



PLANNING COMMISSION MEETING AGENDA
TUESDAY DECEMBER 19, 2023

7:30 PM REGULAR MEETING

1. Call to Order
2. Roll Call
3. Approval of Minutes:
 - a. October 17, 2023, Planning Commission Meeting Minutes.
 - b. December 5, 2023, City Council Meeting Minutes (For Information Only)
4. **(CONTINUED FROM SEPTEMBER PC MEETING) PUBLIC HEARING:** Peter Johnson (Applicant/Owner) is requesting the following actions for the property located at 6220 CSAH 11 (PID No. 02-118-24-32-0001) in the City of Independence, MN:
 - a. A minor subdivision to allow a lot split which would create a new eight (8) acre parcel on the north side of the existing creek and would be accessed via Stephanie Way.
 - b. A variance to allow a new property to be created which has less than the requisite lot frontage on a public road or right of way.
5. **PUBLIC HEARING:** Mike Reneau (Applicant) Greg Page (Owner) is requesting the following action for the property located at 7075 Highway 12 (PID No. 22-118-24-24-0001) in the City of Independence, MN:
 - a. A conditional use permit (CUP) to allow a ground mounted solar system.
 - b. A variance to allow a ground mounted solar system that is greater than 500 SF.
6. Open/Misc.
7. Adjourn.



MINUTES OF A MEETING OF THE
INDEPENDENCE PLANNING COMMISSION
TUESDAY, OCTOBER 17, 2023, AT 7:30 PM

1. **Call to Order**

2. **Roll Call**

Present: Dumas, Volkenant, Gardner and Usset

Absent: Thompson, Tearse

Staff: City Administrator Kaltsas, Administrative Services Director Simon

Visitors: See Sign in sheet

3. **Approval of Minutes:**

a. August 29, 2023, Planning Commission Meeting Minutes.

b. September 19, 2023, City Council Meeting Minutes (For Information Only)

Motion by Gardner to accept the minutes as written.

Ayes: Dumas, Volkenant, Gardner and Usset.

Nays: None. Absent: Thompson, Tearse

Abstain: None.

Motion Approved. 4-0

4. **PUBLIC HEARING:** Peter Bullemer (Applicant/Owner) is requesting the following action for the property located at 3375 Lake Haughey Road (PID No.s 08-118- 24-33-0007 and 08-118-24-33-0008) in the City of Independence, MN:

- a. A minor subdivision to allow a lot combination which would combine the two properties into one property.

Property/Site Information:

The subject properties are located along the west side of Lake Lake Haughey Road near the southwest corner of Lake Haughey and just north of Hwy 12. The north property has an existing house, and the south property is vacant. The properties are heavily wooded, and both have lake frontage on Lake Haughey. The properties have the following site characteristics:

Property Information: 3375 Lake Haughey Road and PID No. 08-118- 24-33-0007

Zoning: *AG-Agriculture*

Comprehensive Plan: *AG-Agriculture*

Acreage (Before): *PID No. 08-118- 24-33-0007 – 4.07 acres*
PID No. 08-118- 24-33-0008 – 2.28 acres
Acreage (After): *6.35 acres*

Discussion:

The applicant approached the City about the possibility of combining the two properties into one property earlier this year. The City noted that the combination of properties would be permitted and advised the applicant of the process. The applicant has prepared a survey showing the individual and combined properties.

There are several items that should be noted by the City during consideration of the application:

1. Both properties have mature tree coverage and lake frontage on Lake Haughey.
2. There is an existing home located on the north lot. The existing home meets all applicable setback requirements in the before and after conditions. The proposed lot combination does create any non-conformities.
3. Based on the current zoning standards for AG - Agriculture properties, this property could not be subdivided again following the combination. The minimum lot size in the AG-Agriculture zoning district required in order for subdivision to be considered is 40 acres.
4. The applicant will be required to dedicate the requisite 10' drainage and utility easements and execute all applicable documents.
5. There are a variety of lot sizes on Lake Haughey Road and the proposed larger lot realized as a result of the combination does not appear to change, alter or be out of context with the surrounding area.

The proposed subdivision to allow a lot combination appears to meet all applicable standards of the City's zoning and subdivision ordinance. The combined lot will fit into the surrounding area and should have minimal impacts on the surrounding properties.

Neighbor Comments:

The city has not received any written comments regarding the proposed subdivision.

Recommendation:

Staff is seeking a recommendation from the Planning Commission for the requested minor subdivision with the following findings:

1. The proposed minor subdivision to allow a lot combination meets all applicable criteria and conditions stated in Chapter V, Section 500, Planning and Land Use Regulations of the City of Independence Zoning Ordinance.

2. The Applicant shall pay for all costs associated with the City's review of the requested minor subdivision.
3. The Applicant shall record the subdivision and City Council Resolution with the county within six (6) months of approval.
4. The applicant shall execute and record the requisite drainage and utility easements with the county within six (6) months of approval.

Kaltsas-North property has vacant house. South property is vacant. Both properties are heavily wooded. Both lots are Lake front on Lake Haughey, AG, AG, 6.35 acres overall. Lot line rearrangement. Meets all applicable setbacks. Properties in current condition are legal nonconforming. They could not resub divide this property in the future if they wanted to undo it. We will require dedication for drainage and utility easement. It would not be out of character for the area.

Gardener – I questioned it being ok with him not being able to do this again.
Kaltsas – we reached out a couple times to make sure he is ok with this.

Open public hearing

Motion by Usset to recommend approval of the request subject to staff recommendations 1-4, seconded by Volkenant to close the public hearing.

Ayes: Dumas, Volkenant, Gardner and Usset.

Nays: None. Absent: Thompson, Tearse

Abstain: None.

Motion Approved. 4-0

5. **(TO BE CONTINUED TO NOVEMBER 14th PLANNING COMMISSION**

MEETING) PUBLIC HEARING: Peter Johnson (Applicant/Owner) is requesting the following actions for the property located at 6220 CSAH 11 (PID No. 02-118-24-32-0001) in the City of Independence, MN:

- a. A minor subdivision to allow a lot split which would create a new eight (8) acre parcel on the north side of the existing creek and would be accessed via Stephanie Way.
- b. A variance to allow a new property to be created which has less than the requisite lot frontage on a public road or right of way.

Motion by Usset to table the public hearing for this agenda item until the November 14th Planning Commission Meeting, seconded by Dumas.

Ayes: Dumas, Volkenant, Gardner and Usset.

Nays: None. Absent: Thompson, Tearse

Abstain: None.

Motion Approved. 4-0

6. **PUBLIC HEARING:** Sam Vandeputte (Applicant) and 1985 Co Rd 90 Llc (Owner) is requesting the following action for the properties located at 1985 and 1989 County Road 90 (PID No.s 22-118-24-41-0005 and 22-118-24-41-0001) in the City of Independence, MN:
 - a. A minor subdivision to allow a lot combination which would combine the two properties into one property.

Property/Site Information:

The properties are located on the west side of CSAH 90 just north of the intersection of County Road 90 and Highway 12. The properties are currently vacant. There are two wetlands on the properties and existing trees located on the north side of both properties. The property has the following characteristics:

Property Information: 1985 and 1989 County Road 90

Zoning: CLI - *Commercial Light Industrial* Comprehensive

Plan: *Commercial Light Industrial*

Acreage: 7.56 acres

Discussion:

In 2018, the City approved a site plan allowing for the commercial development of this property. During the City's review of the site plan, it was noted that there were two properties that would have to be combined and a condition was added to the approval. The owner has begun the site development and is now in a position to combine the two lots.

The combination of the two properties is in keeping with previously approved site plan. It will also allow the requisite drainage and utility easements to be recorded in accordance with the conditions for approval. The City did not find any potential issues relating to the proposed combination. The combination is required in order to allow the proposed development of the property.

Neighbor Comments:

The city has not received any written or verbal comments regarding the proposed site plan review and conditional use permit

Recommendation:

Staff is seeking a recommendation from the Planning Commission for the requested minor subdivision to allow a lot combination. Should the Planning Commission recommend approval to the City Council, the following findings and conditions should be considered:

1. The proposed subdivision allowing a lot combination meets all applicable criteria and conditions stated in Chapter V, Section 500, Planning and Land Use Regulations of the City of Independence Zoning Ordinance.
2. The applicant shall dedicate the requisite drainage and utility easements to the City. The applicant shall execute the necessary documents to convey the easements as determined necessary by the City.
3. The applicant shall pay for all costs associated with the City's review of the requested minor subdivision.
4. The applicant shall record the subdivision and City Council Resolution with Hennepin County within six (6) months of approval.
5. The applicant shall execute and record the requisite drainage and utility easements with Hennepin County within six (6) months of approval.

Kaltsas – noted during site review that this is a housekeeping item that needs to occur to build over the property lines. We have been talking and the surveyor got the paperwork together. Both zoned commercial LI, 7.5 acres overall. Remove property line. Record drainage and utility easements.

Dumas – there are no existing D & U easements?

Kaltsas – not yet.

Motion by Usset to recommend of approval of the application regarding 1985 and 1989 Co Rd 90 subject to staff considerations 1-5, seconded by Volkenant.

Ayes: Dumas, Volkenant, Gardner and Usset.

Nays: None. Absent: Thompson, Tearse

Abstain: None.

Motion Approved. 4-0

7. Open/Misc.

Gardener – what's happening with the cul-de-sac on Brei Kessel?

Kaltsas – I haven't heard any complaints in a while.

8. Adjourn.

Motion by Volkenant to adjourn, seconded by Usset at 7:52PM.

Ayes: Dumas, Volkenant, Gardner and Usset.

Nays: None. Absent: Thompson, Tearse

Abstain: None.

Motion Approved. 4-0

Meeting adjourned.

Respectfully Submitted,
Carrie Solien/Recording Secretary



CITY COUNCIL MEETING AGENDA
TUESDAY DECEMBER 5, 2023

CITY COUNCIL MEETING TIME: 6:30 PM

1. Call to Order

Pursuant to due call and notice thereof, a regular meeting of the Independence City Council was called to order by Mayor Johnson at 6:30 p.m.

2. Pledge of Allegiance

Mayor Johnson led the group in the Pledge of Allegiance.

3. Roll Call

Present: Mayor Johnson, Councilors Spencer, Betts,

Absent: Councilors Grotting and McCoy

Staff: Kaltsas and Simon and Kroells

Visitors: Mike Winkels

4. ****Consent Agenda****

All items listed under Consent Agenda are considered to be routine by Council and will be acted on by one motion. There will be no separate discussion of these items. If discussion is desired, that item will be removed from the Consent Agenda and will be considered separately.

- a. Approval of City Council Minutes from the November 14, 2023, Regular City Council Meeting.
- b. Minutes from ABRC Meeting – November 20, 2023 (for information only).
- c. Approval of Accounts Payable (Check Numbered 22455 Voided, Batch # 1; Checks Numbered 22456-22462, Batch # 2; Checks Numbered 22463-22473 and Batch # 3; Checks Numbered 22474-22488).
- d. Approval of a Temporary Gambling Permit – Orono Baseball Association Event on January 14, 2023.

Motion by Betts, seconded by Spencer to approve the Consent Agenda. Ayes: Johnson, Spencer and Betts. Nays: None. Absent: Grotting and McCoy None. Abstain. None. MOTION DECLARED CARRIED. 3-0

5. Set Agenda – Anyone Not on the Agenda can be Placed Under Open/Misc.

6. Reports of Boards and Committees by Council and Staff.

Spencer attended the following meetings:

ABRC – Accessory Building Review Committee Meeting

Open house by Bryant Johnson preliminary airport property.
City Budget Workshop
City Personnel Meeting
Truth in Taxation Meeting

Betts attended the following meetings:

Fire Commission Meeting
City Budget Workshop
Truth in Taxation Meeting

Johnson attended the following meetings:

Zoom Meeting Metro Cities Legislative policy adoption meeting
Maple Plain Fire Commission Meeting
Police officer interviews – 2 Part Time
Maple Plain City Council Meeting
Hennepin County Truth in Taxation Meeting
City Budget Workshop
Hennepin County Assessor Meeting
Visit from Council Member from another city
View Santa
Lutefisk Dinner at Lyndale Lutheran Church
Ridgeview Foundation Event
Personnel Committee Meeting
Truth in Taxation Hearing

Simon attended the following meetings:

ABRC – Accessory Building Review Committee Meeting
View Santa
City Budget Workshop
Personnel Committee Meeting
Truth in Taxation Hearing

Kaltsas attended the following meetings:

Metro Cities Representative Meeting

7. West Hennepin Public Safety – Director Gary Kroells: Presentation of the October 2023 Activity Report.

Thank you to the city of Independence for everything they did for view Santa. Largest number of families, the cookies, set up and decorations were outstanding. Another thank you, our staff, reserves and officers setting the trailer up the sled and having the new shed to do this in. Food Shelf - Food was donated to the We Can food shelf in Mound. Brought a trailer of food, slightly over 1400 lbs of food and \$700 in cash. They will be doing a news release on the donation. Really nice turn out. It is interesting to see how the neighborhoods have changed over time. Thank you to Ray and his family stepping up during a difficult time.

October Incident Complaints 3698 (272 Independence) / (117 Maple Plain)

3 Year comparison – 9 out of 10 months were higher each month than the previous 2 years.

8. Consider Adoption of the Final 2024 Tax Levy and General Fund Budget and Associated Actions.

a. **RESOLUTION 23-1205-01** – Adopting the 2024 General Fund Budget.
Motion by Spencer, seconded by Betts to adopt the 2024 General Fund Budget. Ayes: Johnson, Spencer and Betts. Nays: None. Absent: Grotting and McCoy None. Abstain. None. MOTION DECLARED CARRIED. 3-0

b. **RESOLUTION 23-1205-02** – Adopting the 2024 General Tax Levy.
Motion by Johnson, seconded by Spencer to adopt the 2024 General Tax Levy. Ayes: Johnson, Spencer and Betts. Nays: None. Absent: Grotting and McCoy None. Abstain. None. MOTION DECLARED CARRIED. 3-0

c. **RESOLUTION 23-1205-03** – Adopting the 2024 Pioneer Sarah Creek Watershed Management Commission Tax Levy.
Motion by Betts, seconded by Spencer to adopt the 2024 Pioneer Sarah Creek Watershed Management Commission Tax Levy. Ayes: Johnson, Spencer and Betts. Nays: None. Absent: Grotting and McCoy None. Abstain. None. MOTION DECLARED CARRIED. 3-0

9. Approval of the League of Minnesota Cities Grant Navigator Application to fund Metropolitan Council Regional Sonication Application for Highway 12 Improvements.

a. **RESOLUTION 23-1205-04** – Considering approval of the League of Minnesota Cities Grant Navigator Application.

Kaltsas – Working for 10 years on the Hwy 12 Coalition to obtain funding to make improvements. \$40M of investment. We have done a lot; we are not done. We still want to see that corridor reconstructed from County Line Rd east to Baker Park Road. Worked with MNDOT doing a \$1M study, outcome was providing a handful of alternatives for the redevelopment. We would like to see the advancement of one alternative. MNDOT has not slated this section of road as high priority, so we are trying to advance that. Without MNDOT we can apply for additional grant funding. The more you show that you attempted to fund privately or alternatively, the higher up MNDOT advances those items. Metropolitan Council Regional grant is a starting point. This particular grant is one of the boxes we need to check to go to the next step. We partnered with KLJ Engineers to go out and do this. We identified a funding mechanism to pay for the grant writing. The scope is \$13.615 and would

be shared with Maple Plain and Delano. We can jointly apply and combine it. Independence would be the lead on this. No cost to taxpayers to write this grant. It would set the city to go after some grants in the spring that we may have better chances at. We met with KLJ and we are now asking council to adopt a supporting resolution to submit with our grant writing.

