

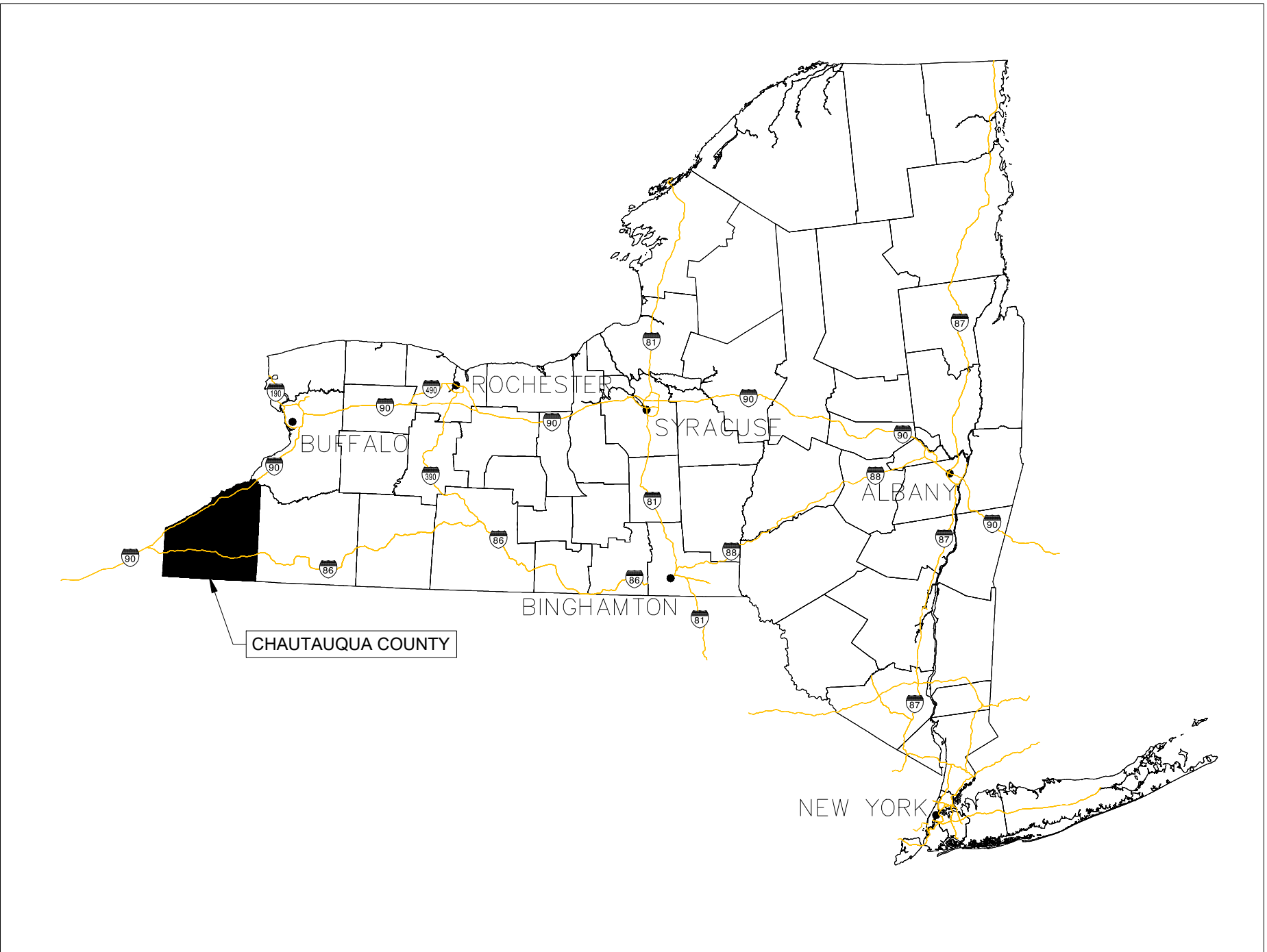
Collector Substation															
Dwg. No.	Drawing Title	Date	Rev.	Date	Rev.	Date	Rev.	Date	Rev.	Date	Rev.	Date	Rev.	Date	Rev.
SRS-E-200-00_SUP_A	230-34.5kV Collector Substation Cover Sheet	11/24/21	A	12/08/21	B	01/07/22	C								
SRS-E-201-01_SUP_A	230-34.5kV Collector Substation Switching Diagram	11/24/21	A												
SRS-E-210-01_SUP_A	230-34.5kV Collector Substation General Arrangement	11/24/21	A	12/08/21	B	01/07/22	C								
SRS-E-211-01_SUP_A	230-34.5kV Collector Substation Bus Section A	11/24/21	A												
SRS-E-211-02_SUP_A	230-34.5kV Collector Substation Bus Section A (Cont'd) & B	11/24/21	A	12/08/21	B										
SRS-E-211-03_SUP_A	230-34.5kV Collector Substation Bus Section C	11/24/21	A												
SRS-E-211-04_SUP_A	230-34.5kV Collector Substation Bus Section D-F	11/24/21	A												
SRS-E-211-05_SUP_A	230-34.5kV Collector Substation Control Enclosure Sections G-K	11/24/21	A	12/08/21	B	01/07/22	C								
SRS-E-211-06_SUP_A	230-34.5kV Collector Substation Sound Wall Sections L-M	01/07/22	A												
SRS-E-212-01_SUP_A	POI Substation General Arrangement	11/24/21	A	12/08/21	B										
SRS-E-213-01_SUP_A	POI Substation Section A	11/24/21	A												
SRS-E-213-02_SUP_A	POI Substation Section A (Cont'd)	11/24/21	A												
SRS-E-213-03_SUP_A	POI Substation Section B	11/24/21	A												
SRS-E-213-04_SUP_A	POI Substation Section B (Cont'd)	11/24/21	A												
SRS-E-213-05_SUP_A	POI Substation Section C	11/24/21	A												
SRS-E-213-06_SUP_A	POI Substation Section D & E	11/24/21	A												
SRS-E-213-07_SUP_A	POI Substation Section F, G, H & J	11/24/21	A	01/07/22	B										
SRS-E-214-01_SUP_A	230-34.5kV Collector Substation Lighting Plan	11/24/21	A	01/07/22	B										
SRS-E-214-02_SUP_A	POI Substation Lighting Plan	11/24/21	A	01/07/22	B										
SRS-E-214-03_SUP_A	POI/Collector Lighting Plan	12/08/21	A	01/07/22	B										
SRS-E-220-01_SUP_A	230KV Transmission Line, Plan and Profile	12/08/21	A												
SRS-E-220-02_SUP_A	230KV Transmission Line, Plan and Profile	12/08/21	A												

**
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 ENGINEER OF RECORD: JOSH BERKOW, LICENSE #089635

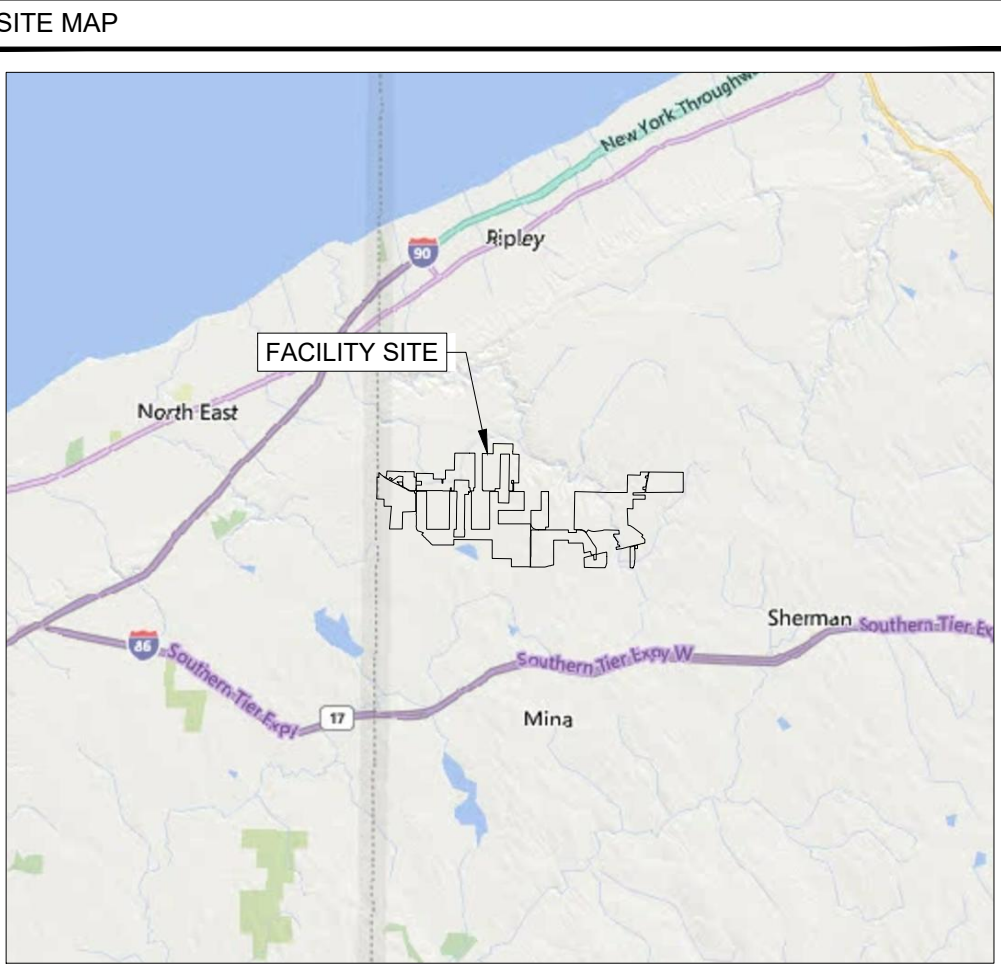
SOUTH RIPLEY SOLAR PROJECT 230-34.5KV COLLECTOR SUBSTATION

PREPARED FOR: CONNECTGEN CHAUTAUQUA COUNTY LLC
 PREPARED BY: MOTT MACDONALD NY, INC
 ISSUE DATE: JANUARY 07, 2022
 ISSUE STATUS: ISSUED FOR 94-C - SUPPLEMENT A

PROJECT DATA:
 LOCATION: CHAUTAUQUA COUNTY, NY
 PROJECTION: STATE PLANE NAD 83 (NY83-WF)
 POWER GENERATED: 270 MWac



THE STATE OF NEW YORK



C	01/07/2022	DT	ISSUED FOR 94-C	DH	KS
B	12/08/2021	DT	ISSUED FOR 94-C	DH	KS
A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS
Rev	Date	Drawn	Description	Ch'k'd	App'd

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South Ripley
SOLAR PROJECT

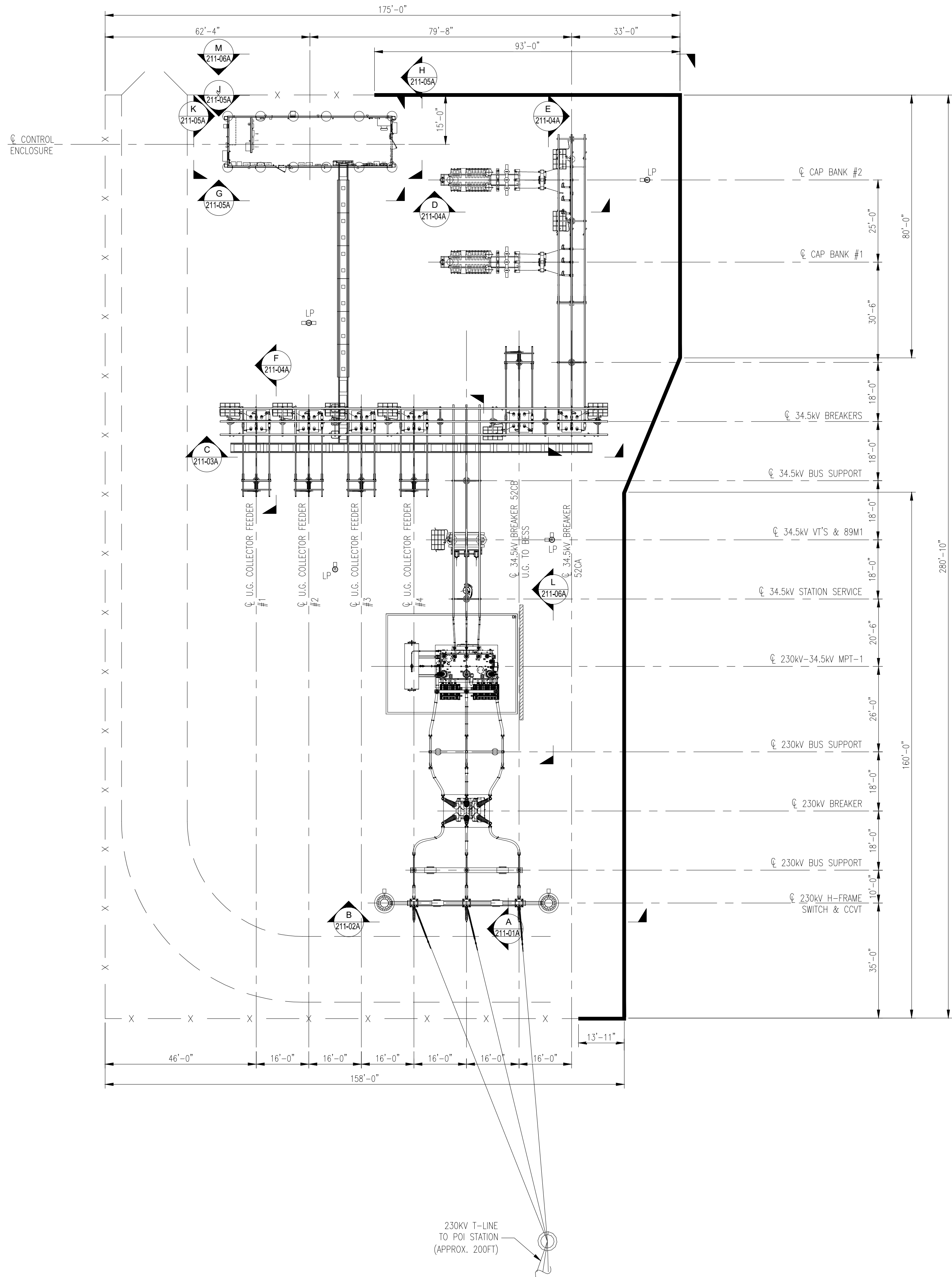
Title

SOUTH RIPLEY SOLAR
230-34.5KV COLLECTOR SUBSTATION
COVER SHEET
SUPPLEMENTAL A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed	DT	Eng check	KS
	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
	Scale at ANSI D		Date	Rev
	NONE		12/8/2021	C
	Drawing Number			
SRS-E-200-00_SUP_A				

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CONCEPTUAL - NOT FOR CONSTRUCTION



VOLTAGE		MINIMUM METAL-TO-METAL CLEARANCE PHASE-TO-PHASE	DESIGN CENTERLINE TO CENTERLINE PHASE SPACING FOR RIGID BUS	CLEARANCE TO GROUNDED PARTS FOR RIGID BUS RECOMMENDED	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS AND GROUND FOR PERSONAL SAFETY	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS AND ROADWAY
KV	BIL					
230	900	7'-5"	11'-0"	6'-4"	15'-0"	27'-0"
34.5	200	1'-6"	4'-0"	1'-3"	10'-0"	22'-0"

- Notes
1. THE EQUIPMENT AND LAYOUT SHOWN IS FOR CONCEPTUAL USE ONLY.
 2. ELECTRICAL EQUIPMENT WILL UTILIZE GALVANIZED STEEL MATERIAL AND EQUIPMENT COLOR WILL BE NATURAL GALVANIZED STEEL, WHITE OR ANSI GREY. FINAL MATERIAL TYPE AND FINISH COLOR DETAILS WILL BE UPDATED DURING DETAILED DESIGN.
 3. SOUND WALL WILL UTILIZE NATURAL STONE OR FLAT PRECAST MATERIAL WITH A GREY, NATURAL, OR TAN COLOR (OR SIMILAR). FINAL MATERIAL TYPE AND FINISH COLOR DETAILS WILL BE UPDATED DURING FINAL DESIGN.

