



# GOODHUE COUNTY MINNESOTA

TO EFFECTIVELY PROMOTE THE SAFETY, HEALTH, AND WELL-BEING OF OUR RESIDENTS

Goodhue County Planning Commission  
Government Center - Board Room  
509 West 5th St, Red Wing MN 55066

Planning Advisory Commission

7:00 PM Call Meeting To Order

Approval Of Current Agenda

Approval Of Previous Month's Meeting Minutes

1. January 14, 2019 Planning Commission Draft Meeting Minutes

Documents:

[MINUTES\\_JANUARY2019\\_PAC\\_DRAFT.PDF](#)

Conflict/Disclosure Of Interests

Public Hearings:

**PUBLIC HEARING: CUP Request To Elevate A Dwelling Within A Floodplain By Means Other Than Fill**  
Request submitted by Curt Caverly (Buyer) and John Enblom (Owner) to elevate a proposed dwelling above the base flood elevation of a Floodplain area by means of a "tuck under" garage foundation. Parcel 43.230.0060. TBD Lake View Ave Red Wing, MN 55066. Lot 6, Block 1 of Wacouta Point Plat located in Sect 31 Twp 113, Range 13 in Wacouta Township. R1 Zoned District.

Documents:

[PACPACKET\\_CAVERLY\\_REDACTED.PDF](#)

**PUBLIC HEARING: "Wildwood Gardens" Preliminary And Final Plat Review**  
Request submitted by Howard Stenerson (Owner) for Preliminary and Final Plat review of the proposed "Wildwood Gardens" Plat comprising approximately 56.45 acres. Parcels 43.135.0200 and 43.136.0380. TBD Wildwood Lane Red Wing, MN 55066. Part of the SE ¼ of Sect 35 and the SW ¼, SW ¼ of Sect 36 in Twp 113, Range 14 in Wacouta Township. A2 Zoned District.

Documents:

[PACPACKET\\_STENERSON\\_REDACTED.PDF](#)

**PUBLIC HEARING: Request For CUP For A Utility-Scale Solar Energy System (SES)**  
Request for a CUP submitted by MN 121819 LLC (applicant) and Jonathan and Lora Luhman (owners) for a Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 6.65 acres. Parcel 26.032.0400. TBD 390th Ave, Goodhue, MN 55027. Part of the NW ¼ of Sect 32 Twp 111 Range 14 in Belvidere Township. A1 Zoned District.

Documents:

[PACPACKET\\_LUHMAN\\_REDACTED.PDF](#)

**PUBLIC HEARING: Request For CUP For A Utility-Scale Solar Energy System (SES)**  
Request for a CUP submitted by MN 121819 LLC (applicant) and Andrew and Kim Huneke (owners) for a

Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 7.31 acres. Parcel 39.007.0301. TBD 180th Ave, Zumbrota, MN 55992. Part of the NW ¼ of Sect 07 Twp 109 Range 15 in Pine Island Township. A1 Zoned District.

Documents:

[PACPACKET\\_HUNEKE1.PDF](#)

PUBLIC HEARING: Request For CUP For A Utility-Scale Solar Energy System (SES)  
Request for a CUP submitted by MN 121819 LLC (applicant) and Andrew and Kim Huneke (owners) for a Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 10.42 acres. Parcel 38.033.0100. TBD ST HWY 60, Zumbrota, MN 55992. Part of the E ½ of the NE ¼ of Sect 33 Twp 110 Range 16 in Minneola Township. A1 Zoned District.

Documents:

[PACPACKET\\_HUNEKE2\\_REDACTED.PDF](#)

PUBLIC HEARING: Request For CUP For A Utility-Scale Solar Energy System (SES)  
Request for a CUP submitted by MN 121819 LLC (applicant) and Paul Betcher (owners) for a Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 5.63 acres. Parcel 33.027.0400. TBD CTY 9 BLVD, Goodhue, MN 55027. Part of the NE ¼ of Sect 27 Twp 111 Range 15 in Goodhue Township. A1 Zoned District.

Documents:

[PACPACKET\\_BETCHER\\_REDACTED.PDF](#)

Other-Discussion

Adjourn

Anyone interested is invited to attend. Agenda items may be subject to change.

## Goodhue County Land Use Management

◆ Goodhue County Government Center ◆ 509 West Fifth Street ◆ Red Wing ◆ Minnesota ◆ 55066 ◆  
◆ Building ◆ Planning ◆ Zoning ◆ Telephone: 651/385-3104 ◆ Fax: 651/385-3106 ◆

**PLANNING COMMISSION  
GOODHUE COUNTY, MN  
January 14th, 2019 MEETING MINUTES  
DRAFT**

The meeting of the Goodhue County Planning Advisory Commission was called to order at 7:00 PM by Chair Darwin Fox at the Goodhue County Government Center 3<sup>rd</sup> Floor Court Room in Red Wing, Minnesota.

### **Roll Call**

Commissioners Present: Marc Huneke, Darwin Fox, Richard (Dick) Nystuen, Tom Gale, Barney Nesseth, Richard Miller and Sarah Pettit

Commissioners Absent: Tom Drazkowski and Howard Stenerson

Staff Present: Land Use Management Director Lisa Hanni, Zoning Administrator Mike Wozniak  
Zoning Assistants Ryan Bechel and Abby Breyfogle

### **1. Approval of Agenda**

<sup>1</sup>Motion by Commissioner Nystuen; seconded by Commissioner Pettit to approve the meeting agenda. Motion carried 5:0

### **2. Approval of Minutes**

<sup>2</sup>Motion by Commissioner Huneke; seconded by Commissioner Nystuen to approve the previous month's meeting minutes. Motion carried 5:0

### **3. Appointment of Chair, Vice-chair and BOA representative**

<sup>3</sup>Motion by Commissioner Nystuen; seconded by Commissioner Fox to appoint Sarah Pettit as Chair. Motion carried 5:0

<sup>4</sup>Motion by Commissioner Nystuen; seconded by Commissioner Huneke to appoint Tom Gale Vice Chair. Motion carried 5:0

Commissioner Nesseth arrived at 7:03 pm.

<sup>5</sup>Motion by Commissioner Nesseth; seconded by Commissioner Nystuen to appoint Darwin Fox BOA representative. Motion carried 6:0

### **4. Conflict/Disclosure of Interest**

There were no reported conflicts/disclosures of interest.

### **5. Public Hearings**

#### **PUBLIC HEARING: Request for Amendment to IUP for Non-Agricultural Use Associated with Agri-tourism (Wedding Barn Event Center)**

Request submitted by Randal and Barbara Kerkhoff (owners) to amend existing IUP to allow a Wedding Barn Event Center to operate from 8:00 AM until midnight (currently 8:00 AM to 10:00 PM). Parcel 39.025.0401. 23897 510th St. Pine Island, MN 55963. Part of the SE ¼ of the SE ¼ of Sect 25 Twp 109, Range 15 in Pine Island Township. A2 Zoned District.

*The Applicants (Randal and Barbara Kerkhoff) were present to represent the application.*

*Ryan Bechel (Bechel) presented the staff report and attachments.*

*Lisa Hanni paused proceedings upon arrival at 7:06 pm to clarify that Richard Miller had been appointed to replace Len Fueling on the Planning Commission. Commissioner Miller joined the commissioners for the remainder of the public hearings.*

**PLANNING COMMISSION  
GOODHUE COUNTY, MN  
January 14th, 2019 MEETING MINUTES  
DRAFT**

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*Commissioner Miller stated that the facility is an asset to the township and there have been no complaints regarding the property.*

**Chair Pettit opened the Public Hearing.**

Noone spoke for or against the request.

**After Chair Pettit asked three times for comments, it was moved by Commissioner Fox and seconded by Commissioner Huneke to close the public hearing.**

**Motion carried 7:0**

**Motion by Commissioner Gale seconded by Commissioner Miller, for the Planning Advisory Commission to:**

- Adopt the staff report into the record;
- Accept the application, testimony, exhibits, and other evidence presented into the record;

and recommend that the County Board of Commissioners **APPROVE** the request from Randal and Barbara Kerkhoff to amend IUP Z16-0072 (approved 11/01/16) to modify Wedding barn Event Center operational hours to 8am to midnight.

Subject to the following conditions:

1. Compliance with all necessary State and Federal registrations, permits, licensing, and regulations;
2. Compliance with Goodhue County Zoning Ordinance, including but not limited to: ARTICLE 22 A-2, AGRICULTURE DISTRICT; and Article 11, Section 30;
3. Compliance with Goodhue County Septic Ordinance, including compliance with septic system permitting requirement as administered by Land Use Management Department Environmental Health Staff;
4. Review of the proposed event facility by a State of Minnesota licensed design professional to evaluate if the structure is in compliance with applicable Building Code standards and requirements for the intended use to be submitted to the Building Official. Any required improvements to the structure must be completed prior to start of operations.
5. The owners will cooperate with inspections of the facility in coordination with Land Use Staff;
6. The Interim Use Permit shall be limited to Barbara and Randy Kerkhoff; use by another owner or operator shall be subject to obtaining a new Interim Use Permit from Goodhue County.
7. Hours of operation shall be 8am to 12am (midnight).

**Motion carried 7:0**

**PUBLIC HEARINGS: Roper Irrevocable Trust (Owner) and Bonnie Weber (Applicant)**  
Parcel 32.021.0800. 31542 West Florence Trail, Red Wing, MN 55066. SW ¼ of Sect 21 Twp 112 Range 13 in Florence Township. A2 Zoned District.

**PLANNING COMMISSION  
GOODHUE COUNTY, MN  
January 14th, 2019 MEETING MINUTES  
DRAFT**

**1. CUP for a Non-Agricultural Use Associated with Agri-tourism (Wedding Event Center)**

Request for Conditional Use Permit (CUP) to establish a Wedding Barn Event Center with a proposed maximum occupancy of 400 guests.

**2. CUP for Commercial Outdoor Recreation Facility**

Request for Conditional Use Permit (CUP) to establish an off-road trail course for ATV's, UTV's and various "4x4" vehicles to host commercial riding events with up to 400 participants.

*The Applicants (Roper Family Trust) were present to represent the application.*

*Bechel presented the staff report and attachments.*

*Bechel read an email from Jim and Marcia Sprout regarding concerns for off road vehicles. (Attachment 1)*

*Bechel read letter from Luann Ludwig regarding concerns with noise and erosion for off road vehicles. (Attachment 2)*

*Commissioner Gale asked how wide the driveway is as he doesn't think 14 feet is wide enough for passing. Commissioner Gale stated a concern regarding the driveway if there are 400 people present.*

*William Roper (Roper) stated that the driveway width is sufficient for cars to pass coming and going and they haven't had a problem in previous events.*

**<sup>8</sup>Commissioner Nystuen moved to have two separate public hearings, Commissioner Huneke seconded the motion.**

**Motion carried 7:0**

*Chair Pettit asked to discuss the wedding event center activities first.*

*Chair Pettit asked if they ever would have an ATV event the same time as a wedding event.*

*Roper stated no, there wouldn't be parking available for that type of event and the congestion would be too much. Roper also stated the driveway is used as part of the trail during riding events.*

*Mike Wozniak (Wozniak) stated that he spoke with the individuals who sent in their written statement and they were not concerned with the wedding event part of the public hearing but were concerned with the outdoor recreational facility.*

**Chair Pettit opened the Public Hearing.**

*Kate Elynck stated she was there on behalf of Florence Township and the township has not yet approved the Roper's application at the township level. She stated the applicants need to have a public hearing at the township level which has not happened yet on either application.*

**<sup>9</sup>After Chair Pettit asked three times for comments, it was moved by Commissioner Gale and seconded by Commissioner Huneke to close the public hearing.**

**Motion carried 7:0**

*Commissioner Fox requested more clarification from Elynck on her statement.*

**PLANNING COMMISSION  
GOODHUE COUNTY, MN  
January 14th, 2019 MEETING MINUTES  
DRAFT**

*Hanni stated that Florence Township did sign off at the Planning Commission Level and then again at the town board level. Hanni stated that the Township failed to hold a public hearing as required by their ordinance and they are now reconsidering the requests.*

**<sup>10</sup>Motion by Commissioner Nystuen seconded by Commissioner Fox, for the Planning Advisory Commission to:**

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

and recommend that the County Board of Commissioners **APPROVE** the request from the Roper Irrevocable Trust (Owner) and Bonnie Weber (Applicant) to establish a Wedding Barn Event Center with a maximum capacity of 400 guests. Subject to the following conditions:

1. Activities shall be conducted according to submitted plans, specifications, and narrative unless modified by a condition of this IUP.
2. Hours of operation shall be Friday and Saturday, May through October from 8:00 AM to 12:00 AM (midnight);
3. Maximum occupancy shall be limited to 400 guests per event;
4. On-street event parking shall be prohibited;
5. Use of the property by wedding event guests for over-night stays shall require issuance of a separate CUP/IUP;
6. Security personnel shall be present at all events in which alcohol is served;
7. All exterior signage located on the property must follow Goodhue County Zoning Ordinance Article 11 section (Sign Regulations). The applicant shall consult the appropriate road authority prior to placing signs located within road right-of-way;
8. Applicant shall obtain Building Permit approvals for use of existing structures from the Goodhue County Building Permits Department prior to hosting future events;
9. Applicants shall work with Goodhue County Environmental Health to develop and implement a plan to provide adequate sanitary facilities for guest use;
10. Compliance with all necessary State and Federal registrations, permits, licensing, and regulations;
11. Compliance with Goodhue County Zoning Ordinance including, but not limited to, Article 11, section 30 Non-Agricultural Uses Associated with Agricultural Tourism; Goodhue County SSTS Ordinance; and Article 22 A2, General Agriculture District.

**Motion Carried 7:0**

*Chair Pettit opened questions and comments for the CUP for outdoor recreational facility.*

*Commissioner Nesseth asked Roper to clarify exactly what kind of vehicles they were.*

*Roper stated that there are no motorcycles but that there are side by sides, off road vehicles with safety harnesses. Roper stated they have a safety checklist and inspection sheet that every vehicle has to go through before they ride on the property.*

*Commissioner Nystuen questioned the difference between 100 and 400 participants.*

*Roper stated that on a normal weekend they would only have about 100 trucks but when they*

**PLANNING COMMISSION  
GOODHUE COUNTY, MN  
January 14th, 2019 MEETING MINUTES  
DRAFT**

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have the Minnesota convention, they have up to 200 trucks, plus a rider and that would be approximately 400 people. Roper indicated a max would be 200 trucks. He also stated that it would only be 1 way on the trail if there were that many trucks on the trail.

Commissioner Nystuen asked what the speeds were.

Roper responded that it's about an average of 5 miles per hour because the trails aren't flat.

Commissioner Miller asked if all 400 people are camping there and asked if they were camping for a week at a time. He expressed concern over having enough room to accommodate that many campsites.

There was some discussion regarding hours of operation/events. The reason the hours were 7 days a week 365 days a year is to accommodate holidays that end on off days, such as a Wednesday or a Monday. This would allow for events to take place over the holiday instead of just on weekends.

Commissioner Miller asked what the ordinance stated about square footage for campsites and access to the roads.

Bechel responded that applicant would have to follow the entire campsite ordinance and stated that they will only be permitted to do what the ordinance allows them to do.

Roper stated that not all riders and drivers stay the night after the event. He added that many people just come for the day.

Hanni stated that before there can be overnight camping, applicants will have to provide all the information to make sure our ordinance is followed. Applicants would have to follow GCZO as well as state licensing for campgrounds.

Roper stated that typically 30-50 people want to stay the night. He added that with the Minnesota conference it can be up to 70 people that stay the night.

Further discussion on 7 days a week, 365 days a year. Roper stated he does not want to be operational all year. He stated they are not running during deer season, winter, or the muddy spring. He concluded their actual times to run would be from May until deer season being limited to 5 events per year.

Discussion regarding putting conditions on the times and dates events can be held. Huneke suggested placing on the number of days events could be held from May to October from 10 am to 10 pm.

Chair Pettit asked for further clarification regarding events for large parties, and events for small parties.

**Chair Pettit opened the Public Hearing.**

Kate Eiyneck stated she was there on behalf of Florence Township and the township has not yet approved this application. She stated the applicants need to have a public hearing at the township level which, contrary to earlier indications by the township, has not happened yet on either application.

**11After Chair Pettit asked three times for comments, it was moved by Commissioner Huneke and seconded by Commissioner Nesseth to close the public hearing.**

**Motion carried 7:0**

**PLANNING COMMISSION  
GOODHUE COUNTY, MN  
January 14th, 2019 MEETING MINUTES  
DRAFT**

*Commissioner Huneke recommended the Commission specify what defines an event and place conditions on the same. Further discussion on length of events and on definition of "event" and how many events should be allowed.*

*Chair Pettit asked how the events are actually counted.*

*Staff responded that in the past we have requested a list of the events prior to the season so that the public can see the schedule for the season and also so that staff can confirm the amount of events.*

*Commissioner Miller asked what if spectators wanted to watch the events.*

*Bechel responded that spectators are counted as participants in the event and would be part of the maximum capacity count.*

Staff suggested conditions:

1. Activities shall be conducted according to submitted plans, specifications, and narrative unless modified by a condition of this CUP.
2. Hours of operation shall be year-round, 7-days per week from 10:00 AM to 10:00 PM;
3. Events shall be limited to five (5) per year with a maximum of 400 participants per event;
4. On-street event parking, loading, and off-loading shall be prohibited;
5. Accessory use of the property for over-night camping is only allowed during trail riding events for the participants, and shall be in accordance with Goodhue County Zoning Ordinance Article 16 Section 7, Campground and Recreation Vehicle Site Regulations. Camping shall not allowed until staff has been provided with written verification that all of the provisions of Article 16 Section 7 have been addressed and satisfied;
6. Applicants shall provide a trail maintenance and erosion control and prevention plan for review and approval by LUM staff prior to hosting future events;
7. All off-road vehicles used during events shall have functioning mufflers;
8. A trail map shall be posted on site and provided to all event participants;
9. Applicants shall work with Goodhue County Environmental Health to develop and implement a plan to provide adequate sanitary facilities for guest use;
10. Compliance with all necessary State and Federal registrations, permits, licensing, and regulations;
11. Compliance with Goodhue County Zoning Ordinance including, but not limited to, Article 12, Bluffland Protection; Goodhue County SSTS Ordinance; and Article 22 A2, General Agriculture District.

**<sup>12</sup>Motion by Commissioner Nystuen seconded by Commissioner Huneke, for the Planning Advisory Commission to:**

- adopt the staff report into the record;
- adopt the findings of fact;
- amend staff suggested conditions #2 and #3 regarding event hours of operation;
- add conditions #4 and #9;
- accept the application, testimony, exhibits, and other evidence presented into the record;



**PLANNING COMMISSION  
GOODHUE COUNTY, MN  
January 14th, 2019 MEETING MINUTES  
DRAFT**

and recommend that the County Board of Commissioners **APPROVE** the request from Roper Irrevocable Trust (Owner) and Bonnie Weber (Applicant) to establish an off-road trail course for ATV's, UTV's and various "4x4" vehicles to host commercial riding events with up to 400 participants subject to the following conditions

1. Activities shall be conducted according to submitted plans, specifications, and narrative unless modified by a condition of this IUP.
2. Events may be held between May-October for a maximum of 28 days or a total of 7 events;
3. No event trail riding shall be allowed between 10pm – 10am;
4. Trail riding events shall not coincide with Wedding events held on this parcel;
5. Maximum capacity shall be 400 participants per event;
6. On-street event parking, loading, and off-loading shall be prohibited;
7. Accessory use of the property for over-night camping is only allowed during trail riding events for the participants, and shall be in accordance with Goodhue County Zoning Ordinance Article 16 Section 7, Campground and Recreation Vehicle Site Regulations. Camping shall not allowed until staff has been provided with written verification that all of the provisions of Article 16 Section 7 have been addressed and satisfied;
8. Applicants shall provide a trail maintenance and erosion control and prevention plan for review and approval by LUM staff prior to hosting future events;
9. Upon request by LUM staff, Applicants shall provide a summary of hosted events including dates and number of participants;
10. All off-road vehicles used during events shall have functioning mufflers;
11. A trail map shall be posted on site and provided to all event participants;
12. Applicants shall work with Goodhue County Environmental Health to develop and implement a plan to provide adequate sanitary facilities for guest use;
13. Compliance with all necessary State and Federal registrations, permits, licensing, and regulations;
14. Compliance with Goodhue County Zoning Ordinance including, but not limited to, Article 12, Bluffland Protection; Goodhue County SSTS Ordinance; and Article 22 A2, General Agriculture District.

**Motion Carried 7:0**

**6. Other discussion**

*Welcome Commissioner Miller*

**<sup>13</sup>Adjourn: Moved by Commissioner Fox, second by Commissioner Huneke, to adjourn the Planning Advisory Commission meeting at 8:11 PM.  
Motion carried 7:0**

Respectfully Submitted,

**PLANNING COMMISSION  
GOODHUE COUNTY, MN  
January 14th, 2019 MEETING MINUTES  
DRAFT**

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Abby Breyfogle; Recording Secretary

<sup>1</sup> APPROVE the PAC meeting agenda.

*Motion carried 5:0.*

<sup>2</sup> APPROVE the previous month's meeting minutes.

*Motion carried 5:0.*

<sup>3</sup> MOTION TO APPOINT SARAH PETTIT CHAIR.

*Motion carried 5:0.*

<sup>4</sup> TO APPOINT TOM GALE VICE CHAIR.

*Motion carried 5:0.*

<sup>5</sup> Motion to appoint Darwin Fox BOA representative.

*Motion carried 6:0.*

<sup>6</sup> Motion to close the Public Hearing.

*Motion carried 7:0*

<sup>7</sup> Recommend the County Board of Commissioners Approve the request from Randal and Barbara Kerhoff to amend IUP Z16-0072 to modify Wedding barn Event Center operational hours to 8am to midnight.

*Motion carried 7:0*

<sup>8</sup> Motion to have 2 separate Public Hearings.

*Motion carried 7:0*

<sup>9</sup> Motion to close the Public Hearing.

*Motion carried 7:0*

<sup>10</sup> Recommend the County Board of Commissioners Approve the request the request from the Roper Irrevocable Trust (Owner) and Bonnie Weber (Applicant) to establish a Wedding Barn Event Center with a maximum capacity of 400 guests.

*Motion carried 7:0*

<sup>11</sup> Motion to close the Public Hearing.

*Motion carried 7:0*

<sup>12</sup> Recommend the County Board of Commissioners Approve the request the request from Roper Irrevocable Trust (Owner) and Bonnie Weber (Applicant) to establish an off-road trail course for ATV's, UTV's and various "4x4" vehicles to host commercial riding events with up to 400 participants

*Motion carried 7:0*

<sup>13</sup> ADJOURN the Planning Commission meeting.

*Motion carried 7:0*

UNOFFICIAL UNTIL APPROVED BY THE PAC

**Wozniak, Michael**

**From:** noreply@civicplus.com  
**Sent:** Thursday, January 10, 2019 7:15 PM  
**To:** Wozniak, Michael  
**Subject:** Online Form Submittal: Contact Planning

**External Email - Use caution opening links or attachments**

**Contact Planning**

Your First Name	JIM & MARCIA
Your Last Name	SPROUT
Address1	32543 OAK RIDGE AVE WAY
Address2	<i>Field not completed.</i>
City	LAKE CITY
State	MN
Zip	55041
Phone Number	651.345.4406(H) 651.500.5392 JIM CELL
Your Email Address	jmbbs1@centurylink.net
Question / Comment	<p>Concerns regarding the CUP request for Wedding Event Center and Commercial Outdoor Recreation Facility 1. Are there any restrictions or regulations for the hours of operation for either facility? 2. Are there any regulations being considered on how many weekends the Outdoor Recreation Facility can host events and during what months? 3. Any thoughts on regulating the noise level – decibal limit for the vehicles? 4. Is the township road leading to and from the area able to handle the extra traffic and at what cost to the township for the extra maintenace needed. The road is narrow and winding and even at a slow speed is not always the safest. It will not be just passenger vehicles coming there, but trucks, trailers etc that will add wear and tear on the road. 5. We have been able to hear events from that location in the past with a much smaller number of participants and we are concerned how much louder it might be with more units running the tracks. We enjoy the peace and quiet of country living and prefer that not to change. We moved out of town to get away from traffic and noise and for the last 16 years it has been great! 6. Our biggest concerns</p>

are for the Outdoor Recreation Facility and it's operaton. We do not have as many concerns regarding The Wedding Event Center – the traffic and road wear would be the main problem we see with that venue. Thanks for taking the time to read and study our concerns Jim & Marcia Sprout 32543 Oak Ridge Ave Way Lake City, MN 55041 651.345.4406(h) 651.500.5392(Jim cell)651.214.7531(Marcia cell)

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Would you like to receive feedback about this?  No

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Email not displaying correctly? [View it in your browser.](#)

TO: Goodhue County Planning Advisory Commission

January 12, 2019

CC: Jason Majerus, Commissioner

RE: CUP Application by The Roper Family Trust

My name is Louanne Brooks Ludwig. I am unable to personally attend the Public Hearing on January 14, 2019 concerning the CUP Request by the Roper Family Trust as I have a previous out of town commitment. Therefore, I am submitting these written comments for your consideration.

I am the trustee of the James and Louanne Brooks Trust property, which lies immediately to the east of the Roper property. My residence is on that adjoining property, where I have lived since 1991. My home is closer to the Ropers' trail system than any other dwelling besides their own. Ropers did not speak to me about their plans or ask me to sign a petition, as evidently they did with some neighbors. The two separate neighbors I spoke to who signed the petition said they signed for the barn wedding venue: when I asked them specifically about the off-road vehicle use, both said they don't remember any discussion from Ropers about that.

I was not aware until the January 2, 2019 notice from Goodhue County of the proposal represented by their CUP Application. I was also unaware it had come before Florence Township until I read the report dated January 4, 2019 to the Planning Advisory Commission on the Goodhue County website.

I have no concerns regarding the Wedding Event portion of the application, however I have very grave concern over the Commercial Outdoor Recreation portion of the application. I can hear when the trails are in use from my home, which I find objectionable and disruptive to the otherwise quiet, tranquil nature of life at the end of a gravel road, a life style choice I made when I moved to Goodhue County. A snowmobile trail used to cross my farm, but the noise and lights were so disruptive, I no longer permit the trail. The noise from off-road vehicles at Roper's is especially disquieting because it reminds me of the land abuse taking place.

The 205 acre farm on which I reside has a 50 year history of adopting best management practices to minimize adverse impacts from farming and logging. It began under the stewardship of Robert Binger in the early 1970's, when he adopted strip farming and crop rotation before it was common practice. My late husband, James Brooks, and I purchased the farm from Binger in 1991. We were both University educated in forestry and wildlife management, and we worked in the field of Natural Resource Management. By way of education and practice, I hold that non-renewable resources, such as water and soil, should be preserved and protected while utilizing renewable resources, such as crops and timber. We continued the farming practices started by Binger, and implemented new stewardship practices to further reduce soil erosion and runoff from our bluff-top agricultural fields and to protect the wooded bluff sides below:

- Several erosion control dikes were installed, seeded and have been maintained
- Grass waterways in tilled fields have been established and maintained
- Minimum tillage practices are used
- Permanent grass buffers along field edges established and cut for hay
- Installation and maintenance of native prairie installed on the most erodible crop land

- Timber harvesting restricted from steep terrain; selective, sustainable timbering done on frozen ground only, with no permanent trails built (temporary skid trails only); trees replanted in harvest areas

As you may suspect, given our dedication to sustainable land use practices, I find the adverse impacts created by off-road trucks on the bluff side of the Roper property adjacent to mine extremely disheartening.

You need to understand that the vehicles using these trails are modified pickup truck/jeep sized vehicles, outfitted with oversized, lugged tires wide enough to extend beyond the body of the vehicle. They are designed to climb steep, rough terrain, and inevitably do damage to the land, which leads to increasing erosion. Development for this sort of "Outdoor Recreation" needs far more scrutiny than mountain biking, cross-country skiing, birdwatching, zip-lining, horseback riding, etc. because of its impact on soil and water. The noise and physical impacts to the landscape from off-road trucks ("wheeling") more resembles impacts from road-building and mining than "outdoor recreation." I suggest that the County's current guidelines and requirements for permitting commercial outdoor recreation is inadequate to address this sort of usage.

One of the trails is right at my property line. I have attached photos of the trails adjacent to my property. The trails are two to six feet below the forest floor and are roughly 12 feet wide as a result of erosion from off-road use over the last twenty years. If you assume:

- 2 feet of erosion as an average
- Trails 12 feet wide
- Six miles of trails
- 10 days of use/year for 20 years = 200 use days

Calculation of soil lost from the site: 2' erosion x 12' width of trail x (6 miles x 5280 ft/mile) = 760,320 cubic feet (nearly 85,000 cubic yards) of soil lost from the hill side. Most dump trucks hold 10-12 cubic yards of soil when full, so something like 8,000 truckloads of soil have been displaced from the bluff sides at Ropers'. The CUP application proposes increasing the number of people/vehicles using the site on a per day basis, and increasing the number of days/year the site is in use.

Consequently, the application proposal, if approved, would increase noise from the site, accelerate soil erosion and further destabilize the hill side. What people choose to do with their property for their personal use is one thing; for a governmental entity, be it Florence Township or Goodhue County, to sanction this commercially is quite another. Therefore, **I am asking the county to deny the CUP for commercialization of this activity.**

Short of immediately denying the application, I request Goodhue County require that:

1. The County review the requirements under which this proposal was submitted and determine if the guidelines in place are sufficient for the degree of impact such activity will have to the environment.
2. No approval be given until the Planning Advisory Commission and the County Board of Commissioners have personally visited the site and inspected ALL the trails there during a time of year without snow cover.

## ATTACHMENT 2

3. BEFORE any approval can be given, a trail maintenance and erosion control plan be presented to and approved by the Planning Advisory Committee (as referenced to in point 6 of the Staff Recommendations).
4. No trails be allowed within 300 yards of Ropers' property boundaries.

# Goodhue County Land Use Management

Goodhue County Government Center | 509 West Fifth Street | Red Wing, Minnesota 55066

*Lisa M. Hanni, L.S. Director*

Building | Planning | Zoning  
Telephone: 651.385.3104  
Fax: 651.385.3106



*County Surveyor / Recorder*

Environmental Health | Land Surveying | GIS  
Telephone: 651.385.3223  
Fax: 651.385.3098

**To:** Planning Advisory Commission  
**From:** Land Use Management  
**Meeting Date:** February 11, 2019  
**Report date:** February 1, 2019

## **PUBLIC HEARING: CUP Request to Elevate a Dwelling within a Floodplain by Means Other than Fill**

Request submitted by Curt Caverly (Buyer) and John Enblom (Owner) to elevate a proposed dwelling above the base flood elevation of a Floodplain area by means of a “tuck under” garage foundation. Parcel 43.230.0060. TBD Lake View Ave Red Wing, MN 55066. Lot 6, Block 1 of Wacouta Point Plat located in Sect 31 Twp 113, Range 13 in Wacouta Township. R1 Zoned District.

### **Application Information:**

Applicant: Curt Caverly (Buyer) and John Enblom (Owner)  
Address of zoning request: TBD Lake View Ave Red Wing, MN 55066  
Parcel(s): 43.230.0060  
Abbreviated Legal Description: Lot 6, Block 1 of Wacouta Point Plat located in Sect 31 Twp 113, Range 13 in Wacouta Township  
Township Information: Stanton Township endorsed acknowledgment of the Applicant’s request.  
Zoning District: R1 (Suburban Residence District)

### **Attachments and links:**

Application and submitted project summary (excerpt of submitted materials; full submittal available from LUM Department upon request)  
Site Map(s)  
Article 4, Section 4 CUP Floodplain review addendum  
Goodhue County Zoning Ordinance (GCZO):  
<http://www.co.goodhue.mn.us/DocumentCenter/View/2428>

### **Summary:**

The applicant (Curt Caverly) has entered an agreement to purchase the subject parcel from the current owner (John Enblom) with the intent of constructing a new 4-bedroom dwelling on the site. The proposed 2,942 square foot 2-story waterfront home would be located within shoreland and Special Flood Hazard Area (floodplain) of the Mississippi River (Lake Pepin).

FEMA rules divide the floodplain areas of lakes and rivers into 2 distinct zones referred to as the “floodway” (areas in the path of flowing water during flood events) and the “flood-fringe” (areas inundated with floodwater during flood events). The GCZO does not permit new dwellings within floodway areas. Dwellings can be constructed within a flood-fringe provided the habitable areas are elevated to the Regulatory Flood Protection Elevation (RFPE). The RFPE is the Base Flood Elevation plus one foot of “free-board.”

The primary method for elevating to the RFPE is to construct the building on fill. Per GCZO, alternative methods for elevating a structures lowest floor to the RFPE such as by stilts, pilings, parallel walls, crawl spaces, or tuck-under garages shall require the approval of a CUP. The applicant is proposing to elevate the proposed home to the RFPE by use of tuck-under garage foundation.

There are 5 existing homes situated in the Wacouta Point floodplain. Though currently vacant, the subject property has historically been occupied by a dwelling.



## **Goodhue County Zoning Ordinance: Article 4 Conditional/Interim Uses**

*No CUP/IUP shall be recommended by the County Planning Commission unless said Commission specifies facts in their findings for each case which establish the proposed CUP/IUP will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, will not substantially diminish and impair property values within the immediate vicinity, will not impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area, that adequate measures have been, or will be, taken to provide utilities, access roads, drainage and other necessary facilities, to provide sufficient off-street parking and loading space, to control offensive odor, fumes, dust, noise and vibration so that none of these will constitute a nuisance, and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result.*

### **Project Summary:**

#### **Property/Building Information:**

- The subject property consists of a single 100 foot by 150 feet parcel (15,000 square feet). The property is zoned R1 (Suburban Residence District) and is located within the Wacouta Point Plat (1921). *Per GCZO Article 24 the minimum lot size for an R1 parcel is 20,000 square feet. The lot existed prior to current minimum lot area requirements. The parcel does meet current requirements for minimum lot depth (125 feet) and width (100 feet).*
- Parcel access is located off of Lakeview Avenue approximately a quarter-mile west of the parcel. Emergency vehicle access to the site is limited during flood events as there is no dryland access route to the dwellings on Wacouta Point. Flooding along the Mississippi River is generally not a “flash flood” and residents have time to evacuate the area as necessary.
- The property is bordered by R1 zoning districts on all sides. Adjacent land uses include undeveloped woodlands and the Mississippi River to the east and west; medium-density residential to the north and south (Wacouta Beach Subdivision).
- The applicant intends to construct a 4-bedroom, 2942 square foot stick-built 2-story home atop a 9-foot tall tuck-under garage concrete poured-wall foundation.

The “tuck under” garage area would be used for parking and cold storage only.

#### **Floodplain:**

- The Base Flood Elevation (BFE) at the site has been determined to be 682 feet mean sea level. The RFPE is therefore 683 feet mean sea level. The proposed building location is not within the FEMA identified floodway portion of the floodplain.
- *Per GCZO Article 32, Section 5 Alternative elevation methods other than the use of fill may be utilized to elevate a structure's lowest floor above the RFPE. These alternative methods may include the use of stilts, pilings, parallel walls, etc., or above grade enclosed areas such as crawl spaces or tuck under garages. The base or floor of an enclosed area shall be considered above grade and not a structure's basement or lowest floor if:*

- 1. If the enclosed area is above grade on at least one side of the structure.*
- 2. Is designed to internally flood and is constructed with flood-resistant materials.*
- 3. Is used solely for parking of vehicles, building access or storage.*

*The above noted alternative elevation methods are subject to the following additional standards:*

*a. Design and Certification. The structure's design and as-built condition must be certified by a registered professional engineer or architect as being in compliance with the general design standards of the State Building Code and, specifically, that all electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities must be at or above the RFPE or be designed to prevent flood water from entering or accumulating within these components during times of flooding.*

*b. Specific Standards for Above Grade, Enclosed Areas. Above grade fully enclosed areas such as crawl spaces or tuck under garages must be designed to internally flood and the design plans must stipulate:*

*i. A minimum area of “automatic” openings in the walls where internal flooding is to be used as a flood-proofing technique. There shall be a minimum of two openings on at least two sides of the structure and the bottom of all openings shall be no higher than one (1) foot above grade. The automatic openings shall have a minimum net area of not less than one square inch for every square foot of enclosed area subject to flooding unless a registered professional engineer or architect certifies that a smaller net area would suffice. The automatic openings may be equipped with screens, louvers, vales or other coverings or devices provided that they permit the automatic entry and exit of flood waters without any form of human intervention.*

*ii. That the enclosed area will be designed of flood-resistant materials in accordance with the FP-3 or FP-4 classifications in the State Building Code and shall be used solely for building access, parking of vehicles, or storage*

- The applicant is proposing to elevate the habitable floors, as well as all machinery and equipment servicing the building to 687 feet, mean sea level. The existing grade around the structure ranges from 675.4-676.6 feet mean sea level. A preliminary Elevation Certificate has been prepared by Johnson-Schofield surveying.
- The applicant has submitted engineered plans for meeting flood proofing requirements which have been prepared by Larson Engineering Inc. The plans call for a series of nine 16”x8” automatic openings (Flood Flaps) spaced 3 inches above grade around the perimeter of the structure.

Goodhue County Building Permits D apartment staff have conducted a preliminary review of the documents and noted they are signed by a licensed engineer and appear to meet applicable engineering standards. A building permit will need to be reviewed and approved by the Department prior to construction of the facility.

#### **Shoreland:**

- The lot is considered a non-conforming lot of record as it does not contain the minimum 20,000 square feet lot area required for riparian lots on unsewered General Development lakes. Staff consulted with Minnesota DNR Area Hydrologist Bill Huber regarding the potential the proposal to reestablish a dwelling on the site. Mr. Huber conveyed that if the lot was created compliant with official controls in effect at the time, and sewage treatment and setback requirements of the shoreland controls are met, the state shoreland rules would allow the substandard lot to be developed.
- The entire property is located within the shoreland overlay of the Mississippi River. Ordinarily, structures are required to be setback 75 feet from Ordinary High Water Level (OHWL). Per GCZO, where principal structures exist on adjoining lots on both sides of a proposed building site, structure setbacks may be altered without a variance to conform to the adjoining setbacks from the OHWL provided the proposed building site is not located in a shore impact zone.
- The shore impact zone is defined as 50% of the minimum required setback. Given the location of the existing structures to the north and south of the parcel, no portion of the proposed structure may be located closer than 37.5 feet of the OHWL of the Mississippi River.
- The structure will be required to adhere to impervious surface standards (maximum 25%), R1 building coverage provisions (maximum coverage 20%), and shoreland height requirements (maximum height 25 feet).

#### **Septic/Well:**

- The site will require a new sub-surface sewage treatment system (SSTS) be installed in addition to a well. The applicant has had a local septic designer prepare a proposed “box-mound” septic system to be located in the southwest corner of the parcel. The bottom of the SSTS will need to be elevated above the 10-year flood elevation as required by the Goodhue County SSTS ordinance.
- Ben Hoyt, Goodhue County Environmental Sanitarian, offered the following comments regarding the applicants’ submitted SSTS plans:

*“I performed a partial review of the design and will perform a full review once a permit is*

*applied for. The septic system will need to a specialized system because the property is in the Mississippi floodplain. The designer has proposed a box mound style system. Box mounds have been successful at adequately treating sewage for properties with space requirements. The preliminary design is acceptable with a few adjustments and clarifications. Environmental Health will require a complete and satisfactory septic permit prior to approving any building permit for the parcel in question.”*

**Township Information:**

- Wacouta Township reviewed the Applicant’s proposal and has approved a permit for the structure subject to county zoning approvals. The township also endorsed acknowledgment of the applicant’s CUP request.

**Draft Findings of Fact:**

*The following staff findings shall be amended to reflect concerns conveyed during the PAC meeting and public hearing.*

1. The proposed dwelling does not appear injurious to the use and enjoyment of properties in the immediate vicinity for uses already permitted, nor would it substantially diminish and impair property values in the immediate vicinity. The structure would be similar to those already existing in the vicinity of Wacouta Point and would be constructed in conformance with current building code and zoning ordinance standards.
2. The establishment of the proposed dwelling is not anticipated to impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area. The structure is proposed to meet all development standards of the Goodhue County Zoning Ordinance. The use as proposed appears compatible with existing adjacent land uses.
3. A review of the applicants submitted project summary indicates adequate utilities, access roads, drainage, and other necessary facilities are available or will be installed to accommodate the proposed use.
4. The submitted plans identify means to provide sufficient off-street parking and loading space to serve the proposed use and meet the Goodhue County Zoning Ordinance’s parking requirements.
5. No offensive odor, fumes, dust, noise, light, or vibration that would constitute a nuisance are anticipated from the proposal.

*Staff recommendation is based on the review of the submitted application and project area prior to the public hearing.*

**Staff Recommendation:**

LUM Staff recommends the Planning Advisory Commission

- 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

Recommend that the County Board of Commissioners **APPROVE** the request submitted by Curt Caverly (Buyer) and John Enblom (Owner) to elevate a proposed dwelling above the Base Flood Elevation of a Floodplain area by means of a “tuck under” garage foundation.

Subject to the following conditions:

1. Activities shall be conducted according to submitted plans, specifications, and narrative unless modified by a condition of this CUP;
2. Applicant shall provide an as-built Elevation Certificate verifying the first-floor elevation and all electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities meet or exceed the regulatory flood protection elevation (RFPE) of 682.0 feet mean sea level;
3. Compliance with Goodhue County Zoning Ordinance including, but not limited to, Article 24 (Suburban Residence District), Article 31 (Shoreland Regulations), and Article 32 (Floodplain District).

## **Article 4, Section 4 CUP Floodplain review**

**Subd. 4. CUP/IUP applications for projects in a floodplain or shoreland area, shall consider all relevant factors specified in other sections of this Ordinance, and:**

A. The danger to life and property due to increased flood height or velocities caused by encroachments.

**The structure will not be located within the Floodway of the Mississippi River. No fill is being proposed and the structure is designed to internally flood to the Base Flood Elevation so an increase in the flood stage will not occur.**

B. The danger that materials may be swept onto other lands or downstream to the injury of others or they may block bridges, culverts or other hydraulic structures.

**It is not anticipated that structure will create downstream hazards due to materials blocking bridges, culverts, or other hydraulic structures.**

C. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.

**The proposed dwelling will be serviced by a Type-2 box-mound SSTS that will be installed and operated in compliance with MPCA rules for SSTS located in Floodplains.**

D. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.

**The dwelling will be required to meet all zoning and building code requirements for buildings located within a floodplain including flood-proofing, using flood-resistant materials, and elevating all living spaces and mechanical components/services above the RFPE.**

E. The importance of the services provided by the proposed facility to the County.

**The dwelling is not proposed to provide any services to the County.**

F. The requirements of the facility for a waterfront location.

**The structure will be required to adhere to all provisions of the Article 31 Shoreland Regulations including impervious surface limits, OHWL setbacks, and vegetation management.**

G. The availability of alternative locations not subject to flooding for the proposed use.

**The entirety of the subject parcel is located within the floodplain of the Mississippi River and was platted as such.**

H. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.

**The Wacouta Point plat was originally developed for low-density residential along the waterfront. There are 5 other residences existing in the vicinity of the proposed structure. Historically, a residence was located on the subject parcel.**

I. The relationship of the proposed use to the Comprehensive Plan and Floodplain Management Program for the area.

**The Goodhue County Comprehensive Plan encourages the maintenance and administration of the floodplain regulations consistent with Minnesota Administrative Rules 6120.5400 (Floodplain Management Rules) which are the basis for the County's current Floodplain Regulations.**

J. The safety of access to the property in times of flood for ordinary and emergency vehicles.

**Emergency vehicle access to the site is limited during flood events as there is no dryland access route to the dwellings on Wacouta Point. Flooding along the Mississippi River is generally not a "flash flood" and residents have time to evacuate the area as necessary.**

K. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site.

