PLANNING COMMISSION MEETING AGENDA
TUESDAY APRIL 19, 2022

7:30 PM REGULAR MEETING

1. Call to Order

2. Roll Call

3. Approval of Minutes:

    a. March 15, 2022, Planning Commission Meeting
    b. April 5, 2022, City Council Meeting Minutes (For Information Only)

4. **PUBLIC HEARING:** Jeffrey Arendt (Applicant/Owner) is requesting that the City consider the following action for the property located at 1665 Copeland Road (PID No. 19-118-24-44-0004) in Independence, MN:

    a. A conditional use permit to allow a detached accessory structure that is larger than 5,000 SF. The applicant is proposing to construct a new private indoor riding arena.

5. **PUBLIC HEARING:** Jon Dailing/Windsong Farm Golf Club (Applicant) and David Meyer (Owner) are requesting the following action for the property generally located at and adjacent to 8590 County Road 92 N (PID No.s 32-118-24-23-0001, 32-118-24-22-0003, 32-118-24-22-0002, 32-118-24-13-0002, 32-118-24-12-0003 and 32-118-24-12-0004) in the City of Independence, MN:

    a. Review of an EAW (Environmental Assessment Worksheet) associated with the proposed development of a new 18-hole golf course on the subject properties. The EAW is required as a result of the conversion of the property from agriculture to a new land use.

6. **PUBLIC HEARING:** Derek Onischuk (Applicant/Owner) is requesting that the City consider the following action for the property located at 190 County Road 92 N. (PID No. 32-118-24-44-0003) in Independence, MN:

    a. A variance for a reduced side yard setback to allow the construction of an addition to the existing home located on the property.

7. **PUBLIC HEARING:** Hennepin County (Applicant) is requesting the following minor subdivision relating to the Highway 12/County Road 92 improvement project in Independence, MN:

    a. 2510 County Road 92 N. (PID No. 16-118-24-33-0003)

8. Open/Misc.

9. Adjourn.

MINUTES OF A MEETING OF THE
INDEPENDENCE PLANNING COMMISSION
MARCH 15, 2022 – 7:30 P.M.

1. CALL TO ORDER

Pursuant to due call and notice thereof, a regular meeting of the Independence Planning Commission was called to order by Gardner at 7:30 p.m.

2. ROLL CALL

PRESENT: Commissioners Gardner, Dumas, Volkenant, Thompson (virtual) and Alternate Story (virtual)
STAFF: City Administrator Kaltsas, Assistant to Administrator Horner
ABSENT: None
VISITORS: See Sign-In Sheet

3. APPROVAL OF MINUTES:

a. January 18, 2022, Planning Commission Meeting
b. March 1, 2022, City Council Meeting Minutes (For Information Only)

Motion by Volkenant to approve the January 18, 2022 Planning Commission minutes, second by Palmquist. Ayes: Gardner, Dumas, Volkenant, and Thompson. Alternate Story. Nays: None. Absent: None. Abstain: None. Motion Approved.

4. PUBLIC HEARING: Doug Campbell and Colleen Klaers (Applicants/Owners) request that the City consider the following action for the property located at 4390 Woodhill Drive and property associated with the home on 4363 S Lake Sarah Drive (PID No.s 01-118-24-32- 0015 and 02-118-24-41-0001) in Independence, MN:

a. A minor subdivision to allow a lot line rearrangement which would take approximately .60 acres from the property associated with 4363 S Lake Sarah Drive and combine it to the 4390 Woodhill Drive property.

Property/Site Information:
The subject properties are located at 4390 Woodhill Drive and property associated with the home on 4363 S Lake Sarah Drive. The properties both have shoreland on Lake Sarah. There is an existing home and two accessory structures located on the 4390 Woodhill Drive property. The property associated with the home on 4363 S Lake Sarah Drive does not have any structures. property is accessed from Lindgren Lane although the property has no direct frontage on the road. The property access is gained across the City's property. The property is approximately .36 acres. This property is considered a sub-standard lot of record. Substandard lots of record in the shoreland district are allowed to have reduced setbacks of 60% of the required setbacks.

Property Information: ***4390 Woodhill Drive (PID No. 01-118-24-32-0015)***
Zoning: *Rural Residential (Shoreland Overlay)*
Comprehensive Plan: *Rural Residential* Acreage:
(Before) .57 acres (24,796 *SF)*
(After) 1.17 acres

Property Information: ***(PID No. 02-118-24-41-0001)***
Zoning: *Rural Residential (Shoreland Overlay)*
Comprehensive Plan: *Rural Residential*
Acreage: (Before) 25.01 *acres*
(After) 24.41 acres

Discussion:

The applicants approached the City about the possibility of a lot line rearrangement to add acreage to the 4390 Woodhill Dr. property. The proposed minor subdivision would allow the 4390 Woodhill Dr. property to be brought closer to compliance with applicable lots size and public frontage requirements. 4390 Woodhill Dr. does not currently meet the minimum 1-acre lot size for sewered properties located within the S-Shoreland Overlay zoning district. 4390 Woodhill Dr. is considered legal non-conforming for not meeting all applicable requirements of the City's zoning ordinance.

There are several factors to consider relating to proposed minor subdivision as follows:

4390 Woodhill Dr.

- The property does not have the minimum public road frontage required (97.96 LF existing, 200 LF required).
- Woodhill Dr. is proposed to be extended to the west in a future condition. The existing ROW width is 60 feet for the majority of the road and then expands to 80 feet in width at the very west end of the ROW. The City is not currently looking for more ROW in this area, but would want to maintain a minimum of 66' of potential future ROW. The applicant may need to revise the plan to accommodate the minimum 66' wide ROW.
- The property is connected to City sewer.
- The additional property will be combined with the existing property and no new lots will be created. The combined property would not meet the minimum lots size to allow for the future subdivision of the combined property.
- The existing home does not meet applicable building setbacks. In the after condition, the west side of the building will meet applicable building setbacks which is an improvement over the existing condition.
- There is an existing shed that is partially located in the Woodhill Dr. ROW. The proposed subdivision does not change this condition in the after condition.
- The property does not meet all applicable impervious surface requirements (25% maximum impervious surface). In the after condition the property will meet applicable impervious surface requirements.

(PID No. 02-118-24-41-0001)

- The proposed subdivision does not create any non-conformities in the after condition.

The proposed minor subdivision to allow a lot line rearrangement generally allows the 4390 Woodhill Dr. property to be brought closer towards compliance with applicable standards. There do not appear to be any adverse impacts resulting from the lot line rearrangement.

Neighbor Comments:

The City has not received any comments at the time this report was prepared.

Recommendation:

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

1. The proposed minor subdivision request meets all applicable conditions and restrictions stated in Chapter V, Section 500, Subdivisions and Chapter V, Section 510, Zoning, in the City of Independence Zoning Ordinance.

2. The applicant shall confirm that there is a minimum width of 66' to accommodate the extension of the Woodhill Dr. to the west in the future.

3. The applicant shall pay for all costs associated with the City's review and recording of the requested minor subdivision.

4. The City Council Resolution shall be recorded with the County.

Kaltsas explained that this is a request for a lot line rearrangement. They would combine Parcel B with new Parcel A to essentially double the size of their property. Woodhill Dr. is planned to extend through in the future. We would want to maintain 66' of ROW going North. There are no new setback issues. The property will go from 0.57 acres to 1.17 acres which is closer to applicable standards.

Thompson asked if the city's rights to Woodhill Drive have to be extended to be flush with the Western edge of Parcel A or 66' be maintained to the edge of the property. Kaltsas said it is 66'going to the North. Thompson asked if the existing property owner that the land is coming from, okay with the ROW extending 100'? Kaltsas said they are not asking for the ROW at this time, we are just trying to reserve it since it could be done in the future. Thompson asked why wouldn't' we extend the ROW to the flush SE, NW line in Parcel A for Woodhill Dr. Kaltsas said we could. When the property develops that's when we would need it or if something changes, it may or may not be beneficial to the City. Gardner said that he sees Thompson's point, but undeveloped property owner may or may not use Woodhill for the access when it comes up to be developed. The property is not under consideration for tonight.

Dumas said it looks pretty straight forward. Gardner said it's a lakeshore lot bending around the corner. He asked if the owner wanted to say anything. Doug said no.

Motion by Volkenant to approve the lot line rearrangement with the consideration of extending 66' extending up to ROW, second by Gardner. Ayes: Gardner, Dumas, Volkenant, and Thompson. Alternate Story. Nays: None. Absent: None. Abstain: None. Motion Approved.

5. PUBLIC HEARING: Kelly Brouwer (Applicant) requests that the City consider a relocation permit to bring in an existing home on the newly created 20-acre portion of the property generally located near 1730 County Line Rd SE (PID No. 19-118-24-34-0002) in Independence, MN.

Request:

Kelly Brouwer (Applicant) requests that the City consider a relocation permit to move an existing home onto the newly created 20-acre property generally located near 1730 County Line Rd SE (PID No. 19-118-24-34-0003) in Independence, MN.

Property/Site Information:

The subject property identified as PID No. 19-118-24-34-0003 which is generally located near 1730 County Line Rd SE on the south side of the road.

Property Information: ***1759 County Line Road***
Zoning: *Agriculture*
Comprehensive Plan: *Agriculture*
Acreage: 20 acres

Discussion:

The applicant approached the City about the possibility of moving an existing home onto the subject property. The existing home was constructed in the 1970's and is approximately 26x50 with an attached 26x24 garage and 21 feet in total height. The subdivision of this property was recently approved by the City. The City has requirements relating to relocating structures into the City. The criteria are further defined in Section 800.09 of the City's ordinance (provided below). Review of the proposed relocation is intended to ensure that the home to be moved into the City is in good repair and when placed on the property will be able to comply with all applicable requirements.

800.09. Application for relocation permit.

Subd. 1. *Contents of application.* Application for a relocation permit shall be made to the clerk-treasurer on forms provided by the clerk-treasurer. The application shall include among other things:

(i) A description of the roads and streets over which the building shall be moved;

(ii) A site plan drawn to scale, showing the location of the proposed building or structure and all other buildings or structures on the site together with the location of driveways, drainageways, boundary lines, and other matters required to determine compliance with applicable codes;

(iii) Plans setting forth construction detail of any reconstruction planned and required to meet or exceed applicable building and other construction codes. Four copies of all documents shall be submitted.

Subd. 2. *Staff review.* The clerk-treasurer shall forward a copy of the application to the building inspector, the director of public works and the planning commission. The director of public works, the building inspector and the planning commission shall examine the application for compliance with the applicable statutes and codes and shall submit to the clerk-treasurer in writing their recommendations upon the compliance or non-compliance of the application with applicable codes.

Subd. 3. *Hearing.* The clerk-treasurer shall mail notice of the time and place of the planning commission meeting at which the relocation permit shall be considered to the owner of record of all property abutting the property upon which the building will be relocated.

Subd. 4. *City council review.* The clerk-treasurer's copy of the application shall be presented to the city council at its next regular meeting together with the written report of the building inspector, the director of public works and the planning commission.

Subd. 5. *Fee.* A permit fee as set by resolution of the city council shall accompany the application. The full amount thereof shall be remitted to the clerk-treasurer and deposited in the general fund. No action by any city official shall be taken on said application until said fee is paid.

The City's Building Official has visited the property with the existing home and completed a general inspection. The home was found to be in good shape and capable of meeting applicable building code requirements once renovated by the applicant.

The applicant has provided the City with a site plan, on-site septic site verification report and proposed moving route. The overall size and configuration of the existing property will support the proposed structure as it relates to applicable building setbacks and proposed site development standards. Due to the property size, its geographic location and character of the surrounding properties, there does not appear to be potential impacts to neighboring properties as a result of moving the existing home onto the subject property.

Planning Commissioners should review the information provided and consider if the requested application to relocate this home into the City of Independence meets applicable requirements.

Recommendation:

Staff is seeking a recommendation from the Planning Commission relating to the requested relocation permit.

Kaltsas explained that this applicant would like to move an existing home outside of the city onto their lot on 1759 Townline Road. Kaltsas said that the building inspector has looked at the home, meets the setbacks in good condition. This property was split off from Anita Branson's property. All setbacks are applicable. It can accommodate a primary and secondary septic site. It will be brought down Hwy 55. Thompson asked who does the review of the route to insure there are no hiccups when it comes to turns or issues. Kaltsas said it would be permitted by the counties and cities involved. Story asked if there is renovation to be done before or after the move. Kaltsas said there are certain things that they would do after the move to bring it up to

code with things that are needed. Certain things are allowed to remain, but pre-inspected. Kaltsas said most are smaller properties so dealing with more issues. This is a large lot so there really are no issues. Gardner asked about the septic. Kaltsas said there will be a primary and secondary.

Motion by Dumas to approve the relocation of the home to Town Line Road, second by Story. Ayes: Gardner, Dumas, Volkenant, and Thompson. Alternate Story. Nays: None. Absent: None. Abstain: None. Motion Approved.

6. PUBLIC HEARING: Tom Koch (Applicant/Owner) is requesting that the City consider the following review/discussion for the property generally located at 5865 Koch's Crossing (PID No.s 11-118-24-12-0004, 11-118-24-13-0003, 11-118-24-31-0005, 11-118-24-13-0002, 11- 118-24-42-0001, 11-118-24-42-0002) in Independence, MN:

a. Rezoning from AG-Agriculture to RR-Rural Residential.

b. A conditional use permit to allow a cluster development. Cluster developments have additional standards which require the preservation of open space within a development.

c. Preliminary Plat to allow a 33-lot subdivision to be known as KOCH FARM SANCTUARY.

Request:

Tom Koch (Applicant/Owner) is requesting that the City consider the following review/discussion for the property generally located at 5865 Koch's Crossing (PID No's. 11-118-24-12-0004, 11-118-24-13-0003, 11-118-24-31-0005, 11-118-24-13-0002, 11-118-24-42-0001, 11-118-24-42-0002) in Independence, MN:

a. Rezoning from AG-Agriculture to RR-Rural Residential.

b. A conditional use permit to allow a cluster development. Cluster developments have additional standards which require the preservation of open space within a development.

c. Preliminary Plat to allow a 33-lot subdivision to be known as KOCH FARM SANCTUARY.

Property/Site Information:

The overall property is comprised of six (6) individual properties located on the north and south sides of Koch's Crossing between County Road 90 and Independence Road. The property also touches Brei Kessel Road on the south. There is an existing home and a series of detached

accessory buildings located across several of the properties. The properties are comprised primarily of agriculture land, a pond/wetlands.

Property Information: **5865 Koch's Crossing**
Zoning: *Agriculture*
Comprehensive Plan: *Rural Residential*
Acreage: *~141 acres*

Discussion:

The City reviewed a concept plan for the subject property in late summer/fall of 2021. The applicant has now submitted an application for rezoning of the property from AG-Agriculture to RR-Rural Residential, a conditional use permit to allow a cluster subdivision and preliminary plat for a 33-unit subdivision developed across the 5 subject properties. The City provided guidance and feedback during the concept plan review process and has now completed a more comprehensive and detailed review of the proposed preliminary plat.

The following steps/sequencing and approvals will be required in order for the project to move forward.

1. Consider rezoning the property to Rural Residential from AG-Agriculture.
2. Consider a Conditional Use Permit to allow the proposed Cluster Subdivision.
3. Consider Preliminary Plat approval.
4. Consider Final Plat approval.

Comprehensive Plan/Rezoning

The City's adopted 2030 and proposed 2040 plan identify this property as Rural Residential. The rural residential designation allows for a general development density of 1 unit per 5 acres.

Proposed Cluster Subdivision

The applicant has prepared detailed plans for further review by the City. The applicant has provided information pertaining to the total number of lots that can be realized on the subject properties using both the straight RR zoning and Cluster Subdivision provisions. Cluster Subdivisions are considered a conditional use in the RR Rural Residential zoning district. The City has criteria relating to granting a conditional user permit. Generally, the City has determined that the purpose of a cluster development is to promote the creative and efficient use of the land, protect natural features and preserve the rural character of the community.

The applicant has prepared the preliminary plat based on the cluster development standards. The City has reviewed the information and provided a comparison of the allowable development yield based on the RR-Rural Residential standards and the Cluster Subdivision standards as follows:

Subd. 3. A maximum of one (1) lot is permitted for each lot of record up to 7.59 acres. For lots of

record with a minimum of 7.6 acres, one (1) additional lot shall be permitted for every five acres. The following table is illustrative of the allowed number of lots.

Area of Lot of Record	Maximum Number of Lots Permitted
7.59 acres or less	One
7.6 through 12.59 acres	Two, plus one additional lot for each additional five acres

Lots Permitted Based on RR Zoning

Total Area: 141.35 acres
138.75 net acres (subtracting CSAH 90 right of way)
12.59 = 2 lots
138.75 – 12.59 = 126.16/5 = 25
27 Lots Permitted

The applicant is proposing to meet all applicable cluster subdivision standards. The cluster subdivision standards are as follows:

Subd. 4. *Cluster development conditional use permit.* Cluster development is a conditional use in the Rural Residential District, subject to the provisions of subsections 520.09, 520.11 and 520.13 of this Code.

(a) *Purpose.* The purpose of the cluster development conditional use permit is to promote the creative and efficient use of land. The provisions of this subdivision are intended to:

(1) Protect natural features in common open space.

(2) Improve the arrangement of structures, facilities and amenities on a site.

(3) Preserve the rural character of the community.

(b) *Criteria.* A cluster development is a residential development in which a number of single-family dwelling units are grouped on smaller lots than in conventional developments, while the remainder of the tract is preserved as open space. If the following standards are complied with, density of one unit per four acres is permitted.

(1) The development parcel must be 40 or more acres in size;

(2) A minimum of 50% of the gross acreage of the subject property, excluding right of way dedicated for State, County and Existing City Roads, must be preserved as open space, recreational space or agricultural use;

(3) A minimum of 50% of the preserved open space, recreational space or agricultural use land must be useable. Wetlands, streams, lakes, ponds and lands within the 100 year flood plain elevation are not considered to be useable for the purpose of this subsection;

(4) Woodland, wetlands and topography must be preserved in a natural state, with modification allowed when no reasonable alternative exists; or, if the site lacks unique features such as woodlands and wetlands, the site must be designed and constructed in such a manner that residential building sites are integrated into a created natural environment including reforestation, wetlands enhancement, and vegetative screening of structures;

(5) The preliminary plat must show a primary and secondary individual sewage treatment site for each dwelling unit and must be supported with soil test reports indicating the adequacy of each proposed location; provided, that shared treatment systems within a development may be acceptable if the plat identifies two or more suitable sites for the shared system and the city council approves the proposal;

(6) Lots within the development must have a minimum lot size of 1.5 contiguous buildable acres. Buildable

acreage must not be separated by streams, wetlands, or other physical impediments;

(7) Lots within the development must have a minimum of 150 feet of frontage on an improved public road or street, except lots fronting on the terminus of a cul-de-sac shall have no less than 50 feet of frontage.

(8) Open space must be designated in the development as one or more outlots and must be owned either by a homeowners' association consisting of the owners of all of the residential lots in the development or by the owners of the residential lots, as tenants in common;

(9) The developer must record against the development a declaration of covenants that places responsibility for management of the open space in a homeowners association and provides for the assessment of management costs to the association members and memorialized in an agreement with the City;

(10) All utilities must be placed underground;

(11) All residential streets within the cluster development must be paved with a bituminous surface according to the city street standards in effect at the time of the development;

(12) A development agreement must be entered into with the city.

Lots Permitted Based on Cluster Subdivison

Total Area: 141.35 acres
138.75 net acres (subtracting CSAH 90 right of way)
138.75 x 50%: 69.40 acres of open space required
69.40 acres of open space provided
50% of 69.40 acres: 34.70 acres of useable open space required
40.60 acres of useable open space provided

33 Lots Proposed

Based on the cluster development standards, the applicant is proposing to develop the property in accordance with applicable provisions with several noted exceptions and or issues.

The City has completed a detailed review of the proposed subdivision as follows:

1. The proposed plan proposes to realign Koch's Crossing at the point of intersection with CSAH 90. The realignment of Koch's Crossing likely aids the sight lines at the CSAH 90/Koch's Crossing intersection. Hennepin County will ultimately need to approve the relocation of Koch's Crossing and has provided comments relating to the preliminary plat request.

    - Hennepin County supports the proactive intersection realignment. The realignment will require a site line profile to be completed by the applicant.
    - Hennepin County will review the need for turn lanes and provide additional feedback prior to City Council consideration.
    - The applicant is proposing to dedicate additional right of way to allow for a 50' half ROW. Hennepin County has initially stated that they agree with this ROW but is still finalizing their review.

2. Koch's Crossing will be fully upgraded to the City's improved street standards and will tie into the eastern half that was recently upgraded as a part of the Serenity Hills

subdivision. The applicant is proposing to locate lots along the realigned Koch's Crossing. This would be consistent with the Serenity Hills subdivision.

3. A new north south cul-de-sac is proposed to serve 26 lots. The length of the proposed cul-de-sac is 3,900 lineal feet. The concept plan that has been reviewed by the City showed the north south road as a through street connecting to Brei Kessel Road to the south. There are several things that should be considered by the City relating to the proposed cul-de-sac as follows:

    - Section 500l.43 of the City's subdivision standards provides requirements relating to minimum subdivision design standards.

      500.43. Minimum subdivision design standards.

      Subd. 1. *Street plan.* The arrangement, character, extent, width, grade, and location of all streets shall conform to these regulations and shall be considered in their relation to existing and planned streets, to reasonable circulation of traffic, to topographical conditions, to run-off of stormwater, to public convenience and safety, and in their appropriate relation to the proposed uses of the land to be served by such streets.

      Subd. 2. *Continuation of existing streets.* The arrangement of streets in new subdivisions shall make provision for the appropriate continuation of the existing streets in adjoining areas.

      Subd. 3. *Future projection of streets.* Where adjoining areas are not subdivided, the arrangement of streets in a new subdivision shall make provision for the proper projection of streets into adjoining areas by carrying the new streets to the boundaries of the new subdivision at appropriate locations.

      Subd. 4. *Cul-de-sac easement required.* If a street terminates at the boundary line of the plat that could at a later date be extended into and through adjacent properties, a cul-de-sac shall be constructed and a cul-de-sac easement on a deed form shall accompany the final plats at the time of recording. Construction of the cul-de-sac shall be the same as the streets in the subdivision, and shall conform to these regulations in all respects.

      Subd. 5. *Public access roads.* A subdivision shall not be approved unless the council makes a finding that the existing public roads providing access to the land to be divided can adequately accommodate any additional traffic that the subdivision may generate. If the public roads providing access to the subdivision do not meet the minimum requirements in section 500.45 of this Code, the required finding must be supported by a traffic study prepared by a licensed traffic engineer selected by the city.

    - The preliminary plat does not appear to comply with Subdivision Ordinance section 500.43, Subd. 2. The applicant would need to request a formal variance from the Subdivision Standards relating to the proposed cul-de-sac. Section 500.75 of the City's Subdivision Ordinance provides standards pertaining to variances:

      500.75. Standards for variances.

      The planning commission may recommend, and the city council may grant variances from the literal provisions of this section in instances where their strict enforcement would cause undue hardship because of circumstances unique to the individual property under consideration. Any person requesting a variance shall appear at all planning commission meetings and city council meetings where such application is considered and provide to the planning commission and the city council such maps, drawings, plans, records and other information necessary to make a determination on the application. It is the responsibility of the applicant to demonstrate that all of the following standards for variance have been met. Undue hardship can be found on the bases of the following:

      (a) Because of the particular physical surroundings, shape, or topographic conditions of

the specific parcels of land involved, a particular hardship to the owner would result if the strict letter of this section were carried out.

(b) The conditions upon which the application for variance is based are unique to the parcel of land for which the variance is sought and are not common to other properties within the city.

(c) The hardship is related to the requirements of these regulations and has not been created by any persons presently or formerly having an interest in the parcel of land.

(d) The granting of the variance will not be detrimental to the public welfare or injurious to other land or improvements in the neighborhood in which the parcel of land is located.

- Planning Commissioners should provide direction/findings relating to if/how the proposed cul-de-sas/dead end meets the applicable standards. The actual variance will need to be considered at a future meeting and any approvals of the proposed preliminary pat, if recommended, would be subject to a variance being considered.

- As requested by the Planning Commission, the City has reviewed and provided additional information relating to maximum cul-de-sac length and street design requirements of a handful of neighboring cities (attached to this report as EXHIBIT A).

- As requested by the Planning Commission, the City has researched and provided additional information relating to the approvals of Brei Kessel Subdivision (attached to this report as EXHIBIT B). Brei Kessel currently terminates with a temporary cul-de-sac. When Brei Kessel was approved in 1996, the City noted that they wanted to plan for the future development of the entire area as it related to roads and transportation. Brei Kessel was required to extend to the northern property line in order to provide for its future connection to the north. It is noted that the existing cul-de-sac does not meet current City dimensional/construction standards. The City has noted that the existing cul-de-sac bulb was not constructed as a permanent road and also that the City does not have right of way that encompasses the entirety of the cul-de-sac terminus. The existing bulb has an 85' diameter rather than 100' as required. The City currently has 66' of right of way and would require 120' for a permanent cul-de-sac. Permanent right of way and a permanent road section should be considered by the City should the road not be extended.
- The Independence subdivision ordinance requires that streets be extended through to adjacent properties unless there is a justification for not extending. The City does not currently stipulate a maximum length for cul-de-sacs. The City has several existing cul-de-sacs that exceed 2,000 LF throughout the City. For example, Polo Club Road is approximately 3,200 LF and has 15 homes on the road. Brei Kessel Rd. and Wood Hill Lane in combination are approximately 2,900 LF with 17 homes on the combined roads. Most recently, the City approved Hamilton Hills with a cul-de-sac length of 1,860 LF with 8 homes.

- There are many varying viewpoints relating to the development of cul-de-sacs, the maximum and minimum cul-de-sac lengths and similar factors that could

be considered. The standard of practice most commonly accepted in the planning, public works, public safety and emergency services realm would support a connected community and subsequent transportation network. Connectivity of a transportation network within a community is generally recognized by associated professional disciplines to reduce the total number of trips taken on a given roadway, reduce travel speeds, increase emergency response times and increase maintenance and similar efficiencies. There are a wide array of factors and considerations that can also influence and change the aforementioned elements. Elements such as traffic calming devices (choke points in a road, speed table, design speeds etc.) can also be used to accomplish some of the items noted. Ultimately, the City should consider whether or not the current ordinance requirements are aligned with the vision for the development of Independence neighborhoods. Planning Commissioners should also provide input relating to the proposed road and whether or not the City should require traffic calming measures due to the proposed length.

- There are no other future road extensions proposed within this preliminary plat. The City should consider if any additional future road connections are needed to allow the reasonable and orderly development of this portion of the City. Due to the existing wetlands and topography of the surrounding areas, it is unlikely that future roads would be beneficial to the southeast or southwest. There is a possible connection point that could be considered to the west near the location of Lots 3 & 4, Block 10 (see below).

4. The City recently revised the Cluster Subdivision section of the zoning ordinance to more clearly stipulate the minimum lot width for properties developed using the Cluster Subdivision standards. The minimum lot width now prescribed is 150 feet. All lots in the proposed development meet the minimum lot width of 150 feet. The average lot width within the development is 198 feet.

5. The City requires a minimum of 1.5 areas of buildable area for each lot. The applicant proposes several lots that have a minimum area of 1.5 acres including wetland buffer. The City would not permit development within the wetland buffer and would therefore not count it towards buildable area. There are several lots where it is not clear if the buffer is included in the minimum buildable lot area calculation. The applicant will need to verify that the following lots meet the minimum area, not including the wetland buffer:

    - Lot 1, Block 3
    - Lots 3, 4, 5, Block 5
    - Lot 1, Block 9

6. The proposed plan shows several lots that appear to have wetland encroachments on the private lots. Ideally, the wetlands would be located within an Outlot and not on private property. The City would recommend that wetlands and wetland buffers are removed from the private lots to prevent future limitations on the useable lot area. Several lots should be noted:

- Lots 3, 4, 5, Block 5
- Lot 1, Block 6
- Lots 1,2, Block 10
- Lot 3, Block 4

7. The applicant has provided information verifying each lot can accommodate a primary and secondary septic site.

8. The applicant shows all applicable building setbacks on each proposed lot along with a proposed house pad. Applicable setbacks are as follows:

    - Front Yard Setback: 85' from centerline of road
    - Corner Yard Setback: 52' from property line
    - Side Yard Setback: 30' from property line
    - Rear Yard Setback: 40' from property line
    - Wetland Setback: 10' from edge of wetland buffer

9. There are a handful of lots that have a non-traditional configuration. This is a result of the property having many unique features and geographical characteristics. Staff is seeking Planning Commissioners feedback relating to individual lot configurations.

10. The applicant is proposing to preserve existing trees located within the proposed open space/Outlots.

11. The developer has noted that they would likely phase the construction of the development going from the north to the south. Phasing of the development would be considered at the time of Final Plat.

12. The existing portion of Koch's Crossing that is proposed to be eliminated will need to be formally vacated. The applicant will be required to make application to the City for vacation of Koch's Crossing.

13. The City and Watershed have standards relating to storm water management and water quality. The City will ensure that the development of this property meets all applicable standards relating to storm water management and water quality. The City's water resource engineers have completed a detailed review of the proposed plans. The applicant will be required to revise the plans in accordance with all applicable comments. Following preliminary plat consideration, the Pioneer Sarah Watershed Management Commission will review the plans.

14. The City's engineering consultant has reviewed the plans and prepared a detailed review of the preliminary plat. The applicant will be required to make all applicable revisions to the plans based on the comments provided.

15. The proposed subdivision is subject to the City's Park dedication requirements. The City is not requesting any public park land within the development. It is anticipated that the proposed useable open space would be fully accessible to the development and there appears to be good connectivity to all of the proposed Outlots. The standard park dedication requirement of $3,500 ($3,500 x 33 = $115,500) per lot will be applicable to all newly developed lots.

Neighbor Comments:
The City has received a petition from neighboring property owners relating to the proposed development and field several verbal questions.

Recommendation:
Staff is seeking a recommendation from the Planning Commission for the request for Rezoning, Preliminary Plat, Conditional Use Permit for a Cluster Development. Should the Planning Commission make a recommendation to the City Council, the following findings and conditions should be included:

1. The proposed Rezoning, Preliminary Plat and Conditional Use Permit meet all applicable conditions and restrictions stated Chapter V, Section 510, Zoning, in the City of Independence Zoning Ordinance.

2. City Council approval of the Rezoning, Preliminary Plat and Conditional Use Permit will be subject to the following:

    a. The Applicant shall make all revisions required and as noted within this report, by the Planning Commission and City Council.

    b. The Applicant shall address all comments and applicable requirements pertaining to the water resources and engineering as outlined in the associated review letters from Hakanson Anderson Associates and Bolton & Menk, Inc.

    c. The Applicant shall comply with all applicable regulations and conditions prescribed by Pioneer Sarah Creek Watershed Management Commission.

    d. The Applicant shall enter into a development agreement with the City for this development.

    e. The Applicant shall provide a letter of credit as established by the development agreement for all public improvements associated with this development.

    f. The Applicant shall provide the City with copies of the HOA agreement and covenants, including information related to the maintenance of the common driveway.

    g. The Applicant shall obtain all necessary City, County, PCA and other regulatory agency approval and permits prior to construction.

3. The Applicant shall pay the park dedication fees in accordance with the terms

defined in the Development Agreement.

4. Koch's Crossing will need to be vacated by the City. The applicant shall apply for vacation of that portion of Koch's Crossing to be vacated. Vacation of the right of way will need to correspond with the establishment and construction of the new right of way and road.

5. The Applicant shall pay for all costs associated with the City's review of the rezoning, preliminary plat and conditional use permit.

6. The Applicant shall submit the final plat to the City within ninety (90) days of the City Council approval of the Preliminary Plat.

Kaltsas explained this is a consideration for a new subdivision of 33 lots proposed to be developed under the city's cluster ordinances. The city would need to rezone to AG to RR. This site was a concept plan last year and discussed various aspects. The applicant is asking for consideration of rezoning the property, a CUP to allow a cluster development and a preliminary plat to allow the 33 lots to be known as Kochs Farms Sanctuary. There are 6 individual parcels associated with this farmstead. It is approx. 141 acres in size. In Fall 2021 the city reviewed the concept plan with 33 lots. The applicant took comments and came back with this final plat. It is consistent with the city's comprehensive plan. On the preliminary plat is shows that the access will come off of 90 realigned that will provide a better intersection. They will vacate the former portion of Kochs crossing, then it will loop back into Koch's crossing. The new street from Koch's crossing will be called William Way. The applicant is asking the city to consider 33 lots on 141 acres. There are standards relating to RR and density issues. Lots permitted are 27 lots, so we have context when considering cluster development. The city also needs preservation of open space. In exchange for density, there has to be usable upland space. The city is requiring the space preserve 50% as usable open space. This equates to approximately 70 acres preserved. There are a couple things that are noted in the ordinance such as the realignment of the Koch's crossing intersection, the additional ROW and turn lanes. The new street would be a dead end, Williams Way, is shown as 3900'. The subdivision standards talk about continuation of existing streets. Proposed street and its alignment will be decided by Council. The future projection would require potential connectivity. There is a high-level survey of surrounding communities regarding their standards on cul-de-sacs and connectivity. The length, connectivity and all needs will be decided by the city. The city needs to look at the character of the city, public safety, costs of maintenance, and speeds. There are well established studies showing that longer dead-end streets increase speeding. The issue with not connecting is the longer dead end. Our policy should reflect this. We developed some of these cluster ordinances when Providence was developed.

When Brei Kessel was developed the city had just a 66' ROW. If this cul-de-sac remains, the city can't fully maintain it. Kaltsas showed the exhibit of if the road went through what were the geologic limitations. The road to East to Independence or West to 90. There is limited access to Independence but some access to 90.

The city did revise the cluster development standards. There was a issue regarding the density calculation. There was actually a density penalty, so we mad a revision. The slopes and minimum lot frontages were also topics that were revised. There were only two other cluster developments, Providence and Serenity Hills. The average lot frontage on this project is 198 lineal feet. There are a couple areas that we were not clear on buffer. This plan meets all applicable setbacks, the house pads, and primary and secondary septic sites. There are some lots that are not your normal layouts. They are trying to provide the best building sites. They looked at stormwater, ponds, and roads but there is nothing prohibitive, just some more detailed comments. This would be subject to watershed approval after prelim plat is approved. There is no park space that is proposed for this space so we would need to confirm where that would be located.

Gardner mentioned that the buffer is caused by the wetland but it's not wetland. He asked if this is still buildable. Kaltsas said in lot 1 block 3, there are 1.5 acres buildable and there is a buffer on the Western line included in this, but they cannot build in the wetland.

Volkenant asked if some of these odd shaped lots cause and issue with the buffer. Kaltsas said he proposes that they leave the buffer and increase the 1.5 to 1.55 with a .5 buffer.

Dumas asked about the Outlot C where there is a bunch of junk there at the end of the old driveway. Kaltsas said that they will be removed.

Story said he has received a lot of emails from Brei Kessel residents, and these people are concerned. He understands but is really concerned about the long cul-de-sac which is dangerous. He asked if there's a compromise instead of a connector. Maybe a gravel connector with bollards that would allow for emergency vehicles but prevent the everyday vehicles. Gardner said this is a very difficult problem with cities. Dumas asked if there are any studies done from the firehouse. Kaltsas said Brei Kessel is right on the border of the Maple Plain line. He asked Chief Kroells about the response time. If one of the access points are blocked, getting emergency vehicles through would be difficult. The fire code threshold is 30 lots on 1 access development. Volkenant asked about the lot line and where Brei Kessel ends. The lines seem to differ. Kaltsas said if the road is accepted as proposed, Brie Kessel would need additional ROW and would need to take some of it from the private properties on the cul-de-sac. Thompson asked about the easement for the temporary cul-de-sac and a predictable way to take the ROW from the residents. Kaltsas said if the city were to go after a permanent ROW, they would have to look at what was granted prior. As of right now there is a temporary easement shown but unsure if it was recorded. Would we have to acquire a permanent easement from the residents. Thompson asked if there is anything remaining from the development of Brei Kessel and the rest of the area to the S around HOA or an entity separate from the homeowners or is this just dealing with the property owners. Kaltsas said this is property owners granted some sort of encumbrance on their property. We need to check if these were recorded. Thomson said there are no guarantees that we could accomplish getting something to permanent standards at the end of that road and up to each individual property owner. Kaltsas said ultimately the city has the right to eminent domain and would determine if this should be upgraded or be permanently maintained. Gardner said we need to solve the cul-de-sac problem.

Gardner said we don't know which way we are going with the cul-de-sac right now. It would

need to get larger. The cul-de-sac would need to be 120' in diameter to make it an official cul-de-sac. The city should own it so that the city can maintain it.

