

Project Details			
Name	Blandford PV	Date	02/17/2022
Location	42375 River Drum Trail, Steamboat Springs, CO 80487	ASCE code	7.10
Total modules	45	Wind speed	105 mph
Module	LG: LG435N2T-E6 (40mm)	Snow load	85 psf
Dimensions	83.86" x 41.02" x 1.57" (2130.0mm x 1042.0mm x 40.0mm)	Wind exposure	C
Total watts	19,575 kW	Piers	30
		Concrete	17.45 yd ³

Substructure & Foundation			
Tilt	40°	South facing grade	0°
Pipe/tubing diameter	3" N.D. 3.5 in. O.D. Std Wt	Soil class	3
Foundation type	C.I.P. Concrete 4000 psi @ 28dys	Hole diameter	24"

Engineer of Record:

Calvetti Engineering Inc
Andrew L Calvetti, P.E. CO 36028
P.O. Box 4231
Aspen, CO 81612
Ph (239) 464- 0624 (c) / (970) 925-8969 (c)

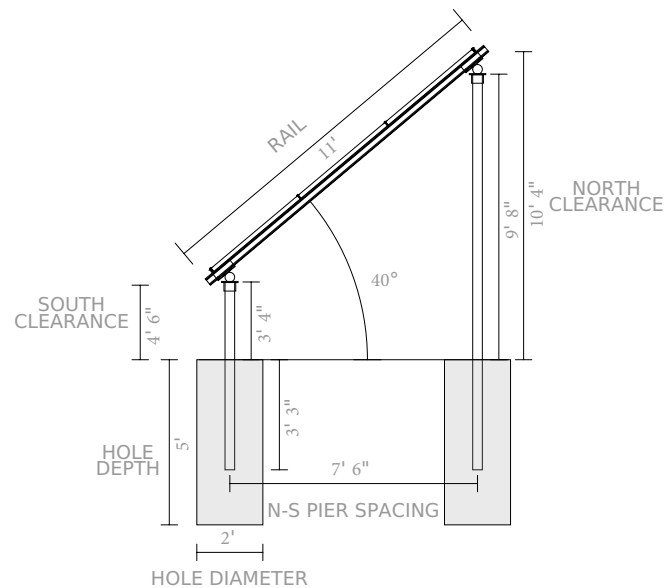
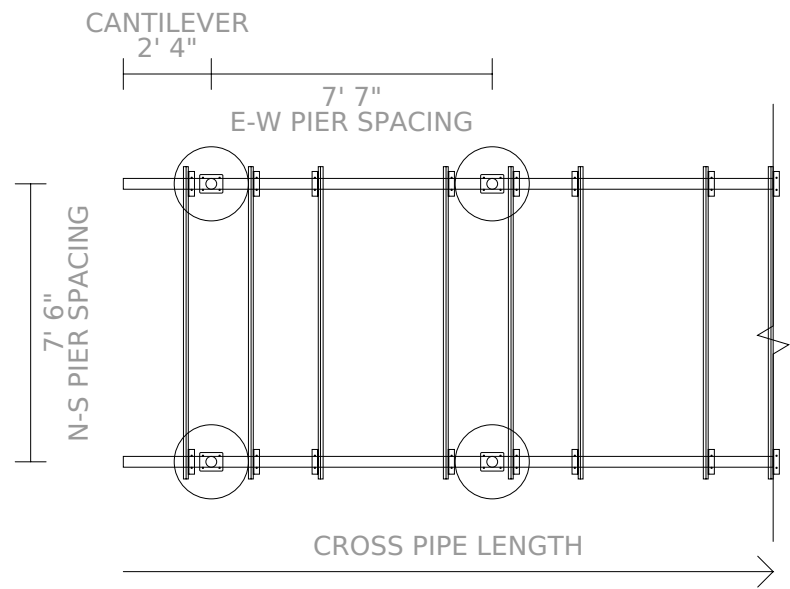
- Structure Notes:
- 1) All concrete mix and placement to be in accordance with Ch 20 2015 IBC.
 - 2) All subgrade to be in accordance with CH 18 2015 IBC.



