
TO: Board of Adjustment
FROM: Land Use Management
MEETING DATE: April 28th, 2025
REPORT DATE: April 18th, 2025

PUBLIC HEARING: Request for Variance, submitted by Lake City Catholic Worker Farm (Applicant) on behalf of Paul and Sara Freid (Owner) to allow construction of a Pole-Mounted Solar Array that will be 29 feet in total height, when the maximum height allowed is 20 feet.

Application Information:

Applicant(s): Lake City Catholic Worker Farm (Applicant)

Address of zoning request: 33292 County 5 Blvd, Lake City, MN 55041.

Parcel: 32.027.0502

Abbreviated Legal Description: Part of the N1/2 of the SW1/4 of SEC 27, Twp 112, Range 13

Township: Florence Township: has not signed the application or made any comments at the time of the writing of this report.

Zoning District: A-2 (Agricultural)

Attachments:

Application

Site Map(s)

Goodhue County Zoning Ordinance: [zoning_ordinance.pdf \(goodhuecountymn.gov\)](https://www.goodhuecountymn.gov/zoning-ordinance.pdf)

Background:

The Lake City Catholic Worker Farm (Applicant) on behalf of Paul Freid (Owner) has applied for a variance to the Solar Energy Systems Regulations allow a pole mounted solar array to be 29 feet in height when the maximum height allowed is 20 feet.

Variance Standards:

Variances shall only be permitted when they are in harmony with the general purposes and intent of the Goodhue County Zoning Ordinance and when consistent with the adopted comprehensive plan. Variances may be granted when the applicant establishes “practical difficulties” exist in complying with the existing official controls. Practical difficulties mean the applicant proposes to use the property in a reasonable manner not permitted by an official control, the plight of the landowner is due to circumstances unique to the property not created by the landowner, and the variance, if granted, will not alter the essential character of the locality. Economic considerations alone do not constitute practical difficulties.

Draft Findings of Fact:

1) Harmony with the general purposes and intent of the official control:

- Ground and pole-mounted systems shall not exceed twenty (20) feet in height when oriented at maximum design tilt.
- The property consists of one parcel containing approximately 51.53 acres. The minimum lot size in the A-2 District is 2 acres.
- The original manufacturers' stock maximum height of 36 feet is being reduced by 7 feet to a final maximum height of 29 feet to be closer to the Solar Energy Systems Regulations.
- The new pole-mount system will not alter the essential character of the property. By placing the array in the farmyard, it will keep it out of the neighbor's view.
- This request appears in harmony with the purpose and intent of the official control.

2) The variance request is consistent with the adopted Comprehensive Plan:

- The Goodhue County Comprehensive Plan supports the development and growth of Businesses and Renewable Energy within the County.

The proposed use appears consistent with the Goodhue County Comprehensive Plan.

3) There are “practical difficulties” in complying with the official control (the applicant proposes to use the property in a reasonable manner not permitted by an official control, the plight of the landowner is due to circumstances unique to the property not created by the landowner, and the variance, if granted, will not alter the essential character of the locality):

- The Applicant's request to construct a solar array is a reasonable use of property in the A-2 Zoning District.
- The first two solar arrays were built too low to the ground. The arrays movement is impacted by snow levels during the winter and by people touching them during tours. The new solar array will be 8 feet above ground to avoid those issues.
- An alternative system that would meet the height requirements is a ground mount system with a support frame. This, however, would take land out of production underneath the system and isn't as conducive to their various educational and agricultural processes.
- The property is surrounded by properties zoned A-2 to the north, south, and east. Zone A-1 to the west. Predominant land uses are agricultural and woodlands with bluffs. Low to medium dwelling density.
- The request appears unlikely to alter the essential character of the locality.

4) **No variance may be granted that would allow any use that is not allowed in the zoning district in which the subject property is located.**

- Solar Energy Systems are permitted use in the A-2 Zoning District.

The draft Findings of Fact shall be amended to reflect concerns conveyed at the Board of Adjustment meeting and public hearing. The Board should specify the facts and reasons that are the basis of the Board's determination. In granting a variance, the Board of Adjustment may impose conditions related to, and bearing a rough proportionality with, the impact(s) created by the variance.

Staff Recommendation:

Staff recommends the BOA:

- adopt the staff report into the record;
- adopt the findings of fact;
- accept the application, testimony, exhibits, and other evidence presented into the record; and

APPROVE the request for a variance, submitted by Lake City Catholic Worker Farm (Applicant) on behalf of Paul and Sara Freid (Owner) to allow construction of a Pole-Mounted Solar Array that will be 29 feet in total height, when the maximum height allowed is 20 feet.



RECEIVED

MAR 17 2025

Variance

Land Use Management

For Staff Use Only

Permit #	Z25-0009
\$400 Receipt #	305345941
DATE:	3/17/2025

SITE ADDRESS, CITY, AND STATE				ZIP CODE:
33292 County 5 Boulevard, Lake City, MN				55041
LEGAL DESCRIPTION:				
SECT-27 TWP-112 RANGE-013 51.53 AC DOC#538844 THAT PT OF N1/2 SW1/4 SEC Attached U				
PID#:	ZONING DISTRICT	LOT AREA (SF/ACRES):	LOT DIMENSIONS:	STRUCTURE DIMENSIONS (if applicable):
320270502	3202			

APPLICANT OR AUTHORIZED AGENT'S NAME	
Lake City Catholic Worker Farm	
APPLICANT'S ADDRESS:	TELEPHONE:
33292 County 5 Blvd Lake City, MN 55041	651-345-3149
	EMAIL:
	paulccw@gmail.com / saralccw@gmail.com

PROPERTY OWNER'S NAME:	
Same as Above <input type="checkbox"/> Paul and Sara Freid	
PROPERTY OWNER'S ADDRESS:	TELEPHONE:
33292 County 5 Blvd Lake City, MN 55041	651-345-3149
	EMAIL:
	paulccw@gmail.com / saralccw@gmail.com

CONTACT FOR PROJECT INFORMATION:	
Same as Above <input type="checkbox"/> Ken Valley /EPF Solar LLC	
ADDRESS:	TELEPHONE:
2210 Parklands Road, Minneapolis, MN 55416	612-889-4780
	EMAIL:
	ken@epfsolar.com

VARIANCE REQUESTED TO: (check all that apply) <input type="checkbox"/> Road Right-Of-Way Setbacks <input type="checkbox"/> % Lot Coverage <input type="checkbox"/> Property Line Setbacks <input type="checkbox"/> Bluff Setbacks <input checked="" type="checkbox"/> Height Limits <input type="checkbox"/> Shoreland Setbacks <input type="checkbox"/> Lot Width &/or Area <input type="checkbox"/> Other (specify) <input type="checkbox"/> Subdivision Regulations	CURRENT OR PREVIOUS USE:
	Farming and agritourism
	PROPOSED USE:
	Install (1) single post solar array-see photos
	BUILDING APPLICATION PERMIT NO.: (if filed)
	DATE FILED:

TOWNSHIP SIGNATURE:		
By signing this form, the Township acknowledges they are aware of the Applicant's variance request. In no way does signing this application indicate the Township's position on the variance request.		
TOWNSHIP OFFICIAL'S SIGNATURE	TOWNSHIP OFFICIAL'S PRINTED NAME AND TITLE	DATE

By signing below, the applicant acknowledges:

1. The undersigned is the owner or authorized agent of the owner of this property.
2. The information presented is true and correct to the best of my knowledge.
3. If I am unable to be present at the hearing where my request is acted upon, I agree to accept the Notice of Decision via mail.
4. Additional information or applications may be required

Applicant's Signature: Sara Freid Paul FreidDate: 3/14/24

REQUEST SUMMARY

Please cite the Ordinance Article(s) and Section(s) you are requesting a variance from:

Article: _____ Section: _____ Name: _____

Article: _____ Section: _____ Name: _____

SUPPORTING INFORMATION& JUSTIFICATION

You, or your agent, bear the burden of providing information to convince the Board to rule in your favor. Please provide answers to the following questions in the spaces below or in an attached document. You may also attach any additional supporting documentation you desire the board to review.

Discuss your current use of the property and the reason for your variance request:

The Lake City Catholic Worker provides educational tours to promote agricultural sustainability and the importance of renewable energy in farming communities. We want an additional solar tracker that will not be impeded by high snowdrifts and will allow farm tours, highlighting renewable energy, to be closer to our

Describe the effects on the property if the variance is not granted:

If this system is not installed we will continue to have tours on our farm viewing the existing solar tracker. This will result in walking tours across from our neighbor's farm, which they do not prefer, and visitors will be less safe with the current solar tracker system. We would also not have as much renewable energy production as we would with the new system.

Describe any unique physical limitations that exist on your property, not generally found on others, which prevent you from complying with the provisions of the current ordinance:

Our current trackers sit too low to the ground and movement can be impacted by snow levels and people touching them during tours. Additionally, we have a lot of agritourism tours on our farm and our neighbors would prefer them to be closer to our home farming operations.

Discuss alternatives you considered that comply with existing standards. If compliant alternatives exist, provide your reasoning for rejecting them:

The only other alternative is a ground mount system which we cannot do since it takes out valuable land for production and is not as conducive to our various educational and agricultural processes with the same amount of solar electric production per the same amount of land used.