PUBLIC HEARING OPENED

Marty Chelstrom said in response to a couple arguments. Jon Paul had mentioned trees falling and the only trees that could fall is where the creek is across the road. Jon Paul said the tree falling is just an example. Marty said in regard to Kaltsas' statement that longer cul-de-sacs make for faster speeds, but he would argue that 100% wrong. The best way out of our neighborhoods is on Hwy 12. People will figure this out quickly, so they'd cut right through and go down Brei Kessel. Marty said public safety is the issue. I wouldn't want kids out on the streets if that was a cut through street. He said he spoke with one of Gary's officers and asked if he'd ever choose Brei Kessel to get to Koch's development and the officer said no. There have been 2 fires in his 20 years living here and one was in Providence with 2 access points and the house burnt to the ground. The other was Fifinski's and had a challenge of getting up the driveway. There was a Council member that talked about the biggest challenge they're facing is rising home values. It's great for the city and developers, but what is lacking there is no balance with regard to the residents. He would like to see recognition for that.

Gardner asked if Marty was aware that this is a copy of what we did on Providence. The people that live in Providence seem to enjoy it. They have extra houses and more open space that in the traditional manner. He asked if anyone has any questions about the goal of maintaining open spaces. Marty asked if open spaces are always in conservation. Gardner said that things can change but this is deeded to an outlot situation. These are supposed to stay there as long as people want it. Marty asked how it would be different in the RR piece if it isn't usable to the people. Kaltsas said it would be owned by the HOA. If it was developed, people could put structures on the 50% usable piece. It is preserving this as perpetual open space. Mary said wetlands cannot be built on. Gardner said there are 40 acres of ground that could have had houses on it but it is open. Marty said he doesn't see the benefits are to the residents. Kaltsas said it is just preservation of open space. This is fairly common and doesn't break up the landscape. This is solely a city decision, and the HOA has the access to it. The city doesn't stipulate that it has to be public.

Dumas asked if anyone has done a traffic study. Gardner said if the road gets joined, they would get to Loretto quicker. He said there are many winds and turns to it that they would prefer the fastest way out or in with less stops. This property is so big that it makes it practical to have more than one way into it.

Mark Kroskin lives at 6000 Providence Curve. He is the president of the HOA. The board voted unanimously that they do not want the connection to Brei Kessel. The reason for that is that we would disagree with the comments. They would prefer that Providence had 2 cul-de-sacs. Providence Curve is a racetrack with traffic from Independence Rd to Becker. We won't allow our daughter to bike 3/10 of a mile because of the speed on Becker. 97% of the vehicles on Becker are going over 50mph. If people need to go East, they are not going to go West to go East. People will cut through and increase the traffic on Becker.

Story asked what the length of Brei Kessel Road is. Steven Brandt lives on Brei Kessel said he can comment on that. Since he runs often, the length from Brei Kessell Cul-de sac to the

stop sign at Woodhill and Becker is about ¾ of a mile which is about 3,900 feet just like the length of the William Way. Gardner said it was ok'd on the plans for them to connect the cul-de-sacs originally. The circumstances on how the Brei Kessel cul-de-sac got there was not intended to leave it that way.

Mark Perhman at 2850 Becker Rd. said that everyone that buys properties on William Way will also not want anyone on Becker Rd, Brei Kessel, etc. driving down William Way to get to Loretto.

Tim Koch, the developers, said that they brought the dropping of the cul-de-sac to tonight's meeting because they came in with the aspect from the customer point of view, meaning the 33 families that will build their homes here. The residents here tonight are also customers that need to be listened to as well. There is a great desire for cul-de-sacs. They foster a sense of community with quite streets keeping extra traffic out. It increases the value of their homes and decreases theft. Kochs said that it offers a much safer neighborhood for the residents. Thompson asked for some more explanation with through street versus cul-de-sac. There are roughly 6 lots in a traditional cul-de-sac and then there is a divide. The first house on the beginning of the cul-de-sac will watch 20 vehicles drive by with the cul-de-sac design versus 10 if it was a through street. Tim said that the HOA homes to the South we would like to foster. We don't know what traffic flow will be. There will be added traffic from the North and South. If William Way was a through street, it would increase more traffic coming from Kochs Crossing. Thompson said that the Koch's family previously developed Brei Kessel and asked what Tim's feedback was on seeking a variance and relying on that to move forward. Tim said that the believes that today, this is what his dad would want.

David Aberling lives at 6098 Woodhill Lane, lives at the end of a cul-de-sac. He said that he is happy that the committee is thinking about public safety because Woodhill is not a safe road. There are blind spots and curves. If you add more traffic, there will be more issues. He thinks the plan is good, but we still want to live in Independence not Hamel. It seems like a very simple decision, and he doesn't feel like the residents are being heard.

Todd Hansen living at 5645 Kochs Crossing on the North side. He said he never thought about the traffic on the North end, but if you open this up, we will see a lot more traffic on Kochs Crossing and Independence Rd. It was mentioned earlier about the fire and having bollards and that did work in case of an emergency. He asked if there is a HOA and what is the minimum housing size. Koch said it was around a 2,000sqft for a 2-story. Todd Hansen suggested putting up a berm where we are, that would be appreciated by Serenity Hills development.

Sarah Chelstrom, 3150 Brei Kessel Road, she asked who is objecting to the permanent cul-de-sac. She is asking what the problem is and why is it taking so long to get approved. Gardner said that these are universally accepted design standards. All cities do the same thing. We have to consider the practical standards and layouts of these subdivisions as they come to us. These long cul-de-sacs are frowned upon by everyone that lives on them that want to keep everyone else out of them. You have to have through streets in cities and not a city of cul-de-sacs. When we looked at this in 1996, Bill Koch agreed that this would be a though street. Sarah asked if Gardner agrees that things change from 1996. Gardner said not in this wisdom. The practicality of laying these cities out is like adding on to your house. If

you hadn't lived there and Bill Koch would have put this road through. Now that you live there, now you are being abused. Sarah asked why we can't have a cul-de-sac. Rules can be changed. Gardner said there is a reason for putting through streets in. Sarah said when we have a bunch of people objecting, when people move into this neighborhood, they know what they are getting and buying into, but we are having our neighborhood completely changed. You are not listening to the public. Gardner said that is what we are doing this right now with the public hearing. Thompson said that there is ordinance in the books for decades that if this plat were to progress, it would require a variance because this proposal is against the City Standards. He understands and appreciates the people's opinion, but we also have to follow the ordinances. Sarah asked if ordinances are never changed. Thompson said they are changed all the time, and there is a process for that, but what is happening here is an ask for an acceptance of an existing ordinance. Marty Chelstom asked how does violating our neighborhood fit in with these ordinances. Thompson said we are not going to debate. Marty said if Bill Koch would have done this 25 years ago, we would have known what we were signing up for when we bought.

Tom Koch asked about the variance, and this may take a couple months more to get a variance to put in a cul-de-sac. Kaltsas said it is going to be based on the decision that planning decides on and what direction we would need to take from there. It depends on the recommendation.

Paul Otto, planning engineer on this project. He mentioned that the end of the road, there is a creek that drains NW a lot of water. We can design something across that, but we would have to account for that and he wasn't sure if that would negatively affect anyone.

Brandon Howe on Kochs Crossing wanted to make mention of any online comments online are heard.

Ryan Baumen online asked why the existing Kochs Crossing is being realigned. Kaltsas said it is HC recommendation to realign this. Story said it is sight line safety. Baumen also asked how they plan on handling the drainage. Paul Otto said there is a grading plan on the North. The water is directed to the culvert across Koch's Crossing. There is no water going to Serenity Hills. Baumen asked about the trees on the 50' outlot and if there can be a buffer. Kaltsas said that can be discussed. Ryan Baumen said the existing public easement is on Cartway comes into the West lots, why is it being moved to the East. There are existing drainage issues so the basin to the West wouldn't help us. He would like to see more engineering on this. Kaltsas said there is no ROW for Cartway currently. Paul Otto said the cartway is at the bottom of the driveway or the hill. He flip flopped it for walkouts. He said they can design houses how they want as long as it meets City standards. The drainage issues were always there. The problem is the slope.

Sarah Chelstrom said that her big thing is safety. Orono is an excellent rated school, and she would guess that since there is open enrollment in Orono many of those homes will probably open enroll. The closest bus stop is on Woodhill and Brei Kessel. There will be a lot of cars there and a larger safety issue.

Motion by Dumas to close the public hearing, second by Volkenant. Ayes: Gardner, Dumas, Volkenant, and Thompson. Alternate Story. Nays: None. Absent: None. Abstain: None. Motion Approved.

Gardner asked what our options are now. Kaltsas said you have the three action items. You can approve, deny, table, or approve with conditions. Thompson said he is thinking of this as the proposal in front of us instead of re-engineering, redesigning standpoint. From a cluster development and CUP standpoint, most of this is satisfactory. Where he is struggling is that there has been a lot of great feedback, but we have to balance that with ordinances that are on the books and the way he reads that is that to terminate this in the cluster development standards it would need a variance. He would also look to the city and homeowners to memorialize a real cul-de-sac. This is a challenge proposed. In addition to the variance, we should also address that there is a permanent cul-de-sac to the North and South.

Story there is a lot of talk about safety of residents on Brei Kessel but also a lot regarding safety of residents on William Way is a concern. This is the longest cul-de-sac by far in the city. Possible speed bumps or traffic safety things could be done. This is setting a precedent for this long of a cul-de-sac for the future developments. He is anti-cluster and super long cul-de-sacs. Thompson agreed with Story's thoughts about just being against the long cul-de-sac, not necessarily that it needs to hook up to Brei Kessel. Gardner said we grant variances for different circumstances often, but this is a far reach. Dumas said that this is midway between the two fire departments. A variance would solve an emergency response issue. Kaltsas said you could plat a ROW to the connection. Gardner asked if anyone had any feedback on the design. Dumas said that the only ones that are unique are 2 & 3. Gardner said this is incomplete so he feels like we should table it until we get the variance worked out. Kaltsas said that if they were to make a recommendation to approve as is, you would have to do it subject to the applicant coming back with a variance or resolve the need for a variance or plat ROW between the two roads.

Thompson asked what the easiest plan forward to take all comments. Is it to table or conditional approval? Kaltsas said that the options are to deny it and it would go to council either way, you can make a recommendation with conditions, or you can make a recommendation subject to connectivity, or table it.

Motion by Thompson to approve subject to conditions, 1. resolution of the need for a variance regarding access to the new development, 2. resolution to city satisfaction regarding the temporary cul-de-sac at the end of Brei Kessel, second by Volkenant. Ayes: Gardner, Dumas, Volkenant, and Thompson. Alternate Story. Nays: None. Absent: None. Abstain: None. Motion Approved.

Kaltsas said it is motion to approve subject conditions. Gardner asked if we would rezone it after this. Kaltsas said they could make it all in one motion or separately. Gardner said this motion will include rezoning from AG to RR. Story asked if we could put this out a couple months to discuss maximum lot size and other things that will allow us to really discuss what this looks like for future developments. Thomsons said that he agrees, and it would allow for all of the city to comment as well.

7. Open/Misc.

8. Adjourn.

Adjourned at 10:01 p.m.

Respectfully Submitted,

_____
Amber Simon / Recording Secretary

MINUTES OF A REGULAR MEETING OF THE
INDEPENDENCE CITY COUNCIL

TUESDAY APRIL 5, 2022–6:30 P.M.
City Hall Chambers

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 8:00 p.m. (running late due to LBAE meeting)

2. PLEDGE OF ALLEGIANCE.

Mayor Johnson led the group in the Pledge of Allegiance.

3. ROLL CALL

PRESENT:	Mayor Johnson, Councilors Spencer, Betts, McCoy and Grotting
ABSENT:	None
STAFF:	City Administrator Kaltsas, Assistant to Administrator Horner, Attorney Bob Vose
VISITORS:	See Full Sign-In Sheet

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 March 15, 2022, Regular City Council Meeting.
b. Approval of City Council Minutes from the March 15, 2022, Pre-Board LBAE City Council Meeting.
c. Approval of Accounts Payable (Batch # 1; Checks Numbered 21118-21121 and Batch # 2; Checks Numbered 21122-21164).
d. Agriculture Preserve Renewal Application for the Following Property:
    i. PID No's. 31-118-24-41-0003, 31-118-24-41-0004 (Requested by Anne Leck)
e. Approval and Award of Annual Dust Control and Gravel Contracts.
f. 1st Quarter Building Permit Summary (for information only).

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

5. SET AGENDA – ANYONE NOT ON THE AGENDA CAN BE PLACED UNDER OPEN/MISC.

6. REPORTS OF BOARDS AND COMMITTEES BY COUNCIL AND STAFF

Grotting attended the following meetings:

- Workshop
- Planning
- LBAE
- Visited the Timm Sawmill property

Spencer attended the following meetings:

- Workshop
- Planning
- LBAE

McCoy attended the following meetings:

- Workshop
- Planning
- LBAE

Betts attended the following meetings:

- Workshop
- LBAE
- Planning

Johnson attended the following meetings:

- Auditor
- Energy Environment Committee ULI (virtual)
- Mayor of MP and Kroells met with County Sheriff candidate
- Orono Healthy Youth (virtual)
- Theater Event at Delano High School
- Farm Bureau Celebrating State Ag in Eden Prairie
- Senior Community Services Board Meeting (virtual)
- Congressman Phillips at Orono High School
- Workshop
- LBAE
- Planning

Horner attended the following meetings:

- Workshop
- LBAE
- Planning

Kaltsas attended the following meetings:

- Highway 12
- Mediacom

- Workshop
- LBAE
- Planning

Kaltsas confirmed that the detour will begin on Hwy 12 on April 18th.

7. Hennepin County Commissioner Kevin Anderson: Annual Visit/County Updates.

Hennepin County Commissioner, Kevin Anderson explained that they set their tax levy at 3.5% increase. He made a motion to keep it at 2.5% but it failed. He stated that he did pass 2 different changes to the County budget. The first is to evaluate how public works evaluates road projects and how that changes the budgets. The other being adding a veteran's memorial on Hennepin County property. He has been working with the MN Association for Veterans for purchasing forfeited properties in HC. They authorized a sale of 4 properties to offer affordable housing for Veterans and bringing light to Veterans' issues. The ARP funding is another area that he is directing a lot of time on. The County allocated $250 million to work on economic recovery, homelessness, broadband expansion, violence prevention and mental health issues. He is advocating for the needs of HC. They finalized an agreement to help pay for broadband expansion. They allocated $10 million to help pay for broadband expansion in HC. It is a necessity for our lives. Where it doesn't exist, cities are stepping up to find companies that can help offer this to their residents. Another major area they are focusing on is mental health and expanding services to make sure emergency services are available. This is increasingly needed to get ahead of the curve coming out of the pandemic to team with local police departments.

Johnson asked if social services going to be available 24/7. The 24/7 service is the 1800 Chicago is the emergency location. They want to make sure they are building the foundation to keep this going for years to come. They are looking for ways to make this available and working with neighborhoods for a cost-sharing option. Anderson said he is always available to take phone calls. Spencer asked how the coffee with the commissioner is going. Anderson said it is slow, but he is working on this and to continue it with getting the word out ahead of time. Johnson said he met with Kevin for coffee. Anderson said they are transitioning back into the office within the next 3 months. Not everyone will go back full-time. They will utilize a hybrid model.

8. Doug Campbell and Colleen Klaers (Applicants/Owners) request that the City consider the following actions for the property located at 4390 Woodhill Drive and property associated with the home on 4364 S Lake Sarah Drive (PID No.s 01-118-24-32-0015 and 02-118-24-41-0001) in Independence, MN:

a. **ORDINANCE 2022-03:** Considering rezoning of the portion of property being added to 4390 Woodhill Dr. from AG-Agriculture to RR-Rural Residential.

b. **RESOLUTION 22-0405-01:** Considering approval of a minor subdivision to allow a lot line rearrangement which would take approximately .60 acres from the property associated with 4364 S Lake Sarah Drive and combine it to the 4390 Woodhill Drive property.

Kaltsas explained the request for minor subdivision for lot line rearrangement. This would need to re-zone the 0.06-acre vacant piece. The ROW for Woodhill Dr is stubbed into the adjacent property when the Woodhill development was done. We ask for the applicant to provide a 66' ROW to be maintained going to the North of that property.

Motion by Spencer, second by McCoy to approve ORDINANCE 2022-03 re-zoning from Ag to RR. Ayes: Johnson, Spencer, Grotting, McCoy and Betts. Nays: None. Absent: None. Abstain. None. MOTION DECLARED CARRIED.

Motion by McCoy, second by Betts to approve RESOLUTION 22-0405-01. Ayes: Johnson, Spencer, Grotting, McCoy and Betts. Nays: None. Absent: None. Abstain. None. MOTION DECLARED CARRIED.

9. Kelly Brouwer (Applicant) requests that the City consider a relocation permit to bring in an existing home on the newly created 20-acre portion of the property generally located near 1730 County Line Rd SE (PID No. 19-118-24-34-0002) in Independence, MN.

Kaltsas explained that this is a request to relocate a home from outside the City to County Line Road. The building inspector inspected the home and the full site plan. They provided locations on the survey for the primary and secondary on-site septic sites. The relocation permit was approved by the Planning Commission. Vose said that there are many recommendations to make to make sure this is done safely. Johnson said there is a map of the route they are taking to move the home. Grotting said this used to happen quite a bit and doesn't happen very often anymore. He asked if there are changes to this ordinance. Kaltsas said the home will fit and meet applicable setbacks. This is a large lot and there are a lot of options on getting to the site. Johnson said usually the biggest complaint is that if there was an old home brought into a new home development. The building inspector evaluated everything and PC approved. Spencer asked if there are any special railroad challenges in this route. Kaltsas said that this is just a permit. Johnson said who ever the mover is, they would pull all applicable permits with the railroads, etc.

Motion by Spencer, second by Grotting to approve the relocation permit. Ayes: Johnson, Spencer, Grotting, McCoy and Betts. Nays: None. Absent: None. Abstain None. MOTION DECLARED CARRIED.

10. Tom Koch (Applicant/Owner) is requesting that the City consider the following review/discussion for the property generally located at 5865 Koch's Crossing (PID No.s 11-118-24-12-0004, 11-118-24-13-0003, 11-118-24-31-0005, 11-118-24-13-0002, 11-118-24-42-0001, 11-118-24-42-0002) in Independence, MN:

c. **ORDINANCE 2022-04:** Considering rezoning of the subject property from AG-Agriculture to RR-Rural Residential.

d. **RESOLUTION 22-0405-02:** Considering approval of a conditional use permit to allow a cluster development and approval of a Preliminary Plat to allow a 33-lot subdivision to be known as KOCH FARM SANCTUARY.

Council Member Grotting Recused himself from this topic
Kaltsas said this is a consideration for a 33-lot cluster development. We would need to rezone the property from Ag to RR. The applicant is asking Council to look at a cluster development and approve preliminary

plat. There are 6 different parcels. The property touches Brei Kessel Road on the South side of the property. There are ponds and wetlands in this area as well. Overall, 141 acres in size. There was a concept plan in the early Fall 2021. The Comp plans show this is zoned as RR. The reason for re-zoning is to increase density. The city has permitted standards with minimum lot size and setbacks. They meet these requirements with their plan which allows for some relief of cluster development in exchange for the preservation of open space. The cluster standards have been in place for over 20 years. There was a need and benefit for adopting a cluster development standard. It is to preserve the rural character of the community. The requirements are that there is 50% open space within development to be left in common ownership outlot. Also 50% of that 50% must be usable open space (not wetlands, ponds, etc.). With these calculations there is about 35 acres that need to be usable and 70 acres as overall open space. Applicant is giving 40 acres as usable space. In exchange for this preservation, the city allows for an increase in density and smaller lots.

In the straight zoning, the property would yield 27 lots, but because of the preservation of a larger open space, the city has allowed 33 lots on this property that could meet these standards. Johnson asked if it could have been 36 lots. Kaltsas said the cluster development does not have an exact number. There is a minimum of 1.5 acres for lot size and we adopted 150' lot width standard on a public road. The 27 lots permitted would have to meet all the standards. The city broke down the detailed review and looked at the grading, drainage, stormwater and public improvement, infrastructure, road standards and type of pipe used under the roads. The prelim plat generates comments before the final plat application. Tonight, we are considering a preliminary plat. We need to look at any fatal flaws that would alter this plan. Planning Commission had thorough discussion and proposed a couple points.

The alignment of Koch's Crossing. County Road 90 causes sight line restrictions but could be re-aligned to the North to make it a better intersection. Hennepin County has made comments that the applicants need to address. The old Kochs crossing would need to be vacated after the re-alignment. They would then reconstruct a road going from the North to South called William Way and this would give access to 26 lots. Those lots have the minimum frontage requirement of 150' and a lot width/lot depth of 1:4. William Way extends to the South close to Brei Kessel. Brei Kessel was to be a temp cul-de-sac and to be put through in the future when this development was to be built. The cul-de-sac is not built to permanent standards. Williams Way is a dead-end road. Planning Commission had asked for information relating to surrounding community standards as it relates to dead end roads. The policy of the City and current ordinances say that roads be extended through. PC recommended to provide for the connection of Brei Kessel to William Way. The applicant provided an exhibit since then that would provide a 66' ROW that would allow for the extension of that road at some point. PC commented on emergency vehicle access, pedestrian walking train, but not necessarily vehicle through street. PC recommended that the applicant or the city require that the Brei Kessel cul-de-sac be brought up to standards as a permanent cul-de-sac and ROW. The applicant only controls a portion of that. PC also talked about the extension of roads anywhere else in this development, not just to Brei Kessel. There may be an impact of other properties if they were developed. There were some wetland buffer areas and rim easement that comes into some properties, these lots are not buildable so it would be excluded from the 1.5 acres minimum buildable lots. Johnson asked how many lots does this effect. Kaltsas said it is about 6 or 7 lots and just a small amount of the lots.

Kaltsas explained that the subdivision is subject to the city's park dedication requirements. There isn't additional request for the dedication of public open space on this development. The applicant is asking that the 6 existing lots reduce the number of park dedications. There is a small 1-acre lot. It went from 33 to 27. Johnson asked if the 1-acre lot is where the building site was. He asked where the 50% usable space. Kaltsas said it is comprised of a series of outlots. We take out the wetland area and calculate the upland areas. It is a linked system of upland areas and open spaces. Betts said this has a lot of trees. This is good for wildlife. Johnson said that's what the other 50% is for. Johnson said there should be more clarification in the ordinance

on what the usable space means.

The Ordinance 2022-04 is to rezone from AG to RR on this property. Bob Vose said that the second of the two actions is to approve the preliminary plat, there are quite a few proposed conditions. The 6th recommendation is that the applicant must submit the final plat within 90 days and Vose requested to add that applicant must submit title work on this as well. Also, assuming the council agrees to connect to the South. This is encompassed to 2e development agreement. The development agreement would address roads and public improvements. That is where you would say that the cul-de-sac on William Way may be temporary and could eventually go through to the South. McCoy said he would like to see a trail connecting those two cul-de-sacs. It is very appropriate for that area. He would also be in favor or waiving the 6 park dedication fees. Spencer said we need to be clearer with 26 homes on a dead-end road. The PC recommendation was that the connection be made so that the neighborhoods could be used in emergency situations. A connection should be made to support a vehicle. It may involve a culvert, gate, etc. or do we need to do more work on this. If Brei Kessel will become a cul-de-sac, the property from the end lot would have to be acquired for ROW since it doesn't meet city road standards. He asked if the ROW easement available from the property to the West and at what cost to the City. He asked who will pay for this and if we have found logistics out about this. The PC idea of connecting the two cul-de-sacs with a trail is better than nothing but it needs to be brought to standards.

Kaltsas said that PC wanted to see the connection. The detail was to come back to council and it hasn't been addressed yet. We can work on the details. This could become part of the record. Spencer said the other subject about a ROW to connect the east of block 10 with an outlet to County Road 90. He asked if this was discussed at all. Kaltsas said we could reserve the ROW. Given the high ground, there could be an East-West connection. Spencer said Bolton Menk recommends we connect Brei Kessel and William Way. Betts said that it would be nice to have a connection as far as a trail goes for emergency vehicles. When Brei Kessel was put in as a temporary cul-de-sac, that was 20 years ago, and things change over time. She said she would be much more comfortable with the two cul-de-sacs so the communities can be connected through a trail. The added traffic is a problem. Personally, she would not want this to connect. Spencer said sometimes when you do developments that happen in long periods of time, you need to make provisions along the way. He had a foresight of the road in the future. When the PC reviewed this 26 years ago, this was supposed to be the plan. The council needs to look at it as what is the right thing to do for the community. The cul-de-sacs are a bad idea. Johnson said we need to do our due diligence as a city. We need to put signage up immediately if something is to change in the future. We had a road on the N side of Lake Sarah was supposed to have a road go through but then years later it happened. Vose asked if there is a public ROW that adjoins this development. Johnson said yes. Vose said that the city has ROW, this can be addressed in a development agreement. He asked if Kaltsas wants to require now for a provision for a road to go through or not. Now is the time. We are in position to require delivery of a road through. It's up to the city to do. McCoy said if the developer came in originally and said they want to connect to Brei Kessel, we couldn't turn them down because that was the original agreement. As far as the emergency road for fire trucks could never get them through. That is the dividing line between fire departments. There is no hydrants there so water would have to be hauled. There is a 9-ton road standard for development. The roads need to be well designed. He said do not do a gated fire access because it is a lot of wasted time and energy. Johnson said that if you had something that was wide enough for cars to go through, people will use this illegally. HE would like to see a hiking path. He wouldn't approve this without ROW to properties for future connection. Spencer said this wouldn't happen in the future. There should be an exit to the West for future development. Planning Commission recommended that these two need to be connected. If Brei Kessel needs to be brought up to standards, then we need to do that and assess the property owners. Kaltsas asked if the council recommends that Brei Kessel be brought up to a standard it would need to be a separate process, needing a 429 feasibility. There was a temporary easement provided for. Unless we make it a permanent cul-de-sac we should not be using it. This would be a separate

direction and bring it back as an action item.

Motion by Spencer, second by Betts to approve the ORDINANCE 2022-04 to rezone the property from AG to RR. Ayes: Johnson, Betts, and Spencer. Nays: None. Absent: None. Abstain. Grotting. MOTION DECLARED CARRIED.

Betts said she would move Resolution 22-0405-02 with stipulation that Bob Vose mentioned. Kaltsas said that would be the added language about the DA and title work. Vose said Condition 6 would include that the requirement that title work be provided. There also should be clarification on the connection between the two be provided. Betts said that she would clarify that there be two separate cul-de-sacs with an easement such as a trail. Kaltsas said that if council is recommending a trail, then staff would work with the applicant to establish the kind of trail. Maybe a paved trail. There would be a culvert to connect the two communities. Kaltsas said this would be back at final plat to review the solution that we come up with. Vose said this is the most authority to make changes. Johnson asked about dedication of property to the West. Kaltsas said that then the prelim plat be revised with 66' of ROW west to William Way. Kaltsas said the property to the East is the Selstad property that is very limited. The city could include the ROW to the West to be included in the motion.

Vose said the safest approach is to direct staff to amend the resolution and bring it back for a vote. It is a good idea to table this and bring it back to the next meeting. McCoy asked if the amended resolution would reflect the Council's input. Kaltsas said yes.

Motion by Betts, second by McCoy to approve to table the RESOLUTION 22-0405-02 and bring it back to the April 19 meeting. Ayes: Johnson, McCoy, and Betts. Nays: Spencer. Absent: None. Abstain. Grotting. MOTION DECLARED CARRIED.

Spencer said we should examine Brei Kessel to bring this up to standards with exact cost, what it would entail, if we can get the property and who is paying for this.

Council member Grotting rejoined the Council

10. Open/Misc.

Marty Chelstrom said that the goal line keeps moving. How is Brei Kessel pushing through going to make emergency better. He sees no gain in punching though. There have been 2 fires in my 20 years and access wasn't a factor. We had a unanimous Providence approval. He said he hopes there was a higher order. No one wants this to happen. They have been proactive about bringing the road to the West. Spencer said that the number one item on the engineer said to connect the road. Ordinances in all cities discourage cul-de-sacs. They are not a good idea from a planning perspective. His job is to do what is right for the city. Chelstrom said he has a neighborhood that they are seeking to destroy. Vose said that this point was made through to PC, this is a public record. There will be other opportunities for comments, but this is not a public hearing.

11. Adjourn.

Mayor Johnson declared the meeting adjourned at 8:57 p.m.

_____

Respectfully Submitted,
Amber Simon / Recording Secretary

City of Independence

Request for a Conditional Use Permit to Allow an Accessory Structure Larger than 5,000 SF on the Property located at 1665 Copeland Road

To:	Planning Commission
From:	Mark Kaltsas, City Planner
Meeting Date:	April 19, 2022
Applicant:	Jeffrey Arendt
Property Owner:	Jeffrey Arendt
Location:	1665 Copeland Road

Request:

Jeffrey Arendt (Applicant/Owner) is requesting that the City consider the following action for the property located at 1665 Copeland Road (PID No. 19-118-24-44-0004) in Independence, MN:

a. A conditional use permit to allow a detached accessory structure that is larger than 5,000 SF. The applicant is proposing to construct a new private indoor riding arena.

Property/Site Information:

The property is located on the west side of Copeland Road and south of Dean Lane. The property has an existing home and two additional detached accessory structures. The property is primarily comprised of tillable acreage and a wooded area in the southeast corner The property has the following characteristics:

Property Information: **1665 Copeland Road**
Zoning: *Agriculture*
Comprehensive Plan: *Agriculture*
Acreage: *65.05 acres*

1665 Copeland Road

Discussion:

The applicant approached the City with plans to add an indoor riding arena onto the existing barn located on the subject property. It was noted that the proposed 21,000 square foot addition that would be connected to the existing structure would exceed the maximum square footage permitted of 5,000 without a conditional use permit. The existing barn is approximately 7,800 SF. The applicant would like the City to consider granting a conditional use permit to allow the proposed 21,000 SF building addition to be added to the property.

All accessory structures greater than 5,000 square feet require a conditional use permit

530.01 Agricultural District established.

Subd. 3. Accessory uses.

(d) Detached agricultural storage buildings, barns, or other structures, accessory to an existing single-family dwelling and subject to the following criteria:

3. The maximum square footage of any individual accessory building or structure shall be 5,000 square feet.

The proposed indoor riding arena is 21,000 square feet in size (100' x 210'). There is an existing ~7,800 square foot detached accessory structure already on the property. The proposed addition would be connected to the existing building via an enclosed breezeway. For properties greater than 10 acres, there is no maximum total allowable detached accessory structure square footage limitations. The proposed building would be used solely for the applicant's personal use and own horses. There would be no commercial use or commercial boarding of horses allowed within the proposed accessory structure. The proposed detached accessory structure would be constructed using materials and colors that would correspond with the existing accessory structure.

The applicant has provided the City with a site survey, floor plan and building elevations of the proposed building.

The proposed site and buildings have the following characteristics:

Site Area: 65.05 acres

Required Setbacks:

Front Yard:	85 feet from centerline
Side Yard:	30 feet principal structure
	15 feet accessory structure
Rear Yard:	40 feet

Proposed Setbacks:

Front Yard:	190 feet from CL of Copeland Road
Side Yard:	N/A - far exceeds requirements
Rear Yard:	N/A - far exceeds requirements

The proposed detached accessory structure would meet all applicable building setbacks.

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.

The City has visited the site and discussed the proposed detached accessory structure with the applicant. The conditional use permit would allow an accessory structure larger than 5,000 SF. The City is being asked to determine whether or not the proposed accessory structure larger than 5,000 SF would meet the criteria for granting a conditional use permit.

Additional Notes/Considerations:
The applicant is proposing to construct an indoor riding arena for their own personal use. The applicants live on the subject property. The applicant has not submitted any information pertaining to building lighting. All building lighting will need to comply with the City's lighting standards. The City typically reviews building lighting during the building permit review process. No additional building screening is proposed given the proximity of all structures on adjacent properties combined with the existing vegetation and general screening provided by the placement of the building. The location and size of this property and the character of the surrounding properties aids in mitigating any potential impacts of the proposed arena.

The applicant has prepared a site plan, grading plan and building plans for the proposed site improvements.

The following conditions should be considered:

1. The conditional use permit will be reviewed annually by the City to ensure conformance with the conditions set forth in the resolution.

2. The applicant shall provide the City with information and details pertaining to any and all building and site lighting. All lighting will be required to comply with the City's applicable lighting standards.

3. No commercial use of the proposed detached accessory structure shall be permitted.

4. No future expansion of the detached accessory structure shall be permitted without the further review and approval by the City through the conditional use permit amendment process.

Neighbor Comments:

The City has not received any written or oral comments regarding the proposed conditional use permit.

Recommendation:

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

1. The proposed conditional use permit 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 be reviewed annually by the City to ensure conformance with the conditions set forth in the resolution.

3. The applicant shall provide the City with information and details pertaining to any and all building and site lighting. All lighting will be required to comply with the City's applicable lighting standards.

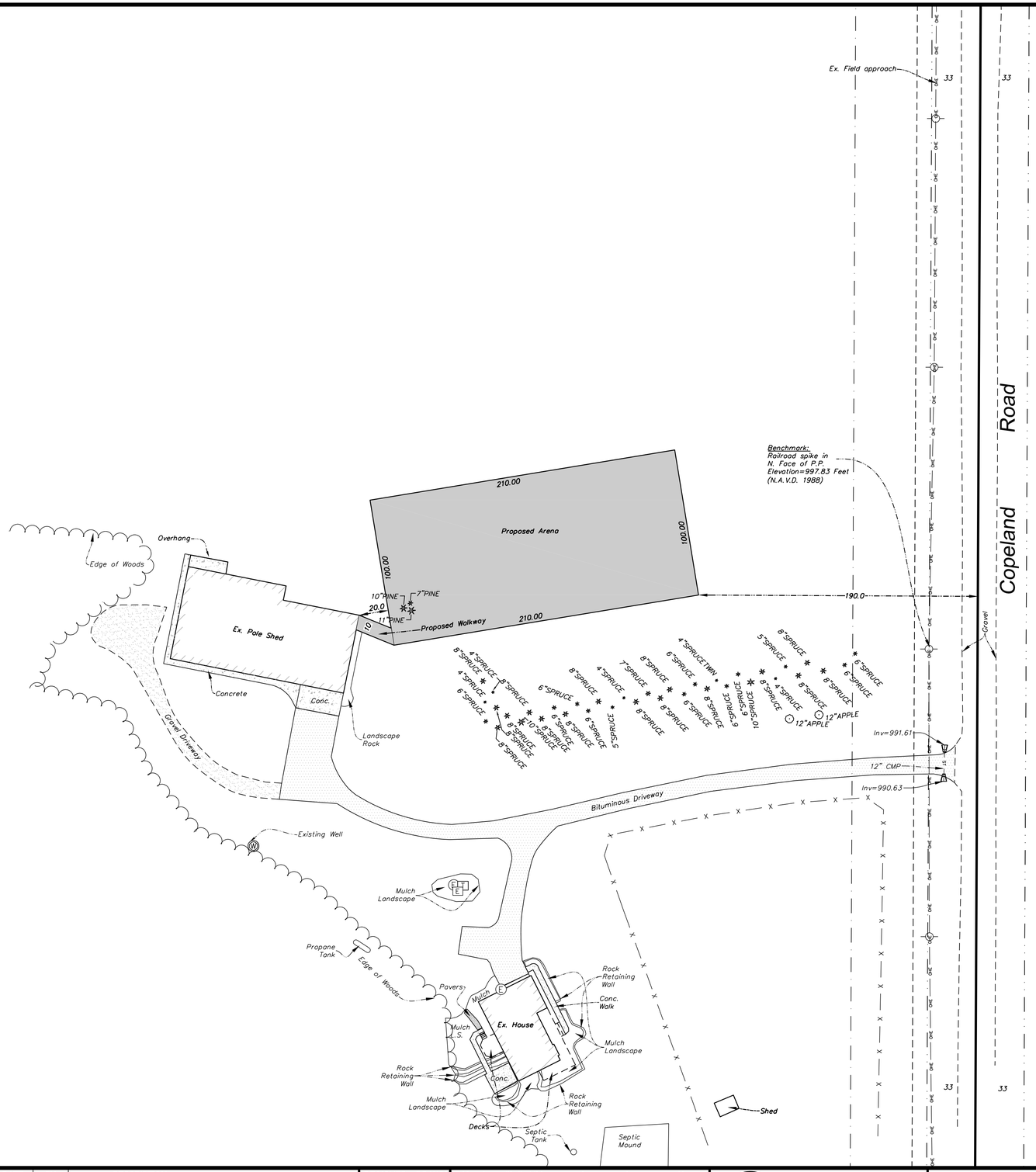
4. No commercial use of the proposed detached accessory structure shall be permitted.

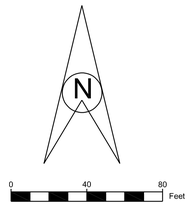
5. No future expansion of the detached accessory structure shall be permitted without the further review and approval by the City through the conditional use permit amendment process.

