CITY OF MINNETRISTA





Subject: Application from Steven & Sharon Veno for a conditional use

permit to install a ground mounted solar energy system at 8485

Squire Lane.

Prepared By: Nickolas Olson, Senior City Planner

Through: David Abel, Community Development Director

Meeting Date: March 17, 2025

<u>Overview:</u> Steven & Sharon Veno (the "Applicants") have made an application for a conditional use permit for a ground mounted solar energy system at 8485 Squire Lane; A – Agriculture Zoning District; PID# 17-117-24-24-0004. (the "Property").

Background: It is the intent of the city in establishing general and specific criteria for conditional uses that such uses, by subject to careful evaluation to ensure that their location, size, and design, are consistent with the standards, purposes, and procedures of the city code and the comprehensive plan. The city may also consider whether the proposed use complies or is likely to comply in the future with all standards and requirements set out in other regulations or ordinances of the city or other governmental bodies having jurisdiction over the city.

The city may grant conditional use permits when such permits are authorized by this section and may impose conditions and safeguards in such permits to protect the health, safety and welfare of the community and assure harmony with the comprehensive plan of the city.

<u>Discussion:</u> When acting upon an application for a conditional use permit, the city will consider the effect of the proposed use upon the health, safety, and general welfare of the city. When considering the effect, the city should look at the following:

(1) The factors of noise, glare, odor, electrical interference, vibration, dust, and other nuisances; fire and safety hazards; existing and anticipated traffic conditions; parking facilities on adjacent streets and land.

The Applicant has indicated there aren't concerns with noise, glare, odor, electrical interference, vibration, dust, and other nuisances. There may be a slight disturbance during construction, but beyond that the system runs silently. The Property is large and there is ample space to stage and park during construction. Post construction, the system won't generate significant traffic nor require any additional parking on the street. Fire and safety should not be a concern as the system will be constructed to the applicable codes and inspected as needed during construction.

Mission Statement:

The City of Minnetrista will deliver quality services in a cost effective and innovative manner and provide opportunities for a high quality of life while protecting natural resources and maintaining a rural character.

(2) The effect on surrounding properties, including valuation, aesthetics and scenic views, land uses, character and integrity of the neighborhood.

City code requires that all ground mounted solar energy system be screened to the fullest extent practical without reducing efficiency. By doing so, this helps to minimize the impact on the surrounding neighborhood and views. The Applicant is proposing the array in a location that utilizes existing vegetative cover for screening. This is shown on the attached screening plan. The City Council should review and determine if this is acceptable. As for valuation, previous similar applications have indicated that solar energy systems add value to properties per government and realtor reports.

(3) Consistency with the city's comprehensive plan; impact on governmental facilities and services, including roads, sanitary sewer, water and police and fire.

In the simplest form, the proposed solar array complies with the comprehensive plan because it's allowed by conditional use permit in the rural land use designation (Agriculture zoning district). It is further confirmed because an element of the comprehensive plan is protecting solar access, which this array is taking advantage of. As far as impact on governmental services, there will be a slight uptick on the roads during construction, but afterwards that should cease and the use will become passive. The project won't necessitate additional police or fire services and the Property is not connected to City water or sewer, so no impact there either.

(4) The effect on sensitive environmental features including lakes, surface and underground water supply and quality, wetlands, slopes, flood plains and soils. The Applicant is proposing the solar energy system in a relatively flat, open space. The Applicant will be using the existing vegetation to help screen the system, so there should be an emphasis on preserving said vegetation. The proposed system meets all the requirements from property lines, the lakeshore, and any wetlands on the Property, which helps protect those features. In addition to complying with the required setbacks, the solar array will only require footings and should be minimally invasive to the slopes and soils and won't alter any floodplains (if applicable). There also shouldn't be an impact on the underground water supply, especially since its counted as hardcover based on minimum tilt, when in reality it will be angled and cover less of the Property (which currently is well below the allotted 25% maximum). The system is also located far way from the existing well on the property.

(5) Any other factors as found relevant by the city.

Based on the request, the information submitted with this land use application, and the lack of neighborhood concerns, there appears to be no other relevant factors to consider.

Neighborhood Comments: Notices were sent out to all property owners within 500 feet of the subject property. Staff spoke with one neighboring property owner prior to the public

Mission Statement:

hearing, but has not received any written comments/concerns regarding this request at the time of this report.

Planning Commission Recommendation: The Planning Commission reviewed the Applicant's request at their February 24, 2025 meeting and held the required public hearing. No one spoke during the public hearing, but the Applicant and their contractor were present for questions. The Planning Commission discussed the proposed screening and felt that the Property would benefit from additional trees being planted. The Commission settled on requiring 5 trees and the Applicant was amenable to this condition. With the additional condition, the Planning Commission made a motion to recommend the City Council approve the proposed CUP for ground-mount solar, based on certain findings of fact and subject to conditions. The motion passed unanimously.

