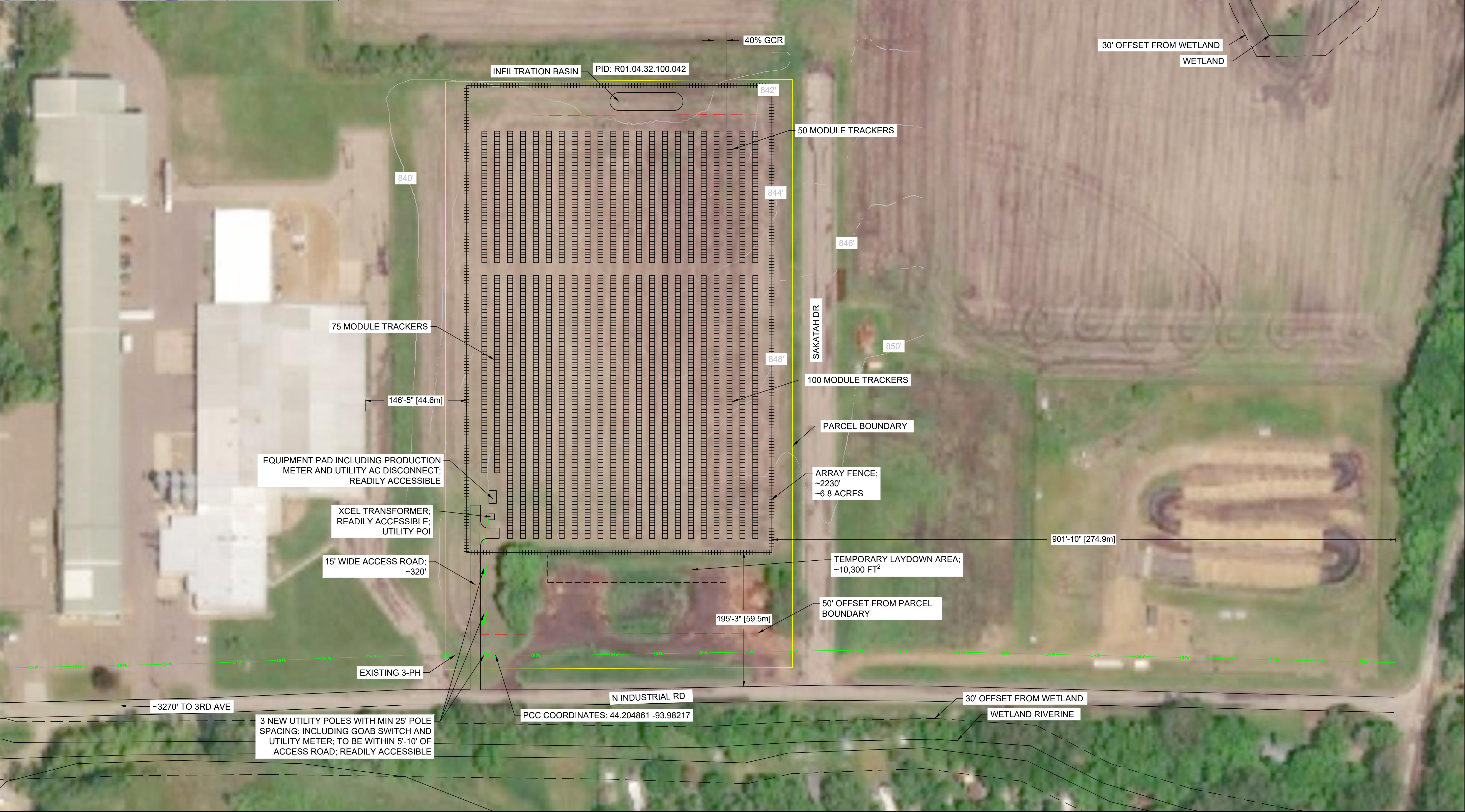
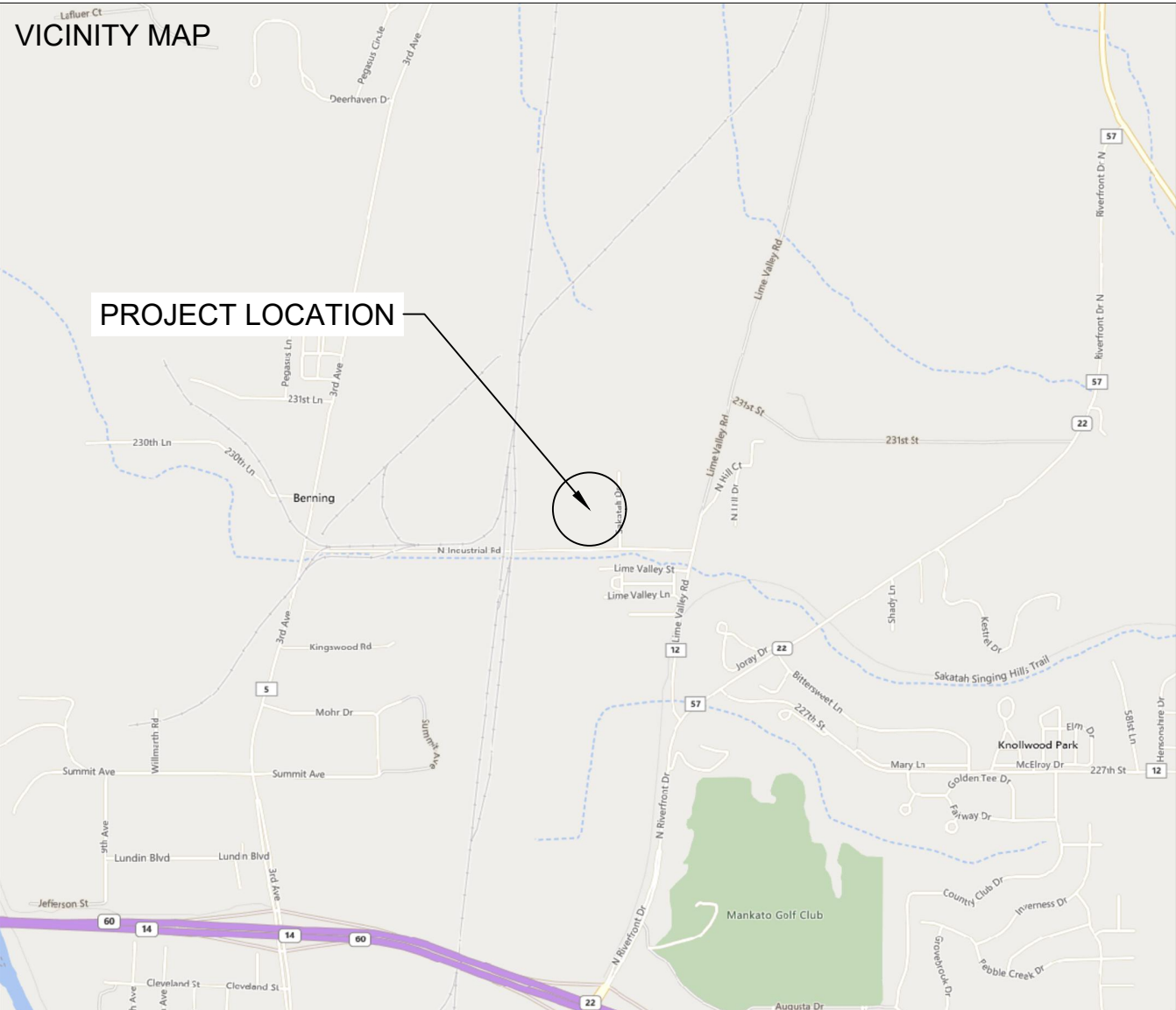
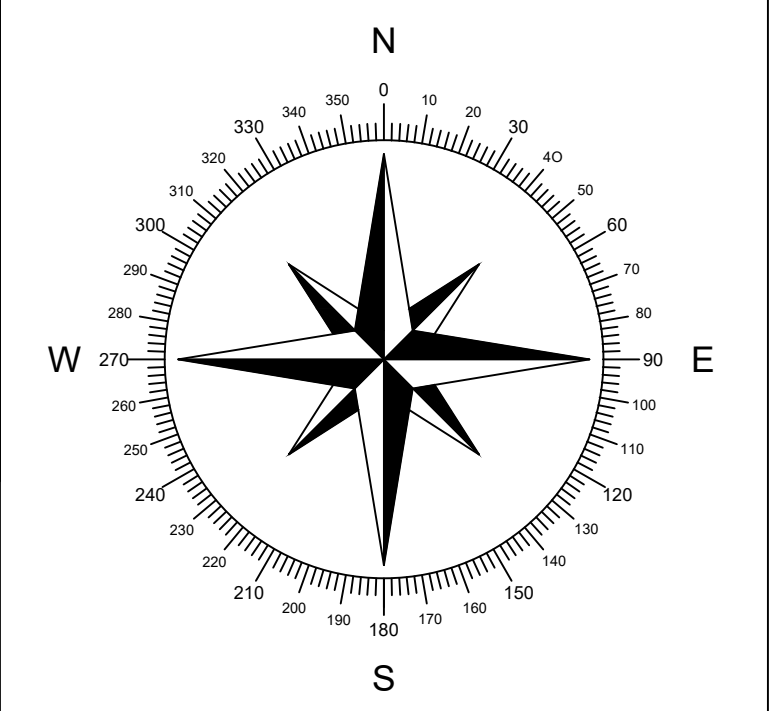