- Legend
- ACCESS PATH
 - SHIELD WIRE
 - x-x- FENCE
 - PEDESTRIAN RATED TRENCH
 - HS 20 VEHICLE RATED TRENCH
 - LIGHT FIXTURE
 - BOLLARD
 - SP SHIELD POLE
 - LP LIGHT POLE
 - 12' SOUND WALL
 - 20' SOUND WALL

Reference Drawings

C	01/07/2022	DT	ISSUED FOR 94-C	DH	KS
B	12/08/2021	DT	ISSUED FOR REVIEW	DH	KS
A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS
Rev	Date	Drawn	Description	Ch'k'd	App'd

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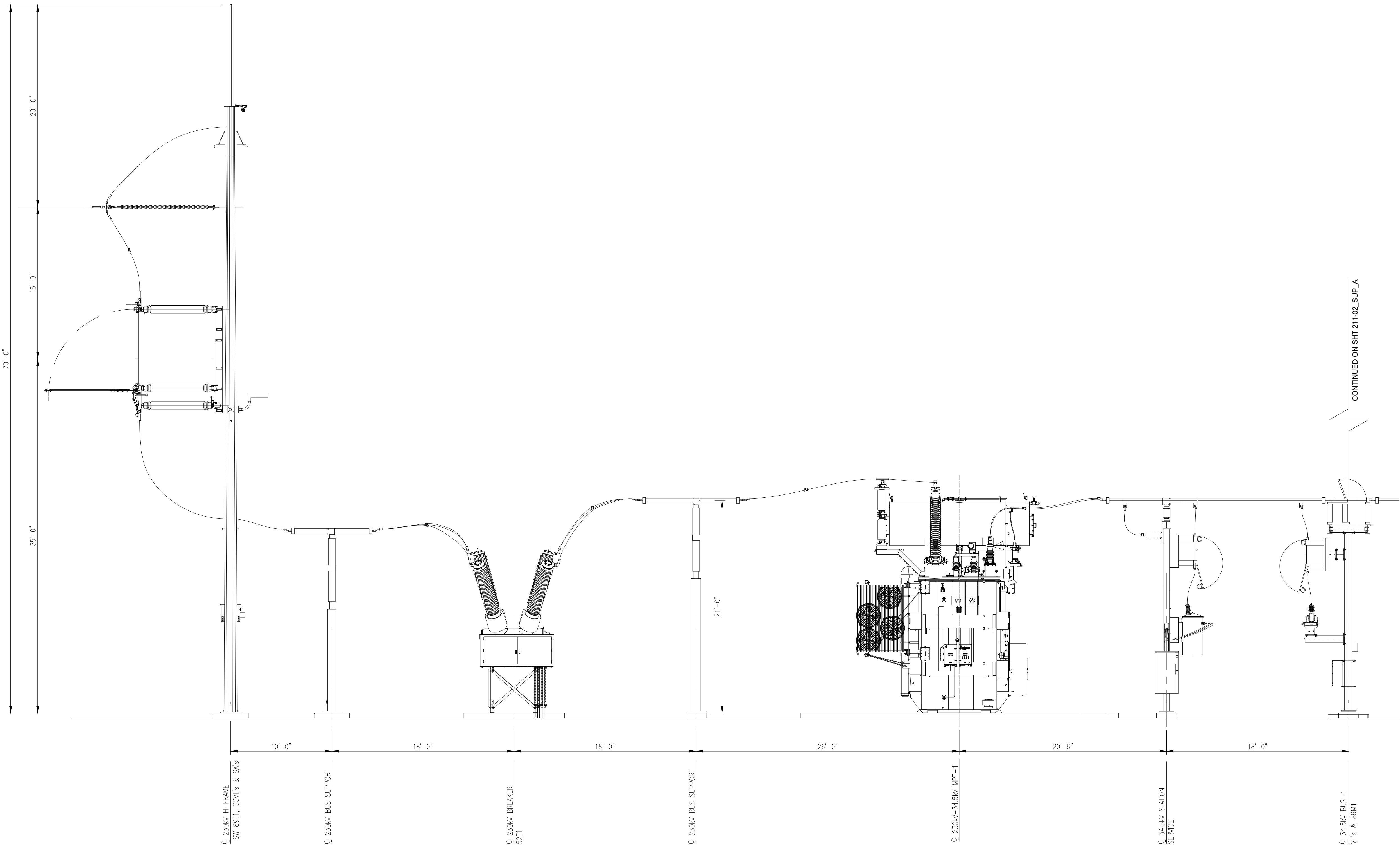
South Ripley
SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR
230-34.5KV COLLECTOR SUBSTATION
GENERAL ARRANGEMENT
SUPPLEMENTAL A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed	DT	Eng check	KS
	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
	Scale at ANSI D 1" = 20'	Date 10/21/2021	Rev C	
	Drawing Number SRS-E-210-01_SUP_A			

CONCEPTUAL-NOT FOR CONSTRUCTION



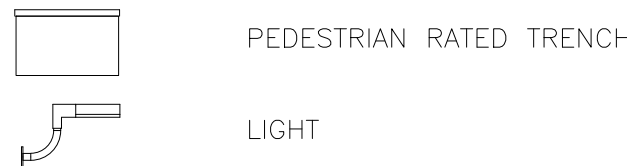
SECTION
3/16"=1'-0"

A
210-01A

Notes

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Legend



Reference Drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS

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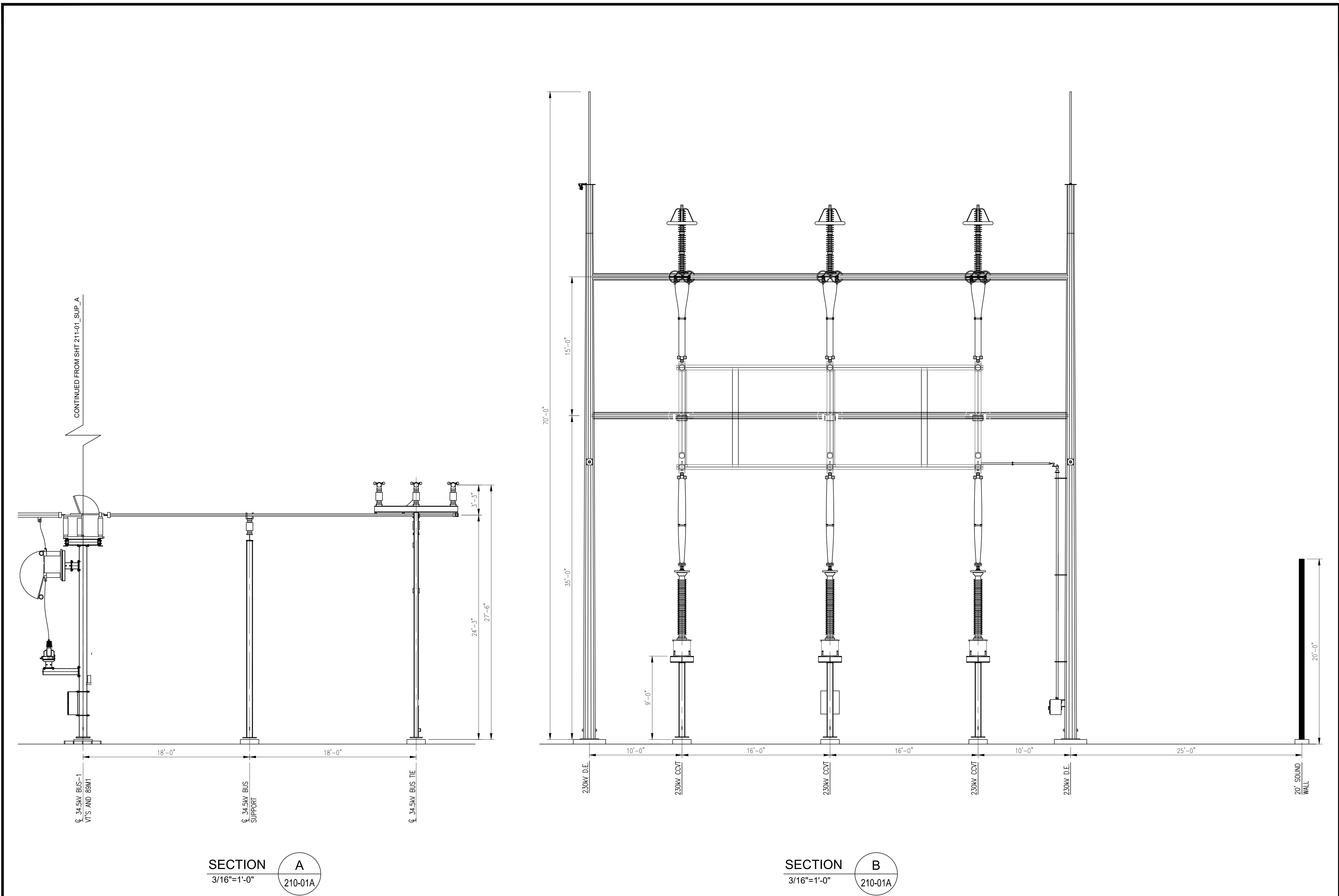
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SOUTH RIPLEY SOLAR
230-34.5KV COLLECTOR SUBSTATION
SECTION A
SUPPLEMENTAL A

PRELIMINARY
NOT FOR
CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR
FABRICATION

Designed	DT	Eng check	KS
Drawn	DT	Approved	KS
Dwg check	DH	Project Mngr	RA
Scale at ANSI D AS NOTED	Date 11/12/2021	Rev A	
Drawing Number SRS-E-211-01_SUP_A			

CONCEPTUAL-NOT FOR CONSTRUCTION



SECTION A
3/16"=1'-0"
210-01A

SECTION B
3/16"=1'-0"
210-01A

Notes

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Legend

20' SOUND WALL

Reference Drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
B	12/08/2021	DT	ISSUED FOR REVIEW	DH	KS
A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS

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SOLAR PROJECT

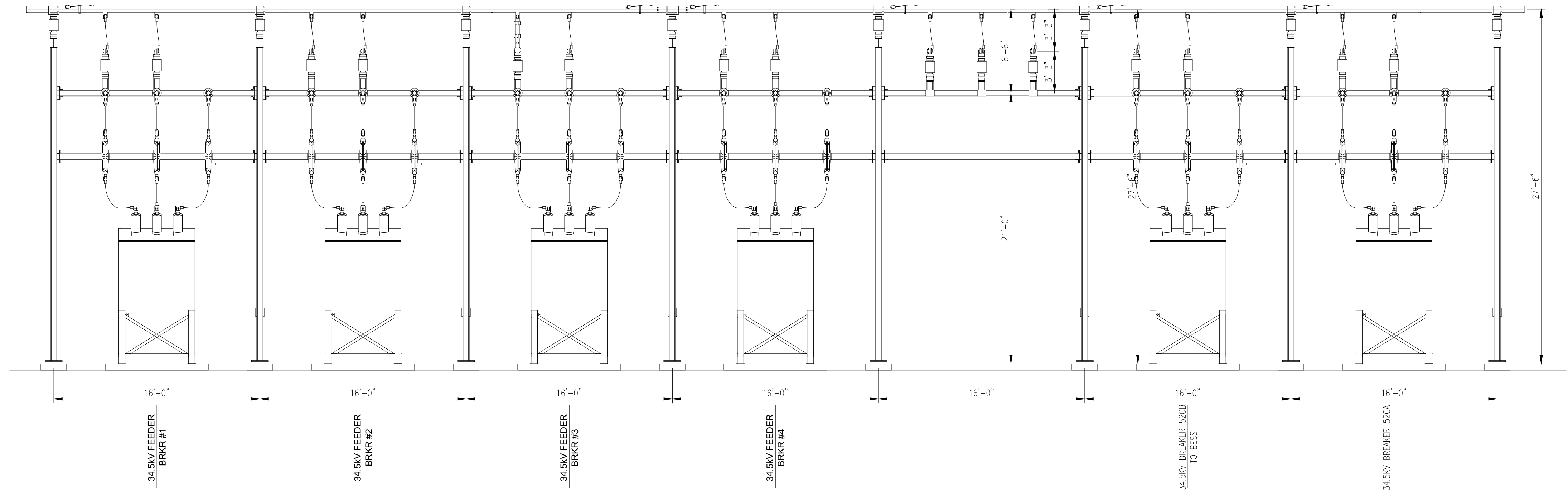
Title

SOUTH RIPLEY SOLAR
230-34.5KV COLLECTOR SUBSTATION
SECTION A (CONT'D) & B
SUPPLEMENTAL A

PRELIMINARY
NOT FOR
CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR
FABRICATION

Designed	DT	Eng check	KS
Drawn	DT	Approved	KS
Dwg check	DH	Project Mngr	RA
Scale at ANSI D	Date	Rev	B
AS NOTED	11/12/2021		

Drawing Number
SRS-E-211-02_SUP_A



SECTION C
3/16"=1'-0" 210-01A

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

Legend

PEDESTRIAN RATED TRENCH

LIGHT

Reference Drawings

A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS
Rev	Date	Drawn	Description	Ch'k'd	App'd

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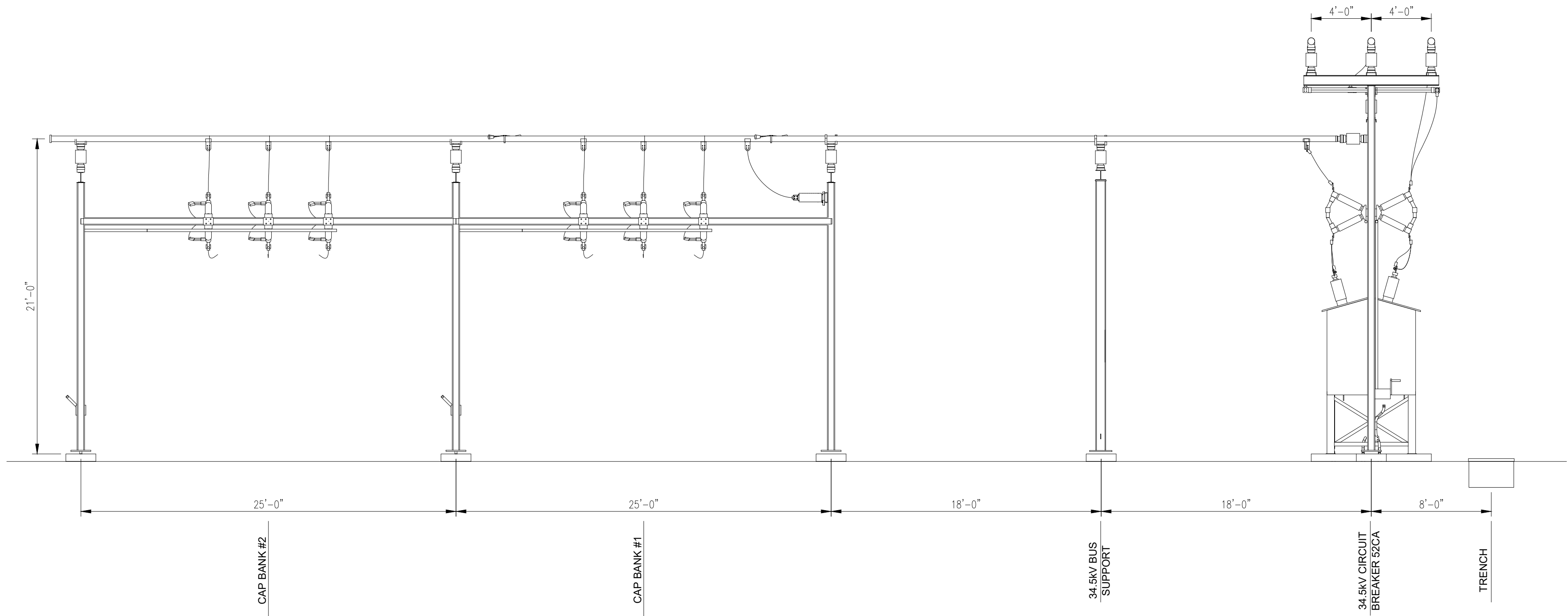
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SOLAR PROJECT

