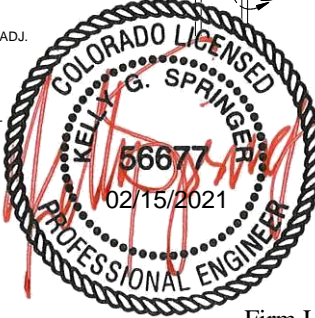
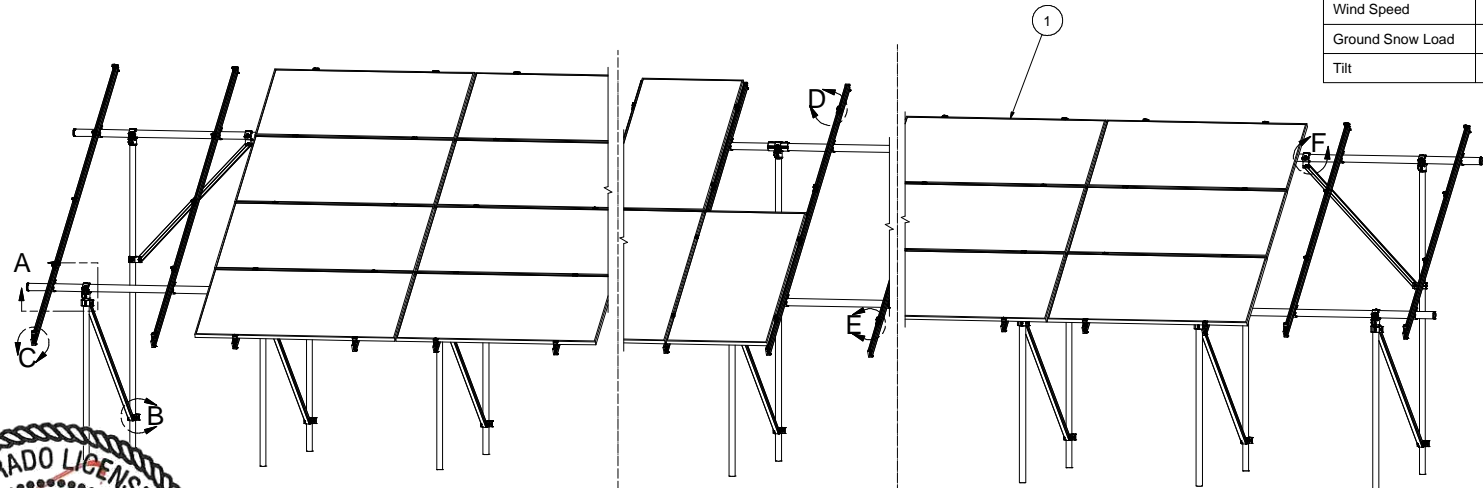


NOTES: UNLESS OTHERWISE SPECIFIED

- 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.
- APPROVED RAIL PROFILES
A20289-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

Packet A3

Model Code	ASCE 7-16
Exposure Category	C and Lower
Wind Speed	135 mph and Lower
Ground Snow Load	60 PSF and Lower
Tilt	35 DEG and Lower



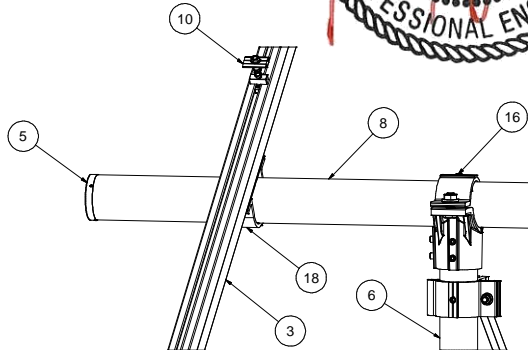
VSE Project Number: U2716-093-191
STRUCTURAL ONLY

