

NOTES: UNLESS OTHERWISE SPECIFIED

- THIS DRAWING IS NOT FOR CONSTRUCTION UNTIL ENGINEERING HAS REVIEWED AND STAMPED THIS DOCUMENT.
- DIMENSIONS SHOWN ARE INCHES.
- THE SELF-BONDING SYSTEM AND SINGLE GROUND LUG IS FOR USE WITH PV MODULES THAT HAVE A MAXIMUM SERIES FUSE RATING OF 30A.
- MATERIALS ARE AS SPECIFIED OR EQUIVALENT:
HARDWARE: 304 STAINLESS STEEL
FABRICATED EXTRUDED PARTS: 6005-T5 ALUMINUM ALLOY
FABRICATED DIE CAST PARTS: ANSI/AA A380 ALUMINUM ALLOY
STEEL PIPE: SCHEDULE 40 GALVANIZED
ALUMINUM PIPE: SCHEDULE 10 ANODIZED
- THE MAXIMUM PERMISSIBLE LENGTH OF ANY STRUCTURE SHALL BE 200 FT. FOR SYSTEMS USING A SHARED RAIL CONFIGURATION, A THERMAL BREAK IS REQUIRED IN THE RAIL EVERY 40 FT. PER THE DRAWING DETAILS.
- 4LXN-3LXN-2PXN-35DEG-GSM-AGM-BGM-PGM.
- PANEL DIMENSIONS ARE AS FOLLOWS
STANDARD (SP): MAX 82"X42"
OVERSIZE (OP): MAX 85"X45"
- APPROVED RAIL PROFILES - STANDARD PANELS
A20288-XXX (HR300 RAIL), A20297-001 (END CAP), K10343-002 (U-CLAMP KIT);
A20145-XXX (HR350 RAIL), A20285-001 (END CAP), K10343-001 (U-CLAMP KIT).
- APPROVED RAIL PROFILES - OVERSIZE PANELS
* A20288-XXX (HR300 RAIL), A20297-001 (END CAP), K10343-002 (U-CLAMP KIT);
* A20145-XXX (HR350 RAIL), A20285-001 (END CAP), K10343-001 (U-CLAMP KIT).
- K10224-XXX END CLAMP KIT OR K10299-XXX ADJ. END CLAMP KIT.
- FOUNDATION TYPES:
GSM = GROUND SCREW GROUND MOUNT
AGM = HELICAL AUGER GROUND MOUNT
PGM = POST-IN-CONCRETE GROUND MOUNT
BSM = BALLAST GROUND MOUNT

LICENSED PROFESSIONAL ENGINEER
RUSSELL N. EMERY
P24886
IOWA

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Russell N. Emery (signature) 02/22/2024 (date)

Russell N. Emery
License Number: P24886
My license renewal date is: December 31, 2025

Pages or sheets covered by this seal: 4

STRUCTURAL ONLY

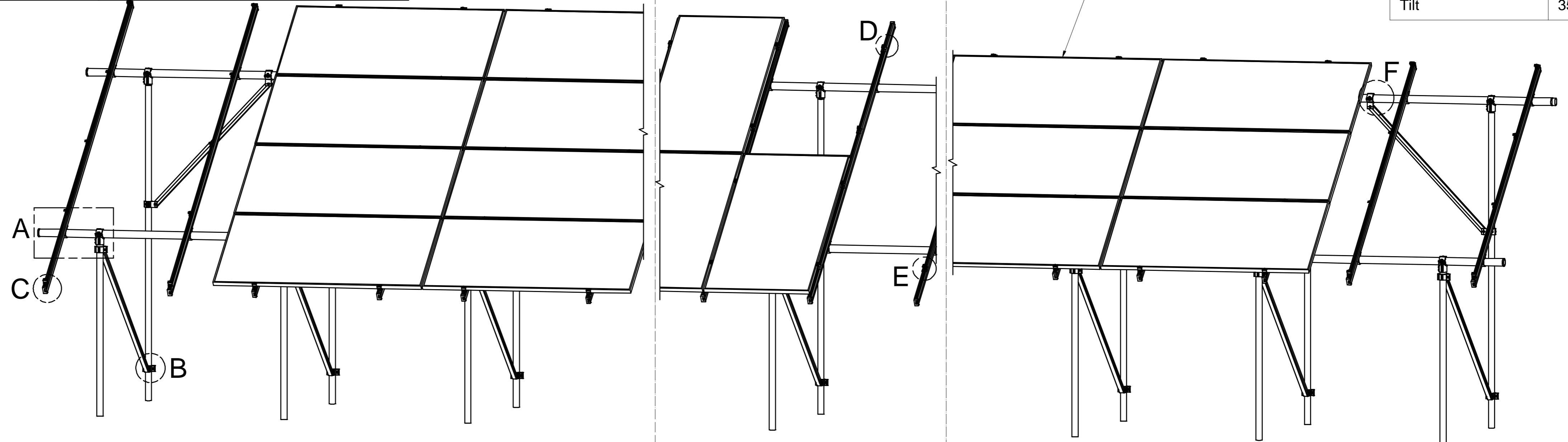
VECTOR ENGINEERS

231 W. BURLINGAME AVENUE, SUITE 101 PHONE (507) 993-1775
DRAKERS, UFAH (840)02 WWW.VECTORSE.COM

VSE Project Number: U2716.114.191

Vector Structural Engineering requires that we review each site-specific install, and we are not liable for installs at site-specific locations we have not reviewed. This document does not address site-specific installations.

