

THE CITY OF ORANGE TOWNSHIP HISTORIC PRESERVATION COMMISSION

APPLICATION NUMBER: A3154-23 DATE RECEIVED: 3/15/23

MEETING DATE: 3/15/23 MEETING DATE: _____

NAME: Fai Kisha Baker

PHONE: 9173966937 E-MAIL: 185oakwoodpl@gmail.com

NAME: Matthew Demjanck - SunRun or Jeff Abdon ^{732 925}
₀₅₃₂

PHONE: 415-580-6420 ^{ext 3} E-MAIL: matthew.demjanck@sunrun.com

BLOCK: 3304 LOT 34 ~~ORANGE VALLEY~~ MONTROSE SEVEN OAKS PARK MAIN STREET ST JOHN'S

ADDRESS: 185 Oakwood Place

PROPOSED WORK: _____

- PHOTOS SURVEY STRUCTURAL CERTIFICATION SKETCHES MATERIAL SPECIFICATIONS SITE PLAN

APPLICATION FEE: 70 CHECK NO: 302 RECEIPT NO: 4991 ONLINE: _____

TRC: _____ APPROVED _____ DENIED _____ RESCHEDULED _____

APPROVAL LETTER _____ RESOLUTION NUMBER _____ RESOLUTION DATE _____

CITY OF ORANGE HISTORIC PRESERVATION COMMISSION
ORANGE CITY HALL
29 North Day Street, Orange, New Jersey 07050
PHONE (973) 266-4025 - FAX (973) 672-6643

CITY OF ORANGE PRESERVATION COMMISSION
APPLICATION FOR CERTIFICATION OF APPROPRIATENESS

DATE RECEIVED 3/15/23 APPLICATION # A3154-23

APPLICANT(S):

Name of Applicant(s): Taukisha Baker

Address: 185 Oakwood Pl Email: 185oakwoodpl@gmail.com

Tele. #: (Day) 917-396-6937 (Eve) _____ (Fax) _____

Relationship of Applicant to Property owner:

Owner(s) [Lessee [] Prop. Under Contract [] Other (Specify) []

Explanation if Other: _____

OWNER(S), IF DIFFERENT THAN APPLICANT:

Name(s) of Owner(s): Sunrun matthew.demjancik@
matthew Demjancik Sunrun.com

Address: _____ Email: _____

Telephone Number: (Day) _____ (Eve) _____

Street Address of the Property that is subject of Application: _____

Tax Block: 3304 Lot: 34

Name of Historic District in which Property lies: Orange Valley

Existing use of the Property: Residential

Existing zoning of the Property: Residential

RECEIVED
ORANGE CITY HALL
3/15/23

Describe in detail the proposed work to be done at the Property.

Solar panels will be installed

Explain how you plan to prevent, minimize and mitigate any adverse effects to this Property, to nearby historically significant properties, and to the Historic District?

work will only be done on 185 Oakwood Pl. with all safety precautions being adhered to. Installation is minimal construction minimizing and adverse effects to the property.

Each Application must be accompanied by sketches, drawings, photographs, descriptions or other information sufficient to show the proposed alterations, additions, changes or new construction. The Commission may require the subsequent submission of such additional materials as it reasonably requires to make an informed decision. A submission shall include:

- A photograph of each elevation of the structure.
- Ten (10) copies of drawings, photographs, material brochures, samples, specifications or information that may be necessary to assist the Commission. Copies may be submitted electronically, or by CD or flash drive.
- Ten (10) copies of a survey, or if applicable, a site plan showing the location of new and existing structures on the site and their location with respect to the building line, property line, and the front of those buildings or structures immediately adjacent to each side of the lot to be built upon.
- Ten (10) copies of façade elevation(s), if applicable, of the proposed work in sufficient detail to identify the limits and location of the proposed work, and existing and proposed materials to be used.
- \$70.00 Application fee (check or money order made to the City of Orange).

By signing this Application, I hereby certify that the owner of record authorizes the proposed work and I have been authorized by the owner to make this Application as his/her authorized agent. By signing this Application, the owner hereby grants authorization to the Commission members, and its professional and support staff to enter the Property in question for inspection purposes. By signing this application I further agree that the attorney's and professional staff's review of my application is chargeable to me and that I agree to pay for such review separately from the application fee, by depositing an escrow payment of \$ 70.

Signature of Applicant(s) TaKisha Baker
(Print Name) TaKisha Baker

Date 3/1/23

Signature of Owner(s) (if different than Applicant) _____
(Print Name) _____

Date _____

Submittal of this Application form-properly signed, with the indicated copies of documents and the Application fee will constitute a complete Application. Upon receipt of a complete Application, the Board Secretary will schedule the Application with the Commission. The Applicant delays his/her own Application if all of these required items are not submitted. The Commission shall reach a decision on the Application within forty-five (45) days of submission of a complete Application. The Applicant must appear in front of the Commission in order to present the Application during the public hearing on the scheduled date.

Telephone: _____ Fax: _____ Website: _____







PARKER AND WEST ENGINEERING, LLC

1425 PARKER ST. BRONX NY 10462

Phone: (917) 251-0319 email: INFO@PARKERWESTENG.COM

Website: PARKERWESTENG.COM

December 16, 2022

Sunrun Inc.
133 Technology Dr. Suite 100
Irvine, CA, 92618

Re: Structural Certification for Installation of Solar Panels
Sunrun Job Tracking Number: 201R-185BAKE, 201R-185BAK1
Client: TAIKISHA BAKER
Address: 185 OAKWOOD PL #2, CITY OF ORANGE, NJ, 07050

To Whom It May Concern:

A field observation of the condition of the existing framing system was performed by an audit team from Sunrun Inc. From the field observation of the property, the existing roof structure was observed as follows:

- Flat rolled roof over roof plywood is supported by 2x10 @ 24" o.c. SPF #2 at ARRAY 1. The rafters are sloped at approximately 6 degrees and have a maximum projected horizontal span of 10 feet between load bearing supports.

