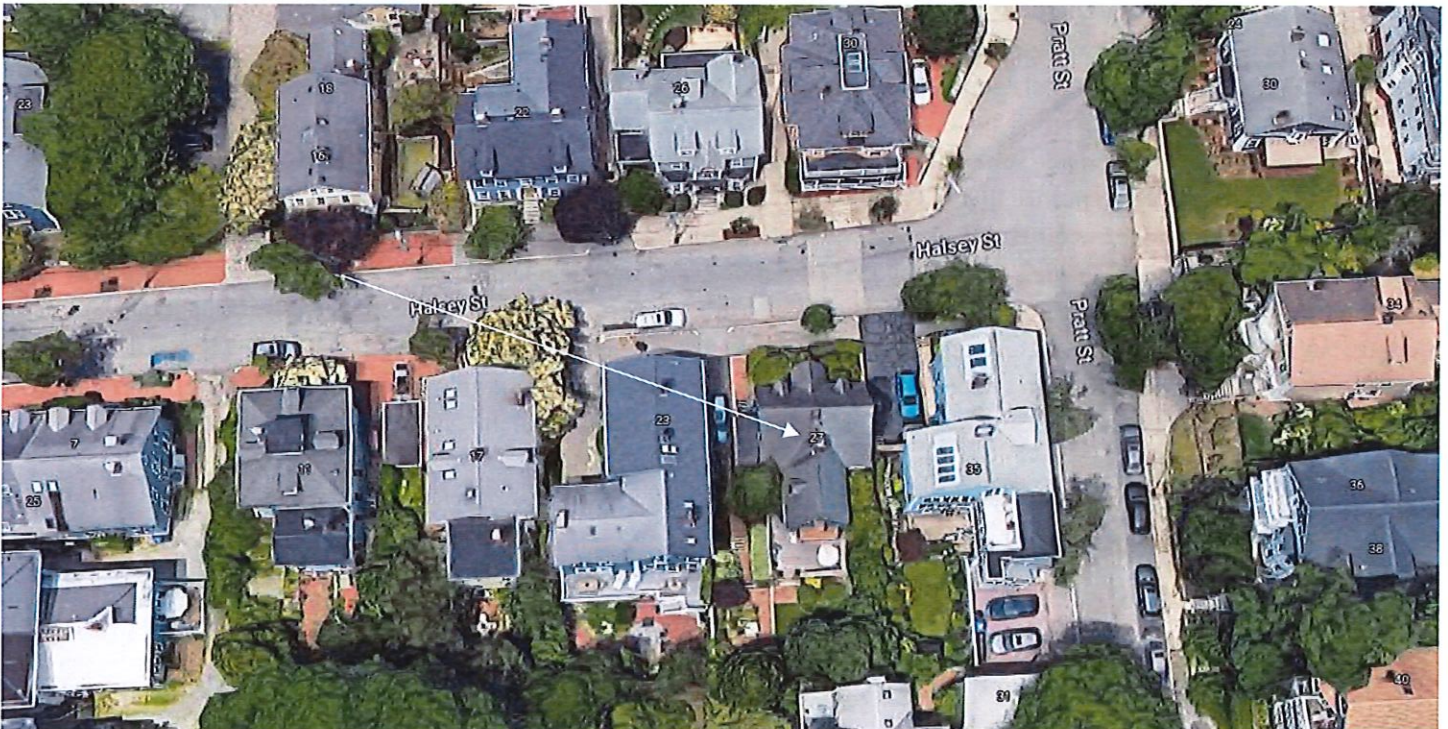


5. CASE 23.099, 27 HALSEY STREET, David A. Cleaveland House, 1846 (COLLEGE HILL)

Gothic cottage; 1½-stories; clapboard; steep gable roof broken by dormers and a gabled bay-window projection; sawn trim side entrance.  
CONTRIBUTING



Arrow indicates 27 Halsey Street.



Arrow indicates project location, looking north.



**Applicant/Contractor:** Skyline Solar, Jonathan Camarda, 95 Ryan Drive, Ste 3, Raynham, MA 02767

**Owner:** Alex Stephens, 27 Halsey Street, Providence, RI 02906

**Proposal:** The scope of work proposed consists of Minor Alterations and includes:

- the installation of 15 solar panels to the south slope of the side-gable roof, and five solar panels to the west slope of the rear el gable roof.