Firm License Number: 20181009799

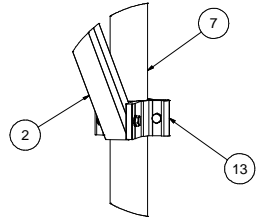


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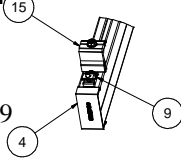
18	K10343-001	2.5" AL PIPE U-CLAMP KIT	
17	K10342-001	2.5" PIPE SPLICE KIT	
16	K10341-001	2.5" PIPE TEE KIT	
15		END CLAMP KIT. VARIES PER NOTE 8	
14	K10222-001	2.5" PIPE CLAMP KIT	
13	K10219-001	2" AL PIPE CLAMP KIT	
12	K10183-XXX	LANDSCAPE GROUNDING END CLAMP KIT	
11	K10182-001	LANDSCAPE GROUNDING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



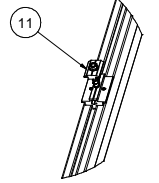
DETAIL A



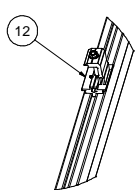
DETAIL B



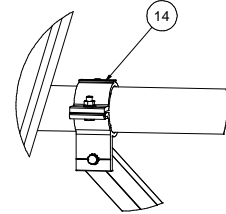
DETAIL C



DETAIL D



DETAIL E



DETAIL F

Vector Engineers requires that we review each site specific install and is not liable for installs at site specific locations we have not reviewed.

SEE BOM

Third Angle Projection

PERSONAL USE ONLY (Not for Redistribution)

DATE: 02/11/2019

DRWING NUMBER: D

SCALE: 1/8" = 1'-0"

SHEET 1 of 4

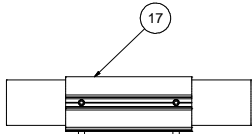
SunModo Corp.
14800 NE 65TH STREET, VANCOUVER WA 98662

TITLE: PACKET A3

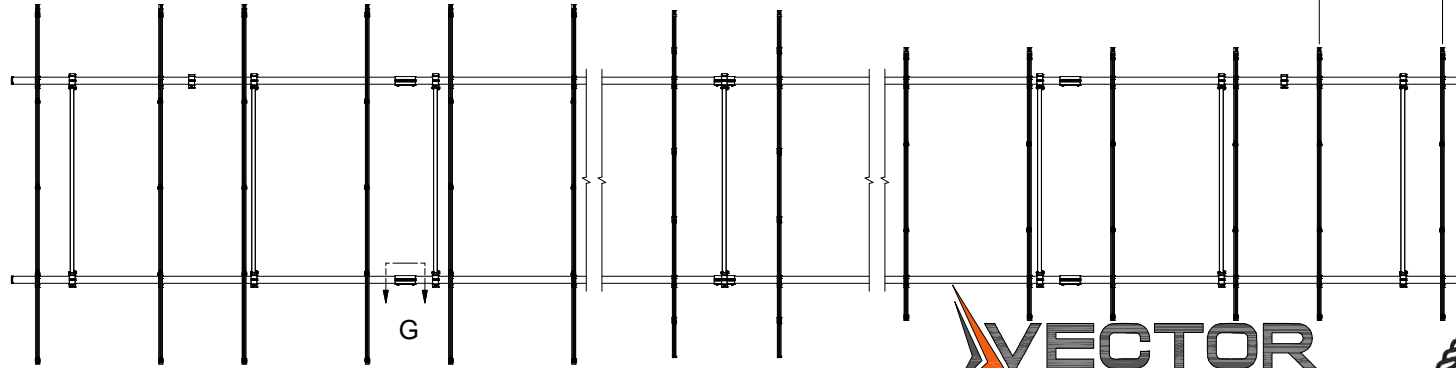
THIS DRAWING IS CONFIDENTIAL PROPERTY OF SUNMODO AND ITS CONTENTS MAY NOT BE DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF SUNMODO CORP.

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.

