



# TOWN OF DIGHTON

PLANNING BOARD  
979 SOMERSET AVENUE  
DIGHTON, MA 02715  
Tel: (508) 669-6431, Ext. 114  
Fax: (508) 669-4509

Jeff Carvalho, Chairman  
Daniel Higgins, Vice Chairman  
Christopher Cunha, Clerk  
Joseph Figueiredo, Member  
Robert J. Woods, Member

## RECEIVED

Town Clerk-Dighton, MA

AUG 24 2023

Time: 11:52 AM

By: S.C.

LEGAL NOTICE  
DIGHTON PLANNING BOARD  
September 20, 2023 at 7:00 PM  
Old Town Hall  
1111 Somerset Avenue  
Dighton, MA 02715

Notice is hereby given the Dighton Planning Board will conduct a Public Hearing on the Special Permit Application & Site Plan Review by Whaling City Solar to install 14.400 kW Small-Scale Ground-Mounted Solar PV System and a 3' retaining wall along the driveway edge, for property located at 2204 Maple Swamp Road being shown as Assessors Map 1, Lot 4, pursuant to Sections 4600, 5300 and 5400 of the Town of Dighton Zoning Bylaws.

Copies of the application and plan may be viewed in the Planning Board office during normal business hours or requested by email at [keasterday@dighton-ma.gov](mailto:keasterday@dighton-ma.gov). Any person wishing to be heard on the above application should appear at the time and place designated for the public hearing.

DIGHTON PLANNING BOARD  
Jeff Carvalho, Chairman



11-23

**TOWN OF DIGHTON**  
**PLANNING BOARD**  
**979 SOMERSET AVENUE**  
**DIGHTON, MA 02715**

PETITIONER: Whaling City Solar  
NAME: 1213 Purchase St Unit 2  
ADDRESS: New Bedford MA 02740

LOCATION (from Assessors' Office)

PLAT AND

LOT NOS. map 1 Lot 4

PRESENT

ZONING Resid/Agri

First Record Date

Planning Board Use Only

DATE OF THIS

DOCUMENT 8/23/2023

FILE:

TITLE:

**APPLICATION FOR SITE PLAN REVIEW**

File two (2) completed copies of this application with the Planning Board and within three (3) days thereafter submit a copy to the Board of Health, Board of Appeals, Building Commissioner, Town Engineer and Conservation Commission in accordance with the Zoning Bylaws. The filing fee as calculated by the Fee Schedule, made payable to the Town of Dighton.

To the Dighton Planning Board:

TITLE OF PLAN: PRAIRIE SITE PLAN

PLAN DATED: Jan 1, 2023

SUBJECT PROPERTY ADDRESS: 2204 Maple Swamp Road

ASSESSOR'S MAP/LOT(s): 1 / 4 (SUBDIV LOT 2)

ALL APPLICABLE ZONING DISTRICTS: 101 - RESIDENTIAL

PROPOSED USES FOR THIS PROPERTY:

Install single-phase ground-mount residential solar PV system, located

102.1' from Wetland Zone (no work within Riverfront Area), over 100' from

any dwelling on adjacent parcels. Plus 3' retaining wall along driveway.

TOTAL LOT AREA: \_\_\_\_\_

TOTAL FRONTAGE: \_\_\_\_\_

EXISTING STRUTURE(s) \_\_\_\_\_ S.F.

PROPOSED STRUCTURE(s) \_\_\_\_\_ S.F.

TOTAL # OF PARKING SPACED REQUIRED: \_\_\_\_\_

TOTAL # OF PARKING SPACES PROPSD: \_\_\_\_\_

ATTACH A LIST OF VARIANCES REQUESTED, IF ANY. (Variances may require relief from the Zoning Board of Appeals)

SPECIAL PERMIT APPLICATION/FEE SCHEDULE, IF APPLICABLE, SHALL BE SUBMITTED IN CONJUNCTION WITH THIS SITE PLAN REVIEW APPLICATION.

I HAVE READ SECTION 5400, SITE PLAN REVIEW OF THE DIGHTON ZONING BYLAWS, AND I AM SUBMITTING THIS APPLICATION WITH ACCOMPANYING PLANS AS REQUIRED. EXCEPT FOR THE ATTACHED LIST OF VARIANCES (IF ANY), IT IS MY BELIEF THAT THE PLANS COMPLY WITH SECTION 5400. I HAVE NOTIFIED TENANTS AND PARTIES (IF ANY) WHO HAVE AN INTEREST IN OR ARE AFFECTED BY THE PROPOSED PLAN.

**RECEIVED**  
Received by the Planning Board:

Date: \_\_\_\_\_

Time: **AUG 23 2023**

Signature: \_\_\_\_\_

By: Dighton Planning Board

Applicant's Name Whaling City Solar  
Applicant's Address 1213 Purchase St, #2-55

New Bedford, MA 02764

Applicant's Phone # 508-415-5661

Signature: Adam Gent

Owner's name, address and signature for authorization  
(if other than applicant)

Owner's Name David Prairie

Owner's Address 2204 Maple Swamp Rd

N. Dighton, MA 02764

Owner's Phone# 774-991-2578

Signature: David Prairie

Received by the Town Clerk:

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Signature: \_\_\_\_\_

Checklist of items to be submitted with application.

1. x Application Form (x2)
2. x Application Fee (please refer to Fee Schedule)
3. x Project Review Fee (please refer to Fee Schedule) & Completed W-9
4. x Tax Status Application Form
5. x Plans (See applicable Zoning Bylaws for Specific Requirements)
6. x Completed Receipt for Special Permit Application/Site Plan Review (within 3 working days of the submittal date)



**TOWN OF DIGHTON**  
**PLANNING BOARD**  
**979 SOMERSET AVENUE**  
**DIGHTON, MA 02715**

11-23

PETITIONER: Whaling City Solar  
NAME: 1213 Purchase St, Unit 2  
ADDRESS: New Bedford, MA 02740

LOCATION (from Assessors' Office)

PLAT AND

LOT NOS. Map 1 Lot 4

PRESENT

ZONING Resid/Agri.

First Record Date

Planning Board Use Only

DATE OF THIS

DOCUMENT 8/23/2023

FILE:

TITLE:

**APPLICATION FOR SPECIAL PERMIT**

File two (2) completed copies of this application. One (1) copy with the Planning Board and one (1) copy with the Town Clerk in accordance with the Zoning Bylaws. The filing fee as calculated by Appendix A, made payable to the Town of Dighton.

To the Dighton Planning Board:

PROJECT NAME: Prairie Ground-Mount Solar

SUBJECT PROPERTY ADDRESS: 2204 Maple Swamp Road

ASSESSOR'S MAP/LOT(s): 1 / 4 (SUBDIV LOT 2)

ALL APPLICABLE ZONING DISTRICT: 101 - RESIDENTIAL

TITLE OF PLAN: PRAIRIE SITE PLAN

PLAN DATED: Jan 1, 2023

DESCRIBE WHAT IS PROPOSED FOR THIS PROPERTY:

Install single-phase ground-mount residential solar PV system, located  
102.1' from Wetland Zone (no work within Riverfront Area), over 100' from  
any dwelling on adjacent parcels. Plus 3' retaining wall along driveway  
edge.

STATE THE EXACT NATURE OF ACTION OR RELIEF REQUESTED BY THIS APPLICATION AND CITE THE APPLICABLE BYLAW(s) AND/OR BYLAW SECTION(s):

Pursuant Section 5422 - work described herein requires the approval of a site  
plan by the Planning Board pursuant to \$5400 of the Zoning By-law. Any  
conditions imposed in such site plan approval shall also be conditions of  
this special permit/variance.

DESCRIBE HOW THIS APPLICATION MEETS THE CRITERIA FOR A SPECIAL PERMIT AS DESCRIBED IN THE APPLICABLE SECTION(s) OF THE DIGHTON ZONING BYLAWS:

Pursuant Section 5470 - work described herein meets all objectives,  
pursuant sections 5471 through 5479.



THE UNDERSIGNED HEREBY CERTIFIES THAT THE INFORMATION ON THIS APPLICATION AND PLANS SUBMITTED HERewith IS CORRECT, AND THAT THE APPLICATION COMPLIES WITH ALL APPLICABLE PROVISIONS OF STATUTES, REGULATIONS AND BYLAWS TO THE BEST OF HIS/HER KNOWLEDGE.

THE ABOVE IS SUBSCRIBED TO AND EXECUTED BY THE UNDERSIGNED UNDER THE PENALTIES OF PERJURY IN ACCORDANCE WITH M.G.L. Ch. 268, §1-A.

Received by the ~~Received~~ Board:

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Signature: AUG 23 2023

By: Dighton Planning Board

Applicant's Name Whaling City Solar

Applicant's Address 1213 Purchase St, #2-55

New Bedford, MA 02764

Applicant's Phone # 508-415-5661

Signature: Adam Gent

Owner's name, address and signature for authorization  
(if other than applicant)

Owner's Name David Prairie

Owner's Address 2204 Maple Swamp Rd

N. Dighton, MA 02764

Owner's Phone# 774-991-2578

Signature: David Prairie

Received by the Town Clerk:

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Signature: \_\_\_\_\_

Checklist of items to be submitted with application.

1. x Application Form (x2)
2. x Application Fee (please refer to Fee Schedule)
3. x Project Review Fee (please refer to Fee Schedule) & Completed W-9
4. x Tax Status Application Form
5. x Plans (See applicable Zoning Bylaws for Specific Requirements)
6. x Certified Abutters List
7. x Completed Receipt for Special Permit Application/Site Plan Review (within 3 working days of the submittal date)

## Kerrie Easterday

---

**From:** Sgt. George L. Nichols  
**Sent:** Wednesday, August 23, 2023 4:42 PM  
**To:** Kerrie Easterday  
**Subject:** Re: 2204 Maple Swamp - Ground-Mount Solar - Site Plan Review

No issues as well

On Aug 23, 2023, at 3:08 PM, Kerrie Easterday <keasterday@dighton-ma.gov> wrote:

Received, thanks Chief!

Kerrie J Easterday  
Office Manager  
Planning Board & Zoning Board of Appeals  
(508) 669-6431, ext. 114

**From:** Chief Chris Maguy <cmaguy@dighton-ma.gov>  
**Sent:** Wednesday, August 23, 2023 3:06 PM  
**To:** Kai R.Hadley <kai@whalingcitysolar.com>; Sgt. George L. Nichols <gnichols@dighton-ma.gov>  
**Cc:** Adam Gent <adam@whalingcitysolar.com>; Kerrie Easterday <keasterday@dighton-ma.gov>  
**Subject:** RE: 2204 Maple Swamp - Ground-Mount Solar - Site Plan Review

All,

I have no issues with the solar array as shown on the plan set.

Chief Maguy

*Christopher J. Maguy*

Fire Chief/EMD  
Dighton Fire Department  
300 Main Street  
Dighton, MA 02715  
Office: 508-669-6611  
Fax: 508-669-6861  
[www.dightonfire.com](http://www.dightonfire.com)

THE DOCUMENTS ACCOMPANYING THIS EMAIL CONTAIN INFORMATION FROM THIS OFFICE WHICH MAY BE CONFIDENTIAL AND/OR LEGALLY PRIVILEGED. THE INFORMATION IS INTENDED ONLY FOR USE OF THE INDIVIDUAL OR ENTITY NAMED ON THIS EMAIL. IF YOU ARE NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT DISCLOSURE, COPYING, DISTRIBUTION OR THE TAKING OF ANY ACTION IN RELIANCE ON THE CONTENTS OF THIS INFORMATION IS

## Kerrie Easterday

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**From:** Chief Chris Maguy  
**Sent:** Wednesday, August 23, 2023 3:06 PM  
**To:** Kai R.Hadley; Sgt. George L. Nichols  
**Cc:** Adam Gent; Kerrie Easterday  
**Subject:** RE: 2204 Maple Swamp - Ground-Mount Solar - Site Plan Review

All,

I have no issues with the solar array as shown on the plan set.

Chief Maguy

*Christopher J. Maguy*

Fire Chief/EMD  
Dighton Fire Department  
300 Main Street  
Dighton, MA 02715  
Office: 508-669-6611  
Fax: 508-669-6861  
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**From:** Kai R.Hadley <kai@whalingcitysolar.com>  
**Sent:** Wednesday, August 23, 2023 2:09 PM  
**To:** Chief Chris Maguy <cmaguy@dighton-ma.gov>; Sgt. George L. Nichols <gnichols@dighton-ma.gov>  
**Cc:** Adam Gent <adam@whalingcitysolar.com>; Kerrie Easterday <keasterday@dighton-ma.gov>  
**Subject:** Re: 2204 Maple Swamp - Ground-Mount Solar - Site Plan Review

Hello George & Chris - I am reaching out following written receipt of the Site Plan Review/Special Permit applications (thank you for accommodating my drop-ins) and planset this afternoon, for a small-scale residential solar PV system.

Could you each please confirm "no concerns" with the proposed array? If we can receive your "okay" with the planset by 4:00pm, we will verify a place for David Prairie on the Planning Board's 9/20 meeting agenda - it would be greatly appreciated by us and the client alike. Please copy Kerrie on any correspondences to ensure she receives the confirmation.

Thank you - Kai

GENERAL NOTES

1. PROJECT NOTES

- 1.1 THIS PHOTOVOLTAIC (PV) SYSTEM SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (NEC 2020) ARTICLE 690, ALL MANUFACTURERS'S LISTING AND INSTALLATION INSTRUCTIONS, AND THE RELEVANT CODES AS SPECIFIED BY THE AUTHORITY HAVING JURISDICTION'S (AHJ) APPLICABLE CODES.
- 1.2 GROUND FAULT DETECTION AND INTERRUPTION (GFDI) DEVICE IS INTEGRATED WITH THE INVERTER.
- 1.3 THE UTILITY INTERCONNECTION APPLICATION MUST BE APPROVED AND PV SYSTEM INSPECTED PRIOR TO PARALLEL OPERATION
- 1.4 ALL PV SYSTEM COMPONENTS; MODULES, UTILITY-INTERACTIVE INVERTERS, AND SOURCE CIRCUIT COMBINER BOXES ARE IDENTIFIED AND LISTED FOR USE IN PHOTOVOLTAIC SYSTEMS

2. SCOPE OF WORK

- 2.1 CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND SPECIFICATIONS OF THE GRID-TIED PHOTOVOLTAIC SYSTEM RETROFIT. CONTRACTOR WILL BE RESPONSIBLE FOR COLLECTING EXISTING ONSITE REQUIREMENTS TO DESIGN, SPECIFY, AND INSTALL THE EXTERIOR ROOF-MOUNTED PORTION OF THE PHOTOVOLTAIC SYSTEMS DETAILED IN THIS DOCUMENT.

DESIGN SPECIFICATIONS

- WIND SPEED: 125 MPH
- GROUND SNOW LOAD: 30 PSF
- EXPOSURE CATEGORY: B

AUTHORITIES HAVING JURISDICTION

- ZONING: N. DIGHTON, MA
- COUNTY: N. DIGHTON, MA

- UTILITY: NATIONAL GRID

APPLICABLE CODES & STANDARDS

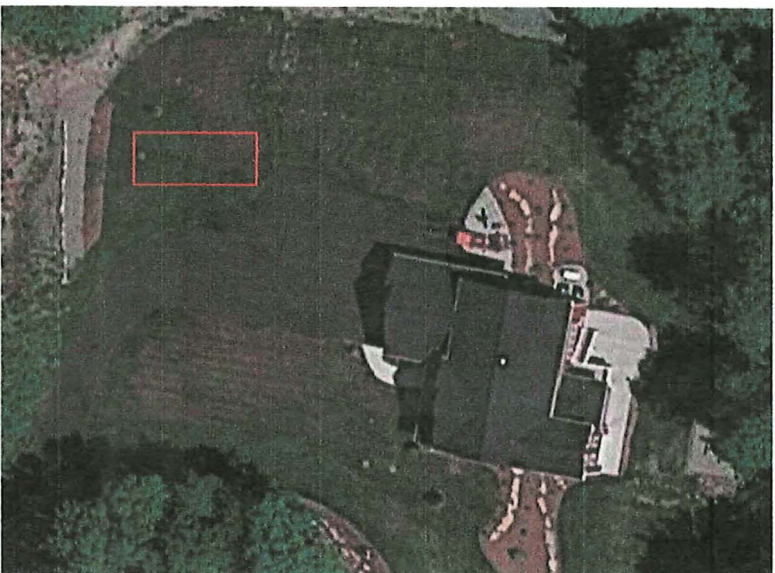
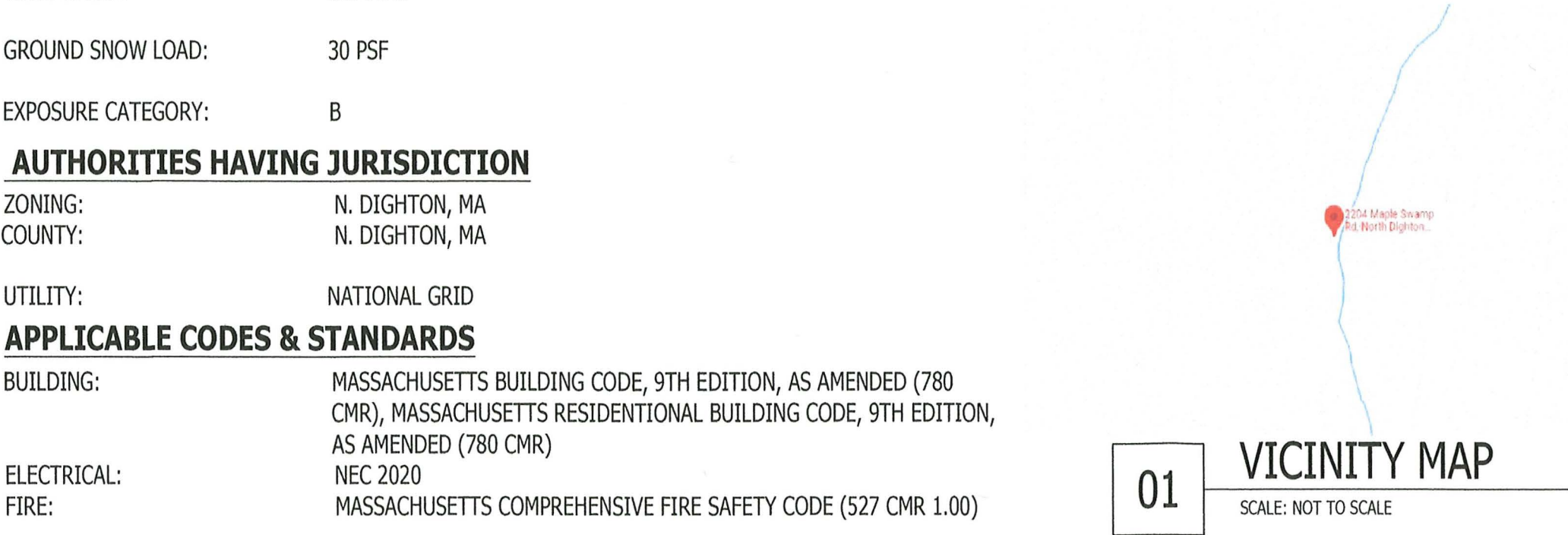
- BUILDING: MASSACHUSETTS BUILDING CODE, 9TH EDITION, AS AMENDED (780 CMR), MASSACHUSETTS RESIDENTIONAL BUILDING CODE, 9TH EDITION, AS AMENDED (780 CMR)
- ELECTRICAL: NEC 2020
- FIRE: MASSACHUSETTS COMPREHENSIVE FIRE SAFETY CODE (527 CMR 1.00)

3. WORK INCLUDES

- 3.1 PV ROOF ATTACHMENTS
- 3.2 PV RACKING SYSTEM INSTALLATION
- 3.3 PV MODULE AND INVERTER INSTALLATION
- 3.4 PV EQUIPMENT GROUNDING
- 3.5 PV SYSTEM WIRING TO A ROOF-MOUNTED JUNCTION BOX
- 3.6 PV INSTALLING SYSTEM MONITORING EQUIPEMENT
- 3.7 PV LOAD CENTERS (IF NECESSARY)
- 3.8 PV METERING (IF NECESSARY)
- 3.8 PV DISCONNECTS
- 3.9 PV GROUNDING ELECTRODE & BONDING TO (E) GEC
- 3.10 PV FINAL COMMISSIONING
- 3.11 (E) ELECTRICAL EQUIPMENT RETROFIT FOR PV

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
PV-1	COVER PAGE
PV-2	SITE PLAN
PV-3	PROJECT PLAN
PV-4	SIGNAGE
PV-5	THREE LINE DIAGRAM



CONTRACTOR  
WHALING CITY SOLAR  
ADDRESS: 1213 PURCHASE ST, NEW BEDFORD,  
MA 02740  
PHONE: 508-4155-661  
LICENSE: CS-114248



DAVID PRAIRIE RESIDENCE

RESIDENTIAL GRID INTERACTIVE SOLAR INSTALLATION  
2204 MAPLE SWAMP ROAD, N. DIGHTON, MA 02764  
APN: DIGHM001B00004L00000

COVER PAGE			
SYSTEM DC SIZE @ STC: 14.400 kW (30) HANWHA Q-CELLS Q.PEAK DUO XL-G10.3/BFG 480 (1) SOLAR EDGE SE10000H-US (240V)			
DRAWN BY: O.S.	CHECKED BY: M.M.	DATE: 09.01.2023	REV:

PAGE:

PV-1



PLAN LEGEND

- E

MAIN ENTRANCE DOOR
- M

(E) UTILITY METER
- MEP

(E) MAIN ELECTRICAL PANEL
- S

(N) AC DISCONNECT
- JB

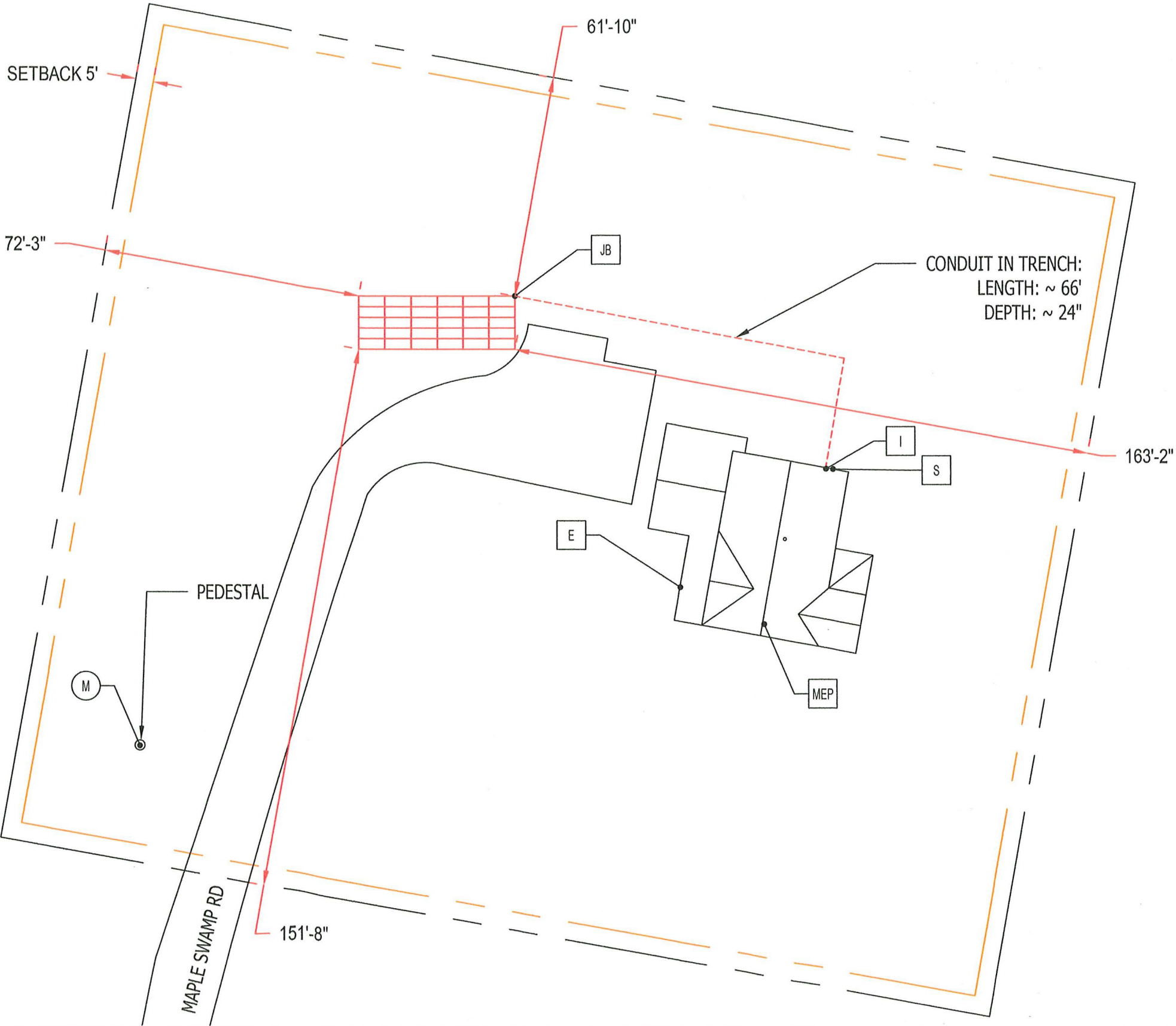
(N) JUNCTION BOX
- I

(N) INVERTER
- CONDUIT IN TRENCH
- PV MODULE
- OBSTRUCTION
- PROPERTY LINE
- SETBACK LINE

AC DISCONNECT IS EXTERNAL, LOCKABLE, TAGGABLE AND ACCESSIBLE 24/7.

NOTES:

1. ALL WORK TO COMPLY WITH MASSACHUSETTS BUILDING CODE, 9TH EDITION, AS AMENDED (780 CMR), NEC 2020, ARTICLE 690, AND ALL MANUFACTURER'S LISTINGS, AND INSTALLATION INSTRUCTIONS.
2. NOTIFY SERVING UTILITY BEFORE ACTIVATION OF PV SYSTEM
3. WHEN A BACKFEED BREAKER IS THE METHOD OF UTILITY INTERCONNECTION, BREAKER SHALL NOT READ "LINE AND LOAD"



01

SITE PLAN

1/32" = 1'-0"

0 16'-0" 32'-0"

N

W

E

S

CONTRACTOR  
WHALING CITY SOLAR  
ADDRESS: 1213 PURCHASE ST, NEW BEDFORD,  
MA 02740  
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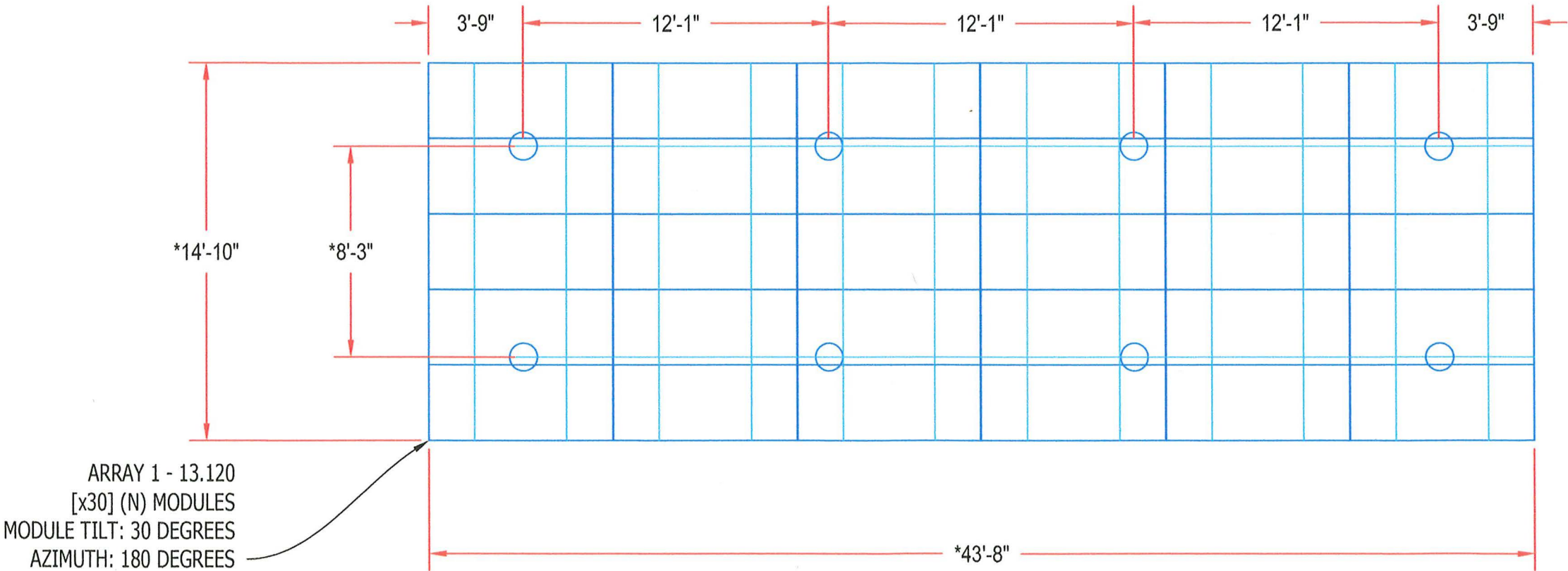
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RESIDENTIAL GRID INTERACTIVE SOLAR INSTALLATION  
2204 MAPLE SWAMP ROAD, N. DIGHTON, MA 02764  
APN: DIGHM001B00004L00000

SITE PLAN				PAGE:  PV-2
SYSTEM DC SIZE @ STC: 14.400 kW (30) HANWHA Q-CELLS Q.PEAK DUO XL-G10.3/BFG 480 (1) SOLAR EDGE SE10000H-US (240V)				
DRAWN BY:	CHECKED BY:	DATE:	REV:	
O.S.	M.M.	09.01.2023		

PLAN LEGEND

- PV MODULE
- RAIL

\* SHOULD BE CALCULATED BY  
MANUFACTURER



01

PROJECT PLAN

3/16" = 1'-0"

0

2'-8"

5'-4"

N

W

E

S

CONTRACTOR  
WHALING CITY SOLAR  
ADDRESS: 1213 PURCHASE ST, NEW BEDFORD,  
MA 02740  
PHONE: 508-4155-661  
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DAVID PRAIRIE RESIDENCE  
RESIDENTIAL GRID INTERACTIVE SOLAR INSTALLATION  
2204 MAPLE SWAMP ROAD, N. DIGHTON, MA 02764  
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PROJECT PLAN			
SYSTEM DC SIZE @ STC: 14.400 kW (30) HANWHA Q-CELLS Q.PEAK DUO XL-G10.3/BFG 480 (1) SOLAR EDGE SE10000H-US (240V)			
DRAWN BY: O.S.	CHECKED BY: M.M.	DATE: 09.01.2023	REV:



LABELING NOTES  
1.1 LABELING REQUIREMENTS BASED ON THE 2020 NATIONAL ELECTRICAL CODE, INTERNATIONAL FIRE CODE 605.11, OSHA STANDARD 1910.145, ANSI Z535  
1.2 MATERIAL BASED ON THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.  
1.3 LABELS TO BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.  
1.4 LABELS TO BE A MINIMUM LETTER HEIGHT OF 3/8" AND PERMANENTLY AFFIXED.  
1.5 ALERTING WORDS TO BE COLOR CODED. "DANGER" WILL HAVE RED BACKGROUND; "WARNING" WILL HAVE ORANGE BACKGROUND; "CAUTION" WILL HAVE YELLOW BACKGROUND. [ANSI Z535]  
1.6 ALL SIGNAGE MUST BE PERMANENTLY ATTACHED AND BE WEATHER RESISTANT/SUNLIGHT RESISTANT AND CANNOT BE HAND-WRITTEN PER NEC 110.21(B)

**WARNING**

ELECTRICAL SHOCK HAZARD

TERMINALS ON THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

**LABEL 1**  
AT EACH DISCONNECTING MEANS FOR PHOTOVOLTAIC EQUIPMENT (2" X 4").  
[NEC 690.13].

**WARNING**

POWER SOURCE OUTPUT CONNECTION DO NOT RELOCATE THIS OVERCURRENT DEVICE

**LABEL 2**  
AT POINT OF INTERCONNECTION OVERCURRENT DEVICE (2" X 4").  
[NEC 705.12(B)(2)(3)(B)].

**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 ARRAY

**LABEL 3**  
AT RAPID SHUTDOWN SYSTEM (3 3/4" X 5 1/4"). [NEC 690.56(C)(1)(A)].

**PHOTOVOLTAIC POWER SOURCE**

**LABEL 4**  
AT EXPOSED RACEWAYS, CABLE TRAYS, AND OTHER WIRING METHODS; SPACED AT MAXIMUM 10 FT SECTION OR WHERE SEPARATED BY ENCLOSURES, WALLS, PARTITIONS, CEILINGS, OR FLOORS (5 3/4" X 1 1/8").  
[NEC 690.31(G)]  
LETTERS AT LEAST 3/8 INCH; WHITE ON RED BACKGROUND; REFLECTIVE  
[IFC 605.11.1.1]

**RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM**

**LABEL 5**  
AT RAPID SHUTDOWN DISCONNECT SWITCH (5 1/4" X 2").  
[NEC 690.56(C)(3)].

**CAUTION**

**SOLAR ELECTRIC SYSTEM CONNECTED**

**LABEL 6**  
AT UTILITY METER (5 3/4" X 1 1/8")  
[NEC 690.56(B)]

**WARNING**

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

**LABEL 7**  
AT POINT OF INTERCONNECTION (2 3/4" X 1 5/8").  
[NEC 705.12(B)(3)]

**WARNING**

SOLAR ELECTRIC CIRCUIT BREAKER IS BACKFED

**LABEL 8**  
AT POINT OF INTERCONNECTION (2" X 1").  
[NEC 705.12(B)(3)]

**INTERACTIVE PHOTOVOLTAIC SYSTEM CONNECTED PHOTOVOLTAIC SYSTEM DISCONNECT LOCATED NORTH SIDE OF THE HOUSE**

**DIRECTORY**  
PERMANENT PLAQUE OR DIRECTORY PROVIDING THE LOCATION OF THE SERVICE DISCONNECTING MEANS AND THE PHOTOVOLTAIC SYSTEM DISCONNECTING MEANS IF NOT IN THE SAME LOCATION (5 3/4" X 1 1/8").  
[NEC 690.56(B)]  
WHERE THE PV SYSTEMS ARE REMOTELY LOCATED FROM EACH OTHER, A DIRECTORY IN ACCORDANCE WITH 705.10 SHALL BE PROVIDED AT EACH PV SYSTEM DISCONNECTING MEANS.  
PV SYSTEM EQUIPMENT AND DISCONNECTING MEANS SHALL NOT BE INSTALLED IN BATHROOMS  
[NEC 690.4(D),(E)]

**PHOTOVOLTAIC SOLAR AC DISCONNECT**

**LABEL 9**  
AT EACH AC DISCONNECTING MEANS (4" X 1").  
[NEC 690.13(B)].

**PHOTOVOLTAIC SOLAR DC DISCONNECT**

**LABEL 10**  
AT EACH DC DISCONNECTING MEANS (4" X 1").  
[NEC 690.13(B)].

MAXIMUM VOLTAGE 480 VDC

MAXIMUM CIRCUIT CURRENT 45 AMPS

MAX. RATED OUTPUT CURRENT OF THE CHARGE CONTROLLER OR DC-TO-DC CONVERTER (IF INSTALLED) 45 AMPS

**LABEL 12**  
AT EACH DC DISCONNECTING MEANS (3" X 4").  
[NEC 690.53].

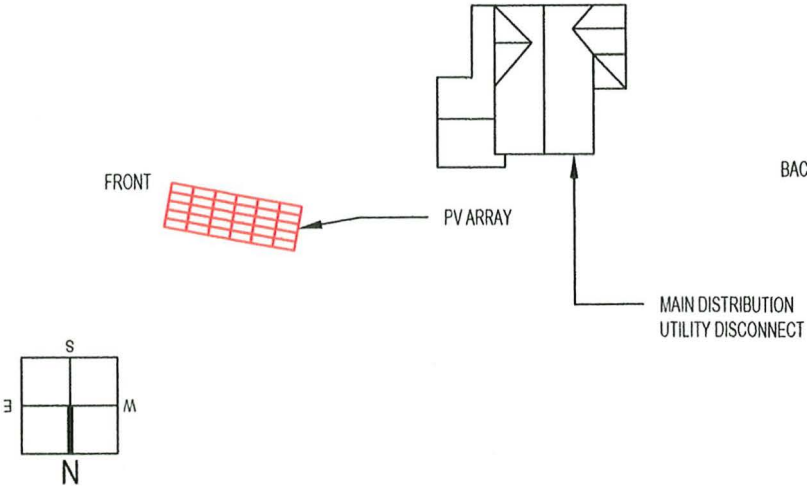
**AC DISCONNECT PHOTOVOLTAIC SYSTEM POWER SOURCE**

RATED AC OUTPUT CURRENT 42 AMPS

NOMINAL OPERATING AC VOLTAGE 240 VOLTS

**LABEL 11**  
AT POINT OF INTERCONNECTION, MARKED AT DISCONNECTING MEANS (4" X 2").  
[NEC 690.54]

**!CAUTION!**  
POWER TO THIS BUILDING IS ALSO SUPPLIED FROM GROUND MOUNTED SOLAR ARRAYS WITH SAFETY DISCONNECTS AS SHOWN:



CONTRACTOR  
WHALING CITY SOLAR  
ADDRESS: 1213 PURCHASE ST, NEW BEDFORD, MA 02740  
PHONE: 508-4155-661  
LICENSE: CS-114248



**DAVID PRAIRIE RESIDENCE**  
RESIDENTIAL GRID INTERACTIVE SOLAR INSTALLATION  
2204 MAPLE SWAMP ROAD, N. DIGHTON, MA 02764  
APN: DIGHM001B00004L00000

**SIGNAGE**

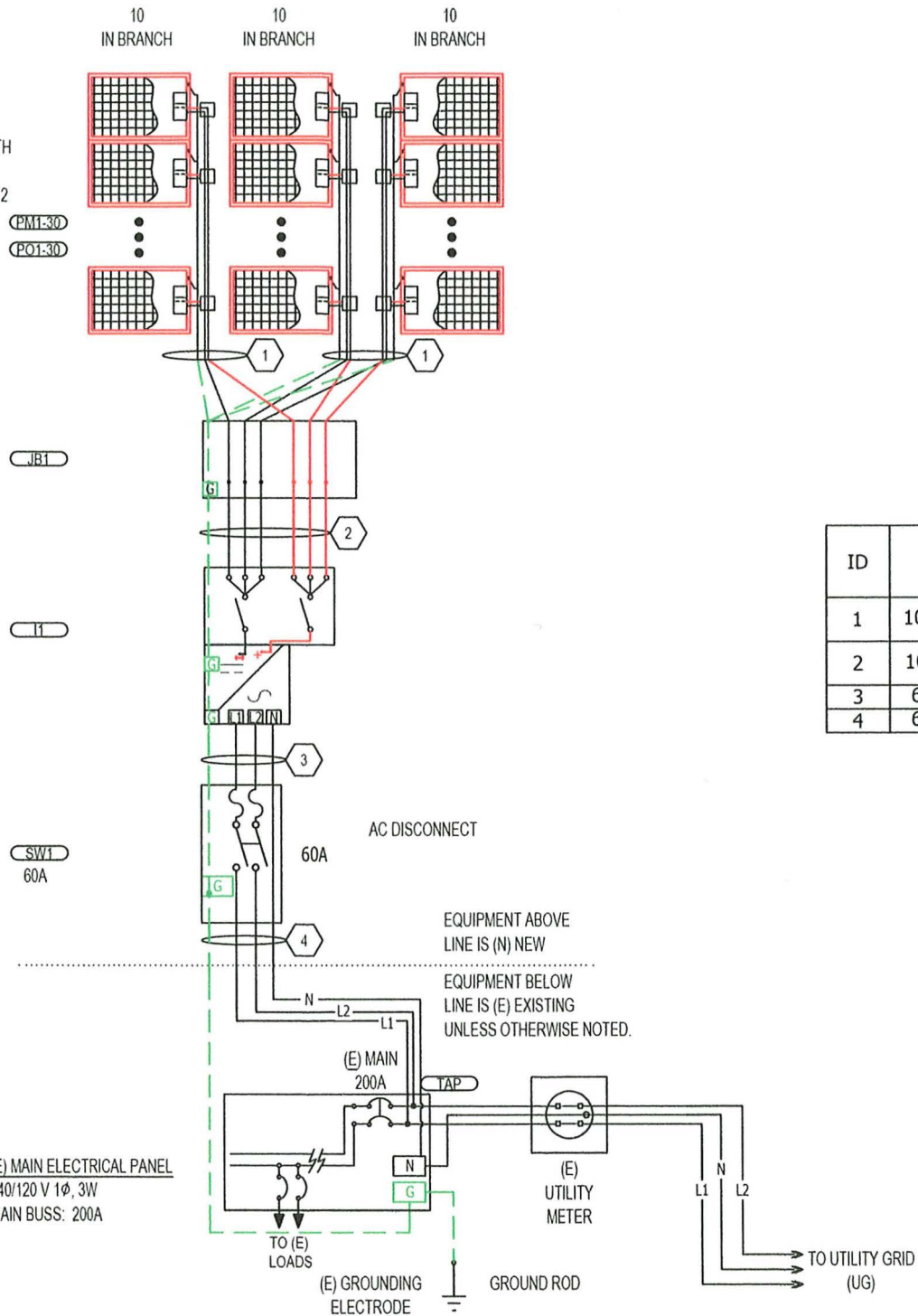
SYSTEM DC SIZE @ STC: 14.400 kW  
(30) HANWHA Q-CELLS Q.PEAK DUO XL-G10.3/BFG 480  
(1) SOLAR EDGE SE10000H-US (240V)

DRAWN BY: O.S. CHECKED BY: M.M. DATE: 09.01.2023 REV:

PAGE:  
**PV-4**



PV SYSTEM EQUIPPED WITH  
RAPID SHUTDOWN AND  
COMLIANT WITH NEC 690.12



EQUIPMENT DESCRIPTION

LABEL	DESCRIPTION	EQUIPMENT
PM1-30	SOLAR MODULES BRAND	HANWHA Q-CELLS Q.PEAK DUO XL-G10.3/BFG 480 (480W), Voc:53.39V, Isc:11.12A
I1	INVERTER	SOLAR EDGE SE10000H-US (240V), RATED AC POWER:10000W
PO1-30	DC POWER OPTIMIZER	SOLAR EDGE P505
SW1	AC BLADE DISCONNECT	SQUARE D D222NRB, FUSED, 2-POLE, 60A, 240VAC
F1-2	FUSE	FUSE, 60A, 240VAC
JB1	JUNCTION BOX	TYP. 4"x4"

ID	CONDUCTOR	EGC	CONDUIT	NUMBER OF CONDUCTORS IN CONDUIT	CONDUIT FILL, %	TEMP. CORR. FACTOR	CONDUIT FILL FACTOR	CONT. CURRENT	MAX. CURRENT (125%)	BASE AMP.	DERATED AMP.	VOLTAGE DROP
1	10 AWG PV WIRE, COPPER	6 AWG BARE, COPPER	FREE AIR	5	N/A	0.96 (32.5 °C)	1	15A	18.75A	55A	52.8A	
2	10 AWG THWN-2, COPPER	10 AWG THWN-2, COPPER	0.75" DIA PVC-40	7	29.09%	0.96 (32.5 °C)	0.8	15A	18.75A	40A	30.72A	1.02%
3	6 AWG THWN-2, COPPER	6 AWG THWN-2, COPPER	0.75" DIA EMT	4	38.03%	0.96 (32.5 °C)	1	42A	52.5A	75A	72A	
4	6 AWG THWN-2, COPPER	6 AWG THWN-2, COPPER	0.75" DIA EMT	4	38.03%	0.96 (32.5 °C)	1	42A	52.5A	75A	72A	

ELECTRICAL CHARACTERISTICS

INVERTER	(1) SOLAR EDGE SE10000H-US (240V)
MODULE	HANWHA Q-CELLS Q.PEAK DUO XL-G10.C 480W (480W)
NUMBER OF MODULES	30
ARRAY CIRCUITS	3 STRINGS OF 10
STC POWER OF ARRAY	14 400W
PTC POWER OF ARRAY	13 413W
DC STRING OPERATING CURRENT	12A, 12A, 12A
DC STRING MAX CURRENT	15A
ARRAY VMP	400V
NUMBER OF STRINGS	3
CEC POWER OUTPUT	10 000W
MAX AC OUTPUT CURRENT	42.0A

CONTRACTOR  
WHALING CITY SOLAR  
ADDRESS: 1213 PURCHASE ST, NEW BEDFORD,  
MA 02740  
PHONE: 508-4155-661  
LICENSE: CS-114248



DAVID PRAIRIE RESIDENCE  
RESIDENTIAL GRID INTERACTIVE SOLAR INSTALLATION  
2204 MAPLE SWAMP ROAD, N. DIGHTON, MA 02764  
APN: DIGHM001B00004L00000

THREE LINE DIAGRAM

SYSTEM DC SIZE @ STC: 14.400 kW  
(30) HANWHA Q-CELLS Q.PEAK DUO XL-G10.3/BFG 480  
(1) SOLAR EDGE SE10000H-US (240V)

DRAWN BY: O.S.      CHECKED BY: M.M.      DATE: 09.01.2023      REV:

PAGE:

PV-5



powered by  
**Q.ANTUM DUO Z**

# Q.PEAK DUO XL-G10.3 / BFG 475-490

BIFACIAL DOUBLE GLASS MODULE  
WITH EXCELLENT RELIABILITY  
AND ADDITIONAL YIELD



Quality  
Controlled PV

www.tuv.com  
ID 1111232615



## BIFACIAL ENERGY YIELD GAIN OF UP TO 20%

Bifacial Q.ANTUM solar cells with zero gap cell layout make efficient use of light shining on the module rear-side for radically improved LCOE.



## LOW ELECTRICITY GENERATION COSTS

Q.ANTUM DUO Z combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology for higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 21.4%.



## INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behavior.



## ENDURING HIGH PERFORMANCE

Long-term yield security with Anti LID and Anti PID Technology<sup>1</sup>, Hot-Spot Protect and Traceable Quality Tra.Q™.



## FRAME FOR VERSATILE MOUNTING OPTIONS

High-tech aluminum alloy frame protects from damage, enables use of a wide range of mounting structures and is certified regarding IEC for high snow (5400 Pa) and wind loads (2400 Pa).

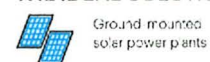


## A RELIABLE INVESTMENT

Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty<sup>2</sup>.

<sup>1</sup> AP1 test conditions according to IEC / TS 62804-1:2015 method B (-1500 V, 168h) including post-treatment according to IEC 61215-1-1 Ed. 2.0 (CD).  
<sup>2</sup> See data sheet on rear for further information.

## THE IDEAL SOLUTION FOR:

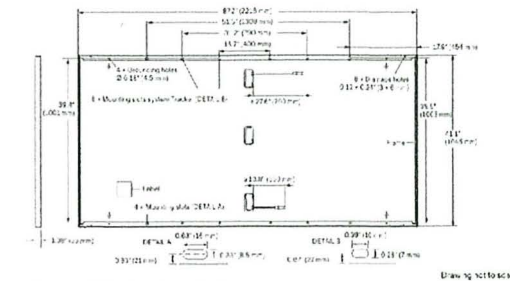


Engineered in Germany

**Q CELLS**

## MECHANICAL SPECIFICATION

Format	87.2 in x 41.1 in x 1.38 in (including frame) (2216 mm x 1045 mm x 35 mm)
Weight	64.2 lbs (29.1 kg)
Front Cover	0.05 in (2.0 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	0.05 in (2.0 mm) semi-tempered glass
Frame	Anodized aluminum
Cell	6 x 26 monocrystalline Q.ANTUM solar half cells
Junction Box	2.09-3.98 in x 1.26-2.36 in x 0.59-0.71 in (53-101 mm x 32-60 mm x 15-18 mm), IP67, with bypass diodes
Cable	4 mm <sup>2</sup> Solar cable; (+) ≥ 27.6 in (700 mm), (-) ≥ 13.8 in (350 mm)
Connector	Stäubli MC4, Stäubli MC4-Evo2, Hanwha Q CELLS HGC4, IP68



## ELECTRICAL CHARACTERISTICS

POWER CLASS		475		480	485		490			
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC <sup>1</sup> AND BSTC <sup>2</sup> (POWER TOLERANCE +5 W / -0 W)										
Minimum			BSTC <sup>2</sup>		BSTC <sup>2</sup>		BSTC <sup>2</sup>		BSTC <sup>2</sup>	
	Power at MPP <sup>3</sup>	P <sub>MPP</sub> [W]	475	519.6	480	525.0	485	530.5	490	536.0
	Short Circuit Current <sup>1</sup>	I <sub>SC</sub> [A]	11.08	12.12	11.12	12.17	11.16	12.21	11.20	12.26
	Open Circuit Voltage <sup>1</sup>	V <sub>OC</sub> [V]	53.15	53.34	53.39	53.58	53.63	53.82	53.86	54.06
	Current at MPP	I <sub>MPP</sub> [A]	10.55	11.54	10.59	11.58	10.63	11.63	10.67	11.67
	Voltage at MPP	V <sub>MPP</sub> [V]	45.03	45.02	45.33	45.32	45.63	45.62	45.93	45.92
	Efficiency <sup>1</sup>	η [%]	≥20.5	≥22.4	≥20.7	≥22.7	≥20.9	≥22.9	≥21.2	≥23.1

Bifaciality of P<sub>MPP</sub> and I<sub>SC</sub>: 70% ± 5% • Bifaciality given for rear side irradiation on top of STC (front side) • According to IEC 60304-1-2

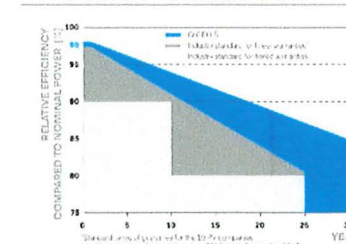
<sup>1</sup> Measurement tolerances P<sub>MPP</sub> ± 3%; I<sub>SC</sub>, V<sub>OC</sub> ± 5% at STC; <sup>2</sup> at BSTC: 1000 W/m<sup>2</sup>; <sup>3</sup> at BSTC: 1000 W/m<sup>2</sup> • φ = 135 W/m<sup>2</sup>, φ = 70% ± 5%, 25 ± 2°C, AM 1.5 according to IEC 60904-3

## MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT<sup>2</sup>

		357.6	361.4	365.1	368.9
Power at MPP	P <sub>MPP</sub> [W]				
Short Circuit Current	I <sub>SC</sub> [A]	8.92	8.96	8.99	9.02
Open Circuit Voltage	V <sub>OC</sub> [V]	50.27	50.49	50.72	50.95
Current at MPP	I <sub>MPP</sub> [A]	8.30	8.34	8.37	8.40
Voltage at MPP	V <sub>MPP</sub> [V]	43.06	43.35	43.63	43.92

<sup>2</sup> 800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5

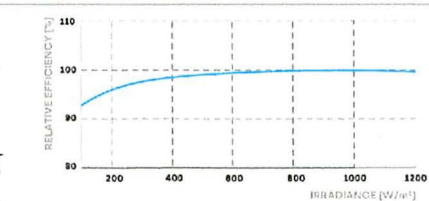
## Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.45% degradation per year. At least 93.95% of nominal power up to 10 years. At least 84.95% of nominal power up to 30 years.

All data with measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organization of your respective country.

## PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25°C, 1000 W/m<sup>2</sup>)

## TEMPERATURE COEFFICIENTS

Temperature Coefficient of I <sub>SC</sub>	α	[%/K]	+0.04	Temperature Coefficient of V <sub>OC</sub>	β	[%/K]	-0.27
Temperature Coefficient of P <sub>MPP</sub>	γ	[%/K]	-0.34	Nominal Module Operating Temperature	NMOT	[°F]	108 ± 5.4 (42 ± 3°C)

## PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V <sub>sys</sub>	[V]	1500	PV module classification	Class II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI/UL 61730	TYPE 29 <sup>1</sup>
Max. Design Load, Push/Pull <sup>3</sup>	[lbs/ft <sup>2</sup> ]	75 (3600 Pa) / 33 (1600 Pa)	Permitted Module Temperature on Continuous Duty	-40°F up to +185°F (-40°C up to +85°C)
Max. Test Load, Push/Pull <sup>3</sup>	[lbs/ft <sup>2</sup> ]	113 (5400 Pa) / 50 (2400 Pa)		

<sup>3</sup> See Installation Manual

<sup>4</sup> New Type is similar to Type 3 but with metallic frame

## QUALIFICATIONS AND CERTIFICATES

Quality Controlled PV - TÜV Rheinland, UL 6730, CE compliant, IEC 61215-1:2016, IEC 61730-2:2016, U.S. Patent No. 8,833,215 (solar cell)



	Horizontal packaging	Vertical packaging
89.4 in 2270 mm	43.1 in 1095 mm	47.6 in 1210 mm
1975 lbs 896 kg	20 pallets	20 pallets
29 modules	29 modules	30 modules

**Note:** Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q CELLS America Inc.  
400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us-q-cel.com | WEB www.q-cel.us



# Single Phase Inverter with HD-Wave Technology for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US / SE7600H-US / **SE10000H-US** / SE11400H-US



INVERTERS

## Optimized installation with HD-Wave technology

- Specifically designed to work with power optimizers
- Record-breaking 99% weighted efficiency
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014, NEC 2017 and NEC 2020 per article 690.11 and 690.12
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Small, lightweight, and easy to install both outdoors or indoors
- Built-in module-level monitoring
- Optional: Faster installations with built-in consumption metering (1% accuracy) and production revenue grade metering (0.5% accuracy, ANSI C12.20)

[solaredge.com](http://solaredge.com)



## Single Phase Inverter with HD-Wave Technology for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US / SE7600H-US / **SE10000H-US** / SE11400H-US

MODEL NUMBER	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	
APPLICABLE TO INVERTERS WITH PART NUMBER	SEXXXXH-XXXXXBXX4							
OUTPUT								
Rated AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
Maximum AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
AC Output Voltage Min.-Nom.-Max. (211 - 240 - 264)	✓	✓	✓	✓	✓	✓	✓	Vac
AC Output Voltage Min.-Nom.-Max. (183 - 208 - 229)	-	✓	-	✓	-	-	✓	Vac
AC Frequency (Nominal)	59.3 - 60 - 60.5 <sup>(1)</sup>							Hz
Maximum Continuous Output Current @240V	12.5	16	21	25	32	42	47.5	A
Maximum Continuous Output Current @208V	-	16	-	24	-	-	48.5	A
Power Factor	1, Adjustable - 0.85 to 0.85							
GFDI Threshold	1							A
Utility Monitoring, Islanding Protection, Country Configurable Thresholds	Yes							
INPUT								
Maximum DC Power @240V	4650	5900	7750	9300	11800	15500	17650	W
Maximum DC Power @208V	-	5100	-	7750	-	-	15500	W
Transformer-less, Ungrounded	Yes							
Maximum Input Voltage	480							Vdc
Nominal DC Input Voltage	380			400				Vdc
Maximum Input Current @240V <sup>(2)</sup>	8.5	10.5	13.5	16.5	20	27	30.5	Adc
Maximum Input Current @208V <sup>(2)</sup>	-	9	-	13.5	-	-	27	Adc
Max. Input Short Circuit Current	45							Adc
Reverse-Polarity Protection	Yes							
Ground-Fault Isolation Detection	600k $\Omega$ Sensitivity							
Maximum Inverter Efficiency	99	99.2						%
CEC Weighted Efficiency	99					99 @ 240V 98.5 @ 208V		%
Nighttime Power Consumption	< 2.5							W

(1) For other regional settings please contact SolarEdge support  
(2) A higher current source may be used, the inverter will limit its input current to the values stated



Power Optimizer
For North America

P370 / P400 / P401 / P485 / P505



PV power optimization at the module level

- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Mitigates all types of module mismatch losses, from manufacturing tolerance to partial shading
- Flexible system design for maximum space utilization
- Fast installation with a single bolt
- Next generation maintenance with module-level monitoring
- Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)
- Module-level voltage shutdown for installer and firefighter safety

POWER OPTIMIZER

Power Optimizer
For North America

P370 / P400 / P401 / P485 / P505

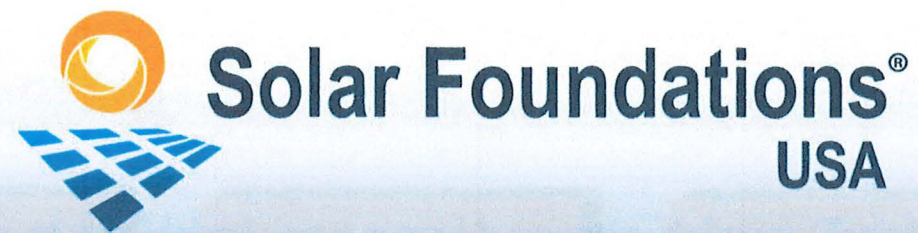
Optimizer model (typical module compatibility)	P370 (for higher-power 60 and 72-cell modules)	P400 (for 72 & 96-cell modules)	P401 (for high power 60 and 72-cell modules)	P485 (for high-voltage modules)	P505 (for higher current modules)	
INPUT						
Rated Input DC Power <sup>(1)</sup>	370	400	430	485	505	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	60	80	60	125 <sup>(2)</sup>	83 <sup>(2)</sup>	Vdc
MPPT Operating Range	8 - 60	8 - 80	8 - 60	12.5 - 105	12.5 - 83	Vdc
Maximum Short Circuit Current (Isc)	11	10.1	12.5	11	14	Adc
Maximum DC Input Current	13.75	12.5	14.65	12.5	17.5	
Maximum Efficiency	99.5					%
Weighted Efficiency	98.8					%
Overvoltage Category	II					
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)						
Maximum Output Current	15					Adc
Maximum Output Voltage	60				80	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)						
Safety Output Voltage per Power Optimizer	1 ± 0.1					Vdc
STANDARD COMPLIANCE						
EMC	FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3					
Safety	IEC62109-1 (class II safety), UL1741, NEC/PVRSS					
Material	UL94 V-0, UV Resistant					
RoHS	Yes					
INSTALLATION SPECIFICATIONS						
Maximum Allowed System Voltage	1000					Vdc
Compatible inverters	All SolarEdge Single Phase and Three Phase inverters					
Dimensions (W x L x H)	129 x 153 x 27.5 / 5.1 x 6 x 1.1	129 x 153 x 33.5 / 5.1 x 6 x 1.3	129 x 153 x 29.5 / 5.1 x 6 x 1.16	129 x 159 x 49.5 / 5.1 x 6.3 x 1.9	129 x 162 x 59 / 5.1 x 6.4 x 2.3	mm / in
Weight (including cables)	630 / 1.4	750 / 1.7	655 / 1.5	845 / 1.9	1064 / 2.3	gr / lb
Input Connector	MC4 <sup>(3)</sup>			MC4 <sup>(3)</sup>	MC4 <sup>(3)</sup>	
Input Wire Length <sup>(4)</sup>	0.16 / 0.5					m / ft
Output Wire Type / Connector	Double Insulated / MC4					
Output Wire Length	1.2 / 3.9					m / ft
Operating Temperature Range <sup>(5)</sup>	-40 to +85 / -40 to +185					°C / °F
Protection Rating	IP68 / NEMA6P					
Relative Humidity	0 - 100					%

(1) Rated power of the module at STC will not exceed the optimizer "Rated Input DC Power". Modules with up to +5% power tolerance are allowed.  
(2) NEC 2017 requires max input voltage be not more than 80V.  
(3) For other connector types please contact SolarEdge.  
(4) Longer inputs wire lengths are available for use. For 0.9m input wire length order P401-xxLxxx.  
(5) For ambient temperature above +85°C / +185°F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details.  
(6) For detailed string sizing information, refer to [http://www.solaredge.com/sites/default/files/string\\_sizing\\_na.pdf](http://www.solaredge.com/sites/default/files/string_sizing_na.pdf).

PV System Design Using a SolarEdge Inverter <sup>(6)(7)</sup>	Single Phase HD-Wave	Single phase	Three Phase for 208V grid	Three Phase for 277/480V grid	
Minimum String Length (Power Optimizers)	P370, P400, P401 P485, P505	8 6	10 8	18 14	
Maximum String Length (Power Optimizers)		25	25	50	
Maximum Power per String	5700 <sup>(8)</sup> (6000 with SE7600-US - SE11400-US)	5250 <sup>(8)</sup>	6000 <sup>(8)</sup>	12750 <sup>(9)</sup>	W
Parallel Strings of Different Lengths or Orientations	Yes				

(6) For detailed string sizing information, refer to [http://www.solaredge.com/sites/default/files/string\\_sizing\\_na.pdf](http://www.solaredge.com/sites/default/files/string_sizing_na.pdf).  
(7) It is not allowed to mix P485/P505 with P370/P400/P401 in one string.  
(8) A string with more than 30 optimizers does not meet NEC rapid shutdown requirements, safety voltage will be above the 30V requirement.  
(9) For the 208V grid, it is allowed to install up to 6,500W per string when the maximum power difference between each string is 1,000W.  
(10) For 277/480V grid, it is allowed to install up to 15,000W per string when the maximum power difference between each string is 2,000W.



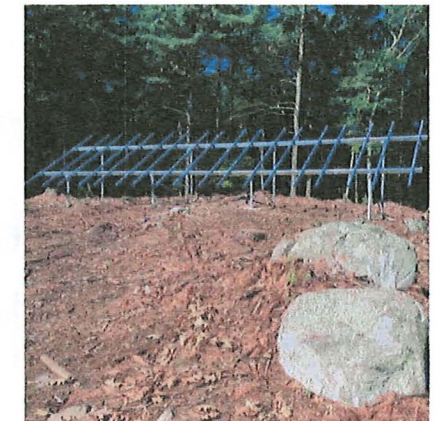


# Solar Foundations<sup>®</sup> USA

*Innovative. Adaptable. Grounded.*

## Adaptable Ground Screw Fixed Tilt System

The SFUSA<sup>®</sup> Ground Mount system is the optimal solution for residential and light commercial solar projects. By custom designing and manufacturing components in-house, Solar Foundations' structure fits and functions together seamlessly, installs in far less time and with greater strength. The highest quality materials such as high-grade steel fully galvanized in accordance with ASTM standards and high-strength aluminum alloys for our panel support rails are utilized for long-term durability. Designed to withstand high snow and wind areas, the UL 2703 classified system has an expected lifespan that exceeds multiple panel lifecycles. Thus, Solar Foundations' product maximizes the residual investment of your ground mount structure.



### Features

Solar Foundations' patented rail design offers a simple connection detail between the panel support rail and the horizontal support beams.

A two-man crew can typically install up to about a 25kW residential structure in a single day.

The patented telescopic design of the SFUSA Wind Brace allows quick and easily adaptable length changes to match installation conditions where significant adjustability is required.

SFUSA has developed processes and equipment that permits the installation of our patent pending ground screws in any soil conditions including solid rock.

Our foundations feature wider spans between support columns and stronger members. We engineered our system to obtain a better balance between all of the system components, resulting in less ground penetrations, a lower installed cost and has allowed us to offer further cost optimizations and array configurations that are not typically available in the industry.

✓ Allows for mounting panels in four-, five- or six-high in landscape orientation and can be adapted to custom configurations

✓ Durable design enables any wind speed and snow load

✓ 0° to 40° tilt with multiple inter-row spacing options

✓ Compatible with a wide range of modules

✓ Pile verification report available after the installation has been completed

✓ 25-year guarantee against failure

SFUSA<sup>®</sup>  
**Ground Mount**

SFUSA<sup>®</sup>  
**Ground Mount**

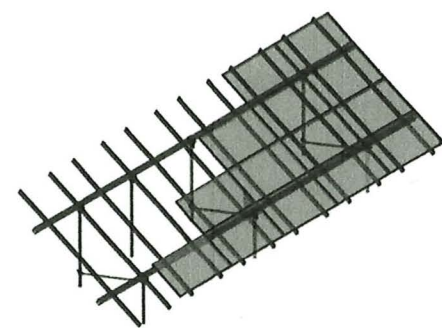


Let us simplify your **ground mount** structure process.

We're more than just a **racking company**.

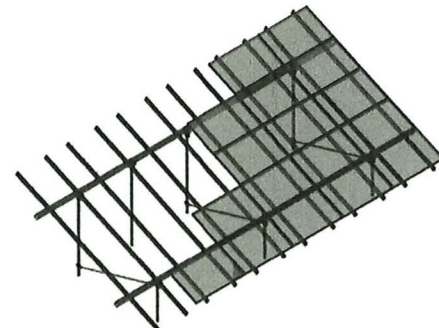
#### FT4L

Fixed Tilt 4 Landscape



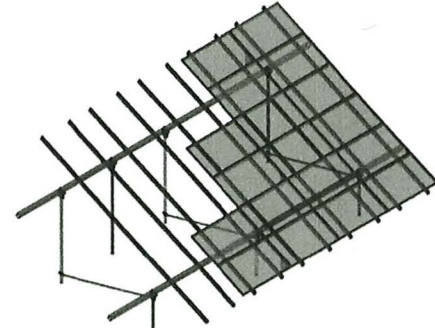
#### FT5L

Fixed Tilt 5 Landscape



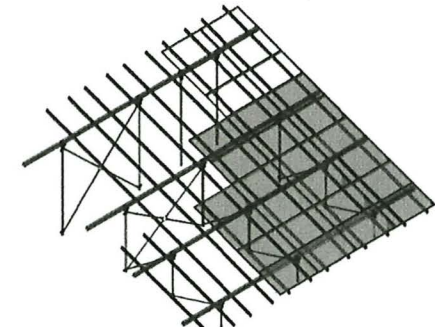
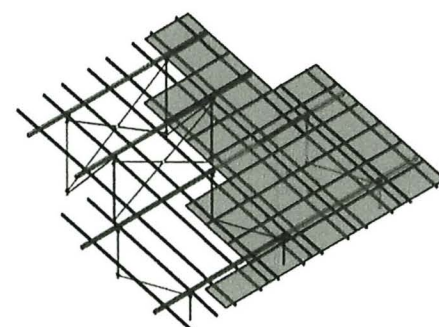
#### FT6L

Fixed Tilt 6 Landscape



#### Custom

SFUSA® has the ability to come up with creative structures and products outside of our standard systems for unique situations.



<b>Materials</b>	Hot-dipped galvanized steel, aluminum, stainless-steel mounting hardware
<b>Tilt Angle</b>	0° - 40°
<b>Module Orientation</b>	Landscape
<b>Finishes</b>	Galvanized
<b>Foundation Options</b>	Ground Screw - All soils including rock drilling
<b>Grounding</b>	Integrated or WEEB Bonding
<b>Maximum Grade of Terrain</b>	15°
<b>Design Services</b>	Signed & sealed structural drawings
<b>Certifications</b>	UL 2703
<b>Warranty</b>	25 years
<b>Installation Services</b>	Material, foundations, racking

LESS PILES  
LARGER SPANS  
UP TO 15°  
TERRAIN SLOPES

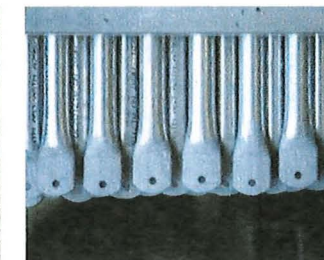
### Substructure Assembly

#### Horizontal Support Beam



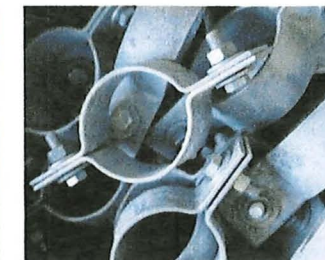
We provide maximum support for our structure by utilizing high yield strength hollow structural steel sections on our racking systems.

#### Diagonal Wind Brace and Insert



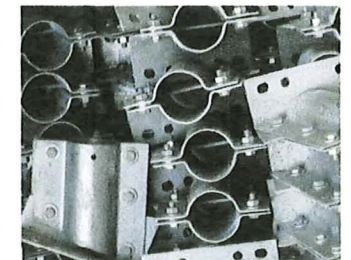
Our patented telescopic design allows quick and easily adaptable length changes to match installation conditions.

#### Diagonal Wind Brace Column Connector



SolarFoundations' hot-dipped galvanized custom Wind Brace Column Connectors fasten the Diagonal Wind Brace to a vertical column.

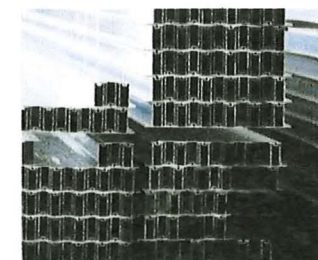
#### Column Caps



Our unique design allows a straightforward connection to the horizontal steel support beam.

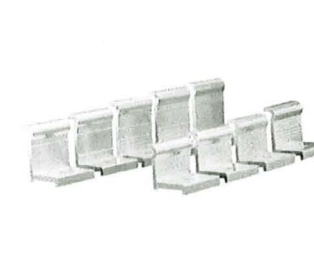
### Racking Assembly

#### Ground Mount Rail



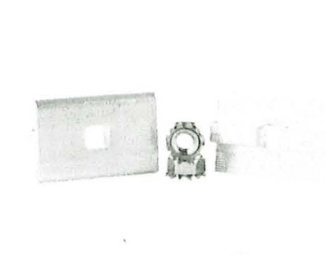
Solar Foundations' patented rail design offers a simple connection detail between the panel support rail and the horizontal support beams, allowing 6 modules per column in landscape orientation.

#### Module End Clamp



Our end clamp design securely fastens the top and bottom edges of a column of solar panels to the SF Rail.

#### Module Mid Clamp



The mid clamp fastens two adjoining solar panels in a column of solar panels to the SF Rail. Our sleek design with multiple serrations increases the holding power of the modules to our SF Rails.

#### Grounding



Our UL 2703 Certification encompasses the rail to beam and beam to pile connections, permitting the use of a single grounding lug for the entire racking system.

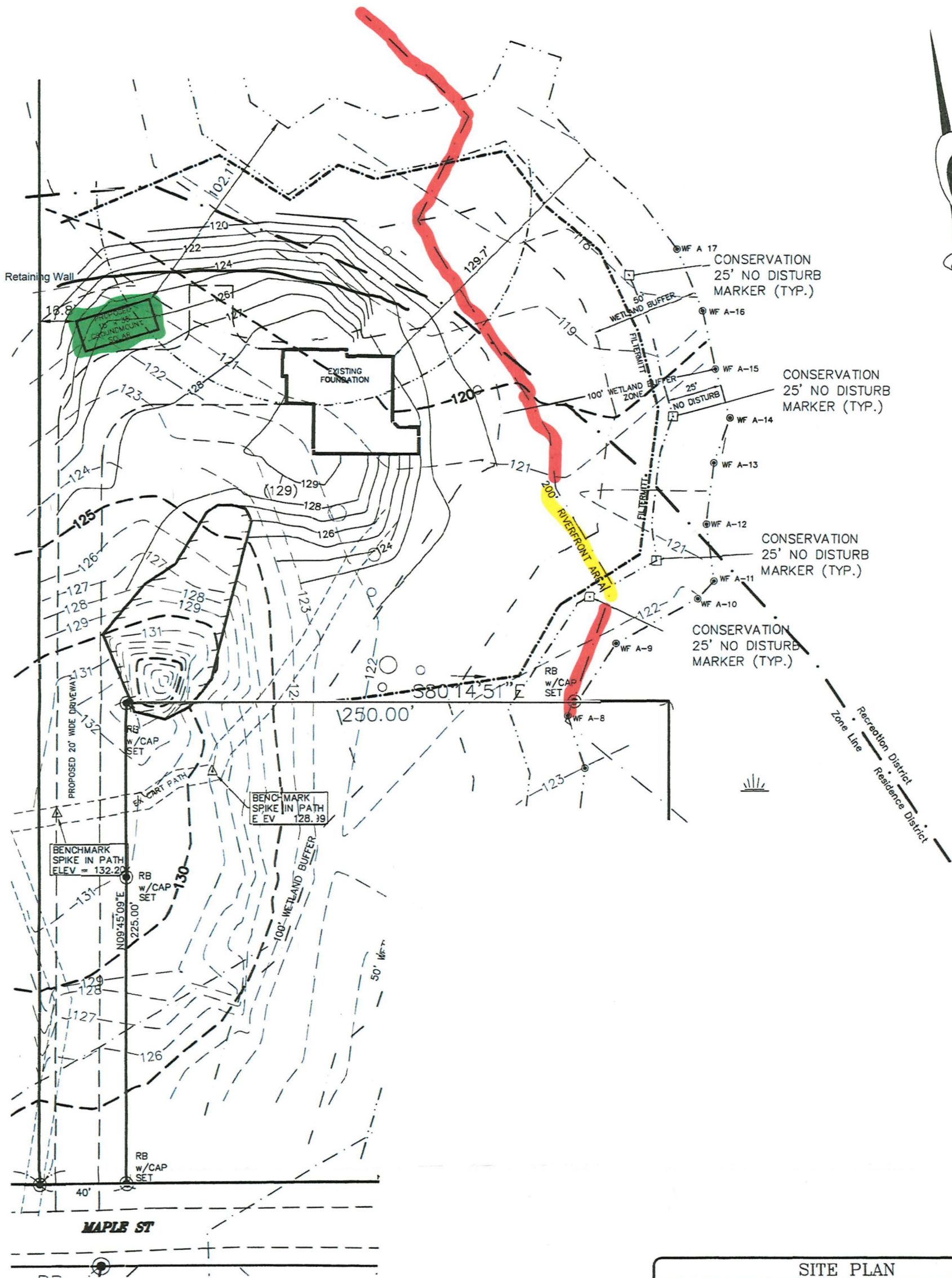
Contact us at [info@solarfoundationsusa.com](mailto:info@solarfoundationsusa.com) or (855) 738-7200.

Solar Foundations USA, Inc.  
1142 River Road, New Castle, DE 19720  
Phone (855) 738-7200  
Fax (866) 644-5665  
[www.solarfoundationsusa.com](http://www.solarfoundationsusa.com)

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SITE PLAN	
PREPARED FOR: DAVID PRARIE 2204 MAPLE SWAMP RD DIGHTON MA 02764	SCALE: 1" = 30'
	DATE: 5/1/2023
	DRAWN: M.H.
	DESIGN: TC
	CHECKED: TC
	PROJECT NO.
	19-280
	SHEET NO.
	1 OF 1