

DWG NO.	DRAWING TITLE	DATE	REV.	DATE	REV.	DATE	REV.	DATE	REV.	DATE	REV.	DATE	REV.
MPS-E-200-00	COVER SHEET	08/30/23	A	09/06/23	B	10/06/23	C	10/20/23	D	01/15/24	E	06/28/24	F
MPS-E-201-00	ONE-LINE DIAGRAM	08/30/23	A	10/6/2023	B	10/20/23	C	01/15/24	D				
MPS-E-210-01	COLLECTOR SUBSTATION GENERAL ARRANGEMENT	08/30/23	A	10/20/23	B	01/15/24	C	06/28/24	D				
MPS-E-210-02	COLLECTOR SUBSTATION SECTION A-A & B-B	08/30/23	A	10/20/23	B	01/15/24	C						
MPS-E-210-03	COLLECTOR SUBSTATION SECTION C-C	08/30/23	A	10/20/23	B	01/15/24	C						
MPS-E-210-04	COLLECTOR SUBSTATION CONTROL HOUSE ELEVATION	05/31/24	A										
MPS-E-210-10	POI SWITCHYARD GENERAL ARRANGEMENT	08/30/23	A	09/06/23	B	10/20/23	C	01/15/24	D	06/28/24	E		
MPS-E-210-11	POI SWITCHYARD SECTION A-A & B-B	09/06/23	A	10/06/23	B	10/20/23	C	01/15/24	D				
MPS-E-210-12	POI SWITCHYARD SECTION C-C	09/06/23	A	10/06/23	B	10/20/23	C	01/15/24	D				
MPS-E-210-13	POI SWITCHYARD SECTION D-D & E-E	09/06/23	A	10/06/23	B	10/20/23	C	01/15/24	D				
MPS-E-210-14	POI SWITCHYARD SECTION F-F,G-G,H-H,J-J	09/06/23	A	10/06/23	B	10/20/23	C	01/15/24	D	06/28/24	E		
MPS-E-210-15	PERIMETER FENCE AND WALL ERECTION DETAILS	08/30/23	A	10/20/23	B	01/15/24	C						
MPS-E-210-16	COLLECTOR PERIMETER WALL/FENCE DETAIL	05/31/24	A										
MPS-E-210-20	COLLECTOR SUBSTATION CONTROL HOUSE LAYOUT	08/30/23	A	10/20/23	B	01/15/24	C						
MPS-E-210-21	345KV COLLECTOR SUBSTATION LIGHTING PLAN	08/30/23	A	10/20/23	B	01/15/24	C	06/28/24	D				
MPS-E-210-22	345KV POI SWITCHYARD LIGHTING PLAN	08/30/23	A	10/20/23	B	01/15/24	C	06/28/24	D				

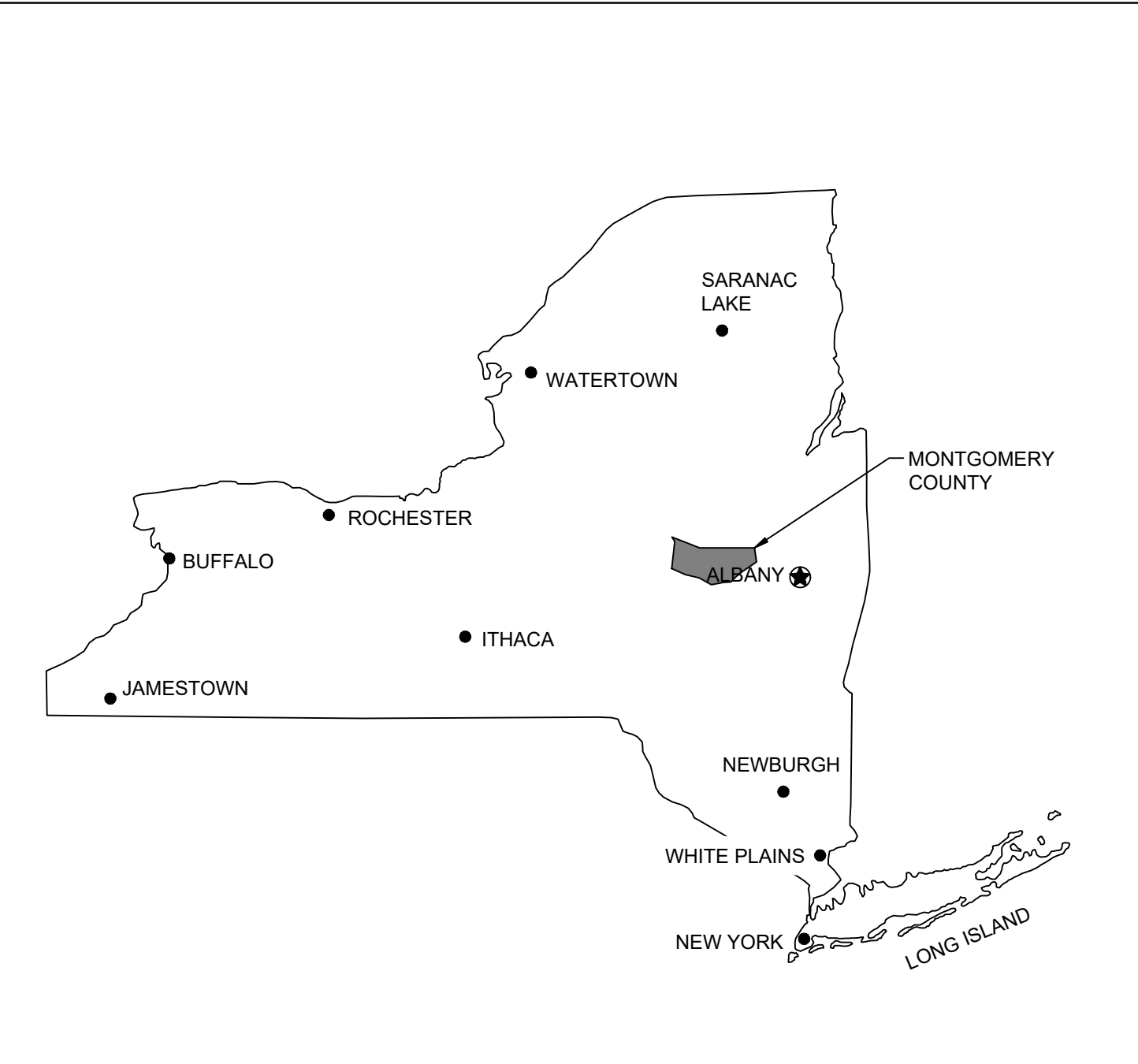
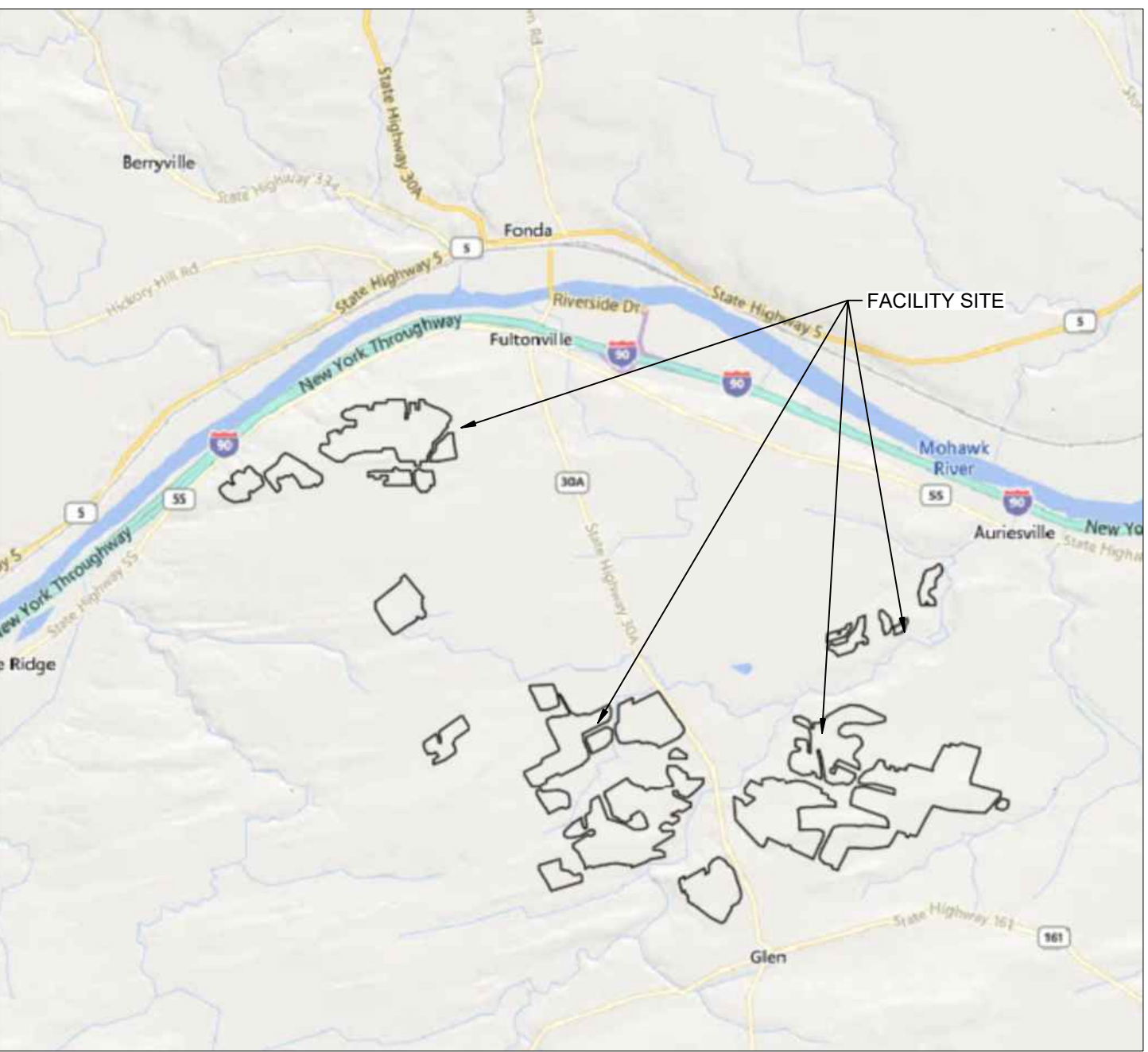
MILL POINT SOLAR I PROJECT

PREPARED FOR: CONNECTGEN MONTGOMERY COUNTY LLC
PREPARED BY: TRC ENGINEERS, INC.
ISSUE DATE: 05/31/24
ISSUE STATUS: 94-C

PROJECT DATA

LOCATION: MONTGOMERY COUNTY, NY
PROJECTION: STATE PLANE NAD 83 (NY82-EF)
POWER GENERATED: 250 MWac

SITE MAP



THE STATE OF NEW YORK

PRELIMINARY
NOT FOR CONSTRUCTION

NOTE:
1. DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC. LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
2. UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



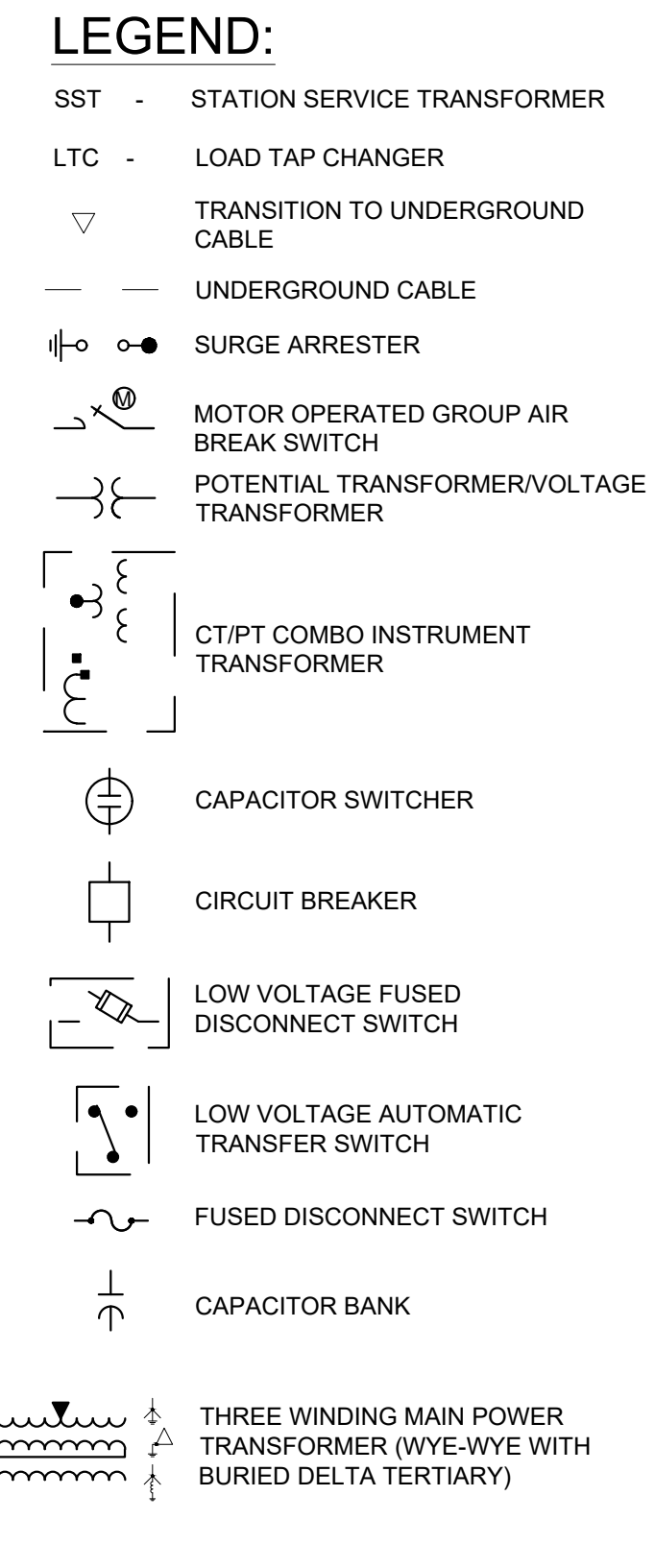
10 MAXWELL DRIVE, SUITE 200
CLIFTON PARK, NY 12065

PROJECT NO: 443269

REV	DESCRIPTION	DATE	DES	CHK	APP
F	ISSUE FOR 94-C DEFICIENCY SUPPLEMENT	06/28/24	TB	CT	
E	RE-ISSUE FOR 94-C	01/15/24	TB	CT	
D	ISSUED FOR 94-C	10/20/23	TB	CT	
C	RE-ISSUED FOR REVIEW	10/05/23	TB	CT	

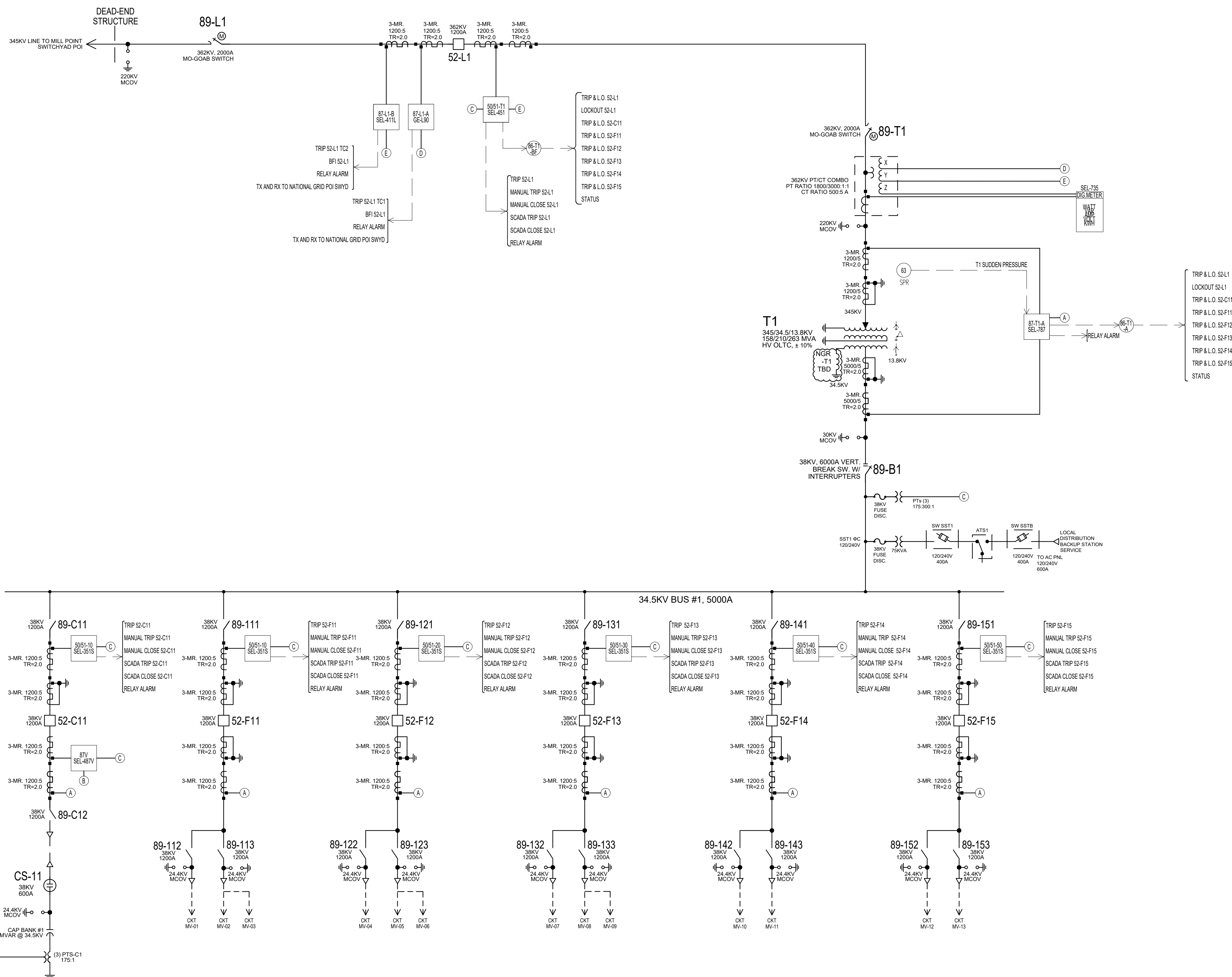


TB DESIGNED	MILL POINT SOLAR I PROJECT CONNECTGEN, MONTGOMERY COUNTY, LLC COVER SHEET	 MPS-E-200-00	REV: F
EL DRAWN			
CT CHECKED			
APPROVED			
REVIEW 1	01/15/24 DATE N.T.S. SCALE		
REVIEW 2			



1. DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC, LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
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 10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065					 Digitally Signed by: Jeremiah T. Bridgwood Date: 2024.01.19 15:11:20-05'00' TB DESIGNED EL DRAWN CT CHECKED APPROVED REVIEW 1 REVIEW 2					MILL POINT SOLAR 34.5/345KV COLLECTOR SUBSTATION ONE-LINE DIAGRAM (ELECTRICAL) 01/15/24 DATE NTS SCALE  MPS-E-201-00 REV. D				
PROJECT NO: 443269														
REV	DESCRIPTION				DATE	DES	CHK	APP						
D	RE-ISSUE FOR 94-C				01/15/24	TB	CT							
C	ISSUED FOR 94-C				10/20/23	TB	CT							
B	RE-ISSUED FOR REVIEW				10/05/23	TB	CT							
A	ISSUE FOR REVIEW				08/30/23	TB	CT							

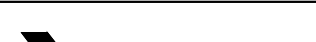


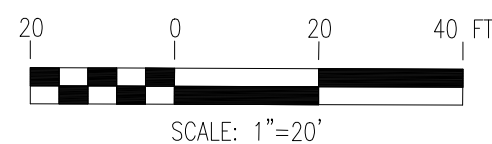
	-	STATION SERVICE TRANSFORMER
	-	LOAD TAP CHANGER
		TRANSITION TO UNDERGROUND CABLE
		UNDERGROUND CABLE
		SURGE ARRESTER
		MOTOR OPERATED GROUP AIR BREAK SWITCH
		POTENTIAL TRANSFORMER/VOLTAGE TRANSFORMER
		CT/PT COMBO INSTRUMENT TRANSFORMER
		CAPACITOR SWITCHER
		CIRCUIT BREAKER
		LOW VOLTAGE FUSED DISCONNECT SWITCH
		LOW VOLTAGE AUTOMATIC TRANSFER SWITCH
		FUSED DISCONNECT SWITCH
		CAPACITOR BANK
		THREE WINDING MAIN POWER TRANSFORMER (WYE-WYE WITH BURIED DELTA TERTIARY)

ANSI DEVICE NUMBERS	
50	INSTANTANEOUS OVERCURRENT RELAY
51	AC TIME OVERCURRENT RELAY
63	TRANSFORMER SUDDEN PRESSURE
86	LOCK-OUT RELAY
87	DIFFERENTIAL PROTECTIVE RELAY
87T	TRANSFORMER DIFFERENTIAL
87L	LINE DIFFERENTIAL

PRELIMINARY
NOT FOR CONSTRUCTION

1. DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC, LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
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 10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065		PROJECT NO: 443269					 Digitally signed by Jeremiah T. Bridgwood Date: 2024.01.19 15:11:20-05'00'		TB DESIGNED EL DRAWN CT CHECKED APPROVED		MILL POINT SOLAR 34.5/345KV COLLECTOR SUBSTATION ONE-LINE METER AND RELAY DIAGRAM (ELECTRICAL)			 MPS-E-201-01		REV. D
REV	DESCRIPTION	DATE	DES	CHK	APP				REVIEW 1	01/15/24 DATE N.T.S.						
D	RE-ISSUE FOR 94-C	01/15/24	TB	CT												
C	ISSUED FOR 94-C	10/29/23	TB	CT												
B	RE-ISSUE FOR REVIEW	10/06/23	TB	CT												
A	ISSUE FOR REVIEW	08/30/23	TB	CT					REVIEW 2							