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



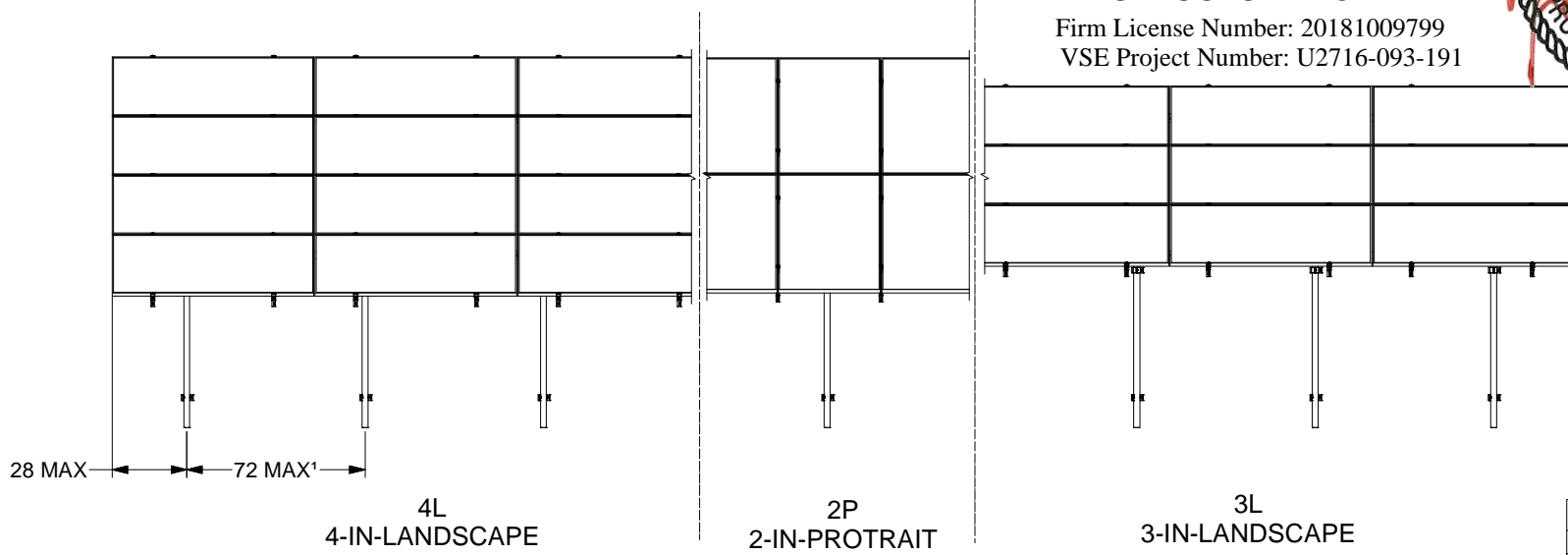
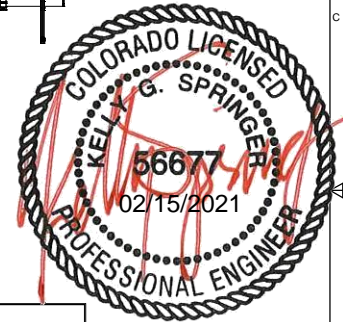
DETAIL G



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SunModo Corp.	
TITLE	PACKET A3
D	DRAWING NUMBER
SCALE:	SHEET 2 of 4 REV