SPACE FOR PE STAMP:



SHEET NOTES:

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PROJECT OWNER: MN CSG 2019-59 LLC

NEW ENERGY EQUITY, LLC
2530 RIVA ROAD, SUITE 200
ANNAPOLIS, MD 21041
NEWENERGYEQUITY.COM
443-267-5012

PROJECT ADDRESS
320 INDUSTRIAL RD
MANKATO, MN 56001

LAT: 44.2048611111
LONG: -93.9821666667

SYSTEM SPECIFICATIONS	
SYSTEM SIZE DC	1.706 MW
SYSTEM SIZE AC	POWER LIMITED TO 1,000 MW
DC/AC RATIO	1.706
AZIMUTH	180°
TILT	+/- 52°
MODULE COUNT	3250
MODULE TYPE	JINKO EAGLE 72HM G5B-JKM525M-72HL4-TV
MODULE STC RATING	525 W
INVERTER COUNT	9
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK3 125-US
INVERTER POWER	125kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA	
MIN/MAX TEMP.	-26°C / 31°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	50 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER 04300348

NO POSITION, DISTANCE, OR CLEARANCE ISSUES WITH OVERHEAD ELECTRIC SERVICE LINES OR OTHER UTILITIES IN RELATION TO THE PV PANELS.

24/7 UNESCORTED KEYLESS ACCESS PROVIDED FOR ALL UTILITY ENERGY EQUIPMENT INCLUDING THE METERS AND AC DISCONNECT.

INTERCONNECTION TYPE: SECONDARY

REVISIONS			
#	DESCRIPTION	BY	DATE
0	ORIGINAL DESIGN	IR	1/20/2021
1	JOSE TAVARES	JT	1/28/2021
2	CUP	ELD	9/15/2021
3	JINKO 525	AE	3/2/2022
4	UPDATED CUP	JT	4/20/2022
5			
6			
7			

DRAWN BY

JOSE TAVARES

PROJECT NAME

CITYLOT CSG

DRAWING TITLE

SITE PLAN

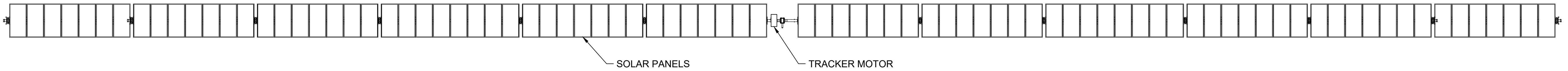
SCALE ¹

1" = 70'

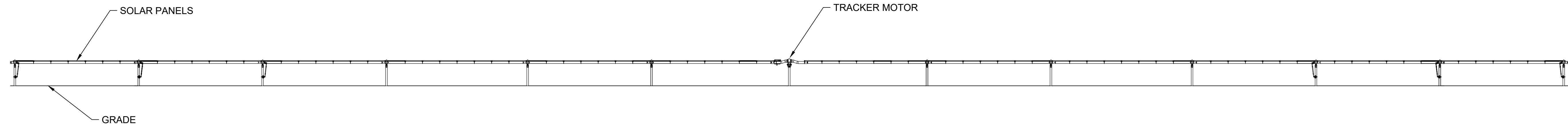
0 1" 2"

SHEET

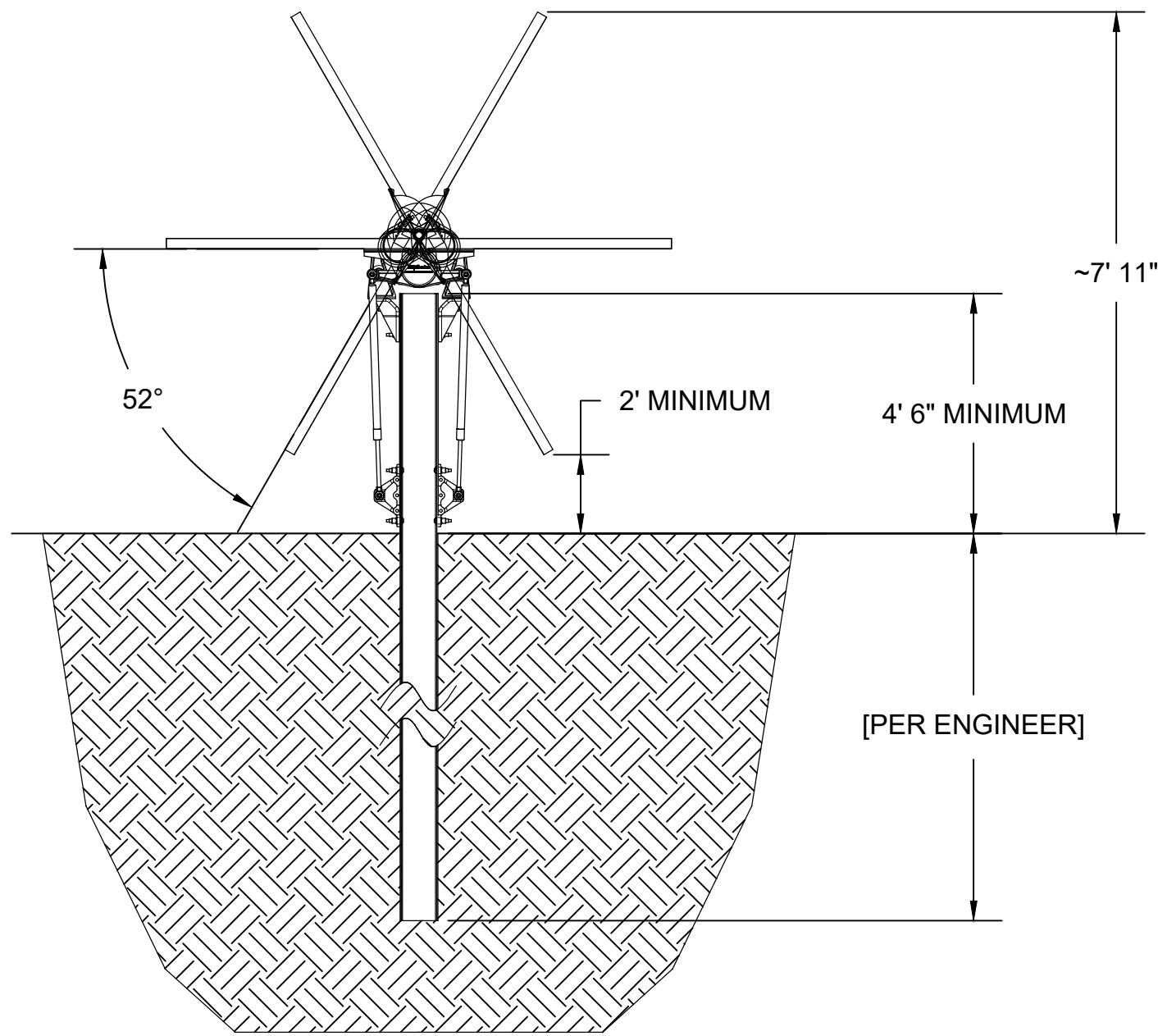
PV1



1 SINGLE AXIS TRACKER TOP DOWN VIEW
NTS



2 SINGLE AXIS TRACKER EAST-WEST ELEVATION
NTS



3 SINGLE AXIS TRACKER NORTH-SOUTH ELEVATION
NTS



PROJECT OWNER: MN CSG 2019-59 LLC

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ANNAPOLIS, MD 21041
NEWENERGYEQUITY.COM
443-267-5012

PROJECT ADDRESS
320 INDUSTRIAL RD
MANKATO, MN 56001

LAT: 44.2048611111
LONG: -93.9821666667

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	1.706 MW
SYSTEM SIZE AC	POWER LIMITED TO 1.000 MW
DC/AC RATIO	1.706
AZIMUTH	180°
TILT	+/- 52°
MODULE COUNT	3250
MODULE TYPE	JINKO EAGLE 72HM G5B-JKM525M-72HL4-TV
MODULE STC RATING	525 W
INVERTER COUNT	9
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK3 125-US
INVERTER POWER	125kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-26°C / 31°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	50 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER 04300348

NO POSITION, DISTANCE, OR CLEARANCE
ISSUES WITH OVERHEAD ELECTRIC
SERVICE LINES OR OTHER UTILITIES IN
RELATION TO THE PV PANELS.

24/7 UNESCORTED KEYLESS ACCESS
PROVIDED FOR ALL UTILITY ENERGY
EQUIPMENT INCLUDING THE METERS AND
AC DISCONNECT.