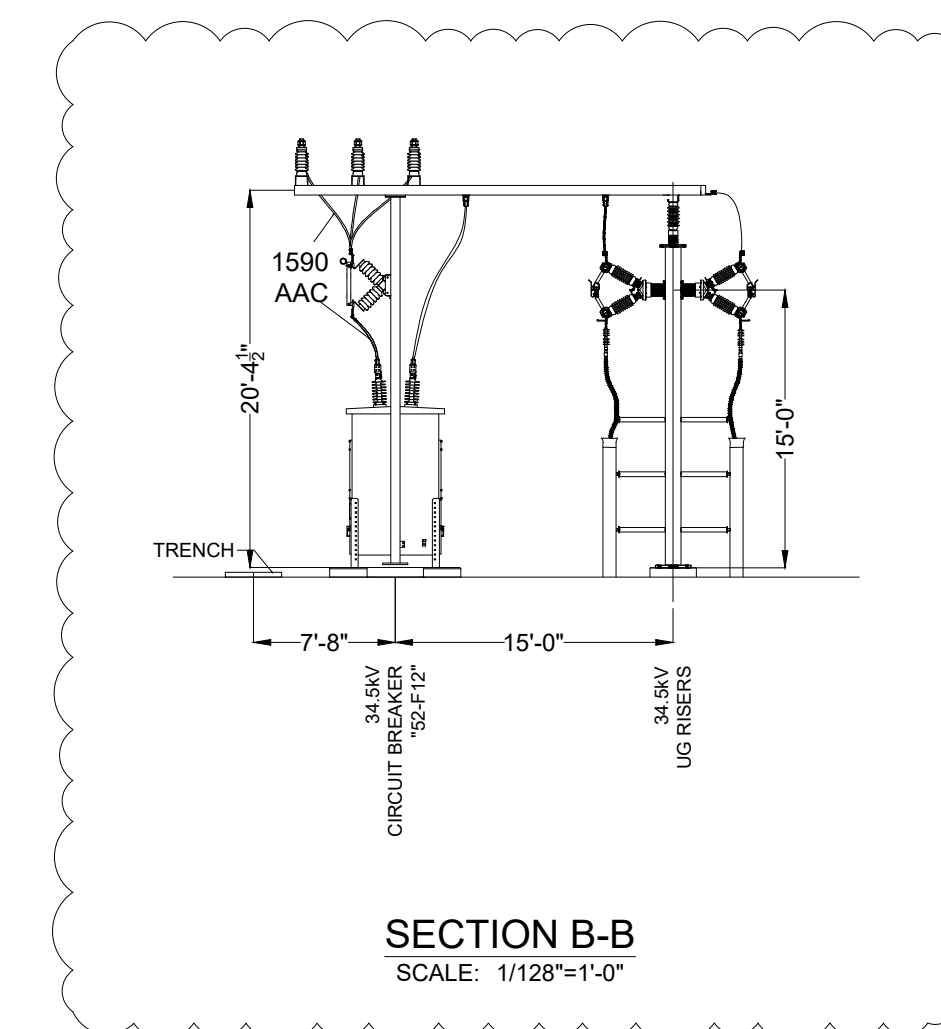


TO GRADE: MIN 10'-0" (BUS)
MIN 22'-0" (DRIVEWAY)

 SOUND WALL
 FENCE

Dig! Safely. New York
Call 811
before you dig

REV
D



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PRELIMINARY
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10 MAXWELL DRIVE, SUITE 200
CLIFTON PARK, NY 12065

PROJECT NO: 443269

REV	DESCRIPTION	DATE	DES	CHK	APP
C	RE-ISSUE FOR 94-C	01/15/24	TB	CT	JTB
B	ISSUE FOR 94-C	10/20/23	TB	CT	
A	ISSUE FOR REVIEW	08/30/23	TB	CT	



TB
DESIGNED

EL
DRAWN

CT
CHECKED

JTB
APPROVED

MILL POINT SOLAR 34.5/345KV
COLLECTOR SUBSTATION
SECTION A-A, B-B
(PHYSICAL)

REVIEW 1

REVIEW 2

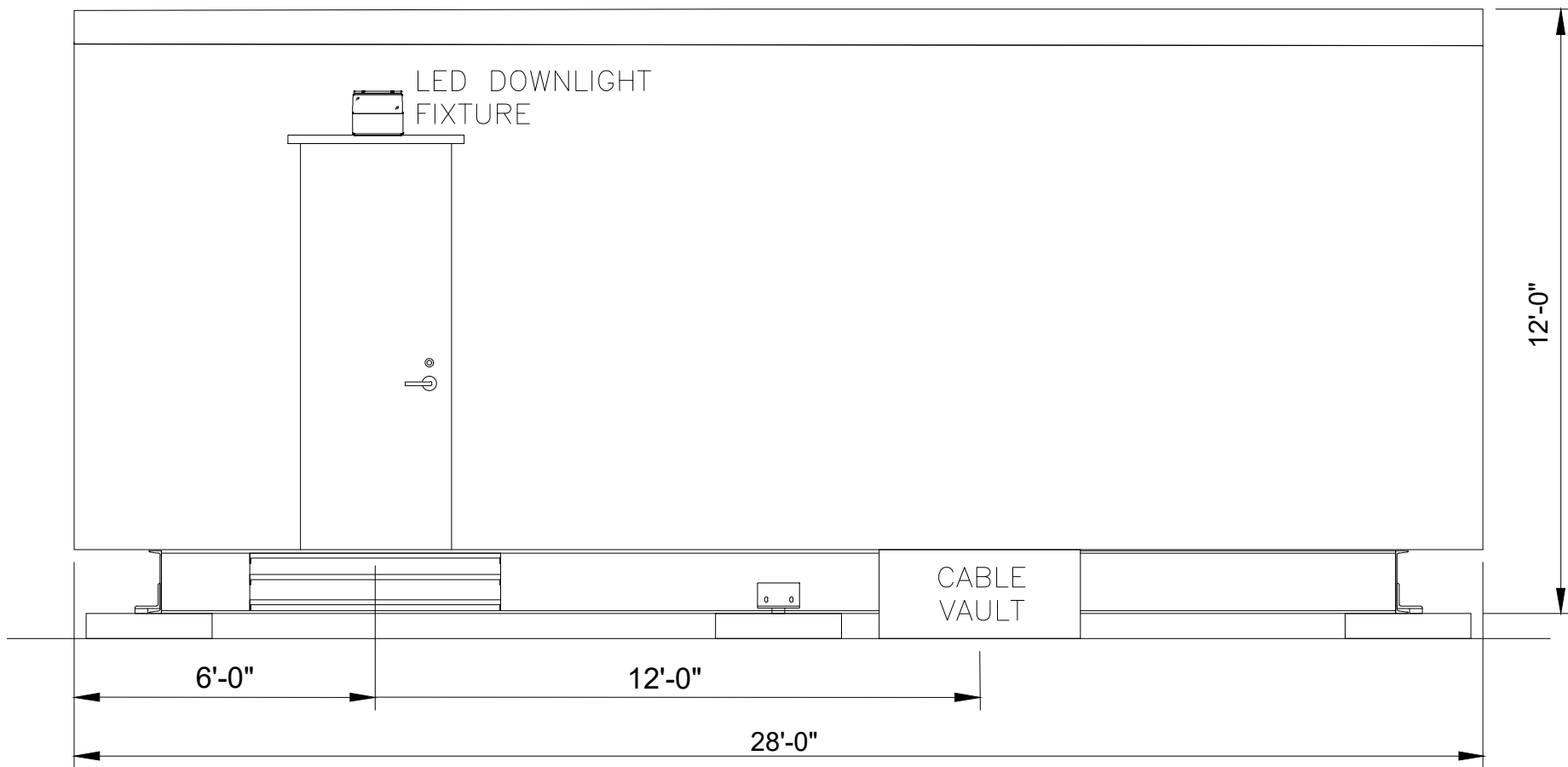
01/15/24
DATE

1/128" = 1'-0"
SCALE

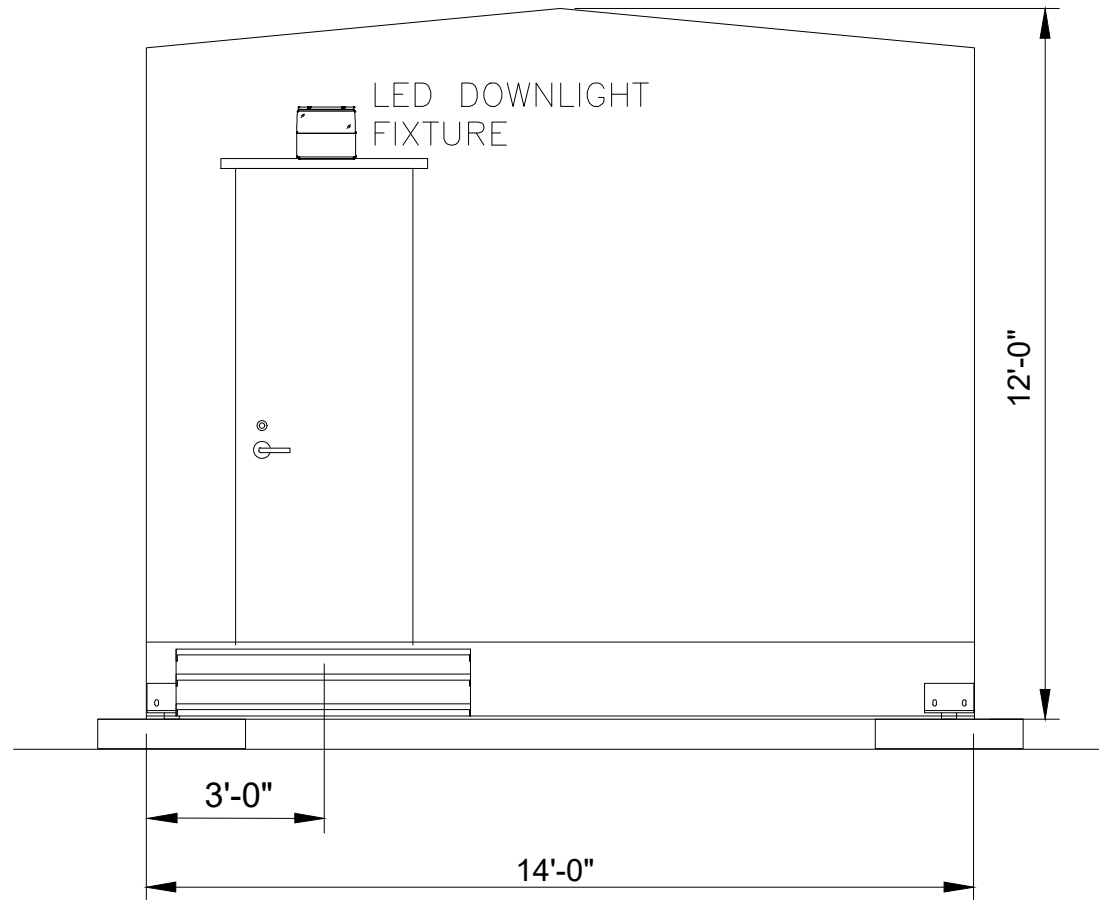


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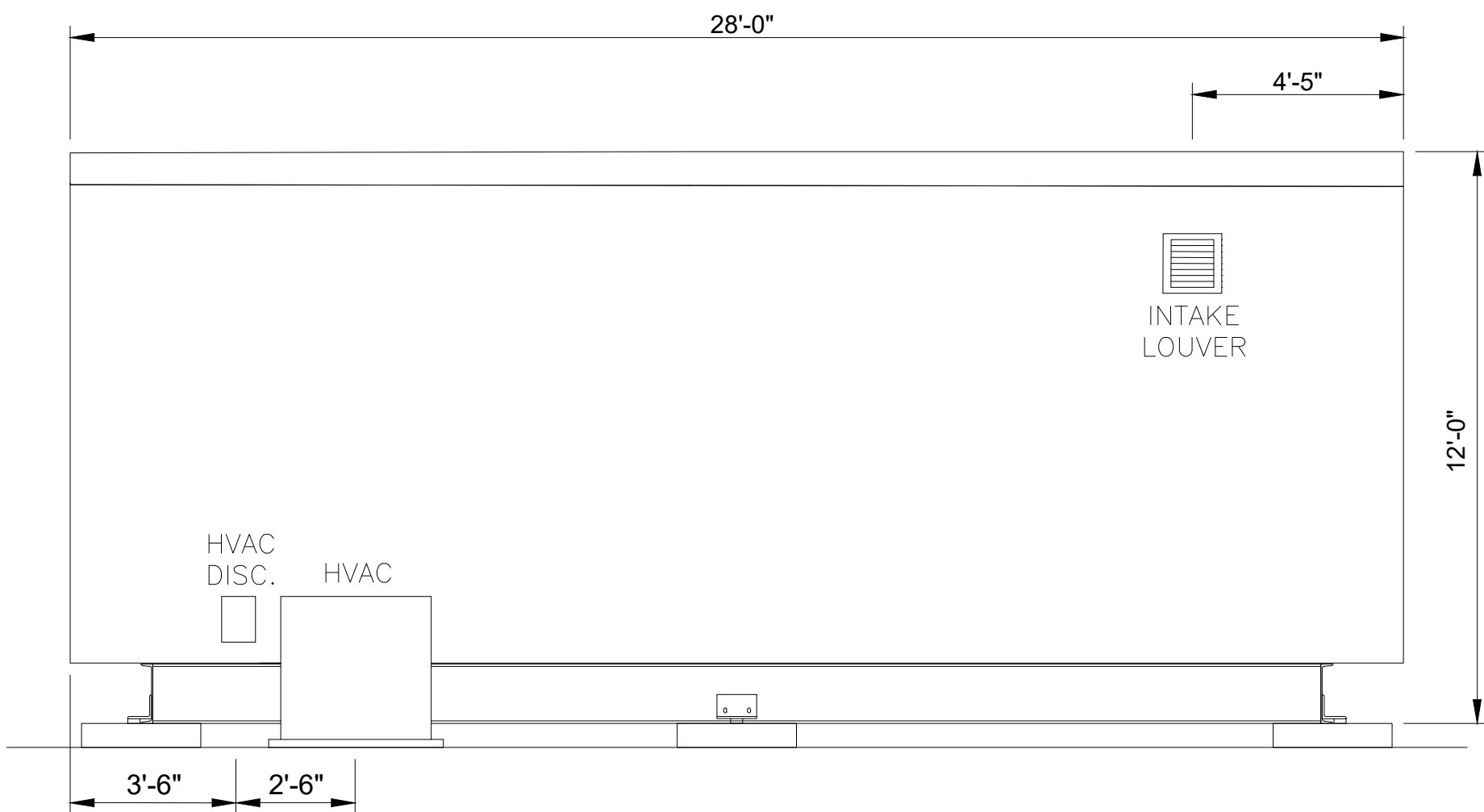
REV.
C



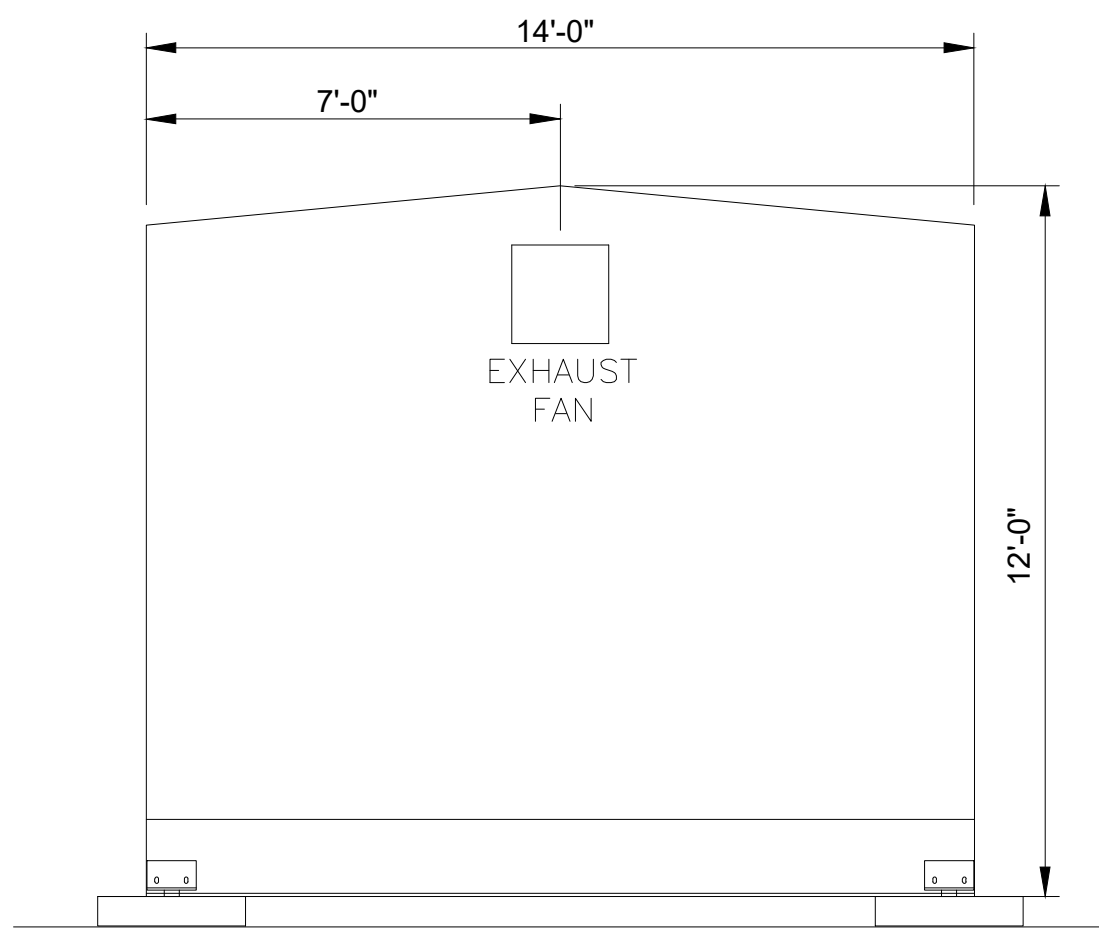
SECTION K-K
SCALE: NTS



SECTION L-L
SCALE: NTS



SECTION M-M
SCALE: NTS



SECTION N-N
SCALE: NTS

- NOTE:
- THE EQUIPMENT AND LAYOUT SHOWN IS FOR CONCEPTUAL USE ONLY.
 - ELECTRICAL EQUIPMENT WILL UTILIZE GALVANIZED STEEL MATERIAL AND EQUIPMENT COLOR WILL BE NATURAL GALVANIZED STEEL, WHITE OR ANSI GRAY. FINAL MATERIAL TYPE AND FINISH COLOR DETAILS WILL BE UPDATED DURING DETAILED DESIGN.

DESIGN CRITERIA:

345kV CLEARANCE: (1300 kV BIL)

LIVE PARTS: MIN Ø-G = 104"
MIN Ø-Ø = 119"

TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

- NOTE:
- DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC, LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
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PRELIMINARY
NOT FOR CONSTRUCTION

		10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065				
		PROJECT NO: 443269				
REV	DESCRIPTION	DATE	DES	CHK	APP	
D	-	-	-	-	-	
C	-	-	-	-	-	
B	-	-	-	-	-	
A	ISSUE FOR 94-C DEFICIENCY SUPPLEMENT	05/31/24	KP	CT	-	



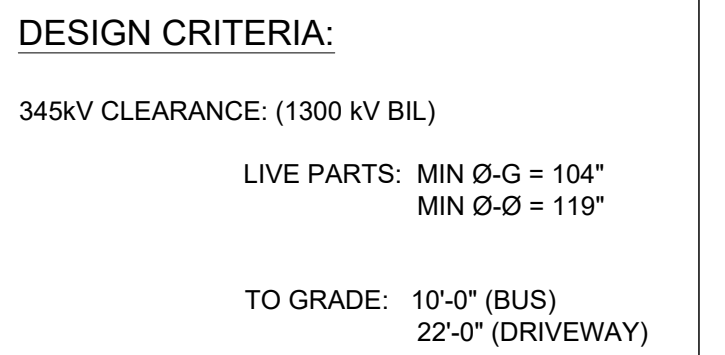
KP DESIGNED
KP DRAWN
CT CHECKED
APPROVED
REVIEW 1
REVIEW 2

MILL POINT SOLAR 34.5/345KV
COLLECTOR SUBSTATION
SECTION K-K, L-L, M-M, N-N
(PHYSICAL)



MPS-E-210-04

REV.
A



1. DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034 EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC, LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
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 **TRC** 10 MAXWELL DRIVE, SUITE 200
CLIFTON PARK, NY 12065

REV	DESCRIPTION	DATE	DES	CHK	APP
E	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT	06/28/24	KP	CT	
D	RE-ISSUE FOR 94-C	01/15/24	TB	CT	
C	ISSUE FOR 94-C	10/20/23	TB	CT	
B	RE-ISSUE FOR CLIENT REVIEW	09/06/23	TB	CT	

