

GENERAL NOTES

- 1.1.1 **PROJECT NOTES**
- 1.1.2 THIS PHOTOVOLTAIC (PV) SYSTEM SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (NEC) ARTICLE 690, ALL MANUFACTURER'S LISTING AND INSTALLATION INSTRUCTIONS AND THE RELEVANT CODES AS SPECIFIED BY THE AUTHORITY HAVING JURISDICTION (AHJ) APPLICABLE CODES.
- 1.1.3 THE UTILITY INTERCONNECTION APPLICATION MUST BE APPROVED AND PV SYSTEM INSTALLED PRIOR TO PARALLEL OPERATION.
- 1.1.4 GROUND FAULT DETECTION AND INTERRUPTION (GFDI) DEVICE IS INTEGRATED WITH THE MICROINVERTER IN ACCORDANCE WITH NEC 690.4 & NEC 690.5(A).
- 1.1.5 ALL PV SYSTEM COMPONENTS: MODULES, UTILITY-INTERACTIVE INVERTERS, AND SOURCE CIRCUIT COMBINER BOXES ARE IDENTIFIED AND LISTED FOR USE IN PHOTOVOLTAIC SYSTEMS AS REQUIRED BY NEC 690.4 & NEC 690.5(A).
- 1.1.6 PV MODULES: UL1703 (60/72V) AND (60/72V) AND VPPA TO CLASS C FIRE INVERTERS: UL1741 CERTIFIED IEEE 1547 AND 1547.819 COMBINER BOXES: UL 773 OR UL 1741 ACCESSORY.
- 1.1.6 WAK DC VOLTAGE CALCULATED USING MANUFACTURER PROVIDED TEMP COEFFICIENT FOR VOC IF UNAVAILABLE, WAK DC VOLTAGE CALCULATED ACCORDING TO NEC 690.7.
- 1.1.7 ALL INVERTERS, PHOTOVOLTAIC MODULES, PHOTOVOLTAIC PANELS, AND SOURCE CIRCUIT COMBINERS INTENDED FOR USE IN A PHOTOVOLTAIC POWER SYSTEM WILL BE IDENTIFIED AND LISTED FOR THE APPLICATION PER 690.4 (D). SHALL BE INSTALLED ACCORDING TO ANY INSTRUCTIONS FROM LISTING OR LABELING NEC 110.1(S).
- 1.1.8 ALL SIGNAGE TO BE PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE IF EXPOSED TO SUNLIGHT IT SHALL BE UV RESISTANT. ALL PLACARDS AND SIGNAGE WILL BE INSTALLED AS REQUIRED BY THE NEC AND AHJ.
- 1.2.1 **SCOPE OF WORK**
- 1.2.2 PRIME CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND SPECIFICATIONS OF THE PROPOSED PHOTOVOLTAIC SYSTEM RETROFIT. PRIME CONTRACTOR WILL BE RESPONSIBLE FOR COLLECTING EXISTING ON-SITE REQUIREMENTS TO DESIGN SPECIFY AND INSTALL THE EXTERIOR ROOF-MOUNTED PORTION OF THE PHOTOVOLTAIC SYSTEMS DETAILED IN THIS DOCUMENT.
- 1.3.1 **WORK INCLUDES**
- 1.3.2 PV ATTACHMENTS - GROUND MOUNT
- 1.3.3 PV RACKING SYSTEM INSTALLATION - IRON/STEEL JOB
- 1.3.4 PV MODULE AND INVERTER INSTALLATION - SOL-GEL-P670H-335 - FRONLUS PRIMO 15.0-1 (24V)
- 1.3.5 PV EQUIPMENT GROUNDING
- 1.3.6 PV SYSTEM WIRING TO A ARRAY-MOUNTED JUNCTION BOX
- 1.3.7 PV LOAD CENTERS (IF INCLUDED)
- 1.3.8 PV WETERMINATION MONITORING (IF INCLUDED)
- 1.3.9 PV DISCONNECTS
- 1.3.10 PV GROUNDING ELECTRODE & BONDING TO (E) GEC
- 1.3.11 PV FINAL COMMISSIONING
- 1.3.12 (S) ELECTRICAL EQUIPMENT RETROFIT FOR PV
- 1.3.13 SIGNAGE PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE

SCOPE OF WORK

SYSTEM SIZE

STD 40 X 335W + 13.400kW

PTC 40 X 334W + 12.76kW DC

(40) SOL-GEL-P670H-335

(1) FRONLUS PRIMO 15.0-1 (24V)