<u>Conclusion:</u> The City Council should review the staff report and the recommendation of the Planning Commission. After review, the City Council should consider the entire record before it prior to making a motion. Along with making a motion, findings of fact should be established which support the motion. Findings of fact based on the information submitted by the Applicant may be as follows:

- 1. The proposed ground-mounted solar energy system is allowed by Conditional Use Permit in the Agriculture (A) Zoning District;
- 2. The proposed use does not have an effect of upon the health, safety, and general welfare of the city regarding the factors of noise, glare, odor, electrical interferences, vibration, dust, or other nuisances;
- 3. The proposed use does not pose any discernable fire or safety hazards;
- 4. The proposed use does not change existing or anticipated traffic conditions or parking facilities on adjacent streets and land;
- 5. The proposed use does not have an effect on surrounding properties, including valuation, aesthetics and scenic views, land uses, or character and integrity of the neighborhood;
- 6. The proposed use does not have any added impact on governmental facilities or services, including roads, sanitary sewer, water and police and fire;
- 7. The proposed use does not have an effect on sensitive environmental features including lakes, surface and underground water supply and quality, wetlands, slopes, flood plains, or soils; and
- 8. The request is consistent with the Minnetrista Comprehensive Plan.

Recommended Action: Motion to adopt a resolution approving the requested conditional use permit for a ground-mounted solar energy system at 8485 Squire Lane, based on the findings of fact outlined in the staff report and subject to the following conditions:

- 1. The Applicants shall plant 5 trees to help with screening of the ground-mounted solar energy system. The proposed location shall be shown on the site plan at the time of building permit and photographs verifying that they have been planted shall be submitted at the final inspection;
- 2. The ground-mounted solar energy system must remain screened from view to the extent possible without reducing efficiency;

Mission Statement:

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- 3. If the ground-mounted solar energy system is not in proper working order, has ceased functioning for a period of more than six months or has not been maintained, it must be deconstructed and removed from the property at which point the Planning Commission and City Council shall review the Conditional Use Permit;
- 4. The Applicants shall obtain all necessary permits and approvals from the City and other applicable entities with jurisdiction prior to any construction;
- 5. The Applicants shall be responsible for all fees incurred by the city in review of this application;
- 6. The City may inspect the property, at any time, for the purposes of insuring the conditions of the Conditional Use Permit are being met;
- 7. The City Council reserves the right to review and revoke the CUP upon violation of any term or condition; and
- 8. Any other conditions deemed necessary by the City Council.

Attachments:

- 1. Location Map
- 2. Applicant Narrative
- 3. Property Survey
- 4. Screening Plan
- 5. Building Plans
- 6. Res. No. 24-25 Approving CUP for Ground Mount Solar at 8485 Squire Lane

8485 Squire Lane



City Boundary
Address Labels

Parcels

1 in = 400 Ft





Application for a Conditional Use Permit 01/21/2025 Minnetrista, MN

PROJECT: Veno Solar and Energy Storage System LOCATION: 8485 Squire Lane, Minnetrista, MN, 55359

PHONE: (612) 618-2227

SIZE: Qty 44, QCells: Q.PEAK DUO XL-G11S 590w (Ground Mount Array) =25.96 KW DC

BUILDING SERVICE: 120/240 V. 1Ø, 3 Wire

UTILITY: Wright-Hennepin ACCOUNT: 15016955137

METER: 333191612

Submitted byTruNorth Solar 3735 Dunlap Street N

Arden Hills, MN 55112 (612) 888-9599

Contact: Donna Pickard

952-500-0789

CUP Criteria:

In submitting an application for a conditional use permit, we have considered the effect of the proposed use (ground-mounted solar array) upon the following criteria:

Health

- Noise
 - After construction, the system runs silently.
- Glare
 - Glare and reflection deflects upward toward the sky.
- Odor
 - None
- Electrical interference
 - None
- Vibration
 - o After construction, there is no vibration.
- Dust
 - o After construction, there is no dust.

Safety

- Fire
 - Correctly installed systems pose no fire risk.

Safety hazards

This system will be installed according to code requirements that insure safety.
 This system will be inspected by all AHJs and the utility for code compliance.