Design Criteria:

- Applicable Codes = 2018 IRC/IBC NJ Edition, ASCE 7-16, and NDS-18
- Ground Snow Load = 25 psf
- Basic Wind Speed = 114 mph, Exposure Category C.

As a result of the completed field observation and design checks:

- ARRAY 1: Is adequate to support the loading imposed by the installation of solar panels and modules. Therefore, no structural upgrades are required.

I certify that the capacity of the structural roof framing that directly supports the additional loading due to the solar panel supports and modules had been reviewed and determined to meet or exceed the requirements without structural upgrade in accordance with the 2018 IRC/IBC NJ Edition.

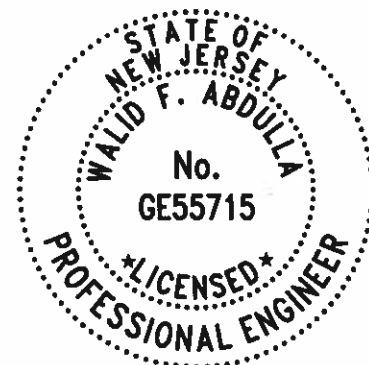
Sincerely,



Walid Abdulla, P.E.

Manager

Parker and West Engineering, LLC



SHEET INDEX

PAGE #	DESCRIPTION
PV-1.0	COVER SHEET
PV-2.0	SITE PLAN
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PV-4.1	ELECTRICAL CALCS
PV-4.2	ELECTRICAL
PV-4.3	ELECTRICAL CALCS
PV-5.0	SIGNAGE

LEGEND

SERVICE ENTRANCE
 MAIN PANEL
 SUB-PANEL
 PV LOAD CENTER
 SUNRUN METER
 DEDICATED PV METER
 INVERTER(S)
 AC DISCONNECT(S)
 DC DISCONNECT(S)
 IQ COMBINER BOX
 INTERIOR EQUIPMENT SHOWN AS DASHED
 CHIMNEY
 ATTIC VENT
 FLUSH ATTIC VENT
 PVC PIPE VENT
 METAL PIPE VENT
 T-VENT
 SATELLITE DISH
 FIRE SETBACKS
 HARDSCAPE
 PROPERTY LINE
 SOLAR MODULES SCALE: NTS
 SNR MOUNT
 SNR MOUNT & SKIRT

SCOPE OF WORK

COMBINED

- SYSTEM SIZE: 10140W DC, 7600W AC
- MODULES: (26) TRINA SOLAR; TSM-390DE09C.07
- INVERTERS: (2) SOLAREEDGE TECHNOLOGIES; SE3800H-USMN
- RACKING: RL UNIVERSAL, SPEEDSEAL TRACK ON COMP. SEE DETAIL SNR-DC-00436

201R-185BAKE

- SYSTEM SIZE: 5460W DC, 3800W AC
- MODULES: (14) TRINA SOLAR; TSM-390DE09C.07
- INVERTERS: (1) SOLAREEDGE TECHNOLOGIES; SE3800H-USMN
- RACKING: RL UNIVERSAL, SPEEDSEAL TRACK ON COMP. SEE DETAIL SNR-DC-00436

201R-185BAK1

- SYSTEM SIZE: 4680W DC, 3800W AC
- MODULES: (12) TRINA SOLAR; TSM-390DE09C.07
- INVERTERS: (1) SOLAREEDGE TECHNOLOGIES; SE3800H-USMN
- RACKING: RL UNIVERSAL, SPEEDSEAL TRACK ON COMP. SEE DETAIL SNR-DC-00436

GENERAL NOTES

- ALL WORK SHALL COMPLY WITH 2018 IRC/IBC NJ ED., 2018 IEBC, MUNICIPAL CODE, AND ALL MANUFACTURERS' LISTINGS AND INSTALLATION INSTRUCTIONS.
 - PHOTOVOLTAIC SYSTEM WILL COMPLY WITH NEC 2020.
 - ELECTRICAL SYSTEM GROUNDING WILL COMPLY WITH NEC 2020.
 - PHOTOVOLTAIC SYSTEM IS UNGROUNDED. NO CONDUCTORS ARE SOLIDLY GROUNDED IN THE INVERTER. SYSTEM COMPLIES WITH 690.35.
 - MODULES CONFORM TO AND ARE LISTED UNDER UL 1703.
 - INVERTER CONFORMS TO AND IS LISTED UNDER UL 1741.
 - RACKING CONFORMS TO AND IS LISTED UNDER UL 2703.
 - SNAPRACK RACKING SYSTEMS, IN COMBINATION WITH TYPE I, OR TYPE II MODULES, ARE CLASS A FIRE RATED.
 - RAPID SHUTDOWN REQUIREMENTS MET WHEN INVERTERS AND ALL CONDUCTORS ARE WITHIN ARRAY BOUNDARIES PER NEC 690.12(1).
 - CONSTRUCTION FOREMAN TO PLACE CONDUIT RUN PER 690.31(G).
 - ARRAY DC CONDUCTORS ARE SIZED FOR DERATED CURRENT.
- 201R-185BAKE:
- 13.35 AMPS MODULE SHORT CIRCUIT CURRENT.
 - 20.85 AMPS DERATED SHORT CIRCUIT CURRENT [690.8 (A) & 690.8 (B)].
- 201R-185BAK1
- 13.35 AMPS MODULE SHORT CIRCUIT CURRENT.
 - 20.85 AMPS DERATED SHORT CIRCUIT CURRENT [690.8 (A) & 690.8 (B)].