**Issues:** The following issues are relevant to this application:

- The modifications as proposed will not be visible from the public rights-of-way;
- The modifications as proposed meets Minor Alterations: Solar Energy Systems Guidelines, Section 2, in the following manner: Panel layout shall be sympathetic or appropriate to design and scale of building. Rectangular configurations are preferred, with ample setback from edge of roof, dormers, chimneys, etc. (2.A); Panels shall be installed parallel to the existing roof slope and matched as closely as possible to the roof plane (2.B); Panels shall be installed without destroying or replacing original or historic materials or significantly compromising or altering the building's structural integrity (2.C); Panels shall be compatible in color to existing roofing insofar as possible (2.D); Installation of panels shall be as inconspicuous as possible when viewed from public right-of-way (2.E); Installation shall be reversible. Panels shall be removed when no longer viable or functioning and roofing restored to pre-existing conditions (2.F); and,
- Plans, specifications and pictures have been submitted.

**Recommendations:** The staff recommends the PHDC make the following findings of fact:

- a) 27 Halsey Street is a structure of historical and architectural significance that contributes to the significance of the College Hill local historic district, having been recognized as a contributing structure to the College Hill National Historic Landmarks District;;
- b) The modifications as proposed meets Minor Alterations: Solar Energy Systems Guidelines, Section 2, and the application is considered complete; and,
- c) The work as proposed is in accord with PHDC Standards 8 & 9 as follows: 8) the work will be done so that it does not destroy the historic character of the property or the district as they are not on the primary elevation and will be minimally-to-not visible from the public rights-of-way; and, 9) Whenever possible... alterations to structures shall be done in such a manner that if removed in the future, the essential form and integrity of the structure and the site will be unimpaired.

**Staff recommends a motion be made stating that:** The application is considered complete. 72 Williams Street is a structure of historical and architectural significance that contributes to the significance of the College Hill local historic district, having been recognized as a contributing structure to the College Hill National Historic Landmarks District. The Commission grants Final Approval of the proposal as submitted as the proposed alteration is appropriate having determined that the proposed alteration does not destroy the historic character of the property or the district and are historically and architecturally compatible with the property and district as the proposed alteration meets Minor Alterations: Solar Energy Systems Guidelines, Section 2, is reversible and will not have an adverse effect on the property or district as they are not on the primary elevation and will be minimally visible from the public rights-of-way (Standards 8 & 9), and the recommendations in the staff report, with staff to review any additional required details.

**SCOPE OF WORK**  
 TO INSTALL A ROOF MOUNTED SOLAR PHOTOVOLTAIC SYSTEM AT THE OWNER RESIDENCE  
 LOCATED AT 27 HALSEY ST. PROVIDENCE, RI 02906 USA  
 (LATITUDE & LONGITUDE: 41.833518, -71.408863).  
 THE POWER GENERATED BY THE PV SYSTEM WILL BE INTERCONNECTED WITH THE UTILITY  
 GRID THROUGH THE EXISTING ELECTRICAL SERVICE EQUIPMENT.  
 THE PV SYSTEM DOES NOT INCLUDE STORAGE BATTERIES.

