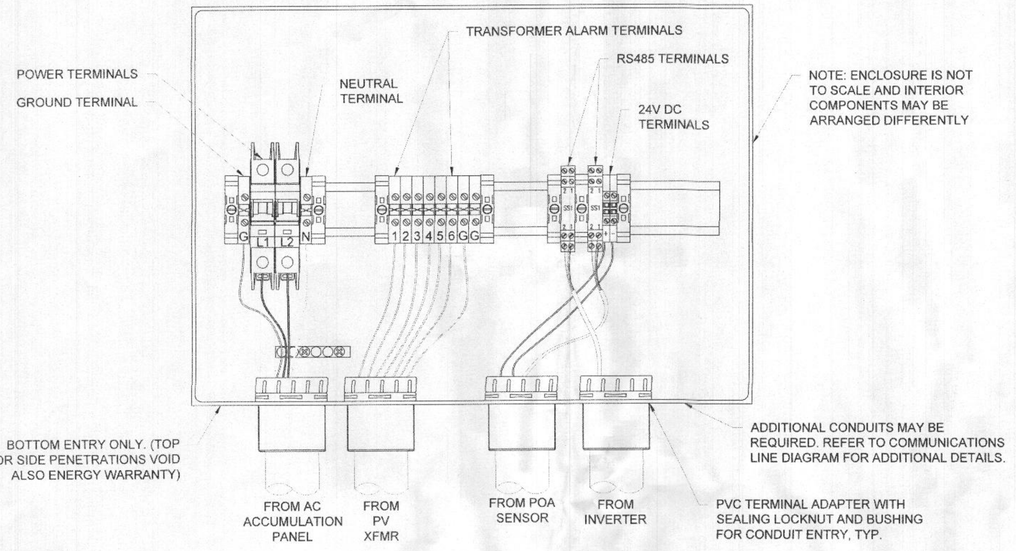
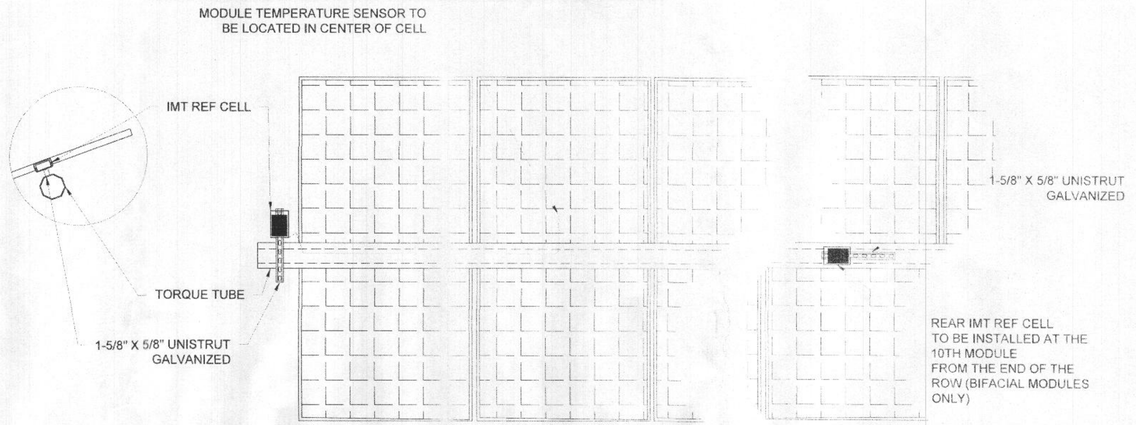
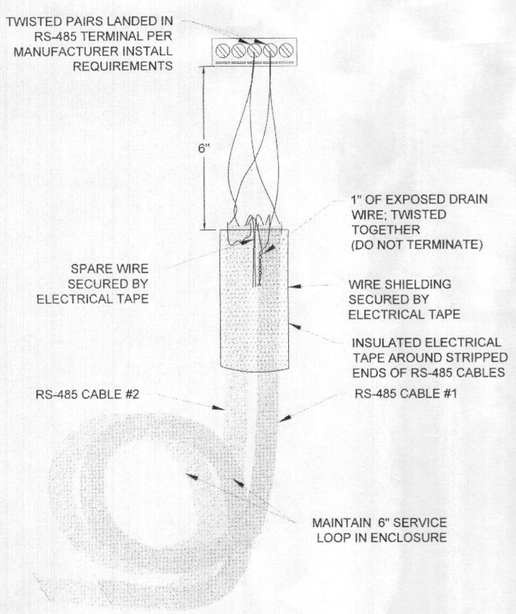


1 DAS ENCLOSURE DETAIL
SCALE: NOT TO SCALE

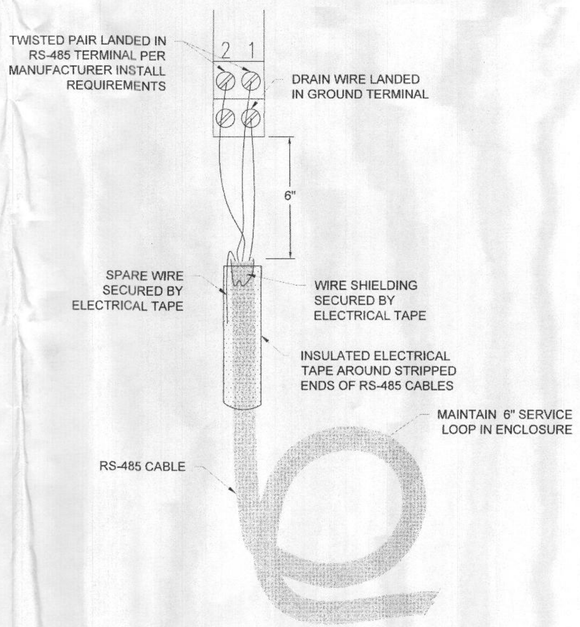


NOTES:
1. FRONT REFERENCE CELL SHALL NOT BE SHADED IN ANY LOCATION DURING DAY TIME AND MOUNTED SUCH THAT THE TOP OF THE REFERENCE CELL IS EVEN WITH THE SOLAR MODULE.
2. USE A P1000 GALVANIZED 1-5/8" X 5/8" UNISTRUT AS THE MOUNTING ARM FOR THE IMT REFERENCE CELL SENSOR. ATTACHED UNISTRUT TO THE RACKING HORIZONTAL RAIL OR PURLIN WITH STAINLESS STEEL NUT AND BOLT. ATTACH IMT REFERENCE CELL TO UNISTRUT WITH STAINLES STEEL NUT AND BOLT.
3. BACK OF MODULE TEMPERATURE SENSOR MUST BE INSTALLED ON CENTER OF AN INTERIOR CELL OF THE MODULE WITH OMEGABOND THERMALLY CONDUCTIVE EPOXY (OMEGA PN: OB-100-1/4). ORDER FROM www.omega.com) cover with 1MIL KAPTON STRAIN RELIEF TAPE AFTER EPOXY SETS TO INSULATE SENSOR.

