



SOLAR OPTIMUM, INC  
501 WEST GLENOAKS BLVD.  
GLENDALE, CA 91202  
800-552-9970  
WWW.SOLAROPTIMUM.COM  
LICENSE NUMBER 972228 C10



SOLAR OPTIMUM, INC  
501 WEST GLENOAKS BLVD.  
GLENDALE, CA 91202  
800-552-9970  
WWW.SOLAROPTIMUM.COM  
LICENSE NUMBER 972228 C10

MARK	DATE	DESCRIPTION
△	11/14/16	AS BUILT
△	12/14/16	AS BUILT

DRAWN BY: SCOTT  
CHECKED BY: T.T.T.  
SCALE: AS SHOWN  
DATE: 5/3/17

**1 SITE PLAN**

SCALE: N.T.S.

EXISTING PANEL SCHEDULE @ 2390			
ARRAY	TILT	AZIMUTH	QTY.
P1	5°	90°/270°	0

NEW PANEL SCHEDULE @ 2390			
ARRAY	TILT	AZIMUTH	QTY.
P1	5°	90°/270°	0

NOTES:

1. ROOF PERIMETER FIRE CLEARANCE: MIN 4'-0".
2. FIRE CLEARANCE AROUND SKYLIGHT: MIN 4'-0".
3. FIRE CLEARANCE AROUND OPENINGS: MIN 4'-0".
4. ROOF HEIGHT: 40'-0" APPROXIMATE.
5. ROOF PITCH: 0°
6. CONDUIT TO PENETRATE ROOF AND ENTER THIRD FLOOR LAUNDRY ROOM. CONDUIT RUN WILL CONTINUE DOWN ALONG SIDE THE TRASH SHOOT FINALLY ENTERING TRASH CLOSET AT GROUND LEVEL, CONDUIT WILL THEN PENETRATE WALL INSIDE OF TRASH CLOSET AND TERMINATE AT PV AC DISCONNECT ON OPPOSITE SIDE OF WALL, USE ADEQUATE SLEEVE TO PROTECT CONDUIT FROM ELEMENTS.

SCOPE OF WORK: 2390

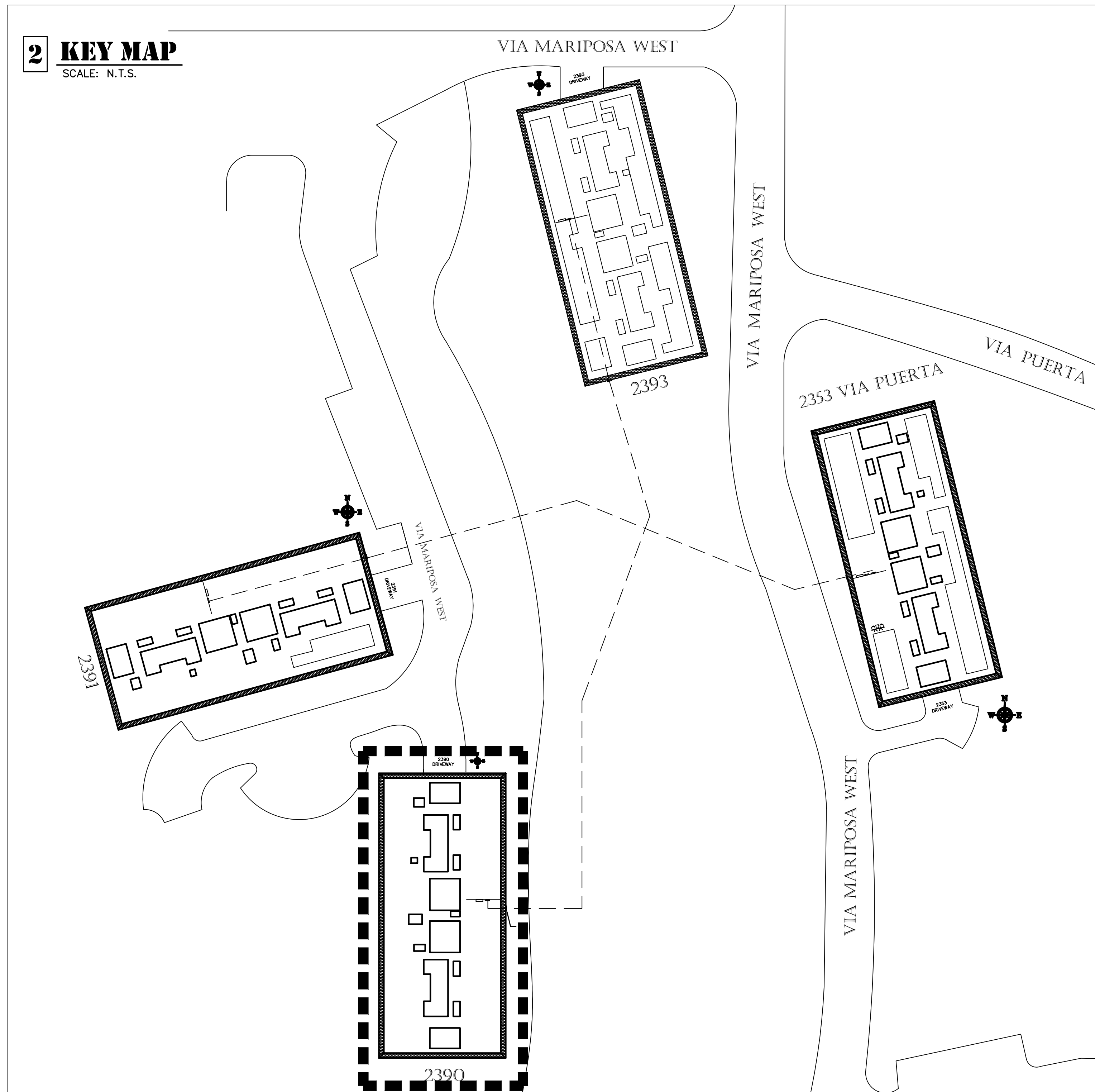
1. PV SYSTEM AND PV COMPONENTS WILL REMAIN ON BUILDING 2393.

2. THE PV OUTPUT FEEDER FROM AC COMBINER BOX WILL BE ROUTED TO BUILDING 2390 FOR INTERCONNECTION.

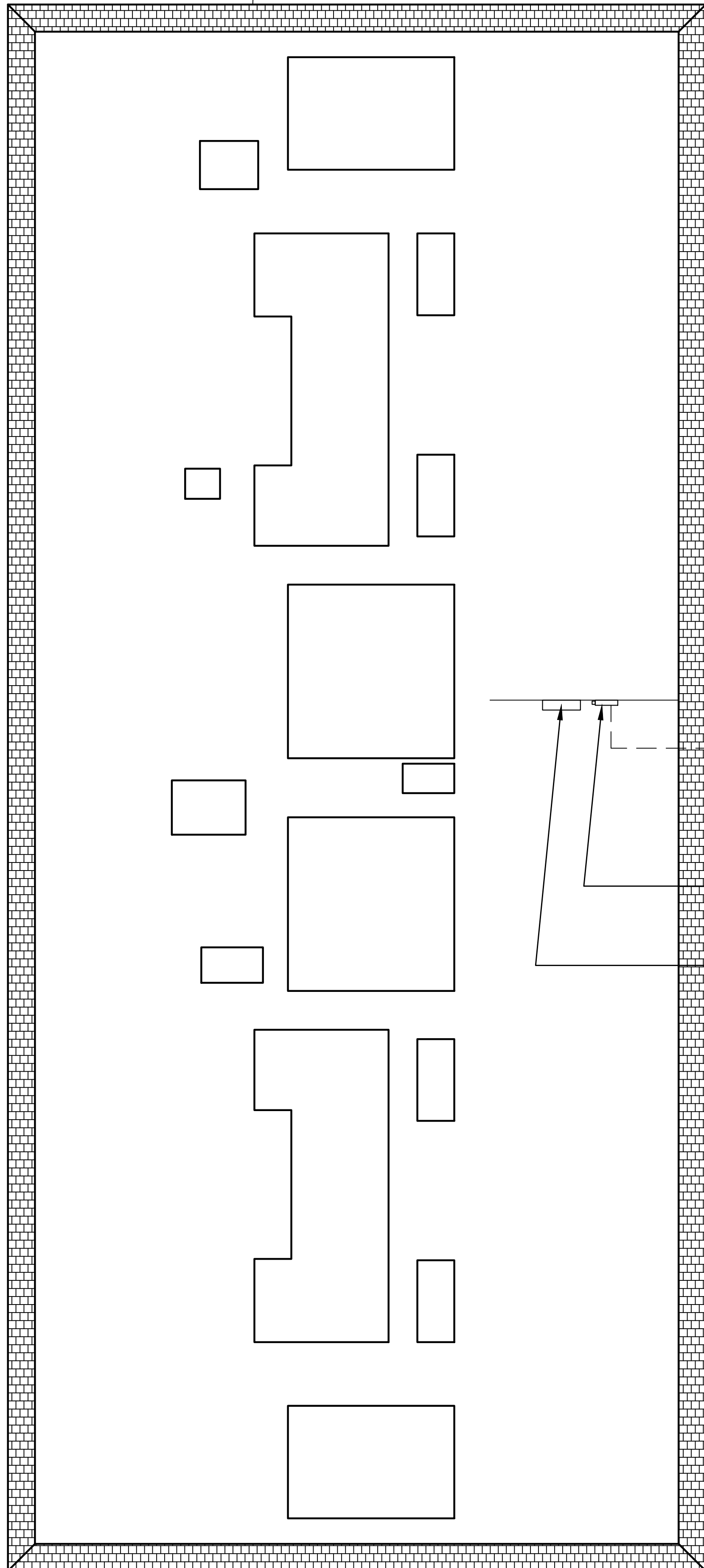
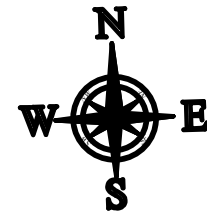
SEE MAP AND SITE PLAN FOR DETAILS.