VICINITY MAP



ELC#34EL01574500

21 WOODS BLVD. SU. 30406812, NJ 08673
 PHONE 732 622 7200
 FAX 732 356 6289

CUSTOMER RESIDENCE:
 TAIKISHA BAKER
 185 OAKWOOD PL FL 1, CITY OF
 ORANGE, NJ, 07050

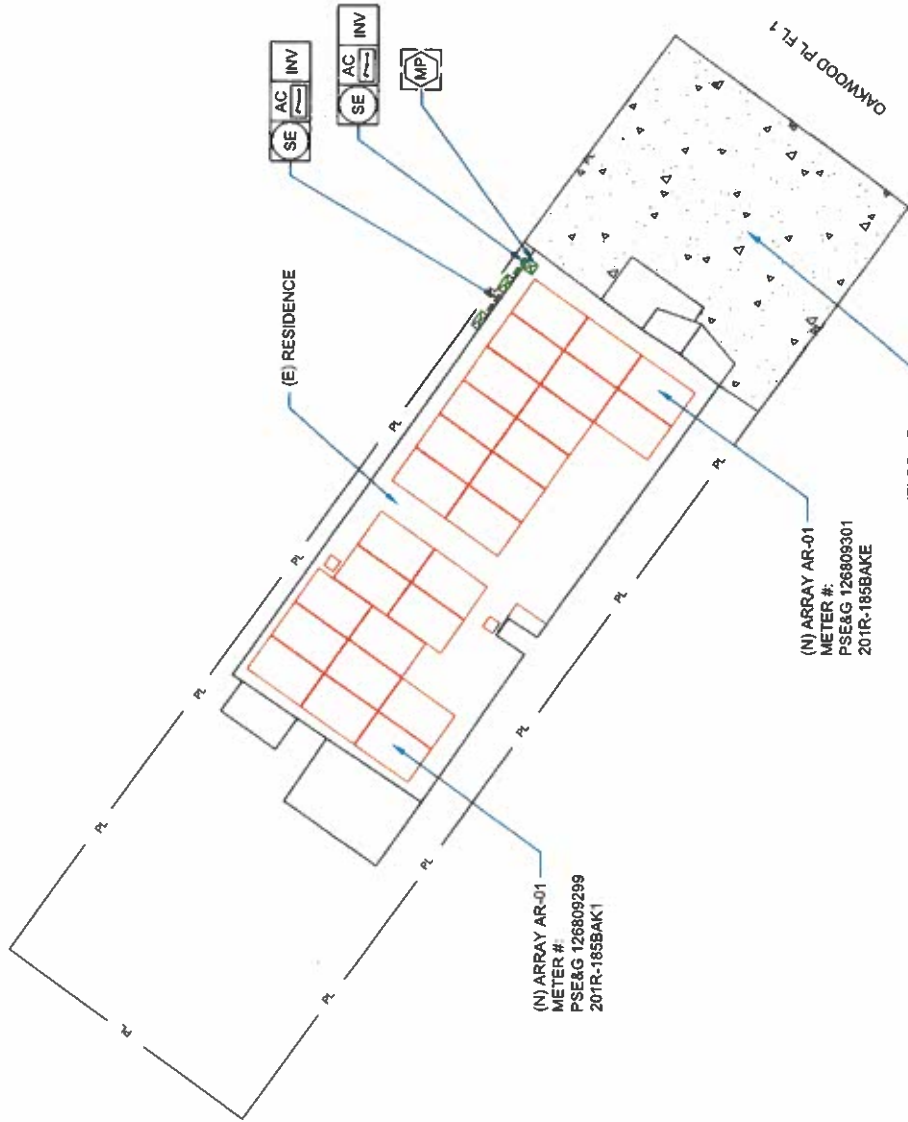
TEL: (917)396-6937
 APN:

PROJECT NUMBER:
 201R-185BAKE, 201R-185BAK1

DESIGNER: (415) 580-6920 ex3
 JEF ABDON

SHEET	COVER SHEET
REV: A	12/21/2022
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SITE PLAN - SCALE = 3/32" = 1'-0"



201R-185BAKE

ARRAY	PITCH	TRUE AZIM	MAG AZIM	PV AREA (SQFT)
AR-01	6°	304°	316°	289.7

NOTES:

- RESIDENCE DOES NOT CONTAIN ACTIVE FIRE SPRINKLERS.

ARRAY DETAILS:

- TOTAL ROOF SURFACE AREA: 916 SQFT.
- TOTAL PV ARRAY AREA: 289.7 SQ FT.
- PERCENTAGE PV COVERAGE: (TOTAL PV ARRAY AREA/TOTAL ROOF SURFACE AREA) * 100 = 31.5%

201R-185BAK1

ARRAY	PITCH	TRUE AZIM	MAG AZIM	PV AREA (SQFT)
AR-01	6°	304°	316°	289.7

NOTES:

- RESIDENCE DOES NOT CONTAIN ACTIVE FIRE SPRINKLERS.

