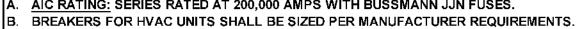
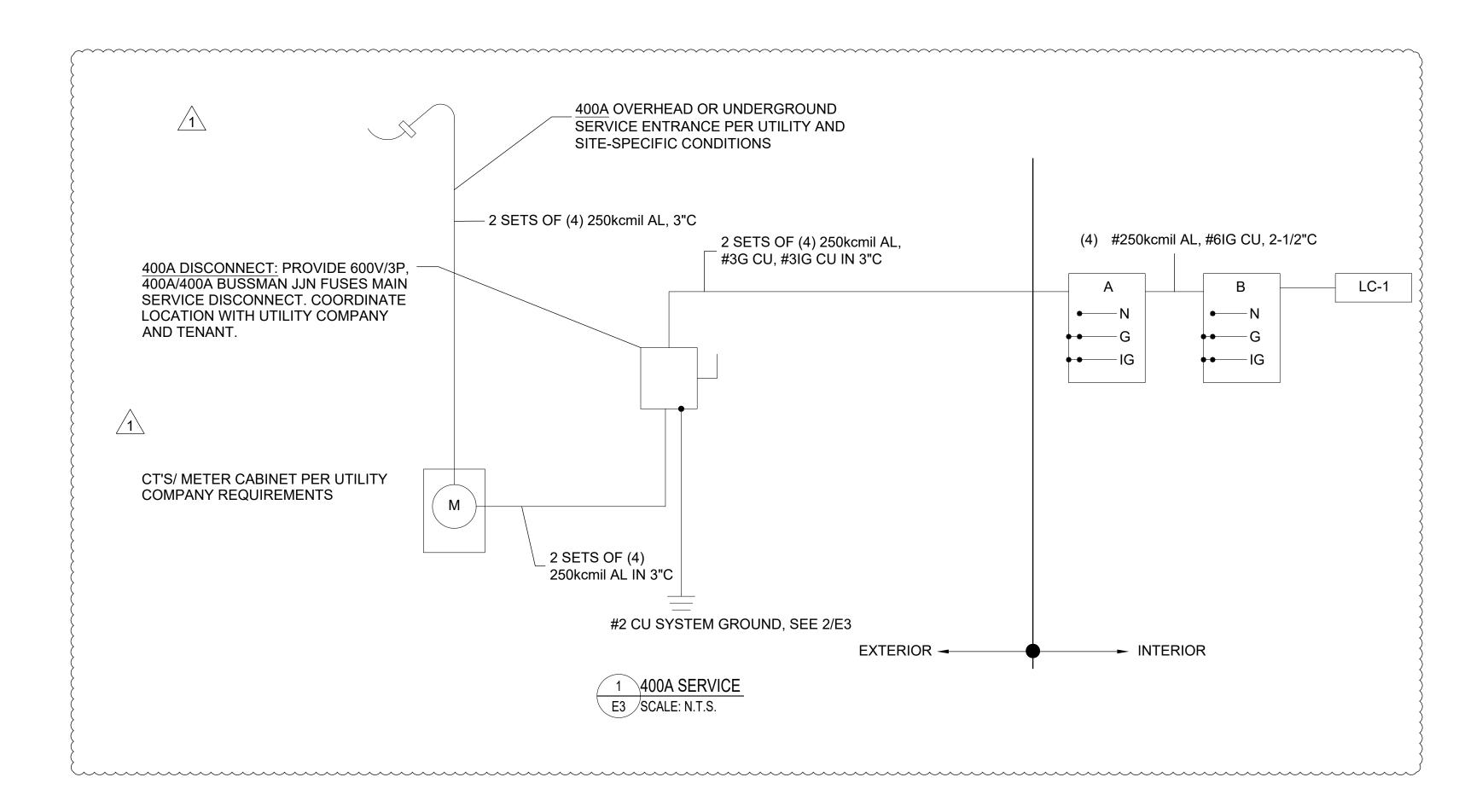


ŝ	M	OUNT:	SURF.	ACE	120/	208	3-PHASE, 4W	} P.	ANEL	· ⁄ î		1	CAPACITY:			ΙΝΤ	CAP:	200KA	L I	NOTES
NOT	LOCA	TION:	BACK	OF BL	DG.			} L <b>I</b>				2	DEMAND LOAD:	341A		AV. FAULT: 26 KA			<u>זַ</u> (	
2	СКТ	LTG	REC	HVAC	MISC	NP	DESCRIPTION	AMP			<b>amp</b>	pole	DÉSCRIPTION	ĹŦĠ	<b>RÉC</b>	ĤVAĈ	Mîsc	NP NP	<u>`</u> ĈŔT´	ľ
	1			9.3						Α	20	1	AUTOMATIC DOOR				0.1		2	
	3			9.3			RTU 1	100	3	В	20	1	PHÓNE BÓARD/BUZZER				0.4		4	
	5			9.3						C	20	1	ENERGY MANAGEMENT				0.2		6	
	7			9.3						Α	20	1	COOLER				0.7		8	(
	9			9.3			RTU 2	100	3	В	20	1 OUTDOC	OUTDOOR HVAC REC		0.4				10	
	11			9.3						С	20	1	OUTDOOR DRINK VEND		0.2				12	
	13						SPARE	20	20 1 A 20		20	2	FREEZER				1.0		14	
	15						SPARE	20	1	В	20	-					1.0		16	
	17						SPARE	20	1	С	20	1	INTERFACE EQUIP				0.5		18	
Ċ	19				1.7		SPARE	20	1	Α	20	1	VSAT SATA HUB EQUIP				0.5		20	
2	21				1.7		WATER HEATER	20	1	В	20	1	CCTV EQUIP				1.0		22	Г
	23				0.2		DRINKING FOUNTAIN	20	1	С	20	1	SECURITY REC		0.2				24	
2	25		0.2				OUTDOOR ICE REC	20	1	Α	20	1	OFRCE REC		0.9				26	
2	27				1.3		COOLER	15	2	В	20	1	BREAK ROOM REC		0.5				28	Γ
	29				1.3				<b>_</b>	С	20	2	PRODUCE COOLER				1.7		30	
С	31				1.3		COOLER	15	2	A	20	-					1.7		32	
	33				1.3				<b>_</b>	В	20	1	ICE CREAM FREEZER		0.2				34	
С	35				1.3		COOLER	15	2	Ç	20	$\sim$ 1 $\sim$	GATORADE		0.8		$\sim$	$\sim$	36	
	37				1.3		COOLER	15	<b>~</b> (	Α			$\land$				16.6		38	)
	39				1.6		SODA COOLERS	20	1 >	В	200	3	PANEL B				16.2		40	R
	41	$\sim$	$\sim \sim \sim$			$\sim$	SPARE	20	~1~	Ç,	$\sim$	$\sim\sim$			$\sim \sim \sim$		<u>17,7</u>	$\sim$	<u>_42</u> _	R
{				<b>0F</b>	LOAD	TYPE	CONNECTED		DEM/	AND		DEM	AND FORMULA				TOTAL	LOAD		В
2		PHASE BALANCE LIGHTING 0.0 KVA				0.0 M	(VA		LOAD	X 125% NEC 210.19 CON	TINUOU	s	CONN	ECTED	DEM	AND	λ.			
{	φ	LO	AD	%	RECEP	TACLE	3.4 KVA	3.4 KVA				10KV	A + 50% REMAINDER NEC	220.44		122.8	KVA	122.8	3KVA	3
$\langle$	Α	44.6	KVA	34%	HV.	AC	55.8 KVA		55.8 KVA LOAD X 100%				) X 100%			340	.9A	340	.9A	8
5	в	44.2	KVA	34%	MIS	sc	63.6 KVA	63.6 KVA LOAD X 100% NEC 210.19 NON-CONT. FILENAME: /						$\wedge$	Į)					
ζ	С	42.7	KVA	32%	N	P	0.0 KVA		0.0 1	VA		0 NO	NCOINCIDENTAL LOADS N	IEC 220.	60	#VALU	E!		∕1∖	В



C. BREAKER LOCK. D. ISOLATED GROUND BUS.



ខ្ល	M	OUNT:	SURF	ACE	120	/208	3-PHASE, 4W	P	ANEL		E	3 /	1 CAPACITY:	200A		ІЛТ	CAP:	200KA		ŝ
NOTE	LOCA	TION:	BACK	OF BL	DG.			LL	JGS:	{	ML	$\tilde{\boldsymbol{\lambda}}$	DEMAND LOAD:	146A		AV. F	AULT:	26KA		NOTES
z	СКТ	LTG	REC	HVAC	MISC	NP	DESCRIPTION	AMP	POLE	$\mathbf{P}$	AMP	POLE	DESCRIPTION	LTG	REC	HVAC	MISC	NP	СКТ	z
B,C	1	0.2					NIGHT LTS	20	1	A	20	1	PWR TERM BROWN				1.2		2	С
B,C	3	0.2					RECEIVING LTS	20	1	в	20	1	PWR TERM BROWN				1.2		4	С
В	5	0.5					70% SALES LTS	20	1	¢	20	1	PWR TERM GREEN				1.2		6	С
в	7	0.5					70% SALES LTS	20	1	Α	20	1	PWR TERM GREEN				1.2		8	С
в	9	0.8					70% SALES LTS	20	1	в	20	1	PWR TERM GREEN				1.6		10	С
в	11	0.4					70% SALES LTS	20	1	С	20	1	PWR TERM GREEN				1.6		12	С
в	13	0.3					30% SALES LTS	20	1	Α	20	1	COOLER				0.7		14	С
в	15	0.5					30% SALES LTS	20	1	в	20	2	FREEZER				1.0		16	С
	17						SPARE	20	1	С	ZŲ	2	FREEZER				0.6		18	С
С	19	0.1					EMERGENCY/EXIT LTS	20	1	Α	20	1	DRINK COOLERS				1.6		20	
С	21	Q.2		0.1			BREAK/OFFICE LTS/EF'S	20	1	в	40	2	FREEZER				3.9		22	с
В	23	1.2					BUILDING SIGN	20	1	С	40	2					3.9		24	C
В	25	0.9					PYLON SIGN	20	1	Α	40	2	FREEZER				3.2		26	с
В	27	0.4					SITE LIGHTING	20	1	в	40	2					3.2		28	28
В	29	0.4					SITE LIGHTING	20	1	С	40	2	FREEZER				3.2		30	С
в	31	0.9					PYLON SIGN	20	1	Α	40	-					3.2		32	C
В	33	0.2					EXTERIOR LTS	20	1	в	20	1	SODA COOLERS				1.6		34	С
В	35	0.9					FRNT WALL/CANPY LTG	20	1	С	25	2	FREEZER				2.6		36	С
	37						SPARE	20	1	Α	25	2					2.6		38	0
	39						SPARE	20	1	в	15	2	COOLER				1.3		40	С
	41						SPARE	20	1	С	10	-	OODEEN				1.3		42	0
				<b>~</b> F	LOAD	TYPE	CONNECTED		DEMA	ND		DEMAND FORMULA				· ·	TOTAL	LOAD		
	PHASE BALANCE LIGHTING 8.6 KVA		8.6 KVA		10.7 K	VA		LOAD	X 125% NEC 210.19 CONT	FINUOU:	s	CONN	ECTED	DEM	AND					
	φ	LO	AD	%	RECEP	TACLE	0.0 KVA	0.0 KVA			10KV	A + 50% REMAINDER NEC	220.44		50.5	KVA	52.71	(VA		
	Α	16.6	KVA	33%	нv	AC	0.1 KVA		0.1 K	VA		LOAD	X 80% (USED MCA IN CAI	CULAT	ION)	140	.3A	146	.1A	
	в	16.2	KVA	32%	MI	sc	41.9 KVA		41.9 K	VA		LOAD	X 100% NEC 210.19 NON	-CONT.			FILEN	AME:		
	С	17.7	KVA	35%	N	IP	0.0 KVA		0.0 K	VA		0 NO	ICOINCIDENTAL LOADS N	EC 220.	60	#VALU	E!			
	NOTES	S:			-			-								-				
	A. <u>A</u> IC	RATI	<u>NG:</u> SE	ERIES	RATED	AT 20	0,000 AMPS WITH BUS	SMAN	IN JJI	1 Fl	USES									

B. ROUTING TO THE EMS PANEL. C. BREAKER LOCK.

D. ISOLATED GROUND BUS.

Ş	120/208	3-PHASE, 4W		PANEL	L	OAD		CAF	ACITY	400A			
ł	LOAD TYPE	CONNECT	ED	DEMA	ND	DEM	AND F	ORMULA				TOTAL	LOAD
8	Lighting	8.6 KVA		10.7 K	VA	LOA	D X 125	% NEC 210	.19 COI	NTINUOUS	C	CONNECTED	DEMAND
∖ {	RECEPTACLE	3.4 KVA	\	3.4 K	VA	10K	/A + 50'	6 REMAIN	DER NEC	220.44		131.5 KVA	133.6KVA
{	HVAC	55.9 KV/	4	55.9 K	VA	LOA	D X 100	%				365.0A	370.8A
Ş	MISC	63.6 KV/	4	63.6 K	VA	LOA	D X 100	% NEC 21	D.19 NO	N-CONT.		FILEN	AME:
ł	NP	0.0 KVA	\	0.0 K	VA	0 NO	NCOIN	IDENTAL	LOADS	NEC 220.60	D	GTP-9100-C	0-208.xlsx
EQUIPMENT SCHEDULE													
		EQUIPMENT SERVED	LOAD	VOLT/	FED BY	DISC BY	MCA	MOCPD	F	EEDER		REMAR	KS
	/ · · · • • •					<b>.</b> r					• • •		

 MARK
 SERVED
 PHASE
 BY

 RTU 1
 ROOF TOP UNIT
 27.96KVA
 208/3
 A

 RTU 2
 ROOF TOP UNIT
 27.96KVA
 208/3
 A

 FILENAME:
 DGTP-9100-CD-208.xlsx

UTILITY TR SERVICI VOLTAGE (L-L): PHASE (PH): AMPS: FULL LOAD KVA: TRANSFORMER: IMPEDANCE (%Z): CALCULATION IS E BUSSMANN SPD. ( AVAILABLE AT SEC CALCULATION IF L

L

MOT C STARTING I-SC: MOTOR LOAD (KV/ MOTOR LOAD (A):

FE STARTING I-SC: VOLTAGE (L-L): PHASE (PH): FEEDER SIZE: FEEDER MATERIAI

PARALLEL SETS ( FEEDER LENGTH ( FEET PER OHMS (

\*f FOR SINGLE PHASE SYST LINE-NEUTRAL (OR V\*LL/2)

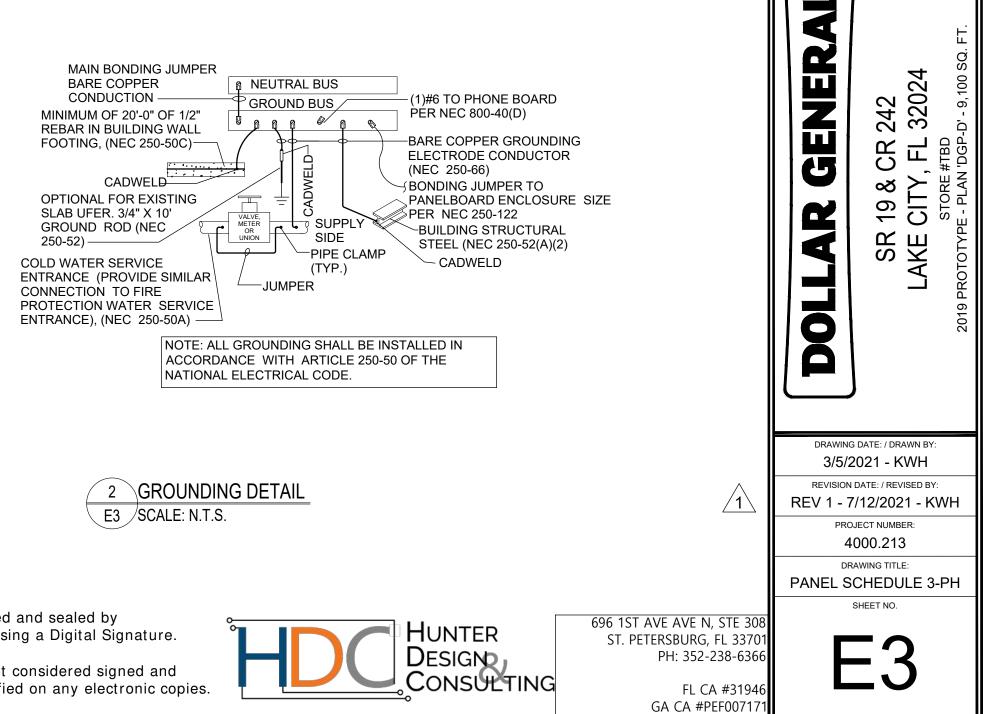
This item has been electronically signed and sealed by Kenneth W. Hunter, P.E. on 7/13/21 using a Digital Signature.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

