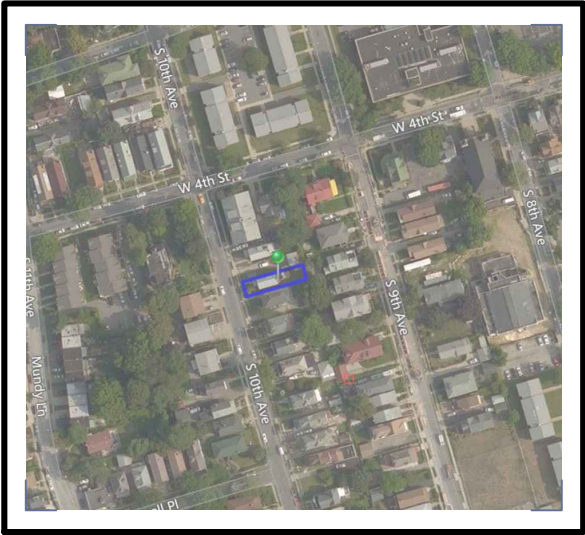


INSTALLATION OF NEW ROOF MOUNTED
4.68kW PV SYSTEM
313 SOUTH 10TH AVENUE
MOUNT VERNON, NY 10550

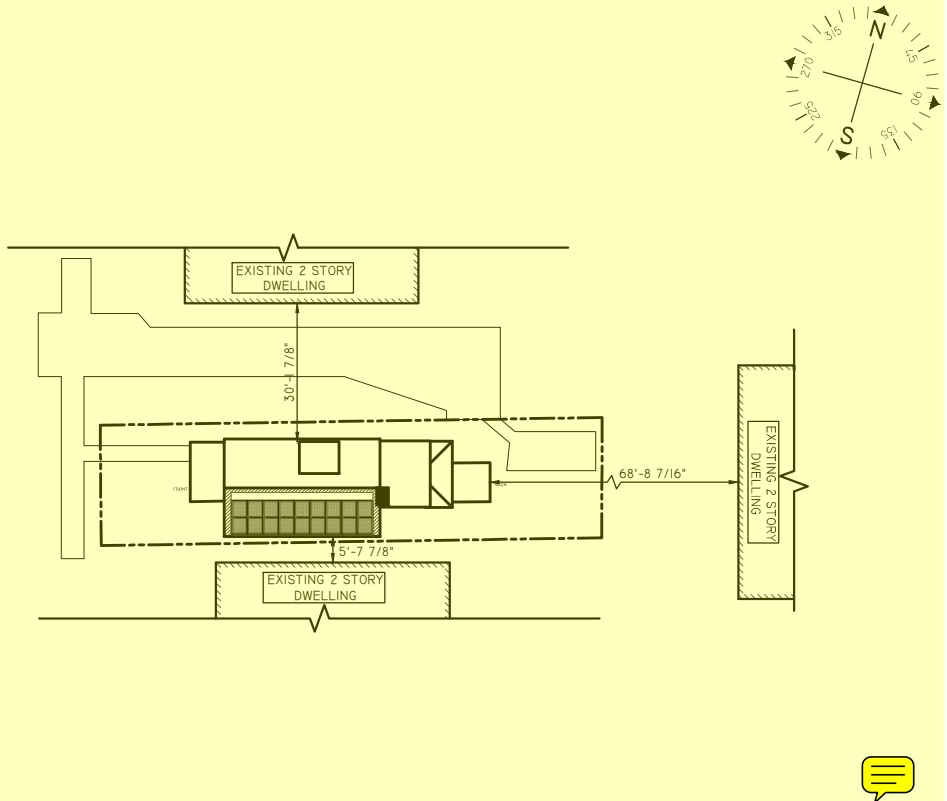


VICINITY MAP
SCALE: NTS



SATELLITE VIEW
SCALE: NTS

LOT DIAGRAM
SCALE: 1"=500'



GENERAL NOTES

1. THE INSTALLATION CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL EQUIPMENT AND FOLLOWING ALL DIRECTIONS AND INSTRUCTIONS CONTAINED IN THE DRAWING PACKAGE AND INFORMATION RECEIVED FROM TRINITY.
2. THE INSTALLATION CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL EQUIPMENT AND FOLLOWING ALL DIRECTIONS AND INSTRUCTION CONTAINED IN THE COMPLETE MANUAL.
3. THE INSTALLATION CONTRACTOR IS RESPONSIBLE FOR READING AND UNDERSTANDING ALL DRAWINGS, COMPONENT AND INVERTER MANUALS PRIOR TO INSTALLATION. THE INSTALLATION CONTRACTOR IS ALSO REQUIRED TO HAVE ALL COMPONENT SWITCHES IN THE OFF POSITION AND FUSES REMOVED PRIOR TO THE INSTALLATION OF ALL FUSES BEARING SYSTEM COMPONENTS.
4. ONCE THE PHOTOVOLTAIC MODULES ARE MOUNTED, THE INSTALLATION CONTRACTOR SHOULD HAVE A MINIMUM OF ONE ELECTRICIAN WHO HAS ATTENDED A SOLAR PHOTOVOLTAIC INSTALLATION COURSE ON SITE.
5. FOR SAFETY, IT IS RECOMMENDED BY THE MANUFACTURE THAT THE INSTALLATION CREW ALWAYS HAVE A MINIMUM OF TWO PERSONS WORKING TOGETHER AND THAT EACH OF THE INSTALLATION CREW MEMBERS BE TRAINED IN FIRST AID AND CPR.
6. THIS SOLAR PHOTOVOLTAIC SYSTEM IS TO BE INSTALLED FOLLOWING THE CONVENTIONS OF THE NATIONAL ELECTRIC CODE. ANY LOCAL CODE WHICH MAY SUPERSEDE THE NEC SHALL GOVERN.
7. ALL SYSTEM COMPONENTS TO BE INSTALLED WITH THIS SYSTEM ARE TO BE "UL" LISTED. ALL EQUIPMENT WILL BE NEMA 3R OUTDOOR RATED UNLESS INDOORS.

GENERAL NOTES CONTINUED

8. THE DC VOLTAGE FROM THE PANELS IS ALWAYS PRESENT AT THE DC DISCONNECT ENCLOSURE AND THE DC TERMINALS OF THE INVERTER DURING DAYLIGHT HOURS. ALL PERSONS WORKING ON OR INVOLVED WITH THE PHOTOVOLTAIC SYSTEM ARE WARNED THAT THE SOLAR MODULES ARE ENERGIZED WHENEVER THEY ARE EXPOSED TO LIGHT.
9. ALL PORTIONS OF THIS SOLAR PHOTOVOLTAIC SYSTEM SHALL BE MARKED CLEARLY IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ARTICLE 690.
10. PRIOR TO THE INSTALLATION OF THIS PHOTOVOLTAIC SYSTEM, THE INSTALLATION CONTRACTOR SHALL ATTEND A PRE-INSTALLATION MEETING FOR THE REVIEW OF THE INSTALLATION PROCEDURES, SCHEDULES, SAFETY AND COORDINATION.
11. PRIOR TO THE SYSTEM START UP THE INSTALLATION CONTRACTOR SHALL ASSIST IN PERFORMING ALL INITIAL HARDWARE CHECKS AND DC WIRING CONDUCTIVITY CHECKS.
12. FOR THE PROPER MAINTENANCE AND ISOLATION OF THE INVERTS REFER TO THE ISOLATION PROCEDURES IN THE OPERATION MANUAL.
13. THE LOCATION OF PROPOSED ELECTRIC AND TELEPHONE UTILITIES ARE SUBJECT TO FINAL APPROVAL OF THE APPROPRIATE UTILITY COMPANIES AND OWNERS.
14. ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREIN SHALL BE IN ACCORDANCE WITH:
 - A) CURRENT PREVAILING MUNICIPAL AND/OR COUNTY SPECIFICATIONS, STANDARDS AND REQUIREMENTS

GENERAL NOTES CONTINUED

14. B) CURRENT PREVAILING UTILITY COMPANY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS
15. THIS SET OF PLANS HAVE BEEN PREPARED FOR THE PURPOSE OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DRAWINGS UNTIL REVISED TO INDICATE "ISSUED FOR CONSTRUCTION".
16. ALL INFORMATION SHOWN MUST BE CERTIFIED PRIOR TO USE FOR CONSTRUCTION ACTIVITIES.