**EQUIPMENT SUMMARY**

20 Q CELLS Q.PEAK DUO BLK.ML-G10-405 MODULES
20 ENPHASE IQ9PLUS -72-2-US (240V) MICROINVERTERS

- GENERAL NOTES**
- THESE CONSTRUCTION DOCUMENTS HAVE BEEN BASED ON FIELD INSPECTIONS AND OTHER INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS IN CONSTRUCTION DETAILS.
  - CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, EQUIPMENT, TOOLS, OBTAINS ALL PERMITS, LICENSES AND PAY ALL REQUIRED FEES AND COMPLETE INSTALLATION.
  - CONTRACTOR HAS THE FULL RESPONSIBILITY TO CHECK AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ANY WORK STARTED BEFORE CONSULTATION AND ACCEPTANCE BY THE ENGINEER SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBJECT TO CORRECTION BY THEM WITHOUT ADDITIONAL COMPENSATION.
  - DAMAGE CAUSED TO THE EXISTING STRUCTURE, PIPES, DUCTS, WINDOWS, WALL, FLOORS, ETC. SHALL BE REPAIRED TO THE ORIGINAL CONDITION OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST.
  - THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE PROPER INSTALLATION AND COMPLETION OF THE WORK WITH APPROVED MATERIALS.
  - CONTRACTOR SHALL OBTAIN BUILDING PERMIT. NO WORK TO START UNLESS BUILDING PERMIT IS PROPERLY DISPLAYED.
  - ALL WORKMANSHIP AND MATERIALS SHALL BE OF FIRST QUALITY AND IN COMPLIANCE WITH THE REQUIREMENTS OF THE NATIONAL BUILDING CODE, THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ALL PERTINENT AGENCIES.
  - IT IS ESSENTIAL THAT ALL WORK PROCEED WITH THE MAXIMUM COOPERATION OF ALL PARTIES AND WITH MINIMUM INTERFERENCE TO THE OCCUPANTS WITHIN THE BUILDING. THE OWNERS DIRECTIONS IN THIS REGARD SHALL BE FULLY COMPLIED WITH.
  - THE CONTRACTOR SHALL PERFORM THE WORK IN STRICT CONFORMANCE WITH THE LOCAL LAWS, REGULATIONS AND THE NATIONAL ELECTRIC CODE.
  - THE CONTRACTOR SHALL OBTAIN ALL PERMITS, AFFIDAVITS, CERTIFICATIONS, ETC. AND PAY ALL FEES AS REQUIRED BY THE LOCAL AUTHORITIES.
  - CONTRACTORS SHALL OBTAIN FIRE CERTIF. UPON COMPLETION OF WORK.

- ELECTRICAL NOTES**
- ALL EQUIPMENT TO BE LISTED BY UL OR OTHER NRTL, AND LABELED FOR ITS APPLICATION.
  - ALL CONDUCTORS SHALL BE COPPER, RATED FOR 600 V AND 90 DEGREE C WET ENVIRONMENT.
  - 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.
  - WORKING CLEARANCES AROUND ALL NEW AND EXISTING ELECTRICAL EQUIPMENT SHALL COMPLY WITH NEC 110.26.
  - WHERE SIZES OF JUNCTION BOXES, RACEWAYS, AND CONDUITS ARE NOT SPECIFIED, THE CONTRACTOR SHALL SIZE THEM ACCORDINGLY.
  - ALL WIRE TERMINATIONS SHALL BE APPROPRIATELY LABELED AND READILY VISIBLE.
  - MODULE GROUNDING CLIPS TO BE INSTALLED BETWEEN MODULE FRAME AND MODULE SUPPORT RAIL. PER THE GROUNDING CLIP MANUFACTURERS INSTRUCTION.
  - MODULE SUPPORT RAIL SHALL BE BONDED TO THE MODULE.

**GOVERNING CODES**

2020 NATIONAL ELECTRICAL CODE
2018 INTERNATIONAL FIRE CODE
2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL RESIDENTIAL CODE
AHJ NAME: PROVIDENCE CITY
AHU ADDRESS: 444 WESTMINSTER STREET PROVIDENCE, RI 02903
AHJ CONTACT NO.: 7342554956

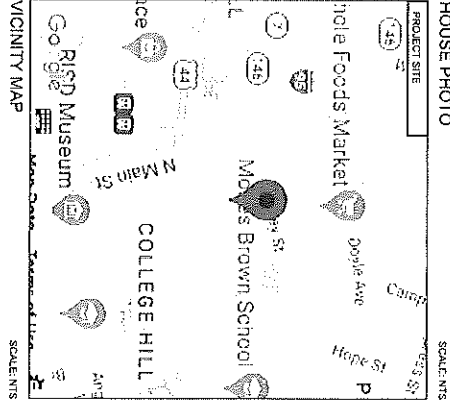
- WIRING AND CONDUIT NOTES**
- ALL CONDUIT SIZES AND TYPES SHALL BE LISTED FOR ITS PURPOSE AND APPROVAL FOR THE SITE APPLICATIONS
  - ALL PV CABLES AND HOMERUN WIRES BE #10AWG -USE 2- PV WIRE, OR PROPRIETARY SOLAR CABLING SPECIFIED BY MFR. OR EQUIVALENT. ROUTED TO SOURCE CIRCUIT COMBINER BOXES AS REQUIRED
  - ALL PV DC CONDUCTORS IN CONDUIT EXPOSED TO SUNLIGHT SHALL BE DERATED ACCORDING TO AS PER LATEST NEC CODE.
  - EXPOSED ROOF PV DC CONDUCTORS SHALL BE USE 2- 90°C RATED, WET AND UV RESISTANT, AND UL LISTED RATED FOR 600V, UV RATED SPIRAL WRAP SHALL BE USED TO PROTECT WIRE FROM SHARP EDGES
  - PHASE AND NEUTRAL CONDUCTORS SHALL BE DUAL RATED T-HNH/T-HNM-2 INSULATED, 90°C RATED, WET AND UV RESISTANT, RATED FOR 1000V AS PER APPLICABLE NEC
  - 4MMR DELTA CONNECTED SYSTEMS HAVE THE PHASE WITH THE HIGHER VOLTAGE TO GROUND MARKED ORANGE OR IDENTIFIED BY OTHER EFFECTIVE MEANS
  - ALL SOURCE CIRCUITS SHALL HAVE INDIVIDUAL SOURCE CIRCUIT PROTECTION
  - VOLTAGE DROP LIMITED TO 2%
  - AC CONDUCTORS #4AWG COLOR CODED OR MARKED: PHASE A OR L1- BLACK, PHASE B OR L2- RED, PHASE C OR L3- BLUE, NEUTRAL- WHITE/GRAY