ARRAY DETAILS:

- TOTAL ROOF SURFACE AREA: 916 SQFT.
- TOTAL PV ARRAY AREA: 289.7 SQ FT.
- PERCENTAGE PV COVERAGE: (TOTAL PV ARRAY AREA/TOTAL ROOF SURFACE AREA) * 100 = 27.11%



ELC#34EL01574500

21 WORLDS PARK DR. SOMERSET, NJ 08873
 TEL: (973) 259-8200
 FAX: (973) 259-8209

CUSTOMER RESIDENCE

TAIKISHA BAKER
 185 OAKWOOD PL FL 1, CITY OF
 ORANGE, NJ, 07050

TEL: (973) 996-6937

APN:

PROJECT NUMBER:

201R-185BAKE, 201R-185BAK1

DESIGNER: (415) 560-6920 ext3

JEF ABDON

SHEET

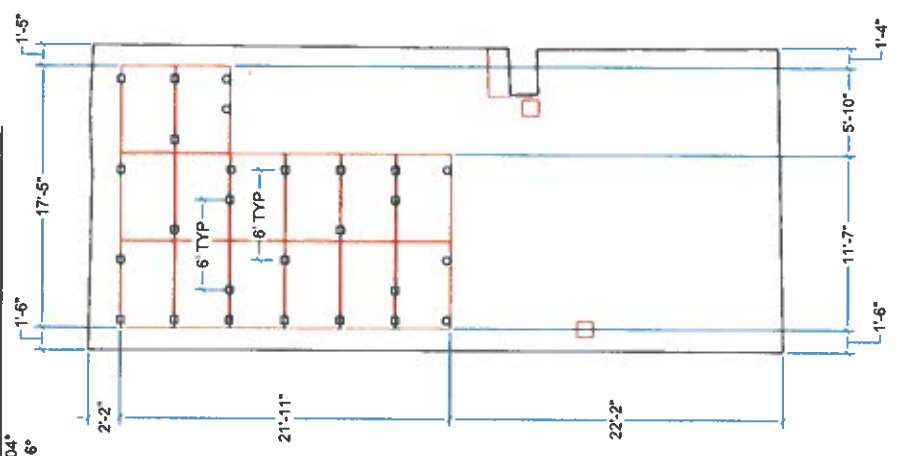
SITE PLAN

REV: A 12/21/2022

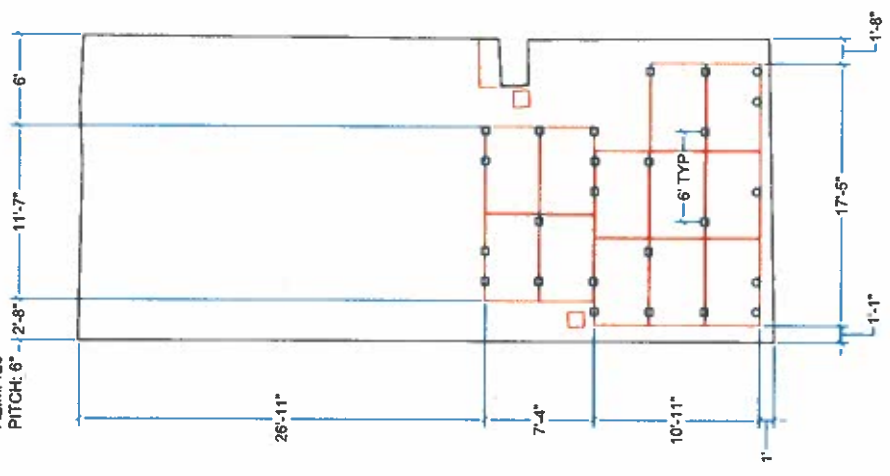
PAGE PV-2.0

ROOF INFO		FRAMING INFO		ATTACHMENT INFORMATION				DESIGN CRITERIA		
Name	Type	Height	Type	Max Span	OC Spacing	Detail	Max Landscape OC Spacing	Max Portrait OC Spacing	Max Portrait Overhang	Configuration
AR-01	FLAT, ROLLED COMP (FLUSH MOUNT) - RLU	3-Story	2X10 RAFTERS	10' - 3"	24"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP. SEE DETAIL SNR-DC-00436	6' - 0"	NA	NA	STAGGERED

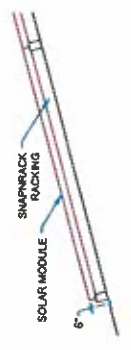
D1 - AR-01 - SCALE: 1/8" = 1'-0" 201R-185BAKE
 AZIM: 304°
 PITCH: 6°



D1 - AR-01 - SCALE: 1/8" = 1'-0" 201R-185BAK1
 AZIM: 125°
 PITCH: 6° - 2-8"



MODULE ELEVATION DETAIL - SCALE: NTS



INSTALLERS SHALL NOTIFY ENGINEER OF ANY POTENTIAL STRUCTURAL ISSUES OBSERVED PRIOR TO PROCEEDING W/ INSTALLATION.

