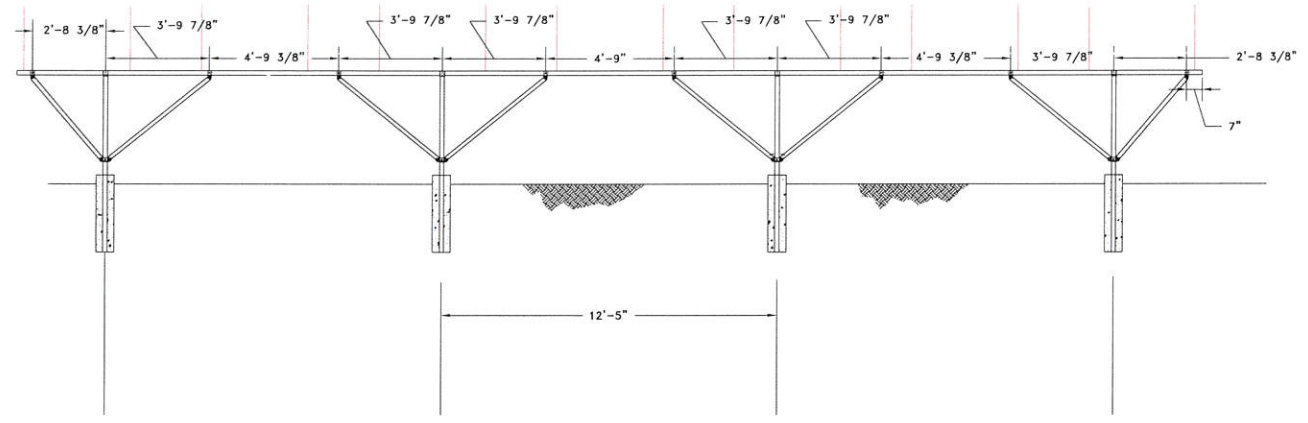
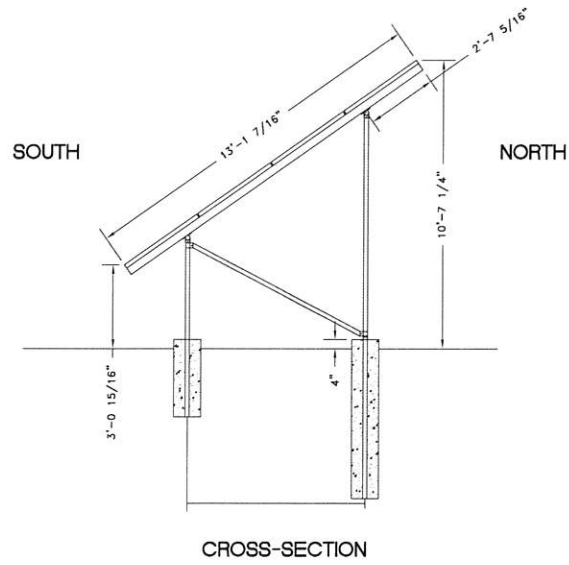