**2 KEY MAP**

SCALE: N.T.S.



2390  
DRIVEWAY



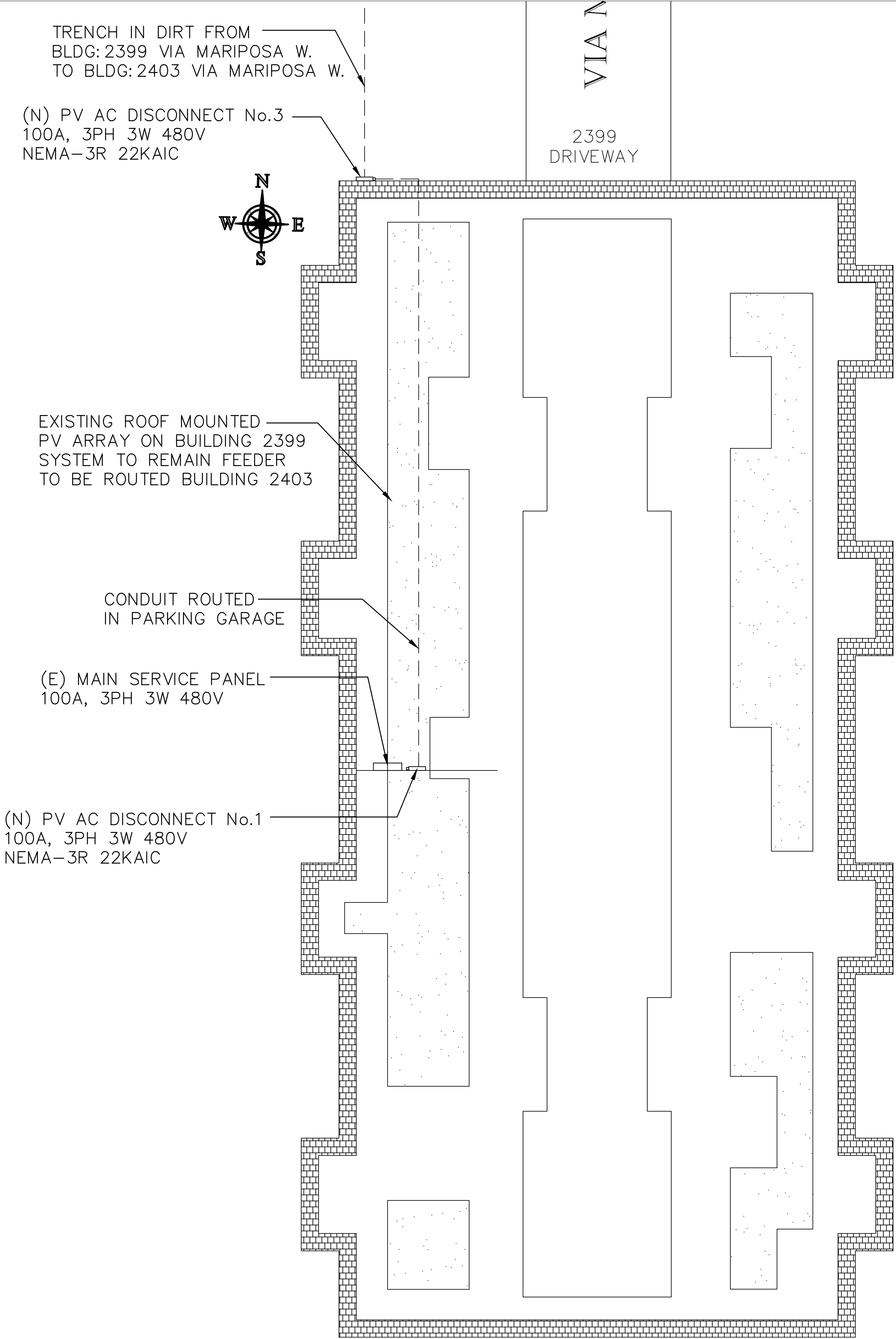
CONDUIT ROUTE  
IN TRENCH (DIRT)

(N) 100A  
PV AC DISCONNECT

(N) 100A FUSED  
PV AC DISCONNECT

(E) MAIN SERVICE PANEL  
100A, 3PH 3W 480V

2390



2399

**1 SITE PLAN**  
SCALE: N.T.S.

EXISTING PANEL SCHEDULE @ 2399			
ARRAY	TILT	AZIMUTH	QTY.
P1	5°	90°/270°	204

NEW PANEL SCHEDULE @ 2399			
ARRAY	TILT	AZIMUTH	QTY.
P1	5°	90°/270°	204

SCOPE OF WORK: 2399

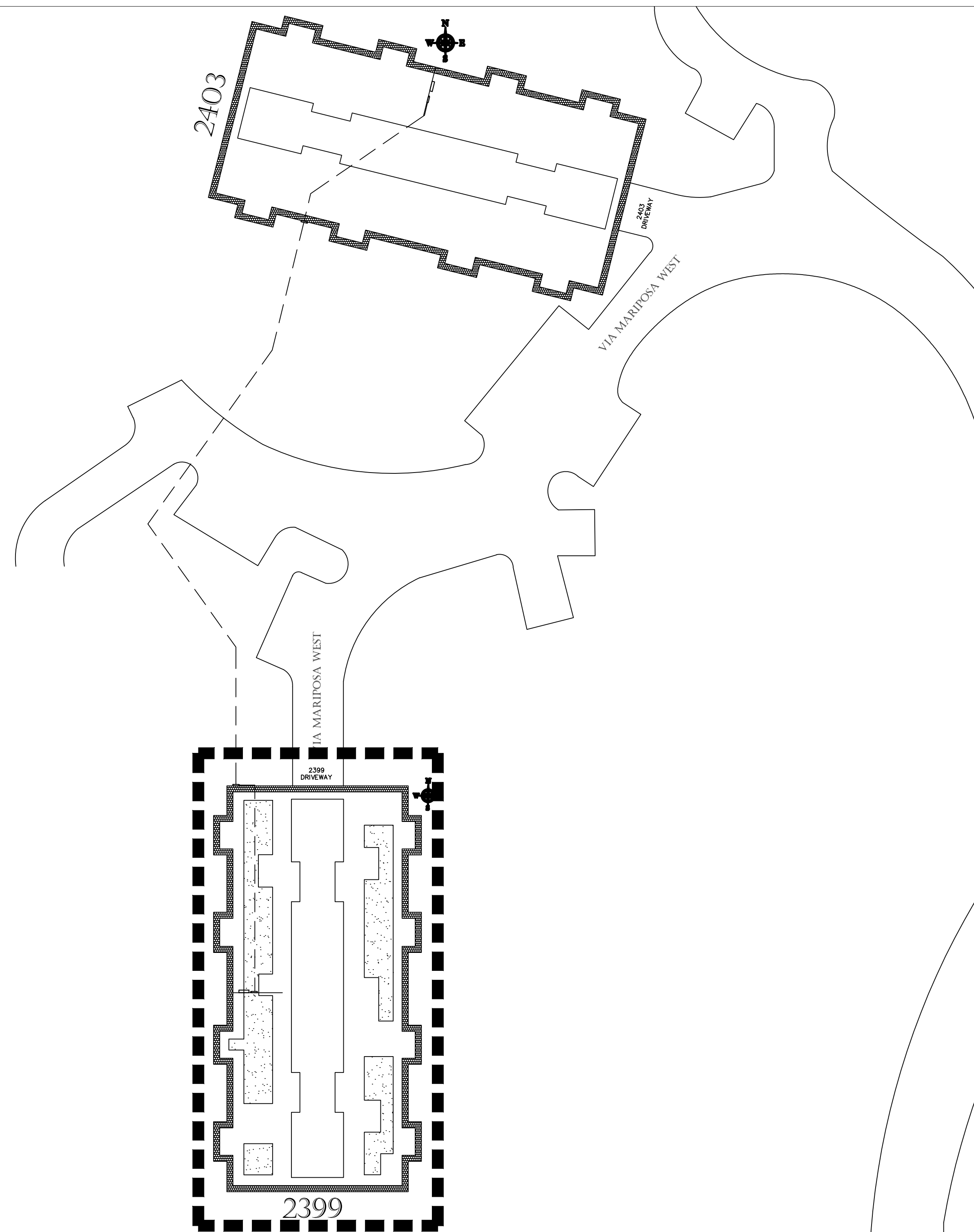
1. PV SYSTEM WILL REMAIN ON BUILDING 2399'S ROOF, THE FEEDER OUTPUT OF AC COMBINER BOX WILL BE ROUTED TO BUILDING 2403 FOR INTERCONNECTION.

SEE MAP AND SITE PLAN FOR DETAILS.

**NOTES:**

1. ROOF PERIMETER FIRE CLEARANCE: MIN 4'-0".
2. FIRE CLEARANCE AROUND SKYLIGHT: MIN 4'-0".
3. FIRE CLEARANCE AROUND OPENINGS: MIN 4'-0".
4. ROOF HEIGHT: 40'-0" APPROXIMATE.
5. ROOF PITCH: 0°
6. CONDUIT TO PENETRATE ROOF AND ENTER THIRD FLOOR LAUNDRY ROOM. CONDUIT RUN WILL CONTINUE DOWN ALONG SIDE THE TRASH SHOOT FINALLY ENTERING TRASH CLOSET AT GROUND LEVEL, CONDUIT WILL THEN PENETRATE WALL INSIDE OF TRASH CLOSET AND TERMINATE AT PV AC DISCONNECT ON OPPOSITE SIDE OF WALL, USE ADEQUATE SLEEVE TO PROTECT CONDUIT FROM ELEMENTS.