- * IF ARRAY (EXCLUDING SKIRT) IS WITHIN 12" BOUNDARY REGION OF ANY ROOF PLANE EDGES (EXCEPT VALLEYS), THEN ATTACHMENTS NEED TO BE ADDED AND OVERHANG REDUCED WITHIN THE 12" BOUNDARY REGION ONLY AS FOLLOWS:
 - ** ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS TO BE REDUCED BY 50%.
 - ** ALLOWABLE OVERHANG INDICATED ON PLANS TO BE 1/8TH OF ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS



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 21 WOODS PL. CLACKAMASKING, NJ 08013
 800-328-8888
 FAX 908-386-8296

CUSTOMER RESIDENCE
 TAIKISHA BAKER
 185 OAKWOOD PL FL 1, CITY OF
 ORANGE, NJ, 07050

TEL (917)396-6837
 APN:

PROJECT NUMBER:
 201R-185BAKE, 201R-185BAK1

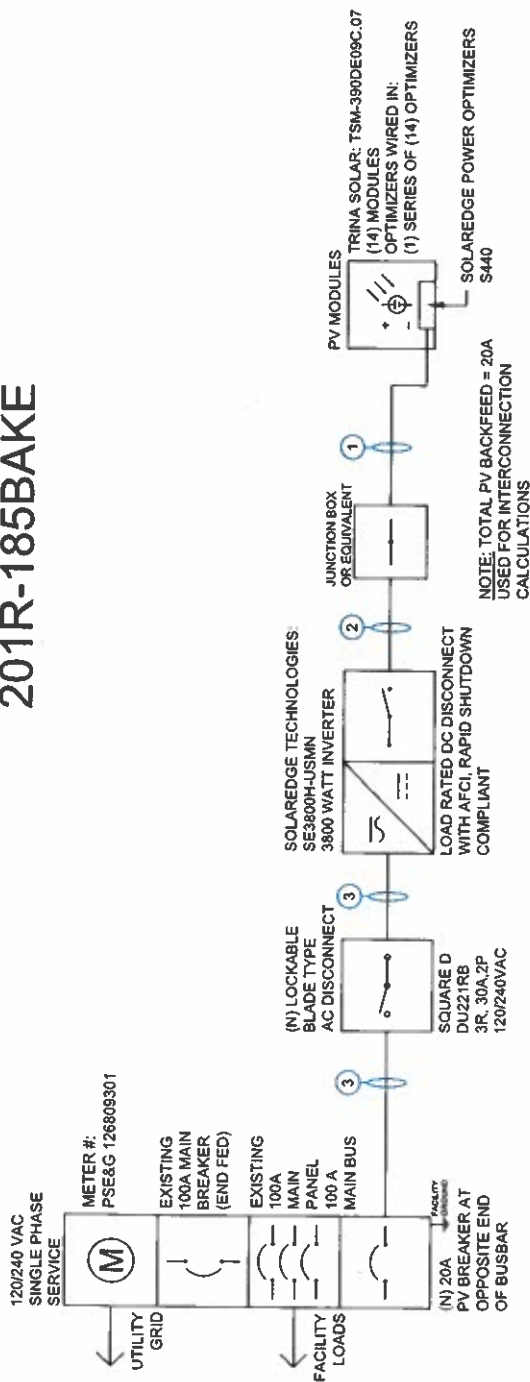
DESIGNER: (415) 960-8920 et.c
 JEF ABDON

SHEET LAYOUT

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201R-185BAKE



CONDUIT SCHEDULE

#	CONDUIT	CONDUCTOR	NEUTRAL	GROUND
1	NONE	(2) 10 AWG PV WIRE	NONE	(1) 10 AWG BARE COPPER
2	3/4" PVC OR EQUIV.	(2) 10 AWG THHN/THWN-2	NONE	(1) 10 AWG THHN/THWN-2
3	3/4" PVC OR EQUIV.	(2) 10 AWG THHN/THWN-2	(1) 10 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2

MODULE CHARACTERISTICS
 TRINA SOLAR: TSM-390DE09C.07:
 OPEN CIRCUIT VOLTAGE: 40.8 V
 MAX POWER VOLTAGE: 33.8 V
 SHORT CIRCUIT CURRENT: 13.35 A

S440 OPTIMIZER CHARACTERISTICS:
 MIN INPUT VOLTAGE: 8 VDC
 MAX INPUT VOLTAGE: 60 VDC
 MAX INPUT ISC: 14.5 ADC
 MAX OUTPUT CURRENT: 15 ADC

SYSTEM CHARACTERISTICS - INVERTER 1
 SYSTEM SIZE: 5460 W
 SYSTEM OPEN CIRCUIT VOLTAGE: 14 V
 SYSTEM OPERATING VOLTAGE: 380 V
 MAX ALLOWABLE DC VOLTAGE: 480 V
 SYSTEM OPERATING CURRENT: 14.37 A
 SYSTEM SHORT CIRCUIT CURRENT: 15 A

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 21 WOODS BLVD, SU. 500-0601, NJ 08673
 PHONE: 732.822.7200
 FAX: 732.256.8399

CUSTOMER RESIDENCE:
 TAIKISHA BAKER
 185 OAKWOOD PL FL 1, CITY OF
 ORANGE, NJ, 07050

TEL: (917)396-6937
 APN:

PROJECT NUMBER:
 201R-185BAKE

DESIGNER: (415) 590-6920 ec3
 JEF ABDON

SHEET
ELECTRICAL

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201R-185BAKE

System Information

5.46 kW DC Photovoltaic System
(14) Trina Solar: TSM-390DE09C.07, SolarEdge Technologies: SE3800H-USMN

Allowable Backfeed

Allowable Backfeed = (Main Panel Rating) x 1.2 - (Main Breaker Rating) =
100A x 1.2 - 100A = 20A
20A ≤ 20A → Interconnection meets 705.12(D)(2) requirements.