Discuss alternatives you considered that would require a lesser variance. If you rejected such alternatives, provide your reasoning:

We have modified the manufacturer's stock maximum height of 36' by reducing pole height 7' (21' stock height to decrease it to 29'. (Note: this is only when sun is low in the horizon and array is at maximum tilt; pole height is 16'-20'-22'). The bottom of array will then be 8' at max tilt to still allow people and animals to freely move around.

In your opinion, do you think the granting of your variance request would alter the "essential character" of the neighborhood/area?:

No, it would not alter the essential character of the property as we already have two solar trackers, and the proposed tracker will be contained in our farmstead area away from our neighbors.

MAP 03: ELEVATIONS



BOARD OF ADJUSTMENT

Public Hearing
April 28th, 2025

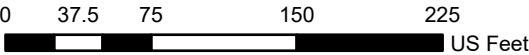
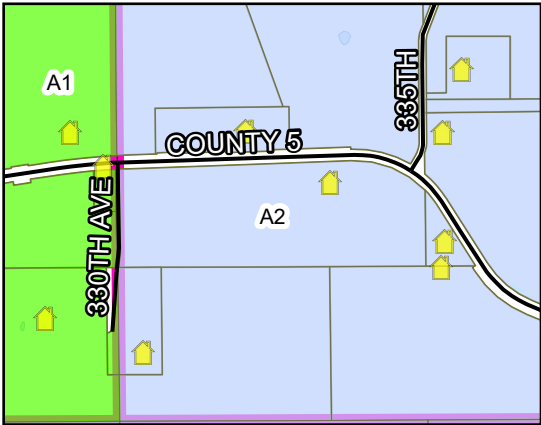
Lake City Catholic Worker Farm (Applicant)
on behalf of Paul and Sara Freid (Owner)
A-2 Zoned District.

Part of the N1/2 of the SW1/4 of Section 27
Twp 112 Range 13 in Florence Township.

Request for Variance to allow construction
of a Pole-Mounted Solar Array that will be
29 feet in total height, when the maximum
height allowed is 20 feet.

Legend

- | | |
|----------------------------|------------------------------|
| Intermittent Streams | Bluff Impact Zones (% slope) |
| Protected Streams | 20 |
| Lakes & Other Water Bodies | 30 |
| Shoreland | |
| Historic Districts | FEMA Flood Zones |
| Parcels | 2% Annual Chance |
| Registered Feedlots | A |
| Dwellings | AE |
| Municipalities | AO |
| | X |

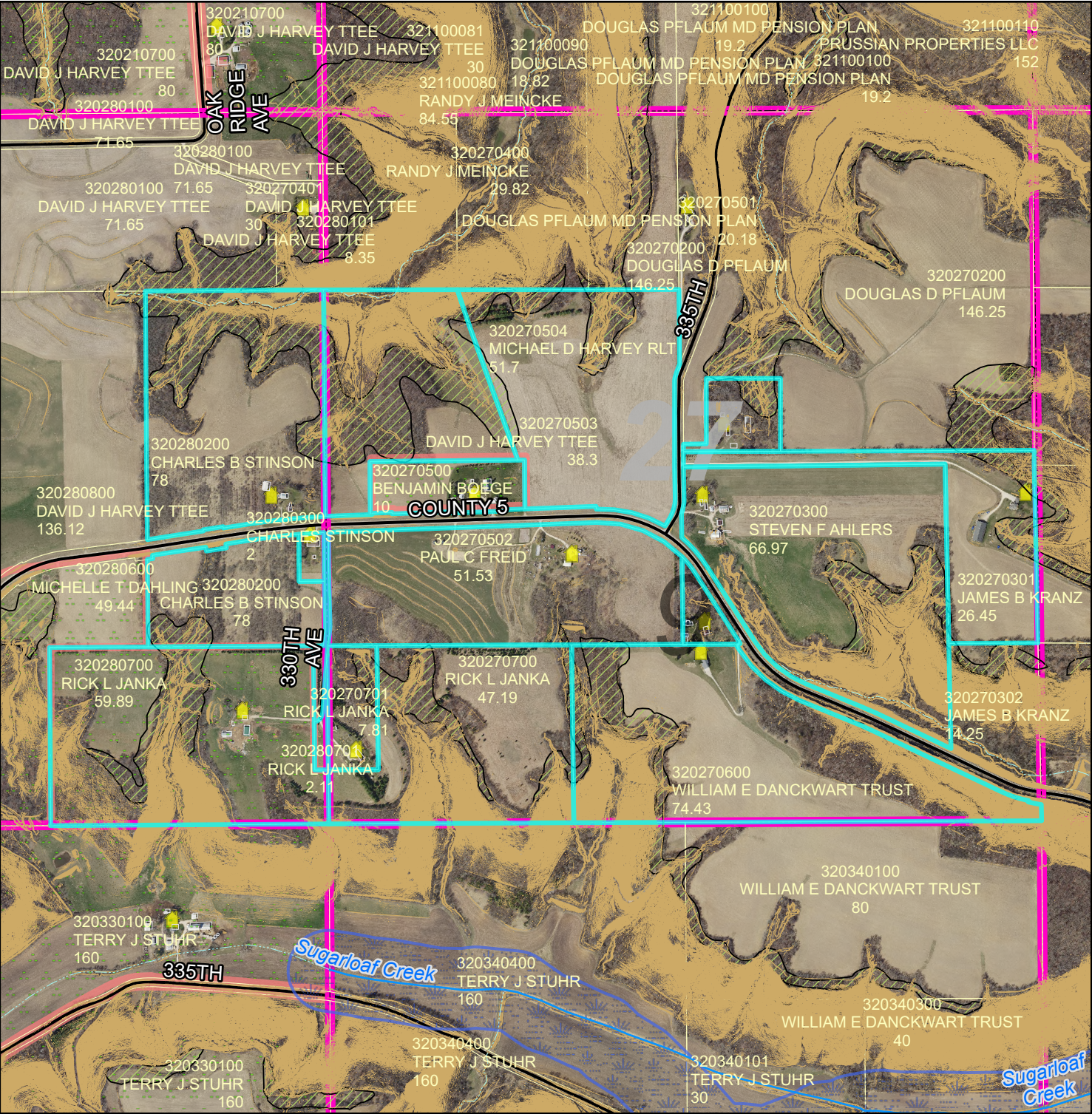


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2024 Aerial Imagery
Map Created April, 2025 by LUM



PUBLIC NOTICE: NEIGHBORHOOD MAILING MAP



BOARD OF ADJUSTMENT

Public Hearing
April 28th, 2025

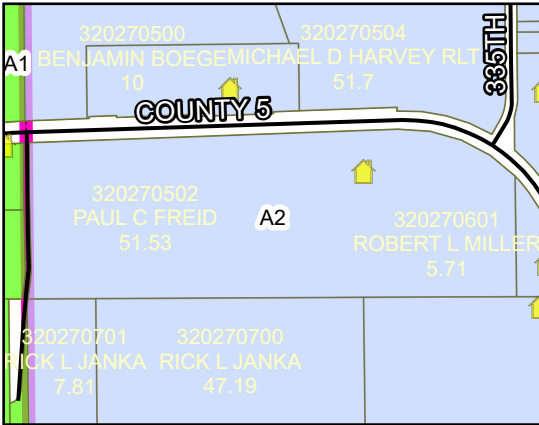
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Legend

- Intermittent Streams
 - Protected Streams
 - Lakes & Other Water Bodies
 - Shoreland
 - Historic Districts
 - Parcels
 - Registered Feedlots
 - Dwellings
 - Municipalities
- | Bluff Impact Zones (% slope) | |
|------------------------------|----|
| 20 | 30 |
- | FEMA Flood Zones | |
|------------------|----|
| 2% Annual Chance | A |
| | AE |
| | AO |
| | X |



