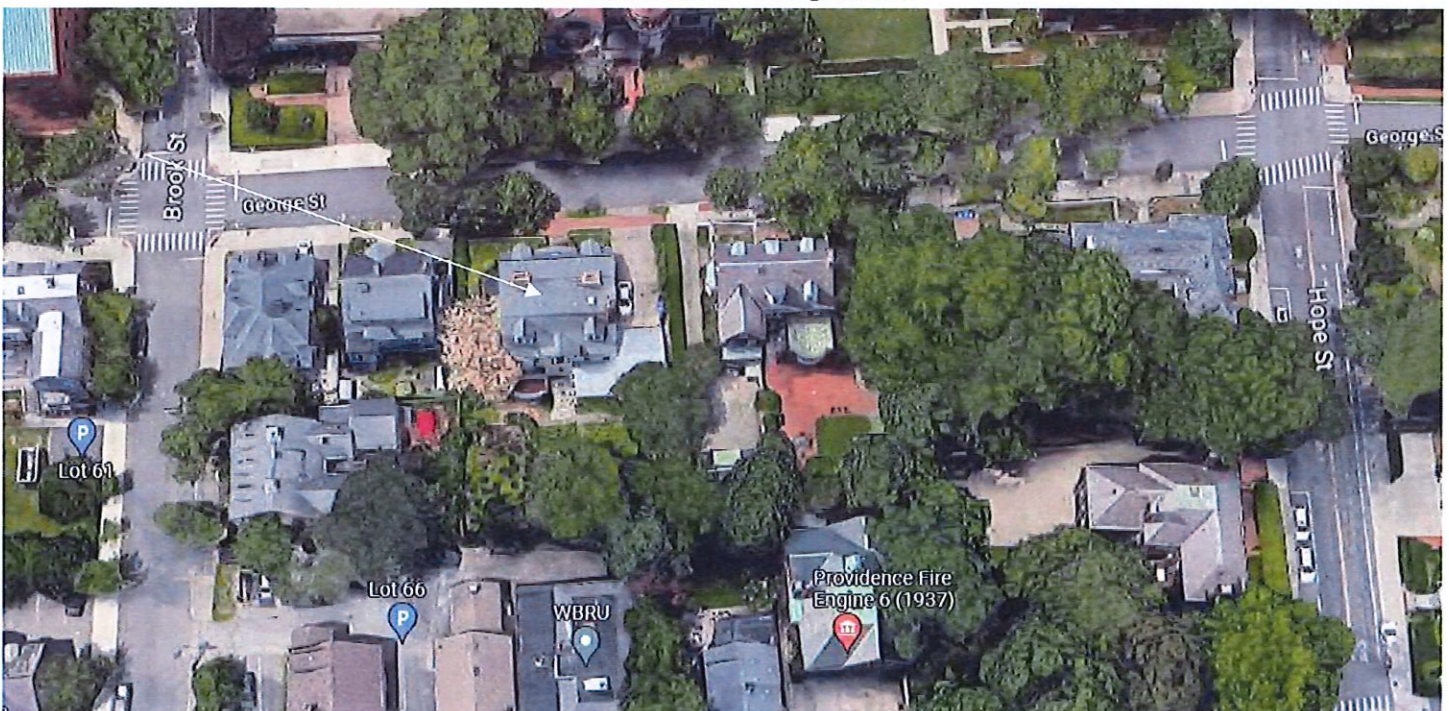


7. CASE 23.085, 177 GEORGE STREET, Frederick M. Sackett House, 1894 (POWER-COOKE)

Stone, Carpenter & Wilson, architects. Colonial Revival; 2-1/2 stories; clapboard; gambrel roof with pedimented dormers, balustrade, modillion cornice; Three-bay façade with pedimented central section including Palladian window and semi-circular Doric entrance portico flanked by major order Ionic pilasters.
CONTRIBUTING



Arrow indicates 177 George Street.



Arrow indicates project location, looking north.

Applicant/Contractor: Rooftop Power, Dan Fisher, 275 West Natick Rd, Suite 800, Warwick, RI 02886

Owner: David Keefe, 177 George Street, Providence, RI 02906

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

- installation of 19 solar panels to the upper south slope of the gambrel roof and eight panels to the south slope of the detached garage's side-gable roof.