Johnson – This is fairly new program with LMC.

Motion by Spencer, seconded by Betts to consider the approval of the League of MN Cities Grant Navigator Application. Ayes: Johnson, Spencer and Betts. Nays: None. Absent: Grotting and McCoy None. Abstain. None. MOTION DECLARED CARRIED. 3-0

10. Open/Misc.

Mike Winkels 5914 Drake Dr.

September 19th my name was brought up about putting in barriers of the snow mobile path on Turner Rd cartway. Just to clear that up, nothing was correct that night. I don't have any barriers, and no one has ever asked us about a snowmobile trail. I just wanted to clear that up.

Questions about the airport property. Bryant Johnson spoke, and they were preliminary plans. Has that property been rezoned yet?

Johnson – No, far from it.

Kaltsas – we encourage the landowner to have a meeting with residents before submitting an application with the city. We haven't accepted or reviewed. Their next step would be to submit a concept level plan review. That would have some review by the city planning to see it, think about, provide feedback. After that process, they would need to make an app for rezoning, prelim, and final plat. The city does not have a zoning category to support that development yet. There are multiple steps involved with that property and figuring out how to serve it with utilities.

Mike Winkels – do we have in place any ordinances?

Kaltsas – Cities adopt comp plan; they would need to have a new category. We have a year to bring our official controls into compliance that supports it.

Mike – So Met Council is after that property being rezoned?

Kaltsas – The Met Council is a regional planning authority, every 10 years met council does a demo study and projects new growth. They issue system statements to cities showing growth. They send us those statements showing growth. We have 5 years to adopt a comp plan that accommodates their projected growth. We try to object what they say and negotiate. We have some growth that they require for sewer residential. They say Independence has to determine how and where. That property has been earmarked for a while that could take some of the sewer growth with the proximity to MP sewer and how big it is. There were a lot

of meetings that we have discussed where to put the growth. It has to be able to connect to sewer so we are limited to where we can put that.

11. Adjourn.

Motion by Betts, seconded by Spencer to adjourn the meeting at 7:13pm. Ayes: Johnson, Spencer and Betts. Nays: None. Absent: Grotting and McCoy None. Abstain. None. MOTION DECLARED CARRIED. 3-0

City of Independence

Request for a Minor Subdivision to Permit a Rural View Lot and Variance to Allow a Reduction in the Requisite Frontage for the Property Located at 6220 County Road 11

To: Planning Commission
From: Mark Kaltsas, City Planner
Meeting Date: December 19, 2023
Applicants: Brian Anderson
Owners: Peter Johnson
Location: 6220 County Road 11

Request:

Peter Johnson (Applicant/Owner) is requesting the following actions for the property located at 6220 CSAH 11 (PID No. 02-118-24-32-0001) in the City of Independence, MN:

- a. A minor subdivision to allow a lot split which would create a new eight (8) acre parcel on the north side of the existing creek and would be accessed via Stephanie Way.
- b. A variance to allow a new property to be created which has less than the requisite lot frontage on a public road or right of way.

Property/Site Information:

The subject property is located on the north side of CSAH 11 and just to the west of the intersection of CSAH 92 and CSAH 11. The property has one existing home and several detached accessory structures. The property is comprised of upland pasture, woodlands and wetlands. The property has the following site characteristics:

Property Information: 6220 County Road 11

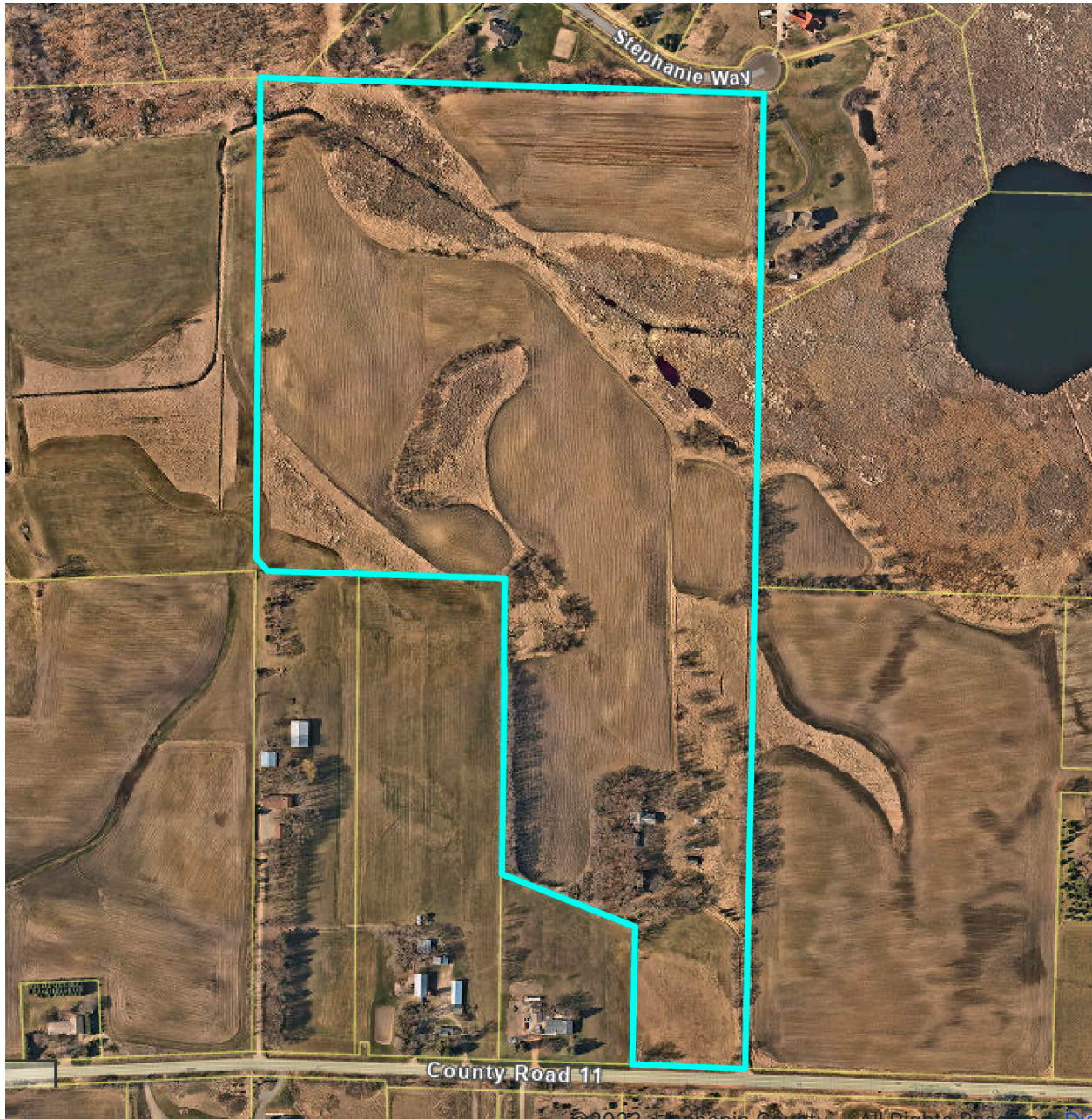
Zoning: AG-Agriculture

Comprehensive Plan: Rural Residential

Acreage Before: 56.95 acres

Acreage After –Parcel A: 8.00 acres

Acreage After –Parcel B: 48.95 acres



Discussion:

The subject property is zoned AG-Agriculture and guided RR-Rural Residential by the City's Comprehensive Land Use Plan. The applicant is seeking a minor subdivision of the property to create two (2) lots. The City allows the subdivision of property in the Agriculture zoning district in accordance with the requirements in the City's zoning ordinance.

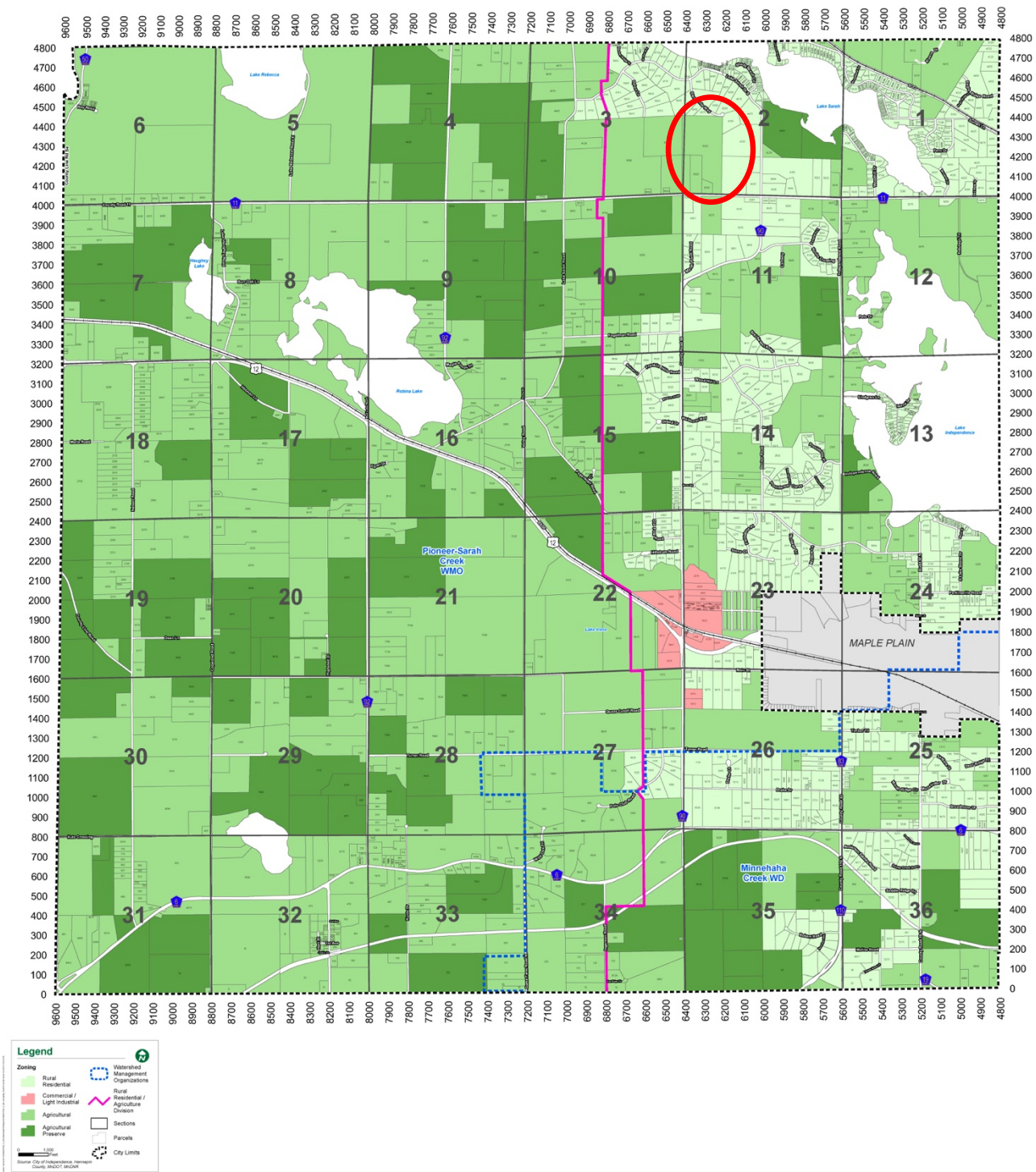
Zoning Map



Zoning Map
City of Independence, MN



May 2019



Minor Subdivision

The subject property is guided for RR-Rural Residential and could be rezoned and subsequently subdivided in accordance with the provisions of the rural residential zoning standards. The Rural Residential standards would allow the property to be subdivided into approximately 8-10 lots. Based on the cost of the roads, stormwater conveyance and filtration system and similar improvements, the current buyer decided not to pursue rezoning. The applicant is seeking approval of a proposed subdivision which would allow the creation of an 8 acre parcel on the north side of the property with access to Stephanie Way.

Using the AG-Agriculture zoning standards, this property has the ability to realize one (1) additional lot. The Agriculture zoning standards allow 1 rural view lot to be created for each 40 acres of property.

Rural view lots must have the following characteristics:

Lot size required: between 2.5 and 10 acres

Lot size proposed: Parcel A – 8.00 acres

Minimum lot frontage required: 300 LF (for property between 5-10 acres)

Minimum lot frontage proposed: Parcel A – 120 LF

Ratio of lot frontage to lot depth required - no more than 1:4

Ratio of lot frontage to lot depth proposed – Parcel A - ~1:1.5 (994:470)

In addition to the minimum size necessary to subdivide, the ordinance requires a minimum of 2.5 acres of buildable upland, 300 LF of frontage on a right of way and no greater than a 1:4 ratio of lot frontage to lot depth for each rural view lot. Based on the proposed subdivision, the rural view lot would have 8.00 acres of useable upland and 120 LF of frontage on Stephanie Way.

The proposed subdivision would create one new lot in addition to the existing. The applicant is proposing to subdivide the property so that the new lot would have access on Stephanie Way. The existing frontage on Stephanie Way does not meet the requisite frontage requirements for an 8-acre lot. The applicant is seeking a variance to allow a lot to be created with reduced frontage on a right of way.

The remainder property would have approximately 45 acres and would maintain an access onto CSAH 11. The remainder parcel does not have any existing non-conformities in the before condition and would not have any in the after condition. As historically has been required,

Hennepin County is requesting an additional 17 feet of right of way for future trail and road expansion. This has been a consistent request for all subdivisions along CSAH 11. The additional right of way is not currently shown on the plans and would need to be dedicated with the requisite conveyance documents.

In addition, both parcels would be required to provide the requisite 10-foot perimeter drainage and utility easements as required by ordinance (Section 500.15, Subd.'s 1 and 2).

The newly created east parcel will be required to pay the City's requisite park dedication fee.