NOTES

1. PV INSTALLATION TO COMPLY WITH ARTICLE 690 OF THE NEC.
2. PV INSTALLATION TO COMPLY WITH NYSEDA REQUIREMENTS.
3. PV INSTALLATION TO COMPLY WITH NEW YORK STAT STANDARDIZED INTERCONNECTION REQUIREMENTS.

2008 NOTES

1. PV INSTALLATION TO COMPLY WITH NYC ELECTRIC CODE 2011.

PLAN NOTES

1. SCOPE OF WORK IS SOLEY FOR THE INSTALLATION OF THE SOLAR ELECTRONIC GENERATING SYSTEM. ALL OTHER WORK IS NOT TO BE RELIED UPON AS BEING APPROVED AND/OR PERMITTED BY THE DOB

SPECIAL INSPECTIONS:

- STRUCTURAL STABILITY
- FIRE STOP
- PROGRESS INSPECTIONS:
 - ENERGY CODE COMPLIANCE
 - FINAL INSPECTION
 - VISUAL AIR SEALING

TENANT SAFETY NOTES

1. CONSTRUCTION WORK WILL BE CONFINED TO THE ROOF / OUTSIDE & WILL NOT CREATE DUST, DIRT OR OTHER INCONVENIENCES TO NEIGHBORING PROPERTIES OR APARTMENT UNITS WITHIN THE BUILDING.
2. CONSTRUCTION WORK WILL NOT BLOCK HALLWAYS OR MEANS OF EGRESS FOR NEIGHBORING PROPERTIES OR TENANTS OF THE BUILDING.
3. CONSTRUCTION WORK WILL NOT INVOLVE INTERRUPTION OF HEATING, WATER OR ELECTRIC SERVICES TO NEIGHBORING PROPERTIES OR TENANTS OF THE BUILDING.
4. CONSTRUCTION WORK WILL BE CONFINED TO NORMAL WORKING HOURS, 8AM - 5PM MONDAY THRU FRIDAY EXCEPT LEGAL HOLIDAYS.

TENANT PROTECTION PLAN

SPECIAL PRECAUTION SHALL BE TAKEN BY THE CONTRACTOR SO THAT EQUIPMENT ON THIS APPLICATION AND ITS INSTALLATION WILL NOT AFFECT THE FOLLOWING:

- A. TENANT EGRESS TO AND FROM THE BUILDING.
- B. FIRE SAFETY, OR CREATE A FIRE HAZARD.
- C. STRUCTURAL SAFETY OF THE BUILDING
- D. ACCUMULATION OF DUST. THE CONTRACTOR SHALL LEAVE THE WORK SITE BROOM CLEAN EACH DAY. IN THE EVENT THAT ASBESTOS IS FOUND ON THE JOBSITE, ITS REMOVAL SHALL TAKE PLACE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS OF O.S.H.A SECTION 1901.1, INCLUDING STAT AND FEDERAL DUMPING GROUNDS
- E. THERE SHALL BE NO CREATION OF NOISE OUTSIDE THE NORMAL HOURS OF 8AM TO 5PM MONDAY THRU FRIDAY EXCEPT LEGAL HOLIDAYS

ABBREVIATIONS

AMP	AMPERE
AC	ALTERNATING CURRENT
AL	ALUMINUM
AF	AMP. FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AWG	AMERICAN WIRE GAUGE
C	CONDUIT (GENERIC TERM OF RACEWAY, PROVIDE AS SPECIFIED)
CB	COMBINER BOX
CKT	CIRCUIT
CT	CURRENT TRANSFORMER
CU	COPPER
DC	DIRECT CURRENT
DISC	DISCONNECT SWITCH
DWG	DRAWING
EC	ELECTRICAL SYSTEM INSTALLER
EMT	ELECTRICAL METALLIC TUBING
FS	FUSIBLE SWITCH
FU	FUSE
GND	GROUND
GFI	GROUND FAULT INTERRUPTER
HZ	FREQUENCY (CYCLES PER SECOND)

ABBREVIATIONS CONTINUED

JB	JUNCTION BOX
KMIL	THOUSAND CIRCULAR MILS
kVA	KILO-VOLT AMPERE
KW	KILO-WATT
KWH	KILO-WATT HOUR
L	LINE
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MLO	MAIN LUG ONLY
MTD	MOUNTED
MTG	MOUNTING
N	NEUTRAL
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NO #	NUMBER
NTS	NOT TO SCALE
OCP	OVER CURRENT PROTECTION
P	POLE
PB	PULL BOX
PH	PHASE
PVC	POLY-VINYL CHLORIDE CONDUIT
PWR	POWER
QTY	QUANTITY
RGS	RIGID GALVANIZED STEEL
SN	SOLID NEUTRAL

ABBREVIATIONS CONTINUED

JSWBD	SWITCHBOARD
TYP	TYPICAL
U.O.I.	UNLESS OTHERWISE INDICATED
WP	WEATHERPROOF
XFMR	TRANSFORMER
+72	MOUNT 72 INCHES TO BOTTOM OF ABOVE FINISHED FLOOR OR GRADE

DRAWING INDEX

- T- 001.00 - COVER SHEET
- T- 002.00 - CLIMATIC CHART
- T- 003.00 - TOPOGRAPHICAL SURVEY
- S- 001.00 - ROOF LAYOUT
- S- 002.00 - ELEVATION DRAWING
- S- 003.00 - ELEVATION DRAWING
- S- 004.00 - ELEVATION DRAWING
- S- 005.00 - PANEL LOCATIONS
- S- 006.00 - PANEL LOCATIONS
- E- 001.00 - ELECTRICAL 3-LINE DRAWING

DEPARTMENT OF BUILDING NOTES

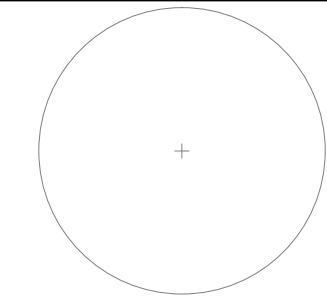
NYC FC504 EXEMPT - PITCH GREATER THAN 5/12
BC 109.3.3
RCNY 5000-01 (H) (IA6) IIA6)
28-116.2.4.2 AND DIRECTIVE 14 OF 1975
RCNY 101-10

PLAN NOTES

1. SCOPE OF WORK IS SOLEY FOR THE INSTALLATION OF THE SOLAR ELECTRONIC GENERATING SYSTEM. ALL OTHER WORK IS NOT TO BE RELIED UPON AS BEING APPROVED AND/OR PERMITTED BY THE DOB

* THE WORK PROPOSED IN THIS APPLICATION IS COMPLIANT WITH THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK CITY
* TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK CITY 2010

Engineer / License Holder:



Issued / Revisions

A1	A5 BUILT	12/2/2016
R2	PLAN SET REVISED / SYSTEM SIZE DECREASE	7/26/2016
R1	SYSTEM SIZE & INVERTER CORRECTED	4/28/2016
P1	ISSUED TO TOWNSHIP FOR PERMIT	4/26/2016

NO.	DESCRIPTION	DATE
-----	-------------	------

Project Title:

CONN, FREDERICK

TRINITY ACCT #: 2016-109963

Project Address:

313 SOUTH 10TH AVENUE
MOUNT VERNON, NY 10550

Drawing Title:

COVER SHEET

Drawing Information

DRAWING DATE:	4/26/2016
DRAWN BY:	MAA
REVISED BY:	JMS

System Information:

TOTAL SYSTEM SIZE:	4.68kW
TOTAL MODULE COUNT:	18
MODULES USED:	TRINA 260
MODULE SPEC #:	TSM-260 PD05.08
UTILITY COMPANY:	CON EDISON
UTILITY ACCT #:	52-2303-0095-003-1
UTILITY METER #:	7773601
DEAL TYPE:	SUNRUN

DWG No:

T-001.00
PAGE: 1 OF 10



2211 Allenwood Road
Wall, New Jersey 07719

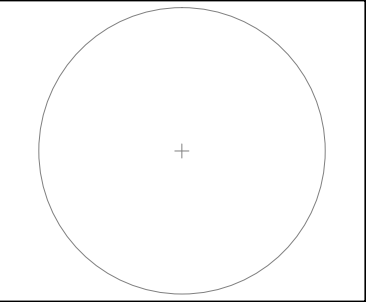
877-797-2978
www.Trinity-Solar.com

NYC DEPT OF BUILDING APPROVAL STAMP

GROUND SNOW LOAD	WIND SPEED (MPH)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMPERATURE	ICE SHIELD UNDERLAYMENT	FLOOD HAZARD
			WEATHERING	FROST LINE	TERMITE			
30 PSF	110	C	SEVERE	42"	MODERATE TO HEAVY	7°F	REQUIRED	*



Engineer / License Holder:



Issued / Revisions		
A1	AS BUILT	12/2/2016
R2	PLAN SET REVISED / SYSTEM SIZE DECREASE	7/26/2016
R1	SYSTEM SIZE & INVERTER CORRECTED	4/28/2016
P1	ISSUED TO TOWNSHIP FOR PERMIT	4/26/2016
NO.	DESCRIPTION	DATE

Project Title:

CONN, FREDERICK
TRINITY ACCT #: 2016-109963

Project Address:

313 SOUTH 10TH AVENUE
MOUNT VERNON, NY 10550

Drawing Title:

CLIMATIC CHART

Drawing Information	
DRAWING DATE:	4/26/2016
DRAWN BY:	MAA
REVISED BY:	JMS

System Information:	
TOTAL SYSTEM SIZE:	4.68kW
TOTAL MODULE COUNT:	18
MODULES USED:	TRINA 260
MODULE SPEC #:	TSM-260 PD05.08
UTILITY COMPANY:	CON EDISON
UTILITY ACCT #:	52-2303-0095-003-1
UTILITY METER #:	7773601
DEAL TYPE:	SUNRUN

DWG No.

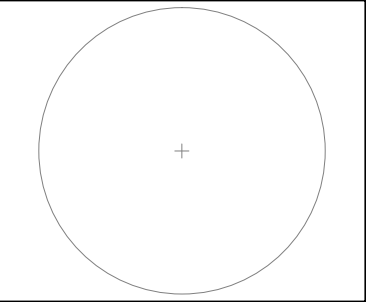
T-002.00

PAGE: 2 OF 10





Engineer / License Holder:



Issued / Revisions		
A1	AS BUILT	12/2/2016
R2	PLAN SET REVISED / SYSTEM SIZE DECREASE	7/26/2016
R1	SYSTEM SIZE & INVERTER CORRECTED	4/28/2016
P1	ISSUED TO TOWNSHIP FOR PERMIT	4/26/2016
NO.	DESCRIPTION	DATE

Project Title:
CONN, FREDERICK
TRINITY ACCT #: 2016-109963

Project Address:
313 SOUTH 10TH AVENUE
MOUNT VERNON, NY 10550

Drawing Title:
TOPOGRAPHICAL
SURVEY

Drawing Information	
DRAWING DATE:	4/26/2016
DRAWN BY:	MAA
REVISED BY:	JMS

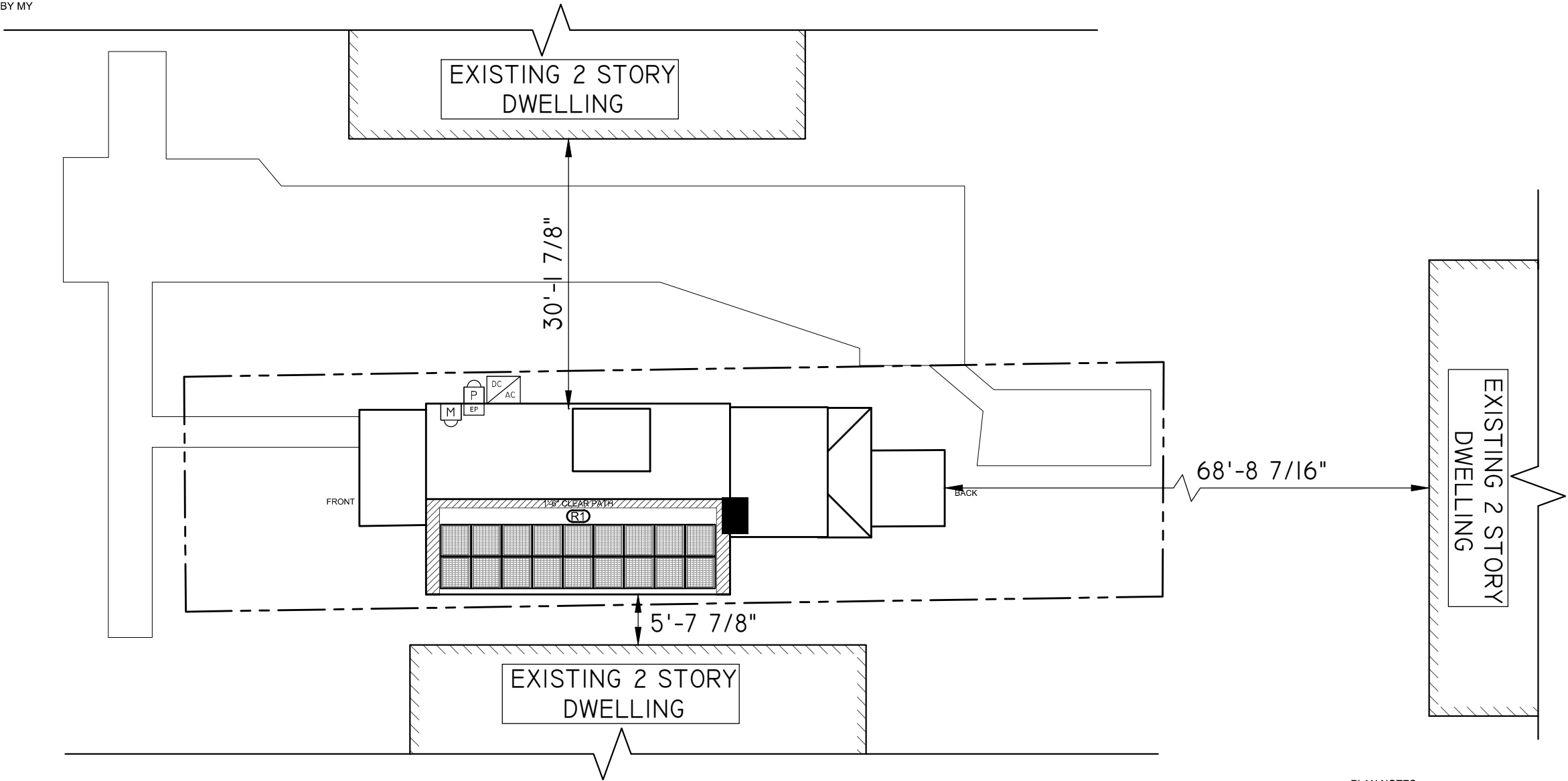
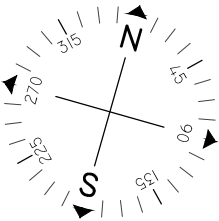
System Information:	
TOTAL SYSTEM SIZE:	4.68kW
TOTAL MODULE COUNT:	18
MODULES USED:	TRINA 260
MODULE SPEC #:	TSM-260 PD05.08
UTILITY COMPANY:	CON EDISON
UTILITY ACCT #:	52-2303-0095-003-1
UTILITY METER #:	7773601
DEAL TYPE:	SUNRUN