**2 KEY MAP**  
SCALE: N.T.S.



PROJECT SITE

**THIRD MUTUAL  
LAGUNA WOODS VILLAGES**

**24351 EL TORO RD.  
LAGUNA WOODS, CA 92637**

PROJECT DEVELOPER

**SOLAR OPTIMUM**  
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SIGNATURE

STAMP

CITY APPROVAL STAMP

REVISION

MARK	DATE	DESCRIPTION
△	11/14/16	AS BUILT
△	12/14/16	AS BUILT

DRAWN BY: SCOTT  
CHECKED BY: T.T.T.  
SCALE: AS SHOWN  
DATE: 5/3/17

SHEET TITLE

**SITE PLAN  
2399 VIA MARIPOSA WEST**

SHEET NUMBER

**S1**



MARK	DATE	DESCRIPTION
△	11/14/16	AS BUILT
△	12/14/16	AS BUILT

DRAWN BY: SCOTT  
CHECKED BY: T.T.T.  
SCALE: AS SHOWN  
DATE: 5/3/17

**1 SITE PLAN**

SCALE: N.T.S.

EXISTING PANEL SCHEDULE @ 2403			
ARRAY	TILT	AZIMUTH	QTY.
P1	5°	90°/270°	0

NEW PANEL SCHEDULE @ 2403			
ARRAY	TILT	AZIMUTH	QTY.
P1	5°	90°/270°	0

SCOPE OF WORK: 2403

1. FEEDER FROM BUILDING 2399 WILL CONNECT TO 2403 AT THE 480V SERVICE.

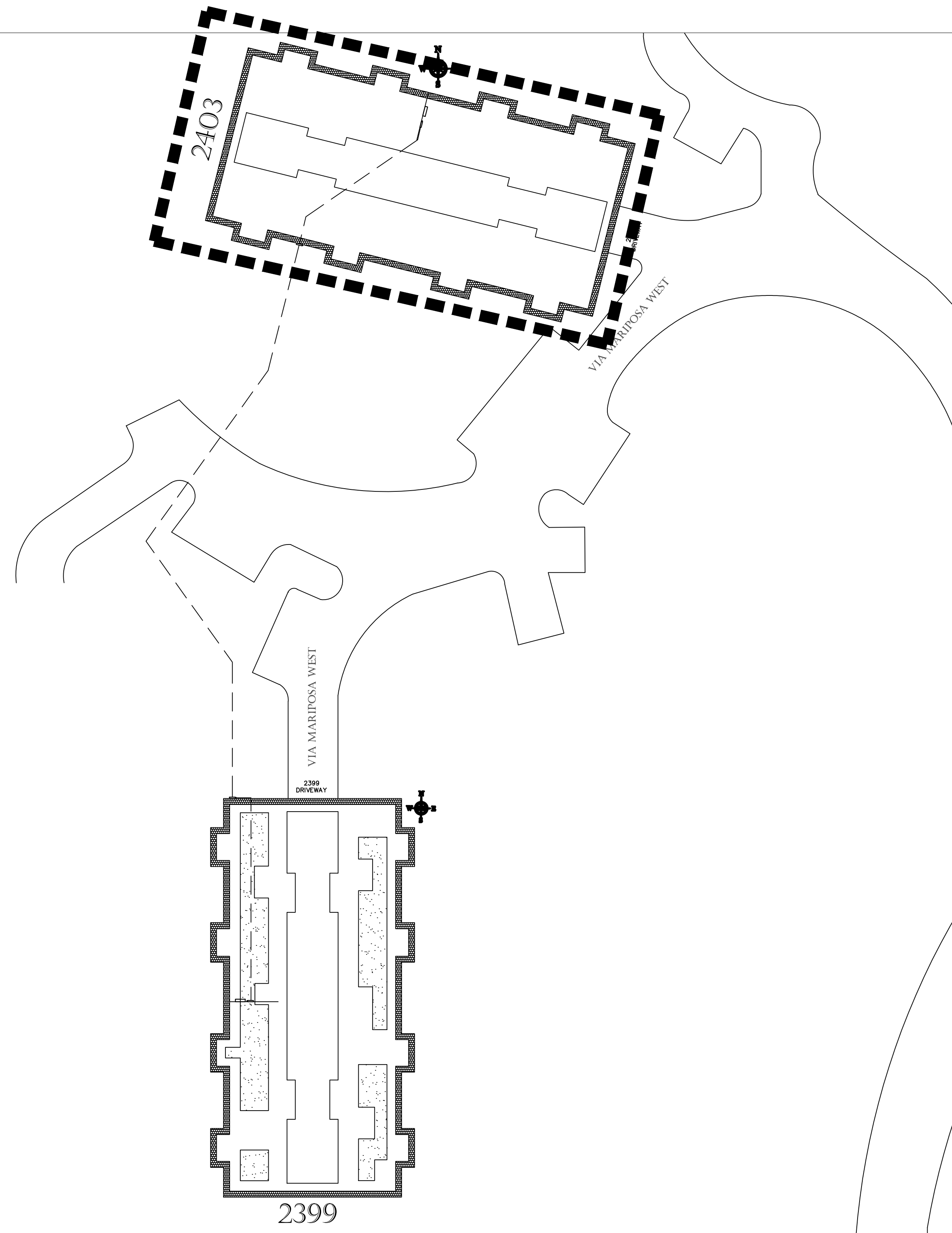
SEE MAP AND SITE PLAN FOR DETAILS.

NOTES:

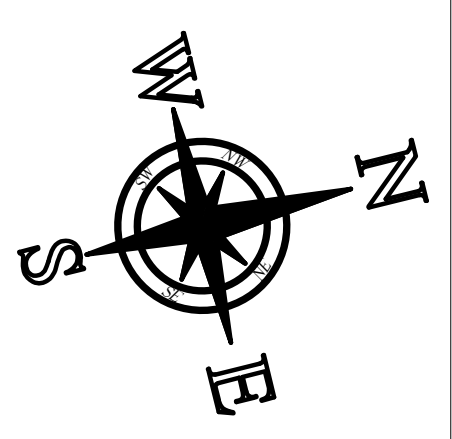
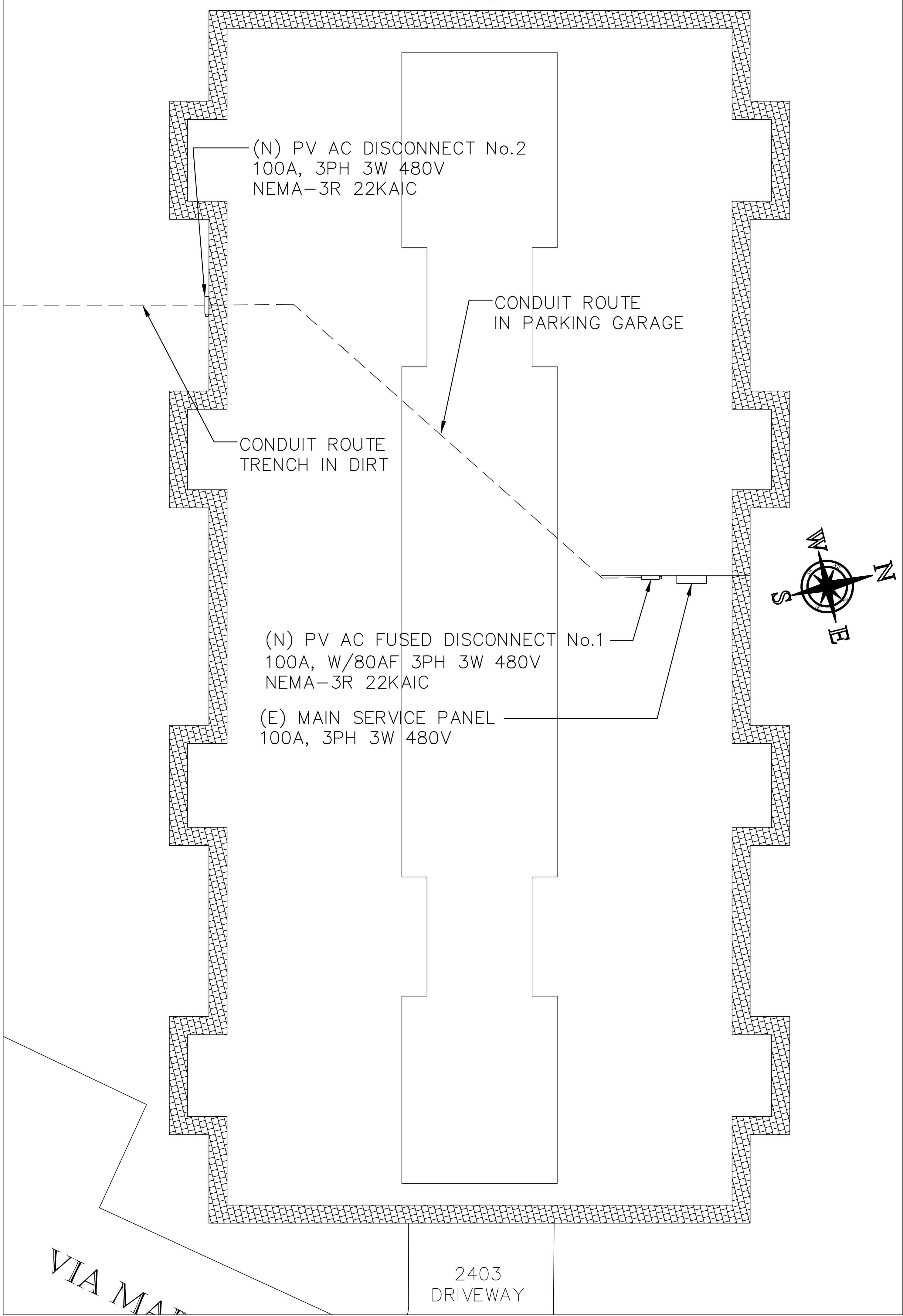
1. ROOF PERIMETER FIRE CLEARANCE: MIN 4'-0".
2. FIRE CLEARANCE AROUND SKYLIGHT: MIN 4'-0".
3. FIRE CLEARANCE AROUND OPENINGS: MIN 4'-0".
4. ROOF HEIGHT: 40'-0" APPROXIMATE.
5. ROOF PITCH: 0°
6. CONDUIT TO PENETRATE ROOF AND ENTER THIRD FLOOR LAUNDRY ROOM. CONDUIT RUN WILL CONTINUE DOWN ALONG SIDE THE TRASH SHOOT FINALLY ENTERING TRASH CLOSET AT GROUND LEVEL, CONDUIT WILL THEN PENETRATE WALL INSIDE OF TRASH CLOSET AND TERMINATE AT PV AC DISCONNECT ON OPPOSITE SIDE OF WALL, USE ADEQUATE SLEEVE TO PROTECT CONDUIT FROM ELEMENTS.