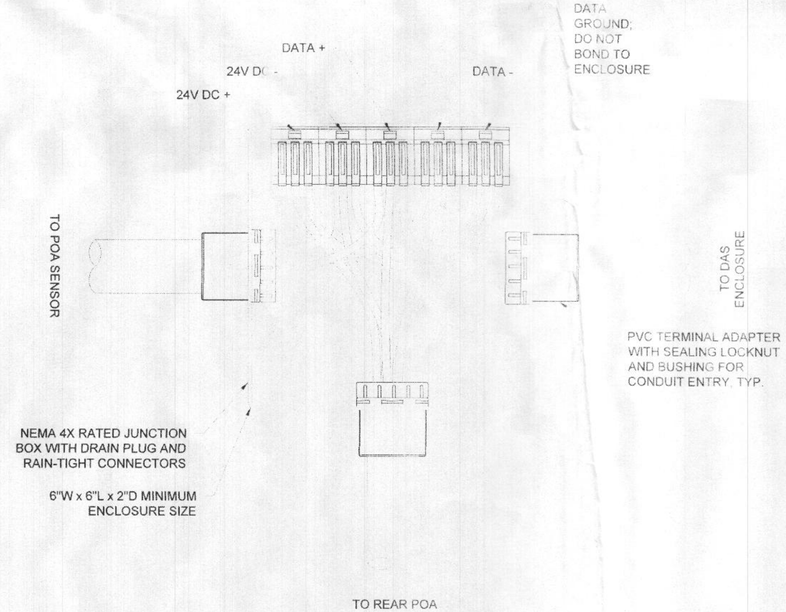
2 POA SENSOR MOUNTING DETAIL
SCALE: NOT TO SCALE



3 RS-485 DAISY CHAIN WIRING DETAIL
SCALE: NOT TO SCALE



4 RS-485 IN DAS ENCLOSURE
SCALE: NOT TO SCALE



5 SENSOR JUNCTION BOX WIRING DETAIL
SCALE: NOT TO SCALE

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PROFESSIONAL ENGINEER CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE #: 45430
EXP. DATE: 05/19/2022

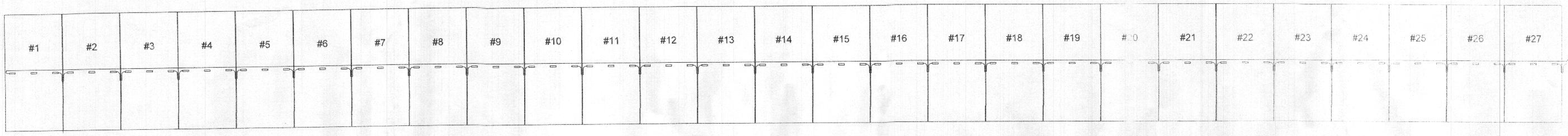
PROJECT TITLE
OER - METALMARK
PROJECT ADDRESS
688 SYKESVILLE ROAD, SYKESVILLE, MD 21784
SHEET TITLE
SITE MONITORING DETAILS - TRACKER

ISSUED SET / REVISIONS

REV	DATE
30%	4/8/2021
60%	6/8/2021
IFP	6/24/2021

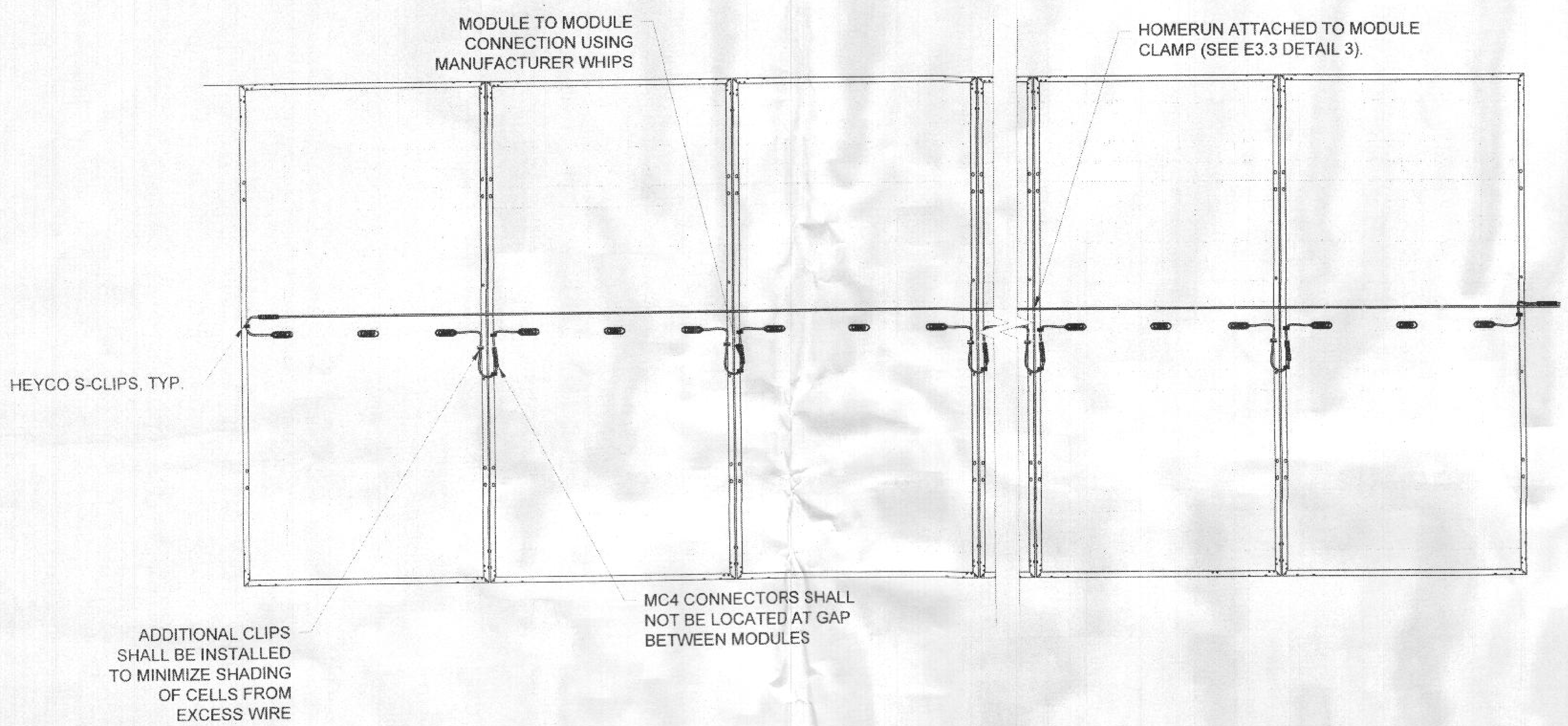
PROJECT NUMBER
20-228
DRAWN BY
TJA
APPROVED BY
NAG
DATE
6/24/2021
ORIGINAL SHEET SIZE
36X24
SHOULD MEASURE 1"
SCALE
AS NOTED
DRAWING
E3.5

