DIRECTORY OF PLAN PAGES

PROJECT DETAILS

PROPERTY OWNER	(INFO WITHHELD FOR PUBLIC SAMPLE)
PROPERTY ADDRESS	(INFO WITHHELD FOR PUBLIC SAMPLE)
PARCEL NO.	(INFO WITHHELD FOR PUBLIC SAMPLE)
AHJ	CITY OF BURIEN
ZONING	CHURCH / WELFARE / RELIG SRVC
CONST. TYPE	ROOF BALLAST-MOUNTED PHOTOVOLTAIC ARRAY
OBSERVED CODES	**2023 NATIONAL ELECTRICAL CODE (NEC)** **2021 WASHINGTON ADMINISTRATIVE CODE (WAC)** 2021 WASHINGTON STATE ENERGY CODE - RESIDENTIAL 2021 INTERNATIONAL CODES REVISED CODE OF WASHINGTON (RCW) WASHINGTON BUILDING CODE & STATE AMENDMENTS APPLICABLE CITY CODE WHEN PRESENT OSHA 29 CFR 1910.269 UNDERWRITERS LABORATORIES (UL) STANDARDS
STRUCT. METHOD	ASCE7-16

CONTRACTOR INFORMATION

CONTRACTOR	(INFO WITHHELD FOR PUBLIC SAMPLE)
LICENSE NO.	(INFO WITHHELD FOR PUBLIC SAMPLE)
ADDRESS	(INFO WITHHELD FOR PUBLIC SAMPLE)
PHONE	(INFO WITHHELD FOR PUBLIC SAMPLE)
CONTRACTOR SIGNATURE	

PLAN DESIGNER INFORMATION

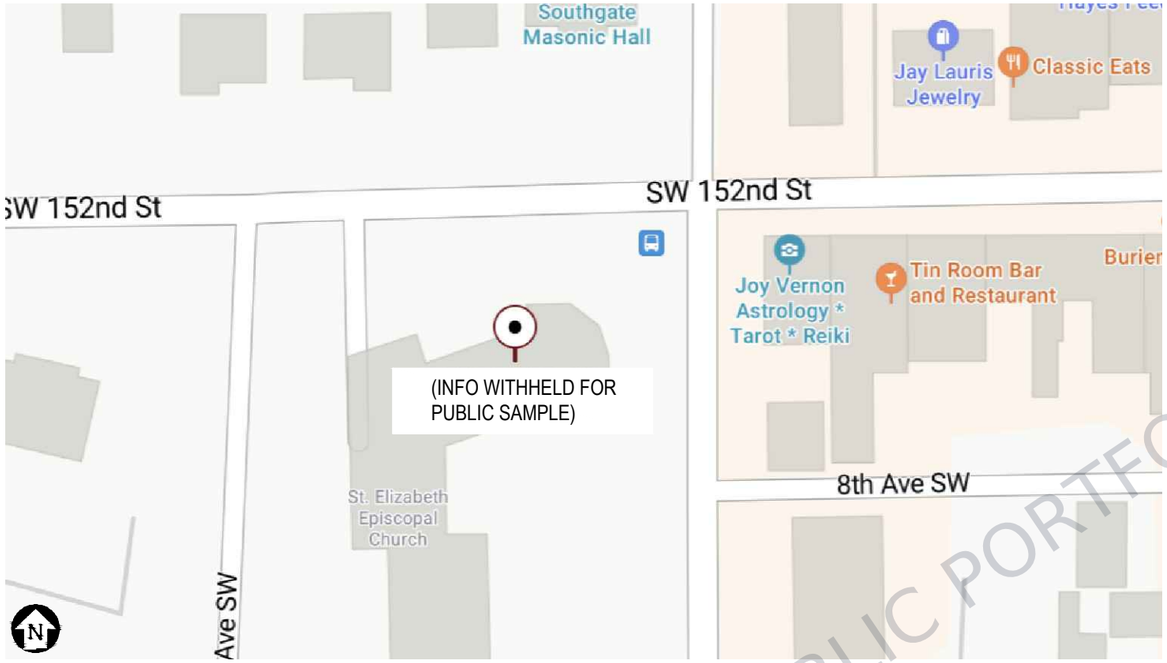
COMPANY	GEMINI SOLAR DESIGN, LLC.
NAME	SANJAY CHRISTOPHER MALLIPUDI
ADDRESS	495 HOWARD HEIGHTS ROAD FRESHWATER, CA 95503
PHONE	(609) 802-5743
PLAN DESIGNER SIGNATURE	Sanjay Mallipudi

SYSTEM DETAILS

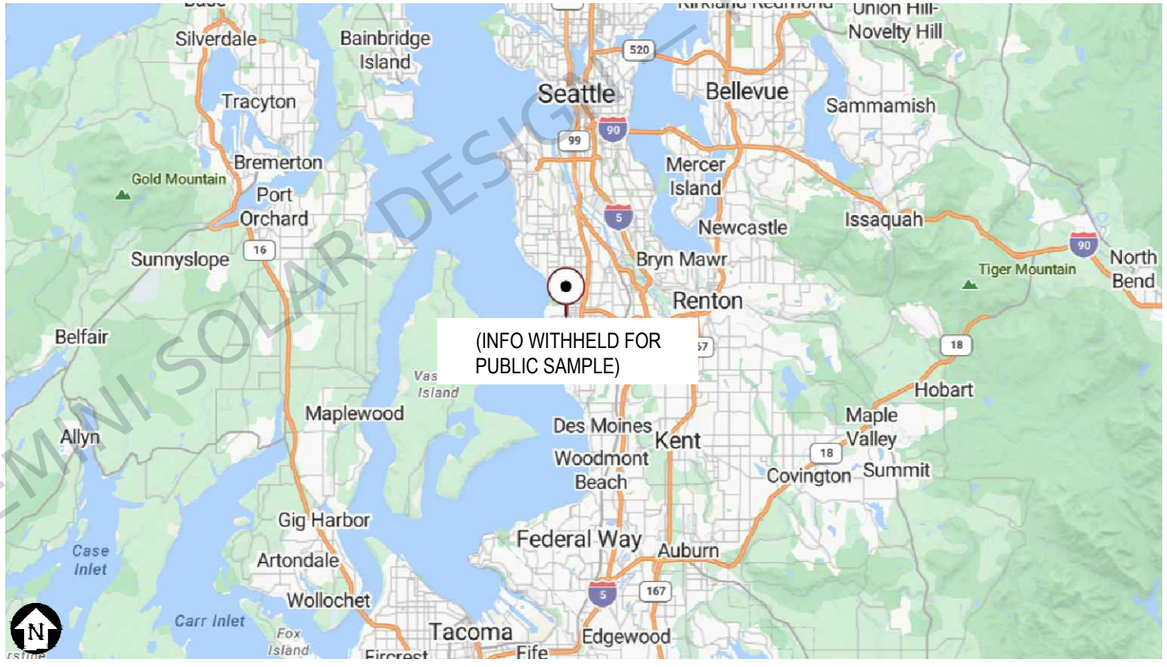
DC RATING OF SYSTEM	51.920W
AC OUTPUT CURRENT	192A @ 240VAC
STRING INVERTER	(6) SOLAR EDGE SE7600H-US
POWER OPTIMIZER	(118) SOLAR EDGE S440
MODULE	(118) SILFAB SOLAR SIL-440 QD
INTERCONNECTION	LINE-SIDE TAP

SITE SPECIFICATIONS

UTILITY SERVICE	***120 / 240 / 208VAC, 3-Ø, 4-WIRE HIGH-LEG DELTA SERVICE***
MAIN DISTRIBUTION SWITCHBOARD (SPLIT-BUS)	***1000A RATED BUSBAR***
ASHRAE EXTREME ANNUAL MEAN MINIMUM DENSITY DRY BULB TEMP.	-7°C
ASHRAE 2% ANNUAL DRY DENSITY BULB TEMP.	29°C



1 PV-1 PLOT
SCALE: NTS



2 PV-1 LOCALE
SCALE: NTS

CONSTRUCTION NOTES

1	CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO INITIATING CONSTRUCTION.
2	CONTRACTOR SHALL REVIEW ALL MANUFACTURER INSTALLATION DOCUMENTS PRIOR TO INITIATING CONSTRUCTION.
3	ALL EQUIPMENT SHALL BE LISTED BY THE U.L. (OR EQUAL) AND LISTED FOR ITS SPECIFIC APPLICATION.
4	ALL EQUIPMENT SHALL BE RATED FOR THE ENVIRONMENT IN WHICH IT IS INSTALLED.
5	ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
6	ACCESS TO ELECTRICAL COMPONENTS OVER 150 VOLTS TO GROUND SHALL BE RESTRICTED TO QUALIFIED PERSONNEL.
7	ALL CONDUCTORS SHALL BE COPPER, RATED FOR 600 VOLTS AND 90°C WET ENVIRONMENT, UNLESS OTHERWISE NOTED.
8	WHERE SIZES OF JUNCTION BOXES, RACEWAYS, AND CONDUITS ARE NOT SPECIFIED, CONTRACTOR SHALL SIZE THEM ACCORDING TO APPLICABLE CODES.
9	PV MODULES FRAMES SHALL BE BONDED TO RACKING RAIL OR BARE COPPER G.E.C. PER THE MODULE MANUFACTURER'S LISTED INSTRUCTION SHEET.
10	PV MODULES RACKING RAIL SHALL BE BONDED TO BARE COPPER G.E.C VIA WEEB LUG, ILSCO GBL-4DBT LAY-IN LUG, OR EQUIVALENT LISTED LUG.
11	GROUNDING ELECTRODE CONDUCTOR (G.E.C) SHALL BE CONTINUOUS AND/OR IRREVERSIBLY SPLICED
12	ALL JUNCTION BOXES, COMBINER BOXES, AND DISCONNECTS SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION.
13	WORKING SPACE AROUND ELECTRICAL EQUIPMENT SHALL COMPLY WITH NEC SECTION 110.26.