DIMENSIONS			
ITEM	4L	2P	3L
A	172	166	130
B	38	35	17
C	56	55	44
D	112	110	100

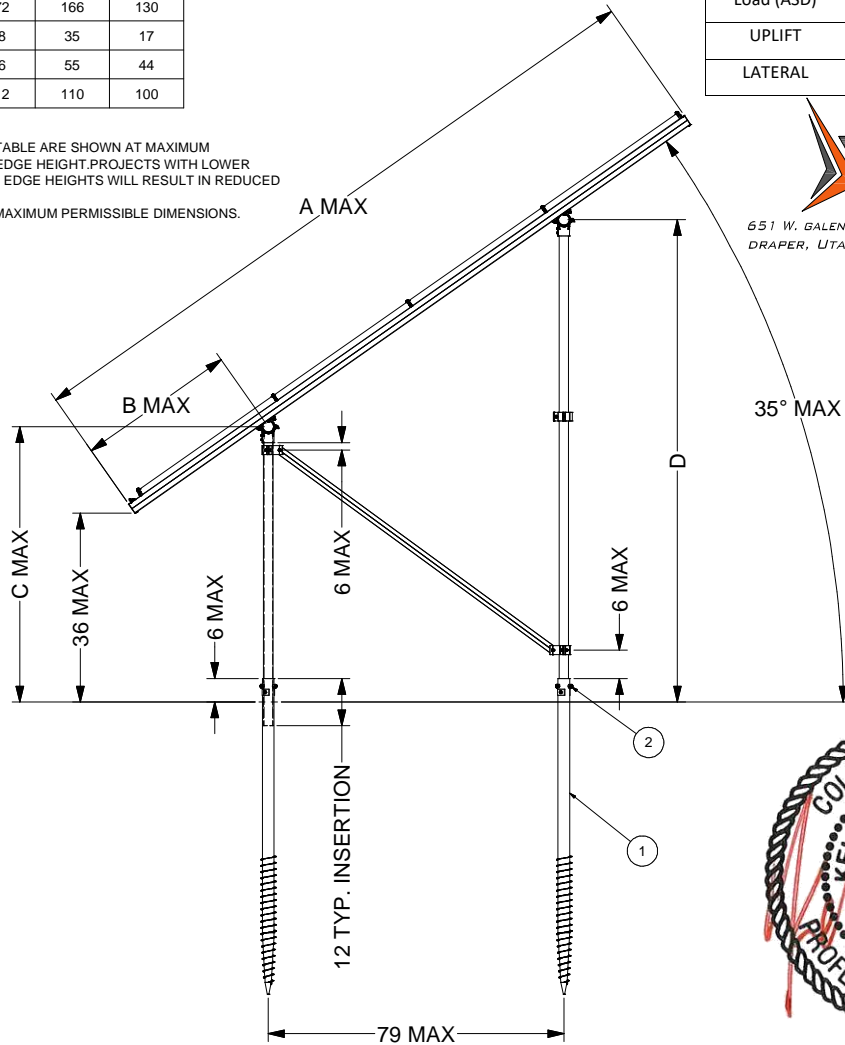
The ground screws and helical piers must be tested to 1.5 times uplift and 2.0 times lateral reactions found in the table below. A minimum of one ground screw or helical pier must be tested.

Load (ASD)	Value (lbs)	Factor of Safety	Test Value (lbs)
UPLIFT	2850	1.5	4275
LATERAL	2000	2	4000