6. The applicant shall pay for all costs associated with reviewing the application and recording the resolution.

Attachments:

1. Application
2. Site Survey/Site Plan
3. Grading Plan
4. Building Floor Plan
5. Building Elevations
6. Colored Rendering





SCALE: 1"=40'

LEGEND

- 988 — denotes Existing Contour
- 988.00 × denotes Existing Spot Elevation
- FF=989.36 denotes Finished Floor Elevation
- denotes Power Pole
- denotes Deciduous Tree
- denotes Coniferous Tree
- OHE — denotes Overhead Electric Line
- X — denotes Fence Line
- denotes Existing Culvert
- E denotes Electrical Meter
- T denotes Telephone Pedestal
- E denotes Electrical Pedestal
- denotes Drainage and Utility Easement
- denotes Building Setback Line
  - Front = 85' to centerline
  - Corner yard side = 52'
  - Side = 30'
  - Rear = 40'

EXISTING HARDCOVER CALCULATIONS:		
Area of Lot =	2,950,165.43	S.F.
	AREA	
Existing House	2,133	S.F.
Pole Shed	7,166	S.F.
Concrete	1,834	S.F.
Shed Overhang	212	S.F.
Decks	613	S.F.
Shed	141	S.F.
Pavers	51	S.F.
Bituminous Drive	9,388	S.F.
TOTAL	21,537	S.F.
% HARDCOVER	0.7	%

PROPOSED HARDCOVER CALCULATIONS:		
Area of Lot =	2,950,165.43	S.F.
	AREA	
PROPOSED ARENA	21,000	S.F.
PROPOSED WALKWAY	256	S.F.
Existing House	2,133	S.F.
Pole Shed	7,166	S.F.
Concrete	1,834	S.F.
Shed Overhang	212	S.F.
Decks	613	S.F.
Shed	141	S.F.
Pavers	51	S.F.
Bituminous Drive	9,388	S.F.
TOTAL	42,793	S.F.
% HARDCOVER	1.5	%

PROPERTY DESCRIPTION
That part of the Southwest Quarter of the Southeast Quarter of Section 19, Township 118, Range 24, Hennepin County, Minnesota, that lies East of the West 436.00 feet thereof.

AND

The Southeast Quarter of the Southeast Quarter of Section 19, Township 118, Range 24, Hennepin County, Minnesota.

REV. NO.	DATE	BY	DESCRIPTION

DESIGNED P.E.O. DRAWN T.R.K.

CHECKED P.E.O.

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.

Paul E. Otto
License #40062 Date: 2-17-22

OTTO ASSOCIATES
Engineers & Land Surveyors, Inc.
www.ottoassociates.com
9 West Division Street
Buffalo, MN 55313
(763)682-4727
Fax: (763)682-3522

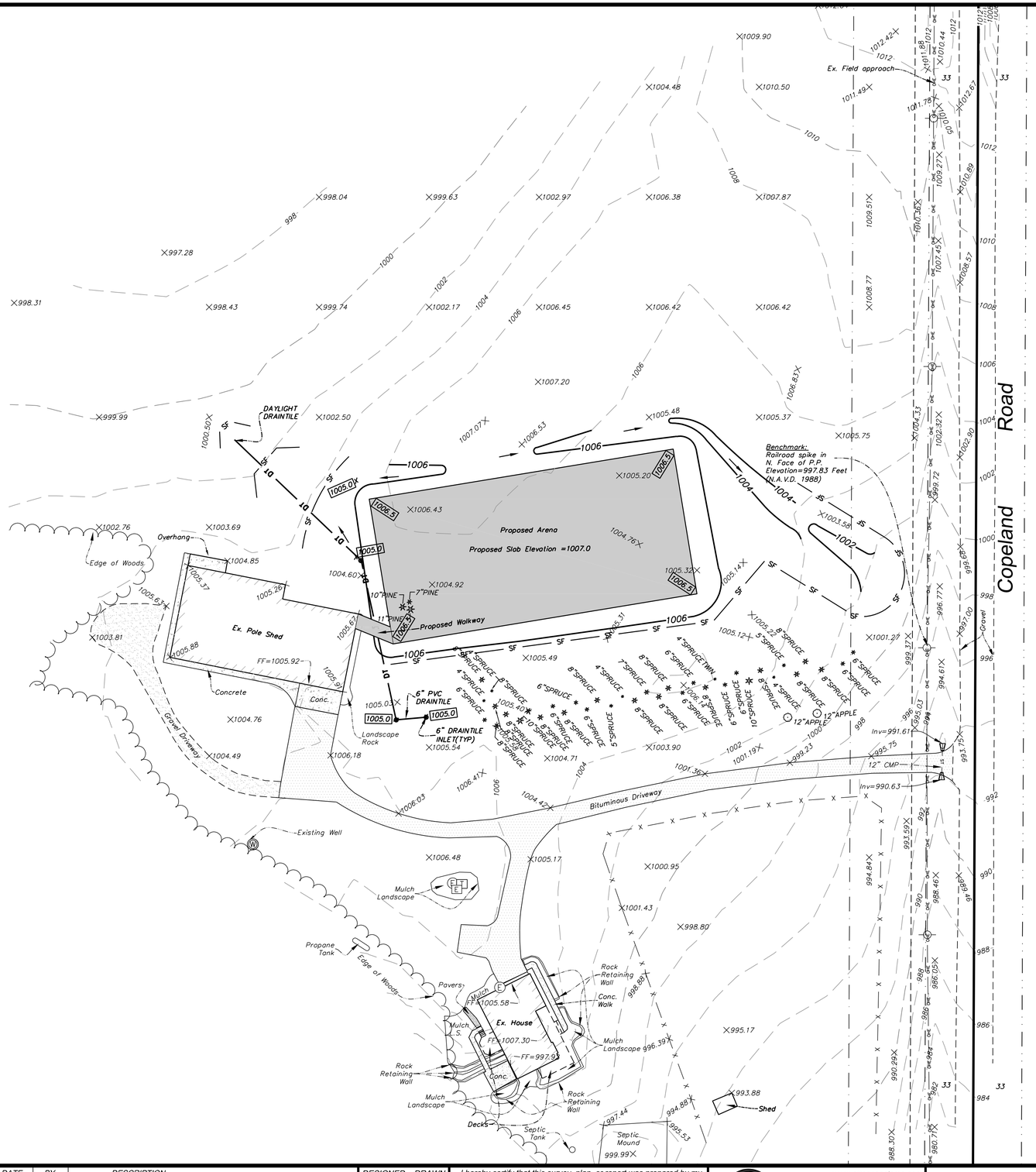
ARENA
JEFF ARENDT
CORCORAN, MN

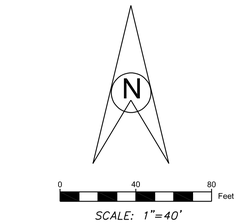
SITE PLAN

SHEET NO. 1 OF 2 SHEETS

PROJECT NO: 21-0126

DATE: 1-6-22





SCALE: 1"=40'

LEGEND

- 1010 — denotes Proposed Contour
- 1017.5 × denotes Proposed Spot Elevation
- → denotes Proposed Drainage
- 988 — denotes Existing Contour
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- FF=989.36 denotes Finished Floor Elevation
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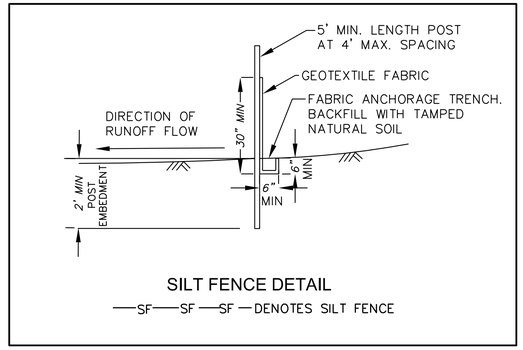
- T denotes Telephone Pedestal
- E denotes Electrical Pedestal
- denotes Drainage and Utility Easement
- denotes Building Setback Line
  - Front = 85' to centerline
  - Corner yard side = 52'
  - Side = 30'
  - Rear = 40'
- DT — denotes Proposed 6" Draintile



SILT FENCE DETAIL

—SF—SF—SF— DENOTES SILT FENCE

REV. NO.	DATE	BY	DESCRIPTION

DESIGNED P.E.O. DRAWN T.R.K.

CHECKED P.E.O.

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.

Paul E. Otto
License #40062 Date: 2-17-22

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Fax: (763)682-3522

ARENA

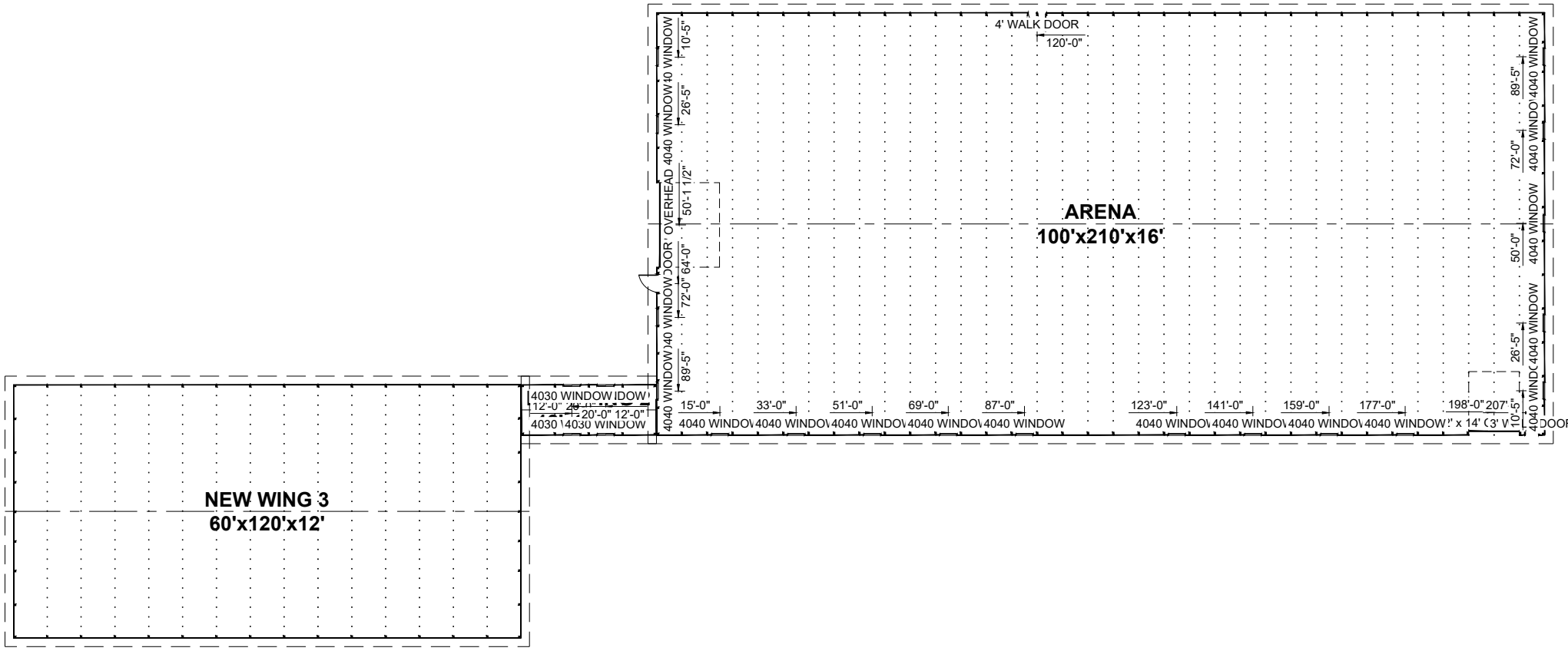
JEFF ARENDT
CORCORAN, MN

GRADING PLAN

PROJECT NO: 21-0126

SHEET NO. 2 OF 2 SHEETS

DATE: 1-6-22



ARENA Bay Spacing - 35 @ 6'-0"

Customer Signature

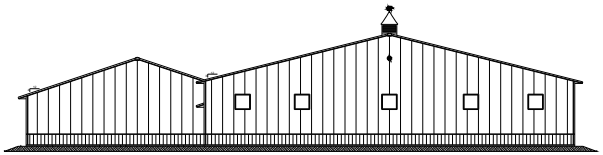
Wick Buildings®

BRAD RADTKE AND ASSOCIATES, LLC
Brad Radtke
10694 Grover Av Sw
Howard Lake, MN 55349

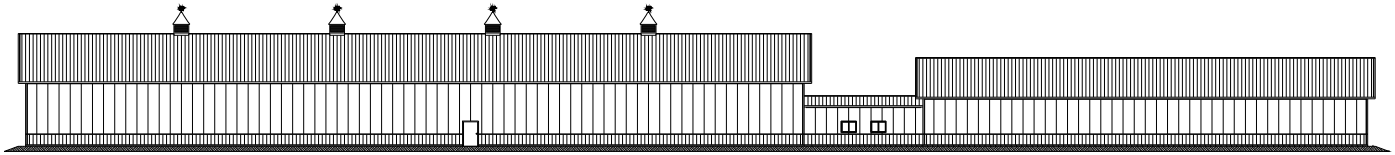
WickBuildings.com
Date: 1-19-2022
Time: 3:56 PM
DO NOT SCALE

Jeff Arendt 100' x 210'
100'-0" x 210'-0" x 16'-4" ICH

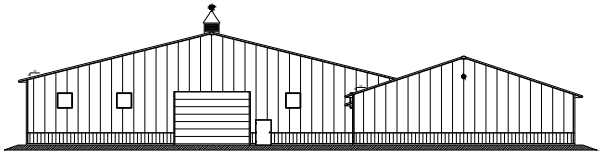
Jeff Arendt
1665 Copland Rd
Independence, MN 55359



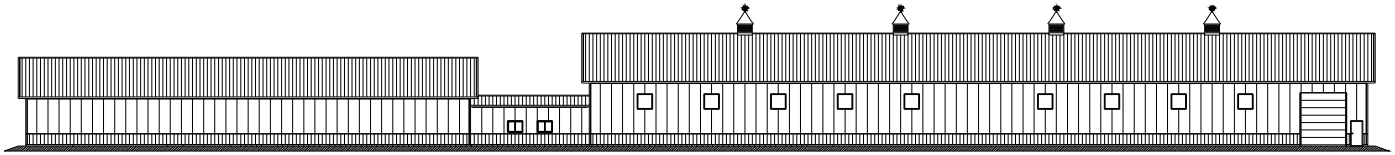
Right Elevation



Top Elevation



Left Elevation



Bottom Elevation

Customer Signature

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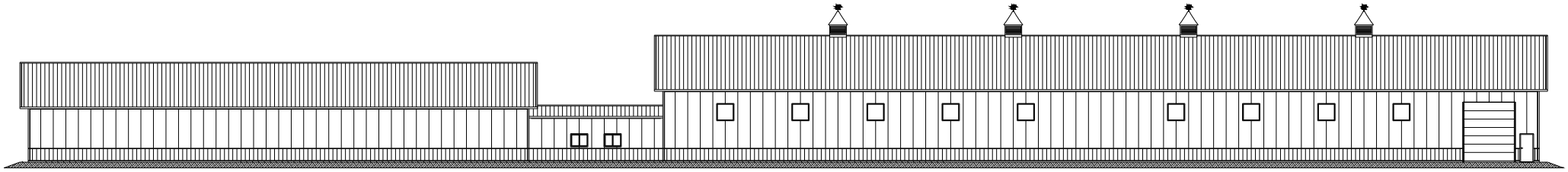

Bottom Elevation

Customer Signature

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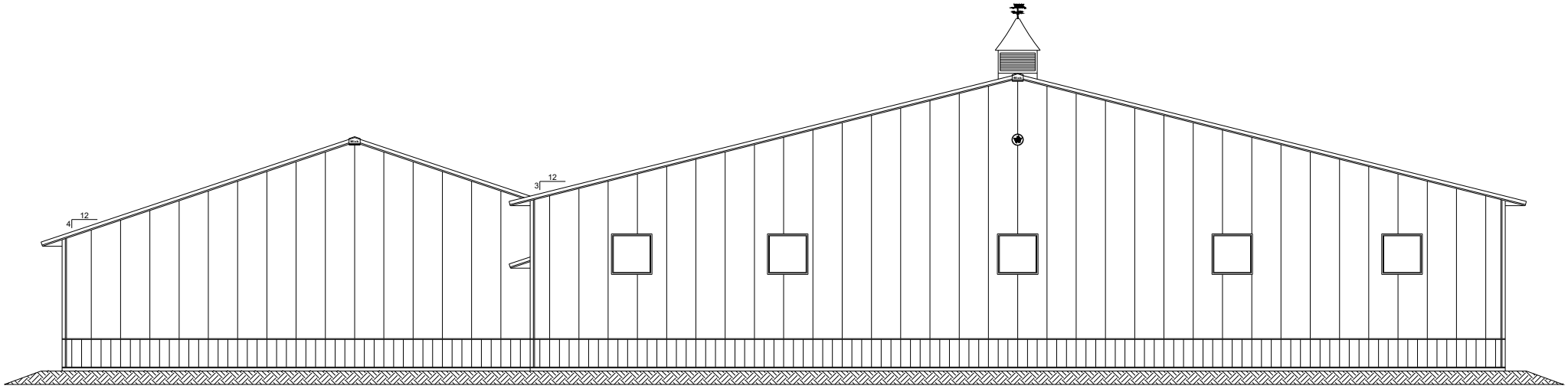

Right Elevation

Customer Signature

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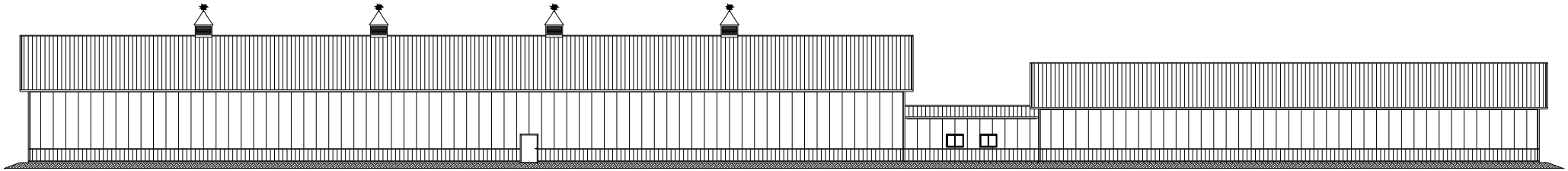


Top Elevation

Customer Signature

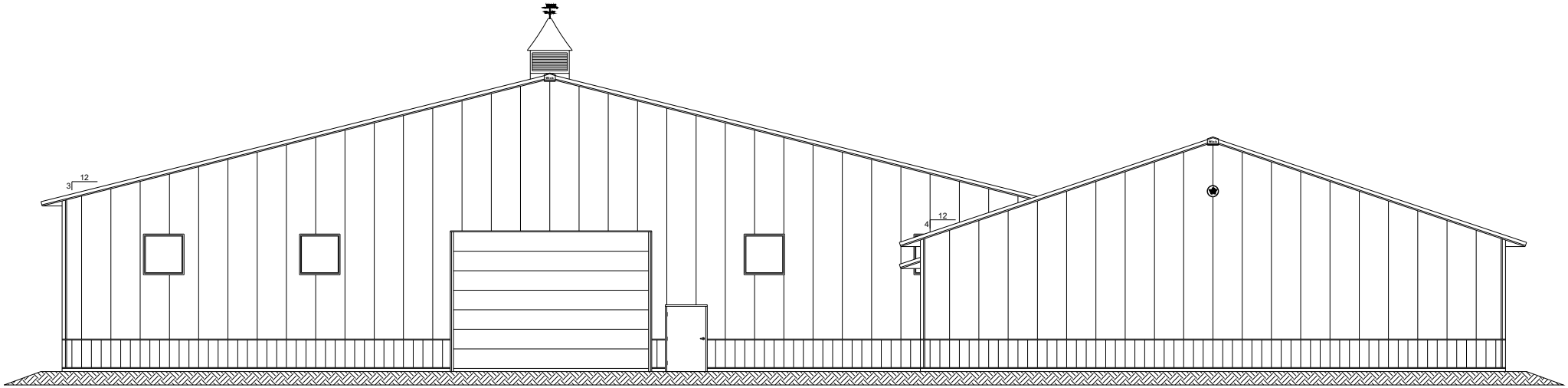
Wick Buildings®

BRAD RADTKE AND ASSOCIATES, LLC
Brad Radtke
10694 Grover Av Sw
Howard Lake, MN 55349

WickBuildings.com
Date: 1-19-2022
Time: 3:56 PM
DO NOT SCALE

Jeff Arendt 100' x 210'
100'-0" x 210'-0" x 16'-4" ICH

Jeff Arendt
1665 Copland Rd
Independence, MN 55359



Left Elevation

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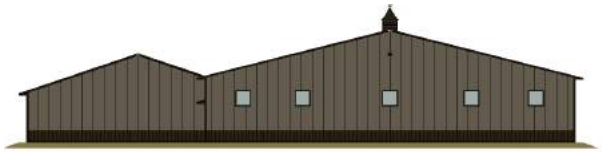
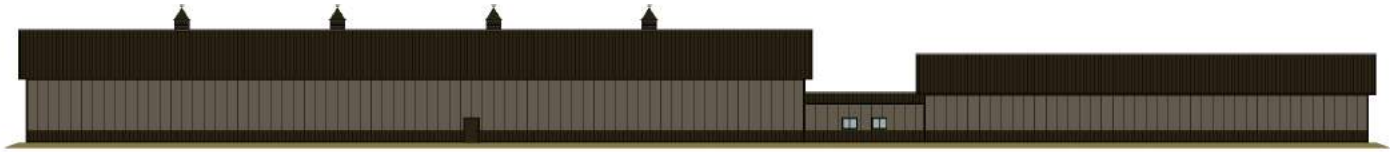


Right Elevation



Top Elevation

Left Elevation

Bottom Elevation

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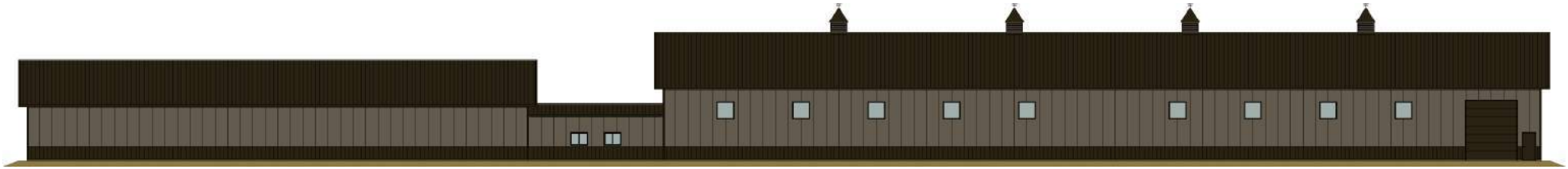

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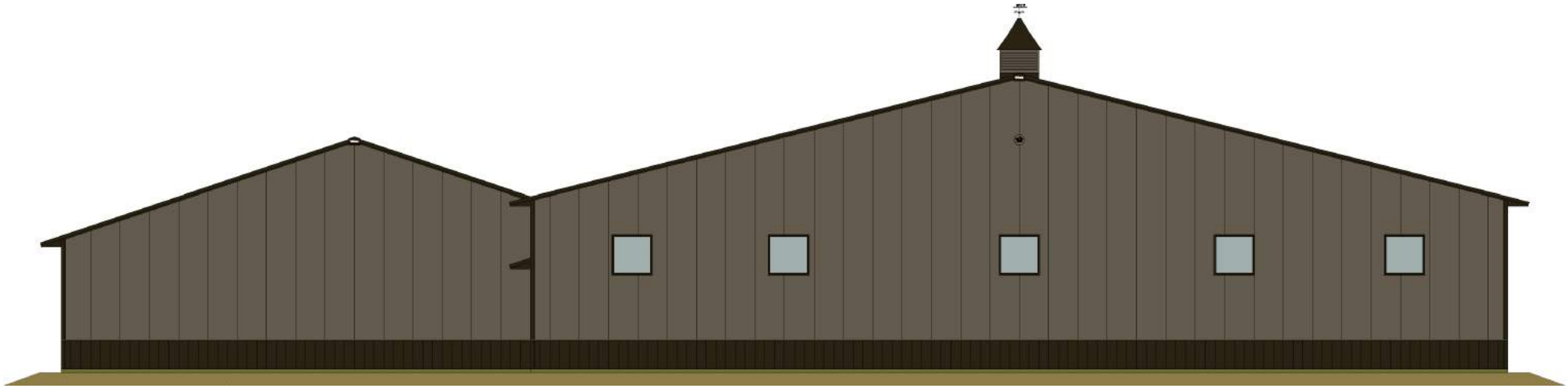

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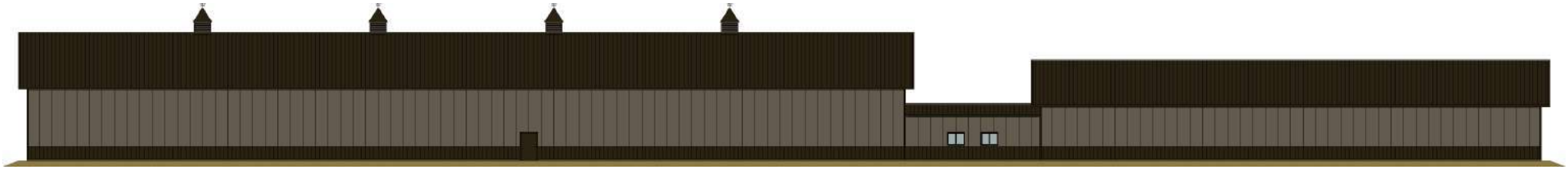

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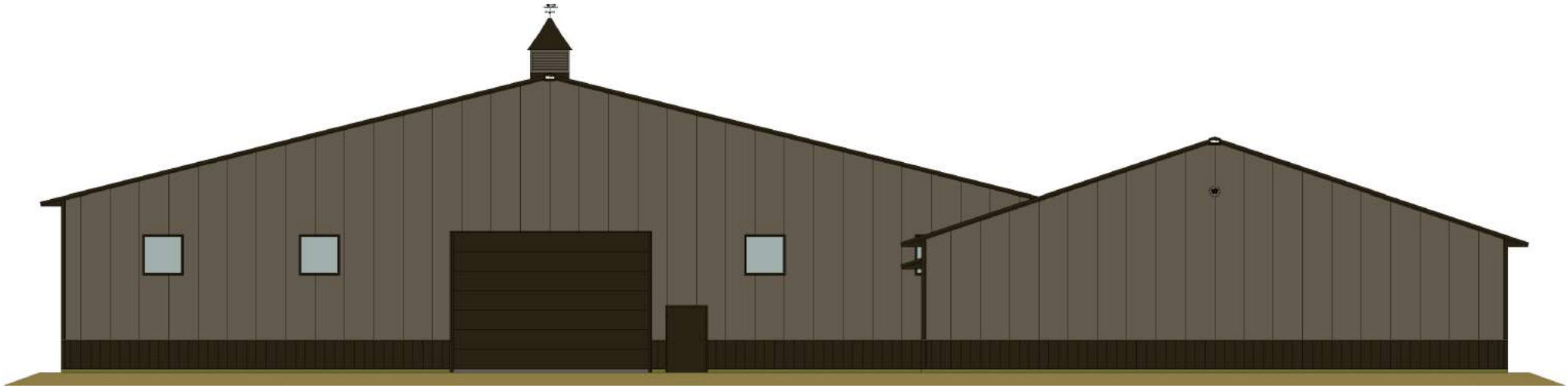

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$360,487
CONTRACT
1,563
HOURS

City of Independence

Public Hearing for Comments Pertaining to Environmental Assessment Worksheet Associated with Windsong GC Possible Golf Course Expansion

To:	Planning Commission
From:	Mark Kaltsas, City Planner
Meeting Date:	April 19, 2021
Applicant:	Windsong Farm Golf Club (Jon Dailing)
Owner:	David Meyer
Location:	18 Golf Walk

Request:

Jon Dailing/Windsong Farm Golf Club (Applicant) and David Meyer (Owner) are requesting the following action for the property generally located at and adjacent to 8590 County Road 92 N (PID No.s 32-118-24-23-0001, 32-118-24-22-0003, 32-118-24-22-0002, 32-118-24-13-0002, 32-118-24-12-0003 and 32-118-24-12-0004) in the City of Independence, MN:

a. Review of an EAW (Environmental Assessment Worksheet) associated with the proposed development of a new 18-hole golf course on the subject properties. The EAW is required as a result of the conversion of the property from agriculture to a new land use.

Property/Site Information:

The subject property is located on the south side of County Road 6, just west of County Road 92. The property is a golf course. The properties have the following characteristics:

Property Information: (PID No.s 32-118-24-23-0001, 32-118-24-22-0003, 32-118-24-22-0002, 32-118-24-13-0002, 32-118-24-12-0003 and 32-118-24-12-0004))
Zoning: *Agriculture*
Comprehensive Plan: *Agriculture*
Acreage: *~125 total acreage of six (6) properties*

Aerial Photograph of Subject Properties

Discussion:

The applicant approached the City about the possibility of constructing an 18-hole private golf course on the subject properties. The properties are currently owned by the same ownership group that also owns Windsong Farm Golf Club. The City initially reviewed the request to determine if an environmental review was required by Minnesota statute. There are certain land use conversions that trigger a mandatory environmental review. In this case, it was determined that the conversion of more than 80 acres of agriculture land to a golf course initiated a mandatory environmental assessment worksheet (EAW). The purpose of the EAW is to consider information about a project that may have the potential for significant environmental impacts.

The EAW – Environmental Assessment Worksheet – document is designed to provide a brief analysis and overview of the potential environmental impacts for a specific project and to help the RGU determine whether further environmental review is necessary. The EAW is not meant to approve or disapprove a project, but is simply a source of information to guide other approvals and permitting decisions

An EAW review is initiated and administered by the City or what is referred to as the responsible government unit (RGU). The EAW is not approved or denied, but rather allows the City as well as other agencies to review the proposed land conversion to determine if/what environmental impacts could occur as a result of the change in use. This process does not alter or circumvent the City's other processes and required approvals. Golf Courses are a conditional use in the AG-Agriculture zoning district and any proposed new golf course will require the review and approval of the City. Full details of the proposed golf course, grading, structures, parking, etc.

have not been provided and will be reviewed at the time of a submittal for a conditional use permit.

The City is not obligated to hold a public hearing on the EAW but felt that it would provide constituents an opportunity to provide any comments or ask questions relating to the conversion of the property to a golf course and any potential environmental impacts associated with that conversion. There will also be a public hearing and more formal review of the actual golf course at the time a conditional use permit application is submitted to the City to consider approval of the golf course and associated improvements.

The City's engineer has reviewed the EAW and provided several comments to the applicant relating to the application. The next step in this process will be for the City to submit the EAW to the Minnesota Environmental Quality Board (EQB). The Environmental Quality Board is made up of 9 agency heads and 8 citizen members. The EQB will formally review and comment on the application submitted and allow for additional public input pertaining to the proposed change in land use.

Recommendation:

No action is required at this time. The City is providing the public with an opportunity to provide comments and ask questions relating to the EAW specifically for the subject properties.

Attachments:

1. EAW

Prepared by Emmons & Olivier Resources, Inc.

Prepared for Fox Lake, LLC

Windsong Farm Golf Club North Course

Environmental Assessment Worksheet

March 7, 2022

EOR water ecology community

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ENVIRONMENTAL ASSESSMENT WORKSHEET

This Environmental Assessment Worksheet (EAW) form and EAW Guidelines are available at the Environmental Quality Board's website at:

http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm.

The EAW form provides information about a project that may have the potential for significant environmental effects. The EAW Guidelines provide additional detail and resources for completing the EAW form. ***Cumulative potential effects*** *can either be addressed under each applicable EAW Item, or can be addresses collectively under EAW Item 19.*

Note to reviewers: *Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the EQB Monitor. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS.*

1. PROJECT TITLE

The project is called Windsong Farm Golf Club North Course. This will be referred to as the Project in the EAW.

2. PROPOSER

Proposer: Fox Lake, LLC

Contact Person: Jon Dailing

Title: Golf Course Superintendent

Address: 18 Golf Walk

City, State, Zip: Maple Plain, MN 55359

Phone: 763-479-7161

Email: jdailing@wsfarm.com

3. RESPONSIBLE GOVERNMENT UNIT (RGU)

RGU: City of Independence

Contact Person: Mark Kaltsas

Title: City Administrator/Planner

Address: 1920 County Road 90

City, State, Zip: Independence, MN 55359

Phone: 612-567-8786

Email: mkaltsas@ci.independence.mn.us

4. REASON FOR EAW PREPARATION

Required	Discretionary
☐ EIS Scoping	☐ Citizen petition
☒ Mandatory EAW	☐ RGU discretion
	☐ Proposer initiated

If Mandatory, give EQB rule category subpart number(s) and name(s).

This EAW is mandatory under Minnesota Administrative Rule 4410.4300 subpart 36, **Land Use Conversion, including golf courses**, due to the fact that it will convert more than 80 acres of agricultural land.

5. PROJECT LOCATION

County: Hennepin

City/Township: City of Independence

PLS Location (¼, ¼, Section, Township, Range)

¼, ¼	Section	Township	Range
NW ¼	32	118 N	24 W
W ½ of the NE ¼			

Figure 1 shows the location of the project site in the state and county. **Figure 2** shows the Project Site overlaid on a U.S. Geological Survey 7.5 minute topographic map.

6. PROJECT DESCRIPTION

a. Project Summary

Provide a brief project summary to be published in the EQB Monitor 50 words.

Fox Lake, LLC proposes to construct an 18 –hole golf course north of the existing Windsong Farm Golf Club south course which will be located on a 125.6-acre tract of land. The land is comprised of rolling farmland, forests and wetlands. The project is privately owned and funded.

b. Description

Give a complete description of the proposed project and related new construction, including infrastructure needs. If the project is an expansion include a description of the existing facility. Emphasize 1) construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes, 2) modifications to existing equipment or industrial processes, 3) significant demolition, removal or remodeling of existing structures, and 4) timing and duration of construction activities.

The Project proposes to construct the golf course expansion on six contiguous parcels located on the northeast corner of Watertown Road (CSAH 6) and Copeland Road in Hennepin County, MN. This 125.6-acre tract will be referred to as the Project (**Figure 3**). The project will consist of an 18-hole golf course, an irrigation pond, and several supporting structures; a starter building, a maintenance building, and a satellite restroom (**Figure 4**). These buildings will be connected to the electrical grid, have separate septic systems and derive their drinking water from groundwater wells. The starter house and the maintenance building will require natural gas pipes for heating. During operation, irrigation water will be provided from wells and from an irrigation pond that is proposed with the Project. **Table 1** summarizes the magnitude of the project.

In preparation for construction, the Project will require removal of a majority of the trees from the Project site, as well as the demolition of an abandoned barn. Landscaping will include grading, grassing, excavating an irrigation pond, installation of irrigation pipes & heads, and establishing native vegetation outside of the fairway. The Project will require construction of paved and unpaved cart paths, cart path bridges, buildings, and the infrastructure mentioned above.

Construction of the Project is anticipated to take 2 years from start to finish: beginning in summer 2022 and continuing in phased steps until spring 2024. Grubbing the site would begin in summer 2022, with grading to commence in September. Then the drainage would be installed, and outlying areas would be stabilized with temporary/permanent seed and mulch. Construction would continue in April 2023 with installation of additional drainage and irrigation, as well as utilities, cart paths, and buildings. Finally, grassing and any remaining revegetation would occur from August to September 2023.

c. Project Magnitude

Table 1. Project Quantities

Project Feature	Quantity
Total Project Acreage	125.6 acres
Linear Project Length	N/A
Number of Housing Units	0
Commercial Building Area	15,000 sq ft
Industrial Building Area	N/A
Institutional Building Area	N/A
Number of Golf Holes	18
Structure Heights	1-2 story buildings

d. Purpose

Explain the purpose of the project; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.

The purpose of the project is to construct an 18-hole golf course that is an expansion to the existing Windsong Farm Golf Club. The beneficiaries would include the club owner and club members. The project would be planned and implemented by private entities.

e. Future Stages

Are future stages of this development including development on any other property planned or likely to happen? ☐ Yes ☒ No

If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.

f. Prior Stages

Is this project a subsequent stage of an earlier project? ☒Yes ☐ No

If yes, briefly describe past development, timeline and any past environmental review.

This project is an expansion of the Windsong Farm Golf Club located south of the Project site. An EAW was completed for the Windsong Farm Golf Club circa 2000 and construction occurred from 2001 to 2003. On-site wetland mitigation for the original course was approved in 2007.

7. COVER TYPES

Table 2 describes the land cover features pre-project and post-project. The pre-project land cover consists of cultivated cropland area that is interspersed with wetlands and is adjacent to a public water. The post-project land cover consists primarily of golf course features. The golf course land cover includes maintained grass areas, sand bunkers, and other typical golf course features. New Impervious surfaces that are proposed for the project include buildings, cart paths, and parking lots. See **Figure 5** and **Figure 6** for existing and proposed land cover maps.