DWG No.
T-003.00
PAGE: 3 OF 10



SIZE OF EXISTING RAFTER: 2" x 6"
RAFTER SPACING: 24" o.c.
RAFTER SPAN: 7'-6"
ROOF PITCH R1: 50° (ASPHALT SHINGLE)
EXISTING KNEEWALL
ADDITIONAL SUPPORT PROVIDED: NO
THE EXISTING ROOF RAFTERS AT THIS
RESIDENCE CAN ADEQUATELY SUPPORT
THE PROPOSED SOLAR PV PANEL
ASSEMBLY (5 LBS. PSF) AND THE
SNOW LOADS (30 LBS. PSF) . IN
ADDITION, THE 3" STAINLESS STEEL
LAG SCREWS INSTALLED AT 4' o.c. MEET
THE UPLIFT REQUIREMENTS OF 4 SCREW
MINIMUM PER ASSEMBLY, 6 SCREWS ARE
PROVIDED. THIS INSTALLATION MEETS
THE REQUIREMENTS OF THE RESIDENTIAL
CODE OF NEW YORK STATE AND HAS
BEEN FOUND TO BE ACCEPTABLE BY MY
OFFICE.

RICHARD GORDON, P.E.



NOTES:

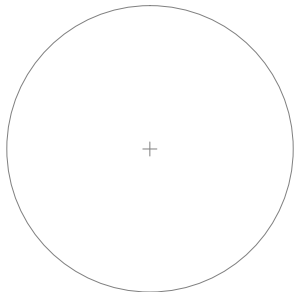
- 1.) ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2.) ALL OUTDOOR EQUIPMENT SHALL BE RAIN TIGHT WITH MINIMUM NEMA 3R RATING.
3.) ALL LOCATIONS ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION.
4.) ROOFTOP SOLAR INSTALLATION ONLY PV ARRAY WILL NOT EXTEND BEYOND THE EXISTING ROOF SURFACES

PLAN NOTES

1. SCOPE OF WORK IS SOLEY FOR THE INSTALLATION OF THE SOLAR ELECTRONIC GENERATING SYSTEM. ALL OTHER WORK IS NOT TO BE RELIED UPON AS BEING APPROVED AND/OR PERMITTED BY THE DOB

ARRAY SCHEDULE		SYMBOL LEGEND				PLUMBING SCHEDULE	EQUIPMENT SCHEDULE	
R1 ARRAY ORIENTATION = 164° MODULE PITCH = 50°	(R1)	INDICATES ROOF DESIGNATION . REFER TO ARRAY SCHEDULE FOR MORE INFORMATION	(D)	INDICATES NEW UTILITY DISCONNECT TO BE INSTALLED OUTSIDE			QTY	SPEC #
	(M)	INDICATES EXISTING METER LOCATION		INDICATES NEW PV SOLAR MODULE. RED MODULES INDICATE PANELS THAT USE MICRO INVERTERS. REFER TO EQUIPMENT SCHEDULE FOR SPECS.			18	TRINA 260 (TSM-260 PD05.08)
	(EP)	INDICATES EXISTING ELECTRICAL PANEL LOCATION: IN THE BASEMENT	(P)	INDICATES NEW PRODUCTION METER TO BE INSTALLED OUTSIDE.			1	SE5000A-US
	A	INDICATES PLUMBING DESIGNATION. REFER TO PLUMBING SCHEDULE FOR DETAILS	DC AC	INDICATES NEW INVERTER TO BE INSTALLED OUTSIDE. REFER TO EQUIPMENT SCHEDULE FOR SPECS.				

Engineer / License Holder:



Issued / Revisions

A1	AS BUILT	12/2/2016
R2	PLAN SET REVISED / SYSTEM SIZE DECREASE	7/26/2016
R1	SYSTEM SIZE & INVERTER CORRECTED	4/28/2016
P1	ISSUED TO TOWNSHIP FOR PERMIT	4/26/2016

NO.	DESCRIPTION	DATE
-----	-------------	------

Project Title:

CONN, FREDERICK

TRINITY ACCT #: 2016-109963

Project Address:

313 SOUTH 10TH AVENUE
MOUNT VERNON, NY 10550

Drawing Title:

ROOF LAYOUT

Drawing Information

DRAWING DATE:	4/26/2016
DRAWN BY:	MAA
REVISED BY:	JMS

System Information:

TOTAL SYSTEM SIZE:	4.68kW
TOTAL MODULE COUNT:	18
MODULES USED:	TRINA 260
MODULE SPEC #:	TSM-260 PD05.08
UTILITY COMPANY:	CON EDISON
UTILITY ACCT #:	52-2303-0095-003-1
UTILITY METER #:	7773601
DEAL TYPE:	SUNRUN

DWG No.

