

Dillaway Residence Solar Panels Installation

APPLICATION INFORMATION

LOCATION: 6725 E Palm Ln APPLICANT: Misty Wales

PARCEL: 129-29-076 COMPANY: Elevation Solar

Q.S.: 13-43 ADDRESS: 2168 E Williams Field Rd #210 Gilbert, AZ

85295

CODE VIOLATION: n/a PHONE: (480) 492-4232

ZONING: R1-7 HP

Request: For approval of new roof top solar panels at an existing residence.

Certificate of No Effect Criteria:

In accordance with the Section 6.122.D of the Zoning Ordinance, the Historic Preservation Officer:

- Finds that the proposed work is determined the proposed work is minor and clearly within the adopted Historic Preservation Plan;
- Requires that any modifications to the proposed work requested by the Historic Preservation Officer are agreed to by the owner/applicant; and
- Finds that the proposed work will not diminish, eliminate, or adversely affect the historic character of the subject property or the HP District.

STIPULATIONS

- 1. Final plans shall substantially conform to the site plan stamped approved by Current Planning Staff on August 14, 2019.
- 2. Roof top solar panels shall be placed on the back/south side of the roof and shall project a maximum of 8" off the roof elevation.

CONSTRUCTION DOCUMENT PLAN REVIEW SUBMITTAL REQUIREMENTS

Please resubmit required documents under plan check number 4057-19.

Kalle Rober

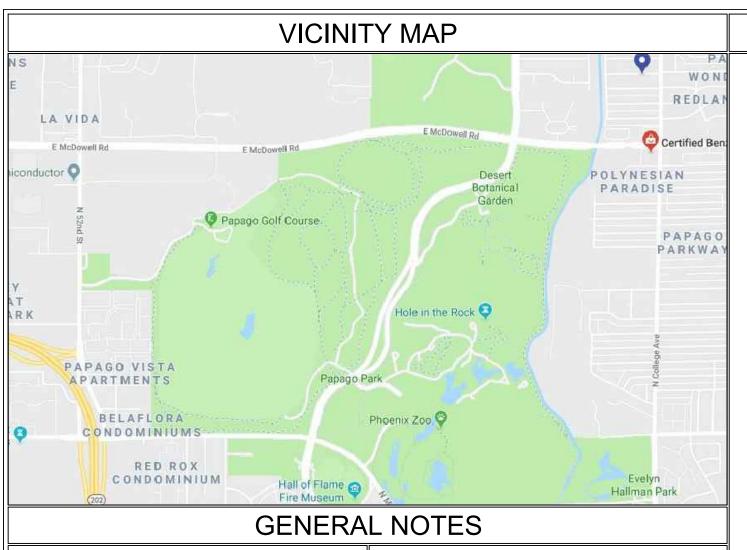
Expiration of this Certificate of No Effect Determination

This approval expires two (2) years from date of approval if a permit has not been issued, or if no permit is required, work for which approval has been granted has not been completed.

SIGNATURE:

DATE: 8/14/19

Katie Posler, 480-312-2703



- 1. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE 2014 NEC, 2015 IRC, 2015 IFC AND ALL OTHER APPLICABLE REQUIREMENTS OF SCOTTSDALE
- 2. PHOTOVOLTAIC ARRAYS SHALL BE PROVIDED WITH DC **GROUND-FAULT PROTECTION. NEC 690.41**
- 3. DC GROUNDING ELECTRODE CONDUCTOR SHALL BE SIZED ACCORDING TO NEC 250 AND NEC690.47 B
- AC GROUNDING ELECTRODE AND THE CONDUCTOR SHALL BE NO SMALLER THAN THE LARGEST GROUNDING ELECTRODE CONDUCTOR, EITHER AC OR DC. NEC 690.47 (A) THROUGH (B)
- 5. THE AC GROUNDING ELECTRODE CONDUCTOR SHALL BE SIZED ACCORDING TO NEC 250.66 AND TABLE 310.15 B 6 FOR DWELLINGS. NEC 690.47 (A)
- 6. GROUNDING BUSHINGS ARE REQUIRED AROUND PRE-PUNCHED CONCENTRIC KNOCKOUTS ON THE DC SIDE OF THE SYSTEM. NEC 250.97
- 7. PV EQUIPMENT GROUNDING CONDUCTORS AND DEVICES SHALL COMPLY WITH 690.43 (A) THROUGH (C). ALL MODULE GROUND CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH NEC 690.47