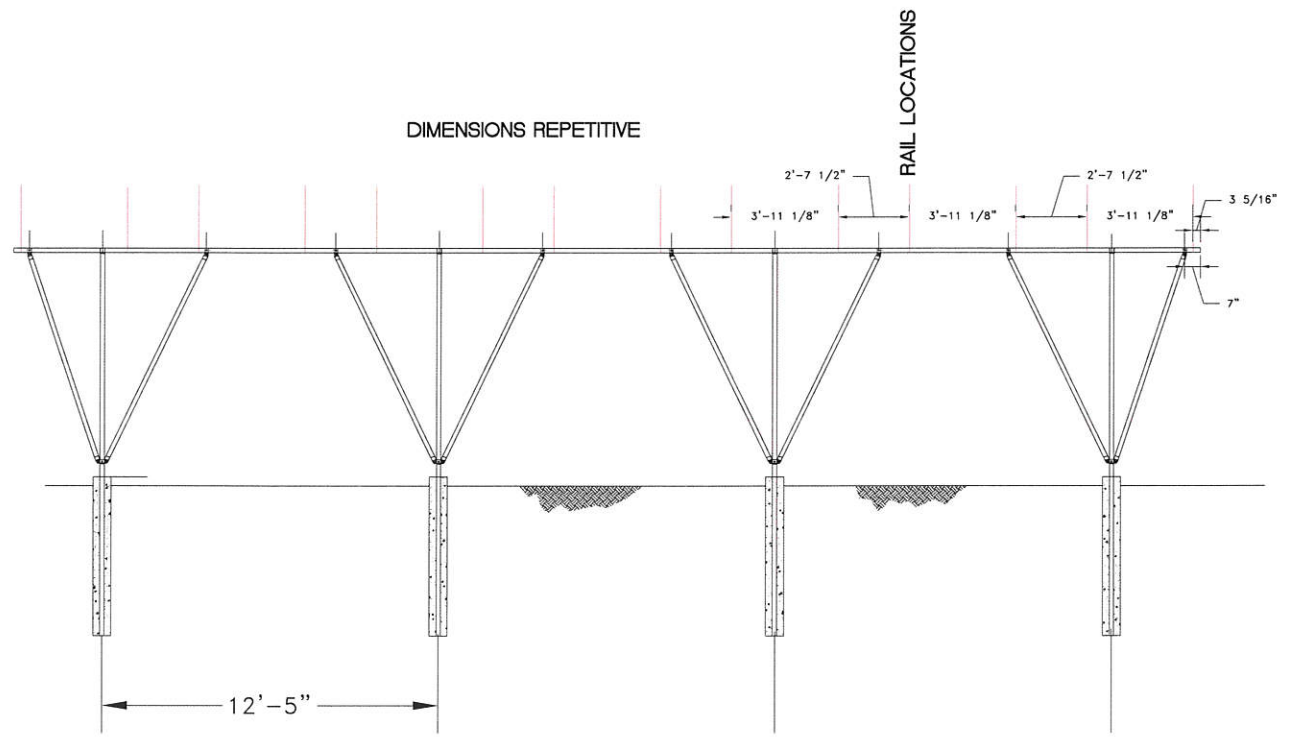