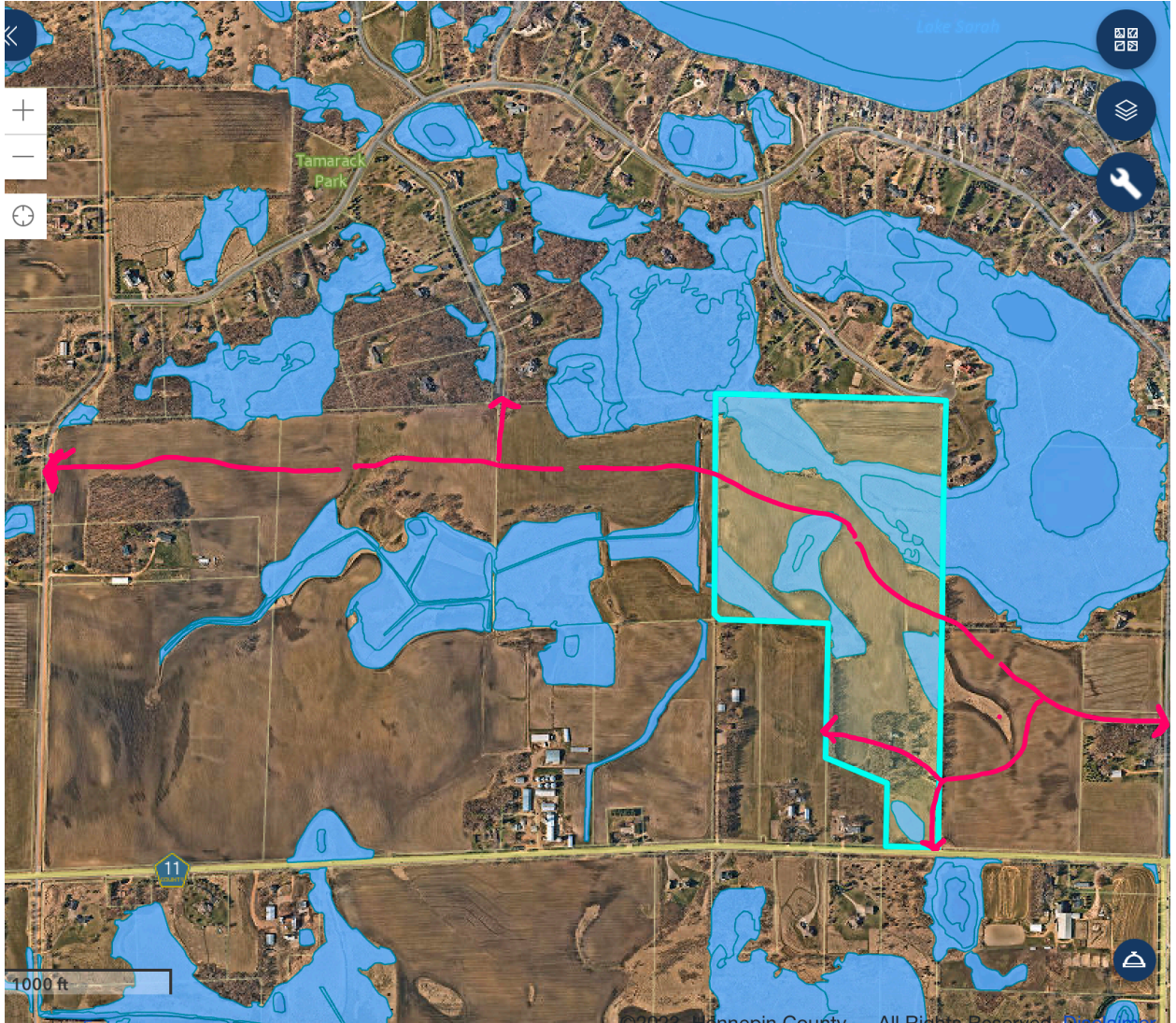
The total park dedication fee collected will be \$5,750.00. The park dedication fees will need to be paid prior to the City recording the subdivision.

*Park dedication fee of \$3,500 per lot up to 4.99 acres,
plus \$750 per acre for each acre over 5 acres*

Other Considerations:

1. The property is guided rural residential by the City's Comprehensive Plan. The proposed subdivision is based on the property remaining AG-Agriculture at this time. There are several additional considerations that should be noted relating to the property not being rezoned as follows:
 - a. The City has considered several plans for this property that were based on the rezoning to RR-Rural Residential. This property is bifurcated by wetlands which makes its development more challenging.
 - b. The property has access onto both Stephanie Way on the north and CSAH 11 on the south. The connection between these two points was considered but created challenges as a result of the topography and wetlands. Development of the north lot without any future consideration for a connection to the south would likely eliminate the ability to extend Stephanie Way. The City would want to consider whether or not a future connection is warranted.
 - c. The property does have the ability to connect to the east and possibly Lake Sarah Drive S. as well as to the west and possibly Dylan Lane and or Lake Sarah. There are many potential issues relating to the development of this area when considering large lot development. The extent of the wetlands, topography and likely span for development makes predicting the potential connections more

difficult. The cost of developing infrastructure around many of these conditions is also difficult. Staff will be seeking feedback from the Planning Commission relating to the access and future access issues.



2. The applicant has provided the City with the requisite percolation tests verifying that each lot can accommodate a primary and secondary septic site. It should be noted that the existing lot has a failing septic system. The house is currently vacant, and the applicant is not sure of what will happen with the existing home. The City has stated that they would allow the existing septic system to be crushed (tank and line to house) without replacing until such time as the existing home is demolished or renovated. This

property is not included in the current service area for sewer on CSAH 11 or Lake Sarah Drive S.

The City has established standards for granting a variance. The following standards should be noted:

520.21. Standards for granting variances. Subdivision 1. The City Council may grant a variance from the terms of this zoning code, including restrictions placed on nonconformities, in cases where: 1) the variance is in harmony with the general purposes and intent of this zoning code; 2) the variance is consistent with the comprehensive plan; and 3) the applicant establishes that there are practical difficulties in complying with the zoning code (Amended, Ord. 2011-08)

Subd. 2. An applicant for a variance must demonstrate that there are practical difficulties in complying with the zoning code. For such purposes, "practical difficulties" means:

- (a) The property owner proposes to use the property in a reasonable manner not permitted by the zoning code;*
- (b) the plight of the property owner is due to circumstances unique to the property not created by the landowner;*
- (c) the variance, if granted, will not alter the essential character of the locality.*

Economic considerations alone do not constitute practical difficulties. Practical difficulties include, but are not limited to, inadequate access to direct sunlight for solar energy systems. (Amended, Ord. 2011-08)

Subd. 3. The City Council shall not grant a variance to permit a use that is not allowed under the zoning code based on the zoning classification of the affected property. (Amended, Ord. 2011-08)

520.23. Conditions and restrictions. The board of adjustments may recommend and the City Council may impose conditions on a variance. Conditions must be directly related to and must bear a rough proportionality to the impact created by the variance. (Amended, Ord. 2011-08)

Consideration of the criteria for granting a variance:

- a. The property abuts the right of way for Stephanie Way. The width of the frontage is 120 LF. A lot that is greater than 4.99 acres is required to have 300 LF of frontage on a public ROW.
- a. There was a question relating to whether or not this property does abut the cul-de-sac bulb. It was noted that the City has provisions relating to cul-de-sac bulbs that allow lot to have only 50 LF of right of way frontage. Given the current geometry

of the property line and right of way, it was determined that the property did not directly fall onto the “bulb” of the cul-de-sac.

- b. The topography and wetlands on the subject property do support the concept that the north side of the property could be separated from the south side in a clear manner. If separated, access to Stephanie Way for the proposed lot could be the most efficient way to develop this portion of the property.
- c. The proposed property does generally align with the character and size of the lots on Stephanie Way.

Summary:

The proposed subdivision of this property appears to be simple in nature but does present the potential to stipulate future connectivity and development patterns. The City does “master plan” at the detailed level that would program local road development. Historically, the City has maintained future road connections to adjacent parcels where it could reasonable be determined that a connection could provide for future connectivity. The City will need to consider if the proposed minor subdivision allows for the reasonable future development of the remainder property without limiting and or creating future connectivity issues.

The proposed lot being created conforms to all applicable criteria for rural view lots. The proposed subdivision does not prevent the future development of the remainder property and the future development still has the ability to connect to the adjacent property and Lake Sarah Drive S. The requested variance to allow reduced frontage on a public right of way can be considered. The limited lineal feet of frontage on Stephanie Way was not created by the property owner and appears to be remnant of the Tamarack on Lake Sarah subdivision. The north portion of this property does relate in size and character to the existing lots on Stephanie Way. The City will need to consider the existing conditions, existing topography and wetlands and find that the standards for granting a variance have been met and that the proposed subdivision meets all other applicable criteria.

Neighbor Comments:

The City has not received any written or verbal comments regarding the proposed subdivision to permit a rural view lot.

Recommendation:

Staff is seeking a recommendation from the Planning Commission for the requested Minor Subdivision and Variance. Should the Planning Commission recommend approval to the City Council, the following findings and conditions should be included:

1. The proposed Minor Subdivision nad meets all applicable conditions and restrictions stated Chapter V, Section 510, Zoning, in the City of Independence Zoning and Subdivision Ordinance.
2. City Council approval of the Minor Subdivision is subject to the following:
 - a. The Applicant shall address all comments and applicable requirements pertaining to the proposed subdivision.
 - b. The Applicant shall make all revisions requested in the staff report, by the Planning Commission and City Council. This includes, but is not limited to the following:
 - Prepare the requisite documents and convey the perimeter drainage and utility easements.
 - Submit and receive approval from Hennepin County.
 - Prepare the requisite documents and convey the additional 17 feet of right of way to the City as requested by Hennepin County.
 - c. The Applicant shall obtain all necessary City, County, PCA and other regulatory agency approval and permits prior to construction.
3. The City finds that the criteria for granting a variance have been satisfied by the applicant. Specifically, the City finds the following:
 - a. Residential use of the property is consistent with the AG-Agriculture District. The applicant is seeking a variance to allow a reduced public right of way frontage onto Stephanie Way.
 - b. The character of the surrounding area is agriculture. The proposed lot is similar in size and character to the surrounding properties.
 - c. The limited frontage on Stephanie Way was not a condition that was created by the property owner.

4. The variance will permit the subdivision of a property with less than 300 LF of frontage on Stephanie Way. The minimum frontage permitted by the variance is 120 LF or a 180 LF reduction to the requisite frontage requirement.
5. The Applicant shall pay the park dedication fees in the amount of \$5,750.00.
6. The Applicant shall pay for all costs associated with the City's review of the minor subdivision and variance.
7. The Applicant shall execute all applicable documents to allow recording of the minor subdivision within six months from the date of the City Council approval.

Attachments:

1. Application
2. Proposed Minor Subdivision Survey (Before and After)
3. Property Survey with Wetlands



**CITY OF
INDEPENDENCE
MINNESOTA**

Applicant Information

Name: Brian Anderson
Address: 14904 Overlook
Drive, Minnesota 55378
Primary Phone: 8165074269
Email: blahdc@gmail.com

Owner Information

Name: Peter Johnson
Address: 51852 Cheryl Drive
Granger, Indiana 46530
Primary Phone: 5743364252
Email: johnson2daddy@gmail.com

Property Address:

PID:

Planning Application Type: Subdivision, Variance

Subdivision Type: Minor Subdivision (3 lots or less)

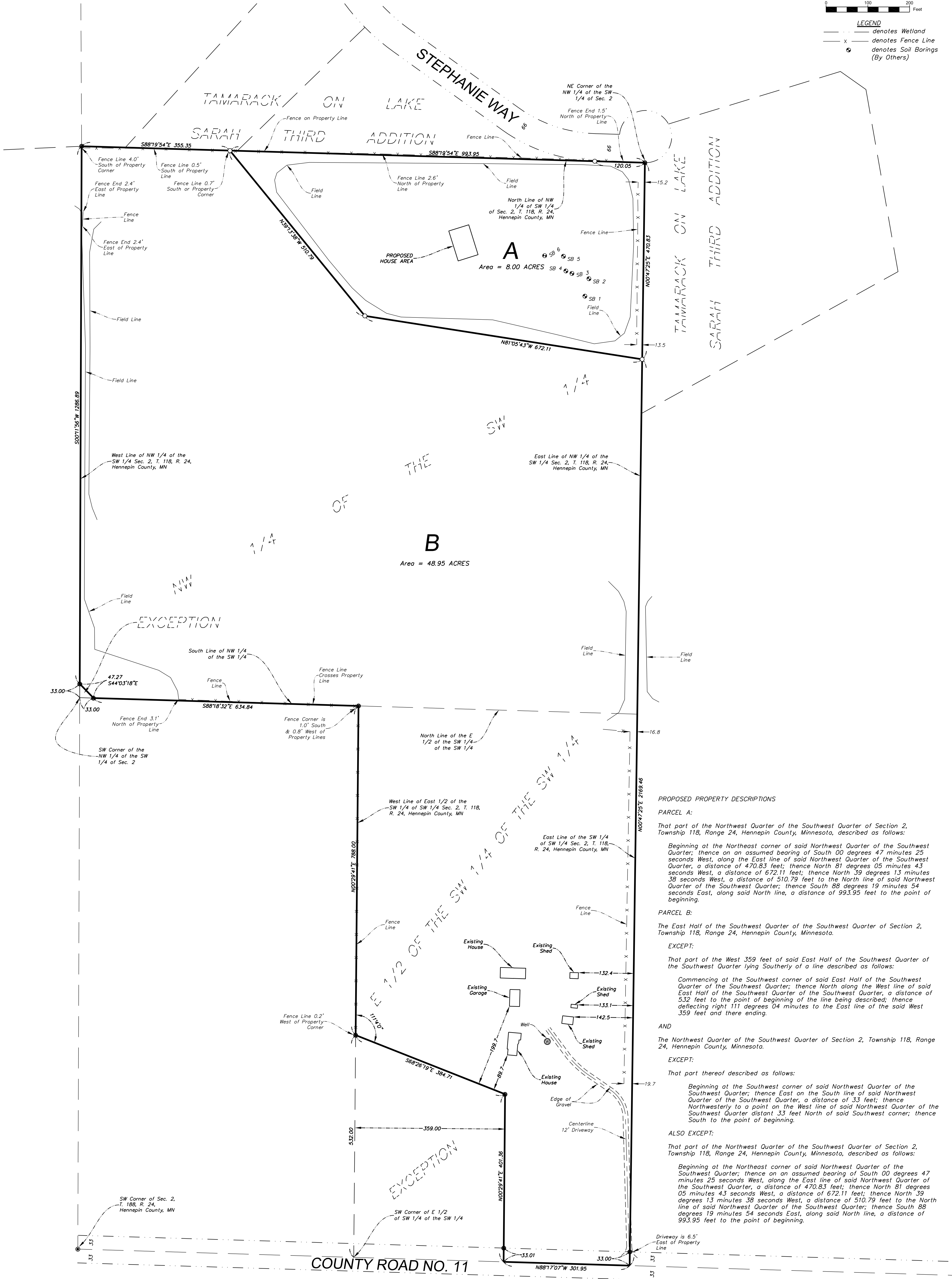
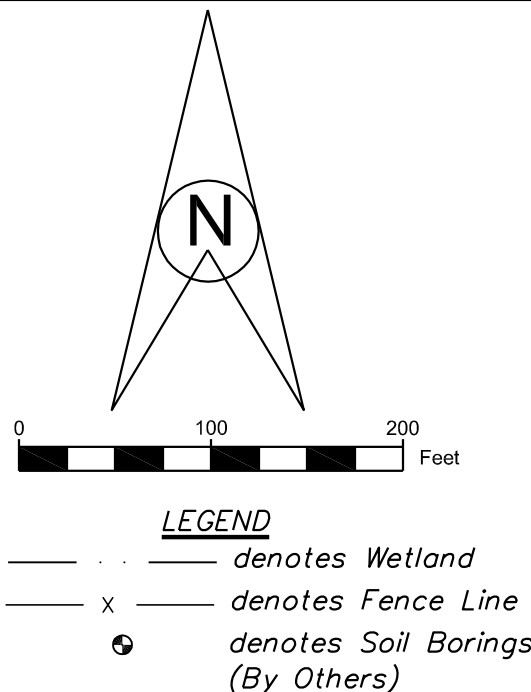
Description:

Supporting Documents: Site Survey (Existing Conditions)

Signature:

My wife and I are submitting this application to split PID 0211824320001 on behalf of the landowner (Peter Johnson, C Matten/J Couillard Et Al). Please see the attached documents that include an existing property survey, written agreement from the landowner to complete this work, and a concept drawing of the parcel split. We are currently working with Mark Kaltsas to understand what should be included on an updated survey to support this request for a lot split and variance for a driveway off of Stephanie Way.