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MAP 01: PROPERTY OVERVIEW



BOARD OF ADJUSTMENT

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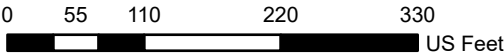
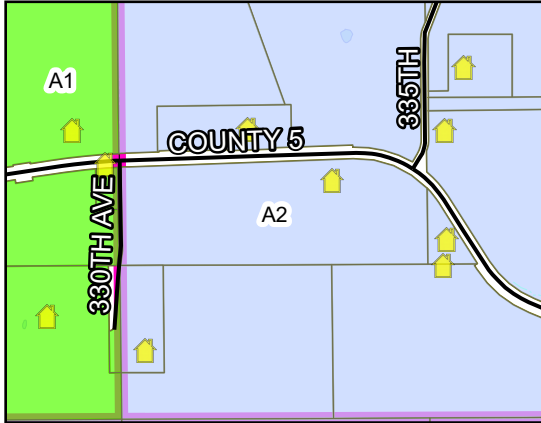
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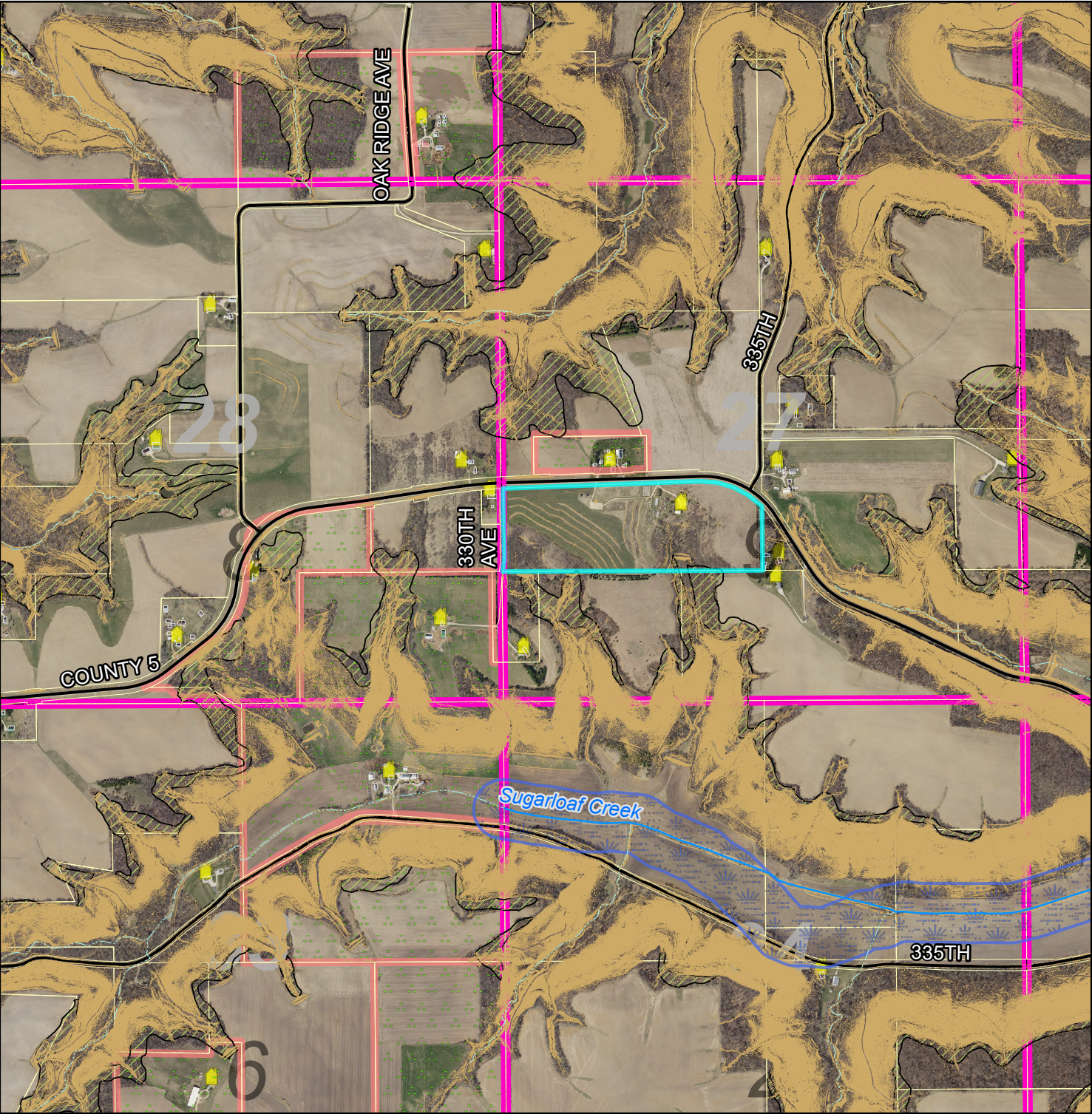
Intermittent Streams	Bluff Impact Zones (% slope)
Protected Streams	20
Lakes & Other Water Bodies	30
Shoreland	FEMA Flood Zones
Historic Districts	2% Annual Chance
Parcels	A
Registered Feedlots	AE
Dwellings	AO
Municipalities	X



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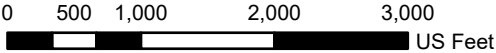
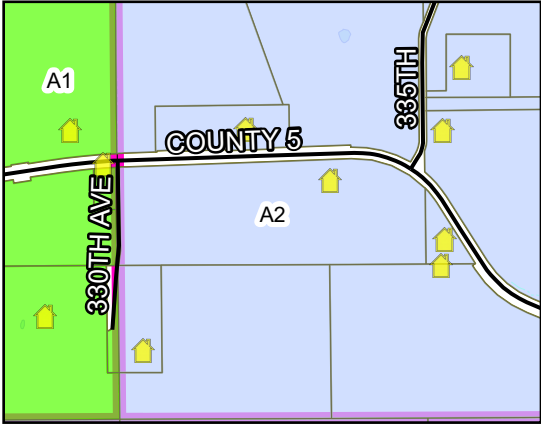
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PAUL FREID - 15.400kW DC, 10.640kW AC

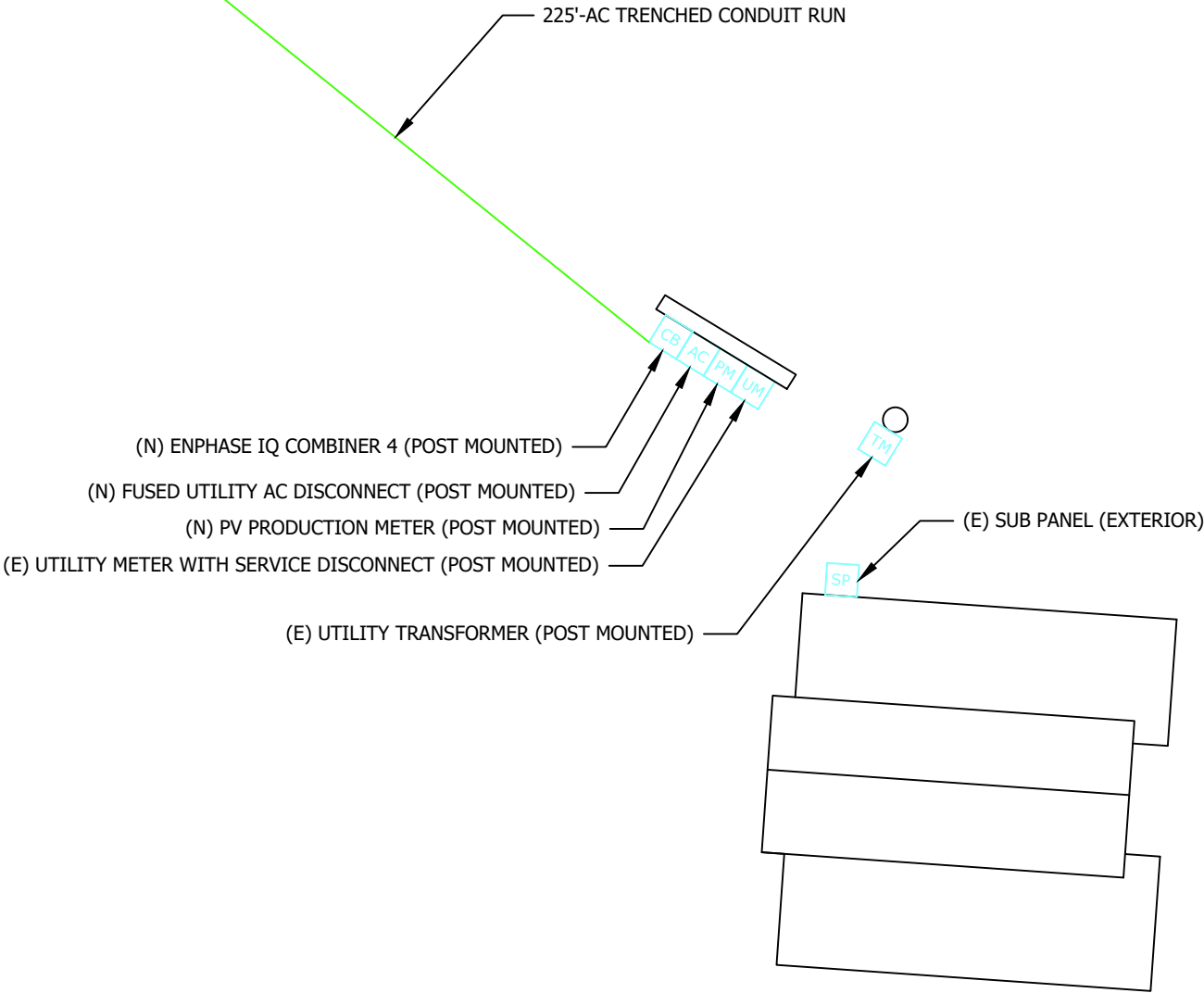
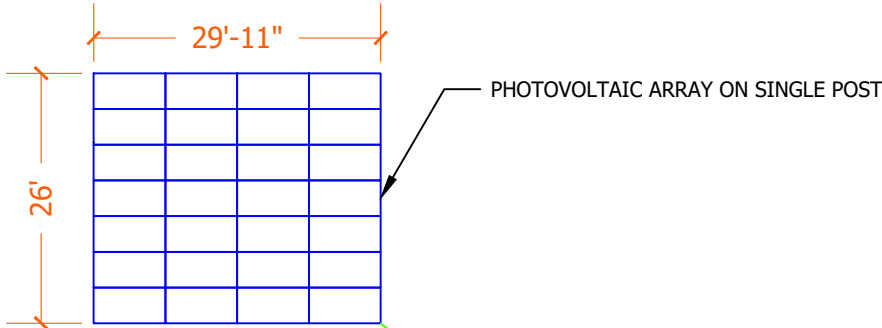
SITE PLAN-1

NOTE:

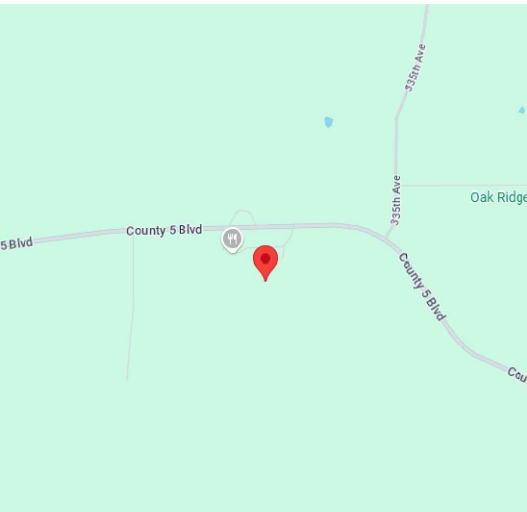
1. NO CLEARANCE ISSUES WITH EXISTING OVERHEAD LINES.
2. CUSTOMER OWNED AND SUPPLIED PV PRODUCTION METER AND PV UTILITY AC DISCONNECTS ARE:
• LOCATED WITHIN 10' OF MAIN SERVICE/BILLING METER.
• VISIBLE,LOCKABLE,READILY ACCESSIBLE AND 24/7 ACCESS.
3. DESIGN COMPLY WITH NEC AND NEC690.
4. LABELS SHALL BE WEATHERPROOF,DURABLE,AND PERMANENTLY MOUNTED.
5. 24/7 UNESCORTED KEYLESS ACCESS TO METERS AND AC DISCONNECTS.
6. SECONDARY INTERCONNECTION.
8.DESIGN SHALL MEET NEC 2023

NOTE:

1. MICRO INVERTER IS UL1741-SB RATED.
2. MODULES ARE UL1703 RATED



DISTANCE BETWEEN EQUIPMENT		
FROM	TO	DISTANCE(FT)
MODULE	JUNCTION BOX	15
JUNCTION BOX	ENPHASE IQ COMBINER 4	125
ENPHASE IQ COMBINER 4	FUSED UTILITY AC DISCONNECT	1
FUSED UTILITY AC DISCONNECT	CUSTOMER OWNED AND SUPPLIED PV PRODUCTION METER	1
CUSTOMER OWNED AND SUPPLIED PV PRODUCTION METER	UTILITY METER WITH SERVICE DISCONNECT	1



A1 VICINITY MAP
PV-1.0 SCALE: NTS

GENERAL INFORMATION

ELECTRIC CODE	NEC 2023
FIRE CODE	MFC 2020
RESIDENTIAL CODE	MRC 2020
BUILDING CODE	MBC 2020
WIND SPEED	108 MPH
SNOW LOAD	50 PSF

INDEX

INDEX NO.	DESCRIPTION
PV-1.0	SITE PLAN-1
PV-1.1	SITE PLAN-2
PV-2.0	GENERAL NOTES
PV-3.0	MOUNTING DETAILS
PV-3.1	STRUCTURAL DETAILS-1
PV-3.2	STRUCTURAL DETAILS-2
PV-4.0	SINGLE LINE DIAGRAM
PV-4.1	ELECTRICAL CALCULATION
PV-5.0	WARNING PLACARDS
SS	SPEC SHEETS



SYSTEM INFORMATION

DC SYSTEM SIZE: 15400W
AC SYSTEM SIZE: 10640W
MODULES:
(28)SEG SOLAR SEG-550-BMA-TB
INVERTER:
(28)ENPHASE IQ8HC-72-M-US(240V,1PH)
BRANCH DETAILS:
1 BRANCH OF 10 MICRO INVERTERS (10 MODULES)
2 BRANCH OF 9 MICRO INVERTERS (9 MODULES)

ENGINEER OF RECORD

CONTRACTOR INFORMATION

DEVELOPER: EPF SOLAR LLC
2210 PARKLANDS RD MINNEAPOLIS, MN 55416.
TEL.NO.:612-889-4780 /Ken@epfsolar.com
ELECTRICIAN: BlueSky Ekectric, Inc
8451 Xerxes Ave N, Brooklyn Park, MN 55444
LICENSE EA711336

CUSTOMER INFORMATION

NAME&ADDRESS:
PAUL FREID
33292 COUNTY 5 BLVD, LAKE CITY, MN 55041.
44°28'30.72"N 92°21'46.88"W
APN:320-270-502
TEL.NO:651-345-3149

AHJ:MN-COUNTY GOODHUE
UTILITY: GOODHUE COUNTY COOPERATIVE

PROJECT NUMBER:EPFS-012383

SITE PLAN-1

DESIGNER/CHECKED BY:

GV/PI

SCALE:AS NOTED PAPER SIZE:17"x11"

DATE:2/14/2025 REV:A PV-1.0

A SITE PLAN-1

PV-1.0 SCALE: 1"=20'-0"

PAUL FREID - 15.400kW DC, 10.640kW AC

SITE PLAN-2



SYSTEM INFORMATION

DC SYSTEM SIZE: 15400W
AC SYSTEM SIZE: 10640W
MODULES:
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TEL.NO:651-345-3149

AHJ:MN-COUNTY GOODHUE

UTILITY: GOODHUE COUNTY COOPERATIVE

PROJECT NUMBER:EPFS-012383

SITE PLAN-2

DESIGNER/CHECKED BY:

GV/PI

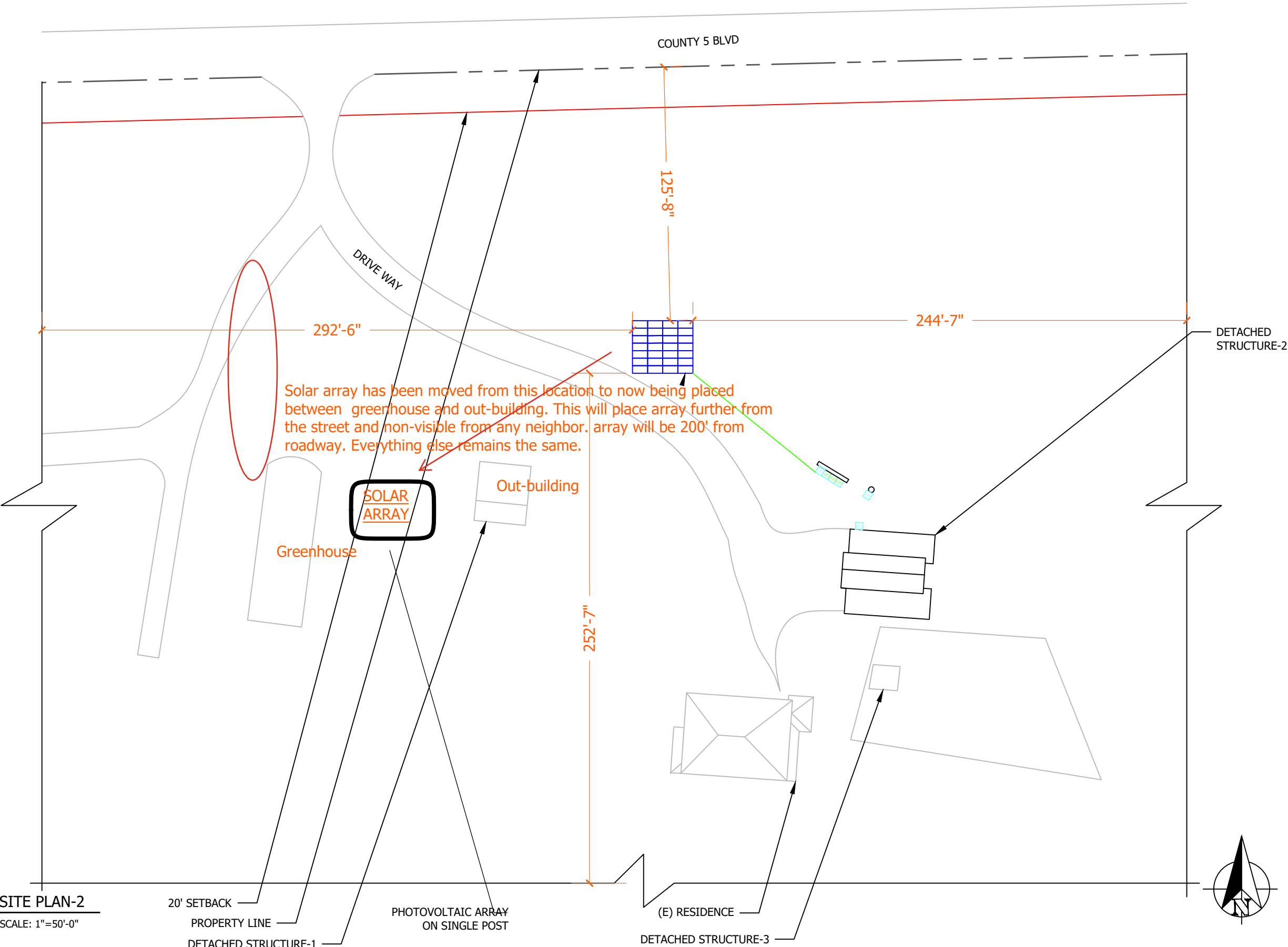
SCALE:AS NOTED


PAPER SIZE:17"x11"