E3.5-REV.2021



1 STRING WIRING DETAIL

SCALE: NOT TO SCALE

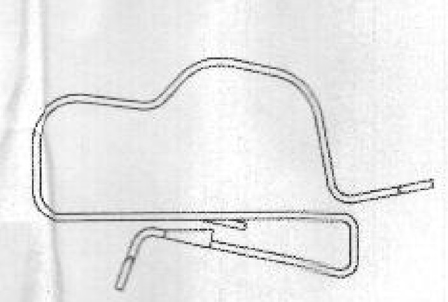


2 WIRE MANAGEMENT DETAIL

SCALE: NOT TO SCALE

3 MODULE TO MODULE WIRE MANAGEMENT DETAIL

SCALE: NOT TO SCALE



4 HEYCO S-CLIP DETAIL

SCALE: NOT TO SCALE

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PROFESSIONAL ENGINEER CERTIFICATION

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LICENSE # 45433

EXP. DATE: 05/18/2022

PROJECT TITLE
OER - METALMARK

PROJECT ADDRESS
688 SYKESVILLE ROAD, SYKESVILLE, MD 21784

SHEET TITLE
STRING WIRING DETAILS

ISSUED SET / REVISIONS

REV	DATE
30%	4/6/2021
60%	6/8/2021
IFP	6/24/2021
-	-
-	-
-	-
-	-
-	-
-	-
-	-

DISCLAIMER

PROJECT NUMBER
20-228

DRAWN BY
TJA

APPROVED BY
NAG

DATE
6/24/2021

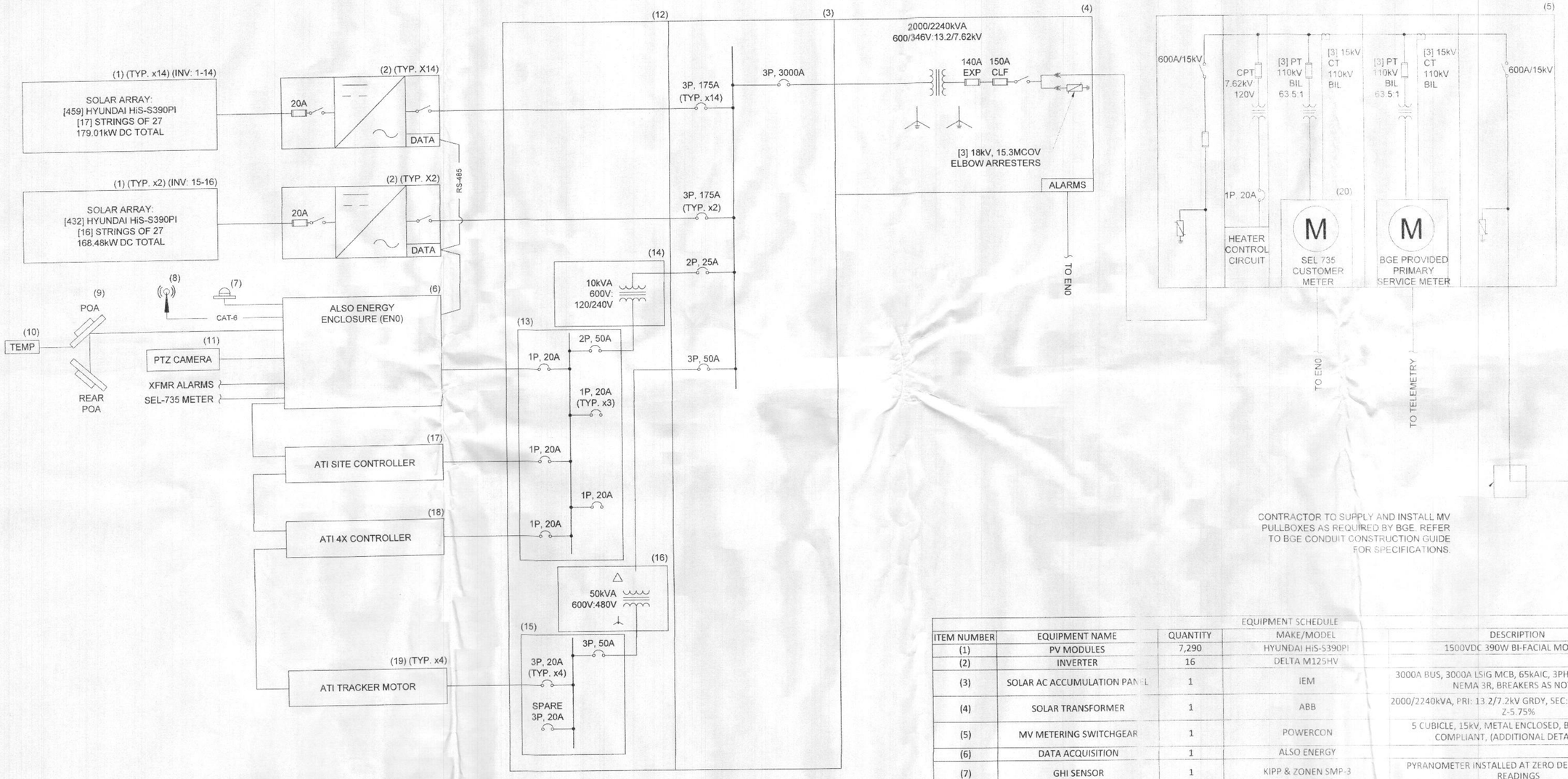
ORIGINAL SHEET SIZE
36X24
SHOULD MEASURE 1"

SCALE
AS NOTED

DRAWING
E3.6

SYSTEM DESCRIPTION

MODULE TYPE:	HYUNDAI HiS-S390PI
QUANTITY:	7,290 MODULES (270 STRINGS 27)
SYSTEM SIZE (DC):	2,843.1 kW
MOUNTING SYSTEM:	ARRAY TECHNOLOGIES DURATRACK v3
TILT ANGLE:	-52° TO 52°
ARRAY AZIMUTH:	180°
MONITORING SYSTEM:	ALSOENERGY
INVERTERS:	[16] DELTA M125HV
SYSTEM SIZE (AC):	2,000 kW



CONTRACTOR TO SUPPLY AND INSTALL MV PULLBOXES AS REQUIRED BY BGE. REFER TO BGE CONDUIT CONSTRUCTION GUIDE FOR SPECIFICATIONS.