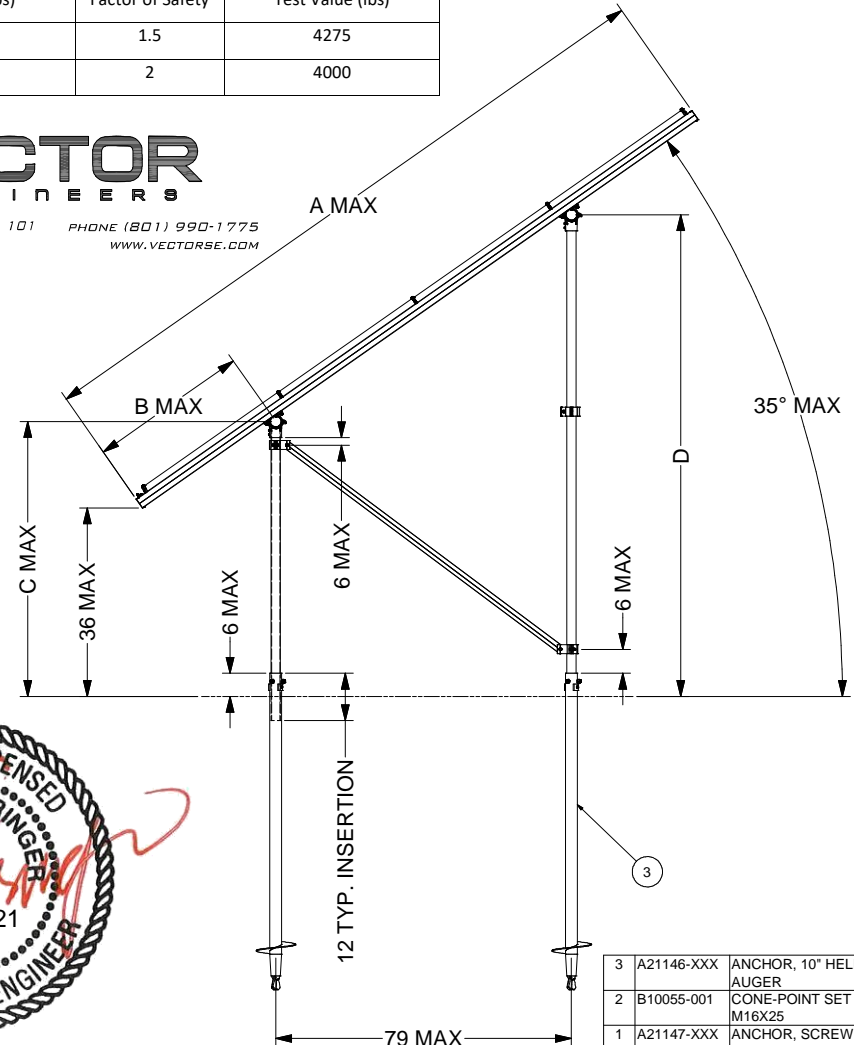
NOTES
 1. DIMENSIONS IN TABLE ARE SHOWN AT MAXIMUM TILT & LEADING EDGE HEIGHT. PROJECTS WITH LOWER TILTS & LEADING EDGE HEIGHTS WILL RESULT IN REDUCED DIMENSIONS.
 2. MAX DENOTES MAXIMUM PERMISSIBLE DIMENSIONS.

VECTOR
ENGINEERS

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GROUND SCREW GROUND MOUNT (GSM)



AUGER GROUND MOUNT (AGM)



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3	A21146-XXX	ANCHOR, 10" HELIX BLADE AUGER	
2	B10055-001	CONE-POINT SET SCREW M16X25	
1	A21147-XXX	ANCHOR, SCREW AUGER, L=XXX	
ITEM	PART NUMBER	DESCRIPTION	QTY
SunModo Corp.			
TITLE: PACKET A3			
D: DRAWING NUMBER			
SCALE: SHEET 3 of 4 REV			