INTERCONNECTION TYPE: SECONDARY

REVISIONS

#	DESCRIPTION	BY	DATE
0	ORIGINAL DESIGN	IR	1/20/2021
1	JOSE TAVARES	JT	1/28/2021
2	CUP	ELD	9/15/2021
3	JINKO 525	AE	3/2/2022
4	UPDATED CUP	JT	4/20/2022
5			
6			
7			

DRAWN BY

JOSE TAVARES

PROJECT NAME

CITYLOT CSG

DRAWING TITLE

SAT RACKING DETAIL

SCALE ¹

NTS

SHEET

PV2

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	1.706 MW
SYSTEM SIZE AC	POWER LIMITED TO 1.000 MW
DC/AC RATIO	1.706
AZIMUTH	180°
TILT	+/- 52°
MODULE COUNT	3250
MODULE TYPE	JINKO EAGLE 72HM G5B-JKM525M-72HL4-TV
MODULE STC RATING	525 W
INVERTER COUNT	9
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK3 125-US
INVERTER POWER	125kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-26°C / 31°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	50 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER 04300348

NO POSITION, DISTANCE, OR CLEARANCE
ISSUES WITH OVERHEAD ELECTRIC
SERVICE LINES OR OTHER UTILITIES IN
RELATION TO THE PV PANELS.

24/7 UNESCORTED KEYLESS ACCESS
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INTERCONNECTION TYPE: SECONDARY

REVISIONS

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5			
6			
7			

DRAWN BY

JOSE TAVARES

PROJECT NAME

CITYLOT CSG

DRAWING TITLE

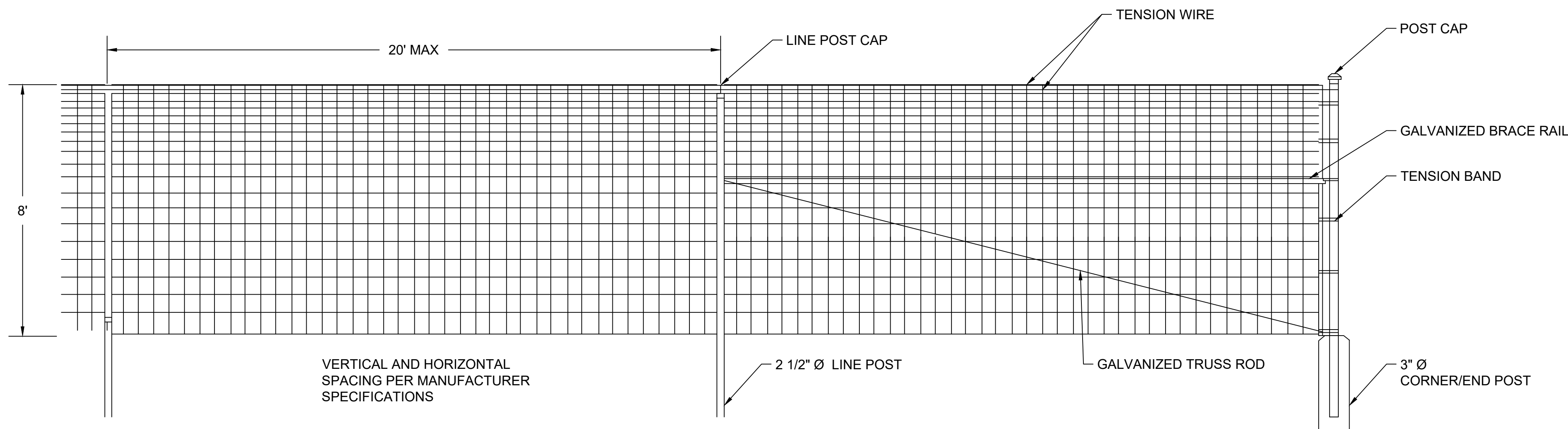
FENCE DETAIL

SCALE ¹

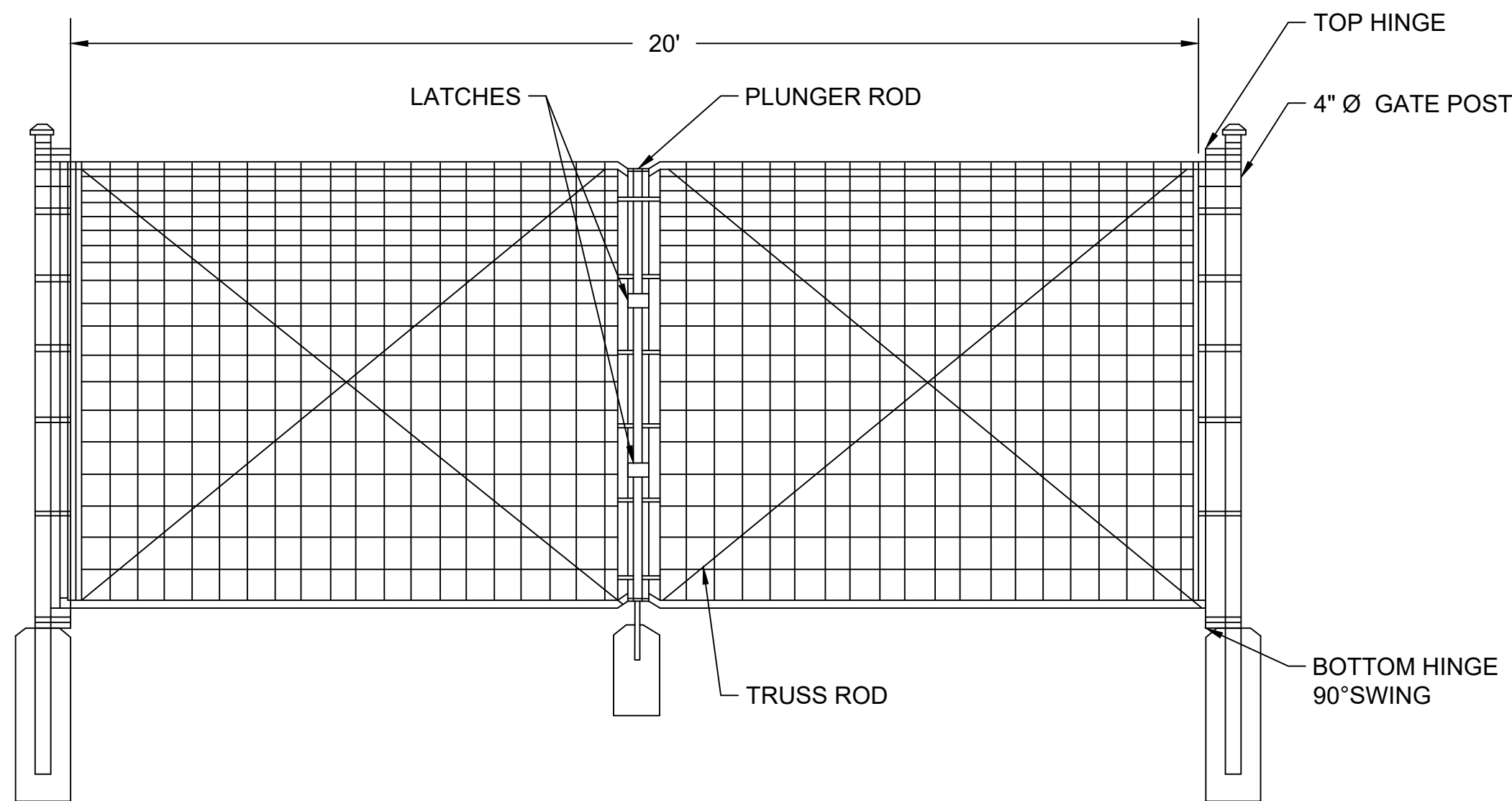
NTS

SHEET

PV3



1 8' FIXED KNOT FENCE
NTS



2 8' FIXED KNOT FENCE GATE
NTS

NOTE:
1. THIS DRAWING IS FOR INFORMATIONAL PURPOSES ONLY
AND NOT TO BE USED FOR CONTRUCTION.
2. DO NOT SCALE DRAWING

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	1.706 MW
SYSTEM SIZE AC	POWER LIMITED TO 1.000 MW
DC/AC RATIO	1.706
AZIMUTH	180°
TILT	+/- 52°
MODULE COUNT	3250
MODULE TYPE	JINKO EAGLE 72HM G5B-JKM525M-72HL4-TV
MODULE STC RATING	525 W
INVERTER COUNT	9
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK3 125-US
INVERTER POWER	125kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-26°C / 31°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	50 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER 04300348

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INTERCONNECTION TYPE: SECONDARY