EQUIPMENT SCHEDULE

ITEM NUMBER	EQUIPMENT NAME	QUANTITY	MAKE/MODEL	DESCRIPTION
(1)	PV MODULES	7,290	HYUNDAI HiS-S390PI	1500VDC 390W BI-FACIAL MODULE
(2)	INVERTER	16	DELTA M125HV	
(3)	SOLAR AC ACCUMULATION PANEL	1	IEM	3000A BUS, 3000A LSIG MCB, 65kAIC, 3PH, 4W, 600Y/347V, NEMA 3R, BREAKERS AS NOTED
(4)	SOLAR TRANSFORMER	1	ABB	2000/2240kVA, PRI: 13.2/7.2kV GRDY, SEC: 600/346.4V GRDY, Z-5.75%
(5)	MV METERING SWITCHGEAR	1	POWERCON	5 CUBICLE, 15kV, METAL ENCLOSED, BGE CSR-1-R18 COMPLIANT, (ADDITIONAL DETAILS TBD)
(6)	DATA ACQUISITION	1	ALSO ENERGY	
(7)	GHI SENSOR	1	KIPP & ZONEN SMP-3	PYRANOMETER INSTALLED AT ZERO DEGREES FOR GHI READINGS
(8)	CELL MODEM	1	TBD	
(9)	IRRADIANCE SENSOR	2	IMT REFERENCE CELL	[1] PLANE OF ARRAY (POA), [1] REAR POA
(10)	TEMPERATURE SENSOR	1	IMT TEMPERATURE SENSOR	
(11)	SECURITY CAMERA	1	AXIS M5525-E PZT NETWORK CAMERA	
(12)	AUXILIARY SWITCHBOARD CUBICLE	1	TBD	NEMA 3R ENCLOSURE CONTAINING ITEMS 13, 14, 15, AND 16
(13)	SINGLE PHASE LOAD CENTER	1	TBD	120/240V, 60A SINGLE PHASE PANEL
(14)	10kVA AUXILIARY TRANSFORMER	1	TBD	10kVA, PRI:600V, SEC: 120/240V, NEMA 3R
(15)	TRACKER MOTOR PANEL	1	TBD	50A MCB, 35kAIC, 3PH, 4W, 480V, NEMA3R, BREAKERS AS NOTED
(16)	50kVA AUXILIARY TRANSFORMER	1	TBD	45kVA, PRI:600V DELTA, SEC: 480Y/277V, NEMA 3R
(17)	ATI SITE CONTROLLER	1	ARRAY TECHNOLOGIES	
(18)	ATI 4X CONTROLLER	1	ARRAY TECHNOLOGIES	
(19)	ATI TRACKER MOTOR	4	ARRAY TECHNOLOGIES	
(20)	CUSTOMER REVENUE GRADE METER	1	SEL-735	

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PROFESSIONAL ENGINEER CERTIFICATION

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LICENSE #: 45433
EXP. DATE: 09/09/2022

