EQUIPMENT SCHEDULE △

	TYPE	DESCRIPTION
A	METER MAIN	(E) METER MAIN 200A | MAIN BREAKER : 200A
B	TRANSFER SWITCH	(N) TESLA GATEWAY 2 | MAIN BREAKER: 200A
C	BATTERY	(N) TESLA POWERWALL 2
D	SOLAR DISCONNECT	(N) NON FUSED DISCONNECT
E	SOLAR PANELBOARD	(N) PANELBOARD 100A | MAIN BREAKER : 80A (BACKFED)
F	INVERTER	(N) SMA SB 7.7-US
G	ROOF PENETRATION	(N) SOLADECK ROOF MOUNTED JUNCTION BOX (GENERIC)
H	RAPID SHUTDOWN DEVICE	(N) SMA JMS-F SUNSPEC RAPID SHUTDOWN DEVICE
I	MODULE	(N) Q CELLS Q.PEAK DUO XL-G10.3/BFG 485

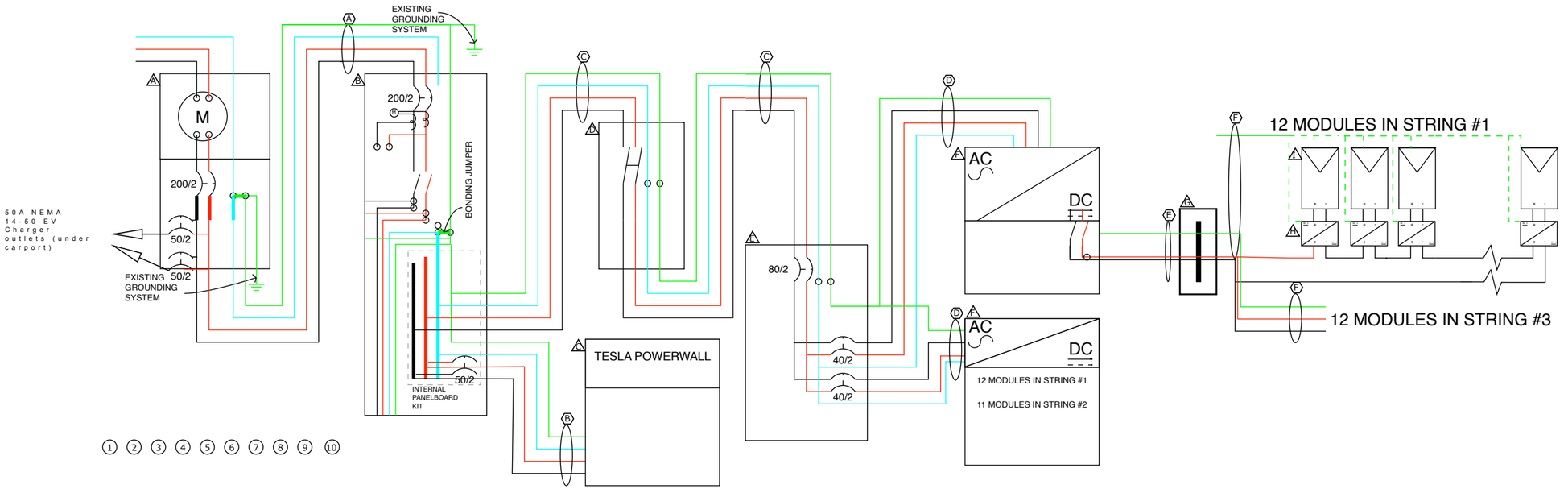
CONDUCTOR SIZES ⬡

A	(1 SET) 2X #3/0 CU + 1X #2/0 CU NTRL + 1X #6 CU GRD IN 2" EMT
B	(1 SET) 2X #10 CU + 1X #10 CU NTRL + 1X #10 CU GRD IN 1/2" EMT
C	(1 SET) 2X #1 CU + 1X #1 CU NTRL + 1X #6 CU GRD IN 1.25" EMT
D	(1 SET) 2X #8 CU + 1X #8 CU NTRL + 1X #10 CU GRD IN 0.75" EMT
E	(1 SET) 2X #10 CU + 1X #10 CU GRD IN 0.75" EMT
F	(1 SET) 4X #10 CU + 1X #4 CU GRD IN FREE AIR

FIELD APPLIED PLACARDS ◯

1	SEE PLACARDS PAGE FOR DETAILS

*Note: NEC 705.95(B) says "Neutral Conductor for Instrumentation, Voltage Detection or Phase Detection. A conductor used solely for instrumentation, voltage detection, or phase detection and connected to a single-phase or 3-phase utility-interactive inverter, shall be permitted to be sized at less than the ampacity of the other current-carrying conductors and shall be sized equal to or larger than the equipment grounding conductor."



SOLAR SCHEDULE

INVERTER	MODEL	FUSE	STRING # 1		STRING # 2	
			RSD	STRING	RSD	STRING
1	SMA SB 7.7-US	40	12	12	12	12
2	SMA SB 7.7-US	40	12	12	11	11

ELECTRICAL NOTES

1.) ALL EQUIPMENT TO BE LISTED BY UL OR OTHER NRTL, AND LABELED FOR ITS APPLICATION.
2.) ALL CONDUCTORS SHALL BE COPPER, RATED FOR 600 V AND 90 DEGREE C WET ENVIRONMENT.
3.) WIRING, CONDUIT, AND RACEWAYS MOUNTED ON ROOFTOPS SHALL BE ROUTED DIRECTLY TO, AND LOCATED AS CLOSE AS POSSIBLE TO THE NEAREST RIDGE, HIP, OR VALLEY.
4.) WORKING CLEARANCES AROUND ALL NEW AND EXISTING ELECTRICAL EQUIPMENT SHALL COMPLY WITH NEC 110.26.
5.) DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS. CONTRACTOR SHALL FURNISH ALL NECESSARY OUTLETS, SUPPORTS, FITTINGS AND ACCESSORIES TO FULFILL APPLICABLE CODES AND STANDARDS.
6.) WHERE SIZES OF JUNCTION BOXES, RACEWAYS, AND CONDUITS ARE NOT SPECIFIED, THE CONTRACTOR SHALL SIZE THEM ACCORDINGLY.
7.) ALL WIRE TERMINATIONS SHALL BE APPROPRIATELY LABELED AND READILY VISIBLE.
8.) MODULE GROUNDING CLIPS TO BE INSTALLED BETWEEN MODULE FRAME AND MODULE SUPPORT RAIL, PER THE GROUNDING CLIP MANUFACTURER'S INSTRUCTION.
9.) MODULE SUPPORT RAIL TO BE BONDED TO CONTINUOUS COPPER G.E.C. VIA WEEB LUG OR ILSCO GBL-4DBT LAY-IN LUG.
10.) THE POLARITY OF THE GROUNDED CONDUCTORS IS NEGATIVE

ADDITIONAL NOTES:

1. EACH MODULE TO BE GROUNDED USING THE SUPPLIED CONNECTION POINT PER MANUFACTURER'S REQUIREMENTS. ALL SOLAR MODULES, EQUIPMENT, AND METALLIC COMPONENTS ARE TO BE BONDED. IF THE EXISTING GROUNDING ELECTRODE SYSTEM CAN NOT BE VERIFIED OR IS ONLY METALLIC WATER PIPING, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE.
2. ALL PLAQUES AND SIGNAGE REQUIRED BY THE LATEST EDITION OF NATIONAL ELECTRICAL CODE. LABEL SHALL BE METALLIC OR PLASTIC, ENGRAVED OR MACHINE PRINTED IN A CONTRASTING COLOR TO THE PLAQUE. PLAQUE SHALL BE UV RESISTANT IF EXPOSED TO SUNLIGHT.
3. DC CONDUCTORS SHALL BE RUN IN EMT AND SHALL BE LABELED, "CAUTION DC CIRCUIT" OR EQUIV. EVERY 5 FT.
4. EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH 250.134 OR 250.136(A).
5. CONFIRM LINE SIDE VOLTAGE AT ELECTRIC UTILITY SERVICE PRIOR TO CONNECTING INVERTER. VERIFY SERVICE VOLTAGE IS WITHIN INVERTER VOLTAGE OPERATIONAL RANGE.
6. OUTDOOR EQUIPMENT SHALL BE NEMA-3R RATED OR BETTER.
7. ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT EXPANSION JOINTS AND ANCHOR CONDUIT RUNS AS REQUIRED PER NEC.
8. ALL WIRING MUST BE PROPERLY SUPPORTED BY DEVICES OR MECHANICAL MEANS DESIGNED AND LISTED FOR SUCH USE, AND FOR ROOF-MOUNTED SYSTEMS, WIRING MUST BE PERMANENTLY AND COMPLETELY HELP OFF OF THE ROOF SURFACE. NEC 110.2 - 110.4 / 300.4

01 - LINE DIAGRAM

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BARRY M JACOBSON LICENSE No 51402 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Barry M Jacobson on the date adjacent to the seal using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.
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