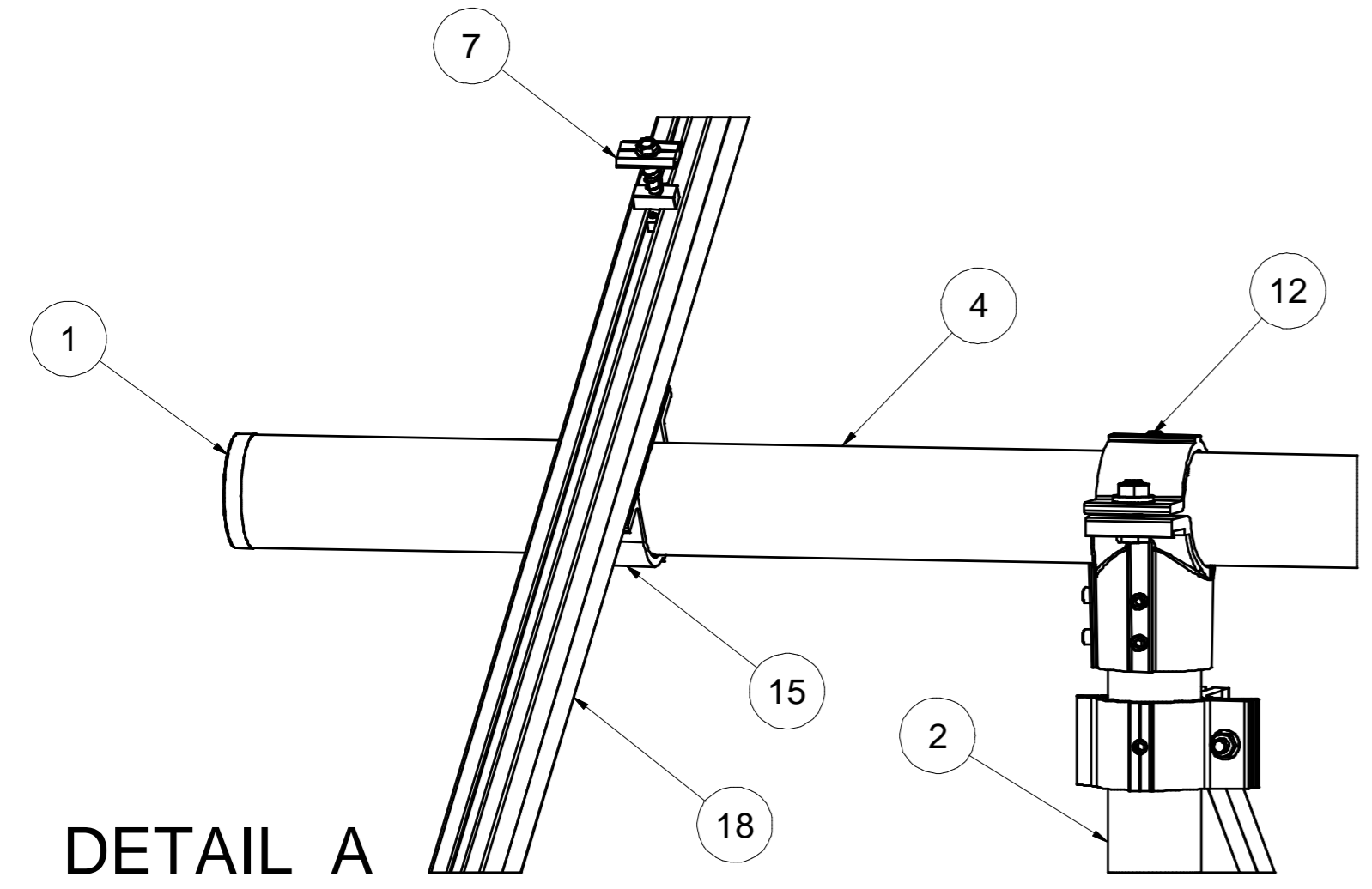
Packet A5	
Model Code	ASCE 7-10
Exposure Category	B and Lower
Wind Speed	140 mph and Lower
Ground Snow Load	70 PSF and Lower
Tilt	35 DEG and Lower