SCOPE OF WORK DESCRIPTION

THE **PROPOSED** SYSTEM IS A BALLAST ROOF MOUNTED PHOTOVOLTAIC ARRAY UTILIZING STRING INVERTERS. THE PHOTOVOLTAIC (PV) SYSTEM IS TO BE INSTALLED ON THE "CHURCH / WELFARE / RELIG SRVC" ZONED PROPERTY IN THE CITY OF BURIEN, KING COUNTY, WASHINGTON. THE ENERGY PRODUCED BY THE PV SYSTEM SHALL BE INTERCONNECTED WITH THE UTILITY GRID THROUGH THE EXISTING ON-SITE ELECTRICAL EQUIPMENT **VIA A LINE-SIDE TAP POINT OF INTERCONNECTION.** THIS PROJECT DOES NOT INCLUDE STORAGE BATTERIES.

(LOGO WITHHELD FOR SAMPLE)

(INFO WITHHELD)
PHONE: (INFO WITHHELD)
LICENSE NO. (INFO WITHHELD)

NEW GRID-TIED SYSTEM 51.92kW

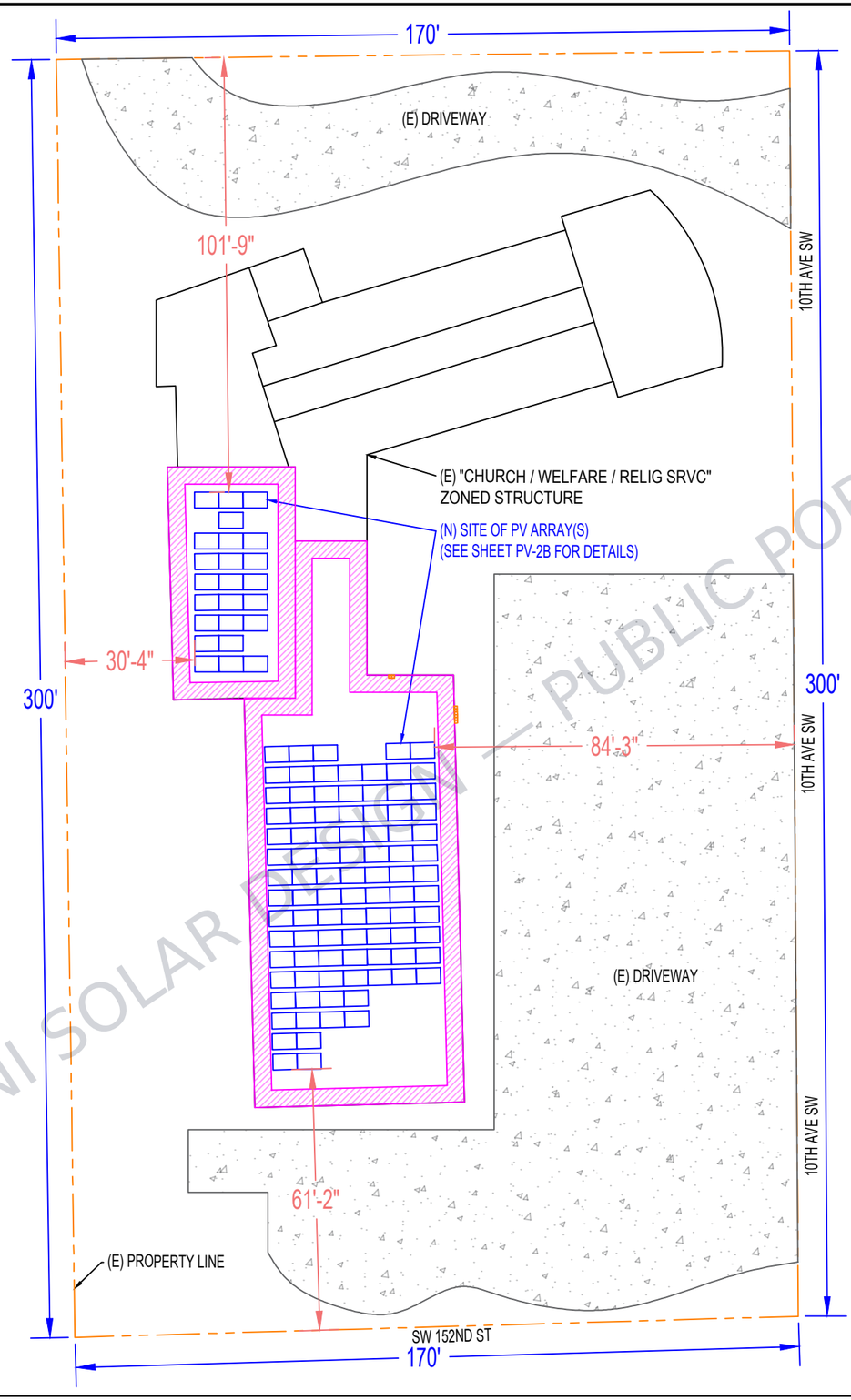
(INFO WITHHELD FOR PUBLIC SAMPLE)

PROJECT INFO

PROJECT NO: GSD-20260227-SCM
DRAWN BY: SCM
DATE: 2/27/2026

PV-1

NOTE TO PLAN REVIEWER:
SHEET PV-2A REPRESENTS A GENERAL SITE PLAN DEPICTING THE RELEVANT ELEMENTS OF THE PARCEL, AND THE SETBACKS FROM THE PROPOSED PV ARRAY TO THE PROPERTY LINES. THIS HAS BEEN DONE BECAUSE THE LOT LINES ARE RATHER LARGE, AND THE RESULTING SCALING MAKES THE READABILITY DIFFICULT. PLEASE REFER TO SHEET PV-2B FOR A DETAILED SITE PLAN WITH REGARDS TO THE DESIGN, AND ALL RELEVANT ELECTRICAL DETAILS. THANK YOU.



A PV-2A SITE PLAN (GENERAL)
SCALE: 1" = 30'

(LOGO WITHHELD FOR SAMPLE)

(INFO WITHHELD)
PHONE: (INFO WITHHELD)
LICENSE NO. (INFO WITHHELD)