The effect on surrounding properties

- Valuation
 - Solar Energy Systems have historically added value to a property; increasing resale value.
- Aesthetics and Scenic views
 - The system will be placed in the center of the property screened by trees on the west, the customer's home on the east and a bank of trees on the north. No neighbor will be able to see the array as it is blocked by the home and a variety of trees.
- Land use
 - The system is designed for residential renewable energy production. It falls within the land use criteria for a ground mounted local Solar Energy System.
- Character and integrity of the neighborhood
 - It is hidden from the surrounding neighborhood by trees and buildings (see Neighborhood Map in package)

Consistency with the city's comprehensive plan

 Without reading the entire 364 page 2040 Comprehensive Plan, we are not aware of consistencies or inconsistencies.

Impact on governmental facilities and services

- Roads–No impact
- Sanitary sewer–The solar array will be installed 175 feet from the closest Septic–No impact
- Water-The well is located 250' away, no impact on water quality.
- Police–No impact
- Fire—The array will be installed according to code which contains multiple Fire Safety requirements.

Effect on sensitive environmental features

- Lakes and wetlands—The array will be placed using the current set-backs determined by the city ordinance to ensure water quality and protection. See Hennepin County DNR Map attached.
- Slopes—The array is installed in the flattest location as possible (both for ease of install
 and erosion control). The racking posts are 'groundscrews' so other than a narrow
 trench for buried electrical conductors, no major groundwork is required.
- Surface and underground water supply and quality-The solar array shed water in a natural and permeable way due to the use of groundscrew posts versus concrete foundations.
- Flood plains-Not located in a flood plain.
- Soils-The nature of the posts adds no new material or pollutants to the soil.

Ordinances of the city or other governmental bodies having jurisdiction over the city.

- (1) A description of the proposed use:
 - 25.96 KW DC ground mounted solar array to be used to create clean and renewable electricity for the property owner's personal residential use. Any extra energy will be fed to the electric grid via Wright-Hennepin Cooperative's Net Metering and Interconnection rules.
- (2) A legal description of the property, including property identification number:
 - See attached Property information
- (3) A site plan showing the location and extent of the proposed building, parking, loading, access drives, landscaping and any other improvements:
 - See attached Site Plan
- (4) A map or plot showing the property in question and all property within 500 feet of the boundaries of the property in question:
 - See attached Map showing this information.
- (5) The names and addresses of the owners of record of all property within 500 feet of the boundaries of the property in question:
 - See attached.
- (6) Any other information required by the zoning administrator, planning commission or city council.

Compliance with City Ordinance:

Subd. 3. Performance Standards. The Solar energy system meets the following required performance standards for the conditional use permit.

- (a) Location
 - The Ground-mounted solar energy system will be located in the side yard behind the house.
 - The Ground-mounted solar energy system will be constructed in a compact manner.
- (b) Height
 - (2) The Ground-mounted solar energy system will be no more than 10 feet high, thus abiding by the maximum height standard.
- (c) Setbacks.
 - A ground-mounted solar energy system must meet the setbacks required for an
 accessory structure in the applicable zoning district when oriented at minimum tilt.
 - Front Yard Setback is 250'.
 - Side Yard Setback is 125' and 290' Rear yard setback is 575'
 - Septic tank setback is 175' to nearest Septic.
 - o septic drain field/mound: 250'
 - Wetland Setbacks
 - Zoning District Distance setback from delineated edge of wetland:
 A, AP, and SDD---150 feet

(d) Coverage.

• In order to calculate the total square footage of a ground mounted solar energy system, the city shall draw a line around the exterior perimeter of all above-ground integrated parts of the solar energy system and then calculate the square footage of that area. Total square footage of the array is 1,261 under the 3,000 square feet maximum.(e)

Screening.

 The ground-mounted solar energy system will be screened from view to the extent possible without reducing its efficiency. This is currently the case with location, trees and existing buildings.

(f) Aesthetics.

 A ground-mounted solar energy system should match the principal structure to the maximum extent possible.

(g) Feeder Lines.