ATTACHMENT TYPE: GROUND MOUNT

WSP UPGRADE: NO

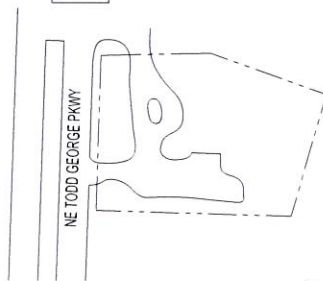
NEW PV SYSTEM: 13.400 kWp

SCIRE RESIDENCE

1201 NE TODD GEORGE PKWY
LEE'S SUMMIT, MO 64086
ASSESSOR'S #: 52710050800000000



01 AERIAL PHOTO
NOT TO SCALE



02 PLAT MAP
NOT TO SCALE

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
T-001	COVER PAGE
S-001	NOTES
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A-103	SOLAR ATTACHMENT PLAN
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E-602	DESIGN TABLES
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E-604	ASSEMBLY DETAILS
R-001	RESOURCE DOCUMENT
R-002	RESOURCE DOCUMENT
R-003	RESOURCE DOCUMENT
R-004	RESOURCE DOCUMENT
R-005	RESOURCE DOCUMENT

PROJECT INFORMATION

OWNER
NAME: VINCENT SCIRE

PROJECT MANAGER
NAME: JACOB HORN
PHONE: 417-689-9881

CONTRACTOR
NAME: ARROWPOINT ENERGY & SOLAR
PHONE: 417-689-0124

AUTHORITIES HAVING JURISDICTION
BUILDING: JACKSON COUNTY
ZONING: JACKSON COUNTY
UTILITY: KOP&L

DESIGN SPECIFICATIONS
OCCUPANCY: II
CONSTRUCTION: SINGLE-FAMILY
ZONING: RESIDENTIAL
GROUND-SNOW LOAD: 20 PSF
WIND EXPOSURE: C
WIND SPEED: 115 MPH

APPLICABLE CODES & STANDARDS
BUILDING: IRC 2012 IFC 2012
ELECTRICAL: NEC 2011
FIRE: IFC 2012

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CONTRACTOR

ARROWPOINT ENERGY & SOLAR

PHONE: 417-689-0124
ADDRESS: 2241 E. BENNETT
SPRINGFIELD, MO 65804

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COVER PAGE

DATE: 3/9/2019

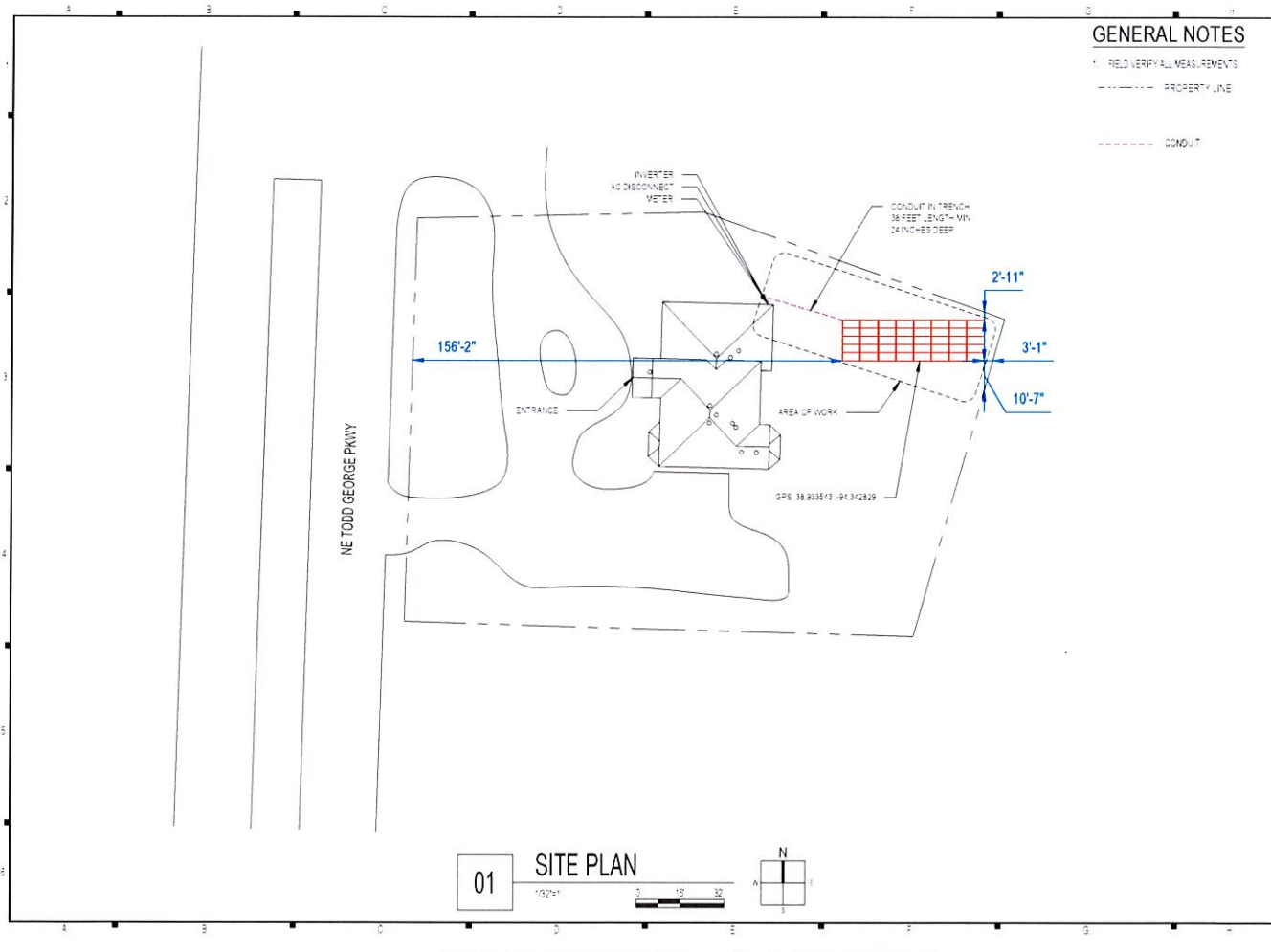
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CHECKED BY: V.M.