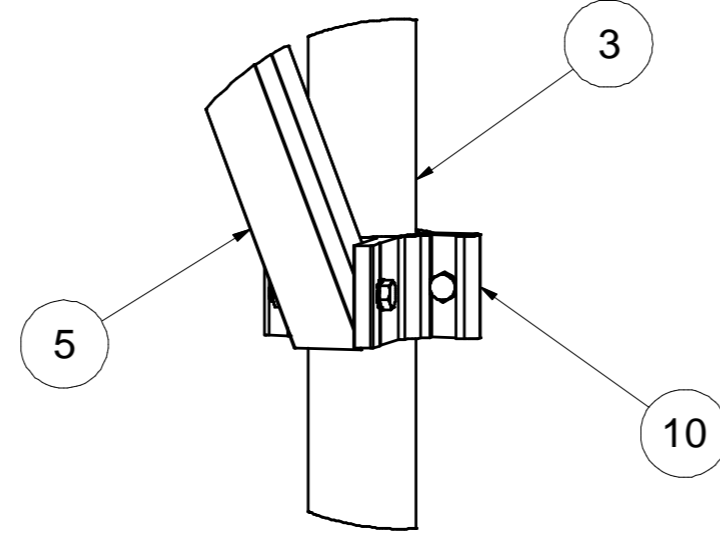
**4L
4-IN-LANDSCAPE**

**2P
2-IN-PROTRAIT**

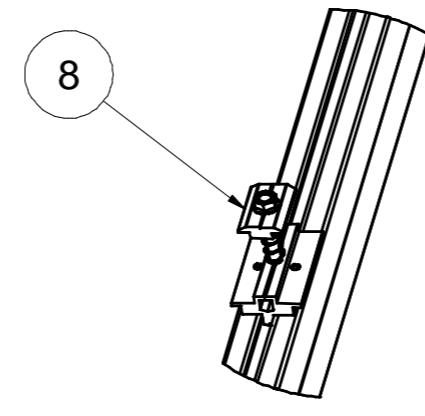
**3L
3-IN-LANDSCAPE**



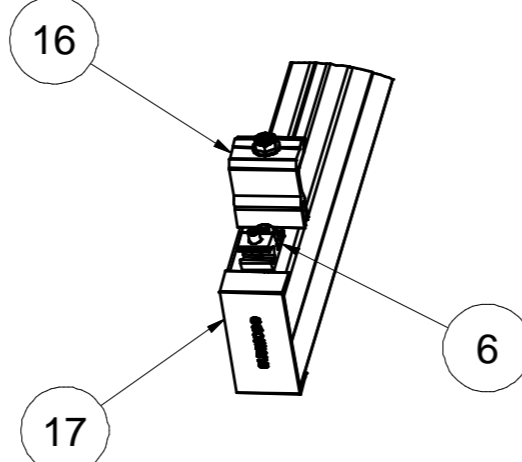
DETAIL A



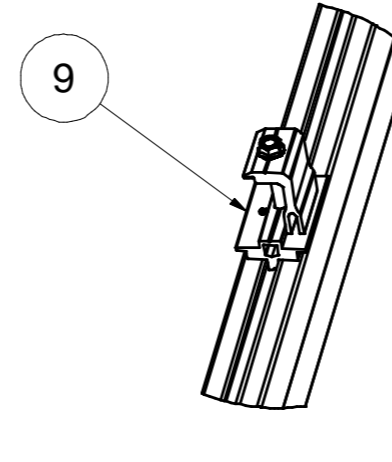
DETAIL B



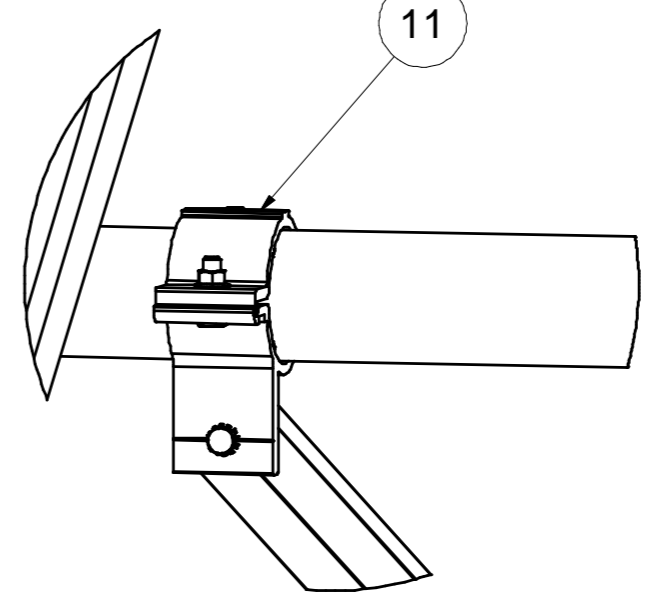
DETAIL D



DETAIL C



DETAIL E



DETAIL F

ITEM	PART NUMBER	DESCRIPTION	QTY
19		PANEL	
18		HELIO-RAIL, VARIES PER NOTE 8 & 9	
17		HELIO-RAIL END CAP, VARIES PER NOTE 8 & 9	
16		END CLAMP KIT, VARIES PER NOTE 10	
15	K10343-001	2.5" AL PIPE U-CLAMP KIT	
14	K10448-001	2.5" PIPE SPLICE KIT	
13	K10342-001	2.5" PIPE SPLICE KIT	
12	K10341-001	2.5" PIPE TEE KIT	
11	K10222-001	2.5" PIPE CLAMP KIT	
10	K10219-001	2" AL PIPE CLAMP KIT	
9	K10183-XXX	LANDSCAPE GROUNDING END CLAMP KIT	
8	K10182-001	LANDSCAPE GROUNDING MID CLAMP KIT	
7	K10180-001	GROUNDING MID-CLAMP KIT WITH T COLLAR BOLT AND GROUNDING BASE	
6	K10179-001	SELF-GROUNDING LUG KIT	
5	A50164-XXX	1.5" SQ. STL TUBE BRACE, L=XXX	
4	A21168-XXX	PIPE, HSS, 2.875" OD X 12 GAUGE, L=XXX	
3	A21165-XXX (REAR)	PIPE, HSS, 2.375" OD X 12 GAUGE, L=XXX	
2	A21165-XXX (FRONT)	PIPE, HSS, 2.375" OD X 12 GAUGE, L=XXX	
1	A20380-001	2.5" PIPE END CAP	