PROJECT TITLE
CER - METALMARK

PROJECT ADDRESS
688 SYKESVILLE ROAD, SYKESVILLE, MD 21784

SHEET TITLE
ONE-LINE DIAGRAM

ISSUED SET / REVISIONS

REV	DATE
30%	4/5/2021
90%	6/8/2021
IFP	6/24/2021

PROJECT NUMBER
20-228

DRAWN BY
TJA

APPROVED BY
NAG

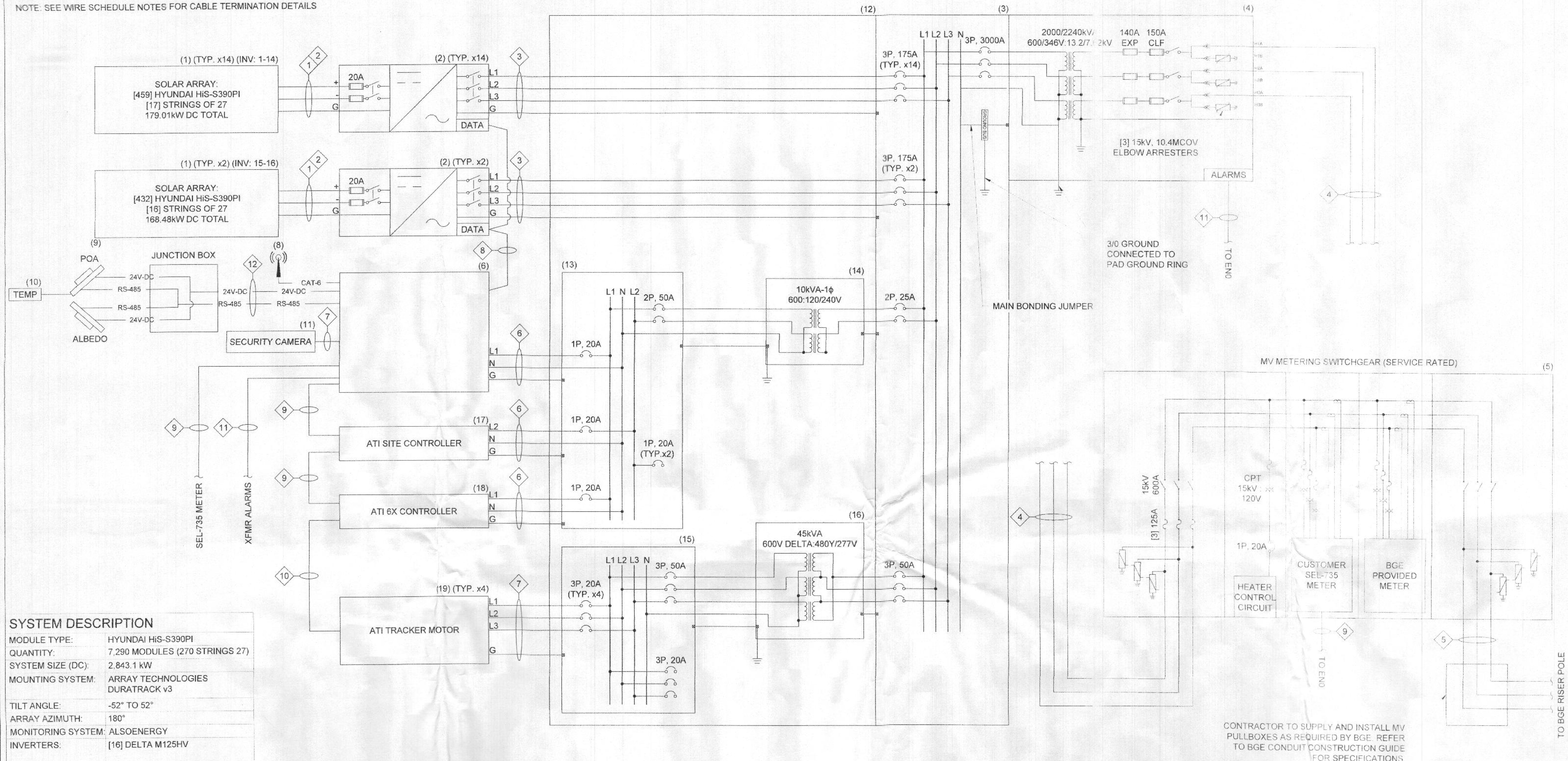
DATE
6/24/2021

ORIGINAL SHEET SIZE
36X24
SHOULD MEASURE 1"

SCALE
NO SCALE

DRAWING
E4.1

NOTE: SEE WIRE SCHEDULE NOTES FOR CABLE TERMINATION DETAILS



SYSTEM DESCRIPTION

MODULE TYPE:	HYUNDAI HiS-S390PI
QUANTITY:	7,290 MODULES (270 STRINGS 27)
SYSTEM SIZE (DC):	2,843.1 kW
MOUNTING SYSTEM:	ARRAY TECHNOLOGIES DURATRACK v3
TILT ANGLE:	-52° TO 52°
ARRAY AZIMUTH:	180°
MONITORING SYSTEM:	ALSOENERGY
INVERTERS:	[16] DELTA M125HV
SYSTEM SIZE (AC):	2,000 kW

WIRE SCHEDULE

CKT #:	FROM:	TO:	PARALLEL RUN QTY:	CONDUCTOR SIZE:	CONDUCTOR QTY:	NEUTRAL SIZE:	NEUTRAL QTY:	GROUND SIZE:	GROUND QTY:	INSULATION TYPE:	CONDUIT SIZE:	CONDUIT TYPE:	NOTES:
1	ARRAY (1 STRING)	DC PULLBOX	-	#8 AWG CU	[1] +, [1] -	-	-	#8 AWG CU	1	PV-WIRE 2000V	1"	PVC SCH40/RMC	MODULE TO HOME-RUN AND MODULE TO JUMPER CONNECTIONS SHALL BE BRAND MATCHED CONNECTORS ONLY
1	ARRAY (2 STRING)	DC PULLBOX	-	#8 AWG CU	[2] +, [2] -	-	-	#8 AWG CU	1	PV-WIRE 2000V	1-1/2"	PVC SCH40/RMC	MODULE TO HOME-RUN AND MODULE TO JUMPER CONNECTIONS SHALL BE BRAND MATCHED CONNECTORS ONLY
1	ARRAY (3 STRING)	DC PULLBOX	-	#8 AWG CU	[3] +, [3] -	-	-	#8 AWG CU	1	PV-WIRE 2000V	1-1/2"	PVC SCH40/RMC	MODULE TO HOME-RUN AND MODULE TO JUMPER CONNECTIONS SHALL BE BRAND MATCHED CONNECTORS ONLY
2	DC PULLBOX (8 STRING)	INVERTER	-	#8 AWG CU	[8] +, [8] -	-	-	#8 AWG CU	1	PV-WIRE 2000V	2-1/2"	PVC SCH40/RMC	INVERTER DC TERMINATIONS: #8 AMPHONEL H4+
2	DC PULLBOX (9 STRING)	INVERTER	-	#8 AWG CU	[9] +, [9] -	-	-	#8 AWG CU	1	PV-WIRE 2000V	2-1/2"	PVC SCH40/RMC	INVERTER DC TERMINATIONS: #8 AMPHONEL H4+
3	INVERTERS 1-6	SOLAR ACCUMULATION PANEL	-	250kcmil CU	[1] L1, [1] L2, [1] L3	-	-	#4 AWG CU	1	THWN-2	2-1/2"	PVC SCH40/RMC	INVERTER AC TERMINATIONS: ONE-HOLE COMPRESSION LUG, BREAKER AC TERMINATIONS: ONE-HOLE COMPRESSION LUG
3	INVERTERS 7-16	SOLAR ACCUMULATION PANEL	-	3/0 AWG CU	[1] L1, [1] L2, [1] L3	-	-	#6 AWG CU	1	THWN-2	2-1/2"	PVC SCH40/RMC	INVERTER AC TERMINATIONS: ONE-HOLE COMPRESSION LUG, BREAKER AC TERMINATIONS: ONE-HOLE COMPRESSION LUG
4	XFMR #1	BGE SWITCHGEAR	-	1/0 MV-105	[1] L1, [1] L2, [1] L3	1/3 CONCENTRIC	1	-	-	15kV EPR/133%	6"	PVC SCH40/80	
5	BGE SWICHGEAR	RISER POLE	2	PULL WIRE	1	-	-	-	-	-	6"	PVC SCH40/80	CONTRACTOR TO INSTALL CONDUIT AND PULL WIRE. BGE TO INSTALL CONDUCTORS AND TERMINATE.
6	SINGLE PHASE LOAD CENTER	EN0, SITE CONTROLLER, 4X CONTROLLER	-	#10 AWG CU	[1] L1	#10 AWG CU	1	#10 AWG CU	1	THWN-2	1"	LFNC	MECHANICAL LUG TERMINATIONS
7	TRACKER MOTOR PANEL	TRACKER MOTOR	-	#10 AWG CU	[1] L1, [1] L2, [1] L3	-	-	#10 AWG CU	1	THWN-2	1"	PVC SCH40/RMC	MECHANICAL LUG TERMINATIONS
8	INVERTERS	EN0	-	-	[1] RS-485	-	-	-	-	BELDEN 3106A RS-485	1"	PVC SCH40/RMC	
9	EN0	ATI SITE CONTROLLER	-	-	[1] CAT-5E	-	-	-	-	CAT-5E	1"	LFNC	
9	ATI SITE CONTROLLER	4X CONTROLLER	-	-	[1] CAT-5E	-	-	-	-	CAT-5E	1"	LFNC	
9	EN0	SECURITY CAMERA	-	-	[1] CAT-5E	-	-	-	-	CAT-5E	1"	LFNC/PVC SCH40	
9	EN0	SEL-735 METER	-	-	[1] CAT-5E	-	-	-	-	CAT-5E	1"	PVC SCH40/80	
10	4X CONTROLLER	TRACKER MOTOR	-	-	[1] ATI SUPPLIED COMM CABLE	-	-	-	-	TBD	1"	PVC SCH40/RMC	
11	EN0	XFMR #1	-	#12 AWG CU	[6] DRY CONTACT	-	-	-	-	THWN-2	1"	PVC SCH40/80	
12	EN0	WEATHER STATION JUNCTION BOX	-	#12 AWG CU	[1] +, [1] -, [1] RS-485	-	-	-	-	THWN-2, RS-485	1"	PVC SCH40/RMC	