REVISIONS

T-001.00

(SHEET 1)



GENERAL NOTES

1. FIELD VERIFY ALL MEASUREMENTS

----- PROPERTY LINE

----- CONDUIT

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SITE PLAN

DATE: 3/9/2019

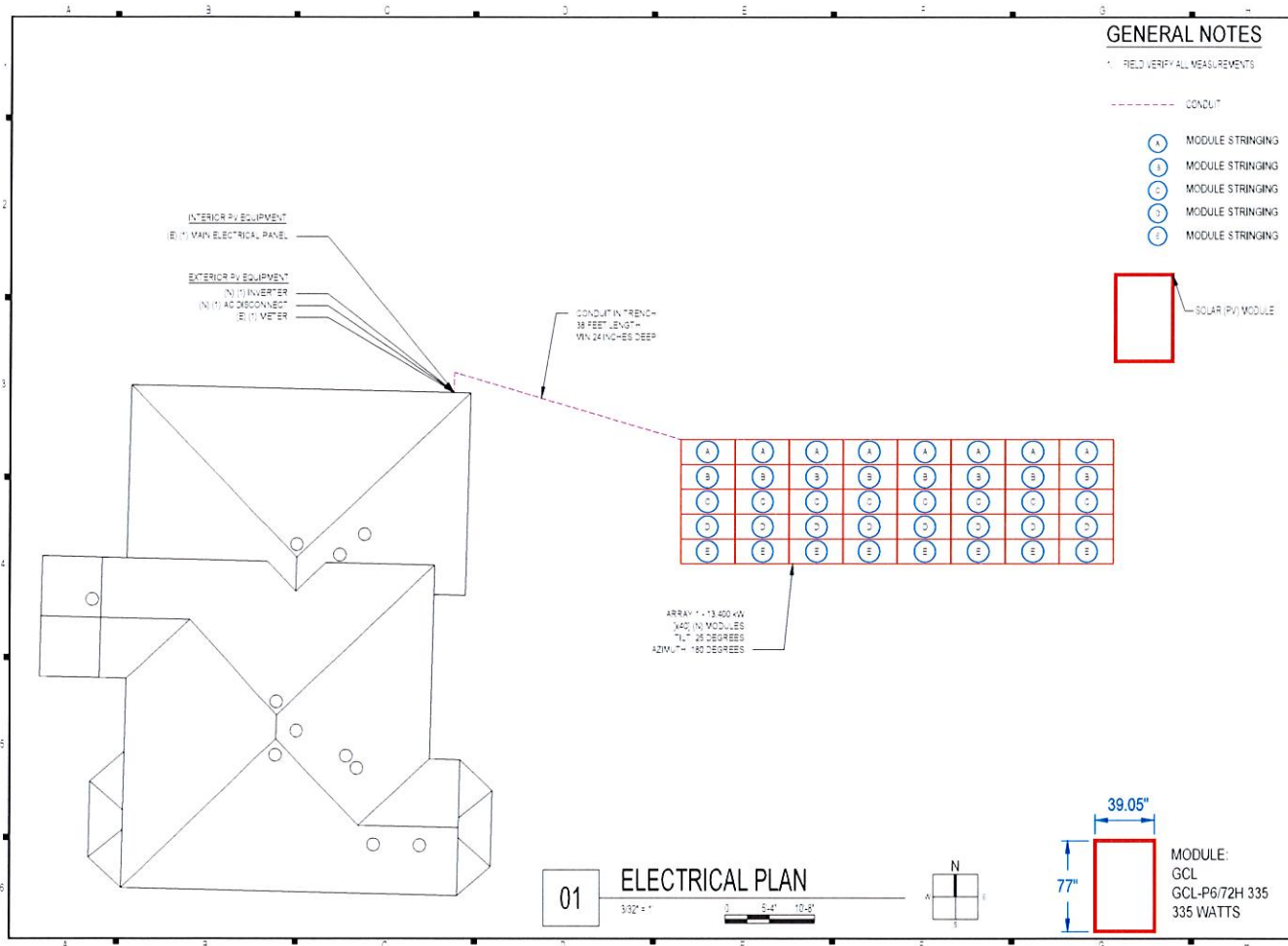
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ELECTRICAL PLAN