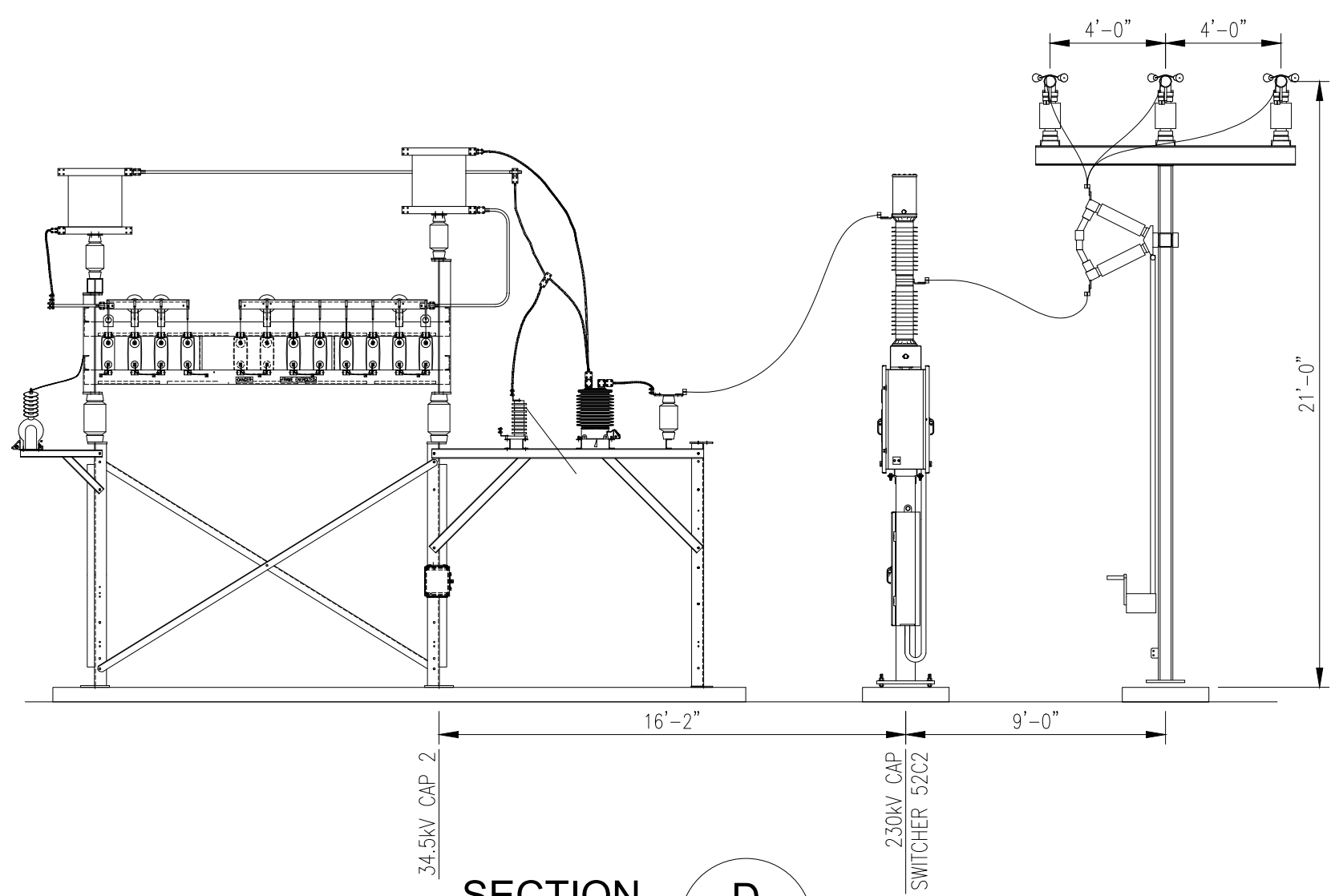
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SOUTH RIPLEY SOLAR
230-34.5KV COLLECTOR SUBSTATION
SECTION C
SUPPLEMENTAL A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed	DT	Eng check	KS
	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
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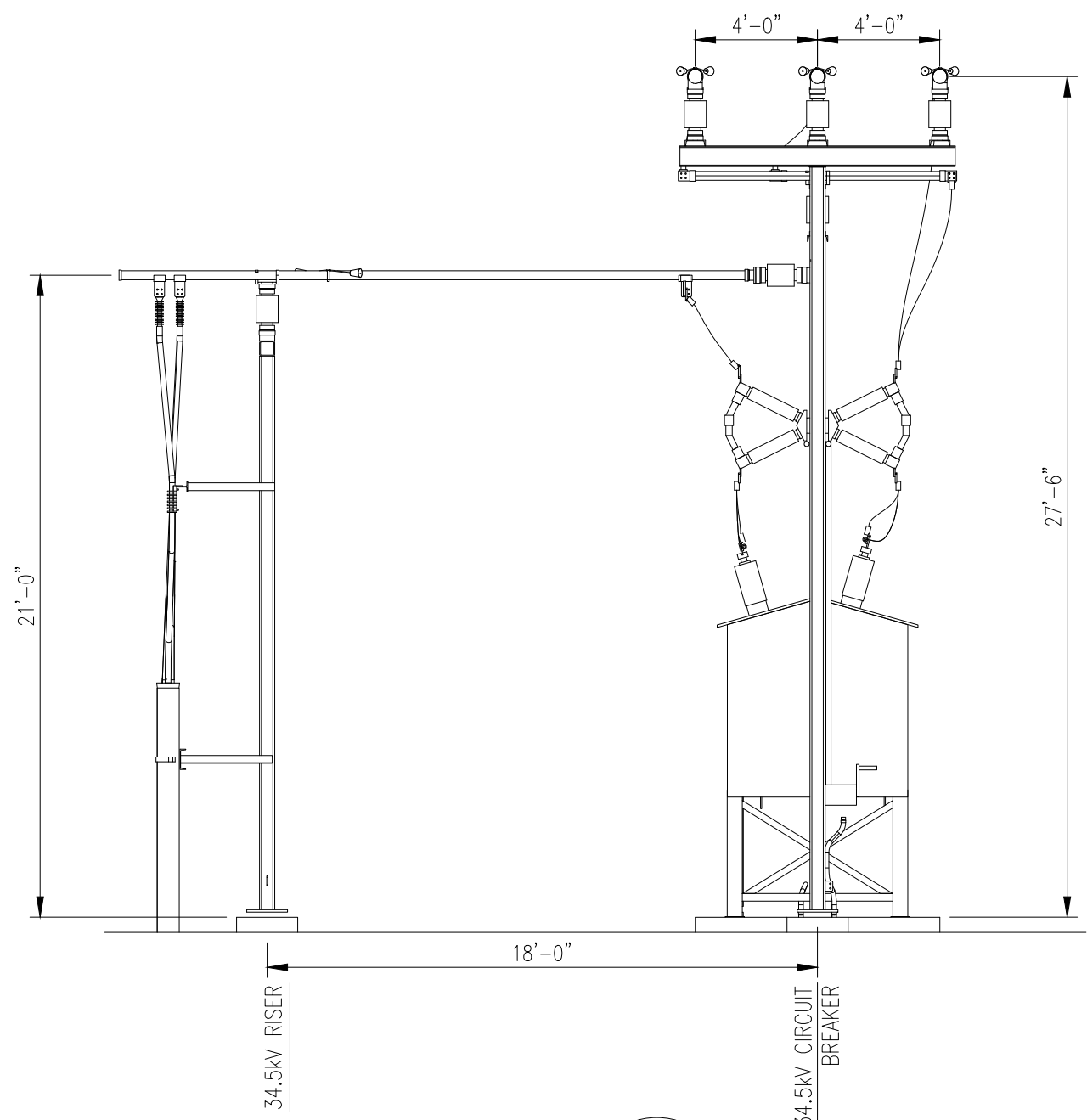
CONCEPTUAL-NOT FOR CONSTRUCTION



SECTION E
3/16"=1'-0"



SECTION D
3/16"=1'-0"



SECTION F
3/16"=1'-0"

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

Legend

PEDESTRIAN RATED TRENCH

Reference Drawings

A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS
Rev	Date	Drawn	Description	Ch'k'd	App'd

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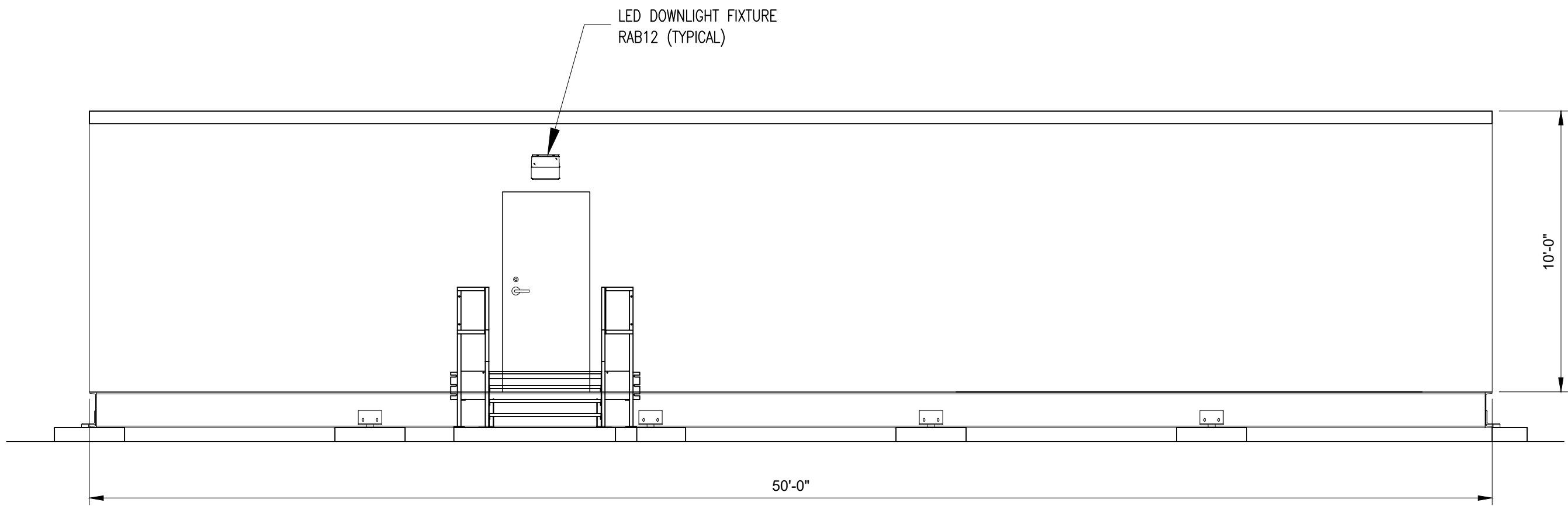
South Riple
SOLAR PROJECT

Title

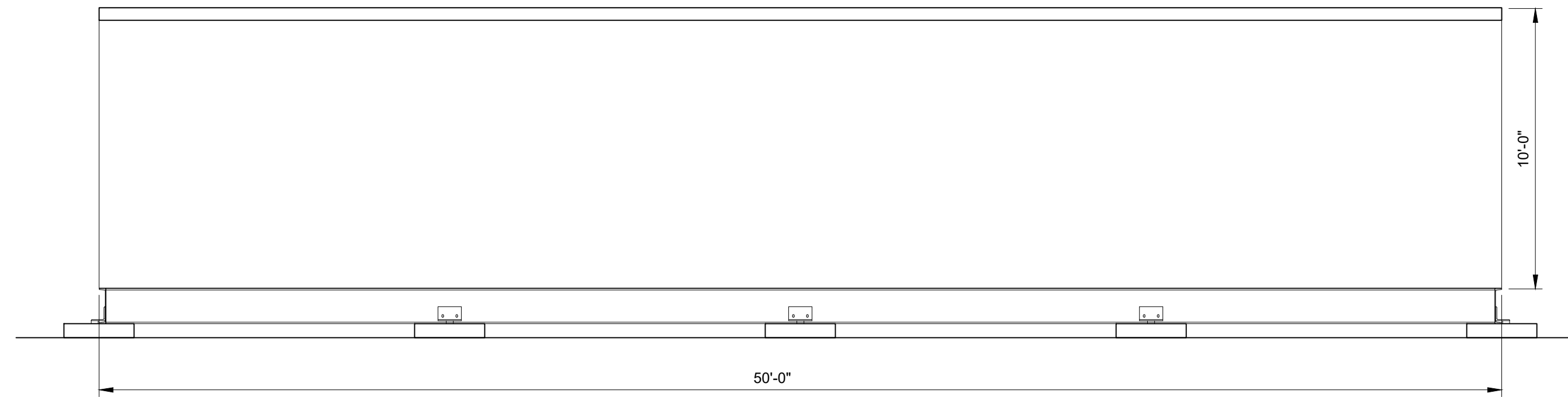
SOUTH RIPLEY SOLAR
230-34.5KV COLLECTOR SUBSTATION
SECTIONS D-F
SUPPLEMENTAL A

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	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
	Scale at ANSI D AS NOTED	Date 11/12/2021	Rev A	
	Drawing Number SRS-E-211-04_SUP_A			

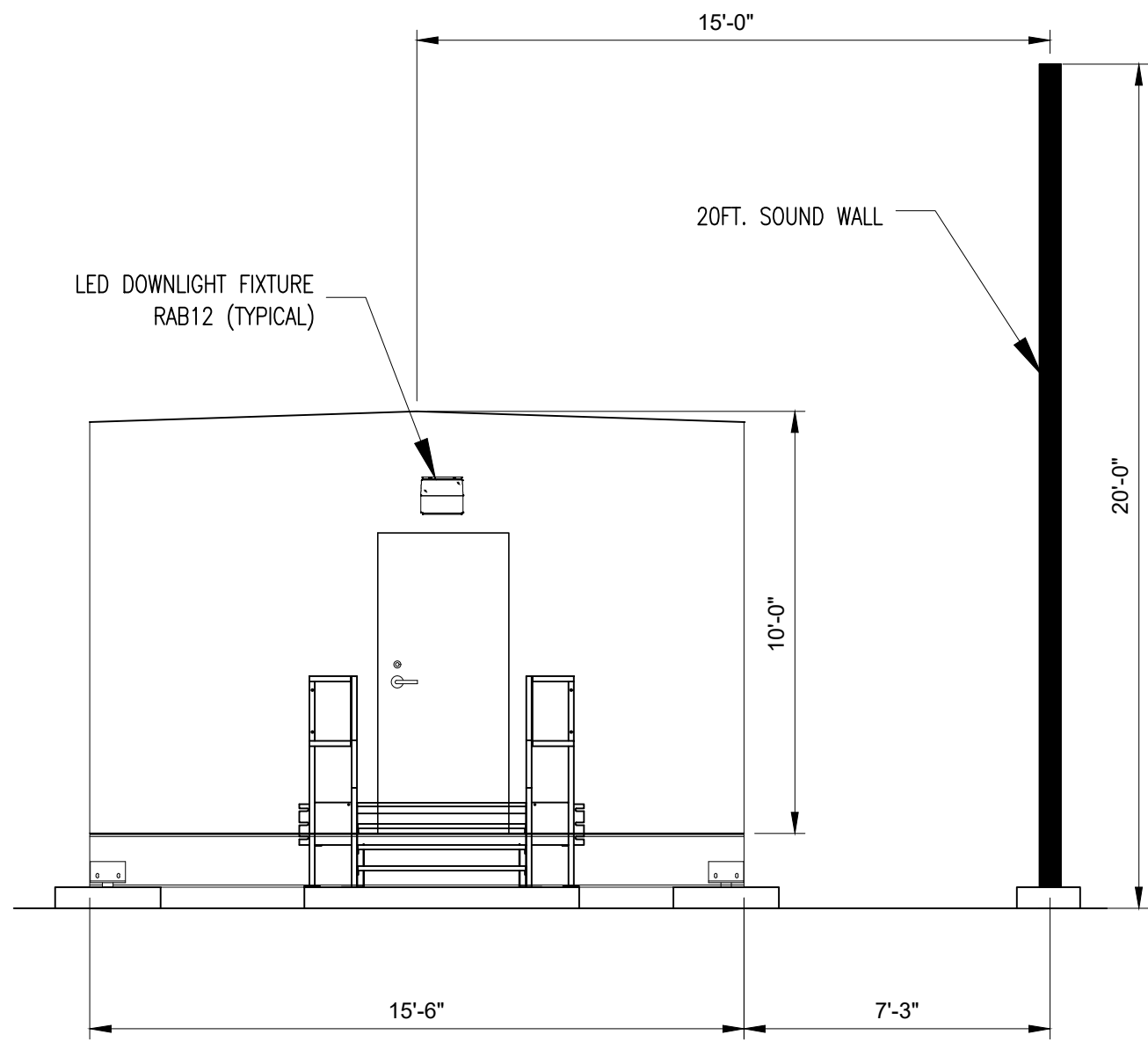
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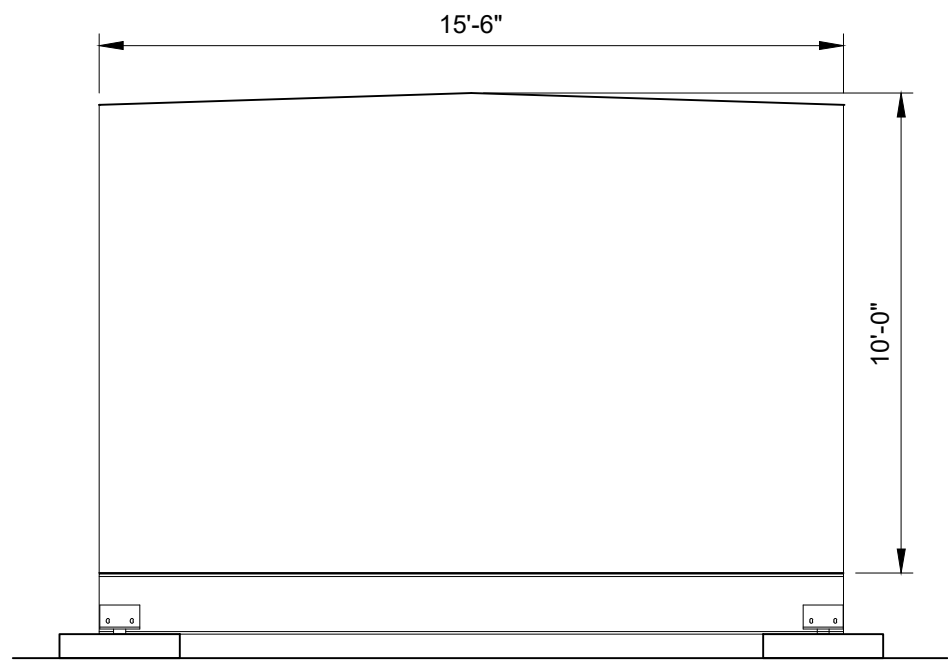
SECTION G
1/4"=1'-0" 210-01A



