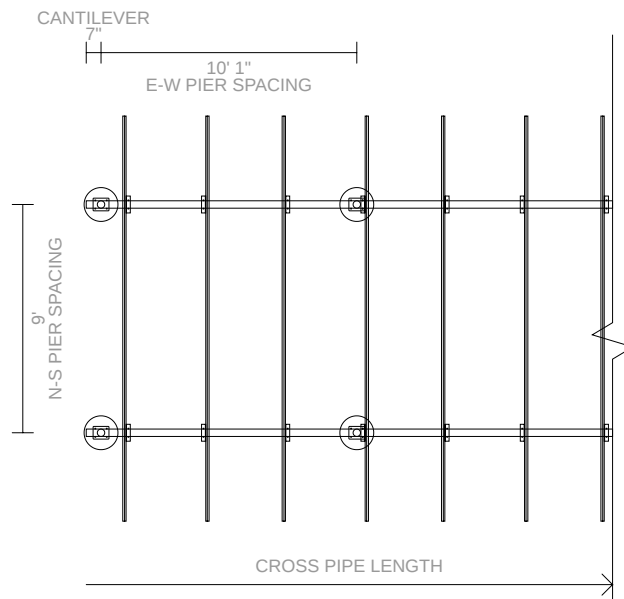
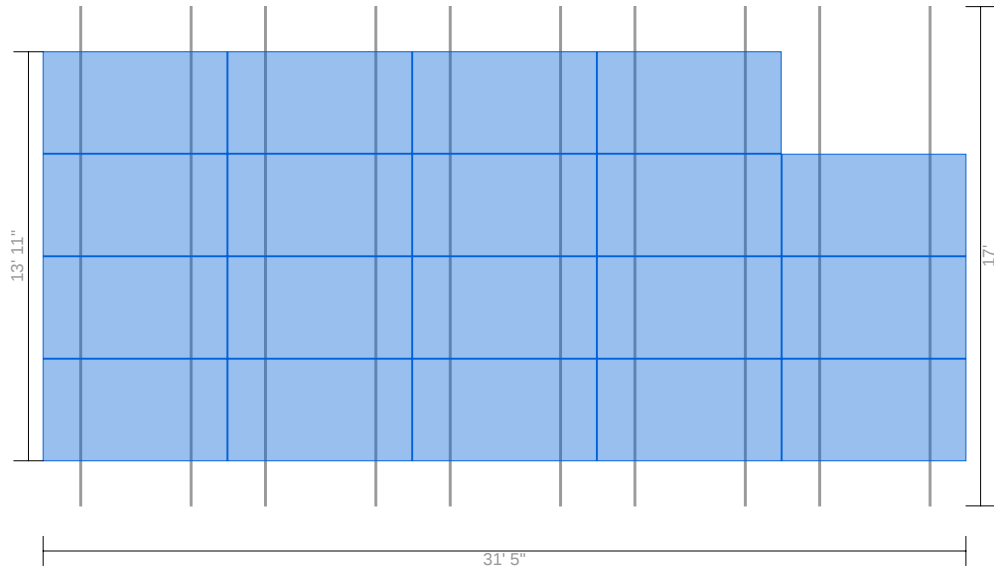
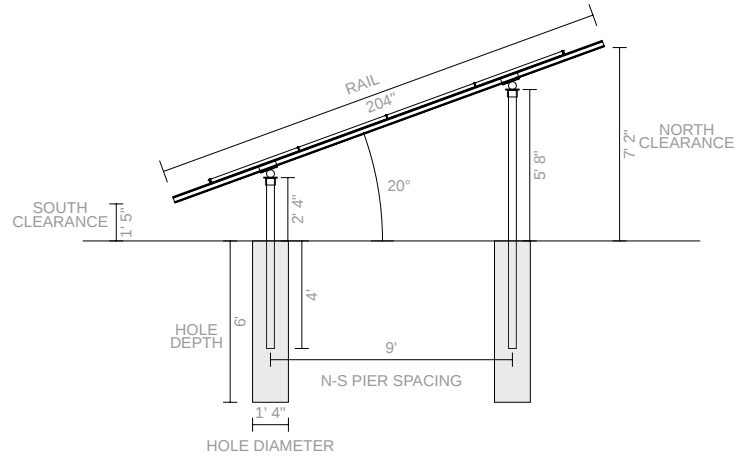