DATE:2/14/2025

REV:A

PV-1.1



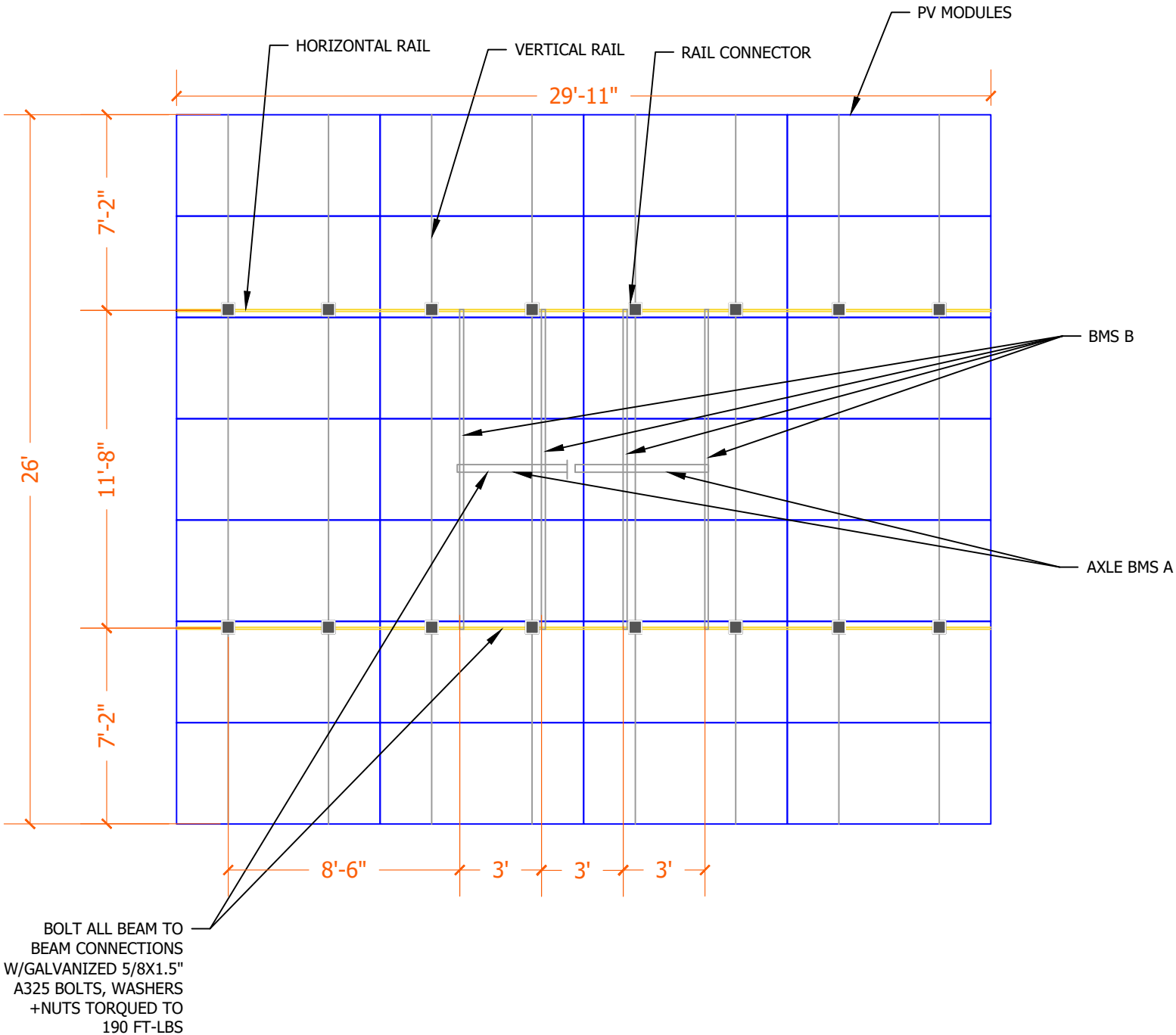
GENERAL NOTES			<div><div></div><div>RVR ENGINEERING</div></div>		
SYSTEM INFORMATION			<div>DC SYSTEM SIZE: 15400W</div> <div>AC SYSTEM SIZE: 10640W</div> <div>MODULES:</div> <div>(28)SEG SOLAR SEG-550-BMA-TB</div> <div>INVERTER:</div> <div>(28)ENPHASE IQ8HC-72-M-US(240V,1PH)</div> <div>BRANCH DETAILS:</div> <div>1 BRANCH OF 10 MICRO INVERTERS (10 MODULES)</div> <div>2 BRANCH OF 9 MICRO INVERTERS (9 MODULES)</div>		
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			AHJ:MN-COUNTY GOODHUE		
			UTILITY: GOODHUE COUNTY COOPERATIVE		
			PROJECT NUMBER:EPFS-012383		
GENERAL NOTES					
DESIGNER/CHECKED BY:			GV/PI		
SCALE:AS NOTED		PAPER SIZE:17"x11"			
DATE:2/14/2025	REV:A	PV-2.0			

GENERAL NOTES		
<div>1. MODULES ARE LISTED UNDER UL 1703 AND CONFORM TO THE STANDARDS.</div> <div>2. INVERTERS ARE LISTED UNDER UL 1741 AND CONFORM TO THE STANDARDS.</div> <div>3. DRAWINGS ARE DIAGRAMMATIC, INDICATING GENERAL ARRANGEMENT OF THE PV SYSTEM AND THE ACTUAL SITE CONDITION MIGHT VARY.</div> <div>4. WORKING CLEARANCES AROUND THE NEW PV ELECTRICAL EQUIPMENT WILL BE MAINTAINED IN ACCORDANCE WITH NEC CODE.</div> <div>5. ALL GROUND WIRING CONNECTED TO THE MAIN SERVICE GROUNDING IN MAIN SERVICE PANEL/ SERVICE EQUIPMENT.</div> <div>6. ALL CONDUCTORS SHALL BE 600V, 75°C STANDARD COPPER UNLESS OTHERWISE NOTED.</div> <div>7. THE SYSTEM WILL NOT BE INTERCONNECTED BY THE CONTRACTOR UNTIL APPROVAL FROM THE LOCAL JURISDICTION AND/OR THE UTILITY.</div> <div>8. PV ARRAY COMBINER/JUNCTION BOX PROVIDES TRANSITION FROM ARRAY WIRING TO CONDUIT WIRING</div>		
EQUIPMENT LOCATION:		
<div>9. ALL EQUIPMENT SHALL MEET MINIMUM SETBACKS AS REQUIRED BY NEC CODE.</div> <div>10. WIRING SYSTEMS INSTALLED IN DIRECT SUNLIGHT MUST BE RATED FOR EXPECTED OPERATING TEMPERATURE AS SPECIFIED BY NEC CODE AND NEC TABLES.</div> <div>11. JUNCTION AND PULL BOXES PERMITTED INSTALLED UNDER PV MODULES ACCORDING TO NEC CODE.</div> <div>12. ADDITIONAL AC DISCONNECT(S) SHALL BE PROVIDED WHERE THE INVERTER IS NOT WITHIN SIGHT OF THE AC SERVICING DISCONNECT.</div> <div>13. ALL EQUIPMENT SHALL BE INSTALLED ACCESSIBLE TO QUALIFIED PERSONNEL ACCORDING TO NEC APPLICABLE CODES.</div> <div>14. ALL COMPONENTS ARE LISTED FOR THEIR PURPOSE AND RATED FOR OUTDOOR USAGE WHEN APPROPRIATE</div> <div>.</div>		
WIRING & CONDUIT NOTES:		
<div>15. ALL CONDUIT AND WIRE WILL BE LISTED AND APPROVED FOR THEIR PURPOSE. CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING.</div> <div>16. CONDUCTORS SIZED ACCORDING TO NEC CODE.</div> <div>17. DC WIRING LIMITED TO MODULE FOOTPRINT. MICRO INVERTER WIRING SYSTEMS SHALL BE LOCATED AND SECURED UNDER THE ARRAY WITH SUITABLE WIRING CLIPS.</div> <div>18. AC CONDUCTORS COLORED OR MARKED AS FOLLOWS: PHASE A OR L1- BLACK PHASE B OR L2- RED, OR OTHER CONVENTION IF THREE PHASE PHASE C OR L3- BLUE, YELLOW, ORANGE**, OR OTHER CONVENTION NEUTRAL- WHITE OR GREY IN 4-WIRE DELTA CONNECTED SYSTEMS THE PHASE WITH HIGHER VOLTAGE TO BE MARKED ORANGE [NEC CODE].</div>		