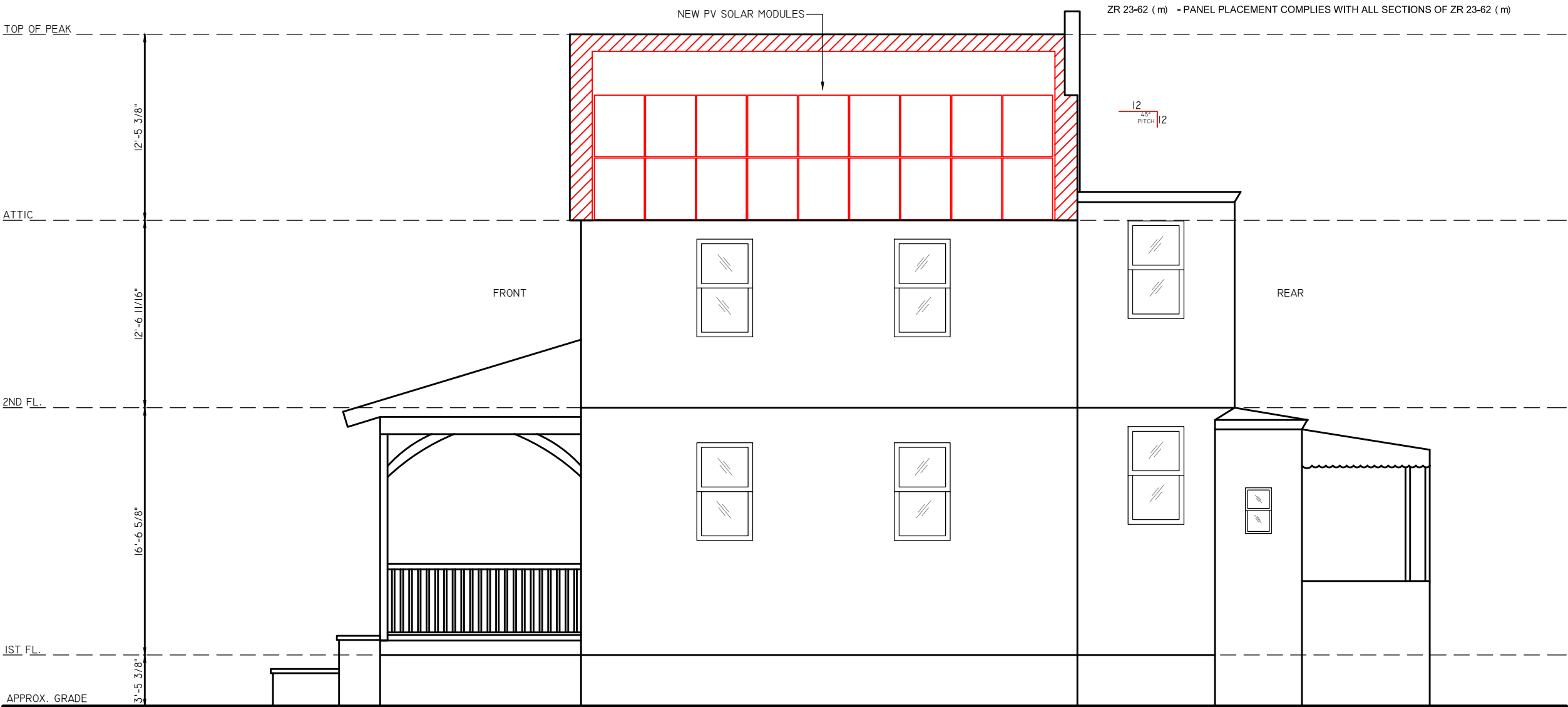
S-001.00

PAGE: 4 OF 10



2211 Allenwood Road
Wall, New Jersey 07719
877-797-2978
www.Trinity-Solar.com

NYC DEPT OF BUILDING APPROVAL STAMP



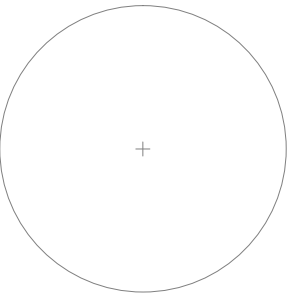
SOUTH ELEVATION
SCALE: 1/8"=1'-0"

PLAN NOTES

- SCOPE OF WORK IS SOLEY FOR THE INSTALLATION OF THE SOLAR ELECTRONIC GENERATING SYSTEM. ALL OTHER WORK IS NOT TO BE RELIED UPON AS BEING APPROVED AND/OR PERMITTED BY THE DOB

NYC DEPT OF BUILDING APPROVAL STAMP

Engineer / License Holder:



Issued / Revisions

NO.	DESCRIPTION	DATE
A1	AS BUILT	12/2/2016
R2	PLAN SET REVISED / SYSTEM SIZE DECREASE	7/26/2016
R1	SYSTEM SIZE & INVERTER CORRECTED	4/28/2016
P1	ISSUED TO TOWNSHIP FOR PERMIT	4/26/2016

Project Title:

CONN, FREDERICK
TRINITY ACCT #: 2016-109963

Project Address:

313 SOUTH 10TH AVENUE
MOUNT VERNON, NY 10550

Drawing Title:

ELEVATION DRAWING

Drawing Information

DRAWING DATE:	4/26/2016
DRAWN BY:	MAA
REVISED BY:	JMS

System Information:

TOTAL SYSTEM SIZE:	4.68kW
TOTAL MODULE COUNT:	18
MODULES USED:	TRINA 260
MODULE SPEC #:	TSM-260 PD05.08
UTILITY COMPANY:	CON EDISON
UTILITY ACCT #:	52-2303-0095-003-1
UTILITY METER #:	7773601
DEAL TYPE:	SUNRUN


DWG No.

S-002.00
PAGE: 5 OF 10



2211 Allenwood Road
Wall, New Jersey 07719
877-797-2978
www.Trinity-Solar.com



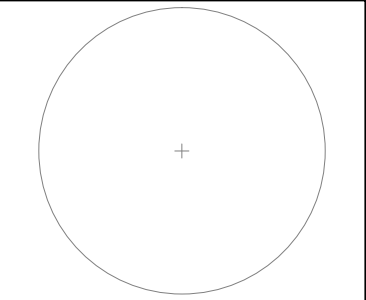
 SOUTHWEST ELEVATION
SCALE: 1/8"=1'-0"

PLAN NOTES

1. SCOPE OF WORK IS SOLEY FOR THE INSTALLATION OF THE SOLAR ELECTRONIC GENERATING SYSTEM. ALL OTHER WORK IS NOT TO BE RELIED UPON AS BEING APPROVED AND/OR PERMITTED BY THE DOB

NYC DEPT OF BUILDING APPROVAL STAMP

Engineer / License Holder:



Issued / Revisions		
A1	AS BUILT	12/2/2016
R2	PLAN SET REVISED / SYSTEM SIZE DECREASE	7/26/2016
R1	SYSTEM SIZE & INVERTER CORRECTED	4/28/2016
P1	ISSUED TO TOWNSHIP FOR PERMIT	4/26/2016
NO.	DESCRIPTION	DATE

Project Title:

CONN, FREDERICK
TRINITY ACCT #: 2016-109963

Project Address:

313 SOUTH 10TH AVENUE
MOUNT VERNON, NY 10550

Drawing Title:

ELEVATION DRAWING

Drawing Information	
DRAWING DATE:	4/26/2016
DRAWN BY:	MAA
REVISED BY:	JMS

System Information:	
TOTAL SYSTEM SIZE:	4.68kW
TOTAL MODULE COUNT:	18
MODULES USED:	TRINA 260
MODULE SPEC #:	TSM-260 PD05.08
UTILITY COMPANY:	CON EDISON
UTILITY ACCT #:	52-2303-0095-003-1
UTILITY METER #:	7773601
DEAL TYPE:	SUNRUN

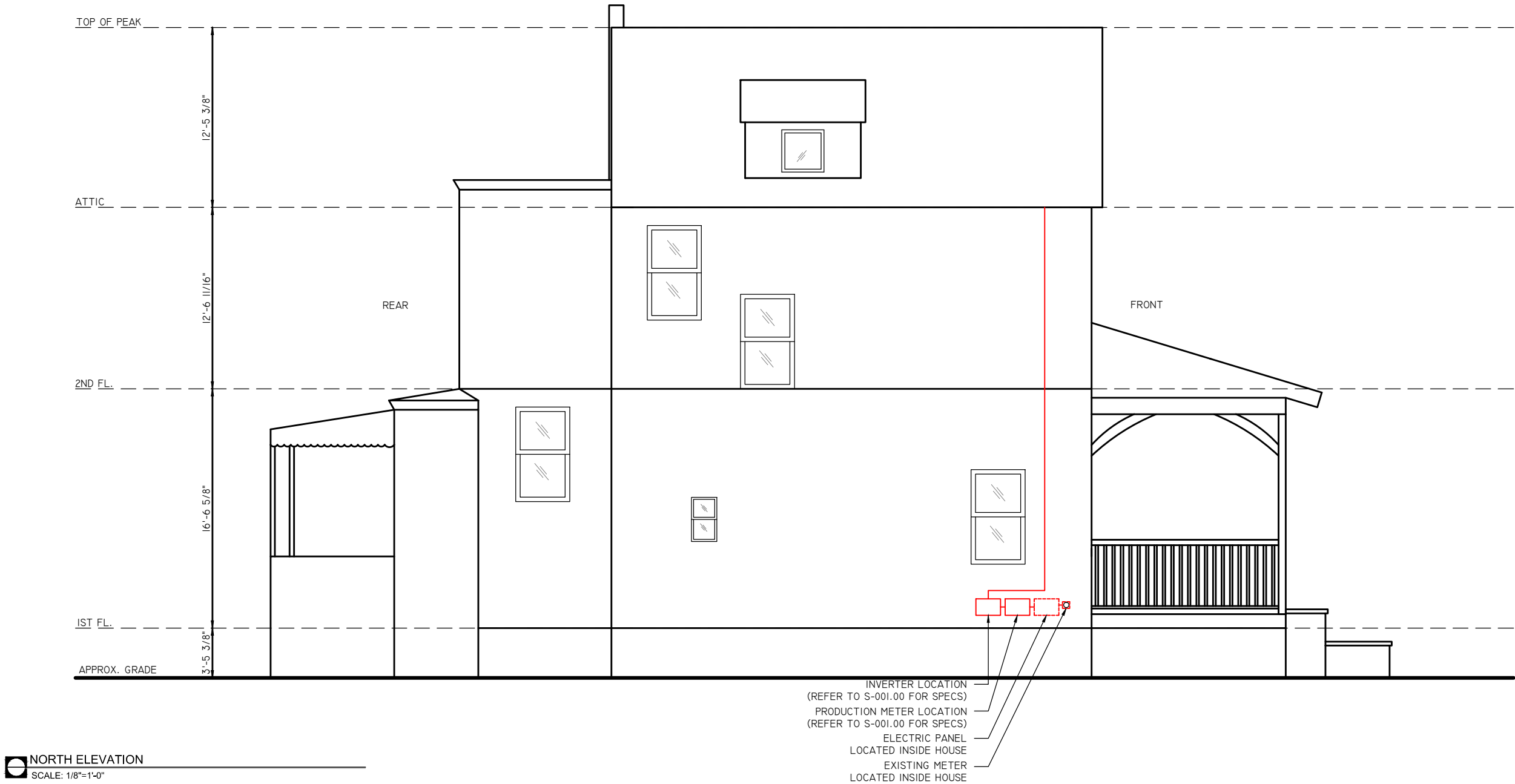
DWG No.