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PROFESSIONAL ENGINEER CERTIFICATION

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LICENSE #: 45433
EXP. DATE: 05-19-2022

PROJECT TITLE: OER - METALMARK
PROJECT ADDRESS: 688 SYKESVILLE ROAD, SYKESVILLE, MD 21784
SHEET TITLE: THREE LINE DIAGRAM

ISSUED SET / REVISIONS

REV	DATE
30%	4/6/2021
60%	6/8/2021
IFP	6/24/2021
-	-
-	-
-	-
-	-
-	-
-	-

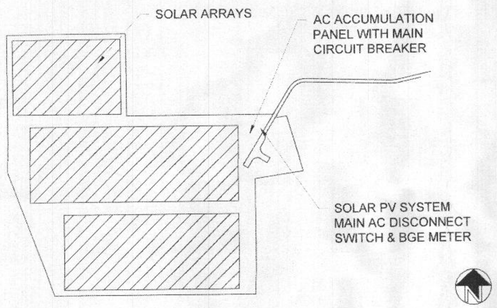
PROJECT NUMBER: 20-228
DRAWN BY: TJA
APPROVED BY: NAG
DATE: 6/24/2021
ORIGINAL SHEET SIZE: 36X24 SHOULD MEASURE 1"
SCALE: NO SCALE
DRAWING: E4.2

A

8½"

⚠ CAUTION!

POWER TO THIS SITE IS SUPPLIED FROM THE FOLLOWING SOURCES WITH DISCONNECTS LOCATED AS SHOWN:



6½"

B

8½"

⚠ CAUTION!

SOLAR GENERATING FACILITY
NO TRESPASSING
IN EMERGENCY CALL:
STANDARD SOLAR
(301) 944-1200 opt. 0

5"

C2

6"

INVERTER INTEGRATED DC COMBINER (1 OF 16)

RATED MPP CURRENT: 165.24A
RATED MPP VOLTAGE: 1085.4V
MAX SYSTEM VOLTAGE: 1452V
MAX CIRCUIT CURRENT: 216.33A

3"

(TYP. x14)
INV 1-14

C2

6"

INVERTER INTEGRATED DC COMBINER (1 OF 16)

RATED MPP CURRENT: 155.52A
RATED MPP VOLTAGE: 1085.4V
MAX SYSTEM VOLTAGE: 1452V
MAX CIRCUIT CURRENT: 203.6A

3"

(TYP. x2)
INV 15-16

D

7¼"

PHOTOVOLTAIC DC DISCONNECT (1 OF 16)

1½"

E

6"

125 kW INVERTER (1 OF 16)

OUTPUT CURRENT: 135A
OPERATING VOLTAGE: 600V

1½"

F

6"

SOLAR ACCUMULATION PANEL

OUTPUT CURRENT: 2160A
OPERATING VOLTAGE: 600V

NEUTRAL WIRE IS SIZED PER EGC FOR CURRENT SENSING ONLY. DO NOT CONNECT ADDITIONAL LOADS TO ACCUMULATION PANEL WITHOUT PROPER ENGINEERING SUPERVISION AND PV SYSTEM OWNER'S FORMAL APPROVAL

4½"

G

7¼"

SOLAR PV SYSTEM AC DISCONNECT

AC OUTPUT CURRENT: 2160A
NOMINAL AC VOLTAGE: 600V

2"

G

7¼"

SOLAR PV SYSTEM MAIN AC DISCONNECT

AC OUTPUT CURRENT: 109.35A
NOMINAL AC VOLTAGE: 13.2kV

2"

H

6¼"

SOLAR PV SYSTEM POINT OF INTERCONNECTION

OPERATING CURRENT: 109.35A
OPERATING VOLTAGE: 13.2kV

2"

K

6"

⚠ DANGER

ARC FLASH & SHOCK HAZARD!
FOLLOW ALL REQUIREMENTS IN NFPA 70E FOR SAFE WORK PRACTICES AND FOR PERSONAL PROTECTIVE EQUIPMENT

2¾"

GENERAL NOTES FOR MARKINGS AND LABELS:

1. ELECTRICAL SUBCONTRACTOR TO PROVIDE ALL LABELS AS SHOWN ON THE FOLLOWING PAGES

2. LABELS AND MARKINGS SHALL BE APPLIED TO THE APPROPRIATE COMPONENTS IN ACCORDANCE WITH THE NEC

3. SOLAR MODULES AND INVERTER(S) ARE SUPPLIED FROM THE MANUFACTURER WITH MARKINGS PRE-APPLIED TO MEET THE REQUIREMENTS OF THE NEC.

4. LABELS WILL BE EITHER ETCHED WITH WHITE GRAPHICS ONTO $\frac{1}{16}$" RED PLASTIC PLACARD OR PRINTED ON A STICKER (HELLERMAN TYTON OR APPROVED EQUIVALENT, ALL CAPITAL LETTERS, ARIEL OR SIMILAR FONT, NON BOLD, REFLECTIVE, WEATHER RESISTANT MATERIAL)

5. LABELS SHALL BE PERMANENTLY AFFIXED TO EQUIPMENT OR CONDUIT RUNS.

6. LABELS SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. STICKERS OF PROPER DURABILITY AND ADHESION ARE PREFERRED. REFERENCE ANSI Z535.4-2011 FOR GUIDELINES.

7. CONTRACTOR SUPPLIED LABELS SHALL BE INSTALLED TO AVOID COVERING FACTORY APPLIED LABELS.

LABELS AND MARKINGS LEGEND:

A. PROVIDES THE LOCATION OF THE SERVICE DISCONNECTING MEANS AND THE PHOTOVOLTAIC DISCONNECTING MEANS. THIS PLAQUE SHALL BE APPLIED TO THE MAIN SERVICE DISCONNECTING MEANS AND THE PHOTOVOLTAIC DISCONNECTING MEANS; ONE PER POCC. WHITE LETTERING ON RED BACKGROUND.