**SYSTEM RATING**

8,100 WADC
5,800 KWAC

**SHEET INDEX**

PV1	COVER PAGE
PV2	SITE PLAN
PV3	ROOF PLAN
PV4	STRUCTURAL DETAIL
PV5	ATTACHMENT DETAIL
PV6	ELECTRICAL LINE & CALCS.
PV7-PV8	SIGNALS
PV9-PV10	EQUIPMENT SPECIFICATIONS
PV11	SPAN TABLE
PV12-PV17	EQUIPMENT SPECIFICATIONS



**SCOTTE WYSSLING**  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL  
 REG. NO. 66286

**Wysling Consulting, PLLC**  
 76 N Meadowbrook Drive, Alpine UT 84004  
 Rhode Island COA: 59333  
 Signed 7/07/2023

**SKYLINE SOLAR**

SKYLINE SOLAR, LLC  
 4 CROSSROADS DRIVE STE  
 116 HAMILTON, NJ 08851  
 HIC: 36732  
 ELEC: A4003137

**SYSTEM INFO**

Q.PEAK DUO BLK.ML-G10-405
(20) ENPHASE
(20) ENPHASE IQ9PLUS (240V)
DC SYSTEM SIZE: 8,100 WADC
AC SYSTEM SIZE: 5,800 KWAC
METER: 10452440

**REVISIONS**

REVISIONS	DATE	REV
DESCRIPTION	DATE	REV
REVISION	07/07/2023	A

**ALEX STEPHENS**  
 RESIDENCE  
 27 HALSEY ST, PROVIDENCE, RI 02906, USA  
 EMAIL ID: ALEXSTEPHENS1@GMAIL.COM  
 PHONE NO. (734) 255-4956