| Project Details | | | |
|----------------------|---|----------------------|----------------------|
| Name | Sharon Dixon-Thibodeaux | Date | 04/27/2023 |
| Location | 60 Aaron Drive, Fuquay-Varina, NC 27526 | ASCE code | 7.16 |
| Total modules | 19 | Wind speed | 120 mph |
| Module | Mission Solar Energy: MSE395SX9R (40mm) | Snow load | 20 psf |
| Dimensions | Dimensions: 75.08" x 41.5" x 1.57" (1907.0mm x 1054.0mm x 40.0mm) | Wind exposure | C |
| Total watts | 7,505 kW | Piers | 8 |
| | | Concrete | 2.48 yd ³ |

| Substructure & Foundation | | | |
|-----------------------------|----------|---------------------------|-----|
| Tilt | 20° | South facing grade | 0° |
| Pipe/tubing diameter | 3" | Soil class | 4 |
| Foundation type | Concrete | Hole diameter | 16" |

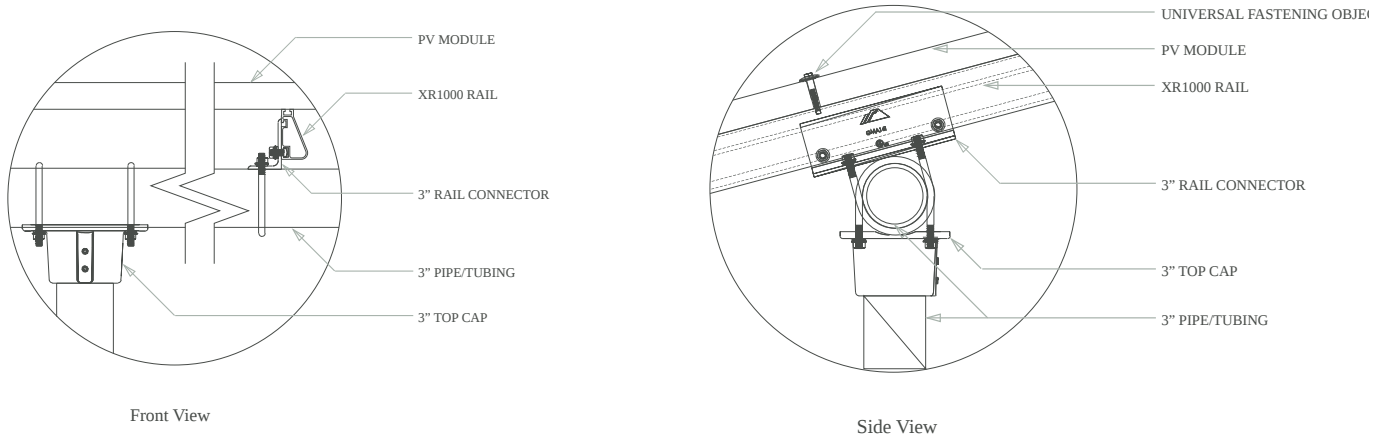
| Sub array #1 | | | | | |
|--------------------------|---------------------------|--------------------------|--------------|--------------------------|------------|
| Rows | 4 | Columns | 5 | # Arrays | 1 |
| Area | 31' 5" (EW) × 14' 1" (NS) | Rail type | XR1000 | Diagonal bracing | no |
| E/W spacing | 10' 1" | Rail cantilever | 3' 9" | Pipe cantilever | 7" |
| Piers/array | 8 | Total south piers | 4 (6' 4") | Total north piers | 4 (9' 8") |
| Total cross pipes | 2 (31' 5") | Total pipe length | 126' 9" | Cut back modules | 1 |
| Shear | 1,175 lbs | Moment | 2,937 ft-lbs | Uplift | -2,061 lbs |