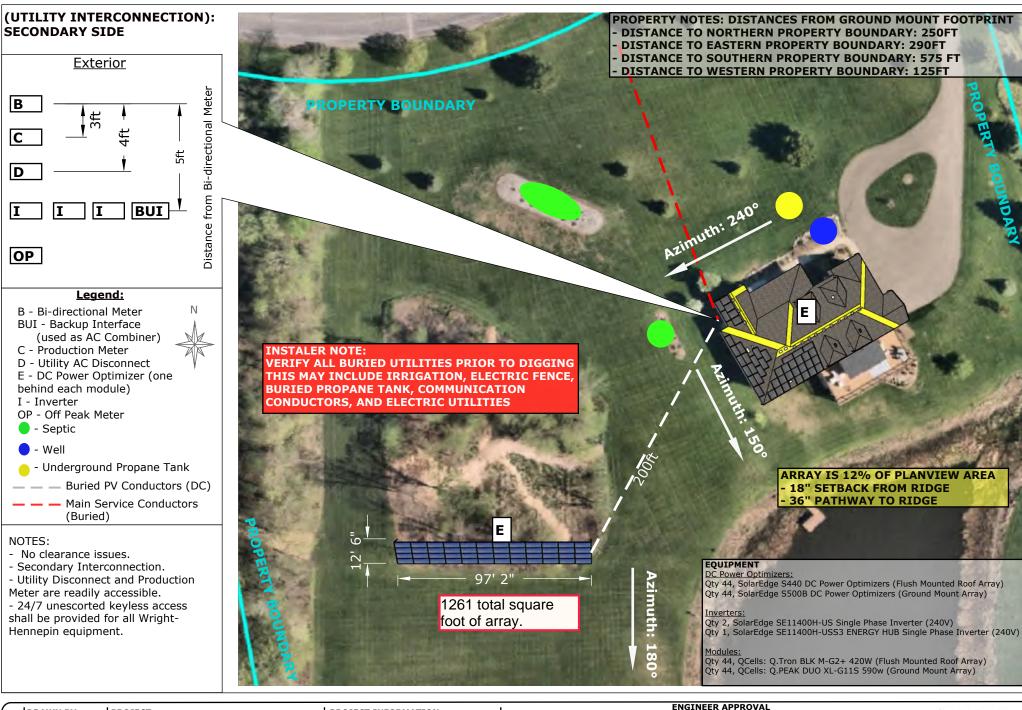
 The conductors for the solar energy system will be placed underground within the boundaries of the property.

(h) Accessory use.

• The ground-mounted solar energy system will be accessory to a principal use on the parcel in the zoning district (A).

(i) Limit.

• The property will have one ground mounted solar energy system and one roof top system.



DRAWN BY

DESCRIPTION Site Diagram

Revision 00 January 13, 2025 **PROJECT**

Name: SHARON VENO Location: 8485 Squire Lane, Minnetrista, MN,

Phone: (612) 618-2227

PROJECT NO.

PROJECT INFORMATION

Size: 44.44 kW DC / 34.2 kW AC Building Service: 120/240 V, 1Ø, 3 Wire

Utility: Wright-Hennepin Account: 15016955137 Premise:

Meter: 333191612 Case Number:





DRAWN BY BF

DESCRIPTIONSite Diagram

Revision 00 January 13, 2025 **PROJECT**

Name: SHARON VENO

Location: 8485 Squire Lane, Minnetrista, MN, 55359

Phone: (612) 618-2227

PROJECT NO. 9364

PROJECT INFORMATION

Size: 44.8 kW DC / 34.2 kW AC Building Service: 120/240 V, 1Ø, 3 Wire

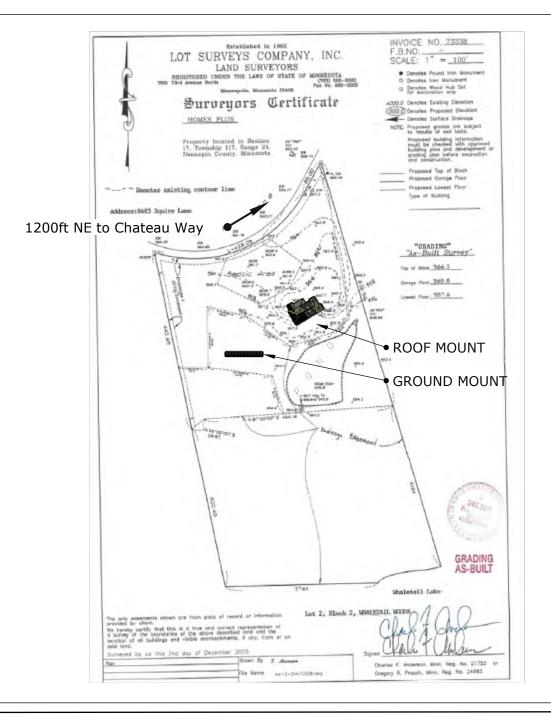
Utility: Wright-Hennepin Account: 15016955137