REVISIONS

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5			
6			
7			

DRAWN BY

JOSE TAVARES

PROJECT NAME

CITYLOT CSG

DRAWING TITLE

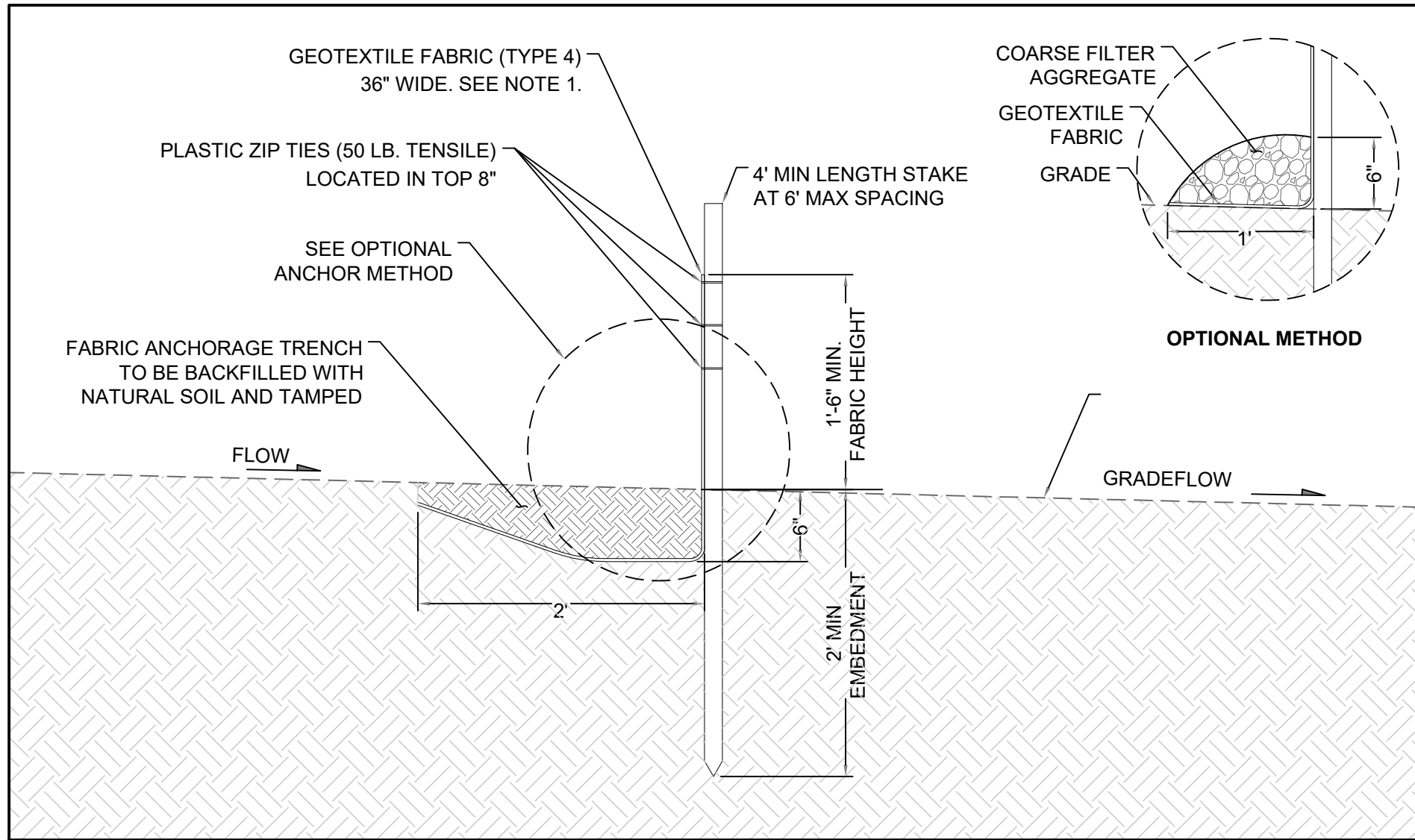
INFILTRATION BASIN DETAIL

SCALE ¹

NTS

SHEET

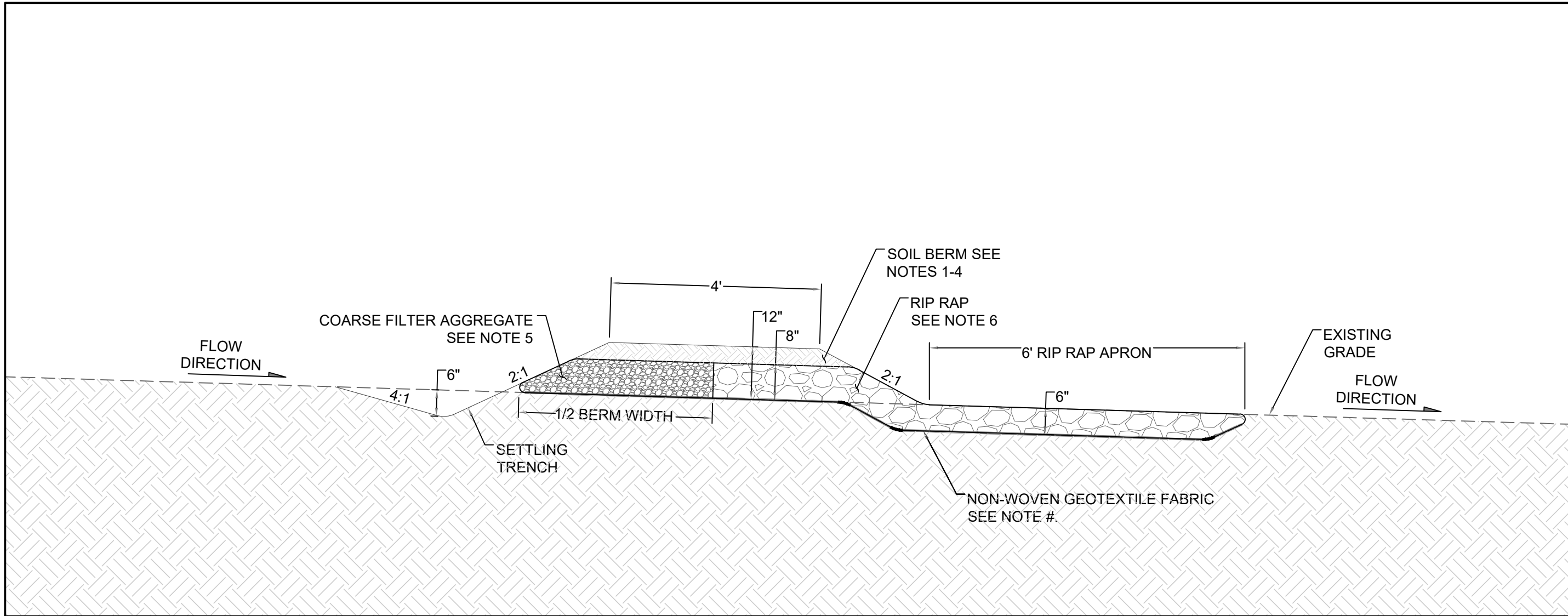
PV4



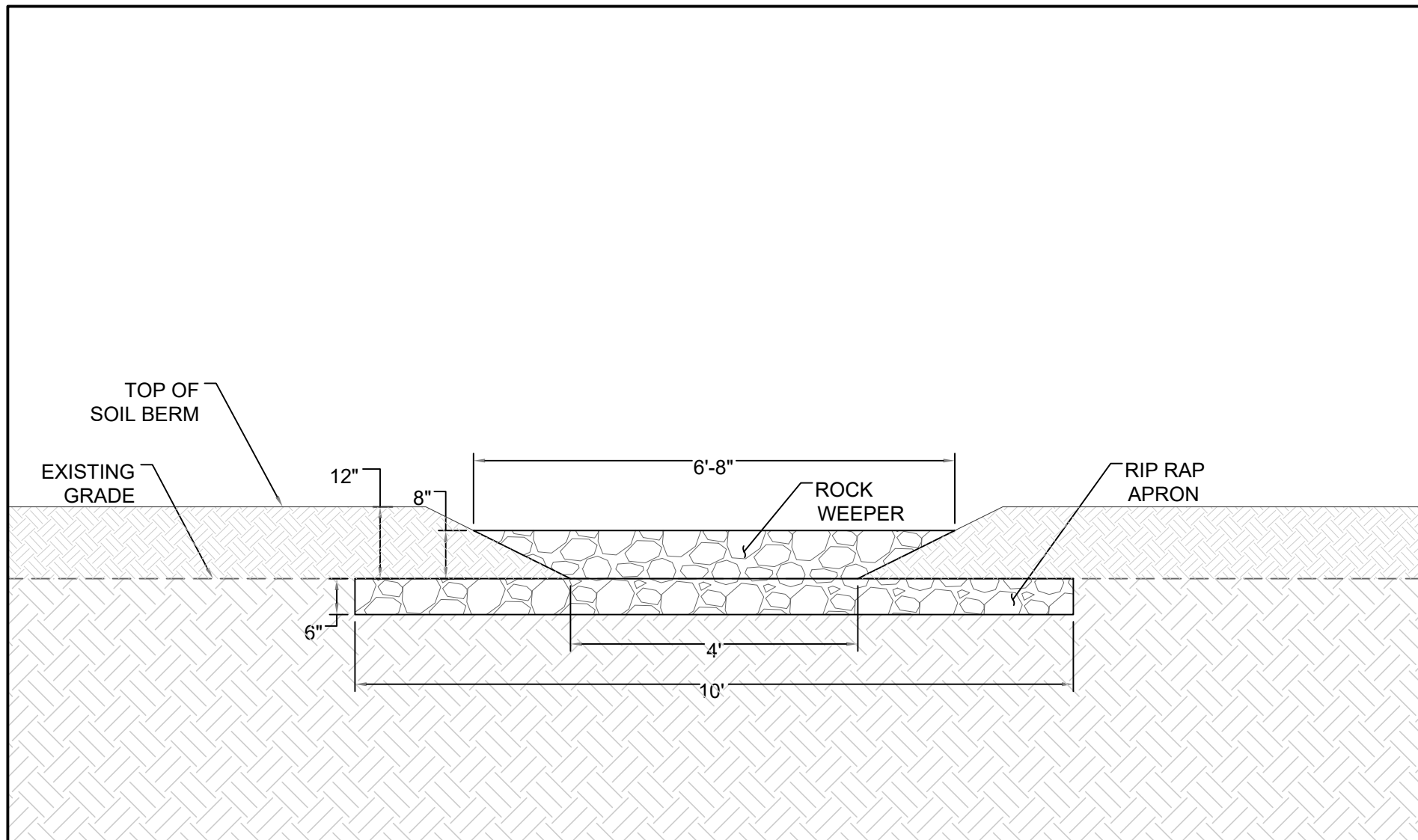
1 **SILT FENCE**
SCALE: 1"=1' VIEW: SECTION

