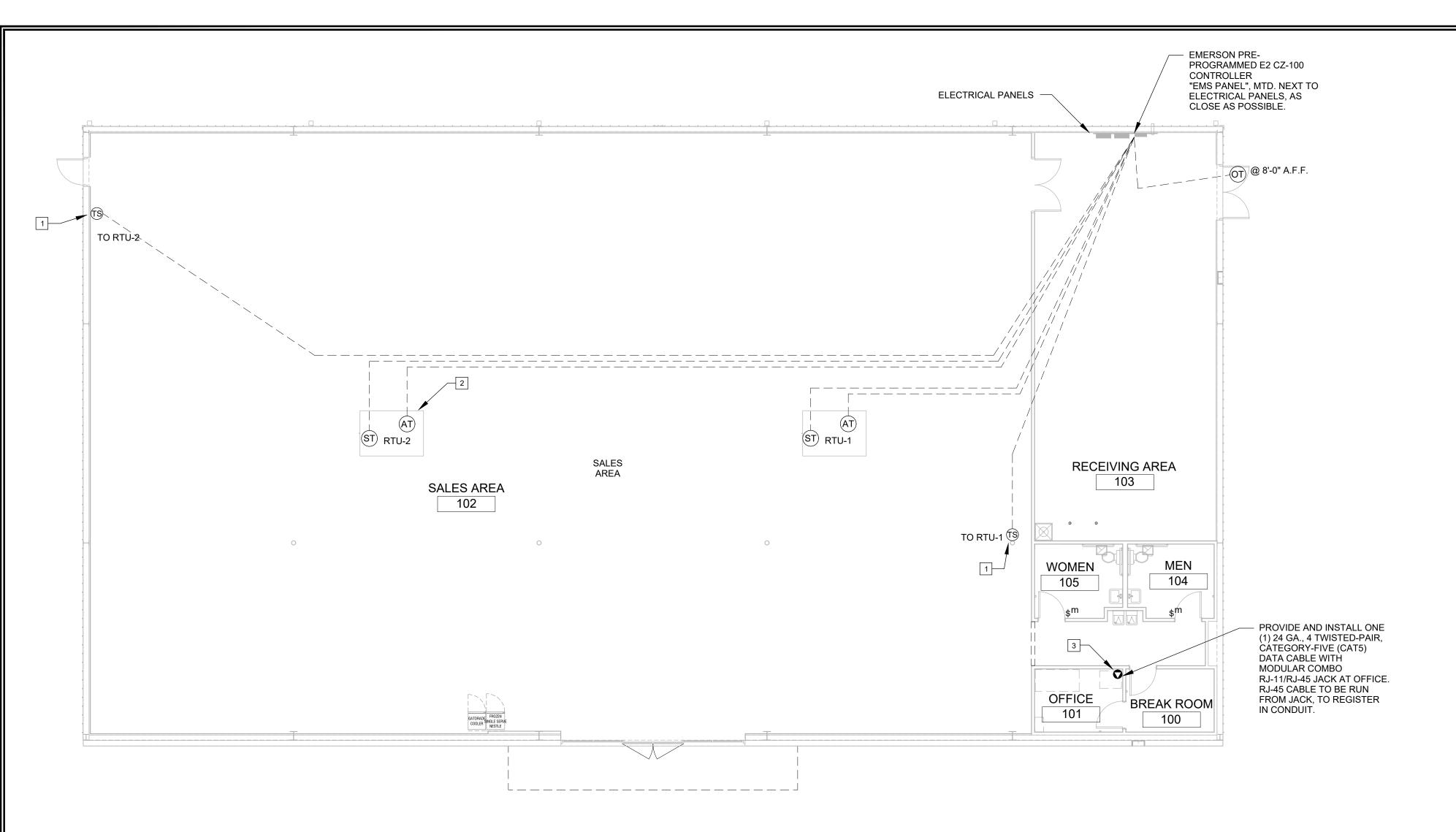
GENERAL 19 & CR 242 CITY, FL 32024 STORE #TBD STORE #TBD SR AKE