S-003.00
PAGE: 6 OF 10



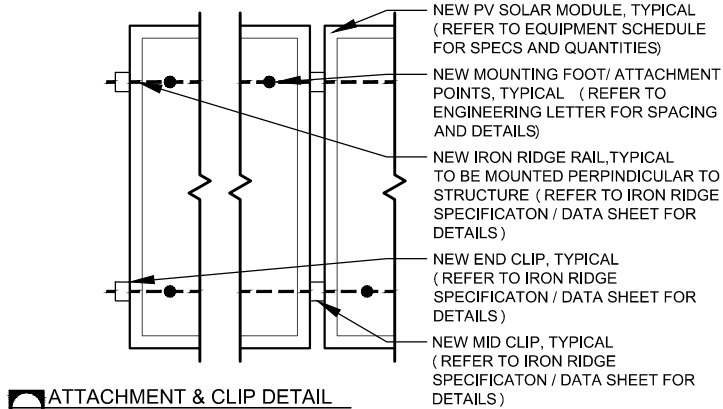
2211 Allenwood Road
Wall, New Jersey 07719

877-797-2978
www.Trinity-Solar.com

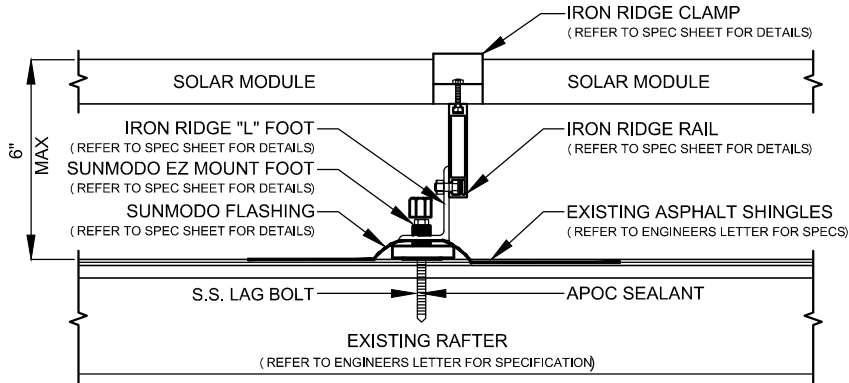


NORTH ELEVATION
SCALE: 1/8"=1'-0"

NOTES : *REFER TO MODULE SPECS FOR MODULE DIMENSIONS
*DEPICTED MODULES MAY BE PORTRAIT OR LANDSCAPE



ATTACHMENT & CLIP DETAIL
SCALE: NOT TO SCALE



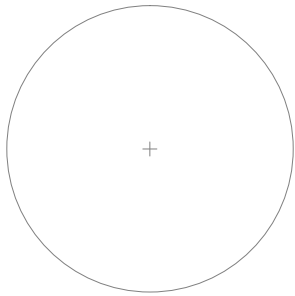
PV MODULE ATTACHMENT ON ASPHALT SHINGLE ROOF
SCALE: NOT TO SCALE

PLAN NOTES

- SCOPE OF WORK IS SOLEY FOR THE INSTALLATION OF THE SOLAR ELECTRONIC GENERATING SYSTEM. ALL OTHER WORK IS NOT TO BE RELIED UPON AS BEING APPROVED AND/OR PERMITTED BY THE DOB

NYC DEPT OF BUILDING APPROVAL STAMP

Engineer / License Holder:



Issued / Revisions

NO.	DESCRIPTION	DATE
A1	AS BUILT	12/2/2016
R2	PLAN SET REVISED / SYSTEM SIZE DECREASE	7/26/2016
R1	SYSTEM SIZE & INVERTER CORRECTED	4/28/2016
P1	ISSUED TO TOWNSHIP FOR PERMIT	4/26/2016

Project Title:

CONN, FREDERICK
TRINITY ACCT #: 2016-109963

Project Address:

313 SOUTH 10TH AVENUE
MOUNT VERNON, NY 10550

Drawing Title:

ELEVATION DRAWING

Drawing Information

DRAWING DATE:	4/26/2016
DRAWN BY:	MAA
REVISED BY:	JMS

System Information:

TOTAL SYSTEM SIZE:	4.68kW
TOTAL MODULE COUNT:	18
MODULES USED:	TRINA 260
MODULE SPEC #:	TSM-260 PD05.08
UTILITY COMPANY:	CON EDISON
UTILITY ACCT #:	52-2303-0095-003-1
UTILITY METER #:	7773601
DEAL TYPE:	SUNRUN

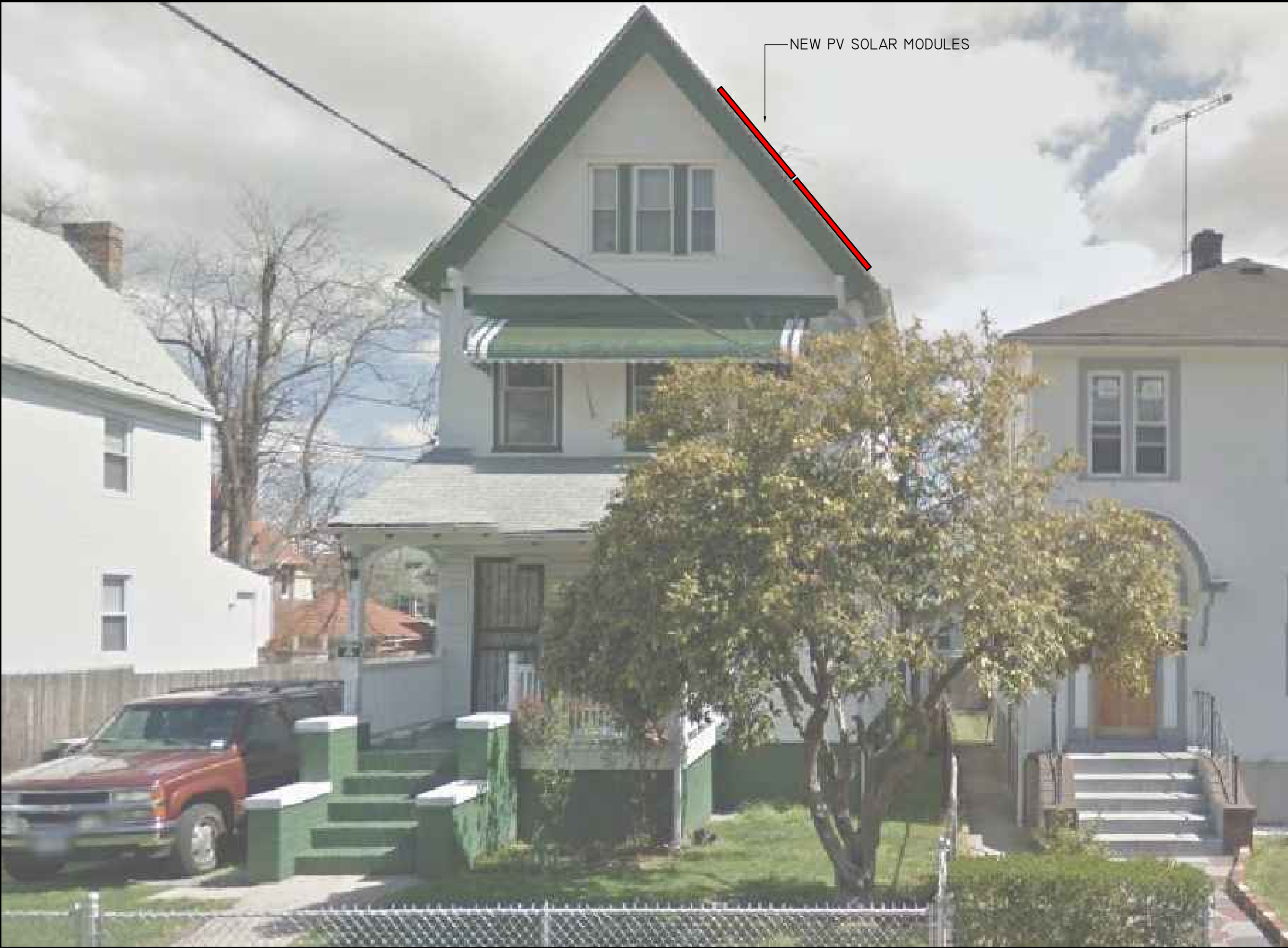
DWG No.