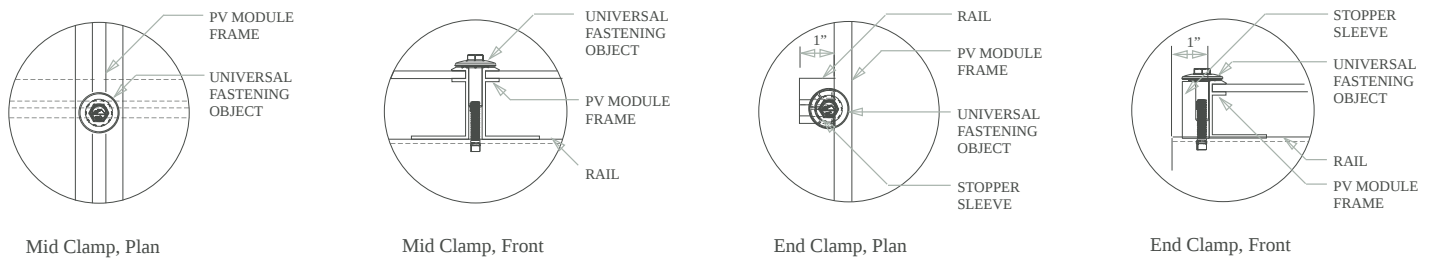


Pipe Fitting Detail

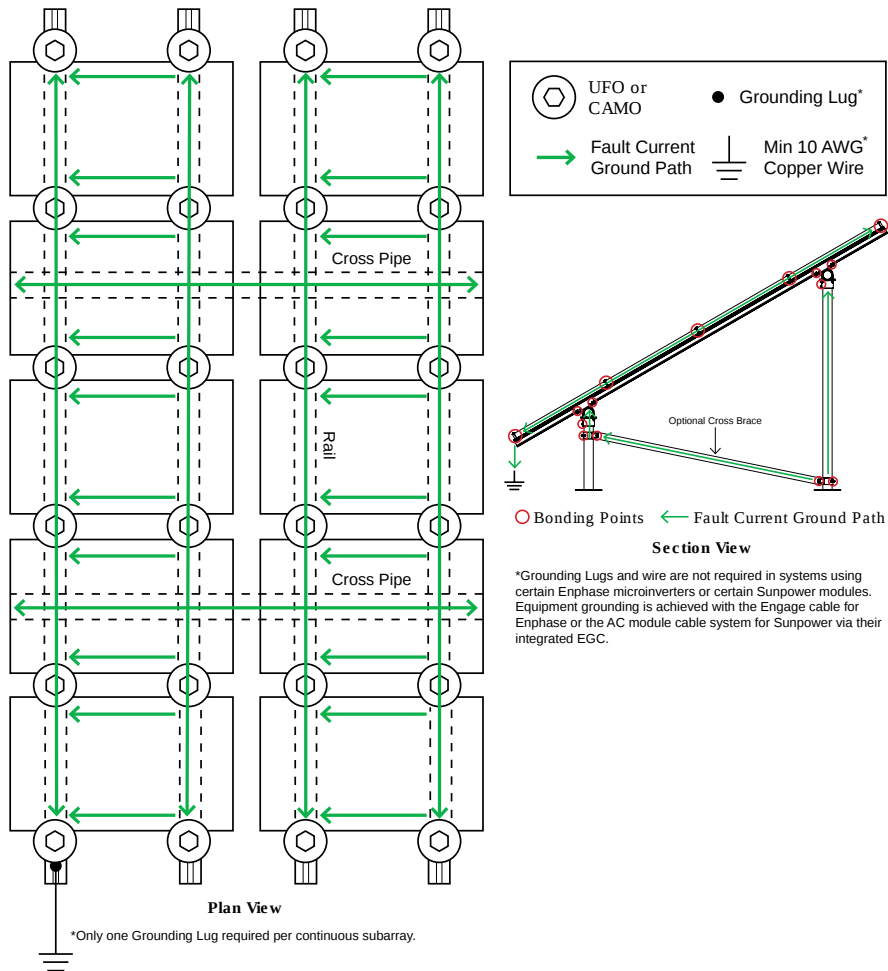
XR1000 Rail



Clamp Detail



Grounding Diagram



Bill of Materials

| Part | Spares | Total Qty |
|-------------|---------------|------------------|
|-------------|---------------|------------------|

Rails

| | | |
|---|---|----|
| XR-1000-204A XR1000, Rail 204" (17 Feet) Clear | 0 | 10 |
|---|---|----|

Clamps & Grounding

| | | |
|---|---|----|
| UFO-CL-01-A1 Universal Module Clamp, Clear | 0 | 48 |
|---|---|----|

| | | |
|---|---|----|
| UFO-STP-40MM-M1 Stopper Sleeve, 40MM, Mill | 0 | 20 |
|---|---|----|

| | | |
|--|---|---|
| XR-LUG-03-A1 Grounding Lug, Low Profile | 0 | 1 |
|--|---|---|

Substructure

| | | |
|----------------------------------|---|---|
| 70-0300-SGA SGA Top Cap at 3" | 0 | 8 |
|----------------------------------|---|---|

| | | |
|--|---|----|
| GM-BRC3-01-M1 Ground Mount Bonded Rail Connector - 3" | 0 | 20 |
|--|---|----|