**2 KEY MAP**

SCALE: N.T.S.



2403



# 2390 VIA MARIPOSA WEST SINGLE LINE

NOTE: RUN ADDITIONAL CONDUIT FROM 2393 TO 2390 FOR DATA. 1" EMT

TOTAL SYSTEM:	LOAD SUMMARY FOR SPB01
HELIX SYSTEM 78.48 KWP 60 KWAC 240 MODULES, SUNPOWER SPR-E20-327-COM 12 MODULES PER STRING, 20 STRINGS	(3) INVERTERS= (2X24KW + 1X12KW) * 1.25 = 75KW (90.2A @ 480V, 3φ)

3  
 (4) #1/0 AWG, THWN-2 (CU)  
 (1) #4 AWG INSULATED GND (CU)  
 (1) 2"  
 LENGTH: 120ft  
 VD= 0.48%

WILL REQUIRE CELL MODEM FOR WIRELESS CONNECTION

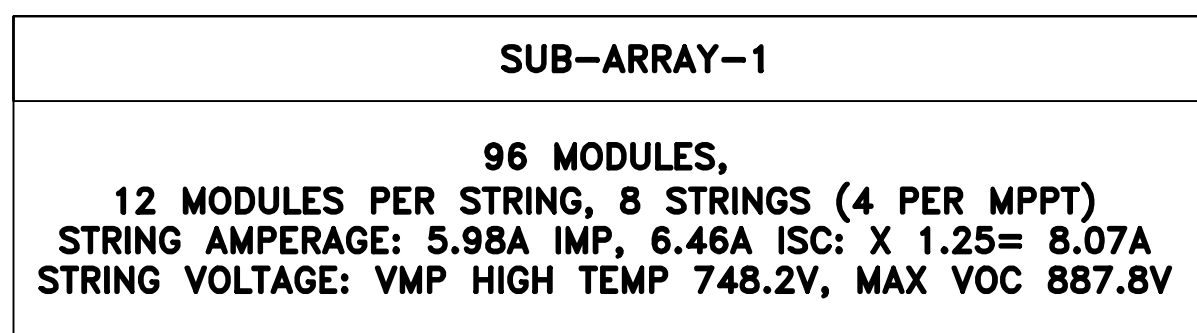


600V MULTI-CONDUCTOR TYPE TC-ER:  
 (3) #8 AWG XHHW-2 (CU)  
 (1) #8 AWG XHHW-2 GND (CU)  
 (1) #8 AWG XHHW-2 NEUTRAL REF (CU)

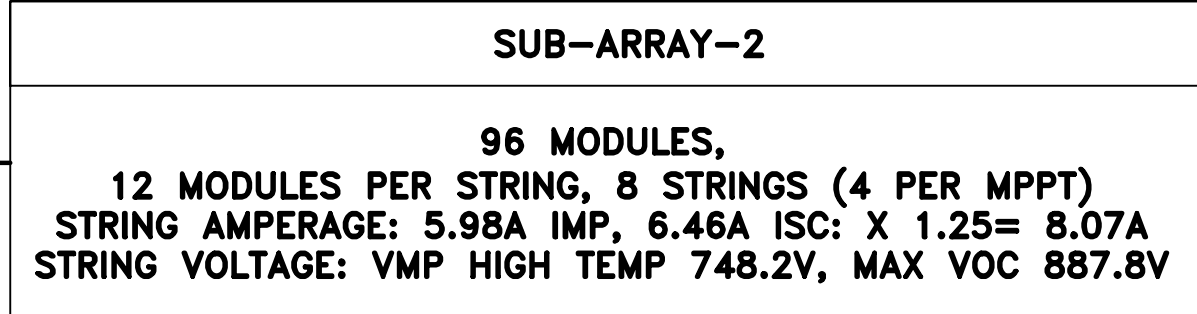
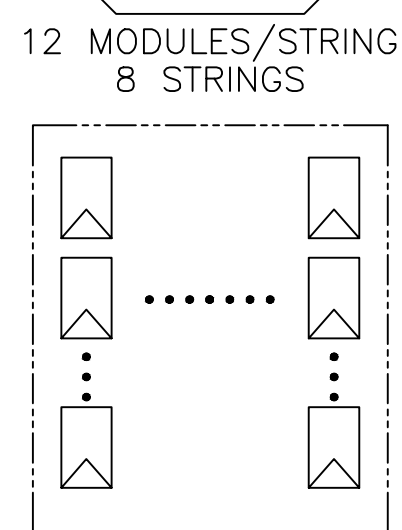
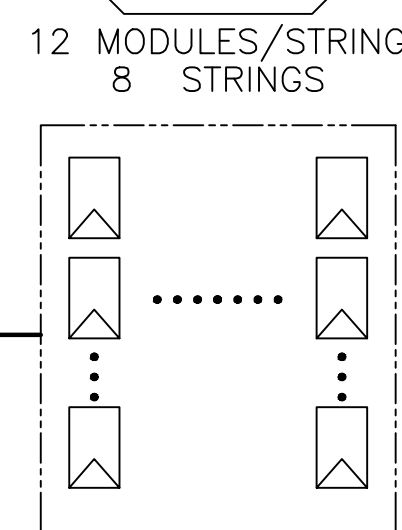
- NOTE:
- SINGLE STRING FUSE SIZE: 15A
  - TWO STRING FUSE SIZE: 20A
  - COMBINER USED IS HELIX DC BRACH SHOALS HARNESS. MODEL NUMBER: HELIX PLUG AND PLAY DC BRANCH REFER TO SPEC.

(N) DC BRANCH, SHOALS HARNESS AND DC DISCONNECT (TYP)

IN CABLE TRAY:  
 #10 AWG, 1000V PV WIRE

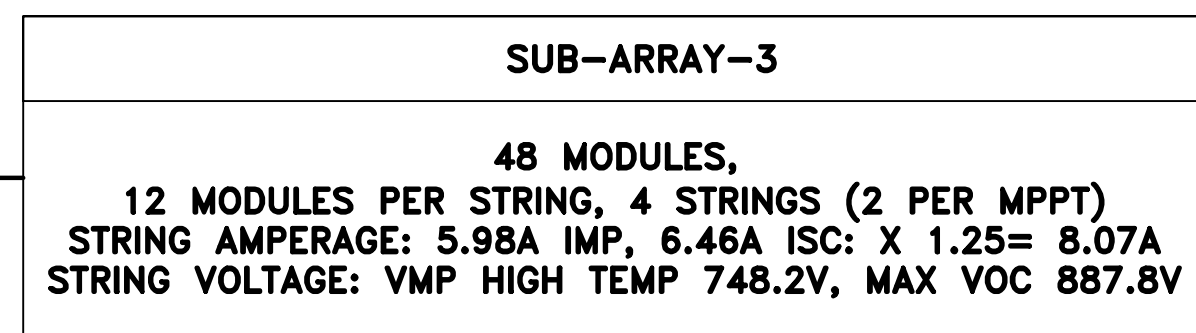
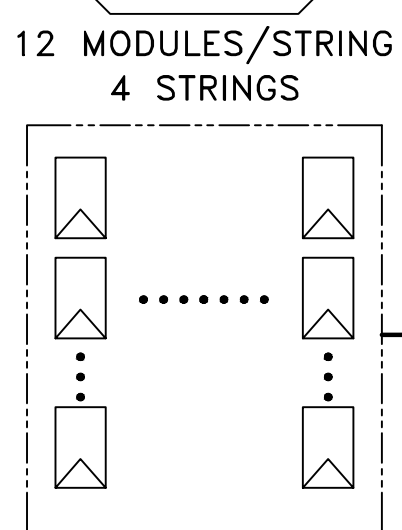