A handwritten signature in blue ink that reads "Andrew L. Calvetti". The signature is written in a cursive style and is positioned below the professional seal.

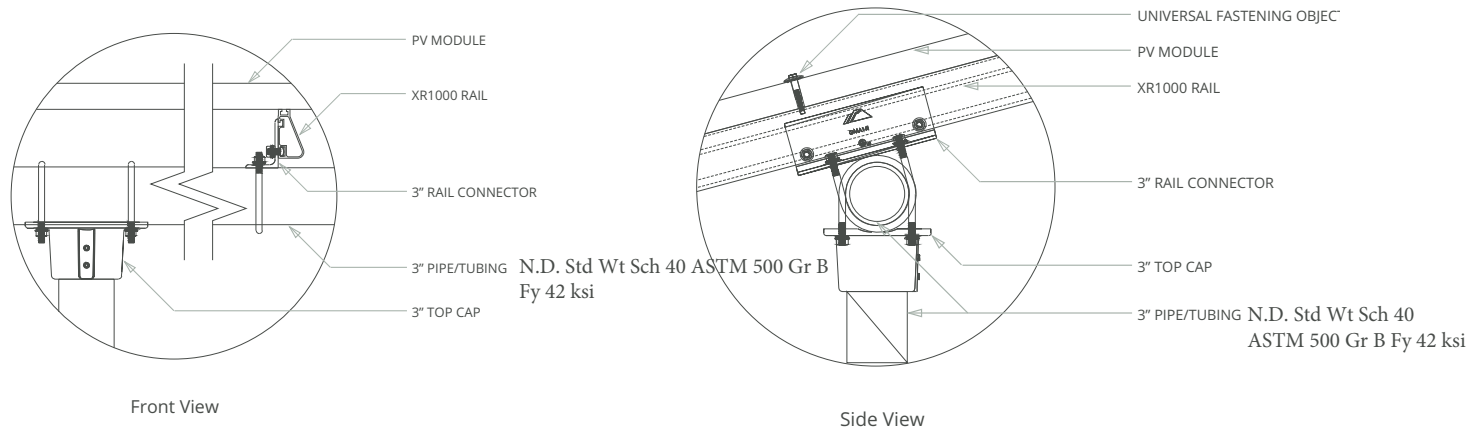
Sub array #1

Rows	3	Columns / Piers	5	Repeats	1
Area	35' 1" (EW) × 10' 6" (NS)	Rail type	XR1000	Diagonal bracing	no
E/W spacing	7' 7"	Rail cantilever	7"	Pipe cantilever	2' 4"
Piers/repeat	10	Total south piers	5 (5' 8")	Total north piers	5 (12')
Total cross pipes	2 (35' 1")	Total pipe length	158' 6"		
Shear	1,532 lbs	Moment	3,830 ft-lbs	Uplift	-799 lbs