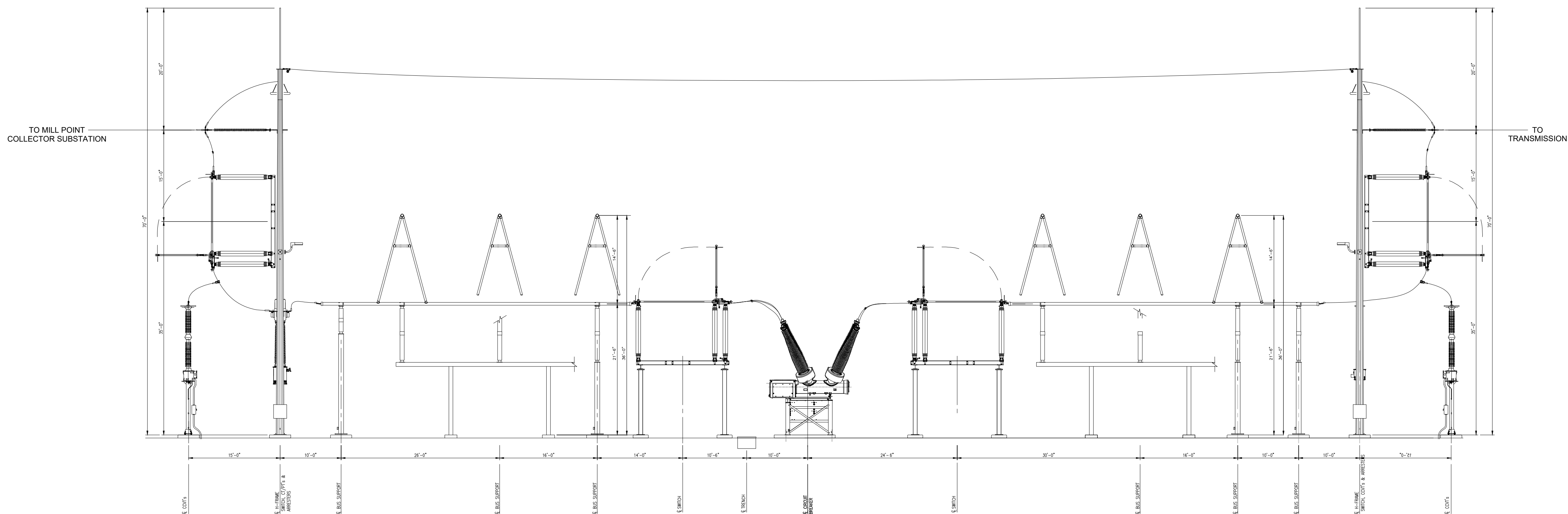


REVIEW 1

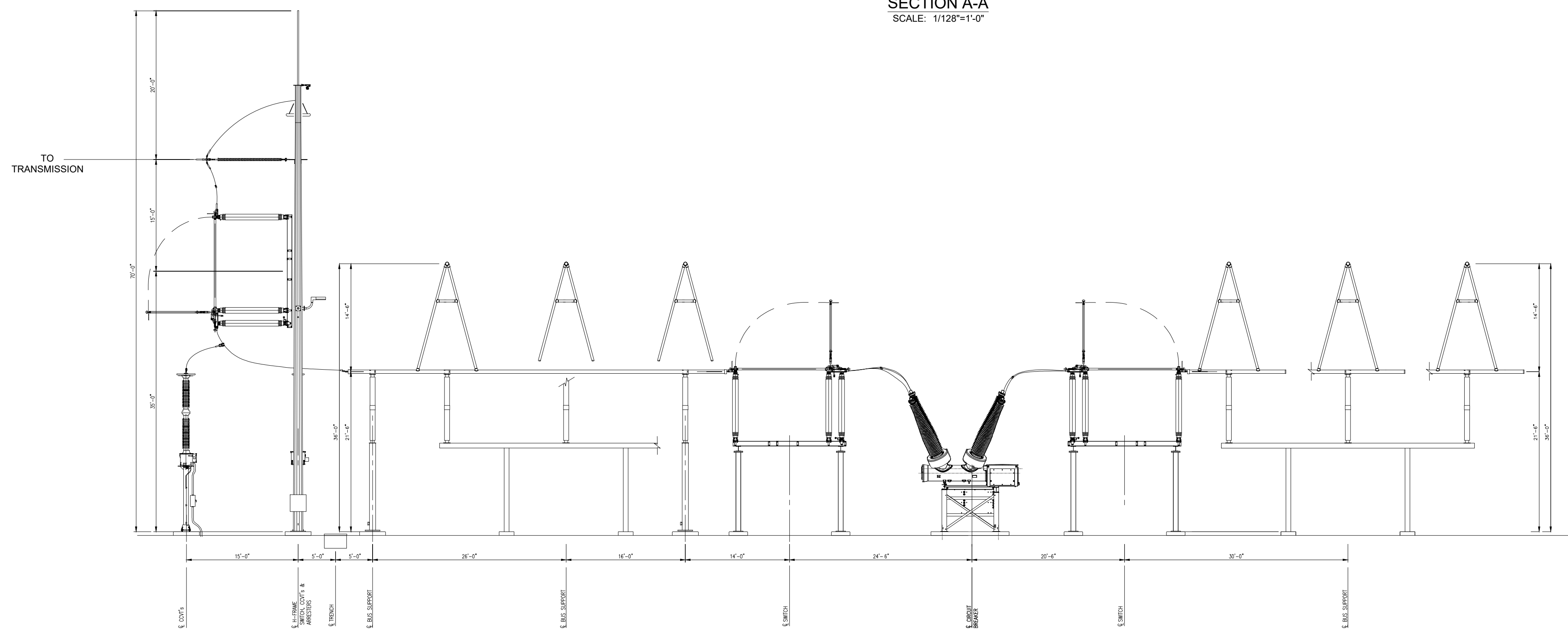
REVIEW 2



V.



SECTION A-A
SCALE: 1/128"=1'-0"



SECTION B-B
SCALE: 1/128"=1'-0"

DESIGN CRITERIA:

345kV CLEARANCE: (1300 kV BIL)

LIVE PARTS: MIN Ø-G = 104"
MIN Ø-Ø = 119"

TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

NOTE:

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PRELIMINARY
NOT FOR CONSTRUCTION



10 MAXWELL DRIVE, SUITE 200
CLIFTON PARK, NY 12065

PROJECT NO: 443269

REV	DESCRIPTION	DATE	DES	CHK	APP
D	RE-ISSUE FOR 94-C	01/15/24	TB	CT	JTB
C	ISSUE FOR 94-C	10/20/23	TB	CT	.
B	RE-ISSUE FOR REVIEW	10/06/23	TB	CT	.
A	ISSUE FOR REVIEW	09/06/23	TB	CT	.



TB
DESIGNED
EL
DRAWN
CT
CHECKED
JTB
APPROVED

MILL POINT SOLAR 34.5/345KV
POI SWITCHYARD
SECTION A-A & B-B
(PHYSICAL)

REVIEW 1
REVIEW 2

01/15/24
DATE
1/128" = 1'-0"
SCALE



MPS-E-210-11

REV.
D



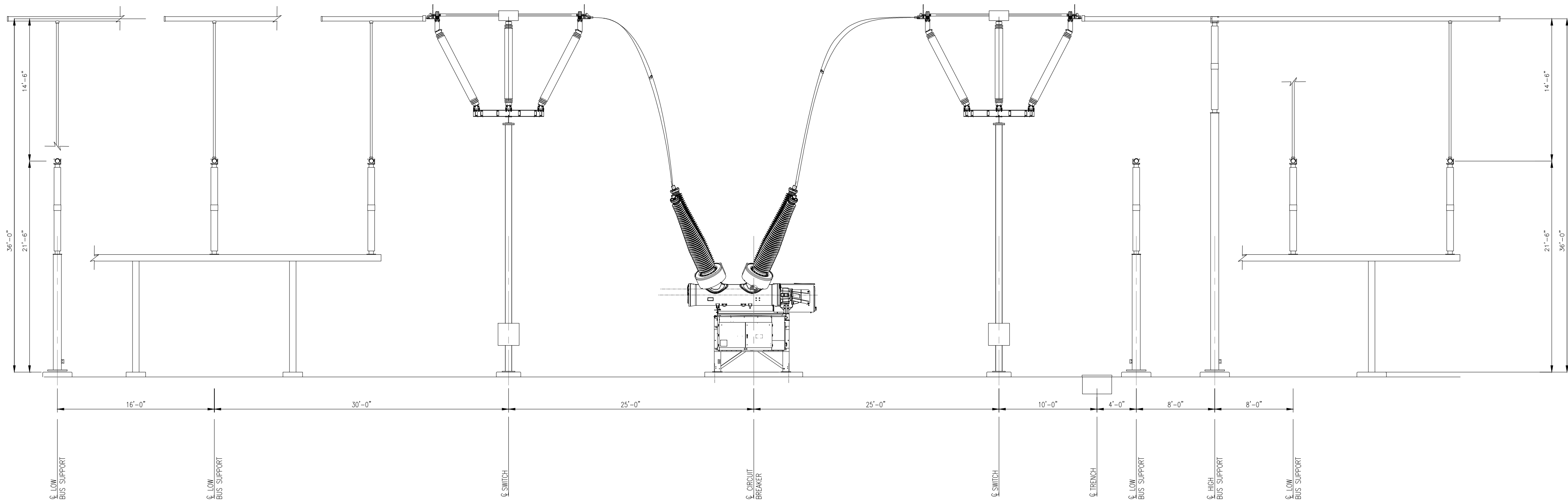
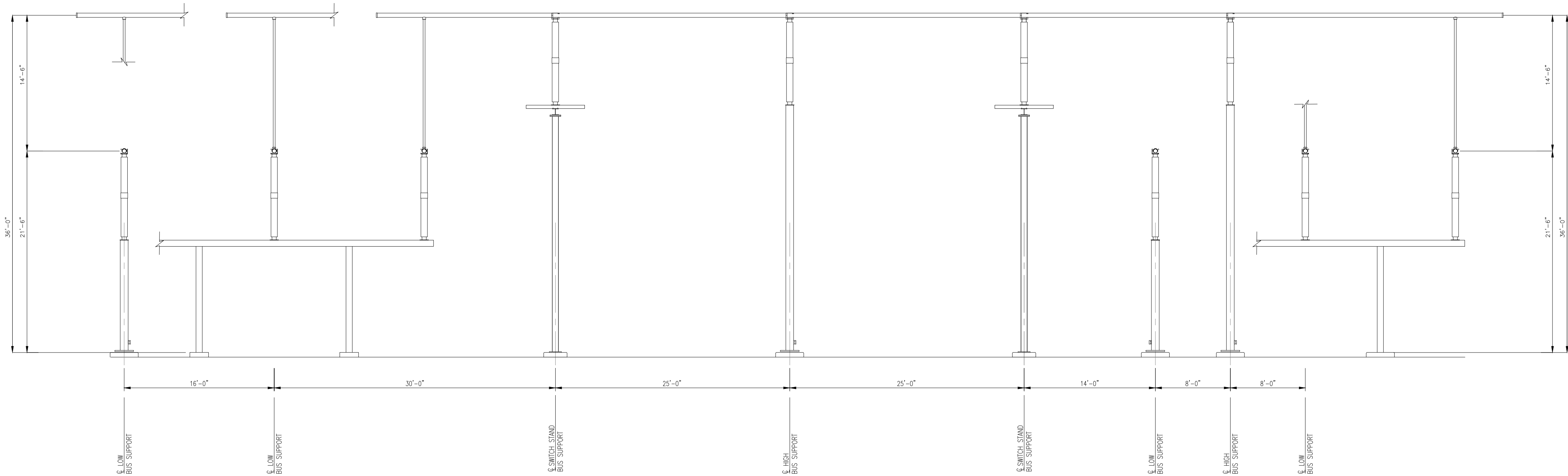
TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

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PRELIMINARY
NOT FOR CONSTRUCTION

REV.
D



DESIGN CRITERIA:

345kV CLEARANCE: (1300 kV BIL)

LIVE PARTS: MIN Ø-G = 104"
MIN Ø-Ø = 119"

TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

- NOTE:
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10 MAXWELL DRIVE, SUITE 200
CLIFTON PARK, NY 12065

PROJECT NO: 443269

REV	DESCRIPTION	DATE	DES	CHK	APP
D	RE-ISSUE FOR 94-C	01/15/24	TB	CT	JTB
C	ISSUE FOR 94-C	10/20/23	TB	CT	.
B	RE-ISSUE FOR REVIEW	10/06/23	TB	CT	.
A	ISSUE FOR REVIEW	09/06/23	TB	CT	.



TB
DESIGNED
EL
DRAWN
CT
CHECKED
JTB
APPROVED

MILL POINT SOLAR 34.5/345KV
POI SWITCHYARD
SECTION D-D & E-E
(PHYSICAL)

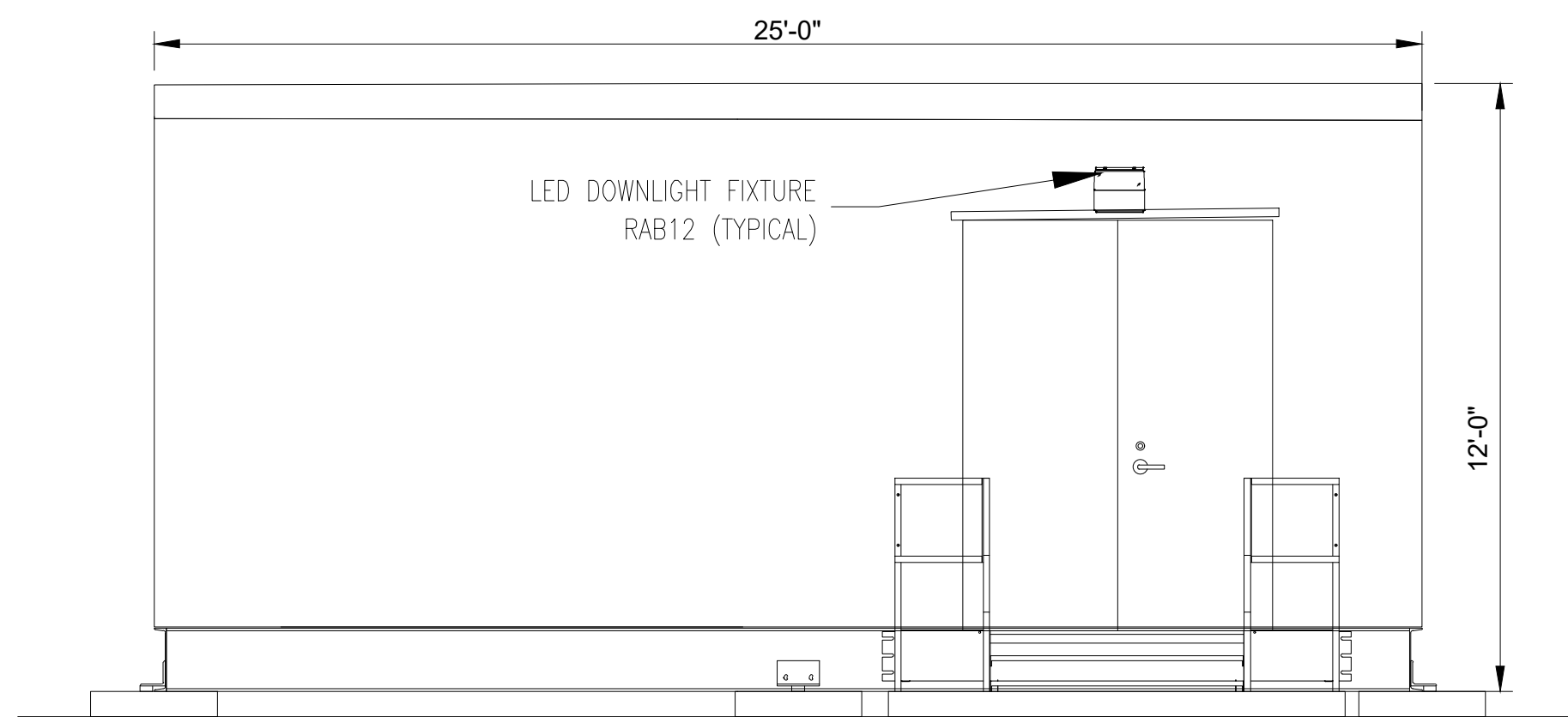
REVIEW 1
DATE
REVIEW 2
SCALE

01/15/24
DATE
NTS
SCALE

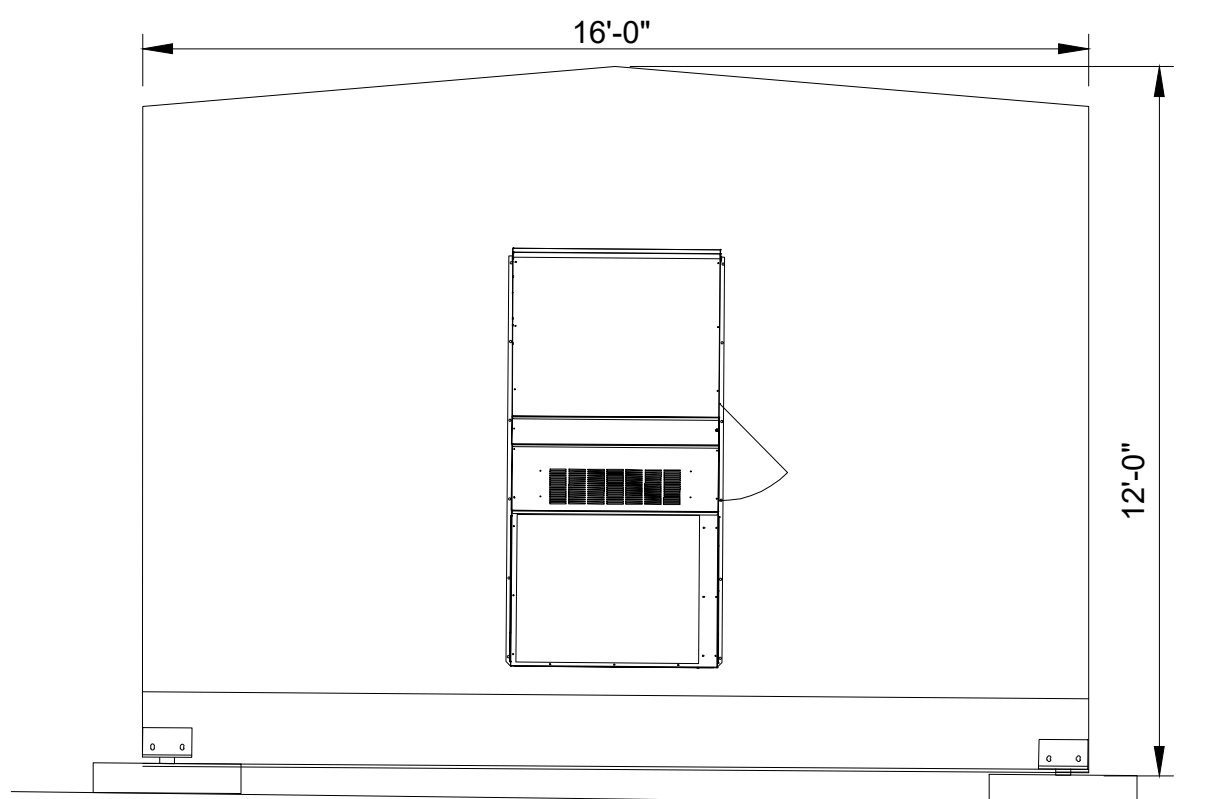


MPS-E-210-13

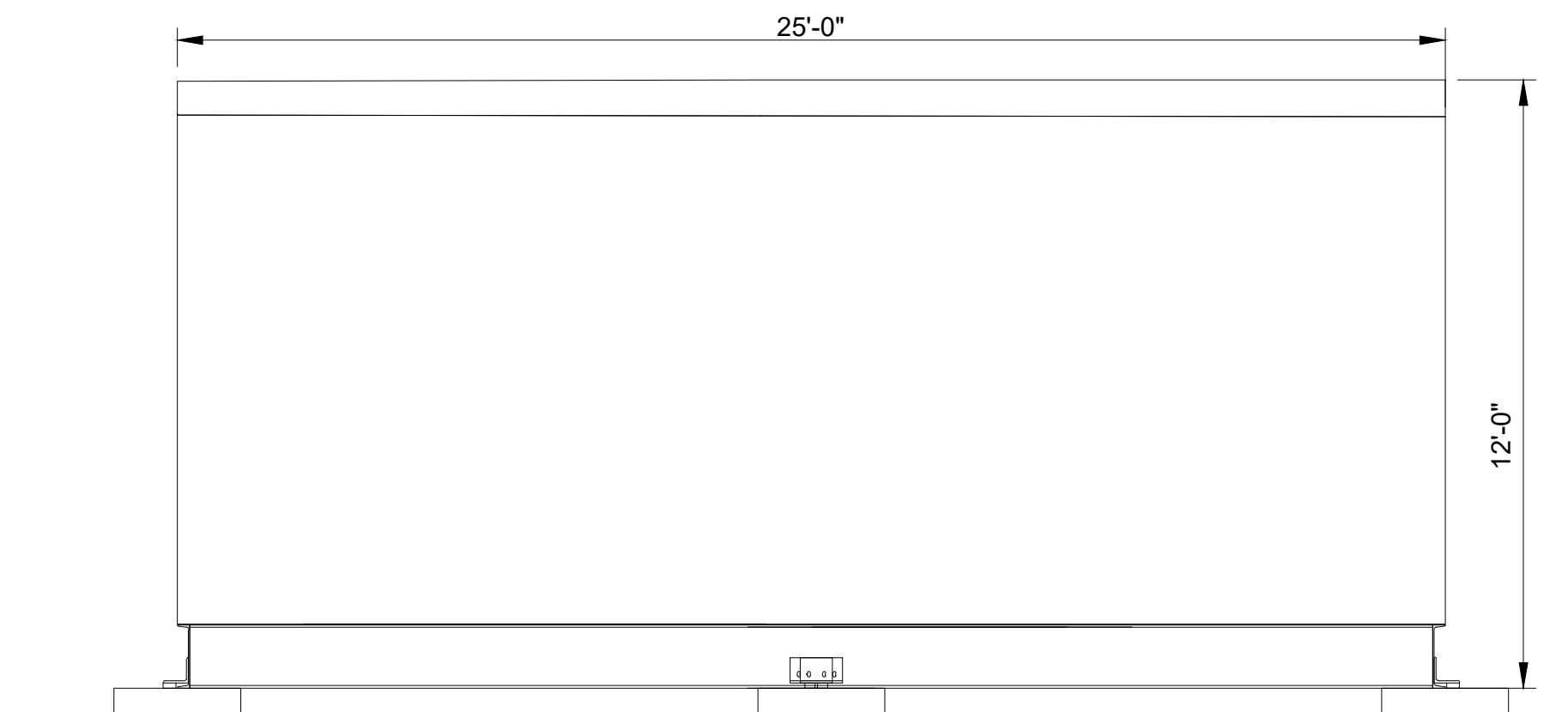
REV.
D



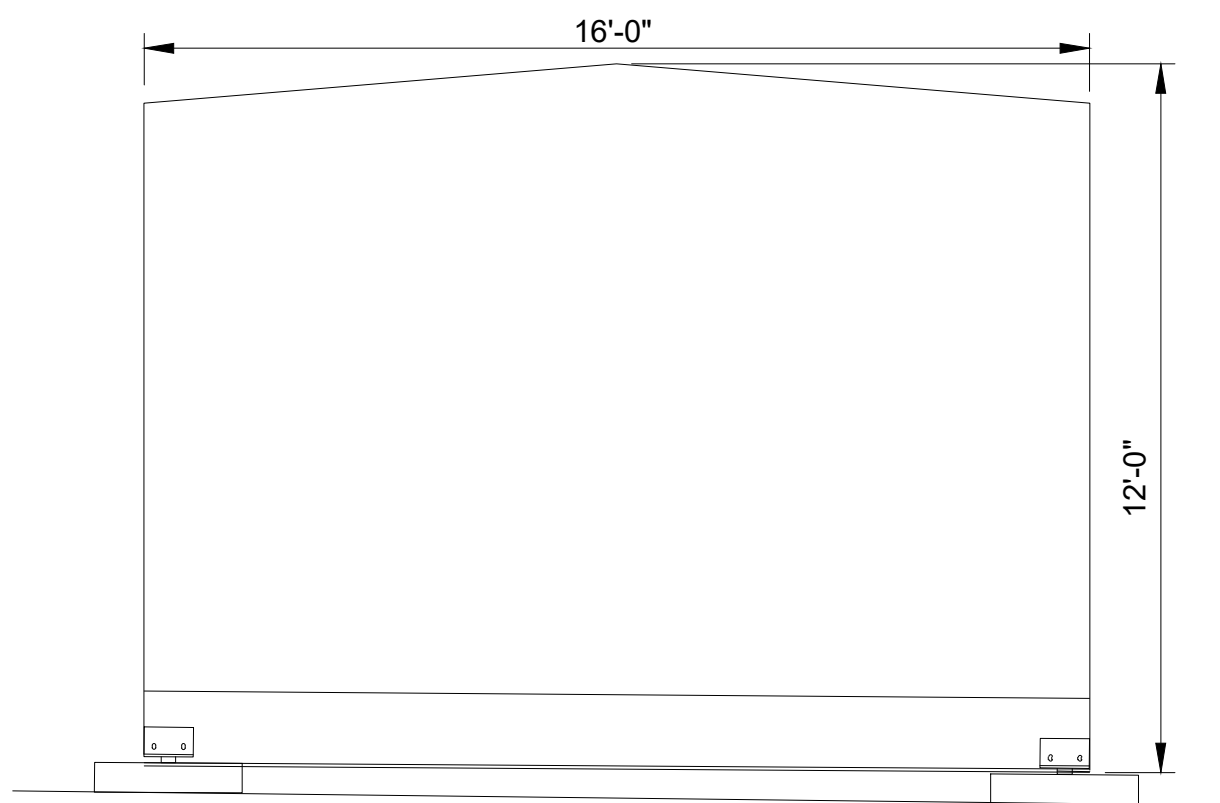
SECTION F-F
SCALE: NTS



SECTION G-G
SCALE: NTS



SECTION H-H
SCALE: NTS



SECTION J-J
SCALE: NTS

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DESIGN CRITERIA:

345kV CLEARANCE: (1300 kV BIL)

LIVE PARTS: MIN Ø-G = 104"
MIN Ø-Ø = 119"

TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

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10 MAXWELL DRIVE, SUITE 200
CLIFTON PARK, NY 12065

PROJECT NO: 443269

REV	DESCRIPTION	DATE	DES	CHK	APP
E	ISSUE FOR 94-C DEFICIENCY SUPPLEMENT	06/28/24	TB	CT	.
D	RE-ISSUE FOR 94-C	01/15/24	TB	CT	.
C	ISSUE FOR 94-C	10/20/23	TB	CT	.
B	RE-ISSUE FOR REVIEW	10/06/23	TB	CT	.



TB
DESIGNED
EL
DRAWN
CT
CHECKED
APPROVED

MILL POINT SOLAR 34.5/345KV
POI SWITCHYARD
SECTION F-F,G-G,H-H,J-J
(PHYSICAL)

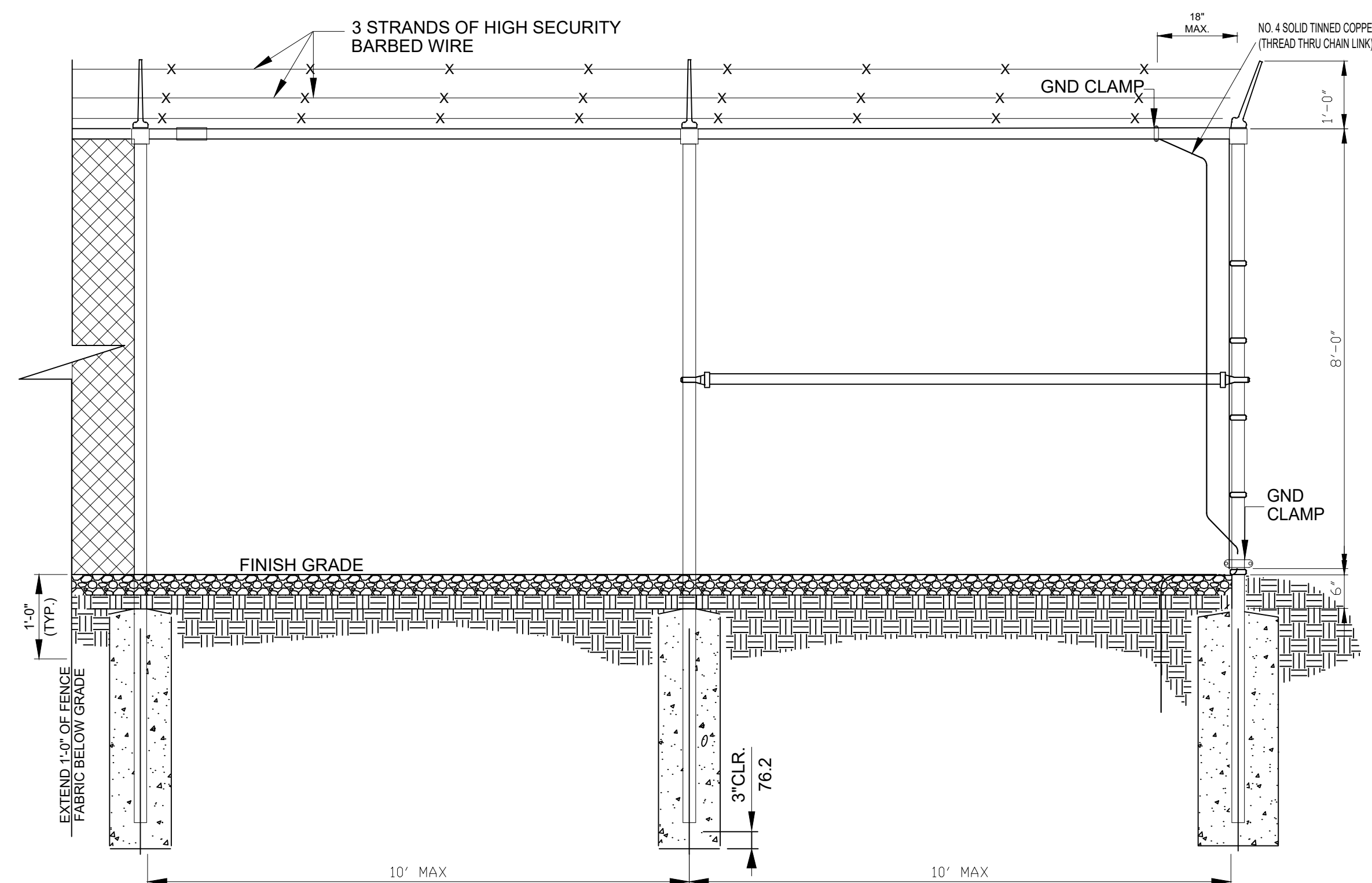
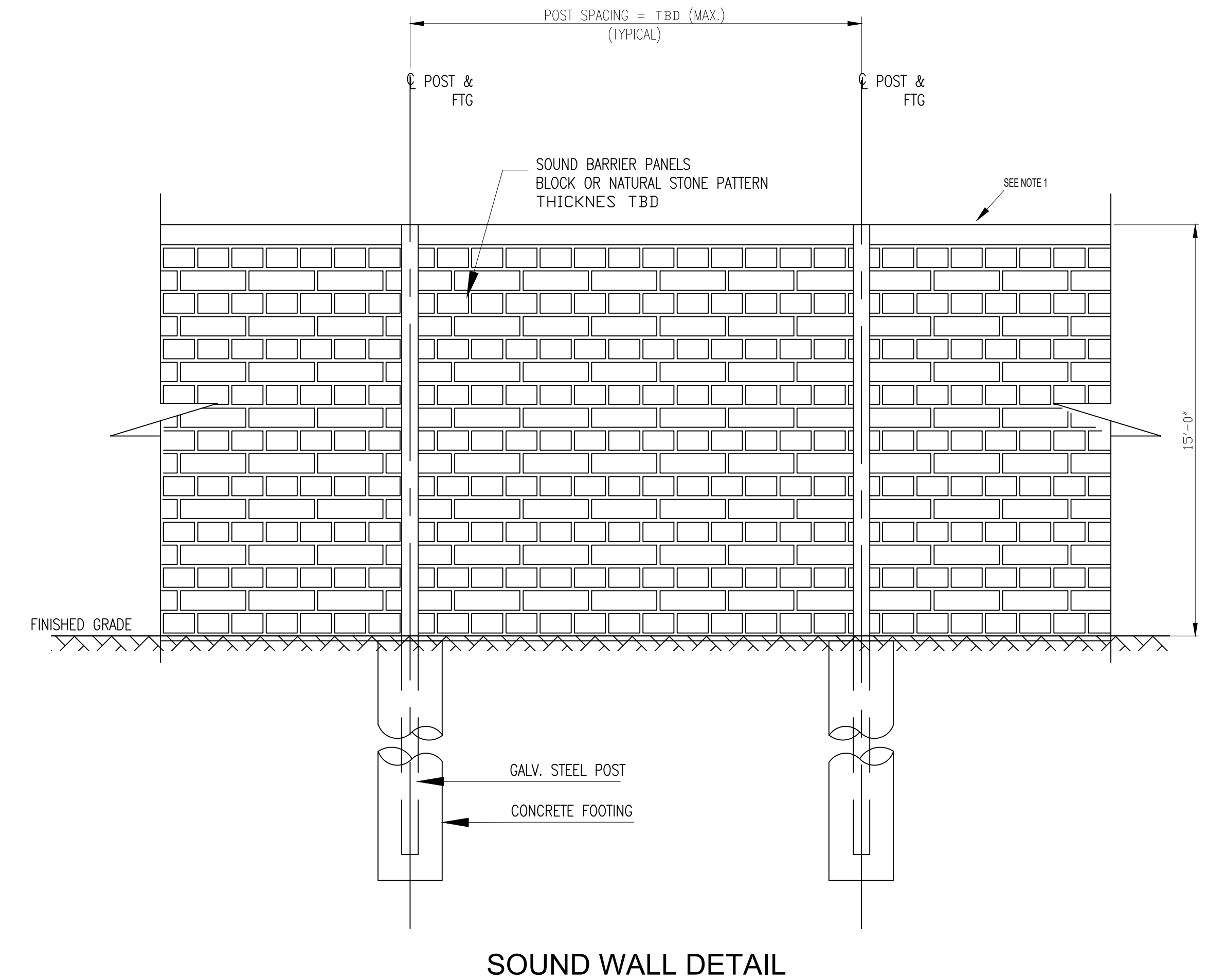
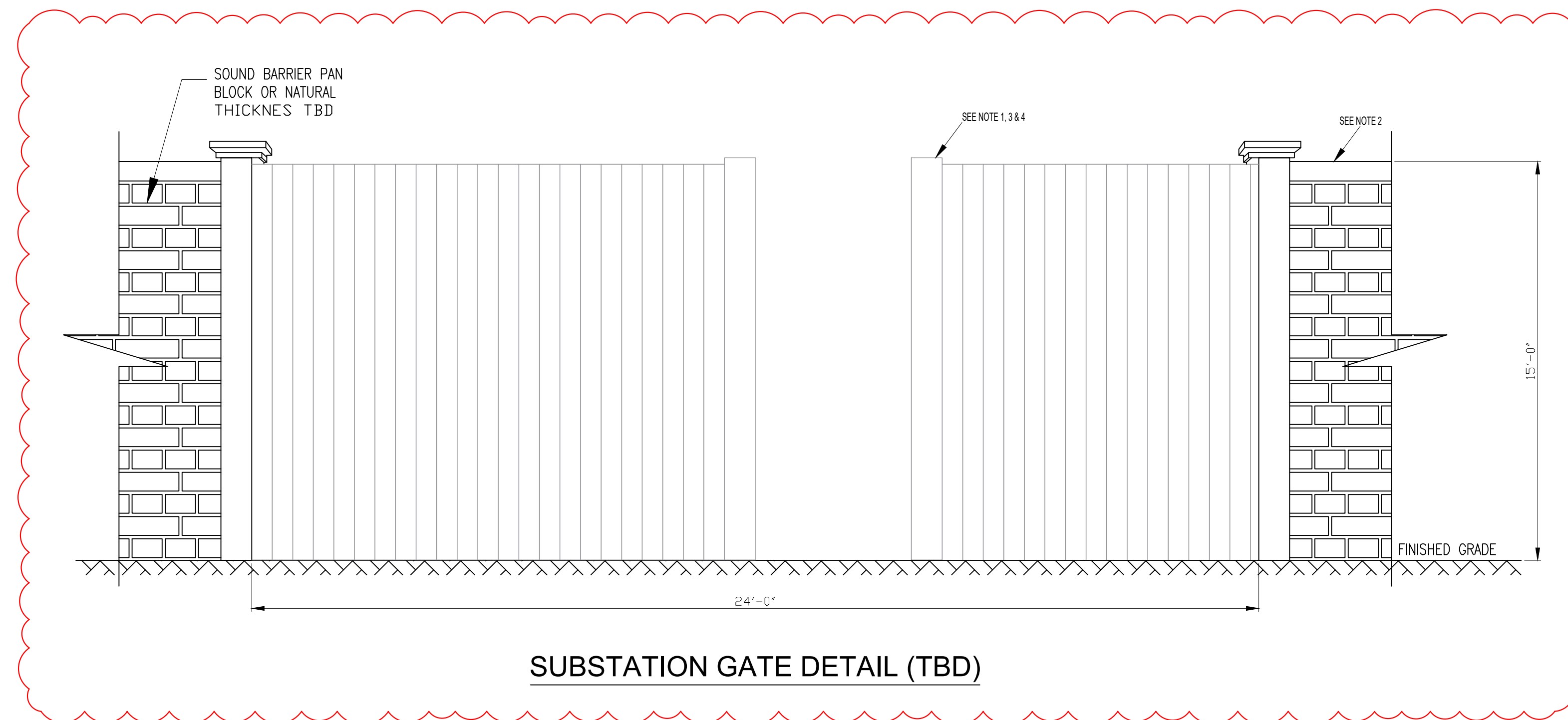
REVIEW 1
REVIEW 2

01/15/24
DATE
NTS
SCALE



MPS-E-210-14

REV.
E



NOTE:

1. THE EQUIPMENT AND LAYOUT SHOWN IS FOR CONCEPTUAL USE ONLY.
2. SOUND WALL WILL UTILIZE NATURAL STONE OR FLAT PRECAST MATERIAL WITH A GRAY, NATURAL, OR TAN COLOR (OR SIMILAR). FINAL MATERIAL TYPE AND FINISH COLOR DETAILS WILL BE UPDATED DURING FINAL DESIGN.
3. GATE MATERIAL AND FINISH WILL COMPRISE OF SOUND ATTENUATING COMPOSITE AND STEEL AND WILL MATCH OR BE SIMILAR TO THE FINISH OF THE SOUND WALL.
4. SUBSTATION GATE WILL BE OPENED AND CLOSED ON A MOTOR DRIVEN TRACK THAT WILL OPERATE INTERMITTENTLY AND ON RARE OCCASIONS WHEN ACCESS TO THE SUBSTATION IS NECESSARY.

DESIGN CRITERIA:

345kV CLEARANCE: (1300 kV BIL)

LIVE PARTS: MIN Ø-G = 104"
MIN Ø-Ø = 119"

MIN Ø-Ø = 119"

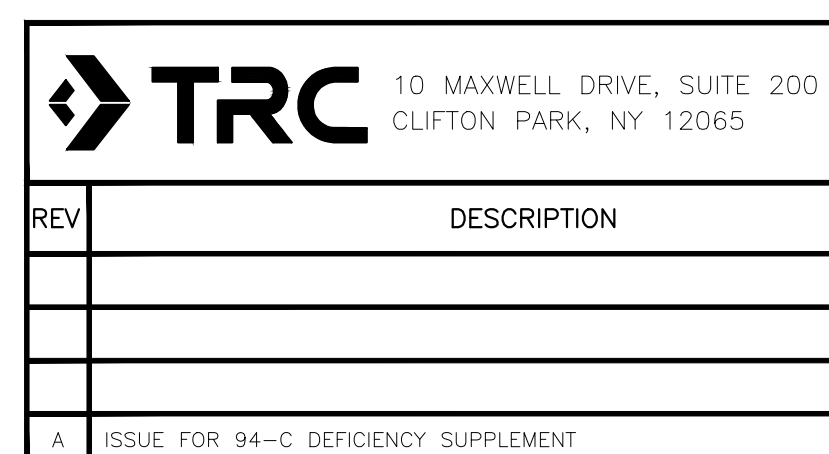
TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

22'-0" (DRIVEWAY)

UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145
(ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF
THE LAW FOR ANY PERSON, UNLESS ACTING UNDER
THE DIRECTION OF A LICENSED PROFESSIONAL
ENGINEER, TO ALTER THIS DOCUMENT.



PRELIMINARY
NOT FOR CONSTRUCTION



TB
DESIGNED

EL
DRAWN

CT
CHECKED

APPROVED

REVIEW 1

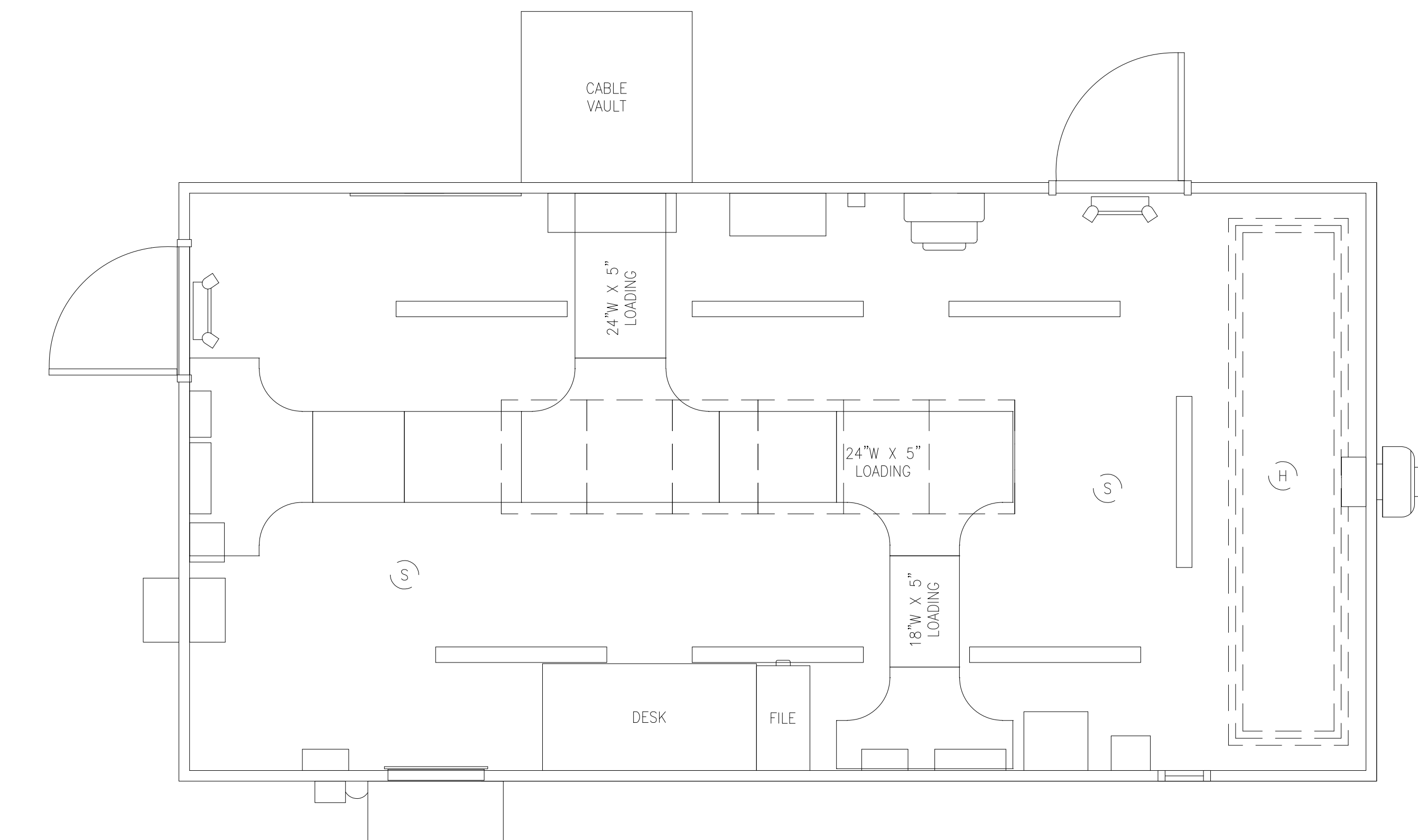
REVIEW 2

MILL POINT SOLAR 34.5/345KV COLLECTOR CHAIN LINK FENCE & WALL DETAILS (PHYSICAL)



MPS-E-210-16	RE A
--------------	---------

V.
A



LEGEND:

- ☐ LED STRIP LIGHT - 4'
☐ (H) HYDROGEN DETECTOR
☐ (S) SMOKE DETECTOR

NOTES:

1. THE GENERAL WIRING METHOD FOR LIGHTING AND RECEPTACLE BRANCH CIRCUITS INSIDE THE CONTROL HOUSE SHALL BE SURFACE MOUNTED 3/4" EMT CONDUIT, WITH #12 THHN CONDUCTORS MINIMUM SIZE.
2. THE ELECTRICAL EQUIPMENT SHOWN LOCATED ON THE BUILDING INTERIOR WALLS SHALL BE SECURED TO MOUNTING CHANNEL WHICH IS ATTACHED TO THE BUILDING STRUCTURE AND SUPPORTED FROM THE CONCRETE FLOOR.
3. ALL AC POWER CIRCUITS SHALL CONTAIN A PROPERLY SIZED EQUIPMENT GROUNDING CONDUCTOR RUN WITH THE PHASE AND NEUTRAL CONDUCTORS.
4. ALL GROUNDING SHALL COMPLY WITH THE NEC AS A MINIMUM REQUIREMENT. A PERIMETER GROUND CONDUCTOR SHALL BE RUN ALONG THE WALL NEAR THE CEILING, CONDUCTOR TO BE SUPPORTED EVERY 4' MINIMUM USING SUPPORT CLIPS. CABLE TRAYS SHALL HAVE A 4/0 BARE COPPER GROUND WIRE IN ALL PARTS OF THE TRAY SYSTEM. CABLE TRAY SHALL BE BONDED AT 5' INTERVALS AND AT EACH FITTING OR SECTION. ALL CABLE TRAY SYSTEMS SHALL BE BOWED TOGETHER AND TO THE BUILDING GROUND SYSTEM. SUPPLEMENTAL GROUNDING IS REQUIRED TO BOND METALLIC FRAMES AND MAJOR EQUIPMENT TO THE GROUNDING ELECTRODE SYSTEM.