TEMP. CORRECTION FACTOR: 1.14



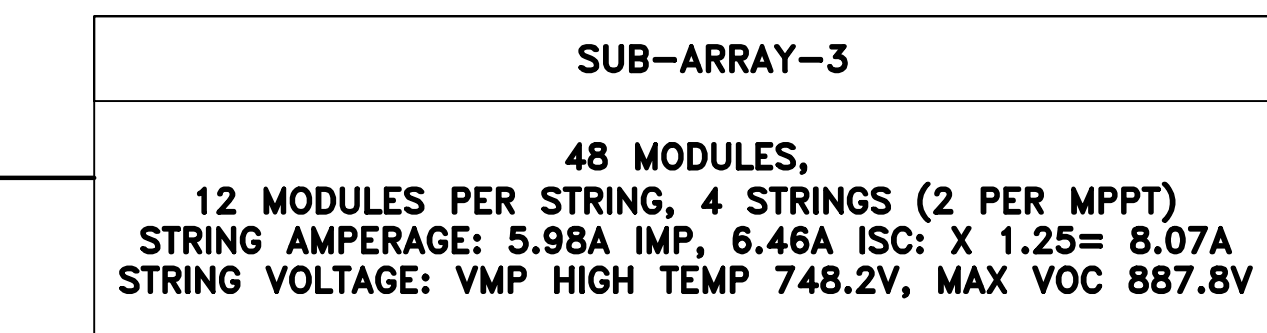
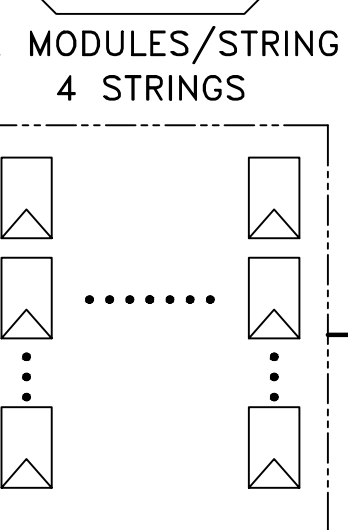
TEMP. CORRECTION FACTOR: 1.14

SUB-ARRAY-2



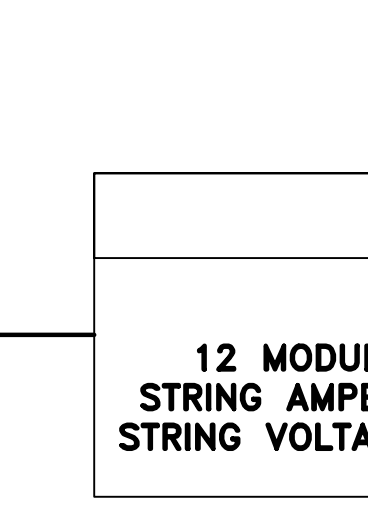
TEMP. CORRECTION FACTOR: 1.14

SUB-ARRAY-3



TEMP. CORRECTION FACTOR: 1.14

SUB-ARRAY-1

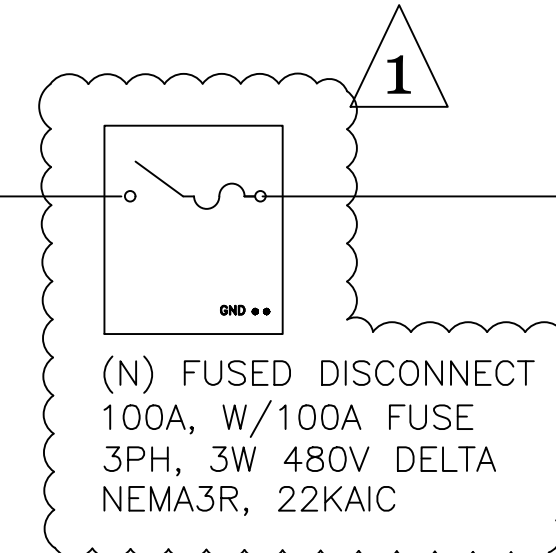
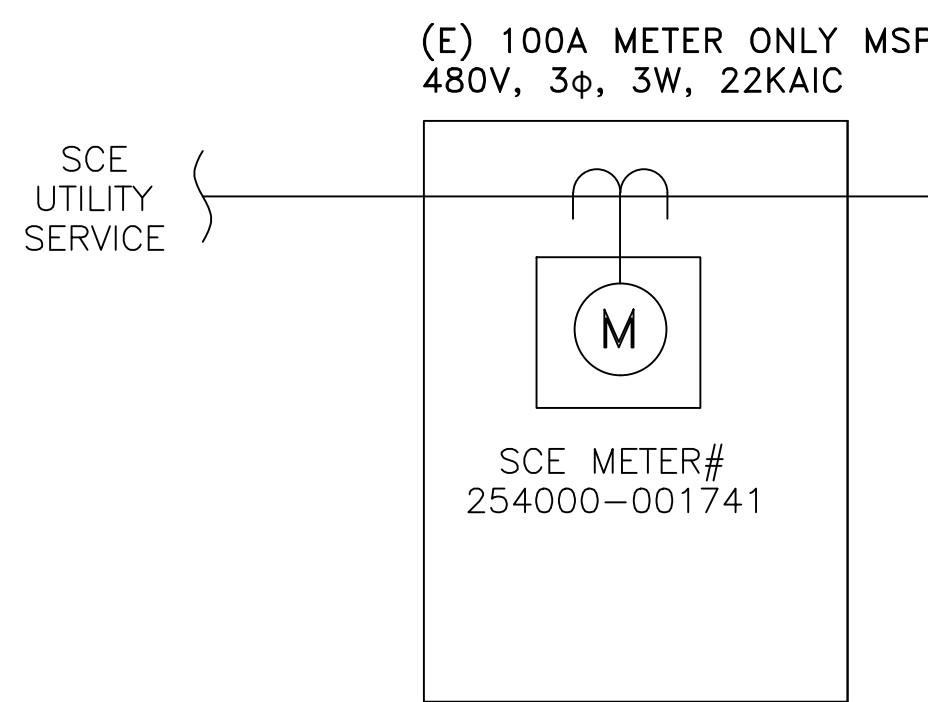


3  
 (3) #500 AWG, XHHW (AL)  
 (1) #4/0 AWG INSULATED GND (CU)  
 (1) 3" EMT/PVC  
 LENGTH: 550ft  
 VD= .76%

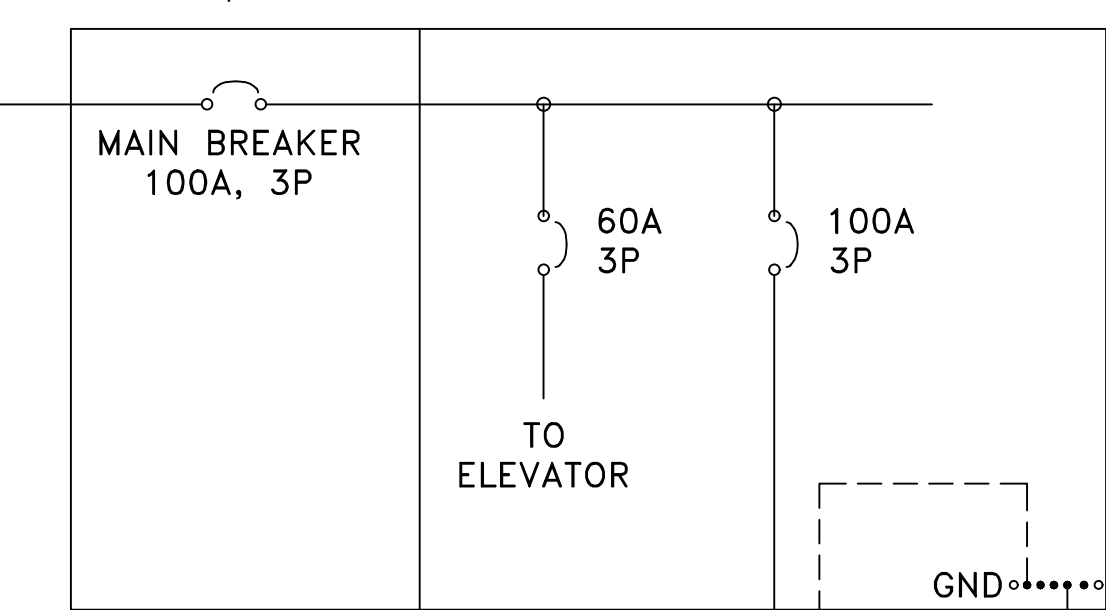
1  
**NEC 690.10 (B) POWER TRANSFORMERS.**  
 OVER CURRENT PROTECTION FOR A TRANSFORMER WITH A SOURCE(S) ON EACH SIDE SHALL BE PROVIDED IN ACCORDANCE WITH 450.3 BY CONSIDERING FIRST ONCE SIDE OF THE TRANSFORMER, THEN THE OTHERS SIDE OF THE TRANSFORMER, AS THE PRIMARY.  
**EXCEPTION:** A POWER TRANSFORMER WITH A CURRENT RATING ON THE SIDE CONNECTED TOWARD THE UTILITY-INTERACTIVE INVERTER OUTPUT, NOT LESS THAN THE RATED CONTINUOUS OUTPUT CURRENT OF THE INVERTER, SHALL BE PERMITTED WITHOUT OVER CURRENT PROTECTION FROM THE INVERTER.

**NOTE**  
 (FOR UN-GROUNDED SYSTEM ONLY):  
 THIS IS UN-GROUNDED SYSTEM. BOTH POSITIVE AND NEGATIVE CONDUCTORS SHALL BE UN-GROUNDED AND FUSED/SWITCHED AS SPECIFIED IN THE DRAWINGS.

- DC WIRING KEY NOTES:
- PROVIDE A CONTINUOUS UNSPLICED PATH FROM INVERTER GROUND TO AC BUS BAR GROUND. SEE GROUNDING SCHEMATIC DRAWING.
  - CONSULT INVERTER INSTALLATION GUIDE FOR WIRING METHODS AND OPERATIONS PROCEDURES.
  - NO SPLICES ARE ALLOWED IN DC STRING WIRING. ALL PV WIRE SHALL BE RATED FOR 1000V.



(N) SUB-PANEL 200A, W/100A MAIN 480V, 3φ, 3W, 22KAIC



- NOTE:
- REPLACE EXISTING 60A DISCONNECT WITH 100A FUSED DISCONNECT.
  - INTERCEPT FEEDER AND TERMINATE AT NEW 200A SUB-PANEL, W/100A MAIN.