Premise: 150169551
Meter: 333191612

Case Number:

| ENGINEER APPROVAL







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DESCRIPTIONSite Diagram

Revision 00 January 13, 2025 **PROJECT**

Name: SHARON VENO Location: 8485 Squire Lane, Minnetrista, MN,

55359

Phone: (612) 618-2227

PROJECT NO. 9364

PROJECT INFORMATION

Size: 44.8 kW DC / 34.2 kW AC Building Service: 120/240 V, 1Ø, 3 Wire

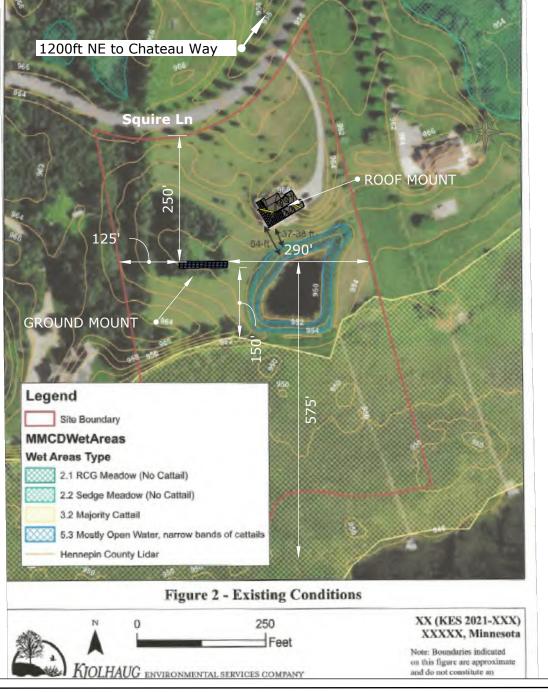
Utility: Wright-Hennepin Account: 15016955137

Premise:
Meter: 333191612
Case Number:

ENGINEER APPROVAL



PROPERTY NOTES: DISTANCES FROM GROUND MOUNT FOOTPRINT
- DISTANCE TO NORTHERN PROPERTY BOUNDARY: 250FT
- DISTANCE TO EASTERN PROPERTY BOUNDARY: 290FT
- DISTANCE TO SOUTHERN PROPERTY BOUNDARY: 575 FT
- DISTANCE TO WESTERN PROPERTY BOUNDARY: 125FT



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DESCRIPTIONSite Diagram

Revision 00 January 13, 2025

PROJECT

Name: SHARON VENO Location: 8485 Squire Lane, Minnetrista, MN,

55359 Phone: (612) 618-2227

PROJECT NO.

PROJECT INFORMATION

Size: 44.8 kW DC / 34.2 kW AC
Building Service: 120/240 V, 1Ø, 3 Wire

Utility: Wright-Hennepin Account: 15016955137

Premise: Meter: 333191612 Case Number:

| ENGINEER APPROVAL











Steve Veno

4BA4BA

Ground Mount - SunTurf System



Project Details Project Name Steve Veno Zip Code: 55359 ASCE 7-16 City, State Maple Plain, MN **Total Watts** 26 kW Date 12/17/24 **Total Modules** 44 Module Model Hanwha Q CELLS Q.PEAK DUO XL-G11S.3 / BFG 590 $\label{eq:Height:2,461.3} Height: 2,461.3 \, \text{mm}, Width: 1,132.8 \, \text{mm}, Depth: 35.0 \, \text{mm} \, (96.90'' \times 44.60'' \times 1.38'') \\ \textbf{Large format module has been selected. Confirm spans with your engineer.}$ **Module Dimensions**

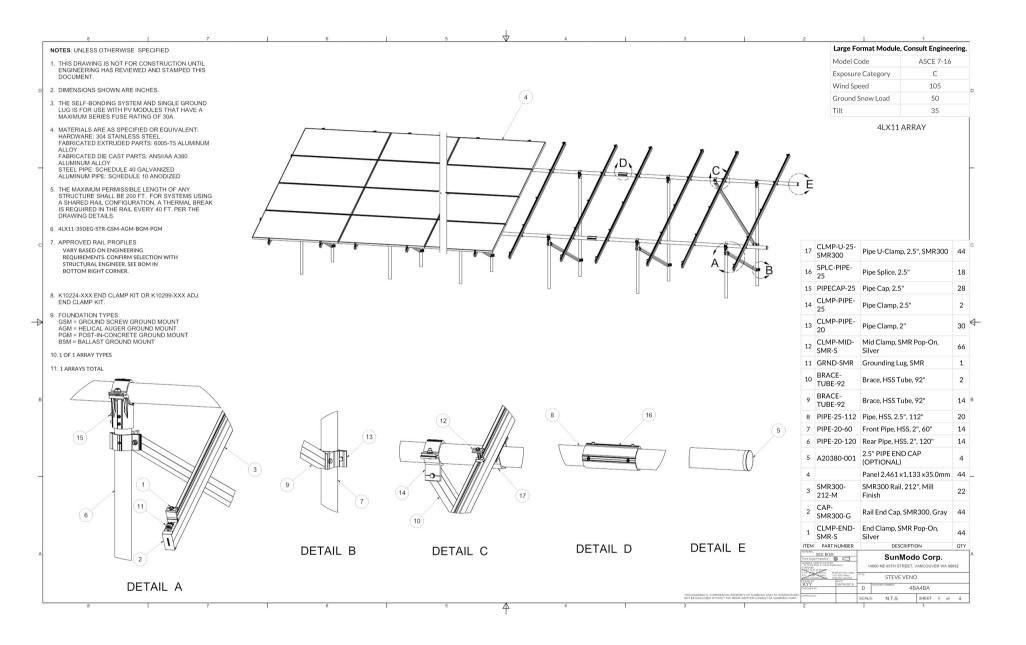
Load Assumptions	
Wind Speed	105 mph
Wind Expsoure	С
Ground Snow Load	50 psf