NOTE:

- NOTE: 1. DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034 EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC, LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
2. UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

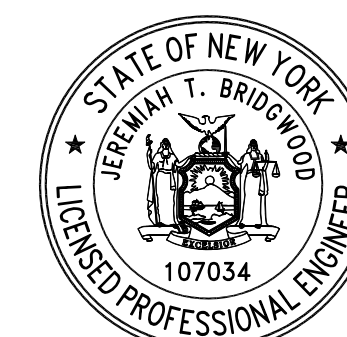


PRELIMINARY
NOT FOR CONSTRUCTION



10 MAXWELL DRIVE, SUITE 200
CLIFTON PARK, NY 12065

PROJECT NO: 443269



TB
 DESIGNED
 EL
 DRAWN
 CT
 CHECKED
 JTB
 APPROVED

MILL POINT SOLAR 34.5/345KV COLLECTOR SUBSTATION CONTROL HOUSE LAYOUT (PHYSICAL)

REVIEW 1

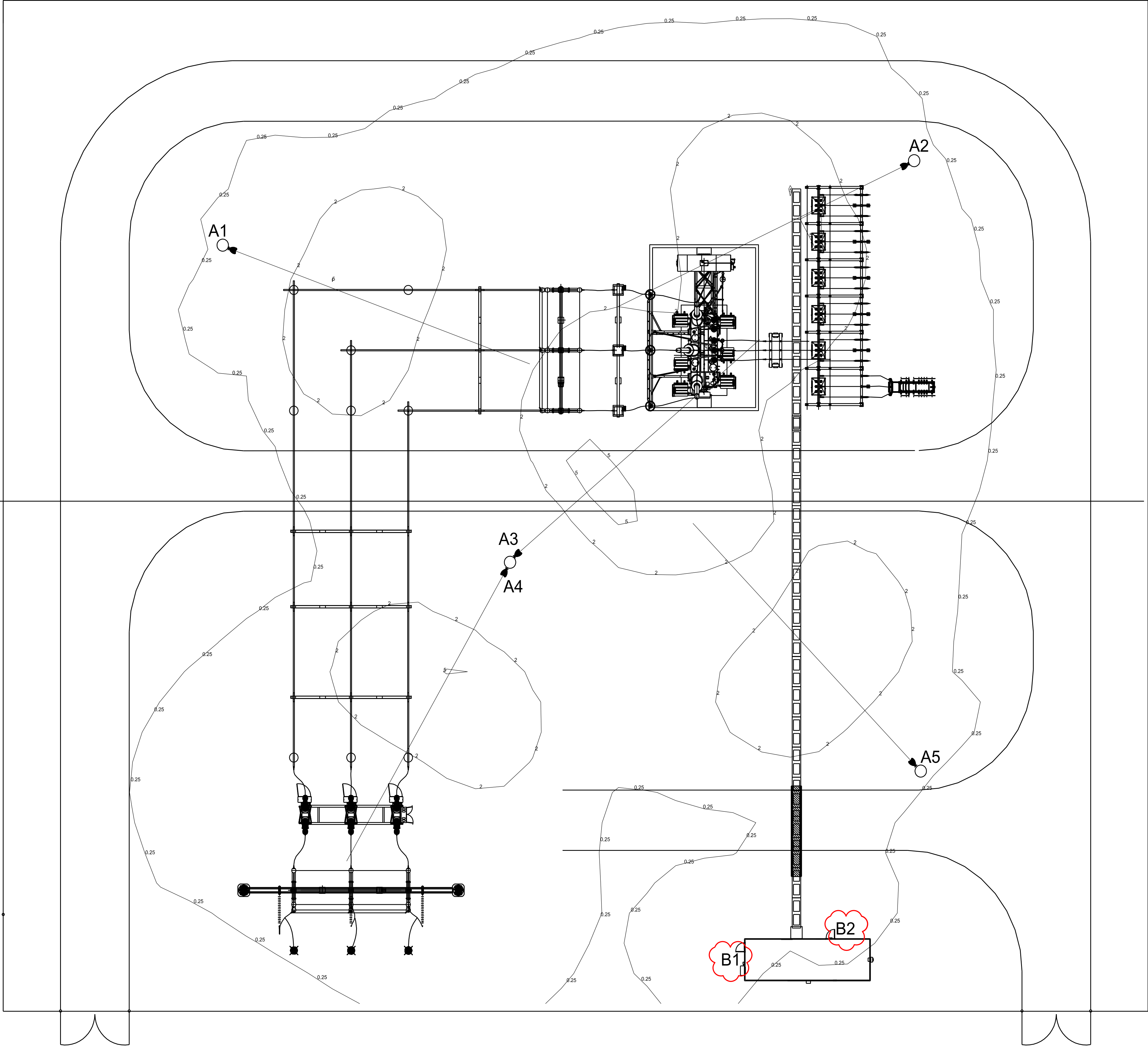
REVIEW 2

01/15/24
DATE
NTS
SCALE



MPS-E-210-20

C



LIGHTING PLAN
SCALE: N.T.S.

NOTE:
1. DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC. CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018, DRAWING PREPARED FOR CONNECTGE, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
2. UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



PRELIMINARY
NOT FOR CONSTRUCTION



10 MAXWELL DRIVE, SUITE 200
CLIFTON PARK, NY 12065

PROJECT NO: 443269

REV	DESCRIPTION	DATE	DES	CHK	APP
D	COMMENT UPDATE RE-ISSUE FOR 94-C	06/28/24	TB	CT	
C	RE-ISSUE FOR 94-C	1/15/24	TB	CT	
B	ISSUE FOR 94-C	10/20/23	MAD	CT	
A	ISSUE FOR REVIEW	8/28/23	MAD	CT	



TB
DESIGNED
TB
DRAWN
CT
CHECKED
APPROVED

MILL POINT SOLAR 34.5/345KV
345KV COLLECTOR SUBSTATION
LIGHTING PLAN
(PHYSICAL)

REVIEW 1
REVIEW 2

05/24/24
DATE
N.T.S.
SCALE



MPS-E-210-21

REV.
D

TABLE 1 - LIGHTING FIXTURE SCHEDULE

FIXTURE							LAMP	PHOTO-ELECTRIC CONTROL
TYPE	WATTAGE	LIGHT SOURCE	VOLTAGE	WEIGHT (LBS)	LUMENS	NEMA CLASS	MANUFACTURER (GE) ITEM #	MANUFACTURER ITEM #
A1 - A5	357	LED	120V	54	50,700	N/A	AMERICAN ELECTRIC LIGHTING ACP2LED P10 MVOLT 55	N/A
B1 - B2	27.1	LED	120V	33	3,100	N/A	HLWPC2_P10_AMB_120_T2M	N/A

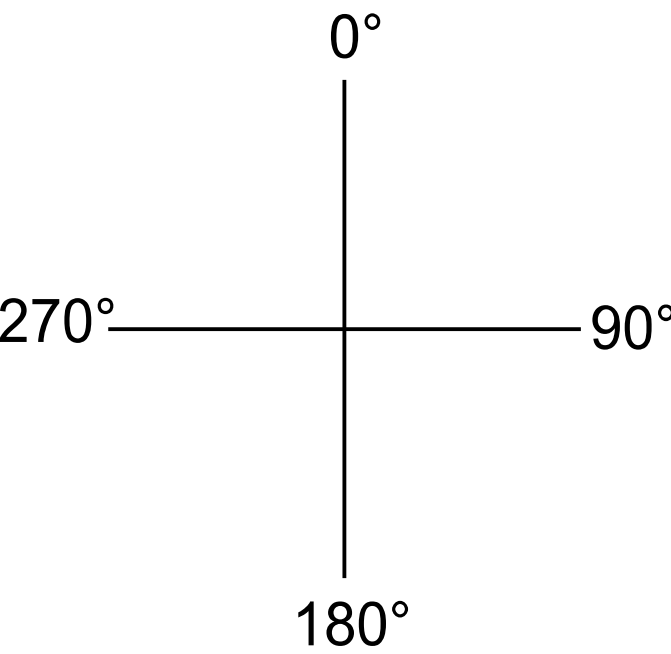
NOTES:

1. LIGHTING CALCULATIONS WERE PERFORMED USING VISUAL 2020, VERSION 2.11
2. PER CODE 19 NYCRR 900-2.9(d)(iii)(a) PERIMETER LIGHTING CONTROL ARE ON/OFF/AUTO
3. SEE DWG. MPS-E-210-01 FOR OVERALL SITE LAYOUT
4. PER CODE 19 NYCRR 900-2.9(d)(iii)(a) LIGHTING FIXTURES WERE DESIGNED TO BE PLACED AT THE LOWEST PRACTICAL HEIGHT AND DIRECTED TO THE GROUND AND/OR WORK AREAS.FIXTURE INSTALLATION HEIGHT AND TILT ARE SHOWN IN THE TABLE BELOW
5. THE NUMBERS ON THE COUNTOURS REPRESENT THE FOOT CANDLE LEVELS AT THAT AREA.

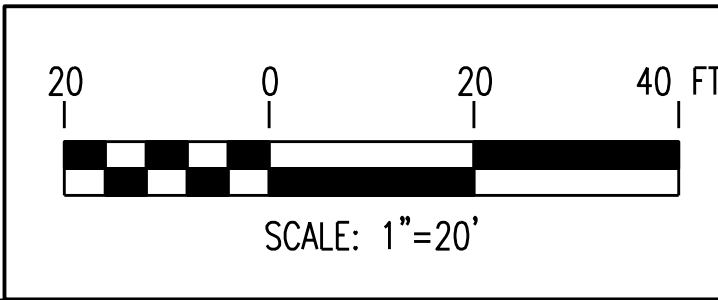
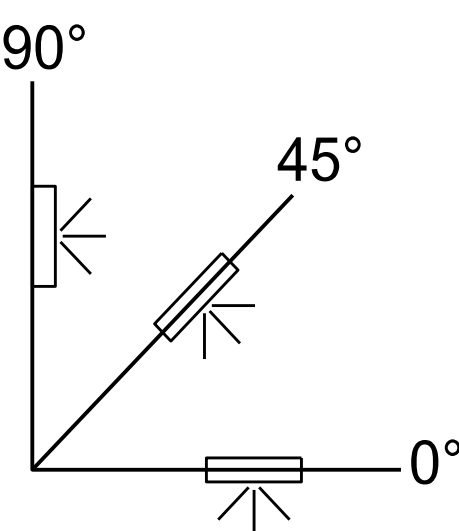
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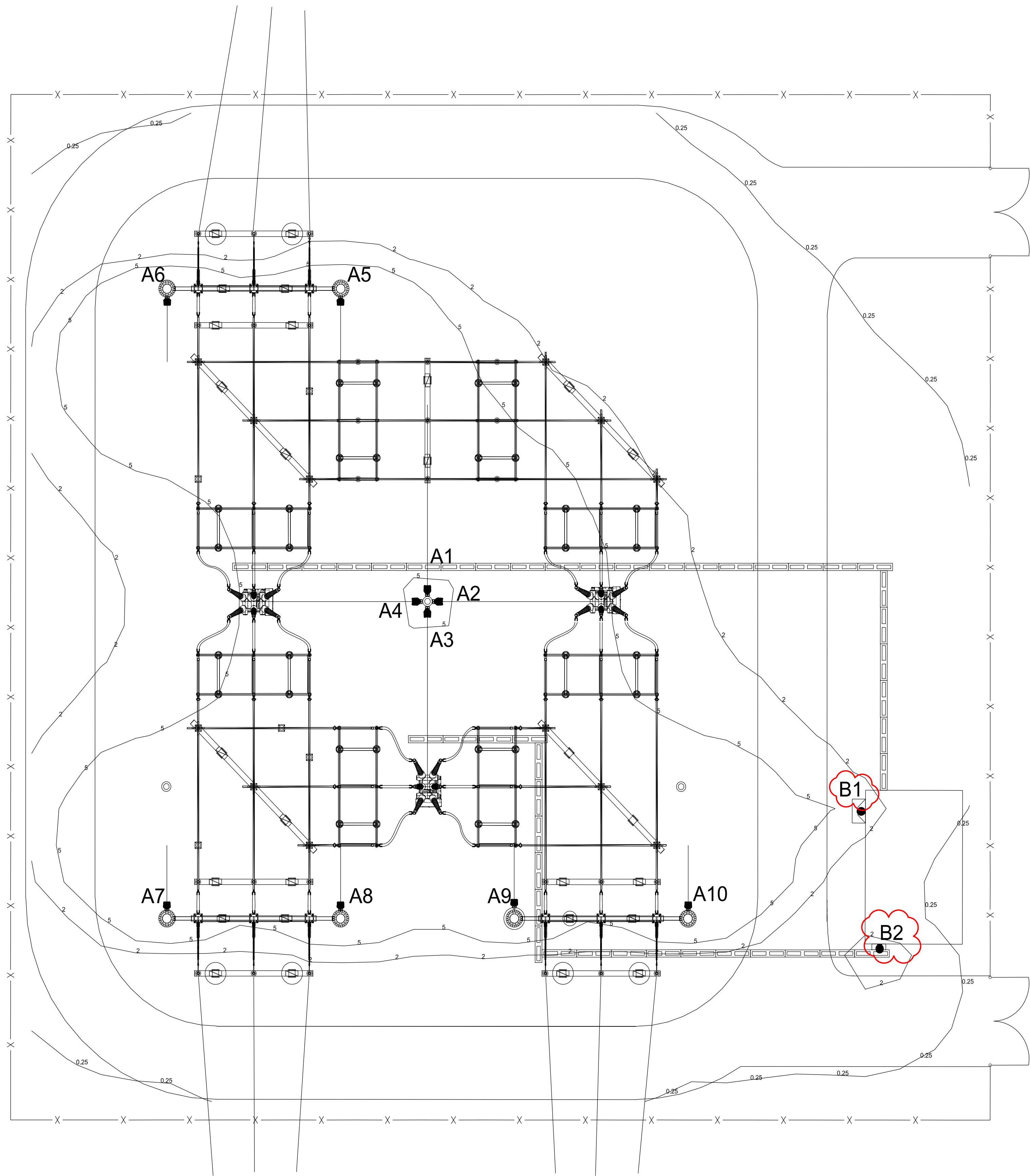
- Ø - LED FLOOD LIGHT
□ - BUILDING LIGHT

ORIENTATION REFERENCE



TILT REFERENCE





NOTE:

DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC. CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018, DRAWING PREPARED FOR CONNECTGE, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.

UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



PRELIMINARY
NOT FOR CONSTRUCTION



10 MAXWELL DRIVE, SUITE 200
CLIFTON PARK, NY 12065

PROJECT NO: 443269

REV	DESCRIPTION	DATE	DES	CHK	APP
D	COMMENT UPDATES RE-ISSUE FOR 94-C	06/28/24	TB	CT	
C	RE-ISSUE FOR 94-C	1/15/24	MAD	CT	
B	ISSUE FOR 94-C	10/20/23	MAD	CT	
A	ISSUE FOR REVIEW	8/28/23	MAD	CT	



TB DESIGNED	XXXXXX DATE N.T.S. SCALE		MPS-E-210-22	REV. D
TB DRAWN				
CT CHECKED				
APPROVED				
REVIEW 1				
REVIEW 2				

MILL POINT SOLAR 345KV
POI SWITCHYARD
LIGHTING PLAN
(PHYSICAL)

TABLE 1 - LIGHTING FIXTURE SCHEDULE

FIXTURE							LAMP	PHOTO-ELECTRIC CONTROL
TYPE	WATTAGE	LIGHT SOURCE	VOLTAGE	WEIGHT (LBS)	LUMENS	NEMA CLASS	MANUFACTURER (GE) ITEM #	MANUFACTURER ITEM #
A1 - A10	357	LED	120V	54	50,700	N/A	AMERICAN ELECTRIC LIGHTING ACP2LED P10 MVOLT 55	N/A
B1 - B2	27.1	LED	120V	33	3,100	N/A	HLWPC2_P10_AMB_120_T2M	N/A

NOTES:

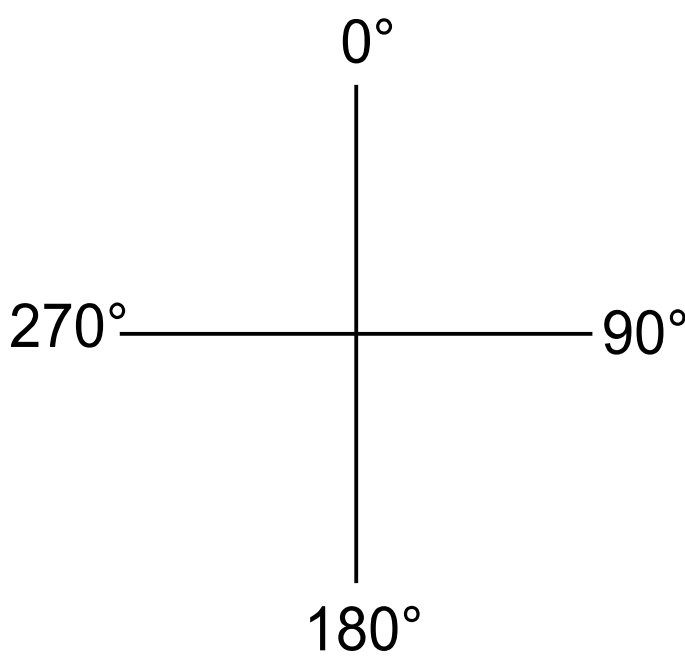
1. LIGHTING CALCULATIONS WERE PERFORMED USING VISUAL 2020, VERSION 2.11
2. PER CODE 19 NYCRR 900-2.9(d)(iii)(a) PERIMETER LIGHTING CONTROL ARE ON/OFF/AUTO
3. SEE DWG. MPS-E-210-01 FOR OVERALL SITE LAYOUT
4. PER CODE 19 NYCRR 900-2.9(d)(iii)(a) LIGHTING FIXTURES WERE DESIGNED TO BE PLACED AT THE LOWEST PRACTICAL HEIGHT AND DIRECTED TO THE GROUND AND/OR WORK AREAS.FIXTURE INSTALLATION HEIGHT AND TILT ARE SHOWN IN THE TABLE BELOW
5. THE NUMBERS ON THE COUNTOURS REPRESENT THE FOOT CANDLE LEVELS AT THAT AREA.