SECTION J
1/4"=1'-0" 210-01A



SECTION H
1/4"=1'-0" 210-01A



SECTION K
1/4"=1'-0" 210-01A

- Notes
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Legend

20' WALL

Reference Drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
C	01/07/2022	DT	ISSUED FOR 94-C	DH	KS
B	12/08/2021	DT	ISSUED FOR REVIEW	DH	KS
A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS

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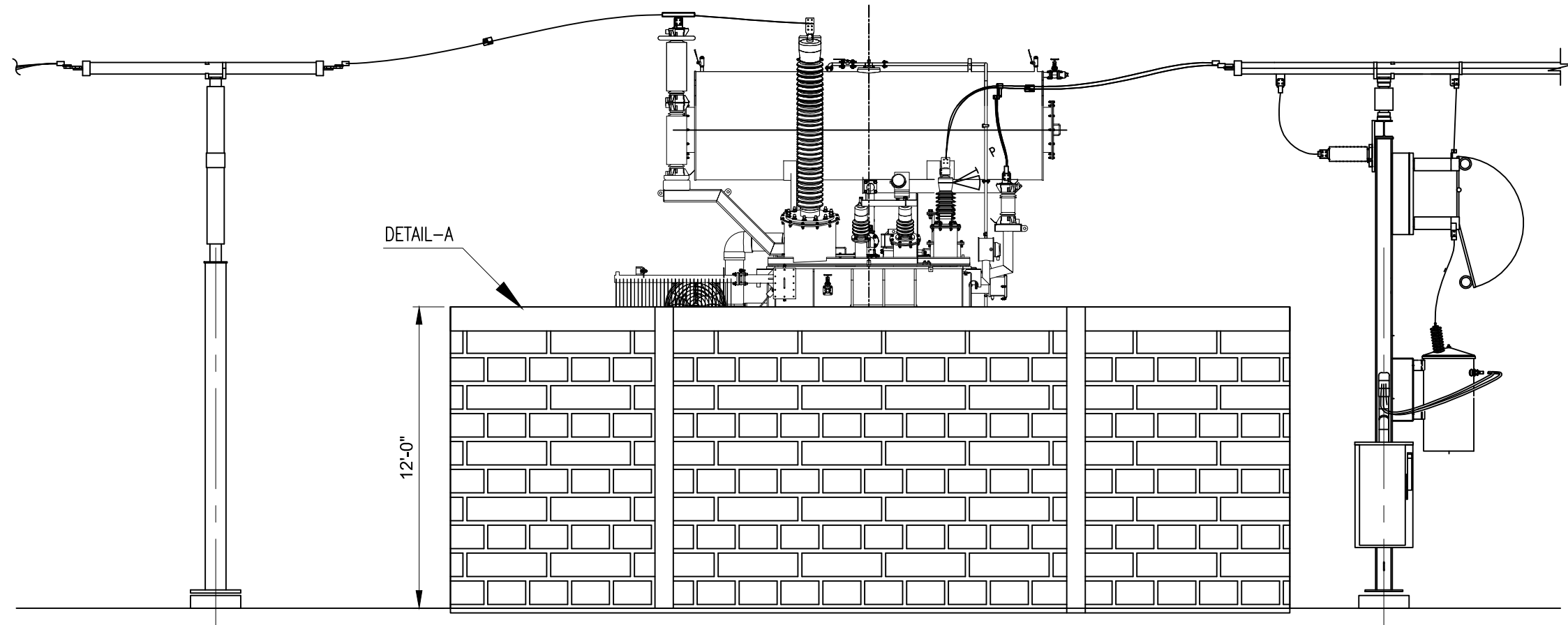
South Ripley
SOLAR PROJECT

Title

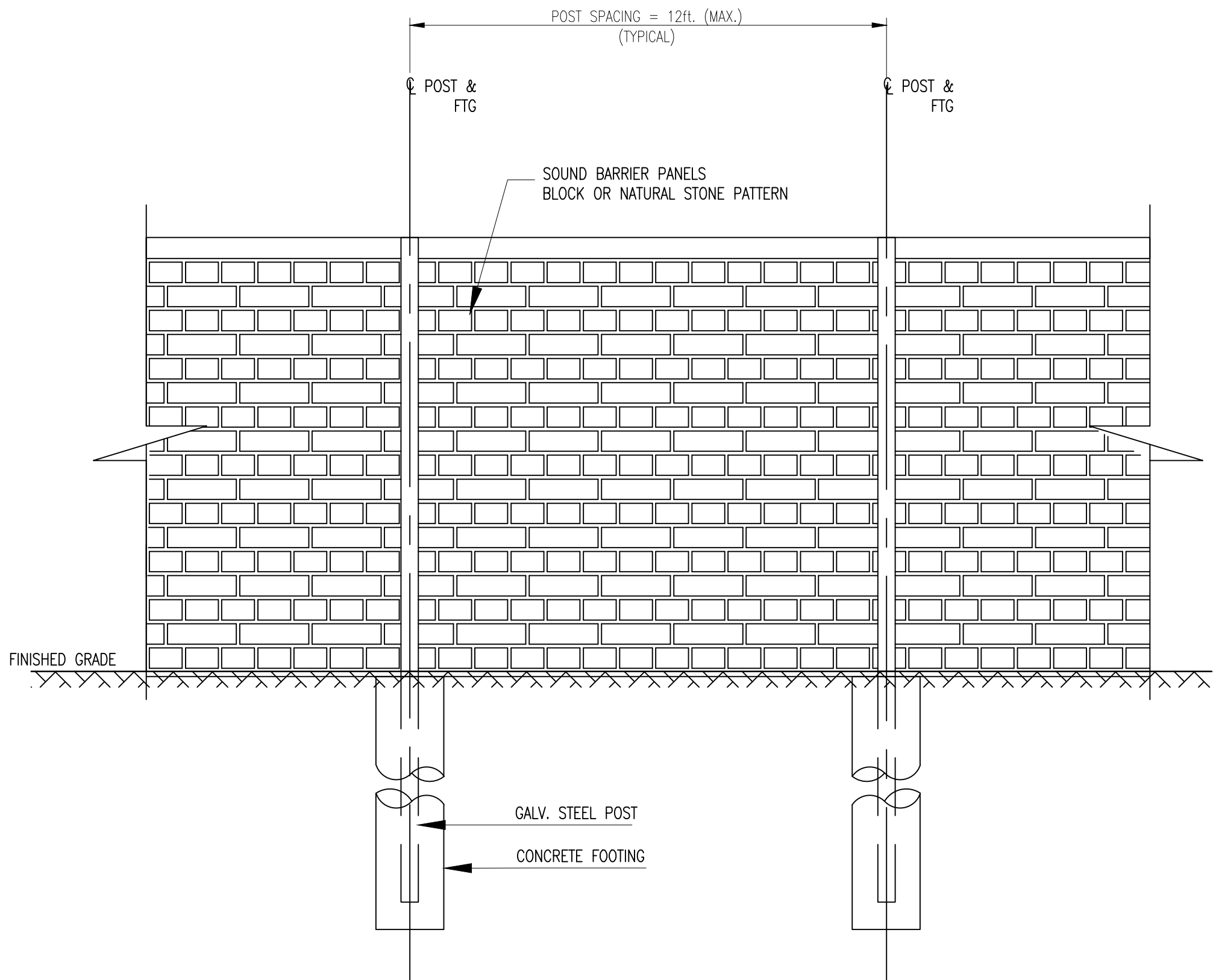
SOUTH RIPLEY SOLAR
230-34.5KV COLLECTOR SUBSTATION
CONTROL ENCL. SECTIONS G-K
SUPPLEMENTAL A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed	DT	Eng check	KS
	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
	Scale at ANSI D	Date	Rev	C
	AS NOTED	11/12/2021		
Drawing Number		SRS-E-211-05_SUP_A		

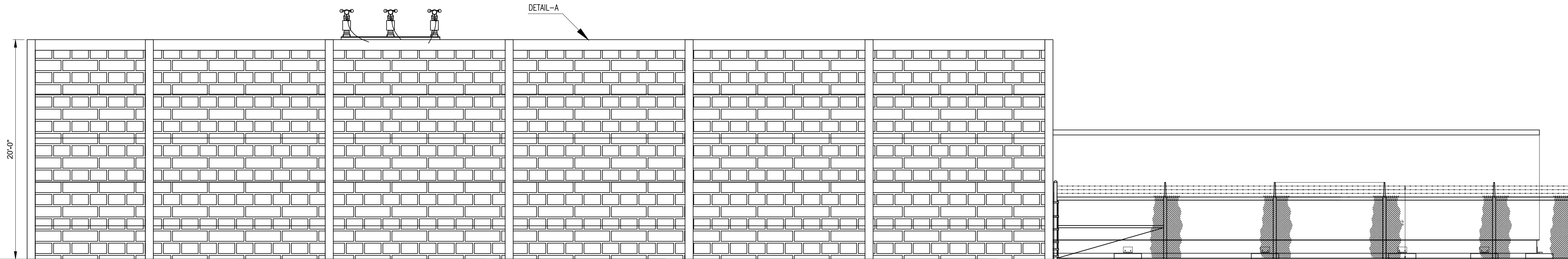
CONCEPTUAL-NOT FOR CONSTRUCTION



SECTION L
3/16"=1'-0" 210-01A



SOUND WALL (TYPICAL)
DETAIL A
N.T.S. 211-05A



SECTION M
3/16"=1'-0" 210-01A

- Notes
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Legend

Reference Drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
A	01/07/2022	DT	ISSUED FOR 94-C	DH	KS

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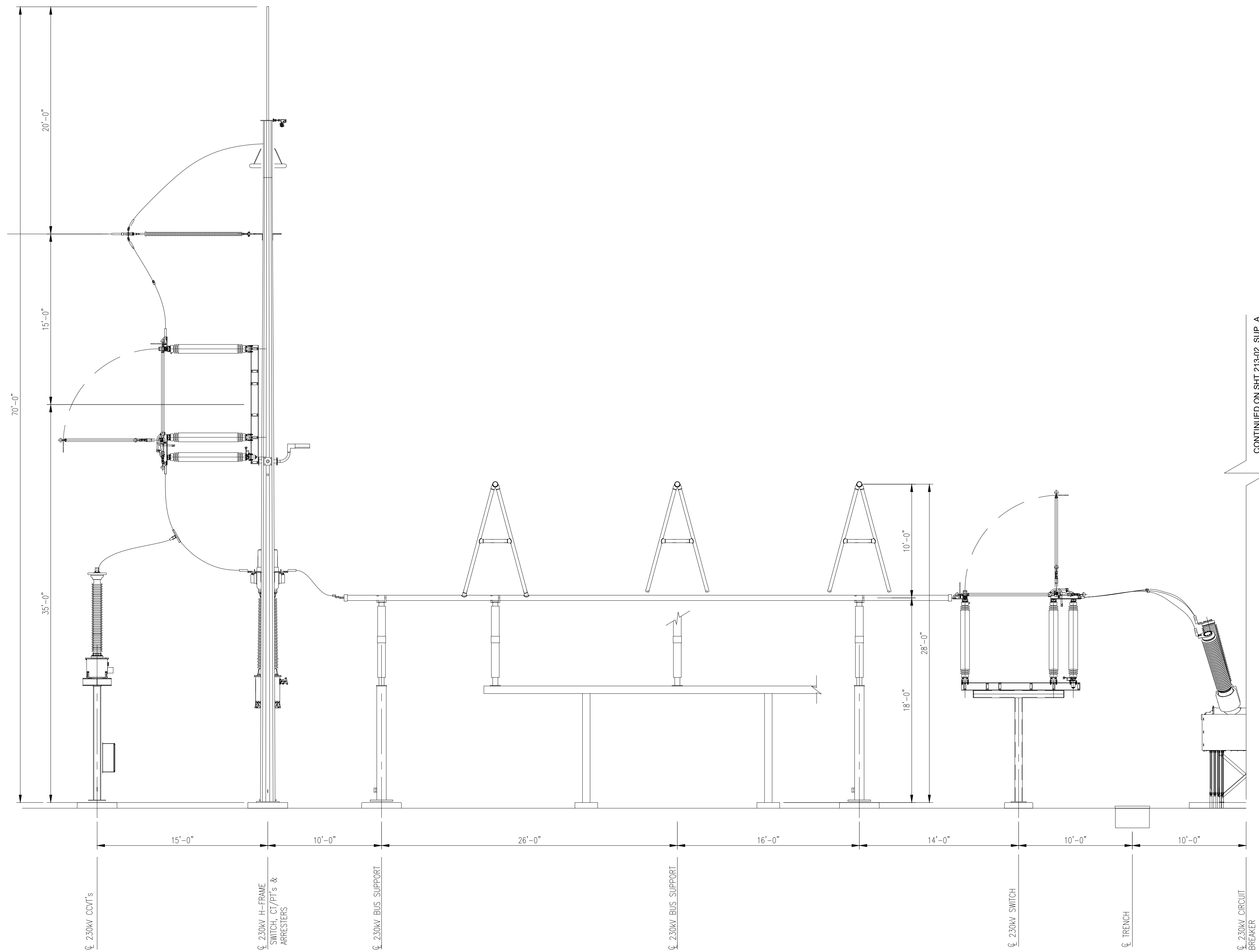
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Title
SOUTH RIPLEY SOLAR
230-34.5KV COLLECTOR SUBSTATION
SOUND WALL SECTIONS L-M
SUPPLEMENTAL A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed	DT	Eng check	KS
	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
	Scale at ANSI D	Date	Rev	
	AS NOTED	11/12/2021		A
	Drawing Number SRS-E-211-06_SUP_A			



SECTION A
3/16"=1'-0"

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- Legend
- PEDESTRIAN RATED TRENCH
 - LIGHT