GENERAL NOTES		
<div>24. LOAD-SIDE INTERCONNECTION SHALL BE IN ACCORDANCE WITH [NEC CODE]</div> <div>25. THE SUM OF THE UTILITY OCPD AND INVERTER CONTINUOUS INPUT MAY NOT EXCEED 120% OF BUSBAR RATING [NEC CODE].</div> <div>26. WHEN SUM OF THE PV SOURCES EQUALS >100% OF BUSBAR RATING, PV DEDICATED BACKFED BREAKERS MUST BE LOCATED OPPOSITE END OF THE BUS FROM THE UTILITY SOURCE OCPD [NEC CODE].</div> <div>27. AT MULTIPLE PV OUTPUT COMBINER PANEL, TOTAL RATING OF ALL OVER CURRENT DEVICES SHALL NOT EXCEED AMPACITY OF BUSBAR. HOWEVER, THE COMBINED OVER CURRENT DEVICE MAY BE EXCLUDED ACCORDING TO NEC CODE.</div> <div>28. FEEDER TAP INTER CONNECTION (LOAD SIDE) ACCORDING TO NEC CODE</div> <div>29. SUPPLY SIDE TAP INTERCONNECTION ACCORDING TO NEC CODE WITH SERVICE ENTRANCE CONDUCTORS IN ACCORDANCE WITH NEC CODE</div> <div>30. BACK FEEDING BREAKER FOR UTILITY-INTERACTIVE INVERTER OUTPUT IS EXEMPT FROM ADDITIONAL FASTENING [NEC CODE].</div>		
GROUNDING NOTES:		
<div>31. GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PURPOSE, AND GROUNDING DEVICES EXPOSED TO THE ELEMENTS SHALL BE RATED FOR SUCH USE.</div> <div>32. PV EQUIPMENT SHALL BE GROUNDED ACCORDING TO NEC CODE AND MINIMUM NEC TABLE.</div> <div>33. EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED ACCORDING TO NEC CODE AND MICRO INVERTER MANUFACTURER'S INSTRUCTIONS.</div> <div>34. THE GROUNDING CONNECTION TO A MODULE SHALL BE ARRANGED SUCH THAT THE REMOVAL OF A MODULE DOES NOT INTERRUPT A GROUNDING CONDUCTOR TO ANOTHER MODULE.</div> <div>35. GROUNDING AND BONDING CONDUCTORS, IF INSULATED, SHALL BE COLORED GREEN OR MARKED GREEN IF #4 AWG OR LARGER [NEC CODE]</div> <div>36. DISCONNECTING SWITCHES SHALL BE WIRED SUCH THAT WHEN THE SWITCH IS OPENED THE CONDUCTORS REMAINING ENERGIZED ARE CONNECTED TO THE TERMINALS MARKED "LINE SIDE" (TYPICALLY THE UPPER TERMINALS).</div> <div>37. DISCONNECTS TO BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCKABLE, AND BE A VISIBLE-BREAK SWITCH</div> <div>38. RAPID SHUTDOWN OF ENERGIZED CONDUCTORS BEYOND 10 FT OF PV ARRAY OR 5 FT INSIDE A BUILDING WITHIN 10 SECONDS. CONTROLLED CONDUCTORS ≤30V AND ≤240VA [NEC CODE]. LOCATION OF LABEL ACCORDING TO AHJ.</div> <div>39. ALL OCPD RATINGS AND TYPES SPECIFIED ACCORDING TO NEC CODE.</div>		

MOUNTING DETAILS

MODULES DATA	
SEG SOLAR SEG-550-BMA-TB	
MODULE DIMS	89.68"x44.65"x1.38"
SITE INFORMATION	
AZIMUTH	180°
TILT	45°
NO. OF MODULES	28



B1 | AERIAL VIEW
PV-3.0 | SCALE: NTS

ARRAY LOCATION



SYSTEM INFORMATION

DC SYSTEM SIZE: 15400W
AC SYSTEM SIZE: 10640W
MODULES:
(28)SEG SOLAR SEG-550-BMA-TB
INVERTER:
(28)ENPHASE IQ8HC-72-M-US(240V,1PH)
BRANCH DETAILS:
1 BRANCH OF 10 MICRO INVERTERS (10 MODULES)
2 BRANCH OF 9 MICRO INVERTERS (9 MODULES)

ENGINEER OF RECORD

CONTRACTOR INFORMATION

DEVELOPER: EPF SOLAR LLC
2210 PARKLANDS RD MINNEAPOLIS, MN 55416.
TEL.NO.:612-889-4780 /Ken@epfsolar.com
ELECTRICIAN: BlueSky Ekectric, Inc
8451 Xerxes Ave N, Brooklyn Park, MN 55444
LICENSE EA711336

CUSTOMER INFORMATION

NAME&ADDRESS:
PAUL FREID
33292 COUNTY 5 BLVD, LAKE CITY, MN 55041.
44°28'30.72"N 92°21'46.88"W
APN:320-270-502
TEL.NO:651-345-3149

AHJ:MN-COUNTY GOODHUE

UTILITY: GOODHUE COUNTY COOPERATIVE

PROJECT NUMBER:EPFS-012383

MOUNTING DETAILS

DESIGNER/CHECKED BY:

GV/PI

SCALE:AS NOTED

PAPER SIZE:17"x11"

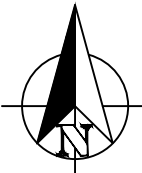
DATE:2/14/2025

REV:A

PV-3.0

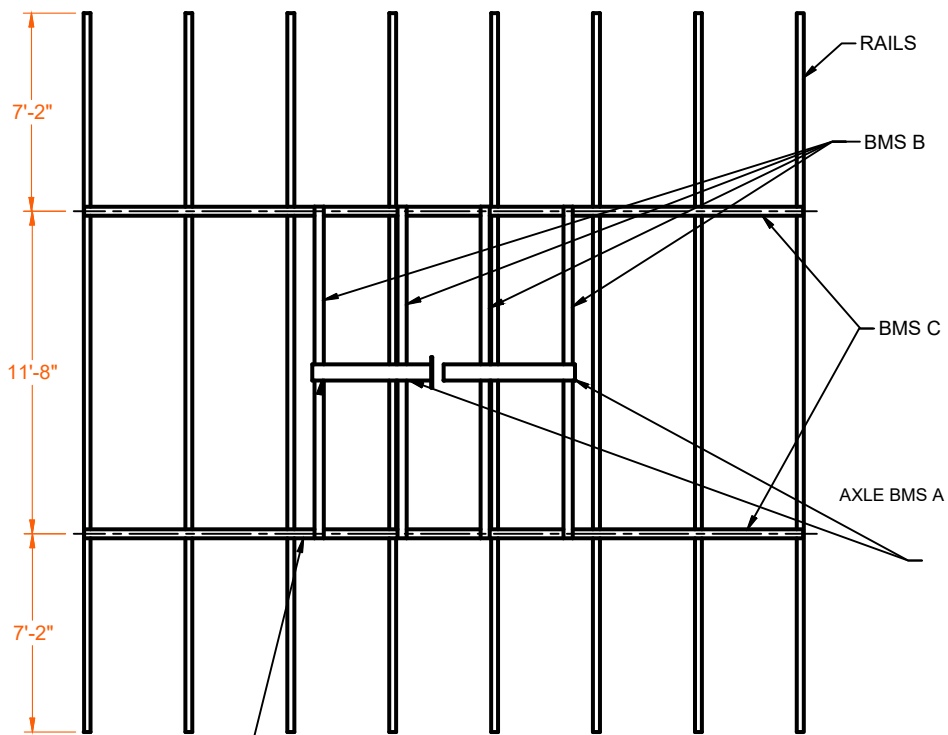
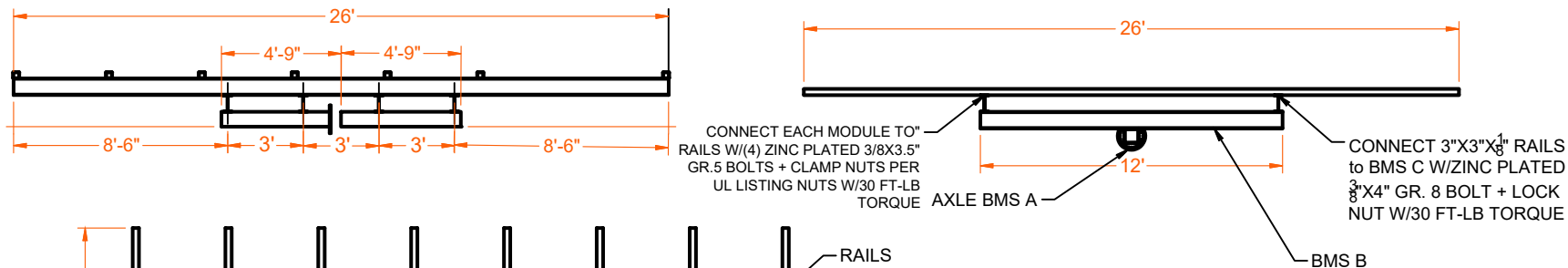
B | MOUNTING DETAILS

PV-3.0 | SCALE:3/16"=1'-0"