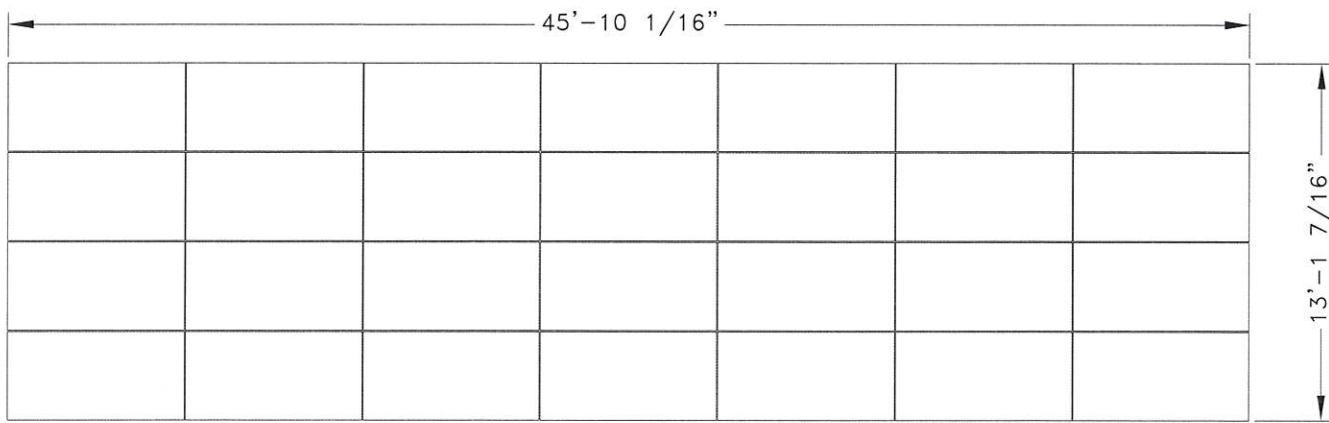
SIMILAR GROUND MOUNT INSTALLED BY GARDNER ENGINEERING AES



SOUTH - FRONT SUPPORTS

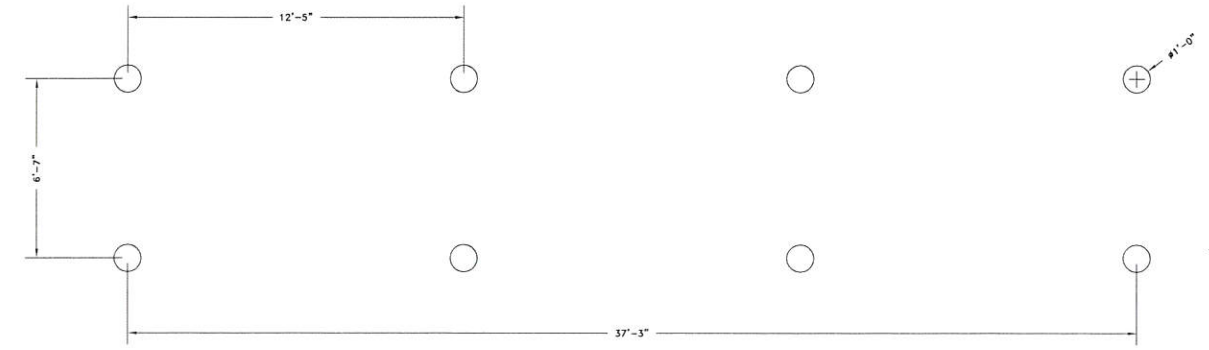


NORTH - REAR SUPPORTS

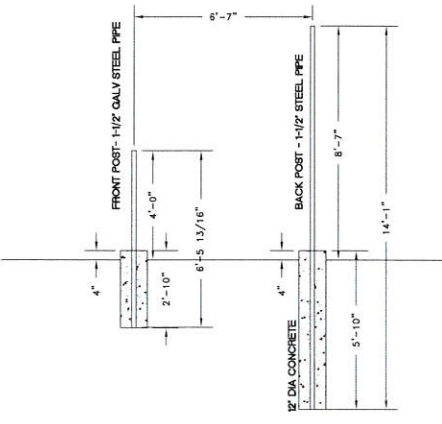


PLANE SURFACE VIEW

28 - 'SOLARWORLD' 315 WATT SOLAR MODULES



FOUNDATION PLAN VIEW OF HOLES



CROSS-SECTION



KEN GARDNER, P.E., L.S.  
 GARDNER ENGINEERING ALTERNATIVE ENERGY SERVICES  
 2047 SOUTH PAINTER LANE, WEST HAVEN, UT 84401

PROFESSIONAL CIVIL ENGINEER - UTAH 154270-2202  
 PROFESSIONAL STRUCTURAL ENGINEER - UTAH 154270-2203  
 PROFESSIONAL LAND SURVEYOR - UTAH 154270-2201  
 LICENSED ELEC/SOLAR CONTRACTOR - UTAH 6399860-5501  
 MASTER ELECTRICIAN - UTAH 154270-5502  
 NABCEP CERTIFICATE NUMBER R031806-17  
 IREC CERTIFIED AFFILIATED INSTRUCTOR US-0133  
 (801) 689-2618 EX. 201 OFFICE  
 (801) 589-0447 CELL

SCALE:	N.T.S.
DATE:	OCT_2014
DESIGN:	K.E.G.
DRAWN:	K.E.G.
CHECKED:	