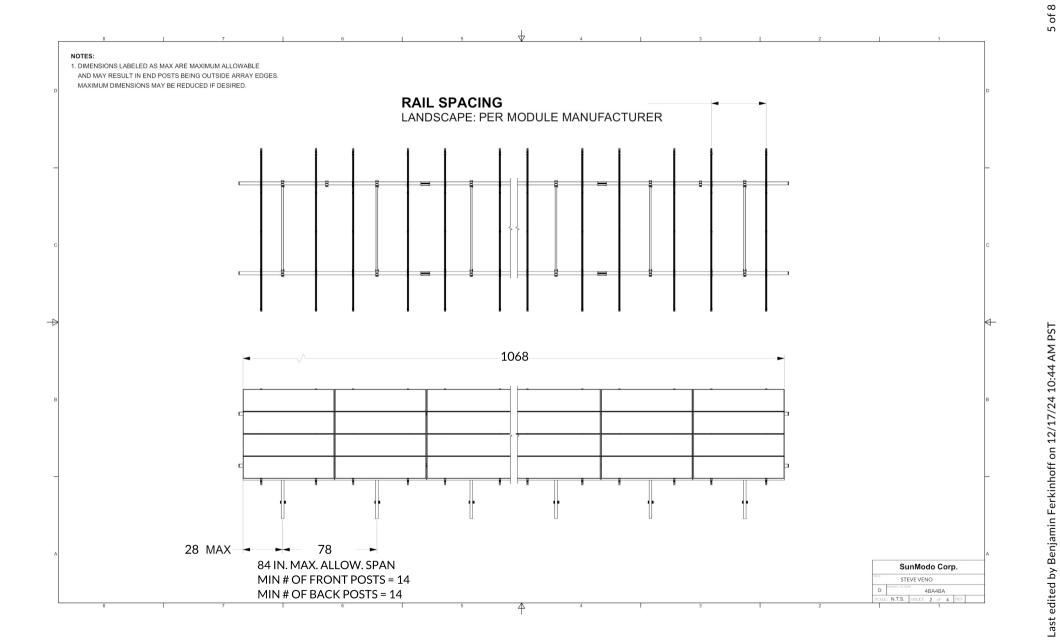
Structure & Foundation		
Span Selection	Automatic: 84"	
Front Edge Height	32"	
Foundation Type	Ground Screw	
Length of Screw	80"	
Tilt	35°	