B. TO BE INSTALLED AT ANY SITE ACCESS POINT.

C1. FOR USE ON IN FIELD DC COMBINERS. WHITE LETTERING ON RED BACKGROUND.

C2. FOR USE ON INVERTER DC WIRE BOX. WHITE LETTERING ON RED BACKGROUND.

D. FOR USE ON DC COMBINERS AND INVERTER DC WIRING BOXES. WHITE LETTERING ON RED BACKGROUND.

E. FOR USE ON INVERTER. WHITE LETTERING ON RED BACKGROUND.

F. FOR USE ON SOLAR ACCUMULATION PANELS. WHITE LETTERING ON RED BACKGROUND.

G. FOR USE ON MAIN AC DISCONNECT. 3/8" WHITE LETTERING ON RED BACKGROUND.

H. TO BE PLACED ON OR NEAR THE INTERCONNECTION POINT(S). WHITE LETTERING ON RED BACKGROUND.

I. FOR USE ON CONDUIT, RACEWAYS, CABLE TRAY, JUNCTION BOX, ENCLOSURES, CONDUIT BODIES CONTAINING PV DC CONDUCTORS. REFLECTIVE, 3/8" WHITE LETTERING ON RED BACKGROUND. 10FT SPACING.

J. TO BE PLACED ON ALL ROOF ACCESS POINTS (PLACARD). WHITE TEXT ON RED BACKGROUND FOR HEADER. WHITE TEXT RED BACKGROUND FOR BODY TEXT.

K. FOR USE ON COMBINERS, INVERTERS, DISCONNECTS, JUNCTION BOXES & DISTRIBUTION BOXES. WHITE TEXT ON RED BACKGROUND FOR HEADER, WHITE TEXT RED BACKGROUND FOR BODY TEXT.

L. FOR USE ON COMBINERS, DISCONNECTS, JUNCTION BOXES, LOAD CENTERS AND ACCUMULATION PANELS. BLACK TEXT ON ORANGE BACKGROUND FOR HEADER, BLACK TEXT WHITE BACKGROUND FOR BODY TEXT.

M. TRANSFORMER GENERIC WARNING LABEL. WHITE LETTERING ON RED BACKGROUND.

N. FOR USE ON SOLAR DATA ENCLOSURE. WHITE LETTERING ON RED BACKGROUND

O. FOR USE ON SOLAR METER. WHITE LETTERING ON RED BACKGROUND.

P. FOR USE IN ANY SYSTEM ACCUMULATION PANEL TO IDENTIFY BREAKER USE. BLACK LETTERING ON WHITE BACKGROUND.

Q. FOR USE ON INTERCONNECTION BREAKER. WHITE TEXT ON RED BACKGROUND FOR HEADER. WHITE TEXT RED BACKGROUND FOR BODY TEXT.

R. FOR USE ON RAPID SHUTDOWN SYSTEMS. TO BE MOUNTED ADJACENT TO PLAQUE A

S. TO BE INSTALLED AT EACH SERVICE EQUIPMENT LOCATION WHERE PV IS CONNECTED. 3/8 BLACK TEXT ON YELLOW BACKGROUND FOR HEADER. BLACK TEXT ON WHITE BACKGROUND FOR BODY TEXT.

T. FOR USE ON ALL RAPID SHUTDOWN SWITCHES. REFLECTIVE, 3/8" WHITE LETTERING ON RED BACKGROUND.

U. FOR USE ON SOLAR ACCUMULATION PANELS. WHITE LETTERING ON RED BACKGROUND.

V. TO BE PLACED AT BOTH ENDS OF PV ROW. WHITE LETTERING ON RED BACKGROUND.

W. FOR USE ON EQUIPMENT AS NOTED. BLACK TEXT ON ORANGE BACKGROUND FOR HEADER, BLACK TEXT ON WHITE BACKGROUND FOR BODY TEXT.

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Rockville, MD 20850
301-944-1200
www.StandardSolar.com

PROFESSIONAL ENGINEER CERTIFICATION

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LICENSE #: 45433
EXP. DATE: 05/19/2022

PROJECT TITLE
OER - METALMARK

PROJECT ADDRESS
688 SYKESVILLE ROAD, SYKESVILLE, MD 21784

SHEET TITLE
MARKINGS AND LABELS

ISSUED SET / REVISIONS

REV	DATE
30%	4/6/2021
60%	5/6/2021
IFP	6/24/2021

PROJECT NUMBER
20-228

DRAWN BY
TJA

APPROVED BY
NAG

DATE
6/24/2021

ORIGINAL SHEET SIZE
36X24
SHOULD MEASURE 1"

SCALE
NO SCALE

DRAWING
E5.1

L — 6" × 2¾"

⚠ WARNING

ELECTRIC SHOCK HAZARD
DO NOT TOUCH THE TERMINALS. TERMINALS ON BOTH THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

W — 6" × 3½"

⚠ DANGER

ARC FLASH & SHOCK HAZARD

FLASH HAZARD CATEGORY	-	VOLTAGE SHOCK HAZARD (VAC)	-
ARC RATING OF CLOTHING	- cal/cm²	LIMITED APPROACH (in)	-
WORKING DISTANCE (in)	-	RESTRICTED APPROACH (in)	-
FLASH BOUNDARY (ft)	-	PPE GLOVE CLASS	-
EQUIPMENT ID	-		
NOTE:			

ARC FLASH LABELS TO BE PROVIDED AFTER COORDINATION STUDY

M — 4" × 2"

2000/2240kVA
TRANSFORMER

PRIMARY VOLTAGE: 13.2kV
SECONDARY VOLTAGE: 600V

N — 6¼" × 1"

SOLAR DATA & MONITORING

O — 6¼" × 1"

SOLAR GENERATION METER

P — 3" × 1"

XXXXXXXXXXXXX
CIRCUIT BREAKER

Q — 4" × 2"

⚠ WARNING

INVERTER OUTPUT CONNECTION
DO NOT RELOCATE THIS OVERCURRENT DEVICE

V — 8" × 4"

ROW #1

X — 3¼" × ½"

X-Xxx

GENERAL NOTES FOR MARKINGS AND LABELS:

1. ELECTRICAL SUBCONTRACTOR TO PROVIDE ALL LABELS AS SHOWN ON THE FOLLOWING PAGES.

2. LABELS AND MARKINGS SHALL BE APPLIED TO THE APPROPRIATE COMPONENTS IN ACCORDANCE WITH THE NEC.

3. SOLAR MODULES AND INVERTER(S) ARE SUPPLIED FROM THE MANUFACTURER WITH MARKINGS PRE-APPLIED TO MEET THE REQUIREMENTS OF THE NEC.