NEW GRID-TIED SYSTEM 51.92kW

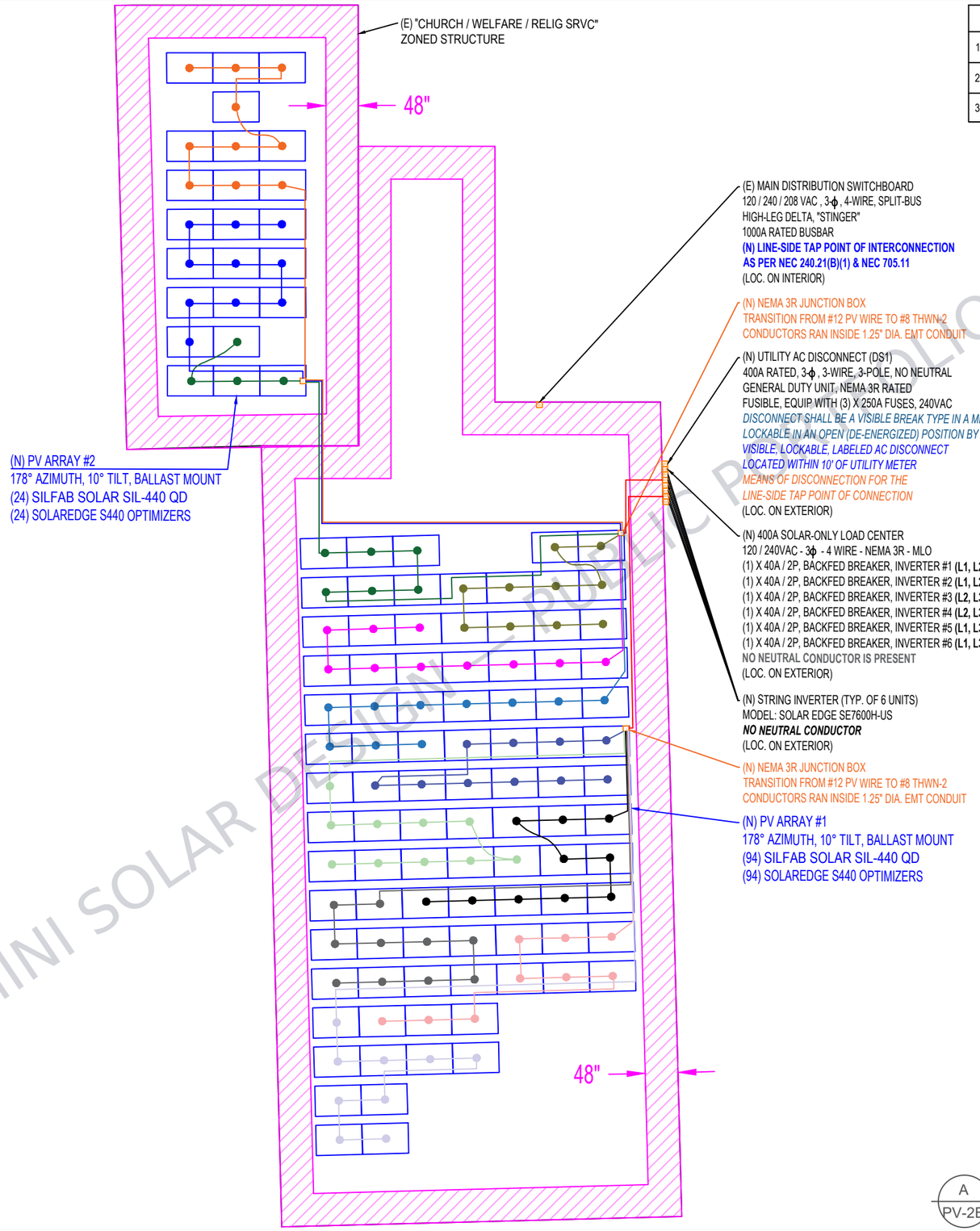
(INFO WITHHELD FOR PUBLIC SAMPLE)

SITE PLAN

PROJECT NO: GSD-20260227-SCM
DRAWN BY: SCM
DATE: 2/27/2026

PV-2A

AREA OF ALL PV ARRAYS : 2,415 SQ. FT
AREA OF ROOF SURFACE : 14,506 SQ. FT
SOLAR PERCENT COVERAGE : ~16.7%



SITE PLAN NOTES	
1	CONDUCTORS EXPOSED TO SUNLIGHT SHALL BE LISTED AS SUNLIGHT RESISTANT PER NEC 319.0(D).
2	CONDUCTORS EXPOSED TO WET LOCATIONS SHALL BE SUITABLE FOR USE IN WET LOCATIONS PER NEC 310.8(C).
3	ARRAYS SHALL BE INSTALLED IN A WAY THAT ENSURES THAT PV SOURCE CONDUCTORS SHALL NOT BE READILY ACCESSIBLE.

- 1 STRING OF 10 MODULES, INVERTER #1 (SOLAREDGE SE7600H-US)
- 1 STRING OF 10 MODULES, INVERTER #1 (SOLAREDGE SE7600H-US)
- 1 STRING OF 10 MODULES, INVERTER #2 (SOLAREDGE SE7600H-US)
- 1 STRING OF 10 MODULES, INVERTER #2 (SOLAREDGE SE7600H-US)
- 1 STRING OF 10 MODULES, INVERTER #3 (SOLAREDGE SE7600H-US)
- 1 STRING OF 10 MODULES, INVERTER #3 (SOLAREDGE SE7600H-US)
- 1 STRING OF 10 MODULES, INVERTER #4 (SOLAREDGE SE7600H-US)
- 1 STRING OF 10 MODULES, INVERTER #4 (SOLAREDGE SE7600H-US)
- 1 STRING OF 10 MODULES, INVERTER #5 (SOLAREDGE SE7600H-US)
- 1 STRING OF 10 MODULES, INVERTER #5 (SOLAREDGE SE7600H-US)
- 1 STRING OF 9 MODULES, INVERTER #6 (SOLAREDGE SE7600H-US)
- 1 STRING OF 9 MODULES, INVERTER #6 (SOLAREDGE SE7600H-US)

A PV-2B SITE PLAN (DETAILED)
SCALE: 1" = 15'

(LOGO WITHHELD FOR SAMPLE)

(INFO WITHHELD)
PHONE: (INFO WITHHELD)
LICENSE NO. (INFO WITHHELD)

NEW GRID-TIED SYSTEM 51.92kW

(INFO WITHHELD FOR PUBLIC SAMPLE)

SITE PLAN

PROJECT NO: GSD-20260227-SCM
DRAWN BY: SCM
DATE: 2/27/2026

PV-2B

PM1-20
440W

PM21-40
440W

PM41-60
440W

PM61-80
440W

PM81-100
440W

PM101-118
440W

SILFAB SOLAR SIL-440 QD
(TYP. OF 118 MODULES)

SOLAREDGE S440
POWER OPTIMIZER
(TYP. OF 118 UNITS)

10 IN SERIES

9 IN SERIES

(N) NEMA 3R JUNCTION BOX
TRANSITION FROM #12 PV WIRE
TO #8 THWN-2 CONDUCTORS
RAN INSIDE 1.25" DIA. EMT CONDUIT

(N) STRING INVERTER #1
SOLAR EDGE SE7600H-US
NO NEUTRAL CONDUCTOR
(LOC. ON EXTERIOR)

(N) STRING INVERTER #2
SOLAR EDGE SE7600H-US
NO NEUTRAL CONDUCTOR
(LOC. ON EXTERIOR)

(N) STRING INVERTER #3
SOLAR EDGE SE7600H-US
NO NEUTRAL CONDUCTOR
(LOC. ON EXTERIOR)

(N) STRING INVERTER #4
SOLAR EDGE SE7600H-US
NO NEUTRAL CONDUCTOR
(LOC. ON EXTERIOR)

(N) STRING INVERTER #5
SOLAR EDGE SE7600H-US
NO NEUTRAL CONDUCTOR
(LOC. ON EXTERIOR)

(N) STRING INVERTER #6
SOLAR EDGE SE7600H-US
NO NEUTRAL CONDUCTOR
(LOC. ON EXTERIOR)

GRND L1 / L2

GRND L1 / L2

GRND L1 / L3

GRND L1 / L3

GRND L2 / L3

GRND L2 / L3

CB1 40A | CB2 40A | CB3 40A | CB4 40A | CB5 40A | CB6 40A

(N) 400A SOLAR-ONLY LOAD CENTER
120 / 240VAC - 3Φ - 4 WIRE - NEMA 3R - MLO
(1) X 40A / 2P, BACKFED BREAKER, INVERTER #1 **(L1, L2)**
(1) X 40A / 2P, BACKFED BREAKER, INVERTER #2 **(L1, L2)**
(1) X 40A / 2P, BACKFED BREAKER, INVERTER #3 **(L2, L3)**
(1) X 40A / 2P, BACKFED BREAKER, INVERTER #4 **(L2, L3)**
(1) X 40A / 2P, BACKFED BREAKER, INVERTER #5 **(L1, L3)**
(1) X 40A / 2P, BACKFED BREAKER, INVERTER #6 **(L1, L3)**
NO NEUTRAL CONDUCTOR IS PRESENT
(LOC. ON EXTERIOR)

(N) UTILITY AC DISCONNECT (DS1)
400A RATED, 3Φ, 3-WIRE, 3-POLE, NO NEUTRAL
GENERAL DUTY UNIT, NEMA 3R RATED
FUSIBLE, EQUIP WITH (3) X 250A FUSES, 240VAC
DISCONNECT SHALL BE A VISIBLE BREAK TYPE IN A METAL ENCLOSURE
LOCKABLE IN AN OPEN (DE-ENERGIZED) POSITION BY A PADLOCK
VISIBLE, LOCKABLE, LABELED AC DISCONNECT
LOCATED WITHIN 10' OF UTILITY METER
MEANS OF DISCONNECTION FOR THE
LINE-SIDE TAP POINT OF CONNECTION
(LOC. ON EXTERIOR)

(LINE) DS1 400A F1-3 250A (LOAD)

TO UTILITY @
120 / 208 / 240VAC, 3-Φ, 4-WIRE
(HIGH-LEG DELTA, "STINGER")

KWHR

(E) CT UTILITY METER
(LOC. ON EXTERIOR)

FEED-THROUGH LUGS
(LINE-SIDE FEEDERS)

(N) LINE-SIDE TAP POINT OF INTERCONNECTION
AS PER NEC 240.21(B)(1) & NEC 705.11
(SHALL TAKE PLACE WITHIN THIS ENCLOSURE)

(E) 800A / 3P
CIRCUT BREAKER

(EXISTING)
MAIN DISTRIBUTION SWITCHBOARD
120 / 240 / 208 VAC , 3-Φ, 4-WIRE, SPLIT-BUS
HIGH-LEG DELTA, "STINGER"
1000A RATED BUSBAR
(LOC. ON INTERIOR)

(E) GEC

PLEASE FIND ALL RELEVANT TABLES, SYSTEM DETAILS, AND DISCONNECT / OCPD SCHEDULES ON SHEET PV-3B.