**The structure will not be located within the Floodway of the Mississippi River. No fill is being proposed and the structure is designed to internally flood to the Base Flood Elevation so an increase in the flood stage will not occur.**

L. Such other factors which are relevant to the purposes of this Ordinance.

# Planning Advisory Commission

Public Hearing  
February 11, 2019

Curt Caverly  
R1 Zoned District

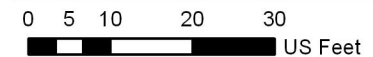
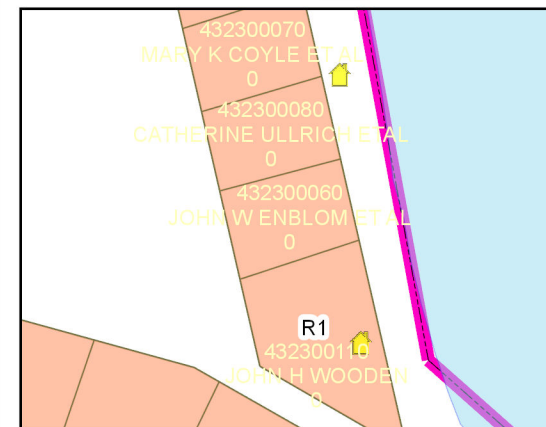
Parcel 43.230.0060  
Lot 6, Block 1 of Wacouta Point Plat  
Sec 31 Twp 113 R 13 Wacouta Township

Request to elevate proposed  
dwelling above base flood elevation  
of Floodplain area



## Legend

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



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2016 Aerial Imagery  
Map Created January, 2019 by LUM



# Planning Advisory Commission

Public Hearing  
February 11, 2019

Curt Caverly  
R1 Zoned District

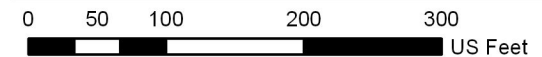
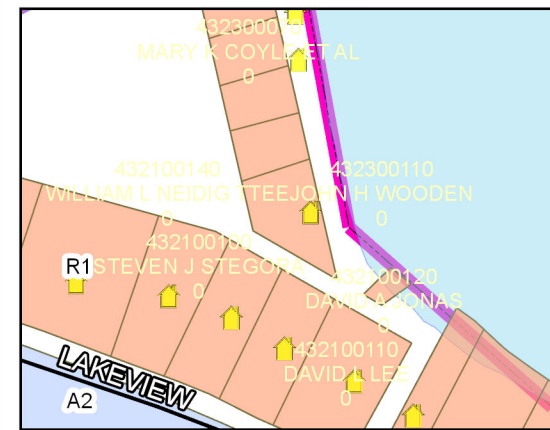
Parcel 43.230.0060  
Lot 6, Block 1 of Wacouta Point Plat  
Sec 31 Twp 113 R 13 Wacouta Township

Request to elevate proposed  
dwelling above base flood elevation  
of Floodplain area



## Legend

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



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2016 Aerial Imagery  
Map Created January, 2019 by LUM



RECEIVED

JAN 22 2019

Land Use Management  
GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

43-230-0060

Parcel # 43230060

Permit# 219-0006

PROPERTY OWNER INFORMATION

Last Name	CAVERLY	First	CURT	Email	
Street Address	1940 GRADIENT PL			Phone	
City	RED WING	State	MN	Zip	55066
Authorized Agent	N/A			Phone	N/A
Mailing Address of Landowner:					
Mailing Address of Agent:					

PROJECT INFORMATION

Site Address (if different than above):

Lot Size 100W, 150D Structure Dimensions (if applicable)

What is the conditional/interim use permit request for? BUILD OF NEW HOME

Written justification for request including discussion of how any potential conflicts with existing nearby land uses will be minimized  
NONE, WITH SETBACK'S FOLLOWED, 15' SIDE'S, 37.5' FROM ORDINARY HIGH WATER LINE.

DISCLAIMER AND PROPERTY OWNER SIGNATURE

I hereby swear and affirm that the information supplied to Goodhue County Land Use Management Department is accurate and true. I acknowledge that this application is rendered invalid and void should the County determine that information supplied by me, the applicant in applying for this variance is inaccurate or untrue. I hereby give authorization for the above mentioned agent to represent me and my property in the above mentioned matter.

Signature of Landowner:  Date

Signature of Agent Authorized by Agent: N/A

TOWNSHIP INFORMATION

Township Zoning Permit Attached?  If no please have township complete below:

By signing this form, the Township acknowledges being made aware of the request stated above. In no way does signing this application indicate the Township's official approval or denial of the request.

Signature:  Title: ZONING ADMINISTRATOR Date: JAN 22, 2019

Comments:

COUNTY SECTION COUNTY FEE \$350 RECEIPT # 116631 DATE PAID 1/22/19

Applicant requests a CUP/IUP pursuant to Article \_\_\_\_ Section \_\_\_\_ Subdivision \_\_\_\_ of the Goodhue County Zoning Ordinance

What is the formal wording of the request?

Shoreland \_\_\_\_\_ Lake/Stream Name \_\_\_\_\_ Zoning District \_\_\_\_\_

Date Received \_\_\_\_\_ Date of Public Hearing \_\_\_\_\_ DNR Notice \_\_\_\_\_ City Notice \_\_\_\_\_

Action Taken: \_\_\_\_ Approve \_\_\_\_ Deny Conditions:



## GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

**PROJECT SUMMARY**

Please provide answers to the following questions in the spaces below. If additional space is needed, you may provide an attached document.

1. Description of purpose and planned scope of operations (including retail/wholesale activities).

BUILD NEW HOME ON LOT, WITH TUCK UNDER GARAGE TO ELEVATE LIVING AREA

2. Planned use of existing buildings and proposed new structures associated with the proposal.

NO EXISTING BUILDINGS, NEW HOME

3. Proposed number of non-resident employees.

NONE

4. Proposed hours of operation (time of day, days of the week, time of year) including special events not within the normal operating schedule.

7 AM - 5 PM SUNDAY - SATURDAY (Construction)

5. Planned maximum capacity/occupancy.

N/A RESIDENTIAL

6. Traffic generation and congestion, loading and unloading areas, and site access.

2 VEHICLES TO NEW HOME

7. Off-street parking provisions (number of spaces, location, and surface materials).

NONE

8. Proposed solid waste disposal provisions.

TAKEN TO LOCAL WASTE FACILITY

9. Proposed sanitary sewage disposal systems, potable water systems, and utility services.

BOX MOUND SYSTEM, WELL, LP GAS, EXCEL

10. Existing and proposed exterior lighting.

PER. ELECTRICAL CODE

11. Existing and proposed exterior signage.

NONE

12. Existing and proposed exterior storage.

NONE

13. Proposed safety and security measures.

BA N/A

14. Adequacy of accessibility for emergency services to the site.

WAS COMPLETED BY A NEIGHBORING PERSON FOR THEIR PERSONAL SAFETY

15. Potential for generation of noise, odor, or dust and proposed mitigation measures.

NONE OTHER THAN TO BE EXPECTED DURING THE BUILDING PROCESS

16. Anticipated landscaping, grading, excavation, filling, and vegetation removal activities.

EXCAVATION OF FOOTINGS, POSSIBLE FILL, FINISH GRITARE, FINAL LANDSCAPING

17. Existing and proposed surface-water drainage provisions.

EROSION CONTROL WILL BE PRESENT DURING THE BUILDING PROCESS

18. Description of food and liquor preparation, serving, and handling provisions.

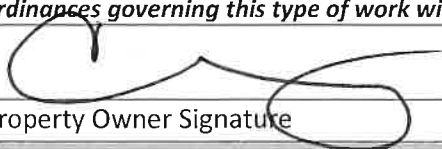

NONE

19. Provide any other such information you feel is essential to the review of your proposal.

HOME'S GARAGE LEVEL WILL BE CONCRETE FOUNDATION W/ PROPER DRAINAGE DURING <sup>POSSIBLE</sup> FLOOD. ALL UTILITIES WILL BE ON LIVABLE SPACE (NOT IN FLOOD AREA)

Goodhue County

Parcel # \_\_\_\_\_

APPLICANT INFORMATION					
Last Name <b>CAVERLY</b>	First <b>CURT</b>	M.I.			
Street Address				Phone	
City <b>RED WING</b>	State <b>MINNESOTA</b>	Zip <b>55066</b>			
PROJECT INFORMATION					
Site Address					
Type of Project <b>NEW HOUSE ON WACOUTA POINT</b>					
<b>CONDITIONAL USE PERMIT HAS BEEN APPROVED BY</b>					
<b>GOODHUE COUNTY</b>					
<u>Type Of Project</u> <input checked="" type="checkbox"/> New Construct <input type="checkbox"/> Addition <input type="checkbox"/> Relocation <input type="checkbox"/> Remodel <input type="checkbox"/> Foundation Only <input type="checkbox"/> Roofing/Siding <input type="checkbox"/> Other _____	<u>Structure Type</u> <input checked="" type="checkbox"/> Residence <input type="checkbox"/> Garage <input type="checkbox"/> Ag Bldg. <input type="checkbox"/> Warehouse <input type="checkbox"/> Office <input type="checkbox"/> Boathouse <input type="checkbox"/> Deck <input type="checkbox"/> Pool	<u>Proposed Use</u> <input checked="" type="checkbox"/> Single Family <input type="checkbox"/> Multiple Family <input type="checkbox"/> Agricultural <input type="checkbox"/> Public <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other _____	<u>Type of Const.</u> <input checked="" type="checkbox"/> Wood/Frame <input type="checkbox"/> Masonry <input type="checkbox"/> Metal <input type="checkbox"/> Pole Bldg. <input type="checkbox"/> On-Site Prefab <input type="checkbox"/> Off-Site Prefab	<u>Structure Dimensions</u> Length (ft)= _____ Width (ft)= _____ Height (ft)= _____ Total Sq Ft= _____	<u>Zoning District</u> <i>(check all that apply)</i> <input type="checkbox"/> Agricultural A1 A2 A3 <input type="checkbox"/> Residential <input type="checkbox"/> Business B1 B2 <input type="checkbox"/> Industrial <input type="checkbox"/> Wild & Scenic River <input type="checkbox"/> Flood Fringe <input type="checkbox"/> Floodway <input type="checkbox"/> General Flood Plain
DISCLAIMER					
<i>I hereby apply for a zoning permit and I acknowledge that the information above is complete and accurate, that the work will be in conformance with the ordinances and codes of Goodhue County. The applicant also understands by signing this application he/she could be held responsible as representative of this project for any violation of compliance with all applicable laws and ordinances of Goodhue County. This permit may be suspended or revoked if the permit has been issued in error or on the basis of incorrect information supplied or in violation of any ordinance or regulation of Goodhue County. All provisions of law and ordinances governing this type of work will be complied with whether specified herein or not.</i>					
 Property Owner Signature			<b>CURT CAVERLY</b> <b>1.22.19</b> Date		
TOWNSHIP APPROVALS					
I, <u>FREDERICK PLAAS</u> , acting on behalf of the Township of <u>Wacouta</u> in capacity of <u>Wacouta Township Zoning Administrator</u> hereby certify that the above described project has been approved according to the Wacouta Township Zoning Ordinance. Also that the above named property owner certifies that the structure and use must meet all Wacouta Township Codes & Ordinances and must be constructed as indicated.					
 Frederick Plaas, Wacouta Township Zoning Administrator				<b>JAN 22, 2019</b> Date	
Application Fee _____			Receipt Number _____		

# ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1-9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A - PROPERTY INFORMATION				FOR INSURANCE COMPANY USE	
A1. Building Owner's Name Curt Caverly				Policy Number:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. No address has been assigned yet				Company NAIC Number:	
City Red Wing		State Minnesota		ZIP Code 55066	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Doc #574233 Lot 6, Block 1, Wacouta Point and an undivided 1/5 interest in Block "A" (PID #432300060)					
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Residential</u>					
A5. Latitude/Longitude: Lat. <u>44.552682N</u> Long. <u>92.426057W</u> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983					
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.					
A7. Building Diagram Number <u>7</u>					
A8. For a building with a crawlspace or enclosure(s):					
a) Square footage of crawlspace or enclosure(s) <u>2,624</u> sq ft					
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>0</u>					
c) Total net area of flood openings in A8.b <u>0</u> sq in					
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
A9. For a building with an attached garage:					
a) Square footage of attached garage <u>0</u> sq ft					
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <u>0</u>					
c) Total net area of flood openings in A9.b <u>0</u> sq in					
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number Goodhue County. 270140			B2. County Name Goodhue County		B3. State Minnesota
B4. Map/Panel Number 27049C0220E	B5. Suffix E	B6. FIRM Index Date 09/25/2009	B7. FIRM Panel Effective/ Revised Date 09/25/2009	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) 682.0
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

**Larson Engineering, Inc.**  
3524 Labore Road  
White Bear Lake, MN 55110-5100  
651.481.9120 Fax: 651.481.9201  
www.larsonengr.com



**Caverly Residence  
30039 Lakeview Avenue  
Red Wing, Minnesota**

**Calculations:  
Flood Design for  
The Foundation Wall and  
Flood Openings**

Prepared for  
Caverly Construction  
Red Wing, MN

I hereby certify that this plan, specification, or report was  
Prepared by me or under my direct supervision and that I am a  
duly Licensed Professional Engineer under the laws of the  
State of Minnesota.

Print Name Norman Dupre IV

Signature Norman Dupre IV

Date 1/16/2017 License #56043

Larson Engineering, Inc.  
Minnesota Office  
Project Number 11181289.000

**Larson Engineering, Inc.**  
3524 Labore Road  
White Bear Lake, MN 55110-5126  
651.481.9120 Fax: 651.481.9201  
www.larsonengr.com



## Design Criteria

### Project Information:

**Project:** Caverly Residence

**Project Location:** 30039 Lakeview Avenue of Red Wing, MN

**Project Number:** 11181289.000

### Building Code Used For Design:

Minnesota Residential Code, 2015 Edition. (IRC 2012)

### Notes:

1. In addition to these drawings, all structural provisions of the Minnesota Residential Code shall be followed.
2. The drawings represent the finished structure. All means and methods not explicitly addressed are by the contractor.
3. Concrete work shall conform to all requirements of ACI 301. Concrete foundation walls shall be air entrained with a strength of  $f'c = 4,000$  psi. Concrete footings shall have a strength of  $f'c = 5,000$  psi.
4. The contractor shall verify, field check, all sizes, dimensions, elevations, locations, etc. of elements of the existing construction which are relative to new construction.
5. The contractor shall properly brace the structure during construction.

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White Bear Lake, MN 55110-5126  
651.481.9120 Fax: 651.481.9201  
www.larsonengr.com



SUBJECT CAVERLY RESIDENCE

SHEET NO. 1 OF 13

PROJECT NO. 11-18-1289

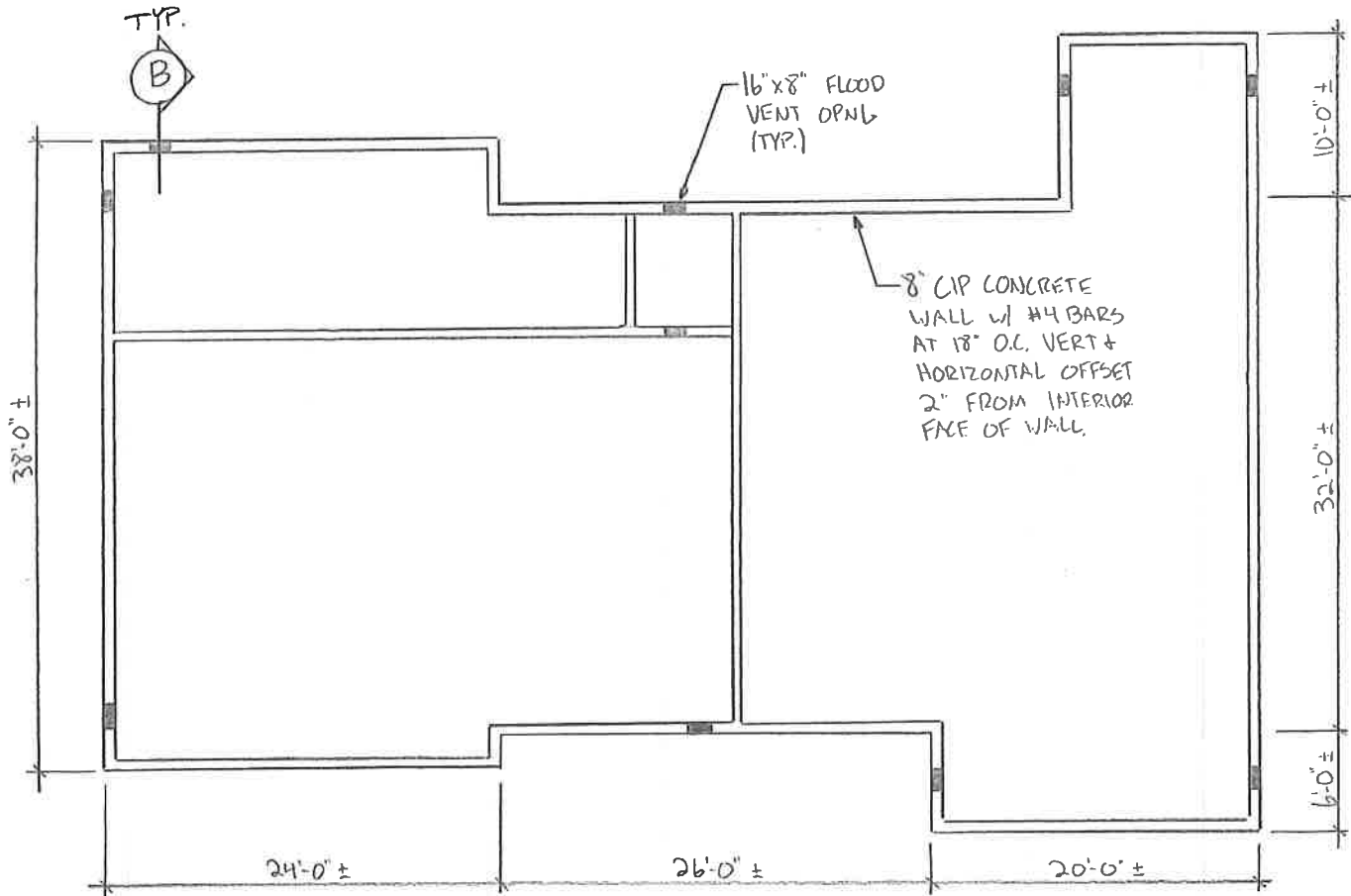
BY BC DATE 1-8-19

RED WIND, MN

CHECKED BY:

NOTES:

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS
2. LARSON ENGINEERING'S SCOPE OF WORK IS LIMITED TO THE DESIGN OF THE CONCRETE FOUNDATION WALLS AND FLOOD OPENINGS (VENTS).
3. FLOOD VENTS SHALL BE "FLOOD FLAPS" AUTOMATIC FLOOD VENTS AS SHOWN ON ATTACHED ICC REPORT,



(A) PLAN  
3/32" = 1'-0"  
N

Larson Engineering, Inc.  
3524 Labore Road  
White Bear Lake, MN 55110-5126  
651.481.9120 Fax: 651.481.9201  
www.larsonengr.com



SUBJECT CAVERLY RESIDENCE

SHEET NO. 2 OF 13

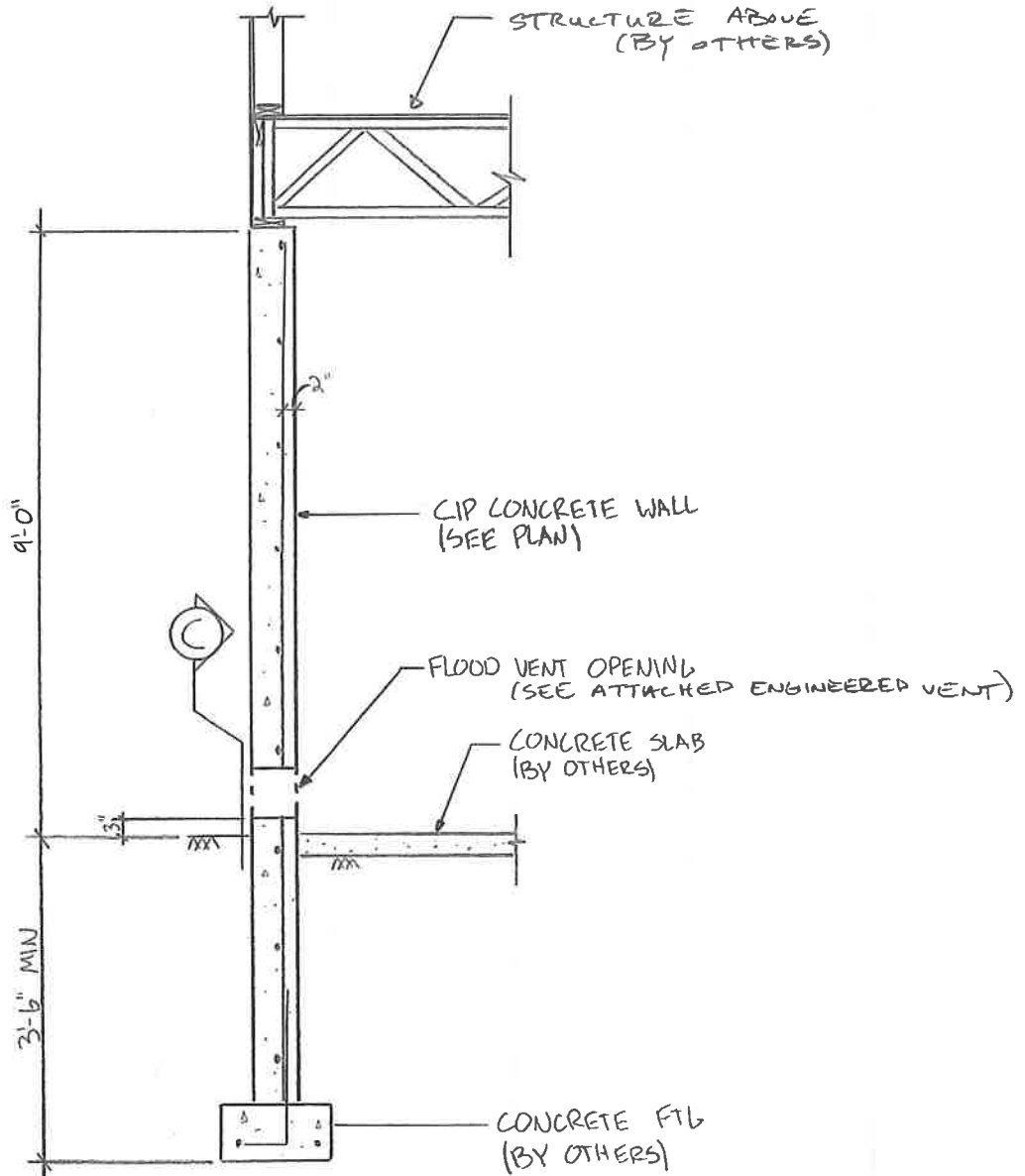
PROJECT NO. 11-18-1289

BY BCL

DATE 1-8-19

RED WING, MN

CHECKED BY:



(B) SECTION  
3/8" = 1'-0"



Larson Engineering, Inc.  
3524 Labore Road  
White Bear Lake, MN 55110-5126  
651.481.9120 Fax: 651.481.9201  
www.larsonengr.com

SUBJECT CAVERLY RESIDENCE

SHEET NO. 3 OF 13

PROJECT NO. 11-18-1289

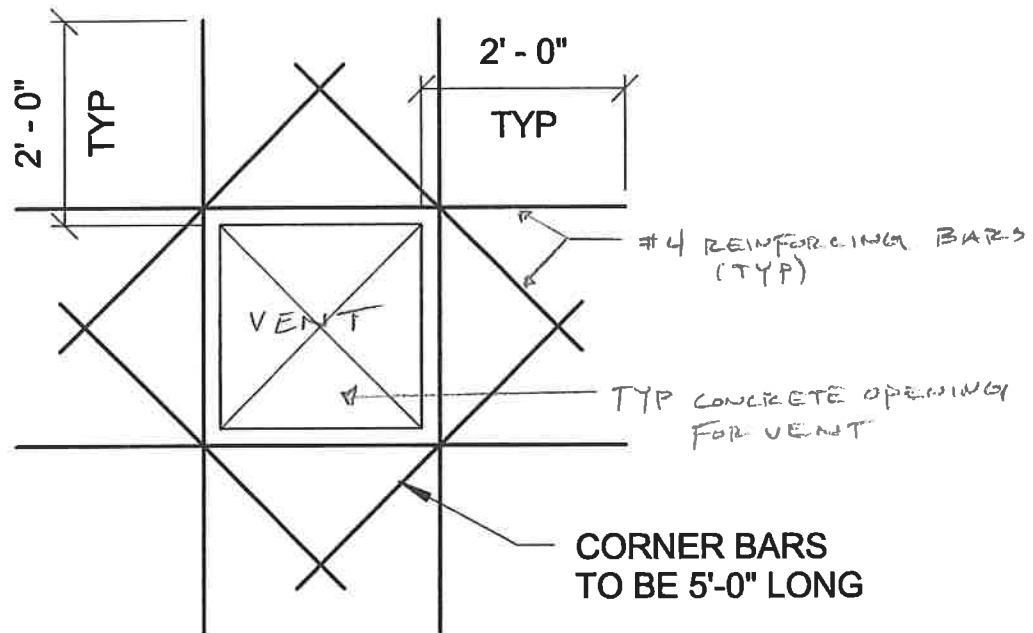
RED WIND, MN

BY BC

DATE 1-8-19



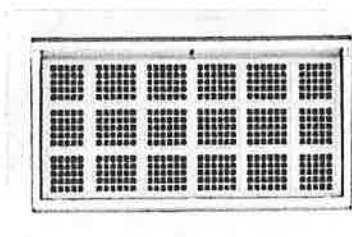
Larson



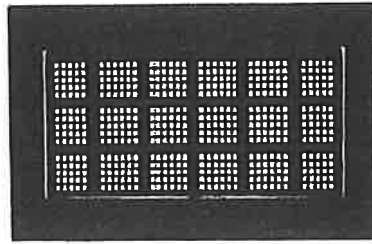
**NOTES:**

1. SIZE OF BARS TO BE SAME AS MAIN REINFORCING
2. VERIFY SIZE, QUANTITY, AND LOCATION OF ALL OPENINGS.

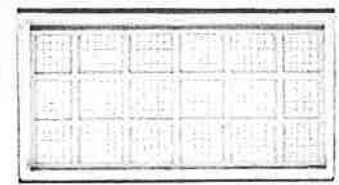
SECTION  
NTS



FFWF12

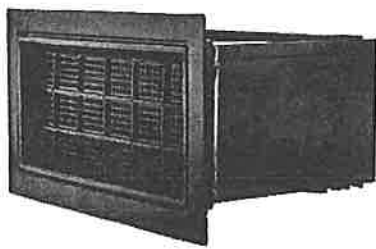


FFNF08



FFNF05

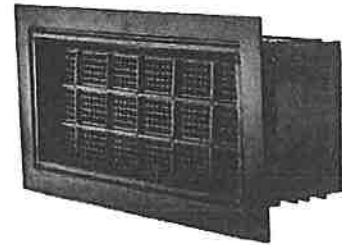
FIGURE 2—FLOOD FLAPS® AUTOMATIC FLOOD VENT SERIES MODELS



12" DEPTH



8" DEPTH



5" DEPTH

FIGURE 3—FLOOD FLAPS® AUTOMATIC FLOOD VENTS MULTIPLE DEPTH OFFERINGS

**7080.2270 Floodplain Areas.**

Subpart 1. **General.** ISTS must be designed under this part if the system is proposed to be located in a floodplain. A system located in a floodplain must meet or exceed the following requirements:

- A. employ flow values in parts 7080.1850 to 7080.1885;
- B. meet or exceed applicable technical requirements of parts 7080.1900 to 7080.2030, 7080.2050, and 7080.2100, except as modified in this part;
- C. provide flow measurement if a pump is to be employed;
- D. meet or exceed the requirements of parts 7080.2210 to 7080.2230;
- E. meet or exceed requirements of part 7080.2150, subparts 2 and 3, except as modified in this subpart; and
- F. meet the requirements of subparts 2 to 11.

Subp. 2. **State and local requirements.** The allowed use of systems in floodplains must be according to state and local floodplain requirements.

Subp. 3. **Location of system.** An ISTS must not be located in a floodway and, whenever possible, placement within any part of the floodplain should be avoided. If no alternative exists, a system is allowed to be placed within the flood fringe if the requirements in subparts 4 to 11 are met.

Subp. 4. **Openings.** There must be no inspection pipe or other installed opening from the distribution media to the soil surface.

Subp. 5. **Highest ground.** An ISTS must be located on the highest feasible area of the lot and must have location preference over all other improvements except the water supply well. If the ten-year flood data are available, the bottom of the distribution media must be at least as high as the elevation of the ten-year flood.

Subp. 6. **Pump.** If a pump is used to distribute effluent to the soil treatment and dispersal system, provisions shall be made to prevent the pump from operating when inundated with floodwaters.

Subp. 7. **Raising elevation.** When it is necessary to raise the elevation of the soil treatment system to meet the vertical separation distance requirements, a mound system as specified in part 7080.2220 is allowed to be used with the following additional requirements:

- A. the elevation of the bottom of the mound bed absorption area must be at least one-half foot above the ten-year flood elevation if ten-year flood data are available;
- B. inspection pipes must not be installed unless the top of the mound is above the 100-year flood elevation; and

- C. the placement of clean sand and other fill must be done according to any community-adopted floodplain management ordinance.

Subp. 8. **Inundation of top.** When the top of a sewage tank is inundated, the dwelling must cease discharging sewage into it.

Subp. 9. **Backflow.** Backflow prevention of liquid into the building when the system is inundated must be provided. If a holding tank is used, the system must be designed to permit rapid diversion of sewage into the holding tank when the system is inundated.

Subp. 10. **Holding tank.** If a holding tank is used to serve a dwelling, the holding tank's liquid capacity must equal 100 gallons times the number of bedrooms times the number of days between the ten-year stage on the rising limb of the 100-year flood hydro-graph and the ten-year stage on the falling limb of the hydrograph, or 1,000 gallons, whichever is greater. The holding tank must be accessible for removal of tank contents under flooded conditions.

Subp. 11. **Water level above top.** Whenever the water level has risen above the top of a sewage tank, the tank must be pumped to remove all solids and liquids after the flood has receded and before use of the system is resumed.

#### **7080.2280 Privies.**

- A. To qualify as a privy, the system must:
  - (1) meet or exceed the requirements of part 7080.2150, subpart 2;
  - (2) have soil beneath the bottom of the pit that meets or exceeds the requirements of part 7080.2150, subpart 3, item C, employ a watertight tank meeting applicable requirements of parts 7080.1900 to 7080.2030, or employ a toilet treatment device; and
  - (3) meet the requirements of items B to E.
- B. Pits or vaults must have sufficient capacity for the dwelling they serve, but must have at least 25 cubic feet of capacity.
- C. The sides of the pit must be curbed to prevent cave-in.
- D. The privy must be easily maintained and insect proof. The door and seat must be self-closing. All exterior openings, including vent openings, shall be screened.
- E. Privies must be adequately vented.

# itional Flood Hazard Layer FIRMette



0.76"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone J
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/5/2018 at 1:35:29 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

8 OF 13

USGS The National Map - Orthoimagery. Data refreshed October 2017. 1:6,000

BEARINGS SHOWN HEREON ARE ORIENTED TO THE GOODHUE COUNTY COORDINATE SYSTEM, NAD 83, 1996 ADJUSTMENT (HARN)

ELEVATIONS ARE BASED ON NAVD 88 DATUM.



ORDINARY HIGH WATER LEVEL (LAKE PEPIN) = 672.90

LAKE

EDGE OF WATER LOCATED NOV. 21, 2018 WATER ELEV: 669.10'±

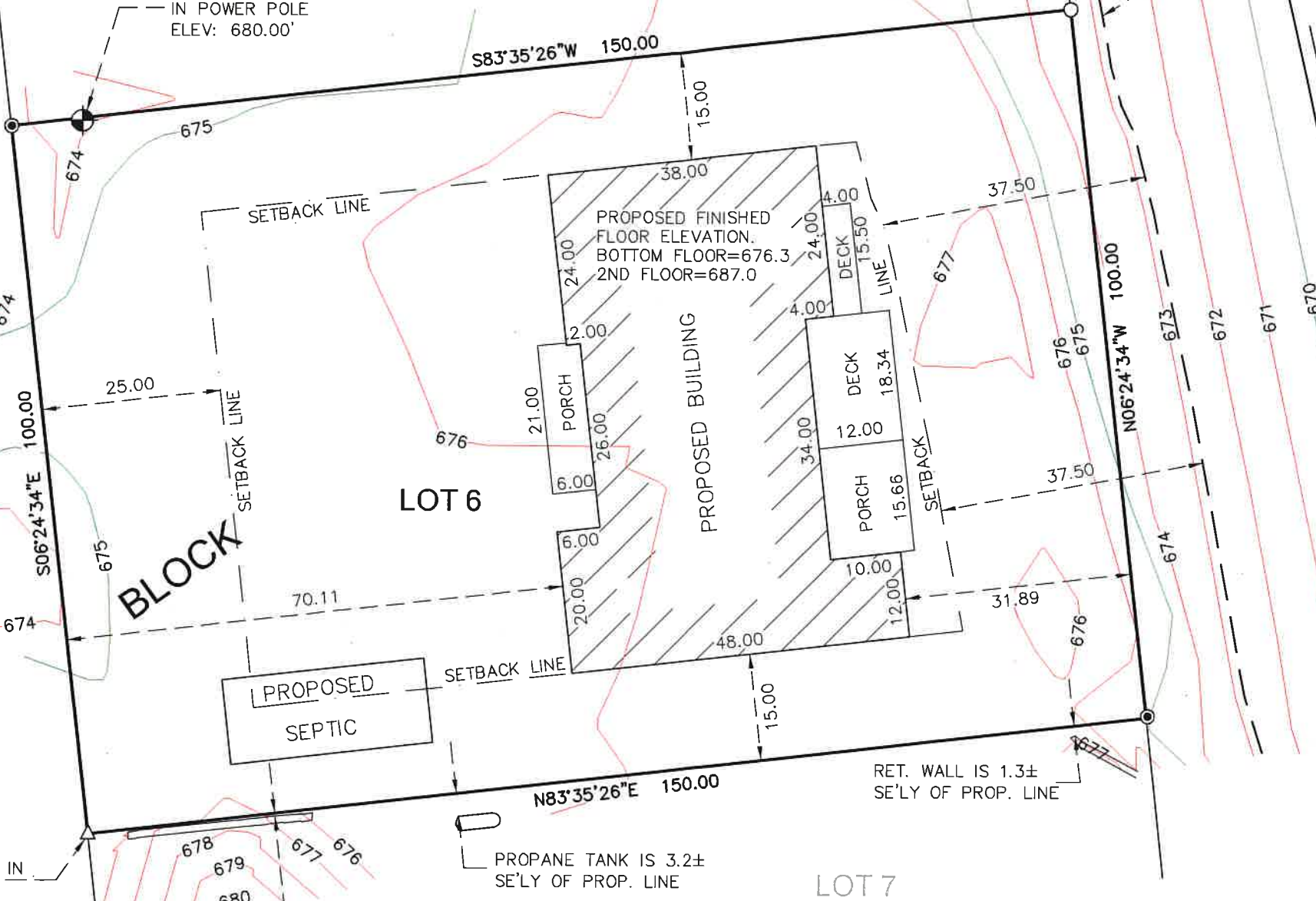
PEPIN

**PROPERTY DESCRIPTION OF RECORD DOC. 574233**

An undivided 29.8726% of real property described as follows:  
 Lot 6, Block 1, Wacouta Point and an undivided 1/5 interest in Block "A" of Wacouta Point and including right of way easements.

BENCHMARK: NAIL IN POWER POLE ELEV: 680.00'

LOT 5



BLOCK "A"

**SURVEYOR'S NOTES**

- ① For the complete illustration of Block "A", see the recorded plat of WACOUTA POINT.
- ② Regulatory Flood Protection Elevation = 683.0
- ③ This survey pertains only to Lot 6, Block 1, WACOUTA POINT.
- ④ Base Flood Elevation = 682.00' per FEMA Map Number 27049C0220E.

**LEGEND**

- DENOTES A PLACED 1" BY 18" IRON PIPE HAVING A PLASTIC CAP BEARING LAND SURVEYOR LICENSE NO. 47460.
- △ DENOTES A PLACED PK NAIL & DISK BEARING LAND SURVEYOR LICENSE NO. 47460.
- DENOTES FOUND IRON MONUMENT.
- 671— DENOTES EXISTING CONTOUR OF ELEVATION.

SET P.K. NAIL IN LARGE ROCK

RET. WALL IS 0.4± SE'LY OF PROP. LINE

RET. WALL IS 1.3± SE'LY OF PROP. LINE

PROPANE TANK IS 3.2± SE'LY OF PROP. LINE

LOT 7

S:\Share\PLATS\WACOUTA POINT\CURT CAVERLY 2018\CAVERLY TOPO.dwg



**CERTIFICATE OF SURVEY FOR:**

**CURT CAVERLY**



**JOHNSON & SCOFIELD INC.**  
**SURVEYING AND ENGINEERING**

1203 MAIN STREET, RED WING, MN 55066  
 (651) 388-1558

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

REVISED ON  
 JANUARY 15, 2019  
 & JANUARY 22, 2019  
 Marcus S. Johnson  
 Minnesota License No. 47460  
 Date: December 27, 2018

BK. NA	PG. NA	W.O.#	DRAWING NUMBER
SHEET 1 OF 1 SHEETS	18-1023	S-7875	



1 REAR ELEVATION - LAKESIDE  
A2 SCALE: 1/4" = 1'-0"



DESIGN PHASE	
PRELIMINARY PLAN	10-10-18
PRELIMINARY PLAN	12-28-18
PRELIMINARY PLAN	01-07-19
CHECK SET PLAN	
FINAL PLAN ISSUED	

REVISION 1	
REVISION 2	
REVISION 3	

**ABC Arrow**  
BUILDING CENTER  
110 CANNON BOTTOM ROAD  
REDWING, MINNESOTA 55066  
651-388-6141

THESE PLANS WERE DRAFTED & DESIGNED FOR:  
**CURT & JODI CAVERLY RESIDENCE**  
30038 LAKEVIEW AVENUE - RED WING, MN. 55066

CONTINUED ON OTHER

ARROW BUILDING CENTER DOES NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF THE PLANS OR FOR THE RESULTS OF THE CONSTRUCTION OF THE STRUCTURE. THE CUSTOMER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF THE PLANS AND FOR THE RESULTS OF THE CONSTRUCTION OF THE STRUCTURE. THE CUSTOMER SHALL NOT DUPLICATE, REPRODUCE, OR TRANSMIT THESE PLANS IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF ARROW BUILDING CENTER. THE CUSTOMER SHALL BE RESPONSIBLE FOR THE COST OF ANY REVISIONS TO THESE PLANS. THE CUSTOMER SHALL BE RESPONSIBLE FOR THE COST OF ANY REVISIONS TO THESE PLANS. THE CUSTOMER SHALL BE RESPONSIBLE FOR THE COST OF ANY REVISIONS TO THESE PLANS.

PRELIMINARY ONLY

# Goodhue County Land Use Management

Goodhue County Government Center | 509 West Fifth Street | Red Wing, Minnesota 55066

*Lisa M. Hanni, L.S. Director*

Building | Planning | Zoning  
Telephone: 651.385.3104  
Fax: 651.385.3106



*County Surveyor / Recorder*

Environmental Health | Land Surveying | GIS  
Telephone: 651.385.3223  
Fax: 651.385.3098

**To:** Planning Advisory Commission  
**From:** Land Use Management  
**Meeting Date:** February 11, 2019  
**Report date:** February 1, 2019

## **PUBLIC HEARING: “Wildwood Gardens” Preliminary and Final Plat Review**

Request submitted by Howard Stenerson (Owner) for Preliminary and Final Plat review of the proposed “Wildwood Gardens” Plat comprising approximately 56.45 acres. Parcels 43.135.0200 and 43.136.0380. TBD Wildwood Lane Red Wing, MN 55066. Part of the SE ¼ of Sect 35 and the SW ¼, SW ¼ of Sect 36 in Twp 113, Range 14 in Wacouta Township. A2 Zoned District.

### **Application Information:**

Applicant: Howard Stenerson

Address of zoning request: TBD Wildwood Lane Red Wing, MN 55066

Parcel(s): 43.136.0380

Abbreviated Legal Description: Part of the SE ¼ of Sect 35 and the SW ¼, SW ¼ of Sect 36 in Twp 113, Range 14 in Wacouta Township

Zoning District: A2 (General Agriculture District)

### **Attachments and links:**

Application and submitted maps

Site Map(s)

Goodhue County Zoning Ordinance (GCZO):

<http://www.co.goodhue.mn.us/DocumentCenter/View/2428>

### **Summary:**

The applicant (Howard Stenerson) has prepared a preliminary and final plat of “Wildwood Gardens” for consideration. Due to inconsistency in the description of the road easements for Wildwood Lane compared with the physical location of the road, there are 2 potential options for processing this plat request.

1) Wacouta Township could vacate the underlying easements within the proposed plat and have the new easements dedicated on the plat. The new easements would better follow the alignment of the existing centerline being used. Wacouta Township would need to hold a public hearing to vacate the existing easements. The applicant would continue with the public review process for the proposed plat.

2) Do not dedicate easements on the plat and leave the old ones as is, even though they don't accurately reflect the actual use. If the township is not going to vacate and rededicate the road easements as part of this process, the Applicant would be able to plat the property as an Administrative Plat which would not require public hearings.

If Wacouta Township desires to match the road with the description (within this plat), now would be the easiest time to do it as part of this platting process. Staff understands that Wacouta Township is holding a Town Meeting on February 11<sup>th</sup>, 2019 to determine their course of action.



**Staff Recommendation:**

LUM Staff recommends the Planning Advisory Commission

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

Recommend that the County Board of Commissioners **APPROVE** the request submitted by Howard Stenerson (Owner) for Preliminary and Final Plat approval of the proposed “Wildwood Gardens” Plat comprising approximately 56.45 acres.