- 8. WORKING CLEARANCES AROUND THE EXITING ELECTRICAL EQUIPMENT AS WELL AS THE NEW ELECTRICAL EQUIPMENT WILL BE MAINTAINED IN **ACCORDANCE WITH NEC 110.26**
- 9. ALL PHOTOVOLTAIC SYSTEM CONDUCTORS WILL BE 90 DEGREE C RATED, NEC 690,31A, TABLE 310,16, TABLE 310.17
- 10. WHERE DC CONDUCTORS ARE RUN INSIDE THE 4. DC GROUNDING ELECTRODE SHALL BE BONDED TO THE BUILDING (OR ATTIC), THEY SHALL BE CONTAINED IN A METAL RACEWAY. NEC 690.31 (G)
 - 11. ALL EXTERIOR CONDUIT, FITTINGS, AND BOXES SHALL BE RAIN-TIGHT AND APPROVED FOR USE IN WET LOCATIONS. NEC314.15
 - 12. ANY CONDUCTORS EXPOSED TO SUNLIGHT SHALL BE LISTED AS SUNLIGHT RESISTANT. NEC 300.6 C1, 310.8 D
 - 13. ALL METALLIC RACEWAYS AND EQUIPMENT SHALL BE BONDED AND ELECTRICALLY CONTINUOUS. NEC 250.90, 250.96
 - 14. EQUIPMENT INTENDED FOR USE IN PV SYSTEMS SHALL BE LISTED OR FIELD LABELED FOR THE PV APPLICATION. NEC 690.4 (B)

FOR MORE INFO SEE NOTES AND REFERENCES PAGE

ABBREVIATIONS

AMPERE ALTERNATING CURRENT AC AHJ **AUTHORITY HAVING JURISDICTION BLDG BUILDING COMBINER BOX** CB CP **COMBINER PANEL** DC DIRECT CURRENT **EQUIPMENT GROUNDING CONDUCTOR** EGC **EMT ELECTRICAL METALLIC TUBING** EQ **EQUAL**

FSB FIRE SETBACK **GALVANIZED GALV** GEC

GROUNDING ELECTRODE CONDUCTOR GND **GROUND**

CURRENT

INTERNATIONAL BUILDING CODE **IBC** INTERNATIONAL FIRE CODE **IFC CURRENT AT MAX POWER** Imp INV(S)

INVERTER(S)

SHORT-CIRCUIT CURRENT Isc kVA KILOVOLT AMPERE kW **KILOWATT** LOAD BEARING WALL **LBW** LOAD CENTER

LC MAXIMUM MAX MIN MINIMUM

MP MOUNTING PLANE **NEC** NATIONAL ELECTRIC CODE

NTS NOT TO SCALE OC ON CENTER **NOMINAL POWER** Pnom

POI POINT OF INTERCONNECTION PV **PHOTOVOLTAIC**

PVC POLYVINYL CHLORIDE **RBC** RESIDENTIAL BUILDING CODE SFD SINGLE FAMILY DWELLING STC STANDARD TESTING CONDITIONS

SUB SUB PANEL

SWH SOLAR WATER HEATER TCF TEMPERATURE CORRECTION FACTOR

TYP **TYPICAL**

UON **UNLESS OTHERWISE NOTED** VOLT

Vmp **VOLTAGE AT MAX POWER** OPEN-CIRCUIT VOLTAGE Voc W

WATT

UTIL

MSP

INV

INVERTER (INTEGRATED DC DISCO)

UTILITY METER & SERVICE ENTRANCE

LEGEND

MAIN SERVICE PANEL

(UM **UTILITY METER**

(PVM) PV SYSTEM METER

DC DC DISCONNECT

AC AC DISCONNECT (UNFUSED)