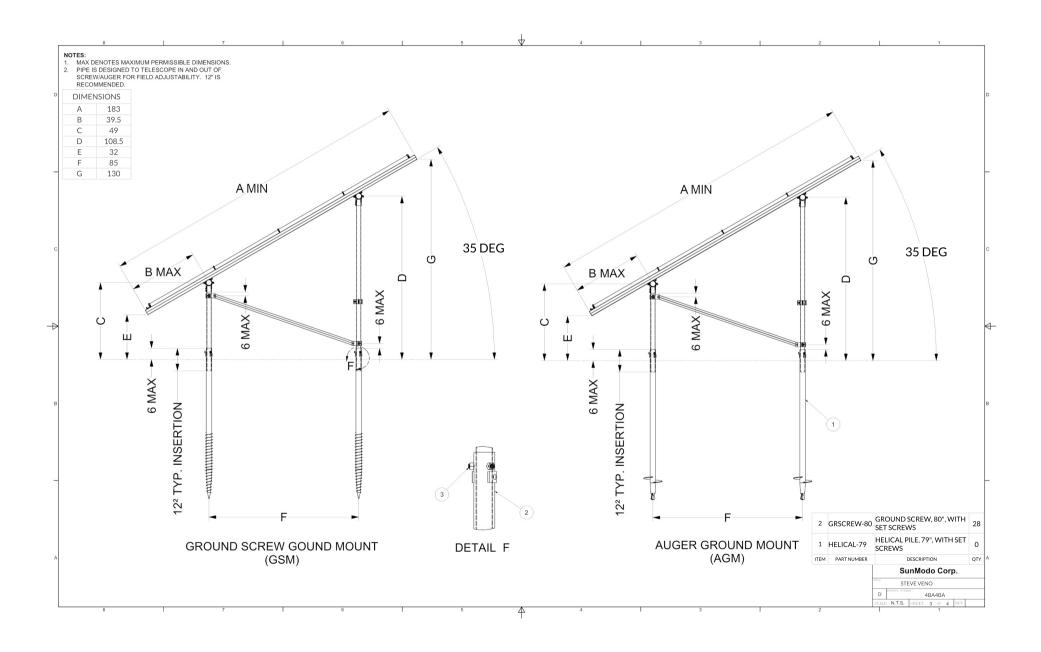
Bill of Materials

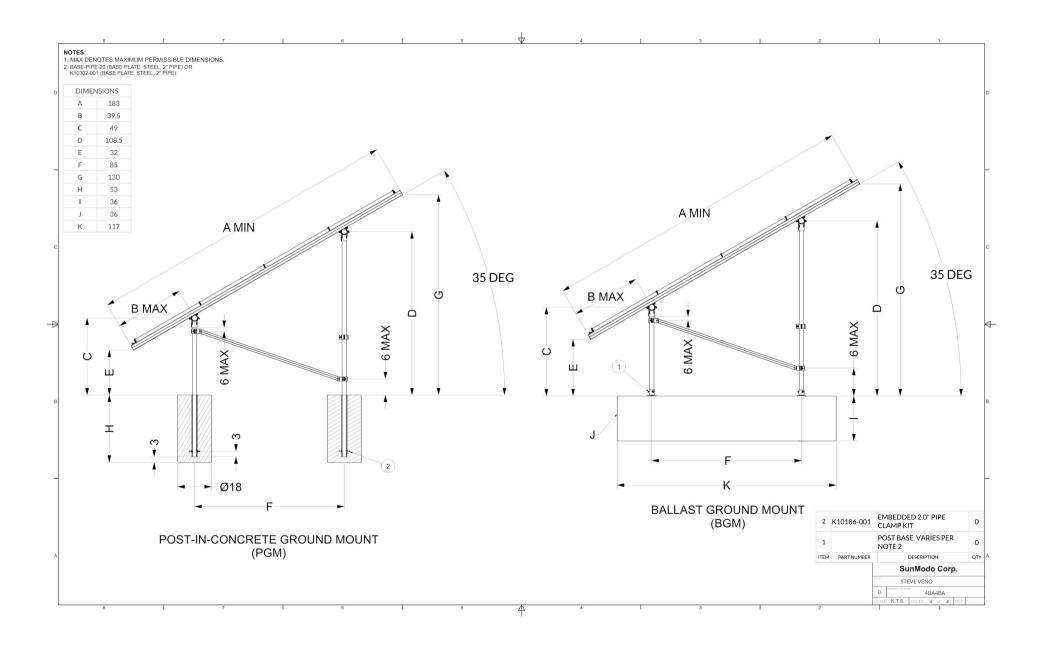
Part	Spares	Total Qty
GRSCREW-80 Ground Screw, 80", with set screws		28
PIPE-20-60 Front Pipe, HSS, 2", 60"		14
PIPE-20-120 Rear Pipe, HSS, 2", 120"		14
PIPE-25-112 Pipe, HSS, 2.5", 112"		20
BRACE-TUBE-92 Brace, HSS Tube, 92"		16
SMR300-212-M SMR300 Rail, 212", Mill Finish		22
CLMP-U-25-SMR300 Pipe U-Clamp, 2.5", SMR300		44
PIPECAP-25 Pipe Cap, 2.5"		28
CLMP-PIPE-20 Pipe Clamp, 2"		30
CLMP-PIPE-25 Pipe Clamp, 2.5"		2
SPLC-PIPE-25 Pipe Splice, 2.5"		18
CLMP-MID-SMR-S Mid Clamp, SMR Pop-On, Silver		66
CLMP-END-SMR-S End Clamp, SMR Pop-On, Silver		44
GRND-SMR Grounding Lug, SMR		1
CAP-SMR300-G Rail End Cap, SMR300, Gray		44
MLPE-SMR MLPE Mount, SMR		44

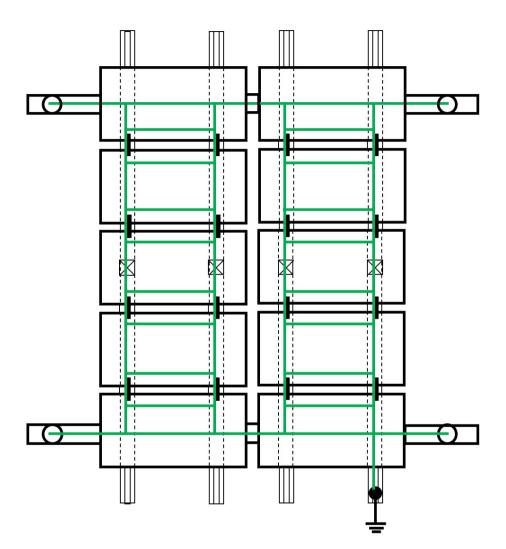
Array #1 Details			
Orientation	Landscape	Rail Type	SMR300 Rail, 212", Mill Finish
Layout	4 rows by 11 columns	N/S Span (in)	85
Front Posts	14	E/W Max Span (in)	84
Back Posts	14	Area	1066" (EW) x 178" (NS)