MATERIAL: SEE BOM
Third Angle Projection:

GENERAL SPECIFICATIONS:
All dimensions in inches (millimeters)
2 decimal places
X.XX (0.01 to 0.99) Break all sharp edges
X.XX (1.00 to 9.99) 3/16" (2.00) unless otherwise specified
X.XX (10.00 to 99.99) 1/4" (6.35) unless otherwise specified

DRAWN BY: LU DATE: 04/21/2021

CHECKED BY: DATE: APPROVALS: TITLE: DRAWING NUMBER: SCALE: SHEET 1 of 4

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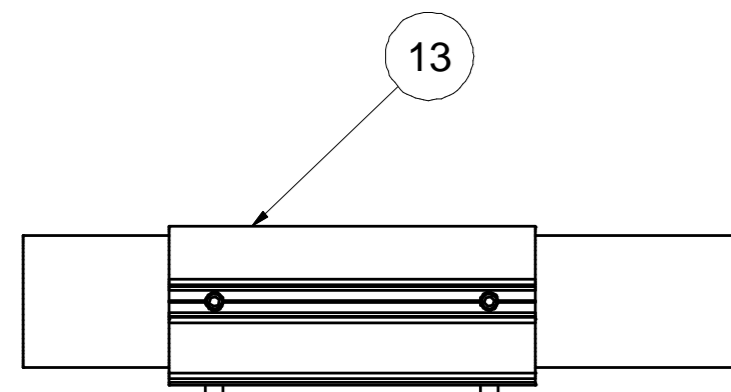
14800 NE 65TH STREET, VANCOUVER WA 98682

PACKET A5

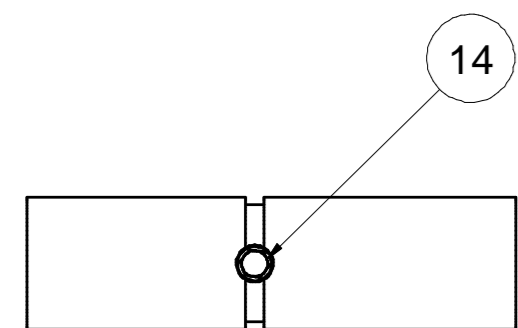
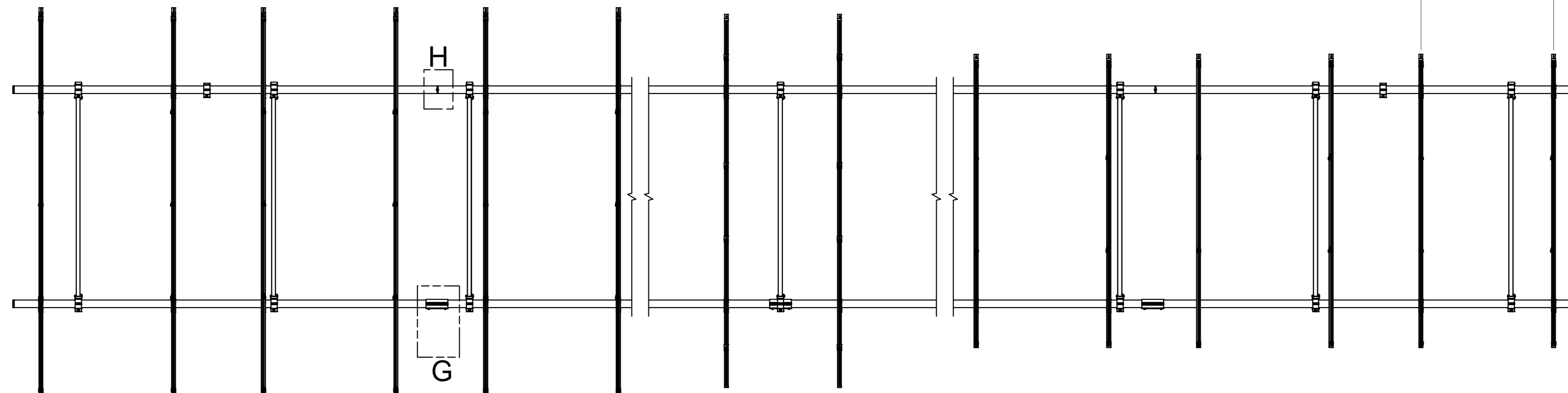
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NOTES:
 1. DIMENSIONS LABELED AS MAX ARE MAXIMUM ALLOWABLE AND MAY RESULT IN END POSTS BEING OUTSIDE ARRAY EDGES. MAXIMUM DIMENSIONS MAY BE REDUCED IF DESIRED.
 2. SEE NOTE 7 OF COVER PAGE FOR PANEL SIZES.