SILT FENCE NOTES

1. GEOTEXTILE FABRIC SHALL BE A WOVEN OR NONWOVEN SYNTHETIC FIBER FABRIC COMPLYING WITH AASHTO M288.
2. GEOTEXTILE FABRIC SHALL BE SPICED TOGETHER WITH A SEWN SEAM AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD.
3. THE FENCE SHOULD FOLLOW THE CONTOUR OF THE SLOPE TO THE MAXIMUM AMOUNT PRACTICABLE AND HAVE NO DIPS OR LOW AREAS WHERE WATER WILL ACCUMULATE AND POOL. POOLED WATER IS A MAJOR CAUSE OF FAILURE BECAUSE OF THE HIGH PRESSURE IT PLACES ON THE FENCE.
4. ENDS OF THE FENCE SHOULD ALWAYS BE ANGLED UP SLOPE SO WATER CANNOT FLOW AROUND THEM.
5. THE MAXIMUM UP SLOPE GRADE PERPENDICULAR TO THE FENCE LINE SHOULD NOT EXCEED 1:1.
6. INSPECT BMPS ACCORDING TO NORMAL MAINTENANCE SCHEDULE.
7. INSPECTION SHOULD INCLUDE ENSURING FABRIC IS PROPERLY TRENCHED INTO THE GROUND AND FABRIC IS NOT TORN OR SAGGING.
8. SEDIMENT REMOVAL AND DISPOSAL IS REQUIRED WHEN SEDIMENT COVERS 1/3 OF THE HEIGHT OF THE FENCE.



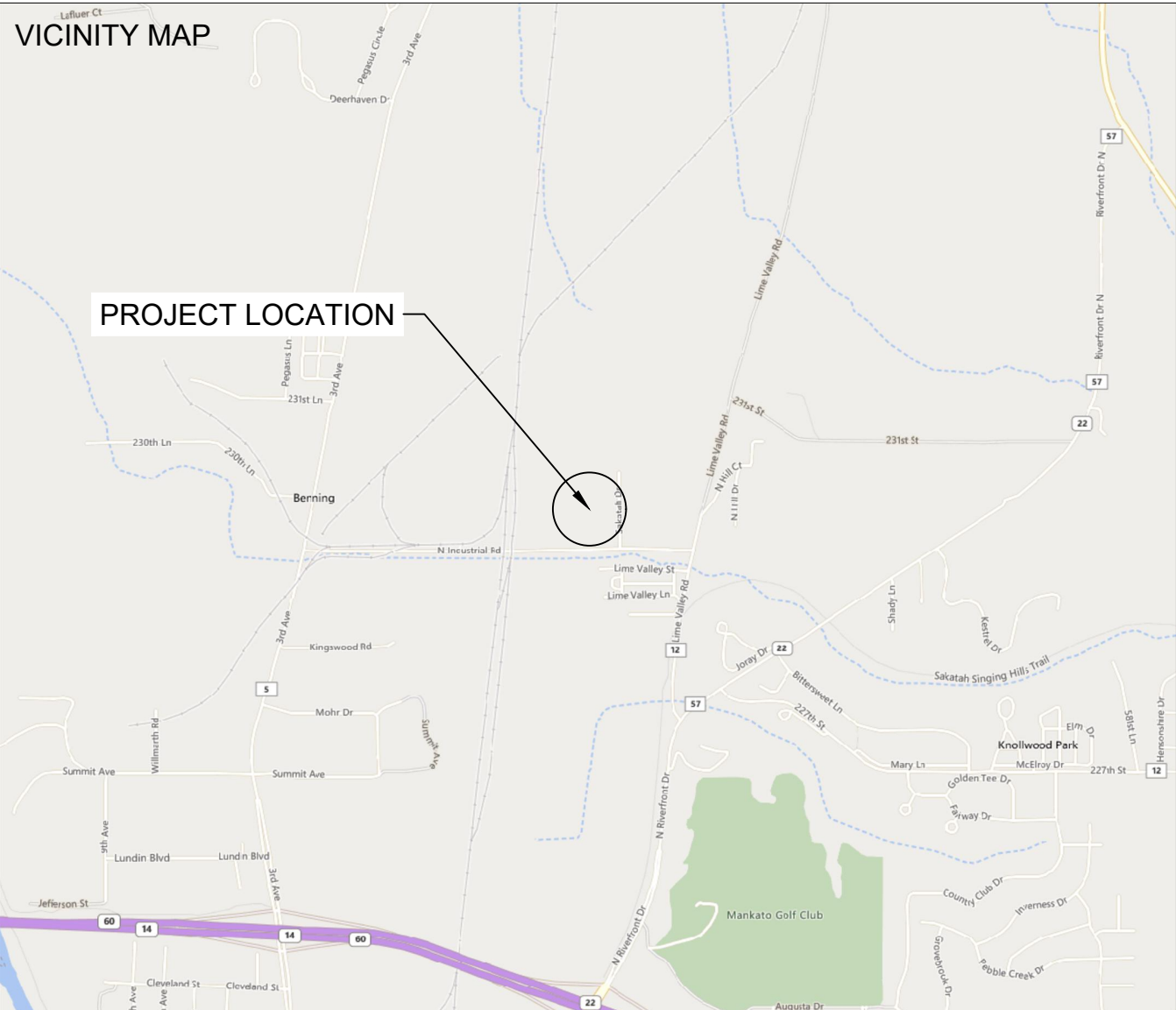
2 **FILTRATION BERM**
SCALE: 1"=2' VIEW: SECTION



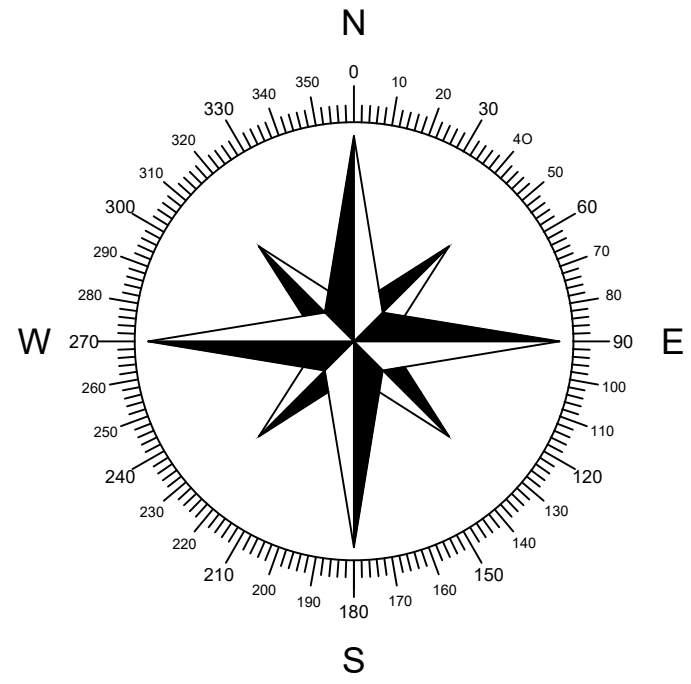
3 **FILTRATION BERM - ROCK WEEPER**
SCALE: 1"=2' VIEW: ELEVATION