PROJECT NAME & ADDRESS

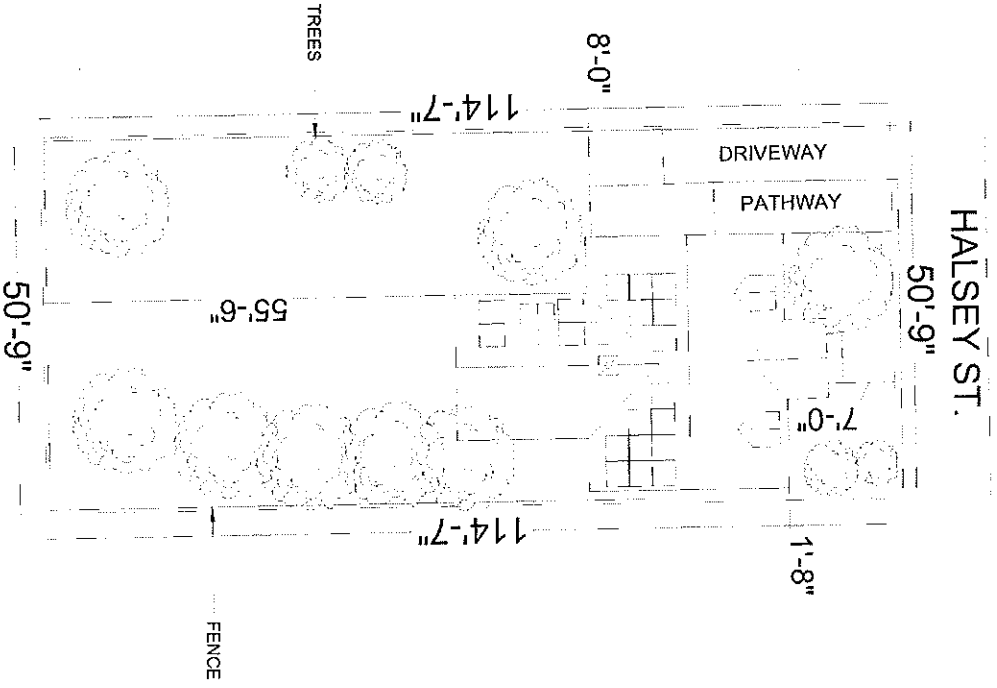
**COVER PAGE**

SHEET NAME	COVER PAGE
SHEET SIZE	ANSI B 11" X 17"
SHEET NUMBER	PV-1

- SITE NOTES**
- A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REGULATIONS.
  - THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE AND THIS SYSTEM IS AN UTILITY INTERACTIVE SYSTEM WITH NO STORAGE BATTERIES.
  - THE SOLAR PV INSTALLATION SHALL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR BUILDING ROOF VENTS.
  - PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL BE PROVIDED AS PER SECTION (NEC 110.26)

**LEGEND**

- (E) UTILITY METER
- (E) MAIN SERVICE PANEL
- (N) EMPHASE TO COMBINER
- (N) NON FUSED AC DISCONNECT
- VENT, ATTIC FAN (ROOF OBSTRUCTION)
- COOP AT ATTACHMENT
- EMPHASE (OR) PLUS 72-2US (240V) MICROINVERTER
- Q CELLS Q.PEAK DUO BLK ML-G10+ 405 MODULES
- NXT HORIZON RAIL - 18' HILL TRENCH



SCALE: 1/16" = 1'-0"

**SCOTT E. WYSSLING**  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL  
 PE 0286

**Wyssling Consulting, PLLC**  
 76 N Meadowbrook Drive, Alpine UT 84004  
 Rhode Island COA #9333  
 Signed 7/07/2023

**SKYLINE SOLAR**  
 4 CROSSROADS DRIVE STE 118  
 HANNAH, CT 06089  
 ELEC : A003137

**SYSTEMING**

Q CELLS	Q.PEAK DUO BLK ML-G10+ 405
CO EMPHASE	(OR) PLUS 72-2US (240V)
DC SYSTEM SIZE	4.100 kWDC
AC SYSTEM SIZE	3.800 kWAC
METER	1043340

JOB NO.	287548	
UTILITY ACC NO.	-	
REVISIONS		
DESCRIPTION	DATE	REV
REVISION	07/07/2023	A

**ALEX STEPHENS**  
 RESIDENCE  
 27 HALSEY ST, PROVIDENCE, RI 02906, USA  
 EMAIL ID: ALEXSTEPHENS1@GMAIL.COM  
 PHONE NO. (734) 255-4956

**PROJECT NAME & ADDRESS**

DATE: 7/7/2023

SHEET NAME: SITE PLAN

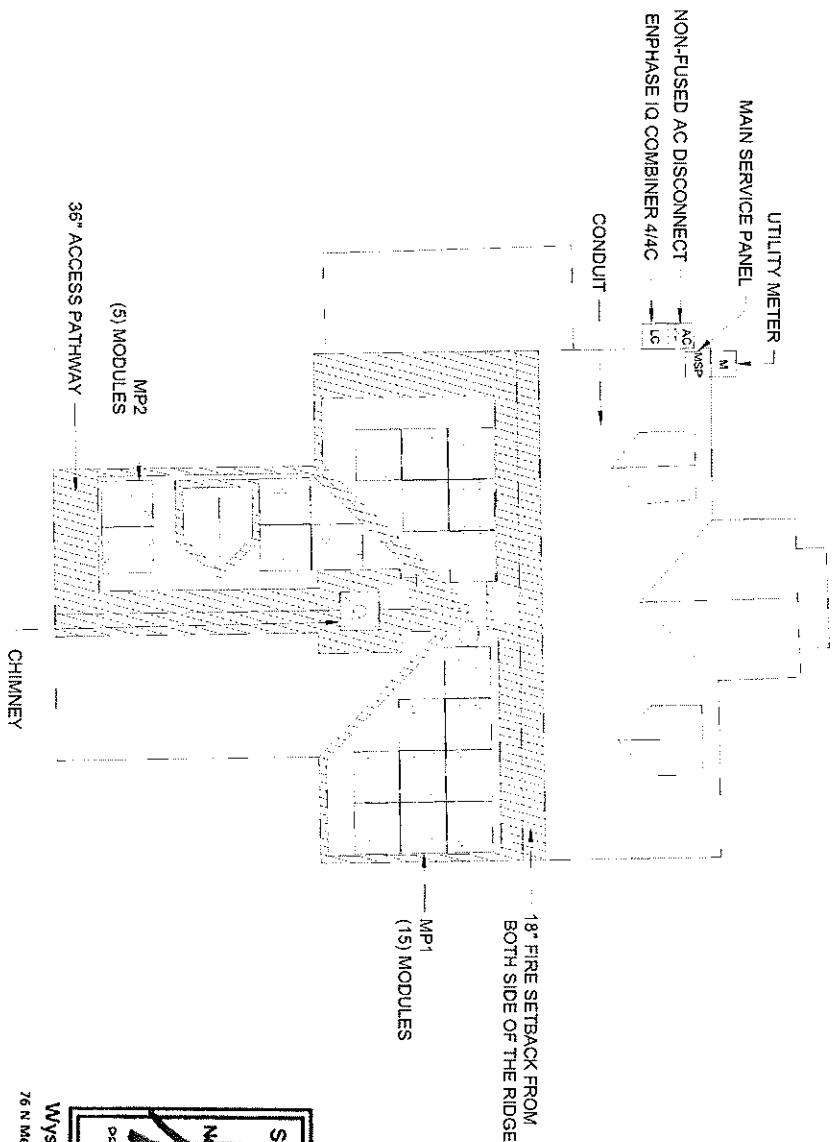
SHEET SIZE: ANSI B 11" X 17"