Certificate of Survey



PROPOSED PROPERTY DESCRIPTIONS

PARCEL A:

That part of the Northwest Quarter of the Southwest Quarter of Section 2, Township 118, Range 24, Hennepin County, Minnesota, described as follows:

Beginning at the Northeast corner of said Northwest Quarter of the Southwest Quarter; thence on an assumed bearing of South 00 degrees 47 minutes 25 seconds West, along the East line of said Northwest Quarter of the Southwest Quarter, a distance of 470.83 feet; thence North 81 degrees 05 minutes 43 seconds West, a distance of 672.11 feet; thence North 39 degrees 13 minutes 38 seconds West, a distance of 510.79 feet to the North line of said Northwest Quarter of the Southwest Quarter; thence South 88 degrees 19 minutes 54 seconds East, along said North line, a distance of 993.95 feet to the point of beginning.

PARCEL B:

The East Half of the Southwest Quarter of the Southwest Quarter of Section 2, Township 118, Range 24, Hennepin County, Minnesota.

EXCEPT:

That part of the West 359 feet of said East Half of the Southwest Quarter of the Southwest Quarter lying Southerly of a line described as follows:

Commencing at the Southwest corner of said East Half of the Southwest Quarter of the Southwest Quarter; thence North along the West line of said East Half of the Southwest Quarter of the Southwest Quarter, a distance of 532 feet to the point of beginning of the line being described; thence deflecting right 111 degrees 04 minutes to the East line of the said West 359 feet and there ending.

AND

The Northwest Quarter of the Southwest Quarter of Section 2, Township 118, Range 24, Hennepin County, Minnesota.

EXCEPT:

That part thereof described as follows:

Beginning at the Southwest corner of said Northwest Quarter of the Southwest Quarter; thence East on the South line of said Northwest Quarter of the Southwest Quarter, a distance of 33 feet; thence Northwesterly to a point on the West line of said Northwest Quarter of the Southwest Quarter distant 33 feet North of said Southwest corner; thence South to the point of beginning.

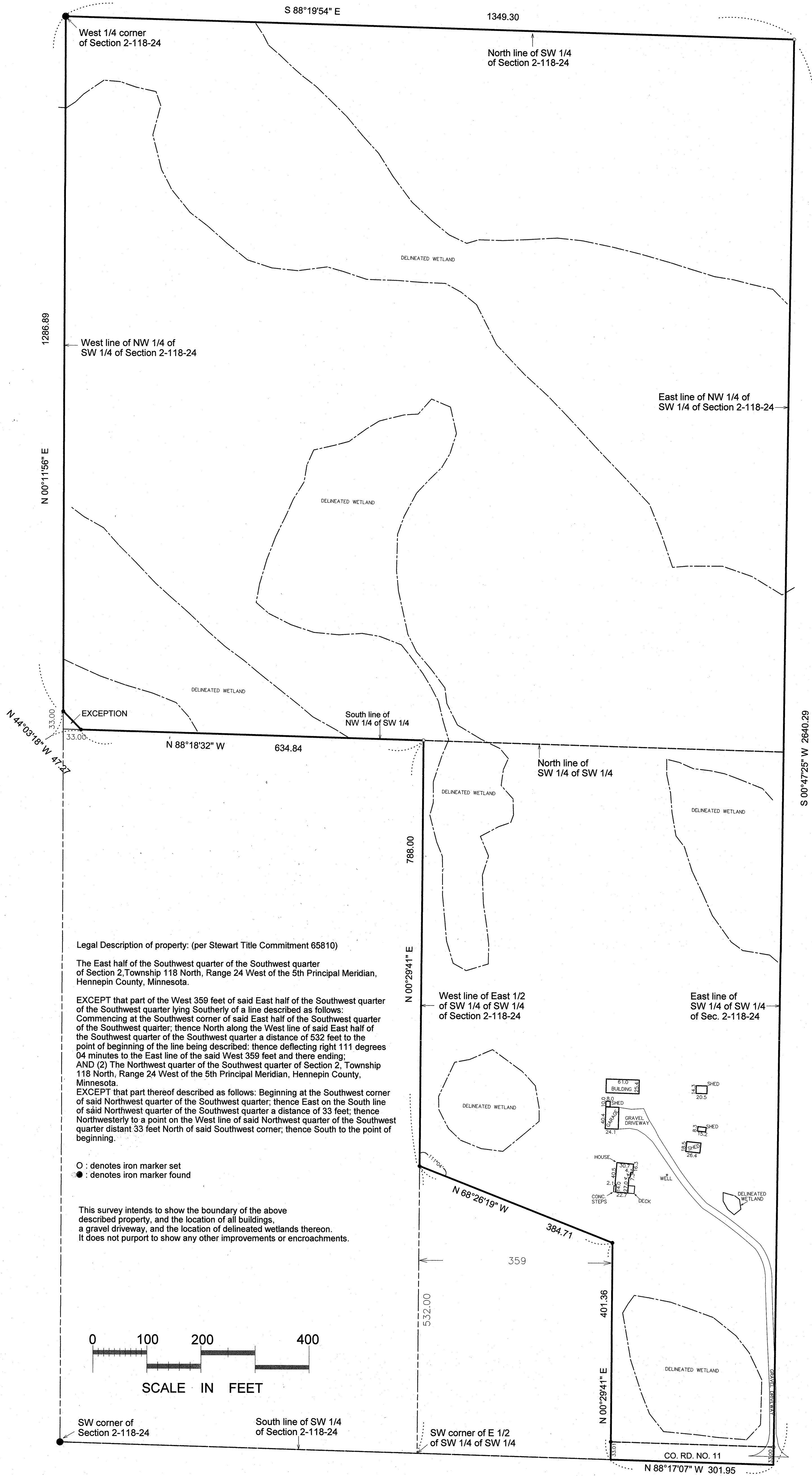
ALSO EXCEPT:

That part of the Northwest Quarter of the Southwest Quarter of Section 2, Township 118, Range 24, Hennepin County, Minnesota, described as follows:

Beginning at the Northeast corner of said Northwest Quarter of the Southwest Quarter; thence on an assumed bearing of South 00 degrees 47 minutes 25 seconds West, along the East line of said Northwest Quarter of the Southwest Quarter, a distance of 470.83 feet; thence North 81 degrees 05 minutes 43 seconds West, a distance of 672.11 feet; thence North 39 degrees 13 minutes 38 seconds West, a distance of 510.79 feet to the North line of said Northwest Quarter of the Southwest Quarter; thence South 88 degrees 19 minutes 54 seconds East, along said North line, a distance of 993.95 feet to the point of beginning.

Certificate of Survey on Part of the SW 1/4 of Sec. 02, T. 118, R. 24, Hennepin County, Minnesota		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. Paul E. Otto License # 40062 Date: 12-04-23		Requested By: Brian Anderson		Engineers & Land Surveyors, Inc.	
Revised: 12-04-23 B.M.H. SOIL BORINGS & FENCE ADDITION		Date: 09-19-23		Drawn By: B.M.H.		Scale: 1"=100'	
				Checked By: P.E.O.		Project No. 23-0383	

CERTIFICATE OF SURVEY FOR
PETER JOHNSON
IN SEC. 02-118-24
HENNEPIN COUNTY, MINNESOTA



Legal Description of property: (per Stewart Title Commitment 65810)

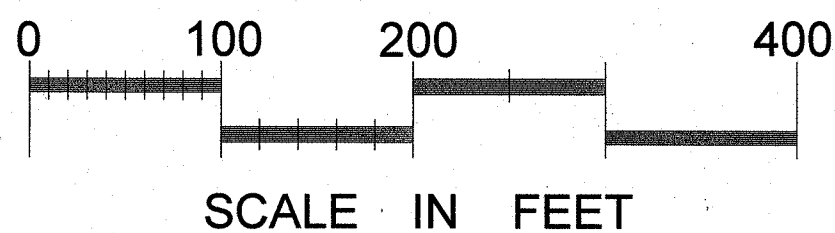
The East half of the Southwest quarter of the Southwest quarter of Section 2, Township 118 North, Range 24 West of the 5th Principal Meridian, Hennepin County, Minnesota.

EXCEPT that part of the West 359 feet of said East half of the Southwest quarter of the Southwest quarter lying Southerly of a line described as follows: Commencing at the Southwest corner of said East half of the Southwest quarter of the Southwest quarter; thence North along the West line of said East half of the Southwest quarter of the Southwest quarter a distance of 532 feet to the point of beginning of the line being described; thence deflecting right 111 degrees 04 minutes to the East line of the said West 359 feet and there ending; AND (2) The Northwest quarter of the Southwest quarter of Section 2, Township 118 North, Range 24 West of the 5th Principal Meridian, Hennepin County, Minnesota.

EXCEPT that part thereof described as follows: Beginning at the Southwest corner of said Northwest quarter of the Southwest quarter; thence East on the South line of said Northwest quarter of the Southwest quarter a distance of 33 feet; thence Northwesterly to a point on the West line of said Northwest quarter of the Southwest quarter distant 33 feet North of said Southwest corner; thence South to the point of beginning.

○ : denotes iron marker set
● : denotes iron marker found

This survey intends to show the boundary of the above described property, and the location of all buildings, a gravel driveway, and the location of delineated wetlands thereon. It does not purport to show any other improvements or encroachments.



SW corner of Section 2-118-24
South line of SW 1/4 of Section 2-118-24
SW corner of E 1/2 of SW 1/4 of SW 1/4

REVISIONS			DESIGNED	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 Land Surveyor under the laws of the State of Minnesota. <i>Mark S. Gronberg</i> DATE <u>2-11-21</u> MINN. LICENSE NUMBER <u>12755</u>	DATE		GRONBERG & ASSOCIATES, INC. CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS 445 N. WILLOW DRIVE LONG LAKE, MN 55356 PHONE: 952-473-4141 FAX: 952-473-4435
DATE	BY	REMARKS	DRAWN		2-11-21		
			CHECKED		SCALE 1"=100'		
					JOB NO. 20-337		
					SHEET OF SHEETS		

City of Independence

Request for a Conditional Use Permit and Variance to Construct a Ground Mounted Solar System on the Property located at 7075 US Hwy 12

<i>To:</i>	Planning Commission
<i>From:</i>	Mark Kaltsas, City Planner
<i>Meeting Date:</i>	December 19, 2023
<i>Applicant:</i>	Mike Reneau
<i>Property Owner:</i>	Greg Page
<i>Location:</i>	7075 US Hwy 12

Request:

Mike Reneau (Applicant) Greg Page (Owner) is requesting the following action for the property located at 7075 Highway 12 (PID No. 22-118-24-24-0001) in the City of Independence, MN:

- a. A conditional use permit (CUP) to allow a ground mounted solar system.
- b. A variance to allow a ground mounted solar system that is greater than 500 SF.

Property/Site Information:

The property is located on the south side of US Hwy 12 and approximately one mile west of the intersection of CSAH 92 and Hwy 12. The property has an existing home and several detached accessory structures. The property has the following characteristics:

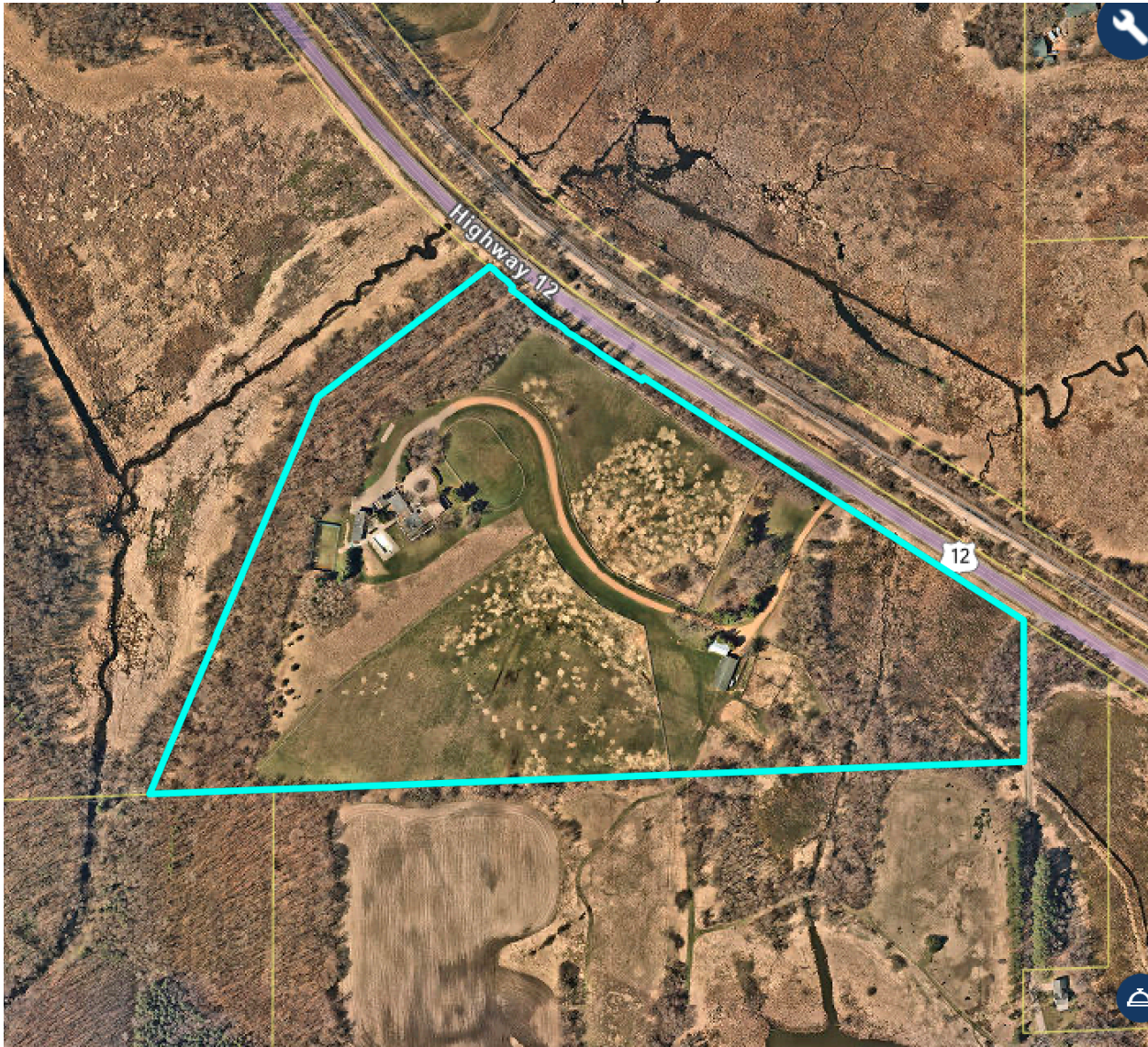
Property Information: 7075 US Hwy 12

Zoning: Agriculture

Comprehensive Plan: Agriculture

Acreage: 42 acres

Subject Property



Discussion:

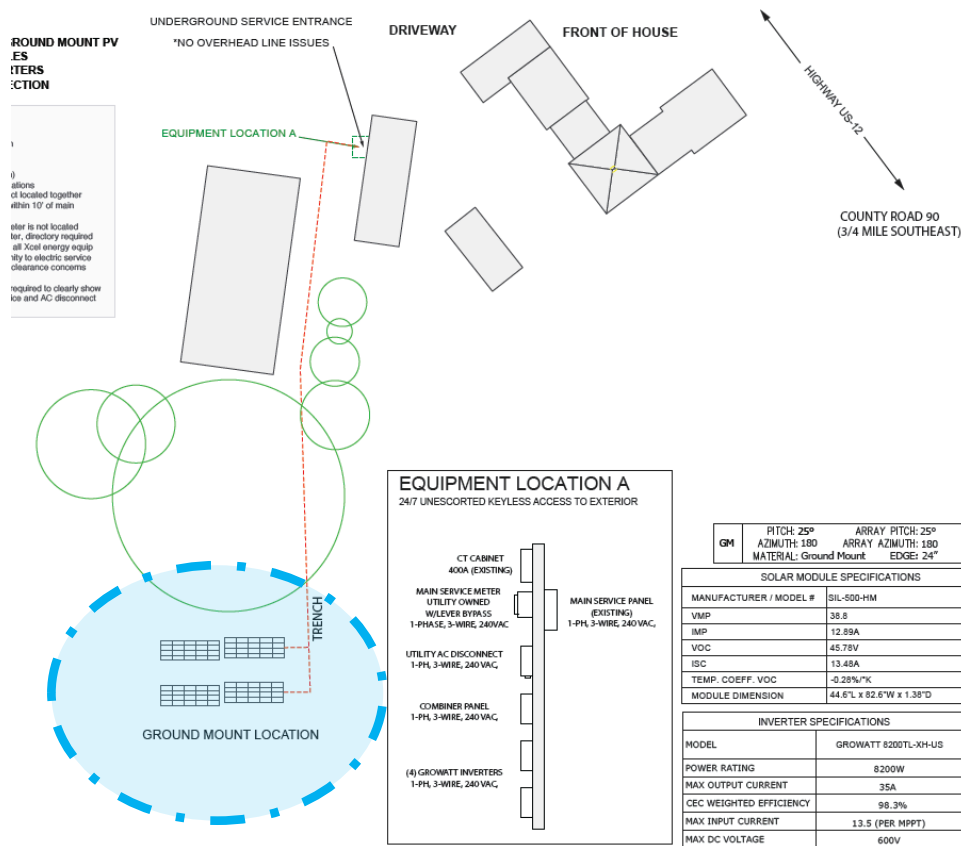
The applicant approached the City about the possibility of installing a ground mounted solar system on the subject property. The City provided the applicant with the requirements and discussed the process for initially developing the City's standards relating to ground mounted solar systems. All ground mounted solar systems require a conditional use permit. Ground mounted solar systems are limited to a maximum square footage of 500 square feet. Ground mounted solar systems have the following requirements:

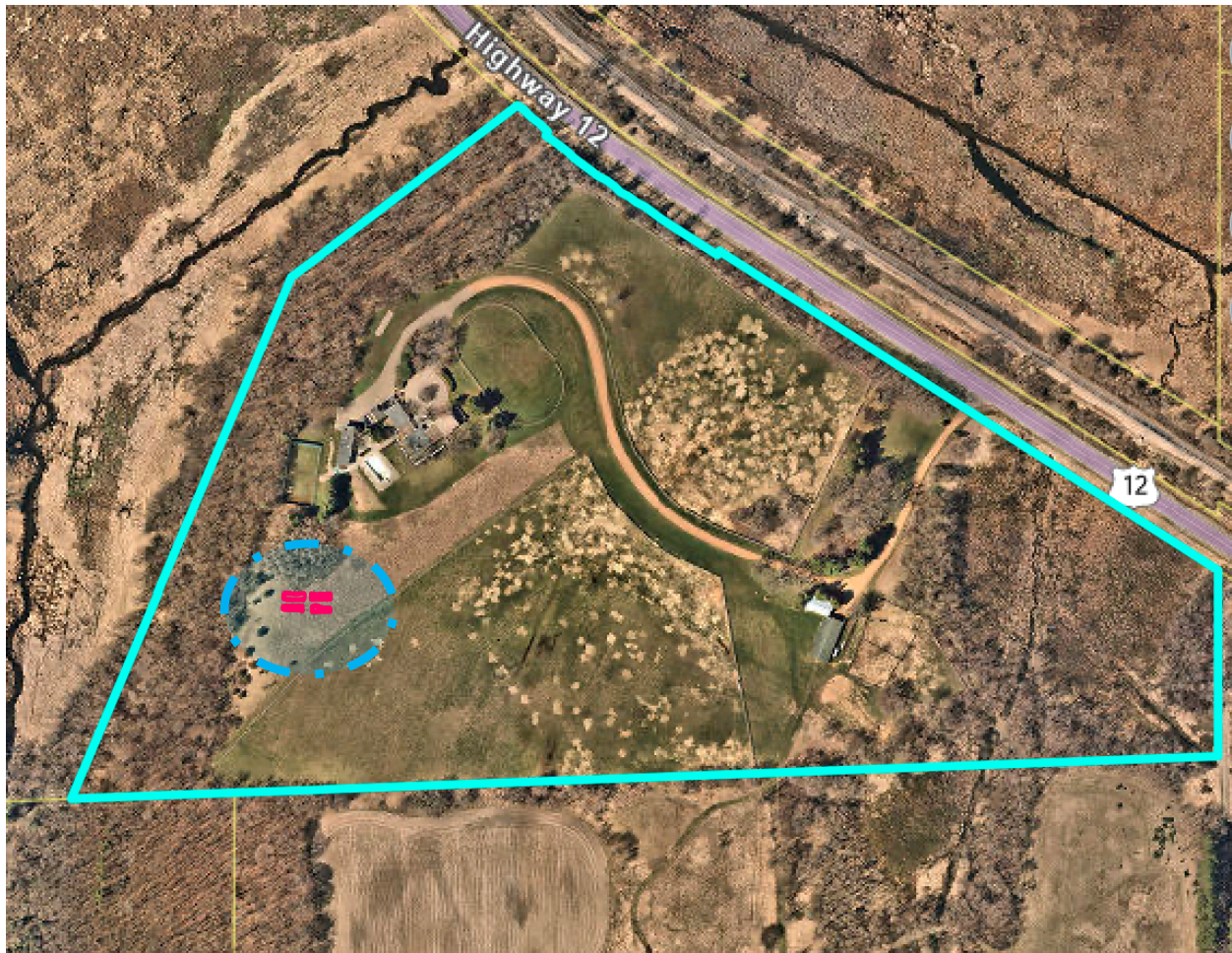
Subd. 5. Ground-mounted solar energy systems shall conform to the following standards:

- (a) Ground-mounted systems shall only be allowed on a parcel with an existing principal structure.*
- (b) Ground-mounted systems shall be located only in rear or side yards.*
- (c) Ground-mounted systems shall not be located in the Shoreland Overlay District.*

- (d) Ground-mounted systems shall be wholly screened from view from the public right-of-way and adjacent residential structures. Methods for screening shall include berming, fencing, landscaping and/or combination thereof.
- (e) Ground-mounted systems shall be located on a parcel of at least 2.5 acres.
- (f) Ground-mounted systems shall be setback 40 feet from the rear yards.
- (g) Ground-mounted systems shall be setback 30 feet from the side yards.
- (h) Ground-mounted systems shall have a maximum area of 500 SF.
- (i) The maximum height for any component of the system shall be 15 feet.
- (j) Ground-mounted systems shall be in compliance with any applicable local, state and federal regulatory standards, including building, electrical and plumbing codes.
- (k) Ground-mounted systems and their support structures shall be designed by a certified professional to meet applicable professional standards for the local soil and climate conditions.

The proposed ground mounted solar system would be located on a portion of the property that is to the south of the existing home. The proposed solar system would be comprised of four (4) separate ground mounted arrays. The total square footage of the four (4) arrays is proposed to be 2,046 SF (511 SF per array). The proposed system would exceed the maximum square footage permitted by 1,546 SF. The arrays would be setback approximately 300 feet from the west (side) property line and 375 feet from the south property line (rear yard). The required setback for the rear yard is 40 feet and the required setback for the side yard is 30 feet.





The proposed ground mounted system would have a maximum height of approximately 10' to the top of the highest portion of the panels. The City requires systems to be wholly screened from view of the public right of way and adjacent residential structures. The property owner owns a total of almost 500 acres including the subject property. The nearest residential structure to this property is approximately 0.5 miles to the east. The distance from the proposed solar arrays to the Hwy 12 right of way is approximately 1,000 feet and there is a significant stand of trees between both the adjacent residential property and Highway 12.

The applicant has provided the City with a site plan and images of the proposed solar system. The system is comprised 80 panels. The panels are oriented to the south and will be installed at a 35-degree angle to the ground. The proposed panels are mounted to a galvanized metal racking system. The racking system is proposed to be secured to the ground using helical pilings. The proposed solar panels are Silfab 500 HM panel that has an anti-reflection coating.

The criteria for granting a conditional use permit are clearly delineated in the City's Zoning Ordinance (Section 520.11 subd. 1, a-i) as follows:

1. *The conditional use will not adversely affect the health, safety, morals and general welfare of occupants of surrounding lands.*
2. *The proposed use will not have a detrimental effect on the use and enjoyment of other property in the immediate vicinity for the proposes already permitted or on the normal and orderly development and improvement of surrounding vacant property for uses predominant in the area.*
3. *Existing roads and proposed access roads will be adequate to accommodate anticipated traffic.*
4. *Sufficient off-street parking and loading space will be provided to serve the proposed use.*
5. *The proposed conditional use can be adequately serviced by public utilities or on-site sewage treatment, and sufficient area of suitable soils for on-site sewage treatment is available to protect the city form pollution hazards.*
6. *The proposal includes adequate provision for protection of natural drainage systems, natural topography, tree growth, water courses, wetlands, historic sites and similar ecological and environmental features.*
7. *The proposal includes adequate measures to prevent or control offensive odor, fumes, dust, noise, or vibration so that none of these will constitute a nuisance.*
8. *The proposed condition use is consistent with the comprehensive plan of the City of Independence.*
9. *The proposed use will not stimulate growth incompatible with prevailing density standards.*

520.21. Standards for granting variances. Subdivision 1. The City Council may grant a variance from the terms of this zoning code, including restrictions placed on nonconformities, in cases where: 1) the variance is in harmony with the general purposes and intent of this zoning code; 2) the variance is consistent with the comprehensive plan; and 3) the applicant establishes that there are practical difficulties in complying with the zoning code (Amended, Ord. 2011-08)

Subd. 2. An applicant for a variance must demonstrate that there are practical difficulties in complying with the zoning code. For such purposes, “practical difficulties” means:

- (a) The property owner proposes to use the property in a reasonable manner not permitted by the zoning code;*
- (b) the plight of the property owner is due to circumstances unique to the property not created by the landowner;*
- (c) the variance, if granted, will not alter the essential character of the locality.*

Economic considerations alone do not constitute practical difficulties. Practical difficulties include, but are not limited to, inadequate access to direct sunlight for solar energy systems. (Amended, Ord. 2011-08)

Subd. 3. The City Council shall not grant a variance to permit a use that is not allowed under the zoning code based on the zoning classification of the affected property. (Amended, Ord. 2011-08)

520.23. Conditions and restrictions. The board of adjustments may recommend, and the City Council may impose conditions on a variance. Conditions must be directly related to and must bear a rough proportionality to the impact created by the variance. (Amended, Ord. 2011-08)

The City has discussed the proposed ground mounted solar system with the applicant. The proposed ground mounted solar system exceeds the City's maximum size for ground mounted solar systems. The energy generated by this system is estimated to be 32.8 kW (AC). The applicant has noted that the proposed system will generate enough electricity to support the electrical loads of the existing residence. There are a few additional considerations that should be noted by the City:

- The maximum size of permitted by a ground mounted solar system (500 SF) was based on the size of a typical residential solar system. This system would require the City to grant a variance to the maximum size to allow 1,546 additional square feet of surface area. The criteria for granting a variance are provided within this report. The City will need to find that the size limitation on ground mounted systems creates a hardship to the owner. Additionally, the City will need to also find that the granting of a variance will not alter the essential character of the area and maintain the reasonable use of the property.
- The proposed system will generate approximately 54,933 kWh in the first year. This is a large property with several accessory buildings, a swimming pool and a higher energy demand than typical residential properties.
- The proposed system meets the location, setback and maximum height requirements of the zoning ordinance.
- There are no surrounding properties that appear to have any visibility into the existing site. The site sits higher than many of the surrounding properties and is buffered around the permitter by heavy vegetative cover. The visibility of this system from the Hwy 12 right of way is fully screened.

The City has generally restricted ground mounted solar arrays to no more than 500 SF. The City has discussed the possibility of allowing a variance to that standard if the power generated by the system would be consumed by the property owner. The City has recommended to property owners that they consider installing additional system on the roofs of buildings as a way to obtain additional square footage. The City will need to consider the requested variance and CUP as presented and determine if the requested variance and CUP meet applicable criteria and can be supported. The City will also need to find that the proposed variance and conditional use permit meet the criteria for granting both and continues to allow the reasonable use and enjoyment of the surrounding properties. This property is a large property located off of US Hwy 12, the orientation of the proposed solar system and the relationship to the surrounding properties all aid in the mitigation of potential impacts relating to the ground mounted solar array.

Neighbor Comments:

The City has not received any comments or questions relating to the requested CUP and variance.

Recommendation:

Staff is seeking a recommendation from the Planning Commission pertaining to the request for a conditional use permit and variance with the following findings and conditions:

1. The proposed conditional use permit and amendment request meets all applicable conditions and restrictions stated in Chapter V, Section 510, Zoning, in the City of Independence Zoning Ordinance.
 2. The conditional use permit will include the following conditions:
 - a) The conditional use permit will allow a 2,046 SF ground mounted solar system that is installed in accordance with the approved plans attached hereto as Exhibit A.
 - b) The ground mounted solar system shall be constructed in accordance with all applicable zoning code, building code and other applicable standards.
 3. The City finds that the criteria for granting a variance have been satisfied by the applicant. Specifically, the City finds the following:
 - a. The proposed residential ground mounted solar system will not take away from the essential character of the property or surrounding properties.
 - b. The proposed variance will allow a larger residential ground mounted solar system that provides energy solely for this residential property.
 - c. Potential impacts resulting from the larger ground mounted solar system are adequately mitigated as a result of the properties location and proximity to surrounding properties.
- a) The applicant shall pay for all costs associated with the review and recording of the resolution granting approval of the conditional use permit and variance.

Attachments:

1. Application
2. Ground Mounted Solar Site Plan
3. Ground Mounted Solar Plans and Details



**CITY OF
INDEPENDENCE
MINNESOTA**

Applicant Information

Name: Mike Reneau
Address: 7075 US-12
Maple Plain, Minnesota
55359
Primary Phone: 612-475-4444
Email: mike@greenwaysolar.org

Owner Information

Name: Greg Page
Address: 7075 US-12
Maple Plain, Minnesota
55359
Primary Phone: 612-772-8599
Email: gregpage0809@gmail.com

Property Address:

PID:

Planning Application Type: Variance

Description:

Supporting Documents: Site Survey (Proposed Conditions), Preliminary/Final Plan

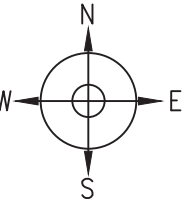
Signature:

We would like to install a 40kW ground mount solar system to support the electrical loads at the residence. The array will be located behind a tree line that obscures it from the residence and all surrounding properties. The planned arrays will have a total surface area of 2,046, requiring a variance per 515.11, subd.5, (h).