Issues: The following issues are relevant to this application:

- The proposed installation will not be visible from the public rights-of-way;
- The proposed conduit runs over the roof to the north slope. Staff recommends this be relocated to running of the south slope and down the West elevation of the building;
- 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) 177 George 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 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. 177 George 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 not be 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 177 GEORGE ST. PROVIDENCE, RI 02906, USA. 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
 27 REC RECA20XA PURE-R MODULES
 27 ENPHASE IQ7X-96-2-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.
 ARCHITECT HAS NOT BEEN RETAINED TO SUPERVISE ANY CONSTRUCTION OR INSTALLATION OF ANY EQUIPMENT AT THE SITE.
 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 APPROVAL 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.
 NO CHANGES ARE TO BE MADE WITHOUT THE CONSULTATION AND APPROVAL OF THE ARCHITECT.
 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 OWNER'S 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 ELECTRICAL CODE.
 THE CONTRACTOR SHALL OBTAIN ALL PERMITS, APPROVALS, 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 800 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 |
| 2021 RHODE ISLAND STATE BUILDING CODE |

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 THHN/THWN-2 INSULATED, 90°C RATED, WET AND UV RESISTANT, RATED FOR 1000V AS PER APPLICABLE NEC
- 4-WIRE DELTA CONNECTED SYSTEMS HAVE THE PHASE WITH THE HIGHER 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 | 11.340 kWDC |
| | 8.505 MWAC |

PHOTOVOLTAIC SYSTEM FIRE CLASSIFICATION LISTING IN ACCORDANCE WITH UL 1703 STANDARD.

| |
|---|
| PHOTOVOLTAIC SYSTEM FIRE CLASSIFICATION LISTING IN ACCORDANCE WITH UL 1703 STANDARD. |
| SHEET INDEX |
| PV1 COVER PAGE |
| PV2 SITE PLAN |
| PV3 ROOF PLAN |
| PV4 STRING LAYOUT & BOM |
| PV5-PV6 ATTACHMENT DETAILS |
| PV7 ELECTRICAL LINE & CALCS. |
| PV8 SPECIFICATIONS & NOTES |
| PV9-PV10 SIGNAGE |
| PV11-PV15 EQUIPMENT SPECIFICATIONS |

| |
|-----------------------------|
| SYSTEM INFO |
| 27 REC |
| REC:20XA PURE-R |
| 27 ENPHASE |
| IQ7X-96-2-US (240V) |
| DC SYSTEM SIZE: 11.340 kWDC |
| AC SYSTEM SIZE: 8.505 MWAC |
| METTER: 10291083 |

| | | |
|------------------|------|-----|
| REVISIONS | | |
| DESCRIPTION | DATE | REV |
| | | |

PROJECT NAME & ADDRESS

JACK GOLDSTEIN
 RESIDENCE
 177 GEORGE ST, PROVIDENCE, RI 02906, USA
 EMAIL ID: JDGOLDSTEIN@GMAIL.COM
 PHONE NO. (401) 864-4468

DATE: 6/13/2023

SHEET NAME
COVER PAGE

SHEET SIZE
 ANSIB
 11" X 17"

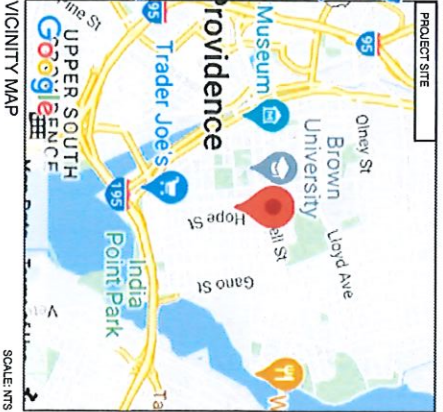
SHEET NUMBER
PV-1



Wyssling Consulting, PLLC
 76 N Meadowbrook Drive, Alpine UT 84004
 Rhode Island C.O.A. #9333
 Signed 6/13/2023