Inverter Overcurrent Protection

(Inverter Max Current) x (Continuous Load) =
16 A x 1.25 = 20 A → 20 A Overcurrent Protection

DC Wire Sizing

Max Circuit Current = (Optimizer Max Output Current) x (Continuous Load) [690.8(B)(1)] =
15A x 1.25 = 18.75A
Adjusted Conductor Ampacity = (High Temp) [Table 310.15(B)(2)(a)] x (Conduit Fill) [Table 310.15(B)(3)(a)] x (Conductor Ampacity) [Table 310.15(B)(16)] =
0.71 x 1 x 40A = 28.4A
Terminal Rating [110.14(C)] =
10 AWG, 75°C Rated = 35A
28.4A < 35A → Adjusted conductor ampacity governs conductor sizing.
18.75A < 28.4A → 10 AWG Ampacity OK
Therefore 10 AWG is sufficient.

AC Wire Sizing

Max AC Output Current = (Max Inverter Output) x (Continuous Load) [210.19(A)(1)] =
16 A x 1.25 = 20 A
Adjusted Conductor Ampacity = (High Temp) [Table 310.15(B)(2)(a)] x (Conduit Fill) [Table 310.15(B)(3)(a)] x (Conductor Ampacity) [Table 310.15(B)(16)] =
0.96 x 1 x 40A = 38.4A
Terminal Rating [110.14(C)] =
10 AWG, 75°C Rated = 35A
35A < 38.4A → Terminal rating governs conductor sizing.
20A < 35A → 10 AWG Ampacity OK
Therefore 10 AWG is sufficient.

System Characteristics

VMP = Inverter Fixed String Voltage =
380V
VOC = Max Inverter System Voltage =
480V
Operating Current = (DC System Size) / 380V =
5460W / 380V = 14.37 A
Short Circuit Current = (Optimizer Max Current) x (# Strings)
15A x 1 = 15A

SUNRUN

ELC634EL01574500

7 WINDSOR PLAZA, SOMERSET, NJ 08877
PHONE: 732.306.8200
FAX: 732.306.8206

CUSTOMER RESIDENCE:

TAIKISHA BAKER
185 OAKWOOD PL FL 1, CITY OF
ORANGE, NJ, 07050

TEL: (917)396-6937

APN:

PROJECT NUMBER:

201R-185BAKE

DESIGNER: (415) 560-6920 ext3

JEF ABDON

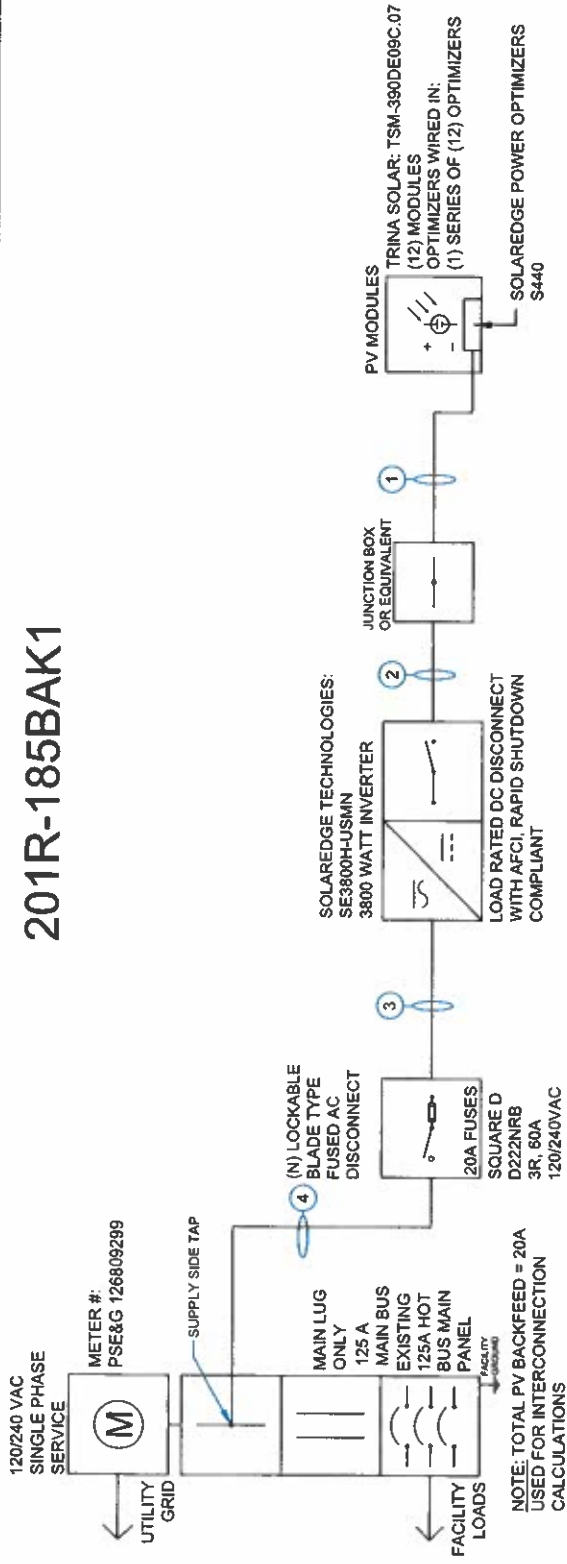
SHEET

ELECTRICAL CALCS

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201R-185BAK1



NOTE: TOTAL PV BACKFEED = 20A USED FOR INTERCONNECTION CALCULATIONS

CONDUIT SCHEDULE				
#	CONDUIT	CONDUCTOR	NEUTRAL	GROUND
1	NONE	(2) 10 AWG PV WIRE	NONE	(1) 10 AWG BARE COPPER
2	3/4" PVC OR EQUIV.	(2) 10 AWG THHN/THWN-2	NONE	(1) 10 AWG THHN/THWN-2
3	3/4" PVC OR EQUIV.	(2) 10 AWG THHN/THWN-2	(1) 10 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2
4	3/4" PVC OR EQUIV.	(2) 8 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2