SCOPE OF WORK

(N) 40 kW DC/ 32.8 kW AC GROUND MOUNT PV
(80) SILFAB 500 HM MODULES
(4) GROWATT 8.2 kW INVERTERS
(N) LINE SIDE INTERCONNECTION

- MNDIP REFERENCE:
- 4.1 Customer Name:
 - 4.2 Installation Address
 - 4.3 Installer name & contact information
 - 4.4 OID
 - 4.5 Buildings and streets labeled
 - 4.6 Compass direction (indicating North)
 - 4.7 Main service entrance, all meter locations
 - 4.8 Production Meter and AC Disconnect located together in readily accesible location within 10’ of main service meter
 - 4.8.1 If AC Disconnect or Production Meter is not located within 10’ of main service meter, directory required
 - 4.9 24/7 unescorted keyless access for all Xcel energy equip
 - 4.10 If DER facilities are in close proximity to electric service lines- position, distance, and clearance concerns should be noted
 - 4.11 Separate detail plan view may be required to clearly show location of meters, main service and AC disconnect



UNDERGROUND SERVICE ENTRANCE

*NO OVERHEAD LINE ISSUES

DRIVEWAY

FRONT OF HOUSE

HIGHWAY US-12

COUNTY ROAD 90
(3/4 MILE SOUTHEAST)

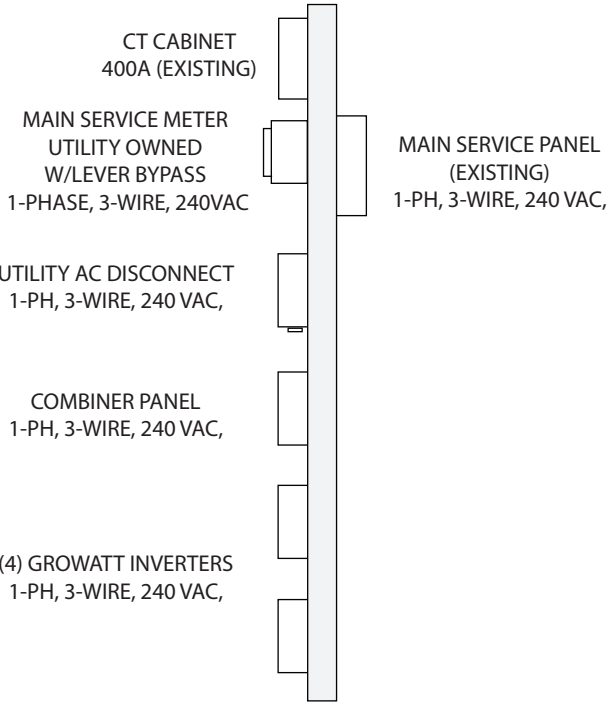
EQUIPMENT LOCATION A

TRENCH

GROUND MOUNT LOCATION

EQUIPMENT LOCATION A

24/7 UNESCORTED KEYLESS ACCESS TO EXTERIOR



GM	PITCH: 25°	ARRAY PITCH: 25°
	AZIMUTH: 180	ARRAY AZIMUTH: 180
	MATERIAL: Ground Mount	EDGE: 24"

SOLAR MODULE SPECIFICATIONS	
MANUFACTURER / MODEL #	SIL-500-HM
VMP	38.8
IMP	12.89A
VOC	45.78V
ISC	13.48A
TEMP. COEFF. VOC	-0.28%/°K
MODULE DIMENSION	44.6"L x 82.6"W x 1.38"D

INVERTER SPECIFICATIONS	
MODEL	GROWATT 8200TL-XH-US
POWER RATING	8200W
MAX OUTPUT CURRENT	35A
CEC WEIGHTED EFFICIENCY	98.3%
MAX INPUT CURRENT	13.5 (PER MPPT)
MAX DC VOLTAGE	600V



GREENWAY SOLAR

3018 EAST 28TH STREET
612.416.1518
LIC EA787224
LIC BC778154

PROJECT INFO & ADDRESS

GREG PAGE
GROUND MOUNT SOLAR ARRAY
7075 US-12
MAPLE PLAIN, MN 55359

612-772-8599
GREGPAGE0809@GMAIL.COM

40 kWDC/ 32.8 kWAC

PRODUCTION ESTIMATE: 54,933 kWh
OFFSET ESTIMATE: UNKNOWN%

UTILITY: XCEL ENERGY - MN

APPLICATION ID: 05607531

METER #: UNKNOWN

PREMISES #: UNKNOWN

ACCOUNT #: UNKNOWN

DRAWN BY

MICHAEL RENEAU
MIKE@GREENWAYSOLAR.ORG

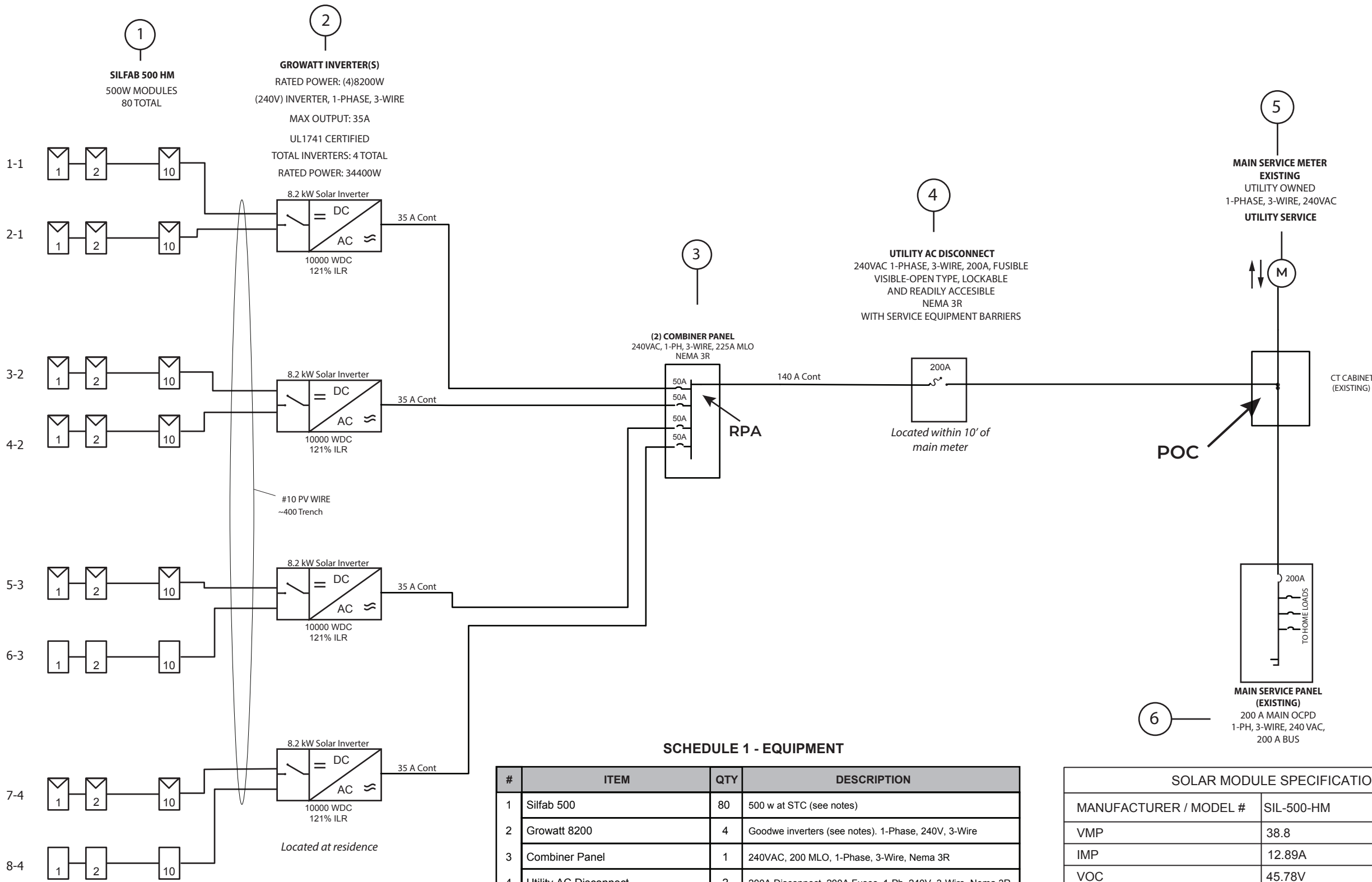
SUBMITTAL

INTERCONNECTION APPLICATION
SINGLE LINE

10/23/2023- FINAL

SHEET

SITE PLAN



Schedule 1 - Equipment			
#	Item	Qty	Description
1	Silfab 500	80	500 w at STC (see notes)
2	Growatt 8200	4	Goodwe inverters (see notes). 1-Phase, 240V, 3-Wire
3	Combiner Panel	1	240VAC, 200 MLO, 1-Phase, 3-Wire, Nema 3R
4	Utility AC Disconnect	2	200A Disconnect. 200A Fuses, 1-Ph, 240V, 3-Wire, Nema 3R
5	Main Service Meter (Existing)	1	1-Phase, 3-Wire, 240 VAC, CL320
6	Main Service Panel (Existing)	1	200A Main, 1-Phase, 3-Wire, 240 VAC, 200 A Bus (Eaton BR)
7			
8			
9			
10			
11			
12			
13			

Solar Module Specifications	
Manufacturer / Model #	SIL-500-HM
VMP	38.8
IMP	12.89A
VOC	45.78V
ISC	13.48A
Temp. Coeff. VOC	-0.28%/°K
Module Dimension	44.6"L x 82.6"W x 1.38"D

Inverter Specifications	
Model	GROWATT 8200TL-XH-US
Power Rating	8200W
Max Output Current	35A
CEC Weighted Efficiency	98.3%
Max Input Current	13.5 (per MPPT)
Max DC Voltage	600V



GREENWAY SOLAR

3018 EAST 28TH STREET
612.416.1518
LIC EA787224
LIC BC778154

PROJECT INFO & ADDRESS

GREG PAGE
GROUND MOUNT SOLAR ARRAY
7075 US-12
MAPLE PLAIN, MN 55359

612-772-8599
GREGPAGE0809@GMAIL.COM

40 kWDC/ 32.8 kWAC

PRODUCTION ESTIMATE: 54,933 kWh
OFFSET ESTIMATE: UNKNOWN%

UTILITY: XCEL ENERGY - MN

APPLICATION ID: NA

METER #: UNKNOWN

PREMISES #: UNKNOWN

ACCOUNT #: UNKNOWN

DRAWN BY

MICHAEL RENEAU
MIKE@GREENWAYSOLAR.ORG

SUBMITTAL

INTERCONNECTION APPLICATION
SINGLE LINE

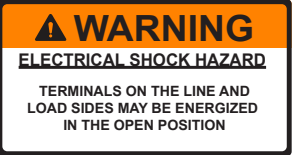
05/19/2023- DRAFT

SHEET

SINGLE LINE

2023 NEC LABELING REQUIREMENTS/PLACEMENT

1 Combiner Box / Circuits / Conduit Combiner Box / Enclosures / EMT Enclosures

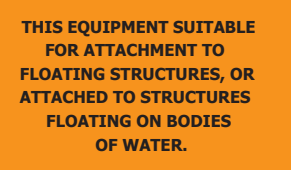


NEC 705.20(7) and NEC 690.13(B)

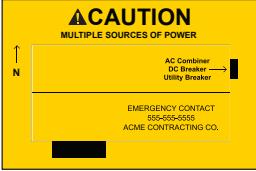


NEC 110.27(C) & OSHA 1910.145(f)(7)

2 Building / Structure

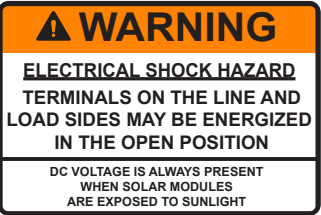


NEC 690.4(G)



NEC 705.10 & NEC 710.10

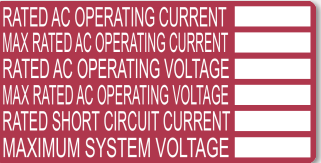
3 DC Disconnect / Breaker / Recombiner Box



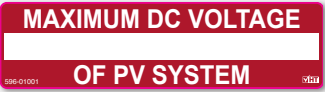
NEC 705.20(7) & NEC 690.13(B)



NEC 690.13(B)

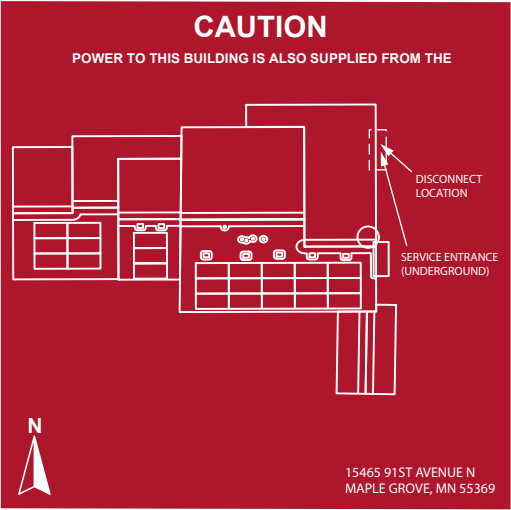


FOR MARKING DC BACKUP SYSTEMS



NEC 690.53

12 Service/System Disconnects



NEC 690.56(C)(1)(a)

4 EMT / Conduit Raceways



NEC 690.31(D)(2)



NEC 690.31(D)(2)

5 Inverter



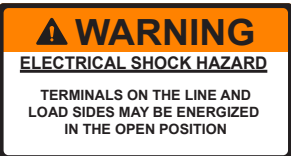
NEC 690.31(E)

6 Production / Net Meter (Bi-directional)



NEC 705.30(C) & NEC 690.59

7 AC Disconnect / Breaker / Points of Connection

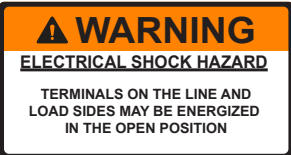


NEC 706.20(7) & NEC 690.13(B)



NEC 705.12(B)(3)

8 Breaker Panel / Pull Boxes

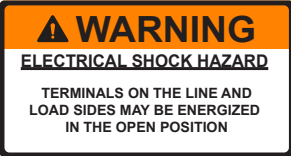


NEC 705.20 (7) & NEC 690.13(B)



NEC 110.27(C) & OSHA 1910.145(f)(7)

9 Main Service Disconnect



NEC 705.20(7) & NEC 690.13(B)



NEC 110.27(C) & OSHA 1910.145(f)(7)



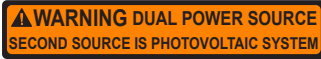
NEC 705.82 & NEC 710.15(C)



NEC 690.15 (B) & NEC 690.33(D)(2)



NEC 705.30(D) & NEC 690.59
Roll#596-00581Q-PI596-00666



NEC 705.30(C) & NEC 690.59
10-PI596-00665



NEC 705.12 (B)(2)



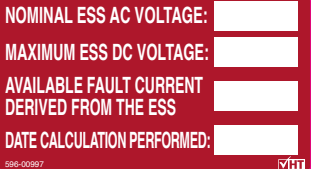
NEC 690.13(B)

10 Main Service Disconnect / Utility Meter

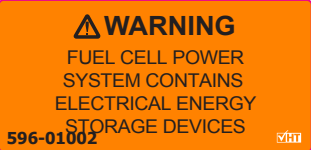


NEC 690.13(B)