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(SHEET 4)

GENERAL NOTES

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PAPER SIZE: 11" x 17" (ANSI B)

SOLAR ATTACHMENT PLAN

DATE: 3/9/2019

DESIGN BY: V.D.

CHECKED BY: V.V.

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(SHEET 1)

GROUND MOUNT SOLAR SYSTEM (SEE SHEET
S-601 FOR MOUNTING DETAILS)

LFO CLAMP

TOP CAP

RAIL CONNECTOR

9'-0"

10'-10"

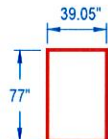
51'-6"

01

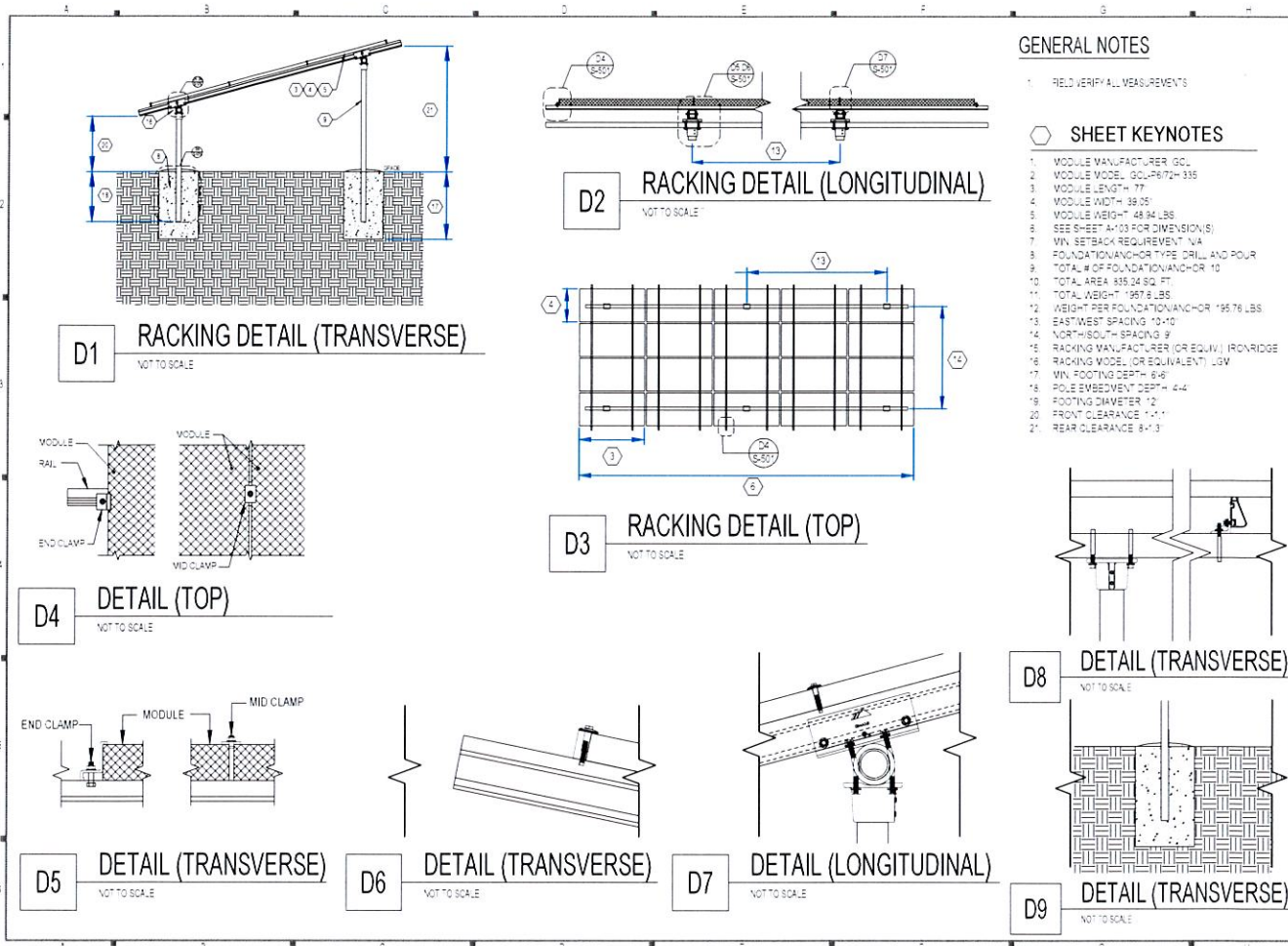
SOLAR ATTACHMENT PLAN

3'-6" x 1'

0 2'-6" 5'-4"



MODULE:
GCL
GCL-P6/72H 335
335 WATTS



GENERAL NOTES

1. FIELD VERIFY ALL MEASUREMENTS

SHEET KEYNOTES

1. MODULE MANUFACTURER: GCL
2. MODULE MODEL: GCL-P672H-335
3. MODULE LENGTH: 77"
4. MODULE WIDTH: 39.05"
5. MODULE WEIGHT: 48.94 LBS
6. SEE SHEET A-103 FOR DIMENSION(S)
7. WIN. SETBACK REQUIREMENT: NA
8. FOUNDATION/ANCHOR TYPE: DRILL AND POUR
9. TOTAL # OF FOUNDATION/ANCHOR: 10
10. TOTAL AREA: 835.24 SQ. FT.
11. TOTAL WEIGHT: 1967.6 LBS
12. WEIGHT PER FOUNDATION/ANCHOR: 196.76 LBS
13. EAST/WEST SPACING: 10'-10"
14. NORTH/SOUTH SPACING: 9'
15. RACKING MANUFACTURER (OR EQUIV.): IRONRIDGE
16. RACKING MODEL (OR EQUIV.): LGW
17. WIN. FOOTING DEPTH: 6'-6"
18. POLE EMBEDMENT DEPTH: 4'-4"
19. FOOTING DIAMETER: 12"
20. FRONT CLEARANCE: 1'-11"
21. REAR CLEARANCE: 8'-13"

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PAPER SIZE: 11" x 17" (ANSI B)

ASSEMBLY DETAILS

DATE: 8/9/2019

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(8-1517-R)



Ground Mount System



Mount on all terrains, in no time.

The IronRidge Ground Mount System combines our XR1000 rails with locally-sourced steel pipes or mechanical tubing, to create a cost-effective structure capable of handling any site or terrain challenge. Installation is simple with only a few structural components and no drilling, welding, or heavy machinery required. In addition, the system works with a variety of foundation options, including concrete piers and driven piles.



Rugged Construction

Engineered steel and aluminum components ensure durability.



UL 2703 Listed System

Meets newest effective UL 2703 standard.



Flexible Architecture

Multiple foundation and array configuration options.



PE Certified

Pre-stamped engineering letters available in most states.