DRAWING DATE: / DRAWN BY: 3/5/2021 - KWH

7

REVISION DATE: / REVISED BY: PROJECT NUMBER: 4000.213

DRAWING TITLE: DATA ROUTING & CCTV



1 EMS/LOW VOLTAGE PLAN EMS1 SCALE: N.T.S. NORTH

GENERAL NOTES

- A. REFER TO E1 FOR GENERAL CONTRACTOR RESPONSIBILITIES. E.C. MAY USE CABLE TRAY FOR LOW VOLTAGE CABLES, SEE 2/E2.
- B. RUN CONDUIT FROM SENSORS TO BOTTOM OF STRUCTURE.
- C. REFRIGERATION UNITS TO BE CONNECTED TO EMS PANEL BY DOLLAR GENERAL REFRIGERATION CONTRACTOR.

SENSOR PLAN KEYED NOTES

- . ALWAYS INSTALL THERMOSTATS 8'-0" A.F.F. THE EXACT MOUNTING LOCATION OF THE THERMOSTAT "TS" MAY VARY DEPENDING ON THE STORE LAYOUT AND DUCT CONFIGURATION. REFER TO SITE SPECIFIC MECHANICAL DRAWINGS FOR HVAC ZONED THERMOSTAT MOUNTING LOCATIONS. IF THERMOSTATS ARE MOUNTED ON EXTERIOR WALLS DUE TO DUCT CONFIGURATION, THEY ARE THEN TO BE INSULATED TO PREVENT AIR INFILTRATION. IF ADDITIONAL HVAC UNITS ARE USED, ADD ADDITIONAL THERMOSTATS "TS".
- 2. ADD ADDITIONAL HVAC UNIT WHEN REQUIRED.
- B. PHONE LINE #1 TWO RJ-11 PORTS. ONE (1) LOCATED IN OFFICE W/RJ-45 DATA JACK COMBO AND ONE (1) AT REGISTER. 24 GA. CAT 5, 4-PAIR TWISTED WIRE ONLY. USE BLUE AND BLUE & WHITE WIRES. HOOK TO LINE #1 TERMINAL IN RJ-11 JACK EACH PHONE JACK TO HAVE DEDICATED, SEPARATE HOME RUN TO DMARC. LABEL AS "PHONE" AT THE DESTINATION AND AT DMARC. PHONE COMPANY PROVIDES FINAL HOOK UP TO DMARC ONLY.PHONE LINE #2 - RJ-11 PHONE JACK SUPPLIED AND WIRED BY CONTRACTOR.

		DEVICE S	CHEDULE		
SYMB	DESCRIPTION	CABLE TYPE	SUPPLIER	INSTALLER	NOTES
AT	AHU TERMINAL STRIP	8C T-STAT CABLE	EMS SUPPLIER	GENERAL CONTRACTOR	(1) PER HVAC UNIT
OT	OUTDOOR AIR TEMP (501-1122) MOUNTED 8'-0" A.F.F.	BELDEN 8761 OR EQUIVALENT (22AWG, 2C, STRANDED, SHIELDED)	EMS SUPPLIER	GENERAL CONTRACTOR	(1) PER RECEIVING ENTRY
ST	SUPPLY TEMP (201-0041) IN SUPPLY DUCT	BELDEN 8761 OR EQUIVALENT (22AWG, 2C, STRANDED, SHIELDED)	EMS SUPPLIER	GENERAL CONTRACTOR	(1) PER HVAC UNIT
TS	TOUCHSCREEN THERMOSTAT (810-1600) 8'-0" A.F.F.	8C T-STAT CABLE	EMS SUPPLIER	GENERAL CONTRACTOR	(1) PER HVAC UNIT ZONE
٥	RJ-11/RJ-45 DATA JACK PHONE COMBO	CAT-5 DATA CABLE (24AWG, 4 TWISTED PAIR)	GENERAL CONTRACTOR	GENERAL CONTRACTOR	(1) AT OFFICE COMPUTER CART
\$ m	MOTION SENSOR SWITCH	LEVITON EZ-FIND ODS-10-IDW	GENERAL CONTRACTOR	GENERAL CONTRACTOR	(1) PER RESTROOM (1) PER BREAK ROOM (1) PER OFFICE