Reference Drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS

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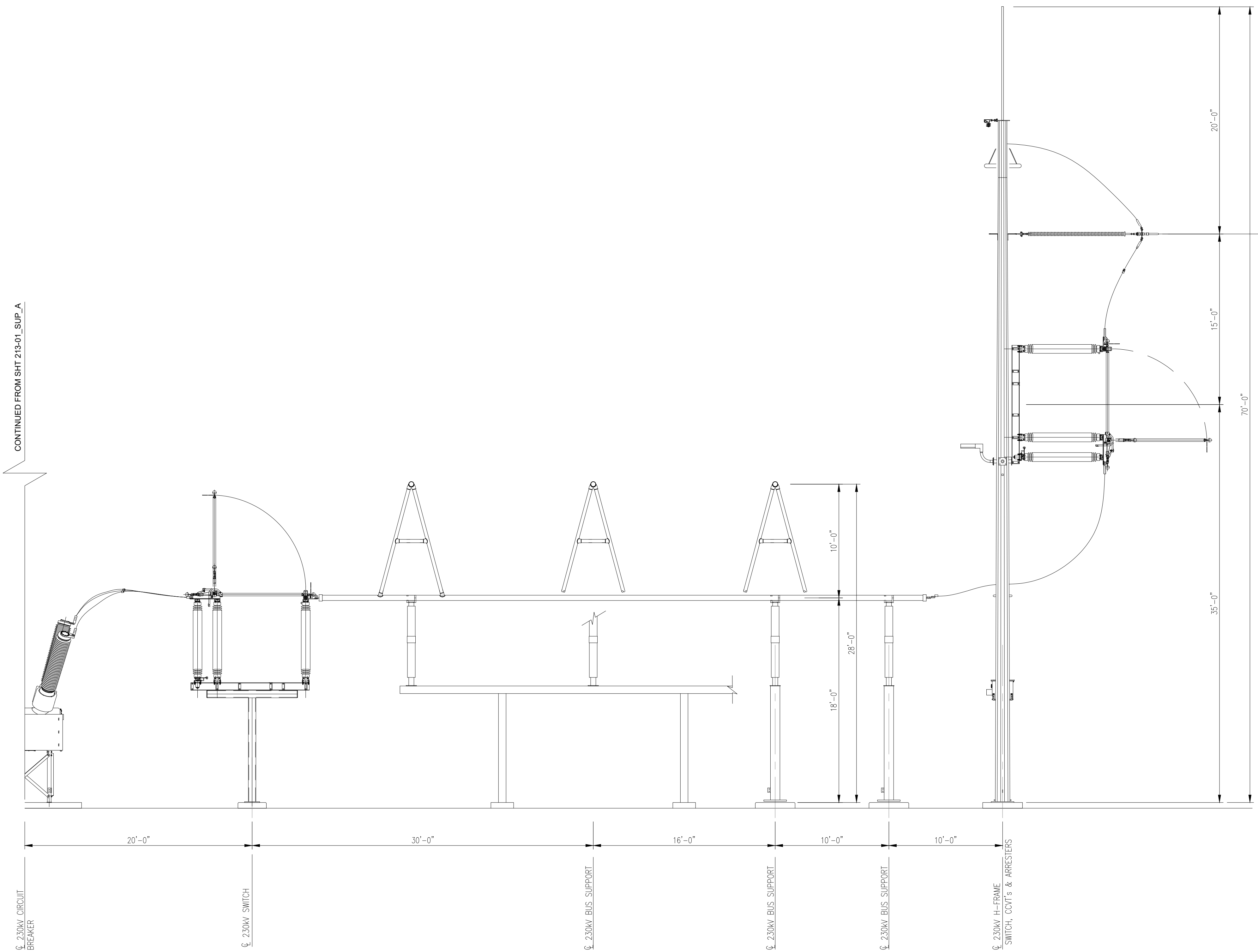
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South Riple
SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR
POI SUBSTATION
SECTION A
SUPPLEMENTAL A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed	DT	Eng check	KS
	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
	Scale at ANSI D AS NOTED	Date 11/15/2021	Rev A	
	Drawing Number SRS-E-213-01_SUP_A			



SECTION
3/16"=1'-0"

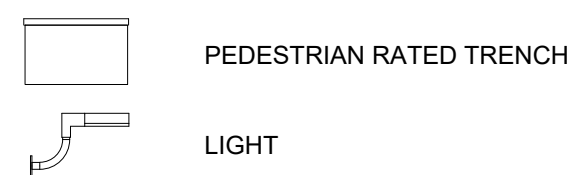
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212-01A

CONCEPTUAL-NOT FOR CONSTRUCTION

Notes

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Legend



Reference Drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS



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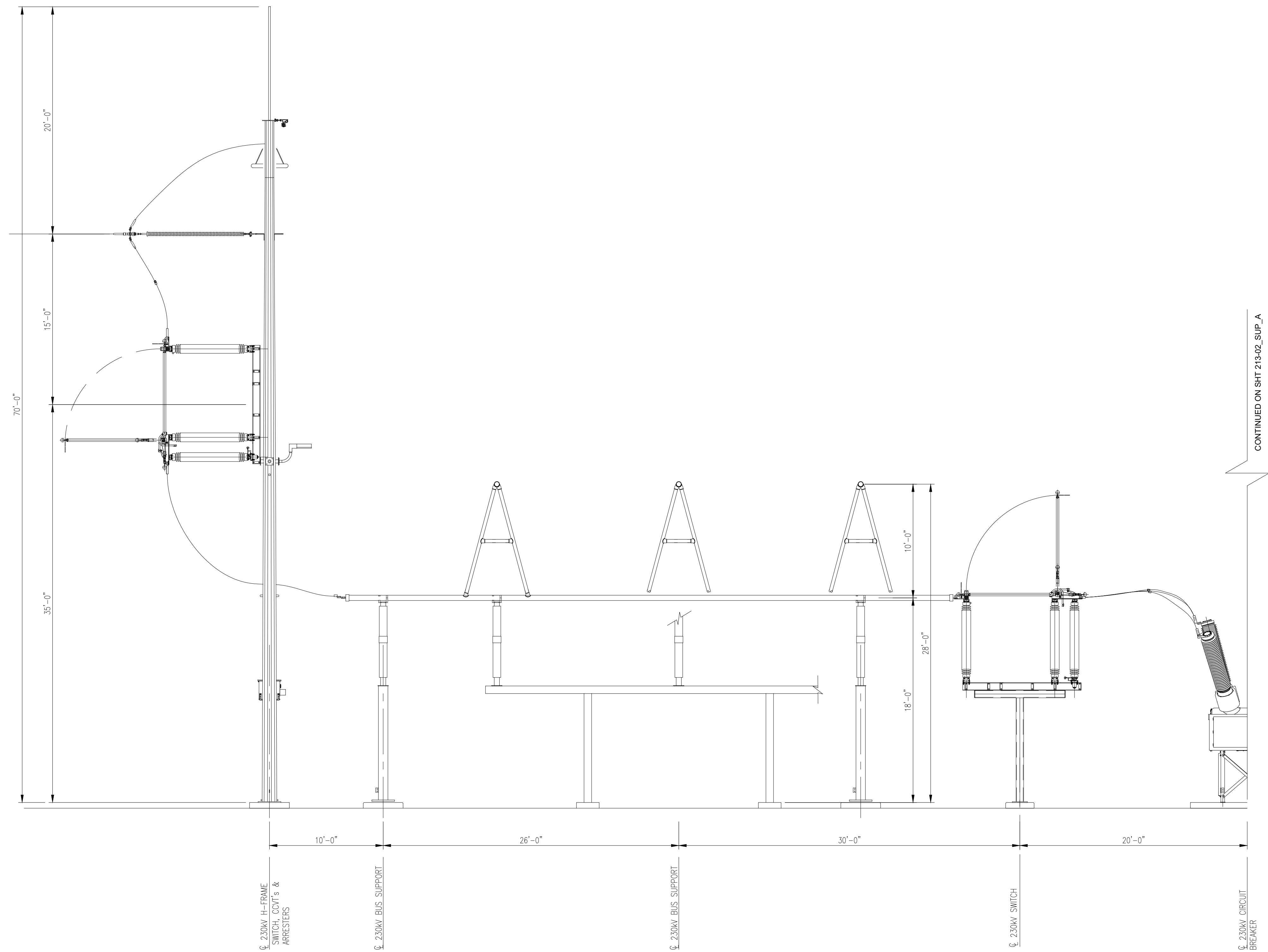


Title

SOUTH RIPLEY SOLAR
POI SUBSTATION
SECTION A (CONT'D)
SUPPLEMENTAL A

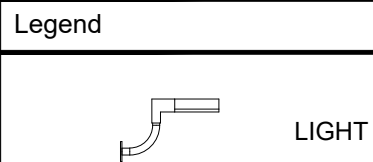
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CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR
FABRICATION

Designed	DT	Eng check	KS
Drawn	DT	Approved	KS
Dwg check	DH	Project Mngr	RA
Scale at ANSI D 1" = 20'	Date 11/12/2021	Rev A	
Drawing Number SRS-E-213-02_SUP_A			



SECTION B
3/16"=1'-0"
212-01A

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



Reference Drawings

A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS
Rev	Date	Drawn	Description	Ch'k'd	App'd

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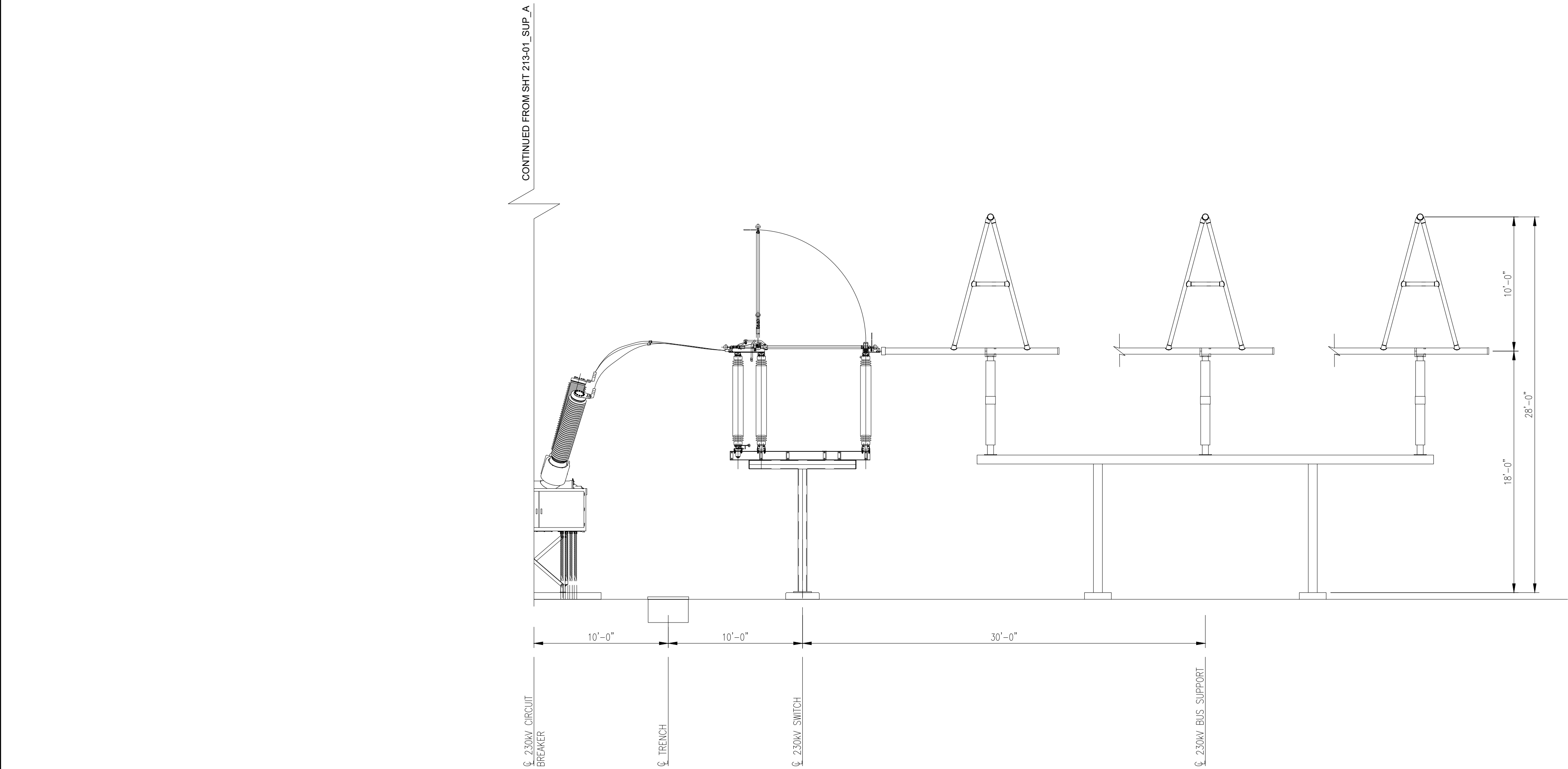
Client

Title

SOUTH RIPLEY SOLAR
POI SUBSTATION
SECTION B
SUPPLEMENTAL A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed	DT	Eng check	KS
	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
	Scale at ANSI D 1" = 20'	Date 11/15/2021	Rev A	
	Drawing Number SRS-E-213-03_SUP_A			

CONCEPTUAL-NOT FOR CONSTRUCTION



SECTION
3/16"=1'-0"

B
212-01A

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CONCEPTUAL-NOT FOR CONSTRUCTION

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

Legend

PEDESTRIAN RATED TRENCH

Reference Drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS

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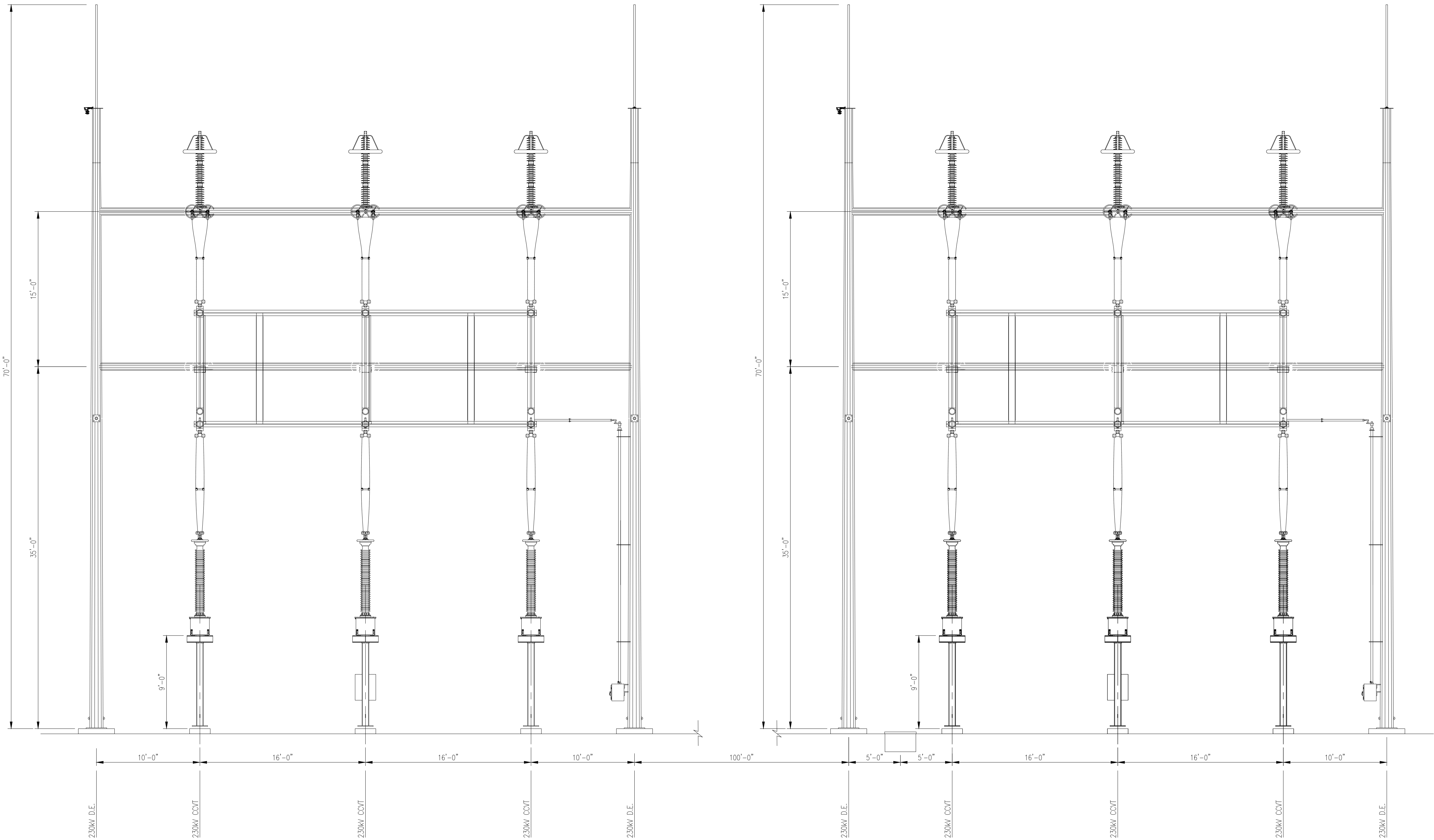
Client

South Ripley
SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR
POI SUBSTATION
SECTION B (CONT'D)
SUPPLEMENTAL A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed	DT	Eng check	KS
	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
	Scale at ANSI D AS NOTED	Date 11/15/2021	Rev A	
	Drawing Number SRS-E-213-04_SUP_A			