LEGEND:

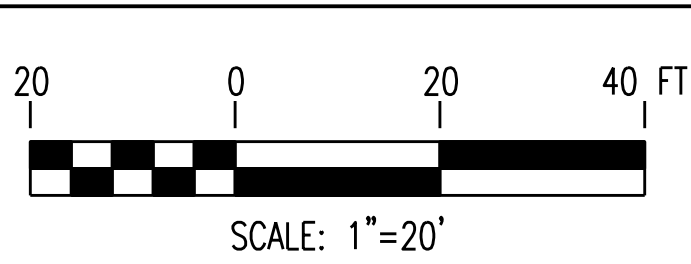
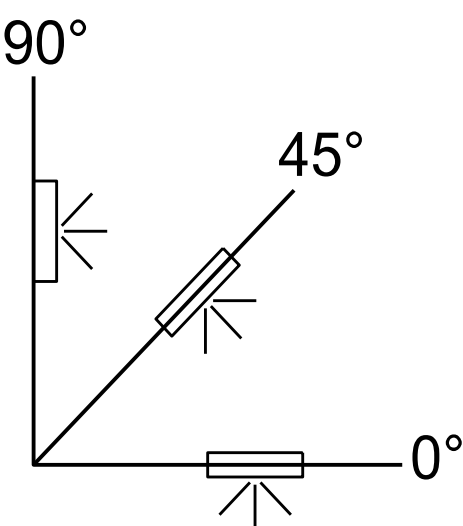
- FIXTURE ON BUILDING
- LED FLOOD LIGHT

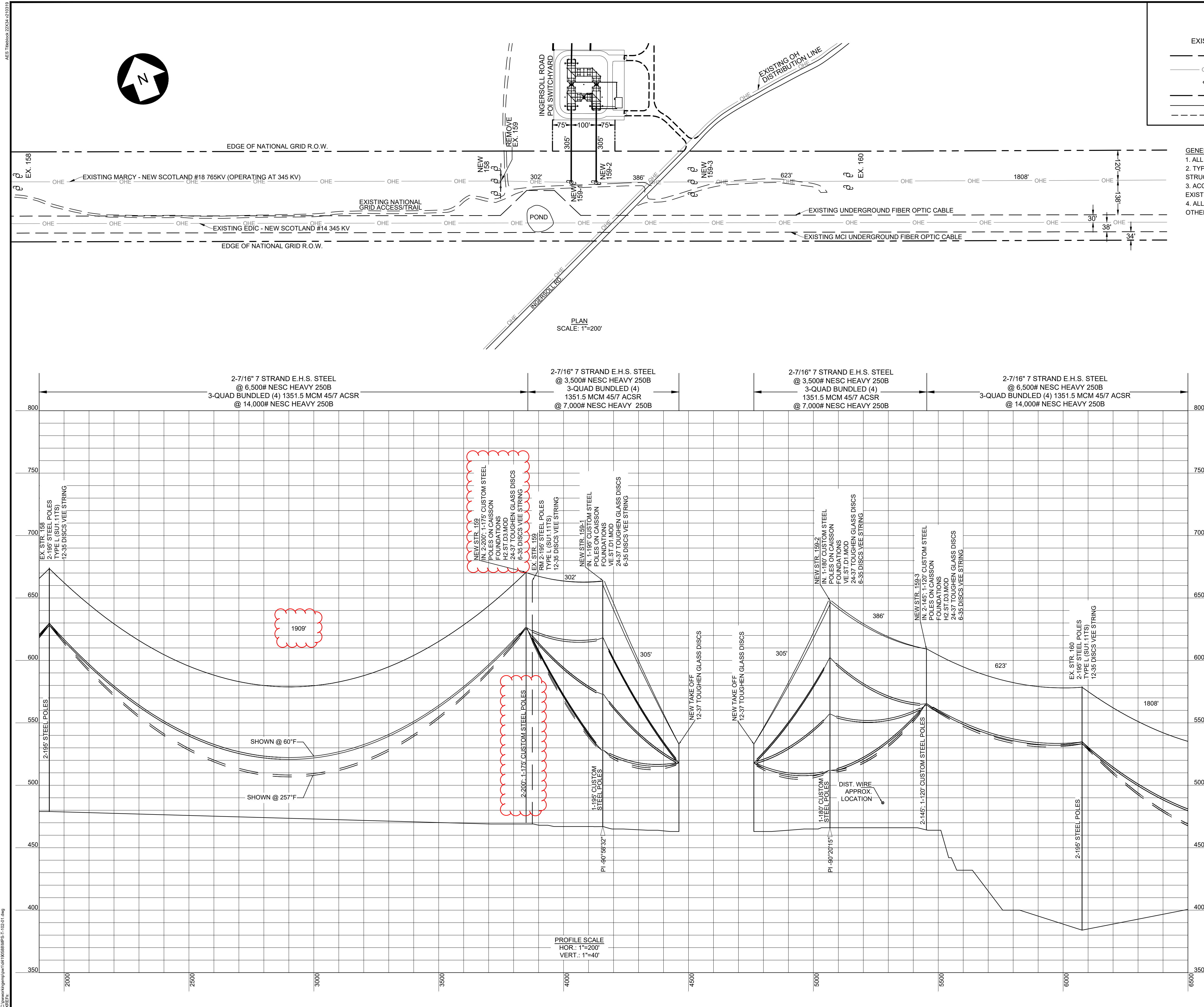
	HEIGHT	ORIENTATION	TILT
A1	30'	0°	60°
A2	30'	90°	60°
A3	30'	180°	60°
A4	30'	270°	60°
A5	30'	180°	30°
A6	30'	180°	30°
A7	30'	0°	30°
A8	30'	0°	30°
A9	30'	0°	30°
A10	30'	0°	30°
B1	10'	270°	0°
B2	10'	180°	0°

ORIENTATION REFERENCE



TILT REFERENCE





EXISTING **LEGEND** **PROPOSED**

— — — — — PROPERTY BOUNDARY

— OHE — OVERHEAD ELECTRIC

⌚ UTILITY POLE

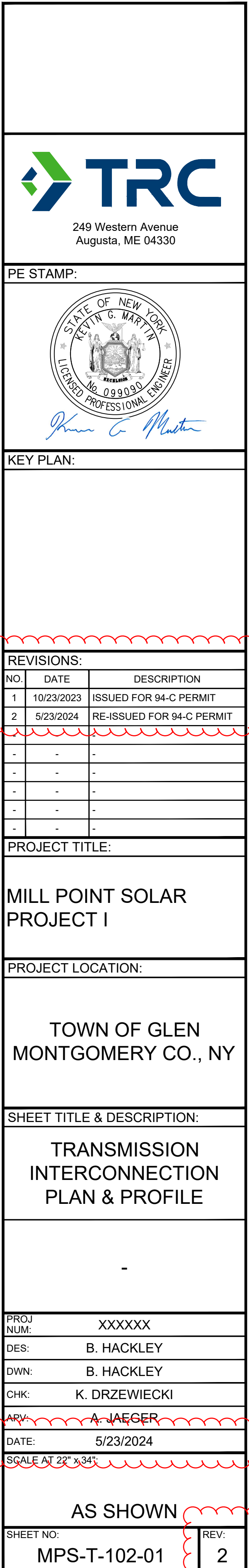
— — — — — RIGHT OF WAY

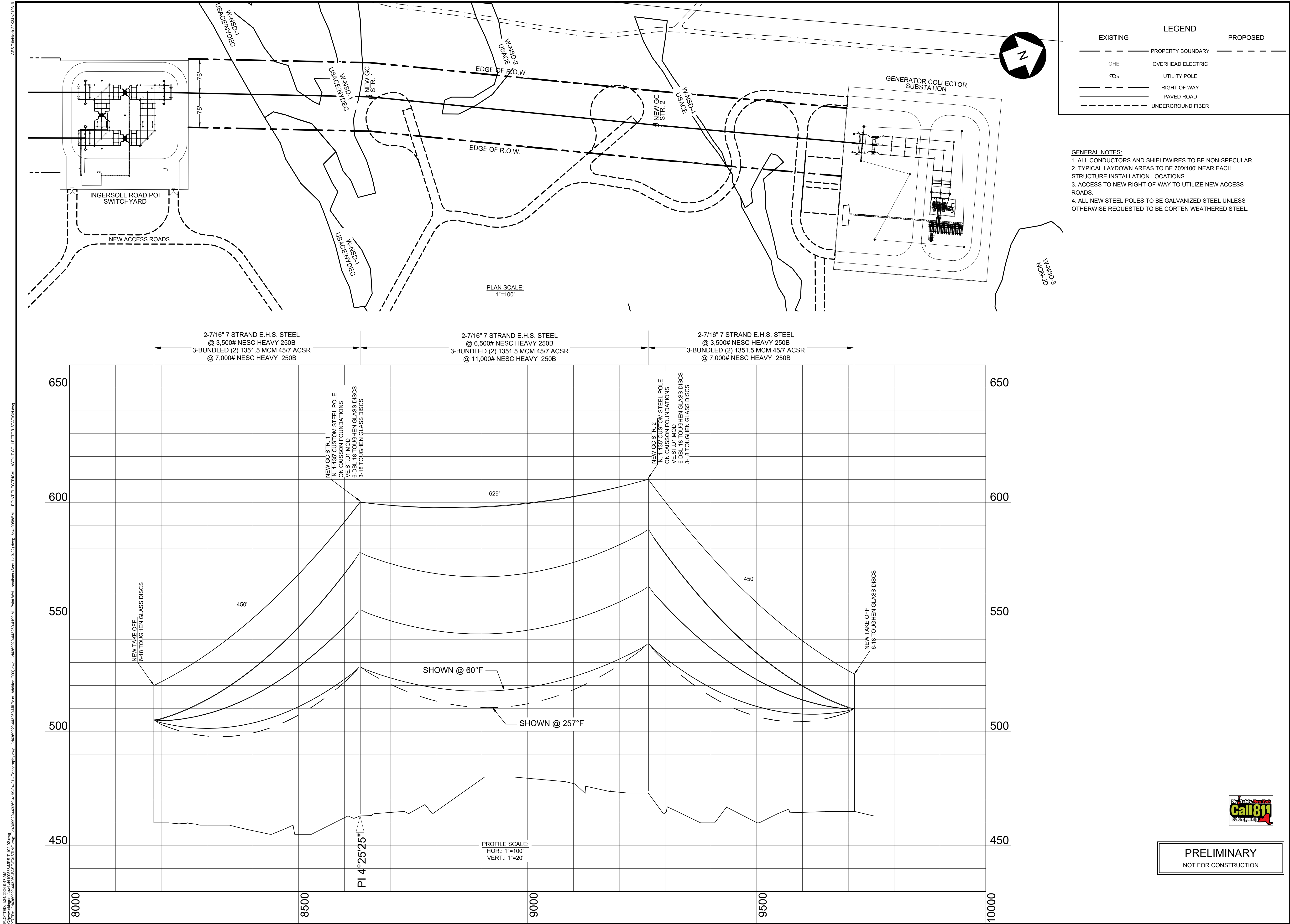
===== PAVED ROAD

- - - - - UNDERGROUND FIBER

GENERAL NOTES:

1. ALL CONDUCTORS AND SHIELDWIRES TO BE NON-SPECULAR
2. TYPICAL LAYDOWN AREAS TO BE 70'X100' NEAR EACH STRUCTURE INSTALLATION LOCATIONS.
3. ACCESS IN NATIONAL GRID RIGHT-OF-WAY TO UTILIZE EXISTING ACCESS ROADS.
4. ALL NEW STEEL POLES TO BE GALVANIZED STEEL UNLESS OTHERWISE REQUESTED TO BE CORTEN WEATHERED STEEL.





TRC

249 Western Avenue
Augusta, ME 04330

PE STAMP:

STATE OF NEW YORK
KEVIN G. MARTIN
No. 099090
LICENSED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	1/24/2024	ISSUED FOR 94-C PERMIT
2	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

MILL POINT SOLAR I PROJECT

PROJECT LOCATION:

TOWN OF GLEN MONTGOMERY CO., NY

SHEET TITLE & DESCRIPTION:

GENERATOR INTERCONNECTION PLAN & PROFILE

-

PROJ. NUM.: XXXXXX

DES.: B. HACKLEY

DWN.: B. HACKLEY

CHK.: K. DRZEWIECKI

APV.: A. JAEGER

DATE: 1/24/2024

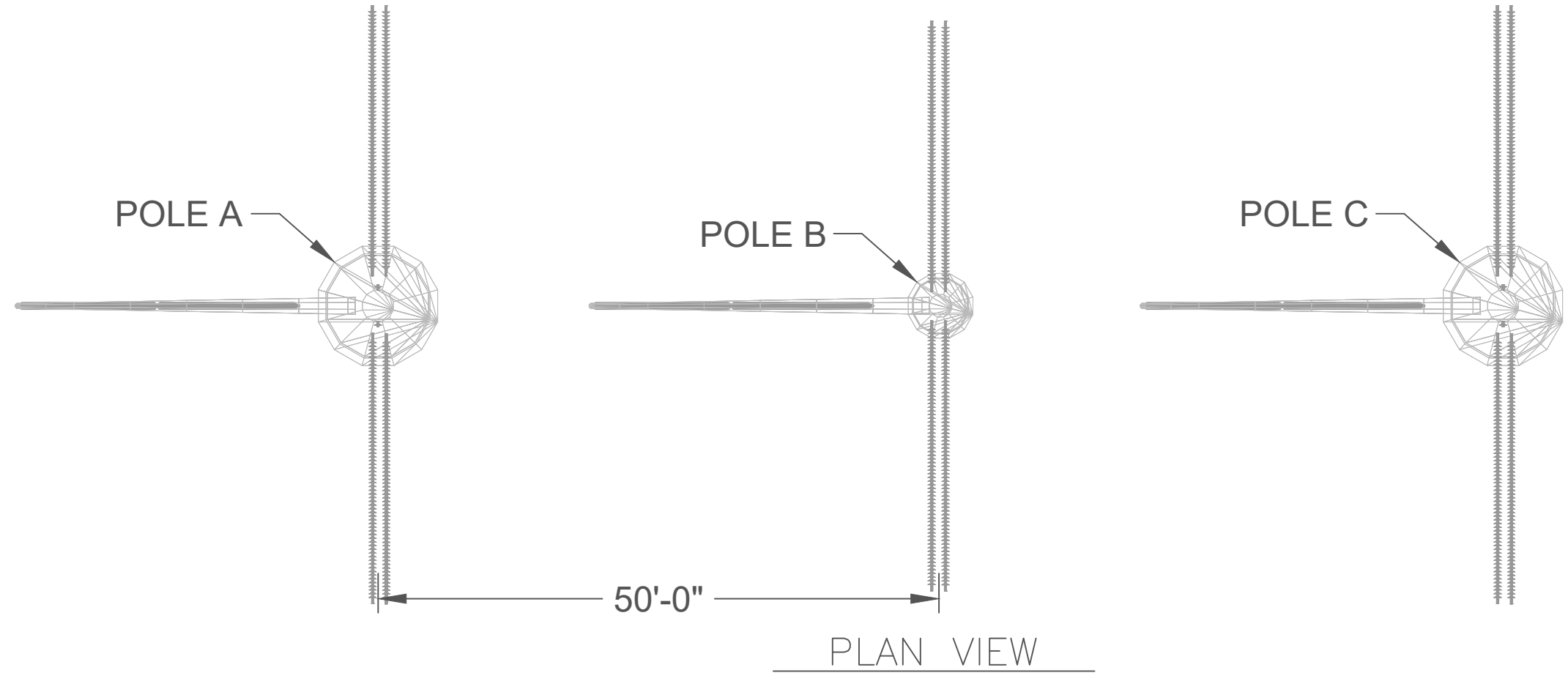
SCALE AT 22" x 34":

AS SHOWN

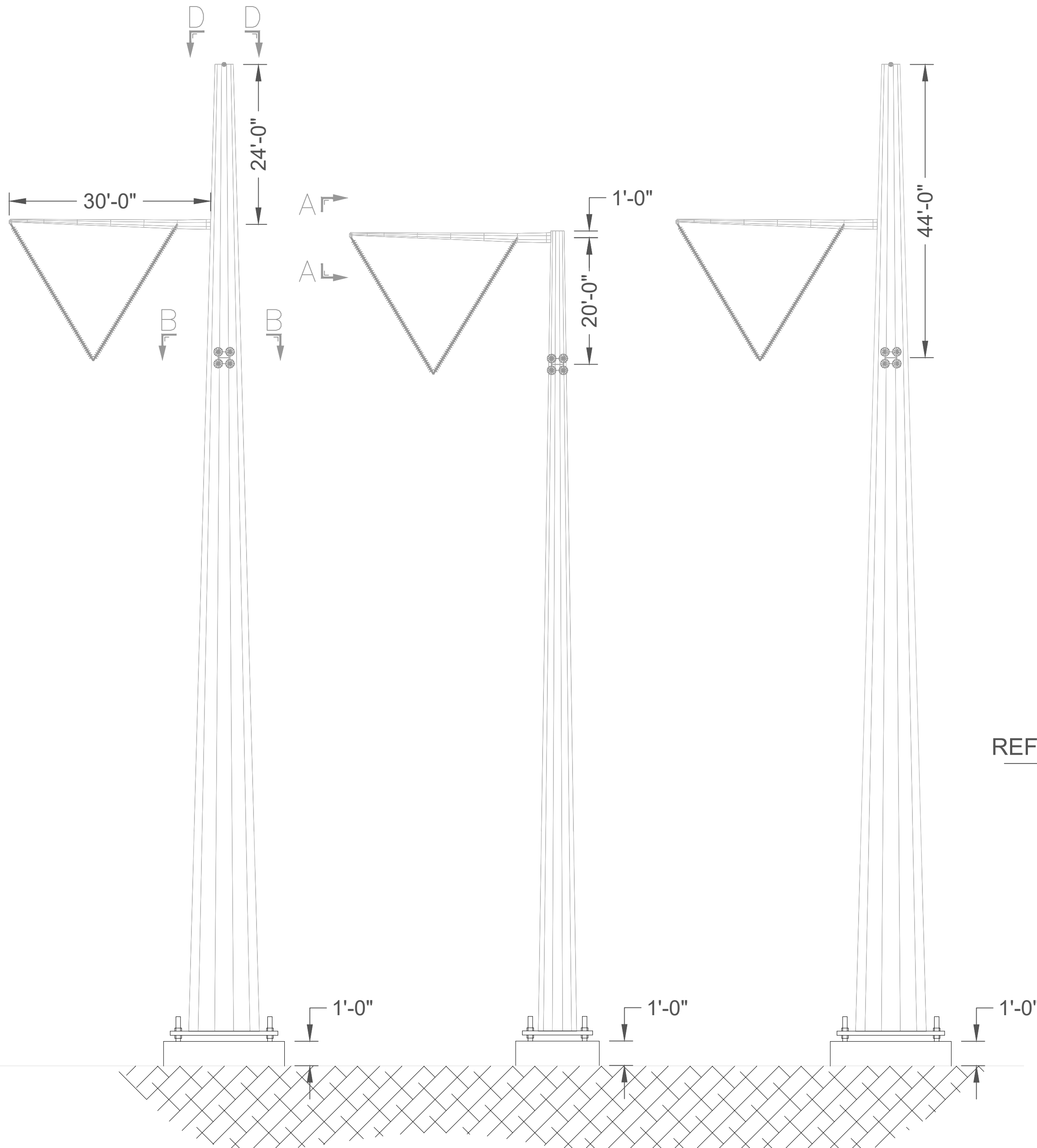
SHEET NO.: MPS-T-102-02

REV: 1

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PLOTED: 7/17/2024 10:01 AM
XREFS: 10/23/2023 10:01 AM
XREFS: 10/23/2023 10:01 AM



PLAN VIEW

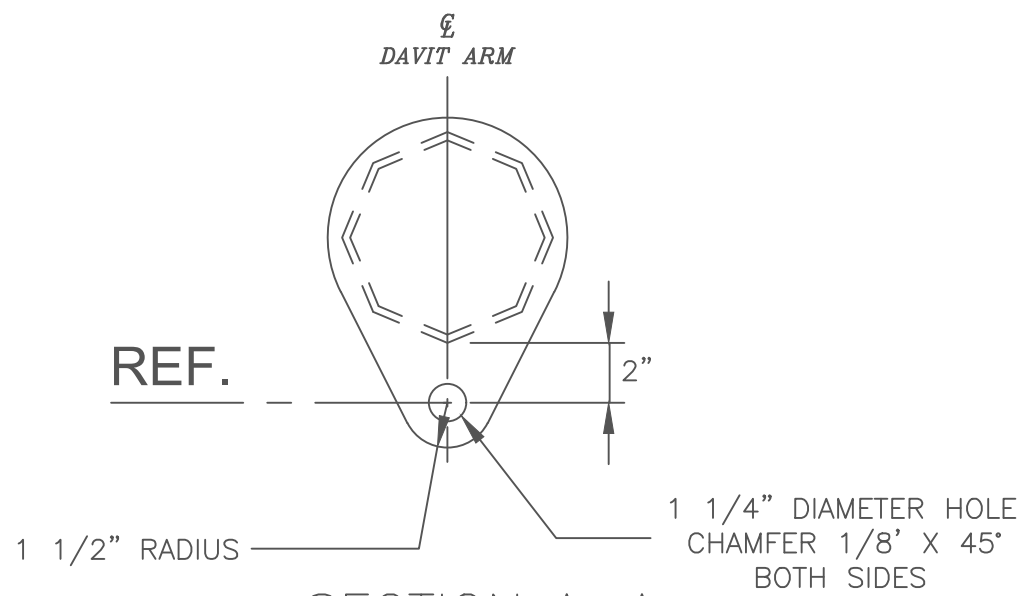


FRONT ELEVATION

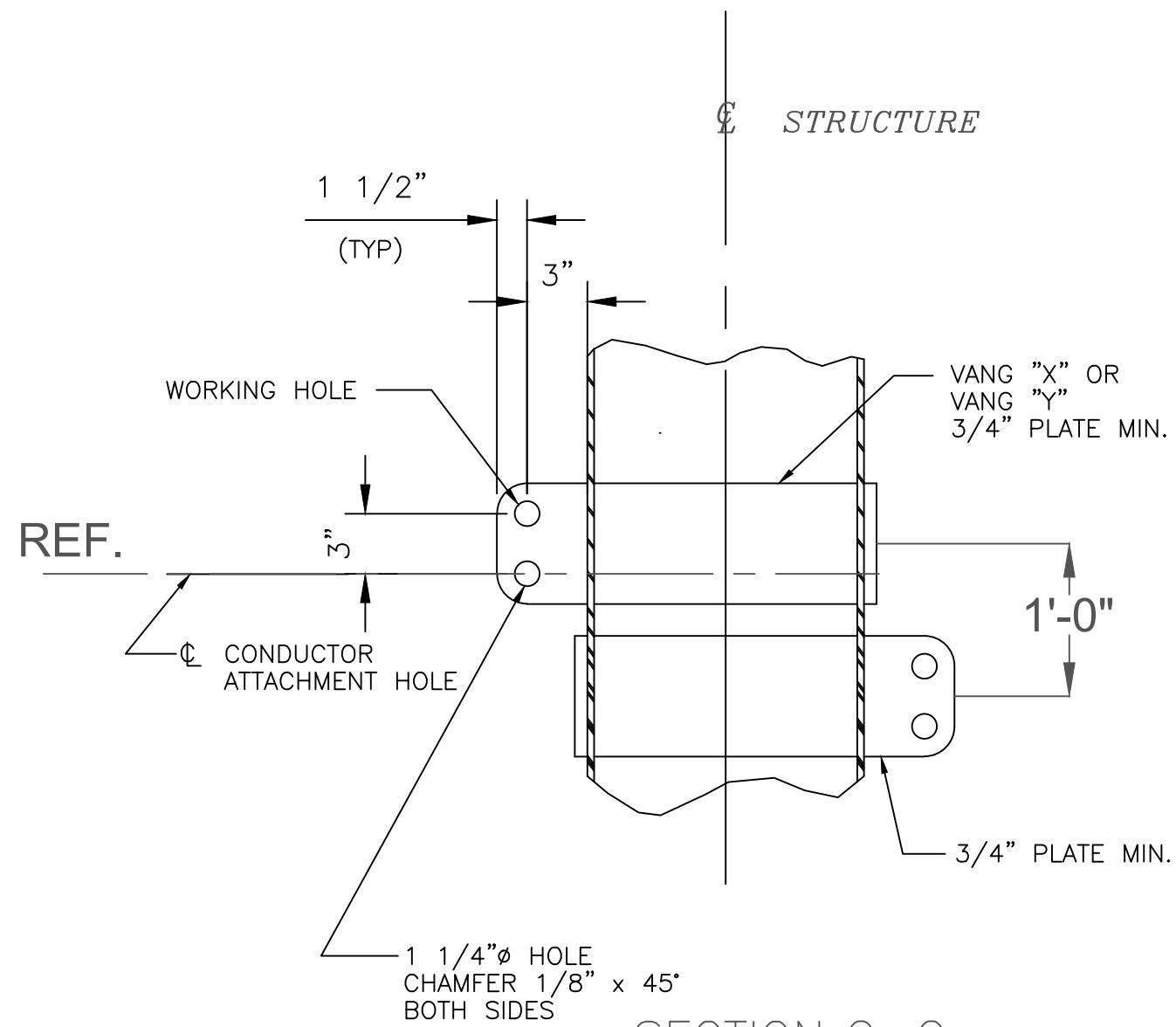
STRUCTURE NUMBER	LINE ANGLE α (DEG.)	STRUCTURE HEIGHT (FT.)			DISCS/ STRING	DISCS/ LOOP STRING	STRINGS/ PHASE	LOOP STRINGS/ PHASE	DESIGN VOLTAGE	OPERATING VOLTAGE
		POLE A	POLE B	POLE C						
159	0°	200'-0"	175'-0"	200'-0"	37	35	8	2	765 kV	345 kV
159-3	0°	145'-0"	120'-0"	145'-0"	37	35	8	2	765 kV	345 kV