Table 2. Land Cover Before and After

Project Feature	Before (ac)	After (ac)
Wetlands	13.68	12.33
Deep Water/Streams	0.02	1.78
Wooded/Forest	2.28	0
Brush/Grassland	15.36	41.79
Cropland	93.35	0
Impervious Surfaces – Paved	0.17	1.87
Impervious Surface - Unpaved	0.79	2.20
Golf Course Turfgrass & Bunkers (roughs, fairways, greens and bunkers)	0	65.68
Total	125.65	125.65

8. PERMITS AND APPROVALS REQUIRED

List all known local, state and federal permits, approvals, certifications and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure. All of these final decisions are prohibited until all appropriate environmental review has been completed. See Minnesota Rules, Chapter 4410.3100.

The Project will be entirely privately financed. **Table 3** details the status of permits and approvals required for the Project.

Table 3. Permits and Approvals Required

Unit of Government	Type of Application	Status
City of Independence	Environmental Assessment Worksheet	Decision Requested
City of Independence/Board of Water and Soil Resources (BWSR)/U.S. Army Corps of Engineers (USACE)	Joint Permit Application (Wetland Delineation Review)	Approved
City of Independence/BWSR/USACE/Minnesota Pollution Control Agency (MPCA)	Wetland Impact and Replacement Plan	To Be Applied For
City of Independence	Conditional Use Permit	To Be Amended
City of Independence	Grading Permit / Stormwater Permit / Floodplain Review	To Be Applied For
City of Independence	Demolition Permit	To Be Applied For
City of Independence	Building Permit: New Construction	To Be Applied For
City of Independence	Building Permit: Septic	To Be Applied For
City of Independence	Tree Clearing Permit	To Be Applied For
City of Independence (West Hennepin Public Safety)	Burn Permit	To Be Applied For
Hennepin County	Access Permit	To Be Applied For
Minnesota Department of Natural Resources (MnDNR)	Water Appropriation Permit	To Be Applied For
MnDNR	Natural Heritage Information System Review	Request Submitted.
Minnesota Pollution Control Agency (MPCA)	NPDES/SDS Permit	To Be Applied For
Pioneer-Sarah Creek Watershed Management Commission (PSCWMC)	Land Development Review	To Be Applied For
State Historical Preservation Office (SHPO)	Letter of Response from SHPO	Initial Response Letter Received. Additional Work Requested.
State of Minnesota	Electrical Permit	To Be Applied For
U.S. Fish and Wildlife	Section 7 Consultation	To Be Initiated
Minnesota Department of Health (MDH)	Water Supply Well Permit	To Be Applied For
Utility Providers	Electrical Service. Natural Gas Service, Telecommunications	To Be Applied For

9. LAND USE

a. Land Use Descriptions

i. Existing Land Use

Describe existing land use of the site as well as area adjacent to and near the site, including parks, trails, prime or unique farmlands.

The Project is located in a rural setting in western Hennepin County. Most of the Project is comprised of agricultural fields, with wetlands occupying the depressions, and forests inhabiting the field margins. Much of the farmland on the Project and in the surrounding region qualifies as prime farmland or farmland of statewide importance. Nearby land uses include farms and golf courses. The Windsong Farm Golf Club is adjacent to the south and Pioneer Creek Golf Course borders the Project on the west. Fox Lake occupies the large depression that defines the irregular northern border of the Project. The rest of the adjoining land uses are agricultural, including a horse farm and fields of row crops.

ii. Planned Land Use

Describe planned land use as identified in comprehensive plan (if available) and any other applicable plan for land use, water, or resources management by a local, regional, state, or federal agency.

The Project is located in the southwest corner of Independence, MN, which is on the western edge of the Twin Cities metropolitan region. Independence is a rural township that incorporated as a city in 1974. It places a high value on maintaining its rural character. The City of Independence 2040 Comprehensive Plan focuses growth to certain areas of the community to maintain the rural character and small town feel of the community. The western two-thirds of the city, where the Project is located, is zoned agricultural. Commercial agriculture is the highest land use priority for this area, followed by golf courses, nature preserves and public parks. The Metropolitan Council's 2040 Regional Framework similarly identifies the western two-thirds of the city as agricultural (Independence, 2018).

iii. Zoning

Describe zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc.

The six parcels that comprise the Project are zoned Agricultural. All of the adjoining parcels except for Fox Lake, are also zoned Agricultural or Agricultural Preserve. Fox Lake is a Public Waters wetland, however it is not included in the Shoreland Ordinance (Independence, 2021). See **Appendix A** for the City of Independence Zoning Map. Fox Lake is within a Zone A FEMA Floodplain. See **Figure 7** for the FEMA flood map. Zone A floodplains have been identified using non-detailed methods such as potential flooding sources, therefore further analysis and estimation has been completed for this project to

provide more details about the Fox Lake floodplain, and the project has been determined to be outside of the floodplain boundary. An Ordinary High Water Level (OHWL) was established for Fox Lake in 2016. The OHWL will be referenced as needed for zoning and regulation for the project.

b. Land Use Compatibility

Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 9a above, concentrating on implications for environmental effects.

The six parcels comprising the Project are zoned Agricultural. Commercial golf courses are allowed as a conditional use in the Agricultural District (Independence, 2021). A conditional use permit has already been obtained for the Project, however the permit will need to be amended prior to construction. Since there is no Shoreland Overlay Zone associated with Fox Lake, none of the parcels in the Project are bound by the Shoreland Overlay District. Fox Lake is within a Zone A FEMA Floodplain (**Figure 7**). Fox Lake is not landlocked and does not have an effective 1% Annual Chance Base Flood Elevation (BFE). The Project has been determined to be outside of the FEMA floodplain area based on an estimated BFE of 955.4, which is estimated using the highest recorded water elevation plus two feet. The MnDNR and PSCWMC have confirmed there are no additional records regarding flood information for Fox Lake.

c. Mitigation Measures

Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 9b above.

No mitigation measures are required for project compatibility with local land use code.

10. GEOLOGY, SOILS AND TOPOGRAPHY

a. Geology

Describe the geology underlying the project area and identify and map any susceptible geologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features for the project and any effects the project could have on these features. Identify any project designs or mitigation measures to address effects to geologic features.

No geotechnical studies have been completed to date.

The uppermost bedrock below the Project is the St. Peter Sandstone. It is described as mostly white to tan, fine- to medium-grained, friable quartzose sandstone (Steenberg, 2018). The depth to bedrock is 218 feet at one well near the center of the site (MDH, 2022a).

The surficial geology is part of the New Ulm Formation and is classified as loam to clay loam diamict. It contains scattered pebbles and cobbles; boulders are rare (Steenberg, 2018). There are no susceptible geologic features (e.g. sinkholes and karst) on the site.

b. Soils and Topography

Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability or other soils limitations, such as steep slopes, highly permeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed in response to Item 11.b.ii.

The Project site is composed of a series of depressional wetland sloughs amid moderately sloped rolling hills. The topography varies from 990 feet elevation at the existing field access along Watertown Road, to 954 feet on the shores of Fox Lake (**Figure 8**). The steepest slopes are along the southern and eastern shores of the lake.

The Web Soil Survey mapped 8 soil units within the Project Site (**Table 4**; **Figure 9**). The upland soils within the project area are fairly tight soils; with textures ranging from loams to clay loams while wetland soils are dominated by peaty muck. About 70% of the Project is comprised of Prime Farmland or Farmland of Statewide Importance, and an additional 26.9% is considered Prime Farmland if Drained. Sixty-three percent of the Project has a moderate erosion hazard rating, and a very small portion, about 1%, has a severe erosion hazard rating. See **Appendix B** for the full soils report.

Table 4. Soils

Soil Unit	Proportion of Project Site	Farmland Class	Erosion Hazard Rating	Hydric Rating	Drainage Class
L24A - Glencoe clay loam, depressional	8.8%	Prime farmland if drained	Slight	100%	Very Poorly Drained
L23A - Cordova loam	12.7%	Prime farmland if drained	Slight	95%	Poorly Drained
L25A - Le Sueur loam, 1 to 3 percent slopes	7.0%	All areas are prime farmland	Slight	15%	Somewhat Poorly Drained
L36A - Hamel, overwash-Hamel complex,	5.4%	Prime farmland if drained	Slight	45%	Somewhat Poorly Drained
L37B - Angus loam, 2 to 6 percent slopes	37.5%	All areas are prime farmland	Moderate	5%	Well Drained

Soil Unit	Proportion of Project Site	Farmland Class	Erosion Hazard Rating	Hydric Rating	Drainage Class
L49A - Klossner soils, depressional, 0 to 1 percent slopes	1.6%	Not prime farmland	Slight	100%	Very Poorly Drained
L22C2 - Lester loam, 6 to 10 percent slopes	25.7%	Farmland of statewide importance	Moderate	2%	Well Drained
L22D2 – Lester loam, 10 to 16 percent slopes	1.3%	Not prime farmland	Severe	0%	Well Drained

Erosion potential is not expected to be a concern with this project. The Project will require approximately 100 acres of grading as well as excavation of a 1.76 acre irrigation pond. Approximately 170,000 cubic yards of cut and fill will be balanced on-site. Forty-one acres will be seeded with native fescue as soon as feasible after grading to stabilize the soil. Another 65 acres will be devoted to managed turfgrasses, which will be installed on a separate schedule. The fairways will be tilled to prevent compaction before turfgrass is installed. The greens will be built to United States Golf Association (USGA) standards. Approximately 10,000 cubic yards of sand and gravel will be needed to construct bunkers and install the soil profile for the greens. Steep slopes along bunkers will be hydroseeded and stabilized immediately after construction. No impacts to soils are expected during normal golf course operation after construction.

11. WATER RESOURCES

a. Surface Water and Groundwater Features

i. Surface Water

Describe surface water – lakes, streams, wetlands, intermittent channels, and county/judicial ditches. Include any special designations such as public waters, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within 1 mile of the project. Include DNR Public Waters Inventory number(s), if any.

The Project is located adjacent to Fox Lake, a DNR Public Waters (Basin ID 27092500). The Ordinary High Water Level (OHWL) for the lake was determined by the MnDNR in 2016 via site survey and analysis. It is based on the average reduced elevation of trees documented around the basin and the surveyed landward edge of cattails around the basin. The OHWL is 953.1 ft NAVD 88 vertical datum. Fox Lake is within a designated FEMA Zone A floodplain, and does not have a designated Base Flood Elevation (BFE) (**Figure 7**). The project has been determined to be outside of the FEMA floodplain area

based on an estimated BFE.

Impaired waters listed by the MPCA and located within one mile of the project area include:

1. Pioneer Creek (07010205-653 and 07010205-654) impaired for aquatic recreation and aquatic life, located roughly 0.4 miles west of the project area; and,
2. Deer Creek (7010205-594) impaired for aquatic recreation and aquatic life, located roughly 1 mile south of the project area.

There are 13.68 acres of wetlands within the project site. These wetlands were delineated by Emmons and Olivier Resources, Inc (EOR) in 2021. **Appendix C** contains the wetland delineation report and state and federal delineation approvals. The extents of these wetlands are illustrated on **Figure 10**. The wetlands consist of several small isolated seasonally flooded basins (Circular 39, Type 1) that are typically cropped. Several larger wet meadows (Type 2) and shallow marshes (Type 3) form networks that drain to Fox Lake or off-site, to the west and north. The wetland in the southeast quadrant of the site was classed as a Type 7, forested swamp.

None of the surface water within the project or within one mile of the project area is considered an Outstanding Resource Value Water by the Minnesota Pollution Control Agency (MPCA). There are no waterbodies of Biological Significance Status within one mile of the project area.

ii. Groundwater

Groundwater – aquifers, springs, seeps. Include: 1) depth to groundwater; 2) if project is within a MDH wellhead protection area; 3) identification of any on-site and/or nearby wells, including unique numbers and well logs if available. If there are no wells known on site or nearby, explain the methodology used to determine this.

The abandoned farmstead on the Project site has an unsealed well that will be re-appropriated as a water supply for the proposed maintenance building.

The depth to the water table is likely less than 10 feet across much of the site, especially close to wetlands and other surface water features (Berg, 2021). Most nearby wells draw water from buried sand and gravel aquifers 140 to 160 feet below ground surface (MDH, 2022a). The Project is not within an MDH wellhead protection area (MDH, 2022b). Nearby wells are shown on **Figure 11**, and well logs from wells with within 1,000 feet of the site are included in **Appendix D**. Well logs from the existing Windsong Farm Golf Club irrigation wells (668254, 644900) located south of the Project site are also included.

b. Impacts and Mitigation

Describe effects from project activities on water resources and measures to minimize or mitigate the effects in Item b.i. through Item b.iv. below.

i. Wastewater

For each of the following, describe the sources, quantities and composition of all sanitary, municipal/domestic and industrial wastewater produced or treated at the site.

1) ***If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water and waste loadings, including any effects on, or required expansion of municipal wastewater infrastructure.***
2) ***If the wastewater discharge is to a subsurface sewage treatment system (SSTS), describe the system used, the design flow, and suitability of site conditions for such a system.***
3) ***If the wastewater discharge is to surface water, identify the wastewater treatment methods and identify discharge points and proposed effluent limitations to mitigate impacts. Discuss any effects to surface or groundwater from wastewater discharges.***

Users of the course will be served by three separate septic systems or subsurface sewage treatment systems (SSTS). One will be installed for the maintenance building for the maintenance crew and two will service the club members; one at the starter building, and one at the comfort station (satellite restroom). Since the Project is an expansion, wastewater production is not expected to change appreciably, but use will be distributed among additional systems at different locations. The new septic systems are Mound Type III systems with a design flow of 300 gallons per day. Average daily production of wastewater at a residential unit is estimated to be 274 gallons per day by the Metropolitan Council (Metropolitan Council, 2022). The new capacity will be more than enough to meet the daily demands of the Project.

The required separation distance between the bottom of the distribution medium and saturated soil levels is 3 feet. The depth to water table in areas where the septic systems will be installed ranges from 39 to 60 inches, making the above grade mound systems adequate for the high water table. There is no maximum site slope value for mound systems, however slopes over 25 percent can be difficult to construct. Slopes of the mound system areas range from 2 to 10 percent. The system locations are in compliance with minimum setback distances from structures, property lines, and ordinary high-water level of public waters as stated in Minn. R. ch. 7080.

ii. Stormwater

Describe the quantity and quality of stormwater runoff at the site prior to and post construction. Include the routes and receiving water bodies for runoff from the site (major downstream water bodies as well as the immediate receiving waters). Discuss any environmental effects from stormwater runoff. Identify specific erosion control, sedimentation control or stabilization measures to address soil limitations during and after project construction.

<u>Pre-Construction Site Runoff</u>

Surface runoff from the existing agricultural area likely contains pesticides, fertilizers, and other nutrients. There is some impervious surface runoff from existing trails, utility, a building, and a parking lot, some both paved and unpaved surface types. There is also some runoff from wooded, wetland,

and tall brush/grass areas. A majority of runoff from the site is overland flow that drains into Fox Lake on the northern border of the Project site, or to wetlands to the north and to the east of the Project site. The roughly 55 remaining acres drain to an existing outlet control structure with a 6-inch pipe, and an existing culvert near the southwest and west perimeters of the Project site, respectively, then to Pioneer Creek, Ox Yoke Lake, Deer Creek, Crow River, and ultimately the Mississippi River.

Post-Construction Site Runoff

Surface runoff from the proposed golf course area will generally follow the existing drainage patterns. The land use type will be converted from primarily cultivated crop agricultural areas to a mix of maintained and unmaintained golf course vegetation. Additional impervious area added as a part of the Project will be disconnected to the greatest extent practicable. Site runoff and volume will not exceed pre-project conditions. This will be achieved by the change in land cover type, increased infiltration from the amended soils used for the golf course features, and the addition of unmaintained vegetation that will replace the existing maintained agricultural areas. Stormwater volume requires control to mitigate the increase in impervious surfaces. The stormwater runoff volume will be mitigated by disconnecting impervious surfaces and receiving credit for the change in land cover, as it is expected that the proposed land cover types will infiltrate more runoff volume than the existing agricultural land cover. The water quality of the stormwater runoff is also required to meet existing Total Phosphorus and Total Suspended Solids pollutant load. The project will reduce the annual loading of Total Phosphorus and Total Suspended Solids because of the land cover change.

Stormwater and Erosion Control BMP's

The proposer will be required to apply for coverage under the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) General Permit to the MPCA, prior to construction starting, due to the disturbance of more than one acre of land. A Stormwater Pollution Prevention Plan (SWPPP) will be required and will include erosion prevention and sediment control Best Management Practices (BMPs) used to comply with the requirements of the permit. BMPs will be employed during construction, and inspection of BMPs will be required weekly by the permittee after each rainfall exceeding one-half inch in 24 hours. Perimeter erosion controls such as silt fence will be installed prior to the initiation of clearing, grading, excavating, or other earth disturbing activities. Wetlands will be protected from unintended impacts by either a 50-foot-wide natural buffer or a double row of silt fence as indicated in the SWPPP. Approximately 41 acres will be seeded with native fescue as soon as feasible after grading to stabilize the soil. Steep slopes along bunkers will also be hydroseeded and stabilized immediately after construction. Fairways will be tilled prior to grading to prevent compaction and promote infiltration.

iii. Water Appropriations

Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use and purpose of the water use and if a DNR water appropriation permit is required. Describe any well abandonment. If connecting to an existing municipal water supply, identify the wells to be used as a water source and any effects from water

appropriation, including an assessment of the water resources available for appropriation. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation.

The Project will require approximately 5-7 million gallons of water per year to maintain high quality turf for golf course operation. This water will be pumped from the irrigation pond which will be replenished from two sources; surface water runoff and groundwater via a well. A new well will be drilled to draw water to replenish the irrigation pond. A DNR Water Appropriations permit will most likely be required for irrigation purposes. A second Water Appropriations permit will be required for the initial establishment period, during which approximately 8 million gallons of water will be needed over a two-month period to establish the turf grasses. Windsong Farm Golf Club has successfully obtained a water appropriations permit for irrigation on their completed 18-hole course, adjacent to the Project Site (permit no. 2003-3207). The aquifers that will be drawn from, have not been assessed for capacity or condition.

Environmental effects from groundwater usage will be mitigated through golf course design and operation. The golf course has reduced the amount of turfgrass coverage to 65 acres, which is 32% less turf than the median 18-hole golf course, according to the USGA (USGA, 2022). The remainder of the playing area will be planted in native fescues, which won't require any irrigation on an annual basis. In addition, the Project will use a less water intensive species of turfgrass, creeping bentgrass (*Agrostis stolonifera*). The Project is creating a 1.76 acre irrigation pond which will capture and store runoff from the surrounding landscape, as well as use groundwater from a well.

iv. Surface Waters & Wetlands

Wetlands – Describe any anticipated physical effects or alterations to wetland features such as draining, filling, permanent inundation, dredging and vegetative removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigation for unavoidable wetland impacts will occur in the same minor or major watershed, and identify those probable locations.

Wetlands on the site were delineated by EOR in 2021 and are shown on **Figure 10**. Wetland impacts have not been permitted, but as currently designed, the Project would require impacting approximately 2.00 acres of existing wetlands including portions of wetlands 1, 2, 3, 4, 5, 8, and 12. This represents approximately 15% of the wetlands on the Project Site. The impacts would include small amounts of fill to achieve the desired contours and excavation of an irrigation pond which would involve 0.80 acres of impact to Wetland 2. Cut material from grading will be used for wetland fill. Wetland 2 will need to be dewatered to excavate the irrigation pond. The excavation will take approximately 2 weeks and 20,000 cubic yards of material will need to be removed.

The Project has been designed to minimize wetland impacts. Through the iterative design process, impacts to wetlands have been reduced from approximately 4.0 acres to 2.0 acres. Steps will be taken to avoid and protect the wetlands and surface waters not being directly impacted. Buffer requirements

of the City of Independence and Pioneer-Sarah Creek Watershed Management Commission will be followed to ensure that the quality of the remaining wetlands does not decrease. Erosion and sediment control measures in the SWPPP including a 50-foot-wide natural buffer or a double row of silt fence down-gradient from construction and adjacent to surface waters and wetlands to ensure construction does not alter any unintended wetlands. Existing wetlands onsite that are not proposed to be impacted will be staked off prior to construction to ensure no unplanned impact is made. Finally, compensatory mitigation will be required to offset the wetlands impacts made on the Project Site. These wetland impacts have yet to be approved and a wetland replacement plan will need to be prepared.

v. Other Surface Waters

Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicial ditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features. Identify measures to avoid, minimize, or mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering the water features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.

Wetlands are the primary surface water feature within the Project site. The other main surface water feature adjacent to the Project site is Fox Lake, which no impacts are anticipated. There area drainage pipes proposed within the Project site. Drainage pipes that outlet to Fox Lake will be installed above the OHWL elevation as to not require any physical alterations of the lake's shoreland area. Adjustments to watershed boundaries will be minor as a result of the minimization of proposed grading, and the utilization of the existing topography to create the golf course features.

To avoid, minimize, and mitigate environmental effects to surface waters, the impervious area has been reduced to the greatest extent practicable. Additionally, paved impervious surfaces have also been minimized to reduce negative environmental effects. The cart paths within the site will be disconnected from other impervious surfaces to reduce the effect they have on pollutant loading and surface runoff.

Erosion and sediment control measures will be used during active construction, and until vegetation has been established to protect Fox Lake from turbidity or sedimentation. It is expected that sedimentation and turbidity to the downstream surface water features of Fox Lake, Pioneer Creek, and adjacent wetlands will be reduced due to the change in land cover. Under existing conditions, the cultivated cropland area is managed and disturbed for agricultural practices. The proposed golf course will have managed turf areas, however it will not be routinely disturbed and once vegetation is established, it will be maintained as permanent vegetation, therefore there is less risk of erosion and sedimentation of the proposed site. The Project is not expected to change the number or type of watercraft using Fox Lake, as it is not currently considered a recreational lake and does not have any points for public access.

12. CONTAMINATION, HAZARDOUS MATERIALS, AND WASTE

a. Pre-project Site Conditions

Describe existing contamination or potential environmental hazards on or in close proximity to the project site such as soil or ground water contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.

The Project has been used for farming since at least the 1930s. Based on historical aerial imagery dating back to 1938, a majority of the land area was hayed or planted in row crops, with an intensity similar to current land use. The abandoned farmstead along Watertown Road appears to have been inhabited since at least the 1930s until the 2010s. A home and an outbuilding were demolished sometime between 2012 and 2016, but a barn remains standing. It is possible the area around the barn or demolished buildings have some amount of lead contamination, as lead-based paint was ubiquitously used on structures built before 1973. The farmstead has an unsealed groundwater well, and may have an abandoned septic system. The well will either be re-appropriated or sealed and the abandoned septic tank, if present, will be removed and properly disposed of. Utility lines such as gas and electricity are located along the perimeter of the site, on the north side of Watertown Road, but they do not cross through the Project.

No existing site contamination is known within or adjacent to the Project. A review of the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Agriculture (MDA) websites' "What's In My Neighborhood?" tools revealed that there are no known underground storage tanks or contamination hazards on the Project site. The MPCA tool identified the following sites in the vicinity of the Project site;

- A feedlot at Copeland Farms, approximately 500 feet north of the Project.
- An above ground hazardous waste storage tank at the existing Windsong Farm Golf Club (south course) approximately 500 feet south of the Project.

Neither of these sites have any recorded leaks that would impinge on the Project. The MPCA website also identified several stormwater construction permits associated with Pioneer Creek Golf Course (2016) located west of the Project and Windsong Farm Golf Club (2018-19, 2015-16, 2012-22) which is located south of the Project. According to the MDA website the nearest agricultural chemical spill is 2.5 miles south of the Project and the nearest wellhead protection area is in Maple Plain, 4 miles to the east.

b. Project Related Generation/Storage of Solid Wastes

Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of solid waste including source reduction and recycling.

Project construction would require demolition of the abandoned barn on the farmstead and removal of the abandoned septic tank. Prior to demolition, a survey will be completed to identify potentially hazardous materials associated with the barn and those materials would be managed appropriately as described below in **item 12d.** To the extent feasible, demolition is expected to segregate recyclable materials and dispose of wastes at one of several MPCA permitted demolition landfill facilities in the region. The Project will require 100 acres of grading and approximately 10 acres of clearing & grubbing to remove trees and shrubs. The cut and fill will be balanced on-site, and no disposal of soil will be necessary. Woody debris from clearing & grubbing will be burned on-site after obtaining the appropriate local burning permit.

Construction of buildings and infrastructure will generate waste, including scrap wood and other construction materials. Construction debris would likely be stored on-site in roll-off dumpsters that would be hauled to an MPCA-permitted disposal facility. The construction process may generate a small amount of hazardous waste which will be disposed of properly as discussed further below.

During operation, the Project is not expected to generate a considerable amount of additional waste. Solid waste at the expanded golf course will be disposed of and hauled away by licensed waste haulers.

c. Project Related Use/Storage of Hazardous Materials

Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location and size of any above or below ground tanks to store petroleum or other materials. Discuss potential environmental effects from accidental spill or release of hazardous materials. Identify measures to avoid, minimize or mitigate adverse effects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.

Construction of the Project is not expected to use or require storage of a large amount of hazardous waste or materials. Project construction may include temporary storage of oil, petroleum, and gasoline or diesel fuel for the construction equipment. Storage of these hazardous materials would be managed by the contractor.

During operation of the golf course, fuel tanks will be stored on-site and used as needed for fueling golf course maintenance equipment. This will include one 500-gallon gasoline tank and one 500-gallon diesel tank. The fuel tanks will be operated by qualified golf course employees. In the event there is a fuel spill, an emergency spill kit will be used to clean up the fuel. Pesticides, herbicides and fertilizers will be used during the routine operation of the golf course. These chemicals will be stored off the

Project, in the maintenance facility on the original Windsong Farm Golf Club south course. The chemicals are stored in a fire-resistant U.S. Chemical Storage tank protected by a 300-gallon sump basket. This off-site storage location is licensed by the MPCA as a Very Small Quantity Generator, license number MNS000328800. The pesticides will be applied by Windsong Farm Golf Club staff with up-to-date non-commercial pesticide applicators licenses with the Minnesota Department of Agriculture (MDA). All handling and usage of pesticides/fertilizers is done in accordance with the written label and Safety Data Sheets (SDS) of that product. All Environmental Protection Agency (EPA) and MDA rules and regulations are followed.

A spill prevention plan has already been developed by the Windsong Farm Golf Club south course. If a release of pesticides/fertilizer should happen, the area would be evacuated; the spill would be absorbed and cleaned up with the best available means. The SDS sheets would be consulted for necessary neutralizing agents and clean up procedures. The State Duty Officer would be contacted and consulted on any further measures. Local fire departments have been familiarized with the facility and its storage areas as well as drainage around the facility. Windsong Farm Golf Club staff briefed them on the precautions and tactics for fighting agricultural chemicals fires; and provided them with the names and numbers of persons to be contacted in case of fire. All SDS sheets are located in the "right to know" area located in the maintenance facility.

d. Project Related Generation/Storage of Hazardous Wastes

Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of hazardous waste including source reduction and recycling.

The Project is not anticipated to generate hazardous waste during construction. A survey of the barn will be conducted before demolition and if hazardous materials are discovered they will be properly separated and disposed of at MPCA-permitted sites.

During operation, the Project will not generate hazardous wastes or store generated hazardous wastes of any kind on the Project site. The pesticides, herbicides, and fertilizers that will be used during the operation of the golf course will be stored in an existing chemical storage tank, on the south golf course property, south of the Project.

13. FISH, WILDLIFE, PLANT COMMUNITIES, AND ECOLOGICAL RESOURCES

a. Fish and Wildlife Resources

Describe fish and wildlife resources as well as habitats and vegetation on or near the site.

Fish and wildlife resources on the Project site have been strongly influenced by a hundred years or more of farming. Over 74% of the land cover is devoted to agriculture. Aerial photos from the 1930s indicate that a larger percentage of the Project site was devoted to either crops or pasture in the prior century than present day. Wetlands exist in the depressional areas and account for about 10% of the land cover, and forests have sprung up in any area that hasn't been plowed or mowed in the last 10 years, or isn't too wet to support trees. The forests on the Project site are mesic Maple-Oak-Ash forests that grow in field margins, sloughs, and on former homesteads. Pre-settlement land cover mapping developed from the earliest public land surveys indicate the entire area was hardwood forest dominated by oak, maple, basswood, and hickory prior to European settlement. The intensity of agricultural activities have left these remaining natural areas in a highly-degraded condition. Invasive species, including reed canary grass, dominate much of the unfarmed areas which significantly decreases their value for wildlife.

The wetlands on the Project site form drainage sloughs dominated by wet meadow and shallow marsh (Circular 39, Type 2 and Type 3) with several isolated seasonally flooded basins (Type 1), a saturated hardwood swamp (Type 7). Shallow open water wetlands (Type 5) are present where Fox Lake encroaches on the Project site. Fox Lake itself is a shallow open water wetland with a thick fringe of cattails that, in some years, is completely dominated by floating or emergent vegetation. Fox Lake has been ditched and drains to Pioneer Creek north of the Project site. Aside from Fox Lake, the wetlands provide limited habitat value for fish, but moderate potential value for amphibians.

b. Rare Features

Describe rare features such as state-listed (endangered, threatened or special concern) species, native plant communities, Minnesota County Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number (LA-1068) and/or correspondence number (ERDB _____) from which the data were obtained and attach the Natural Heritage letter from the DNR. Indicate if any additional habitat or species survey work has been conducted within the site and describe the results.

A Natural History Inventory System (NHIS) data request was sent to the MnDNR to assess the project impact to rare species and habitats. At time of writing, the MnDNR has not yet issued a response. EOR conducted a review of the rare features in the vicinity of the Project, which included an NHIS query of the Project and a 1-mile radius of the Project. No state-listed endangered, threatened or special concern species were identified within the Project site or within the 1-mile buffer. In addition, no native plant communities or sites of Biodiversity Significance were identified within the Project or the buffer.

The nearest native plant communities and sites of Biodiversity Significance are Sugar Maple Forests (MHs39) of Moderate biodiversity significance located 1.8 and 2 miles west of the Project.

EOR conducted a query of the federal counterpart to the NHIS database to identify federally-listed threatened and endangered species as well as their critical habitat that may occur in the same county as the proposed project. An Information for Planning and Consultation (IPaC) Resources List was reviewed for information on endangered species, critical habitats, migratory birds, refuges and hatcheries, and wetlands that may occur within the Project. The IPaC report identified 2 species that may occur within the Project; the northern long-eared bat (*Myotis septentrionalis*) and the monarch butterfly (*Danaus plexippus*). The IPaC report did not identify any critical habitat within the Project site, but mentioned other federal protections for certain species including the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. See details of the report in **Appendix F**. The Project is also within the low-potential zone for the federally-endangered Rusty Patched Bumblebee (*Bombus affinis*) (USFWS, 2021).

While the natural areas on the Project are highly disturbed, the close proximity to Fox Lake provides potential foraging habitat for northern-long eared bats and bald eagles. This fact improves to a small degree the suitability of the Project for these species and the chances that they might roost or nest in the forested areas on the Project. The natural areas on the Project provide potential foraging habitat for the monarch butterfly and the rusty patched bumblebee, although they are of poor quality due to a lack of floral resources.

c. Impacts to Ecological Resources

Discuss how the identified fish, wildlife, plant communities, rare features and ecosystems may be affected by the project. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.

The golf course expansion will impact forest and wetland communities but also increase the acreage of native grasslands on the Project site. Although the natural habitats in the Project are significantly degraded, impacts to approximately 2.0 acres of wetlands and removal of approximately 10 acres of the trees will further disrupt the habitat value that these areas currently provide. However, perennial vegetation in the form of turfgrass or native fescues, will be established on all areas of bare soil. Approximately 25 acres of cropland will be converted to native grassland. This will preserve soil quality and reduce stormwater runoff compared to the current agricultural regime. In addition, approximately 1.5 acres will be planted in native wildflowers in a strip along the roadsides bordering the Project

Project construction will impact habitat that could potentially be used by rare and protected species. Removing trees from the Project site could have impacts to migrating birds, bald eagles, and the northern long-eared bat, if they were roosting or nesting on the Project site. The northern long-eared bat hibernates in caves in the winter and roosts under the bark of trees during the summer (USFWS, 2020). While there are no caves on the Project site, tree removal has the potential to disrupt or kill roosting bats if done during the summer roosting season. Similarly, tree removal has the potential to

disrupt or kill nesting bald eagles and other migrating birds during the spring nesting season. Approximately 100 acres of the Project site will be graded. Grading and clearing & grubbing would have the potential to impact nesting bumblebees and floral resources for monarch butterflies and bumblebees.

Construction is also anticipated to slightly increase the chance of spread of weedy and invasive species. However due to the highly disturbed nature of the natural areas, this won't cause a large shift in community structure.

During golf course operation, positive impacts on wildlife species would occur with the establishment of more native grasslands. A pollinator blend will be seeded in the roadside ditches along Copeland and Watertown Roads, which will improve habitat for two of the federally-listed species; monarch butterflies and rusty patched bumblebees.

d. Ecological Impact Mitigation

Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to fish, wildlife, plant communities, and sensitive ecological resources.

Project impacts have been minimized to the largest extent practicable. The layout of the golf course was designed to avoid several onsite wetlands and minimize wetland impact. Impacts to wetlands have been reduced from approximately 4.0 acres to 2.0 acres during the design process by adjusting grading and the extents of the irrigation pond. Wetland areas will be staked off prior to construction to ensure that no wetlands will be impacted during grading beyond the permitted amount. Wetland buffers with native vegetation will comply with City of Independence and Pioneer-Sarah Creek Watershed Management Commission buffer requirements to protect wetland quality and reduce erosion. As mentioned above, the Project will increase the cover of native habitat on the Project site through the conversion of 25 acres of cropland to native grassland.

14. HISTORIC PROPERTIES

Describe any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site. Include: 1) historic designations, 2) known artifact areas, and 3) architectural features. Attach letter received from the State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

EOR completed a Phase IA Archaeological and Cultural Resources Desktop Assessment technical memorandum for the Project in February 2022. The area included in this study (referred to as the Study Area) is comprised of the 6 parcels of the Project and a portion of Fox Lake up to the adjacent parcel boundaries (see **Figure 2** in **Appendix G**). This study showed: 1) No properties currently listed on the National Register are located within or proximal to the Study Area; 2) The Study Area has not been

previously inventoried for archaeological resources; 3) No previously recorded archaeological sites have been identified within or proximal to the project area; 4) The Study Area is assessed as having a moderate to high potential for precontact archaeological sites on upland landforms overlooking Fox Lake; a low potential on the wetland fringes of Fox Lake; and an undetermined probability on the southern one-third of the Study Area and the moraine slopes directly above the lake; 5) Mapped soils across the property are loamy glacial tills and mucks, with limited potential for intact, subsurface archaeological deposits, layers, or signatures as the project area has been in near continuous row-crop production over the past 100 to 125 years; and 6) The only extent structure present within the project area or evident on historical aerial imagery examined for this study is a wood-framed barn located immediately north of Watertown Road (All of the other associated buildings and structures on the farmstead have been removed over the past 10 to 12 years. This barn has not been recorded with the Minnesota State Historic Preservation Office (MnSHPO). It is a common-style barn that is in poor condition. It is not likely a significant historical resource.).

The nearest archaeological resource is Site 21HE0171 – the Burkett Site – located approximately 1.5 miles north of the Study Area. This archaeological site is reported as an undisturbed, sparse cultural material scatter with potential mounds positioned on an upland landform on the edge of a basin. Other previously reported archaeological sites within a 2-mile radius include Sites 21CR0066, 21CR0067 (Lukes Mounds), 21HE0172, and 21HE0176.

On February 1, 2022, EOR submitted the Phase IA Archaeological and Cultural Resources Literature technical memorandum to the MnSHPO with a Request for Project Review and photographs of the farmstead. The Phase IA Archaeological and Cultural Resources Desktop Assessment memorandum/Request for SHPO Project Review is included in **Appendix G**.

On March 2, 2022, the SHPO responded to the request to comment on the effects the Project may have on potentially historic properties and resources. Because modeling indicates a moderate to high probability of pre-contact archaeological sites in the Project site, they requested that the Project area be inventoried by a professional archaeologist for archaeological resources. While this is a private development on private property, the Project Proposer is currently making arrangements for a professional archaeologist who meets the Secretary of Interior's standards to complete the field investigation in the early spring of 2022. The results will be transmitted to the City and MnSHPO for additional comments once the technical report detailing the results of this study is completed. Recommendations will be incorporated into the development plans to the extent possible. A copy of the MnSHPO response letter is included in **Appendix G**.

As part of the Section 404 permitting process, the USACE is likely to conduct their own internal review of the project to fulfill its responsibilities under Section 106 of the *National Historic Preservation Act* to identify and consider impacts their action may have on historic or potentially historic resources. Under current policy stemming from case law, the USACE is likely to only take jurisdiction of waters of the United States and any associated wetland resources. These types of areas are usually not suitable for habitation or extended use and more-often-than-not lack any sort of evidence. It is not expected that an archaeological or cultural resources inventory will be required for the project by the USACE.

15. VISUAL

Describe any scenic views or vistas on or near the project site. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects from the project. Identify any measures to avoid, minimize, or mitigate visual effects.