FILTRATION BERM NOTES

1. SOIL PREPARATION SHALL INCLUDE THE REMOVAL OF EXISTING VEGETATION, CULTIVATED SOIL, TOPSOIL, AND OTHER SOFT, UNSUITABLE OR DELETERIOUS MATERIAL AND CLODS OR FRAGMENTS LARGER THAN 3" IN ANY DIMENSION.
2. SOILS USED TO CONSTRUCT THE BERM SHALL BE FREE OF ROOTS, VEGETATION, ORGANIC MATTER, AND CONTAIN A SAND CONTENT BELOW 70 PERCENT.
3. SOIL SHALL BE MIXED TO ACHIEVE UNIFORM MOISTURE CONTENT AND COMPACTED. THE FINISHED BERM MUST BE STABILIZED IMMEDIATELY WITH PERMANENT VEGETATION OR EROSION CONTROL BLANKETS. IN AREAS WHICH ARE ANTICIPATED TO RECEIVE HIGH FLOW, SEED SHALL BE COVERED WITH EROSION CONTROL BLANKETS UNTIL PERMANENT VEGETATION IS ACHIEVED.
4. BERMS SHALL BE INSTALLED ON THE CONTOUR PERPENDICULAR TO SHEET FLOW AND SHALL HAVE A CONSISTENT SHAPE THROUGHOUT
5. COARSE FILTER AGGREGATE SHALL BE 1" ROCK CONSISTING OF NATURALLY OCCURRING UNIFORMLY BLENDED MINERAL MATERIALS WITH NO MORE THAN 20% PASSING THE NO. 200 SIEVE AND CONTAINING NO TOPSOIL, ORGANICS, OR SEVERELY WEATHERED ROCK.
6. RIP RAP SHALL HAVE A D50 = 6" AND SHALL BE FREE OF SOIL AND OTHER DEBRIS AND CONSIST OF STONES WITH AT LEAST ONE FRACTURED FACE WHOSE WIDTHS ARE NOT LESS THAN 30% OF THE LENGTH OF EACH STONE.
7. INSPECT BERMS WEEKLY AND BEFORE AND AFTER A RAIN EVENT. REPAIR DAMAGED AREAS WITHIN 24 HOURS AND REESTABLISH VEGETATIVE COVER OR TEMPORARY STABILIZATION AS SOON AS POSSIBLE. IF PORTIONS OF THE BERM OUTSIDE OF THE ROCK FILTERS ARE BREACHED THE BERM SHALL BE EXPANDED OR ENLARGED UNTIL BREACHING IS PREVENTED.



SPACE FOR PE STAMP:



SHEET NOTES:

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2530 RIVA ROAD, SUITE 200
ANNAPOLIS, MD 21041
NEWENERGYEQUITY.COM
443-267-5012

PROJECT ADDRESS
320 INDUSTRIAL RD
MANKATO, MN 56001

LAT: 44.2048611111
LONG: -93.9821666667

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	1.706 MW
SYSTEM SIZE AC	POWER LIMITED TO 1.000 MW
DC/AC RATIO	1.706
AZIMUTH	180°
TILT	+/- 52°
MODULE COUNT	3250
MODULE TYPE	JINKO EAGLE 72HM G5B-JKM525M-72HL4-TV
MODULE STC RATING	525 W
INVERTER COUNT	9
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK3 125-US
INVERTER POWER	125kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-26°C / 31°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	50 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER 04300348

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24/7 UNESCORTED KEYLESS ACCESS PROVIDED FOR ALL UTILITY ENERGY EQUIPMENT INCLUDING THE METERS AND AC DISCONNECT.

INTERCONNECTION TYPE: SECONDARY

REVISIONS

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4	UPDATED CUP	JT	4/20/2022
5			
6			
7			

DRAWN BY

JOSE TAVARES

PROJECT NAME

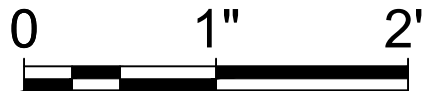
CITYLOT CSG

DRAWING TITLE

DRAINAGE PATTERNS

SCALE ¹

1" = 70'



SHEET

PV5

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	1.706 MW
SYSTEM SIZE AC	POWER LIMITED TO 1.000 MW
DC/AC RATIO	1.706
AZIMUTH	180°
TILT	+/- 52°
MODULE COUNT	3250
MODULE TYPE	JINKO EAGLE 72HM G5B-JKM525M-72HL4-TV
MODULE STC RATING	525 W
INVERTER COUNT	9
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK3 125-US
INVERTER POWER	125kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-26°C / 31°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	50 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES

CASE NUMBER 04300348

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4	UPDATED CUP	JT	4/20/2022
5			
6			
7			