11 Energy Storage Systems



NEC 706.15(C)



NEC 692.52



NEC 706.15(C)

13 Utility Specific Labeling Requirements



GREENWAY SOLAR

3018 EAST 28TH STREET
612.416.1518
LIC EA787224
LIC BC778154

PROJECT INFO & ADDRESS

GREG PAGE
GROUND MOUNT SOLAR ARRAY
7075 US-12
MAPLE PLAIN, MN 55359

612-772-8599
GREGPAGE0809@GMAIL.COM

40 kWDC/ 32.8 kWAC

PRODUCTION ESTIMATE: 54,933 kWh
OFFSET ESTIMATE: UNKNOWN%

UTILITY: XCEL ENERGY - MN

APPLICATION ID: NA

METER #: UNKNOWN

PREMISES #: UNKNOWN

ACCOUNT #: UNKNOWN

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INTERCONNECTION APPLICATION
SINGLE LINE

02/02/2023- FINAL
03/30/23- SAM EDITS

SHEET

LABELING



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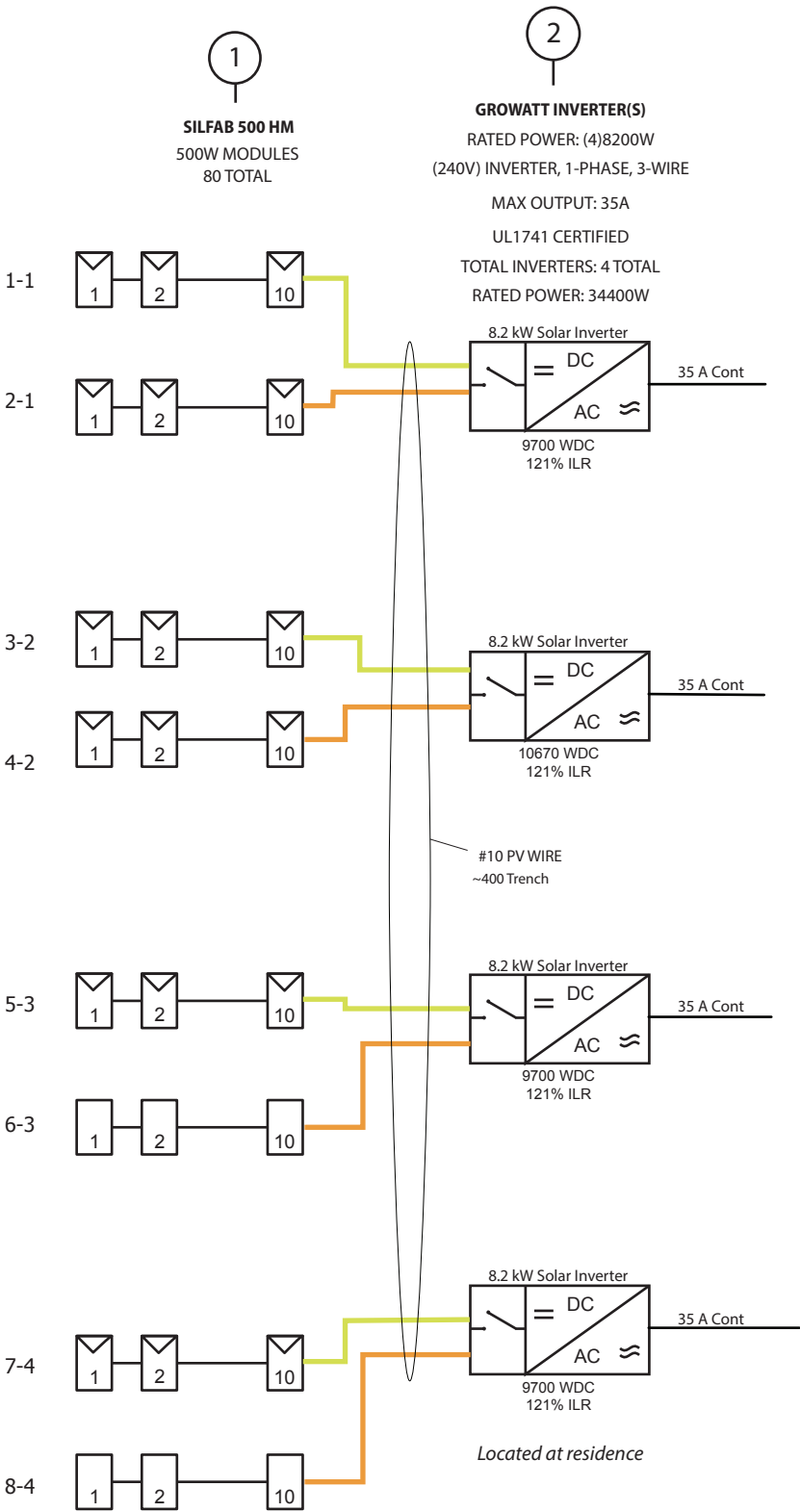
SUBMITTAL

INSTALLATION STRING DIAGRAM

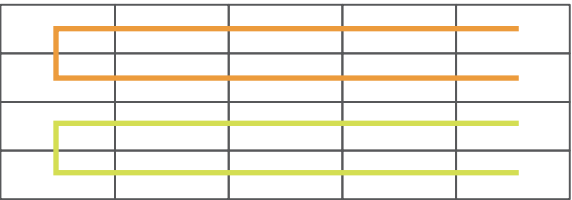
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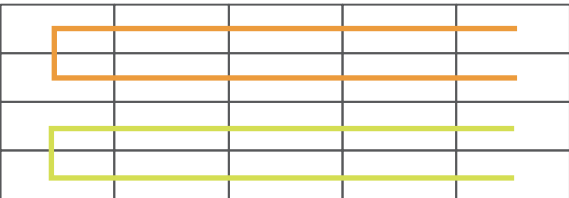
STRING
DIAGRAM



INVERTER 1

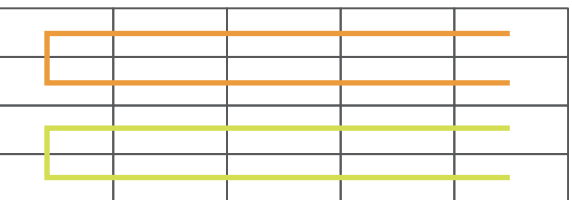


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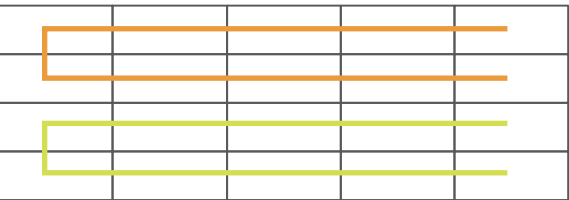


TRENCH

INVERTER 3



INVERTER 4



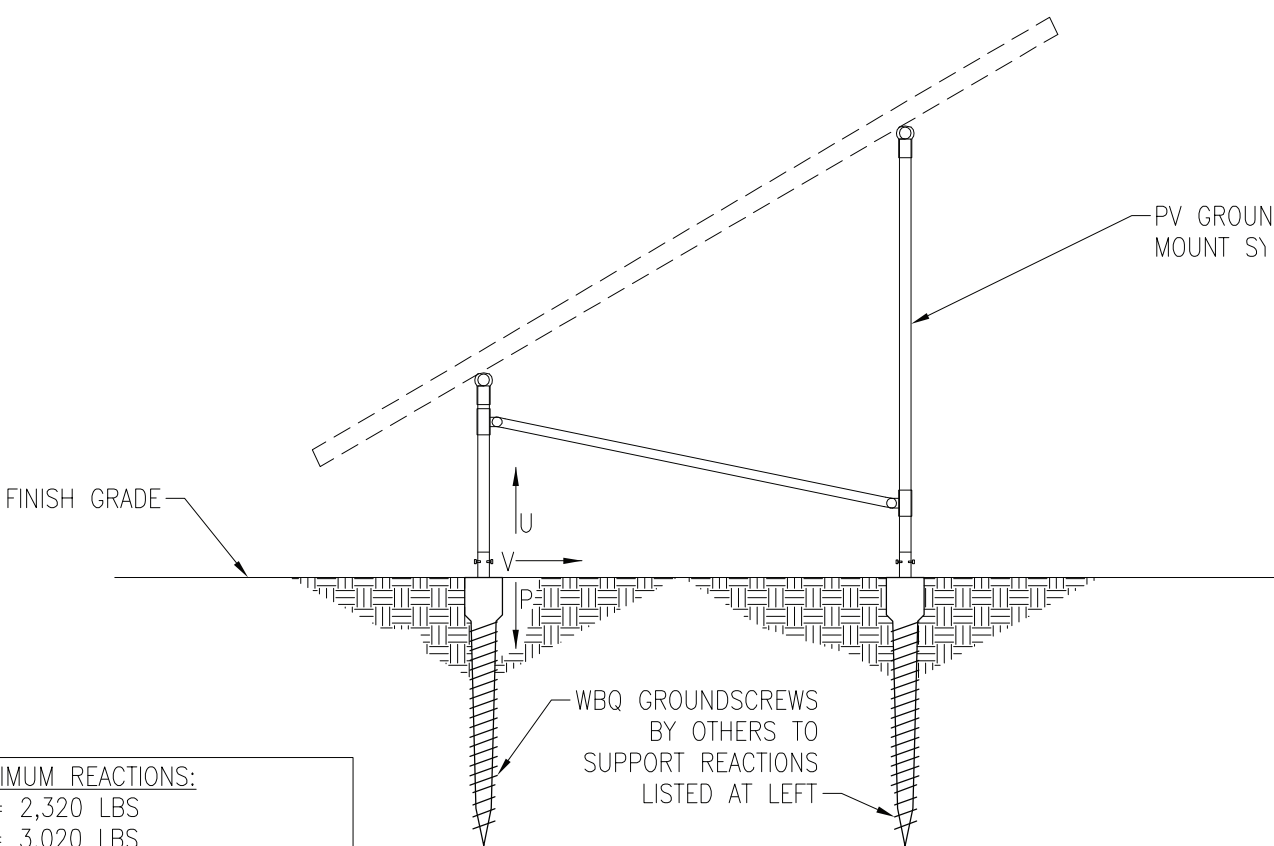
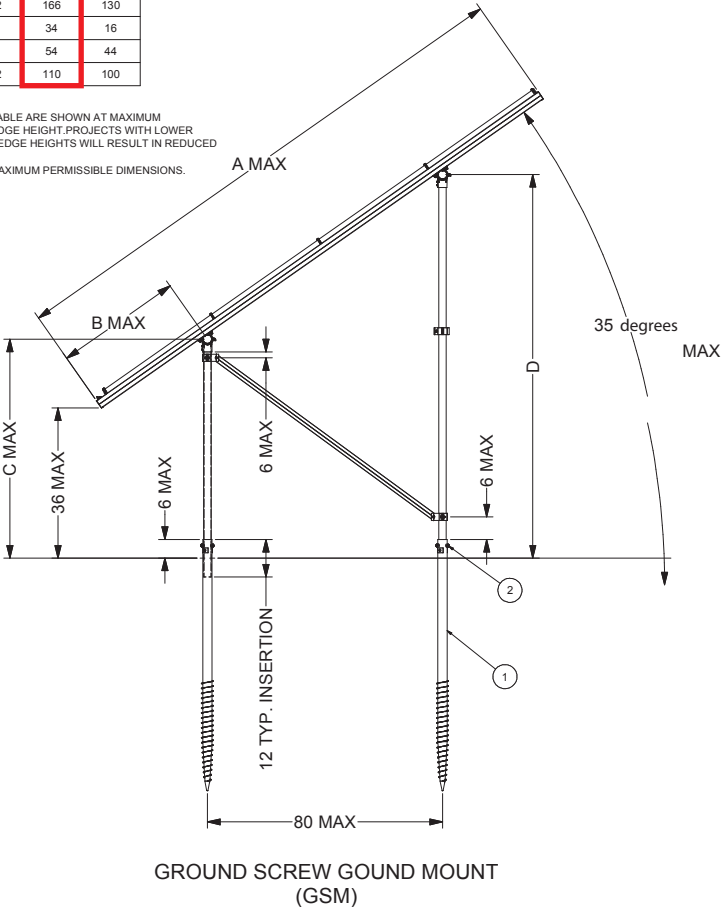
TRENCH

INVERTERS LOCATED AT GARAGE.