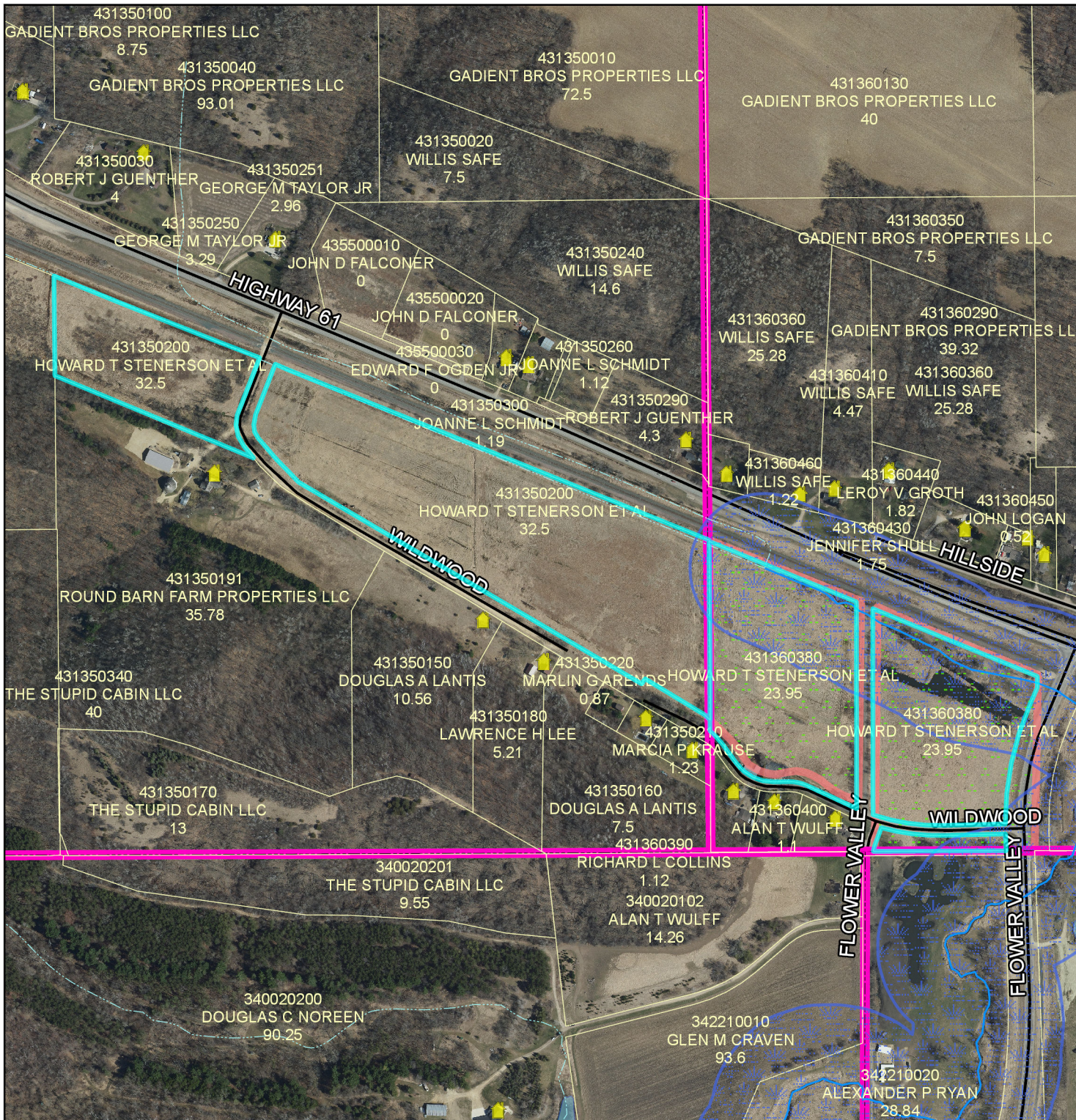
# Planning Advisory Commission

Public Hearing  
February 11, 2019

Howard Stenerson  
A2 Zoned District

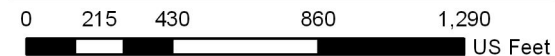
Parcel 43.135.0200 & 43.136.0380  
SE1/4 of S35 and SW1/4 SW1/4 of S36  
T113 R14 in Wacouta Township

Preliminary and Final Plat review of  
proposed "Wildwood Gardens" Plat



## Legend

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



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2016 Aerial Imagery  
Map Created January, 2019 by LUM



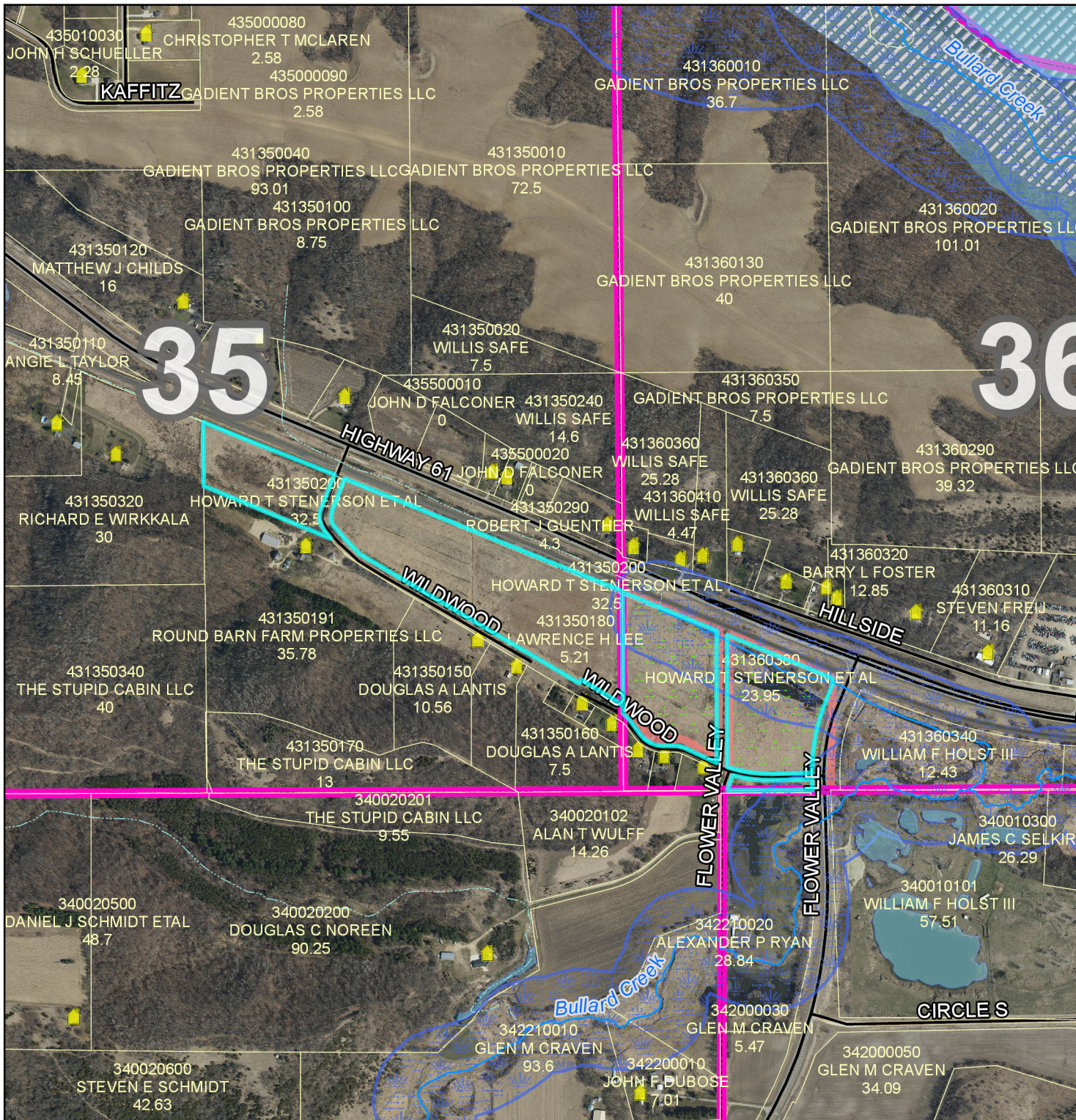
# Planning Advisory Commission

Public Hearing  
February 11, 2019

Howard Stenerson  
A2 Zoned District

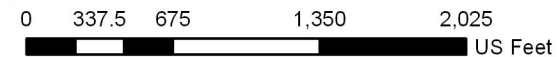
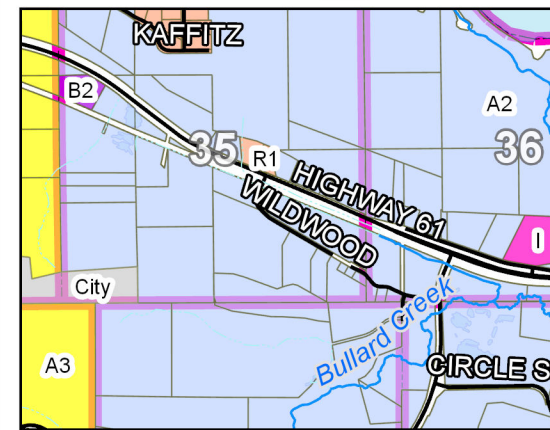
Parcel 43.135.0200 & 43.136.0380  
SE1/4 of S35 and SW1/4 SW1/4 of S36  
T113 R14 in Wacouta Township

Preliminary and Final Plat review of  
proposed "Wildwood Gardens" Plat



## Legend

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



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Map Created January, 2019 by LUM



RECEIVED

JAN 16 2019

Land Use Management

FILE #	Z19.0005
PARCEL #	

# 505 Plat Application

A. A Minnesota Statue Chapter 505 plat\* is required under the following circumstances:

1) The creation of three or more tax parcels from one tax parcel, except when the tax parcels created can be described by an aliquot part of the Public Land Survey. The minimum division shall be a Quarter Quarter of the Section (i.e. SE 1/4 of the NW 1/4 ). Non-contiguous land must be separate tax parcels. The parcels shown on the plat provide for road access for each new division or reconfiguration of land;

2) If a subdivision of a platted lot or outlot can result in one or more potential dwelling sites, the subdivision must be platted.

\*Requires approval and public hearings from the Planning Commission and County Board

Landowner Information	
Landowner Name	Howard Steenson
Mailing Address	28969 City 1 Blvd Red Wing 55066
Daytime Phone	

Applicant Information (if different than above)	
Applicant Name	
Mailing Address	
Daytime Phone	

Township Information	
Township position	Supervisor
Signature	Kirk Steenson
	Date 1-16-19

County Use	
Application Fee	\$350
Receipt Number	10624
Received Date	1-16-19
Initial Reviewed by	
Plat Name	

Request complies with Goodhue County Zoning and Subdivision requirements as attested by me \_\_\_\_\_ the Goodhue County Planner/Zoning Administrator on this day \_\_\_\_\_

# WILDWOOD GARDENS

**PRELIMINARY**  
11-09-2018



**JOHNSON & SCOFIELD INC.**  
SURVEYING AND ENGINEERING  
1203 MAIN STREET, RED WING, MN 55068  
(507) 381-1108

BEARINGS SHOWN HEREON ARE ORIENTED TO THE GOODHUE COUNTY COORDINATE SYSTEM, NAD 83, 1996 ADJUSTMENT (HARN)

**KNOW ALL PERSONS BY THESE PRESENTS:** That Howard T. Stenerson and Joyce L. Stenerson, husband and wife, and Howard P. Stenerson, Jr., a single person, owners of the following described property:

All that part of the Southwest Quarter (SW1/4) of Section Thirty-five (35), in Township One Hundred Thirteen (113) North, of Range Fourteen (14) West, in Goodhue County and State of Minnesota, described as follows:

Beginning at the intersection of the southerly right of way line of the Chicago, Milwaukee, St. Paul and Pacific Railroad Company with the East line of said Section Thirty-five (35) thence run northwesterly along the southerly right of way line of said Railroad for 2,850 feet to its intersection with the West line of the Southwest Quarter (SW1/4) of said Section Thirty-five (35) thence run South along the West line of said Southwest Quarter (SW1/4) for 414 feet to a point which is 380 feet southwesterly of the southerly right of way line of said Railroad, measured at right angles thereto, thence run southerly parallel to said southerly right of way line and distant 380 feet thence run 75.5 feet, thence defect to the right and run southerly for 2,250 feet to a point on the east line of said Section 35 distant 714 feet North of said place of beginning; thence run North 51 feet to the place of beginning.

-And-

All that part of the West Half of the Southwest Quarter (W1/2) of (SW1/4) of Section 36, in Township 113 North, Range 14 West, which lies South of the Chicago, Milwaukee, St. Paul and Pacific Railroad tracks, EXCEPT THE FOLLOWING DESCRIBED PARCELS OF LAND:

- All that part of the Southwest Quarter (SW1/4) of the Southwest Quarter (SW1/4) of Section 36, Township 113 North, Range 14 West in Goodhue County and State of Minnesota, described as follows:  
Beginning at an iron pipe on the South line of said Section 36 distant 325 feet East of the Southwest corner thereof; thence East 272 feet to the West line of Township Road; thence North 137 feet, thence North 65 degrees West 250 feet to an iron pipe; thence South 19 degrees and 14 minutes West 243 feet to the place of beginning.
- Part of the Southwest Quarter (SW1/4) of the Southwest Quarter (SW1/4) of Section 36, Township 113 North, Range 14 West described as follows:  
Beginning at a point 150 feet East of the Southwest corner of said Section 36, thence East 175 feet, thence North 10 degrees 41 minutes East 305 feet, thence North 65 degrees West to an intersection with a line run North 10 degrees 41 minutes East of place of beginning; thence South 10 degrees 41 minutes West to the place of beginning.
- That part of the Southwest Quarter (SW1/4) of the Southwest Quarter (SW1/4) of Section 36, Township 113 North, Range 14 West, Goodhue County, Minnesota, described as follows:  
Beginning at the Southwest corner of said Section 36, thence on an assumed bearing of East, along the South line of the Southwest Quarter (SW1/4) of said Section 36, a distance of 150 feet, thence North 10 degrees 41 minutes East, a distance of 207 feet, more or less, to the centerline of that certain 71.00 foot wide easement described as Goodhue County Discontinued Number 295305; thence Northwesterly along said centerline, a distance of 210 feet, more or less, to the West line of the Southwest Quarter (SW1/4) of said Section 36; thence Southwesterly along said West line, a distance of 280 feet, more or less, to the point of beginning.
- That part of the West half of the Southwest Quarter of Section 36, Township 113 North, Range 14 West, which lies south of the Chicago, Milwaukee, St. Paul and Pacific Railroad Right of Way described as follows:  
Commencing at the Southwest corner of said Section 36, thence on an assumed azimuth from North, 89 degrees 42 minutes 54 seconds along the South line of said Southwest quarter 653.05 feet to the southerly Right of Way of the Valley Road and the point of beginning; thence southerly along said South line on an azimuth of 89 degrees 42 minutes 54 seconds 533.30 feet to the Westerly Right of Way of Goodhue County Right of Way Plat No. 121, thence on an azimuth of 71.8 degrees 08 minutes 26 seconds along said Right of Way 78.07 feet, thence along a tangential curve, concave to the east, deflection angle of 2 degrees 55 minutes 56 seconds, radius 117.40 feet, distance of 60.09 feet; thence on an azimuth of 25.8 degrees 49 minutes 15 seconds 270.57 feet, thence along a tangential curve, concave to the North, deflection angle of 13 degrees 54 minutes 34 seconds, radius 820.21 feet, a distance of 285.01 feet to the Eastern Right of Way of the Valley Road, thence Southerly along said Right of Way 173.55 feet to the point of beginning.
- Part of the Southwest Quarter (SW1/4) of the Southwest Quarter (SW1/4) of Section 36, Township 113 North, Range 14 West, Goodhue County, shown as Plotted 136-0180 on the Plat designated as Goodhue County Right of Way Plat No. 121 as this record is in the office of the County Recorder as said Goodhue County, Minnesota.

Have caused the same to be surveyed and plotted as WILDWOOD GARDENS and do hereby dedicate to the public for public use the public way as created by this plat.

In witness whereof Howard T. Stenerson and Joyce L. Stenerson, husband and wife, and Howard P. Stenerson, Jr., a single person, have hereunto set their hands this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Howard T. Stenerson \_\_\_\_\_  
Joyce L. Stenerson \_\_\_\_\_  
Howard P. Stenerson, Jr. \_\_\_\_\_

STATE OF MINNESOTA  
COUNTY OF GOODHUE

This instrument was acknowledged before me on \_\_\_\_\_, by Howard T. Stenerson, Joyce L. Stenerson and Howard P. Stenerson, Jr.

Notary Public  
My commission expires \_\_\_\_\_

Acknowledged by the Waconda Township Supervisor, this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Signatures: \_\_\_\_\_  
Township Supervisor

I certify that: I am a duly licensed surveyor of the State of Minnesota; that I prepared or directed the preparation of this plat as WILDWOOD GARDENS; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been correctly and lawfully placed; and that all monuments depicted on this plat are shown and labeled on this plat, and that all public ways are shown and labeled on this plat.

Dated this \_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
Marissa S. Johnson, Land Surveyor  
Minnesota License Number 47490

STATE OF MINNESOTA  
COUNTY OF GOODHUE

This instrument was acknowledged before me on \_\_\_\_\_, by Marissa S. Johnson, Land Surveyor.

Notary Public  
My commission expires \_\_\_\_\_

County Auditor/Treasurer, Goodhue County, Minnesota  
Payment to Minnesota Statutes, Section 272, (2 and Chapter 505.02), Subd. 9, there are no delinquent taxes and the taxes for the year 2018 on the land hereinafter described have been paid on this plat and therefore omitted here.

Goodhue County Auditor/Treasurer  
\_\_\_\_\_  
Auditor/Treasurer By \_\_\_\_\_ Deputy

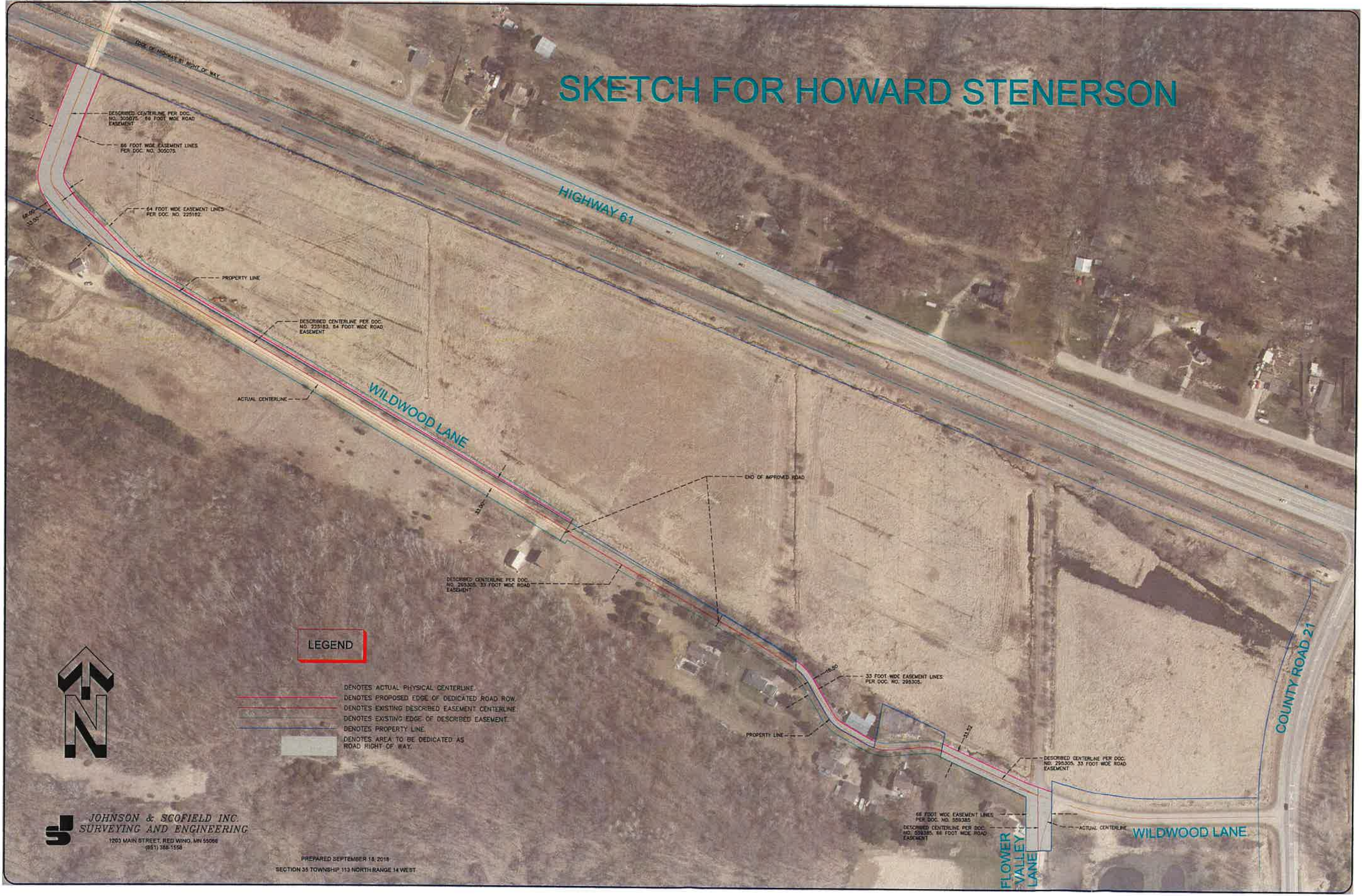
I hereby certify that in accordance with Minnesota Statutes, Section 575.021, Subd. 11, this plat has been reviewed and approved this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Lara M. Himm  
Goodhue County Surveyor






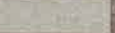
County Recorder, County of Goodhue, State of Minnesota  
I hereby certify that this plat of WILDWOOD GARDENS was filed in the office of the County Recorder for public record on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ at \_\_\_\_ o'clock \_\_\_\_ M., and was duly filed as described hereby.

\_\_\_\_\_  
County Recorder

# SKETCH FOR HOWARD STENERSON



## LEGEND

-  DENOTES ACTUAL PHYSICAL CENTERLINE.
-  DENOTES PROPOSED EDGE OF DEDICATED ROAD ROW.
-  DENOTES EXISTING DESCRIBED EASEMENT CENTERLINE.
-  DENOTES EXISTING EDGE OF DESCRIBED EASEMENT.
-  DENOTES PROPERTY LINE.
-  DENOTES AREA TO BE DEDICATED AS ROAD RIGHT OF WAY.

**JOHNSON & SCOFIELD INC.**  
**SURVEYING AND ENGINEERING**  
 1203 MAIN STREET, RED WING, MN 55066  
 (951) 388-1558

PREPARED SEPTEMBER 18, 2018  
 SECTION 35 TOWNSHIP 113 NORTH RANGE 14 WEST

# Goodhue County Land Use Management

Goodhue County Government Center | 509 West Fifth Street | Red Wing, Minnesota 55066

*Lisa M. Hanni, L.S. Director*

Building | Planning | Zoning  
Telephone: 651.385.3104  
Fax: 651.385.3106



*County Surveyor / Recorder*

Environmental Health | Land Surveying | GIS  
Telephone: 651.385.3223  
Fax: 651.385.3098

**To:** Planning Commission  
**From:** Land Use Management  
**Meeting Date:** February 11, 2019  
**Report date:** February 1, 2019

## **PUBLIC HEARING: Request for CUP for a Utility-Scale Solar Energy System (SES)**

Request for a CUP submitted by MN 121819 LLC (applicant) and Jonathan and Lora Luhman (owners) for a Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 6.65 acres. Parcel 26.032.0400. TBD 390th Ave, Goodhue, MN 55027. Part of the NW ¼ of Sect 32 Twp 111 Range 14 in Belvidere Township. A1 Zoned District.

### **Application Information:**

Applicant: MN 121819 LLC (applicant) and Jonathan and Lora Luhman (owners)

Address of zoning request: TBD 390th Ave, Goodhue, MN 55027

Parcel(s): 26.032.0400

Abbreviated Legal: Part of the NW ¼ of Sect 32 Twp 111 Range 14 in Belvidere Township

Township Information: Belvidere Township completed a township zoning application approving the applicant's request on 1/8/19.

Zoning District: A1 (Agriculture District)

### **Attachments and links:**

Application and submitted project summary (excerpt of submitted materials; full submittal available from LUM Department upon request)

Site Map(s)

Goodhue County Zoning Ordinance (GCZO):

<http://www.co.goodhue.mn.us/DocumentCenter/View/2428>

### **Background:**

The applicant has submitted a CUP request to construct and operate a one (1) Megawatt (MW) photovoltaic (PV) utility-scale solar garden on approximately 6.65 acres of leased land located in Belvidere Township that is currently owned by Jonathan and Lora Luhman. The project would be developed in conjunction with the State of Minnesota Solar Garden program and Xcel Energy's Solar Rewards Community Program. The program allows developers to design, permit, own, and operate solar energy systems and sell the generated power directly to consumers. Upon completion, the Solar Garden would connect to Xcel Energy's distribution grid and generate up to 1 MW of energy annually over the next 25 years.

Per Goodhue County regulations, Solar Energy Systems (SES) that are the primary use of the land and are designed to primarily provide energy to off-site users or export to the wholesale market may be conditionally permitted as a "Utility-Scale SES" within the County's A1 zoned districts.

### **Goodhue County Zoning Ordinance: Article 4 Conditional/Interim Uses**

*No CUP/IUP shall be recommended by the County Planning Commission unless said Commission specifies facts in their findings for each case which establish the proposed CUP/IUP will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, will not substantially diminish and impair property values within the immediate vicinity, will not impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area, that adequate measures have been, or will be, taken to provide utilities, access roads, drainage and other necessary facilities, to provide sufficient off-street parking and loading space, to control offensive odor, fumes, dust, noise and vibration so that none of these will constitute a nuisance, and to control lighted signs*

"To effectively promote the safety, health, and well-being of our residents"

[www.co.goodhue.mn.us](http://www.co.goodhue.mn.us)

and other lights in such a manner that no disturbance to neighboring properties will result.

### **Project Summary:**

#### **Property Information:**

- The approximately 6.65-acre site to be leased by the applicant is currently used for row-crop agriculture (corn and soybeans) by the owner.

The 159-acre Luhman property includes a dwelling, a registered feedlot, tilled cropland, and pasture areas.

Adjacent land uses include agriculture and low-density residential.

The nearest residence is located approximately 1500 feet northwest of the proposed facility (Marlyn Hinrichs). The city of Bellechester is located approximately one half-mile southeast of the project area.

- The property is bordered on all sides by A1 (Agriculture Protection) Zoned Districts.

#### **Solar Array:**

- The solar array is proposed to include 4046 solar modules (panels) installed in 9 rows spaced 10-15 feet apart.

Single-axis tracker racks tilted at 30 degrees will hold up solar panels, reaching a typical height of 10 feet above grade.

The racking will be installed with piles that are anchored into the ground to an appropriate depth based on detailed structural and geotechnical analysis.

The solar array will interconnect to the power grid via a pad-mounted transformer at the north edge of the project area, facilitating connection to an existing Xcel Energy circuit.

- A new driveway/access road will be constructed from 390<sup>th</sup> ST to access the leased project area.

A recorded ingress/egress easement is not required for the property given the site is to be leased and all land to be crossed to access the site will remain under common ownership.

A separate fire number will be required for the site.

- The 12-foot wide access drive would be composed of crushed aggregate to facilitate emergency vehicle access in inclement weather conditions. Emergency vehicle access appears adequate to service the facility.
- Once constructed, traffic to the site would be limited to four visits per year (quarterly) by two maintenance personnel to perform routine maintenance, in addition to any unplanned maintenance. During the first few years of operation two vegetation maintenance personnel will visit the site a handful of times per year and then an anticipated four times per year for the duration of the project.
- The solar garden is sited to comply with all GCZO setback requirements for Solar Energy Systems.

#### **Landscaping/Drainage:**

- The site slopes generally from north to south with stormwater runoff draining towards the lower areas in the southeast corner of the parcel.

Apart from the gravel access road and meter pad, the entire area within the fenced project boundary will be restored to a low-maintenance seed mix, including the area below the solar panels. A “pollinator friendly” seed mix designed to grow no more than 2 feet tall will be selected in accordance with Minnesota Department of Transportation native seed mix design guidelines.

- Beau Kennedy with the Goodhue SWCD reviewed the application materials and offered the following comments:

*No official wetland determination has been made for this project area. However, I do not foresee any wetland impacts associated with the project site or the access road. The application references a MNDOT manual for selecting a proper mix on these sites, but I can't find what the applicant has actually picked for a temporary and/or permanent seed mix for the facility.*



*Listing a specific seed mix should be included when/if a CUP is approved to avoid any confusion down the road with contractors and subcontractors.*

- A level-1 Wetland Delineation Report completed by Area M Consulting on behalf of the Applicant indicated no wetlands were present in the project area.
- The application notes that stormwater management measures will be determined by EVS, a licensed civil engineering firm. Measures will include an analysis of the existing topography and the use of control logs and silt fences where necessary.

An erosion control/stormwater management plan is customarily submitted for administrative review at the time of building permit application.

- The Applicant stated they conducted a site visit and visual impact analysis and stated that there would be a minimal visual impact on nearby properties. There is no vegetative screening existing at the site or proposed. There is some topographic relief in the area that will limit some views of the project area, however much of it will be visible. The Planning Commission should consider whether any screening of the proposed SES is warranted.
- A 6-foot tall chain-link fence with a 1-foot barbed wire top will be constructed around the perimeter of the project area for security.
- Ample room exists on the property to fulfill GCZO off-street parking requirements.
- Construction is expected to last 9 months from April to December 2019. Construction crews would operate from 8:00 AM to 6:00 PM daily.
- A Cultural Resource Literature Review completed by Area M Consulting on behalf of the Applicant indicated no cultural resources were identified in the project area.

#### **Maintenance/Decommissioning:**

- The project is subject to issuance of a Building Permit and must be constructed according to applicable building code requirements. The project will be inspected by County Building Inspections Staff and the State Electrical Inspector. In addition, Planning and Zoning Staff will inspect the project upon completion to ensure conformance with applicable zoning requirements.
- MN 121819 LLC has a long-term maintenance plan to ensure safety, reliable operation, and production of the system. Monitoring and metering equipment installed on site will alert the maintenance team in real-time of a system performance issue.
- The Applicant has prepared a Decommissioning Agreement between MN 121819 LLC and Jonathan and Lora Luhman that includes removal of all equipment to a depth of 2-3 feet, timelines for removal, and the establishment of a financial security. The Applicant has estimated total costs for decommissioning to be \$87,767 and has estimated the salvage value of reclaimed materials to be \$86,126.

Per GCZO Article 19, the applicant may be required to provide a financial surety at up to 125% of the estimated decommissioning cost. The county has not typically exercised the right to financial assurance requirements for similar solar installations. The Planning Advisory Commission and County Board will need to decide if the County will require financial assurance to cover anticipated decommissioning costs.

#### **Draft Findings of Fact:**

*The following staff findings shall be amended to reflect concerns conveyed during the PAC meeting and public hearing.*

1. The proposed Solar Garden does not appear injurious to the use and enjoyment of properties in the immediate vicinity for uses already permitted, nor would it substantially diminish and impair property values in the immediate vicinity. The use appears harmonious with the established uses in the vicinity.
2. The establishment of the proposed Solar Garden is not anticipated to impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area. The use is proposed to meet all development standards of the Goodhue County Zoning

Ordinance and it does not appear incompatible with adjacent land uses.

3. A review of the applicants submitted project summary indicates adequate utilities, access roads, drainage, and other necessary facilities are available to accommodate the proposed use.
4. The submitted plans identify means to provide sufficient off-street parking and loading space to serve the proposed use and meet the Goodhue County Zoning Ordinance's parking requirements.
5. The submitted plans detail adequate measures to prevent or control offensive odor, fumes, dust, noise, and vibration so that none of these will constitute a nuisance. Furthermore, the applicants' lighting plans appear capable of controlling lights in such a manner that no disturbance to neighboring properties will result.

*Staff recommendation is based on the review of the submitted application and project area prior to the public hearing.*

**Staff Recommendation:**

LUM Staff recommends the Planning Advisory Commission

- 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

Recommend that the County Board of Commissioners **APPROVE** the request for a CUP submitted by MN 121819 LLC (applicant) and Jonathan and Lora Luhman (owners) for a Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 6.65 acres.

Subject to the following conditions:

1. Activities shall be conducted according to submitted plans, specifications, and narrative unless modified by a condition of this CUP;
2. The project shall be decommissioned according to Article 19 Section 6 of the Goodhue County Zoning Ordinance and submitted plans;
3. A decommissioning agreement between the landowner and MN 121819 LLC shall be maintained to ensure reclamation of the area;
4. LUM staff shall be notified by the landowner or solar company 30 days prior to ownership transfer or operator changes;
5. Applicants shall communicate with Beau Kennedy, Wetlands Coordinator with the Goodhue SWCD to ensure compliance with applicable Wetlands Rules prior to completion of any site grading/construction and/or submittal of the Building Permit Application;
6. A stormwater management and erosion control plan shall be submitted for administrative review as part of the Building Permit Application for the project;
7. Applicants shall work with the Goodhue County Soil and Water Conservation District to determine an appropriate seed mix to establish on disturbed areas of the site;
8. Applicants shall obtain Building Permit approvals from the Goodhue County Land Use Management Department prior to establishing the use;
9. Compliance with Goodhue County Zoning Ordinance including, but not limited to, Article 19 Solar Energy Systems (SES) and Article 21 (Agriculture Protection District). The applicant shall request a final inspection of the project for compliance with applicable zoning requirements upon completion of the project;
10. Compliance with all necessary State and Federal registrations, permits, licensing, and regulations;
11. This CUP shall expire 30 years from the date of approval unless terminated prior to that date.

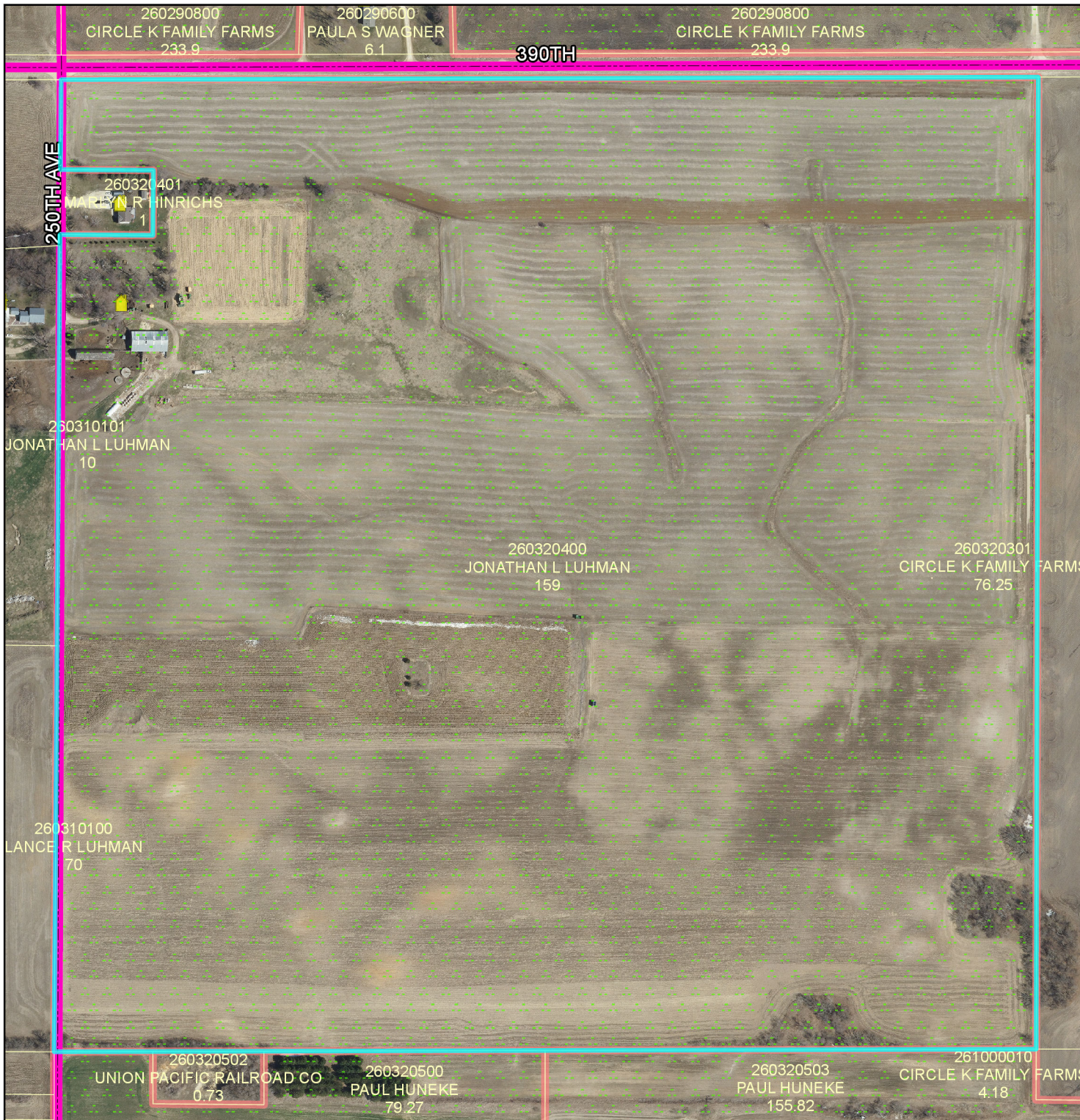
# Planning Advisory Commission

Public Hearing  
February 11, 2019

MN121819 LLC  
A1 Zoned District

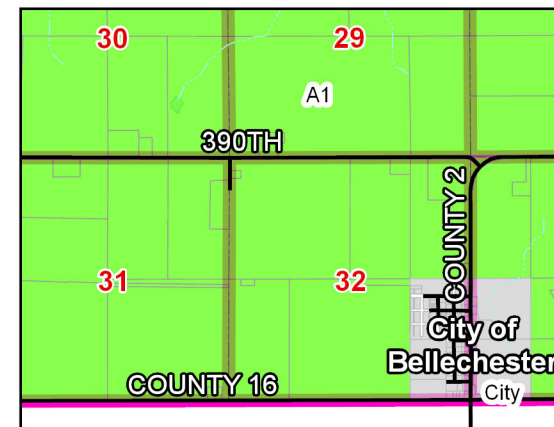
Parcel 26.032.0400  
NW 1/4 of Sec 32 Twp 111  
Range 14 in Belvidere Township

CUP request for Utility-Scale  
Photovoltaic Ground 1 Megawatt  
Solar Energy System



## Legend

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

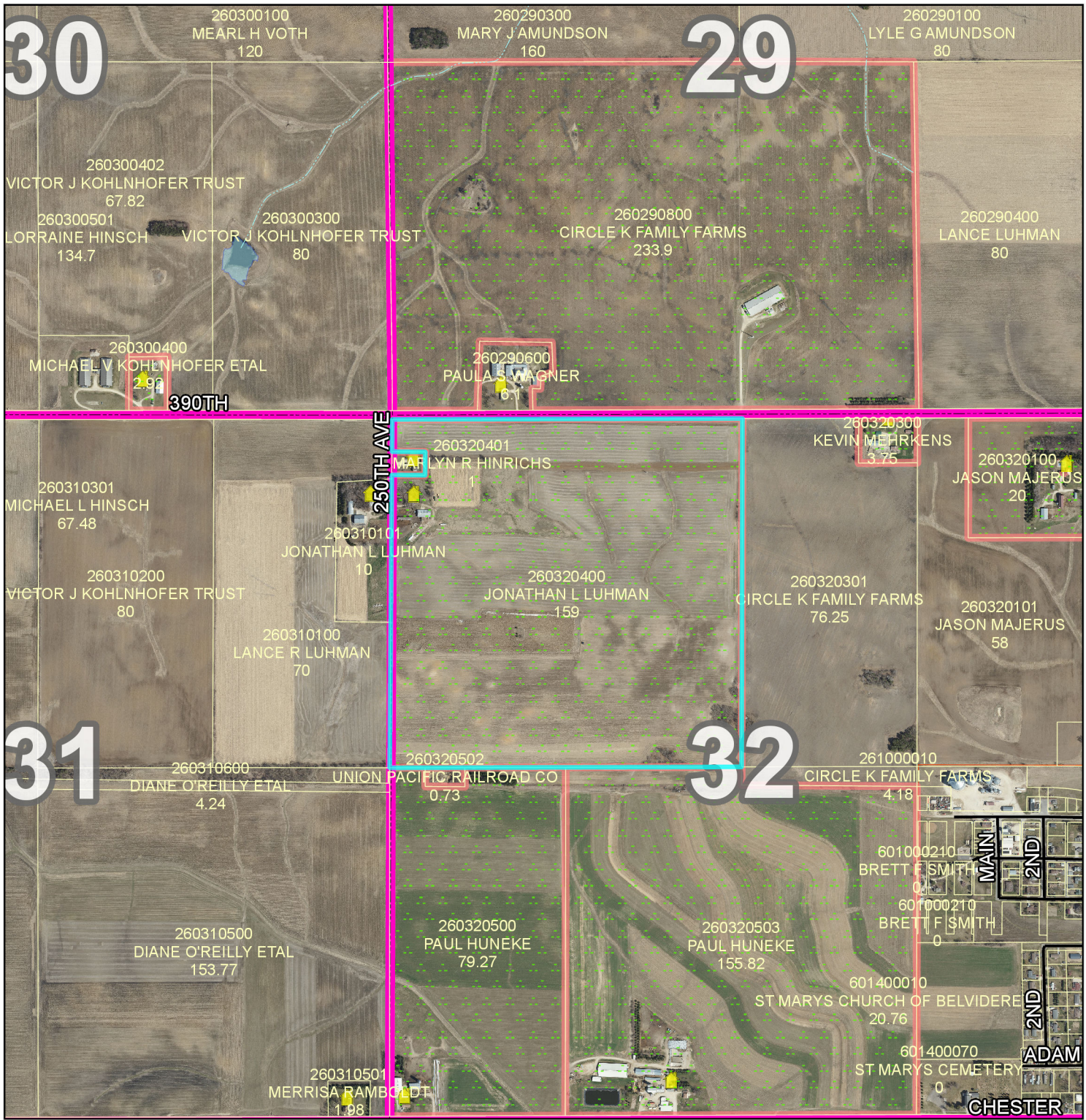


0 145 290 580 870 US Feet

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2016 Aerial Imagery  
Map Created January, 2019 by LUM





**Planning Advisory Commission**

Public Hearing  
February 11, 2019

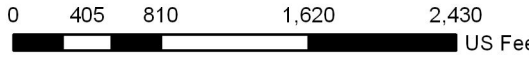
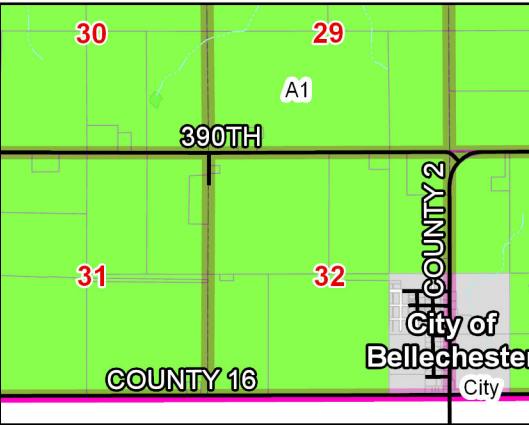
MN121819 LLC  
A1 Zoned District

Parcel 26.032.0400  
NW 1/4 of Sec 32 Twp 111  
Range 14 in Belvidere Township

CUP request for Utility-Scale  
Photovoltaic Ground 1 Megawatt  
Solar Energy System

**Legend**

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



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2016 Aerial Imagery  
Map Created January, 2019 by LUM



Permit NUMBER:  
For Staff Use only

219.0004

APPLICATION FOR

# Solar Energy System Application

## 1. Owner/Applicant Information

PROPERTY OWNER'S NAME:

Jonathan Luhman and Lora Luhman

PROPERTY OWNER'S ADDRESS:

39133 250th Ave Way, Goodhue, MN 55027

TELEPHONE:

EMAIL:

APPLICANT OR AUTHORIZED AGENT'S NAME:

MN 121819, LLC

Same as Above

APPLICANT'S ADDRESS:

3915 Coolidge Ave Baltimore MD 21229 USA

TELEPHONE:

EMAIL:

CONTACT FOR PROJECT INFORMATION:

Michael Bufalini

Same as Above

ADDRESS:

3915 Coolidge Ave Baltimore MD 21229 USA

TELEPHONE:

## 2. Location and Classification

STREET ADDRESS OF PROJECT:

39122 250th Ave Way, Goodhue, MN 55027

ZIP CODE:

LEGAL DESCRIPTION:

NW 1/4 SEC 32-111-14 EX 1.00 AC ID# 26-0000-23900. PID 26.032.0400

Attached

## 3. Supporting information

NUMBER OF SOLAR COLLECTORS TO BE INSTALLED

4,046

TOTAL SIZE OF PROJECT

1.416 MW DC / 1.000 MW AC

DESCRIBE METHOD OF CONNECTING THE ARRAY TO A BUILDING OR SUBSTATION

The panels will be arranged into rows. Each row of solar panels will connect to an inverter. The inverters will be connected by trenching underground conduit that is housed inside of PVC housing which will be installed two (2) feet below the surface. The conduit will lead to the concrete equipment pad for each garden. The inverters transform the direct current (DC) power generated by the photovoltaic system to alternating current (AC) power, which is then connected to the existing Xcel Energy three phase power distribution line at the point of common coupling (PCC).