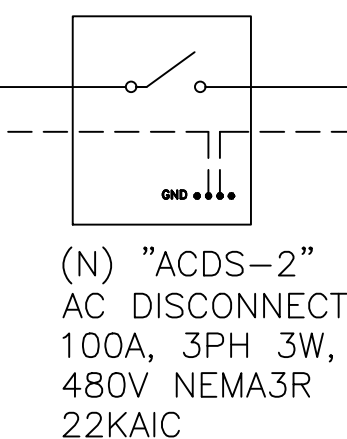
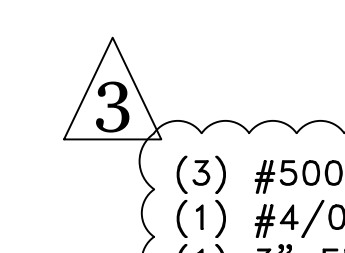
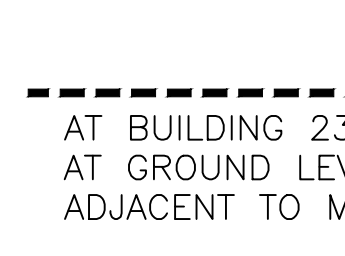
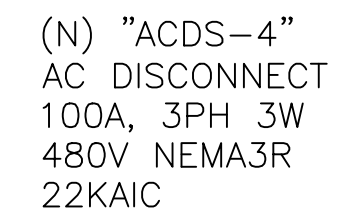
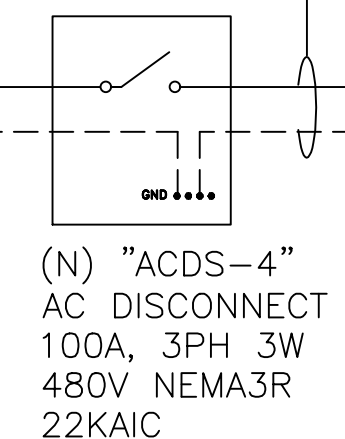
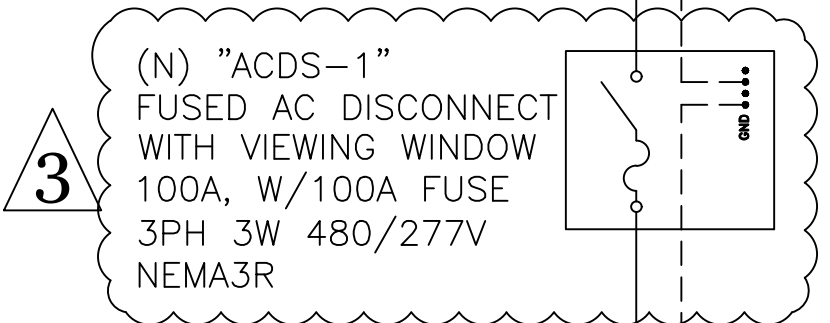
NEC 690.64B CALCULATION: (200x1.2-100) ≥ 100

NOTE: PV BREAKER MUST BE INSTALLED AT THE END OF THE BUS

1  
 NOTE: ADDITIONAL GROUND ROD TO SUPPLEMENT EXISTING GEC ROD, RAN UN-SPLICED TO TERMINATE WITH IRREVERSIBLE CONNECTION.

3  
 (3) #4 AWG, THWN-2 (CU)  
 (1) #6 AWG INSULATED GND (CU)  
 (1) 1-1/4" EMT  
 LENGTH: 20FT  
 VD= 0.20%

3  
 (3) #500 AWG, XHHW (AL)  
 (1) #4/0 AWG INSULATED GND (CU)  
 (1) 3" EMT  
 LENGTH: 140FT  
 VD= 0.19%



PROJECT SITE

**THIRD MUTUAL LAGUNA WOODS VILLAGES**  
 24351 EL TORO RD.  
 LAGUNA WOODS, CA 92637

PROJECT DEVELOPER



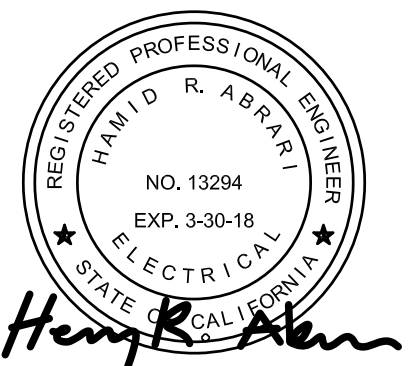
CONTRACTOR



SIGNATURE

*[Handwritten Signature]*

STAMP



CITY APPROVAL STAMP

REVISION

MARK	DATE	DESCRIPTION
△	11/14/16	AS BUILT
△	12/14/16	AS BUILT
△	03/22/17	MOVING SYSTEMS

DRAWN BY: SCOTT  
 CHECKED BY: T.T.T.  
 SCALE: AS SHOWN  
 DATE: 3/30/17

SHEET TITLE

**2390 VIA MARIPOSA WEST SINGLE LINE**

SHEET NUMBER

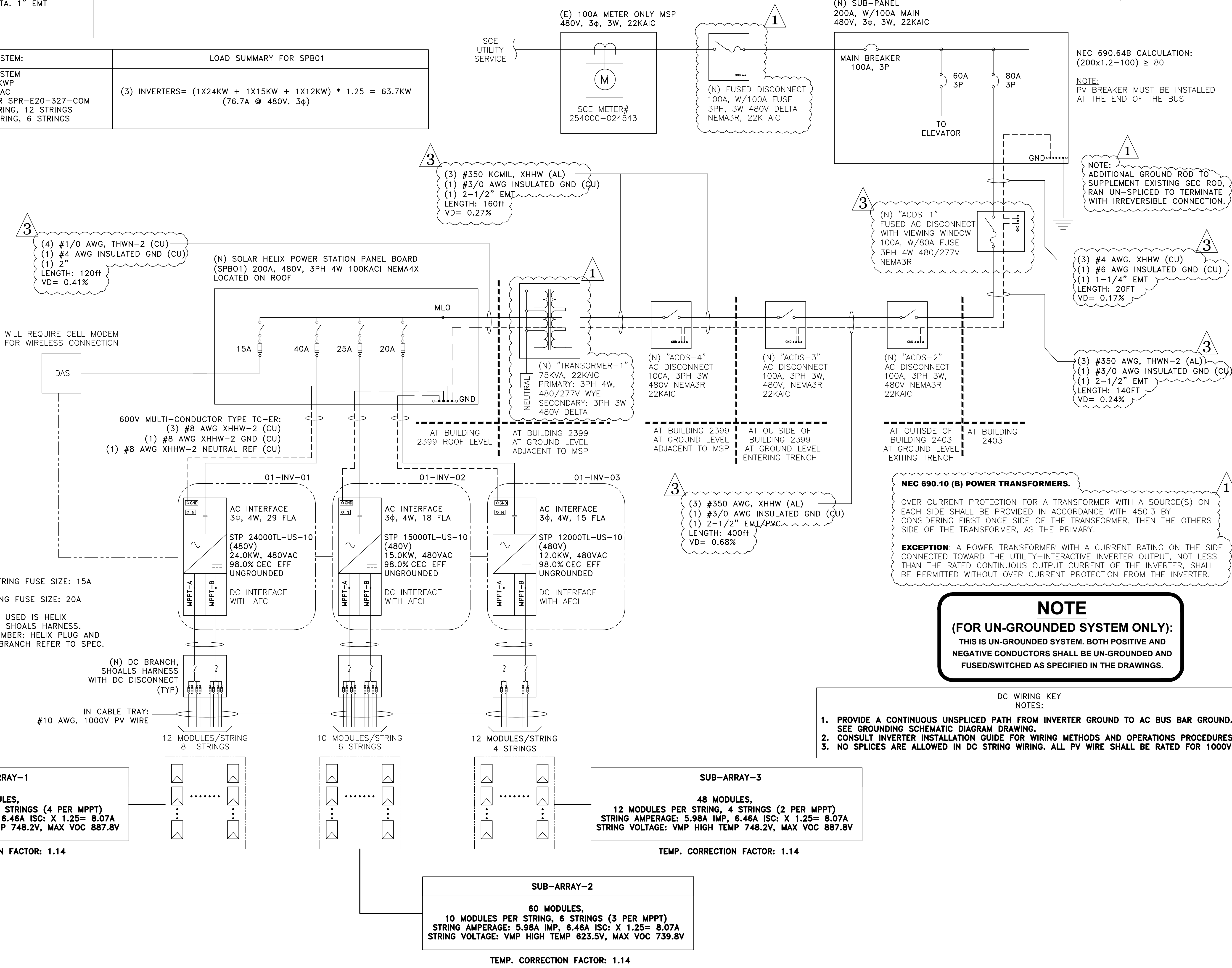
**E1.12**

# 2403 VIA MARIPOSA WEST SINGLE LINE

NOTE: RUN ADDITIONAL CONDUIT FROM 2399 TO 2403 FOR DATA. 1" EMT

- NOTE:
1. REPLACE EXISTING 60A DISCONNECT WITH 100A FUSED DISCONNECT.
  2. INTERCEPT FEEDER AND TERMINATE AT NEW 200A SUB-PANEL, W/100A MAIN.

TOTAL SYSTEM:	LOAD SUMMARY FOR SPB01
HELIX SYSTEM 66.70 KWP 51 KWAC 204 MODULES, SUNPOWER SPR-E20-327-COM 12 MODULES PER STRING, 12 STRINGS 10 MODULES PER STRING, 6 STRINGS	(3) INVERTERS= (1X24KW + 1X15KW + 1X12KW) * 1.25 = 63.7KW (76.7A @ 480V, 3φ)



3 (4) #1/0 AWG, THWN-2 (CU)  
(1) #4 AWG INSULATED GND (CU)  
(1) 2"  
LENGTH: 120ft  
VD= 0.41%

3 (3) #350 KCMIL, XHHW (AL)  
(1) #3/0 AWG INSULATED GND (CU)  
(1) 2-1/2" EMT  
LENGTH: 160ft  
VD= 0.27%

3 (5) #350 AWG, XHHW (AL)  
(1) #3/0 AWG INSULATED GND (CU)  
(1) 2-1/2" EMT/EXC  
LENGTH: 400ft  
VD= 0.68%

1 NOTE:  
ADDITIONAL GROUND ROD TO SUPPLEMENT EXISTING GEC ROD, RAN UN-SPLICED TO TERMINATE WITH IRREVERSIBLE CONNECTION.