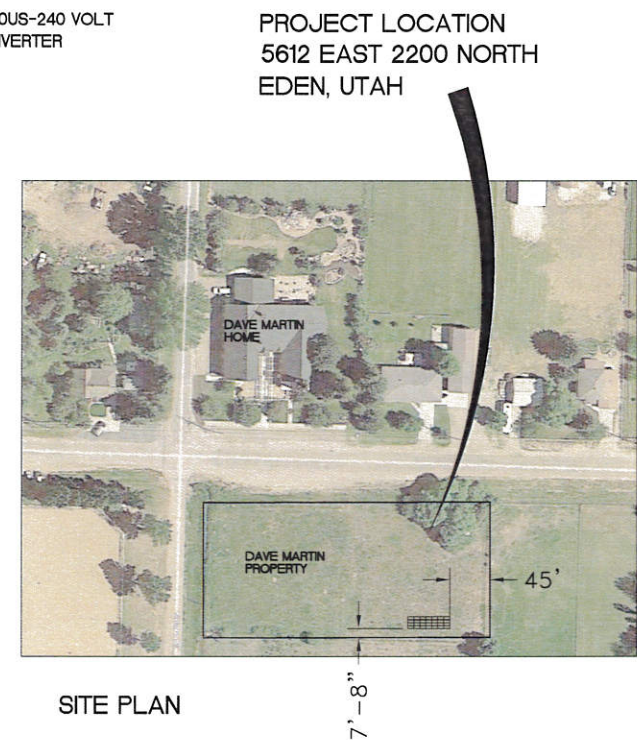
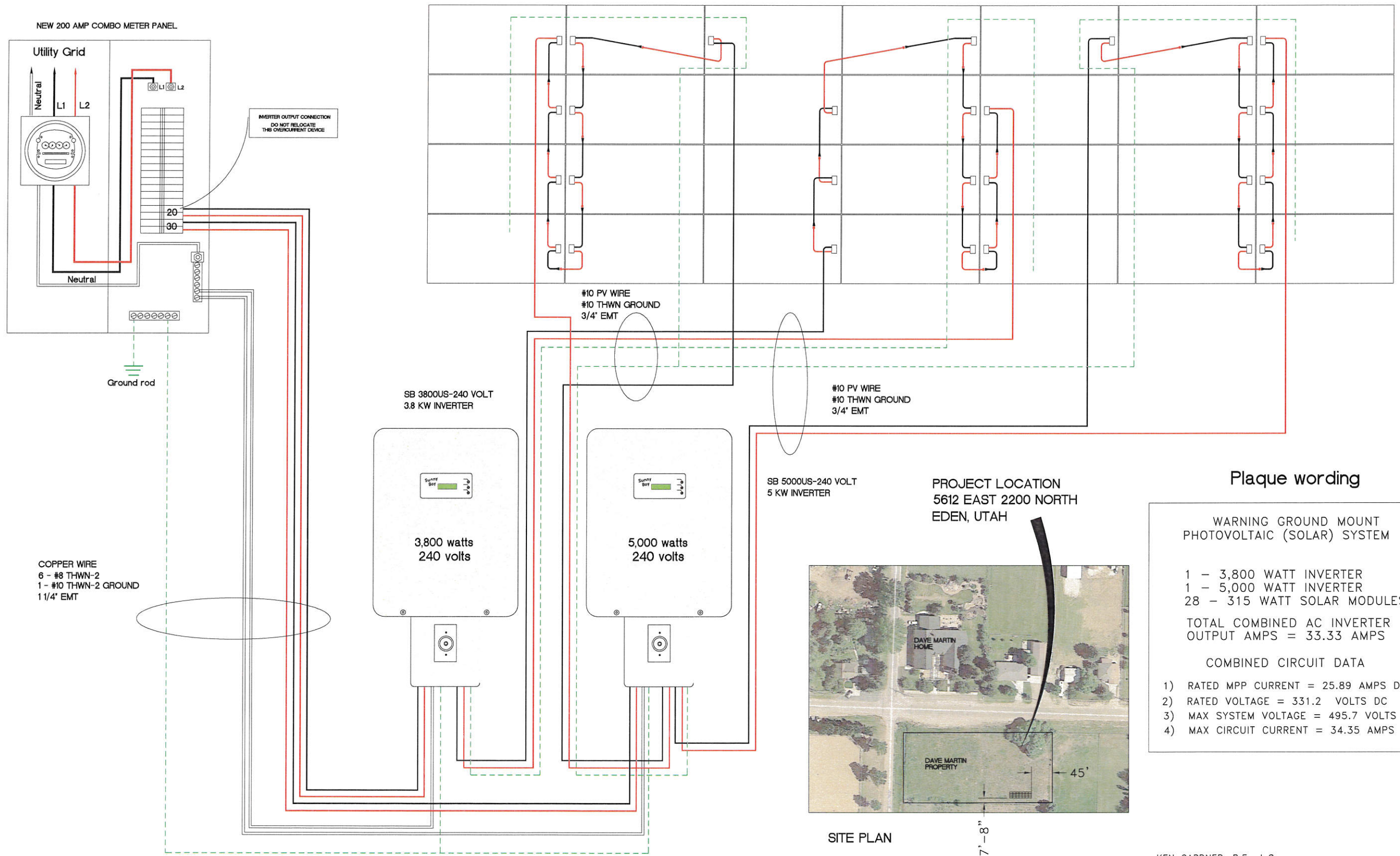
DAVE MARTIN RESIDENCE  
 8.82 KW GRID-TIE PHOTOVOLTAIC SYSTEM  
 ELECTRICAL DETAILS  
 5612 EAST 2200 NORTH, EDEN, UTAH