Attach signed interconnection agreement

## 4. Applicant's Affidavit

Under penalty of perjury the following declarations are made:

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. Other information or applications may be required.

Signature: Michael H Bufalini

Digitally signed by Michael H Bufalini  
DN: cn=Michael H Bufalini, o=Xcel Energy of Minnesota, llc,  
c=US, email=Michael.H.Bufalini@xcelenergy.com

Date: 12/21/2018

Print name: Michael Bufalini owner or authorized agent (circle one)

**RECEIVED**  
**JAN 16 2019**  
**Land Use Management**

## GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

Parcel # \_\_\_\_\_

Permit# \_\_\_\_\_

PROPERTY OWNER INFORMATION			
Last Name	Luhman	First	Jonathan
Street Address			39133 250th Ave Way
City			Goodhue
State	MN	Zip	55027
Authorized Agent			Michael Bufalini
Mailing Address of Landowner:			39133 250th Ave Way, Goodhue, MN 55027
Mailing Address of Agent:			3519 Coolidge Ave, Baltimore MD 21229
Attach Legal Description as Exhibit "A"			<input type="checkbox"/>
Phone			724-630-4106
PROJECT INFORMATION			
Site Address (if different than above): 39122 250th Ave Way, Goodhue, MN 55027			
Lot Size	157.5 acres	Structure Dimensions (if applicable)	8 acres
What is the conditional/interim use permit request for? Ground-Mounted SES			
Written justification for request including discussion of how any potential conflicts with existing nearby land uses will be minimized See Exhibit K			
DISCLAIMER AND PROPERTY OWNER SIGNATURE			
<i>I hereby swear and affirm that the information supplied to Goodhue County Land Use Management Department is accurate and true. I acknowledge that this application is rendered invalid and void should the County determine that information supplied by me, the applicant in applying for this variance is inaccurate or untrue. I hereby give authorization for the above mentioned agent to represent me and my property in the above mentioned matter.</i>			
Signature of Landowner:			Date
Signature of Agent Authorized by Agent:			
TOWNSHIP INFORMATION			
Township Zoning Permit Attached?			<input type="checkbox"/> If no please have township complete below:
By signing this form, the Township acknowledges being made aware of the request stated above. In no way does signing this application indicate the Township's official approval or denial of the request.			
Signature		Title	Date
Comments:			
COUNTY SECTION			
COUNTY FEE	\$350	RECEIPT #	DATE PAID
Applicant requests a CUP/IUP pursuant to Article ___ Section ___ Subdivision ___ of the Goodhue County Zoning Ordinance			
What is the formal wording of the request?			
Shoreland ___ Lake/Stream Name _____ Zoning District _____			
Date Received _____ Date of Public Hearing _____ DNR Notice _____ City Notice _____			
Action Taken: ___ Approve ___ Deny Conditions:			

GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

Parcel # \_\_\_\_\_ Permit# \_\_\_\_\_

PROPERTY OWNER INFORMATION

Last Name Luhman First Jonathan Email: [redacted]  
Street Address 39133 250th Ave Way Phone [redacted]  
City Goodhue State MN Zip 55027 Attach Legal Description as Exhibit "A"   
Authorized Agent Michael Bufalini Phone 724-630-4106  
Mailing Address of Landowner: 39133 250th Ave Way, Goodhue, MN 55027  
Mailing Address of Agent: 3519 Coolidge Ave, Baltimore MD 21229

PROJECT INFORMATION

Site Address (if different than above): 39122 250th Ave Way, Goodhue, MN 55027  
Lot Size 157.5 acres Structure Dimensions (if applicable) 8 acres  
What is the conditional/interim use permit request for? Ground-Mounted SES  
Written justification for request including discussion of how any potential conflicts with existing nearby land uses will be minimized  
See Exhibit K

DISCLAIMER AND PROPERTY OWNER SIGNATURE

I hereby swear and affirm that the information supplied to Goodhue County Land Use Management Department is accurate and true. I acknowledge that this application is rendered invalid and void should the County determine that information supplied by me, the applicant in applying for this variance is inaccurate or untrue. I hereby give authorization for the above mentioned agent to represent me and my property in the above mentioned matter.

Signature of Landowner: Jonathan Luhman Date 12-20-18  
Signature of Agent Authorized by Agent: M U B F M

TOWNSHIP INFORMATION

Township Zoning Permit Attached?  If no please have township complete below:  
By signing this form, the Township acknowledges being made aware of the request stated above. In no way does signing this application indicate the Township's official approval or denial of the request.  
Signature \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Comments:

COUNTY SECTION \_\_\_\_\_ COUNTY FEE \$350 RECEIPT # \_\_\_\_\_ DATE PAID \_\_\_\_\_

Applicant requests a CUP/IUP pursuant to Article \_\_\_\_\_ Section \_\_\_\_\_ Subdivision \_\_\_\_\_ of the Goodhue County Zoning Ordinance.  
What is the formal wording of the request?

Shoreland \_\_\_\_\_ Lake/Stream Name \_\_\_\_\_ Zoning District \_\_\_\_\_  
Date Received \_\_\_\_\_ Date of Public Hearing \_\_\_\_\_ DNR Notice \_\_\_\_\_ City Notice \_\_\_\_\_

Action Taken: \_\_\_\_\_ Approve \_\_\_\_\_ Deny \_\_\_\_\_ Conditions:

## GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

**PROJECT SUMMARY**

Please provide answers to the following questions in the spaces below. If additional space is needed, you may provide an attached document.

1. Description of purpose and planned scope of operations (including retail/wholesale activities).

---

See Exhibit J

---

2. Planned use of existing buildings and proposed new structures associated with the proposal.

---

See Exhibit J

---

3. Proposed number of non-resident employees.

---

N/A

---

4. Proposed hours of operation (time of day, days of the week, time of year) including special events not within the normal operating schedule.

---

See Exhibit J

---

5. Planned maximum capacity/occupancy.

---

N/A

---

6. Traffic generation and congestion, loading and unloading areas, and site access.

---

See Exhibit J

---

7. Off-street parking provisions (number of spaces, location, and surface materials).

---

See Exhibit J

---

8. Proposed solid waste disposal provisions.

---

See Exhibit J

---

9. Proposed sanitary sewage disposal systems, potable water systems, and utility services.

---

See Exhibit J

---



10. Existing and proposed exterior lighting.

---

See Exhibit J

---

11. Existing and proposed exterior signage.

---

See Exhibit J

---

12. Existing and proposed exterior storage.

---

See Exhibit J

---

13. Proposed safety and security measures.

---

See Exhibit J

---

14. Adequacy of accessibility for emergency services to the site.

---

See Exhibit J

---

15. Potential for generation of noise, odor, or dust and proposed mitigation measures.

---

See Exhibit J

---

16. Anticipated landscaping, grading, excavation, filling, and vegetation removal activities.

---

See Exhibit J

---

17. Existing and proposed surface-water drainage provisions.

---

See Exhibit J

---

18. Description of food and liquor preparation, serving, and handling provisions.

---

N/A

---

19. Provide any other such information you feel is essential to the review of your proposal.

---

N/A

---

TOWNSHIP ZONING APPLICATION

TOWNSHIP NAME Belvidere

Goodhue County

Parcel # 26.031.0101

APPLICANT INFORMATION

Last Name Bufalini First Michael M.I. H  
 Street Address 4001 Coolidge Avenue Phone \_\_\_\_\_  
 City Baltimore State MD ZIP 21229  
 Email Address \_\_\_\_\_  
 Township 111 Range 14 Section 31

PROJECT INFORMATION

Site Address 39122 250th Ave Way, Goodhue, MN 55027  
 Zoning District \_\_\_\_\_ Lot Size 157.5 Acres Structure Dimensions 8 Acres  
 Type of Project Solar CSG Proposed Use \_\_\_\_\_  
 Structure Type \_\_\_\_\_ Replacement? YES  NO   
 Variance # \_\_\_\_\_ Conditional Use Permit # \_\_\_\_\_

GPS Coordinates

DISCLAIMER AND SIGNATURE

*I hereby apply for a zoning permit and I acknowledge that the information above is complete and accurate, that the work will be in conformance with the ordinances and codes of Goodhue County. The applicant also understands by signing this application he / she could be held responsible as representative of this project for any violation of compliance with all applicable laws and ordinances of Goodhue County. This permit may be suspended or revoked if the permit has been issued in error or on the basis of incorrect information supplied or in violation of any ordinance or regulation of Goodhue County. All provisions of law and ordinances governing this type of work will be complied with whether specified herein or not.*

Signature M.A. Babin Date 1/8/19

TOWNSHIP APPROVALS

*I hereby certify that the above described project has been approved by the Township Board, and the structure and use will meet all Township Codes and Ordinances if constructed as indicated.*

Signature Henry Thompson Title CHAIRMAN Date 1-8-19

Signature Stanley Klair Title Supervisor Date 1-8-19

Application fee \_\_\_\_\_ Receipt Number \_\_\_\_\_

## Exhibit E - Equipment Specifications

The 1.000MW solar PV project is rated to 1.000 MW AC/ 1.416 MW DC.

The system consists of the following:

- A. 4046 modules (REC Solar REC350TP 72, 350W, 1000V modules) feed into inverters.
- B. 17 inverters (CHINT SCA60KTL-DO/US, 480 inverter W/integrated DC and AC disconnects) which feed into 3 MLO panels.
- C. Low voltage switchgear- 1600A, 480V, 3 phase, 4 wire, 3R which is connected to the 480V side of the step-up transformer.
- D. Step up three phase pad mounted transformer- 1.5MVA, 12.47kV:480V, 5.32%
- E. Zig-zag grounding transformer on the 480V side

The 4046 modules are divided into strings and each string has 18 modules.

· Each inverter has up to 14 string input of 18 modules each.

The following attachments are the single line electrical drawings and equipment specs as well as the data sheets for the manufacturers.

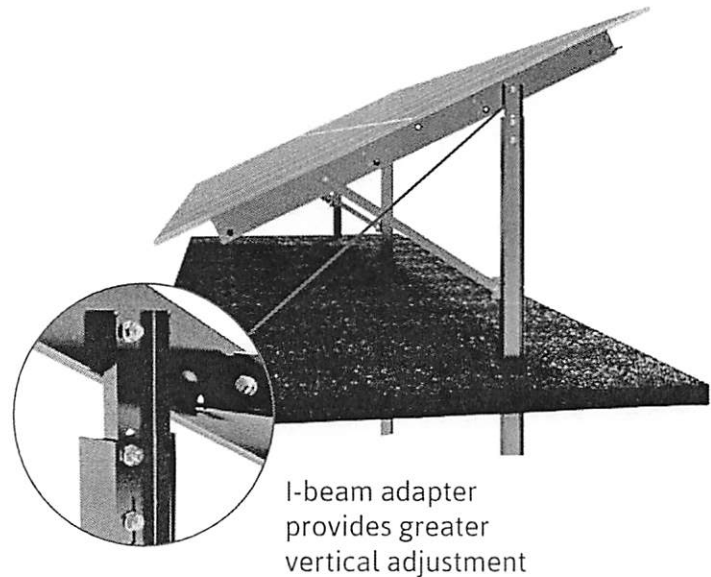
# CONTOUR DB

The numerous benefits of DCE Solar's Contour DB result in the lowest system cost.

- » Single point purlin connection creates unmatched system compatibility with grade
- » Integrated wire support system
- » Integrated array grounding
- » Industry leading installation time

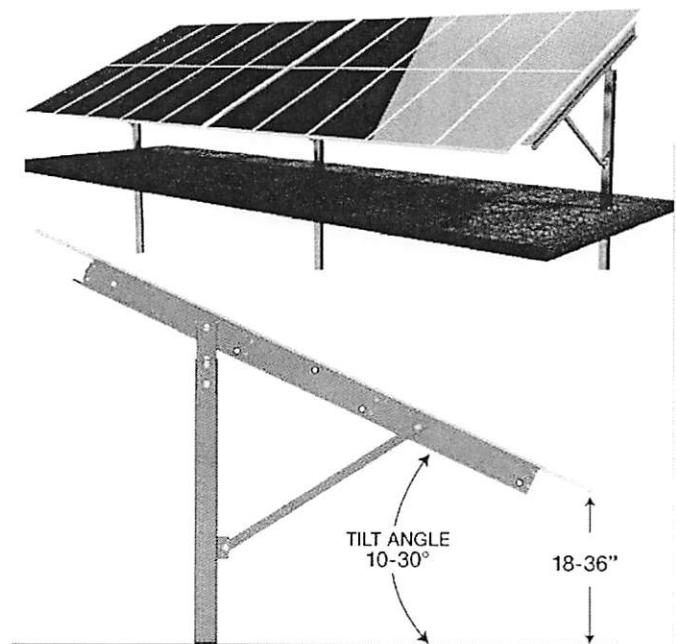
## Driven Beam

Rugged and economical I-beam foundation provides a flexible solution for all conditions, including rocky soils.



## Grounding and Bonding

Grounding and bonding via serrated hardware certified to UL 2703 (listing available upon request).



**Exhibit J - Conditional Use Permit**

Friday, December 21, 2018  
Goodhue County  
Attn: Michael Wozniak, Planning Supervisor  
509 W 5<sup>th</sup> Street  
Red Wing, MN 55066

MN 121819, LLC (MN 121819) is requesting a Conditional Use Permit for a one-Megawatt Alternate Current photovoltaic community solar garden with service period of 25-35 years. The Utility Scale community solar garden is going to cover 8 acres of land the following described 157.5-acre parcel of land owned by Jonathan Luhman and Lora Luhman, PID 38.033.0100; NW 1/4 SEC 32-111-14 EX 1.00 AC ID# 26-0000-23900. The property is Zoned Agricultural Protection. Commercial Community Solar Gardens are permitted as a conditional use. A property tax bill and assessors report are attached in **Exhibit D** to provide evidence that property taxes are current on the parcel involved in this request.

The site was selected due to its physical characteristics, proximity to existing Xcel Energy electrical infrastructure and distribution lines, zoning and permitting requirements, and landowner participation.

- 1. Township Recommendation..... 2
- 2. Design and Interconnection..... 2
- 3. Construction ..... 3
- 4. Access, Parking, Road Use and Maintenance..... 3
- 5. Storm Water Management Measures ..... 3
- 6. Operations & Emergency Response ..... 3
- 7. Landscaping ..... 4
- 8. Fire Prevention ..... 5
- 9. Visual Impact Analysis..... 5
- 10. Decommissioning Plan ..... 5
- 11. Insurance Information ..... 8
- 12. Exhibit List..... 9
- 13. Appendix A..... 10

# MN121819,LLC

## 1. Township Recommendation:

MN 121819 is planning to attend a Belvidere Township meeting and will obtain the Township acknowledgement and approval that will be reflected in **Exhibit L**.

## 2. Design and Interconnection:

Each garden will consist of approximately four thousand forty-six (4046) solar panels. The panels are mounted on a steel and aluminum racking structure positioned at a fixed 30° tilt, and generally averages approximately ten (10) feet above grade and will not exceed a maximum height of twenty (20) feet above grade. The racking system is installed in the ground with I-beams that are driven directly into the ground at a depth usually between six (6) feet and ten (10) feet depending on soil conditions. The racking system manufacturer's engineer will provide certification that the design of the foundations and panels are within accepted professional standards, given local soil and climate controls. The equipment is designed to withstand wind up to ninety (90) MPH and sixty pounds per square foot (60 LBS/SF) of snow. Each of the gardens will have one (1) concrete equipment pad, typically less than 320 square feet, to support interconnection and metering equipment. The only proposed grading that will occur is for the roads and concrete equipment pads. Equipment specifications as well as their UL rating are attached as **Exhibit E**.

The panels will be arranged into rows. Each row of solar panels will connect to an inverter. The inverters will be connected by trenched underground conduit that is housed inside of PVC housing which will be installed two (2) feet below the surface. The conduit will lead to the concrete equipment pad for each garden. The inverters transform the direct current (DC) power generated by the photovoltaic system to alternating current (AC) power, which is then connected to the existing Xcel Energy three phase power distribution line at the point of common coupling (PCC).

The solar array will be contained within an area protected by a six-foot chain link fence with one foot of barbed wire above it. Construction of this system will not create any noise, odor, dust, or any other pollutants or annoyances to surrounding parcels. There will be 10" x 7" "Danger High Voltage" signs placed around the fence in intervals of 100'. In addition, there will be site emergency contact information, Xcel contact information, and the SRC number posted on the front gate. The solar garden will comply with all applicable state, county, and federal regulations. No exterior lighting is proposed for the project. We will not need the county to provide any services or county personnel.

# MN121819,LLC

## **3. Construction:**

MN 121819 would like to begin construction in April 2019 date and complete the project before December 2019. The construction process takes approximately nine months. Operating hours during construction will be 8am-6pm. The site will have a portable toilet for workers. No water supply will be required. A dumpster will be on site during the entire construction process and will be serviced periodically for any waste debris that may come as a result of construction. Any materials will be stored and locked in storage containers that are placed on site and part of the access road turnaround. Large flatbed and delivery trucks will be delivering heavy machinery and equipment to the site periodically throughout the construction process. In addition, crews in passenger vehicles, pickup trucks, bobcats and skid steer loaders on tracks will be used on site almost daily. MN 121819 will use appropriate temporary (construction-related) erosion and sediment control best management practices (BMP) through construction. MN 121819 agrees to the Site Rules attached as **Exhibit F**.

## **4. Access, Parking, Road Use and Maintenance:**

Construction and operation and maintenance crews will access to the site by a proposed twelve (12) foot wide gravel road that has a forty (20) foot entrance off 390<sup>th</sup> on the north part of the property. Road access will be controlled for erosion control during construction compliant with the methods used for storm water management. Construction crew parking will be located entirely within the site. No additional permanent parking is required. Maintenance crews will park within the site access road and turnaround area.

## **5. Storm Water Management Measures**

Storm water management measures will be determined by EVS, a licensed civil engineering firm. They are a Minnesota based company with an enormous amount of experience designing solar arrays. Measures will include an analysis of the existing topography since no substantial grading will be required, the use of erosion control logs and silt fences where necessary, and establishment of a germinated pollinator friendly vegetative base underneath the project site before construction begins to prevent erosion.

## **6. Operations & Emergency Response:**

The solar garden site will operate and be monitored 24 hours a day, 365 days a year after construction has been completed. It will be monitored remotely through

# MN121819,LLC

a computer data acquisition system (DAS) so that appropriate personal can be dispatched to investigate potential problems. An operations and maintenance technician will be sent out to the site twice a year to inspect and provide maintenance the modules, electrical equipment, and the array fence. Construction, maintenance and decommissioning of the garden will be conducted in accordance with the MN 121819 Safety Manual, which is attached as **Exhibit G** as well as a Site Specific Safety Plan. The proposed contacts for emergency response as well as ongoing maintenance and operations are local and easily accessible due to the 12 ft wide access road.

Drainage, weeds, screening, general operations:

Mike Bufalini  
Gordian Energy Systems, LLC  
mbufalini@GordianE.com  
724-630-4106

Maintenance, stray voltage and electrical:

Mike Bufalini  
Gordian Energy Systems, LLC  
mbufalini@GordianE.com  
724-630-4106

No chemicals will be used, stored, or disposed of on the modules unless they are certified organic cleaning products.

## **7. Landscaping:**

MN 121819 has voluntarily participated in the Pollination Pledge, in which it has agreed to seed with native pollinator friendly vegetation underneath the panels and in surrounding areas within the project site. Seeding will be done as soon as the weather allows for proper germination. MN 121819 will utilize local companies to maintain the vegetation by mowing as needed and in a manner as to maximize weed and erosion control. Ground cover within the fenced portion of the array will not exceed 24 inches in height and will cover under and between the collectors, surrounding system foundation, and mounting devices. MN 121819 proposes a seed mix design specific to this site based on the parameters and methodology defined by the Minnesota Department of Transportation attached as **Exhibit H**.



# MN121819,LLC

The purpose of the solar garden seed mix will be to:

- Withstand harsh climate conditions
- Minimize maintenance costs
- Minimize erosion
- Improve water quality
- Infiltrate storm water runoff

MN 121819 will be responsible for maintaining the existing drain tile system underneath the array and replacing any damage to tile that occurs during the construction process, or any time prior to or during decommissioning. Existing drain tile lines will be identified upon the completion of the ALTA survey prior to construction.

## **8. Fire Prevention:**

This solar array will meet the requirements of the 2015 International Fire Code, specifically to sections 605.11 – 605.11.2 for clearance, markings and location of underground DC conductors. The solar garden will meet the International Building Code (IBC), National Electric Code (NEC), and local electric and fire code. NEC code is produced by the National Fire Protection Agency (NFPA) with safety of the public, contractors, and firefighters as the objective. Safety is paramount in our solar PV facilities.

## **9. Visual Impact Analysis:**

MN 121819 conducted a site visit and visual analysis of the parcel and adjacent parcels to determine if any nearby properties would suffer substantially from obstructed or impeded views as a result of the proposed project. MN 121819 concluded that the impact is minimal.

## **10. Decommissioning Plan:**

MN 121819 has contractual obligations to the landowner regarding decommissioning arising out of Section 4.4 of the lease. These obligations include removal of all equipment to a depth of 2-3 feet, timelines for removal, owner's rights to remove the solar facility upon failure by the Project Company, and establishment of a monetary security for removal in the form of a bond, escrow, or letter of credit. Section 4.4 of the lease is attached as **Exhibit I**.

# MN121819,LLC

The purpose of the security is to ensure there is sufficient money available to return the project site to an appropriate condition at the end of the project's useful life, or earlier. The landowner will be the designated beneficiary of the fund and will be provided a copy of the document establishing the security before construction commences.

MN 121819 or its successors agree to be responsible for all decommissioning costs and agree that any future buyer or successor of the project will assume the same decommissioning responsibilities. Installation by MN 121819 will be done with no significant or permanent alterations to the land. Upon removal, the project site shall be restored to pre-construction conditions as is reasonably practical, including removal of structures, foundation, and restoration of soil and vegetation. The system will be dismantled and removed using minimal impact construction equipment and materials will be safely recycled or disposed. Appropriate temporary construction-related erosion and sediment control best management practices (BMP) during the decommissioning of the project.

MN 121819 anticipates that decommissioning will occur 25-35 years after the date that the system becomes operational depending on the owner renewal option. All equipment and structures will be removed within ninety (90) days from either of the following: A. The end of the system's serviceable life; or B. the system becomes discontinued. A system shall be considered a discontinued use after one (1) year without energy production, unless a plan is developed and submitted to the Zoning Administrator outlining the steps and schedule for returning the system to service.

The following is a list of assumptions and clarifications to further define the methodology used to establish the scope and values of the removal costs and salvage values.

## General

- The intent of the decommissioning work will be to fully remove the solar facility and restore the site to a stabilized natural condition. Even if the intent is to resume farming, the site will first be fully restored and stabilized.
- The service life of the facility is assumed to be 25 years. All dollar amounts are in present day value, and it is assumed that all values will inflate at a similar rate, therefore, the net comparison of removal cost to salvage value at the end of the service life will remain accurate.

# MN121819,LLC

- Costs associated with this plan represent a “turn key” operation for a general contractor to be hired for this work, including permits, mobilization, contingency, etc.
- Unit costs for each line item have been provided by local contractors familiar with this type of work.
- Haul costs assume a maximum distance of 60 miles between the project and nearest disposal or recycling facility.
- No maximum duration has been assigned for this work. It has been assumed that this work would be handled by a single crew without full time site personnel.

## Civil Infrastructure

- Topsoil used to backfill excavations will be borrowed from adjacent onsite locations. No topsoil import is included.
- Stormwater features such as retention berms or shallow basins with drain tile under drains may remain in place as they do not negatively impact future agricultural land uses and they will continue to provide an environmental benefit to the quality and quantity of offsite runoff.
- Aggregate removal will be the full depth of the aggregate section for roads, equipment pads, and other areas utilizing aggregate. No aggregate will be buried. Includes subgrade scarification prior to backfilling with topsoil.
- Turf establishment includes mulch, fertilizer, and water as necessary to achieve 70% ground cover as required to satisfy the NPDES Construction General Permit.
- Sediment control is priced as silt fence but could also be fiber logs. Location of sediment control will be downslope from exposed soils only in areas where sedimentation offsite or into onsite water bodies can reasonably be expected.

## Structural Infrastructure

- Steel pile foundation removal is assumed to be similar in effort and price to pile installation.
- Steel racking removal is assumed to be similar in effort and price to racking installation.

# MN121819,LLC

## Electrical Infrastructure

- PV modules to be recycled. Assumption is that the modules are 72 cell polysilicon modules about 6' X 3' in dimension.
- Switchgear including transformers will be removed from their respective concrete pads and recycled/returned to the manufacturer.
- DC copper wiring will be dismantled and recycled.
- AC AL wiring, where underground will be dug up, retrieved and recycled.
- On site riser or interconnection poles shall be removed.
- String inverters/combiner boxes are no more than 130 lbs. in weight and not more than 40" X 25" X 12" in dimension. A two-person crew can dismantle a string inverter.
- Transformers are pad mounted and weigh approximately 6500 pounds. These are dry type transformers, so there is no need for any oil disposal.
- Switchgear and the transformer sit on the same concrete pad
- Underground medium voltage wires are generally aluminum and are placed in trenches, in some cases direct buried or in PVC conduits. They can be removed by trenching with a ditch witch

For the estimated cost for decommissioning, please see Schedule of Removal and Restoration Costs in Appendix A.

### **11. Insurance Information:**

MN 121819 or its successor will provide a certificate of insurance meeting the Minnesota State requirements for liability insurance coverage. These requirements include:

- Insurance provider must be rated B+ or better by "Best."
- Limits of \$2,000,000 for each occurrence.
- Coverage against claims for damages resulting from bodily injury, wrongful death, and property damage arising out of the Interconnection Customer's ownership and/or operating of the Generation System under the interconnection agreement.
- Include "Northern States Power Company, a Minnesota Company" as additional insured.
- Contain a severability of interest clause of cross-liability insurance
- Provides for thirty (30) calendar days written notice to NSP prior to cancellation, termination, alteration, or material change of such insurance.
- Coverage provided is primary, and not excess of, contributing to, or combined with, any insurance maintained by NSP.

# MN121819,LLC

We at MN 121819 sincerely appreciate all the help we have received from your staff with regard to our applications and we look forward to collaborating with you further to develop a great project that we can all be proud of.

## **12. Exhibit List:**

- A. Application Form
- B. Site Plan
- C. Topographic Map
- D. Property Tax Evidence
- E. Equipment Pack
- F. Site Rules
- G. MN 121819, LLC Safety Manual
- H. MN DOT Seeding Guideline
- I. Executed Lease
- J. Conditional Use Permit Summary
- K. Interconnection Application
- L. Township Approval and Documentation
- M. Area M Cultural Report / Wetland Delineation Report

# MN121819,LLC

## Appendix A

### Schedule of Removal and Restoration Costs

	Quantity	Units	\$/Unit	Cost	Notes
<b>Civil Infrastructure</b>					
					remove full section of aggregate road, structural concrete base material, and surfacing around equipment pads
aggregate removal	180	CY	\$4.00	\$720.00	
aggregate haul and offsite disposal	180	CY	\$6.00	\$1,080.00	
geotextile removal under aggregate roads	550	SY	\$0.05	\$27.50	
geotextile haul and offsite disposal	550	SY	\$0.05	\$27.50	
topsoil backfill	180	CY	\$12.00	\$2,160.00	onsite relocation of topsoil to backfill road and equipment pad excavations
culvert removal	1	each	\$1,200.00	\$1,200.00	remove CMP of approximate 30' length with no greater than 2' of cover
culvert haul and offsite disposal	1	each	\$100.00	\$100.00	
chainlink fence removal	1900	LF	\$6.00	\$11,400.00	includes fence mesh, post framing, concrete foundations, etc
chainlink fence haul and offsite disposal	1900	LF	\$3.00	\$5,700.00	
reinforced concrete equipment pad removal	1	EA	\$500.00	\$500.00	
concrete waste haul and offsite disposal	1	CY	\$500.00	\$500.00	
site grading	1	AC	\$8,000.00	\$8,000.00	grading smooth all areas disturbed by removals, excavations, etc
turf establishment	1	AC	\$1,000.00	\$1,000.00	seed and mulch all areas disturbed by removals, excavations, etc
sediment control	0	LF	\$2.00	\$0.00	silt fence
<b>Structural Infrastructure</b>					
steel pile foundation removal	550	EA	\$13.00	\$7,150.00	
steel pile foundation haul and offsite disposal	550	EA	\$3.00	\$1,650.00	
steel racking removal	1	MW	\$5,000.00	\$5,000.00	
steel racking haul and offsite disposal	1	MW	\$700.00	\$700.00	
<b>Electrical Infrastructure</b>					
Removal of Solar modules	4104	EA	\$8.00	\$32,832.00	
Removal of string inverters/combiners	17	EA	\$60.00	\$1,020.00	
Removal of switchgear/Xfmr	1	EA	\$1,500.00	\$1,500.00	
Removal of Riser and Interconnection poles	0	EA	\$1,000.00	\$0.00	
Removal of SCADA/Aux panel/weather station	1	EA	\$500.00	\$500.00	
Removal of medium voltage AL cables	1	MW	\$2,000.00	\$2,000.00	
Removal of fiber optic cables	0	MW	\$500.00	\$0.00	
<b>General</b>					
permits	1	ea	\$ 3,000.00	\$ 3,000.00	NPDES Construction General Permit and SWPPP preparation
				\$ 87,767.00	
Total Salvage Value				86126	
Decommission - Salvage Value:				\$ (1,641.00)	

## **SUMMARY**

Area M Consulting (Area M), on behalf of Gordian Energy Systems (Client), conducted a wetland delineation for the J. Luhman CSG 1 Project (Project) located within Goodhue County, Minnesota. The Area M biologist conducted a routine Level 1 delineation, as defined by the Board of Water and Soil Resources (BWSR), which includes only a desktop component (BWSR, 2010). The off-site delineation was conducted following general procedures and methods outlined by the United States Army Core of Engineers (USACE) Wetland Delineation Manual (USACE, 1987), Midwest Regional Supplement (USACE, 2010), and BWSR Guidance for Offsite Hydrology/Wetland Determinations (2016). This wetland delineation report is assembled to assist the Client with meeting regulatory requirements necessary for permitting a Community Solar Garden (CSG) in Goodhue County.

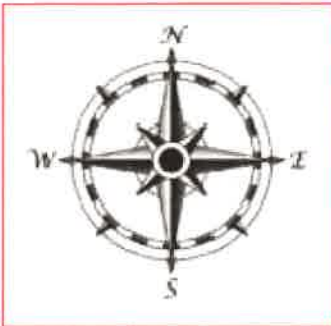
## **PROJECT DESCRIPTION**

The Project, encompassing approximately 19.4 acres, is located 0.8 miles northwest of Bellechester, MN in Section 32, T111N:R14W (Study Area) (Appendix A). The Study Area is on a north-facing slope and is cultivated annually. The surrounding landscape is mostly agricultural, with small streams, wooded shelterbelts, and farmsteads intermixed within among the rolling topography.

## **LEVEL 1 DELINEATION METHODOLOGY**

Wetland biologists conducted a comprehensive desktop review of data available within the public domain to identify the presence/absence and extent of wetland/waterbodies that could occur within Study Area. This data was analyzed by identifying wetland signatures which indicate the potential presence of wetland/waterbody features. The following data sources were reviewed; the analysis of each data set is discussed in greater detail in the later part of this section.

- Hydrologic soil data
- Elevation Data
  - MN Department of Natural Resources (MNDNR) Light Detection and Ranging (LiDAR) Data
  - United States Geological Survey (USGS) topographic maps
- Mapped Wetlands/Waterbodies
  - U.S. Fish and Wildlife Services (USFWS) National Wetland Inventory (NWI)
  - MNDNR updated NWI
  - MNDNR Public Waters Inventory (PWI)
  - National Hydrography Dataset (NHD)
- Historic and current aerial photographs



EXISTING 3 PHASE  
UTILITY LINES

390TH STREET

NEW DISCONNECT POLE  
NEW METERING POLE  
NEW INTERCONNECTION POLE

25' MIN. SEPARATION BETWEEN POLES

NEW 12' WIDE ACCESS ROAD  
(APPROX. 1,000')

PARCEL BOUNDARY

UNDERGROUND MV  
(APPROX. 960')

EQUIPMENT PAD MAIN AC DISCONNECT

POTENTIAL WETLANDS

SRC# 069526

ARRAY FENCE  
(± 2,517')

ARRAY AREA (6.65 ACERS)

95'-7 5/16"

MN121818,LLC  
3915 COOLIDGE AVE.  
BALTIMORE, MARYLAND 21229  
410-242-2449

PROJECT ADDRESS: 39122 250th Avenue Way, Goodhue, MN 55027  
LAT: 44°37'08.06"N  
LON: 92°52'48.78"W

SYSTEM	SPECIFICATION
System size DC	1,416 MW
System size AC	1,000 MW
DC/AC RATIO	1.415
AZIMUTH	180
TILT	30
MODULE COUNT	4046
MODULE TYPE	REC 350TP72
MODULE STC RATING	350 W
INVERTER COUNT	17
INVERTER POWER	CP6 SCARSKEL-DO/US-POWER LIMITED TO 14w AC
RACKING	60KW
MONITORING	ALSO ENERGY

DESIGN CRITERIA	
MIN/MAX TEMP.	-28 C/32 C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
EXPOSURE CATEGORY	50 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES:  
NO POSITION, DISTANCE OR CLEARANCE ISSUES WITH OVERHEAD ELECTRICAL SERVICE LINES OR OTHER UTILITIES IN RELATION TO THE PV PANELS.  
24-7 UNESCORTED KEYLESS ACCESS PROVIDED FOR THE METERS AND AC DISCONNECT.  
EXISTING VEGETATION: PLOWED FIELDS  
NO TREES REMOVED

REVISIONS			
#	DESCRIPTION	BY	DATE
0	CAPACITY STUDY DESIGN	S.B.J.	8/16/18
1	INTERCONNECTION COMMENTS	W.R.J.	12/7/18
2	CUP SUBMISSION	W.R.J.	12/21/18
3	ADDED WETLANDS	W.R.J.	1/7/19
4			
5			
6			
7			

DRAWN BY:  
WILL JAWISH

PROJECT NAME:  
J. LUHMAN CSG 1  
SRC#069526

DRAWING TITLE:  
SITE PLAN

SCALE:

SHEET:  
PV1

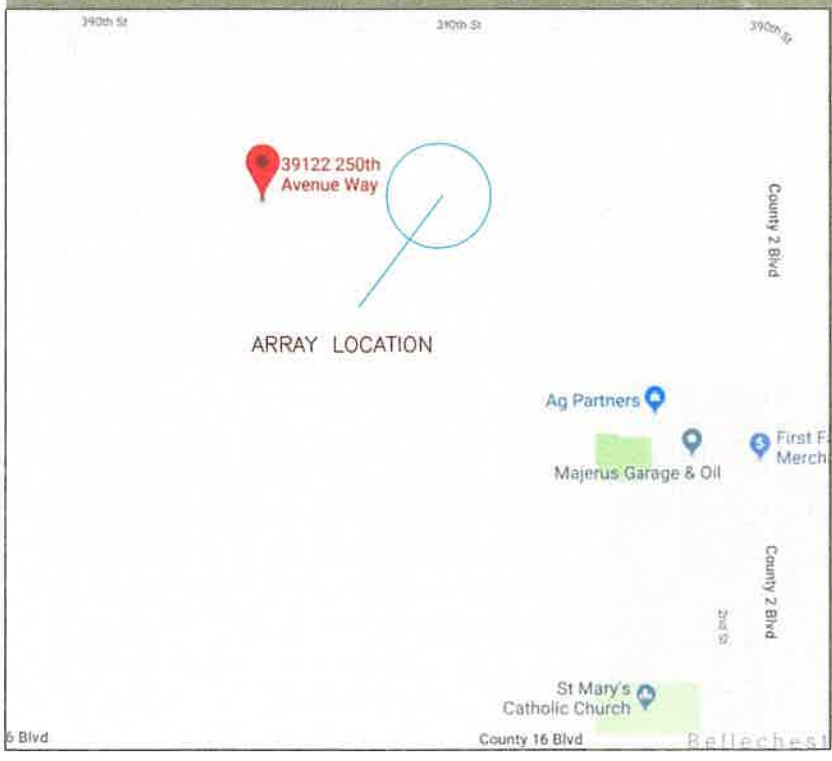




Exhibit C - Topographical Map

**Topographical Map, 39122 250<sup>th</sup> Avenue Way, Zumbrota, MN 55992**



# Goodhue County Land Use Management

Goodhue County Government Center | 509 West Fifth Street | Red Wing, Minnesota 55066

*Lisa M. Hanni, L.S. Director*



*County Surveyor / Recorder*

Building | Planning | Zoning  
Telephone: 651.385.3104  
Fax: 651.385.3106

Environmental Health | Land Surveying | GIS  
Telephone: 651.385.3223  
Fax: 651.385.3098

**To:** Planning Commission  
**From:** Land Use Management  
**Meeting Date:** February 11, 2019  
**Report date:** February 1, 2019

## **PUBLIC HEARING: Request for CUP for a Utility-Scale Solar Energy System (SES)**

Request for a CUP submitted by MN 121819 LLC (applicant) and Andrew and Kim Huneke (owners) for a Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 8 acres. Parcel 39.007.0301. TBD 180th Ave, Zumbrota, MN 55992. Part of the NW ¼ of Sect 07 Twp 109 Range 15 in Pine Island Township. A1 Zoned District.

### **Application Information:**

Applicant: MN 121819 LLC (applicant) and Andrew and Kim Huneke (owners)  
Address of zoning request: TBD 180th Ave, Zumbrota, MN 55992  
Parcel(s): 39.007.0301  
Abbreviated Legal: Part of the NW ¼ of Sect 07 Twp 109 Range 15 in Pine Island Township  
Township Information: Pine Island Township acknowledged the CUP request and the Township Board of Supervisor voted to approve the project (2 for/1 against) on 1/3/2019.  
Zoning District: A1 (Agriculture District)

### **Attachments and links:**

Application and submitted project summary  
Site Map(s)  
Goodhue County Zoning Ordinance (GCZO):  
<http://www.co.goodhue.mn.us/DocumentCenter/View/2428>

### **Background:**

The applicant has submitted a CUP request to construct and operate a one (1) Megawatt (MW) photovoltaic (PV) utility-scale solar garden on up to 8 acres of leased land located in Pine Island Township that is currently owned by Andrew Huneke and Kim Huneke. The project would be developed in conjunction with the State of Minnesota Solar Garden program and Xcel Energy's Solar Rewards Community Program. The program allows developers to design, permit, own, and operate solar energy systems and sell the generated power directly to consumers. Upon completion, the "USS Solar Greenhouse LLC" Solar Garden would connect to Xcel Energy's distribution grid and generate up to 1 MW of energy annually over the next 25 years.

Per Goodhue County regulations, Solar Energy Systems (SES) that are the primary use of the land and are designed to primarily provide energy to off-site users or export to the wholesale market may be conditionally permitted as a "Utility-Scale SES" within the County's A1 zoned districts.

### **Goodhue County Zoning Ordinance: Article 4 Conditional/Interim Uses**

*No CUP/IUP shall be recommended by the County Planning Commission unless said Commission specifies facts in their findings for each case which establish the proposed CUP/IUP will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, will not substantially diminish and impair property values within the immediate vicinity, will not impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area, that adequate measures have been, or will be, taken to provide utilities, access roads, drainage and other necessary facilities, to provide sufficient off-street parking and loading space, to control offensive odor, fumes, dust, noise and vibration so that none of these will constitute a nuisance, and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result.*

"To effectively promote the safety, health, and well-being of our residents"

[www.co.goodhue.mn.us](http://www.co.goodhue.mn.us)

## **Project Summary:**

### **Property Information:**

- The approximately 8-acre site to be leased by the applicant is currently used for row-crop agriculture (corn and soybeans) by the owner.

Current land use of the 152-acre Huneke property includes another one (1) Megawatt (MW) photovoltaic (PV utility scale solar garden situated immediately west of the proposed site on approximately 8 acres. A CUP for this solar project that was developed by Innovative Power Systems was approved by the County Board in February, 2017 and has since been constructed (see included site maps). The balance of the property is comprised of tilled cropland and grass drainage swales.

Adjacent land uses include agriculture and low-density residential.

The nearest residences are located between 1,150 and 1,250 feet from the proposed facility. These included the Dana Hoffbeck (Parcel #390061700) property to the north and the Jeffrey M Post (Parcel #390070300) and John R Lexvold (Parcel 400120100) properties located southwest of the proposed site.

- Section 7 is located within the County's A1 (Agriculture Protection) Zone. Section 6, Pine Island Township located immediately north of the proposed project area is located within the County's A-3 (Urban Fringe) Zone. The other Sections abutting Section 7, are located within the A-1 (Agriculture Protection Zone).
- The major equipment components of the project are solar panels, inverters, and racking.

### **Solar Array:**

- The solar array is proposed to include 4046 solar panels. The panels are mounted on a steel and aluminum racking structure positioned a fixed 30 degree tilt, and generally averages ten (10) feet above grade and will not exceed a maximum height of twenty (20) feet above grade.
- The racking system is installed in the ground with I-beams that are driven directly into the ground at a depth usually between six (6) feet and ten (10) feet depending on soil conditions.
- The only proposed grading that will occur is for the roads and concrete equipment pads.
- The panels will be arranged into rows. Each row of solar panels will connect to an inverter. The inverters will be connected by trenched underground conduit that is housed inside of PVC housing which will be installed two (2) feet below the surface.
- The inverters transform the direct current (DC) power generated by the photovoltaic system to alternating current (AC) power, which is then connected to the existing Xcel Energy three phase power distribution line at the point of common coupling (PCC).
- MN 121819 would like to begin construction in April 2019 and complete the project before December 2019. The construction process takes approximately nine months.
- Construction, operation and maintenance crews will access the site by a proposed twelve (12) foot wide gravel road that has a forty (40) foot entrance off 180<sup>th</sup> Avenue on the west side of the property.
- A recorded ingress/egress easement is not required for the property given the site is to be leased and all land to be crossed to access the site will remain under common ownership.

A separate fire number will be required for the site.

- Adequate emergency vehicle access is available to service the location.

The access route would be composed of crushed aggregate to facilitate emergency vehicle access in inclement weather conditions.

- The solar garden is sited to comply with all GCZO setback requirements for solar energy systems.

### **Landscaping/Drainage:**

- Storm water management measures will be determined by EVS, a licensed civil engineering firm.

They are a Minnesota based company with an enormous amount of experience designing solar arrays. Since no substantial grading will be required, the use of erosion control logs and silt fences where necessary, and establishment of a germinated pollinator friendly base underneath the project site before construction begins to prevent erosion. The project will be subject to National Pollution Discharge Elimination System (NPDES)/Storm water discharge permit requirements as administered by the Minnesota Pollution Control Agency. Land Use Management Department Staff will confirm that, these requirement have been met by the applicant during the Building Permit review.

- The applicant has included a Level 1 Wetland Delineation Report for the Huneke 1 Project, prepared by Area M Consulting (Area M). It is the professional opinion of Area M that the Study Area contains one feature (Wetland 1, located within Area 1) that satisfies the criteria to be a wetland pursuant to the Army Corps of Engineers' 1987 Manual with subsequent clarification memoranda and pursuant to confirmation by the USACE (Appendix A). They note that only state, federal, or local agencies have final authority over wetland extent and jurisdictional status.