SECTION C
3/16"=1'-0"

C
212-01A

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

Legend

PEDESTRIAN RATED TRENCH

Reference Drawings

A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS
Rev	Date	Drawn	Description	Ch'k'd	App'd

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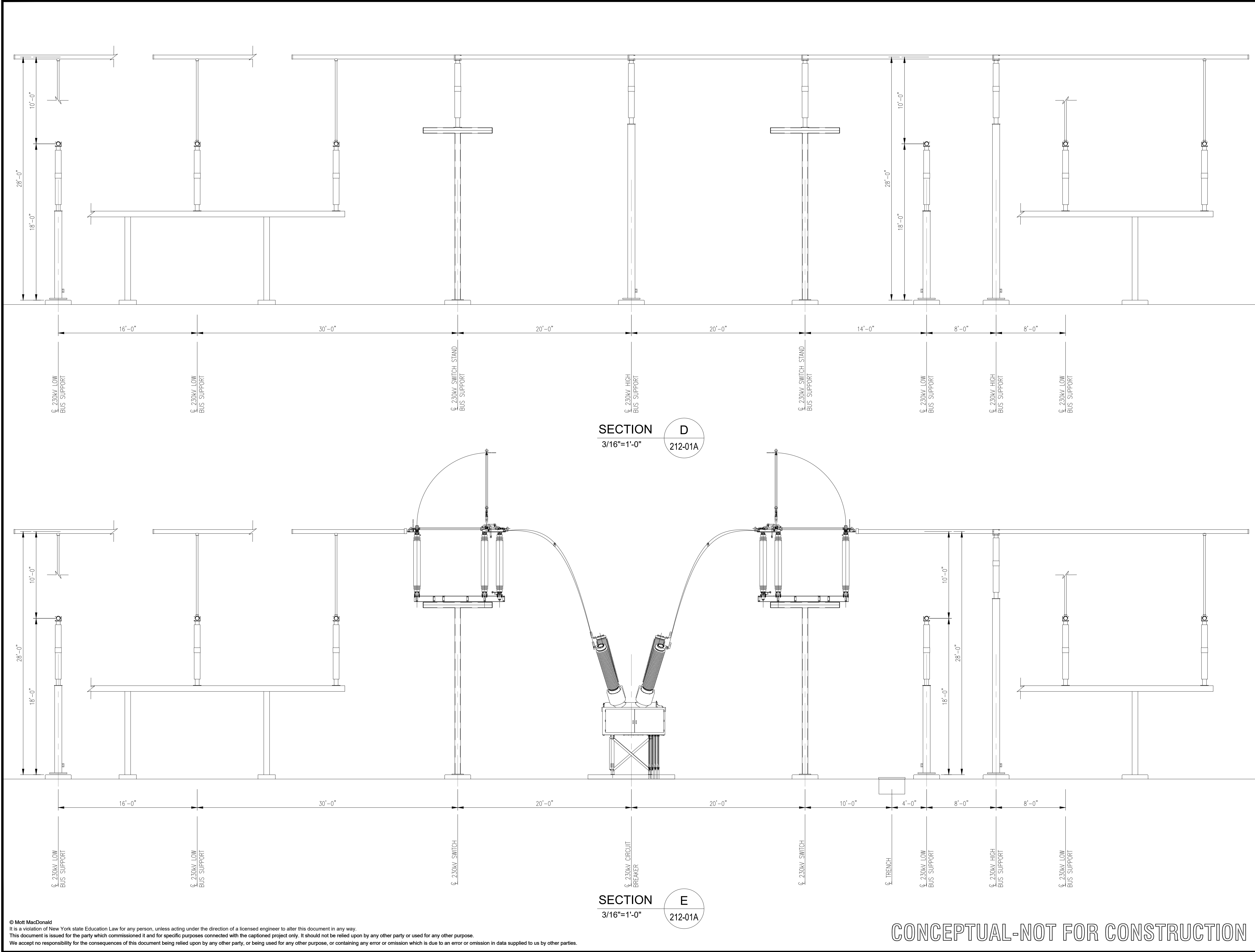
South Ripley
SOLAR PROJECT

Title

SOUTH RIPLEY SOLAR
POI SUBSTATION
SECTION C
SUPPLEMENTAL A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed	DT	Eng check	KS
	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
	Scale at ANSI D AS NOTED	Date 11/12/2021	Rev A	
	Drawing Number SRS-E-213-05_SUP_A			

CONCEPTUAL-NOT FOR CONSTRUCTION



Notes

- 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 GREY. FINAL MATERIAL TYPE AND FINISH COLOR DETAILS WILL BE UPDATED DURING DETAILED DESIGN.

Legend

PEDESTRIAN RATED TRENCH

Reference Drawings

A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS
Rev	Date	Drawn	Description	Ch'k'd	App'd

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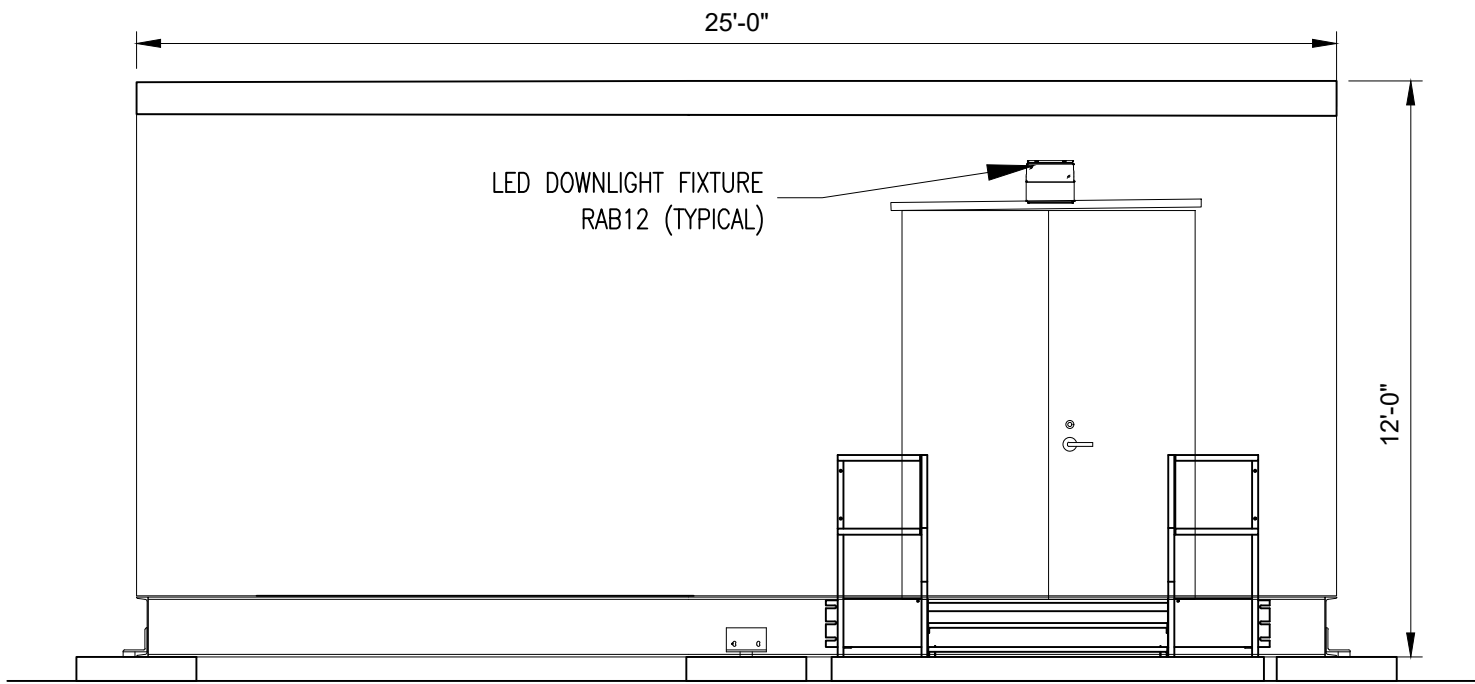
South Ripley
SOLAR PROJECT

Title

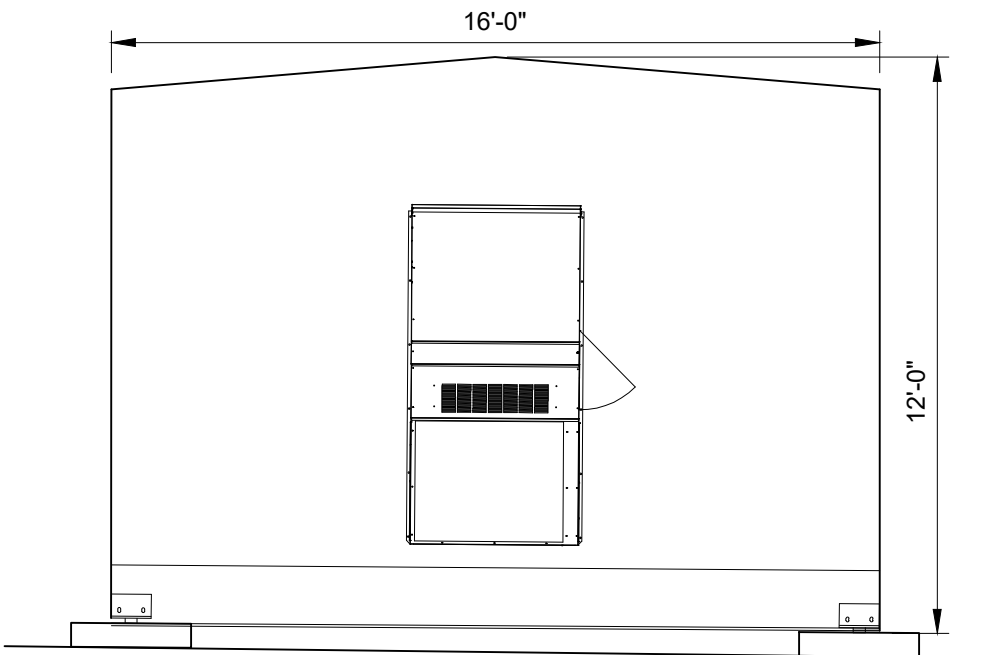
SOUTH RIPLEY SOLAR
POI SUBSTATION
SECTION D & E
SUPPLEMENTAL A

PRELIMINARY
NOT FOR
CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR
FABRICATION

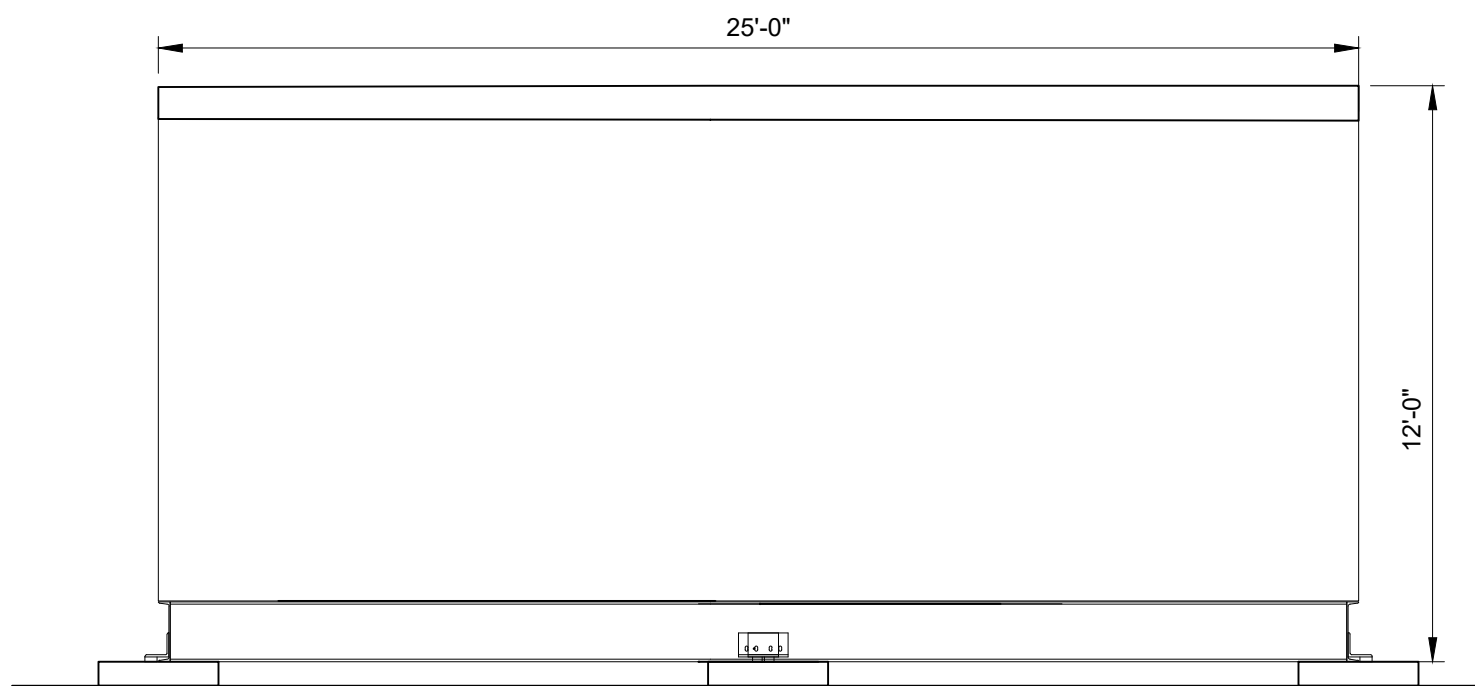
Designed	DT	Eng check	KS
Drawn	DT	Approved	KS
Dwg check	DH	Project Mngr	RA
Scale at ANSI D AS NOTED	Date 11/15/2021	Rev A	
Drawing Number SRS-E-213-06_SUP_A			



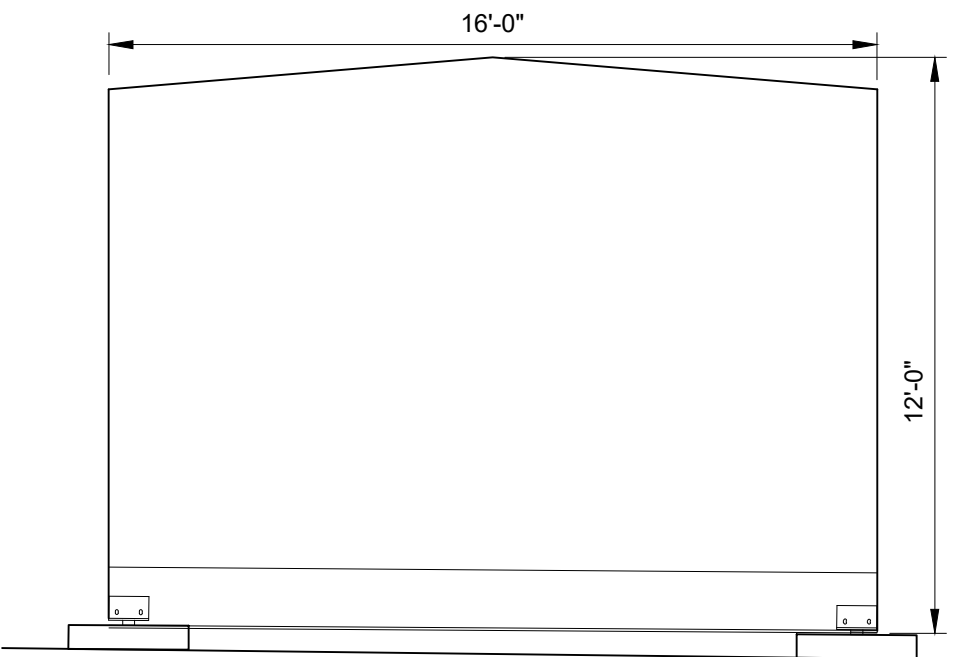
SECTION F
1/4"=1'-0" 212-01A



SECTION G
1/4"=1'-0" 212-01A



SECTION H
1/4"=1'-0" 212-01A



SECTION J
1/4"=1'-0" 212-01A

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

Legend

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Reference Drawings

B	01/07/2022	DT	ISSUED FOR 94-C	DH	KS
A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS
Rev	Date	Drawn	Description	Ch'k'd	App'd

