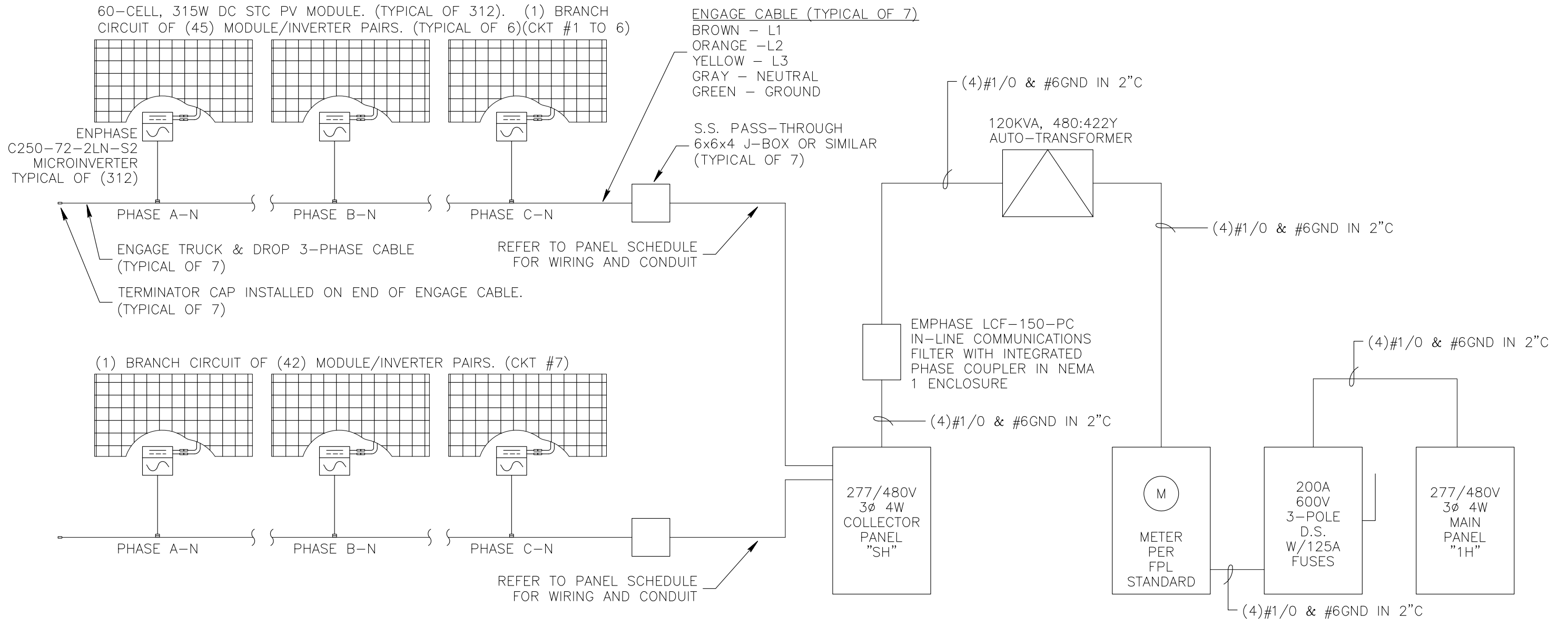








File Name: P:\Projects\2018\181461\_Surfside\_Community\_Center\_Photovoltaic\_System\CADD\_Files\X-Ref\Photometric\Roof\_Plan.dwg - (Plotted by: Jorge Cervantes on Thursday, September 19, 2019 8:45:25 AM)



# OUTLINE DIAGRAM

NOT TO SCALE

INTERNAL REVIEW SET  
 PRELIMINARY NOT FOR CONSTRUCTION



NO	DATE	REVISION	BY	NO	DATE	REVISION	BY

**Calvin, Giordano & Associates, Inc.**  
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 Certificate of Authorization 514