Beau Kennedy of the Goodhue SWCD (Wetlands Coordinator) has indicated that "no official wetland determination has been made for this project area. There are 2 grassed waterways that may show wetland features from an aerial slide review but are likely non-wetland. There are known wetland features further to the east of this site but not within the project area. The wetland report suggests a site visit to do further investigation of the waterway for wetlands. I support that."

The Applicant will need to communicate with Beau Kennedy, Goodhue SWCD, Wetlands Coordinator to ensure compliance with the Wetlands Conservation Act and applicable rules prior to building permit issuance.

- Aside from the gravel access road and meter pad, the entire area within the fenced project boundary will be restored to a low-maintenance seed mix, including the area below the solar panels. The Applicant has been asked to specify the seed mix prior to County approval of the CUP. Mike Bufulini with Gordian Energy, a representative of the Applicant has indicated that information regarding the specific seed mix to be used will be provided prior to the Planning Advisory Commission meeting on February 11.
- The solar array will be contained within an area protected by a six-foot chain link fence with one foot of barbed wire above it.
- Ample room exists on the property to fulfill GCZO off-street parking requirements.

#### **Maintenance/Decommissioning:**

- The project is subject to issuance of a Building Permit and must be constructed according to applicable building code requirements. The project will be inspected by County Building Inspections Staff and the State Electrical Inspector. In addition, Planning and Zoning Staff will inspect the project upon completion to ensure conformance with applicable zoning requirements.
- MN121819, LLC, has indicated that the solar garden site will operate and be monitored 24 hours a day, 365 days a year after construction has been completed. A description of proposed Operations and Emergency Response plans and contact personnel has been included in Exhibit J.
- The Applicant has contractual obligations to the landowner regarding decommissioning arising out of Section 4.4 of the "LAND LEASE AND SOLAR EASEMENT" between the property owners (Andrew J. Huneke and Kim Y. Huneke) and MN121819 LLC. These obligations include a provision for "Security for Removal". Per GCZO Article 19, the applicant may be required to provide a financial surety at up to 125% of the estimated decommissioning cost. The county has not typically exercised the right to financial assurance requirements for similar solar installations. The Planning Advisory Commission and County Board will need to decide if the County will require financial assurance to cover anticipated decommissioning costs.
- The Applicant has prepared a Decommissioning Agreement between MN 121819 LLC and Andrew Huneke and Kim Huneke that includes removal of all equipment to a depth of 2-3 feet, timelines for removal, and the establishment of a financial security. The Applicant has estimated

total costs for decommissioning to be \$87,767 and has estimated the salvage value of reclaimed materials to be \$86,126.

- Per GCZO Article 19, the applicant may be required to provide a financial surety at up to 125% of the estimated decommissioning cost. The county has not typically exercised the right to financial assurance requirements for similar solar installations. The Planning Advisory Commission and County Board will need to decide if the County will require financial assurance to cover anticipated decommissioning costs.

**Draft Findings of Fact:**

*The following staff findings shall be amended to reflect concerns conveyed during the PAC meeting and public hearing.*

1. The proposed Solar Garden does not appear injurious to the use and enjoyment of properties in the immediate vicinity for uses already permitted, nor would it substantially diminish and impair property values in the immediate vicinity. The use appears harmonious with the established uses in the vicinity. There is an existing Solar Garden existing directly south of the subject site that has been functioning without record of complaint from neighboring residences.
2. The establishment of the proposed Solar Garden is not anticipated to impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area. The use is proposed to meet all development standards of the Goodhue County Zoning Ordinance and it does not appear incompatible with adjacent land uses.
3. A review of the applicants submitted project summary indicates adequate utilities, access roads, drainage, and other necessary facilities are available to accommodate the proposed use.
4. The submitted plans identify means to provide sufficient off-street parking and loading space to serve the proposed use and meet the Goodhue County Zoning Ordinance's parking requirements.
5. The submitted plans detail adequate measures to prevent or control offensive odor, fumes, dust, noise, and vibration so that none of these will constitute a nuisance. Furthermore, the applicants' lighting plans appear capable of controlling lights in such a manner that no disturbance to neighboring properties will result.

*Staff recommendation is based on the review of the submitted application and project area prior to the public hearing.*

**Staff Recommendation:**

LUM Staff recommends the Planning Advisory Commission

- 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

Recommend that the County Board of Commissioners **APPROVE** the request for a CUP submitted by MN 121819 LLC (applicant) and Andrew and Kim Huneke (owners) for a Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 8 acres.

Subject to the following conditions:

1. Activities shall be conducted according to submitted plans, specifications, and narrative unless modified by a condition of this CUP;
2. The project shall be decommissioned according to Article 19 Section 6 of the Goodhue County Zoning Ordinance and submitted plans;
3. A decommissioning agreement between the landowner and MN 121819 LLC shall be maintained to ensure reclamation of the area;
4. LUM staff shall be notified by the landowner or solar company 30 days prior to ownership transfer or operator changes;
5. Applicants shall communicate with Beau Kennedy, Wetlands Coordinator with the Goodhue SWCD to ensure compliance with applicable Wetlands Rules prior to completion of any site

- grading/construction and/or submittal of the Building Permit Application;
6. A stormwater management and erosion control plan shall be submitted for administrative review as part of the Building Permit Application for the project;
  7. Applicants shall work with the Goodhue County Soil and Water Conservation District to determine an appropriate seed mix to establish on disturbed areas of the site;
  8. Applicants shall obtain Building Permit approvals from the Goodhue County Land Use Management Department prior to establishing the use;
  9. Compliance with Goodhue County Zoning Ordinance including, but not limited to, Article 19 Solar Energy Systems (SES) and Article 21 (Agriculture Protection District). The applicant shall request a final inspection of the project for compliance with applicable zoning requirements upon completion of the project;
  10. Compliance with all necessary State and Federal registrations, permits, licensing, and regulations;
  11. This CUP shall expire 30 years from the date of approval unless terminated prior to that date.



# Planning Advisory Commission

Public Hearing  
February 11, 2019

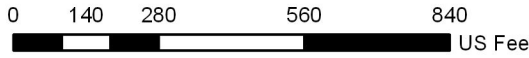
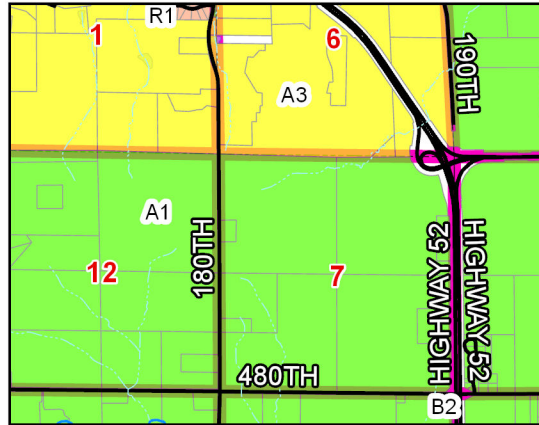
MN 121819 LLC  
A1 Zoned District

Parcel 39.007.0301  
NW1/4 of Sec 07 Twp 109  
Range 15 in Pine Island Township

CUP for Utility-Scale Photovoltaic  
Ground 1 Megawatt Solar Energy  
System

### Legend

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



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2016 Aerial Imagery  
Map Created January, 2019 by LUM



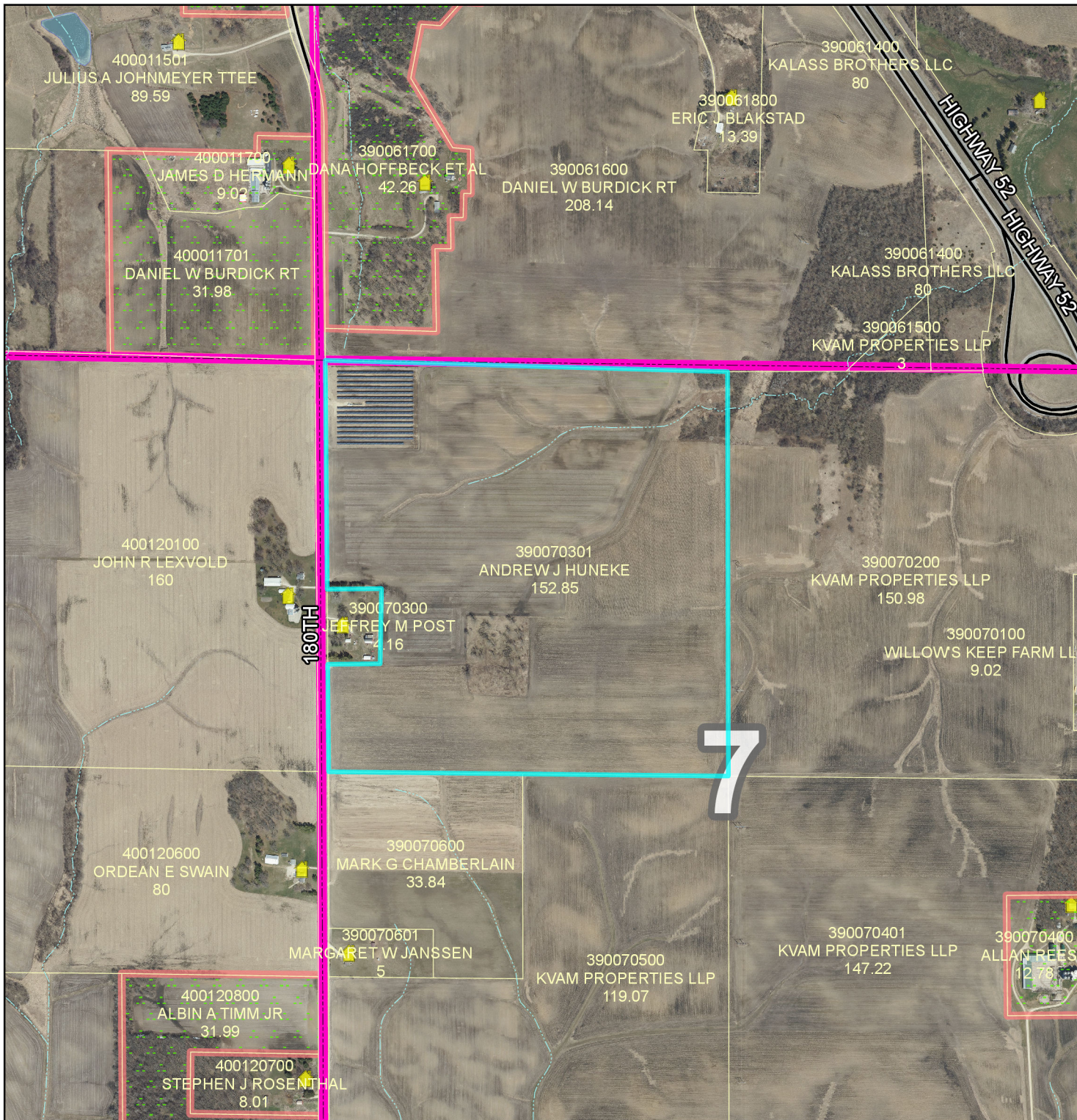
# Planning Advisory Commission

Public Hearing  
February 11, 2019

MN 121819 LLC  
A1 Zoned District

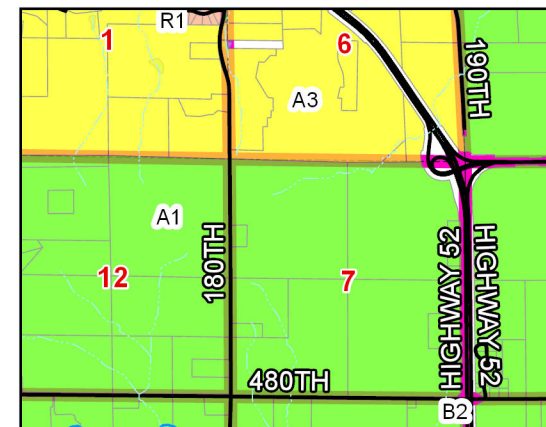
Parcel 39.007.0301  
NW1/4 of Sec 07 Twp 109  
Range 15 in Pine Island Township

CUP for Utility-Scale Photovoltaic  
Ground 1 Megawatt Solar Energy  
System



## Legend

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



0 345 690 1,380 2,070 US Feet

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2016 Aerial Imagery  
Map Created January, 2019 by LUM





Permit NUMBER:  
For Staff Use only

Z19-0003

APPLICATION FOR

# Solar Energy System Application

1. Owner/Applicant Information

PROPERTY OWNER'S NAME:

Andrew Huneke and Kim Huneke

PROPERTY OWNER'S ADDRESS:

46433 145th Ave, Zumbrota, MN 55992

TELEPHONE:

( 507 ) 694-1276

EMAIL:

huneke.andy@gmail.com

APPLICANT OR AUTHORIZED AGENT'S NAME:

MN 121819, LLC

Same as Above

APPLICANT'S ADDRESS:

3915 Coolidge Ave Baltimore MD 21229 USA

TELEPHONE:

(410) 242-2449

EMAIL:

mbufalini@GordianE.com

CONTACT FOR PROJECT INFORMATION:

Michael Bufalini

Same as Above

ADDRESS:

3915 Coolidge Ave Baltimore MD 21229 USA

TELEPHONE:

( 724 ) 630-4106

EMAIL:

mbufalini@GordianE.com

2. Location and Classification

STREET ADDRESS OF PROJECT:

47050 180th Ave, Zumbrota, MN 55992

ZIP CODE:

LEGAL DESCRIPTION:

Attached

The NW/4 of section 7, township 109, range 15 less 4.16 AC exception, Section Goodhue County. PID 39.007.0301

3. Supporting information

NUMBER OF SOLAR COLLECTORS TO BE INSTALLED

4,046

TOTAL SIZE OF PROJECT

1.416 MW DC / 1.000 MW AC

DESCRIBE METHOD OF CONNECTING THE ARRAY TO A BUILDING OR SUBSTATION

The panels will be arranged into rows. Each row of solar panels will connect to an inverter. The inverters will be connected by trenching underground conduit that is housed inside of PVC housing which will be installed two (2) feet below the surface. The conduit will lead to the concrete requirement pad for each garage. The inverters transform the direct current (DC) power generated by the photovoltaic system to alternating current (AC) power, which is then connected to the existing Xcel Energy three phase power distribution line at the point of common coupling (PCC).

Attach signed interconnection agreement

4. Applicant's Affidavit

Under penalty of perjury the following declarations are made:

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. Other information or applications may be required.

Signature: Michael H Bufalini

Digitally signed by Michael H Bufalini  
DN: cn=Michael H Bufalini, o=Michael H Bufalini  
Reason: I am approving this document  
Created: 2018.12.21 15:05:00  
[Date: 2018.12.21 15:05:00 -0500]

Date: 12/21/2018

Print name: Michael Bufalini

owner or authorized agent (circle one)

RECEIVED

JAN 16 2019

# GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

Parcel # \_\_\_\_\_

Permit# \_\_\_\_\_

**PROPERTY OWNER INFORMATION**

Last Name <b>Huneke</b>		First <b>Andrew</b>		Email: <b>huneke.andy@gmail.com</b>
Street Address <b>46433 145th Ave</b>			Phone <b>507-694-1276</b>	
City <b>Zumbrota</b>	State <b>MN</b>	Zip <b>55992</b>	Attach Legal Description as Exhibit "A" <input type="checkbox"/>	
Authorized Agent <b>Michael Bufalini</b>			Phone <b>724-630-4106</b>	
Mailing Address of Landowner: <b>46433 145th Ave, Zumbrota MN, 55992</b>				
Mailing Address of Agent: <b>3519 Coolidge Ave, Baltimore MD 21229</b>				

**PROJECT INFORMATION**

Site Address (if different than above): <b>47050 180th Ave, Zumbrota, MN 55992</b>	
Lot Size <b>150.2 acres</b>	Structure Dimensions (if applicable) <b>8 acres</b>
What is the conditional/interim use permit request for? <b>Ground-Mounted SES</b>	
Written justification for request including discussion of how any potential conflicts with existing nearby land uses will be minimized  <b>See Exhibit J</b>	

**DISCLAIMER AND PROPERTY OWNER SIGNATURE**

*I hereby swear and affirm that the information supplied to Goodhue County Land Use Management Department is accurate and true. I acknowledge that this application is rendered invalid and void should the County determine that information supplied by me, the applicant in applying for this variance is inaccurate or untrue. I hereby give authorization for the above mentioned agent to represent me and my property in the above mentioned matter.*

Signature of Landowner:	Date
Signature of Agent Authorized by Agent:	

**TOWNSHIP INFORMATION**

Township Zoning Permit Attached?  If no please have township complete below:

By signing this form, the Township acknowledges being made aware of the request stated above. In no way does signing this application indicate the Township's official approval or denial of the request.

Signature	Title	Date
-----------	-------	------

Comments:

**COUNTY SECTION**      COUNTY FEE \$**350**      RECEIPT # \_\_\_\_\_      DATE PAID \_\_\_\_\_

Applicant requests a CUP/IUP pursuant to Article \_\_\_\_ Section \_\_\_\_ Subdivision \_\_\_\_ of the Goodhue County Zoning Ordinance

What is the formal wording of the request?

Shoreland \_\_\_\_\_ Lake/Stream Name \_\_\_\_\_ Zoning District \_\_\_\_\_  
 Date Received \_\_\_\_\_ Date of Public Hearing \_\_\_\_\_ DNR Notice \_\_\_\_\_ City Notice \_\_\_\_\_

Action Taken: \_\_\_\_ Approve    \_\_\_\_ Deny    Conditions:

# GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

Parcel # \_\_\_\_\_

Permit# \_\_\_\_\_

PROPERTY OWNER INFORMATION			
Last Name Huneke	First Andrew	Email: huneke.andy@gmail.com	
Street Address 46433 145th Ave		Phone 507-694-1276	
City Zumbrota	State MN	Zip 55992	Attach Legal Description as Exhibit "A" <input type="checkbox"/>
Authorized Agent Michael Bufalini		Phone 724-630-4106	
Mailing Address of Landowner: 46433 145th Ave, Zumbrota MN, 55992			
Mailing Address of Agent: 3519 Coolidge Ave, Baltimore MD 21229			
PROJECT INFORMATION			
Site Address (if different than above): 47050 180th Ave, Zumbrota, MN 55992			
Lot Size 150.2 acres	Structure Dimensions (if applicable) 8 acres		
What is the conditional/interim use permit request for? Ground-Mounted SES			
Written justification for request including discussion of how any potential conflicts with existing nearby land uses will be minimized See Exhibit J			
DISCLAIMER AND PROPERTY OWNER SIGNATURE			
<i>I hereby swear and affirm that the information supplied to Goodhue County Land Use Management Department is accurate and true. I acknowledge that this application is rendered invalid and void should the County determine that information supplied by me, the applicant in applying for this variance is inaccurate or untrue. I hereby give authorization for the above mentioned agent to represent me and my property in the above mentioned matter.</i>			
Signature of Landowner: <i>Andrew Huneke</i>		Date 12-18-2018	
Signature of Agent Authorized by Agent: <i>M.H. Bufalini</i>			
TOWNSHIP INFORMATION			
Township Zoning Permit Attached? <input type="checkbox"/> If no please have township complete below:			
By signing this form, the Township acknowledges being made aware of the request stated above. In no way does signing this application indicate the Township's official approval or denial of the request.			
Signature	Title	Date	
Comments:			
COUNTY SECTION			
COUNTY FEE \$350 _____ RECEIPT # _____ DATE PAID _____			
Applicant requests a CUP/IUP pursuant to Article _____ Section _____ Subdivision _____ of the Goodhue County Zoning Ordinance			
What is the formal wording of the request?			
Shoreland _____ Lake/Stream Name _____ Zoning District _____			
Date Received _____ Date of Public Hearing _____ DNR Notice _____ City Notice _____			
Action Taken: _____ Approve _____ Deny _____ Conditions:			

## GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

**PROJECT SUMMARY**

Please provide answers to the following questions in the spaces below. If additional space is needed, you may provide an attached document.

1. Description of purpose and planned scope of operations (including retail/wholesale activities).

---

See Exhibit J

---

2. Planned use of existing buildings and proposed new structures associated with the proposal.

---

See Exhibit J

---

3. Proposed number of non-resident employees.

---

N/A

---

4. Proposed hours of operation (time of day, days of the week, time of year) including special events not within the normal operating schedule.

---

See Exhibit J

---

5. Planned maximum capacity/occupancy.

---

N/A

---

6. Traffic generation and congestion, loading and unloading areas, and site access.

---

See Exhibit J

---

7. Off-street parking provisions (number of spaces, location, and surface materials).

---

See Exhibit J

---

8. Proposed solid waste disposal provisions.

---

See Exhibit J

---

9. Proposed sanitary sewage disposal systems, potable water systems, and utility services.

---

See Exhibit J

---

10. Existing and proposed exterior lighting.

---

See Exhibit J

---

11. Existing and proposed exterior signage.

---

See Exhibit J

---

12. Existing and proposed exterior storage.

---

See Exhibit J

---

13. Proposed safety and security measures.

---

See Exhibit J

---

14. Adequacy of accessibility for emergency services to the site.

---

See Exhibit J

---

15. Potential for generation of noise, odor, or dust and proposed mitigation measures.

---

See Exhibit J

---

16. Anticipated landscaping, grading, excavation, filling, and vegetation removal activities.

---

See Exhibit J

---

17. Existing and proposed surface-water drainage provisions.

---

See Exhibit J

---

18. Description of food and liquor preparation, serving, and handling provisions.

---

N/A

---

19. Provide any other such information you feel is essential to the review of your proposal.

---

N/A

---

Pine Island Township Conditional Use Permit

Pine Island Township grants a variance to Andrew Huneke for the purpose

of an extension of solar garden on the date of 1/03/19.

M.A. Baffini (Recipient)

Glen Betches (Chairman Pine Island Township)

David A. Arndt (Clerk Pine Island Township)

Comments:



## Exhibit E - Equipment Specifications

The 1.000MW solar PV project is rated to 1.000 MW AC/ 1.416 MW DC.

The system consists of the following:

- A. 4046 modules (REC Solar REC350TP 72, 350W, 1000V modules) feed into inverters.
- B. 17 inverters (CHINT SCA60KTL-DO/US, 480 inverter W/integrated DC and AC disconnects) which feed into 3 MLO panels.
- C. Low voltage switchgear- 1600A, 480V, 3 phase, 4 wire, 3R which is connected to the 480V side of the step-up transformer.
- D. Step up three phase pad mounted transformer- 1.5MVA, 12.47kV:480V, 5.32%
- E. Zig-zag grounding transformer on the 480V side

The 4046 modules are divided into strings and each string has 18 modules.

· Each inverter has up to 14 string input of 18 modules each.

The following attachments are the single line electrical drawings and equipment specs as well as the data sheets for the manufacturers.



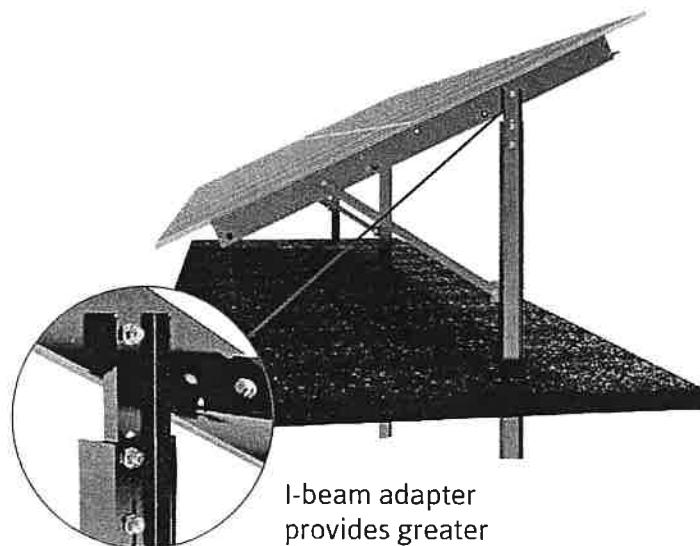
# CONTOUR DB

The numerous benefits of DCE Solar's Contour DB result in the lowest system cost.

- » Single point purlin connection creates unmatched system compatibility with grade
- » Integrated wire support system
- » Integrated array grounding
- » Industry leading installation time

## Driven Beam

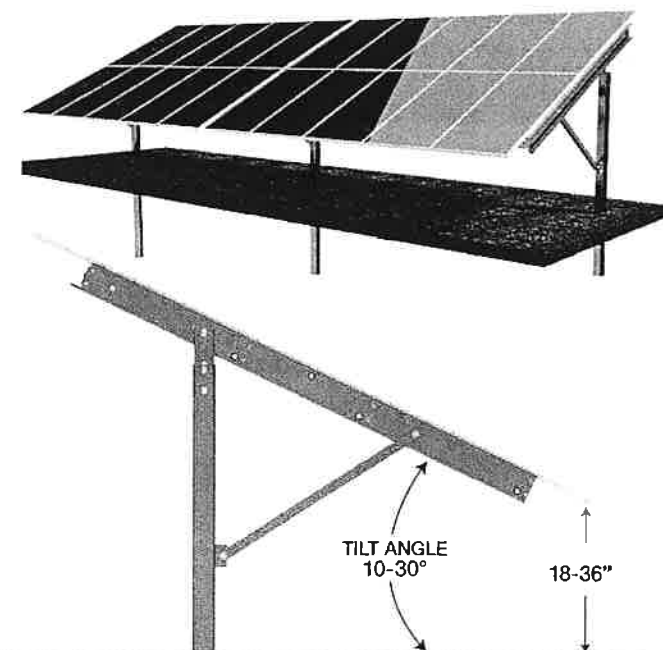
Rugged and economical I-beam foundation provides a flexible solution for all conditions, including rocky soils.



I-beam adapter provides greater vertical adjustment

## Grounding and Bonding

Grounding and bonding via serrated hardware certified to UL 2703 (listing available upon request).



TILT ANGLE  
10-30°

18-36"



## Exhibit J - Conditional Use Permit

Friday, December 21, 2018  
Goodhue County  
Attn: Michael Wozniak, Planning Supervisor  
509 W 5<sup>th</sup> Street  
Red Wing, MN 55066

MN 121819, LLC (MN 121819) is requesting a Conditional Use Permit for a one-Megawatt Alternate Current photovoltaic community solar garden with service period of 25-35 years. The Utility Scale community solar garden is going to cover 8 acres of land the following described 105.2-acre parcel of land owned by Andrew J. Huneke and Kim Y. Huneke, PID 38.033.0100; the NW/4 of section 7, township 109, range 15 less 4.16 AC exception, Section Goodhue County. The property is Zoned Agricultural Protection. Commercial Community Solar Gardens are permitted as a conditional use. A property tax bill and assessors report are attached in **Exhibit D** to provide evidence that property taxes are current on the parcel involved in this request.

The site was selected due to its physical characteristics, proximity to existing Xcel Energy electrical infrastructure and distribution lines, zoning and permitting requirements, and landowner participation.

1. Township Recommendation .....	2
2. Design and Interconnection.....	2
3. Construction .....	3
4. Access, Parking, Road Use and Maintenance.....	3
5. Storm Water Management Measures .....	3
6. Operations & Emergency Response .....	3
7. Landscaping.....	4
8. Fire Prevention .....	5
9. Visual Impact Analysis.....	5
10. Decommissioning Plan .....	5
11. Insurance Information .....	8
12. Exhibit List.....	9
13. Appendix A.....	9

# MN121819, LLC

## **1. Township Recommendation:**

MN 121819 is planning to attend a Pine Island Township meeting and will obtain the Township acknowledgement and approval that will be reflected in **Exhibit L**

## **2. Design and Interconnection:**

Each garden will consist of approximately four thousand forty-six (4046) solar panels. The panels are mounted on a steel and aluminum racking structure positioned at a fixed 30° tilt, and generally averages approximately ten (10) feet above grade and will not exceed a maximum height of twenty (20) feet above grade. The racking system is installed in the ground with I-beams that are driven directly into the ground at a depth usually between six (6) feet and ten (10) feet depending on soil conditions. The racking system manufacturer's engineer will provide certification that the design of the foundations and panels are within accepted professional standards, given local soil and climate controls. The equipment is designed to withstand wind up to ninety (90) MPH and sixty pounds per square foot (60 LBS/SF) of snow. Each of the gardens will have one (1) concrete equipment pad, typically less than 320 square feet, to support interconnection and metering equipment. The only proposed grading that will occur is for the roads and concrete equipment pads. Equipment specifications as well as their UL rating are attached as **Exhibit E**.

The panels will be arranged into rows. Each row of solar panels will connect to an inverter. The inverters will be connected by trenched underground conduit that is housed inside of PVC housing which will be installed two (2) feet below the surface. The conduit will lead to the concrete equipment pad for each garden. The inverters transform the direct current (DC) power generated by the photovoltaic system to alternating current (AC) power, which is then connected to the existing Xcel Energy three phase power distribution line at the point of common coupling (PCC).

The solar array will be contained within an area protected by a six-foot chain link fence with one foot of barbed wire above it. Construction of this system will not create any noise, odor, dust, or any other pollutants or annoyances to surrounding parcels. There will be 10" x 7" "Danger High Voltage" signs placed around the fence in intervals of 100'. In addition, there will be site emergency contact information, Xcel contact information, and the SRC number posted on the front gate. The solar garden will comply with all applicable state, county, and federal regulations. No exterior lighting is proposed for the project. We will not need the county to provide any services or county personnel.

# MN121819,LLC

### 3. Construction:

MN 121819 would like to begin construction in April 2019 date and complete the project before December 2019. The construction process takes approximately nine months. Operating hours during construction will be 8am-6pm. The site will have a portable toilet for workers. No water supply will be required. A dumpster will be on site during the entire construction process and will be serviced periodically for any waste debris that may come as a result of construction. Any materials will be stored and locked in storage containers that are placed on site and part of the access road turnaround. Large flatbed and delivery trucks will be delivering heavy machinery and equipment to the site periodically throughout the construction process. In addition, crews in passenger vehicles, pickup trucks, bobcats and skid steer loaders on tracks will be used on site almost daily. MN 121819 will use appropriate temporary (construction-related) erosion and sediment control best management practices (BMP) through construction. MN 121819 agrees to the Site Rules attached as **Exhibit F**.

### 4. Access, Parking, Road Use and Maintenance:

Construction and operation and maintenance crews will access to the site by a proposed twelve (12) foot wide gravel road that has a forty (40) foot entrance off 180<sup>th</sup> Avenue on the ~~East~~ part of the property. Road access will be controlled for erosion control during construction compliant with the methods used for storm water management. Construction crew parking will be located entirely within the site. No additional permanent parking is required. Maintenance crews will park within the site access road and turnaround area.

West

### 5. Storm Water Management Measures

Storm water management measures will be determined by EVS, a licensed civil engineering firm. They are a Minnesota based company with an enormous amount of experience designing solar arrays. Measures will include an analysis of the existing topography since no substantial grading will be required, the use of erosion control logs and silt fences where necessary, and establishment of a germinated pollinator friendly vegetative base underneath the project site before construction begins to prevent erosion.

### 6. Operations & Emergency Response:

The solar garden site will operate and be monitored 24 hours a day, 365 days a year after construction has been completed. It will be monitored remotely through

# MN121819,LLC

a computer data acquisition system (DAS) so that appropriate personal can be dispatched to investigate potential problems. An operations and maintenance technician will be sent out to the site twice a year to inspect and provide maintenance the modules, electrical equipment, and the array fence. Construction, maintenance and decommissioning of the garden will be conducted in accordance with the MN 121819 Safety Manual, which is attached as **Exhibit G** as well as a Site Specific Safety Plan. The proposed contacts for emergency response as well as ongoing maintenance and operations are local and easily accessible due to the 12 ft wide access road.

Drainage, weeds, screening, general operations:

Mike Bufalini  
Gordian Energy Systems, LLC  
mbufalini@GordianE.com  
724-630-4106

Maintenance, stray voltage and electrical:

Mike Bufalini  
Gordian Energy Systems, LLC  
mbufalini@GordianE.com  
724-630-4106

No chemicals will be used, stored, or disposed of on the modules unless they are certified organic cleaning products.

## **7. Landscaping:**

MN 121819 has voluntarily participated in the Pollination Pledge, in which it has agreed to seed with native pollinator friendly vegetation underneath the panels and in surrounding areas within the project site. Seeding will be done as soon as the weather allows for proper germination. MN 121819 will utilize local companies to maintain the vegetation by mowing as needed and in a manner as to maximize weed and erosion control. Ground cover within the fenced portion of the array will not exceed 24 inches in height and will cover under and between the collectors, surrounding system foundation, and mounting devices. MN 121819 proposes a seed mix design specific to this site based on the parameters and methodology defined by the Minnesota Department of Transportation attached as **Exhibit H**.

# MN121819, LLC

The purpose of the solar garden seed mix will be to:

- Withstand harsh climate conditions
- Minimize maintenance costs
- Minimize erosion
- Improve water quality
- Infiltrate storm water runoff

MN 121819 will be responsible for maintaining the existing drain tile system underneath the array and replacing any damage to tile that occurs during the construction process, or any time prior to or during decommissioning. Existing drain tile lines will be identified upon the completion of the ALTA survey prior to construction.

## **8. Fire Prevention:**

This solar array will meet the requirements of the 2015 International Fire Code, specifically to sections 605.11 – 605.11.2 for clearance, markings and location of underground DC conductors. The solar garden will meet the International Building Code (IBC), National Electric Code (NEC), and local electric and fire code. NEC code is produced by the National Fire Protection Agency (NFPA) with safety of the public, contractors, and firefighters as the objective. Safety is paramount in our solar PV facilities.

## **9. Visual Impact Analysis:**

MN 121819 conducted a site visit and visual analysis of the parcel and adjacent parcels to determine if any nearby properties would suffer substantially from obstructed or impeded views as a result of the proposed project. MN 121819 concluded that the impact is minimal.

## **10. Decommissioning Plan:**

MN 121819 has contractual obligations to the landowner regarding decommissioning arising out of Section 4.4 of the lease. These obligations include removal of all equipment to a depth of 2-3 feet, timelines for removal, owner's rights to remove the solar facility upon failure by the Project Company, and establishment of a monetary security for removal in the form of a bond, escrow, or letter of credit. Section 4.4 of the lease is attached as **Exhibit I**.

# MN121819,LLC

The purpose of the security is to ensure there is sufficient money available to return the project site to an appropriate condition at the end of the project's useful life, or earlier. The landowner will be the designated beneficiary of the fund and will be provided a copy of the document establishing the security before construction commences.

MN 121819 or its successors agree to be responsible for all decommissioning costs and agree that any future buyer or successor of the project will assume the same decommissioning responsibilities. Installation by MN 121819 will be done with no significant or permanent alterations to the land. Upon removal, the project site shall be restored to pre-construction conditions as is reasonably practical, including removal of structures, foundation, and restoration of soil and vegetation. The system will be dismantled and removed using minimal impact construction equipment and materials will be safely recycled or disposed. Appropriate temporary construction-related erosion and sediment control best management practices (BMP) during the decommissioning of the project.

MN 121819 anticipates that decommissioning will occur 25-35 years after the date that the system becomes operational depending on the owner renewal option. All equipment and structures will be removed within ninety (90) days from either of the following: A. The end of the system's serviceable life; or B. the system becomes discontinued. A system shall be considered a discontinued use after one (1) year without energy production, unless a plan is developed and submitted to the Zoning Administrator outlining the steps and schedule for returning the system to service.

The following is a list of assumptions and clarifications to further define the methodology used to establish the scope and values of the removal costs and salvage values.

## General

- The intent of the decommissioning work will be to fully remove the solar facility and restore the site to a stabilized natural condition. Even if the intent is to resume farming, the site will first be fully restored and stabilized.
- The service life of the facility is assumed to be 25 years. All dollar amounts are in present day value, and it is assumed that all values will inflate at a similar rate, therefore, the net comparison of removal cost to salvage value at the end of the service life will remain accurate.

# MN121819,LLC

- Costs associated with this plan represent a “turn key” operation for a general contractor to be hired for this work, including permits, mobilization, contingency, etc.
- Unit costs for each line item have been provided by local contractors familiar with this type of work.
- Haul costs assume a maximum distance of 60 miles between the project and nearest disposal or recycling facility.
- No maximum duration has been assigned for this work. It has been assumed that this work would be handled by a single crew without full time site personnel.

## Civil Infrastructure

- Topsoil used to backfill excavations will be borrowed from adjacent onsite locations. No topsoil import is included.
- Stormwater features such as retention berms or shallow basins with drain tile under drains may remain in place as they do not negatively impact future agricultural land uses and they will continue to provide an environmental benefit to the quality and quantity of offsite runoff.
- Aggregate removal will be the full depth of the aggregate section for roads, equipment pads, and other areas utilizing aggregate. No aggregate will be buried. Includes subgrade scarification prior to backfilling with topsoil.
- Turf establishment includes mulch, fertilizer, and water as necessary to achieve 70% ground cover as required to satisfy the NPDES Construction General Permit.
- Sediment control is priced as silt fence but could also be fiber logs. Location of sediment control will be downslope from exposed soils only in areas where sedimentation offsite or into onsite water bodies can reasonably be expected.

## Structural Infrastructure

- Steel pile foundation removal is assumed to be similar in effort and price to pile installation.
- Steel racking removal is assumed to be similar in effort and price to racking installation.

# MN121819,LLC

## Electrical Infrastructure

- PV modules to be recycled. Assumption is that the modules are 72 cell polysilicon modules about 6' X 3' in dimension.
- Switchgear including transformers will be removed from their respective concrete pads and recycled/returned to the manufacturer.
- DC copper wiring will be dismantled and recycled.
- AC AL wiring, where underground will be dug up, retrieved and recycled.
- On site riser or interconnection poles shall be removed.
- String inverters/combiner boxes are no more than 130 lbs. in weight and not more than 40" X 25" X 12" in dimension. A two-person crew can dismantle a string inverter.
- Transformers are pad mounted and weigh approximately 6500 pounds. These are dry type transformers, so there is no need for any oil disposal.
- Switchgear and the transformer sit on the same concrete pad
- Underground medium voltage wires are generally aluminum and are placed in trenches, in some cases direct buried or in PVC conduits. They can be removed by trenching with a ditch witch

For the estimated cost for decommissioning, please see Schedule of Removal and Restoration Costs in Appendix A.

### **11. Insurance Information:**

MN 121819 or its successor will provide a certificate of insurance meeting the Minnesota State requirements for liability insurance coverage. These requirements include:

- Insurance provider must be rated B+ or better by "Best."
- Limits of \$2,000,000 for each occurrence.
- Coverage against claims for damages resulting from bodily injury, wrongful death, and property damage arising out of the Interconnection Customer's ownership and/or operating of the Generation System under the interconnection agreement.
- Include "Northern States Power Company, a Minnesota Company" as additional insured.
- Contain a severability of interest clause of cross-liability insurance
- Provides for thirty (30) calendar days written notice to NSP prior to cancellation, termination, alteration, or material change of such insurance.
- Coverage provided is primary, and not excess of, contributing to, or combined with, any insurance maintained by NSP.



# MN121819,LLC

We at MN 121819 sincerely appreciate all the help we have received from your staff with regard to our applications and we look forward to collaborating with you further to develop a great project that we can all be proud of.