3 (3) #4 AWG, XHHW (CU)  
(1) #6 AWG INSULATED GND (CU)  
(1) 1-1/4" EMT  
LENGTH: 20FT  
VD= 0.17%

3 (3) #350 AWG, THWN-2 (AL)  
(1) #3/0 AWG INSULATED GND (CU)  
(1) 2-1/2" EMT  
LENGTH: 140FT  
VD= 0.24%

1 **NEC 690.10 (B) POWER TRANSFORMERS.**  
OVER CURRENT PROTECTION FOR A TRANSFORMER WITH A SOURCE(S) ON EACH SIDE SHALL BE PROVIDED IN ACCORDANCE WITH 450.3 BY CONSIDERING FIRST ONCE SIDE OF THE TRANSFORMER, THEN THE OTHERS SIDE OF THE TRANSFORMER, AS THE PRIMARY.  
**EXCEPTION:** A POWER TRANSFORMER WITH A CURRENT RATING ON THE SIDE CONNECTED TOWARD THE UTILITY-INTERACTIVE INVERTER OUTPUT, NOT LESS THAN THE RATED CONTINUOUS OUTPUT CURRENT OF THE INVERTER, SHALL BE PERMITTED WITHOUT OVER CURRENT PROTECTION FROM THE INVERTER.

**NOTE**  
**(FOR UN-GROUNDED SYSTEM ONLY):**  
THIS IS UN-GROUNDED SYSTEM. BOTH POSITIVE AND NEGATIVE CONDUCTORS SHALL BE UN-GROUNDED AND FUSED/SWITCHED AS SPECIFIED IN THE DRAWINGS.

- DC WIRING KEY**  
NOTES:
1. PROVIDE A CONTINUOUS UNSPLICED PATH FROM INVERTER GROUND TO AC BUS BAR GROUND. SEE GROUNDING SCHEMATIC DIAGRAM DRAWING.
  2. CONSULT INVERTER INSTALLATION GUIDE FOR WIRING METHODS AND OPERATIONS PROCEDURES.
  3. NO SPLICES ARE ALLOWED IN DC STRING WIRING. ALL PV WIRE SHALL BE RATED FOR 1000V.

- NOTE:
1. SINGLE STRING FUSE SIZE: 15A
  2. TWO STRING FUSE SIZE: 20A
  3. COMBINER USED IS HELIX DC BRACH SHOALS HARNESS. MODEL NUMBER: HELIX PLUG AND PLAY DC BRANCH REFER TO SPEC.

**SUB-ARRAY-1**  
96 MODULES,  
12 MODULES PER STRING, 8 STRINGS (4 PER MPPT)  
STRING AMPERAGE: 5.98A IMP, 6.46A ISC: X 1.25= 8.07A  
STRING VOLTAGE: VMP HIGH TEMP 748.2V, MAX VOC 887.8V

**SUB-ARRAY-3**  
48 MODULES,  
12 MODULES PER STRING, 4 STRINGS (2 PER MPPT)  
STRING AMPERAGE: 5.98A IMP, 6.46A ISC: X 1.25= 8.07A  
STRING VOLTAGE: VMP HIGH TEMP 748.2V, MAX VOC 887.8V

**SUB-ARRAY-2**  
60 MODULES,  
10 MODULES PER STRING, 6 STRINGS (3 PER MPPT)  
STRING AMPERAGE: 5.98A IMP, 6.46A ISC: X 1.25= 8.07A  
STRING VOLTAGE: VMP HIGH TEMP 623.5V, MAX VOC 739.8V

PROJECT SITE

**THIRD MUTUAL LAGUNA WOODS VILLAGES**

**24351 EL TORO RD. LAGUNA WOODS, CA 92637**

PROJECT DEVELOPER

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CITY APPROVAL STAMP

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1	11/14/16	AS BUILT
2	12/14/16	AS BUILT
3	03/22/17	MOVING SYSTEMS

DRAWN BY: SCOTT  
CHECKED BY: T.T.T.  
SCALE: AS SHOWN  
DATE: 5/4/17

SHEET TITLE

**2403 VIA MARIPOSA WEST SINGLE LINE**

SHEET NUMBER

**E1.13**

NOTE: RUN ADDITIONAL CONDUIT FROM 2353 TO 2391 FOR DATA. 1" EMT

# 2391 VIA PUERTA SINGLE LINE

PROJECT SITE

**THIRD MUTUAL  
LAGUNA WOODS VILLAGES**

**24351 EL TORO RD.  
LAGUNA WOODS, CA 92637**

PROJECT DEVELOPER



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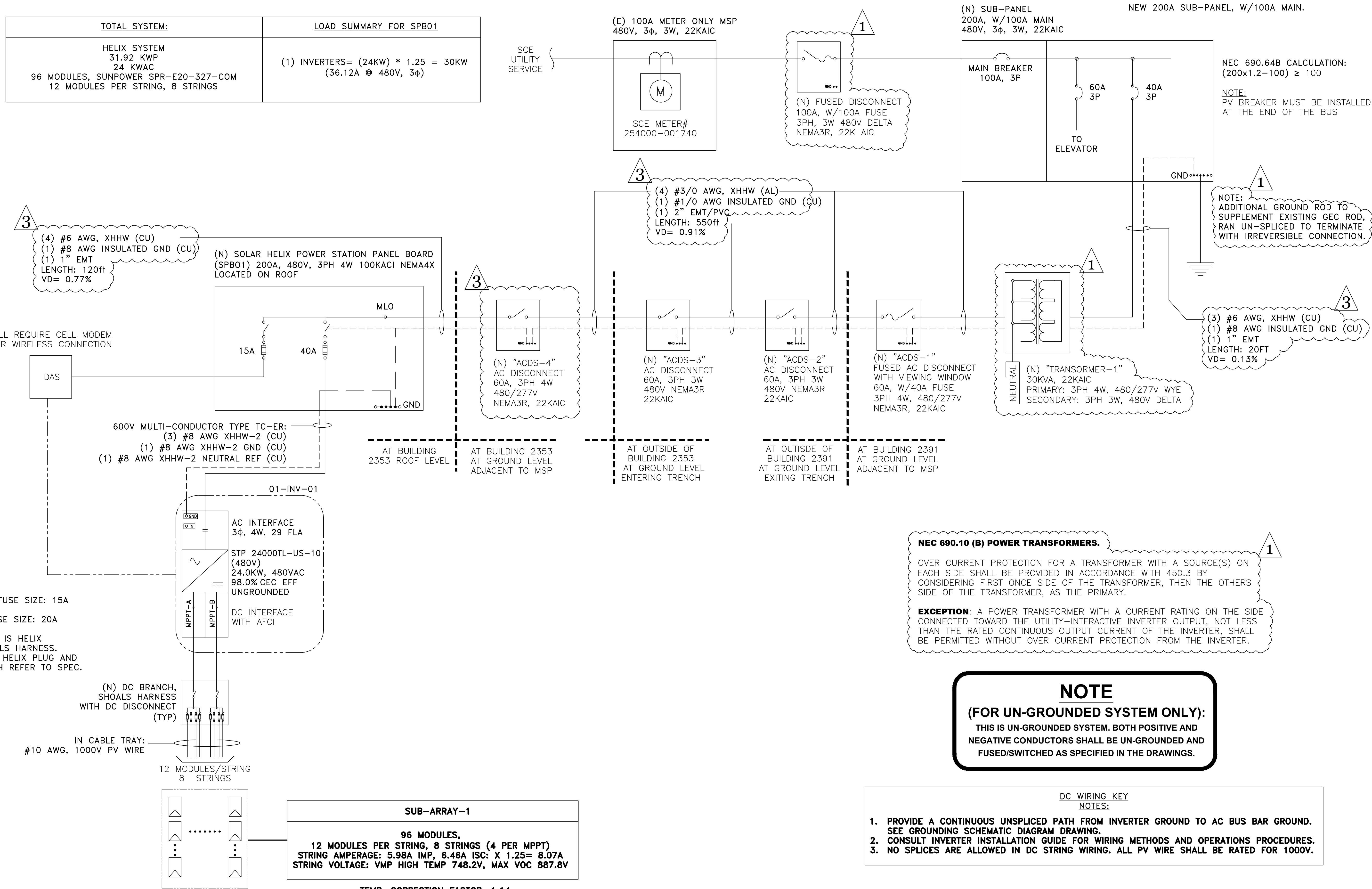
SIGNATURE

STAMP



CITY APPROVAL STAMP

TOTAL SYSTEM:	LOAD SUMMARY FOR SPB01
HELIX SYSTEM 31.92 KWP 24 KWAC 96 MODULES, SUNPOWER SPR-E20-327-COM 12 MODULES PER STRING, 8 STRINGS	(1) INVERTERS= (24KW) * 1.25 = 30KW (36.12A @ 480V, 3φ)



NOTE:  
1. REPLACE EXISTING 60A DISCONNECT WITH 100A FUSED DISCONNECT.  
2. INTERCEPT FEEDER AND TERMINATE AT NEW 200A SUB-PANEL, W/100A MAIN.