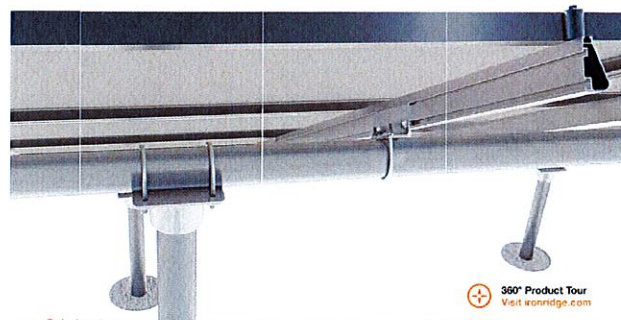
Design Software

Online tool generates engineering values and bill of materials.



20-Year Warranty

Twice the protection offered by competitors.



360° Product Tour
Visit ironridge.com

Substructure

Top Caps



Connect vertical and cross pipes.

Bonded Rail Connectors



Attach and bond Rail Assembly to cross pipes.

Diagonal Braces



Optional Brace provides additional support.

Cross Pipe & Piers



Steel pipes or mechanical tubing for substructure.

Rail Assembly

XR1000 Rails



Curved rails increase spanning capabilities.

UFOs



Universal Fastening Objects bond modules to rails.

Stopper Sleeves



Snap onto the UFO to turn into a bonded and clamp.

Accessories



Wire Clips and End Clips provide a finished look.

Resources



Design Assistant

Go from rough layout to fully engineered system. For free. Go to ironridge.com/design



NABCEP Certified Training

Earn free continuing education credits while learning more about our systems. Go to ironridge.com/training

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NEW PV SYSTEM 13.400 kWp

SCIRE RESIDENCE

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ENGINEER OF RECORD

PAPER 3025 11' x 17" (ANSI)

RESOURCE DOCUMENT

DATE 3/9/2019

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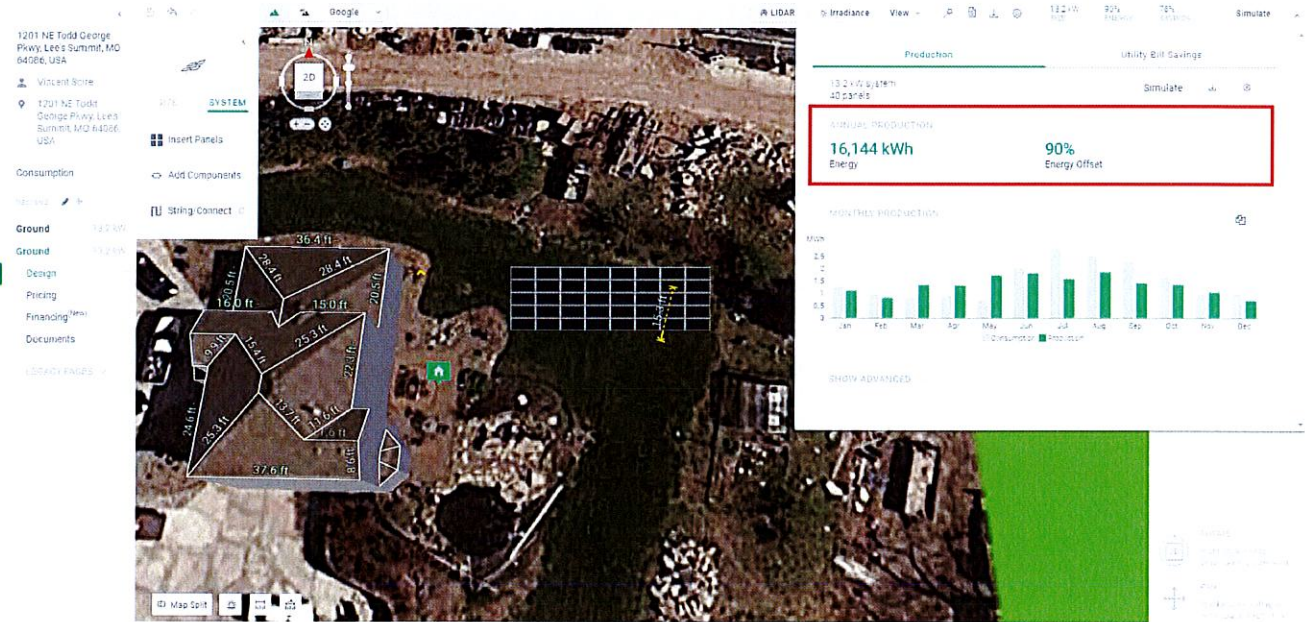
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(SHEET 12)

30 DEGREE TILT AT TRUE SOUTH ↓



20 DEGREE TILT AT TRUE SOUTH ↓



20 DEGREES AT 12 FEET WITHIN ORDINANCE ↓