MODULE CHARACTERISTICS
 TRINA SOLAR: TSM-390DE09C.07:
 OPEN CIRCUIT VOLTAGE: 40.8 V
 MAX POWER VOLTAGE: 33.8 V
 SHORT CIRCUIT CURRENT: 13.35 A

S440 OPTIMIZER CHARACTERISTICS:
 MIN INPUT VOLTAGE: 8 VDC
 MAX INPUT VOLTAGE: 60 VDC
 MAX INPUT ISC: 14.5 ADC
 MAX OUTPUT CURRENT: 15 ADC

SYSTEM CHARACTERISTICS - INVERTER 1
 SYSTEM SIZE: 4680 W
 SYSTEM OPEN CIRCUIT VOLTAGE: 12 V
 SYSTEM OPERATING VOLTAGE: 380 V
 MAX ALLOWABLE DC VOLTAGE: 480 V
 SYSTEM OPERATING CURRENT: 12.32 A
 SYSTEM SHORT CIRCUIT CURRENT: 15 A

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 21 WORLDS FAIR DR., SOMERSET, NJ 08873
 PHONE 732.827.7000
 FAX 732.827.8800

CUSTOMER RESIDENCE:
 TAIKISHA BAKER
 185 OAKWOOD PL FL 1, CITY OF
 ORANGE, NJ, 07050

TEL: (917)396-6837
 APN:

PROJECT NUMBER:
 201R-185BAK1

DESIGNER: (415) 580-6920 ex3
 JEF ABDON

SHEET
ELECTRICAL

REV: A 12/21/2022
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201R-185BAK1

System Information
4.68 kW DC Photovoltaic System
(12) Trina Solar: TSM-390DE09C.07, SolarEdge Technologies: SE3800H-USMN

Inverter Overcurrent Protection
(Inverter Max Current) x (Continuous Load) =
16 A x 1.25 = 20 A → 20 A Overcurrent Protection

DC Wire Sizing
Max Circuit Current = (Optimizer Max Output Current) x (Continuous Load) [690.8(B)(1)] =
15A x 1.25 = 18.75A
Adjusted Conductor Ampacity = (High Temp) [Table 310.15(B)(2)(a)] x (Conduit Fill) [Table 310.15(B)(3)(a)] x (Conductor Ampacity) [Table 310.15(B)(16)] =
0.71 x 1 x 40A = 28.4A
Terminal Rating [110.14(C)] =
10 AWG, 75°C Rated = 35A
28.4A < 35A → Adjusted conductor ampacity governs conductor sizing.
18.75A < 28.4A → 10 AWG Ampacity OK
Therefore 10 AWG is sufficient.

AC Wire Sizing
Max AC Output Current = (Max Inverter Output) x (Continuous Load) [210.19(A)(1)] =
16 A x 1.25 = 20 A
Adjusted Conductor Ampacity = (High Temp) [Table 310.15(B)(2)(a)] x (Conduit Fill) [Table 310.15(B)(3)(a)] x (Conductor Ampacity) [Table 310.15(B)(16)] =
0.96 x 1 x 40A = 38.4A
Terminal Rating [110.14(C)] =
10 AWG, 75°C Rated = 35A
35A < 38.4A → Terminal rating governs conductor sizing.
20A < 35A → 10 AWG Ampacity OK
Therefore 10 AWG is sufficient.

System Characteristics
VMP = Inverter Fixed String Voltage =
380V
VOC = Max Inverter System Voltage =
480V
Operating Current = (DC System Size) / 380V =
4680W / 380V = 12.32 A
Short Circuit Current = (Optimizer Max Current) x (# Strings)
15A x 1 = 15A

SUNRUN

ELC#34EL01574500

81 WORLDS FARM DR. SOMERSET, NJ 08873
PHONE 732.802.7229
FAX 732.396.8389

CUSTOMER RESIDENCE:
TARIKISHA BAKER
185 OAKWOOD PL FL 1, CITY OF
ORANGE, NJ, 07050

TEL. (917)396-6937
APN:

PROJECT NUMBER:
201R-185BAK1

DESIGNER: (415) 580-5920 ex3
JEF ABDON

SHEET
ELECTRICAL CALCS

REV: A 12/21/2022

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WARNING
ELECTRICAL SHOCK HAZARD
TERMINALS ON LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

LABEL LOCATION:
INVERTER(S), AC/DC DISCONNECT(S),
AC COMBINER PANEL (IF APPLICABLE),
PER CODE(S): NEC 2020: 690.13(B)

WARNING
DUAL POWER SUPPLY
SOURCES: UTILITY GRID
AND PV SOLAR ELECTRIC
SYSTEM

LABEL LOCATION:
UTILITY SERVICE METER AND MAIN
SERVICE PANEL
PER CODE(S): NEC 2020: 705.12(C)

WARNING
POWER SOURCE OUTPUT CONNECTION
DO NOT RELOCATE THIS
OVERCURRENT DEVICE

LABEL LOCATION:
ADJACENT TO PV BREAKER AND ESS
OCPD (IF APPLICABLE)
PER CODE(S): NEC 2020:
705.12(B)(3)(2)

WARNING
PHOTOVOLTAGIC SYSTEM
COMBINER PANEL
DO NOT ADD LOADS

LABEL LOCATION:
PHOTOVOLTAGIC AC COMBINER (IF
APPLICABLE)
PER CODE(S): NEC 2020: 705.12(D)(2)(3)(4)