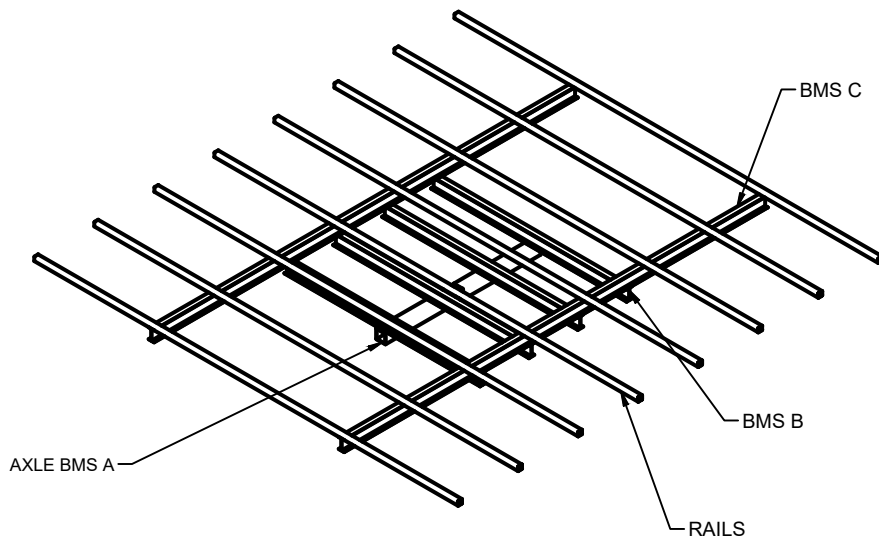


STRUCTURAL DETAILS- SOLAR DUAL-AXIS TRACKER

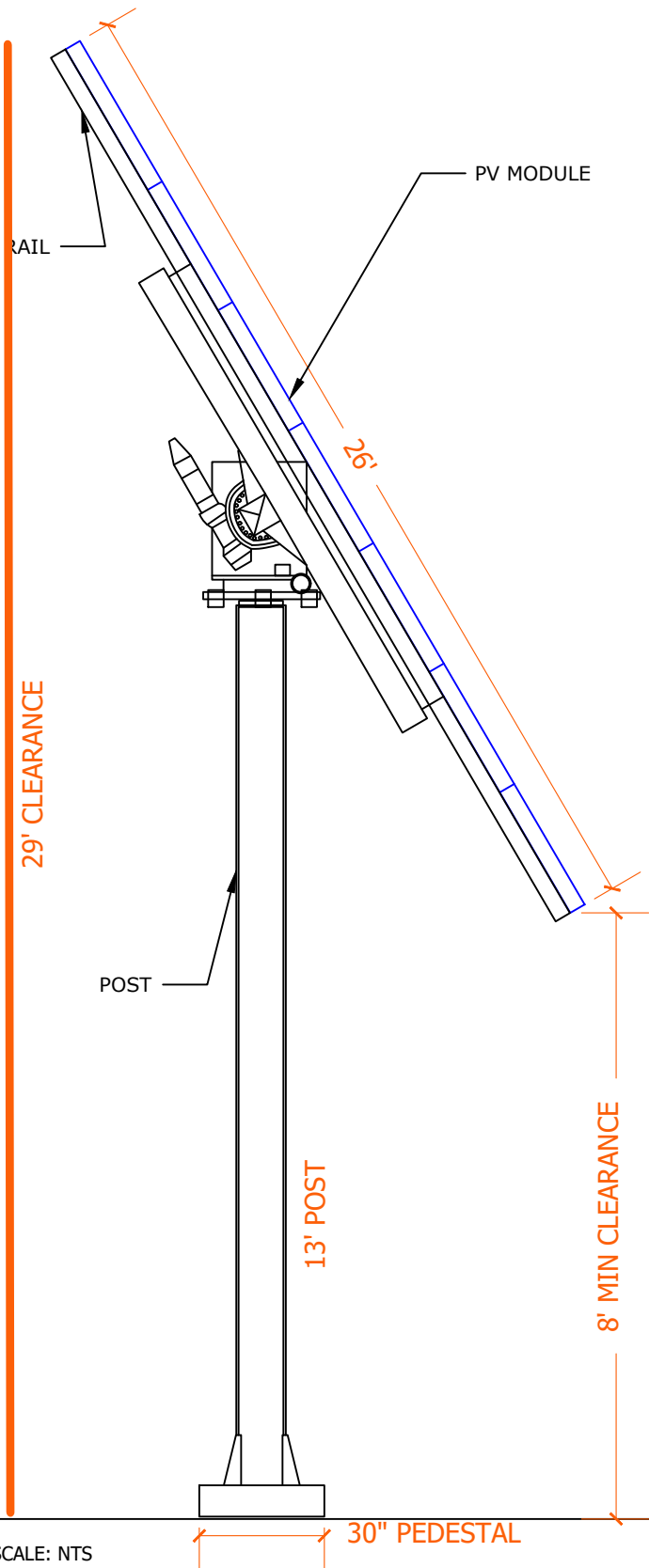
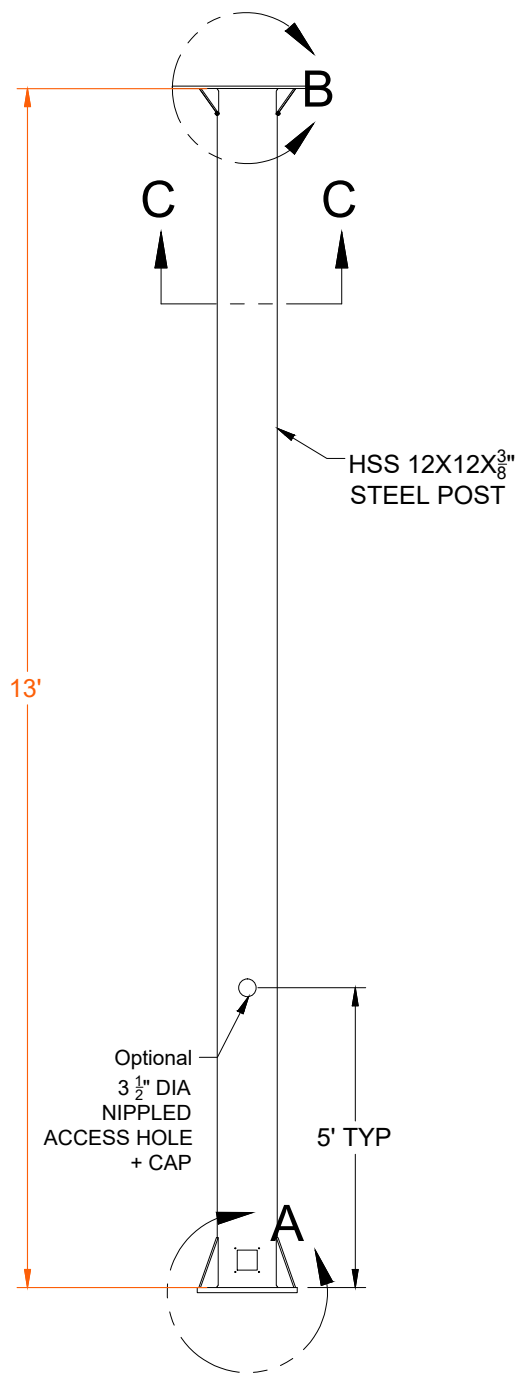
FRAME + RAIL DETAILS



BOLT ALL BEAM TO BEAM CONNECTIONS W/GALVANIZED 5/8X1.5" A325 BOLTS, WASHERS +NUTS TORQUED TO 190 FT-LBS



POLE DETAIL



SCALE: NTS



SYSTEM INFORMATION

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TEL.NO:651-345-3149

AHJ:MN-COUNTY GOODHUE

UTILITY: GOODHUE COUNTY COOPERATIVE

PROJECT NUMBER:EPFS-012383

STRUCTURAL DETAILS-1

DESIGNER/CHECKED BY:

GV/PI

SCALE:AS NOTED

PAPER SIZE:17"x11"

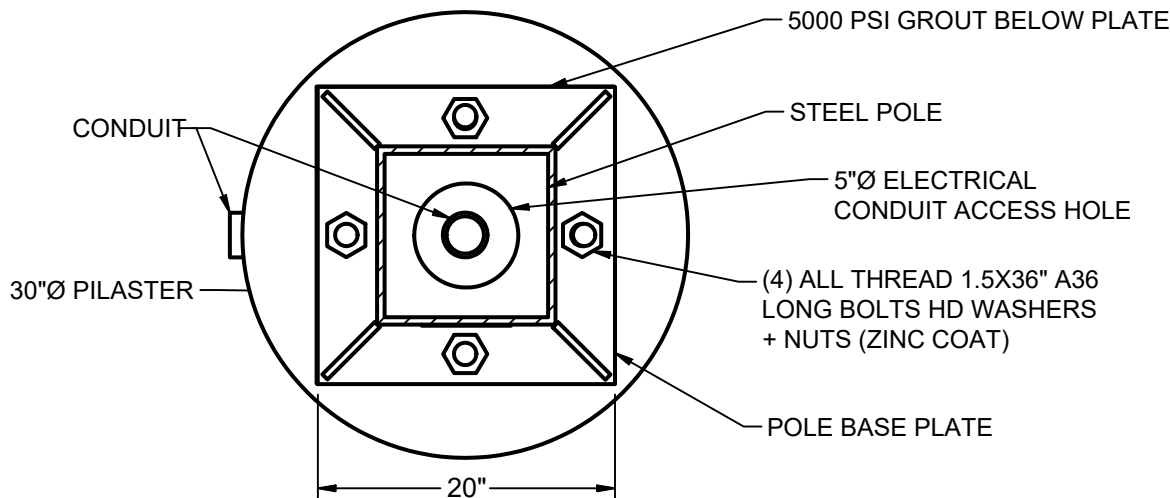
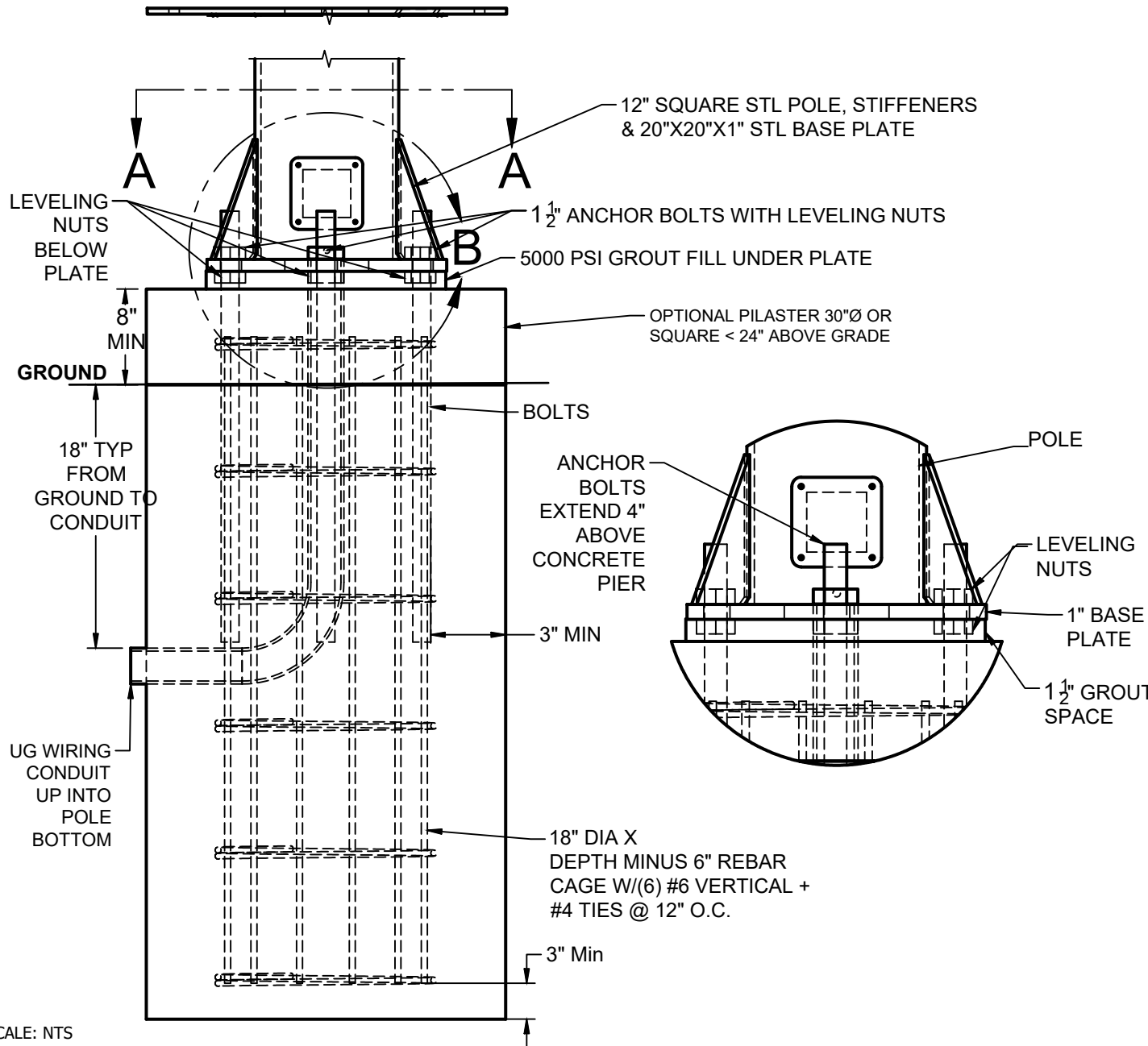
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REV:A