	EQUIPMENT SCHEDULE									
PMEN⊤ RVĘD	LOAD	VOLT/		DISC BY	MCA	MOCPD	FEEDER	REMARKS		
OP UNIT	27.96KVA	208/3	A	EC	97.0A	100A	(3)#3,#8G 1-1/4"C	PROVIDE 100A/3P		
OP UNIT	27.96KVA	208/3	A	EC	97.0A	100A	(3)#3,#8G 1-1/4"C	PROVIDE 100A/3P		
								~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		

ANSFORMER FAULT CALCULATION								
E ENTRANCE	CALCULATION							
208V	I-FLA=[RATED K\	/A * 1000]/						
3	[V-LL*SQR	T(PHASE)]						
400A ∧	I-FLA=	A16A						
<pre>{ 144KVA ∠1 \</pre>	1-1 EA-							
(  1 <b>50KVA</b> )	M=100/%Z=	93.5						
4.1%Z~~~~~	I-SC=I-FLA*M=	39 KA						
	TRANSFORMER SIZE WI ONTACT UTILITY AND VI							
ECONDARY OF TRANSFO	RMER. CONTACT ENGIN	EER FOR RE-						
LARGER THAN CALCUL	ATED.							

OR LO	OR LOAD FAULT CALCULATION								
	39 KA	CALCULAT	ION						
/A):	56KVA	I-SC(ML)=I-ML*6=	931A						
<u>.</u>	155A	I-SC=I-SC+I-SC(ML)=	40 KA						
EEDEF	R FAULT CALCU	LATION							
	40 KA	IMPEDANCE BASED ON	3 SINGLE						
8	208V	CONDUCTORS IN NON-N	AGNETIC						
7	3	CONDUIT							
5	250 1		ION						
<u>\L:</u> }	AL	\$*f=[SQRT(PHASE)*L*IS-C	;)/						
<u>(Q):</u> (	2	[Q*C*V-LL]							
<u>(L):</u> }	40FT	{ f=	0.516						
<u>(C):</u> ``	<b>12,862 FT/OHMS</b>	M=1/(1+f)=	0.660						
		I-SC=I-SC*M=	26 KA ) <u>/1</u>						
ASE S	YSTEMS, FEEDEF	R LENGTH IS DOUBLED A	ND VOLTAGE IS						
R V*LL	R V*LL/2)								



	KENNETH W.	1
	HUNTER, P.E. PROFESSIONAL ENGINEER 696 1ST AVE N, STE 200 ST. PETERSBURG, FL 33701 PE #76961	
DKD	ST. PETERSBURG, FL 33701 PE #76961 No. 76961 * * * Gitally signed by enright VI Therefore ate: 2021-07-1394.25:	52
	THESE DRAWINGS HAVE BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE ARCHITECT ASSUMED NO RESPONSIBILITY FOR THE ACCURACY OF THESE DRAWINGS FOR ANY ERRORS OR OMISSIONS THAT MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT OF INCORRECT INFORMATION PROVIDED TO THE ARCHITECT. THOSE RELYING ON THIS DOCUMENT ARE ADVISED TO OBTAIN VERIFICATION OF ITS ACCURACY. ALL WORK SHALL COMPLY WITH ANY AND ALL APPLICABLE CODES AND ORDINANCES. SUPERINTENDENTS ARE TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. ALL INFORMATION, DESIGN AND BUILDING TECHNIQUES HELD WITHIN ARE THE EXCLUSIVE PROPERTY OF THE PARTIES NOTED ON THIS ARE THE EXCLUSIVE PROPERTY OF THE PARTIES NOTED ON THIS	
	<b>OOSDDDDDDDDDDDDD</b>	
	<b>BOLLAR GENERAL</b> SR 19 & CR 242 LAKE CITY, FL 32024 STORE #TBD 2019 PROTOTYPE - PLAN 'DGP-D' - 9,100 SQ. FT.	
	DRAWING DATE: / DRAWN BY: 3/5/2021 - KWH REVISION DATE: / REVISED BY: REV 1 - 7/12/2021 - KWH PROJECT NUMBER: 4000.213 DRAWING TITLE: PANEL SCHEDULE 3-PH	-
STE 308 FL 33701 238-6366 x #31946 EF007171	SHEET NO.	