0	Pipe Connection		Pipe
_	Mid Clamp	-	Fault Current Pati
	Rail	Γ	Solar Panel
\boxtimes	Rail Splice		
•	Ground Lug		

Note: All SunTurf metal structural components (Horizontal and Vertical Pipe, Pipe Splices, Post Caps, Pipe Clamps, Braces, Rail and Rail Splices) are electrically bonded together by design during the assembly of the racking.

RESOLUTION NO. 24-25

CITY OF MINNETRISTA

RESOLUTION APPROVING A CONDITIONAL USE PERMIT FOR STEVEN AND SHARON VENO FOR A GROUND-MOUNTED SOLAR ENERGY SYSTEM AT 8485 SOUIRE LANE

WHEREAS, the City of Minnetrista is a municipal corporation, organized and existing under the laws of the State of Minnesota; and

WHEREAS, the City Council of the City of Minnetrista has adopted zoning and subdivision regulations, per Chapter 5 of the Municipal Code, to promote the orderly, economic and safe development and utilization of land within the city; and

WHEREAS, Steven & Sharon Veno (the "Applicants") have made an application for a conditional use permit for a ground-mounted solar energy system at the property located generally at 8485 Squire Lane (the "Property") and which is legally described on Exhibit A attached hereto; and

WHEREAS, on February 24, 2025, the Minnetrista Planning Commission considered the requested conditional use permit, held a public hearing, and, after consideration of the record before it, voted 5-0 in favor of recommending approval of the conditional use permit; and

WHEREAS, on March 17, 2025, the City Council reviewed the application, as submitted, and has made the following findings of fact:

- 1. The proposed ground-mounted solar energy system is allowed by Conditional Use Permit in the Agriculture (A) Zoning District;
- 2. The proposed use does not have an effect of upon the health, safety, and general welfare of the city regarding the factors of noise, glare, odor, electrical interferences, vibration, dust, or other nuisances;
- 3. The proposed use does not pose any discernable fire or safety hazards;
- 4. The proposed use does not change existing or anticipated traffic conditions or parking facilities on adjacent streets and land;
- 5. The proposed use does not have an effect on surrounding properties, including valuation, aesthetics and scenic views, land uses, or character and integrity of the neighborhood;
- 6. The proposed use does not have any added impact on governmental facilities or services, including roads, sanitary sewer, water and police and fire;
- 7. The proposed use does not have an effect on sensitive environmental features including lakes, surface and underground water supply and quality, wetlands, slopes, flood plains, or soils; and
- 8. The request is consistent with the Minnetrista Comprehensive Plan.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Minnetrista hereby approves the ground-mounted solar conditional use permit at 8485 Squire Lane, as requested by the Applicants, based on the findings of fact outlined above, with the following conditions:

- 1. The Applicants shall plant 5 trees to help with screening of the ground-mounted solar energy system. The proposed location shall be shown on the site plan at the time of building permit and photographs verifying that they have been planted shall be submitted at the final inspection;
- 2. The ground-mounted solar energy system must remain screened from view to the extent possible without reducing efficiency;
- 3. If the ground-mounted solar energy system is not in proper working order, has ceased functioning for a period of more than six months or has not been maintained, it must be deconstructed and removed from the property at which point the Planning Commission and City Council shall review the Conditional Use Permit;
- 4. The Applicants shall obtain all necessary permits and approvals from the City and other applicable entities with jurisdiction prior to any construction;
- 5. The Applicants shall be responsible for all fees incurred by the city in review of this application;
- 6. The City may inspect the property, at any time, for the purposes of insuring the conditions of the Conditional Use Permit are being met; and
- 7. The City Council reserves the right to review and revoke the CUP upon violation of any term or condition.

This resolution was adopted by the C 2025, by a vote of Ayes and	ity Council of the City of Minnetrista on the 17 th day of March_Nays.
ATTEST:	Lisa Whalen, Mayor
Ann Meyerhoff, City Clerk	

EXHIBIT A

<u>Legal Description of 8485 Squire Lane:</u>

Lot 2, Block 2, Whaletail Woods, Hennepin County, Minnesota.