NOTES:

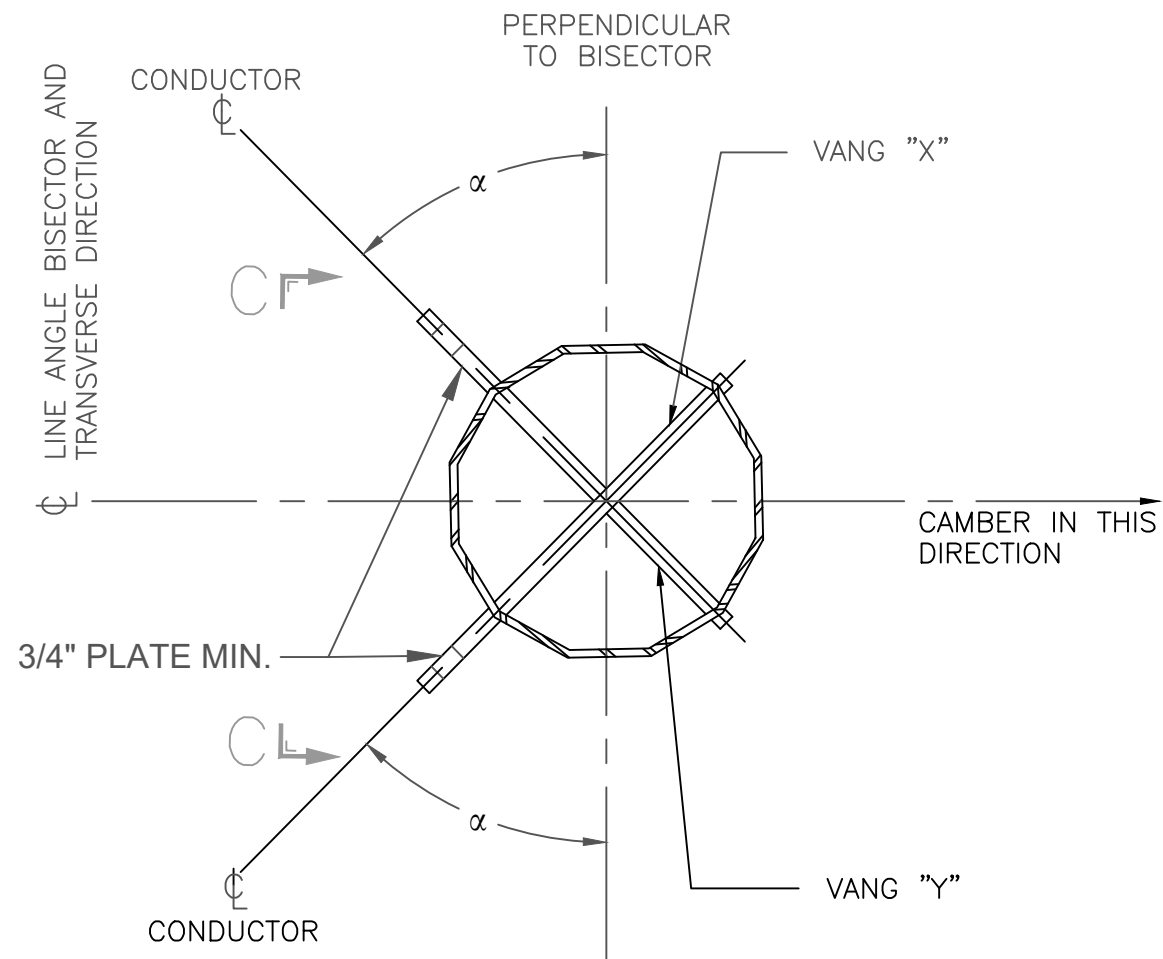
ALL INSULATOR DISCS TO BE TOUGHENED GLASS.
ALL POLES TO BE GALVANIZED STEEL UNLESS OTHERWISE REQUESTED TO BE CORTEN WEATHERED STEEL.
ALL POLES INSTALLED ON CAISSON FOUNDATION WITH 1'-0" REVEAL.



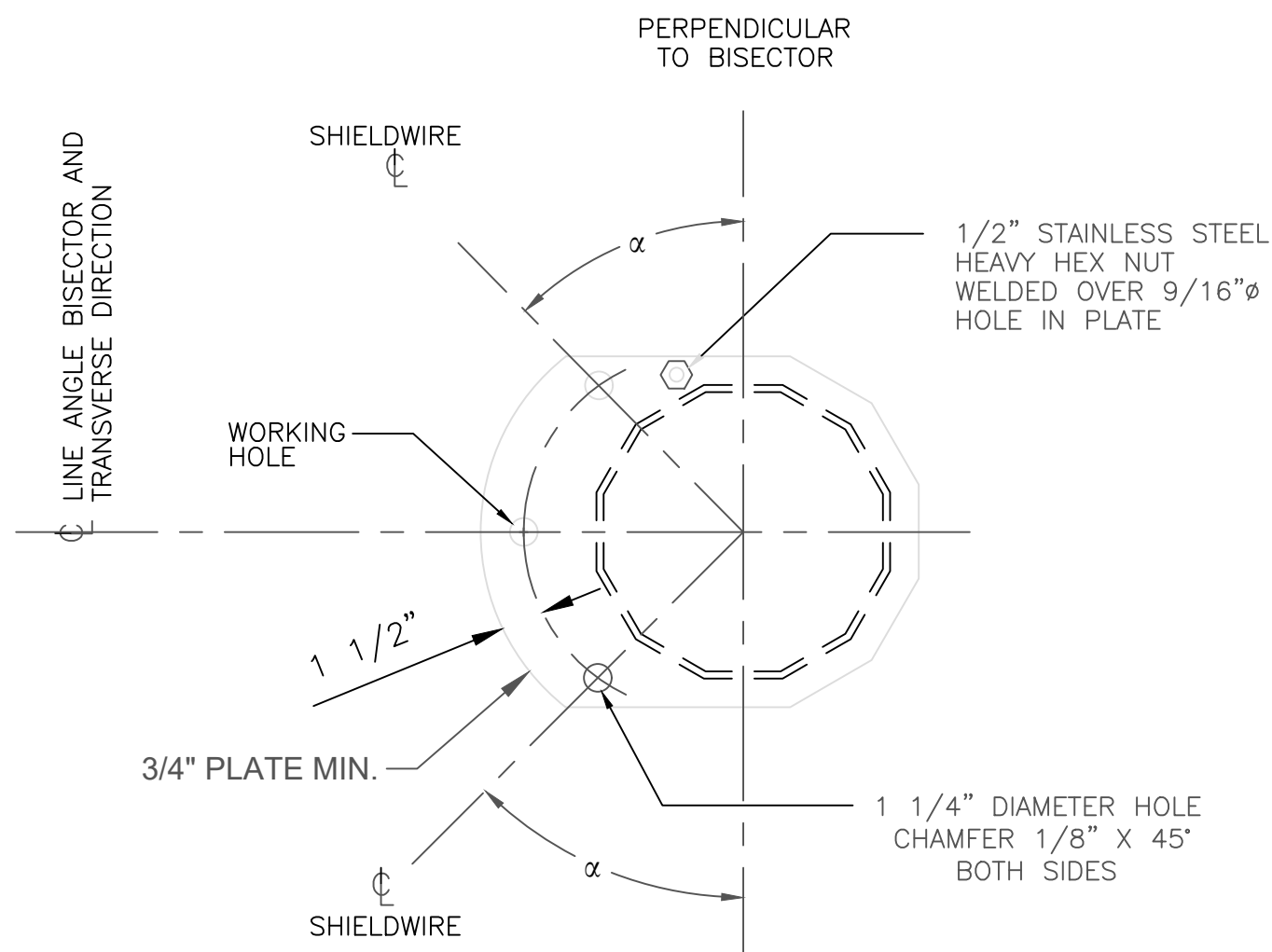
SECTION A-A
CONDUCTOR ATTACHMENT PLATES
(TYPICAL 3 LOCATIONS)



SECTION C-C
(TYPICAL 3 LOCATIONS)



SECTION B-B
(TYPICAL 3 LOCATIONS)



SECTION D-D
POLE CAP WITH SHIELD WIRE
ATTACHMENT AND GROUNDING NUT

PRELIMINARY
NOT FOR CONSTRUCTION



249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	10/23/2023	ISSUED FOR 94-C PERMIT
2	07/17/2024	RE-ISSUED FOR 94-C PERMIT

PROJECT TITLE:

MILL POINT SOLAR
PROJECT I

PROJECT LOCATION:

TOWN OF GLEN
MONTGOMERY CO., NY

SHEET TITLE & DESCRIPTION:

HE.ST.D3.MOD
3-STEEL POLE
DEAD-END

PROJ. NUM: XXXXXX

DES: B. HACKLEY

DWN: B. HACKLEY

CHK: K. DRZEWIECKI

APV: A. JAEGER

DATE: 07/17/2024

SCALE AT 2" x 84"

NTS

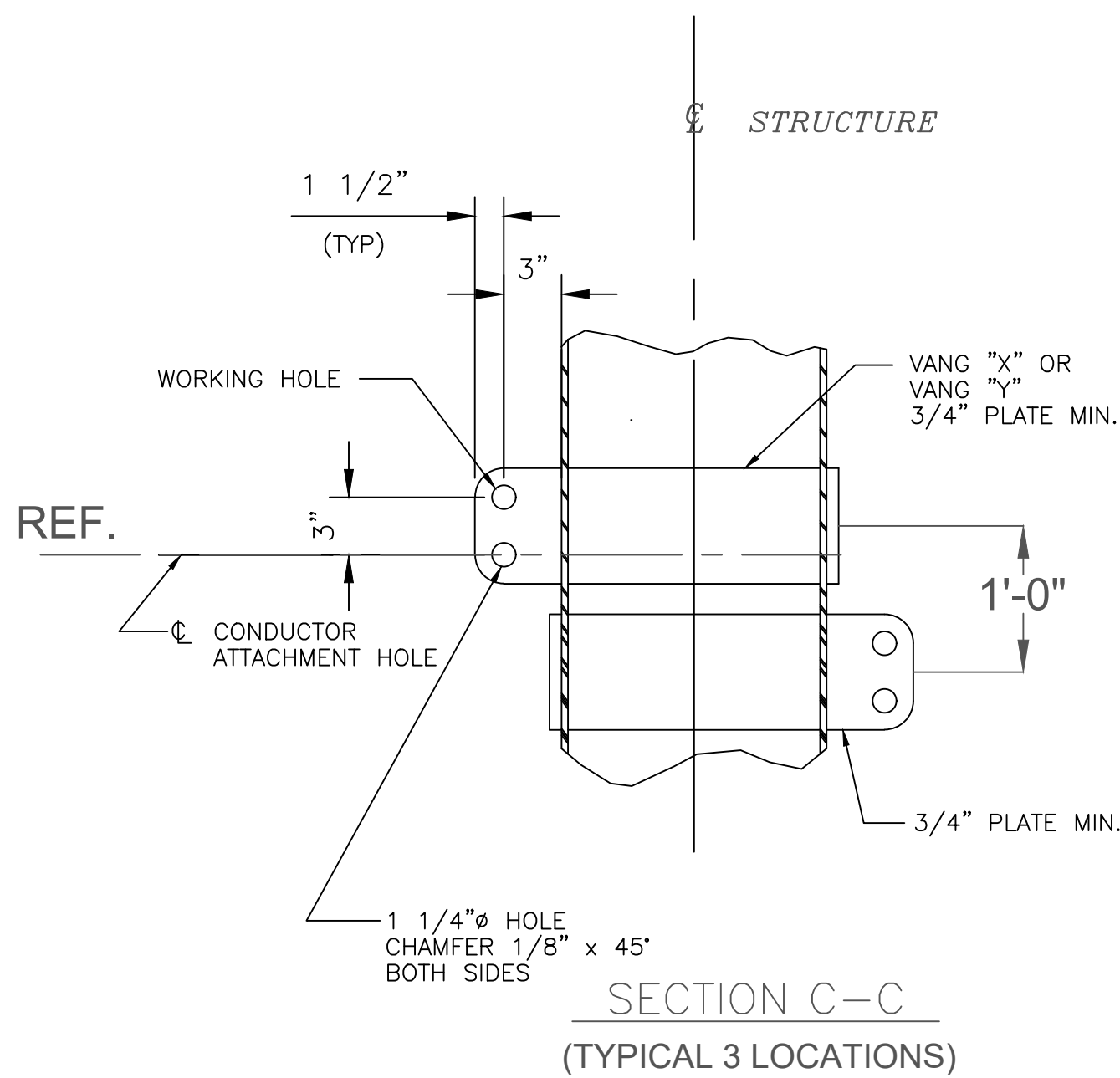
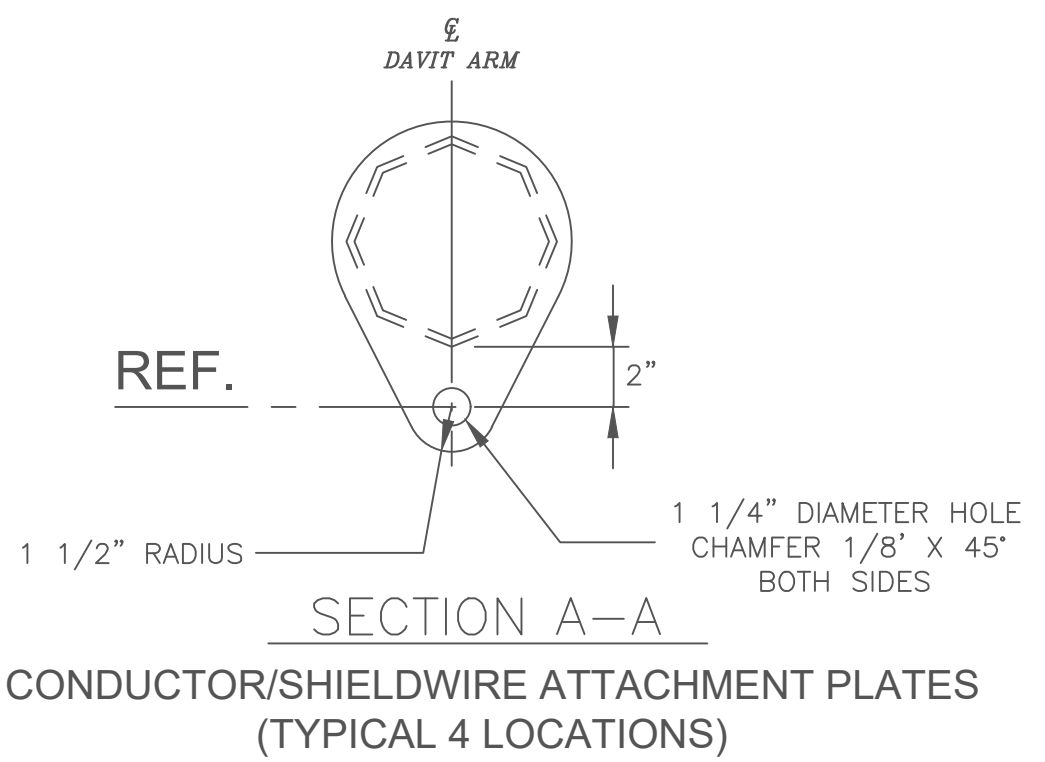
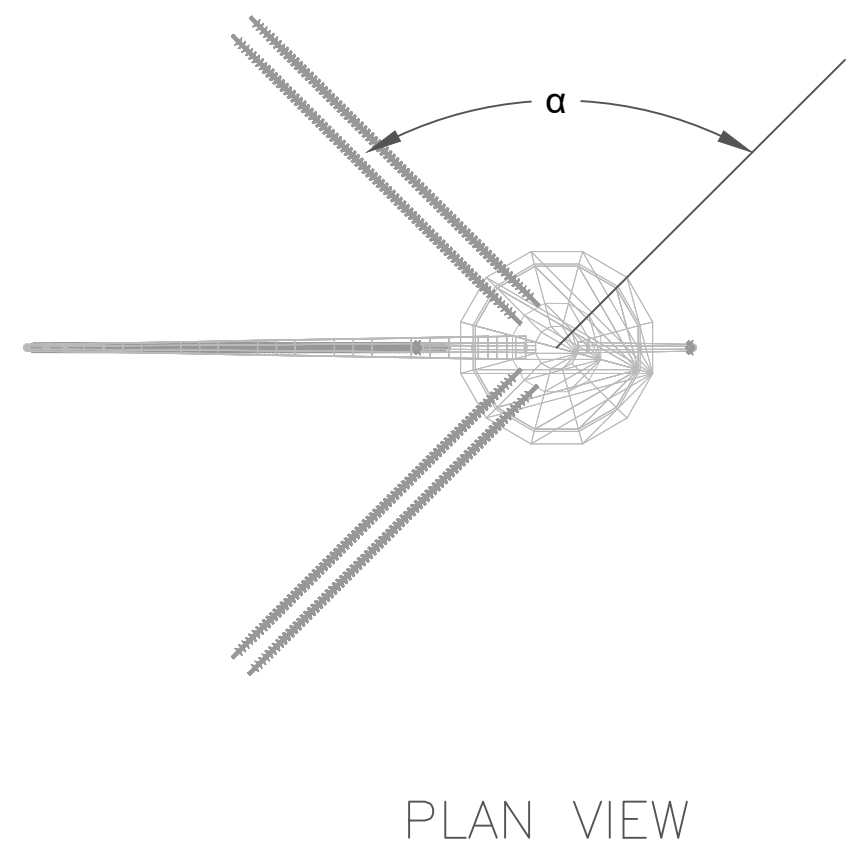
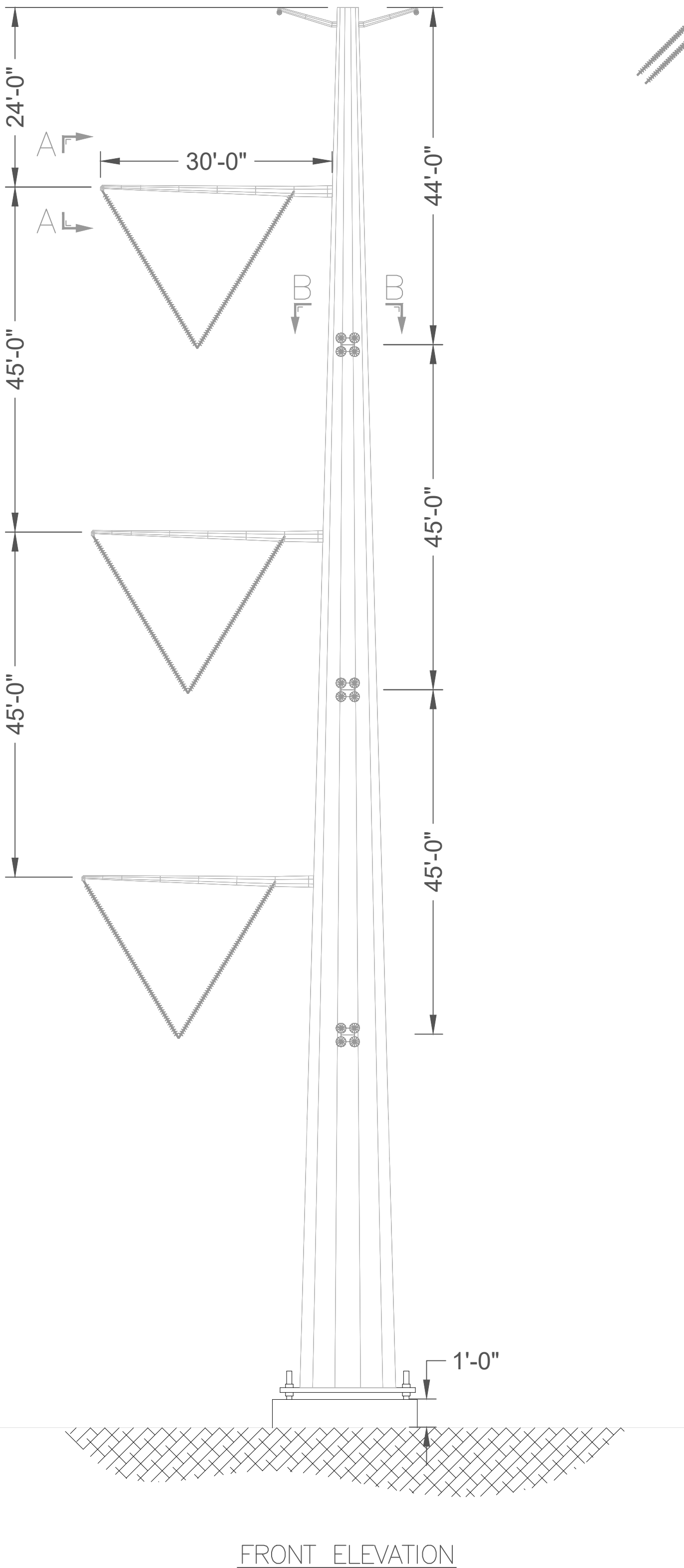
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MPS-T-103-01