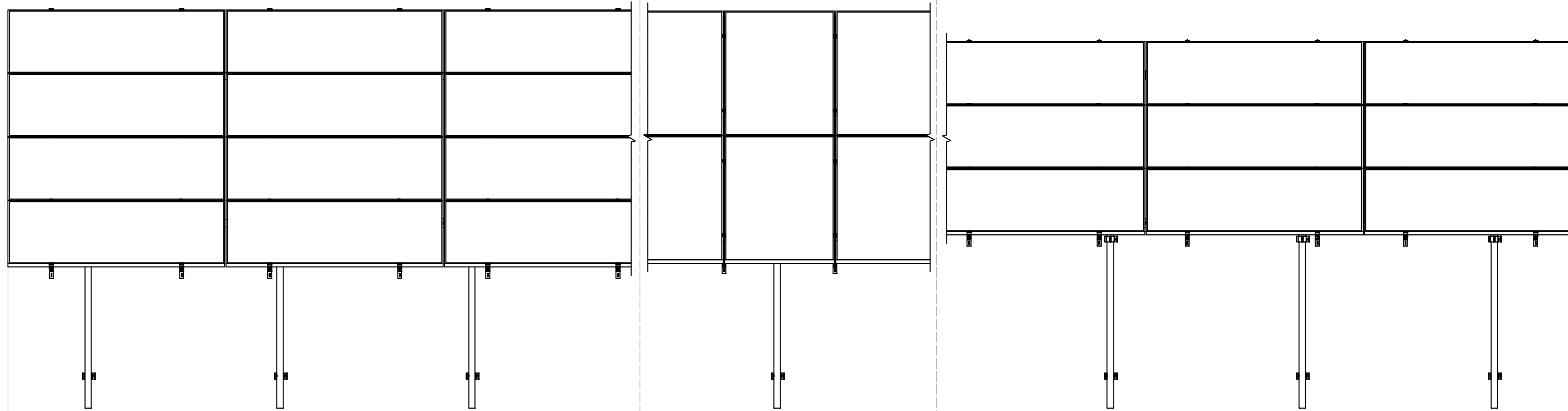
RAIL SPACING
 LANDSCAPE: PER PANEL MANUFACTURER
 PORTRAIT: PANEL WIDTH + 0.25"



DETAIL G



DETAIL H (ALTERNATE)