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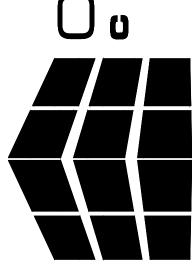


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FL CA #31946 GA CA #PEF007171

KENNETH W. PROFESSIONAL ENGINEER PE #76961



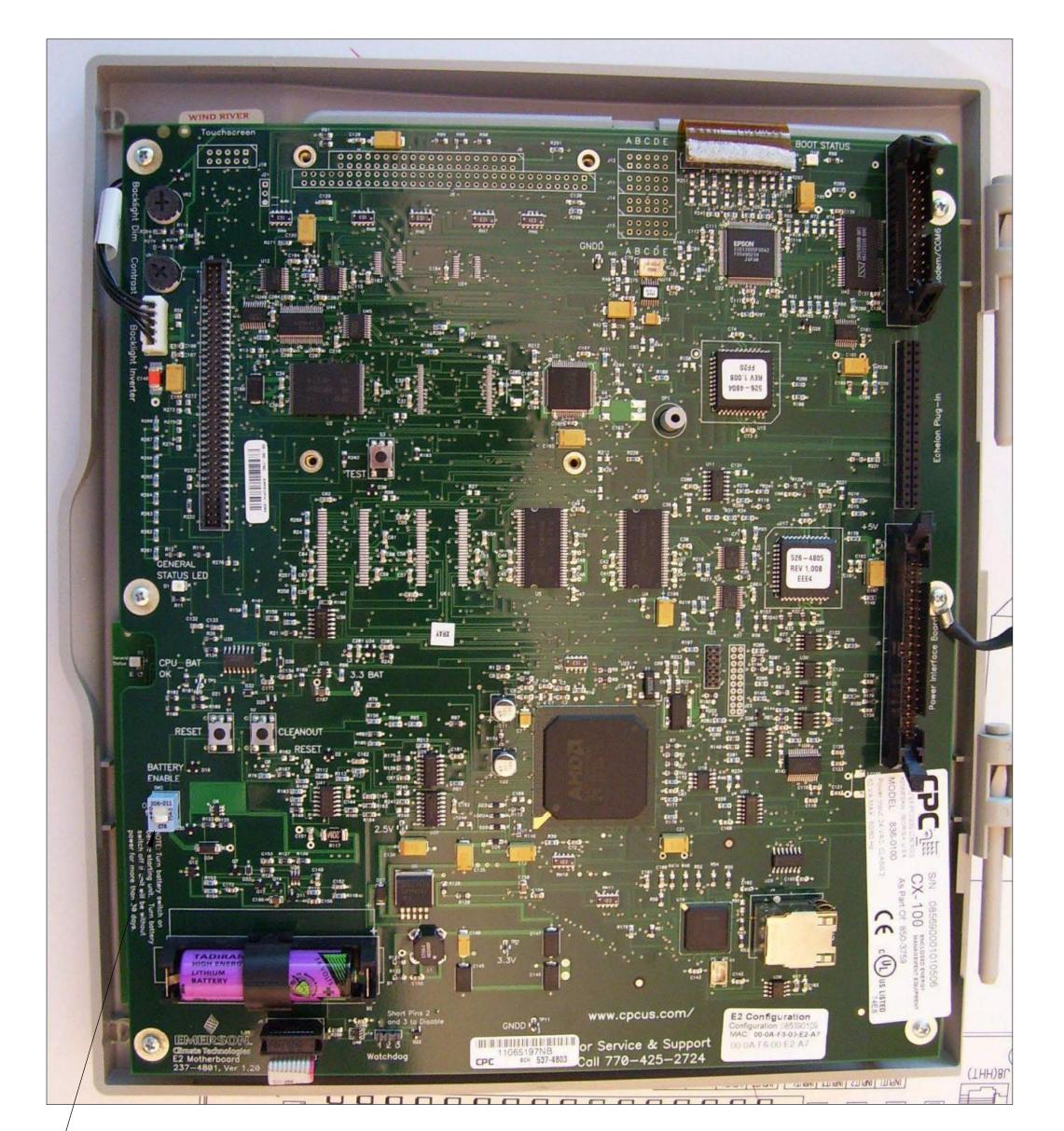


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