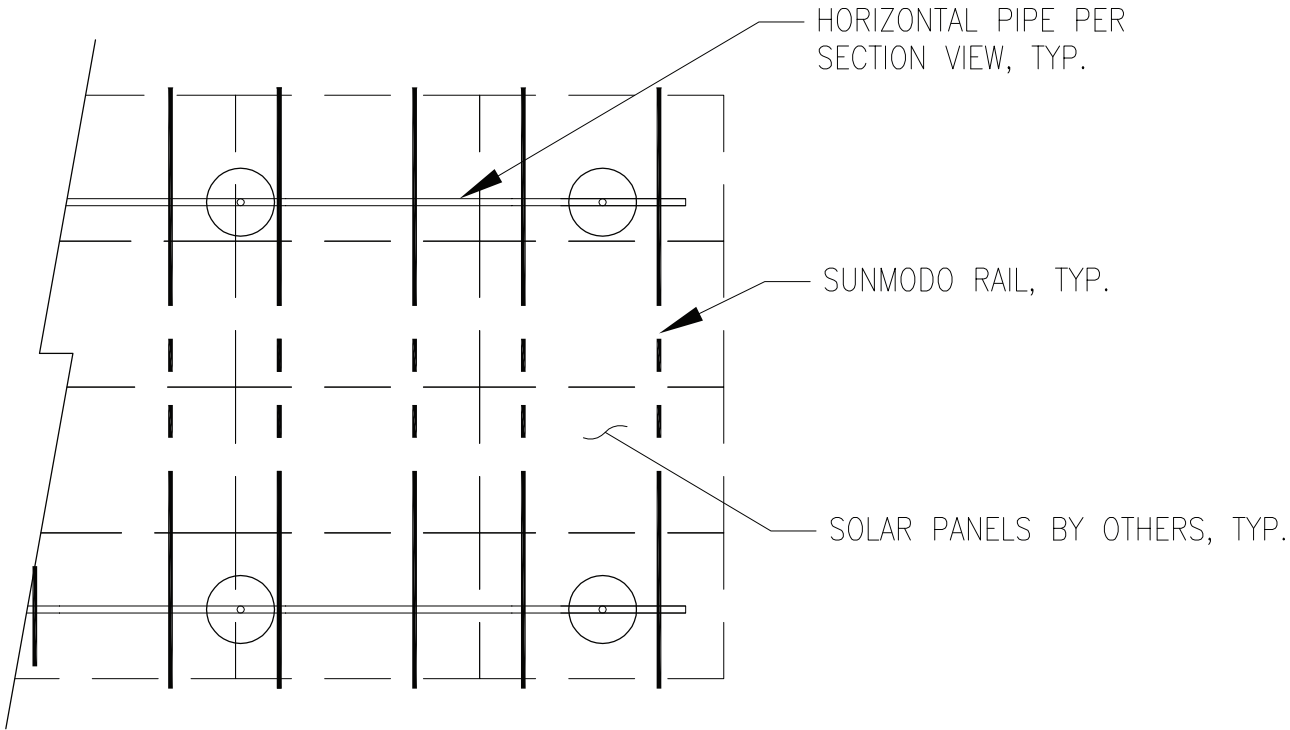
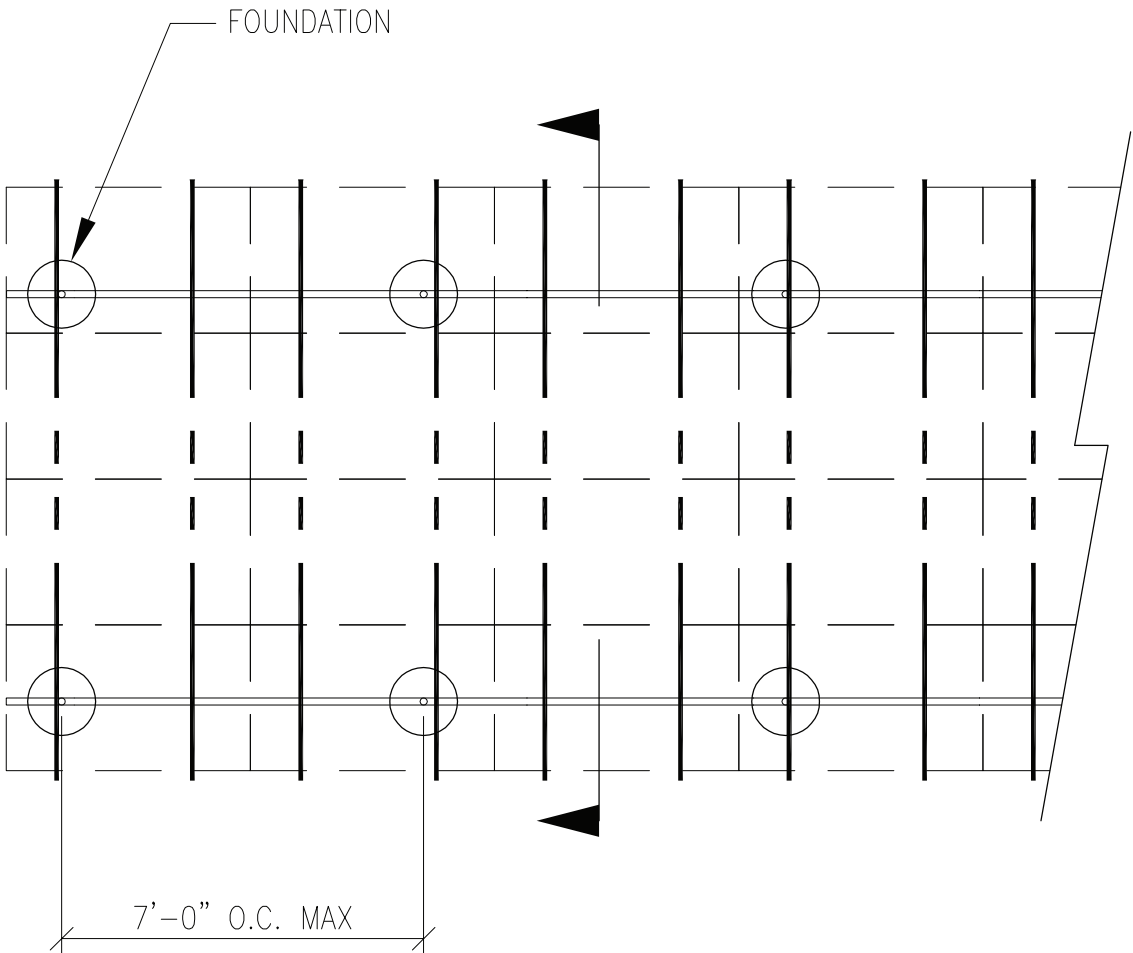


DIMENSIONS			
ITEM	4L	2P	3L
A	172	166	130
B	37	34	16
C	56	54	44
D	112	110	100

NOTES
1.DIMENSIONS IN TABLE ARE SHOWN AT MAXIMUM TILT & LEADING EDGE HEIGHT. PROJECTS WITH LOWER TILTS & LEADING EDGE HEIGHTS WILL RESULT IN REDUCED DIMENSIONS.
2. MAX DENOTES MAXIMUM PERMISSIBLE DIMENSIONS.



MAXIMUM REACTIONS:
U = 2,320 LBS
P = 3,020 LBS
V = 1,690 LBS



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INSTALLATION STRING DIAGRAM

02/02/2023- FINAL

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STRUCTURAL

SILFAB COMMERCIAL

SIL-500 HM

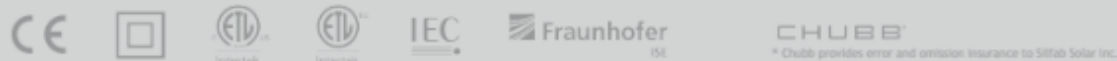


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Superior performance and proven reliability from a trusted source.

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ELECTRICAL SPECIFICATIONS		500 HM	
Test Conditions		STC	NOCT
Module Power (P _{max})	Wp	500	369
Maximum power voltage (V _{pmax})	V	38.80	35.69
Maximum power current (I _{pmax})	A	12.89	10.34
Open circuit voltage (V _{oc})	V	45.78	42.11
Short circuit current (I _{sc})	A	13.48	10.82
Module efficiency	%	21.0%	19.4%
Maximum system voltage (V _{DC})	V	1500	
Series fuse rating	A	25	
Power Tolerance	Wp	0 to +10	

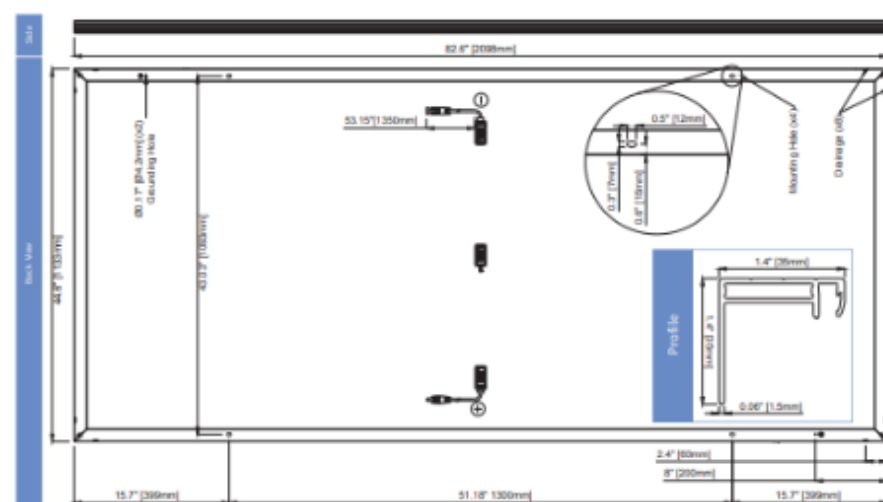
Measurement conditions: STC 1000 W/m² • AM 1.5 • Temperature 25 °C • NOCT 800 W/m² • AM 1.5 • Measurement uncertainty ± 3%
Sun simulator calibration reference modules from Fraunhofer Institute. Electrical characteristics may vary by ±5% and power by 0 to +10W.

MECHANICAL PROPERTIES / COMPONENTS	METRIC	IMPERIAL
Module weight	26.2kg ± 0.2kg	57.8lbs ± 0.4lbs
Dimensions (H x L x D)	2098 mm x 1133 mm x 35 mm	82.6 in x 44.6 in x 1.37 in
Maximum surface load (wind/snow)*	2400 Pa rear load / 5400 Pa front load	50.1 lb/ft ² rear load / 112.8 lb/ft ² front load
Hail impact resistance	ø 25 mm at 83 km/h	ø 1 in at 51.6 mph
Cells	132 Half cells - Si mono PERC 10 busbar - 182 mm x 91 mm	132 Half cells- Si mono PERC 10 busbar - 3.58 x 7.16 in
Glass	3.2 mm high transmittance, tempered, DSM antireflective coating	0.126 in high transmittance, tempered, DSM antireflective coating
Cables and connectors (refer to installation manual)	1350 mm, ø 5.7 mm, EVO2 from Staubli	53.15 in, ø 0.22 in (12AWG), EVO2 from Staubli
Backsheet	High durability, superior hydrolysis and UV resistance, multi-layer dielectric film, fluorine-free PV white backsheet	
Frame	Anodized Aluminum (Silver)	
Bypass diodes	3 diodes - GF5045 (45V max DC blocking voltage, 50A max forward rectified current)	
Junction Box	UL 3730 Certified, IEC 62790 Certified, IP68 rated	

TEMPERATURE RATINGS		WARRANTIES	
Temperature Coefficient I _{sc}	+0.064 %/°C	Module product workmanship warranty	25 years**
Temperature Coefficient V _{oc}	-0.28 %/°C	Linear power performance guarantee	30 years
Temperature Coefficient P _{max}	-0.36 %/°C		≥ 97.1% end 1st yr ≥ 91.6% end 12th yr ≥ 85.1% end 25th yr ≥ 82.6% end 30th yr
NOCT (± 2°C)	45 °C		
Operating temperature	-40/+85 °C		

CERTIFICATIONS		SHIPPING SPECS	
Product	UL 61215-1:2017 Ed.1***, UL 61215-2:2017 Ed.1***, UL 61730-1:2017 Ed.1***, UL 61730-2:2017 Ed.1***, CSA C22.2#61730-1:2019 Ed.2***, CSA C22.2#61730-2:2019 Ed.2***, IEC 61215-1:2016 Ed.1***, IEC 61215-2:2016 Ed.1***, IEC 61730-1:2016 Ed.2***, IEC 61730-2:2016 Ed.2***, IEC 61701:2020 (Salt Mist Corrosion), IEC 62716:2013 (Ammonia Corrosion), CEC Listing***, UL Fire Rating: Type 1	Modules Per Pallet:	29 or 29 (California)
Factory	ISO9001:2015	Pallets Per Truck	24 or 23 (California)
		Modules Per Truck	696 or 667 (California)

* ⚠ Warning: Read the Safety and Installation Manual for mounting specifications and before handling, installing and operating modules.
** 12 year extendable to 25 years subject to registration and conditions outlined under "Warranty" at silfabsolar.com
PAN files generated from 3rd party performance data are available for download at: silfabsolar.com/downloads
*** Certification and CEC listing in progress.



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SITE PLAN

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SHEET

RESOURCE DOCUMENT

MIN 8200~11400TL-XH-US

- Battery Ready for DC Coupled and AC Coupled systems
- With backup power and dark start operations
- Support RSD and AFCI
- Support multiple energy management modes: Self-consumption, Zero Export, TOU and Off-grid
- Comply with UL1741SA, CA Rule 21 & HECO
- Integrate diesel generator to charge battery for optimal energy management



GROWATT

<https://us.growatt.com>

P O W E R
- I N G
T O M O R R O W

Datasheet	MIN 8200TL-XH-US	MIN 9000TL-XH-US	MIN 10000TL-XH-US	MIN 11400TL-XH-US
Input Data (PV)				
Max. Recommended PV Power(STC)	16400W	18000W	20000W	22800W
DC/AC Ratio			2	
Max. DC System Voltage			600V	
Startup Voltage			50V	
Full load voltage range	170-500V	190-500V	210-500V	235-500V
Nominal Voltage			360V	
Operating Voltage Range			50~550V/LG Battery:50~450V	
No. of MPPT Trackers			4	
No. of PV Strings per MPPT Tracker			2	
Max. Input Current per MPPT Tracker			13.5A	
Max. Short-circuit current per MPPT Tracker			16.9A	
Input/Output Data (DC)				
Battery Voltage Range		ARO Battery :360V~550V/LG Battery:350V~450V		
Nominal DC Voltage		400V		
I/O DC Current	24A/24A	27A/27A	30A/30A	34A/34A*
I/O DC Power	8500W	9300W	10300W	11700W
Battery Technology		IFP / NMC		
Battery Capacity per Module		9.9kWh / 10kWh,1.6kWh		
Scalability		Up to 4 / Up to 2 in parallel		
Compatible Batteries		Growatt ARO HV battery / LG Prime (Gen3) battery		
Output Data (AC)				
AC Nominal Power@240V AC	8200W	9000W	10000W	11400W
AC Nominal Power@208V AC	7280W	7900W	8735W	9880W
Max. AC Apparent Power	8200VA	9000VA	10000VA	11400VA
Nominal AC Voltage		208V/240V		
AC Voltage Range @208V AC @240V AC		183V~229V/211V~264V		
AC Grid Frequency		50/60Hz		
AC Grid Frequency Range		45~65Hz		
Max. Output Current	35A	38A	42A	48A
Power Factor@Nominal Power		> 0.99		
Adjustable Power Factor		0.8 leading~0.8 lagging		
THD		<3%		
AC Grid Connection Type		L1/L2/N/PE		
Output Data (Backup)				
AC Nominal Power	8200W	9000W	10000W	11400W*
Max. AC Power Output	9840VA	10800VA	12000VA	13680VA
Nominal AC Voltage		240V		
Max. Output Current	41A	45A	50A	57A
THD		5%		
AC Port-V2 Inverter	2AC Ports, 1 for ON Grid, 1 for Backup(EPS) compatible with ATS-UB for Partial Home Backup			
AC Port-V3 Inverter	1AC Port for 1 ON Grid compatible with SYN200-US for Whole Home Backup			
Efficiency				
Max. Efficiency	98.3%	98.3%	98.3%	98.5%
CBC Efficiency@208V AC	97.5%	97.5%	97.5%	97.5%
CBC Efficiency@240V AC	97.5%	97.5%	97.5%	98.0%
Protection Devices				
DC Reverse-polarity Protection		Yes		
DC Switch		Yes		
DC Surge Protection		Type I		
Insulation Resistance Monitoring		Yes		
AC Surge Protection		Type III		
AC short-circuit Protection		Yes		
Ground Fault Monitoring		Yes		
Grid Monitoring		Yes		
Anti-islanding Protection		Yes		
Residual-current Monitoring Unit		Yes		
ARCI Protection		Yes		
General Data				
Dimensions (W / H / D)		15.8/25.2/7.4inch(400/638/187mm)		
Weight		45.2lbs (20.5kg)		
Operating Temperature Range		-13°F~+140°F (-25 °C ~ +60 °C) de-rating above 113°F		
Altitude		9843ft (3000m)		
Internal Consumption at Night		<1W (for PV Inverter)/ <5W (for storage Inverter)		
Cooling		Natural Convection		
Electronics Protection Degree		NEMA4X (IP65)		
Relative Humidity		0~95%		
Interfaces				
RS485		Yes		
WiFi/4G Communication		Optional		
Warranty: 10 Years		Yes(optional for extended 15 and 20 years warranty)		
Revenue Grade Meter		ANSI C12.20 (meet 0.5% accuracy)		
IEEE1547, CA Rule21, Rule 14(HECO Compliant), FCC Part15 Class B, UL1741,UL1741SA,CSA C22.2, UL1699B, UL1741 CRD, UL9540				

* 34A/34A can only be achieved with LG battery, ARO battery is 30A/30A.
* 11700W can only be achieved with LG battery, ARO battery is 10300W.
* 11400W when using ARO battery, 11400W off-grid output requires both PV and battery power supply, and ARO battery itself has a rated off-grid power of 10kW.

GROWATT USA INC. Address: 9227 Reseda Blvd. #435 Northridge, CA 91324. Sales Hotline: 818 800 9455 Service Hotline: 186 6 686 0298
Email: usa@growatt.com



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