34 MAX ← → 84 MAX¹

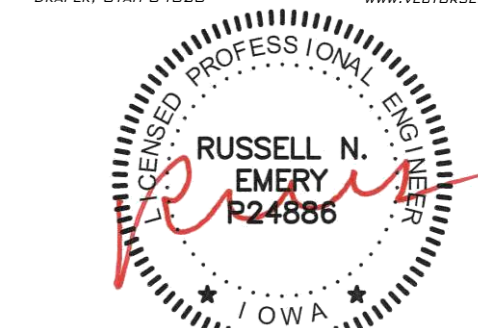
4L
4-IN-LANDSCAPE

2P
2-IN-PROTRAIT

3L
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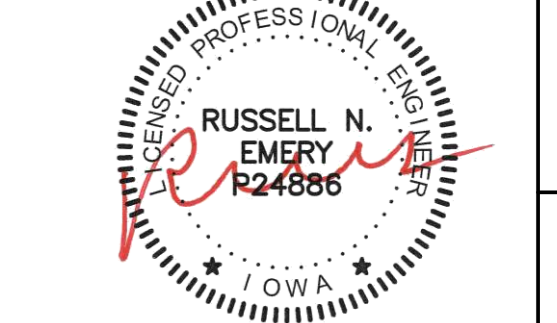
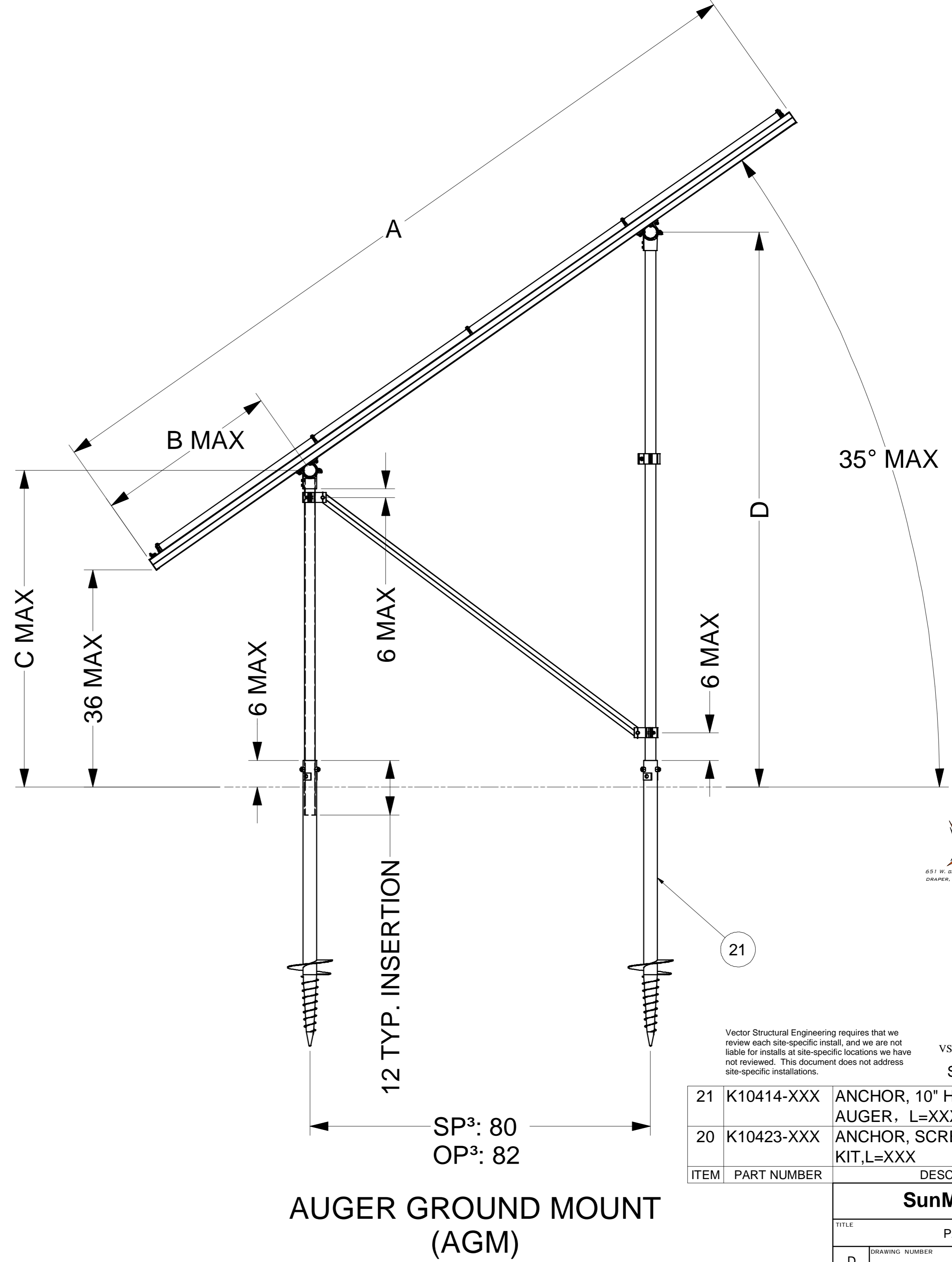
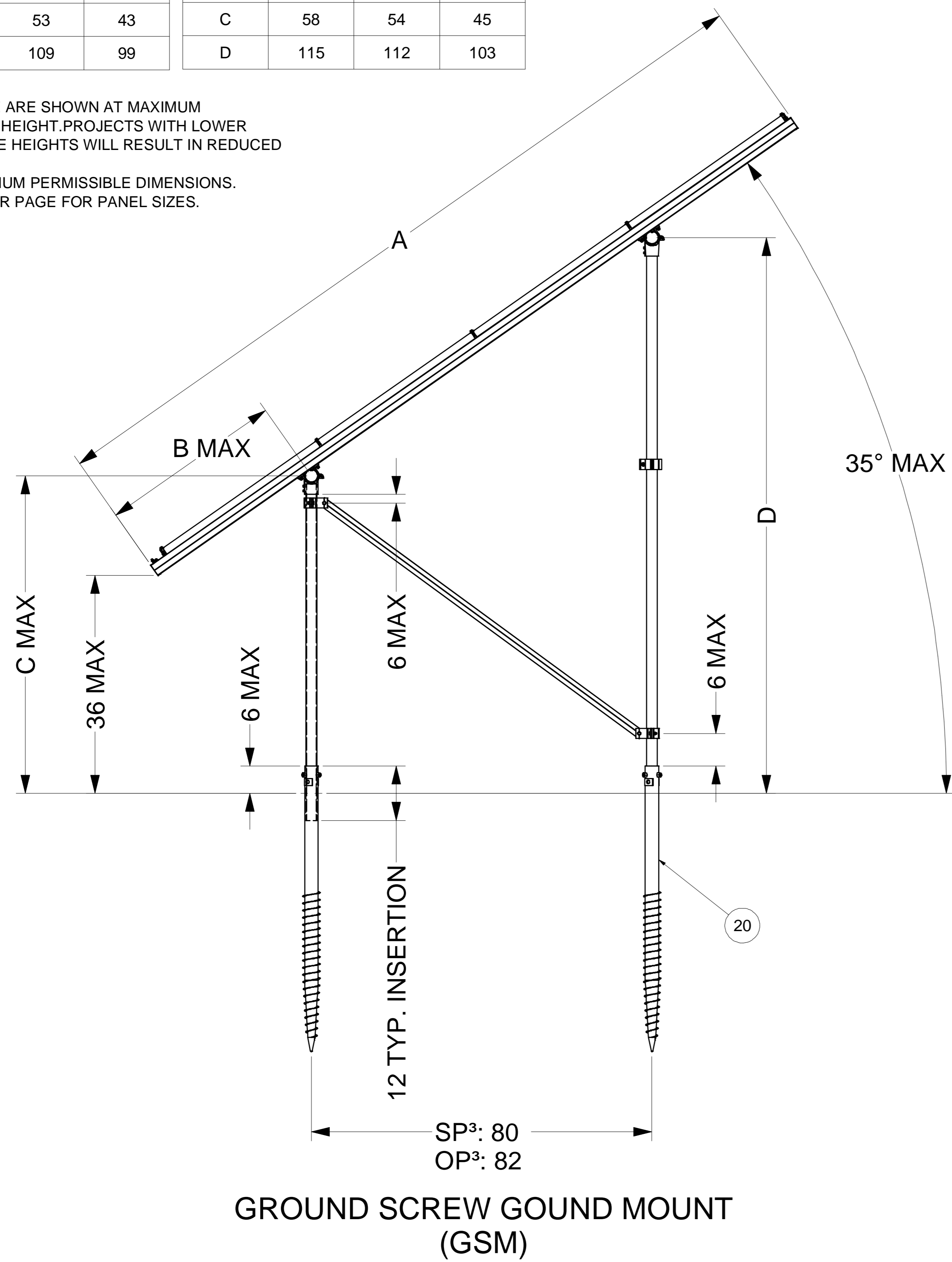
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TITLE	PACKET A5
D	DRAWING NUMBER
SCALE:	SHEET 2 of 4 REV