## **12. Exhibit List:**

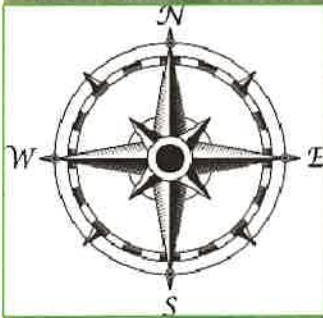
- A. Application Form
- B. Site Plan
- C. Topographic Map
- D. Property Tax Evidence
- E. Equipment Pack
- F. Site Rules
- G. MN 121819, LLC Safety Manual
- H. MN DOT Seeding Guideline
- I. Executed Lease
- J. Conditional Use Permit Summary
- K. Interconnection Application
- L. Township Approval and Documentation
- M. Area M Cultural Report / Wetland Delineation Report

# MN121819,LLC

## Appendix A

### Schedule of Removal and Restoration Costs

	Quantity	Units	\$/Unit	Cost	Notes
<b>Civil Infrastructure</b>					
					remove full section of aggregate road, structural concrete base material, and surfacing around equipment pads
aggregate removal	180	CY	\$4.00	\$720.00	
aggregate haul and offsite disposal	180	CY	\$6.00	\$1,080.00	
geotextile removal under aggregate roads	550	SY	\$0.05	\$27.50	
geotextile haul and offsite disposal	550	SY	\$0.05	\$27.50	
topsoil backfill	180	CY	\$12.00	\$2,160.00	onsite relocation of topsoil to backfill road and equipment pad excavations
culvert removal	1	each	\$1,200.00	\$1,200.00	remove CMP of approximate 30' length with no greater than 2' of cover
culvert haul and offsite disposal	1	each	\$100.00	\$100.00	
chainlink fence removal	1900	LF	\$6.00	\$11,400.00	includes fence mesh, post framing, concrete foundations, etc
chainlink fence haul and offsite disposal	1900	LF	\$3.00	\$5,700.00	
reinforced concrete equipment pad removal	1	EA	\$500.00	\$500.00	
concrete waste haul and offsite disposal	1	CY	\$500.00	\$500.00	
site grading	1	AC	\$8,000.00	\$8,000.00	grading smooth all areas disturbed by removals, excavations, etc
turf establishment	1	AC	\$1,000.00	\$1,000.00	seed and mulch all areas disturbed by removals, excavations, etc
sediment control	0	LF	\$2.00	\$0.00	silt fence
<b>Structural Infrastructure</b>					
steel pile foundation removal	550	EA	\$13.00	\$7,150.00	
steel pile foundation haul and offsite disposal	550	EA	\$3.00	\$1,650.00	
steel racking removal	1	MW	\$5,000.00	\$5,000.00	
steel racking haul and offsite disposal	1	MW	\$700.00	\$700.00	
<b>Electrical Infrastructure</b>					
Removal of Solar modules	4104	EA	\$8.00	\$32,832.00	
Removal of string inverters/combiners	17	EA	\$60.00	\$1,020.00	
Removal of switchgear/Xfmr	1	EA	\$1,500.00	\$1,500.00	
Removal of Riser and Interconnection poles	0	EA	\$1,000.00	\$0.00	
Removal of SCADA/Aux panel/weather station	1	EA	\$500.00	\$500.00	
Removal of medium voltage AL cables	1	MW	\$2,000.00	\$2,000.00	
Removal of fiber optic cables	0	MW	\$500.00	\$0.00	
<b>General</b>					
permits	1	ea	\$ 3,000.00	\$ 3,000.00	NPDES Construction General Permit and SWPPP preparation
				\$ 87,767.00	
Total Salvage Value				86126	
Decommission - Salvage Value:				\$ (1,641.00)	



MN121819,LLC  
 3915 COOLIDGE AVE.  
 BALTIMORE, MARYLAND 21229  
 410-242-2449

PROJECT ADDRESS: 47050 180th Avenue  
 Zumbrota MN 55992  
 LAT: 44°16'01.7"N  
 LON: 92°40'10.7"W

SYSTEM	SPECIFICATION
System size DC	1,416 MW
System size AC	1,000 MW
DC/AC RATIO	1.415
AZIMUTH	180
TILT	30
MODULE COUNT	4,048
MODULE TYPE	REC 360TP72
MODULE STC RATING	350 W
INVERTER COUNT	17
INVERTER TYPE	CPS SC60KLT-DO/US-POWER LIMITED TO 1MW AC
INVERTER POWER	60KW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA	
MIN/MAX TEMP.	-28 C/32 C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
EXPOSURE CATEGORY	50 PSF
BUILDING HEIGHT	0'-0"

**OTHER NOTES:**  
 NO POSITION, DISTANCE OR CLEARANCE ISSUES WITH OVERHEAD ELECTRICAL SERVICE LINES OR OTHER UTILITIES IN RELATION TO THE PV PANELS.  
 24-7 UNESCORTED KEYLESS ACCESS PROVIDED FOR THE METERS AND AC DISCONNECT.  
 EXISTING VEGETATION: PLOWED FIELDS  
 NO WETLANDS  
 NO TREES REMOVED  
 7.31 ACRE SITE ZONED A-1

REVISIONS			
#	DESCRIPTION	BY	DATE
0	CAPACITY STUDY DESIGN	S.B.J	5/16/18
1	INTERCONNECTION COMMENTS	W.R.J	12/7/18
2	CLIP SUBMISSION	W.R.J	12/21/18
3			
4			
5			
6			
7			

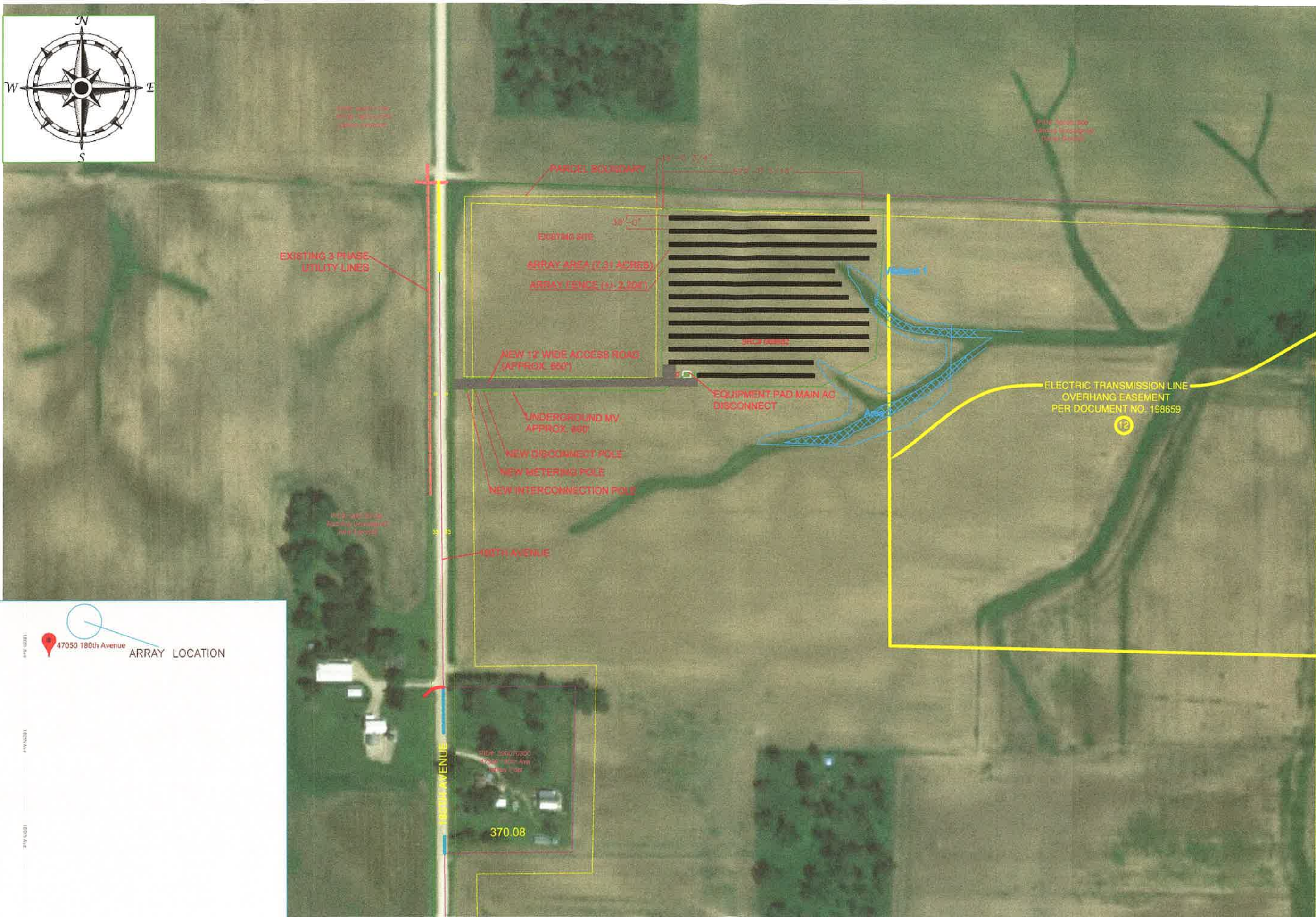
DRAWN BY:  
 SEAN BRANCH JR.

PROJECT NAME:  
 Huneke CSG 2  
 SRC#068984

DRAWING TITLE:  
 SITE PLAN

SCALE:

SHEET:  
 PV1



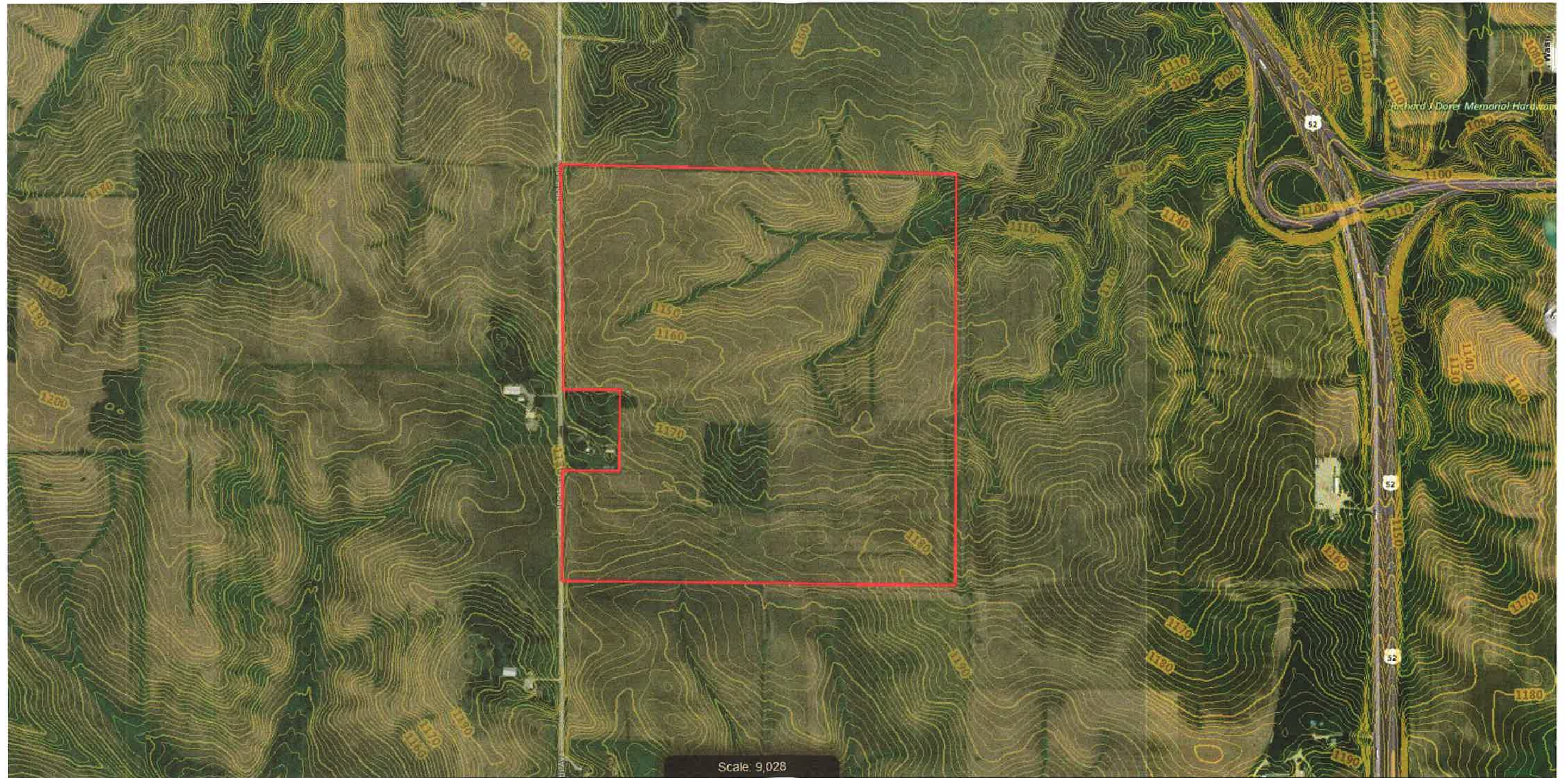
**ARRAY LOCATION**

47050 180th Avenue

370.08

# Exhibit C - Topographical Map

**Topographical Map, 47050 180<sup>th</sup> Avenue, Zumbrota, MN 55992**



# Goodhue County Land Use Management

Goodhue County Government Center | 509 West Fifth Street | Red Wing, Minnesota 55066

*Lisa M. Hanni, L.S. Director*

Building | Planning | Zoning  
Telephone: 651.385.3104  
Fax: 651.385.3106



*County Surveyor / Recorder*

Environmental Health | Land Surveying | GIS  
Telephone: 651.385.3223  
Fax: 651.385.3098

**To:** Planning Commission  
**From:** Land Use Management  
**Meeting Date:** February 11, 2019  
**Report date:** February 1, 2019

**HUNEKE 2**

## **PUBLIC HEARING: Request for CUP for a Utility-Scale Solar Energy System (SES)**

Request for a CUP submitted by MN 121819 LLC (applicant) and Andrew and Kim Huneke (owners) for a Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 10.4 acres. Parcel 38.033.0100. TBD ST HWY 60, Zumbrota, MN 55992. Part of the E 1/2 of the NE 1/4 of Sect 33 Twp 110 Range 16 in Minneola Township. A1 Zoned District.

### **Application Information:**

Applicant: MN 121819 LLC (applicant) and Andrew and Kim Huneke (owners)

Address of zoning request: TBD ST HWY 60, Zumbrota, MN 55992

Parcel(s): 38.033.0100

Abbreviated Legal: Part of the E 1/2 of the NE 1/4 of Sect 33 Twp 110 Range 16 in Minneola Township

Township Information: Minneola Township acknowledged the CUP and approved a Township

Permit for the request on 1/8/2019.

Zoning District: A1 (Agriculture District)

### **Attachments and links:**

Application and submitted project summary

Site Map(s)

Goodhue County Zoning Ordinance (GCZO):

<http://www.co.goodhue.mn.us/DocumentCenter/View/2428>

### **Background:**

The applicant has submitted a CUP request to construct and operate a one (1) Megawatt (MW) photovoltaic (PV) utility-scale solar garden on up to 10.42 acres of leased land located in Minneola Township that is currently owned by Andrew Huneke and Kim Huneke. The project would be developed in conjunction with the State of Minnesota Solar Garden program and Xcel Energy's Solar Rewards Community Program. The program allows developers to design, permit, own, and operate solar energy systems and sell the generated power directly to consumers. Upon completion, the "USS Solar Greenhouse LLC" Solar Garden would connect to Xcel Energy's distribution grid and generate up to 1 MW of energy annually over the next 30 years.

Per Goodhue County regulations, Solar Energy Systems (SES) that are the primary use of the land and are designed to primarily provide energy to off-site users or export to the wholesale market may be conditionally permitted as a "Utility-Scale SES" within the County's A1 zoned districts.

### **Goodhue County Zoning Ordinance: Article 4 Conditional/Interim Uses**

*No CUP/IUP shall be recommended by the County Planning Commission unless said Commission specifies facts in their findings for each case which establish the proposed CUP/IUP will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, will not substantially diminish and impair property values within the immediate vicinity, will not impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area, that adequate measures have been, or will be, taken to provide utilities, access roads, drainage and other necessary facilities, to provide sufficient off-street parking and loading space, to control offensive odor, fumes, dust, noise and vibration so that none of these will constitute a nuisance, and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result.*

"To effectively promote the safety, health, and well-being of our residents"

[www.co.goodhue.mn.us](http://www.co.goodhue.mn.us)

## **Project Summary:**

### **Property Information:**

- The approximately 10.42-acre site to be leased by the applicant is currently used for row-crop agriculture (corn and soybeans) by the owner.

Land use on the 72.97 acre parcel includes another one (1) Megawatt (MW) photovoltaic PV utility scale solar garden situated immediately north of the proposed site on approximately 8 acres. A CUP for this solar project that was developed by Innovative Power Systems was approved by the County Board in February, 2017 and the project has since been constructed (see enclosed site map). The balance of the property is comprised of tilled cropland.

Adjacent land uses include agriculture and low-density residential.

The nearest residence (Parcel #380341100 – Jon P Yusten) is located 337 feet from the proposed facility. There are existing trees and other vegetative cover that partially screens the proposed site from the Yusten property and the Bruce W Goodman property (Parcel #380341300) located southeast of the proposed site.

- Section 33 and all of the surrounding Sections are located within the County's A1 (Agriculture Protection) Zone.
- The major equipment components of the project are solar panels, inverters, and racking.

### **Solar Array:**

- The solar array is proposed to include 4046 solar panels. The panels are mounted on a steel and aluminum racking structure positioned a fixed 30 degree tilt, and generally averages ten (10) feet above grade and will not exceed a maximum height of twenty (20) feet above grade.
- The racking system is installed in the ground with I-beams that are driven directly into the ground at a depth usually between six (6) feet and ten (10) feet depending on soil conditions.
- The only proposed grading that will occur is for the roads and concrete equipment pads.
- The panels will be arranged into rows. Each row of solar panels will connect to an inverter. The inverters will be connected by trenched underground conduit that is housed inside of PVC housing which will be installed two (2) feet below the surface.
- The inverters transform the direct current (DC) power generated by the photovoltaic system to alternating current (AC) power, which is then connected to the existing Xcel Energy three phase power distribution line at the point of common coupling (PCC).
- MN 121819 would like to begin construction in April 2019 and complete the project before December 2019. The construction process takes approximately nine months.
- Construction, operation and maintenance crews will access the site by a proposed twelve (12) foot wide gravel road that has a forty (40) foot entrance off MN-60 on the north side of the property.
- A recorded ingress/egress easement is not required for the property given the site is to be leased and all land to be crossed to access the site will remain under common ownership.

A separate fire number will be required for the site.

- Adequate emergency vehicle access is available to service the location.

The access route would be composed of crushed aggregate to facilitate emergency vehicle access in inclement weather conditions.

- The solar garden is sited to comply with all GCZO setback requirements for solar energy systems.

### **Landscaping/Drainage:**

- Storm water management measures will be determined by EVS, a licensed civil engineering firm. They are a Minnesota based company with an enormous amount of experience designing solar arrays. Since no substantial grading will be required, the use of erosion control logs and silt fences where necessary, and establishment of a germinated pollinator friendly base underneath the project site before construction begins to prevent erosion. The project will be subject to

National Pollution Discharge Elimination System (NPDES)/Storm water discharge permit requirements as administered by the Minnesota Pollution Control Agency. Land Use Management Department Staff will confirm that, these requirement have been met by the applicant during the Building Permit review.

- The applicant has included a Level 1 Wetland Delineation Report for the Huneke 1 Project, prepared by Area M Consulting (Area M). It is the professional opinion of Area M that the Study Area does not contain areas that satisfy the criteria to be wetlands. They note that only state, federal, or local agencies have final authority over wetland extent and jurisdictional status.

Beau Kennedy of the Goodhue SWCD (Wetlands Coordinator) has indicated that “no official wetland determination has been made for this project area. However past delineations for this site did show a wetland to the north of the solar facility that was installed in 2018. I would concur with the wetland report submitted with the CUP that no wetlands are present in this proposals project area.”

- Aside from the gravel access road and meter pad, the entire area within the fenced project boundary will be restored to a low-maintenance seed mix, including the area below the solar panels. The Applicant has been asked to specify the seed mix prior to County approval of the CUP. Mike Bufulini with Gordian Energy, a representative of the Applicant has indicated that information regarding the specific seed mix to be used will be provided prior to the Planning Advisory Commission meeting on February 11.
- The solar array will be contained within an area protected by a six-foot chain link fence with one foot of barbed wire above it.
- Ample room exists on the property to fulfill GCZO off-street parking requirements.

#### **Maintenance/Decommissioning:**

- The project is subject to issuance of a Building Permit and must be constructed according to applicable building code requirements. The project will be inspected by County Building Inspections Staff and the State Electrical Inspector. In addition, Planning and Zoning Staff will inspect the project upon completion to ensure conformance with applicable zoning requirements.
- MN121819, LLC, has indicated that the solar garden site will operate and be monitored 24 hours a day, 365 days a year after construction has been completed. A description of proposed Operations and Emergency Response plans and contact personnel has been included in Exhibit J.
- The Applicant has contractual obligations to the landowner regarding decommissioning arising out of Section 4.4 of the “LAND LEASE AND SOLAR EASEMENT” between the property owners (Andrew J. Huneke and Kim Y. Huneke) and MN121819 LLC. These obligations include a provision for “Security for Removal”. Per GCZO Article 19, the applicant may be required to provide a financial surety at up to 125% of the estimated decommissioning cost. The county has not typically exercised the right to financial assurance requirements for similar solar installations. The Planning Advisory Commission and County Board will need to decide if the County will require financial assurance to cover anticipated decommissioning costs.
- The Applicant has prepared a Decommissioning Agreement between MN 121819 LLC and Andrew Huneke and Kim Huneke that includes removal of all equipment to a depth of 2-3 feet, timelines for removal, and the establishment of a financial security. The Applicant has estimated total costs for decommissioning to be \$87,767 and has estimated the salvage value of reclaimed materials to be \$86,126.
- Per GCZO Article 19, the applicant may be required to provide a financial surety at up to 125% of the estimated decommissioning cost. The county has not typically exercised the right to financial assurance requirements for similar solar installations. The Planning Advisory Commission and County Board will need to decide if the County will require financial assurance to cover anticipated decommissioning costs.

**Draft Findings of Fact:**

*The following staff findings shall be amended to reflect concerns conveyed during the PAC meeting and public hearing.*

1. The proposed Solar Garden does not appear injurious to the use and enjoyment of properties in the immediate vicinity for uses already permitted, nor would it substantially diminish and impair property values in the immediate vicinity. The use appears harmonious with the established uses in the vicinity. There is an existing Solar Garden existing directly south of the subject site that has been functioning without record of complaint from neighboring residences.
2. The establishment of the proposed Solar Garden is not anticipated to impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area. The use is proposed to meet all development standards of the Goodhue County Zoning Ordinance and it does not appear incompatible with adjacent land uses.
3. A review of the applicants submitted project summary indicates adequate utilities, access roads, drainage, and other necessary facilities are available to accommodate the proposed use.
4. The submitted plans identify means to provide sufficient off-street parking and loading space to serve the proposed use and meet the Goodhue County Zoning Ordinance's parking requirements.
5. The submitted plans detail adequate measures to prevent or control offensive odor, fumes, dust, noise, and vibration so that none of these will constitute a nuisance. Furthermore, the applicants' lighting plans appear capable of controlling lights in such a manner that no disturbance to neighboring properties will result.

*Staff recommendation is based on the review of the submitted application and project area prior to the public hearing.*

**Staff Recommendation:**

LUM Staff recommends the Planning Advisory Commission

- 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

Recommend that the County Board of Commissioners **APPROVE** the request for a CUP submitted by MN 121819 LLC (applicant) and Andrew and Kim Huneke (owners) for a Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 10.42 acres.

Subject to the following conditions:

1. Activities shall be conducted according to submitted plans, specifications, and narrative unless modified by a condition of this CUP;
2. The project shall be decommissioned according to Article 19 Section 6 of the Goodhue County Zoning Ordinance and submitted plans;
3. A decommissioning agreement between the landowner and MN 121819 LLC shall be maintained to ensure reclamation of the area;
4. LUM staff shall be notified by the landowner or solar company 30 days prior to ownership transfer or operator changes;
5. A storm water management and erosion control plan shall be submitted for administrative review as part of the Building Permit Application for the project;
6. Applicants shall work with the Goodhue County Soil and Water Conservation District to determine an appropriate seed mix to establish on disturbed areas of the site;
7. Applicants shall obtain Building Permit approvals from the Goodhue County Land Use Management Department prior to establishing the use;
8. Compliance with Goodhue County Zoning Ordinance including, but not limited to, Article 19 Solar Energy Systems (SES) and Article 21 (Agriculture Protection District). The applicant shall request a final inspection of the project for compliance with applicable zoning requirements upon completion of the project;



9. Compliance with all necessary State and Federal registrations, permits, licensing, and regulations;
10. This CUP shall expire 30 years from the date of approval unless terminated prior to that date.

**Planning Advisory Commission**

Public Hearing  
February 11, 2019

MN121819 LLC  
A1 Zoned District

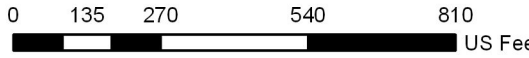
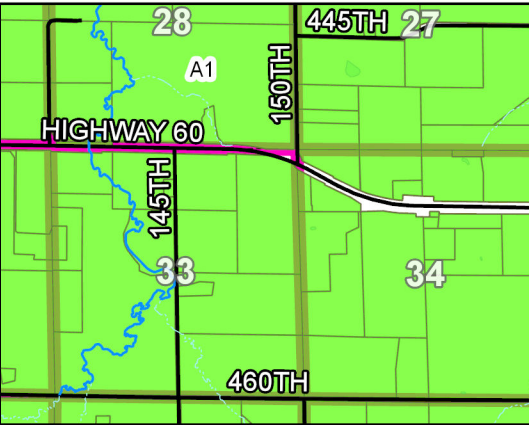
Parcel 38.033.0100  
E1/2 of NE 1/2 of Sec 33 Twp 110  
Range 16 in Minneola Township

Request for Utility-Scale Photovoltaic  
Ground 1 Megawatt Solar Energy System



**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 Created January, 2019 by LUM



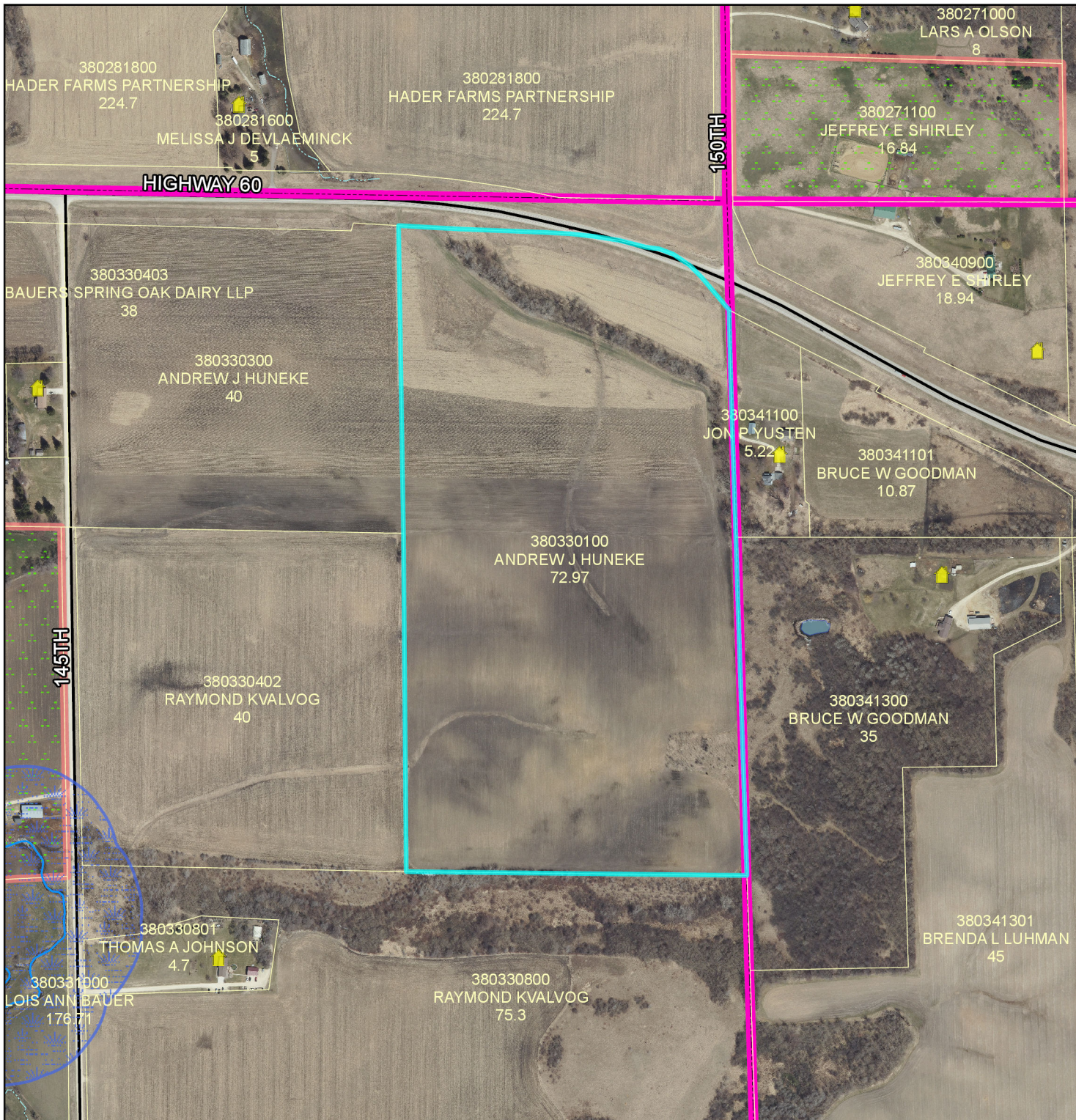
# Planning Advisory Commission

Public Hearing  
February 11, 2019

MN121819 LLC  
A1 Zoned District

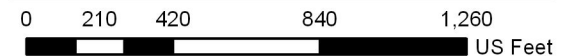
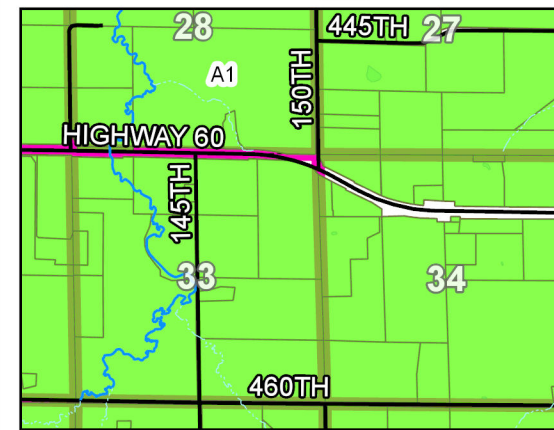
Parcel 38.033.0100  
E1/2 of NE 1/2 of Sec 33 Twp 110  
Range 16 in Minneola Township

Request for Utility-Scale Photovoltaic  
Ground 1 Megawatt Solar Energy System



## Legend

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



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2016 Aerial Imagery  
Map Created January, 2019 by LUM



RECEIVED

JAN 16 2019

Application for Solar Energy System

2

Permit NUMBER:  
For Staff Use only

Z19-0002

Land Use Management

APPLICATION FOR

Solar Energy System Application

1. Owner/Applicant Information

PROPERTY OWNER'S NAME:

Andrew Huneke and Kim Huneke

PROPERTY OWNER'S ADDRESS:

46433 145th Ave, Zumbrota, MN 55992

TELEPHONE:

EMAIL:

APPLICANT OR AUTHORIZED AGENT'S NAME:

MN 121819, LLC

Same as Above

APPLICANT'S ADDRESS:

3915 Coolidge Ave Baltimore MD 21229 USA

TELEPHONE:

EMAIL:

CONTACT FOR PROJECT INFORMATION:

Michael Bufalini

Same as Above

ADDRESS:

3915 Coolidge Ave Baltimore MD 21229 USA

TELEPHONE:

EMAIL:

2. Location and Classification

STREET ADDRESS OF PROJECT:

14766 Highway 60, Zumbrota, MN 55992

ZIP CODE:

LEGAL DESCRIPTION:

PID 3800330300: The NW 1/4 of the NE 1/4 of Section 33, Township 110, Range 16, less 1.99 ac HWY easement, Goodhue County, MN Attached   
PID 380330100: The E 1/2 of the NW 1/4 of Section 33, Township 110, Range 16, less 7.02 ac to State and except 1.37 ac to HWY easement, Goodhue County, MN.

3. Supporting information

NUMBER OF SOLAR COLLECTORS TO BE INSTALLED

4,046

TOTAL SIZE OF PROJECT

1.416 MW DC / 1.000 MW AC

DESCRIBE METHOD OF CONNECTING THE ARRAY TO A BUILDING OR SUBSTATION

The panels will be arranged into rows. Each row of solar panels will connect to an inverter. The inverters will be connected by trenched underground conduit that is housed inside of PVC housing which will be installed two (2) feet below the surface. The conduit will lead to the concrete equipment pad for each garden. The inverters transform the direct current (DC) power generated by the photovoltaic system to alternating current (AC) power, which is then connected to the existing Xcel Energy three phase power distribution line at the point of common coupling (PCC).

Attach signed interconnection agreement

4. Applicant's Affidavit

Under penalty of perjury the following declarations are made:

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. Other information or applications may be required.

Signature: Michael H Bufalini

Digitally signed by Michael H Bufalini  
DN: cn=Michael H Bufalini  
Reason: I am approving this document  
Created: 2018.12.21 14:51:41-0500  
Email: 2018.12.21 14:51:41-0500

Date: 12/21/2018

Print name: Michael Bufalini owner or authorized agent (circle one)

# GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

Parcel # \_\_\_\_\_

Permit# \_\_\_\_\_

### PROPERTY OWNER INFORMATION

Last Name <b>Huneke</b>		First <b>Andrew</b>		Email:
Street Address <b>46433 145th Ave</b>				Phone
City <b>Zumbrota</b>	State <b>MN</b>	Zip <b>55992</b>	Attach Legal Description as Exhibit "A" <input type="checkbox"/>	
Authorized Agent <b>Michael Bufalini</b>			Phone <b>724-630-4106</b>	
Mailing Address of Landowner: <b>46433 145th Ave, Zumbrota MN, 55992</b>				
Mailing Address of Agent: <b>3915 Coolidge Ave, Baltimore MD 21229</b>				

### PROJECT INFORMATION

Site Address (if different than above): **14766 Highway 60, Zumbrota, MN 55992**

Lot Size <b>35.5 acres</b>	Structure Dimensions (if applicable) <b>8 acres</b>
----------------------------	---

What is the conditional/interim use permit request for? **Ground-Mounted SES**

Written justification for request including discussion of how any potential conflicts with existing nearby land uses will be minimized  
**See Exhibit J**

### DISCLAIMER AND PROPERTY OWNER SIGNATURE

*I hereby swear and affirm that the information supplied to Goodhue County Land Use Management Department is accurate and true. I acknowledge that this application is rendered invalid and void should the County determine that information supplied by me, the applicant in applying for this variance is inaccurate or untrue. I hereby give authorization for the above mentioned agent to represent me and my property in the above mentioned matter.*

Signature of Landowner: \_\_\_\_\_ Date \_\_\_\_\_

Signature of Agent Authorized by Agent: \_\_\_\_\_

### TOWNSHIP INFORMATION

Township Zoning Permit Attached?  If no please have township complete below:

By signing this form, the Township acknowledges being made aware of the request stated above. In no way does signing this application indicate the Township's official approval or denial of the request.

Signature _____	Title _____	Date _____
-----------------	-------------	------------

Comments:

**COUNTY SECTION** \_\_\_\_\_ **COUNTY FEE \$350** \_\_\_\_\_ **RECEIPT #** \_\_\_\_\_ **DATE PAID** \_\_\_\_\_

Applicant requests a CUP/IUP pursuant to Article \_\_\_\_ Section \_\_\_\_ Subdivision \_\_\_\_ of the Goodhue County Zoning Ordinance

What is the formal wording of the request?

Shoreland \_\_\_\_\_ Lake/Stream Name \_\_\_\_\_ Zoning District \_\_\_\_\_

Date Received \_\_\_\_\_ Date of Public Hearing \_\_\_\_\_ DNR Notice \_\_\_\_\_ City Notice \_\_\_\_\_

Action Taken: \_\_\_\_ Approve \_\_\_\_ Deny Conditions:

# GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

Parcel # \_\_\_\_\_

Permit# \_\_\_\_\_

PROPERTY OWNER INFORMATION			
Last Name Huneke	First Andrew	Email: _____	
Street Address 46433 145th Ave		Phone _____	
City Zumbrota	State MN	Zip 55992	Attach Legal Description as Exhibit "A" <input type="checkbox"/>
Authorized Agent Michael Bufalini		Phone _____	
Mailing Address of Landowner: 46433 145th Ave, Zumbrota MN, 55992			
Mailing Address of Agent: 3519 Coolidge Ave, Baltimore MD 21229			
PROJECT INFORMATION			
Site Address (if different than above): 14766 Highway 60, Zumbrota, MN 55992			
Lot Size 35.5 acres	Structure Dimensions (if applicable) 8 acres		
What is the conditional/interim use permit request for? Ground-Mounted SES			
Written justification for request including discussion of how any potential conflicts with existing nearby land uses will be minimized See Exhibit K			
DISCLAIMER AND PROPERTY OWNER SIGNATURE			
<i>I hereby swear and affirm that the information supplied to Goodhue County Land Use Management Department is accurate and true. I acknowledge that this application is rendered invalid and void should the County determine that information supplied by me, the applicant in applying for this variance is inaccurate or untrue. I hereby give authorization for the above mentioned agent to represent me and my property in the above mentioned matter.</i>			
Signature of Landowner: <u>Andrew Huneke</u>		Date <u>12-18-2018</u>	
Signature of Agent Authorized by Agent: <u>M.H. EPA</u>			
TOWNSHIP INFORMATION			
Township Zoning Permit Attached? <input type="checkbox"/> If no please have township complete below:			
By signing this form, the Township acknowledges being made aware of the request stated above. In no way does signing this application indicate the Township's official approval or denial of the request.			
Signature _____	Title _____	Date _____	
Comments:			
COUNTY SECTION			
COUNTY FEE \$350	RECEIPT # _____	DATE PAID _____	
Applicant requests a CUP/IUP pursuant to Article _____ Section _____ Subdivision _____ of the Goodhue County Zoning Ordinance			
What is the formal wording of the request?			
Shoreland _____	Lake/Stream Name _____	Zoning District _____	
Date Received _____	Date of Public Hearing _____	DNR Notice _____	City Notice _____
Action Taken: _____ Approve _____ Deny _____ Conditions:			



GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

**PROJECT SUMMARY**

Please provide answers to the following questions in the spaces below. If additional space is needed, you may provide an attached document.

1. Description of purpose and planned scope of operations (including retail/wholesale activities).

See Exhibit J

2. Planned use of existing buildings and proposed new structures associated with the proposal.

See Exhibit J

3. Proposed number of non-resident employees.

N/A

4. Proposed hours of operation (time of day, days of the week, time of year) including special events not within the normal operating schedule.

See Exhibit J

5. Planned maximum capacity/occupancy.

N/A

6. Traffic generation and congestion, loading and unloading areas, and site access.

See Exhibit J

7. Off-street parking provisions (number of spaces, location, and surface materials).

See Exhibit J

8. Proposed solid waste disposal provisions.

See Exhibit J

9. Proposed sanitary sewage disposal systems, potable water systems, and utility services.

See Exhibit J

10. Existing and proposed exterior lighting.

---

See Exhibit J

---

11. Existing and proposed exterior signage.

---

See Exhibit J

---

12. Existing and proposed exterior storage.

---

See Exhibit J

---

13. Proposed safety and security measures.

---

See Exhibit J

---

14. Adequacy of accessibility for emergency services to the site.

---

See Exhibit J

---

15. Potential for generation of noise, odor, or dust and proposed mitigation measures.

---

See Exhibit J

---

16. Anticipated landscaping, grading, excavation, filling, and vegetation removal activities.

---

See Exhibit J

---

17. Existing and proposed surface-water drainage provisions.

---

See Exhibit J

---

18. Description of food and liquor preparation, serving, and handling provisions.

---

N/A

---

19. Provide any other such information you feel is essential to the review of your proposal.

---

N/A

---



**TOWNSHIP ZONING APPLICATION**

**TOWNSHIP NAME** Minneola

Goodhue County

Parcel # 38.033.0100

**APPLICANT INFORMATION**

Last Name <u>Bufalini</u>	First <u>Michael</u>	M.I. <u>H</u>
Street Address <u>4001 Coolidge Avenue</u>		Phone
City <u>Baltimore</u>	State <u>MD</u>	ZIP <u>21229</u>
Email Address		
Township <u>110</u>	Range <u>16</u>	Section <u>33</u>

**PROJECT INFORMATION**

Site Address <u>14766 HWY 60 Zumbrota, MN 55992</u>		
Zoning District	Lot Size	Structure Dimensions <u>10.42 Acres</u>
Type of Project <u>Solar CSG</u>	Proposed Use	
Structure Type	Replacement?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Variance # _____	Conditional Use Permit # _____	
GPS Coordinates		

**DISCLAIMER AND SIGNATURE**

*I hereby apply for a zoning permit and I acknowledge that the information above is complete and accurate, that the work will be in conformance with the ordinances and codes of Goodhue County. The applicant also understands by signing this application he / she could be held responsible as representative of this project for any violation of compliance with all applicable laws and ordinances of Goodhue County. This permit may be suspended or revoked if the permit has been issued in error or on the basis of incorrect information supplied or in violation of any ordinance or regulation of Goodhue County. All provisions of law and ordinances governing this type of work will be complied with whether specified herein or not.*

Signature <u>M.A. Bufalini</u>	Date <u>1/8/19</u>
--------------------------------	--------------------

**TOWNSHIP APPROVALS**

*I hereby certify that the above described project has been approved by the Township Board, and the structure and use will meet all Township Codes and Ordinances if constructed as indicated.*

Signature <u>[Signature]</u>	Title <u>Clerk</u>	Date <u>1-8-2019</u>
Signature <u>[Signature]</u>	Title <u>Chair</u>	Date <u>1-8-2019</u>

Application fee <u>\$800</u>	Receipt Number <u>209891</u>
------------------------------	------------------------------



## Exhibit E - Equipment Specifications

The 1.000MW solar PV project is rated to 1.000 MW AC/ 1.416 MW DC.

The system consists of the following:

- A. 4046 modules (REC Solar REC350TP 72, 350W, 1000V modules) feed into inverters.
- B. 17 inverters (CHINT SCA60KTL-DO/US, 480 inverter W/integrated DC and AC disconnects) which feed into 3 MLO panels.
- C. Low voltage switchgear- 1600A, 480V, 3 phase, 4 wire, 3R which is connected to the 480V side of the step-up transformer.
- D. Step up three phase pad mounted transformer- 1.5MVA, 12.47kV:480V, 5.32%
- E. Zig-zag grounding transformer on the 480V side

The 4046 modules are divided into strings and each string has 18 modules.

· Each inverter has up to 14 string input of 18 modules each.

The following attachments are the single line electrical drawings and equipment specs as well as the data sheets for the manufacturers.



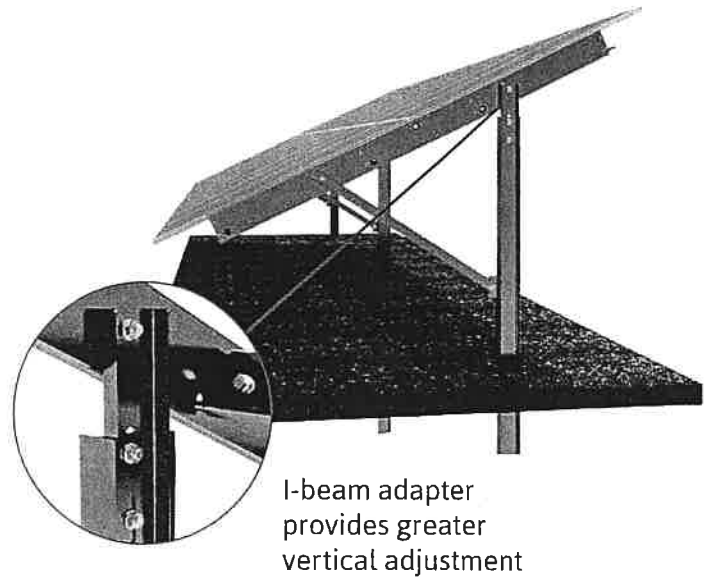
# CONTOUR DB

The numerous benefits of DCE Solar's Contour DB result in the lowest system cost.

- » Single point purlin connection creates unmatched system compatibility with grade
- » Integrated wire support system
- » Integrated array grounding
- » Industry leading installation time

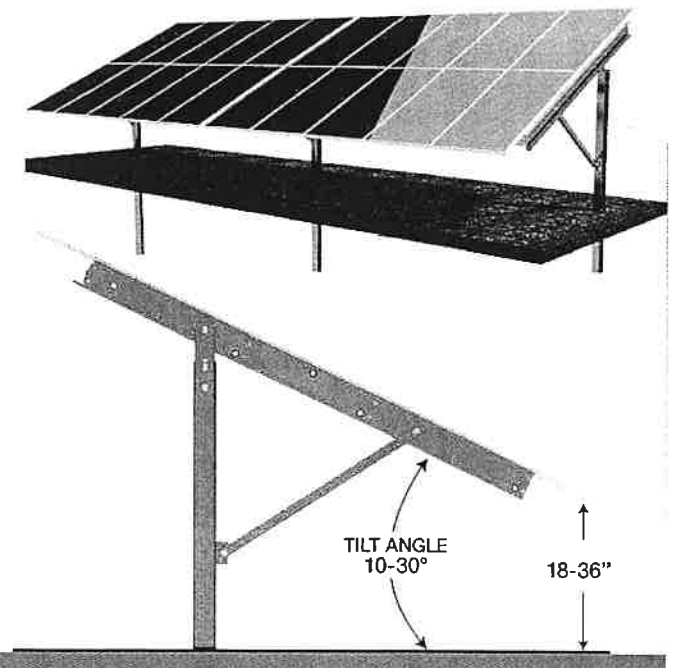
## Driven Beam

Rugged and economical I-beam foundation provides a flexible solution for all conditions, including rocky soils.



## Grounding and Bonding

Grounding and bonding via serrated hardware certified to UL 2703 (listing available upon request).



## Exhibit J - Conditional Use Permit

Friday, December 21, 2018  
Goodhue County  
Attn: Michael Wozniak, Planning Supervisor  
509 W 5<sup>th</sup> Street  
Red Wing, MN 55066

MN 121819, LLC (MN 121819) is requesting a Conditional Use Permit for a one-Megawatt Alternate Current photovoltaic community solar garden with service period of 25-35 years. The Utility Scale community solar garden is going to cover 8 acres of land the following described 35.5-acre parcel of land owned by Andrew J. Huneke and Kim Y. Huneke, PID 3800330300: The NW 1/4 of the NE 1/4 of Section 33, Township 110, Range 16, less 1.99 ac HWY easement, Goodhue County, MN. PID 380330100: The E 1/2 of the NW 1/4 of Section 33, Township 110, Range 16, less 7.02 ac to State and except 1.37 ac to HWY easement, Goodhue County, MN. The property is Zoned Agricultural Protection. Commercial Community Solar Gardens are permitted as a conditional use. A property tax bill and assessors report are attached in **Exhibit D** to provide evidence that property taxes are current on the parcel involved in this request.

The site was selected due to its physical characteristics, proximity to existing Xcel Energy electrical infrastructure and distribution lines, zoning and permitting requirements, and landowner participation.