NEC 690.64B CALCULATION:  
(200x1.2-100) ≥ 100

NOTE:  
PV BREAKER MUST BE INSTALLED AT THE END OF THE BUS

NOTE:  
ADDITIONAL GROUND ROD TO SUPPLEMENT EXISTING GEC ROD. RAN UN-SPLICED TO TERMINATE WITH IRREVERSIBLE CONNECTION.

(3) #6 AWG, XHHW (CU)  
(1) #8 AWG INSULATED GND (CU)  
(1) 1" EMT  
LENGTH: 20FT  
VD= 0.13%

**NEC 690.10 (B) POWER TRANSFORMERS.**

OVER CURRENT PROTECTION FOR A TRANSFORMER WITH A SOURCE(S) ON EACH SIDE SHALL BE PROVIDED IN ACCORDANCE WITH 450.3 BY CONSIDERING FIRST ONCE SIDE OF THE TRANSFORMER, THEN THE OTHERS SIDE OF THE TRANSFORMER, AS THE PRIMARY.

**EXCEPTION:** A POWER TRANSFORMER WITH A CURRENT RATING ON THE SIDE CONNECTED TOWARD THE UTILITY-INTERACTIVE INVERTER OUTPUT, NOT LESS THAN THE RATED CONTINUOUS OUTPUT CURRENT OF THE INVERTER, SHALL BE PERMITTED WITHOUT OVER CURRENT PROTECTION FROM THE INVERTER.

**NOTE**  
**(FOR UN-GROUNDED SYSTEM ONLY):**  
THIS IS UN-GROUNDED SYSTEM. BOTH POSITIVE AND NEGATIVE CONDUCTORS SHALL BE UN-GROUNDED AND FUSED/SWITCHED AS SPECIFIED IN THE DRAWINGS.

**DC WIRING KEY NOTES:**

1. PROVIDE A CONTINUOUS UNSPLICED PATH FROM INVERTER GROUND TO AC BUS BAR GROUND. SEE GROUNDING SCHEMATIC DIAGRAM DRAWING.
2. CONSULT INVERTER INSTALLATION GUIDE FOR WIRING METHODS AND OPERATIONS PROCEDURES.
3. NO SPLICES ARE ALLOWED IN DC STRING WIRING. ALL PV WIRE SHALL BE RATED FOR 1000V.

NOTE:  
1. SINGLE STRING FUSE SIZE: 15A  
2. TWO STRING FUSE SIZE: 20A  
3. COMBINER USED IS HELIX DC BRACH SHOALS HARNESS. MODEL NUMBER: HELIX PLUG AND PLAY DC BRANCH REFER TO SPEC.

(N) DC BRANCH, SHOALS HARNESS WITH DC DISCONNECT (TYP)

IN CABLE TRAY:  
#10 AWG, 1000V PV WIRE

12 MODULES/STRING  
8 STRINGS

**SUB-ARRAY-1**

96 MODULES,  
12 MODULES PER STRING, 8 STRINGS (4 PER MPPT)  
STRING AMPERAGE: 5.98A IMP, 6.46A ISC: X 1.25= 8.07A  
STRING VOLTAGE: VMP HIGH TEMP 748.2V, MAX VOC 887.8V

TEMP. CORRECTION FACTOR: 1.14

REVISION		
MARK	DATE	DESCRIPTION
△	11/14/16	AS BUILT
△	12/14/16	AS BUILT
△	03/22/17	MOVING SYSTEMS

DRAWN BY: SCOTT  
CHECKED BY: T.T.T.  
SCALE: AS SHOWN  
DATE: 3/30/17

SHEET TITLE

**2391 VIA PUERTA  
SINGLE LINE**

SHEET NUMBER

**E1.14**

# 2353 VIA PUERTA SINGLE LINE

PROJECT SITE

**THIRD MUTUAL  
LAGUNA WOODS VILLAGES**

**24351 EL TORO RD.  
LAGUNA WOODS, CA 92637**

PROJECT DEVELOPER



SOLAR OPTIMUM, INC  
501 WEST GLENOAKS BLVD.  
GLENDAL, CA 91202  
800-552-9970  
WWW.SOLAROPTIMUM.COM  
LICENSE NUMBER 972228 C10

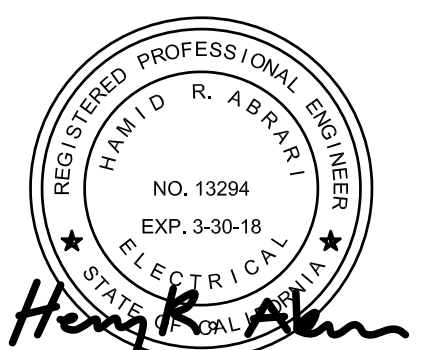
CONTRACTOR



SOLAR OPTIMUM, INC  
501 WEST GLENOAKS BLVD.  
GLENDAL, CA 91202  
800-552-9970  
WWW.SOLAROPTIMUM.COM  
LICENSE NUMBER 972228 C10

SIGNATURE

STAMP



CITY APPROVAL STAMP

REVISION

MARK	DATE	DESCRIPTION
△	11/14/16	AS BUILT
△	12/14/16	AS BUILT
△	03/22/17	MOVING SYSTEMS

DRAWN BY: SCOTT  
CHECKED BY: T.T.T.  
SCALE: AS SHOWN  
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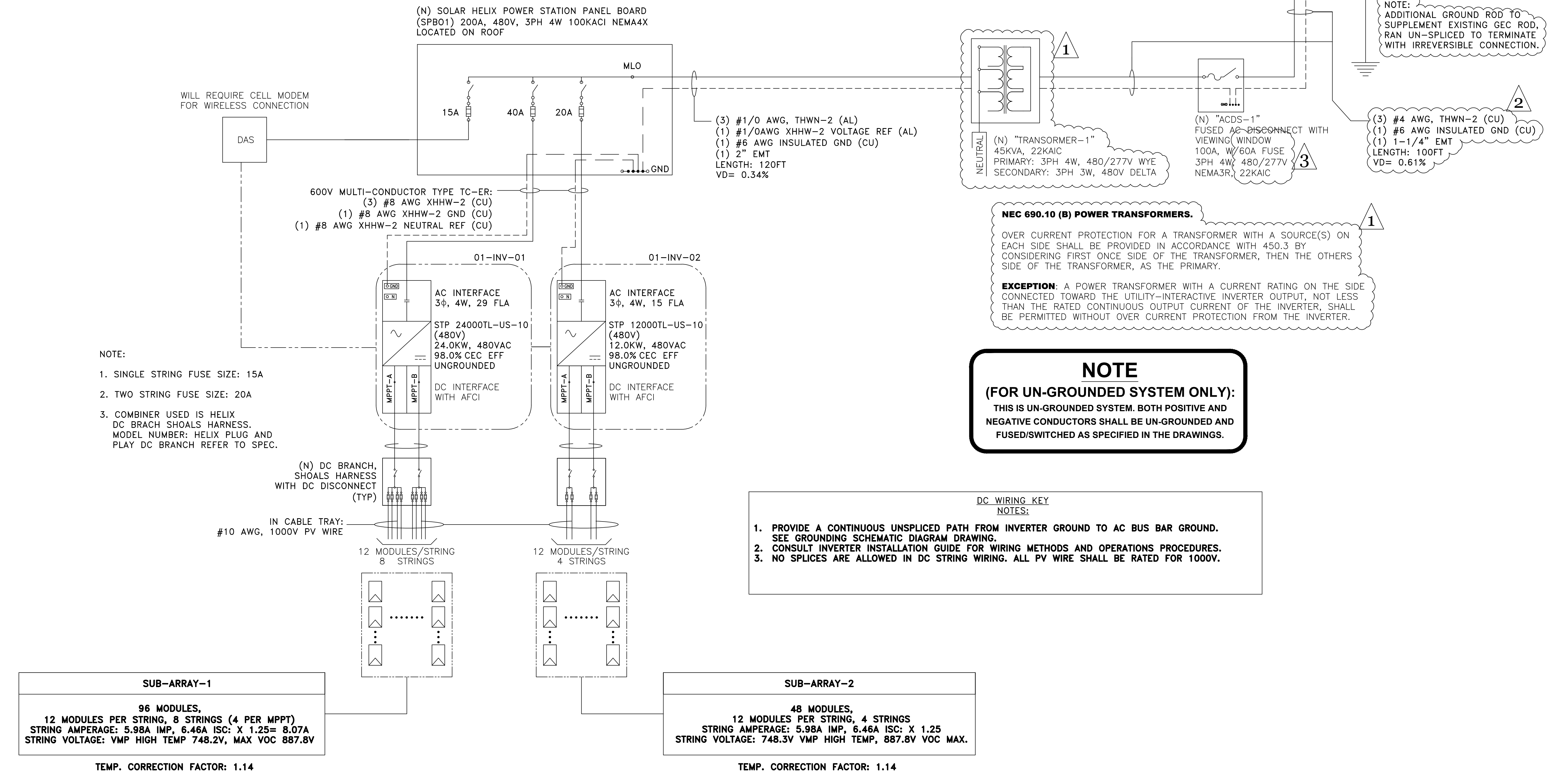
SHEET TITLE

**2353 VIA PUERTA  
SINGLE LINE**

SHEET NUMBER

**E1.9**

TOTAL SYSTEM:	LOAD SUMMARY FOR SPB01
HELIX SYSTEM 47.08 KWP 36 KWAC 144 MODULES, SUNPOWER SPR-E20-327-COM 12 MODULES PER STRING, 16 STRINGS	(2) INVERTERS= (24KW + 12KW) * 1.25 = 45KW (54.19A @ 480V, 3φ)



- NOTE:
- SINGLE STRING FUSE SIZE: 15A
  - TWO STRING FUSE SIZE: 20A
  - COMBINER USED IS HELIX DC BRANCH SHOALS HARNESS. MODEL NUMBER: HELIX PLUG AND PLAY DC BRANCH REFER TO SPEC.