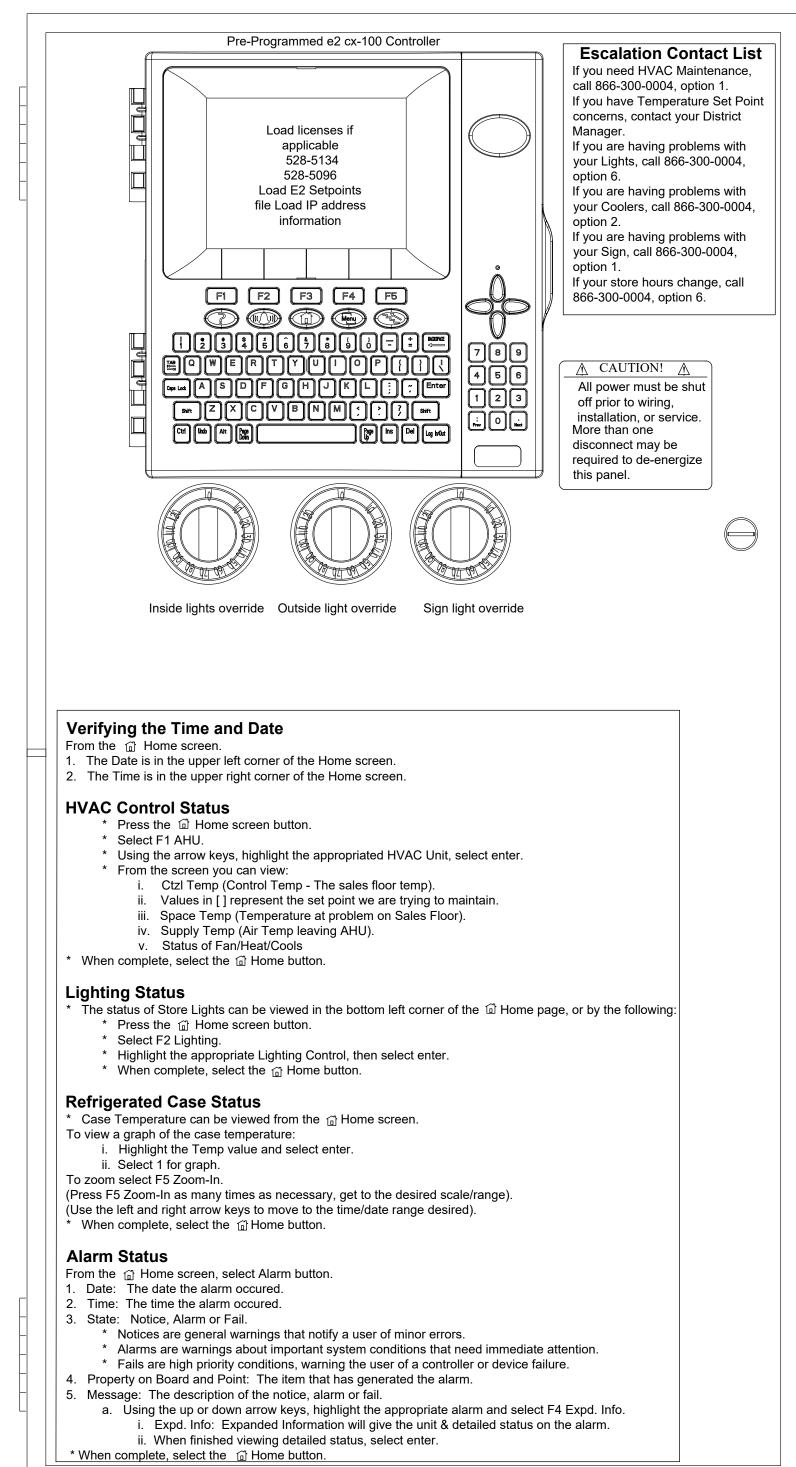
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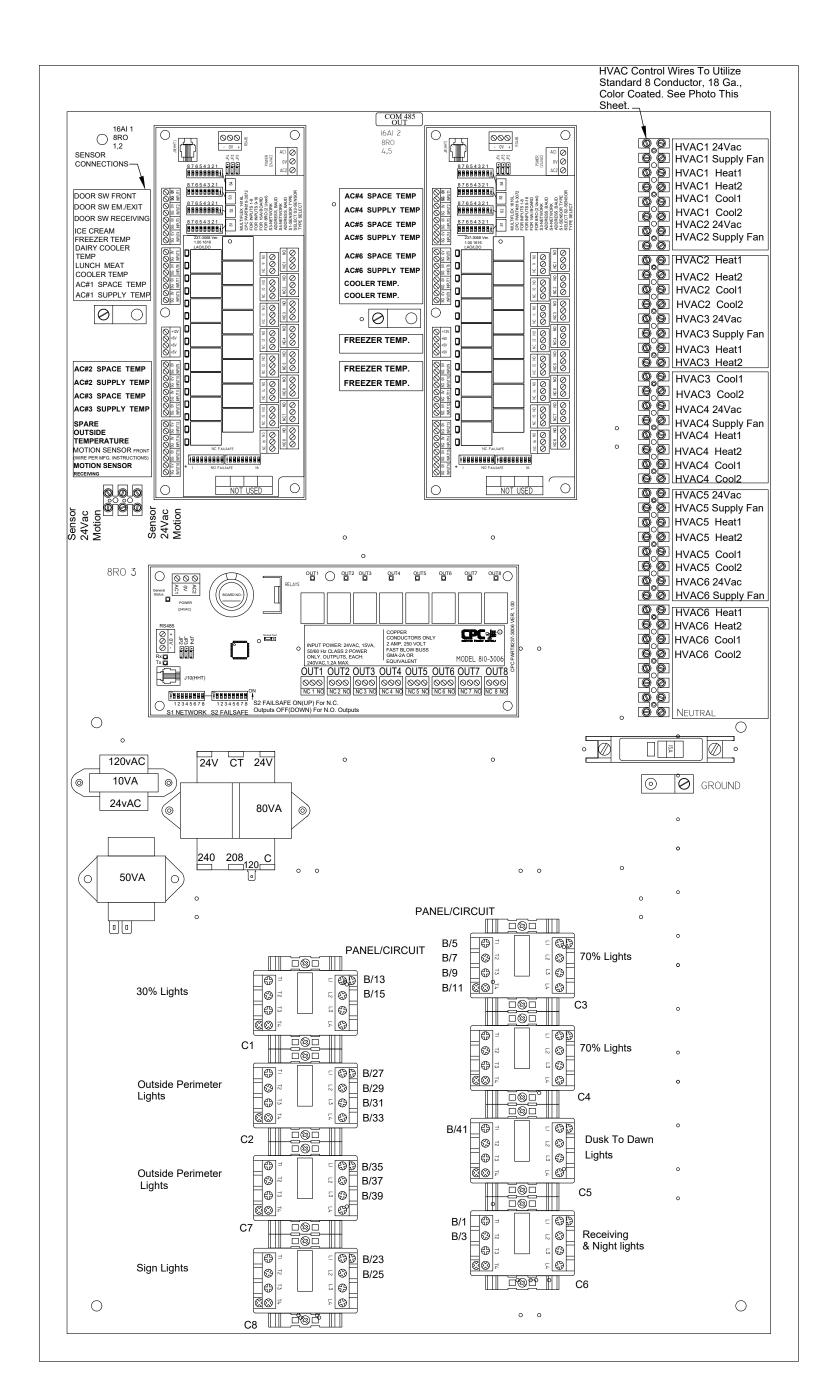
EMS/LOW VOLTAGE