PLEASE FIND THE CORRESPONDING WIRE & CONDUCTOR SCHEDULE ON SHEET PV-3C.

SEPARATE SHEETS WERE CREATED DUE TO SPACE LIMITATIONS.

SCHEMATIC NOTES

1	MAXIMUM STRING VOLTAGE OF ARRAY AT DESIGN LOW TEMPERATURE OF -7°C WOULD BE 400VDC.
2	INTEGRATED DC DISCONNECT IS PROVIDED WITH INVERTER. DISCONNECT IS LISTED FOR USE WITH SOLAR EDGE UL 1741 LISTED STRING INVERTERS.
3	PHOTOVOLTAIC OUTPUT STRINGS ARE COMBINED INSIDE THE INVERTERS' DC INTEGRATED DISCONNECT.
4	LINE-SIDE TAP POINT OF INTERCONNECTION SHALL TAKE PLACE AS PER NEC 240.21(B)(1) & NEC 705.11. LENGTH OF TAP CONDUCTORS SHALL NOT EXCEED 10 FEET.

A SINGLE-LINE DIAGRAM
PV-3A SCALE: N/A

(LOGO WITHHELD FOR SAMPLE)

(INFO WITHHELD)
PHONE: (INFO WITHHELD)
LICENSE NO. (INFO WITHHELD)

NEW GRID-TIED SYSTEM 51.92kW

(INFO WITHHELD FOR PUBLIC SAMPLE)

SINGLE-LINE DIAGRAM

PROJECT NO: GSD-20260227-SCM
DRAWN BY: SCM
DATE: 2/27/2026

PV-3A

PV MODULE

REF.	TYP.	MODULE	STC POWER	ISC	IMP	VOC	VMP	SERIES FUSE RATING
PM1-118	118	SILFAB SOLAR SIL-440 QD	440W	14.22A	13.17A	38.97V	33.41V	25A

STRING INVERTER

REF.	TYP.	INVERTER	TRANSFORMERLESS	AC VOLTAGE	INVERTER OCPD SIZE	MAX OUTPUT POWER	MAX. CONTINUOUS OUTPUT CURRENT	MAXIMUM INPUT CURRENT @ 240VAC	MAX INPUT VOLTAGE	CEC WEIGHTED EFFICIENCY
I1 - I6	6	SOLAR EDGE SE7600H-US	YES	240VAC	40A	7,600W	32A @ 240VAC	20A	480VDC	99%

POWER OPTIMIZER

REF.	TYP.	INVERTER	MAXIMUM OUTPUT CURRENT	NOMINAL STRING VOLTAGE
PO1-118	118	SOLAR EDGE S440 POWER OPTIMIZER	15A	400VDC

UTILITY AC DISCONNECT SCHEDULE

REF.	POLES	CURRENT RATING	RATED VOLTAGE
UTILITY AC DISCONNECT (DS1), NO NEUTRAL PRESENT 3-POLE KNIFE TYPE (FUSIBLE), GENERAL DUTY UNIT	3	400A	240VAC

OCPD SCHEDULE

REF.	TYP.	POLES	CURRENT RATING	RATED VOLTAGE	LEGS
CB1 (BACKFED SOLAR BREAKER, INVERTER #1)	1	3	40A	240VAC	L1 - L2
CB2 (BACKFED SOLAR BREAKER, INVERTER #2)	1	3	40A	240VAC	L1 - L2
CB3 (BACKFED SOLAR BREAKER, INVERTER #3)	1	3	40A	240VAC	L1 - L3
CB4 (BACKFED SOLAR BREAKER, INVERTER #4)	1	3	40A	240VAC	L1 - L3
CB5 (BACKFED SOLAR BREAKER, INVERTER #5)	1	3	40A	240VAC	L2 - L3
CB6 (BACKFED SOLAR BREAKER, INVERTER #6)	1	3	40A	240VAC	L2 - L3
F1-3 (UTILITY AC DISCONNECT FUSES)	3	N/A	250A	240VAC	ONE FUSE PER PHASE

SYSTEM SUMMARY

	INVERTER #1	***INVERTER #2***	***INVERTER #3***	***INVERTER #4***	***INVERTER #5***	***INVERTER #6***
ARRAY STC POWER	**8,800W**	**8,800W**	**8,800W**	**8,800W**	**8,800W**	**7,920W**
ARRAY CIRCUITS	**1 X 10, 1 X 10**	**1 X 10, 1 X 10**	**1 X 10, 1 X 10**	**1 X 10, 1 X 10**	**1 X 10, 1 X 10**	**1 X 9, 1 X 9**
DC STRING OPERATING CURRENTS	**11A, 11A**	**11A, 11A**	**11A, 11A**	**11A, 11A**	**11A, 11A**	**9.9A, 9.9A**
DC STRING MAX CURRENTS	**15A, 15A**	**15A, 15A**	**15A, 15A**	**15A, 15A**	**15A, 15A**	**15A, 15A**
DC STRING OPERATING VOLTAGE	**400VDC**	**400VDC**	**400VDC**	**400VDC**	**400VDC**	**400VDC**
CONTINUOUS AC OUTPUT CURRENT	**32A @ 240VAC**	**32A @ 240VAC**	**32A @ 240VAC**	**32A @ 240VAC**	**32A @ 240VAC**	**32A @ 240VAC**
CONTINUOUS AC POWER OUTPUT	**7,600W**	**7,600W**	**7,600W**	**7,600W**	**7,600W**	**7,600W**
TOTAL ARRAY STC POWER	***51,920W***					
TOTAL COMBINED CONTINUOUS AC OUTPUT CURRENT	***192A @ 240VAC***					
TOTAL COMBINED CONTINUOUS AC POWER OUTPUT	***45,600W***					

GROUND FAULT PROTECTION NOTES

1	THE SOLAREDGE SYSTEM INCLUDES GROUND FAULT DETECTION AS REFERENCED BY NEC ARTICLE 690.5 AND REQUIRED BY NEC 690.35 (C). BECAUSE THE ARRAY CIRCUIT CONDUCTORS ARE UNGROUNDED, ONLY THE REQUIREMENTS OF NEC ARTICLE 690.35 (C) (1), (2) AND (3) APPLY. EACH POWER OPTIMIZER MONITORS ITS CONNECTED MODULES AND COMMUNICATES ANY DETECTED FAULT TO THE INVERTER. THE INVERTER MONITORS THE CONDUCTORS BETWEEN THE POWER OPTIMIZERS AND THE INVERTER. IN RESPONSE TO A GROUND FAULT THE INVERTER WILL CEASE TO EXPORT POWER, SHUT DOWN THE POWER OPTIMIZERS TO ISOLATE THE FAULTED CIRCUIT, AND INDICATE THE GROUND FAULT ON THE INVERTER'S DISPLAY.

ELECTRICAL NOTES SPECIFICATIONS

1	INSTALLATION SHALL COMPLY WITH ALL REQUIREMENTS OF NEC 2023 AND ANY APPLICABLE LOCAL AMENDMENTS.
2	MODULE INTERCONNECTION CONNECTORS SHALL BE IN COMPLIANCE WITH NEC 690.33(A) AND SHALL BE POLARIZED AND NON INTERCHANGEABLE WITH RECEPTACLES IN OTHER ELECTRICAL SYSTEMS ON THE PREMISES.
3	MODULE INTERCONNECTION CONNECTORS SHALL BE OF THE LOCKING TYPE REQUIRING A TOOL FOR OPENING IN ACCORDANCE WITH NEC 690.33(C)
4	MODULE INTERCONNECTION CONNECTORS SHALL BE MARKED "DO NOT OPEN UNDER LOAD" IN ACCORDANCE WITH NEC 690.33(E).
5	THE CONNECTION OF ALL MODULES SHALL BE ARRANGED SO THAT THE REMOVAL OF ANY PANEL OR MODULE SHALL NOT INTERRUPT A GROUNDED CONDUCTOR TO ANOTHER PHOTOVOLTAIC SOURCE CIRCUIT IN ACCORDANCE WITH NEC 690.4(C).
6	ALL EQUIPMENT IN PHOTOVOLTAIC SYSTEM SHALL BE LISTED BY AN INDEPENDENT TESTING AGENCY.
7	THE OUTPUT VOLTAGE OF THE POWER OPTIMIZERS ARE REGULATED BY THE INVERTER. THEY ARE NOT IMPACTED BY THE NUMBER OF MODULES IN THE STRING. THE CONTINUOUS CURRENT IS CALCULATED BY DIVIDING THE MAXIMUM POWER BY THE VOLTAGE.