DRAWN BY

JOSE TAVARES

PROJECT NAME

CITYLOT CSG

DRAWING TITLE

ELECTRICAL DETAILS

SCALE¹

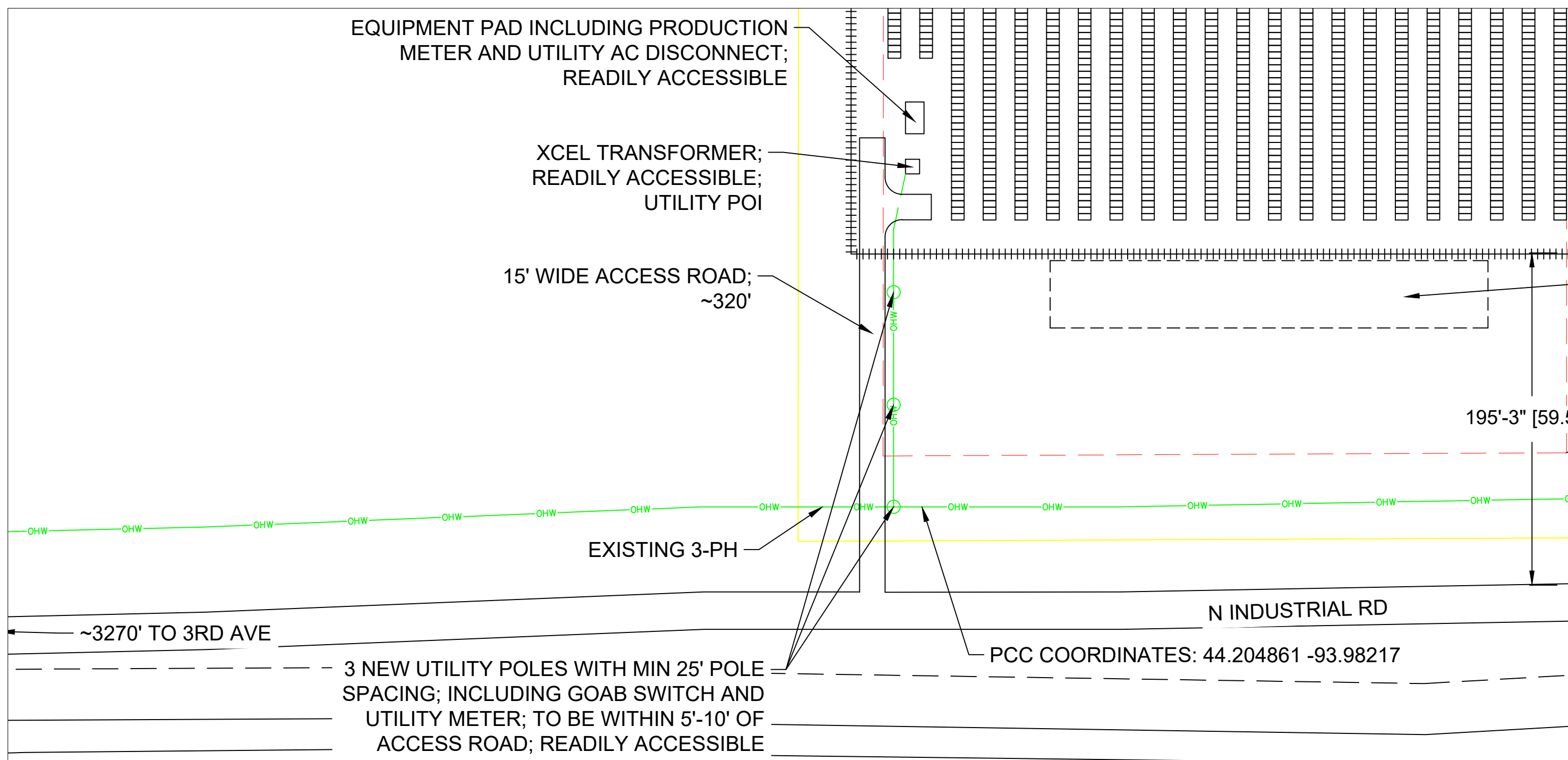
AS NOTED

SHEET

E3

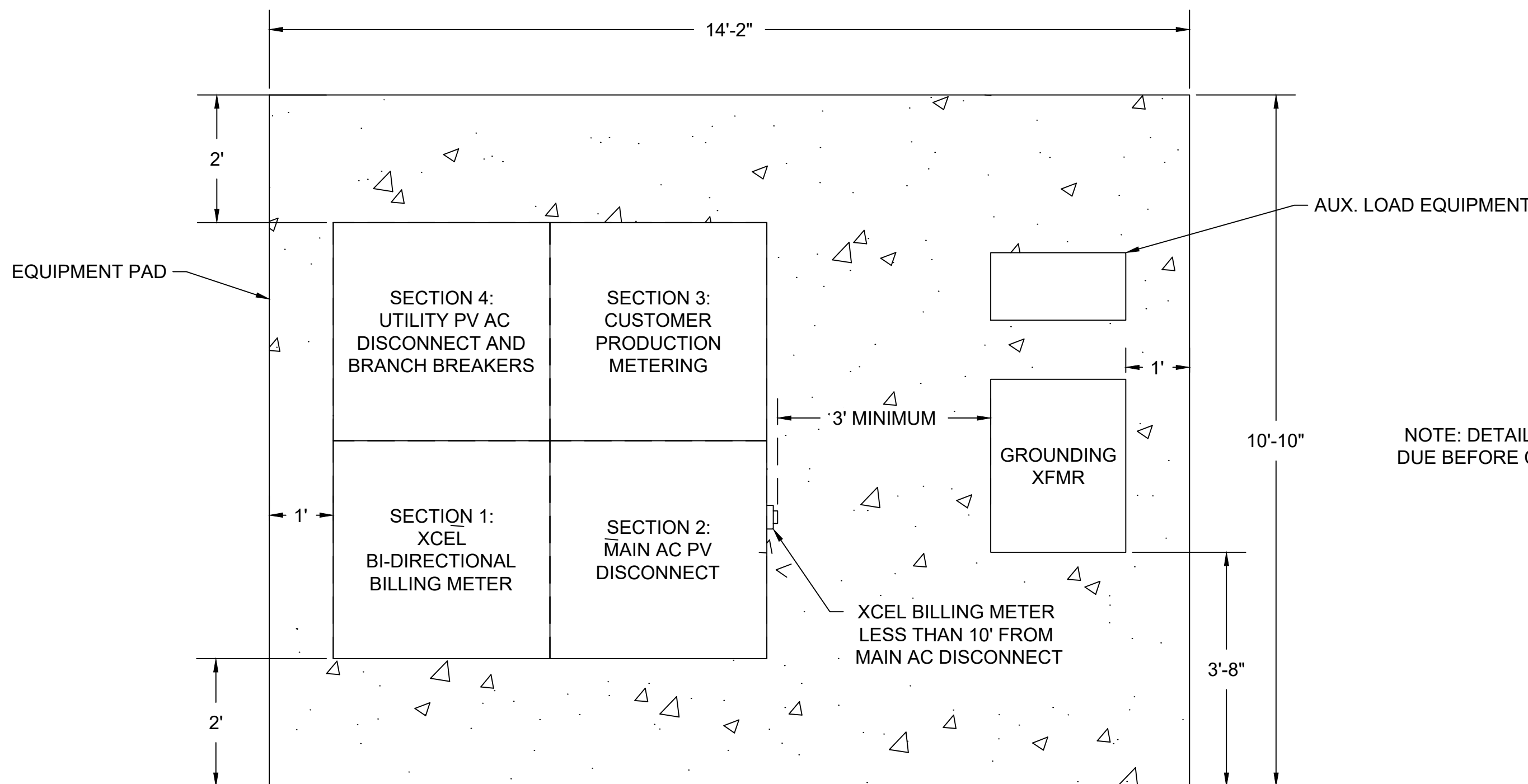
SHEET NOTES:

- Overhead line to underground service conductors detail - provided by utility
- Fence Detail and Fence Grounding - provided in the civil engineering drawings



1 INTERCONNECTION PLAN

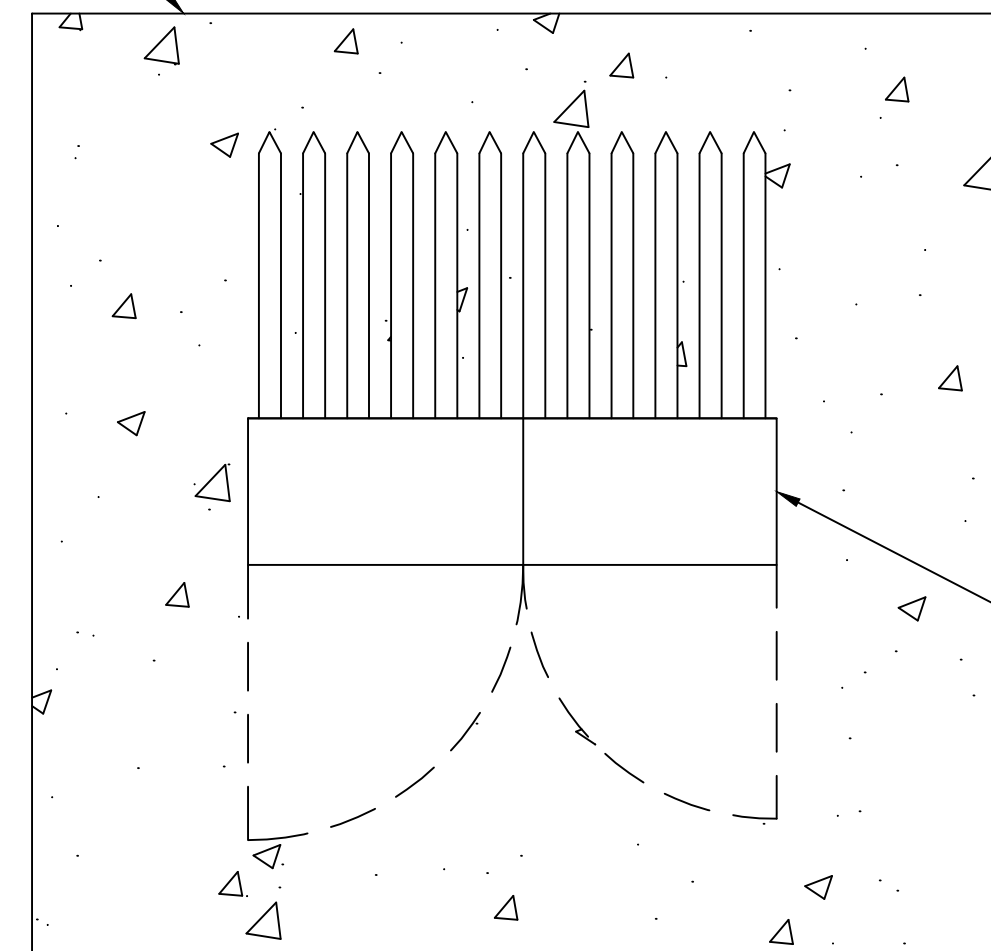
Scale: 1" = 60'



2 EQUIPMENT PAD PLAN

Scale: 3/4" = 1'

SEPARATE EQUIPMENT PAD FOR XCEL OWNED TRANSFORMER



SPACE FOR PE STAMP:



PROJECT ADDRESS
320 INDUSTRIAL RD
MANKATO, MN 56001

LAT: 44.2048611111
LONG: -93.9821666667

SYSTEM SIZE DC	1.706 MW
SYSTEM SIZE AC	POWER LIMITED TO 1.000 MW
DC/AC RATIO	1.706
AZIMUTH	180°
TILT	+/- 52°
MODULE COUNT	3250
MODULE TYPE	JINKO EAGLE 72HM G5B-JKM525M-72HL4-TV
MODULE STC RATING	525 W
INVERTER COUNT	9
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK3-125-US
INVERTER POWER	125kW
RACKING	TBD
MONITORING	ALSO ENERGY

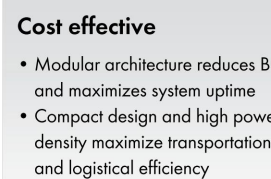
MIN/MAX TEMP.	-26°C / 31°C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	50 PSF
BUILDING HEIGHT	0'-0"

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E4



- Scalable 1,500 VDC building block with best-in-class performance
- Flexible architecture creates scalability while maximizing land usage

- Ergonomic handling and simple connections enable quick installation
- Centralized commissioning and control with SMA Data Manager

- SMA Smart Connected reduces O&M costs and simplifies field-service
- Powered by award winning ennexO