There are no scenic views or vistas located on or adjacent to the Project, and substantial effects on visual resources are not anticipated in conjunction with the Project. Although the golf course is visible from higher elevations around the Project, the course would provide long, unobstructed views of an open landscape and would provide a harmonious continuity of land use in the immediate area. The Project abuts two operating golf courses to the south and west; livestock operations to the north; and small agricultural fields to the east. The Project would enhance the open space offered by the existing golf courses and agricultural operations. The Project would not generate any visual intrusions vista associated with Fox Lake located on the northern edge of the Project. Moreover, the course has been designed in such a way as to incorporate the natural topography and features currently existing on the property by minimizing grading. As a result, the Project is expected to have visual continuity with the surrounding area. Landscape plantings are expected to soften visual transitions and help mitigate effects on views from nearby low-density, single-family residences and roadways. The Project Proposer has included design elements in the project to minimize visual effects on nearby homeowners, including a berm along Watertown Road and native vegetation consisting of grass and forb species between the roadway and the course itself. Finally, the Project would not include industries that would emit vapor plumes, and the Project would not involve installation of intense light that would cause glare.

16. AIR

a. Stationary Source Emissions

Describe the type, sources, quantities and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants, and any greenhouse gases. Discuss effects to air quality including any sensitive receptors, human health or applicable regulatory criteria. Include a discussion of any methods used assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.

The starter building and maintenance building on the Project site will be heated by natural gas and contribute to direct or indirect sources of stationary emissions. Emissions from the building will be similar to existing buildings in the area and will be reduced by ensuring the buildings on-site are well insulated. The emissions from the buildings will have a negligible effect on air quality. The trees cleared on the Project during construction will be burned on site, contributing to the stationary source

emission. Burning of the trees cleared on site is not of concern to air quality and will be following fire safety and air quality requirements of the West Hennepin Public Safety.

b. Vehicle Emissions

Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g. traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.

Heavy equipment such as trucks, backhoes, bulldozers, and skidsteers will be used during construction for site excavation. Vehicle tailpipe emissions including particle pollution, carbon monoxide, hydrocarbons, and nitrogen oxides will increase at the Project during construction. Minimization measures will be taken during construction, such as the utilization of Tier 4 emission efficient vehicles used for earthwork and telematics in heavy equipment that tracks idling time, ensuring the construction will not be causing unnecessary emissions. The mass grading of the Project is estimated to take approximately two months and therefore emissions from construction will be considered temporary and have a negligible effect on air quality. Thus, no air quality modeling or monitoring will be performed. After construction, vehicle-related emissions from site maintenance will be minimal compared to current agricultural operation.

c. Dust and Odors

Describe sources, characteristics, duration, quantities, and intensity of dust and odors generated during project construction and operation. (Fugitive dust may be discussed under item 16a). Discuss the effect of dust and odors in the vicinity of the project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize or mitigate the effects of dust and odors.

The Project will generate dust during construction. Fugitive dust is expected from earthmoving associated with demolition, clearing & grubbing, , grading, and installation of utilities. Fugitive dust is also expected from re-suspension of loose material by construction traffic on unpaved roads. The amount of dust generated will vary by the type and intensity of construction activity and the prevailing meteorological conditions. The effects on air quality from fugitive dust generated during construction will be temporary and localized. Fugitive dust from construction will be further minimized by water application and other Best Management Practices (BMPs) outlined in the construction Stormwater Pollution Prevention Plan (SWPPP) and NPDES permit requirements. Dust minimization and prevention efforts are expected to be consistent with state standards contained in Minn. R. ch. 7011. Dust receptors near the project include Windsong Farm Golf Club south course, Pioneer Creek Golf Course to the west, and residential areas located in all directions. Graded areas will be seeded immediately with temporary and/or permanent seeding to control dust and stabilize disturbed earth.

After construction is complete, the Project is not anticipated to create any dust on an ongoing basis. Small amounts of dust from the gravel surface parking lots can occur during dry or windy weather but is not of concern for affecting nearby receptors or site use.

Odors generated by the project during construction will be temporary and are expected to be odors typical of construction materials and processes – dust, diesel exhaust, paint, lumber, welding, and wood chips. After construction, odors will be related to the Project uses, such as golf course maintenance and landscaping.

17. NOISE

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area, 2) nearby sensitive receptors, 3) conformance to state noise standards, and 4) quality of life. Identify measures that will be taken to minimize or mitigate the effects of noise

Existing Noise Levels and Sources

The Project is located in a rural area, with sources of noise coming from Watertown Road, the Windsong Farm Golf Club south course, Copeland Road, and the Pioneer Creek Golf Course to the west. Watertown Road is the main source of noise. The adjacent golf courses are generally quiet with little to no noise contribution.

Noise Generated During Construction

The Project is expected to generate noise during the construction phase. Daily hours of construction will follow regulatory, and construction permit regulated times. Noise will primarily be generated by the construction machinery on site. All machinery is equipped with back-up alarms for safety purposes, which will likely be the producers of the loudest noise. Sound levels associated with heavy construction equipment generally range from 80 to 120 dBA. Noise levels will vary depending on equipment in use and the distance between construction equipment and receptors.

Noise Generated After Construction

After construction, the Project is expected to generate noise similar to a typical golf course in a rural setting. There will be no additional obtrusive noises compared to current agricultural operation.

Nearby Sensitive Receptors

The closest residential unit is approximately 60 feet from the northwest corner of the Project and buffered by trees. The Windsong Farm Golf Club south course and the Pioneer Creek Golf Course are adjacent to the Project to the south and west, respectfully, and the increased noise levels during construction could be of disturbance to the typically quiet golf courses.

Conformance to State Noise Standards

State noise standards are contained in Minn. R. ch. 7030. The noise standards are based on the landuse at the location of the person that hears the noise and the sound level in A-weighted decibels (dBA) over ten percent (L10) or fifty percent (L50) of an hour.

The land in the vicinity of the site is zoned agricultural and agricultural preserve on the city's zoning map. Noise limits for agricultural locations are L10=80 dBA and L50=75 dBA during both the daytime and nighttime. Noise generated from grading and construction will be limited by city ordinance to the hours between 6am to 10:30pm . In addition, contractors will be required to minimize noise impacts by maintaining equipment properly, including the use of mufflers and other noise controls as specified by the manufacturers.

18. TRANSPORTATION

a. Traffic Related Aspects

Describe traffic-related aspects of project construction and operation. Include: 1) existing and proposed additional parking spaces, 2) estimated total average daily traffic generated, 3) estimated maximum peak hour traffic generated and time of occurrence, 4) indicate source of trip generation rates used in the estimates, and 5) availability of transit and/or other alternative transportation modes.

Kimley-Horn and Associates evaluated the impact of the Project on traffic generation and congestion in the vicinity of the Project site. Items 18a-c provides a summary of their results. A copy of the memo is in **Appendix H**.

There are approximately five existing driveways to the parcel along Watertown Road. One of these driveways provides access to the existing grass/gravel parking lot on the site, three of the driveways provide access to a barn, and one of the driveways provides access to an existing cell tower. There are no driveways along Copeland Road. The proposed golf course expansion would maintain the driveways to the cell tower and the parking lot as well as one of the driveways to the barn that would become a maintenance building for the golf course. All other road accesses will be eliminated. The proposed site plan showing these accesses is provided in **Appendix H**.

The site currently has a grass/gravel parking lot with a maximum capacity of 92 parking spaces. This parking lot is being utilized to provide overflow parking for the existing golf course south of Watertown Road, but the lot has never been at full capacity. With the development of the site, the existing parking lot is proposed to be relocated approximately 500 feet to the east. This lot would maintain approximately the same number of parking spaces as the current parking lot. In addition to this parking lot, a narrow parking strip would be added to the west of the parking lot driveway that would provide approximately 10-15 additional parking spaces. This new parking area would be accessed from the same driveway on Watertown Road.

The trip generation for the proposed golf course was calculated based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* using land use code 430 (Golf Course). The golf course is anticipated to generate 32 vehicle trips in the AM peak hour (25 entering, 7 exiting), 52 vehicle trips in the PM peak hour (27 entering, 25 exiting), and 547 daily trips.

There are currently no pedestrian or bicycle facilities along the parcel on Watertown Road or Copeland Road due to the location's rural setting. Additionally, there is no transit service that is provided to this area of Hennepin County. Because of this, it is assumed that all trips to the site would be vehicle trips.

b. Effects on Traffic Congestion

Discuss the effect on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system. If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Use the format and procedures described in the Minnesota Department of Transportation's Access Management Manual, Chapter 5 (available at: http://www.dot.state.mn.us/accessmanagement/resources.html) or a similar local guidance.

It is not anticipated that there will be a significant impact to traffic operations on Watertown Road at the parking lot driveway. Because the peak hour traffic generated by the site is less than 250 vehicles and the total daily trips is less than 2,500 vehicles, a full traffic study was not completed. The number of daily trips that would be generated by the golf course on Watertown Road would be less than a 10% increase of daily traffic volumes experienced on the roadway. Additionally, the number of trips in the peak hour accessing the parking lot would be less than one vehicle entering or leaving the site per minute during either peak hour. Because the traffic volumes turning in at the parking lot driveway are low, right- and left-turn lane treatments into the parking lot are not warranted. See **Appendix H** for further details.

c. Traffic Mitigation Measures

Identify measures that will be taken to minimize or mitigate project-related transportation effects.

It is not anticipated that there will be a significant impact to traffic operations on Watertown Road with the addition of the site traffic, and no mitigations are expected to be needed due to the additional traffic.

19. CUMULATIVE POTENTIAL EFFECTS

(Preparers can leave this item blank if cumulative potential effects are addressed under the applicable EAW Items)

a. Geographic Scales and Timeframes

Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.

The changes in regional land use in the Independence area from open space, rural and agricultural land uses to more suburbanized uses is expected to have a cumulative impact on the area, though the City is committed to maintaining an open, minimally developed area which keeps the agricultural and rural feel. Cumulative effects of this and future projects on natural resources and infrastructure are expected to be roughly proportional to the impacts discussed in this EAW or greater if future projects are developed at a higher density. The City of Independence has planned for future growth and development in this particular area as part of its 2040 Comprehensive Plan and 2040 Regional Land Use Plan. These efforts will ensure that the cumulative impacts of future growth and development to the environment and to the City's service capacity are anticipated and mitigated.

Cumulative effects result from the incremental impact of the Project added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. The geographic area considered for cumulative potential effects is the area proximate to the project limits. No additional developments are anticipated on the properties bordering the proposed project area.

Table 5 summarizes project related environmental effects that could combine with other environmental effects and the geographic extent of the anticipated impacts.

Table 5. Project-Related Environmental Effects and Mitigation.

EAW Section	Project-Related Effects	Mitigation
7 – Cover Types	Loss in wetland vegetation	Minimization and wetland credit purchase
	Loss of crop land	No Effect
	Increase in impervious surface area	Stormwater best management practices outlined in City, Regional, and State guidelines and requirements
	Increase of deep water and streams and grasslands	No mitigation is required

EAW Section	Project-Related Effects	Mitigation
9 – Land Use	The project is zoned as Existing conditional use in Agricultural District	No mitigation is required
	The project is compatible with City zoning ordinances and is consistent with long-term land-use planning	No mitigation is required
10 – Geology, Soils, and Topography	Disturbed ground and exposed soil during construction	Erosional control measures stipulated in City and State ordinances and regulations
11 – Water Resources	Wastewater	Installation of state-of-the-art septic systems pursuant to City and State regulations and requirements
	Surface run-off	Stormwater Pollution Prevention Plan developed using practices required by local, regional, and state regulations, guidelines, and best management practices
	Groundwater	Golf course design and operations using best management practices in City, Regional, and State regulations and guidelines
	Impacts to wetland resources	Minimization and wetland credit purchase
12 – Contamination, Hazardous Materials, and Waste	Demolition of barn and removal of septic system	Segregation of recyclable materials and disposal at State- and EPA-approved disposal site
	Construction Debris and Waste	Hauled to State- and EPA-approved disposal site and appropriate on-site storage of construction materials, fuels, and chemicals
	Hazardous materials	Hazardous material review of barn. Removal using approved best management practices

EAW Section	Project-Related Effects	Mitigation
		defined by City, State, and Federal regulations
13 – Fish, Wildlife, Plant Communities, and Ecological Resources	Loss and creation of habitat	Purchase of wetland credits and minimization of wetland impacts Minimization of grading and tree removal. Creation of 25 acres of native-dominated grasslands
14 – Historic Properties	None anticipated	Intensive Phase I archaeological inventory of project area
15 – Visual	None anticipated	No additional actions are required
16 – Air	Emissions and dust during construction	Temporary impacts – reduction employing best management practices detailed in City and State guidelines and regulations
17 – Noise	Construction noise impacts	Temporary impacts – Reduce noise levels, employ best management practices required under City and State ordinances. Construction vehicles will be mufflered and equipment will be maintained properly.
	After construction – negligible	Compliance with State noise standards
18 – Transportation	Increase in traffic volume on Watertown Road	No additional actions are required.

b. Future Projects

Describe any reasonably fore-seeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.

There are no future associated projects. The nearest public construction project that has been identified are transportation improvements that are to occur on CSAH 92, approximately 1,800 feet east of Project site. The interchange at Watertown Road (CSAH 6) and CSAH 92 is currently receiving improvements, and the stretch of CSAH 92 between CSAH 6 and State Highway 12 is scheduled for pavement improvements in 2023 (pers. comm. with Hennepin County staff, 2/17/22).

c. Cumulative Potential Effects

Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects.

The Project will result in minor conversion of jurisdictional wetland to nonwetland, tree removal, and conversion of agricultural lands to non-agricultural uses. Consequently, cumulative impacts to natural resources are anticipated to be minimal. Development of parcels will also result in cumulative impacts to City infrastructure such as roads. These cumulative impacts have been addressed in the City's 2040 Comprehensive Plan. In addition, as surrounding properties develop, they will be evaluated under the Minnesota Environmental Policy Act (MEPA) rules and will need to adhere to guidelines presented in the City's approved zoning and comprehensive plans.

Considering the types of other projects listed above and considering regulatory permitting and approval processes, the proposed project along with other reasonably foreseeable actions would have a minimal cumulative impact upon the environment. Mitigation for anticipated minor cumulative impacts in the area will include:

- Establishing large areas of native tall fescues which will provide visual buffers, create a more aesthetically pleasing setting, and provide habitat for a range of species
- Providing buffers from surrounding developments
- Protecting woodlands and wetlands to the extent practicable
- Pretreating stormwater and controlling stormwater runoff rate
- Providing adequate facilities such as potable water
- Requiring appropriate septic systems which meet City and State standards and BMPs
- Reducing erosion and sedimentation
- Providing visual buffers along Watertown Road and to nearby residences and businesses through tree plantings, establishment of native vegetation, construction of a berm and maintaining an open, minimally developed landscape, and maintaining the natural topography and landscape features currently present on the property

- Appropriate handling of hazardous materials and waste generated by the project

These provisions will help minimize potential cumulative effects of past developments and future developments within the region. Given the nature of cumulative potential effects, the evaluation of available and relevant information, and mitigation efforts proposed, the potential for significant environmental effects due to these cumulative effects appears minor.

20. OTHER POTENTIAL ENVIRONMENTAL EFFECTS

If the project may cause any additional environmental effects not addressed by items 1 to 19, describe the effects here, discuss the how the environment will be affected, and identify measures that will be taken to minimize and mitigate these effects.

No other additional environmental effects are anticipated as a result of this project. Potential environmental effects have been addressed in Items 1 through 19.

RGU CERTIFICATION

I hereby certify that:

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9c and 60, respectively.
- Copies of this EAW are being sent to the entire EQB distribution list.

Signature _____ Date _____

Title _____

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FIGURES

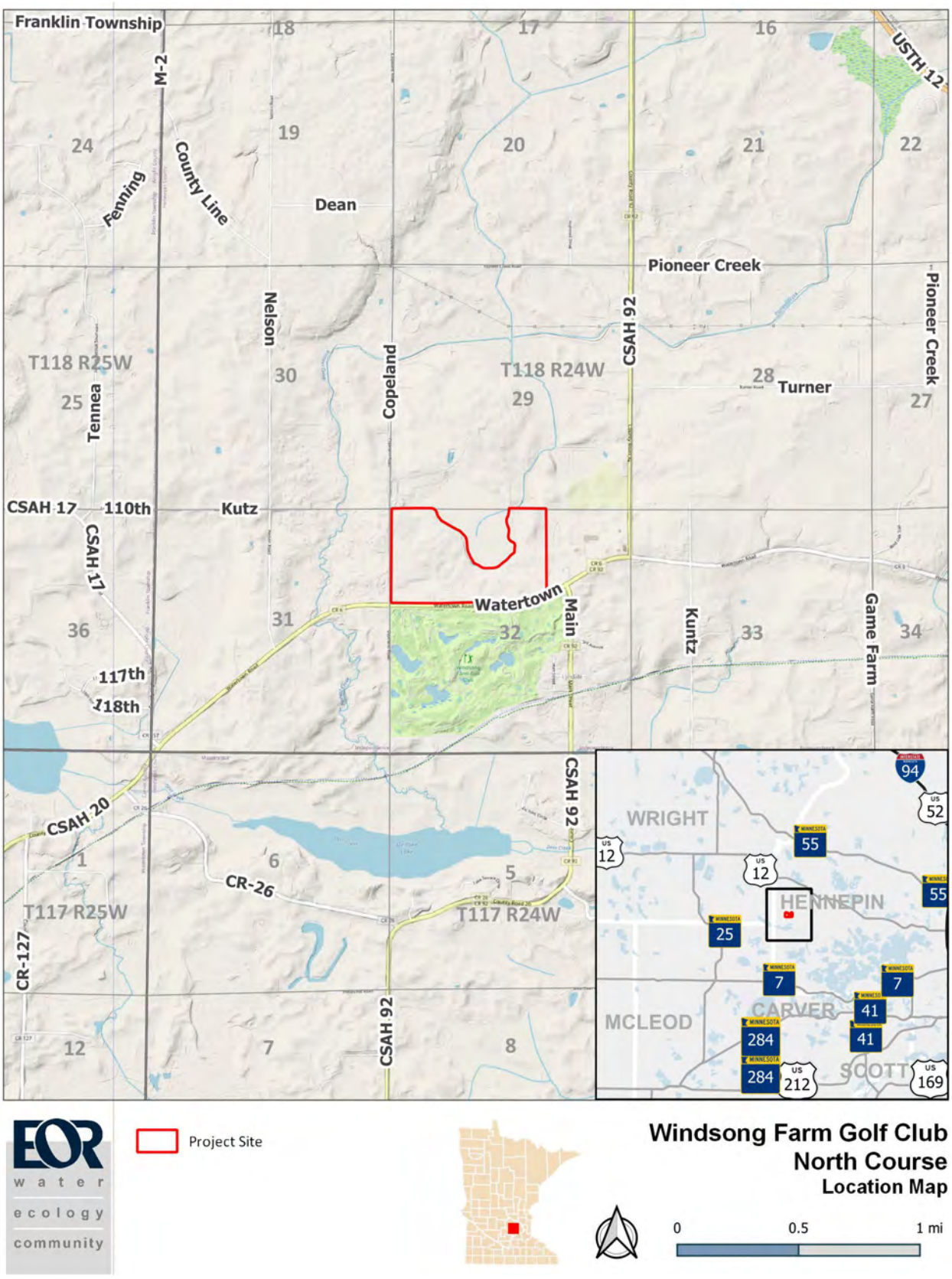

Figure 1. The Project is located in western Hennepin County

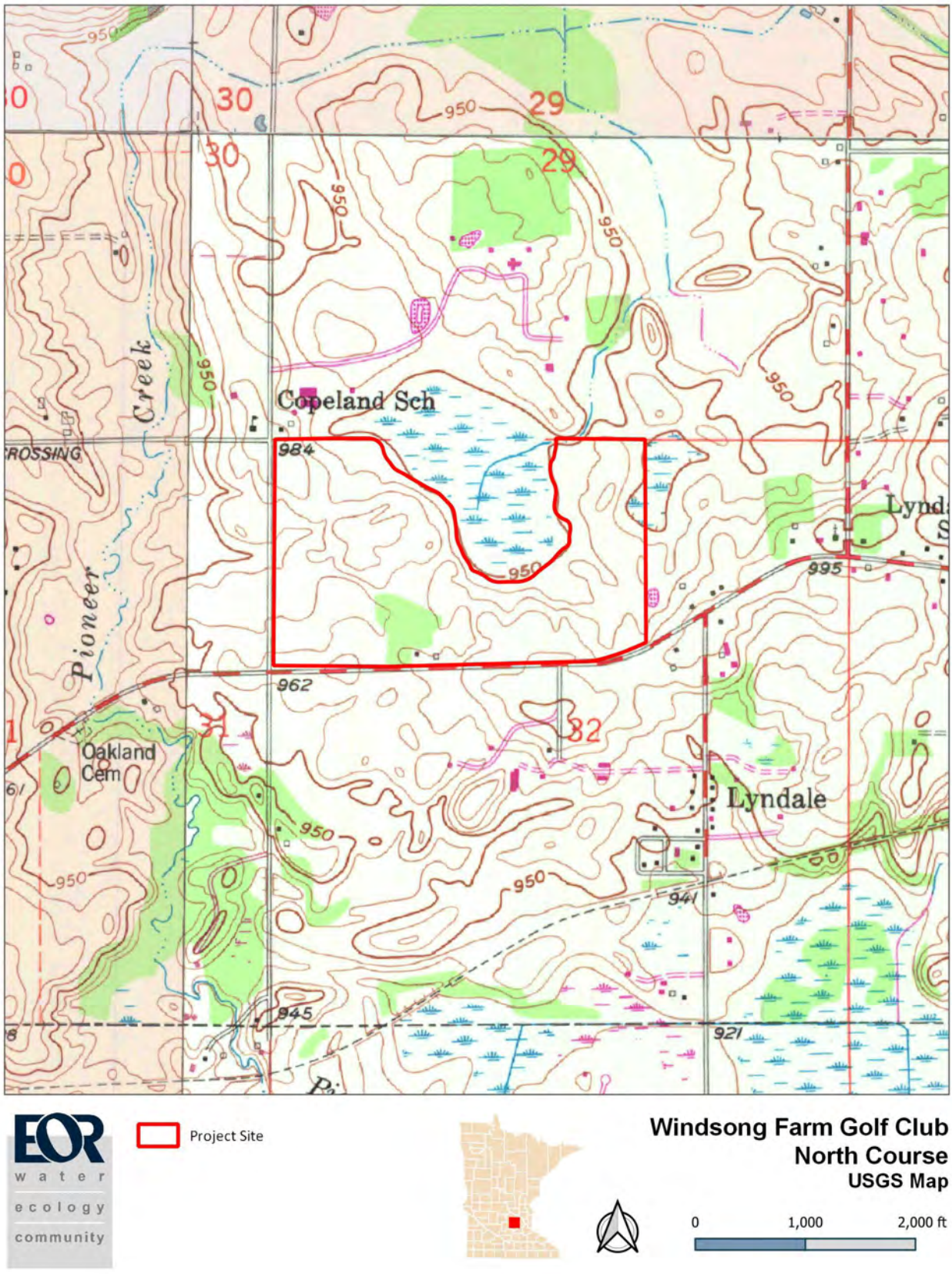

Figure 2. Project location on USGS 7.5 minute topography map.

Figure 3. Site map with Hennepin County parcel numbers.

Figure 4. Proposed project design 2/15/2022.

Figure 5. Land cover uses before construction.

Figure 6. Proposed land cover after construction.

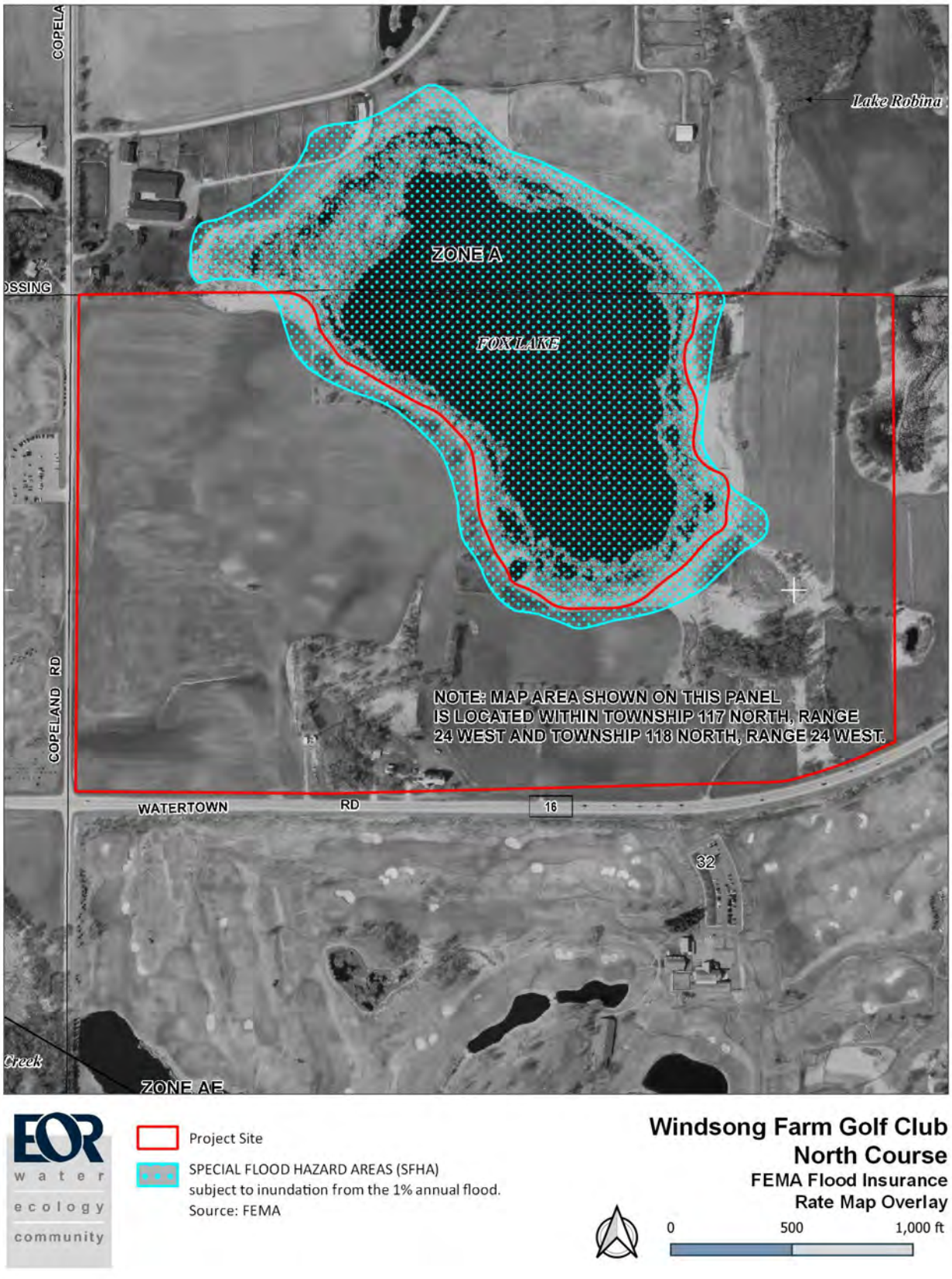

Figure 7. Project Site with FEMA FIRM Overlay.

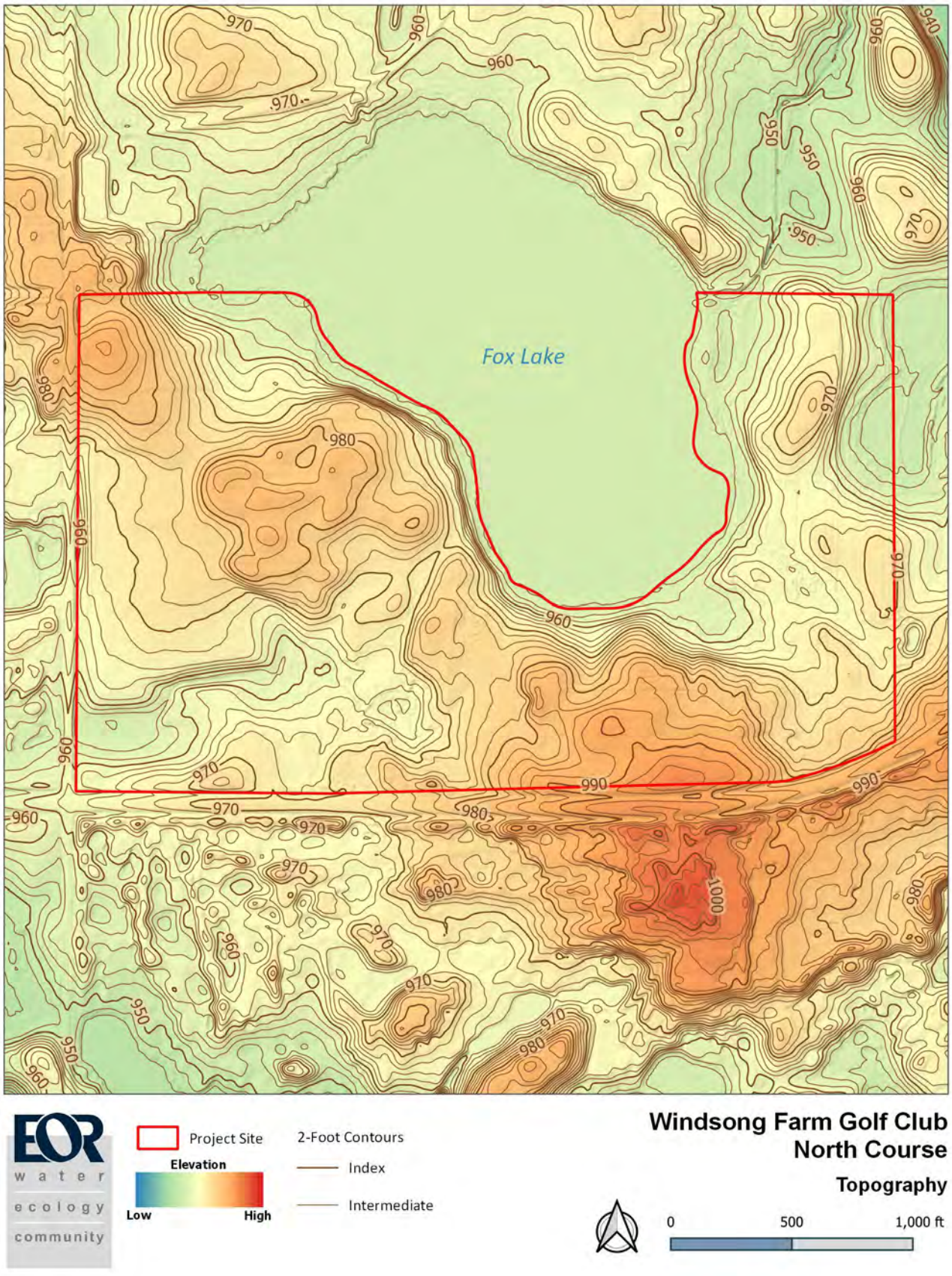

Figure 8. Project Site topography map.

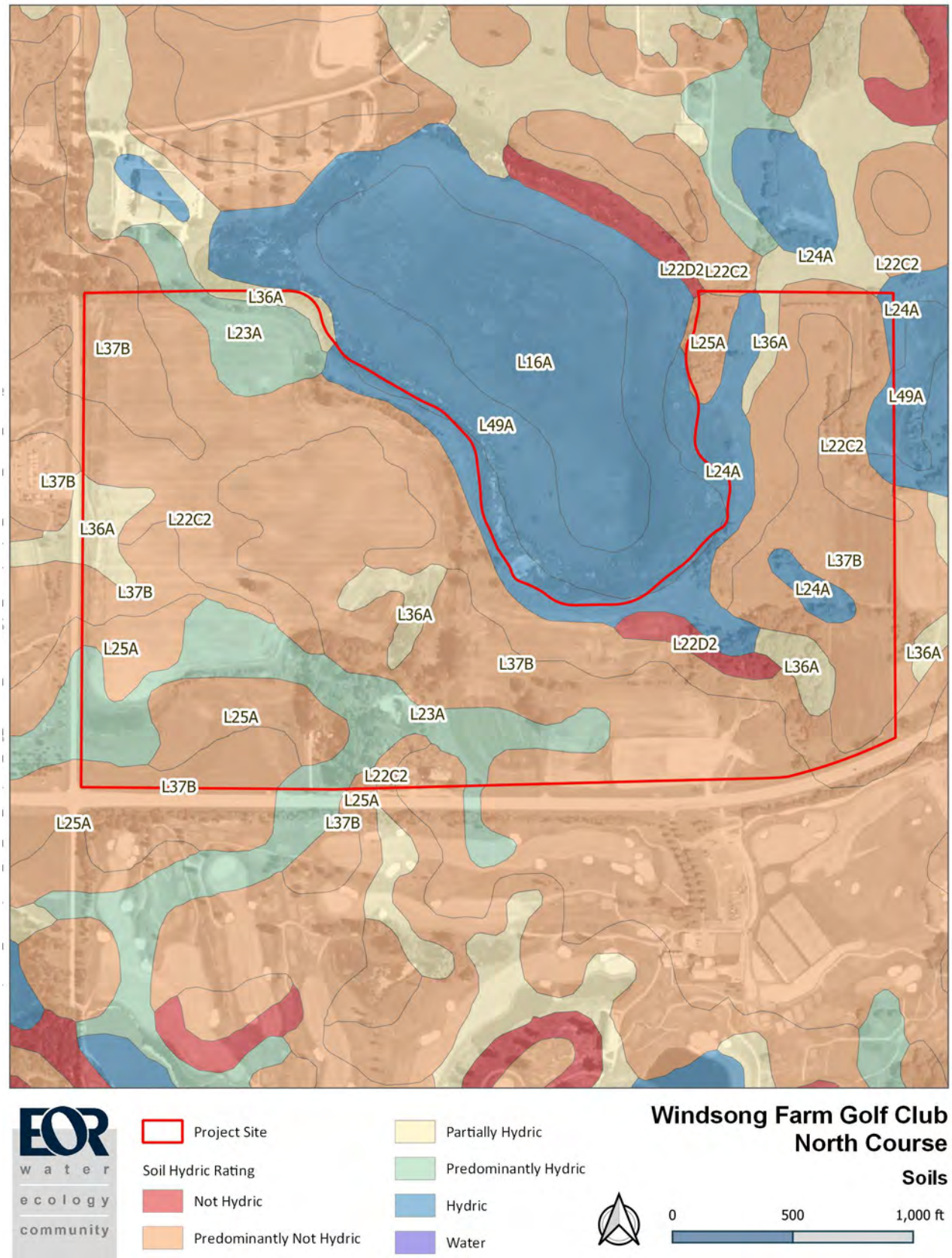

Figure 9. Soil units by hydric rating.

Figure 10. Surface water features.

Figure 11. Approximate well locations. Source: Minnesota Well Index.

APPENDIX A – CITY OF INDEPENDENCE ZONING MAP

Zoning Map

City of Independence, MN

February 2019

BOLTON & MENK
Real People. Real Solutions.