1. Township Recommendation .....	2
2. Design and Interconnection .....	2
3. Construction .....	3
4. Access, Parking, Road Use and Maintenance .....	3
5. Storm Water Management Measures .....	3
6. Operations & Emergency Response .....	3
7. Landscaping .....	4
8. Fire Prevention .....	5
9. Visual Impact Analysis .....	5
10. Decommissioning Plan .....	5
11. Insurance Information .....	8
12. Exhibit List .....	9
13. Appendix A .....	9

# MN121819, LLC

## **1. Township Recommendation:**

MN 121819 is planning to attend a Minneola Township meeting and will obtain the Township acknowledgement and approval that will be reflected in **Exhibit L**.

## **2. Design and Interconnection:**

Each garden will consist of approximately four thousand forty-six (4046) solar panels. The panels are mounted on a steel and aluminum racking structure positioned at a fixed 30° tilt, and generally averages approximately ten (10) feet above grade and will not exceed a maximum height of twenty (20) feet above grade. The racking system is installed in the ground with I-beams that are driven directly into the ground at a depth usually between six (6) feet and ten (10) feet depending on soil conditions. The racking system manufacturer's engineer will provide certification that the design of the foundations and panels are within accepted professional standards, given local soil and climate controls. The equipment is designed to withstand wind up to ninety (90) MPH and sixty pounds per square foot (60 LBS/SF) of snow. Each of the gardens will have one (1) concrete equipment pad, typically less than 320 square feet, to support interconnection and metering equipment. The only proposed grading that will occur is for the roads and concrete equipment pads. Equipment specifications as well as their UL rating are attached as **Exhibit E**.

The panels will be arranged into rows. Each row of solar panels will connect to an inverter. The inverters will be connected by trenched underground conduit that is housed inside of PVC housing which will be installed two (2) feet below the surface. The conduit will lead to the concrete equipment pad for each garden. The inverters transform the direct current (DC) power generated by the photovoltaic system to alternating current (AC) power, which is then connected to the existing Xcel Energy three phase power distribution line at the point of common coupling (PCC).

The solar array will be contained within an area protected by a six-foot chain link fence with one foot of barbed wire above it. Construction of this system will not create any noise, odor, dust, or any other pollutants or annoyances to surrounding parcels. There will be 10" x 7" "Danger High Voltage" signs placed around the fence in intervals of 100'. In addition, there will be site emergency contact information, Xcel contact information, and the SRC number posted on the front gate. The solar garden will comply with all applicable state, county, and federal regulations. No exterior lighting is proposed for the project. We will not need the county to provide any services or county personnel.

# MN121819,LLC

### **3. Construction:**

MN 121819 would like to begin construction in April 2019 date and complete the project before December 2019. The construction process takes approximately nine months. Operating hours during construction will be 8am-6pm. The site will have a portable toilet for workers. No water supply will be required. A dumpster will be on site during the entire construction process and will be serviced periodically for any waste debris that may come as a result of construction. Any materials will be stored and locked in storage containers that are placed on site and part of the access road turnaround. Large flatbed and delivery trucks will be delivering heavy machinery and equipment to the site periodically throughout the construction process. In addition, crews in passenger vehicles, pickup trucks, bobcats and skid steer loaders on tracks will be used on site almost daily. MN 121819 will use appropriate temporary (construction-related) erosion and sediment control best management practices (BMP) through construction. MN 121819 agrees to the Site Rules attached as **Exhibit F**.

### **4. Access, Parking, Road Use and Maintenance:**

Construction and operation and maintenance crews will access to the site by a proposed twelve (12) foot wide gravel road that has a forty (40) foot entrance off MN-60 on the North part of the property. Road access will be controlled for erosion control during construction compliant with the methods used for storm water management. Construction crew parking will be located entirely within the site. No additional permanent parking is required. Maintenance crews will park within the site access road and turnaround area.

### **5. Storm Water Management Measures**

Storm water management measures will be determined by EVS, a licensed civil engineering firm. They are a Minnesota based company with an enormous amount of experience designing solar arrays. Measures will include an analysis of the existing topography since no substantial grading will be required, the use of erosion control logs and silt fences where necessary, and establishment of a germinated pollinator friendly vegetative base underneath the project site before construction begins to prevent erosion.

### **6. Operations & Emergency Response:**

The solar garden site will operate and be monitored 24 hours a day, 365 days a year after construction has been completed. It will be monitored remotely through

# MN121819,LLC

a computer data acquisition system (DAS) so that appropriate personal can be dispatched to investigate potential problems. An operations and maintenance technician will be sent out to the site twice a year to inspect and provide maintenance the modules, electrical equipment, and the array fence. Construction, maintenance and decommissioning of the garden will be conducted in accordance with the MN 121819 Safety Manual, which is attached as **Exhibit G** as well as a Site Specific Safety Plan. The proposed contacts for emergency response as well as ongoing maintenance and operations are local and easily accessible due to the twelve ft wide access road.

Drainage, weeds, screening, general operations:

Mike Bufalini  
Gordian Energy Systems, LLC  
mbufalini@GordianE.com  
724-630-4106

Maintenance, stray voltage and electrical:

Mike Bufalini  
Gordian Energy Systems, LLC  
mbufalini@GordianE.com  
724-630-4106

No chemicals will be used, stored, or disposed of on the modules unless they are certified organic cleaning products.

## **7. Landscaping:**

MN 121819 has voluntarily participated in the Pollination Pledge, in which it has agreed to seed with native pollinator friendly vegetation underneath the panels and in surrounding areas within the project site. Seeding will be done as soon as the weather allows for proper germination. MN 121819 will utilize local companies to maintain the vegetation by mowing as needed and in a manner as to maximize weed and erosion control. Ground cover within the fenced portion of the array will not exceed 24 inches in height and will cover under and between the collectors, surrounding system foundation, and mounting devices. MN 121819 proposes a seed mix design specific to this site based on the parameters and methodology defined by the Minnesota Department of Transportation attached as **Exhibit H**.

# MN121819,LLC

The purpose of the solar garden seed mix will be to:

- Withstand harsh climate conditions
- Minimize maintenance costs
- Minimize erosion
- Improve water quality
- Infiltrate storm water runoff

MN 121819 will be responsible for maintaining the existing drain tile system underneath the array and replacing any damage to tile that occurs during the construction process, or any time prior to or during decommissioning. Existing drain tile lines will be identified upon the completion of the ALTA survey prior to construction.

## **8. Fire Prevention:**

This solar array will meet the requirements of the 2015 International Fire Code, specifically to sections 605.11 – 605.11.2 for clearance, markings and location of underground DC conductors. The solar garden will meet the International Building Code (IBC), National Electric Code (NEC), and local electric and fire code. NEC code is produced by the National Fire Protection Agency (NFPA) with safety of the public, contractors, and firefighters as the objective. Safety is paramount in our solar PV facilities.

## **9. Visual Impact Analysis:**

MN 121819 conducted a site visit and visual analysis of the parcel and adjacent parcels to determine if any nearby properties would suffer substantially from obstructed or impeded views as a result of the proposed project. MN 121819 concluded that the impact is minimal.

## **10. Decommissioning Plan:**

MN 121819 has contractual obligations to the landowner regarding decommissioning arising out of Section 4.4 of the lease. These obligations include removal of all equipment to a depth of 2-3 feet, timelines for removal, owner's rights to remove the solar facility upon failure by the Project Company, and establishment of a monetary security for removal in the form of a bond, escrow, or letter of credit. Section 4.4 of the lease is attached as **Exhibit I**.



# MN121819,LLC

The purpose of the security is to ensure there is sufficient money available to return the project site to an appropriate condition at the end of the project's useful life, or earlier. The landowner will be the designated beneficiary of the fund and will be provided a copy of the document establishing the security before construction commences.

MN 121819 or its successors agree to be responsible for all decommissioning costs and agree that any future buyer or successor of the project will assume the same decommissioning responsibilities. Installation by MN 121819 will be done with no significant or permanent alterations to the land. Upon removal, the project site shall be restored to pre-construction conditions as is reasonably practical, including removal of structures, foundation, and restoration of soil and vegetation. The system will be dismantled and removed using minimal impact construction equipment and materials will be safely recycled or disposed. Appropriate temporary construction-related erosion and sediment control best management practices (BMP) during the decommissioning of the project.

MN 121819 anticipates that decommissioning will occur 25-35 years after the date that the system becomes operational depending on the owner renewal option. All equipment and structures will be removed within ninety (90) days from either of the following: A. The end of the system's serviceable life; or B. the system becomes discontinued. A system shall be considered a discontinued use after one (1) year without energy production, unless a plan is developed and submitted to the Zoning Administrator outlining the steps and schedule for returning the system to service.

The following is a list of assumptions and clarifications to further define the methodology used to establish the scope and values of the removal costs and salvage values.

## General

- The intent of the decommissioning work will be to fully remove the solar facility and restore the site to a stabilized natural condition. Even if the intent is to resume farming, the site will first be fully restored and stabilized.
- The service life of the facility is assumed to be 25 years. All dollar amounts are in present day value, and it is assumed that all values will inflate at a similar rate, therefore, the net comparison of removal cost to salvage value at the end of the service life will remain accurate.

# MN121819,LLC

- Costs associated with this plan represent a “turn key” operation for a general contractor to be hired for this work, including permits, mobilization, contingency, etc.
- Unit costs for each line item have been provided by local contractors familiar with this type of work.
- Haul costs assume a maximum distance of 60 miles between the project and nearest disposal or recycling facility.
- No maximum duration has been assigned for this work. It has been assumed that this work would be handled by a single crew without full time site personnel.

## Civil Infrastructure

- Topsoil used to backfill excavations will be borrowed from adjacent onsite locations. No topsoil import is included.
- Stormwater features such as retention berms or shallow basins with drain tile under drains may remain in place as they do not negatively impact future agricultural land uses and they will continue to provide an environmental benefit to the quality and quantity of offsite runoff.
- Aggregate removal will be the full depth of the aggregate section for roads, equipment pads, and other areas utilizing aggregate. No aggregate will be buried. Includes subgrade scarification prior to backfilling with topsoil.
- Turf establishment includes mulch, fertilizer, and water as necessary to achieve 70% ground cover as required to satisfy the NPDES Construction General Permit.
- Sediment control is priced as silt fence but could also be fiber logs. Location of sediment control will be downslope from exposed soils only in areas where sedimentation offsite or into onsite water bodies can reasonably be expected.

## Structural Infrastructure

- Steel pile foundation removal is assumed to be similar in effort and price to pile installation.
- Steel racking removal is assumed to be similar in effort and price to racking installation.

# MN121819,LLC

## Electrical Infrastructure

- PV modules to be recycled. Assumption is that the modules are 72 cell polysilicon modules about 6' X 3' in dimension.
- Switchgear including transformers will be removed from their respective concrete pads and recycled/returned to the manufacturer.
- DC copper wiring will be dismantled and recycled.
- AC AL wiring, where underground will be dug up, retrieved and recycled.
- On site riser or interconnection poles shall be removed.
- String inverters/combiner boxes are no more than 130 lbs. in weight and not more than 40" X 25" X 12" in dimension. A two-person crew can dismantle a string inverter.
- Transformers are pad mounted and weigh approximately 6500 pounds. These are dry type transformers, so there is no need for any oil disposal.
- Switchgear and the transformer sit on the same concrete pad
- Underground medium voltage wires are generally aluminum and are placed in trenches, in some cases direct buried or in PVC conduits. They can be removed by trenching with a ditch witch

For the estimated cost for decommissioning, please see Schedule of Removal and Restoration Costs in Appendix A.

### **11. Insurance Information:**

MN 121819 or its successor will provide a certificate of insurance meeting the Minnesota State requirements for liability insurance coverage. These requirements include:

- Insurance provider must be rated B+ or better by "Best."
- Limits of \$2,000,000 for each occurrence.
- Coverage against claims for damages resulting from bodily injury, wrongful death, and property damage arising out of the Interconnection Customer's ownership and/or operating of the Generation System under the interconnection agreement.
- Include "Northern States Power Company, a Minnesota Company" as additional insured.
- Contain a severability of interest clause of cross-liability insurance
- Provides for thirty (30) calendar days written notice to NSP prior to cancellation, termination, alteration, or material change of such insurance.
- Coverage provided is primary, and not excess of, contributing to, or combined with, any insurance maintained by NSP.

# MN121819,LLC

We at MN 121819 sincerely appreciate all the help we have received from your staff with regard to our applications and we look forward to collaborating with you further to develop a great project that we can all be proud of.

## **12. Exhibit List:**

- A. Application Form
- B. Site Plan
- C. Topographic Map
- D. Property Tax Evidence
- E. Equipment Pack
- F. Site Rules
- G. MN 121819, LLC Safety Manual
- H. MN DOT Seeding Guideline
- I. Executed Lease
- J. Conditional Use Permit Summary
- K. Interconnection Application
- L. Township Approval and Documentation
- M. Area M Cultural Report

# MN121819, LLC

## Appendix A

Schedule of Removal and Restoration Costs					
	Quantity	Units	\$/Unit	Cost	Notes
<b>Civil Infrastructure</b>					
aggregate removal	180	CY	\$4.00	\$720.00	remove full section of aggregate road, structural concrete base material, and surfacing around equipment pads
aggregate haul and offsite disposal	180	CY	\$6.00	\$1,080.00	
geotextile removal under aggregate roads	550	SY	\$0.05	\$27.50	
geotextile haul and offsite disposal	550	SY	\$0.05	\$27.50	
topsoil backfill	180	CY	\$12.00	\$2,160.00	onsite relocation of topsoil to backfill road and equipment pad excavations
culvert removal	1	each	\$1,200.00	\$1,200.00	remove CMP of approximate 30' length with no greater than 2' of cover
culvert haul and offsite disposal	1	each	\$100.00	\$100.00	
chainlink fence removal	1900	LF	\$6.00	\$11,400.00	includes fence mesh, post framing, concrete foundations, etc
chainlink fence haul and offsite disposal	1900	LF	\$3.00	\$5,700.00	
reinforced concrete equipment pad removal	1	EA	\$500.00	\$500.00	
concrete waste haul and offsite disposal	1	CY	\$500.00	\$500.00	
site grading	1	AC	\$8,000.00	\$8,000.00	grading smooth all areas disturbed by removals, excavations, etc
turf establishment	1	AC	\$1,000.00	\$1,000.00	seed and mulch all areas disturbed by removals, excavations, etc
sediment control	0	LF	\$2.00	\$0.00	silt fence
<b>Structural Infrastructure</b>					
steel pile foundation removal	550	EA	\$13.00	\$7,150.00	
steel pile foundation haul and offsite disposal	550	EA	\$3.00	\$1,650.00	
steel racking removal	1	MW	\$5,000.00	\$5,000.00	
steel racking haul and offsite disposal	1	MW	\$700.00	\$700.00	
<b>Electrical Infrastructure</b>					
Removal of Solar modules	4104	EA	\$8.00	\$32,832.00	
Removal of string inverters/combiners	17	EA	\$60.00	\$1,020.00	
Removal of switchgear/Xfmr	1	EA	\$1,500.00	\$1,500.00	
Removal of Riser and Interconnection poles	0	EA	\$1,000.00	\$0.00	
Removal of SCADA/Aux panel/weather station	1	EA	\$500.00	\$500.00	
Removal of medium voltage AL cables	1	MW	\$2,000.00	\$2,000.00	
Removal of fiber optic cables	0	MW	\$500.00	\$0.00	
<b>General</b>					
permits	1	ea	\$ 3,000.00	\$ 3,000.00	NPDES Construction General Permit and SWPPP preparation
				\$ 87,767.00	
Total Salvage Value				86126	
Decommission - Salvage Value:				\$ (1,641.00)	



MN121819, LLC  
 3915 CODDAGE AVE.  
 BALTIMORE, MARYLAND 21220  
 410-242-2449

PROJECT ADDRESS: 14766 HIGHWAY 60 ZUMBROTA, MN 55992  
 LAT: 44.1748.18"N  
 LON: 92.4411.20"W

SYSTEM	SPECIFICATION
System size DC	1,416 MW
System size AC	1,000 MW
DC/AC RATIO	1.415
AZIMUTH	180
TILT	30
MODULE COUNT	4,046
MODULE TYPE	REC 350TP72
MODULE STC RATING	350 W
INVERTER COUNT	17
INVERTER TYPE	CPS SCA60KLT-DO/US-POWER LIMITED TO 1MW AC
INVERTER POWER	60KW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA	
MIN/MAT TEMP.	-28 C/32 C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
EXPOSURE CATEGORY	50 PSF
BUILDING HEIGHT	0'-0"

**OTHER NOTES:**  
 NO POSITION, DISTANCE OR CLEARANCE ISSUES WITH OVERHEAD ELECTRICAL SERVICE LINES OR OTHER UTILITIES IN RELATION TO THE PV-PANELS.  
 24-7 UNESCORTED KEYLESS ACCESS PROVIDED FOR THE METERS AND AC DISCONNECT.  
 EXISTING VEGETATION: PLOWED FIELDS  
 NO WETLANDS  
 NO TREES REMOVED

REVISIONS			
#	DESCRIPTION	BY	DATE
0	CAPACITY STUDY DESIGN	S.B.J	11/18/18
1	INTERCONNECTION COMMENTS	W.P.J	12/7/18
2	CUP SUBMISSION	W.R.J	12/21/18
3	REV. FOR CUP MEETING	W.R.J	1/3/19
4			
5			
6			
7			

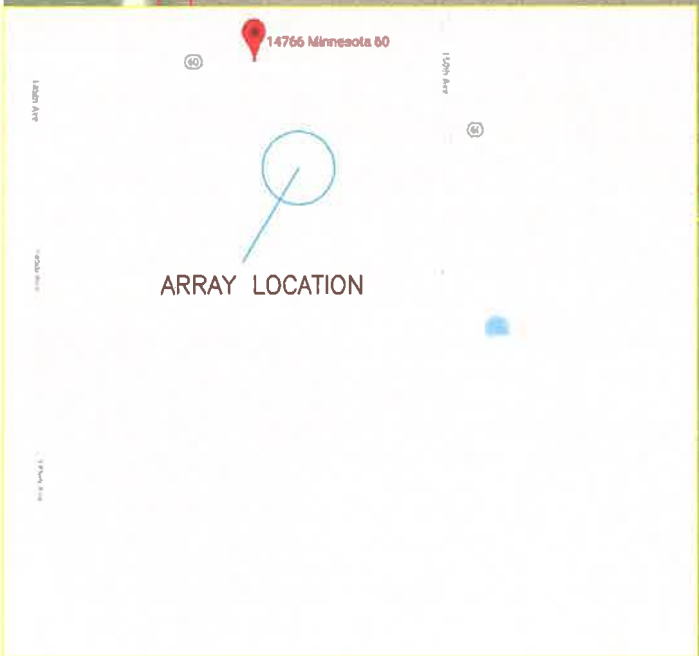
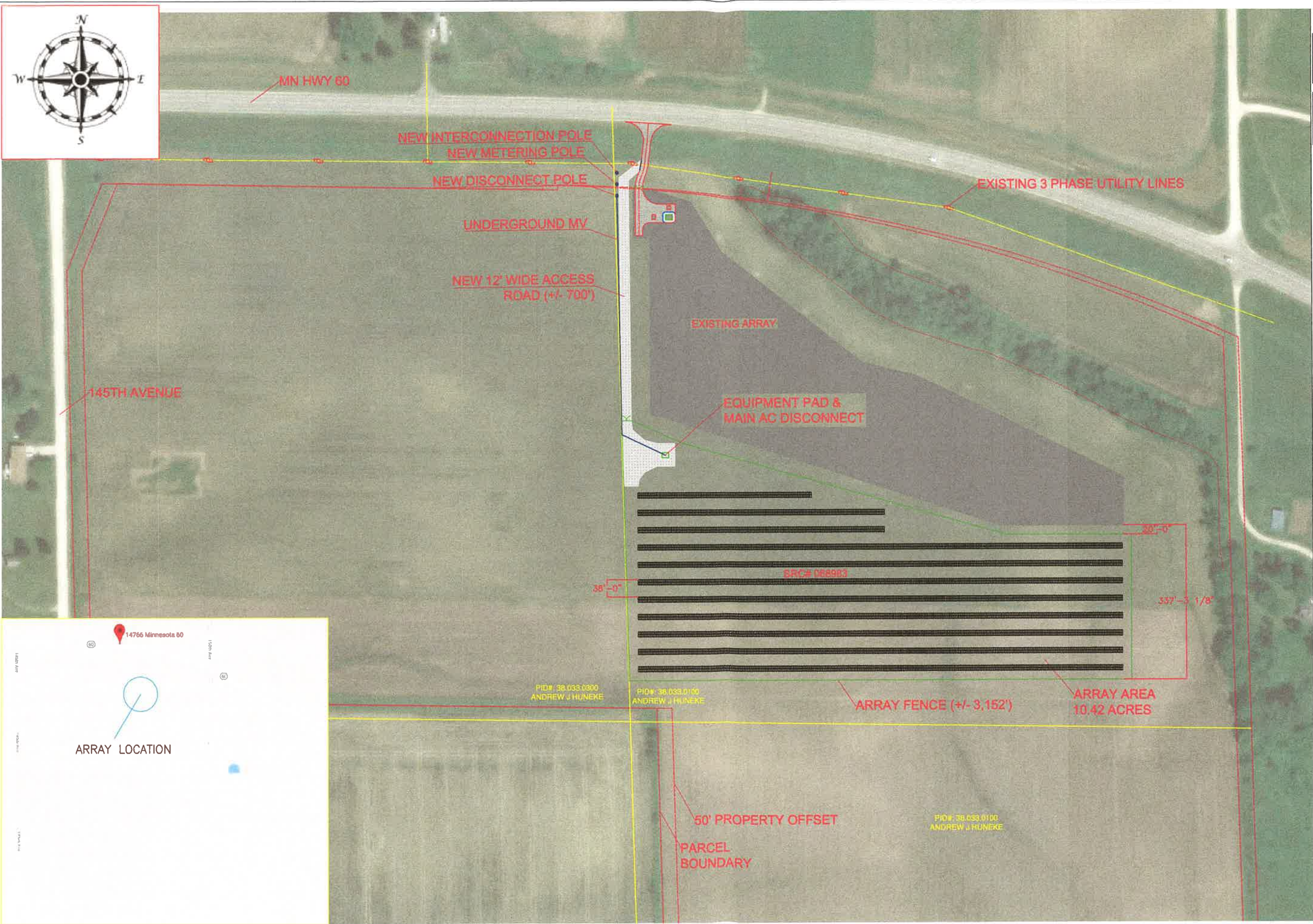
DRAWN BY:  
 WILL JAWISH

PROJECT NAME:  
 HUNEKE CSG1  
 SRC#068983

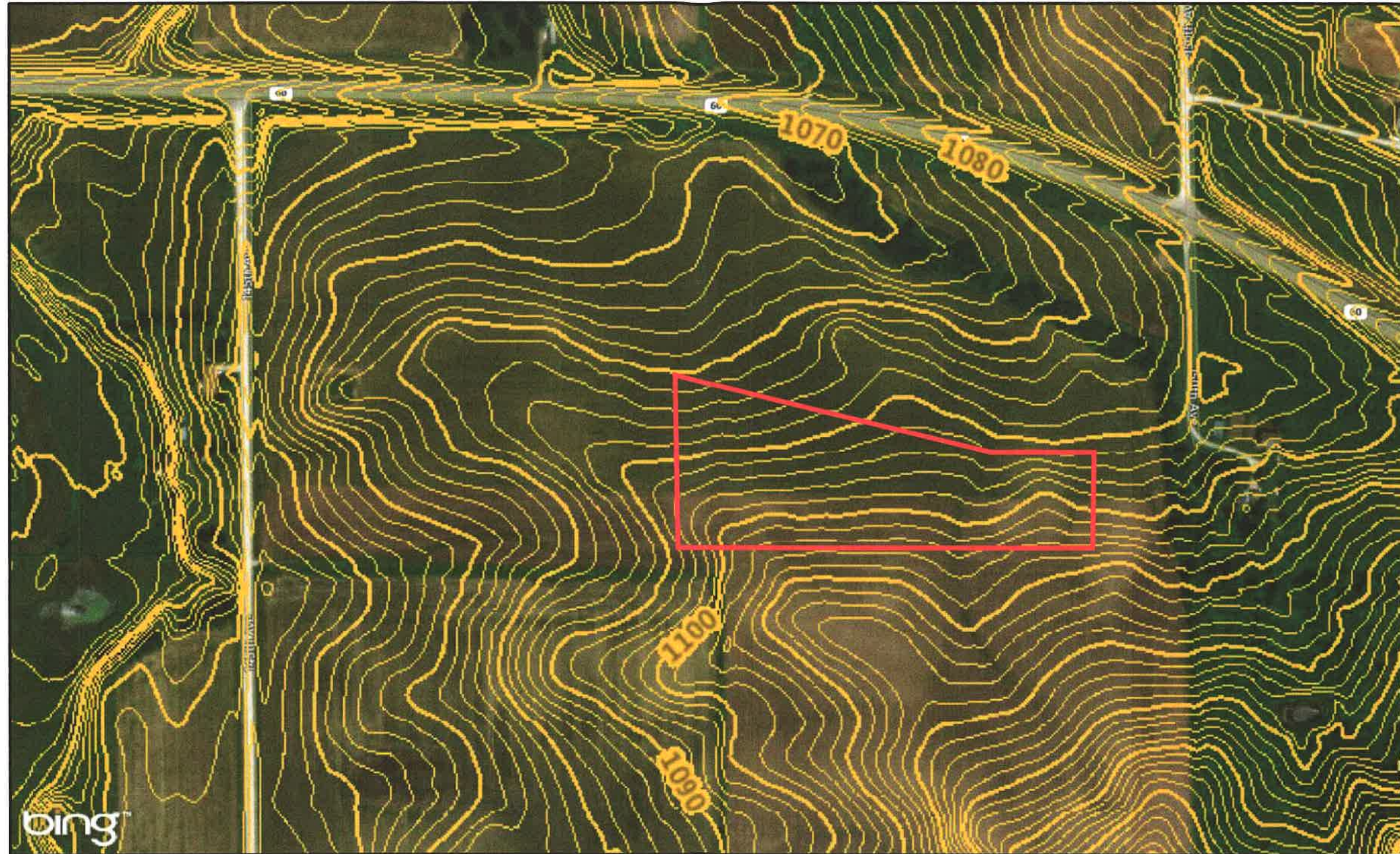
DRAWING TITLE:  
 SITE PLAN

SCALE:

SHEET:  
 PV1



# Exhibit C - Huneke 1 Topographic Map



The State of Minnesota and the Minnesota Department of Natural Resources makes no representations or warranties expressed or implied, with respect to the use of maps or geographic data provided herewith regardless of its format or the means of its transmission. There is no guarantee or representation to the user as to the accuracy, currency, suitability, or reliability of this data for any purpose. The user accepts the data "as is."

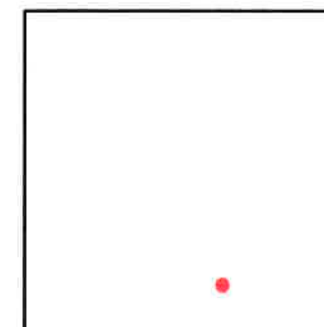
The State of Minnesota assumes no responsibility for loss or damage incurred as a result of any user reliance on this data. All maps and other material provided herein are protected by copyright.

Extreme care was used during the compilation of this product. However, due to changes in ownership and the need to rely on outside information, errors or omissions may exist. If you should discover an oversight, we encourage you to let us know by calling the DNR at 1-888-646-6367 or by e-mail at [info.dnr@state.mn.us](mailto:info.dnr@state.mn.us).

Note: Elevation images and contours were generated from LIDAR derived elevation surfaces acquired 2007-2012.



Scale: 1:6,771



Created on 1/15/2019

# Goodhue County Land Use Management

Goodhue County Government Center | 509 West Fifth Street | Red Wing, Minnesota 55066

*Lisa M. Hanni, L.S. Director*

Building | Planning | Zoning  
Telephone: 651.385.3104  
Fax: 651.385.3106



*County Surveyor / Recorder*

Environmental Health | Land Surveying | GIS  
Telephone: 651.385.3223  
Fax: 651.385.3098

**To:** Planning Commission  
**From:** Land Use Management  
**Meeting Date:** February 11, 2019  
**Report date:** February 1, 2019

## **PUBLIC HEARING: Request for CUP for a Utility-Scale Solar Energy System (SES)**

Request for a CUP submitted by MN 121819 LLC (applicant) and Paul Betcher (owners) for a Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 5.63 acres. Parcel 33.027.0400. TBD CTY 9 BLVD, Goodhue, MN 55027. Part of the NE ¼ of Sect 27 Twp 111 Range 15 in Goodhue Township. A1 Zoned District.

### **Application Information:**

Applicant: MN 121819 LLC (applicant) and Paul Betcher (owners)  
Address of zoning request: TBD CTY 9 BLVD, Goodhue, MN 55027  
Parcel(s): 33.027.0400  
Abbreviated Legal: Part of the NE ¼ of Sect 27 Twp 111 Range 15 in Goodhue Township  
Township Information: Goodhue Township issued a Township Zoning Approval for the request on 1/21/19. No conditions were cited.  
Zoning District: A1 (Agriculture Protection District)

### **Attachments and links:**

Application and submitted project summary (excerpt of submitted materials; full submittal available from LUM Department upon request)  
Site Map(s)  
Goodhue County Zoning Ordinance (GCZO):  
<http://www.co.goodhue.mn.us/DocumentCenter/View/2428>

### **Background:**

The applicant has submitted a CUP request to construct and operate a one (1) Megawatt (MW) photovoltaic (PV) utility-scale solar garden on approximately 5.63 acres of leased land located in Goodhue Township that is currently owned by Paul Betcher. The project would be developed in conjunction with the State of Minnesota Solar Garden program and Xcel Energy's Solar Rewards Community Program. The program allows developers to design, permit, own, and operate solar energy systems and sell the generated power directly to consumers. Upon completion, the Solar Garden would connect to Xcel Energy's distribution grid and generate up to 1 MW of energy annually over the next 25 years.

Per Goodhue County regulations, Solar Energy Systems (SES) that are the primary use of the land and are designed to primarily provide energy to off-site users or export to the wholesale market may be conditionally permitted as a "Utility-Scale SES" within the County's A1 zoned districts.

### **Goodhue County Zoning Ordinance: Article 4 Conditional/Interim Uses**

*No CUP/IUP shall be recommended by the County Planning Commission unless said Commission specifies facts in their findings for each case which establish the proposed CUP/IUP will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, will not substantially diminish and impair property values within the immediate vicinity, will not impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area, that adequate measures have been, or will be, taken to provide utilities, access roads, drainage and other necessary facilities, to provide sufficient off-street parking and loading space, to control offensive odor, fumes, dust, noise and vibration so that none of these will constitute a nuisance, and to control lighted signs*

"To effectively promote the safety, health, and well-being of our residents"

[www.co.goodhue.mn.us](http://www.co.goodhue.mn.us)



## **Project Summary:**

### **Property Information:**

- The approximately 5.63-acre site to be leased by the applicant is currently used for row-crop agriculture (corn and soybeans) by the owner.

The 159-acre Betcher property includes a dwelling, a registered feedlot, tilled cropland, and pasture areas. There is an existing 1 MW SES located on the property directly south of the proposed site. The site was approved February 2017 (CUP Z17-0005) and installation was completed in the fall of 2018.

Adjacent land uses include agriculture and low-density residential.

The nearest residence is located approximately 500 feet northeast of the proposed facility (Kimm Burns). The Goodhue City limits abut the site to the west.

- Adjacent zoning districts include A1 (Agriculture Protection) to north, east, and south; A3 (Urban Fringe)/City of Goodhue to the west.

### **Solar Array:**

- The solar array is proposed to include 4046 solar modules (panels) installed in 6 rows spaced 38 feet apart.

Single-axis tracker racks tilted at 30 degrees will hold up solar panels, reaching a typical height of 10 feet above grade.

The racking will be installed with piles that are anchored into the ground to an appropriate depth based on detailed structural and geotechnical analysis.

The solar array will interconnect to the power grid via a pad-mounted transformer at the north edge of the project area, facilitating connection to an existing Xcel Energy circuit.

- An existing driveway access to CTY 9 BLVD servicing the established SES to the south will also be used for the new site. The 12-foot wide access drive is composed of crushed aggregate. Emergency vehicle access appears adequate to service the facility.

A recorded ingress/egress easement is not required for the property given the site is to be leased and all land to be crossed to access the site will remain under common ownership.

A separate fire number will be required for the new project site.

- Once constructed, traffic to the site would be limited to four visits per year (quarterly) by two maintenance personnel to perform routine maintenance, in addition to any unplanned maintenance. During the first few years of operation two vegetation maintenance personnel will visit the site a handful of times per year and then an anticipated four times per year for the duration of the project.
- The solar garden is sited to comply with all GCZO setback requirements for Solar Energy Systems.

### **Landscaping/Drainage:**

- The site slopes generally from south to the north with stormwater runoff draining towards the lower areas in the northwest corner of the parcel.

Apart from the gravel access road and meter pad, the entire area within the fenced project boundary will be restored to a low-maintenance seed mix, including the area below the solar panels. A “pollinator friendly” seed mix designed to grow no more than 2 feet tall will be selected in accordance with Minnesota Department of Transportation native seed mix design guidelines.

- A level-1 Wetland Delineation Report completed by Area M Consulting on behalf of the Applicant indicated no wetlands were present in the project area.
- Beau Kennedy with the Goodhue SWCD reviewed the application materials and offered the following comments:

*No official wetland determination has been made for this portion of the solar project. However, I do not foresee any wetlands present within the project area. Also, the first facility constructed*

*in 2018 on this farm witnessed some significant erosion problems on the north facing steep slopes. Developer should take steps to assure no downstream sedimentation during and after construction when developing panel layouts and SWPPP.*

- The application notes that stormwater management measures will be determined by EVS, a licensed civil engineering firm. Measures will include an analysis of the existing topography and the use of control logs and silt fences where necessary.

An erosion control/stormwater management plan is customarily submitted for administrative review at the time of building permit application.

- The Applicant stated they conducted a site visit and visual impact analysis and stated that there would be a minimal visual impact on nearby properties. There is no vegetative screening existing at the site or proposed. Crops grown around the site provide some cover during the growing season. Screening was not required for the existing SES installation to the south. The Planning Commission should consider whether any screening of the proposed SES is warranted.
- A 6-foot tall chain-link fence with a 1-foot barbed wire top will be constructed around the perimeter of the project area for security.
- Ample room exists on the property to fulfill GCZO off-street parking requirements.
- Construction is expected to last 9 months from April to December 2019. Construction crews would operate from 8:00 AM to 6:00 PM daily.
- A Cultural Resource Literature Review completed by Area M Consulting on behalf of the Applicant indicated no cultural resources were identified in the project area.

#### **Maintenance/Decommissioning:**

- The project is subject to issuance of a Building Permit and must be constructed according to applicable building code requirements. The project will be inspected by County Building Inspections Staff and the State Electrical Inspector. In addition, Planning and Zoning Staff will inspect the project upon completion to ensure conformance with applicable zoning requirements.
- MN 121819 LLC has a long-term maintenance plan to ensure safety, reliable operation, and production of the system. Monitoring and metering equipment installed on site will alert the maintenance team in real-time of a system performance issue.
- The Applicant has prepared a Decommissioning Agreement between MN 121819 LLC and Paul Betcher that includes removal of all equipment to a depth of 2-3 feet, timelines for removal, and the establishment of a financial security. The Applicant has estimated total costs for decommissioning to be \$87,767 and has estimated the salvage value of reclaimed materials to be \$86,126.

Per GCZO Article 19, the applicant may be required to provide a financial surety at up to 125% of the estimated decommissioning cost. The county has not typically exercised the right to financial assurance requirements for similar solar installations. The Planning Advisory Commission and County Board will need to decide if the County will require financial assurance to cover anticipated decommissioning costs.

#### **Draft Findings of Fact:**

*The following staff findings shall be amended to reflect concerns conveyed during the PAC meeting and public hearing.*

1. The proposed Solar Garden does not appear injurious to the use and enjoyment of properties in the immediate vicinity for uses already permitted, nor would it substantially diminish and impair property values in the immediate vicinity. The use appears harmonious with the established uses in the vicinity. There is an existing Solar Garden existing directly south of the subject site that has been functioning without record of complaint from neighboring residences.
2. The establishment of the proposed Solar Garden is not anticipated to impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area. The use is proposed to meet all development standards of the Goodhue County Zoning

Ordinance and it does not appear incompatible with adjacent land uses.

3. A review of the applicants submitted project summary indicates adequate utilities, access roads, drainage, and other necessary facilities are available to accommodate the proposed use.
4. The submitted plans identify means to provide sufficient off-street parking and loading space to serve the proposed use and meet the Goodhue County Zoning Ordinance's parking requirements.
5. The submitted plans detail adequate measures to prevent or control offensive odor, fumes, dust, noise, and vibration so that none of these will constitute a nuisance. Furthermore, the applicants' lighting plans appear capable of controlling lights in such a manner that no disturbance to neighboring properties will result.

*Staff recommendation is based on the review of the submitted application and project area prior to the public hearing.*

**Staff Recommendation:**

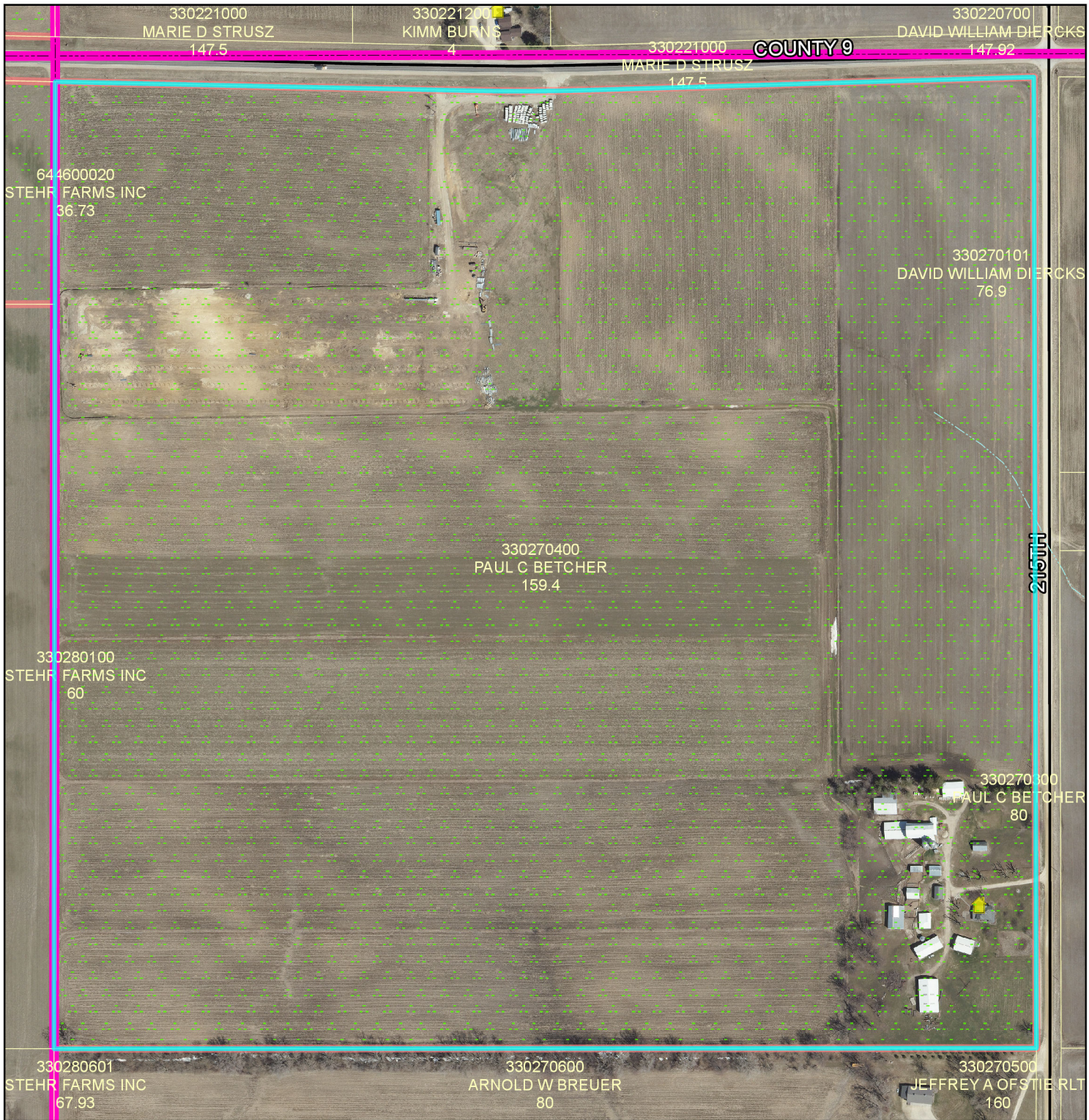
LUM Staff recommends the Planning Advisory Commission

- 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

Recommend that the County Board of Commissioners **APPROVE** the request for a CUP submitted by MN 121819 LLC (applicant) and Paul Betcher (owners) for a Utility-Scale Photovoltaic Ground 1 Megawatt Solar Energy System (SES) occupying approximately 5.63 acres.

Subject to the following conditions:

1. Activities shall be conducted according to submitted plans, specifications, and narrative unless modified by a condition of this CUP;
2. The project shall be decommissioned according to Article 19 Section 6 of the Goodhue County Zoning Ordinance and submitted plans;
3. A decommissioning agreement between the landowner and MN 121819 LLC shall be maintained to ensure reclamation of the area;
4. LUM staff shall be notified by the landowner or solar company 30 days prior to ownership transfer or operator changes;
5. Applicants shall communicate with Beau Kennedy, Wetlands Coordinator with the Goodhue SWCD to ensure compliance with applicable Wetlands Rules prior to completion of any site grading/construction and/or submittal of the Building Permit Application;
6. A stormwater management and erosion control plan shall be submitted for administrative review as part of the Building Permit Application for the project;
7. Applicants shall work with the Goodhue County Soil and Water Conservation District to determine an appropriate seed mix to establish on disturbed areas of the site;
8. Applicants shall obtain Building Permit approvals from the Goodhue County Land Use Management Department prior to establishing the use;
9. Compliance with Goodhue County Zoning Ordinance including, but not limited to, Article 19 Solar Energy Systems (SES) and Article 21 (Agriculture Protection District). The applicant shall request a final inspection of the project for compliance with applicable zoning requirements upon completion of the project;
10. Compliance with all necessary State and Federal registrations, permits, licensing, and regulations;
11. This CUP shall expire 30 years from the date of approval unless terminated prior to that date.