4. LABELS WILL BE EITHER ETCHED WITH WHITE GRAPHICS ONTO $\frac{1}{16}$" RED PLASTIC PLACARD OR PRINTED ON A STICKER (HELLERMAN TYTON OR APPROVED EQUIVALENT. ALL CAPITAL LETTERS, ARIEL OR SIMILAR FONT, NON BOLD, REFLECTIVE, WEATHER RESISTANT MATERIAL)

5. LABELS SHALL BE PERMANENTLY AFFIXED TO EQUIPMENT OR CONDUIT RUNS.

6. LABELS SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. STICKERS OF PROPER DURABILITY AND ADHESION ARE PREFERRED. REFERENCE ANSI Z535.4-2011 FOR GUIDELINES.

7. CONTRACTOR SUPPLIED LABELS SHALL BE INSTALLED TO AVOID COVERING FACTORY APPLIED LABELS.

LABELS AND MARKINGS LEGEND:

A. PROVIDES THE LOCATION OF THE SERVICE DISCONNECTING MEANS AND THE PHOTOVOLTAIC DISCONNECTING MEANS. THIS PLAQUE SHALL BE APPLIED TO THE MAIN SERVICE DISCONNECTING MEANS AND THE PHOTOVOLTAIC DISCONNECTING MEANS, ONE PER POCC. WHITE LETTERING ON RED BACKGROUND.

B. TO BE INSTALLED AT ANY SITE ACCESS POINT.

C1. FOR USE ON IN FIELD DC COMBINERS. WHITE LETTERING ON RED BACKGROUND.

C2. FOR USE ON INVERTER DC WIRE BOX. WHITE LETTERING ON RED BACKGROUND.

D. FOR USE ON DC COMBINERS AND INVERTER DC WIRING BOXES. WHITE LETTERING ON RED BACKGROUND.

E. FOR USE ON INVERTER. WHITE LETTERING ON RED BACKGROUND.

F. FOR USE ON SOLAR ACCUMULATION PANELS. WHITE LETTERING ON RED BACKGROUND.

G. FOR USE ON MAIN AC DISCONNECT. 3/8" WHITE LETTERING ON RED BACKGROUND.

H. TO BE PLACED ON OR NEAR THE INTERCONNECTION POINT(S). WHITE LETTERING ON RED BACKGROUND.

I. FOR USE ON CONDUIT, RACEWAYS, CABLE TRAY, JUNCTION BOX, ENCLOSURES, CONDUIT BODIES CONTAINING PV DC CONDUCTORS. REFLECTIVE, 3/8" WHITE LETTERING ON RED BACKGROUND. 10FT SPACING.

J. TO BE PLACED ON ALL ROOF ACCESS POINTS (PLACARD). WHITE TEXT ON RED BACKGROUND FOR HEADER. WHITE TEXT RED BACKGROUND FOR BODY TEXT.

K. FOR USE ON COMBINERS, INVERTERS, DISCONNECTS, JUNCTION BOXES & DISTRIBUTION BOXES. WHITE TEXT ON RED BACKGROUND FOR HEADER, WHITE TEXT RED BACKGROUND FOR BODY TEXT.

L. FOR USE ON COMBINERS, DISCONNECTS, JUNCTION BOXES, LOAD CENTERS AND ACCUMULATION PANELS. BLACK TEXT ON ORANGE BACKGROUND FOR HEADER. BLACK TEXT WHITE BACKGROUND FOR BODY TEXT.

M. TRANSFORMER GENERIC WARNING LABEL. WHITE LETTERING ON RED BACKGROUND.

N. FOR USE ON SOLAR DATA ENCLOSURE. WHITE LETTERING ON RED BACKGROUND.

O. FOR USE ON SOLAR METER. WHITE LETTERING ON RED BACKGROUND.

P. FOR USE IN ANY SYSTEM ACCUMULATION PANEL TO IDENTIFY BREAKER USE. BLACK LETTERING ON WHITE BACKGROUND.

Q. FOR USE ON INTERCONNECTION BREAKER. WHITE TEXT ON RED BACKGROUND FOR HEADER, WHITE TEXT RED BACKGROUND FOR BODY TEXT.

R. FOR USE ON RAPID SHUTDOWN SYSTEMS. TO BE MOUNTED ADJACENT TO PLAQUE A.

S. TO BE INSTALLED AT EACH SERVICE EQUIPMENT LOCATION WHERE PV IS CONNECTED. 3/8 BLACK TEXT ON YELLOW BACKGROUND FOR HEADER. BLACK TEXT ON WHITE BACKGROUND FOR BODY TEXT.

T. FOR USE ON ALL RAPID SHUTDOWN SWITCHES. REFLECTIVE, 3/8" WHITE LETTERING ON RED BACKGROUND.

U. FOR USE ON SOLAR ACCUMULATION PANELS. WHITE LETTERING ON RED BACKGROUND.

V. TO BE PLACED AT BOTH ENDS OF PV ROW. WHITE LETTERING ON RED BACKGROUND.

W. FOR USE ON EQUIPMENT AS NOTED. BLACK TEXT ON ORANGE BACKGROUND FOR HEADER. BLACK TEXT ON WHITE BACKGROUND FOR BODY TEXT.

X. FOR USE ON EACH END OF DC CONDUCTORS (INV-STRING$_{\#OF MODULES}$)

RECEIVED
AUG 0 3 2021
LICENSES & PERMITS DIVISION

STANDARD SOLAR
Clean Energy. Smart Business.
530 Gaither Road, Suite 900
Rockville, MD 20850
301-944-1200
www.StandardSolar.com

PROFESSIONAL ENGINEER CERTIFICATION

I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE #: 45433
EXP. DATE: 08/19/2022

PROJECT TITLE
OER - METALMARK

PROJECT ADDRESS
688 SYKESVILLE ROAD, SYKESVILLE, MD 21784

SHEET TITLE
MARKINGS AND LABELS

ISSUED SET / REVISIONS

REV	DATE
30%	4/6/2021
50%	6/8/2021
IFP	6/24/2021
-	-
-	-
-	-
-	-
-	-
-	-
-	-

PROJECT NUMBER: 20-228
DRAWN BY: TJA
APPROVED BY: NAG
DATE: 6/24/2021
ORIGINAL SHEET SIZE: 36X24 SHOULD MEASURE 1"
SCALE: NO SCALE
DRAWING: E5.1