DIMENSIONS			
ITEM	4L	2P	3L
A	172	166	130
B	38	35	17
C	56	55	44
D	112	110	100

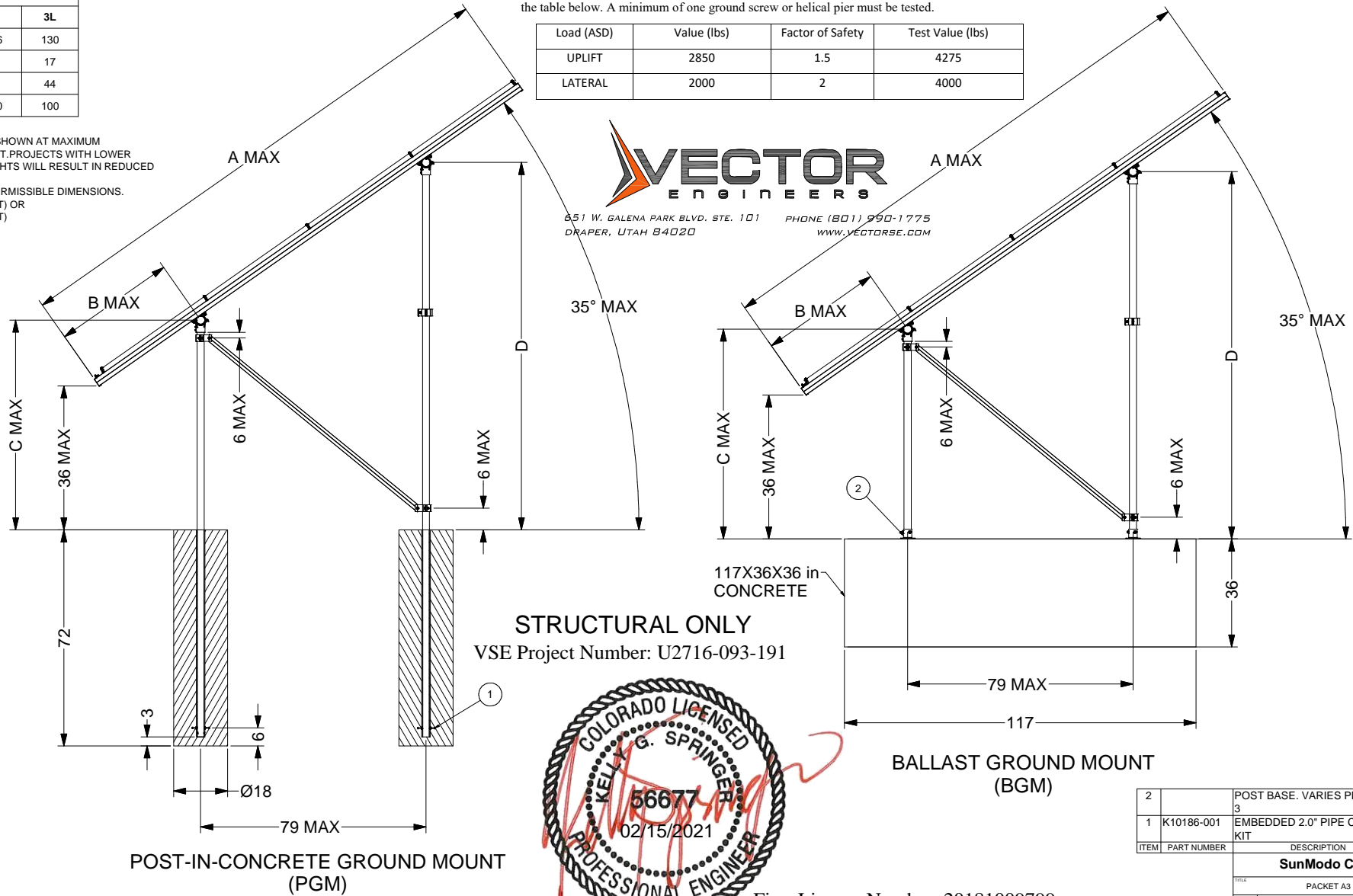
- NOTES**
1. DIMENSIONS IN TABLE ARE SHOWN AT MAXIMUM TILT & LEADING EDGE HEIGHT. PROJECTS WITH LOWER TILTS & LEADING EDGE HEIGHTS WILL RESULT IN REDUCED DIMENSIONS.
 2. MAX DENOTES MAXIMUM PERMISSIBLE DIMENSIONS.
 3. K10268-005 (2" PIPE BASE KIT) OR K10302-001 (2" PIPE BASE KIT)

The ground screws and helical piers must be tested to 1.5 times uplift and 2.0 times lateral reactions found in the table below. A minimum of one ground screw or helical pier must be tested.

Load (ASD)	Value (lbs)	Factor of Safety	Test Value (lbs)
UPLIFT	2850	1.5	4275
LATERAL	2000	2	4000



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Firm License Number: 20181009799

2		POST BASE. VARIES PER NOTE	
3		EMBEDDED 2.0" PIPE CLAMP KIT	
1	K10186-001	EMBEDDED 2.0" PIPE CLAMP KIT	
ITEM	PART NUMBER	DESCRIPTION	QTY
SunModo Corp.			
TITLE: PACKET A3			
D: DRAWING NUMBER			
SCALE: SHEET 4 of 4 REV			