PROJECT LOCATION

Lake Rebecca
Lake Sarah
Haughey Lake
Robina Lake
Lake Independence
Lake Irene
Pioneer-Sarah Creek WMO
Minnehaha Creek WD
MAPLE PLAIN

Legend

Zoning

- Rural Residential
- Commercial / Light Industrial
- Agricultural
- Agricultural Preserve

- Watershed Management Organizations
- Rural Residential / Agriculture Division
- Sections
- Parcels
- City Limits

0 1,000 Feet

Source: City of Independence, Hennepin County, MnDOT, MnDNR

APPENDIX B – USDA SOIL SURVEY

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Hennepin County, Minnesota

Windsong Farm Golf Club North Course

February 10, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:5,670 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hennepin County, Minnesota
Survey Area Data: Version 17, Sep 10, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 12, 2010—Aug 2, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
L22C2	Lester loam, 6 to 10 percent slopes, moderately eroded	31.9	25.7%
L22D2	Lester loam, 10 to 16 percent slopes, moderately eroded	1.6	1.3%
L23A	Cordova loam, 0 to 2 percent slopes	15.8	12.7%
L24A	Glencoe clay loam, 0 to 1 percent slopes	11.0	8.8%
L25A	Le Sueur loam, 1 to 3 percent slopes	8.7	7.0%
L36A	Hamel, overwash-Hamel complex, 0 to 3 percent slopes	6.7	5.4%
L37B	Angus loam, 2 to 6 percent slopes	46.7	37.6%
L49A	Klossner soils, depressional, 0 to 1 percent slopes	2.0	1.6%
Totals for Area of Interest		**124.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas

are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Hennepin County, Minnesota

L22C2—Lester loam, 6 to 10 percent slopes, moderately eroded

Map Unit Setting

National map unit symbol: 2ttc4
Elevation: 690 to 1,840 feet
Mean annual precipitation: 24 to 37 inches
Mean annual air temperature: 43 to 52 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lester, moderately eroded, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lester, Moderately Eroded

Setting

Landform: Ground moraines, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Convex
Across-slope shape: Linear, convex
Parent material: Fine-loamy till

Typical profile

Ap - 0 to 6 inches: loam
Bt - 6 to 38 inches: clay loam
C - 38 to 79 inches: loam

Properties and qualities

Slope: 6 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 47 to 63 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R103XY020MN - Loamy Upland Savannas
Forage suitability group: Sloping Upland, Acid (G103XS006MN)
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

Minor Components

Storden, moderately eroded

Percent of map unit: 10 percent
Landform: Ground moraines
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Calcareous (G103XS010MN)
Hydric soil rating: No

Le sueur

Percent of map unit: 3 percent
Landform: Hillslopes, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

Hamel

Percent of map unit: 2 percent
Landform: Ground moraines
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Ecological site: F103XY030MN - Wet Footslope/Drainageway Forests
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: Yes

L22D2—Lester loam, 10 to 16 percent slopes, moderately eroded

Map Unit Setting

National map unit symbol: 2ttc8
Elevation: 690 to 1,840 feet
Mean annual precipitation: 24 to 37 inches
Mean annual air temperature: 43 to 52 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Lester, moderately eroded, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lester, Moderately Eroded

Setting

Landform: Hillslopes, ground moraines
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, rise
Down-slope shape: Convex
Across-slope shape: Convex, linear
Parent material: Fine-loamy till

Typical profile

Ap - 0 to 6 inches: loam
Bt - 6 to 38 inches: clay loam
C - 38 to 79 inches: loam

Properties and qualities

Slope: 10 to 16 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 55 to 71 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R103XY020MN - Loamy Upland Savannas
Forage suitability group: Sloping Upland, Acid (G103XS006MN)
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

Minor Components

Storden, moderately eroded

Percent of map unit: 10 percent
Landform: Ground moraines
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Calcareous (G103XS010MN)
Hydric soil rating: No

Lester, moderately eroded

Percent of map unit: 3 percent
Landform: Hillslopes, ground moraines
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Convex

Across-slope shape: Convex, linear
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

Le sueur

Percent of map unit: 2 percent
Landform: Hillslopes, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

L23A—Cordova loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: h4xf
Elevation: 800 to 1,080 feet
Mean annual precipitation: 23 to 35 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 124 to 200 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Cordova and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cordova

Setting

Landform: Drainageways on moraines
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Till

Typical profile

Ap,AB - 0 to 13 inches: loam
Btg - 13 to 33 inches: clay loam
Cg - 33 to 80 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 6 inches

Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Gypsum, maximum content: 1 percent
Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F103XY027MN - Loamy Wet Forests
Forage suitability group: Level Swale, Neutral (G103XS001MN)
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: Yes

Minor Components

Glencoe, depressional

Percent of map unit: 10 percent
Landform: Depressions on moraines
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Ponded If Not Drained (G103XS013MN)
Hydric soil rating: Yes

Nessel

Percent of map unit: 5 percent
Landform: Moraines
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

L24A—Glencoe clay loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2tsjr
Elevation: 690 to 1,840 feet
Mean annual precipitation: 24 to 37 inches
Mean annual air temperature: 43 to 52 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Glencoe and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Glencoe

Setting

Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Local alluvium over till

Typical profile

Ap - 0 to 9 inches: clay loam
A - 9 to 39 inches: clay loam
Bg - 39 to 50 inches: clay loam
Cg - 50 to 79 inches: clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 2.00 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: R103XY015MN - Depressional Marsh
Forage suitability group: Ponded If Not Drained (G103XS013MN)
Other vegetative classification: Ponded If Not Drained (G103XS013MN)
Hydric soil rating: Yes

Minor Components

Okoboji

Percent of map unit: 10 percent
Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R103XY015MN - Depressional Marsh
Other vegetative classification: Ponded If Not Drained (G103XS013MN)
Hydric soil rating: Yes

Canisteo

Percent of map unit: 5 percent
Landform: Rims on depressions, ground moraines
Landform position (three-dimensional): Talf
Down-slope shape: Concave, linear
Across-slope shape: Linear
Ecological site: R103XY001MN - Loamy Wet Prairies
Other vegetative classification: Level Swale, Calcareous (G103XS009MN)
Hydric soil rating: Yes

Webster

Percent of map unit: 5 percent
Landform: Ground moraines
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R103XY001MN - Loamy Wet Prairies
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: Yes

L25A—Le Sueur loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2vvdg
Elevation: 690 to 1,840 feet
Mean annual precipitation: 24 to 37 inches
Mean annual air temperature: 43 to 52 degrees F
Frost-free period: 140 to 180 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Le sueur and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Le Sueur

Setting

Landform: Hillslopes, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Fine-loamy till

Typical profile

Ap - 0 to 8 inches: loam
A - 8 to 14 inches: loam
Btg - 14 to 52 inches: clay loam
Cg - 52 to 79 inches: loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None

Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: C/D
Ecological site: R103XY020MN - Loamy Upland Savannas
Forage suitability group: Sloping Upland, Acid (G103XS006MN)
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

Minor Components

Cordova

Percent of map unit: 10 percent
Landform: Ground moraines
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Concave
Ecological site: F103XY027MN - Loamy Wet Forests
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: Yes

Webster

Percent of map unit: 5 percent
Landform: Ground moraines
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R103XY001MN - Loamy Wet Prairies
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: Yes

Lester

Percent of map unit: 5 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

L36A—Hamel, overwash-Hamel complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tsjx
Elevation: 690 to 1,840 feet

Mean annual precipitation: 24 to 37 inches
Mean annual air temperature: 43 to 52 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Hamel, overwash, and similar soils: 50 percent
Hamel and similar soils: 43 percent
Minor components: 7 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hamel, Overwash

Setting

Landform: Ground moraines
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Parent material: Colluvium over till

Typical profile

Ap - 0 to 12 inches: loam
A - 12 to 26 inches: loam
Btg - 26 to 48 inches: clay loam
Cg - 48 to 79 inches: clay loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F103XY029MN - Footslope/Drainageway Forests
Forage suitability group: Level Swale, Neutral (G103XS001MN)
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: No

Description of Hamel

Setting

Landform: Ground moraines
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Parent material: Colluvium over till

Typical profile

Ap - 0 to 10 inches: loam
A - 10 to 24 inches: loam
Btg - 24 to 46 inches: clay loam
Cg - 46 to 79 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 0 to 8 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F103XY030MN - Wet Footslope/Drainageway Forests
Forage suitability group: Level Swale, Neutral (G103XS001MN)
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: Yes

Minor Components

Terril

Percent of map unit: 5 percent
Landform: Ground moraines
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: R103XY011MN - Footslope/Drainageway Prairies
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: No

Glencoe

Percent of map unit: 2 percent
Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R103XY015MN - Depressional Marsh
Other vegetative classification: Ponded If Not Drained (G103XS013MN)
Hydric soil rating: Yes

L37B—Angus loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2syrq
Elevation: 690 to 1,840 feet
Mean annual precipitation: 24 to 37 inches
Mean annual air temperature: 43 to 52 degrees F
Frost-free period: 140 to 180 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Angus and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Angus

Setting

Landform: Hillslopes, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Convex
Across-slope shape: Convex, linear
Parent material: Fine-loamy till

Typical profile

Ap - 0 to 7 inches: loam
Bt - 7 to 37 inches: clay loam
BC - 37 to 50 inches: clay loam
C - 50 to 79 inches: loam

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 39 to 51 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: R103XY020MN - Loamy Upland Savannas

Forage suitability group: Sloping Upland, Acid (G103XS006MN)
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

Minor Components

Angus, moderately eroded
Percent of map unit: 10 percent
Landform: Hillslopes, ground moraines
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Convex
Across-slope shape: Convex, linear
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

Cordova
Percent of map unit: 5 percent
Landform: Ground moraines
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: F103XY027MN - Loamy Wet Forests
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: Yes

Le sueur
Percent of map unit: 5 percent
Landform: Hillslopes, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

L49A—Klossner soils, depressional, 0 to 1 percent slopes

Map Unit Setting
National map unit symbol: gj6z
Elevation: 820 to 1,050 feet
Mean annual precipitation: 23 to 35 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 124 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition
Klossner, surface drained, and similar soils: 65 percent

Klossner, drained, and similar soils: 20 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Klossner, Surface Drained

Setting

Landform: Depressions on moraines
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Organic material over till

Typical profile

Oa - 0 to 26 inches: muck
2A1 - 26 to 33 inches: silt loam
2A2 - 33 to 40 inches: loam
2Cg - 40 to 80 inches: loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 20 percent
Gypsum, maximum content: 1 percent
Available water supply, 0 to 60 inches: Very high (about 17.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: B/D
Ecological site: R103XY016MN - Organic Marsh
Forage suitability group: Not Suited (G103XS024MN)
Other vegetative classification: Not Suited (G103XS024MN)
Hydric soil rating: Yes

Description of Klossner, Drained

Setting

Landform: Depressions on moraines
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Organic material over till

Typical profile

Oap,Oa - 0 to 26 inches: muck
2A1 - 26 to 36 inches: mucky silty clay loam
2A2 - 36 to 48 inches: silty clay loam
2Cg - 48 to 80 inches: loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 20 percent
Gypsum, maximum content: 1 percent
Available water supply, 0 to 60 inches: Very high (about 17.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Ecological site: R103XY016MN - Organic Marsh
Forage suitability group: Organic (G103XS014MN)
Other vegetative classification: Organic (G103XS014MN)
Hydric soil rating: Yes

Minor Components

Mineral soil, drained

Percent of map unit: 15 percent
Landform: Depressions on moraines
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Ponded If Not Drained (G103XS013MN)
Hydric soil rating: Yes

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APPENDIX C – WETLAND DELINEATION AND APPROVALS

Prepared by Emmons & Olivier Resources, Inc.

Windsong Farm Golf Club / Fox Lake, LLC

Wetland Delineation Update

Independence, Minnesota

10.12.2021

water ecology community

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EXECUTIVE SUMMARY

The purpose of this report is to provide Windsong Farm Golf Club, LLC and Fox Lake, LLC an update to the wetland delineation conducted in 2016. This report updates and validates the boundaries of the existing wetlands and jurisdictional waters within the **Study Area** that may affect the development of a golf course expansion on the property. The Study Area includes 6 parcels, 127.24 acres, that are under consideration for development. (**Figure 1**). The Study Area represents the focus of this report; this report was not developed to evaluate areas beyond the Study Area.

EOR will share this report with the appropriate Local Government Unit (LGU) and state agencies from which the need for future work, potential permits, concerns, and need for additional coordination and consultation with the state or LGU will be determined. Conclusions, permitting requirements, and recommendations for future work within the project area are summarized below.

Evaluation of the Study Area began with a review of the 2016 wetland delineation alongside publicly available data including statewide LiDAR elevation data, hydric soil data, National Wetland Inventory (NWI) data, and Minnesota Department of Natural Resources (MNDNR) Public Waters Inventory (PWI) data. A review of the cultivated portions of the parcel was conducted in accordance with the Minnesota Board of Water and Soil Resources (BWSR) 2016 offsite wetland hydrology determination technical guidance document.

Based on these reviews, a Level 2 onsite delineation was performed on August 19, 2021 which confirmed a majority of the wetland boundaries from the 2016 delineation, and identified a few areas where boundary adjustments are necessary. Final changes to the delineation were made following a field review by the Technical Evaluation Panel (TEP) on October 11, 2021. EOR recommends submittal of this report to the LGU to validate the boundary of the delineated wetlands and wetland types in relation to the proposed golf course expansion.

1.1. Review Team and Contact Information

The delineation was performed by Chris Long and the report reviewed by Jason Naber of Emmons & Olivier Resources.

Wetland Delineators:

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Figure 1. Study Area for the Windsong Farm golf course expansion.

INTRODUCTION

The proposed golf course expansion is located north of and adjacent to the Windsong Farm Golf Club in Independence, MN (**Figure 2**). The legal description is the southern half of Section 32, Township 118N, Range 24W. The proposed project will construct an 18-link golf course on a 127.24 acre tract of land. The golf course expansion will occur on six privately-held parcels comprised mostly of agricultural land in corn- soybean rotation. These six parcels comprise the delineation Study Area which is identified in red on each figure. In addition to agricultural land, the parcels also contain Maple-Oak-Ash forest uplands, prairie uplands, wetland sloughs, and prairie-pothole depressional wetlands. The Pioneer-Sarah Creek Watershed Management Commission is the Wetland Conservation Act LGU at this location.

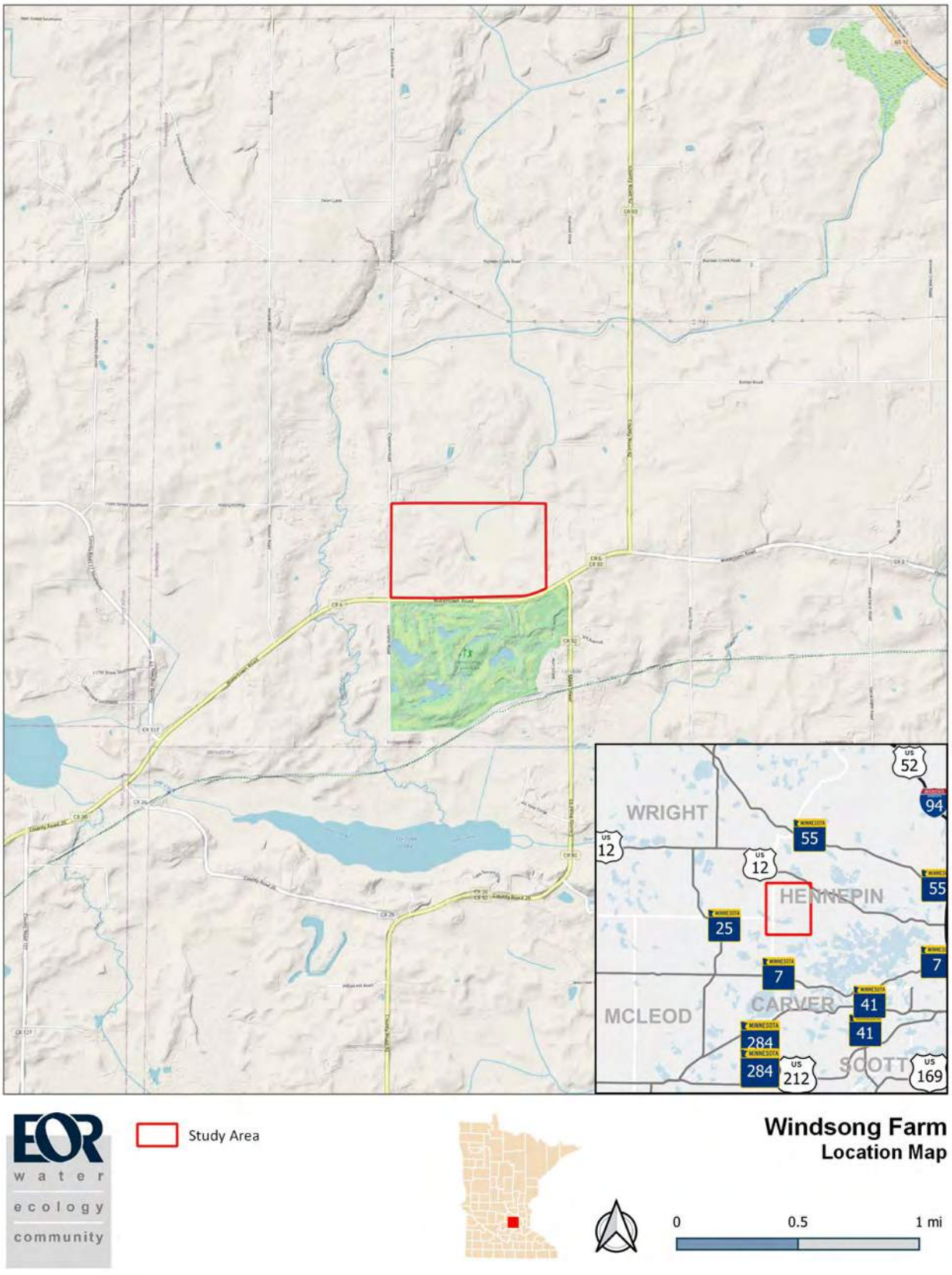

Figure 2. The Study Area is on the west side of Hennepin County in Independence, MN.

METHODOLOGY

3.1. Offsite - Level 1 Delineation Methods

EOR compared the existing wetland boundaries from the 2016 delineation against the wetland signatures from updated aerial imagery. Wetland areas that deviated significantly from the existing linework were identified and evaluated based on BWSR's 2016 Guidance for Offsite Hydrology/Wetland Determinations. Historical aerial imagery was acquired for all available years from 2003 to 2019 (**Appendix A**). All areas within the cultivated fields which exhibited a potential wetland signature were identified in each aerial photograph. The aerial imagery was evaluated in the context of antecedent moisture conditions by examining precipitation for the three months prior to the date the image was collected. Additionally, the Natural Resources Conservation Service (NRCS) Engineering Toolbox Version 1.1.7 was used to analyze the high resolution 1-meter digital elevation data to evaluate likely drainage paths and depressions on the property (**Figure 3**). The following data were also reviewed prior to the field delineation:

- MNDNR high resolution 1-meter digital elevation data from LiDAR and 2-foot elevation contours (**Figure 3**)
- Natural Resources Conservation Service (NRCS) SSURGO hydric soil classification data (**Figure 4**)
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) (**Figure 5**)
- U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) (**Figure 5**)
- MNDNR Public Waters Inventory (PWI) (**Figure 5**)

3.2. Onsite – Level 2 Wetland Delineation Methods

3.2.1. Data Collection and Tabulation

EOR followed methodology in accordance with the BWSR technical guidance documentation and methodology outlined in the 1987 Corps of Engineers Wetland Delineation Manual and supplemental methods identified in the Midwest Regional Supplement to delineate wetlands within the Study Area (USACE 2012). Wetland and upland observations and data were recorded in the field and subsequently entered into the U.S. Army Corps of Engineers Automated Wetland Determination Data Form – Midwest. Sample points and delineated boundaries were collected in the field using a Trimble R1 GNSS Receiver capable of submeter accuracy with ArcGIS Collector mobile application. GPS data was mapped using QGIS v. 3.10.

3.2.2. Wetland Indicator Methodology

EOR conducted field work on August 19, 2021 to verify the boundaries of the known waterbodies and to identify any new ones. A representative section of each wetland boundary was checked for accuracy and photo-documented. Transects were established in each new wetland identified from the aerial imagery review and in areas where the existing delineation deviated significantly from the

field conditions. Each transect consisted of sample point in the potential wetland, and if wetland criteria were met, one point in the upland. Soils, vegetation, and hydrology were documented at each sample point and provided in the data sheets in **Appendix C**.

3.2.3. Vegetation

Observed plant species were identified and assigned corresponding Midwest Region wetland indicator status. Literature used for nomenclature and identification are listed in References. The wetland probability indicator status of dominant plant species was determined using the 2016 National Wetland Plant List v3.3 (**Appendix B**).

3.2.4. Soils

Soil samples were collected using a soil auger and were dug to a minimum of 24 inches. Soil colors were determined using the Munsell Soil Color Charts. Soils were described to include those hydric indicators immediately below the A-horizon. A hydric soil determination was made based upon soil characterization (texture, color), soil order, ponding, and flooding frequency.

3.2.5. Hydrology

As required in the 1987 Manual, the presence of subsurface hydrology or indicators thereof was characterized in the rooting zone to a minimum of 24 inches. Primary and secondary hydrology indicators were identified according to the Midwest Supplement.

3.2.6. Delineation Boundary Determination

Wetland boundaries were determined after taking into consideration the parameters of soil, hydrology, vegetation, topography, and professional judgment at paired upland and wetland sample points. Boundary GPS data was collected at sufficient and appropriate intervals, depending on curvature and assumed accuracy.

4. RESULTS

4.1. Offsite – Level 1 Wetland Delineation Results

4.1.1. Topography and Hydrology

The Study Area is composed of a series of depressional wetland sloughs amid moderately sloped rolling hills. The NRCS Engineering Toolbox analysis indicates that some of the depressional sloughs, including about two thirds of the Study Area, drain towards Fox Lake, while the remainder of the Study Area drains off site to the west (**Figure 3**). Both drainages converge in Pioneer Creek which is located west and north of the Study Area. The steepest contours are along the southern and eastern shores of the lake.

4.1.2. Soils

The upland soils within the project area are fairly tight soils; comprised of loams to clay loams while wetland soils are dominated by peaty muck (Figure 4). The parent soil within the wetlands is properly classified as muck (Table 1; Figure 4).

Table 1. Soils and Hydric Rating within project vicinity

Soil symbol	Hydric Rating	Soil Name	Surface texture	Drainage Class
L16A	100%	Muskego, Blue Earth, and Houghton Soils, Ponded	Muck	Very Poorly Drained
L37B	5%	Angus loam, morainic, 2 to 5 percent slopes	Loam	Well Drained
L24A	100%	Glencoe clay loam, depressional,	Clay Loam	Very Poorly Drained
L23A	95%	Cordova loam	Loam	Poorly Drained
L25A	15%	Le Sueur loam, 1 to 3 percent slopes	Loam	Somewhat Poorly Drained
L36A	45%	Hamel, overwash-Hamel complex,	Loam	Somewhat Poorly Drained
L37B	5%	Angus loam, 2 to 6 percent slopes	Loam	Well Drained
L49A	100%	Klossner soils, depressional, 0 to 1 percent slopes	Muck	Very Poorly Drained
L22C2	2%	Lester loam, 6 to 10 percent slopes	Loam	Well Drained

4.1.3. Water Resources

Several previously mapped water resources are partially or completely contained within the Study Area (**Figure 5**). The NWI identifies one large wetland complex and three small isolated wetlands within the Study Area. The large wetland complex includes Fox Lake and contiguous lowland areas. Fox Lake is also identified by the MN DNR as a Public Water wetland. The delineation completed in 2016 identified 12 wetland areas with includes Fox Lake and the NWI wetlands previously mentioned, as well as two farmed wetlands (**Wetlands 11** and **12**) and an interconnected series of swales in the southwest quadrant of the Study Area (**Wetlands 1, 3,** and **4**). No other streams or Public Water resources are within the Study Area.

4.1.4. Aerial Imagery Analysis

EOR reviewed 12 photos from 2003 to 2019, of which nine images had normal antecedent precipitation levels in the three months preceding the image date (**Appendix A**, **Table 2**). 9 suspect areas were identified for review. 3 areas (**Areas B, G, H**) had been previously identified as cultivated wetlands by the 2016 delineation. The remaining areas were newly-identified or extensions of existing wetlands. Based on the decision matrix in BWSR's 2016 guidance for offsite hydrology, three areas were identified as wetlands, three areas required field review and three areas were not wetlands. However, all nine areas were reviewed in some capacity during the on-site delineation.

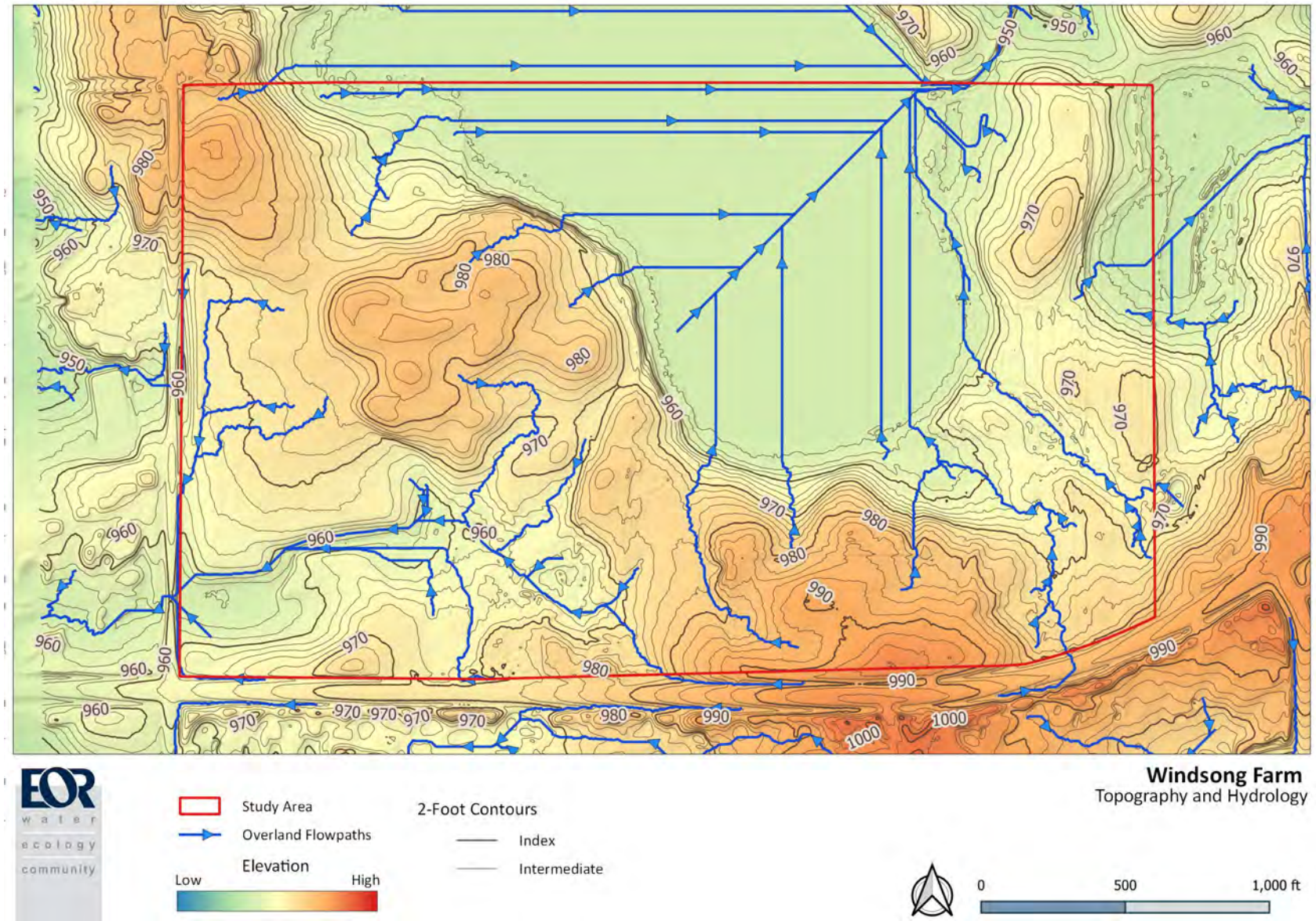

Figure 3. A majority of the Study Area drains to Fox Lake, then northward offsite to join with Pioneer Creek.

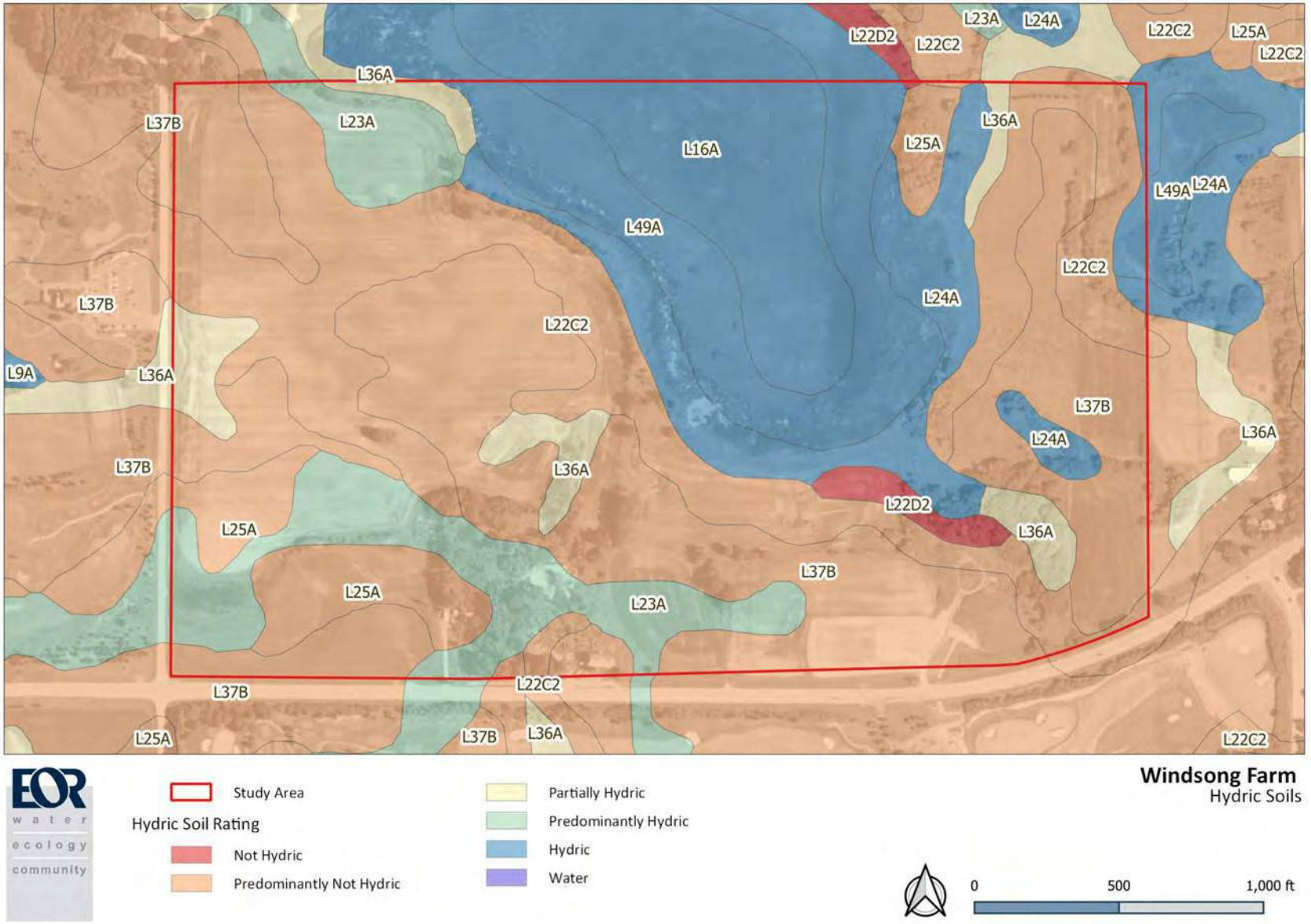

Figure 4. Only a small portion of the site has Not Hydric soils.

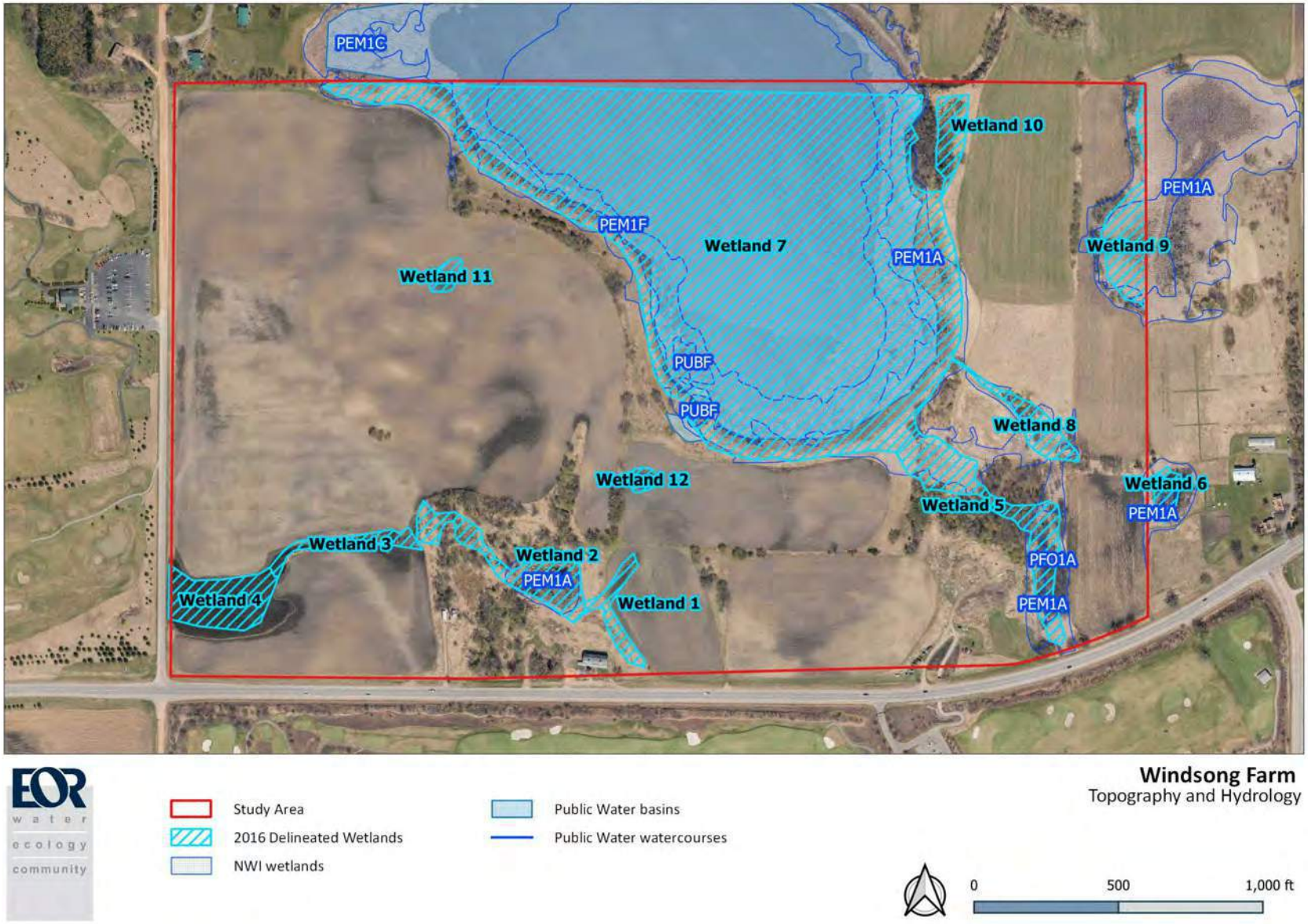

Figure 5. Wetland boundaries approved in 2016. Fox Lake (Wetland 7) is a Public Water wetland.

4.2. Onsite – Level 2 Wetland Delineation Results

EOR conducted a wetland delineation review on August 19, 2021. EOR documented conditions at each of the 9 suspect areas identified in the level 1 delineation. Transects were established at each area as deemed necessary. EOR also checked a representative boundary area for each of the wetlands delineated in 2016.

Antecedent precipitation data from the Minnesota Climatology Working Group indicated the three month antecedent precipitation was normal prior to field work; with the previous month also normal (**Table 2**). This should be weighed against the fact that the region was experiencing a Severe Drought at the time of the delineation, according the U.S. Drought Monitor. In addition, the region has been in a state of drought since the first week of June 2021.

Table 2. Antecedent Precipitation from Minnesota Climatology Working Group

Precipitation data for target wetland location:	
County: **Hennepin**	Township number: **118N**
Township name: **Independence**	Range number: **24W**
Nearest community: **Lyndale**	Section number: **32**

Score using 1981-2010 normal period:

(Values are in inches)	1st prior month: July 2021	2nd prior month: June 2021	3rd prior month: May 2021
Estimated precipitation total for this location:	**4.02***	**1.24R**	**2.93R**
There is a 30% chance this location will have less than:	2.46	3.08	2.32
There is a 30% chance this location will have more than:	4.18	5.34	4.05
Type of month: dry normal wet	**normal**	**dry**	**normal**
Monthly score	**3 * 2 = 6**	**2 * 1 = 2**	**1 * 2 = 2**
Multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	**10 (normal)**		

*** Value averaged from local weather stations KMNMAPLE123 and KMNFRANK9 appx 2.5 and 2 miles distant from site, respectively.**

R Indicates a provisional value derived from radar-based estimates.

4.3. Wetland Descriptions

EOR identified one new wetland, eliminated one previously-identified wetland, and adjusted the boundary of 3 wetland areas within the Study Area (**Table 3**). **Figure 6** shows where the 2021 wetland delineation differs from the 2016 delineation. Specifically, the boundaries for wetlands 1, 3, 4, and 11 changed due to the level 2 delineation. The wetland due east of the Study Area (Check point 9) was not delineated. Upon review by the Technical Evaluation Panel on October 11, 2021, the wetland boundaries were adjusted for a final time; Wetland 1 was reduced in size, Wetland 7 boundary by checkpoint 1 was shifted west, and Wetland 14 was added. The analysis of each area is

in **Appendix A**. Details of sample points and photographs can be found in the data sheets and photographs included in **Appendix C**.