SHEET NUMBER: PV-2

ROOF TILT	RAFTER SIZE	RAFTER SPACING	ROOF MATERIAL
#1 59°	179"	24" x 6"	36" o.c. COMP SHINGLE
#2 59°	268"	24" x 6"	36" o.c. COMP SHINGLE

ARRAY AREA & ROOF AREA CALCS			
ROOF #1	# OF MODULES	ARRAY AREA (sq. FT.)	ARRAY AREA (sq. FT.)
#1	15	316.82	
#2	5	105.61	
TOTAL ARRAY AREA/TOTAL ROOF AREA X 100%		= (422.42/1458) X 100% = 29.04%	

- LEGEND**
- (E) UTILITY METER
  - (E) MAIN SERVICE PANEL
  - (N) ENPHASE IQ COMBINER
  - (N) NON-FUSED AC DISCONNECT
  - VENT. ATTIC FAN (ROOF) ROOF ATTACHMENT
  - CONDUIT
  - ENPHASE IQ PLUS 72-2-US (240V) MICROINVERTER
  - O CELLS Q PEAK DUO BLK 14.610-405 MODULES
  - NXT HORIZON RAIL - 18" MILL TRENCH



SCALE: 1/8" = 1'-0"

**SKYLINE SOLAR**  
 SKYLINE SOLAR LLC  
 4 CROSSROADS DRIVE STE  
 116 HAMILTON, NJ 08691  
 HIC: 38742  
 ELEC: A003137

**SYSTEM INFO**

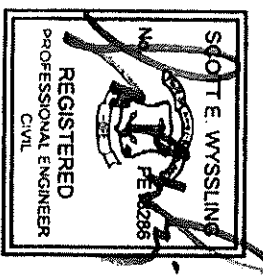
Q PEAK DUO BLK 14.610-405	120 Q CELLS
108-105-72-2-US (240V)	(20) ENPHASE
AC SYSTEM SIZE: 8,100 W/MC	DC SYSTEM SIZE: 8,100 W/MC
METER: IMC344	

**REVISIONS**

DESCRIPTION	DATE	REV
REVISION	07/07/2023	A

**ALEX STEPHENS**  
 RESIDENCE  
 27 HALSEY ST, PROVIDENCE, RI 02906, USA  
 EMAIL ID: ALEXSTEPHENS1@GMAIL.COM  
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**Wyssling Consulting, PLLC**  
 76 N Meadowbrook Drive, Alpine UT 84004  
 Rhode Island COA: 59333  
 Signed 7/07/2023



**ROOF PLAN**

SHEET NAME  
 SHEET SIZE  
 ANSIB  
 11" X 17"  
 SHEET NUMBER  
 PV-3





← 27 Halsey Street, Providence, R 🔍 ✕

**27 Halsey St**  
Providence, Rhode Island  
 Google Street View  
Dec 2022 [See more dates](#)



Google