- GENERAL CONTRACTOR TO **ENSURE THAT THE BATTERY** ENABLE IS SWITCHED TO "ON" POSITION



EMS SYSTEM SHOULD BE TESTED FOR HVAC OPERATION, INTERIOR LIGHTING, EXTERIOR LIGHTING AND SIGN LIGHTING PRIOR TO CONTRACTOR'S ELECTRICAL POSSESSION DATE. USE OUTSIDE LIGHT AND SIGN LIGHT OVERRIDE FOR EXTERIOR TESTING.



TESTING NOTES

TESTING OF HVAC UNITS THRU EMS PANEL IS ACCOMPLISHED BY SIMPLY WARMING UP OR COOLING DOWN A SPACE TEMPERATURE SENSOR (USING A BLOW DRYER OR ELECTRONIC EQUIPMENT DUSTER AEROSOL) AND WATCH THE FAN, HEAT AND COOL STAGES CYCLE ON AND OFF. THIS REQUIRES TWO PEOPLE AT ALL TIMES....ONE TO WATCH THE SCREEN AND THE OTHER TO WATCH OPERATION OF THE AHU. WHEN COMPLETE, PRESS THE HOME BUTTON TO RETURN TO THE MAIN SCREEN.

EMS GENERAL NOTES

EMS SUPPLIER NOTE: CUSTOMIZED DOLLAR GENERAL EMS PANEL REQUIRES STORE #, CITY, STATE, ZIP CODE & QTY. OF HVAC UNITS OF THE INSTALL SITE WHEN ORDERING. EMS SYSTEMS INSTALLATION GUIDE WITH PHOTOS IS AVAILABLE ON NATIONAL ACCOUNT WEBSITE. ALL QUESTIONS PERTAINING TO THE EMS PANEL. SYSTEM INSTALLATION & SETUP SHOULD BE DIRECTED TO EMERSON'S DOLLAR GENERAL SUPPORT TEAM AT 770-425-2724.

ALL SIGN & LIGHTING CIRCUITS MUST BE FED THROUGH THE DESIGNATED CONTACTORS AS NOTED ON THIS

ALL LOW VOLTAGE HVAC & DOOR SENSORS MUST BE CONNECTED TO THE PROPER TERMINAL. 24 GA. SHIELDED (SHIELD MUST BE GROUNDED) CABLE, BELDEN #8641, 2 CONDUCTOR WIRE OR IT'S EQUIVALENT IS REQUIRED.

COOLER & FREEZER HOME RUNS WILL BE TERMINATED AT ALL POINTS BY DOLLAR GENERAL REFRIGERATION DEPARTMENT.