A PV-3B SINGLE-LINE DIAGRAM
SCALE: N/A

(LOGO WITHHELD FOR SAMPLE)

(INFO WITHHELD)
PHONE: (INFO WITHHELD)
LICENSE NO. (INFO WITHHELD)

NEW GRID-TIED SYSTEM 51.92kW

(INFO WITHHELD FOR PUBLIC SAMPLE)

SINGLE-LINE DIAGRAM

PROJECT NO: GSD-20260227-SCM
DRAWN BY: SCM
DATE: 2/27/2026

PV-3B

CONDUCTOR SCHEDULE WITH NEC ELECTRICAL CALCULATIONS

ID	TYP	DESCRIPTION	CONDUCTOR	CONDUIT	NO. OF CURRENT CARRYING CNDRS. IN CNDT.	FILL %	RATED AMPS	OCPD	EGC	TEMP. CORR. FACTOR @ 90°C TEMP. RATING	FILL ADJ. FACTOR	CONT. CURRENT	MAX. CURRENT	TERMINAL RATING CHECK (ASSUME 75°C) SHALL EXCEED 1.25X CONT. CURRENT	BASE AMPACITY @ 90°C TEMP. RATING	CONDITIONS OF USE (COU) @ 90°C TEMP. RATING
1	12	DC CIRCUIT: SERIES STRING OUTPUT TO JUNCTION BOX	12 AWG PV WIRE COPPER	***FREE AIR***	N/A	N/A	***15A***	N/A	***6 AWG BARE COPPER***	0.76 (51°C) (ROOF-TOP CONDITION)	1.0	***15A***	***18.75A***	25A > 18.75A **PASS**	**40A** ***(IN FREE AIR)***	**30.4A** ***(IN FREE AIR)***
2	1	DC CIRCUIT (TRANSITIONED): JUNCTION BOX TO INVERTER #1 / INVERTER #2 / INVERTER #3	8 AWG THWN-2 COPPER	***1.25" DIA. EMT***	***12*** ***6 X (DC +)*** ***6 X (DC -)*** ***6 DC CIRCUITS TO BE RAN IN THIS EMT CONDUIT***	33.5%	***15A***	***INTEGRATED DC DISCONNECT WITHIN STRING INVERTER***	***10 AWG THWN-2 COPPER***	0.76 (51°C) (ROOF-TOP CONDITION)	0.5	***15A***	***18.75A***	50A > 18.75A **PASS**	***55A*** ***(IN CONDUIT)***	**20.9A** ***(IN CONDUIT)***
3	1	DC CIRCUIT (TRANSITIONED): JUNCTION BOX TO INVERTER #4 / INVERTER #5 / INVERTER #6	8 AWG THWN-2 COPPER	***1.25" DIA. EMT***	***12*** ***6 X (DC +)*** ***6 X (DC -)*** ***6 DC CIRCUITS TO BE RAN IN THIS EMT CONDUIT***	33.5%	***15A***	***INTEGRATED DC DISCONNECT WITHIN STRING INVERTER***	***10 AWG THWN-2 COPPER***	0.76 (51°C) (ROOF-TOP CONDITION)	0.5	***15A***	***18.75A***	50A > 18.75A **PASS**	***55A*** ***(IN CONDUIT)***	**20.9A** ***(IN CONDUIT)***
4	1	INVERTER #1 OUTPUT: INVERTER #1 TO 400A SOLAR-ONLY LOAD CENTER	8 AWG THWN-2 COPPER	***0.75" DIA. EMT*** ***(EACH INVERTER OUTPUT IN ITS OWN EMT CONDUIT)***	***2*** ***(L1, L2) X 1*** ***NO NEUTRAL***	17.8%	***32A (I1)***	***40A / 2P (CB1)***	***10 AWG THWN-2 COPPER***	1.0 (29°C) (GROUND-LEVEL CONDITION)	1.0	***32A (I1)***	***40A (I1)***	50A > 40A **PASS**	***55A*** ***(IN CONDUIT)***	**55A** ***(IN CONDUIT)***
5	1	INVERTER #2 OUTPUT: INVERTER #2 TO 400A SOLAR-ONLY LOAD CENTER	8 AWG THWN-2 COPPER	***0.75" DIA. EMT*** ***(EACH INVERTER OUTPUT IN ITS OWN EMT CONDUIT)***	***2*** ***(L1, L2) X 1*** ***NO NEUTRAL***	17.8%	***32A (I2)***	***40A / 2P (CB2)***	***10 AWG THWN-2 COPPER***	1.0 (29°C) (GROUND-LEVEL CONDITION)	1.0	***32A (I2)***	***40A (I2)***	50A > 40A **PASS**	***55A*** ***(IN CONDUIT)***	**55A** ***(IN CONDUIT)***
6	1	INVERTER #3 OUTPUT: INVERTER #3 TO 400A SOLAR-ONLY LOAD CENTER	8 AWG THWN-2 COPPER	***0.75" DIA. EMT*** ***(EACH INVERTER OUTPUT IN ITS OWN EMT CONDUIT)***	***2*** ***(L1, L2) X 1*** ***NO NEUTRAL***	17.8%	***32A (I3)***	***40A / 2P (CB3)***	***10 AWG THWN-2 COPPER***	1.0 (29°C) (GROUND-LEVEL CONDITION)	1.0	***32A (I3)***	***40A (I3)***	50A > 40A **PASS**	***55A*** ***(IN CONDUIT)***	**55A** ***(IN CONDUIT)***
7	1	INVERTER #4 OUTPUT: INVERTER #4 TO 400A SOLAR-ONLY LOAD CENTER	8 AWG THWN-2 COPPER	***0.75" DIA. EMT*** ***(EACH INVERTER OUTPUT IN ITS OWN EMT CONDUIT)***	***2*** ***(L1, L2) X 1*** ***NO NEUTRAL***	17.8%	***32A (I4)***	***40A / 2P (CB4)***	***10 AWG THWN-2 COPPER***	1.0 (29°C) (GROUND-LEVEL CONDITION)	1.0	***32A (I4)***	***40A (I4)***	50A > 40A **PASS**	***55A*** ***(IN CONDUIT)***	**55A** ***(IN CONDUIT)***
8	1	INVERTER #5 OUTPUT: INVERTER #5 TO 400A SOLAR-ONLY LOAD CENTER	8 AWG THWN-2 COPPER	***0.75" DIA. EMT*** ***(EACH INVERTER OUTPUT IN ITS OWN EMT CONDUIT)***	***2*** ***(L1, L2) X 1*** ***NO NEUTRAL***	17.8%	***32A (I5)***	***40A / 2P (CB5)***	***10 AWG THWN-2 COPPER***	1.0 (29°C) (GROUND-LEVEL CONDITION)	1.0	***32A (I5)***	***40A (I5)***	50A > 40A **PASS**	***55A*** ***(IN CONDUIT)***	**55A** ***(IN CONDUIT)***
9	1	INVERTER #6 OUTPUT: INVERTER #6 TO 400A SOLAR-ONLY LOAD CENTER	8 AWG THWN-2 COPPER	***0.75" DIA. EMT*** ***(EACH INVERTER OUTPUT IN ITS OWN EMT CONDUIT)***	***2*** ***(L1, L2) X 1*** ***NO NEUTRAL***	17.8%	***32A (I6)***	***40A / 2P (CB6)***	***10 AWG THWN-2 COPPER***	1.0 (29°C) (GROUND-LEVEL CONDITION)	1.0	***32A (I6)***	***40A (I6)***	50A > 40A **PASS**	***55A*** ***(IN CONDUIT)***	**55A** ***(IN CONDUIT)***
10	1	COMBINED OUTPUT OF INVERTERS: 400A SOLAR-ONLY LOAD CENTER TO UTILITY AC DISCONNECT (DS1)	250 MCM THHN / THWN-2 COPPER	***2½" DIA. EMT***	***3*** ***(L1, L2, L3) X 1*** ***NO NEUTRAL***	22.0%	***192A***	***250A (F1-3)*** ***400A / 3P (DS1)***	***3 AWG THWN-2 COPPER***	1.0 (29°C) (GROUND-LEVEL CONDITION)	1.0	***192A***	***240A***	255A > 240A **PASS**	**290A** ***(IN CONDUIT)***	**290A** ***(IN CONDUIT)***
11	1	UTILITY AC DISCONNECT (DS1) OUTPUT: UTILITY AC DISCONNECT (DS1) TO ***LINE-SIDE TAP P.O.C. (TO BE MADE AS PER NEC 240.21(B)(1) & NEC 705.11)***	250 MCM THHN / THWN-2 COPPER	***2½" DIA. SCH. 40 PVC***	***3*** ***(L1, L2, L3) X 1*** ***NO NEUTRAL***	25.4%	***192A***	N/A	***3 AWG BARE COPPER*** ***(RAN OUTSIDE OF CONDUIT)***	1.0 (29°C) (GROUND-LEVEL CONDITION)	1.0	***192A***	***240A***	255A > 240A **PASS**	**290A** ***(IN CONDUIT)***	**290A** ***(IN CONDUIT)***

ALL CONDUCTORS, OCPD SIZES AND TYPES SPECIFIED ACCORDING TO NEC ARTICLES 690.8(A)(1), NEC ARTICLE 240, AND NEC ARTICLE 690.7.