HOUSE PHOTO SCALE: NTS

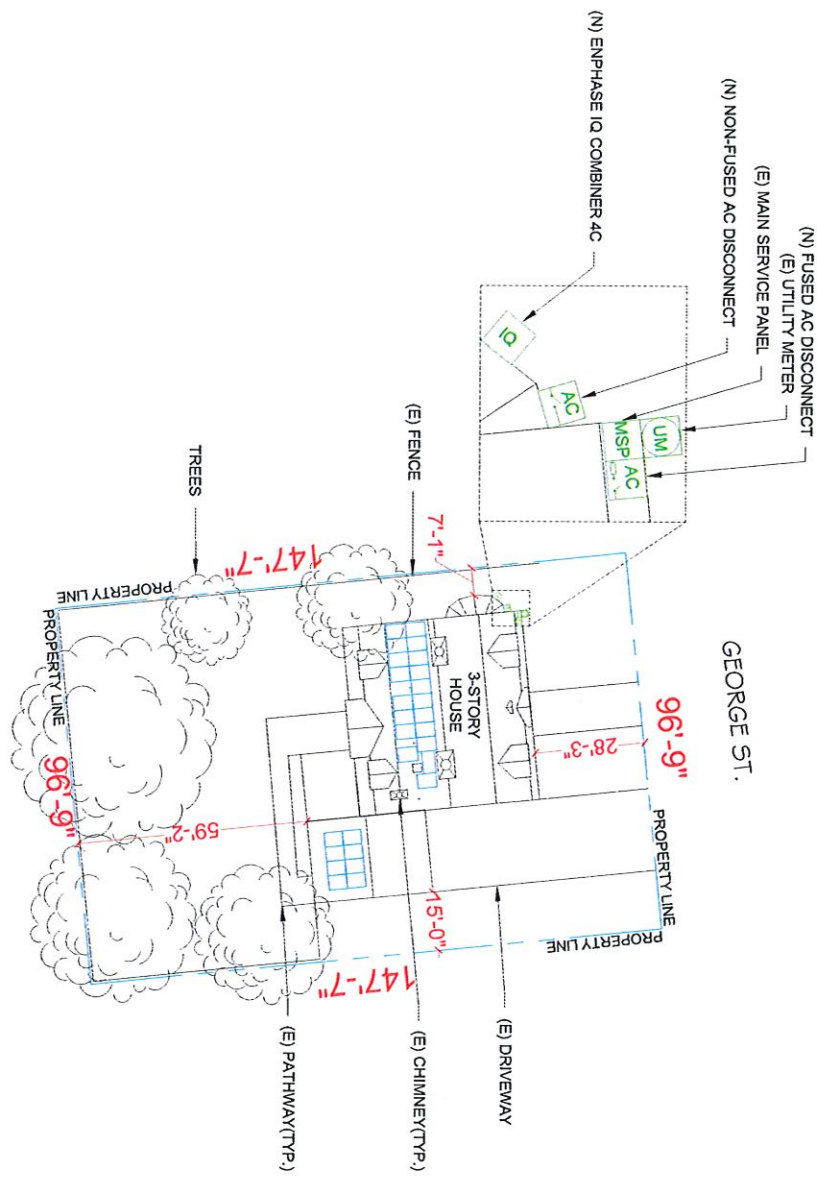


VICINITY MAP SCALE: NTS

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

| | |
|--|---|
| | (N) JUNCTION BOX |
| | (E) UTILITY METER |
| | (E) MAIN SERVICE PANEL |
| | (N) EMPHASE IQ COMBINER |
| | (N) FUSED AC DISCONNECT |
| | (N) NON-FUSED AC DISCONNECT |
| | VENT, ATTIC FAN ROOF |
| | OBSTRUCTION |
| | COOLING ATTACHMENT |
| | EMPHASE IQ7X-96-2-US (240V) MICROINVERTER |
| | REC REC420AA PURE-R MODULES |
| | XR-10-1889 PAUL TRENCH |



SCALE: 1/32" = 1'-0"

Smart Green Solar
 SMART GREEN
 33 BROAD ST SUITE 500,
 PROVIDENCE, RI 02903, USA
 PH#: (401) 502-5948

SYSTEM INFO

| | |
|----------------|---------------------|
| REC | REC420AA PURE-R |
| EMPHASE | IQ7X-96-2-US (240V) |
| DC SYSTEM SIZE | 11.340 kWDC |
| AC SYSTEM SIZE | 8.505 kWAC |
| METER | 10261693 |

REVISIONS

| DESCRIPTION | DATE | REV |
|-------------|------|-----|
| | | |
| | | |

JACK GOLDSTEIN
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 PHONE NO. (401) 864-4468

SCOTT E. WYSSLIN
 REGISTERED PROFESSIONAL ENGINEER
 No. PE 02908
 WYSSLIN CONSULTING, PLLC
 76 N Meadowbrook Drive, Alpine UT 84004
 Rhode Island COA #9333
 Signed 6/13/2023

METER NO#: 10261693

DATE: 6/13/2023
SHEET NAME: SITE PLAN
SHEET SIZE: ANSIB
ANSI B: 11" X 17"
SHEET NUMBER: PV-2



OWN
University
Manning St
George St
Benvenuto St

Google

Navigation controls including a compass and zoom in (+) and zoom out (-) buttons.