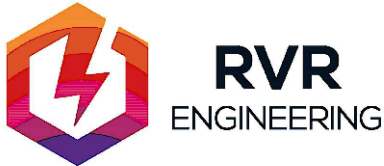
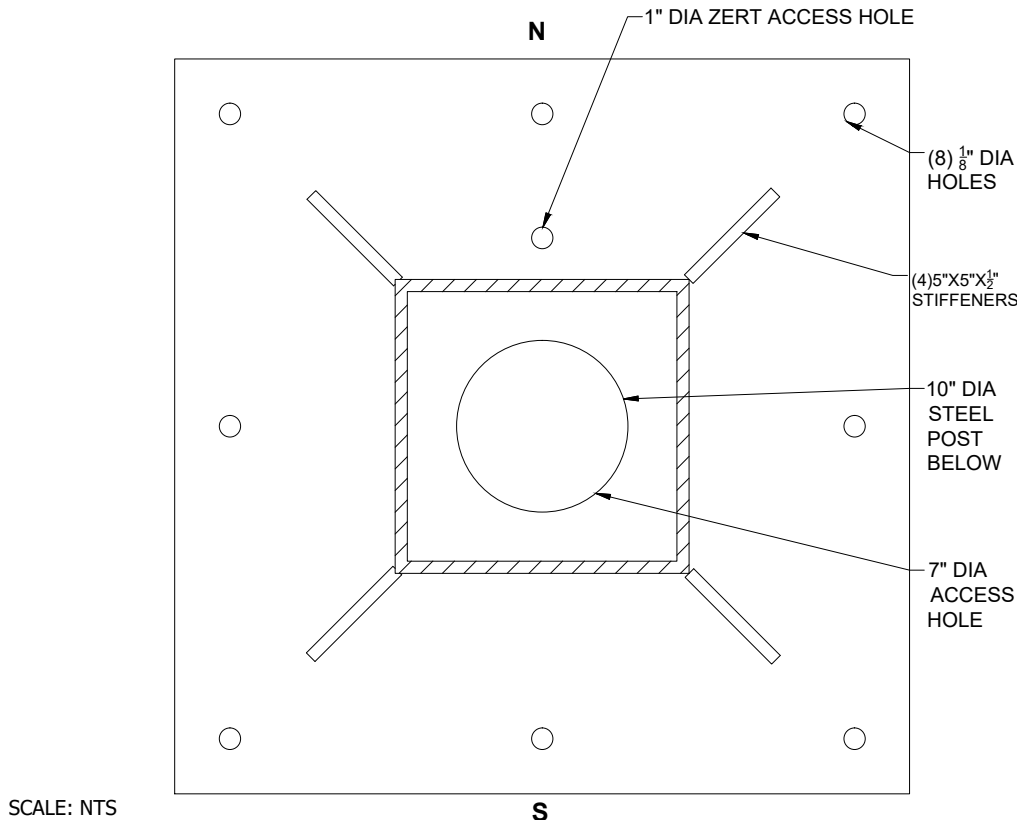
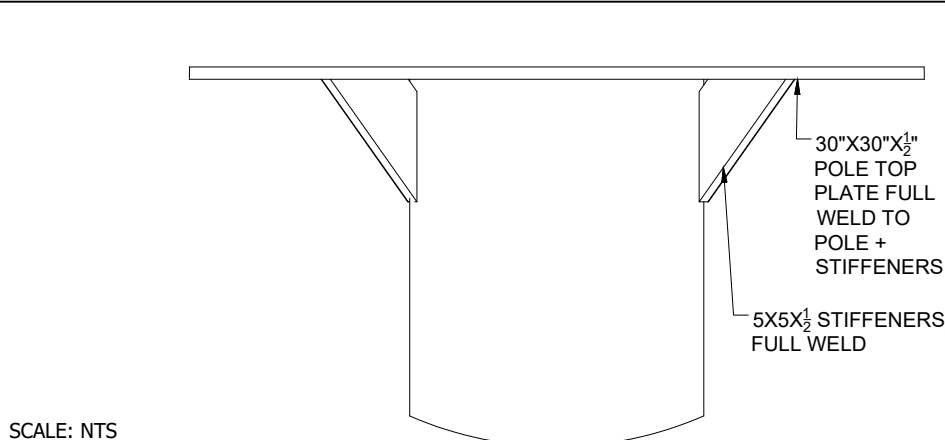
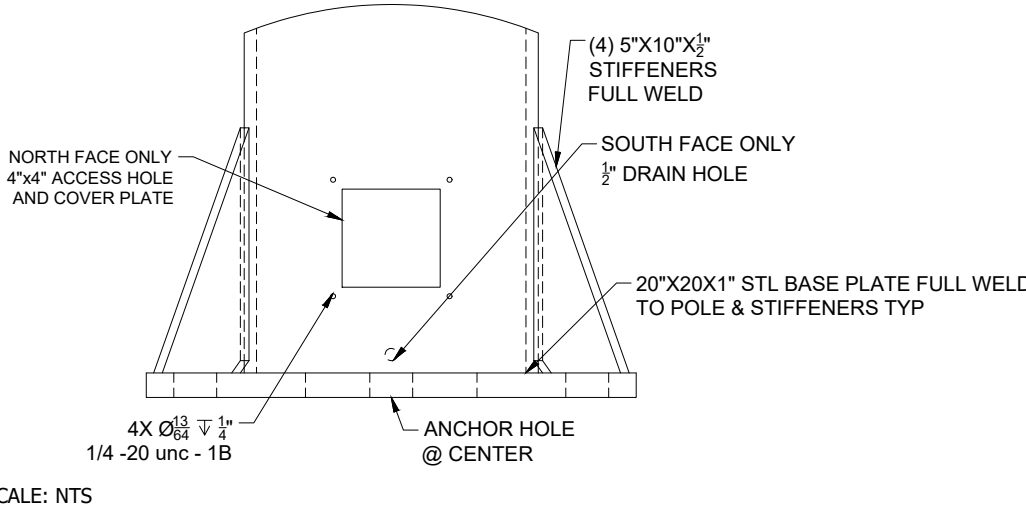
PV-3.1

STRUCTURAL DETAILS- SOLAR DUAL-AXIS TRACKER

FOUNDATION DETAILS



POLE DETAIL



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AHJ:MN-COUNTY GOODHUE

UTILITY: GOODHUE COUNTY COOPERATIVE

PROJECT NUMBER:EPFS-012383

STRUCTURAL DETAILS-2

DESIGNER/CHECKED BY:

GV/PI

SCALE:AS NOTED

PAPER SIZE:17"x11"

DATE:2/14/2025

REV:A

PV-3.2

Lake City Catholic Worker