(LOGO WITHHELD FOR SAMPLE)
(INFO WITHHELD)
PHONE: (INFO WITHHELD)
LICENSE NO. (INFO WITHHELD)

NEW GRID-TIED SYSTEM 51.92kW

(INFO WITHHELD FOR PUBLIC SAMPLE)

SINGLE-LINE DIAGRAM

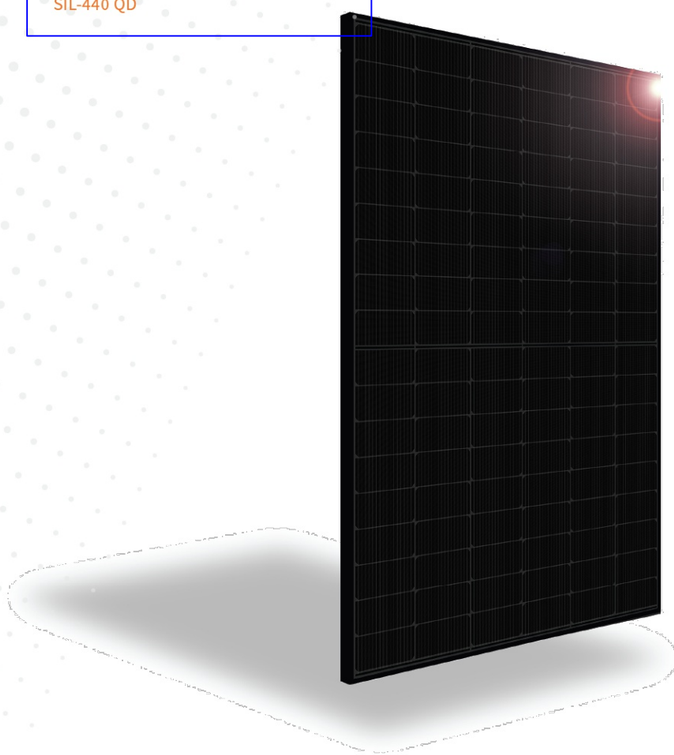
PROJECT NO: GSD-20260227-SCM
DRAWN BY: SCM
DATE: 2/27/2026

PV-3C

SILFAB PRIME NTC

SIL-440 QD

SILFAB SOLAR®



NEXT-GENERATION N-TYPE CELL TECHNOLOGY

- Improved Shade Tolerance
- Improved Low-Light Performance
- Increased Performance in High Temperatures
- Enhanced Durability
- Reduced Degradation Rate
- 25-Year Product Warranty/ 30-Year Performance Warranty

SILFABSOLAR.COM

ELECTRICAL SPECIFICATIONS		440	
Test Conditions		STC	NOCT
Module Power (Pmax)	Wp	440	328.0
Maximum power voltage (Vpmax)	V	33.41	31.17
Maximum power current (Ipmax)	A	13.17	10.52
Open circuit voltage (Voc)	V	38.97	36.64
Short circuit current (Isc)	A	14.22	11.44
Module efficiency	%	22.6%	
Maximum system voltage (VDC)	V	1000	
Series fuse rating	A	25	
Power Tolerance	Wp	0 to +10	

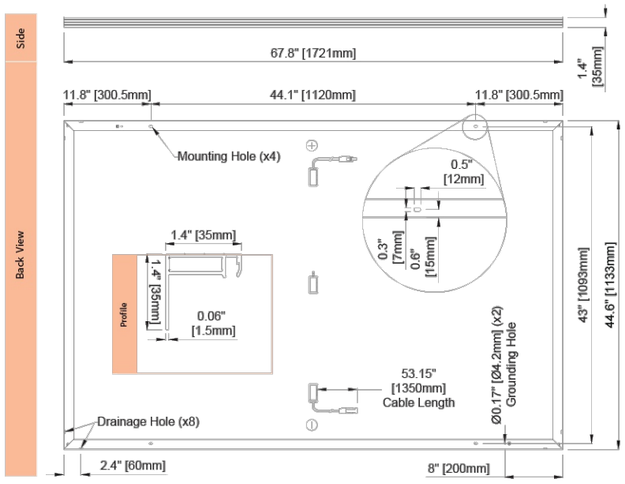
Measurement conditions: STC 1000 W/m² • AM 1.5 • Temperature 25 °C • NOCT 800 W/m² • AM 1.5 • Measurement uncertainty ≤ 3%
Sun simulator calibration reference modules from Fraunhofer Institute. Electrical characteristics may vary by ±5% and power by 0 to +10 W.

MECHANICAL PROPERTIES / COMPONENTS	METRIC	IMPERIAL
Module weight	21 kg ± 0.2 kg	46.3 lbs ± 0.4 lbs
Dimensions (H x L x D)	1721 mm x 1133 mm x 35 mm	67.8 in x 44.6 in x 1.37 in
Maximum surface load (wind/snow)*	4000 Pa rear load / 5400 Pa front load	83.5 lb/ft² rear load / 112.8 lb/ft² front load
Hail impact resistance	ø 25 mm at 83 km/h	ø 1 in at 51.6 mph
Cells	108 Half cells - N-Type Silicon solar cell 182 mm x 91 mm	108 Half cells - N-Type Silicon solar cell 7.16 in x 3.58 in
Glass	3.2 mm high transmittance, tempered, antireflective coating	0.126 in high transmittance, tempered, antireflective coating
Cables and connectors (refer to installation manual)	1350 mm, ø 5.7 mm, MC4 from Staubli	53.1 in, ø 0.22 in (12 AWG), MC4 from Staubli
Backsheet	High durability, superior hydrolysis and UV resistance, multi-layer dielectric film, fluorine-free PV backsheet	
Frame	Anodized aluminum (Black)	
Junction Box	UL 3730 Certified, IEC 62790 Certified, IP68 rated, 3 diodes	

TEMPERATURE RATINGS		WARRANTIES	
Temperature Coefficient Isc	0.04 %/°C	Module product workmanship warranty	25 years**
Temperature Coefficient Voc	-0.24 %/°C	Linear power performance guarantee	30 years
Temperature Coefficient Pmax	-0.29 %/°C		≥ 98% end 1st yr ≥ 94.7% end 12th yr ≥ 90.8% end 25th yr ≥ 89.3% end 30th yr
NOCT (± 2 °C)	45 °C		
Operating temperature	-40/+85 °C		

CERTIFICATIONS		SHIPPING SPECS	
Product	UL 61215, UL 61730, CSA C22.2#61730, IEC 61215, IEC 61730, IEC 61701 (Salt Mist Corrosion), IEC 62716 (Ammonia Corrosion), CEC Listed, UL Fire Rating: Type 2	Modules Per Pallet:	26 or 26 (California)
		Pallets Per Truck	32 or 30 (California)
Factory	ISO9001:2015	Modules Per Truck	832 or 780 (California)

* ⚠ Warning. Read the Safety and Installation Manual for mounting specifications and before handling, installing and operating modules.
** 12 year extendable to 25 years subject to registration and conditions outlined under "Warranty" at silfabsolar.com.
PAN files generated from 3rd party performance data are available for download at: silfabsolar.com/downloads.