S-004.00
PAGE: 7 OF 10



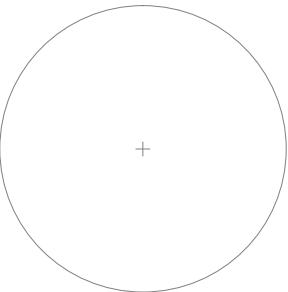
2211 Allenwood Road
Wall, New Jersey 07719

877-797-2978
www.Trinity-Solar.com



NEW PV SOLAR MODULES

Engineer / License Holder:



Issued / Revisions

A1	AS BUILT	12/2/2016
R2	PLAN SET REVISED / SYSTEM SIZE DECREASE	7/26/2016
R1	SYSTEM SIZE & INVERTER CORRECTED	4/28/2016
P1	ISSUED TO TOWNSHIP FOR PERMIT	4/26/2016

NO.	DESCRIPTION	DATE
-----	-------------	------

Project Title:

CONN, FREDERICK
TRINITY ACCT #: 2016-109963

Project Address:

313 SOUTH 10TH AVENUE
MOUNT VERNON, NY 10550

Drawing Title:

PANEL
LOCATIONS

Drawing Information

DRAWING DATE:	4/26/2016
DRAWN BY:	MAA
REVISED BY:	JMS

System Information:

TOTAL SYSTEM SIZE:	4.68kW
TOTAL MODULE COUNT:	18
MODULES USED:	TRINA 260
MODULE SPEC #:	TSM-260 PD05.08
UTILITY COMPANY:	CON EDISON
UTILITY ACCT #:	52-2303-0095-003-1
UTILITY METER #:	7773601
DEAL TYPE:	SUNRUN

DWG No.

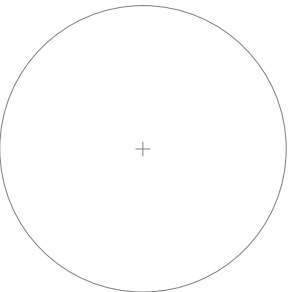
S-005.00
PAGE: 8 OF 10





NEW PV SOLAR MODULES

Engineer / License Holder:



Issued / Revisions

A1	AS BUILT	12/2/2016
R2	PLAN SET REVISED / SYSTEM SIZE DECREASE	7/26/2016
R1	SYSTEM SIZE & INVERTER CORRECTED	4/28/2016
P1	ISSUED TO TOWNSHIP FOR PERMIT	4/26/2016

NO.	DESCRIPTION	DATE
-----	-------------	------

Project Title:

CONN, FREDERICK
TRINITY ACCT #: 2016-109963

Project Address:

313 SOUTH 10TH AVENUE
MOUNT VERNON, NY 10550

Drawing Title:

PANEL
LOCATIONS

Drawing Information

DRAWING DATE:	4/26/2016
DRAWN BY:	MAA
REVISED BY:	JMS

System Information:

TOTAL SYSTEM SIZE:	4.68kW
TOTAL MODULE COUNT:	18
MODULES USED:	TRINA 260
MODULE SPEC #:	TSM-260 PD05.08
UTILITY COMPANY:	CON EDISON
UTILITY ACCT #:	52-2303-0095-003-1
UTILITY METER #:	7773601
DEAL TYPE:	SUNRUN

DWG No.

S-006.00
PAGE: 9 OF 10



SOLAR MODULES MOUNTED TO ROOF ON 1 ARRAY
18 - 260W MODULES W/ 1 SOLAR EDGE P300 PER MODULE
18.75 ADC MAX PER STRING

1 STRING OF 18 MODULES IN SERIES - 350 Vmax

*TERMINATED INSIDE INVERTER 1

ARRAY CIRCUIT WIRING NOTES

1.) LICENSED ELECTRICIAN ASSUMES ALL RESPONSIBILITY FOR DETERMINING ONSITE CONDITIONS AND EXECUTING INSTALLATION IN ACCORDANCE WITH NEC 2014

2.) LOWEST EXPECTED AMBIENT TEMPERATURE BASED ON ASHRAE MINIMUM MEAN EXTREME DRY BULB TEMPERATURE FOR ASHRAE LOCATION MOST SIMILAR TO INSTALLATION LOCATION. LOWEST EXPECTED AMBIENT TEMP = -16°C

3.) HIGHEST CONTINUOUS AMBIENT TEMPERATURE BASED ON ASHRAE HIGHEST MONTH 2% DRY BULB TEMPERATURE FOR ASHRAE LOCATION MOST SIMILAR TO INSTALLATION LOCATION. HIGHEST CONTINUOUS TEMP = 33°C

4.) 2005 ASHRAE FUNDAMENTALS 2% DESIGN TEMPERATURES DO NOT EXCEED 47°C IN THE UNITED STATES (PALM SPRINGS, CA IS 44.1°C). FOR LESS THAN 9 CURRENT-CARRYING CONDUCTORS IN A ROOF-MOUNTED SUNLIT CONDUIT AT LEAST 0.5" ABOVE ROOF AND USING THE OUTDOOR DESIGN TEMPERATURE OF 47°C OR LESS (ALL OF UNITED STATES)

5.) PHOTOVOLTAIC POWER SYSTEMS SHALL BE PERMITTED TO OPERATE WITH UNGROUNDED PHOTOVOLTAIC SOURCE AND OUTPUT CIRCUIT AS PER NEC 690.35

6.) ALL EQUIPMENT INSTALLED OUTDOORS SHALL HAVE A NEMA 3R RATING

7.) ALL SOLAR SYSTEM LOAD CENTERS TO CONTAIN ONLY GENERATION CIRCUITS AND NO UNUSED POSITIONS OR LOADS

8.) PV SYSTEM CIRCUITS INSTALLED ON OR IN BUILDINGS SHALL INCLUDE A RAPID SHUTDOWN FUNCTION THAT CONTROLS SPECIFIC CONDUCTORS IN ACCORDANCE WITH NEC 690.12(1) THROUGH (5)