REV:

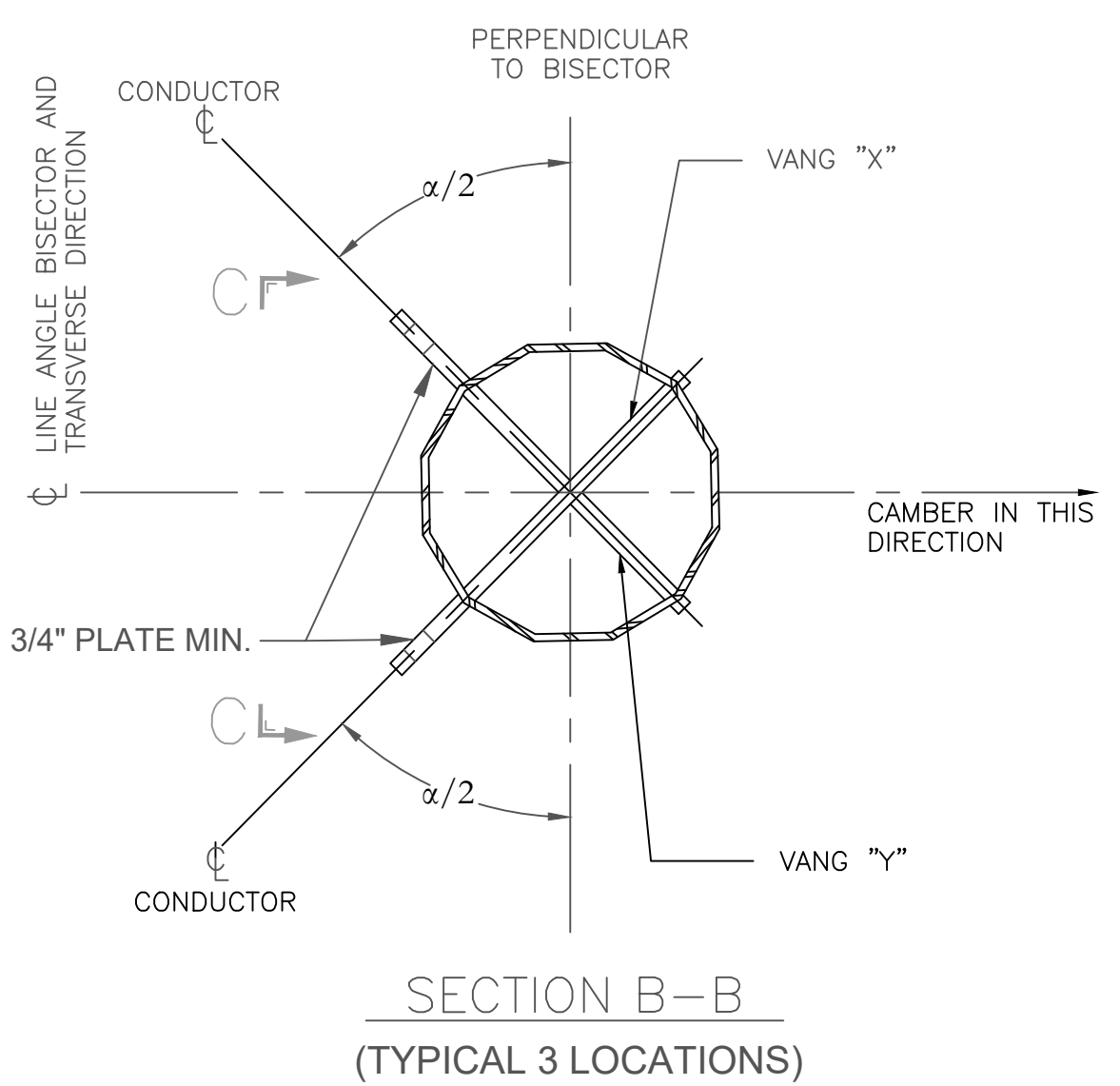
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XREF: C:\Users\jmartin\OneDrive\Documents\Projects\103-02.dwg

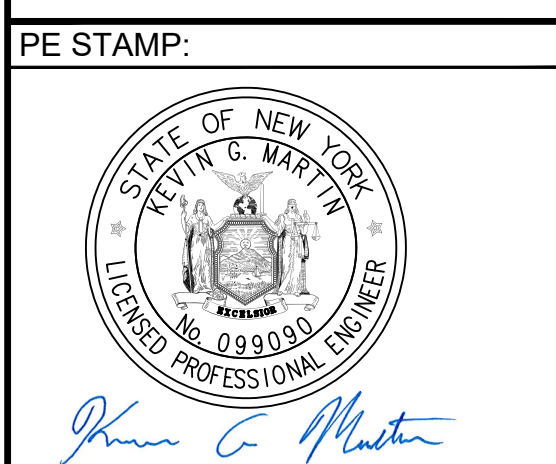


STRUCTURE INFORMATION								
STRUCTURE NUMBER	LINE ANGLE α (DEG.)	STRUCTURE HEIGHT (FT.)	DISCS/ STRING	DISCS/ LOOP STRING	STRINGS/ PHASE	LOOP STRINGS/ PHASE	DESIGN VOLTAGE	OPERATING VOLTAGE
159-1	90°58'32"	195'-0"	37	35	8	2	765 kV	345 kV
159-2	-90°20'15"	180'-0"	37	35	8	2	765 kV	345 kV

NOTES:
ALL INSULATOR DISCS TO BE TOUGHENED GLASS.
ALL POLES TO BE GALVANIZED STEEL UNLESS OTHERWISE REQUESTED TO BE CORTEN WEATHERED STEEL.
ALL POLES INSTALLED ON CAISSON FOUNDATION WITH 1'-0" REVEAL.



PRELIMINARY
NOT FOR CONSTRUCTION



REVISIONS:		
NO.	DATE	DESCRIPTION
1	10/23/2023	ISSUED FOR 94-C PERMIT
2	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

REVISIONS:		
NO.	DATE	DESCRIPTION
1	10/23/2023	ISSUED FOR 94-C PERMIT
2	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

MILL POINT SOLAR I
PROJECT

PROJECT LOCATION:

TOWN OF GLEN
MONTGOMERY CO., NY

SHEET TITLE & DESCRIPTION:

V1.ST.D1.MOD
VERTICAL STEEL POLE
DEAD-END

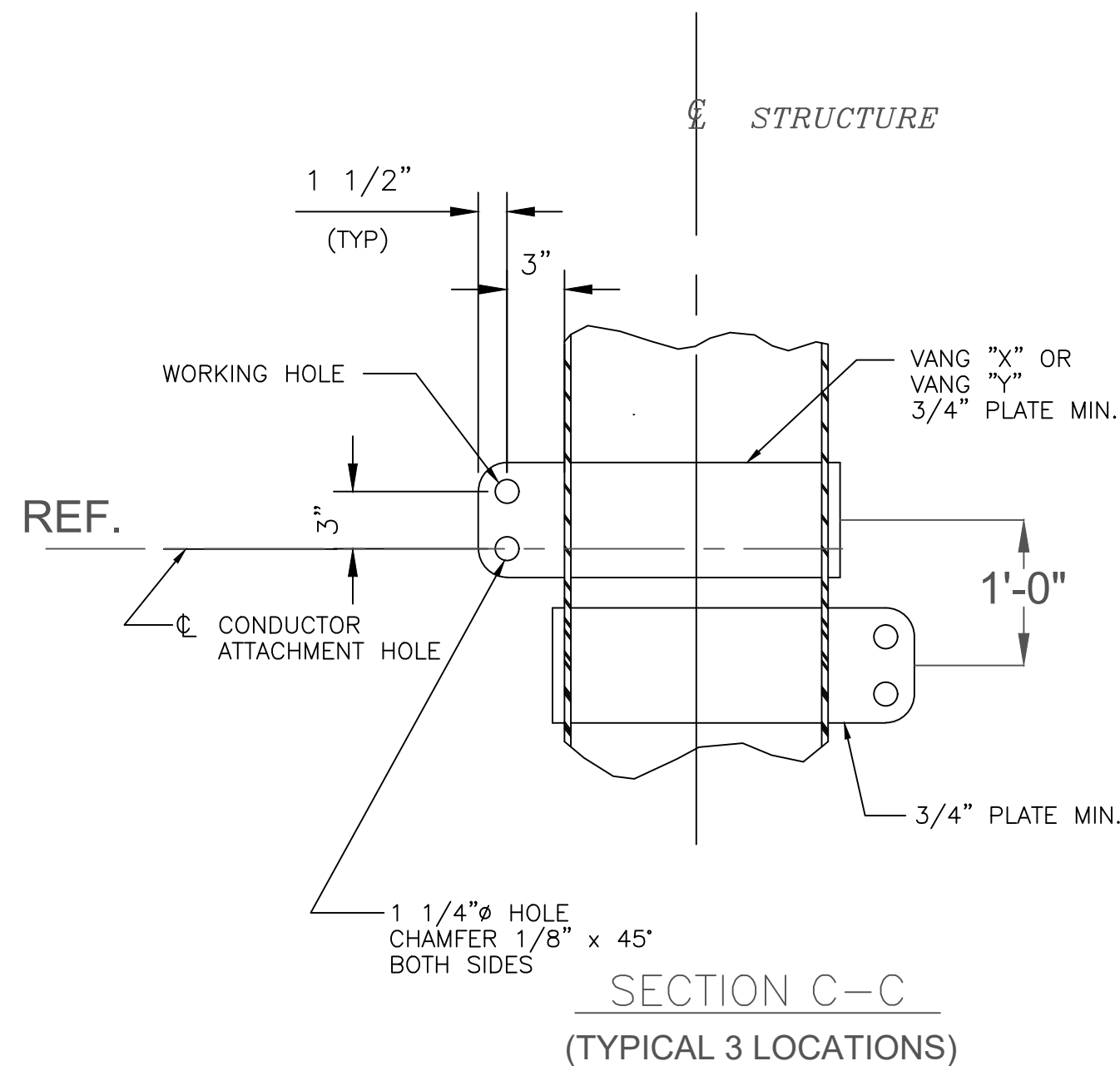
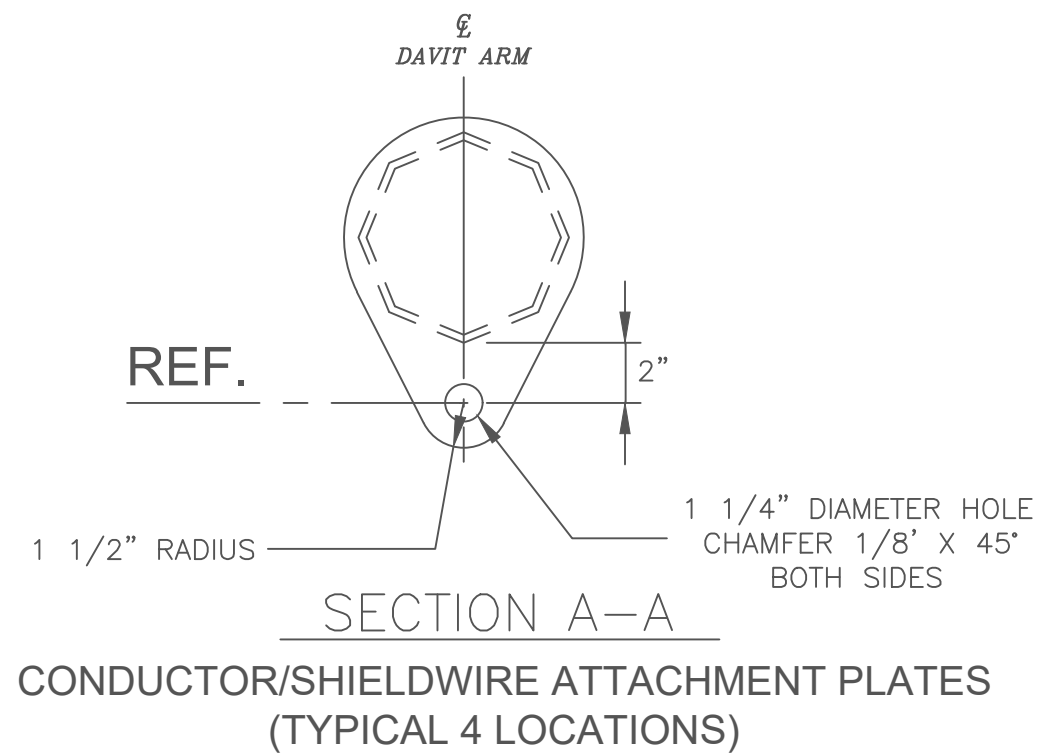
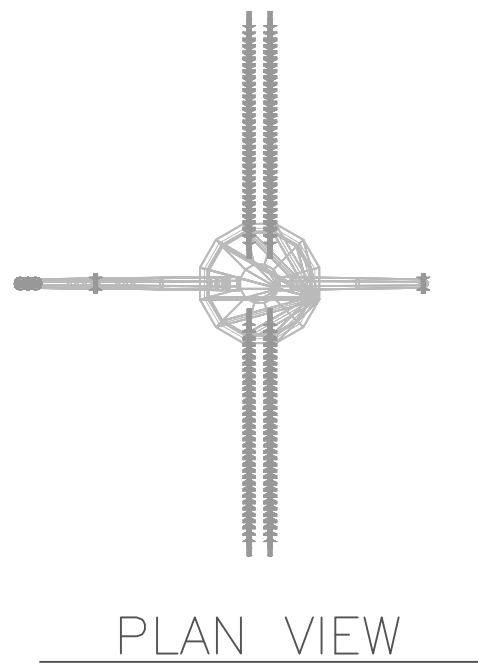
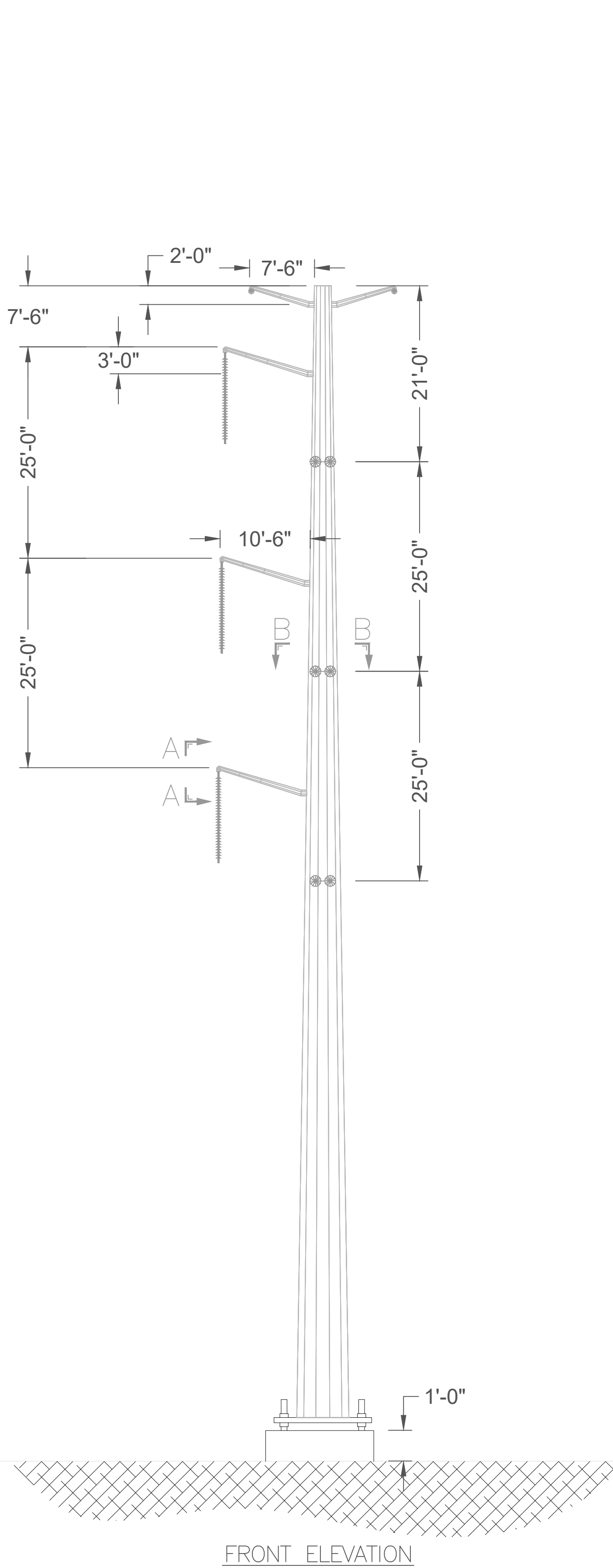
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PROJ NUM:	XXXXXX
DES:	B. HACKLEY
DWN:	B. HACKLEY
CHK:	K. DRZEWIECKI
APV:	A. JAEGER
DATE:	10/23/2023
SCALE AT 22" x 34":	

NTS

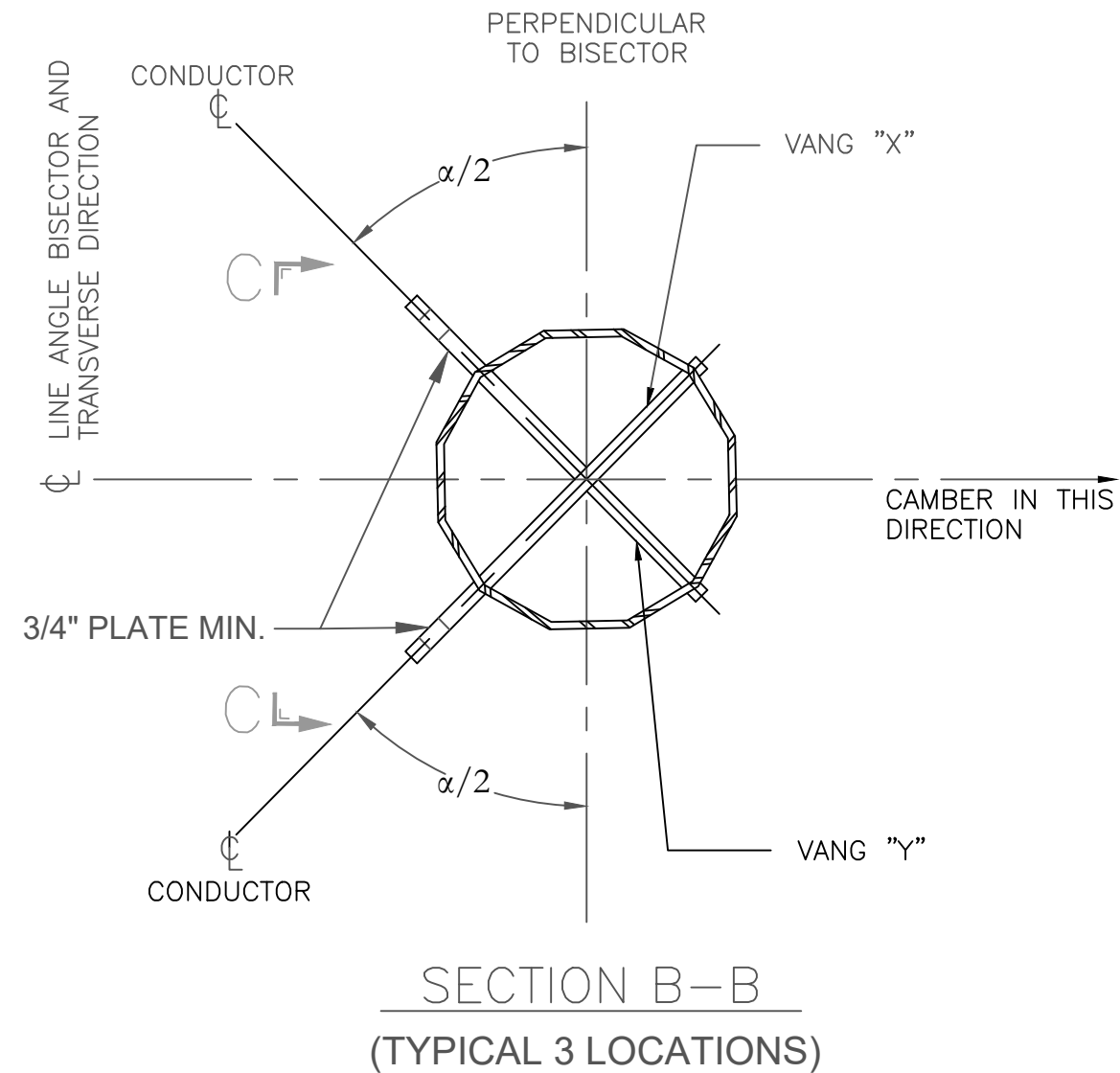
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STRUCTURE INFORMATION								
STRUCTURE NUMBER	LINE ANGLE α (DEG.)	STRUCTURE HEIGHT (FT.)	DISCS/ STRING	DISCS/ LOOP STRING	STRINGS/ PHASE	LOOP STRINGS/ PHASE	DESIGN VOLTAGE	OPERATING VOLTAGE
GC STR. 1	4°25'25"	135'-0"	18	18	4	1	345 kV	345 kV
GC STR. 2	0°0'0"	135'-0"	18	18	4	1	345 kV	345 kV

NOTES:
ALL INSULATOR DISCS TO BE TOUGHENED GLASS.
ALL POLES TO BE GALVANIZED STEEL UNLESS OTHERWISE REQUESTED TO BE CORTEN WEATHERED STEEL.
ALL POLES INSTALLED ON CAISSON FOUNDATION WITH 1'-0" REVEAL.



PRELIMINARY
NOT FOR CONSTRUCTION



PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	10/23/2023	ISSUED FOR 94-C PERMIT
2	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

MILL POINT SOLAR I
PROJECT

PROJECT LOCATION:

TOWN OF GLEN
MONTGOMERY CO., NY

SHEET TITLE & DESCRIPTION:

V1.ST.D1.MOD
VERTICAL STEEL POLE
DEAD-END

PROJ NUM:	XXXXXX
DES:	B. HACKLEY
DWN:	B. HACKLEY
CHK:	K. DRZEWIECKI
APV:	A. JAEGER
DATE:	10/23/2023
SCALE AT 22" x 34":	

NTS

SHEET NO:

MPS-T-103-03

REV:

1