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Mississauga ON L5T 2Y3 Canada
T +1 905.255.2501
F +1 905.696.0267

1 PV-4 PV MODULE DATASHEET
SCALE: NTS

(LOGO WITHHELD FOR SAMPLE)

(INFO WITHHELD)
PHONE: (INFO WITHHELD)
LICENSE NO. (INFO WITHHELD)

NEW GRID-TIED SYSTEM 51.92kW

(INFO WITHHELD FOR PUBLIC SAMPLE)

MODULE DATASHEET

PROJECT NO: GSD-20260227-SCM
DRAWN BY: SCM
DATE: 2/27/2026

PV-4

SolarEdge Home Wave Inverter

For North America

SE3000H-US / SE3800H-US / SE5000H-US / SE5700H-US /
SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US

INVERTERS

12-25 YEAR WARRANTY

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 SolarEdge SetApp
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014-2023 per articles 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)

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/ SolarEdge Home Wave Inverter

For North America

SE3000H-US / SE3800H-US / SE5000H-US / SE5700H-US / SE6000H-US/ SE7600H-US

Applicable to inverters with part number	SEXXXXH-XXXXXBXX4						
	SE3000H-US	SE3800H-US	SE5000H-US	SE5700H-US	SE6000H-US	SE7600H-US	Units
OUTPUT							
Rated AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	5760 @ 240V 5000 @ 208V	6000 @ 240V 5000 @ 208V	7600	VA
Maximum AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	5760 @ 240V 5000 @ 208V	6000 @ 240V 5000 @ 208V	7600	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[1]						Hz
Maximum Continuous Output Current @240V	12.5	16	21	24	25	32	A
Maximum Continuous Output Current @208V	-	16	-	24	24	-	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	8900	9300	11800	W
Maximum DC Power @208V	-	5100	-	7750	7750	-	W
Transformer-less, Ungrounded	Yes						
Maximum Input Voltage	480						Vdc
Nominal DC Input Voltage	380						Vdc
Maximum Input Current @240V[2]	8.5	10.5	13.5	16	16.5	20	Adc
Maximum Input Current @208V[2]	-	9	-	13.5	13.5	-	Adc
Max. Input Short Circuit Current	45						Adc
Reverse-Polarity Protection	Yes						
Ground-Fault Isolation Detection	600k Sensitivity						
Maximum Inverter Efficiency	99	99.2					%
CEC Weighted Efficiency	99						%
Nighttime Power Consumption	< 2.5						W
ADDITIONAL FEATURES							
Supported Communication Interfaces	RS485, Ethernet, wireless SolarEdge Home Network (optional)[3], Wi-Fi (optional), Cellular (optional)						
Revenue Grade Metering, ANSI C12.20	Optional[4]						
Consumption Metering	Optional[4]						
Inverter Commissioning	With the SetApp mobile application using Built-in Wi-Fi Access Point for Local Connection						
Rapid Shutdown - NEC 2014-2023 per articles 690.11 and 690.12	Automatic Rapid Shutdown upon AC Grid Disconnect						
STANDARD COMPLIANCE							
Safety	Conforms to UL 1741, UL 1741SA, UL 1741SB, UL 1699B Certified by CSA 22.2#107.1, C22.2#330, C22.3#9, ANSI/CAN/UL 9540						
Grid Connection Standards	IEEE1547 and IEEE-1547.1, Rule 21, Rule 14H						
Emissions	FCC Part 15 Class B						
INSTALLATION SPECIFICATIONS							
AC Output Conduit Size / AWG Range	1" Maximum / 14 – 6 AWG						
DC Input Conduit Size / # of Strings / AWG Range	1" Maximum / 1 – 2 strings / 14 – 6 AWG						
Dimensions with Safety Switch (H x W x D)	17.7 x 14.6 x 6.8 / 450 x 370 x 174						in / mm
Weight with Safety Switch	22 / 10	25.1 / 11.4	27.5 / 12.5	26.2 / 11.9			lb / kg
Noise	< 25					< 50	dBA
Cooling	Natural Convection						
Operating Temperature Range	-40 to +140 / -40 to +60[5]						°F / °C
Protection Rating	NEMA 4X (Inverter with Safety Switch)						

(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.
(3) For more information, refer to the SolarEdge Home Network datasheet
(4) Inverter with Revenue Grade Production and Consumption Meter P/N: SExxxxH-US000BEI4. For consumption metering, current transformers should be ordered separately: SEACT0750-200NA-20 or SEACT0750-400NA-20. 20 units per box.
(5) Full power up to at least 50°C / 122°F; for power de-rating information refer to the Temperature Derating technical note for North America.

1 PV-5A STRING INVERTER DATASHEET
SCALE: NTS

(LOGO WITHHELD FOR SAMPLE)

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PHONE: (INFO WITHHELD)
LICENSE NO. (INFO WITHHELD)

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NEW GRID-TIED SYSTEM 51.92kW

(INFO WITHHELD FOR PUBLIC SAMPLE)

INVERTER DATASHEET

PROJECT NO: GSD-20260227-SCM
DRAWN BY: SCM
DATE: 2/27/2026

PV-5A

Monitoring Platform

The monitoring platform enables monitoring the technical and financial performance of one or more SolarEdge sites. It provides past and present information on the system performance both at the system and module levels.

Supported AC Grids

The following figures illustrate grids that are supported by SolarEdge single phase inverters. Refer to *Country and Grid* on page 41).

Ground connection is required for all grids, as described in *Connecting the AC Grid to the Safety Switch* on page 29.

Note that in some cases L1 and L2 are not interchangeable. In these places, L1 and L2 locations appear in the drawing.

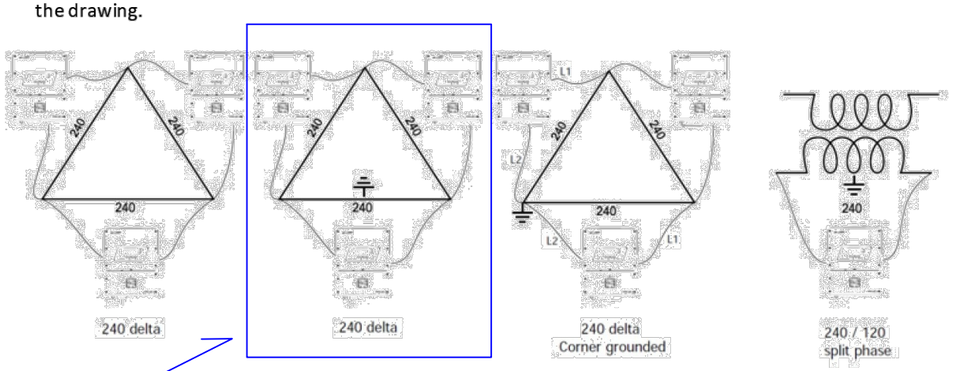

Figure 2: 240V AC grids supported by SolarEdge single phase inverter

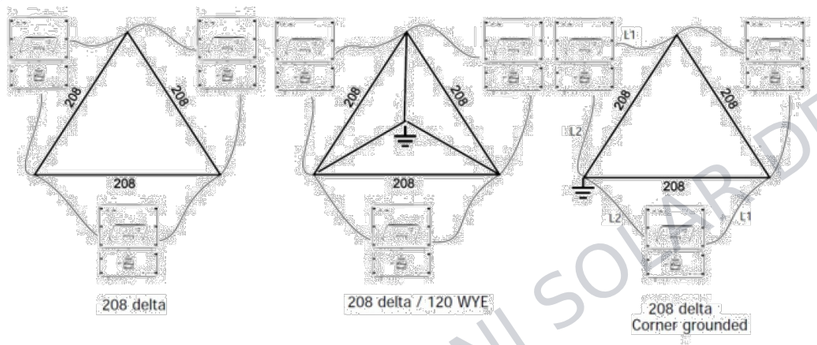

Figure 3: 208V AC grids supported by SolarEdge single phase inverter[1]

[1] 208V AC grids are only supported by some inverter models. Refer to the specification supplied with the inverter.

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NEW GRID-TIED SYSTEM 51.92kW

(INFO WITHHELD FOR PUBLIC SAMPLE)

1 PV-5B STRING INVERTER (SUPPORTED GRIDS)
SCALE: NTS

SUPPORTED GRIDS

PROJECT NO: GSD-20260227-SCM
DRAWN BY: SCM
DATE: 2/27/2026

PV-5B

Power Optimizer

For Residential Installations

S440 / S500 / S500B / S650B

POWER OPTIMIZER

Enabling PV power optimization at the module level

- Specifically designed to work with SolarEdge residential inverters
- Detects abnormal PV connector behavior, preventing potential safety issues*
- Module-level voltage shutdown for installer and firefighter safety
- Superior efficiency (99.5%)
- Mitigates all types of module mismatch loss, from manufacturing tolerance to partial shading
- Faster installations with simplified cable management and easy assembly using a single bolt
- Flexible system design for maximum space utilization
- Compatible with bifacial PV modules