**PHOTOVOLTAIC SYSTEM**  
 COMMUNITY CENTER  
 TOWN OF SURFSIDE, FLORIDA

**OUTLINE DIAGRAM**

SCALE: AS NOTED  
 PROJECT No: 18-1461  
 DATE: 9-12-19  
 SHEET: **EXH-D**

<b>PANEL NAME: 1H (EXISTING)</b>																				
TYPE: SIEMENS P4E90H0500FTS (S.O. #3003025031)												MAIN BUS: 600 AMP								
Ø-TO-N VOLTAGE: 277												NEUTRAL: 100 %								
Ø-TO-Ø VOLTAGE: 480												3-PHASE, 4-WIRE MOUNTING: SURFACE								
												MAIN BREAKER: 500 AMP								
												A.I.C.: 10 K								
KVA	C.B.	COND.	Ø	NEU.	GND.	FEET	%VD	LOAD	CKT	CKT	LOAD	%VD	FEET	GND.	NEU.	Ø	COND.	C.B.	KVA	
2.82	20-1	1 1/4"	250		4	500	0.19	LTG. INTERIOR SOUTH	1	2	PANEL "1L" XFMR	0.53	30	10		8	3/4"	50-3	10.00	
2.12	20-1							LTG. INTERIOR NORTH	3	4									10.00	
1.20	20-1	2"	350	350	4	300	0.03	LTG. EXTERIOR SOUTH	5	6									10.00	
6.67	30-3	1/2"	10		10	100	1.87	EDH-1	7	8	PANEL "SH"	0.71	100	6		1	1 1/2"	125-3	20.42	
6.67									9	10									20.42	
6.67									11	12									20.42	
0.94	20-3	1/2"	12		12	100	0.42	EF-6	13	14	RP-1 CONTROL	0.13	30	12	12	12	1/2"	20-3	1.00	
0.94									15	16									1.00	
0.94									17	18									1.00	
9.00	40-3	3/4"	8		10	100	1.58	CU-1A	19	20	SPARE							20-3		
9.00									21	22										
9.00									23	24										
9.00	40-3	3/4"	8		10	100	1.58	CU-1B	25	26	WATER HEATER	0.35	100	6		2	1 1/4"	110-3	8.00	
9.00									27	28									8.00	
9.00									29	30									8.00	
2.10	15-3	1/2"	12		12	100	0.93	AHU-1	31	32	PANEL "PH"	0.53	100	6	1	1	1 1/2"	100-3	15.19	
2.10									33	34									15.19	
2.10									35	36									15.19	
(1)(2)	(27.30)	125-3	1 1/2"	1	1	6	50	(0.47)	PROPOSED PANEL "SH"	37	38	PANEL "PL" XFMR	0.00		8		4	1 1/4"	70-3	15.00
(1)(2)	(27.30)								39	40									15.00	
(1)(2)	(27.30)								41	42									15.00	

PANEL LOAD(KVA): 298.10 KVA  
PANEL LOAD(AMP): 358.56 AMPS  
A-PHASE TOTAL CONNECTED LOAD: 361.52 AMPS  
B-PHASE TOTAL CONNECTED LOAD: 358.99 AMPS  
C-PHASE TOTAL CONNECTED LOAD: 355.67 AMPS

- (1) REMOVE EXISTING SPARE BREAKER AND INSTALL NEW BREAKER SIZE SHOWN. MATCH EXISTING BREAKERS IN PANEL.
- (2) 98.28KWdc/81.9KWac

<b>PANEL NAME: SH</b>																				
TYPE: SIEMENS												MAIN BUS: 225 AMP								
Ø-TO-N VOLTAGE: 277												NEUTRAL: 100 %								
Ø-TO-Ø VOLTAGE: 480												3-PHASE, 4-WIRE MOUNTING: SURFACE								
												MAIN BREAKER: 150 AMP								
												A.I.C.: 14 K								
KWdc	C.B.	COND.	Ø	NEU.	GND.	FEET	%VD	LOAD	CKT	CKT	LOAD	%VD	FEET	GND.	NEU.	Ø	COND.	C.B.	KWdc	
(2)	4.73	20-3	1"	8	8	10	255	2.12	SOLAR CKT #1	1	2	SOLAR CKT #5	2.12	255	10	8	8	1"	20-3	4.73
(2)	4.73								(45)PANELS	3	4	(45)PANELS								4.73
(2)	4.73									5	6									4.73
(2)	4.73	20-3	1"	8	8	10	255	2.12	SOLAR CKT #2	7	8	SOLAR CKT #6	2.12	255	10	8	8	1"	20-3	4.73
(2)	4.73								(45)PANELS	9	10	(45)PANELS								4.73
(2)	4.73									11	12									4.73
(2)	4.73	20-3	1"	8	8	10	255	2.12	SOLAR CKT #3	13	14	SOLAR CKT #7	1.98	255	10	8	8	1"	20-3	4.41
(2)	4.73								(45)PANELS	15	16	(42)PANELS								4.41
(2)	4.73									17	18									4.41
(2)	4.73	20-3	1"	8	8	10	255	2.12	SOLAR CKT #4	19	20	SPACE								
(2)	4.73								(45)PANELS	21	22	SPACE								
(2)	4.73									23	24	SPACE								
										25	26	SPACE								
										27	28	SPACE								
										29	30	SPACE								

PANEL LOAD(KVA): 98.28 KWdc(1)  
PANEL LOAD(AMP): 118.21 AMPS  
A-PHASE TOTAL CONNECTED LOAD: 118.27 AMPS  
B-PHASE TOTAL CONNECTED LOAD: 118.27 AMPS  
C-PHASE TOTAL CONNECTED LOAD: 118.27 AMPS

- (1) 98.28KWdc/81.9KWac
- (2) WIRING AND CONDUIT SIZING SHOWN FOR REFERENCE. VERIFY SIZES DURING DESIGN.

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**PHOTOVOLTAIC SYSTEM**  
COMMUNITY CENTER  
TOWN OF SURFSIDE, FLORIDA

**PANEL SCHEDULES**

INTERNAL REVIEW SET  
PRELIMINARY NOT FOR CONSTRUCTION



SCALE: AS NOTED  
PROJECT No: 18-1461  
SHEET: **EXH-E**

NO	DATE	REVISION	BY	NO	DATE	REVISION	BY

DATE: 9-12-19