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EMS PANEL CONTROLS

KENNETH W

PROFESSIONAL ENGINEER 696 1ST AVE N, STE 200 ST. PETERSBURG, FL 33701 PE #76961

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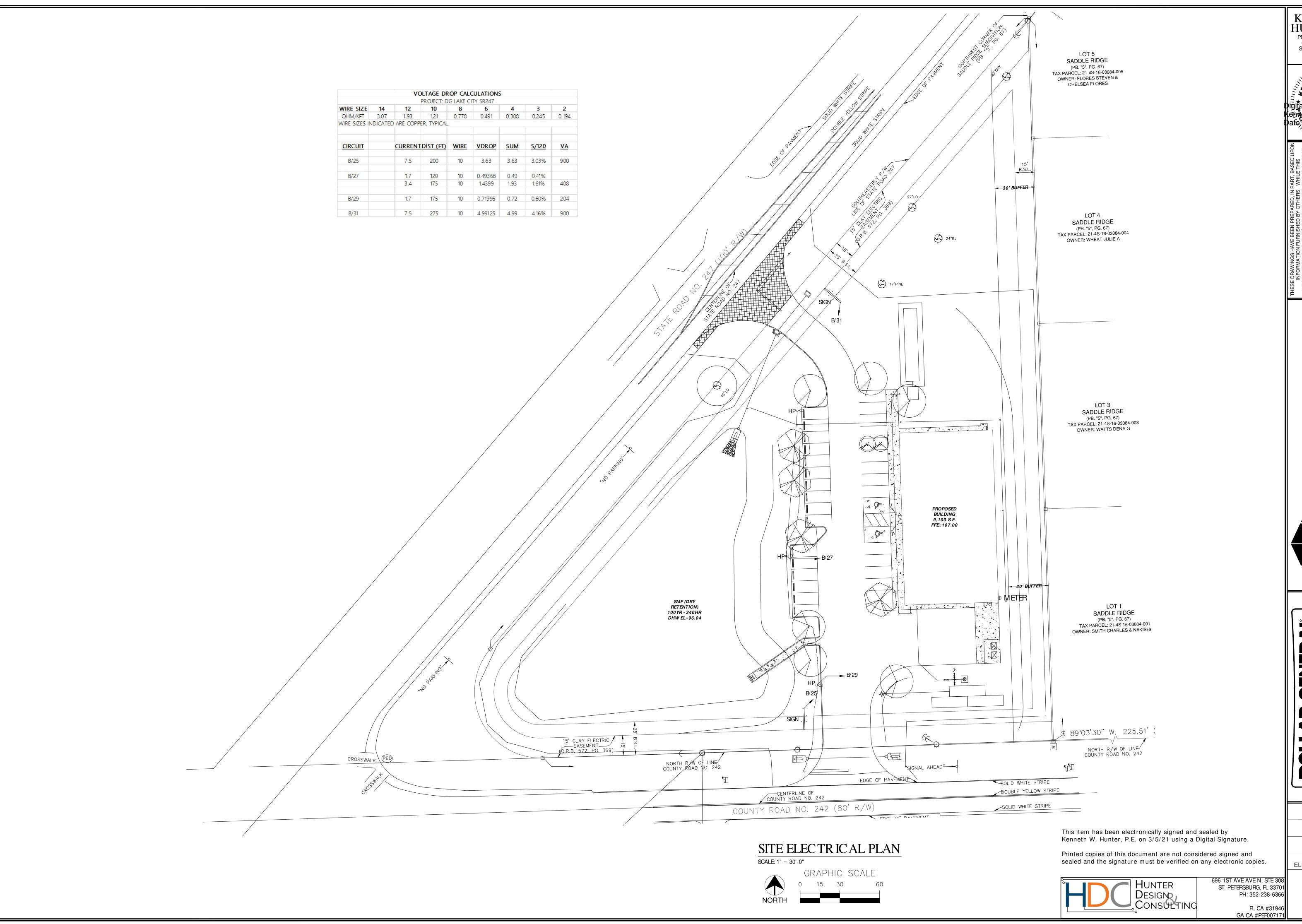
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1 CPU TERMINAL DIAGRAM EMS2/SCALE: N.T.S.

2 PROGRAMMER CONTROLLER EMS2/SCALE: N.T.S.

3 CONTROL WIRING DIAGRAM EMS2/SCALE: N.T.S.

FL CA #31946 GA CA #PEF00717



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No. 76961
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Gonacth W Hunter
Date 202 203 203 140

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DOLLAR GENERAL
SR 19 & CR 242

DRAWING DATE: / DRAWN BY:

3/5/2021 - KWH

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PROJECT NUMBER:
4000.213

DRAWING TITLE:

ELECTRICAL SITE PLAN

SHEET NO.

ES1