* Functionality subject to inverter model and firmware version

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CE RoHS

Power Optimizer

For Residential Installations

S440 / S500 / S500B / S650B

	S440	S500	S500B	S650B	UNIT
INPUT					
Rated Input DC Power(1)	440 / 490(2)	500 / 550(2)	500 / 650(2)	650	W
Absolute Maximum Input Voltage (Voc)	60		125	85(3)	Vdc
MPPT Operating Range	8 – 60		12.5 – 105	12.5 – 85	Vdc
Maximum Continuous Input Current	14.5 / 15(2)	15			Adc
Maximum Short-Circuit Current (Isc) of Connected PV Module for Residential SolarEdge Home Hub Inverters	16.5				Adc
Maximum Short-Circuit Current (Isc) of Connected PV Module for All Other SolarEdge Inverters	15				Adc
Maximum Efficiency	99.5				%
Weighted Efficiency	98.6				%
Overvoltage Category	II				
OUTPUT DURING OPERATION					
Maximum Output Current	15				Adc
Maximum Output Voltage	60		80		Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR INVERTER OFF)					
Safety Output Voltage per Power Optimizer	1 ± 0.1				Vdc
STANDARD COMPLIANCE(4)					
EMC	FCC Part 15 Class B; IEC 61000-6-2; IEC 61000-6-3; CISPR 11; EN 55011				
Safety	IEC 62109-1 (class II safety); UL 1741				
Material	UL 94 V-0, UV Resistant				
RoHS	Yes				
Fire Safety	VDE-AR-E 2100-712:2018-12				
INSTALLATION SPECIFICATIONS					
Maximum Allowed System Voltage	1000				Vdc
Dimensions (W x L x H)	129 x 155 x 30		129 x 165 x 45		mm
Weight	720		790		gr
Input Connector	MC4(5)				
Input Wire Length	0.1				m
Output Connector	MC4				
Output Wire Length	(+) 2.3, (-) 0.10				m
Operating Temperature Range(6)	-40 to +85				°C
Protection Rating	IP68				
Relative Humidity	0 – 100				%

(1) Rated power of the module at STC will not exceed the Power Optimizer Rated Input DC Power. Modules with up to +5% power tolerance are allowed.
(2) For installations after April 1st, 2024.
(3) For S650B-1GM4MBM, available only in the Netherlands and the United Kingdom, the Absolute Maximum Input Voltage (Voc) is 125V.
(4) For details about CE compliance, see Declaration of Conformity – CE.
(5) For other connector types please contact SolarEdge.
(6) Power derating is applied for ambient temperatures above +85°C for S440 and S500, and for ambient temperatures above +75°C for S500B. Refer to the Power Optimizers Temperature Derating technical note for details.

CE RoHS

Power Optimizer

For Residential Installations

S440 / S500 / S500B / S650B

PV System Design Using a SolarEdge Inverter(7)		SolarEdge Home Wave/Hub Inverter Single Phase	SolarEdge Home Short String Inverter Three Phase	Three Phase for 230/400V Grid	Three Phase for 277/480V Grid	
Minimum String Length (Power Optimizers)	S440, S500	8	9	16	18	
	S500B, S650B	6	8	14		
Maximum String Length (Power Optimizers)		25	20	50(8)		
Maximum Continuous Power per String		5700	5625	11,250	12,750	W
Maximum Allowed Connected Power per String(9) (In multiple string designs, the maximum is permitted only when the difference in connected power between strings is 2000 W or less)	Inverter's Rated AC Power ≤ Maximum Continuous Power per String	Per the inverter's maximum input DC power	Per the inverter's maximum input DC power	Per the inverter's maximum input DC power	Per the inverter's maximum input DC power	W
	Inverter's Rated AC Power > Maximum Continuous Power per String	6000(10) 6800 for inverters with Rated AC Power ≥ 8000 W that are connected to two or more strings		13,500	15,000	
Parallel Strings of Different Lengths or Orientations		Yes				

(7) It is not allowed to mix S-series and P-series Power Optimizers in new installations in the same string.
(8) For the SolarEdge Nexis Inverter 3ph, the Maximum String Length allowed is 33 Power Optimizers.
(9) Refer to the Single String Design Guidelines application note for further details.
(10) Valid only for installations performed after January 1st, 2025. For earlier installations, the Maximum Allowed Connected Power per String is 5700 W.

S440, S500, S500B(11) (Flat Bracket)	S500B(11), S650B (Bent Bracket)
	

(11) S500B has either a flat bracket or a bent bracket. S500B-1GM4MBM has a flat bracket, and S500B-1GM4MBM has a bent bracket.

1 PV-6 POWER OPTIMIZER DATASHEET
SCALE: NTS

(LOGO WITHHELD FOR SAMPLE)

(INFO WITHHELD)
PHONE: (INFO WITHHELD)
LICENSE NO. (INFO WITHHELD)

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NEW GRID-TIED SYSTEM 51.92kW

(INFO WITHHELD FOR PUBLIC SAMPLE)

OPTMZR. DATASHEET

PROJECT NO: GSD-20260227-SCM
DRAWN BY: SCM
DATE: 2/27/2026

PV-6

intertek
Total Quality. Assured.

Intertek
3933 US Route 11
Cortland, NY 13045
Telephone: 607-753-7311
www.intertek.com

Subject: ETL Evaluation of SolarEdge Products to Rapid Shutdown Requirements

To, whom it may concern

This letter represents the testing results of the below listed products to the requirements contained in the following standards:

The evaluation was done on the PV Rapid Shutdown System (PVRSS), and covers installations consisting of optimizers and inverters with part numbers listed below.

The testing done has verified that controlled conductors are limited to:

- Not more than 30 volts and 240 voltamperes within 30 seconds of rapid shutdown initiation outside the array.
- Not more than 80 volts and 240 voltamperes within 30 seconds of rapid shutdown initiation inside the array.

The rapid shutdown initiation is performed by either disconnecting the AC feed to the inverter, or – if the inverter DC Safety switch is readily accessible – by turning off the DC Safety switch.

Applicable products:

(1) Power optimizers:

PB followed by 001 to 350; followed by -AOB or -TFI.
OP followed by 001 to 500; followed by -LV, -MV, -IV or -EV.
P followed by 001 to 1100.
SP followed by 001 to 350.
When optimizers are connected to 2 or more modules in series, the max input voltage may exceed 80V. Following the implementation of the NEC 2017 rapid shutdown value of 80V max inside of the array at the beginning of 2019, modules exceeding this combined input max voltage will be required to use optimizers with parallel inputs. Also meeting NEC 2020 rapid shutdown requirement.

(2) 1 -PH Inverters

SE3000A-US / SE3800A-US / SE5000A-US / SE6000A-US / SE7600A-US / SE10000A-US / SE11400A-US / SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US when the following label is labeled on the side of the inverter:

Inverter part number may be followed by a suffix.

(3) 3 -PH Inverters

intertek
Total Quality. Assured.

Intertek
3933 US Route 11
Cortland, NY 13045
Telephone: 607-753-7311
www.intertek.com

SE9KUS / SE10KUS / SE14.4KUS/ SE16.7kUS / SE17.3kUS / SE20KUS/ SE24KUS / SE30KUS / SE33.3KUS / SE40KUS / SE43.2KUS / SE50KUS / SE66.6KUS / SE80KUS / SE85KUS / SE100KUS / SE120KUS; when the following label is labeled on the side of the inverter:

Please note, this Letter Report does not represent authorization for the use of any Intertek certification marks.

Brand Name(s)	SolarEdge
Relevant Standard(s)	UL 1741, UL 1741 CRD for rapid shutdown National Electric Code, 2020, Section 690.12 requirement for rapid shutdown
Verification Issuing Office	3933 US Route 11, Cortland, NY 13045

NRTL Disclaimer, Different for each NRTL – Example: *"This Verification is for the exclusive use of NRTL's Client and is provided pursuant to the agreement between NRTL and its Client. NRTL's responsibility and liability are limited to the terms and conditions of the agreement. NRTL assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to copy or distribute this Verification. Any use of the NRTL name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by NRTL. The observations and test results referenced from this Verification are relevant only to the sample tested. This Verification by itself does not imply that the material, product, or service is or has ever been under an NRTL certification program."*

Signature:

Name: Mukund Rana
Position: Staff Engineer
Date:5/17/2021

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Intertek
3933 US Route 11
Cortland, NY 13045
Telephone: 607-753-7311
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Date	Engineer / Reviewer	Description
5/17/2021 G104683664CRT	Dishant Patel	Added New 3-PH Inverter model SE50KUS, SE80KUS, SE85KUS and SE120KUS.
	Mukund Rana	Updated Power optimizers from "P followed by 001 to 960" to "P followed by 001 to 1100" Updated NEC standard from "National Electric Code, 2017, Section 690.12 requirement for rapid shutdown" To "National Electric Code, 2020, Section 690.12 requirement for rapid shutdown"

1 PV-7 RAPID SHUTDOWN CERTIFICATION
SCALE: NTS

(LOGO WITHHELD FOR SAMPLE)

(INFO WITHHELD)
PHONE: (INFO WITHHELD)
LICENSE NO. (INFO WITHHELD)

NEW GRID-TIED SYSTEM 51.92kW

(INFO WITHHELD FOR PUBLIC SAMPLE)

RAPID SHUTDOWN

PROJECT NO: GSD-20260227-SCM
DRAWN BY: SCM
DATE: 2/27/2026

PV-7