PV SYSTEM DISCONNECT
MAXIMUM AC OPERATING CURRENT: 14.20 A @ 120 VAC
NOMINAL OPERATING AC VOLTAGE: 240V VAC

LABEL LOCATION:
PHOTOVOLTAGIC AC DISCONNECT(S), PHOTOVOLTAGIC SYSTEM POINT OF
INTERCONNECT(S)
PER CODE(S): NEC 2020: 690.54

INVERTER 1

PHOTOVOLTAGIC DC DISCONNECT
MINIMUM SYSTEM VOLTAGE 480 VDC

LABEL LOCATION:
INVERTER(S), DC DISCONNECT(S),
PER CODE(S): NEC 2020: 690.53

**WARNING: PHOTOVOLTAGIC
POWER SOURCE**

LABEL LOCATION:
INTERIOR AND EXTERIOR DC CONDUIT EVERY 10 FT,
AT EACH TURN, ABOVE AND BELOW PENETRATIONS,
ON EVERY JBPULL BOX CONTAINING DC CIRCUITS.
PER CODE(S): NEC 2020: 690.31(D)(2), IFC 2012:
605.11.1.4

**RAPID SHUTDOWN SWITCH
FOR SOLAR PV SYSTEM**

LABEL LOCATION:
INSTALLED WITHIN 3' OF RAPID SHUT DOWN
SWITCH PER CODE(S): NEC 2020: 690.56(C)(2), IFC
2012: 605.11.1, IFC 2018: 1204.5.3

**SOLAR PV SYSTEM EQUIPPED
WITH RAPID SHUTDOWN**

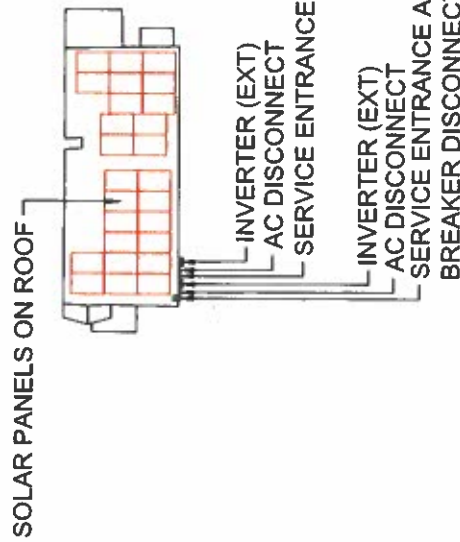
TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN THE ARRAY.

LABEL LOCATION:
ON OR NO MORE THAN 1 M (3 FT) FROM THE SERVICE
DISCONNECTING MEANS TO WHICH THE PV SYSTEMS
ARE CONNECTED.
PER CODE(S): NEC 2020: 690.56(C)

- NOTES AND SPECIFICATIONS:
- SIGNS AND LABELS SHALL MEET THE REQUIREMENTS OF THE NEC 2020 ARTICLE 110.2(10), UNLESS SPECIFIC INSTRUCTIONS ARE REQUIRED BY SECTION 690, OR IF REQUESTED BY THE LOCAL A.H.U.
 - SIGNS AND LABELS SHALL ADEQUATELY WARN OF HAZARDS USING EFFECTIVE WORDS, COLORS AND SYMBOLS.
 - LABELS SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT OR WIRING METHOD AND SHALL NOT BE HAND WRITTEN.
 - LABEL SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
 - SIGNS AND LABELS SHALL COMPLY WITH ANSI Z39.5-2011, PRODUCT SAFETY SIGNS AND LABELS, UNLESS OTHERWISE SPECIFIED.
 - DO NOT COVER EXISTING MANUFACTURER LABELS.

CAUTION:

MULTIPLE SOURCES OF POWER



185 OAKWOOD PL FL 1, CITY OF ORANGE, NJ, 07050

PER CODE(S): NEC 2020 : 705.10, 710.10

SUNRUN

ELCR34EL01574500

21 WORKS PARK DR., SOMERSET, NJ 08873
PH: 973-299-8200
FAX: 973-299-8200

CUSTOMER RESIDENCE:

TAIKISHA BAKER
185 OAKWOOD PL FL 1, CITY OF
ORANGE, NJ, 07050

TEL: (917)396-6837

APN:

PROJECT NUMBER:

201R-185BAKE, 201R-185BAK1

DESIGNER: (415) 580-8920 ex3

JEF ABDON

SHEET

SIGNAGE

REV: A 12/21/2022

PAGE PV-5.0



TAIKISHA BAKER
 666 E. 141ST ST.
 APT. 3D
 BRONX, NY 10454

302

62-7611/311

DATE 3/1/23



PAY TO THE ORDER OF

City of Orange

\$ 70.00

Seventy dollars 00/100

DOLLARS



Photo Safe Deposit Details on back



MEMO

historic preservation

Taikisha Baker

⑆031176110⑆036186451073⑆ 0302

Thank You

[Signature]

BY

- M.O.
- CHECK
- CASH

		BALANCE DUE
	<u>70.00</u>	THIS PAYMENT
	<u>70.00</u>	AMOUNT OF ACCOUNT

DOLLARS

FOR HPC-APT A 3154-23185 OAKWOOD PL

SEVENTY DOLLARS + 00/100

\$ 70 00

RECEIVED FROM

Taikisha Baker

DATE

3/15/23

ORANGE, NEW JERSEY 07050

CITY HALL

THE CITY OF ORANGE TOWNSHIP

OFFICE OF THE MUNICIPAL CLERK

4991