Table 3. Delineated Wetlands and Types

Wetland ID	Wetland Type		Acres Delineated
	Circular 39 / NWI	Eggers and Reed	
Wetland 1	Type 2/ PEMB	Shallow Marsh	0.11
Wetland 2	Type 2,3,4/ PEMC PEMF	Shallow Marsh, Deep Marsh	1.60
Wetland 3	Type 2/ PEMB	Shallow Marsh	0.69
Wetland 4	Type 2,3/ PEMF	Shallow Marsh	1.87
Wetland 5	Type 7,2 /PFO1B, PEMB	Saturated Hardwood Swamp /Shallow Marsh	2.04
Wetland 7	Type 5/PEMUB	Shallow, Open Water	36.70
Wetland 8	Type 2/PEMB	Shallow Marsh	0.51
Wetland 9	Type 3/PEMC	Shallow Marsh	1.23
Wetland 10	Type 3/PEMC	Shallow Marsh	0.57
Wetland 12	Type 1/PEMA	Seasonally Flooded Basin	0.14
Wetland 13	Type 1/PEMA	Seasonally Flooded Basin	0.20
Wetland 14	Type 1/PEMA	Seasonally Flooded Basin	0.10

* Includes area of wetlands delineated outside of the Study Area.

4.3.1. Wetland Checkpoints

In addition to the 9 suspect areas analyzed in **Appendix A**. the 2016 delineation was updated by checking the boundaries of the wetlands as originally delineated. The wetland boundaries were located by GPS and flags were placed along a representative section of boundary and then photographed. Some of the boundaries had clear hydrophytic vegetation changes, others were reed canary grass meadows, but each boundary passed a gut check as a reasonable approximation of the wetland edge. Check points are marked as triangles on Figure 6 and photographs are in **Appendix D**.

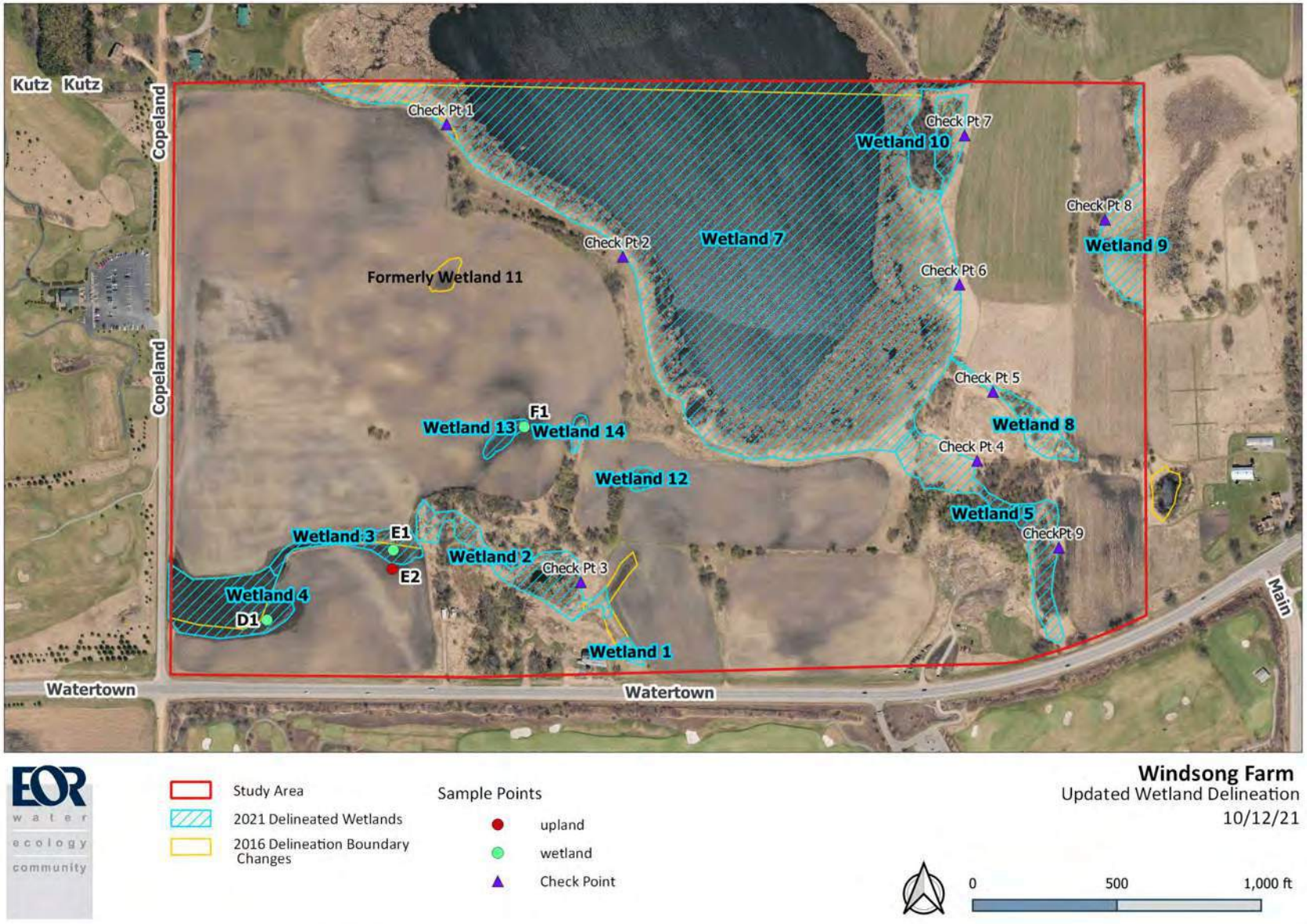

Figure 6. Updated wetland delineation. The yellow lines indicate where the 2016 delineation differed from the 2021 delineation.

APPENDIX A: HISTORICAL AERIAL IMAGE REVIEW & SAMPLE POINT DESCRIPTIONS

Table 4. Aerial Imagery Analysis Decision Matrix

Year	Image Source	Climate Condition (wet, dry, normal)	Interpretation (list hydrology indicators observed, e.g. crop stress, drowned out, standing water, etc.)[2]								
			A	B	C	D	E	F	G	H	I
Sep-03	Google Earth (GE) via Farm Service Agency (FSA)	Dry	NV	NV	NV	NV	NV	NV	NC	NV	NV
Apr-04	GE - FSA	Normal	NV	**DO/CS**	NV	NV	NV	**DO**	**NC**	NV	NV
Mar-06	GE - USGS	Normal	NV	**CS**	NSS	NSS	NSS	NSS/SW	**NC**	NSS	NSS
Sep-08	GE - FSA	Normal	NV	NV	NSS	NV	**SS**	**CS**	**NC**	NSS	NSS
Apr-11	GE - FSA	Normal	**SS**	NSS	NSS	NSS	**SS**	**SS/SW**	**NC**	**SS**	NSS
Jun-12	GE - FSA	Wet	CS	CS	NV	WS	DO	CS	NC	NV	NV
Jul-13	FSA	Wet	NV	CS	NV	AP/SS	NV	NV	NC	NV	NV
Sep-15	FSA	Normal	NV	NV	NV	**AP**	NV	NV	NV	NV	NV
Jun-16	GE	Normal	**SS**	NSS	NSS	**SS**	**SS**	**SS**	**SS**	**SS**	NSS
Aug-17	FSA	Normal	**DO**	NV	**AP**	**NC**	**DO**	**DO**	**DO**	NV	**NC/DO**
May-18	GE	Normal	NSS	NSS	**AP**	**SS**	**WS**	NSS	NSS	NSS	NSS
Jul-19	FSA	Normal	NSS	NSS	**AP**	**WS**	**WS**	**WS**	**NC**	NV	NSS
# of hits during normal years			3	2	3	5	6	6	7	2	1
# of normal years analyzed			9	9	9	9	9	9	9	9	9
% normal years with hits			**33%**	**22%**	**33%**	**56%**	**67%**	**67%**	**78%**	**22%**	**11%**
NWI classification			None	None	None	None	None	None	None	None	None
Hydric Soils			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wetland Status?			**field verify**	**No**	**field verify**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**

Area A is in the middle of an agricultural field and was planted in soybeans at the time of the delineation. It was deemed to be a non-wetland, due to a lack of crop stress, and a lack of hydrophytic vegetation.

Area B is also in the middle of a field of soybeans. This area was deemed to be a non-wetland because it received only 2 of 9 hits in the aerial imagery review, which means it can be classed as an upland without a field review. This area was delineated as a small, isolated wetland (**Wetland 11**, 0.198 ac) in 2016. Upon field review in 2021, it showed no crop stress and no hydrophytic vegetation.

Area C is a moderately steep area on the edge of the soybean field that appears to be an erosion-prone area that is frequently not cropped. It was deemed to be a non-wetland, due to its landscape position and lack of hydrophytic vegetation.

Area D is within a depression in the soybean field, adjacent to Wetland 4. Sample Point D1 met two of three wetland indicators. E1 met the hydric soil indicator Thick Dark Surface (A12) and two secondary wetland hydrology indicators Geomorphic Position (D2) and Saturation Visible on Aerial Photography (C9). The hydrophytic vegetation indicator was not met but this requirement was discarded because the vegetation was significantly disturbed due to cropping. Sample point **D1** in **Appendix C** documents these results. The wetland was delineated as an expansion of Wetland 4 and the boundaries were chosen by the zone of saturated soil on aerial imagery.

Area E is in a depression in the soybean field, adjacent to Wetland 3. A transect was established here and two sample points were taken. Sample Point **E1** met all three wetland indicators. At this location, a small area (0.1 acre) had no crops and a sparce covering of hydrophytic vegetation dominated by waterhemp (*Amaranthus tuberculatus* - OBL) and nut sedge (*Cyperus esculentus* - FACW) along with reed canary grass (*Phalaris arundinacea* - FACW) and narrow-leaf cattail (*Typha angustifolia*- OBL). Sample Point E1 met hydric soil indicator Thick Dark Surface (A12), and wetland hydrology indicators Geomorphic Position (D2) and FAC-Neutral Test (D5). Sample Point **E2** was located upslope within a row of soybeans. E2 also had hydric soil indicator A12, but it failed wetland hydrology with only one secondary indicator D2, and so even though the vegetation was significantly disturbed, it could not be classed as a wetland. The wetland was delineated as an expansion of Wetland 3 and the boundaries were marked by following the contours that circumscribed the not-cropped area.

Area F was also a depression in the soybean field. It was determined to be a wetland along similar lines as Area D. Sample Point **F1** met hydric soil indicator A12, and secondary wetland hydrology indicators D2 and D6. Vegetation was significantly disturbed. Wetland 13 was delineated from the boundaries of the saturated area on the aerial image

Area G was delineated as a wetland in 2016. It was re-confirmed as a wetland during the level 1 delineation because it had wetland hydrology signatures in 7 of 9 years with normal antecedent precipitation conditions. Like most of the other points it was planted in soybeans with no sign of crop stress and hydrophytic vegetation present upon field review.

Area H occupies a gentle swale in the soybean field. Area H had wetland signatures in 2 of 9 normal years in the recent level 1 delineation, which would classify the area as a non-wetland without field review. This area was also evaluated in the field since it was delineated as a wetland in 2016. Upon field review, the area showed no signs of crop stress and had no hydrophytic vegetation, so it was determined to not be a wetland.

Area I appeared to be a moderately sloped erosional drainage channel running down the center of a soybean field that had been washed out, or not cropped. Level 1 aerial photo analysis revealed hydrology signatures in only 2 of 9 years, which would classify the area as a non-wetland without requiring a field review.

Figure 7. Sept 2003 Historical Aerial Image. Source: FSA

Figure 8. April 2004 Historical Aerial Image. Source: FSA via Google Earth

Figure 9. March 2006 Historical Aerial Imagery. Source: FSA via Google Earth

Figure 10. Sept. 2008. Source: FSA

Figure 11. April 2011 Historical Aerial Imagery. Source: FSA via Google Earth

Figure 12. June 2012 Historical Aerial Imagery. Source: FSA via Google Earth

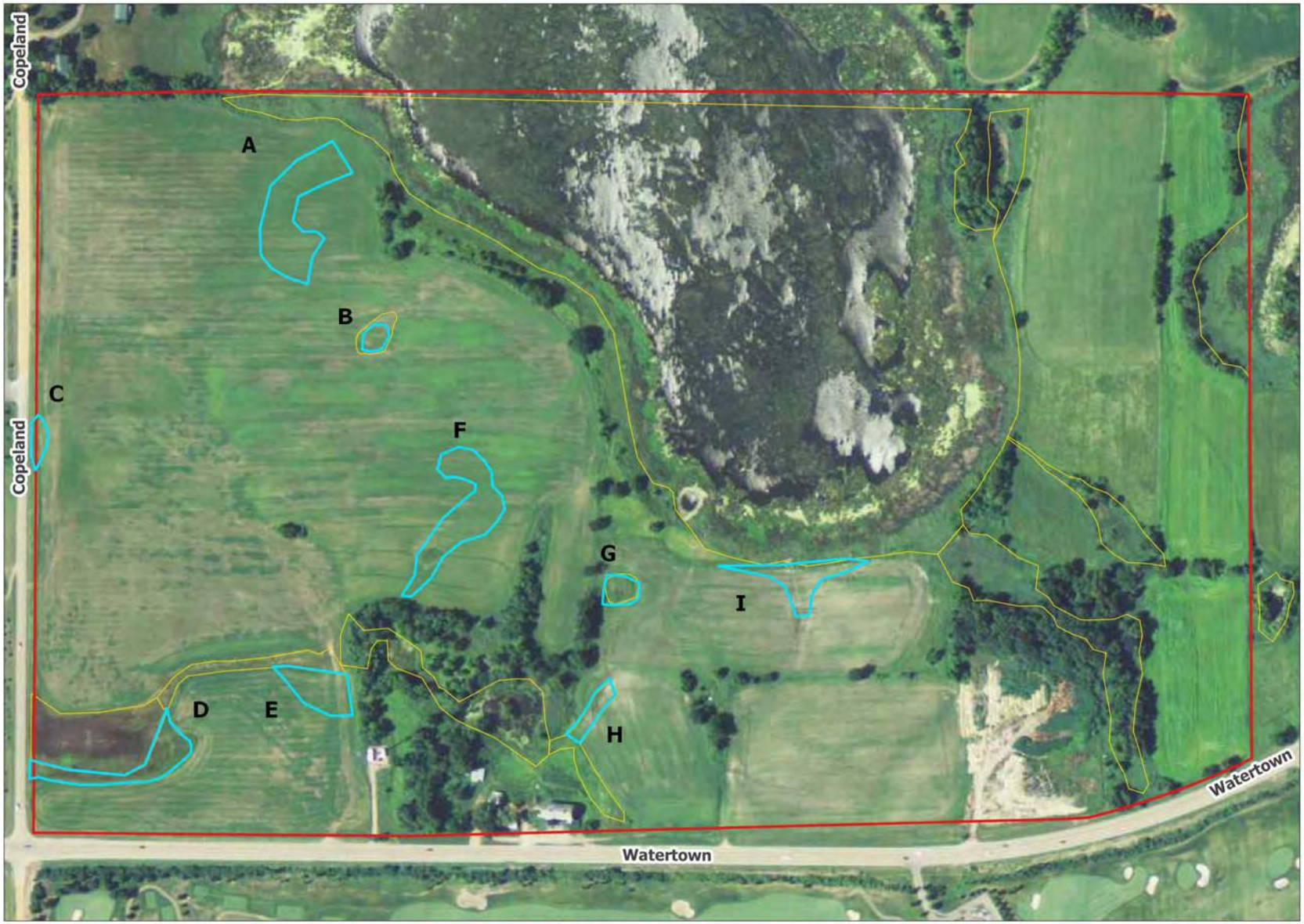

Figure 13. July 2013 Historical Aerial Imagery. Source: FSA

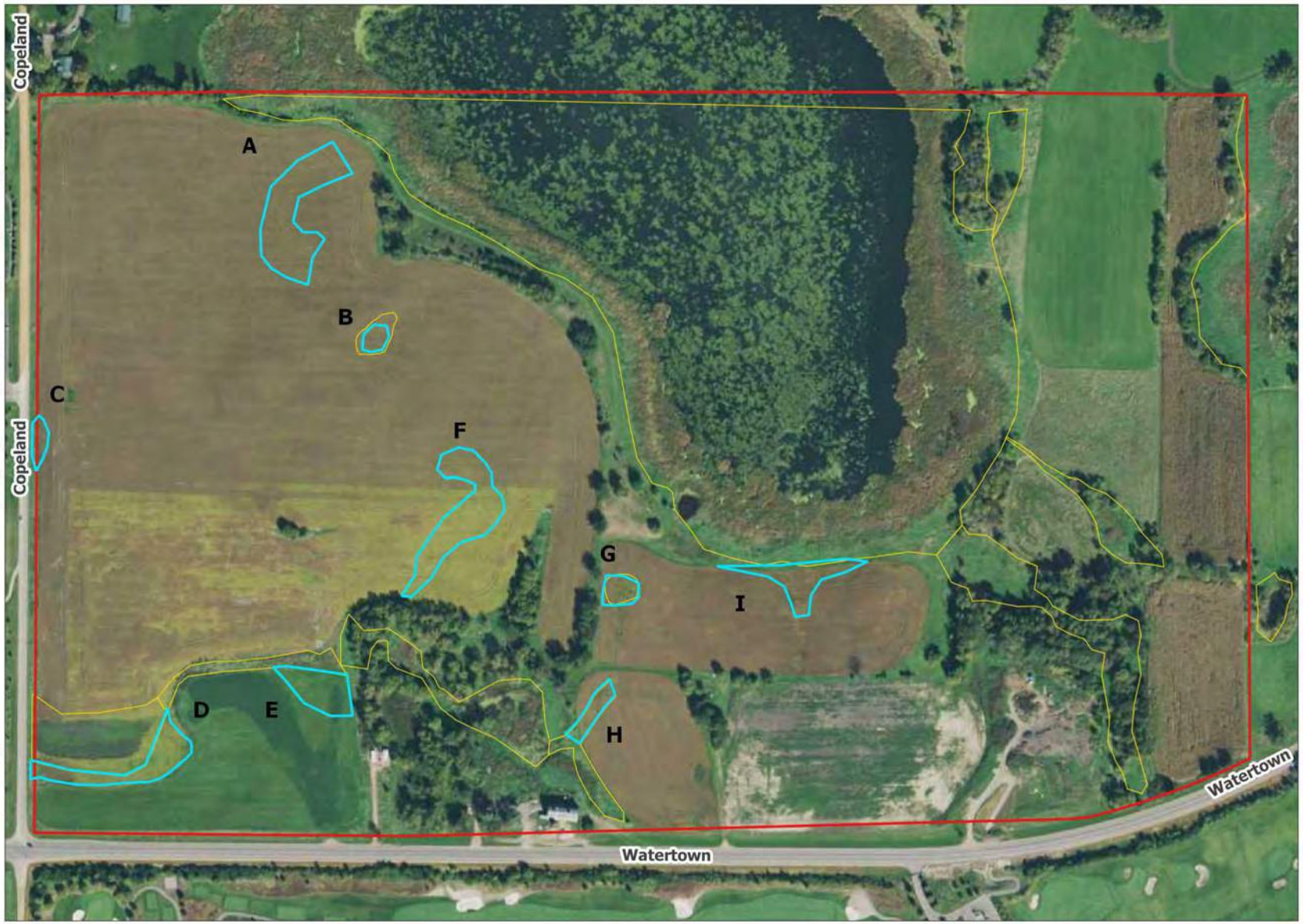

Figure 14. Sept. 2015 Historical Aerial Imagery. Source: FSA

Figure 15. June 2016 Historical Aerial Imagery. Source: Google Earth

Figure 16. May 2017 Historical Aerial Imagery. Source: Google Earth

Figure 17. August 2017 Historical Aerial Imagery. Source: FSA

Figure 18. May 2018 Historical Aerial Imagery. Source: Google Earth

Figure 19. July 2019 Historical Aerial Imagery. Source: FSA

APPENDIX B: WETLAND PLANT INDICATOR CLASSES

Obligate Wetland (OBL)	Species occurs almost always (estimated probability >99%) in wetlands under natural conditions.
Facultative Wetland (FACW)	Species usually occurs in wetlands (estimated probability 67 to 99%) but occasionally found in non-wetlands.
Facultative (FAC)	Species equally likely to occur in wetlands and non-wetlands (estimated probability 34 to 66%).
Facultative Upland (FACU)	Species usually occurs in non-wetlands (estimated probability 67 to 99%) but occasionally is found in wetlands (estimated probability 1 to 33%).
Obligate Upland (UPL)	Species occurs in wetlands in other region but, under normal conditions, occur almost always (estimated probability >99%) in non-wetlands within the region specified. Species that do not occur in wetlands in any region are not found on the National List.
No Indicator Status (NI)	Insufficient information available to establish indicator status.

APPENDIX C: WETLAND DATA FORMS AND SAMPLE POINT PHOTOGRAPHS

Sample Point D1 - Wetland 4

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Windsong Farm Wetland Delineation | City/County: Hennepin | Sampling Date: 8/19/2021

Applicant/Owner: Windsong Farm Golf Course | State: Minnesota | Sampling Point: D1

Investigator(s): Chris Long & Nick McReavy | Section, Township, Range: S31, T118N, R24W

Landform (hillslope, terrace, etc.): toeslope | Local relief (concave, convex, none): concave

Slope (%): 0-3% | Lat: 44°59'14.09"N | Long: 93°44'45.29"W | Datum: WGS 1984

Soil Map Unit Name: L25A - Le Sueur loam, 1 to 3 percent slopes | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? N (If no, explain in remarks)

Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? No

Are vegetation ____, soil ____, or hydrology ____ naturally problematic?

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present? N

Hydric soil present? Y

Indicators of wetland hydrology present? N

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: Wetland 4

Remarks: (Explain alternative procedures here or in a separate report.)

Vegetation indicator is significantly disturbed and saturation signatures observed during L1 review indicate that this is a wetland. According to the U.S. Drought Monitor, the region was experiencing extreme drought at the time of the delineation.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)		Absolute % Cover	Dominant Species	Indicator Staus
1				
2				
3				
4				
5				
		0	= Total Cover	
Sapling/Shrub stratun (Plot size: 15 ft)				
1				
2				
3				
4				
5				
		0	= Total Cover	
Herb stratum (Plot size: 5 ft)				
1	*Glycine max*	100	Y	UPL
2	*Amaranthus tuberculatus*	15	N	OBL
3	*Abutilon theophrasti*	15	N	FACU
4				
5				
6				
7				
8				
9				
10				
		130	= Total Cover	
Woody vine stratum (Plot size: 30 ft)				
1				
2				
		0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	15	x 1 =	15
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	100	x 5 =	500
Column totals	130 (A)		575 (B)

Prevalence Index = B/A = 4.42

Hydrophytic Vegetation Indicators:

- ____ Rapid test for hydrophytic vegetation
- ____ Dominance test is >50%
- ____ Prevalence index is ≤3.0*
- ____ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ____ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

Approximately 5% bare ground. Sample point was planted in soy beans at the time of the delineation.

SOIL

Sampling Point: D1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-48	10YR 2/1	100					Silty Loam	
48-52	10YR 5/1	100					Silty Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	___	Depth (inches): ___
Water table present?	Yes	___	No	___	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	___	Depth (inches): ___

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

50% wetland hits during aerial imagery analysis.

Remarks:

Photograph 1. Sample Point D1.

Sample Point E1- Wetland 3

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Windsong Farm Wetland Delineation | City/County: Hennepin | Sampling Date: 8/19/2021

Applicant/Owner: Windsong Farm Golf Course | State: Minnesota | Sampling Point: E1

Investigator(s): Chris Long & Nick McReavy | Section, Township, Range: S31, T118N, R24W

Landform (hillslope, terrace, etc.): toeslope | Local relief (concave, convex, none): concave

Slope (%): 3% | Lat: 44°59'16.53"N | Long: 93°44'39.22"W | Datum: WGS 1984

Soil Map Unit Name: L25A - Le Sueur loam, 1 to 3 percent slopes | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? N (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? Yes

Are vegetation ____, soil ____, or hydrology ____ naturally problematic?

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y
Hydric soil present?	Y
Indicators of wetland hydrology present?	Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: Wetland 3

Remarks: (Explain alternative procedures here or in a separate report.)

According to the U.S. Drought Monitor, the region was experiencing extreme drought at the time of the delieation.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Staus
1			
2			
3			
4			
5			
	0	= Total Cover	
Sapling/Shrub stratum (Plot size: 15 ft)			
1			
2			
3			
4			
5			
	0	= Total Cover	
Herb stratum (Plot size: 5 ft)			
1 *Amaranthus tuberculatus*	18	Y	OBL
2 *Cyperus esculentus*	15	Y	FACW
3 *Phalaris arundinacea*	7	N	FACW
4 *Typha angustifolia*	4	N	OBL
5			
6			
7			
8			
9			
10			
	44	= Total Cover	
Woody vine stratum (Plot size: 30 ft)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	22	x 1 =	22
FACW species	22	x 2 =	44
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	44 (A)		66 (B)

Prevalence Index = B/A = 1.50

Hydrophytic Vegetation Indicators:

- ____ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ____ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ____ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

25-30% bare ground

SOIL **Sampling Point:** E1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-42	10YR 2/1	100					Silty Clay Loam	
42-52	10YR 5/2	95	10YR 4/6	5	C	M	Silty Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	___	Depth (inches):	___
Water table present?	Yes	___	No	___	Depth (inches):	___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	52

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Sample Point E2 - Upland

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Windsong Farm Wetland Delineation | City/County: Hennepin | Sampling Date: 8/19/2021

Applicant/Owner: Windsong Farm Golf Course | State: Minnesota | Sampling Point: E2

Investigator(s): Chris Long & Nick McReavy | Section, Township, Range: S31, T118N, R24W

Landform (hillslope, terrace, etc.): toeslope | Local relief (concave, convex, none): concave

Slope (%): 4% | Lat: 44°59'15.88"N | Long: 93°44'39.26"W | Datum: WGS 1984

Soil Map Unit Name: L25A - Le Sueur loam, 1 to 3 percent slopes | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? N (If no, explain in remarks)

Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? No

Are vegetation ____, soil ____, or hydrology ____ naturally problematic?

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	N
Hydric soil present?	Y
Indicators of wetland hydrology present?	N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

According to the U.S. Drought Monitor, the region was experiencing extreme drought at the time of the delieation. Sample point was planted in soy beans at the time of the delineation.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Staus
1			
2			
3			
4			
5			
	0 = Total Cover		
Sapling/Shrub stratum (Plot size: 15 ft)			
1			
2			
3			
4			
5			
	0 = Total Cover		
Herb stratum (Plot size: 5 ft)			
1 *Glycine max*	65	Y	UPL
2 *Cyperus esculentus*	2	N	FACW
3 *Setaria pumila*	2	N	FAC
4			
5			
6			
7			
8			
9			
10			
	69 = Total Cover		
Woody vine stratum (Plot size: 30 ft)			
1			
2			
	0 = Total Cover		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	2	x 2 =	4
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	65	x 5 =	325
Column totals	69 (A)		335 (B)

Prevalence Index = B/A = 4.86

Hydrophytic Vegetation Indicators:

- ____ Rapid test for hydrophytic vegetation
- ____ Dominance test is >50%
- ____ Prevalence index is ≤3.0*
- ____ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ____ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

Sample point is planted in soy beans, showing no signs of water stress or drought stress. Cover includes roughly 30% bare ground.

SOIL **Sampling Point:** E2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-16	10YR 3/1	100					Silty Clay Loam	
16-54	10YR 5/2	98	10YR 5/6	2			Silty Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes ___ No ___ Depth (inches): ___

Water table present? Yes ___ No ___ Depth (inches): ___

Saturation present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Photograph 2. Sample Point E1.

Photograph 3. Sample Point E2.

Sample Point F1 - Wetland 13

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Windsong Farm Wetland Delineation | City/County: Hennepin | Sampling Date: 8/19/2021

Applicant/Owner: Windsong Farm Golf Course | State: Minnesota | Sampling Point: F1

Investigator(s): Chris Long & Nick McReavy | Section, Township, Range: S31, T118N, R24W

Landform (hillslope, terrace, etc.): toeslope | Local relief (concave, convex, none): concave

Slope (%): 0-3% | Lat: 44°59'20.80"N | Long: 93°44'32.95"W | Datum: WGS 1984

Soil Map Unit Name: L37A - Hamel, overwash-Hamel complex, 0 to 3 percent slopes | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? N (If no, explain in remarks)

Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? No

Are vegetation ____, soil ____, or hydrology ____ naturally problematic?

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	N
Hydric soil present?	Y
Indicators of wetland hydrology present?	Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: Wetland 13

Remarks: (Explain alternative procedures here or in a separate report.)

Vegetation indicator is significantly disturbed and saturation signatures observed during L1 review indicate that this is a wetland. According to the U.S. Drought Monitor, the region was experiencing extreme drought at the time of the delieation.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Staus
1			
2			
3			
4			
5			
	0 = Total Cover		
Sapling/Shrub stratum (Plot size: 15 ft)			
1			
2			
3			
4			
5			
	0 = Total Cover		
Herb stratum (Plot size: 5 ft)			
1 *Glycine max*	100	Y	UPL
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100 = Total Cover		
Woody vine stratum (Plot size: 30 ft)			
1			
2			
	0 = Total Cover		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:			
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column totals	100 (A)		500 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

- ____ Rapid test for hydrophytic vegetation
- ____ Dominance test is >50%
- ____ Prevalence index is ≤3.0*
- ____ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ____ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: F1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-25	10YR 2/1	100					Silty Loam	
25-36	10YR 2/1	98	10YR 3/4	2	C	M	Silty Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

Assumed thick dark surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
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- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	___	Depth (inches): ___
Water table present?	Yes	___	No	___	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	___	Depth (inches): ___

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

70% hits during aerial imagery review.

Remarks:

Photograph 4. Sample Point F1.

APPENDIX D: CHECK POINT PHOTOGRAPHS

Photograph 5. Check Point 1. Flag marks 2016 delineation. The edge of Wetland 7 is on the left, upland on right.

Photograph 6. Check Point 2. Flags in middle mark 2016 delineation. Wetland 7 (Fox Lake) in background.

Photograph 7. Check Point 3. Wetland 1 on right, upland on left.

Photograph 8. Check Point 4. Wetland 5 on left, upland on right.

Photograph 9. Check Point 5. Wetland 8 on left, upland on right.

Photograph 10. Check Point 6. Hay field on left, Wetland 7 on right.

Photograph 11. Check Point 7. Upland hay field on left, Wetland 10 on right.

Photograph 12. Check Point 8. Wetland 9 on left, wooded upland fringe on right.

Photograph 13. Check Point 9. Wooded area of Wetland 5 on left, upland on right.

BOARD OF WATER AND SOIL RESOURCES

Minnesota Wetland Conservation Act
Notice of Decision

Local Government Unit: City of Independence	**County:** Hennepin
Applicant Name: John Dailing, Windsong Farm Golf Club LLC/ Fox Lake LLC **Applicant Representative:** Jason Naber- EOR, Inc	
Project Name: Windsong Farm Golf Club	**LGU Project No. (if any):** IN401-21-11
Date Complete Application Received by LGU: 9/17/2021	
Date of LGU Decision: 11/11/21	
Date this Notice was Sent: 11/11/21	

WCA Decision Type - check all that apply

☒ Wetland Boundary/Type ☐ Sequencing ☐ Replacement Plan ☐ Bank Plan (not credit purchase)
☐ No-Loss (8420.0415) ☐ Exemption (8420.0420)
Part: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H Subpart: ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

Replacement Plan Impacts (replacement plan decisions only)

Total WCA Wetland Impact Area:
Wetland Replacement Type: ☐ Project Specific Credits: ☐ Bank Credits:
Bank Account Number(s):

Technical Evaluation Panel Findings and Recommendations (attach if any)

☒ Approve ☐ Approve w/Conditions ☐ Deny ☐ No TEP Recommendation

LGU Decision

☒ Approved with Conditions (specify below)[1] ☒ Approved[1] ☐ Denied
List Conditions: **Provide GIS file of wetland boundaries**

Decision-Maker for this Application: ☒ Staff ☐ Governing Board/Council ☐ Other:

Decision is valid for: ☒ 5 years (default) ☐ Other (specify):

[1] *Wetland Replacement Plan approval is not valid until BWSR confirms the withdrawal of any required wetland bank credits. For project-specific replacement a financial assurance per MN Rule 8420.0522, Subp. 9 and evidence that all required forms have been recorded on the title of the property on which the replacement wetland is located must be provided to the LGU for the approval to be valid.*

LGU Findings – Attach document(s) and/or insert narrative providing the basis for the LGU decision[1].

☒ Attachment(s) (specify): **Updated Wetland Delineation dated 10/12/21**
☒ Summary: **The TEP reviewed the wetlands on site (10/11/21) and requested some changes as reflected in the attached figures.**

The delineated wetlands are summarized below:

Wetland ID	Wetland Type		Acres Delineated
	Circular 39 / NWI	Eggers and Reed	
Wetland 1	Type 2/ PEMB	Shallow Marsh	0.11
Wetland 2	Type 2,3,4/ PEMC PEMF	Shallow Marsh, Deep Marsh	1.60
Wetland 3	Type 2/ PEMB	Shallow Marsh	0.69
Wetland 4	Type 2,3/ PEMF	Shallow Marsh	1.87
Wetland 5	Type 7,2 /PFO1B, PEMB	Saturated Hardwood Swamp /Shallow Marsh	2.04
Wetland 7	Type 5/PEMUB	Shallow, Open Water	36.70
Wetland 8	Type 2/PEMB	Shallow Marsh	0.51
Wetland 9	Type 3/PEMC	Shallow Marsh	1.23
Wetland 10	Type 3/PEMC	Shallow Marsh	0.57
Wetland 12	Type 1/PEMA	Seasonally Flooded Basin	0.14
Wetland 13	Type 1/PEMA	Seasonally Flooded Basin	0.20
Wetland 14	Type 1/PEMA	Seasonally Flooded Basin	0.10

[1] *Findings must consider any TEP recommendations.*

Attached Project Documents

☒ Site Location Map ☐ Project Plan(s)/Descriptions/Reports (specify):

Appeals of LGU Decisions

If you wish to appeal this decision, you must provide a written request within 30 calendar days of the date you received the notice. All appeals must be submitted to the Board of Water and Soil Resources Executive Director along with a check payable to BWSR for $500 *unless* the LGU has adopted a local appeal process as identified below. The check must be sent by mail and the written request to appeal can be submitted by mail or e-mail. The appeal should include a copy of this notice, name and contact information of appellant(s) and their representatives (if applicable), a statement clarifying the intent to appeal and supporting information as to why the decision is in error. Send to:

Appeals & Regulatory Compliance Coordinator
Minnesota Board of Water & Soils Resources
520 Lafayette Road North
St. Paul, MN 55155
travis.germundson@state.mn.us

Does the LGU have a local appeal process applicable to this decision?

☐ Yes[1] ☒ No

[1] *If yes, all appeals must first be considered via the local appeals process.*

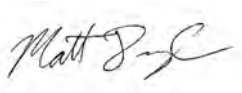
Local Appeals Submittal Requirements (LGU must describe how to appeal, submittal requirements, fees, etc. as applicable)

Required on all notices:

☒ SWCD TEP Member: Stacey Lijewski (Stacey.lijewski@hennepin.us) ☒ BWSR TEP Member: Ben Carlson (Ben.carlson@state.mn.us)
☐ LGU TEP Member (if different than LGU contact):
☒ DNR Representative: Melissa Collins (Melissa.Collins@state.mn.us)
☒ Watershed District or Watershed Mgmt. Org.: Andrew Vistad (Andrewv@haa-inc.com)
☒ Applicant: ☒ Agent/Consultant:

Optional or As Applicable:

☒ Corps of Engineers:
☐ BWSR Wetland Mitigation Coordinator (required for bank plan applications only):
☐ Members of the Public (notice only): ☐ Other:

Signature: 	**Date:** 11/11/21

This notice and accompanying application materials may be sent electronically or by mail. The LGU may opt to send a summary of the application to members of the public upon request per 8420.0255, Subp. 3.