CALCULATIONS FOR CURRENT CARRYING CONDUCTORS

REQUIRED CONDUCTOR AMPACITY PER STRING

[NEC 690.8(B)(1)]: (15.00*1.25)1 = 18.75A

AWG #10, DERATED AMPACITY
AMBIENT TEMP: 55°C, TEMP DERATING FACTOR: .76
RACEWAY DERATING = 2 CCC: 1.00
(40*.76)1.00 = 30.40A

30.40A ≥ 18.75A, THEREFORE WIRE SIZE IS VALID

TOTAL AC REQUIRED CONDUCTOR AMPACITY
23.00A*1.25 = 28.75A

AWG #10, DERATED AMPACITY
AMBIENT TEMP: 30°C, TEMP DERATING: 1.0
RACEWAY DERATING ≤ 3 CCC: N/A
40A*1.0 = 40A

40A ≥ 28.75A, THEREFORE AC WIRE SIZE IS VALID

CALCULATION FOR PV OVERCURRENT PROTECTION

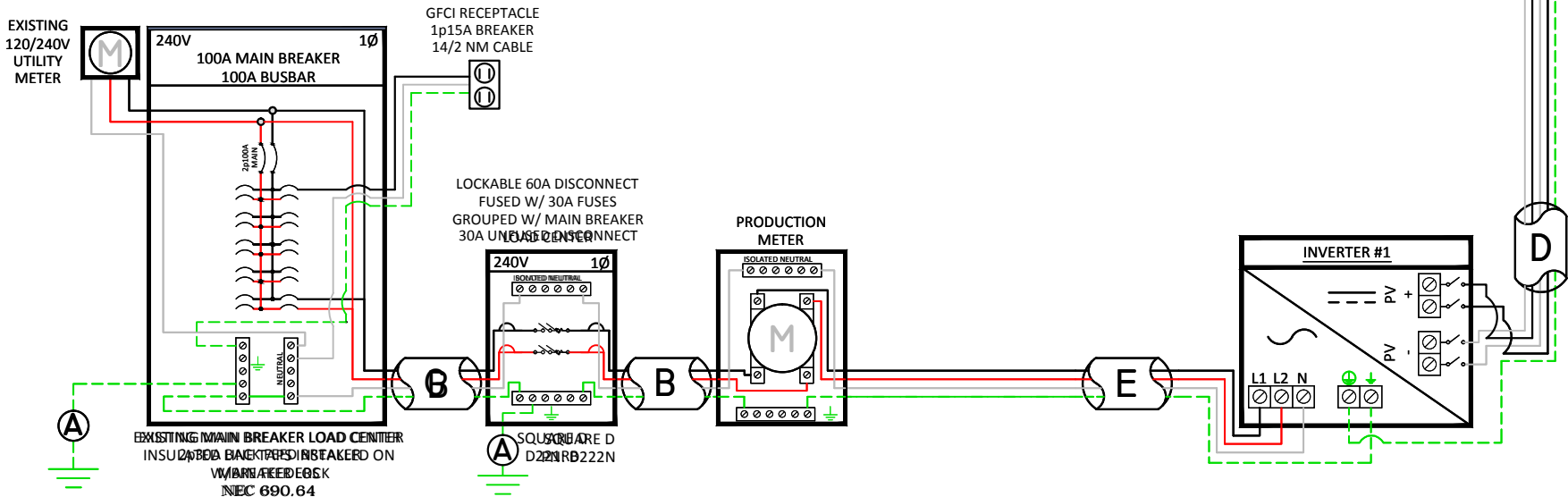
TOTAL INVERTER CURRENT: 23.00A

23.00A*1.25 = 28.75A

--> 30A OVERCURRENT PROTECTION IS VALID

PV MODULE SPECIFICATIONS	
TRINA 260 (TSM-260 PD05.08)	
Imp	8.5
Vmp	30.6
Voc	38.2
Isc	9

INVERTER #1 - SE5000A-US			
DC		AC	
Imp	13.37	Pout	5000
Vmp	350	Iout	23
Voc	500	Imax	28.75
Isc	15	Vnom	240



PLAN NOTES

- SCOPE OF WORK IS SOLEY FOR THE INSTALLATION OF THE SOLAR ELECTRONIC GENERATING SYSTEM. ALL OTHER WORK IS NOT TO BE RELIED UPON AS BEING APPROVED AND/OR PERMITTED BY THE DOB

A	#6 THWN-2 GEC TO EXISTING GROUND ROD
B	3/4" EMT W/ 3-#10 THWN-2, 1-#10 THWN-2 GROUND
C	3/4" EMT W/ 2-#10 THWN-2, 1-#10 THWN-2 GROUND
D	3/4" EMT W/ 2-#10 THWN-2, 1-#10 THWN-2 GROUND
E	3/4" EMT W/ 3-#10 THWN-2, 1-#10 THWN-2 GROUND
F	#12 PV WIRE W/ #6 BARE COPPER BOND TO ARRAY
G	3/4" FMC W/ 3-#6 THWN-2, 1-#8 THWN-2 GROUND

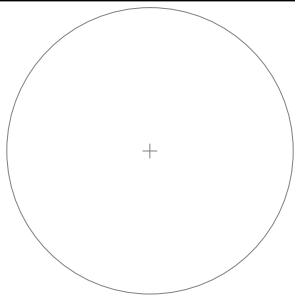
FC 504.4.7 - ALL CONDUITS AND PIPING INSTALLATIONS SHALL BE COLOR-CODED WITH CONTINUOUS, DURABLE, AND WEATHERPROOF REFLECTIVE OR LUMINESCENT MARKINGS AS FOLLOWS, AND FOR CONDUIT AND PIPING INSTALLED AFTER JULY 1, 2014, SHALL BE CONTINUOUSLY LABELED IN AN APPROVED MANNER TO INDICATES ITS CONTENTS:

- HIGH VOLTAGE WIRING - RED
- LOW VOLTAGE WIRING - ORANGE
- NATURAL GAS PIPING - YELLOW

FC 512.4.2 - INDOOR AND OUTDOOR DIRECT CURRENT CONDUIT, ENCLOSURE, RACEWAYS, CABLE ASSEMBLIES, JUNCTION BOXES, COMBINER BOXES, AND MAIN SERVICE AND OTHER DISCONNECTS SHALL HAVE DURABLE, RETOREFLECTIVE, AND, IF OUTDOORS, WEATHERPROOF, MARKINGS, IN WHITE CAPITAL LETTERS WITH A HEIGHT OF NOT LESS THAN 8/16 INCH (9.5 MM) ON A RED BACKGROUND, READING "WARNING: PHOTOVOLTAIC POWER SOURCE."

NYC DEPT OF BUILDING APPROVAL STAMP

Engineer / License Holder:



Issued / Revisions

A1	AS BUILT	12/2/2016
R2	PLAN SET REVISED / SYSTEM SIZE DECREASE	7/26/2016
R1	SYSTEM SIZE & INVERTER CORRECTED	4/28/2016
P1	ISSUED TO TOWNSHIP FOR PERMIT	4/26/2016
NO.	DESCRIPTION	DATE

Project Title:

CONN, FREDERICK

TRINITY ACCT #: 2016-109963

Project Address:

313 SOUTH 10TH AVENUE
MOUNT VERNON, NY 10550

Drawing Title:

ELECTRICAL 3-LINE
DRAWING

Drawing Information

DRAWING DATE:	4/26/2016
DRAWN BY:	MAA
REVISED BY:	JMS

System Information:

TOTAL SYSTEM SIZE:	4.68kW
TOTAL MODULE COUNT:	18
MODULES USED:	TRINA 260
MODULE SPEC #:	TSM-260 PD05.08
UTILITY COMPANY:	CON EDISON
UTILITY ACCT #:	52-2303-0095-003-1
UTILITY METER #:	7773601
DEAL TYPE:	SUNRUN

DWG No.

E-001.00

PAGE: 10 OF 10



2211 Allenwood Road
Wall, New Jersey 07719

877-797-2978
www.Trinity-Solar.com