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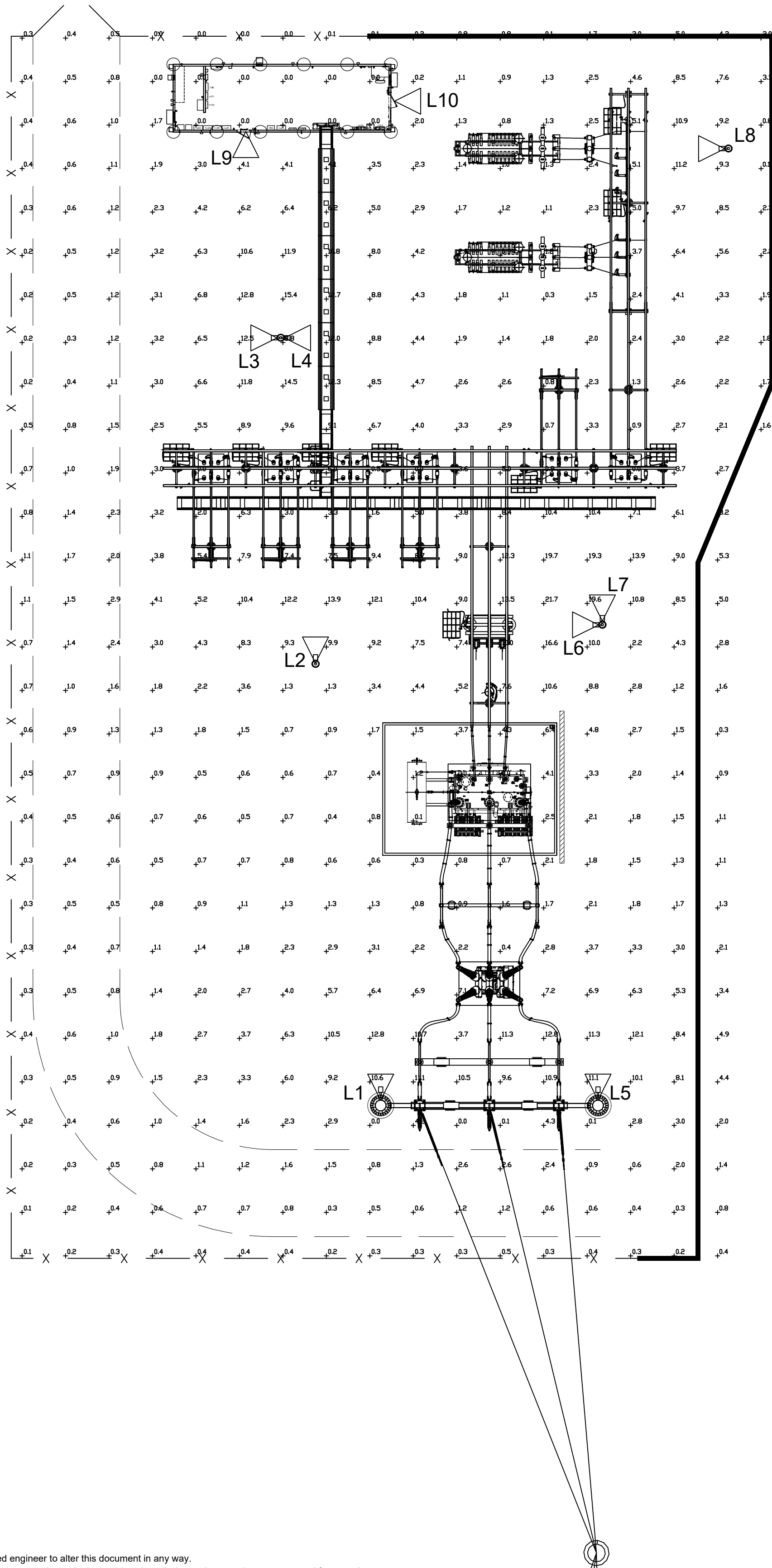
Client

G

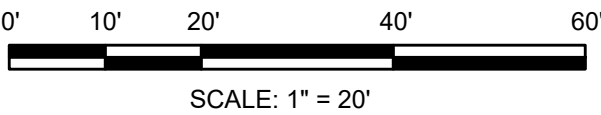
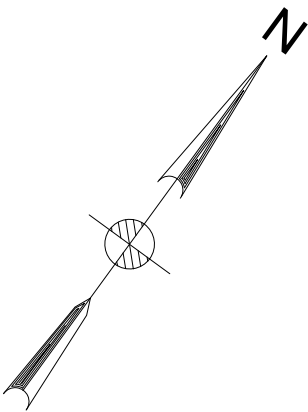
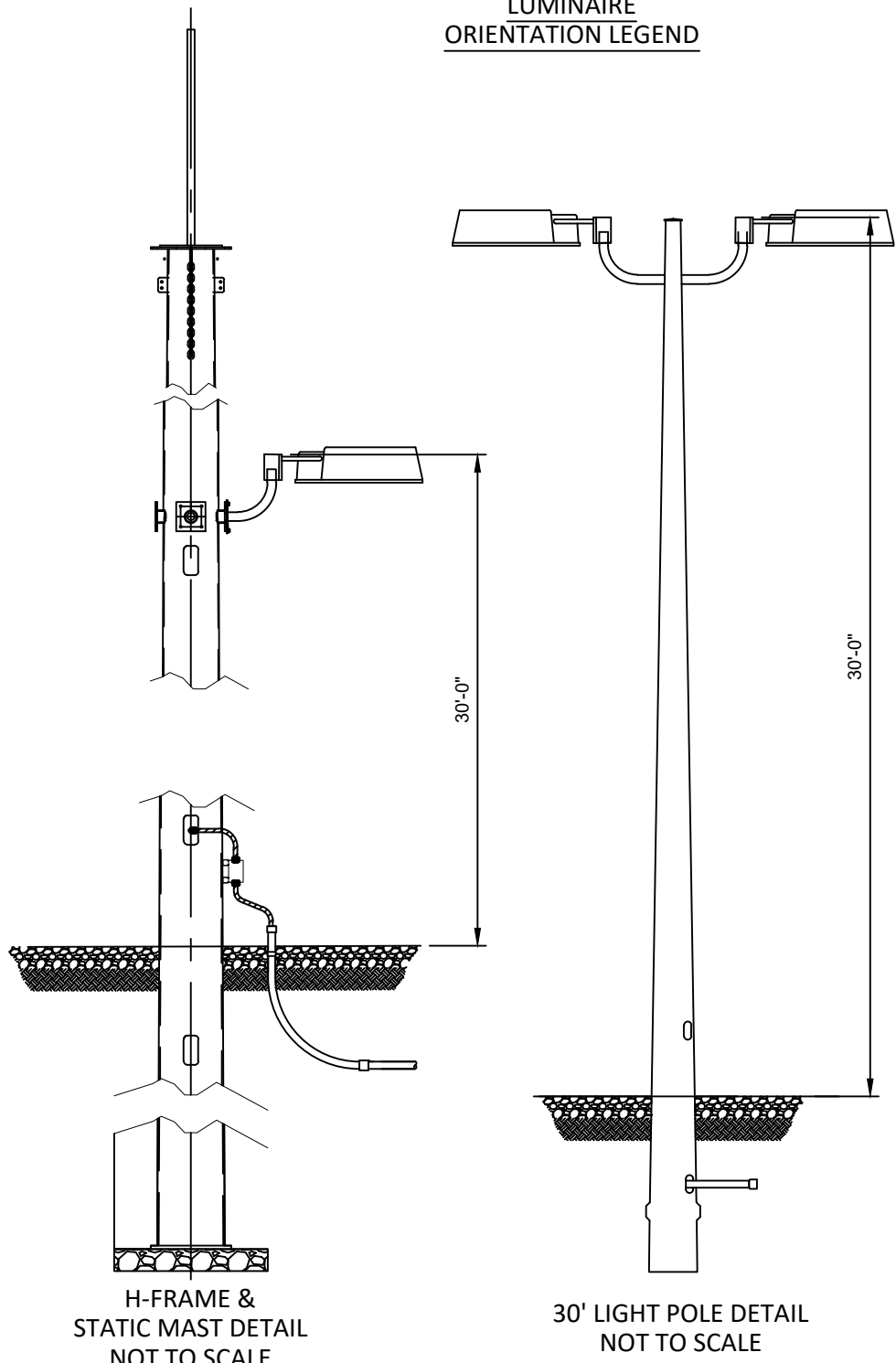
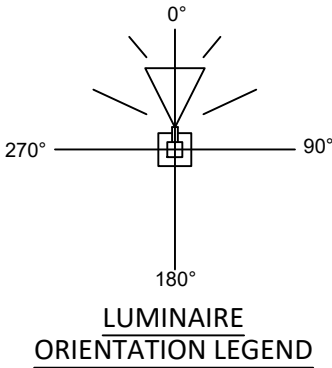
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SOLAR PROJECT

Title
SOUTH RIPLEY SOLAR
POI SUBSTATION
CONTROL ENCL. SECTIONS F-J
SUPPLEMENTAL A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed	DT	Eng check	KS
	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
	Scale at ANSI D AS NOTED	Date 11/12/2021	Rev B	
	Drawing Number SRS-E-213-07_SUP_A			



LIGHT FIXTURE ID	ORIENTATION (DEG.) HORIZONTAL PLANE	TILT (DEG.) VERTICAL PLANE	MOUNTING HEIGHT (FT)	MANUFACTURER	PART NO.	WATT S	LUMENS
L1	0°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L2	0°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L3	270°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L4	90°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L5	0°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L6	270°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L7	0°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L8	270°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L9	180°	0° FIXED	10	RAB	WP1LED-39L-740	12	1,925
L10	90°	0° FIXED	10	RAB	WP1LED-39L-740	12	1,925



CONCEPTUAL-NOT FOR CONSTRUCTION

- Notes
- IEEE / NESC, TABLE 111-1 ILLUMINATION LEVELS IN ELECTRIC SUBSTATIONS WAS FOLLOWED FOR THIS CALCULATION.
 - THE FOLLOWING MINIMUM VALUES WERE SOUGHT:
SUBSTATION GENERAL HORIZONTAL = 2 fc
REMOTE AREAS = 0.2 fc

- Legend
- LUMINAIRE LOCATION
 - CALCULATED ILLUMINATION LEVEL (fc)
 - G.E. EALP03_L2AN730

Reference Drawings

SRS-E-210-01A GENERAL ARRANGEMENT

B	01/07/2022	DT	ISSUED FOR 94-C	DH	KS
A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS
Rev	Date	Drawn	Description	Ch'k'd	App'd

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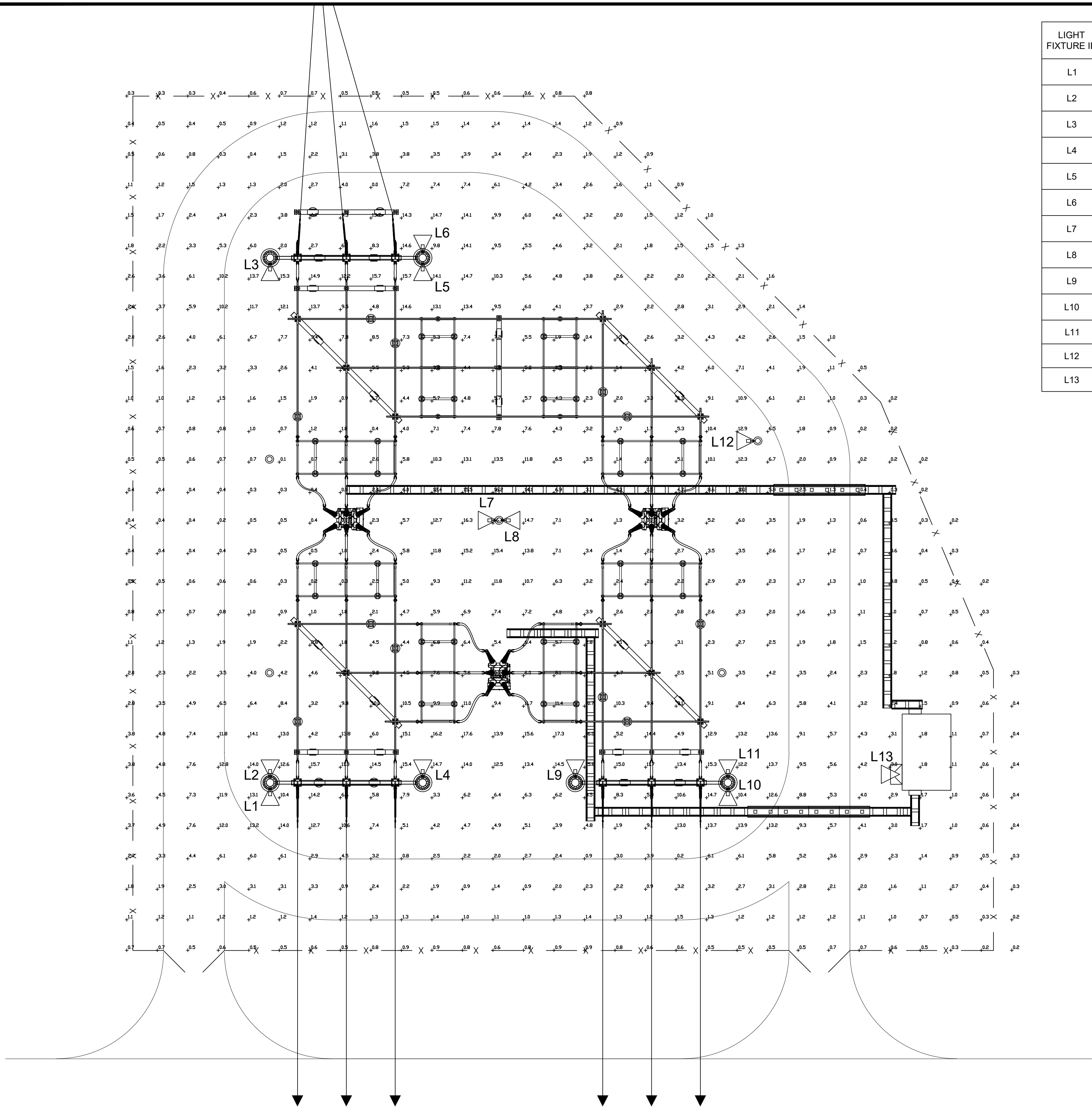
Client