**Planning Advisory Commission**

Public Hearing  
February 11, 2019

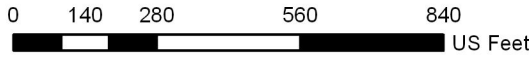
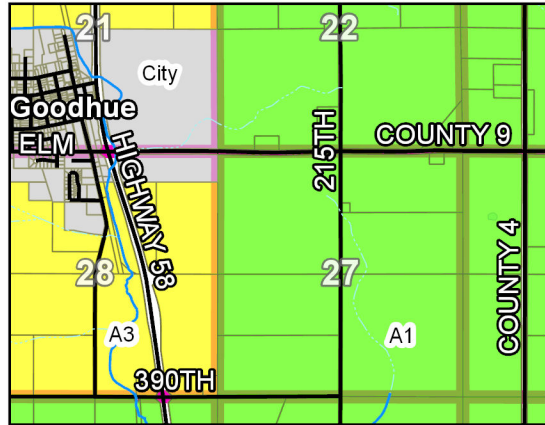
MN 121819 LLC  
A1 Zoned District

Parcel 33.027.0400  
NE 1/4 of Sec 27 Twp 111  
Range 15 in Goodhue Township

CUP Request for Utility-Scale Photovoltaic  
Ground 1 Megawatt Solar Energy System

**Legend**

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



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2016 Aerial Imagery  
Map Created January, 2019 by LUM



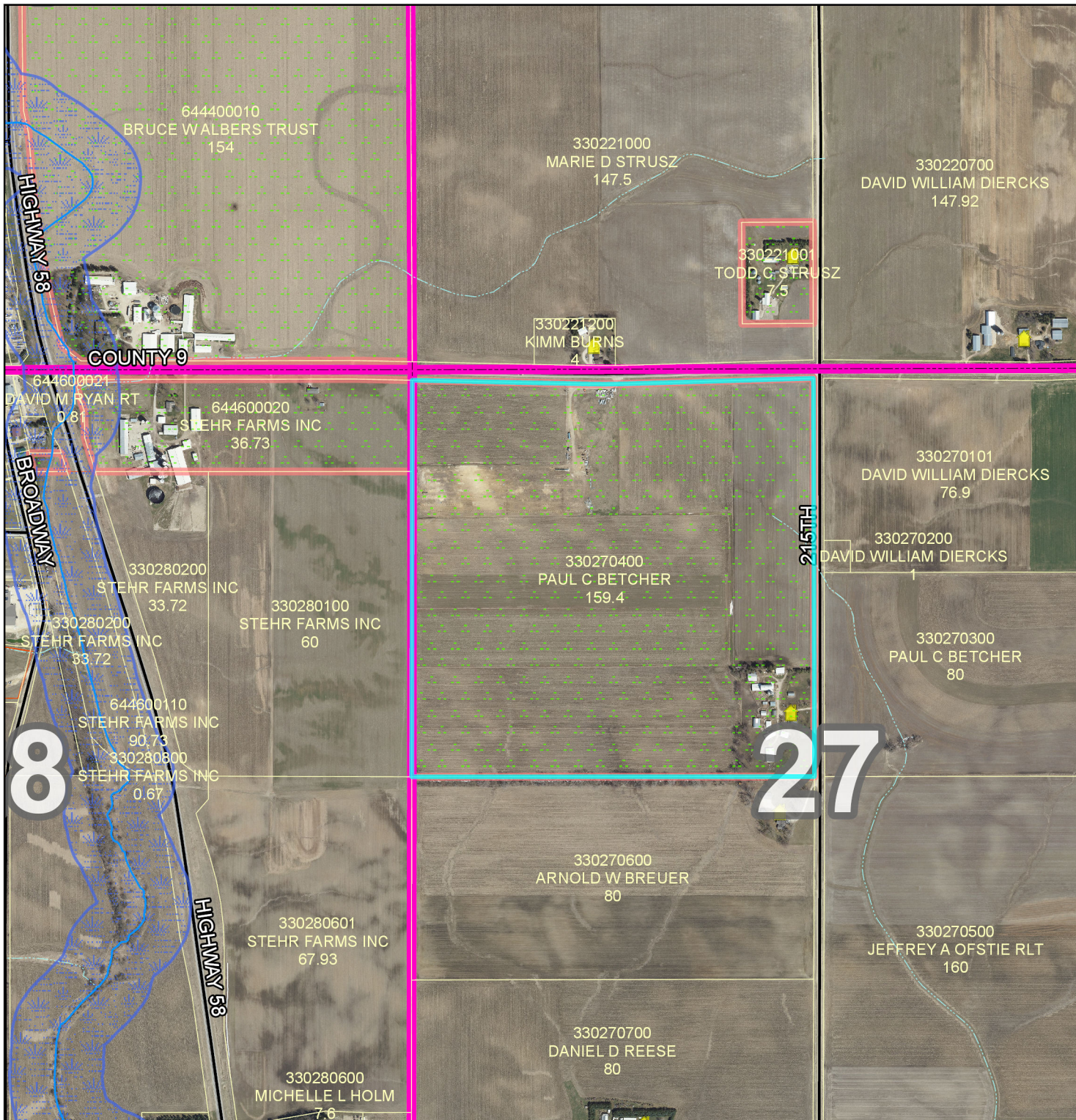
# Planning Advisory Commission

Public Hearing  
February 11, 2019

MN 121819 LLC  
A1 Zoned District

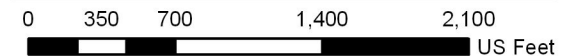
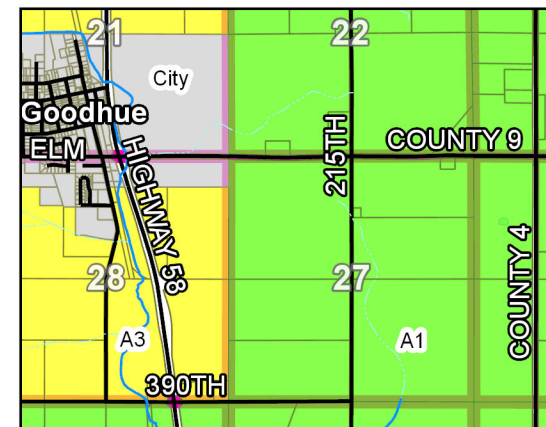
Parcel 33.027.0400  
NE 1/4 of Sec 27 Twp 111  
Range 15 in Goodhue Township

CUP Request for Utility-Scale Photovoltaic  
Ground 1 Megawatt Solar Energy System



## Legend

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



DATA DISCLAIMER: Goodhue County assumes NO liability for the accuracy or completeness of this map OR responsibility for any associated direct, indirect, or consequential damages that may result from its use or misuse. Goodhue County Copyright 2019.

2016 Aerial Imagery  
Map Created January, 2019 by LUM



RECEIVED

JAN 16 2019

Land Use Management

Application for Solar Energy System

2

Permit NUMBER:  
For Staff Use only

Z19.0001

APPLICATION FOR

# Solar Energy System Application

## 1. Owner/Applicant Information

PROPERTY OWNER'S NAME:

Paul Betcher

PROPERTY OWNER'S ADDRESS:

383215 215th Ave, Goodhue, MN 55027

TELEPHONE:

EMAIL:

APPLICANT OR AUTHORIZED AGENT'S NAME:

MN 121819, LLC

Same as Above

APPLICANT'S ADDRESS:

3915 Coolidge Ave Baltimore MD 21229 USA

TELEPHONE:

EMAIL:

CONTACT FOR PROJECT INFORMATION:

Michael Bufalini

Same as Above

ADDRESS:

3915 Coolidge Ave Baltimore MD 21229 USA

TELEPHONE:

EMAIL:

## 2. Location and Classification

STREET ADDRESS OF PROJECT:

38369 215th Ave, Goodhue, MN 55027

ZIP CODE:

LEGAL DESCRIPTION:

The NW 1/4 of section 27, Township 111, Range 15, Except 60/100 except S A R9 2.14 AC HWY Easement to Goodhue. PID 33.027.0400

Attached

## 3. Supporting information

NUMBER OF SOLAR COLLECTORS TO BE INSTALLED

4,046

TOTAL SIZE OF PROJECT

1.416 MW DC / 1.000 MW AC

DESCRIBE METHOD OF CONNECTING THE ARRAY TO A BUILDING OR SUBSTATION

The panels will be arranged into rows. Each row of solar panels will connect to an inverter. The inverters will be connected by trench underground conduit that is housed inside of PVC housing which will be installed two (2) feet below the surface. The conduit will lead to the concrete equipment pad for each garden. The inverters transform the direct current (DC) power generated by the photovoltaic system to alternating current (AC) power, which is then connected to the existing Xcel Energy three phase power distribution line at the point of common coupling (PCC).

Attach signed interconnection agreement

## 4. Applicant's Affidavit

Under penalty of perjury the following declarations are made:

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. Other information or applications may be required.

Signature:

*M. H. Bufalini*

Date:

12/21/2018

Print name:

Michael Bufalini

owner or authorized agent (circle one)



# GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

Parcel # \_\_\_\_\_

Permit# \_\_\_\_\_

### PROPERTY OWNER INFORMATION

Last Name **Betcher**

First **Paul**

Email: \_\_\_\_\_

Street Address **383215 215th Ave**

City **Goodhue**

State **MN**

Zip **55027**

Attach Legal Description as Exhibit "A"

Authorized Agent **Michael Bufalini**

Phone \_\_\_\_\_

Mailing Address of Landowner: **383215 215th Ave, Goodhue, MN 55027**

Mailing Address of Agent: **3519 Coolidge Ave, Baltimore MD 21229**

### PROJECT INFORMATION

Site Address (if different than above): **38369 215th Ave, Goodhue, MN 55027**

Lot Size **154.2 acres** Structure Dimensions (if applicable) **8 acres**

What is the conditional/interim use permit request for? **Ground-Mounted SES**

Written justification for request including discussion of how any potential conflicts with existing nearby land uses will be minimized

See Exhibit J.

### DISCLAIMER AND PROPERTY OWNER SIGNATURE

*I hereby swear and affirm that the information supplied to Goodhue County Land Use Management Department is accurate and true. I acknowledge that this application is rendered invalid and void should the County determine that information supplied by me, the applicant in applying for this variance is inaccurate or untrue. I hereby give authorization for the above mentioned agent to represent me and my property in the above mentioned matter.*

Signature of Landowner: \_\_\_\_\_

*Paul C Betcher*

Date

*12/21/18*

Signature of Agent Authorized by Agent: \_\_\_\_\_

*M. Bufalini*

### TOWNSHIP INFORMATION

Township Zoning Permit Attached?  If no please have township complete below:

By signing this form, the Township acknowledges being made aware of the request stated above. In no way does signing this application indicate the Township's official approval or denial of the request.

Signature \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Comments: \_\_\_\_\_

COUNTY SECTION \_\_\_\_\_

COUNTY FEE \$350 \_\_\_\_\_

RECEIPT # \_\_\_\_\_

DATE PAID \_\_\_\_\_

Applicant requests a CUP/DUP pursuant to Article \_\_\_\_\_ Section \_\_\_\_\_ Subdivision \_\_\_\_\_ of the Goodhue County Zoning Ordinance

What is the formal wording of the request? \_\_\_\_\_

Shoreland \_\_\_\_\_

Lake/Stream Name \_\_\_\_\_

Zoning District \_\_\_\_\_

Date Received \_\_\_\_\_

Date of Public Hearing \_\_\_\_\_

DNR Notice \_\_\_\_\_

City Notice \_\_\_\_\_

Action Taken:  Approve  Deny

Conditions: \_\_\_\_\_

## GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

**PROJECT SUMMARY**

Please provide answers to the following questions in the spaces below. If additional space is needed, you may provide an attached document.

1. Description of purpose and planned scope of operations (including retail/wholesale activities).

---

See Exhibit J

---

2. Planned use of existing buildings and proposed new structures associated with the proposal.

---

See Exhibit J

---

3. Proposed number of non-resident employees.

---

N/A

---

4. Proposed hours of operation (time of day, days of the week, time of year) including special events not within the normal operating schedule.

---

See Exhibit J

---

5. Planned maximum capacity/occupancy.

---

N/A

---

6. Traffic generation and congestion, loading and unloading areas, and site access.

---

See Exhibit J

---

7. Off-street parking provisions (number of spaces, location, and surface materials).

---

See Exhibit J

---

8. Proposed solid waste disposal provisions.

---

See Exhibit J

---

9. Proposed sanitary sewage disposal systems, potable water systems, and utility services.

---

See Exhibit J

---





10. Existing and proposed exterior lighting.

---

See Exhibit J

---

11. Existing and proposed exterior signage.

---

See Exhibit J

---

12. Existing and proposed exterior storage.

---

See Exhibit J

---

13. Proposed safety and security measures.

---

See Exhibit J

---

14. Adequacy of accessibility for emergency services to the site.

---

See Exhibit J

---

15. Potential for generation of noise, odor, or dust and proposed mitigation measures.

---

See Exhibit J

---

16. Anticipated landscaping, grading, excavation, filling, and vegetation removal activities.

---

See Exhibit J

---

17. Existing and proposed surface-water drainage provisions.

---

See Exhibit J

---

18. Description of food and liquor preparation, serving, and handling provisions.

---

N/A

---

19. Provide any other such information you feel is essential to the review of your proposal.

---

N/A

---

TOWNSHIP ZONING APPLICATION

TOWNSHIP NAME Goodhue  
Parcel # 33.027.0400

Goodhue County

APPLICANT INFORMATION

Last Name <u>Bufalini</u>	First <u>Michael</u>	M.I. <u>H</u>
Street Address <u>4001 Coolidge Ave</u>	Phone	
City <u>Baltimore</u>	State <u>MD</u>	ZIP <u>21229</u>
Email Address		
Township <u>III</u> Range <u>015</u>	Section <u>27</u>	

PROJECT INFORMATION

Site Address <u>38369 215th Ave Goodhue MN 55027</u>		
Zoning District	Lot Size <u>159.40</u>	Structure Dimensions <u>5.63</u>
Type of Project <u>Solar-CSG</u>	Proposed Use	
Structure Type	Replacement? YES <input type="checkbox"/> NO <input type="checkbox"/>	
Variance # _____	Conditional Use Permit # _____	

GPS Coordinates

DISCLAIMER AND SIGNATURE

I hereby apply for a zoning permit and I acknowledge that the information above is complete and accurate, that the work will be in conformance with the ordinances and codes of Goodhue County. The applicant also understands by signing this application he / she could be held responsible as representative of this project for any violation of compliance with all applicable laws and ordinances of Goodhue County. This permit may be suspended or revoked if the permit has been issued in error or on the basis of incorrect information supplied or in violation of any ordinance or regulation of Goodhue County. All provisions of law and ordinances governing this type of work will be complied with whether specified herein or not

Signature <u>Malachi Velez</u>	Date <u>1/21/2019</u>
--------------------------------	-----------------------

TOWNSHIP APPROVALS

I hereby certify that the above described project has been approved by the Township Board, and the structure and use will meet all Township Codes and Ordinances if constructed as indicated.

Signature <u>Dale Duke</u>	Title <u>Chairman</u>	Date <u>Jan 21, 19</u>
Signature <u>[Signature]</u>	Title <u>Clerk</u>	Date <u>1/21/19</u>

Application fee \_\_\_\_\_

Receipt Number \_\_\_\_\_



## Exhibit E - Equipment Specifications

The 1.000MW solar PV project is rated to 1.000 MW AC/ 1.416 MW DC.

The system consists of the following:

- A. 4046 modules (REC Solar REC350TP 72, 350W, 1000V modules) feed into inverters.
- B. 17 inverters (CHINT SCA60KTL-DO/US, 480 inverter W/integrated DC and AC disconnects) which feed into 3 MLO panels.
- C. Low voltage switchgear- 1600A, 480V, 3 phase, 4 wire, 3R which is connected to the 480V side of the step-up transformer.
- D. Step up three phase pad mounted transformer- 1.5MVA, 12.47kV:480V, 5.32%
- E. Zig-zag grounding transformer on the 480V side

The 4046 modules are divided into strings and each string has 18 modules.

· Each inverter has up to 14 string input of 18 modules each.

The following attachments are the single line electrical drawings and equipment specs as well as the data sheets for the manufacturers.



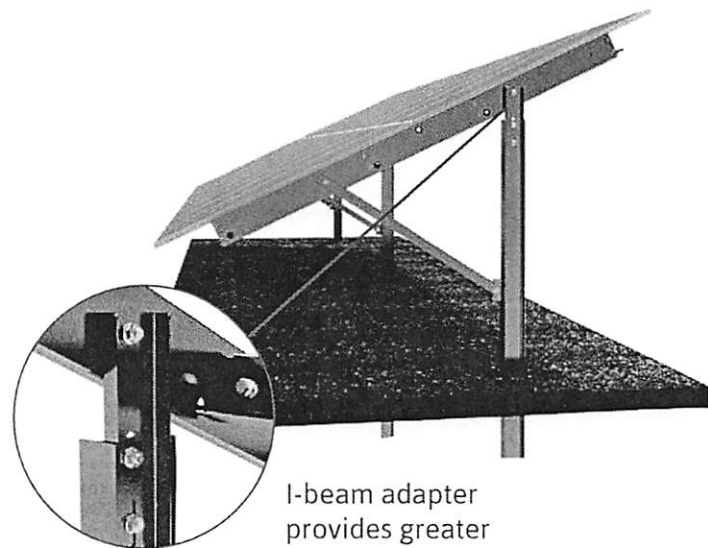
# CONTOUR DB

The numerous benefits of DCE Solar's Contour DB result in the lowest system cost.

- » Single point purlin connection creates unmatched system compatibility with grade
- » Integrated wire support system
- » Integrated array grounding
- » Industry leading installation time

## Driven Beam

Rugged and economical I-beam foundation provides a flexible solution for all conditions, including rocky soils.



I-beam adapter provides greater vertical adjustment

## Grounding and Bonding

Grounding and bonding via serrated hardware certified to UL 2703 (listing available upon request).

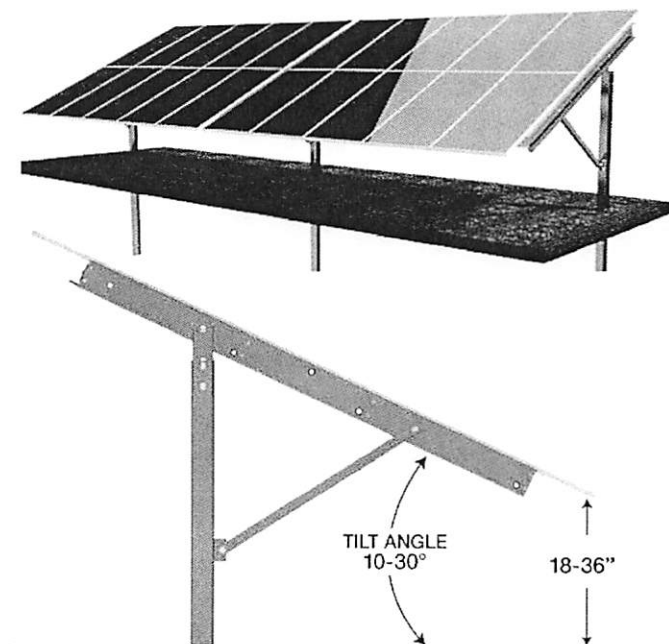


Exhibit J - Conditional Use Permit

Friday, December 21, 2018  
Goodhue County  
Attn: Michael Wozniak, Planning Supervisor  
509 W 5<sup>th</sup> Street  
Red Wing, MN 55066

MN 121819, LLC (MN 121819) is requesting a Conditional Use Permit for a one-Megawatt Alternate Current photovoltaic community solar garden with service period of 25-35 years. The Utility Scale community solar garden is going to cover 8 acres of land the following described 154.2-acre parcel of land owned by Paul Betcher, PID 38.033.0100; The NW 1/4 of section 27, Township 111, Range 15, Except 60/100 except S A R9 2.14 AC HWY Easement to Goodhue. The property is Zoned Agricultural Protection. Commercial Community Solar Gardens are permitted as a conditional use. A property tax bill and assessors report are attached in **Exhibit D** to provide evidence that property taxes are current on the parcel involved in this request.

The site was selected due to its physical characteristics, proximity to existing Xcel Energy electrical infrastructure and distribution lines, zoning and permitting requirements, and landowner participation.

- 1. Township Recommendation ..... 2
- 2. Design and Interconnection..... 2
- 3. Construction ..... 3
- 4. Access, Parking, Road Use and Maintenance..... 3
- 5. Storm Water Management Measures ..... 3
- 6. Operations & Emergency Response ..... 3
- 7. Landscaping ..... 4
- 8. Fire Prevention ..... 5
- 9. Visual Impact Analysis..... 5
- 10. Decommissioning Plan ..... 5
- 11. Insurance Information ..... 8
- 12. Exhibit List ..... 9
- 13. Appendix A..... 9

# MN121819,LLC

## 1. Township Recommendation:

MN 121819 is planning to attend a Goodhue Township meeting and will obtain the Township acknowledgement and approval that will be reflected in **Exhibit L**.

## 2. Design and Interconnection:

Each garden will consist of approximately four thousand forty-six (4046) solar panels. The panels are mounted on a steel and aluminum racking structure positioned at a fixed 30° tilt, and generally averages approximately ten (10) feet above grade and will not exceed a maximum height of twenty (20) feet above grade. The racking system is installed in the ground with I-beams that are driven directly into the ground at a depth usually between six (6) feet and ten (10) feet depending on soil conditions. The racking system manufacturer's engineer will provide certification that the design of the foundations and panels are within accepted professional standards, given local soil and climate controls. The equipment is designed to withstand wind up to ninety (90) MPH and sixty pounds per square foot (60 LBS/SF) of snow. Each of the gardens will have one (1) concrete equipment pad, typically less than 320 square feet, to support interconnection and metering equipment. The only proposed grading that will occur is for the roads and concrete equipment pads. Equipment specifications as well as their UL rating are attached as **Exhibit E**.

The panels will be arranged into rows. Each row of solar panels will connect to an inverter. The inverters will be connected by trenched underground conduit that is housed inside of PVC housing which will be installed two (2) feet below the surface. The conduit will lead to the concrete equipment pad for each garden. The inverters transform the direct current (DC) power generated by the photovoltaic system to alternating current (AC) power, which is then connected to the existing Xcel Energy three phase power distribution line at the point of common coupling (PCC).

The solar array will be contained within an area protected by a six-foot chain link fence with one foot of barbed wire above it. Construction of this system will not create any noise, odor, dust, or any other pollutants or annoyances to surrounding parcels. There will be 10" x 7" "Danger High Voltage" signs placed around the fence in intervals of 100'. In addition, there will be site emergency contact information, Xcel contact information, and the SRC number posted on the front gate. The solar garden will comply with all applicable state, county, and federal regulations. No exterior lighting is proposed for the project. We will not need the county to provide any services or county personnel.

# MN121819,LLC

### **3. Construction:**

MN 121819 would like to begin construction in April 2019 date and complete the project before December 2019. The construction process takes approximately nine months. Operating hours during construction will be 8am-6pm. The site will have a portable toilet for workers. No water supply will be required. A dumpster will be on site during the entire construction process and will be serviced periodically for any waste debris that may come as a result of construction. Any materials will be stored and locked in storage containers that are placed on site and part of the access road turnaround. Large flatbed and delivery trucks will be delivering heavy machinery and equipment to the site periodically throughout the construction process. In addition, crews in passenger vehicles, pickup trucks, bobcats and skid steer loaders on tracks will be used on site almost daily. MN 121819 will use appropriate temporary (construction-related) erosion and sediment control best management practices (BMP) through construction. MN 121819 agrees to the Site Rules attached as **Exhibit F**.

### **4. Access, Parking, Road Use and Maintenance:**

Construction and operation and maintenance crews will access to the site by a proposed twelve (12) foot wide gravel road that has a forty (40) foot entrance off County 9 Blvd on the north part of the property. Road access will be controlled for erosion control during construction compliant with the methods used for storm water management. Construction crew parking will be located entirely within the site. No additional permanent parking is required. Maintenance crews will park within the site access road and turnaround area.

### **5. Storm Water Management Measures**

Storm water management measures will be determined by EVS, a licensed civil engineering firm. They are a Minnesota based company with an enormous amount of experience designing solar arrays. Measures will include an analysis of the existing topography since no substantial grading will be required, the use of erosion control logs and silt fences where necessary, and establishment of a germinated pollinator friendly vegetative base underneath the project site before construction begins to prevent erosion.

### **6. Operations & Emergency Response:**

The solar garden site will operate and be monitored 24 hours a day, 365 days a year after construction has been completed. It will be monitored remotely through

# MN121819,LLC

a computer data acquisition system (DAS) so that appropriate personnel can be dispatched to investigate potential problems. An operations and maintenance technician will be sent out to the site twice a year to inspect and provide maintenance the modules, electrical equipment, and the array fence. Construction, maintenance and decommissioning of the garden will be conducted in accordance with the MN 121819 Safety Manual, which is attached as **Exhibit G** as well as a Site Specific Safety Plan. The proposed contacts for emergency response as well as ongoing maintenance and operations are local and easily accessible due to the 12 ft wide access road.

Drainage, weeds, screening, general operations:

Mike Bufalini  
Gordian Energy Systems, LLC  
mbufalini@GordianE.com  
724-630-4106

Maintenance, stray voltage and electrical:

Mike Bufalini  
Gordian Energy Systems, LLC  
mbufalini@GordianE.com  
724-630-4106

No chemicals will be used, stored, or disposed of on the modules unless they are certified organic cleaning products.

## **7. Landscaping:**

MN 121819 has voluntarily participated in the Pollination Pledge, in which it has agreed to seed with native pollinator friendly vegetation underneath the panels and in surrounding areas within the project site. Seeding will be done as soon as the weather allows for proper germination. MN 121819 will utilize local companies to maintain the vegetation by mowing as needed and in a manner as to maximize weed and erosion control. Ground cover within the fenced portion of the array will not exceed 24 inches in height and will cover under and between the collectors, surrounding system foundation, and mounting devices. MN 121819 proposes a seed mix design specific to this site based on the parameters and methodology defined by the Minnesota Department of Transportation attached as **Exhibit H**.



# MN121819,LLC

The purpose of the solar garden seed mix will be to:

- Withstand harsh climate conditions
- Minimize maintenance costs
- Minimize erosion
- Improve water quality
- Infiltrate storm water runoff

MN 121819 will be responsible for maintaining the existing drain tile system underneath the array and replacing any damage to tile that occurs during the construction process, or any time prior to or during decommissioning. Existing drain tile lines will be identified upon the completion of the ALTA survey prior to construction.

## **8. Fire Prevention:**

This solar array will meet the requirements of the 2015 International Fire Code, specifically to sections 605.11 – 605.11.2 for clearance, markings and location of underground DC conductors. The solar garden will meet the International Building Code (IBC), National Electric Code (NEC), and local electric and fire code. NEC code is produced by the National Fire Protection Agency (NFPA) with safety of the public, contractors, and firefighters as the objective. Safety is paramount in our solar PV facilities.

## **9. Visual Impact Analysis:**

MN 121819 conducted a site visit and visual analysis of the parcel and adjacent parcels to determine if any nearby properties would suffer substantially from obstructed or impeded views as a result of the proposed project. MN 121819 concluded that the impact is minimal

## **10. Decommissioning Plan:**

MN 121819 has contractual obligations to the landowner regarding decommissioning arising out of Section 4.4 of the lease. These obligations include removal of all equipment to a depth of 2-3 feet, timelines for removal, owner's rights to remove the solar facility upon failure by the Project Company, and establishment of a monetary security for removal in the form of a bond, escrow, or letter of credit. Section 4.4 of the lease is attached as **Exhibit I**.

# MN121819,LLC

The purpose of the security is to ensure there is sufficient money available to return the project site to an appropriate condition at the end of the project's useful life, or earlier. The landowner will be the designated beneficiary of the fund and will be provided a copy of the document establishing the security before construction commences.

MN 121819 or its successors agree to be responsible for all decommissioning costs and agree that any future buyer or successor of the project will assume the same decommissioning responsibilities. Installation by MN 121819 will be done with no significant or permanent alterations to the land. Upon removal, the project site shall be restored to pre-construction conditions as is reasonably practical, including removal of structures, foundation, and restoration of soil and vegetation. The system will be dismantled and removed using minimal impact construction equipment and materials will be safely recycled or disposed. Appropriate temporary construction-related erosion and sediment control best management practices (BMP) during the decommissioning of the project.

MN 121819 anticipates that decommissioning will occur 25-35 years after the date that the system becomes operational depending on the owner renewal option. All equipment and structures will be removed within ninety (90) days from either of the following: A. The end of the system's serviceable life; or B. the system becomes discontinued. A system shall be considered a discontinued use after one (1) year without energy production, unless a plan is developed and submitted to the Zoning Administrator outlining the steps and schedule for returning the system to service.

The following is a list of assumptions and clarifications to further define the methodology used to establish the scope and values of the removal costs and salvage values.

## General

- The intent of the decommissioning work will be to fully remove the solar facility and restore the site to a stabilized natural condition. Even if the intent is to resume farming, the site will first be fully restored and stabilized.
- The service life of the facility is assumed to be 25 years. All dollar amounts are in present day value, and it is assumed that all values will inflate at a similar rate, therefore, the net comparison of removal cost to salvage value at the end of the service life will remain accurate.

# MN121819,LLC

- Costs associated with this plan represent a “turn key” operation for a general contractor to be hired for this work, including permits, mobilization, contingency, etc.
- Unit costs for each line item have been provided by local contractors familiar with this type of work.
- Haul costs assume a maximum distance of 60 miles between the project and nearest disposal or recycling facility.
- No maximum duration has been assigned for this work. It has been assumed that this work would be handled by a single crew without full time site personnel.

## Civil Infrastructure

- Topsoil used to backfill excavations will be borrowed from adjacent onsite locations. No topsoil import is included.
- Stormwater features such as retention berms or shallow basins with drain tile under drains may remain in place as they do not negatively impact future agricultural land uses and they will continue to provide an environmental benefit to the quality and quantity of offsite runoff.
- Aggregate removal will be the full depth of the aggregate section for roads, equipment pads, and other areas utilizing aggregate. No aggregate will be buried. Includes subgrade scarification prior to backfilling with topsoil.
- Turf establishment includes mulch, fertilizer, and water as necessary to achieve 70% ground cover as required to satisfy the NPDES Construction General Permit.
- Sediment control is priced as silt fence but could also be fiber logs. Location of sediment control will be downslope from exposed soils only in areas where sedimentation offsite or into onsite water bodies can reasonably be expected.

## Structural Infrastructure

- Steel pile foundation removal is assumed to be similar in effort and price to pile installation.
- Steel racking removal is assumed to be similar in effort and price to racking installation.

# MN121819,LLC

## Electrical Infrastructure

- PV modules to be recycled. Assumption is that the modules are 72 cell polysilicon modules about 6' X 3' in dimension.
- Switchgear including transformers will be removed from their respective concrete pads and recycled/returned to the manufacturer.
- DC copper wiring will be dismantled and recycled.
- AC AL wiring, where underground will be dug up, retrieved and recycled.
- On site riser or interconnection poles shall be removed.
- String inverters/combiner boxes are no more than 130 lbs. in weight and not more than 40" X 25" X 12" in dimension. A two-person crew can dismantle a string inverter.
- Transformers are pad mounted and weigh approximately 6500 pounds. These are dry type transformers, so there is no need for any oil disposal.
- Switchgear and the transformer sit on the same concrete pad
- Underground medium voltage wires are generally aluminum and are placed in trenches, in some cases direct buried or in PVC conduits. They can be removed by trenching with a ditch witch

For the estimated cost for decommissioning, please see Schedule of Removal and Restoration Costs in Appendix A.

### **11. Insurance Information:**

MN 121819 or its successor will provide a certificate of insurance meeting the Minnesota State requirements for liability insurance coverage. These requirements include:

- Insurance provider must be rated B+ or better by "Best."
- Limits of \$2,000,000 for each occurrence.
- Coverage against claims for damages resulting from bodily injury, wrongful death, and property damage arising out of the Interconnection Customer's ownership and/or operating of the Generation System under the interconnection agreement.
- Include "Northern States Power Company, a Minnesota Company" as additional insured.
- Contain a severability of interest clause of cross-liability insurance
- Provides for thirty (30) calendar days written notice to NSP prior to cancellation, termination, alteration, or material change of such insurance.
- Coverage provided is primary, and not excess of, contributing to, or combined with, any insurance maintained by NSP.

# MN121819,LLC

We at MN 121819 sincerely appreciate all the help we have received from your staff with regard to our applications and we look forward to collaborating with you further to develop a great project that we can all be proud of.

## **12. Exhibit List:**

- A. Application Form
- B. Site Plan
- C. Topographic Map
- D. Property Tax Evidence
- E. Equipment Pack
- F. Site Rules
- G. MN 121819, LLC Safety Manual
- H. MN DOT Seeding Guideline
- I. Executed Lease
- J. Conditional Use Permit Summary
- K. Interconnection Application
- L. Township Approval and Documentation
- M. Area M Cultural Report / Wetland Delineation

# MN121819,LLC

## Appendix A

### Schedule of Removal and Restoration Costs

	Quantity	Units	\$/Unit	Cost	Notes
<b>Civil Infrastructure</b>					
					remove full section of aggregate road, structural concrete base material, and surfacing around equipment pads
aggregate removal	180	CY	\$4.00	\$720.00	
aggregate haul and offsite disposal	180	CY	\$6.00	\$1,080.00	
geotextile removal under aggregate roads	550	SY	\$0.05	\$27.50	
geotextile haul and offsite disposal	550	SY	\$0.05	\$27.50	
topsoil backfill	180	CY	\$12.00	\$2,160.00	onsite relocation of topsoil to backfill road and equipment pad excavations
culvert removal	1	each	\$1,200.00	\$1,200.00	remove CMP of approximate 30' length with no greater than 2' of cover
culvert haul and offsite disposal	1	each	\$100.00	\$100.00	
chainlink fence removal	1900	LF	\$6.00	\$11,400.00	includes fence mesh, post framing, concrete foundations, etc
chainlink fence haul and offsite disposal	1900	LF	\$3.00	\$5,700.00	
reinforced concrete equipment pad removal	1	EA	\$500.00	\$500.00	
concrete waste haul and offsite disposal	1	CY	\$500.00	\$500.00	
site grading	1	AC	\$8,000.00	\$8,000.00	grading smooth all areas disturbed by removals, excavations, etc
turf establishment	1	AC	\$1,000.00	\$1,000.00	seed and mulch all areas disturbed by removals, excavations, etc
sediment control	0	LF	\$2.00	\$0.00	silt fence
<b>Structural Infrastructure</b>					
steel pile foundation removal	550	EA	\$13.00	\$7,150.00	
steel pile foundation haul and offsite disposal	550	EA	\$3.00	\$1,650.00	
steel racking removal	1	MW	\$5,000.00	\$5,000.00	
steel racking haul and offsite disposal	1	MW	\$700.00	\$700.00	
<b>Electrical Infrastructure</b>					
Removal of Solar modules	4104	EA	\$8.00	\$32,832.00	
Removal of string inverters/combiners	17	EA	\$60.00	\$1,020.00	
Removal of switchgear/Xfmr	1	EA	\$1,500.00	\$1,500.00	
Removal of Riser and Interconnection poles	0	EA	\$1,000.00	\$0.00	
Removal of SCADA/Aux panel/weather station	1	EA	\$500.00	\$500.00	
Removal of medium voltage AL cables	1	MW	\$2,000.00	\$2,000.00	
Removal of fiber optic cables	0	MW	\$500.00	\$0.00	
<b>General</b>					
permits	1	ea	\$ 3,000.00	\$ 3,000.00	NPDES Construction General Permit and SWPPP preparation
				\$ 87,767.00	
Total Salvage Value				86126	
Decommission - Salvage Value:				\$ (1,641.00)	

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## **SUMMARY**

Area M Consulting (Area M), on behalf of Gordian Energy Systems (Client), conducted a wetland delineation for the Betcher CSG 1 Project (Project) located within Goodhue County, Minnesota. The Area M biologist conducted a routine Level 1 delineation, as defined by the Board of Water and Soil Resources (BWSR), which includes only a desktop component (BWSR, 2010). The off-site delineation was conducted following general procedures and methods outlined by the United States Army Core of Engineers (USACE) Wetland Delineation Manual (USACE, 1987), Midwest Regional Supplement (USACE, 2010), and BWSR Guidance for Offsite Hydrology/Wetland Determinations (2016). This wetland delineation report is assembled to assist the Client with meeting regulatory requirements necessary for permitting a Community Solar Garden (CSG) in Goodhue County.

## **PROJECT DESCRIPTION**

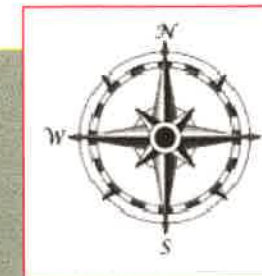
The Project, encompassing approximately 35.4 acres, is located 0.5 miles east of Goodhue, MN in Section 27, T111N:R15W (Study Area) (Appendix A). The Study Area is on a north-facing slope and is cultivated annually. The surrounding landscape is mostly agricultural, with small streams, wooded shelterbelts, and farmsteads intermixed among the rolling topography.

## **LEVEL 1 DELINEATION METHODOLOGY**

Wetland biologists conducted a comprehensive desktop review of data available within the public domain to identify the presence/absence and extent of wetland/waterbodies that could occur within Study Area. This data was analyzed by identifying wetland signatures which indicate the potential presence of wetland/waterbody features. The following data sources were reviewed; the analysis of each data set is discussed in greater detail in the later part of this section.

- Hydrologic soil data
- Elevation Data
  - MN Department of Natural Resources (MNDNR) Light Detection and Ranging (LiDAR) Data
  - United States Geological Survey (USGS) topographic maps
- Mapped Wetlands/Waterbodies
  - U.S. Fish and Wildlife Services (USFWS) National Wetland Inventory (NWI)
  - MNDNR updated NWI
  - MNDNR Public Waters Inventory (PWI)
  - National Hydrography Dataset (NHD)

Historic and current aerial photographs



MN121819,LLC  
 3915 COOLIDGE AVE.  
 BALTIMORE, MARYLAND 21229  
 410-242-2449

PROJECT ADDRESS: 38389 215TH AVENUE GOODHUE, MN 55027  
 LAT: 44°23'44.88"N  
 LON: 92°38'29.57"W

SYSTEM	SPECIFICATION
System size DC	1.418 MW
System size AC	1.000 MW
DC/AC RATIO	1.415
AZIMUTH	180
TILT	30
MODULE COUNT	4,048
MODULE TYPE	REC 350TP72
MODULE STC RATING	350 W
INVERTER COUNT	17
INVERTER TYPE	CPS SCABOKLT-DG/US-POWER LIMITED TO 1MW AC
INVERTER POWER	60KW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA	
MIN/MAT TEMP.	-28 C/32 C
WIND SPEED (ASCE 7-10)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
EXPOSURE CATEGORY	50 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES:  
 NO POSITION, DISTANCE OR CLEARANCE ISSUES WITH OVERHEAD ELECTRICAL SERVICE LINES OR OTHER UTILITIES IN RELATION TO THE PV PANELS.  
 24-7 UNESCORTED KEYLESS ACCESS PROVIDED FOR THE METERS AND AC DISCONNECT.  
 NO TREES REMOVED  
 NO CONSTRUCTION IN WETLANDS  
 5.63 ACRE SITE ZONED A-1

REVISIONS			
#	DESCRIPTION	BY	DATE
0	CAPACITY STUDY DESIGN	S.B.J.	5/16/18
1	INTERCONNECTION COMMENTS	W.R.J.	7/7/18
2	CUP SUBMISSION	W.R.J.	12/21/18
3			
4			
5			
6			
7			

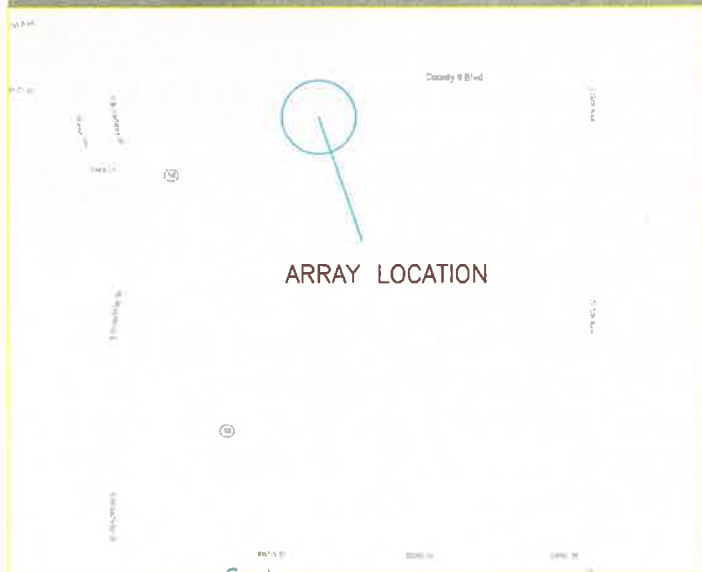
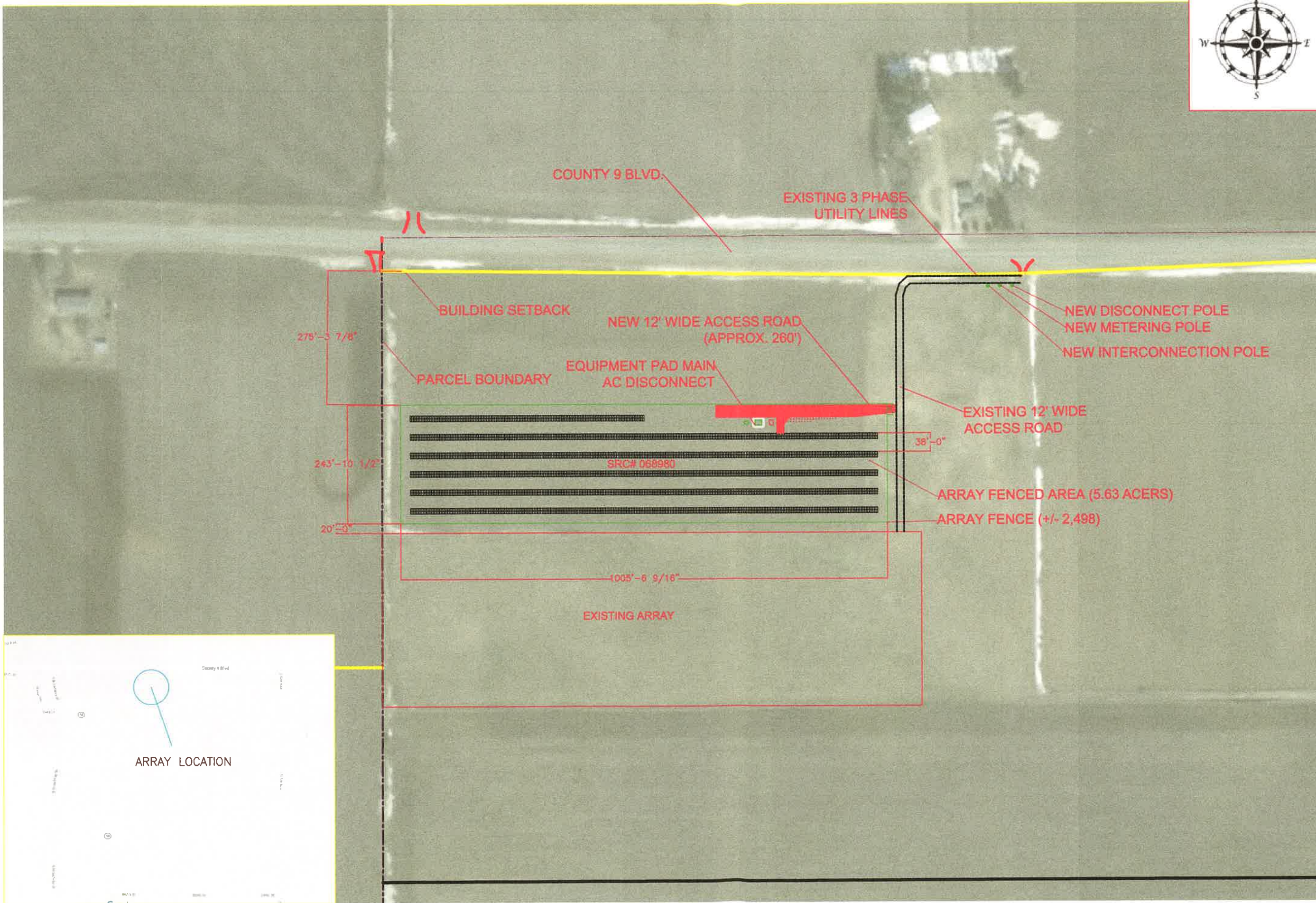
DRAWN BY:  
 SEAN BRANCH JR.

PROJECT NAME:  
 BETCHER CSG1  
 SRC#068980

DRAWING TITLE:  
 SITE PLAN

SCALE:

SHEET:  
 PV1





# Exhibit C - Topographical Map

**Topographical Map, 38369 215<sup>th</sup> Avenue, Goodhue, MN 55027**