LOAD CENTER

AC AC FUSED DISCONNECT **√**-\\

FENCE/BLOCK WALL

PROPERTY LINE

TRENCH CONDUIT

SCOPE OF WORK

INSTALL (17) PANASONIC N330 VBHN330SA17 MODULE INSTALL (1) SOLAREDGE - SE5000H-US INSTALL (17) SOLAREDGE P400 POWER OPTIMIZERS

INSTALL SOLAREDGE MONITORING INSTALL J-BOX, RACEWAYS, AND WIRING

INSTALL 30A AC DISCONNECT **INSTALL 30A 2 POLE PV BREAKER**

TOTAL SYSTEM SIZE 5.61 kW (DC) INSTALL ELEVATION DEMAND MANAGER

INSTALL NEW 200A/200A MAIN SERVICE PANEL

PAGE INDEX

PV 1 **COVER SHEET** PV₂ SITE PLAN

PV₃ **PV LAYOUT**

PV 4 **DETAILS & UPLIFT CALCULATIONS**

PV 5 ONE-LINE DIAGRAM PV 5.1 THREE LINE DIAGRAM

PV 5.2 LOAD CONTROLLER DETAIL

LABELS PV 6

CS **CUT SHEETS** ш ш 5.610 kW

Z

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PAGE COVER



DILLAWAY RESIDENCE 6725 E. PALM LANE SCOTTSDALE, ARIZONA 85257

NTS 7/29/2019 DILLAWAY PV



47-HP-2019

APPROVED

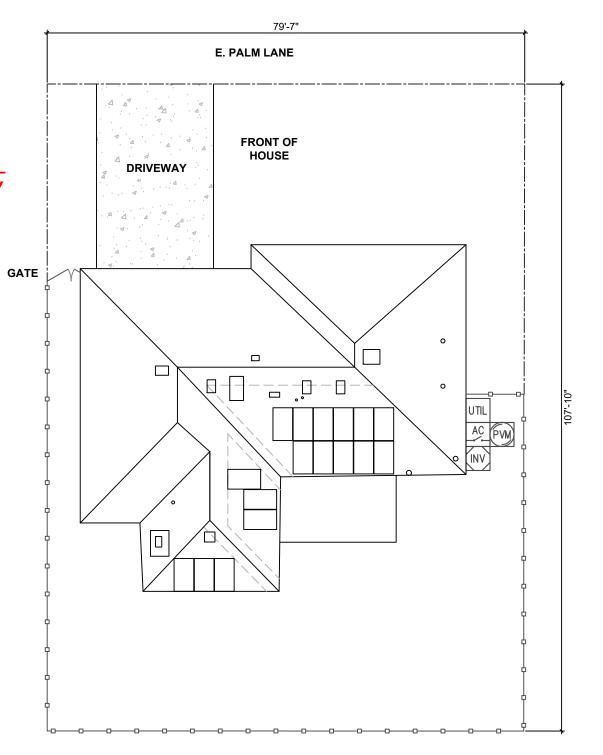
STIPULATION SET RETAIN FOR RECORDS

8/14/19

KP

DATE

APPROVED BY



O PV SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NEC SECTION 690.17, 705.10, 705.12

NO NAOS OR PROTECTED NATIVE PLANTS SHALL BE AFFECTED BY INSTALLATION OF **SOLAR PANELS**



ALL-IN-ONE UTIL. METER & MAIN SERVICE PANEL

(MSP)



UM

(E) UTILITY METER

(N) PV SYSTEM PRODUCTION METER



(N) FUSED UTILITY DISCONNECT

(N) UNFUSED UTILITY DISCONNECT



(N) INVERTER (W/DC DISCONNECT)

(N) DC DISCONNECT



SUB

(N) LOAD CENTER (COMBINER PANEL)

(E) SUB PANEL



FENCE/BLOCK WALL PROPERTY LINE CONDUIT **TRENCH**



(17) PANASONIC N330 VBHN330SA17 5.610 kW

DILLAWAY RESIDENCE 6725 E. PALM LANE SCOTTSDALE, ARIZONA 85257

SITE PLAN



DM 1/16" = 1'-0" 7/29/2019



DILLAWAY