DIMENSIONS - STANDARD PANEL				DIMENSIONS - OVERSIZE PANEL			
ITEM	4L	2P	3L	ITEM	4L	2P	3L
A	172	166	130	A	184	172	140
B	37	34	16	B	42	36	20
C	55	53	43	C	58	54	45
D	111	109	99	D	115	112	103

NOTES

1. DIMENSIONS IN TABLE ARE SHOWN AT MAXIMUM TILT & LEADING EDGE HEIGHT. PROJECTS WITH LOWER TILTS & LEADING EDGE HEIGHTS WILL RESULT IN REDUCED DIMENSIONS.
2. MAX DENOTES MAXIMUM PERMISSIBLE DIMENSIONS.
3. SEE NOTE 7 OF COVER PAGE FOR PANEL SIZES.



02/22/2024
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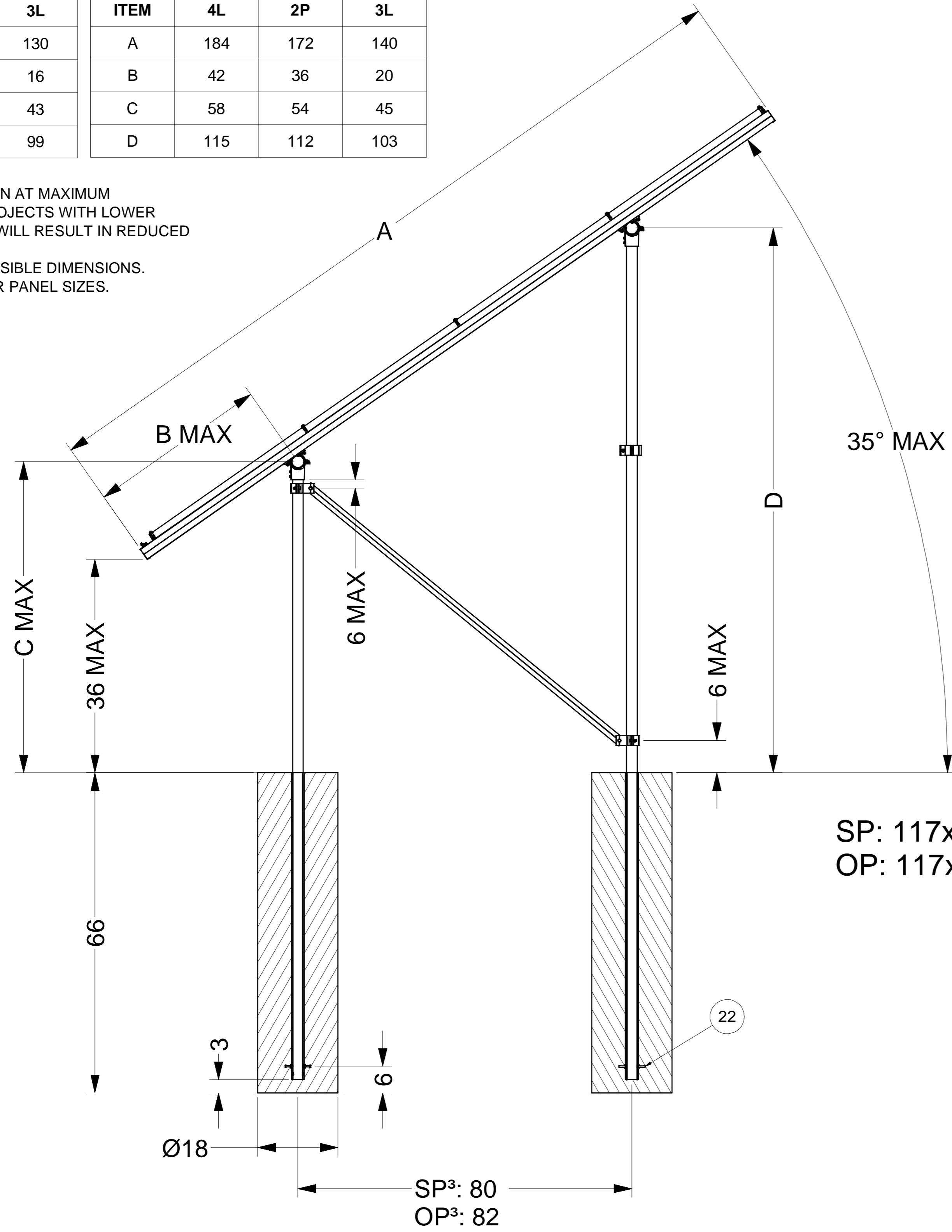
ITEM	PART NUMBER	DESCRIPTION	QTY
21	K10414-XXX	ANCHOR, 10" HELIX SCREW AUGER, L=XXX	
20	K10423-XXX	ANCHOR, SCREW AUGER KIT, L=XXX	