South Ripley
SOLAR PROJECT

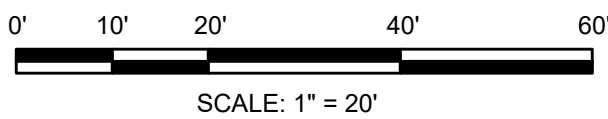
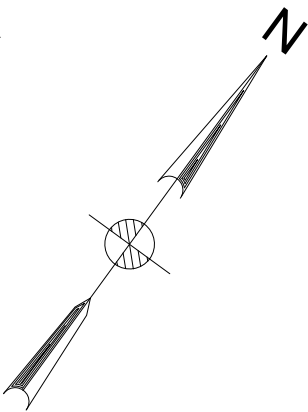
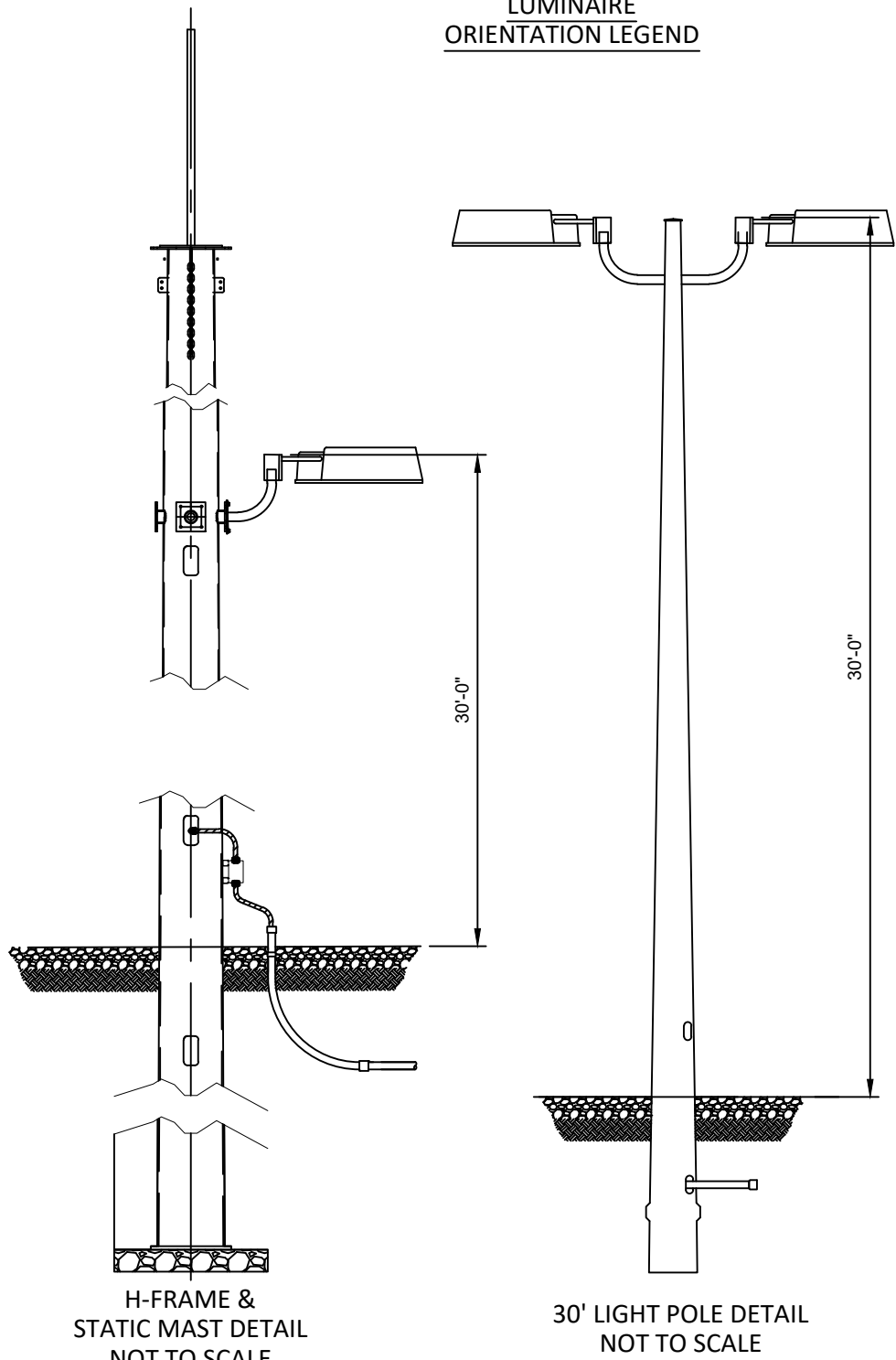
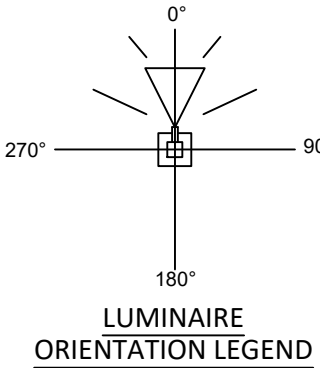
Title

SOUTH RIPLEY SOLAR
230-34.5KV COLLECTOR SUBSTATION
LIGHTING PLAN
SUPPLEMENTAL A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed	DT	Eng check	KS
	Drawn	DT	Approved	KS
	Dwg check	DH	Project Mngr	RA
	Scale at ANSI D 1" = 20'-0"	Date 11/15/2021	Rev	B
	Drawing Number	SRS-E-214-01_SUP_A		



LIGHT FIXTURE ID	ORIENTATION (DEG.) HORIZONTAL PLANE	TILT (DEG.) VERTICAL PLANE	MOUNTING HEIGHT (FT)	MANUFACTURER	PART NO.	WATTS	LUMENS
L1	180°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L2	0°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L3	180°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L4	0°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L5	180°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L6	0°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L7	270°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L8	90°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L9	0°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L10	180°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L11	0°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L12	270°	0° FIXED	30	GE	EALP03_L2AN730	263	33,300
L13	270	0° FIXED	10	RAB	WP1LED-39L-740	12	1,925



- Notes
- IEEE / NESC, TABLE 111-1 ILLUMINATION LEVELS IN ELECTRIC SUBSTATIONS WAS FOLLOWED FOR THIS CALCULATION.
 - THE FOLLOWING MINIMUM VALUES WERE SOUGHT:
SUBSTATION GENERAL HORIZONTAL = 2 fc
REMOTE AREAS = 0.2 fc

- Legend
- LUMINAIRE LOCATION
 - +1.0 CALCULATED ILLUMINATION LEVEL (fc)
 - G.E. EALP03_L2AN730

Reference Drawings

SRS-E-212-01A GENERAL ARRANGMENT

B	01/07/2022	DT	ISSUED FOR 94-C	DH	KS
A	11/24/2021	DT	ISSUED FOR REVIEW	DH	KS
Rev	Date	Drawn	Description	Ch'k'd	App'd

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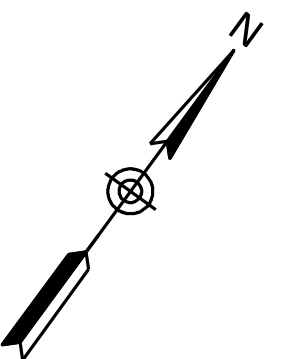
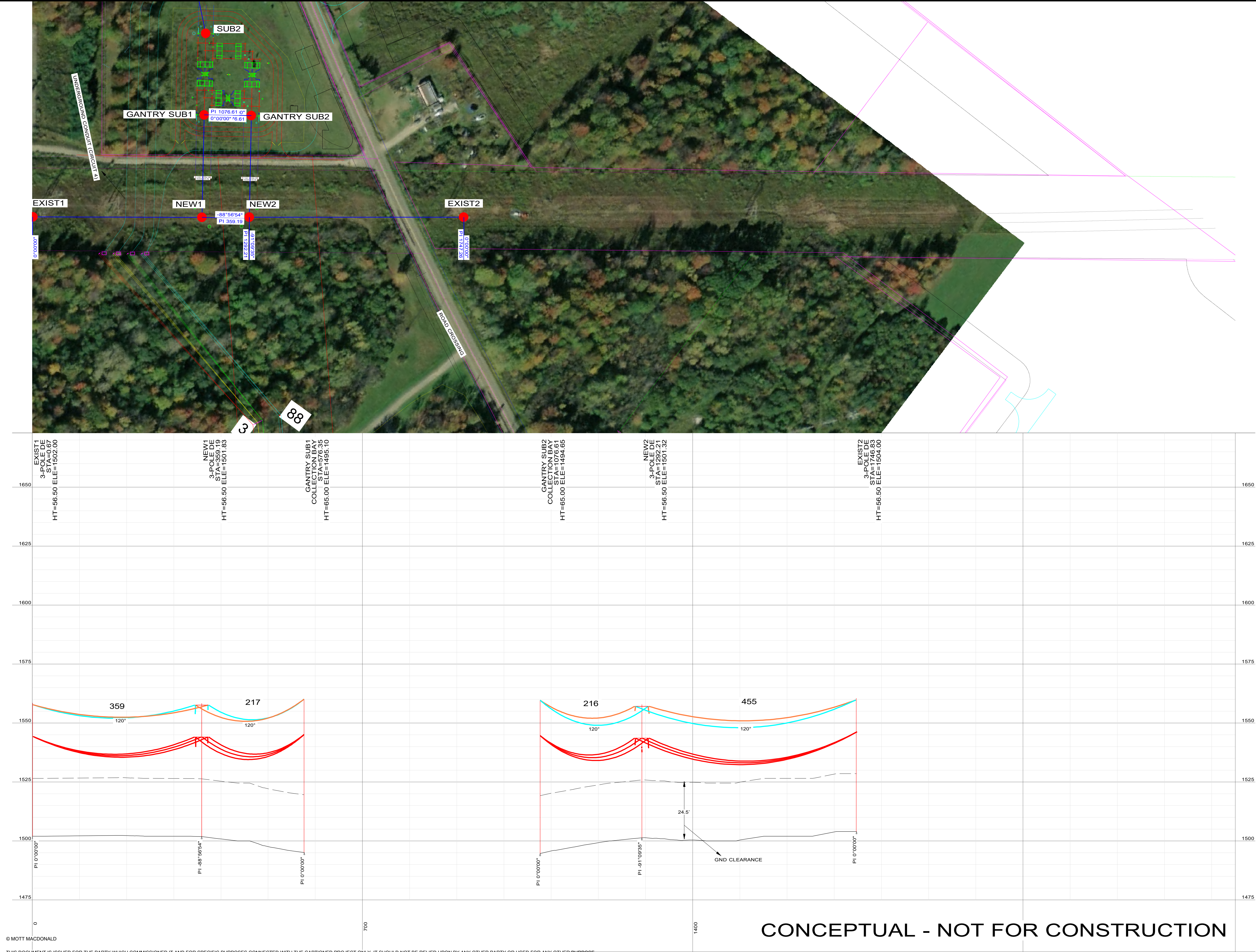
South Ripley
SOLAR PROJECT

Title

**SOUTH RIPLEY SOLAR
POI SUBSTATION
LIGHTING PLAN
SUPPLEMENTAL A**

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	Designed DT Eng check KS	Drawn DT Approved KS	Dwg check DH Project Mngr RA	Scale at ANSI D 1" = 20'-0"	Date 11/15/2021	Rev B
Drawing Number	SRS-E-214-02_SUP_A					

CONCEPTUAL-NOT FOR CONSTRUCTION



- NOTES:
- POLE LOCATIONS ARE INDICATIVE ONLY AND BASED ON LIDAR DATA PROVIDED ON 18/05/2021 AND ESRI WMS IMAGES.
 - THE COORDINATE SYSTEM IS NAD83 (3103), NEW YORK WEST, US SURVEY FEET.
 - PHASE CONDUCTOR AND DOWNLEADS INCORPORATE SINGLE 795 KCMIL 26/7 STRAND DRAKE ACSR CONDUCTOR.
 - PHASE CONDUCTOR IS DISPLAYED AT EMERGENCY TEMPERATURE OF 212°F AND OPGW AND EHS AT 120°F.
 - GROUND CLEARANCE LINE IS SHOWN AT 24.5 FT ABOVE GROUND.
 - ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE STATED.
 - DESIGN TENSIONS:
795 ACSR 26/7 STRAND DRAKE
25% CREEP @ NESC TENSION LIMIT 261H1C
SLACK SPAN 795 ACSR 26/7 STRAND DRAKE
2000 LBS INITIAL @ NESC 250B HEAVY
36 FIBRE AFL AC/20/47/607 AND 1/2 INCH 7-STRAND EHS
25% & 18% INITIAL @ NESC 250B HEAVY
SLACK SPAN 36 FIBRE AFL AC/20/47/607 AND 1/2 INCH 7-STRAND EHS
12000 LBS INITIAL @ NESC 250B HEAVY
 - LEGEND
795 ACSR 26/7 STRAND DRAKE: —
36 FIBRE AFL AC/20/47/607: —
AND 1/2 INCH 7-STRAND EHS: —
ALIGNMENT: —

CONCEPTUAL DESIGN

A	12/08/2021	SS	FOR REVIEW ONLY-230KV LINE	SA	SA
REV	DATE	DRAWN	DESCRIPTION	CHK'D	APP'D

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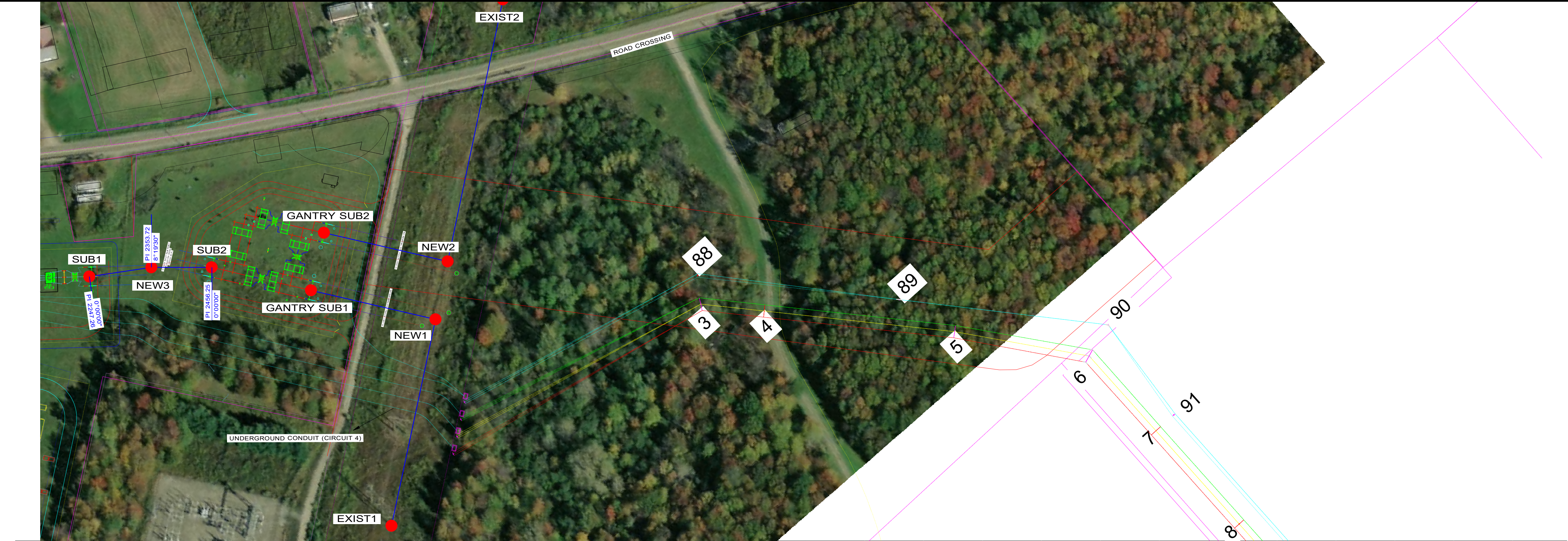
South Ripley
SOLAR PROJECT

TITLE

SOUTH RIPLEY SOLAR
230 KV TRANSMISSION LINE
PLAN AND PROFILE
SUPPLEMENT A

PRELIMINARY NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION	DESIGNED	SS	ENG CHECK	SA
	DRAWN	SS	APPROVED	SA
	SCALE AT ANSI D AS NOTED		DATE 12/08/2021	REV A
	DRAWING NUMBER SRS-E-220-01_SUP_A			

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CONCEPTUAL - NOT FOR CONSTRUCTION

100.0 FT. HORIZ. SCALE

20.0 FT. VERT. SCALE

NOTES:

- POLE LOCATIONS ARE INDICATIVE ONLY AND BASED ON LIDAR DATA PROVIDED ON 18/05/2021 AND ESRI WMS IMAGES.
- THE COORDINATE SYSTEM IS NAD83 (3103), NEW YORK WEST, US SURVEY FEET.
- PHASE CONDUCTOR AND DOWNLEADS INCORPORATE SINGLE 795 KCMIL 26/7 STRAND DRAKE ACSR CONDUCTOR.
- PHASE CONDUCTOR IS DISPLAYED AT EMERGENCY TEMPERATURE OF 212°F AND OPGW AND EHS AT 120°F.
- GROUND CLEARANCE LINE IS SHOWN AT 24.5 FT ABOVE GROUND.
- ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE STATED.
- DESIGN TENSIONS:
795 ACSR 26/7 STRAND DRAKE
25% CREEP @ NESC TENSION LIMIT 261H1C
SLACK SPAN 795 ACSR 26/7 STRAND DRAKE
2000 LBS INITIAL @ NESC 250B HEAVY
36 FIBRE AFL AC/20/47/607 AND 1/2 INCH 7-STRAND EHS
25% & 18% INITIAL @ NESC 250B HEAVY
SLACK SPAN 36 FIBRE AFL AC/20/47/607 AND 1/2 INCH 7-STRAND EHS
12000 LBS INITIAL @ NESC 250B HEAVY

8. LEGEND

795 ACSR 26/7 STRAND DRAKE: —

36 FIBRE AFL AC/20/47/607: —

AND 1/2 INCH 7-STRAND EHS: —

ALIGNMENT: —

CONCEPTUAL DESIGN

REV	DATE	DRAWN	DESCRIPTION	CHK'D	APP'D
A	12/08/2021	SS	FOR REVIEW ONLY-230KV LINE	SA	SA

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SOLAR PROJECT

TITLE

SOUTH RIPLEY SOLAR
230 KV TRANSMISSION LINE
PLAN AND PROFILE
SUPPLEMENT A

DESIGNED	SS	ENG CHECK	SA
DRAWN	SS	APPROVED	SA
SCALE AT ANSI D AS NOTED		DATE 12/08/2021	REV A
DRAWING NUMBER SRS-E-220-02_SUP_A			