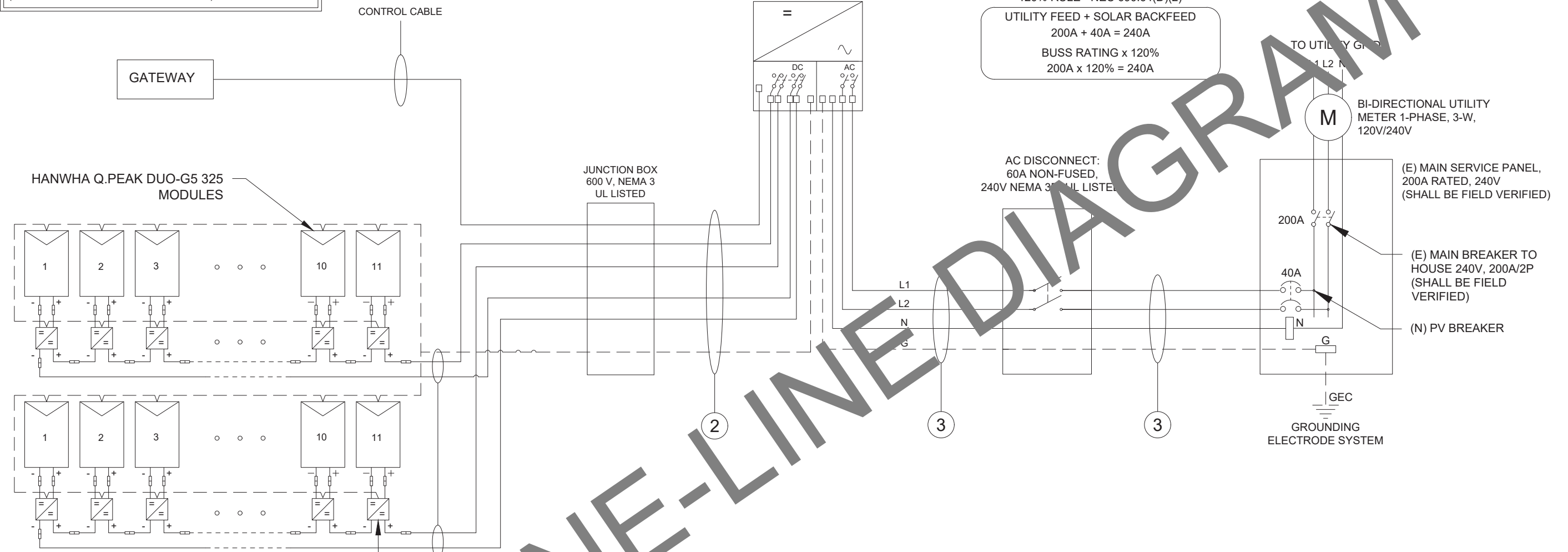


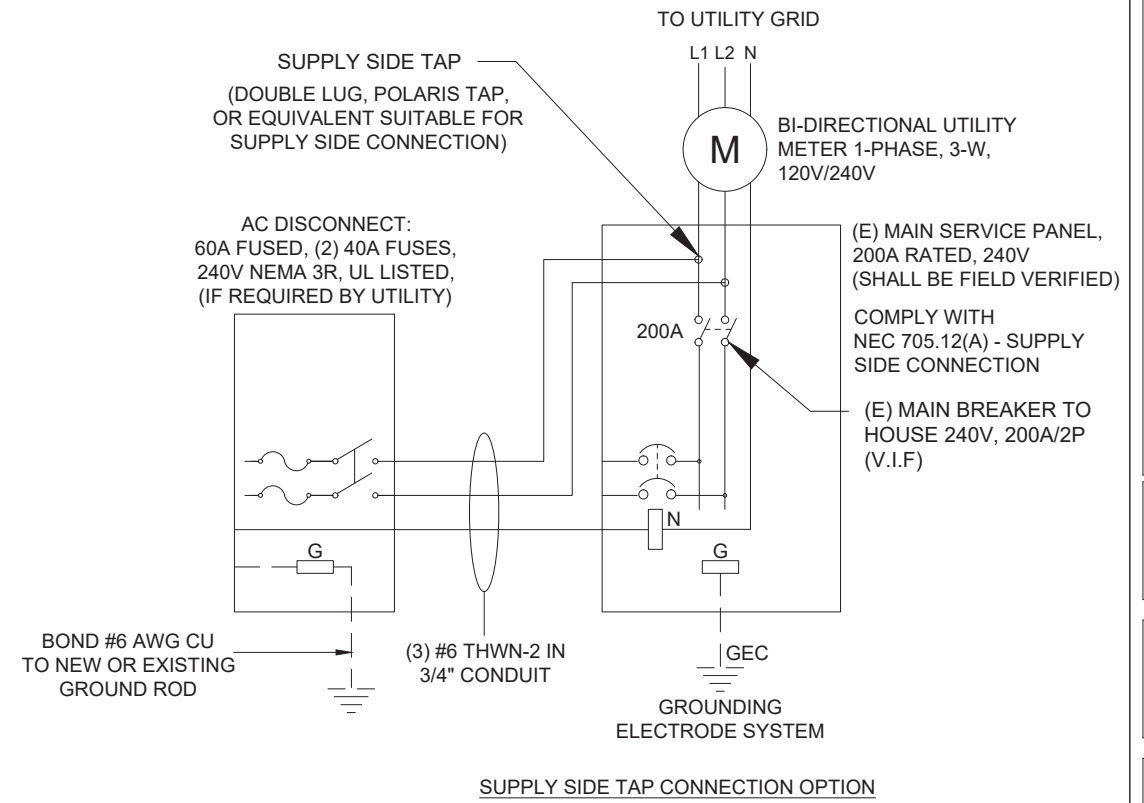
(22) HANWHA Q.PEAK DUO-G5 325 MODULES  
 (22) SMA TS4-R-O (OPTIMIZER) (471-00252-40) WITH ROOFTOP COMMUNICATION KIT (ROOFCOMMKIT-P2-US)  
 (2) STRINGS OF 11 MODULES WITH OPTIMIZERS (CONNECTED IN SERIES PER STRING)

SMA SUNNY BOY 6.0-US INVERTER  
 OUTPUT: 240VAC, 25.0  
 97% CEC WEIGHTED EFFICIENCY  
 NEMA 3R, UL LISTED, INTERNAL GFDI WITH INTEGRATED DC DISCONNECT

INTERCONNECTION  
 120% RULE - NEC 690.64(D)(2)  
 UTILITY FEED + SOLAR BACKFEED  
 $200A + 40A = 240A$   
 BUSS RATING x 120%  
 $200A \times 120\% = 240A$



SMA TS4-R-O (optimizer)  
 (471-00252-40) Rated  
 DC Input Power - 475 watts  
 Maximum Current Isc - 12 A  
 Output Power Range - 0-475 W  
 Maximum Series fuse rating - 15 Adc  
 Maximum System Voltage - 1,000 V  
 NEC 2017 Rapid Shutdown Compliant



Conduit Conductor Schedule (ALL CONDUCTORS MUST BE COPPER)

Tag #	Description	Wire Gauge	# of Conductors/Color	Conduit Type	Conduit Size
1	PV WIRE	10 AWG	2 (V+, V-)	N/A-Free Air	N/A-Free Air
1	Bare Copper Ground (EGC/GEC)	8 AWG	1 BARE	N/A-Free Air	N/A-Free Air
2	THWN-2	10 AWG	4 (2V+, 2V-) B/R	EMT	3/4"
	THWN-2 - Ground (EGC/GEC)	8 AWG	1 (GRN)	EMT	3/4"
	THWN-2	8 AWG	3 (1L1, 1L2, 1N) B/R/W	EMT	3/4"
3	THWN-2 - Ground (GEC)	8 AWG	1 (GRN)	EMT	3/4"

REVISIONS

DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME

SHEET NAME  
**ELECTRICAL LINE DIAGRAM**

SHEET SIZE

SHEET NUMBER