SunModo Corp.	
TITLE: PACKET A5	
D	DRAWING NUMBER
SCALE:	SHEET 3 of 4 REV

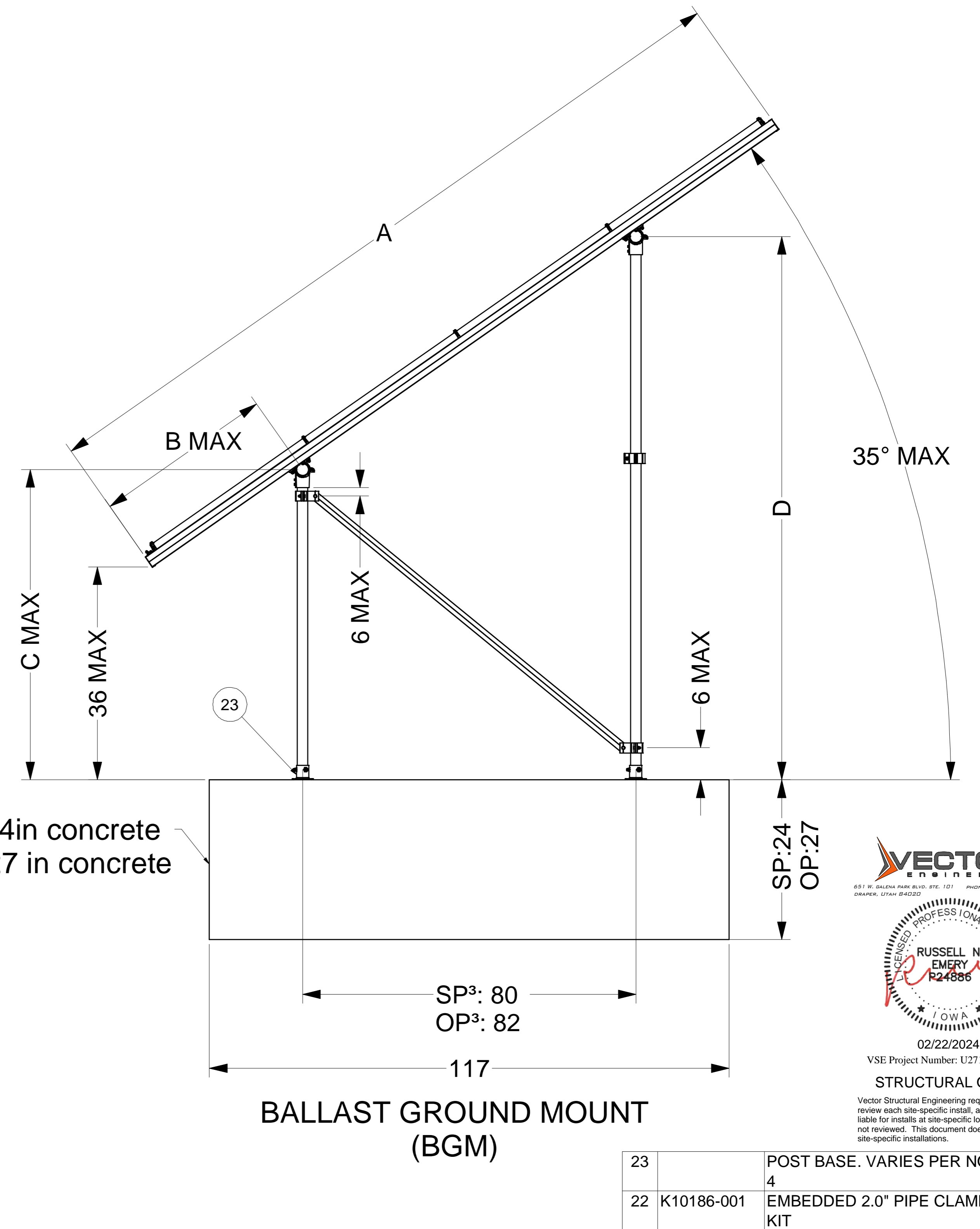
DIMENSIONS - STANDARD PANEL				DIMENSIONS - OVERSIZE PANEL			
ITEM	4L	2P	3L	ITEM	4L	2P	3L
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3. SEE NOTE 7 OF COVER PAGE FOR PANEL SIZES.
4. K10268-005 (2" PIPE BASE KIT) OR K10302-001 (2" PIPE BASE KIT)



POST-IN-CONCRETE GROUND MOUNT (PGM)



BALLAST GROUND MOUNT (BGM)

SP: 117x30x24in concrete
OP: 117x30x27 in concrete



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ITEM	PART NUMBER	DESCRIPTION	QTY
23		POST BASE. VARIES PER NOTE 4	
22	K10186-001	EMBEDDED 2.0" PIPE CLAMP KIT	

SunModo Corp.			
TITLE: PACKET A5			
DRAWING NUMBER: D			
SCALE:	SHEET 4 of 4	REV	