Sunny Highpower PEAK3 125-US

Sunny Highpower PEAK3 150-US

Input [DC]		
Maximum array power	187500 Wp STC	1500 VDC
Maximum system voltage		225000 Wp STC
NPP voltage range	710 V ~ 1425 V	855 V ~ 1425 V
MPP trackers	1	
Maximum operating input current	1	
Maximum input short circuit current	180 A	
Output [AC]		
Nominal AC power	125000 W	
Maximum export power	125000 VA	
Output phases / line connections	3 / 3 PE	
Nominal AC voltage	480 V	600 V
Compatible transformer winding configuration		Wye-grounded
Maximum output current		151 A
Rated grid frequency		60 Hz
Grid frequency / range		50 Hz, 60 Hz; ± 6 Hz, -16 Hz 1 / 0.0 leading ... 0.0 lagging
Power factor at rated power / adjustable displacement harmonics (THD)		<3%
Efficiency		
CEC efficiency (preliminary)	98.5 %	98.5 %
Protection and safety features		
Ground fault monitoring: Res / Differential current		● / ●
DC reverse polarity protection		●
AC short circuit protection		●
Monitored surge protection (Type 2); DC / AC		● / ●
Protection class / overvoltage category (as per IEC 61641)		/ II
General data		
Device dimensions (W x H x D)	770 / 830 / 444 mm	[30.3 / 32.7 / 17.5 in.]
Device weight		85 kg (188 lb.)
Operating temperature range	-25°C ... +60°C (13°F ... +140°F)	
Storage temperature range	-40°C ... +70°C (-40°F ... +158°F)	
Audible noise emission (full power @ 1m and 25°C)		< 65 dB(A) < 5 W
Internal consumption at night		Transformers
Cooling concept		OpiTec® (forced convection, variable speed fans)
Enclosure protection rating		Type XX (as per US DOE)
Maximum permissible relative humidity (non-condensing)		100%
Additional information		
Mounting		Rock mount
DC connection		Terminal lugs - up to 400 kcmil CU/AL
AC connection		Screw terminals - up to 300 kcmil CU/AL
LED indicators (Status/Fault/Communication)		
SMA Speedwire (Ethernet network interface)		● (2 x RJ45 ports)
Data protocols: SMA Modbus / SunSpec Modbus / Walcomnet		● / ● / ●
OpiTect Global Peak (shade tolerant MPP tracking)		● / ● / ●
PID Mitigation Solution		○
Integrated Plant Control / Q on Demand 24/7		● / ●
Oil/gel capacitor / SMA Full-Save Controller compatible		● / ●
SMA Smart Connected (predictive maintenance and service) Certifications (landing on page 10-15)		
Certifications and approvals	UL 1741, UL 1998, IEEE 1547, CAN/CSSA/C22.2 No.62 t09	
FCC compliance	FCC Part 15, Class A	
Grid interconnection standards	UL 1741 SA, C-0 Rate 141, HSCQ Rule 14H, PRCO204.02	
Advanced grid support capabilities	L1/HFRT, L1/HVRT, Volt/VAr, Volt/Watt, Frequency-Watt, Ramp Rate Control, Fixed Power Factor	
Warranty		5 years
Standard		10 / 15 / 20 years
Optional extensions		
Type designation:	SHF 125J5U-20	SHF 150J5U-20
Preliminary data as of June 2018 ● Standard features	○ Optional features	

Toll Free +1 888 4 SMA USA
www.SMA-America.com

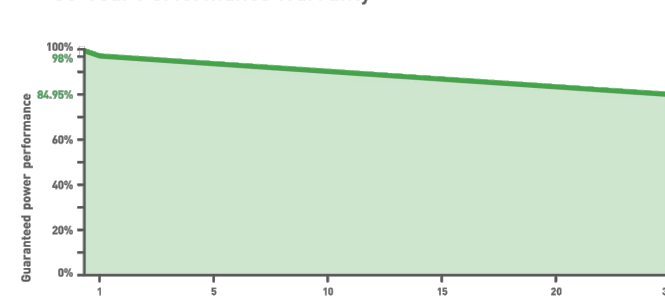
SMA America, LLC



525-545 WATT • HALF CELL BIFACIAL
Positive power tolerance of 0~+3%

- NYSE-listed since 2010, Bloomberg Tier 1 manufacturer
- Best-selling module globally for last 4 years
- Top performance in the strictest 3rd party labs
- 99.9% on-time delivery to the installer
- Automated manufacturing utilizing artificial intelligence
- Vertically integrated, tight controls on quality
- Premium solar panel factories in USA and Malaysia

30-Year Performance Warranty



- ISO9001:2015 Quality Standards
- ISO14001:2015 Environmental Standards
- IEC61215, IEC61730 certified products
- ISO45001: 2018 Occupational Health & Safety Standards
- UL61730 certified products



BUILDING YOUR TRUST IN SOLAR. JINKOSOLAR.US



- **Multi Busbar Half Cell Technology**
High efficiency half cut solar cells deliver high power in a small footprint.
- **Bifacial Power Gain**
Bifacial cell architecture allows backside bonus and more lifetime power yield.
- **Designed for Long Life**
Uses the same DUPO® protective film as the Space Station, Mars Lander, and jetliners. 30-year warranty.
- **Shade Tolerant**
Twin array design allows continued performance even with shading by trees or debris.
- **Power Boost in Cloudy Conditions**
A special film diffuses light, boosting performance even with shading by trees or debris.
- **Protected Against All Environments**
Certified to withstand humidity, heat, rain, marine environments, hail, salt, sand, and packed snow.

Technical drawing of the 1180x500 Grid 1, showing front, side, and back views with dimensions and assembly details.

Front View: A rectangular grid with dimensions 1180mm (500) and 500mm. The grid is composed of 10 columns and 10 rows of squares. The top edge is labeled "1180mm (500)" and the right edge is labeled "500mm".

Side View: A vertical rectangular profile with a height of 500mm. The top edge is labeled "500mm".

Back View: A rectangular grid with dimensions 1180mm (500) and 500mm. The grid is composed of 10 columns and 10 rows of squares. The top edge is labeled "1180mm (500)" and the right edge is labeled "500mm".

Assembly Details: Three small diagrams (A, B, C) show the assembly of the grid. Diagram A shows a cross-section of the grid with a central hole. Diagram B shows a cross-section of the grid with a central hole and a surrounding frame. Diagram C shows a cross-section of the grid with a central hole and a surrounding frame.

Dimensions:

- Length: 1180mm (500)
- Width: 500mm
- Height: 500mm
- Row Pitch: 50mm

Figure 10 consists of two graphs. The left graph, titled 'Current-Voltage & Power-Voltage Curves (520W)', plots Current (A) on the left y-axis (0 to 14) and Power (W) on the right y-axis (0 to 560) against Voltage (V) on the x-axis (0 to 50). It shows multiple curves for current and power, with power peaking around 45V. The right graph, titled 'Temperature Dependence of Isc, Voc, Pmax', plots Normalized Isc, Voc, Pmax (%) on the y-axis (80 to 100) against Cell Temperature (°C) on the x-axis (10 to 70). It shows three downward-sloping lines for Isc, Voc, and Pmax.

No. of Half Cells	144 (2x72)
Dimensions	227x113x40mm [89.53x44.45x1.57in]
Weight	29.4kg [64.82lbs]
Front Glass	3.2mm, Anti-Reflection Coating High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68 Rated
Output Cables	12 AWG, 1400mm [55.12in] or Customized Length
Fire Type	Type 1
Pressure Rating	5400Pa (Snow) & 2400Pa (Wind)
Hailstone Test	45mm Hailstones at 27mm/s

Temperature Coefficients of Pmax	-0.35%/°C
Temperature Coefficients of Voc	-0.28%/°C
Temperature Coefficients of Isc	0.048%/°C
Nominal Operating Cell Temperature (NOCT)	45±2°C
Refer. Bifacial Factor	70±5%

Operating Temperature [°C]	-40°C~+85°C
Maximum System Voltage	1500VDC (UL and IEC)
Maximum Series Fuse Rating	30A

(Two pallets = One stack)
27pcs/pallets, 54pcs/stack, 540pcs/40 HQ Container

5%	Maximum Power [P _{max}]	551Wp	557Wp	562Wp	567Wp	572Wp
	Module Efficiency [%]	21.38%	21.58%	21.78%	21.99%	22.19%
15%	Maximum Power [P _{max}]	604Wp	610Wp	615Wp	621Wp	623Wp
	Module Efficiency [%]	23.41%	23.64%	23.86%	24.08%	24.30%
25%	Maximum Power [P _{max}]	656Wp	663Wp	669Wp	675Wp	681Wp
	Module Efficiency [%]	25.45%	25.69%	25.93%	26.18%	26.42%

Module Type	JM625M-72HL4-T	JM632M-72HL4-T	JM635M-72HL4-T	JM650M-72HL4-T	JM654M-72HL4-T
	STC	NOCT	STC	NOCT	STC
Maximum Power (Pmax)	525Wp	531Wp	530Wp	536Wp	539Wp
Maximum Power Voltage (Vmp)	40.61V	37.74V	37.17V	37.88V	40.17V
Maximum Power Current (Imp)	12.93A	10.55A	13.02A	10.47A	13.21A
Open-circuit Voltage (Voc)	49.27V	46.30V	49.35V	46.58V	49.42V
Short-circuit Current (Isc)	13.44A	11.02A	13.71A	11.07A	13.79A
Module Efficiency STC (%)	20.34%		20.55%	20.75%	
					20.94%
					21.13%

*STC: ☀ Irradiance 1000W/m² 🌡 Cell Temperature 25°C ☁ AM = 1.5
NOCT: ☀ Irradiance 800W/m² 🌡 Ambient Temperature 20°C ☁ AM = 1.5 🌀 Wind Speed 1m/s

The company reserves the final right for explanation on any of the information presented hereby. JKM525-545M-72HL4-TV-F1-US



SPACE FOR PE STAMP: