

SECTION 13650 - SOLAR PHOTOVOLTAIC SYSTEMS

PART 1 - GENERAL

1.01 SUMMARY

A. Provide photovoltaic power systems.

1.02 SUBMITTALS

A. Submit the following:

1. Manufacturer's product data.
2. Representative samples.
3. Shop drawings.
4. Operating and maintenance instructions.
5. Commissioning

PART 2 - PRODUCTS

2.01 Photovoltaic Power Systems

A. Provide Sunslate Q6, as manufactured by Atlantis Energy Systems, Pokepssee, NY, telephone: 916-869-6784, complying with the following:

1. Provide photovoltaic power modules, regulators, system components and other materials and accessories necessary for a complete installation.

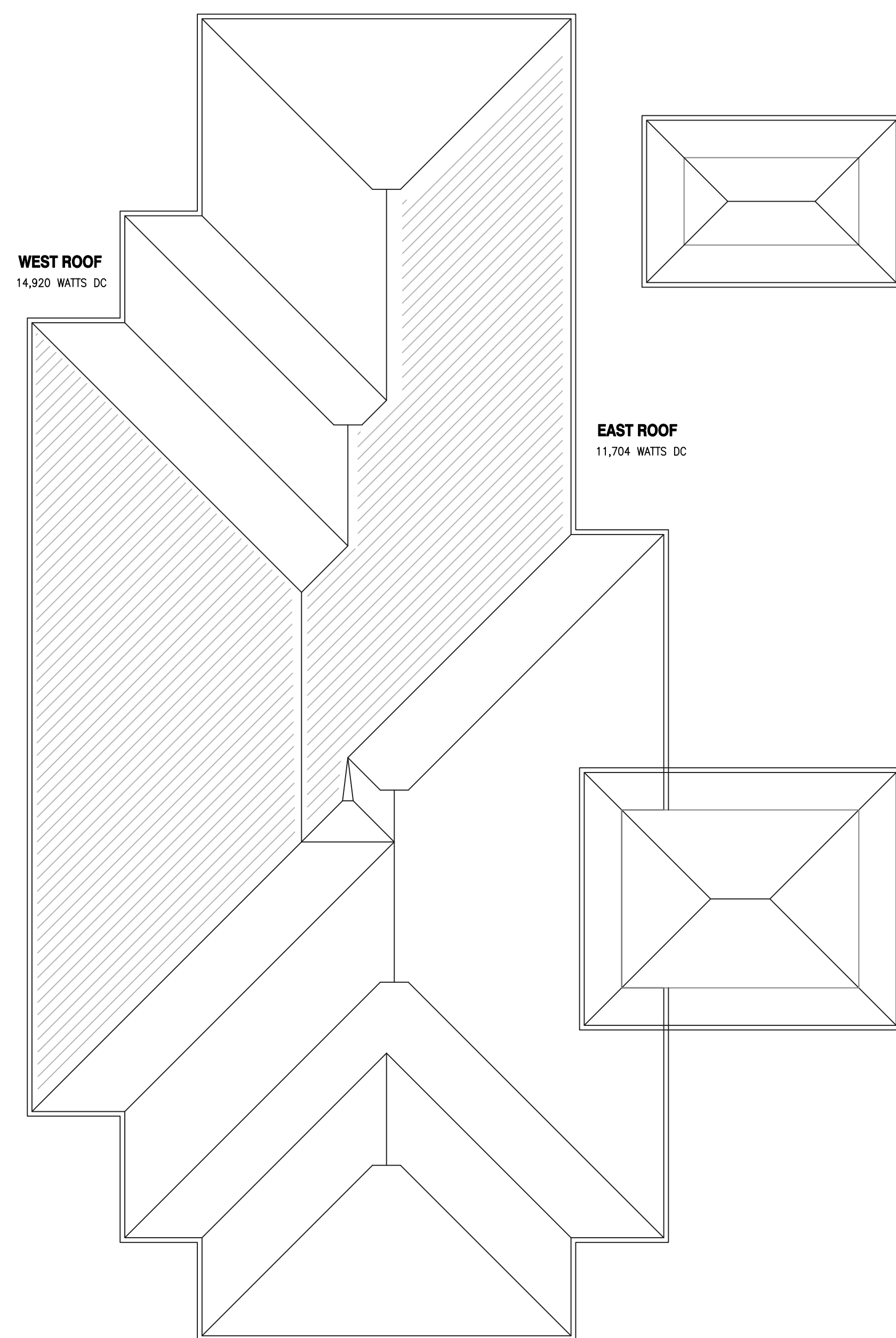
PART 3 - EXECUTION

3.01 INSTALLATION

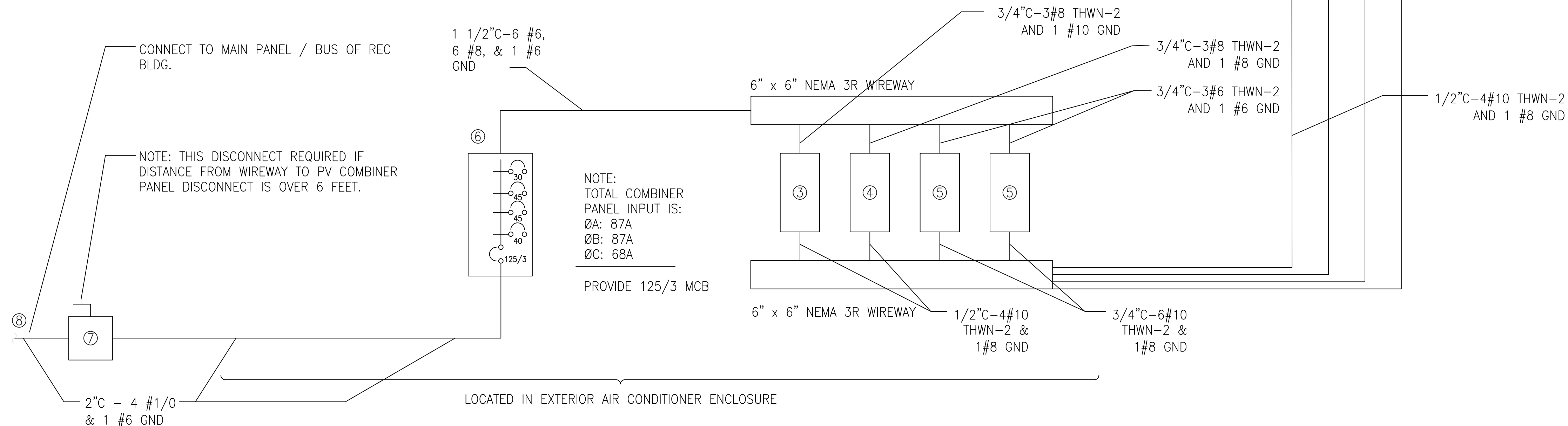
A. Install in strict accordance with manufacturer's instructions and the following:

1. Inspect substrate and adjacent construction for proper installation conditions.
2. Correct any deficiencies prior to installation.
3. Install materials in proper relation with adjacent work.
4. Restore units damaged during installation. Replace units which cannot be satisfactorily restored.
5. Test for proper operation and provide training.

END OF SECTION



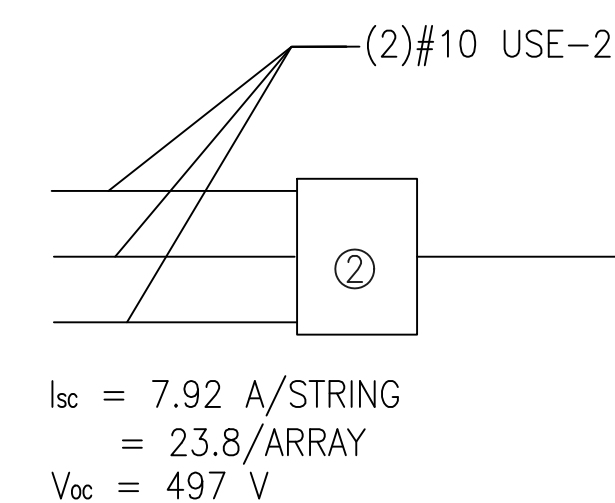
BUILDING "REC" PV LAYOUT
RECREATION BUILDING



BUILDING "REC" ONE LINE DIAGRAM
RECREATION BUILDING

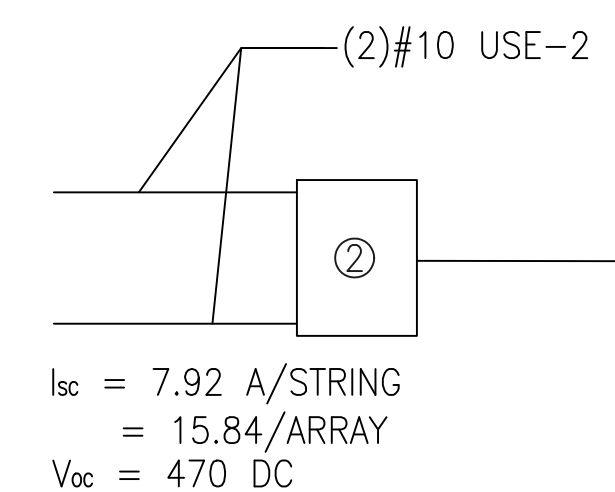
WEST ROOF

8,056 WATTS DC
3 STRING OF (122) ATLANTIS ENERGY SUNSLATES
TYPE Q6 22W MODULES
TO SUNNY BOY 7000



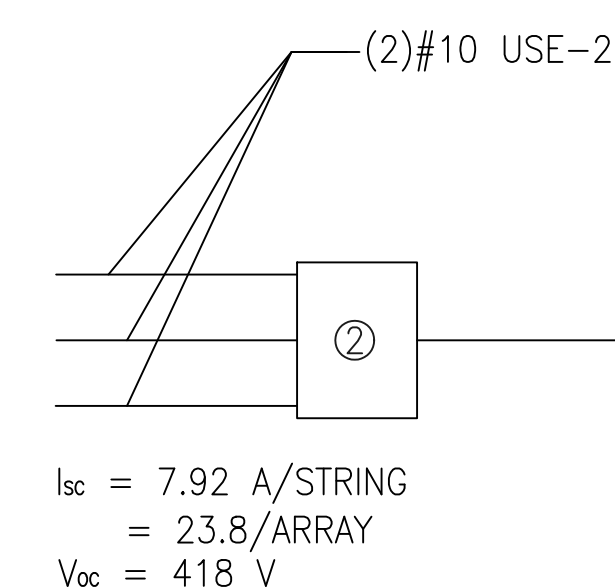
EAST ROOF

5,104 WATTS DC
2 STRING OF (116) ATLANTIS ENERGY SUNSLATES
TYPE Q6 22W MODULES
TO SUNNY BOY 5000



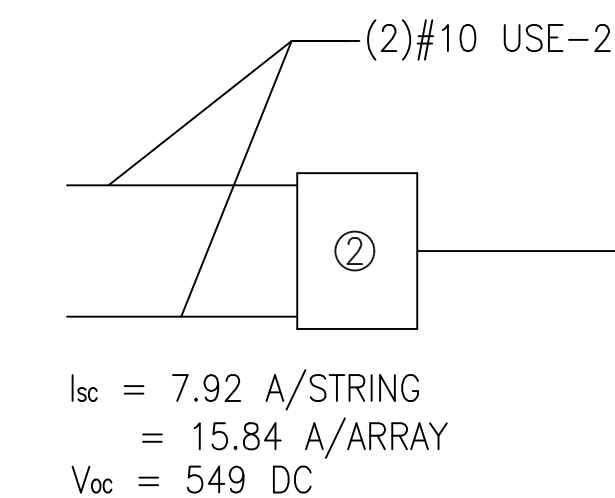
WEST ROOF

6,864 WATTS DC
3 STRING OF (104) ATLANTIS ENERGY SUNSLATES
TYPE Q6 22W MODULES
TO SUNNY BOY 7000



EAST ROOF

6600 WATTS DC
2 STRING OF (100) ATLANTIS ENERGY SUNSLATES
TYPE Q6 22W MODULES
TO SUNNY BOY 6000



- ① PV ARRAY APPROXIMATELY 15KW DC (STC RATING) ON WEST ROOF CONNECTED TO (2) 7000W INVERTERS
PV ARRAY APPROXIMATELY 11.1KW DC (STC RATING) ON EAST ROOF #2 CONNECTED TO (1) 6000W INVERTER AND (1) 5000W INVERTER.
- ② PV JUNCTION BOX - SMA COMBI-SWITCH
- ③ PV INVERTER: SMA SUNNY BOY 5000US, 208VAC, 24A
- ④ PV INVERTER: SMA SUNNY BOY 6000US, 208VAC, 29A
- ⑤ PV INVERTER: SMA SUNNY BOY 7000US, 208VAC, 34A
- ⑥ AC LOAD CENTER, 3 PHASE, 125A-MCB, 400A MINIMUM BUS WITH (1) 30/2 BREAKER PER 5000US INVERTER
- ⑦ AC DISCONNECT: SQUARE D D324NRB, 240VAC, 200A WITH 125A FUSES
- ⑧ PV POINT OF INTERCONNECTION FEEDER SIZED FOR 125A. CONNECT TO LINE OF SERVICE EQUIPMENT

BREAKER SIZES IN AC LOAD CENTER (#7) ARE BASED ON INVERTERS SUPPLYING POWER AT 208 1 PHASE. DISCONNECT AND FEEDER SIZE BASED ON THE POWER CONNECTION BEING 208 3 PHASE