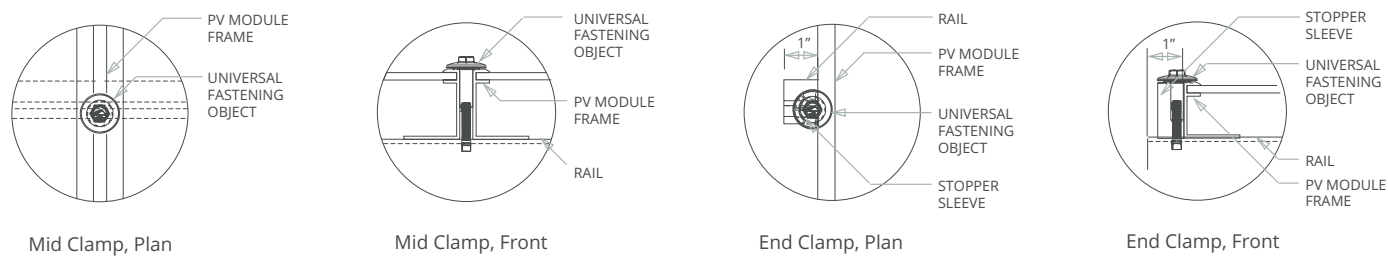


Pipe Fitting Detail

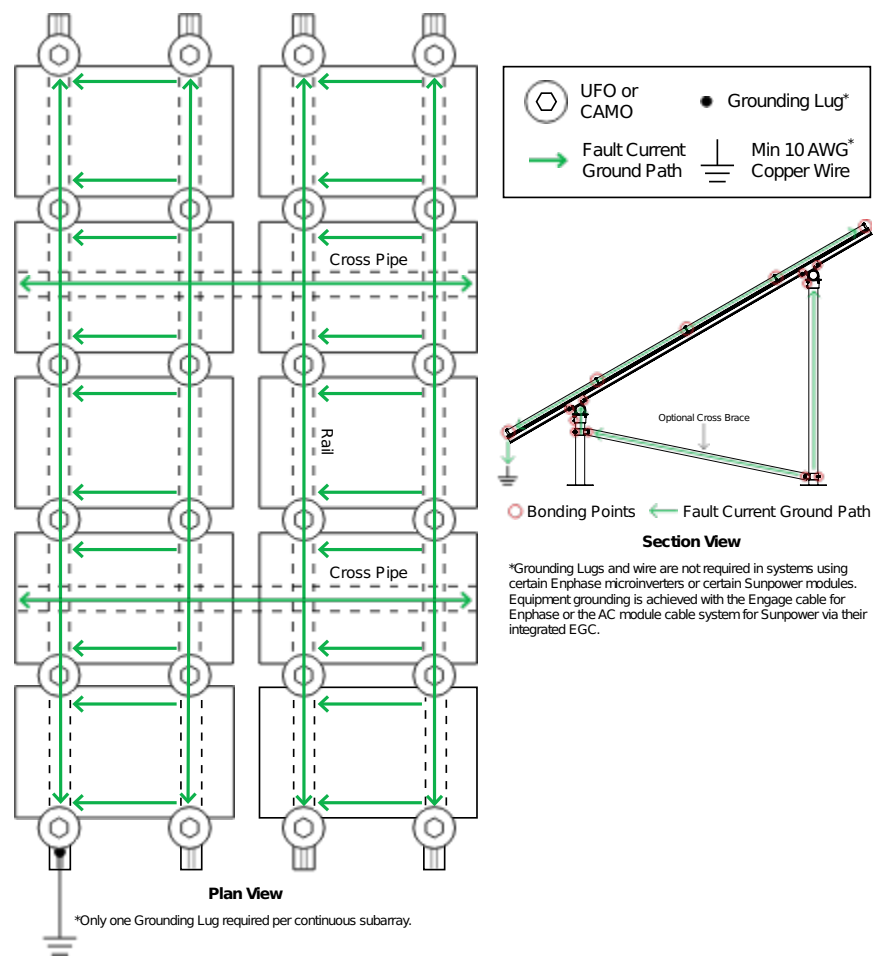
XR1000 Rail



Clamp Detail



Grounding Diagram



Bill of Materials		
Part	Spares	Total Qty
Rails		
XR-1000-132A XR1000, Rail 132" (11 Feet) Clear	0	45
Clamps & Grounding		
UFO-CL-01-A1 Universal Module Clamp, Clear	0	180
UFO-STP-40MM-M1 Stopper Sleeve, 40MM, Mill	0	90
XR-LUG-03-A1 Grounding Lug, Low Profile	0	3
Substructure		
70-0300-SGA SGA Top Cap at 3"	0	30
GM-BRC-003 Ground Mount Bonded Rail Connector - 3"	0	90