Alternative Energy Services/  
**Gardner Engineering**  
 2047 South Painter Lane  
 Suite A  
 West Haven, Utah 84401  
 (801) 689-2618

1	2
---	---



28 - "SOLARWORLD" 315 WATT SOLAR MODULES



**Plaque wording**

WARNING GROUND MOUNT PHOTOVOLTAIC (SOLAR) SYSTEM

1 - 3,800 WATT INVERTER  
1 - 5,000 WATT INVERTER  
28 - 315 WATT SOLAR MODULES

TOTAL COMBINED AC INVERTER OUTPUT AMPS = 33.33 AMPS

COMBINED CIRCUIT DATA

- 1) RATED MPP CURRENT = 25.89 AMPS DC
- 2) RATED VOLTAGE = 331.2 VOLTS DC
- 3) MAX SYSTEM VOLTAGE = 495.7 VOLTS DC
- 4) MAX CIRCUIT CURRENT = 34.35 AMPS DC



KEN GARDNER, P.E., L.S.  
GARDNER ENGINEERING ALTERNATIVE ENERGY SERVICES  
2047 SOUTH PAINTER LANE, WEST HAVEN, UT 84401

PROFESSIONAL CIVIL ENGINEER - UTAH 154270-2202  
PROFESSIONAL STRUCTURAL ENGINEER - UTAH 154270-2203  
PROFESSIONAL LAND SURVEYOR - UTAH 154270-2201  
LICENSED ELEC/SOLAR CONTRACTOR - UTAH 6399860-5501  
MASTER ELECTRICIAN - UTAH 154270-5502  
NABCEP CERTIFICATE NUMBER R031806-17  
IREC CERTIFIED AFFILIATED INSTRUCTOR US-0133  
(801) 689-2618 EX. 201 OFFICE  
(801) 589-0447 CELL

SCALE:	N.T.S.
DATE:	OCT. 2014
DESIGN:	K.E.G.
DRAWN:	K.E.G.
CHECKED:	
REVISIONS	DESCRIPTION
DATE	
DWG: ALTERNATIVE_ENERGY_MARTIN.DWG	



DAVE MARTIN RESIDENCE

8.82 KW GRID-TIE PHOTOVOLTAIC SYSTEM  
ELECTRICAL DETAILS

5612 EAST 2200 NORTH, EDEN, UTAH

Alternative Energy Services/  
**Gardner Engineering**  
2047 South Painter Lane  
Suite A  
West Haven, Utah 84401  
(801) 689-2618