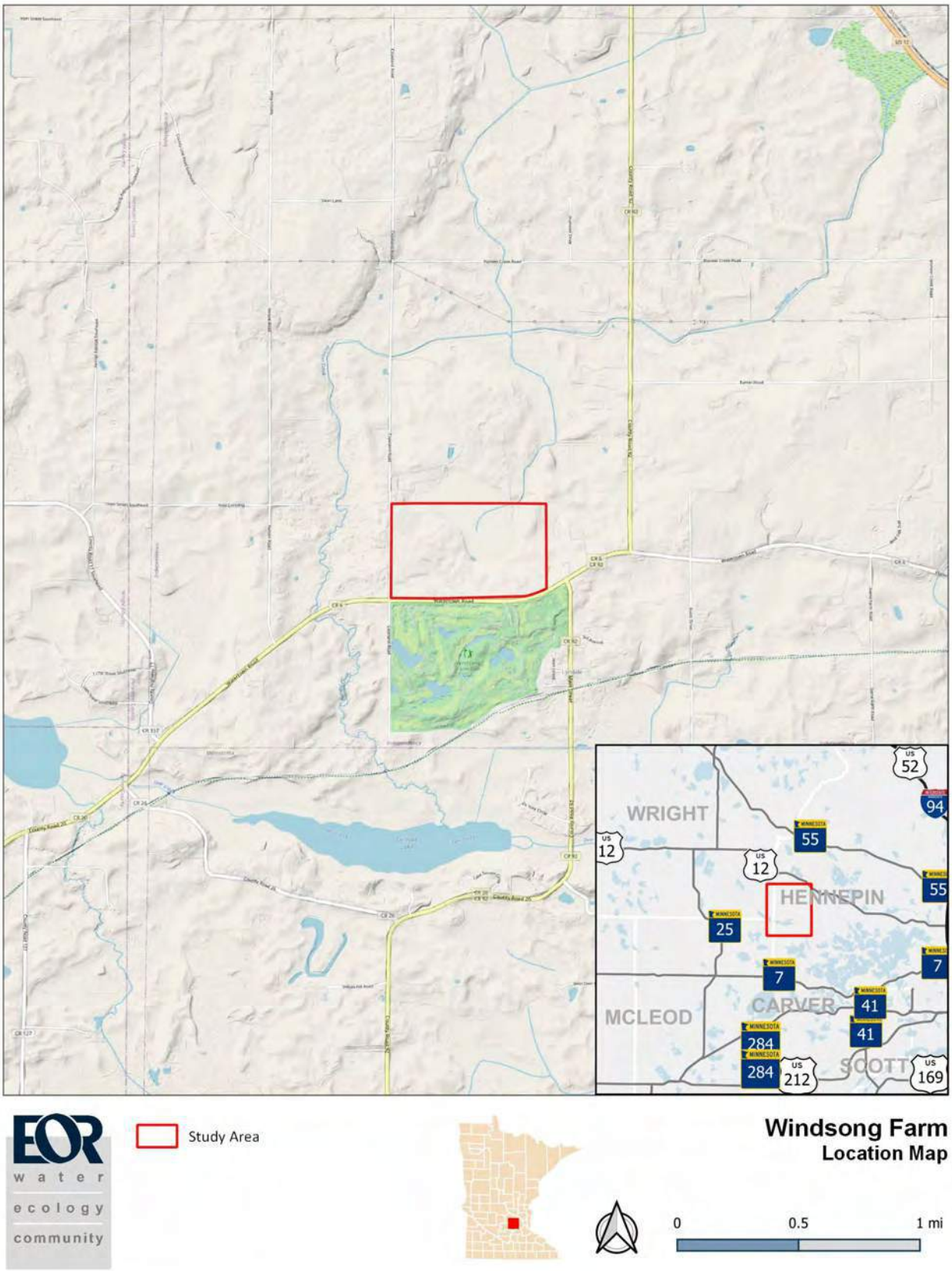


Figure 1. Project Location

Figure 2.Map of the Study Area.

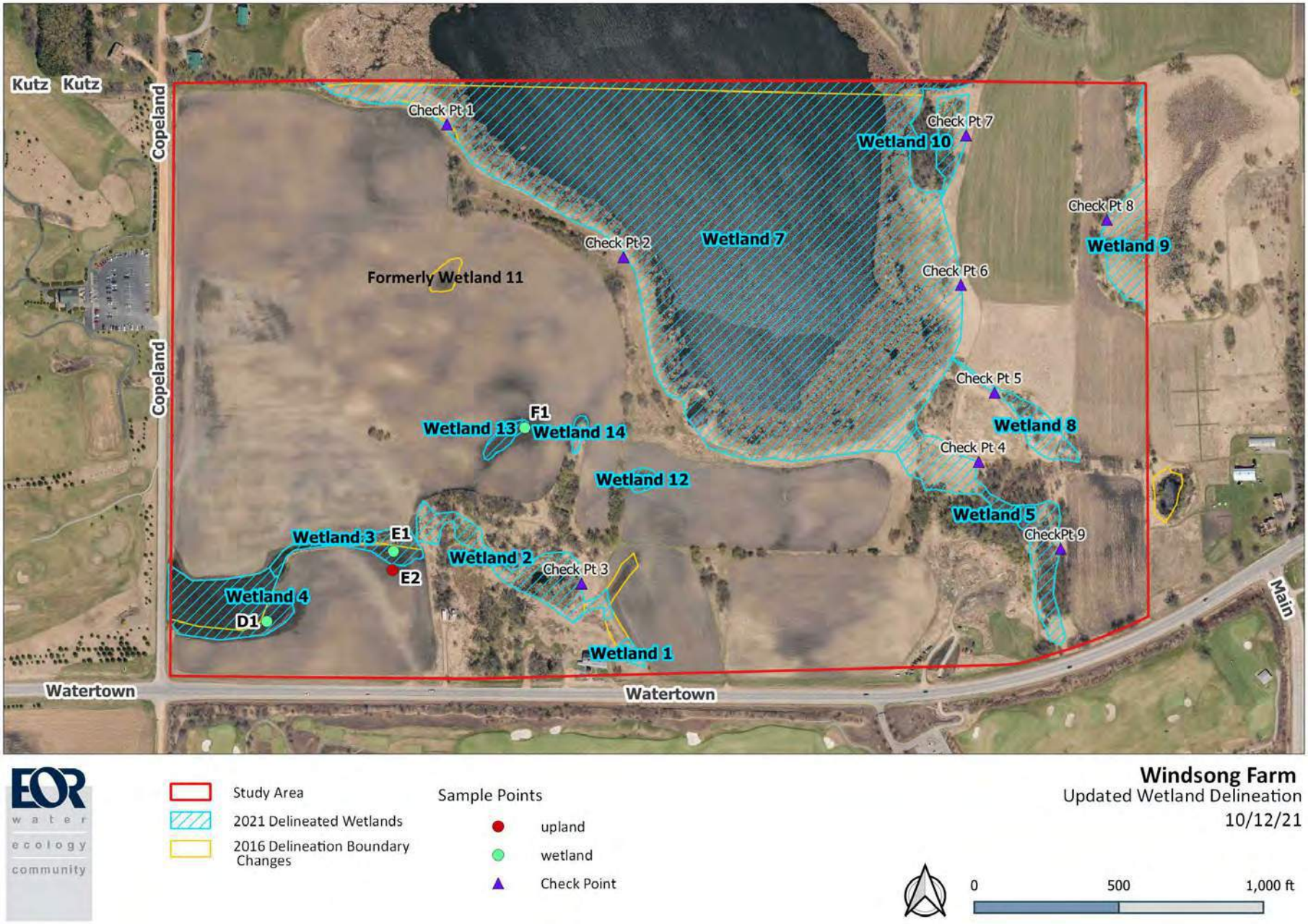


Figure 3. Updated wetland delineation. The yellow lines indicate where the 2016 delineation differed from the 2021 updates.

DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

DECEMBER 13, 2021

Regulatory File No. MVP-2008-05235-CEB

Windsong Farm Golf Club
c/o Mr. John Dailing
18 Golf Walk
Maple Plain, MN 55359

Dear Mr. Dailing:

This letter is in response to correspondence, submitted by Jason Naber on your behalf, requesting Corps of Engineers (Corps) concurrence with the delineation of aquatic resources completed on the 127 acre Windsong Farm Golf Club in the City of Independence. The project site is in Section 32, Township 118 North, Range 24 West, Hennepin County, Minnesota.

We have reviewed the initial wetland delineation report dated September 20, 2021 and the revised wetland delineation report dated October 12, 2021, which is referenced in the Technical Evaluation Panel's Notice of Decision (NOD), and determined that the limits of the aquatic resources have been accurately identified in accordance with current agency guidance including the *Corps of Engineers Wetland Delineation Manual* (1987 Manual) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region. This concurrence is only valid for the review area shown on the enclosed figures labeled MVP-2008-05235-CEB Page 1 of 3 through 3 of 3. The boundaries shown on the enclosed figures accurately reflect the limits of the aquatic resources in the review area.

This concurrence may generally be relied upon for five years from the date of this letter. However, we reserve the right to review and revise our concurrence in response to changing site conditions, information that was not considered during our initial review, or off-site activities that could indirectly alter the extent of wetlands and other resources on-site. Our concurrence may be renewed at the end of this period provided you submit a written request and our staff are able to verify that the determination is still valid.

No jurisdictional determination was requested or prepared for this project. While not required, you may request a jurisdictional determination from the Corps contact indicated below.

Please note that the discharge of dredged or fill material into waters of the United States without a Department of the Army permit could subject you to an enforcement action. Receipt of a permit from a state or local agency does not obviate the requirement for obtaining a Department of the Army permit.

If you have any questions, please contact me in our La Crescent office at (651) 290-5371 or Catherine.E.Beatty@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory file number shown above.

Sincerely,

Catherine Beatty
Project Manager

Enclosure

cc:
Jason Naber (Agent)
Matthew Danzl (LGU)
Stacey Lijewski (SWCD)
Ben Carlson (BWSR)
Melissa Collins (MnDNR)
Andrew Vistad (Pioneer-Sarah Watershed Management Commission)

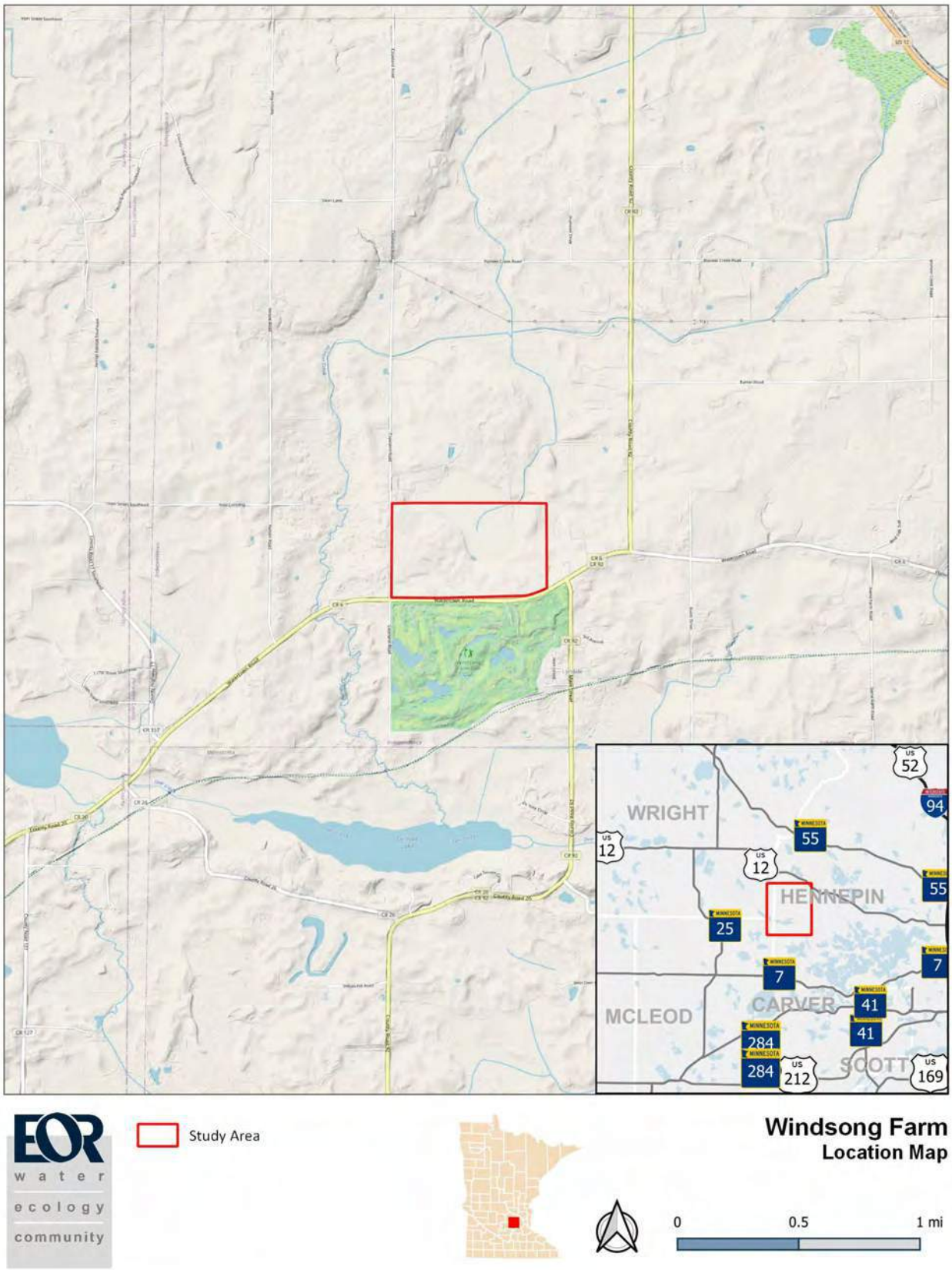


Figure 1. Project Location

Figure 2.Map of the Study Area.

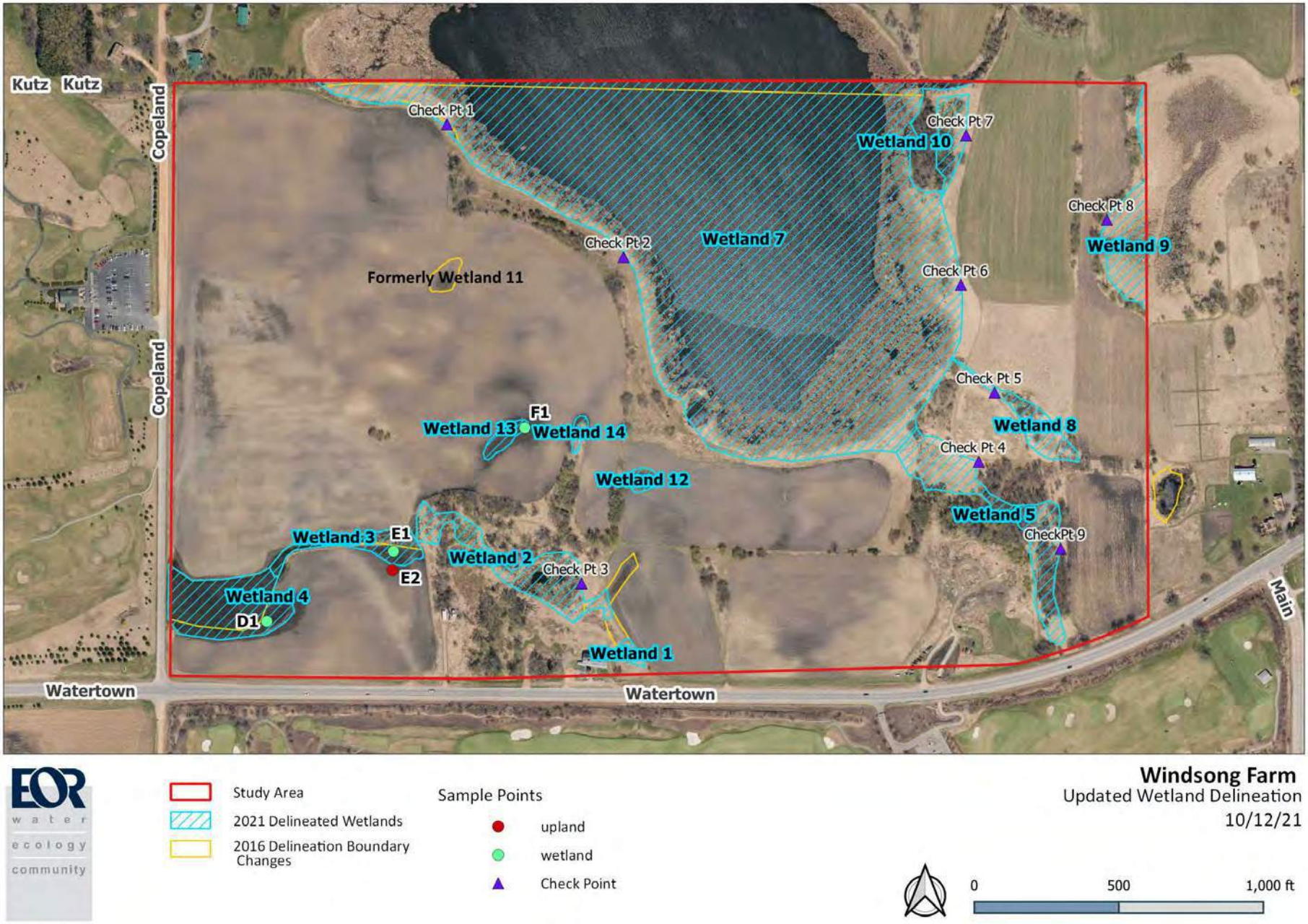


Figure 3. Updated wetland delineation. The yellow lines indicate where the 2016 delineation differed from the 2021 updates.

APPENDIX D – GROUNDWATER WELL LOGS

Minnesota Unique Well Number

208875

County Hennepin
Quad Mound
Quad ID 105B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 08/24/1991
Update Date 03/14/2015
Received Date

Well Name	Township	Range	Dir	Section	Subsection
GIESE, MELVIN	118	24	W	32	BBCBDA

Elevation 958 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W NELSON RD INDEPENDENCE MN

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
YELLOW CLAY	0	12	BROWN	
CLAY & SAND	12	33	BROWN	
SAND & CLAY	33	69	GRAY	
STONES & GRAVEL	69	72	GRAY	
CLAY	72	81	GRAY	
SAND	81	86	BROWN	
FINE, MUDDY SAND	86	128	GRAY	
WATER SAND	128	138	BROWN	

Remarks

Well Depth 138 ft. **Depth Completed** 138 ft. **Date Well Completed** 08/27/1969

Drill Method **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint**

Drive Shoe? Yes ☐ No ☐ **Above/Below**

Casing Diameter **Weight**

4 in. To 133 ft. lbs./ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make**

Diameter	Slot/Gauze	Length	Set	
3 in.	12	4 ft.	133 ft.	138 ft.

Static Water Level

55 ft. land surface Measure 08/27/1969

Pumping Level (below land surface)

0 ft. hrs. Pumping at 25 g.p.m.

Wellhead Completion

Pitless adapter manufacturer Model

☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☐ Yes ☐ No ☐ Not Specified

Nearest Known Source of Contamination

feet Direction Type

Well disinfected upon completion? ☐ Yes ☐ No

Pump ☐ Not Installed Date Installed

Manufacturer's name

Model Number HP 0 Volt

Length of drop pipe ft Capacity 25 g.p. Typ

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Aquifer Quat. buried

Last Strat sand-brown Depth to Bedrock ft

Located by Minnesota Geological Survey

Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)

System UTM - NAD83, Zone 15, Meters X 441155 Y 4982106

Unique Number Verification Information from Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Leuthner Well Co. 10125

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

400844

County Hennepin
Quad Mound
Quad ID 105B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 08/24/1991
Update Date 02/14/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
NOLAN, CLYDE	118	24	W	32	ADBBAB

Elevation 989 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 8180 6 CR INDEPENDENCE MN

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
CLAY	0	148		
WATERSAND	148	173		

Remarks

Well Depth	Depth Completed	Date Well Completed
173 ft.	172 ft.	11/21/1983

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint**
Drive Shoe? Yes ☐ No ☐ **Above/Below**

Casing Diameter	Weight
4 in. To 167 ft.	lbs./ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set
2 in.		ft.	ft. ft.

Static Water Level
75 ft. land surface Measure 11/21/1983

Pumping Level (below land surface)
75 ft. 3 hrs. Pumping at 20 g.p.m.

Wellhead Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
well grouted, type unknown		ft.	ft.

Nearest Known Source of Contamination
feet Direction Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 12/01/1983
Manufacturer's name AERMOTOR
Model Number HP 0.5 Volt
Length of drop pipe 90 ft Capacity g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock Aquifer Quat. buried
Last Strat sand Depth to Bedrock ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 442331 Y 4981944
Unique Number Verification Address verification Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Torgerson Well Co.	27056	OTTEN, D.

Minnesota Unique Well Number

405975

County Hennepin
Quad Mound
Quad ID 105B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 08/24/1991
Update Date 02/14/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
MYERS,	118	24	W	30	DDDACA

Elevation 982 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W COPELAND RD INDEPENDENCE MN

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
YELLOW CLAY	0	34	BROWN	SOFT
CLAY & SAND	34	86	GRAY	SOFT
CLAY	86	114	GRAY	SOFT
SAND & CLAY	114	150	GRAY	SOFT
SAND	150	157	BROWN	SOFT

Remarks

Well Depth 157 ft. **Depth Completed** 157 ft. **Date Well Completed** 09/18/1984

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☐ No ☐ **Above/Below**

Casing Diameter		Weight
4	in. To 152 ft.	lbs./ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set
2 in.	15	5 ft.	0 ft. ft.

Static Water Level
90 ft. land surface Measure 09/18/1984

Pumping Level (below land surface)
ft. hrs. Pumping at 30 g.p.m.

Wellhead Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		ft.	ft.

Nearest Known Source of Contamination
feet Direction Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed
Manufacturer's name PIONEER
Model Number HP 0.75 Volt 220
Length of drop pipe 126 ft Capacity 10 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock Aquifer Quat. buried
Last Strat sand-brown Depth to Bedrock ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 440999 Y 4982511
Unique Number Verification Information from Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Leuthner Well Co.	10125	SCHMIEG, K.

Minnesota Unique Well Number

583323

County Hennepin
Quad Mound
Quad ID 105B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 07/31/1998
Update Date 03/14/2015
Received Date

Well Name	Township	Range	Dir	Section	Subsection
	118	24	W	29	CCCCDB

Elevation 980 ft. **Elev. Method** LiDAR 1m DEM (MNDNR)

Address

Well 810 COPELAND RD INDEPENDENCE MN

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
CLAY	0	28	BROWN	
CLAY	28	173	GRAY	
WATER SAND	173	189		

Remarks

SEALED 3 OLD WELLS H109277, H109278, & H114238

Well Depth 189 ft. **Depth Completed** 189 ft. **Date Well Completed** 12/30/1996

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint**

Drive Shoe? Yes ☒ No ☐ **Above/Below**

Casing Diameter	Weight	Hole Diameter
6 in. To 179 ft.	lbs./ft.	9 in. To 189 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** WESCO

Diameter	Slot/Gauze	Length	Set
6 in.	15	10 ft.	179 ft. 189 ft.

Static Water Level

65 ft. land surface Measure 12/30/1996

Pumping Level (below land surface)

ft. hrs. Pumping at 200 g.p.m.

Wellhead Completion

Pitless adapter manufacturer MONITOR Model

☐ Casing Protection ☐ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
well grouted, type unknown		ft.	ft.

Nearest Known Source of Contamination

52 feet North Direction Barnyard Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 12/30/1996

Manufacturer's name FLINT & WALLING

Model Number 6P080A07 HP 7.5 Volt

Length of drop pipe 126 ft Capacity g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous

First Bedrock Aquifer Quat. buried

Last Strat sand Depth to Bedrock ft

Located by Minnesota Geological Survey

Locate Method GPS SA Off (averaged) (15 meters)

System UTM - NAD83, Zone 15, Meters X 441162 Y 4982395

Unique Number Verification Address verification Input Date 07/28/2014

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Torgerson Well Co.	27056	TORGERSON, R.

Minnesota Unique Well Number

600770

County Hennepin
Quad Mound
Quad ID 105B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 07/31/1998
Update Date 03/14/2015
Received Date

Well Name	Township	Range	Dir	Section	Subsection
BENSON &	118	24	W	32	AACBDA

Elevation 981 ft. **Elev. Method** LiDAR 1m DEM (MNDNR)

Address

Well 8170 6 CR INDEPENDENCE MN

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
CLAY FIRM	0	20	TAN	
CLAY FIRM	20	30	BROWN	
CLAY FIRM	30	85	GRAY	
ROCKY CLAY FIRM	85	120	GRAY	
CLAY FIRM	120	135	TAN	
SAND	135	145	TAN	SOFT
SAND & GRAVEL FIRM	145	191	TAN	

Remarks

Well Depth 191 ft. **Depth Completed** 191 ft. **Date Well Completed** 08/14/1997

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☒ **From** **To**

Casing Type Single casing **Joint**
Drive Shoe? Yes ☐ No ☒ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 181 ft.	lbs./ft.	6.5 in. To 191 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** plastic **Make** MONOFLEX

Diameter	Slot/Gauze	Length	Set
4 in.	8	10 ft.	181 ft. 191 ft.

Static Water Level

61 ft. land surface Measure 08/08/1997

Pumping Level (below land surface)

73 ft. 2 hrs. Pumping at 20 g.p.m.

Wellhead Completion

Pitless adapter manufacturer MONITOR Model SNAPPY
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
cuttings		30 ft.	181 ft.
high solids bentonite	2 Sacks	ft.	30 ft.

Nearest Known Source of Contamination

99 feet Northeas Direction Sewer Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 08/11/1997
Manufacturer's name AERMOTOR
Model Number T20-150 HP 1.5 Volt 230
Length of drop pipe 100 ft Capacity 20 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous

First Bedrock Aquifer Quat. buried
Last Strat sand +larger-brown Depth to Bedrock ft
Located by Minnesota Geological Survey
Locate Method GPS SA Off (averaged) (15 meters)
System UTM - NAD83, Zone 15, Meters X 442371 Y 4982096
Unique Number Verification Address verification Input Date 07/28/2014

Angled Drill Hole

Well Contractor

Praught M. Well Co. 86576 PRAUGHT, M
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well No.

644900

County Hennepin
Quad Mound
Quad ID 105B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING RECORD

Minnesota Statutes Chapter 1031

Entry Date 06/28/2002
Update
Received Date 03/14/2015

Well Name	Township	Range	Dir	Section	Subsection	Use	Status	Well Depth	Depth Completed	Date Well Completed	Lic/Reg. No.
THE GOLF CLUB	118	24	W	32	CADAAD	irrigation	A	184 ft.	184 ft.	05/03/2002	27194

Elevation 957 ft. **Elev. Method** LiDAR 1m DEM (MNDNR) **Aquifer** Quat. buried artes. **Depth to Bedrock** ft **Open Hole** - ft **Static Water Level** 41 ft

Field Located By County Environmental &/or
Unique No. Verified Address verification
Geological Interpretation Emily Bauer
Agency (Interpretation)

Locate Method GPS SA Off (averaged) (15 meters)
Input Source Minnesota Geological Survey
Input Date 07/28/2014

Universal Transverse Mercator (UTM) - NAD83 - Zone 15 -
UTM Easting (X) 441870
UTM Northing (Y) 498131
Interpretaion Method Geologic study 1:24k to 1:100k

			Depth (ft.)			Elevation (ft.)					
Geological Material	**Color**	**Hardness**	**From**	**To**	**Thickness**	**From**	**To**	**Stratigraphy**	**Primary Lithology**	**Secondary**	**Minor Lithology**
CLAY	YELLOW		0	22	22	957	935	clay-yellow	clay		
CLAY	GRAY		22	35	13	935	922	clay-gray	clay		
SAND & GRAVEL	GRAY		35	50	15	922	907	sand +larger-gray	sand	gravel	
CLAY	GRAY		50	82	32	907	875	clay-gray	clay		
CLAY W/SAND	GRAY		82	95	13	875	862	clay+sand-gray	clay	sand	
SAND & GRAVEL W/CLAY	BROWN		95	123	28	862	834	pebbly sand/silt/clay-	sand	gravel	clay
CLAY	BROWN		123	128	5	834	829	clay-brown	clay		
SAND & GRAVEL	BROWN		128	133	5	829	824	sand +larger-brown	sand	gravel	
SAND & CLAY	BROWN		133	138	5	824	819	clay+sand-brown	sand	clay	
SAND & GRAVEL	BROWN		138	148	10	819	809	sand +larger-brown	sand	gravel	
GRAVEL & CLAY	BROWN		148	152	4	809	805	pebbly sand/silt/clay-	gravel	clay	
GRAVEL	BROWN		152	165	13	805	792	gravel (+larger)-	gravel		
GRAVEL & CLAY	BROWN		165	170	5	792	787	pebbly sand/silt/clay-	gravel	clay	
GRAVEL	BROWN		170	184	14	787	773	gravel (+larger)-	gravel		

Minnesota Unique Well No.

668254

County Hennepin
Quad Mound
Quad ID 105B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING RECORD

Minnesota Statutes Chapter 1031

Entry Date 08/29/2002
Update
Received Date 10/15/2014

Well Name	Township	Range	Dir	Section	Subsection	Use	Status	Well Depth	Depth Completed	Date Well Completed	Lic/Reg. No.
GOLF CLUB AT	118	24	W	32	CAACDB	irrigation	A	180 ft.	180 ft.	05/02/2002	27194

Elevation 963 ft. **Elev. Method** LiDAR 1m DEM (MNDNR) **Aquifer** Quat. buried artes. **Depth to Bedrock** ft **Open Hole** - ft **Static Water Level** 47 ft

Field Located By County Environmental &/or
Unique No. Verified Address verification
Geological Interpretation Emily Bauer
Agency (Interpretation)

Locate Method GPS SA Off (averaged) (15 meters)
Input Source Minnesota Geological Survey
Input Date 10/06/2014

Universal Transverse Mercator (UTM) - NAD83 - Zone 15 -
UTM Easting (X) 441749
UTM Northing (Y) 498138
Interpretaion Method Geologic study 1:24k to 1:100k

			Depth (ft.)			Elevation (ft.)					
Geological Material	**Color**	**Hardness**	**From**	**To**	**Thickness**	**From**	**To**	**Stratigraphy**	**Primary Lithology**	**Secondary**	**Minor Lithology**
CLAY	YELLOW		0	26	26	963	937	clay-yellow	clay		
CLAY	GRAY		26	52	26	937	911	clay-gray	clay		
SAND	BROWN		52	71	19	911	892	sand-brown	sand		
CLAY W/ SAND	GRAY		71	126	55	892	837	clay+sand-gray	clay	sand	
CLAY W/ GRAVEL	GRAY		126	152	26	837	811	pebbly sand/silt/clay-	clay	gravel	
SAND & GRAVEL	BROWN		152	180	28	811	783	sand +larger-brown	sand	gravel	

Minnesota Unique Well Number

668257

County Hennepin
Quad Mound
Quad ID 105B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 05/23/2002
Update Date 03/14/2015
Received Date

Well Name	Township	Range	Dir	Section	Subsection
PIONEER CREEK	118	24	W	30	DDADCB

Elevation 972 ft. **Elev. Method** LiDAR 1m DEM (MNDNR)

Address

Well 823 COPELAND RD MAPLE PLAIN MN 55359

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
CLAY	0	17	YELLOW	
CLAY	17	39	GRAY	
CLAY W/GRAVEL	39	67	GRAY	
SAND & GRAVEL	67	93	GRY/YEL	
CLAY W/GRAVEL	93	151	GRAY	
SAND & GRAVEL	151	180	GRAY	

Remarks

WELL LOCATION INFO: SHOP WELL

Well Depth 180 ft. **Depth Completed** 180 ft. **Date Well Completed** 03/13/2002

Drill Method Non-specified Rotary **Drill Fluid** Water

Use commercial **Status** Active

Well Hydrofractured? Yes ☐ No ☒ **From** **To**

Casing Type Single casing **Joint** Unknown

Drive Shoe? Yes ☐ No ☒ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 165 ft.	lbs./ft.	7 in. To 180 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** plastic **Make** JAYCO/JET STREAM

Diameter	Slot/Gauze	Length	Set	
3 in.	15	5 ft.	165 ft.	170 ft.
4 in.	15	10 ft.	170 ft.	180 ft.

Static Water Level

53 ft. land surface Measure 02/08/2002

Pumping Level (below land surface)

ft. hrs. Pumping at 30 g.p.m.

Wellhead Completion

Pitless adapter manufacturer WHITEWATER Model SU4

☐ Casing Protection ☐ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
high solids bentonite	2.5 Sacks	0 ft.	38 ft.

Nearest Known Source of Contamination

65 feet Southwes Direction Septic tank/drain field Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 03/13/2002

Manufacturer's name AERMOTOR

Model Number T21-50 HP 1.5 Volt 230

Length of drop pipe 126 ft Capacity 20 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous

First Bedrock Aquifer Quat. buried

Last Strat sand +larger-gray Depth to Bedrock ft

Located by Minnesota Geological Survey

Locate Method GPS SA Off (averaged) (15 meters)

System UTM - NAD83, Zone 15, Meters X 441013 Y 4982607

Unique Number Verification Address verification Input Date 07/28/2014

Angled Drill Hole

Well Contractor

Stevens Well Co. 27194 STEVENS, J.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

799044

County Hennepin
Quad Mound
Quad ID 105B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/07/2015
Update Date 04/15/2015
Received Date 01/29/2015

Well Name	Township	Range	Dir	Section	Subsection
RITCHIE, NANCY	118	24	W	30	DDDDDB

Elevation 982 ft. **Elev. Method** LiDAR 1m DEM (MNDNR)

Address

Well 805 COPELAND RD INDEPENDENCE MN 55359

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
TOP SOIL	0	3	BLACK	SOFT
CLAY	3	23	YELLOW	MEDIUM
SANDY CLAY	23	67	GRAY	MEDIUM
SAND	67	94	BROWN	SOFT
CLAY	94	115	TAN	MEDIUM
SANDY CLAY	115	177	GRAY	SOFT
SAND	177	195	TAN	MEDIUM

Remarks

Well Depth 195 ft. **Depth Completed** 195 ft. **Date Well Completed** 05/16/2014

Drill Method Non-specified Rotary **Drill Fluid** Water

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☒ **From** **To**

Casing Type Single casing **Joint**
Drive Shoe? Yes ☐ No ☒ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 186 ft.	lbs./ft.	8 in. To 50 ft.
		6.2 in. To 195 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set	
2 in.	10	9 ft.	186 ft.	195 ft.

Static Water Level

69 ft. land surface Measure 05/16/2014

Pumping Level (below land surface)

180 ft. 3 hrs. Pumping at 20 g.p.m.

Wellhead Completion

Pitless adapter manufacturer WHITEWATER Model
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
cuttings		50 ft.	186 ft.
bentonite	3 Sacks	ft.	50 ft.

Nearest Known Source of Contamination

90 feet West Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 05/27/2014
Manufacturer's name SCHAEFER
Model Number HP 0.75 Volt 230
Length of drop pipe 126 ft Capacity g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous

First Bedrock Aquifer Quat. buried
Last Strat sand-brown Depth to Bedrock ft
Located by Minnesota Geological Survey
Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or
System UTM - NAD83, Zone 15, Meters X 441051 Y 4982392
Unique Number Verification Address verification Input Date 04/14/2015

Angled Drill Hole

Well Contractor

Don Stodola Well Drilling 1691 STODOLA, R.
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well No.

816829

County Hennepin
Quad Mound
Quad ID 105B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING RECORD

Minnesota Statutes Chapter 1031

Entry Date 01/27/2016
Update 01/13/2016
Received Date 01/27/2016

Well Name	Township	Range	Dir	Section	Subsection	Use	Status	Well Depth	Depth Completed	Date Well Completed	Lic/Reg. No.
WINDSONG	118	24	W	32	ADBCBA	domestic	A	200 ft.	199 ft.	11/10/2015	1767

Elevation 995 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet) **Aquifer** Quat. buried artes. **Depth to Bedrock** ft **Open Hole** - ft **Static Water Level** 95 ft

Field Located By Minnesota Geological Survey
Unique No. Verified Address verification
Geological Interpretation Emily Bauer
Agency (Interpretation)

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters
Input Source Minnesota Geological Survey
Input Date 01/27/2016

Universal Transverse Mercator (UTM) - NAD83 - Zone 15 -
UTM Easting (X) 442319
UTM Northing (Y) 498185
Interpretaion Method Geologic study 1:24k to 1:100k

Geological Material	Color	Hardness	Depth (ft.) From	Depth (ft.) To	Thickness	Elevation (ft.) From	Elevation (ft.) To	Stratigraphy	Primary Lithology	Secondary	Minor Lithology
CLAY		SOFT	0	40	40	995	955	clay	clay		
SANDY CLAY		SOFT	40	162	122	955	833	clay+sand	clay	sand	
SAND & GRAVEL		SOFT	162	200	38	833	795	sand +larger	sand	gravel	

Minnesota Well Index - Stratigraphy Report **816829** Printed on 02/08/2022

APPENDIX E – DNR NATURAL HERITAGE INFORMATION SYSTEM LETTER

Letter has not been received from the MnDNR at time of writing.

NO STAPLES PLEASE

2012	For Agency Use Only:	
	Received _____ Due _____ Inv _____	#Sec _____ Contact Rqsted? _____
	Search Radius _____mi. L / I / D EM Map'd _____	#EOs _____ Survey Rqsted? _____
	NoR / NoF / NoE / Std / Sub Let _____ Log out _____	#Com _____
		Related ERDB# _____

NATURAL HERITAGE INFORMATION SYSTEM (NHIS) DATA REQUEST FORM

Please read the instructions on page 3 before filling out the form. Thank you!

WHO IS REQUESTING THE INFORMATION?

☐ Mr.
☐ Ms.

Name and Title

Agency/Company

Mailing Address

(Street) (City) (State) (Zip Code)

Phone e-mail

Responses will be sent via email. If you prefer US Mail check here: ☐

THIS INFORMATION IS BEING REQUESTED FOR A:

☐ Federal EA ☐ State EAW ☐ PUC Site or Route Application ☐ Watershed Plan ☐ BER
☐ Federal EIS ☐ State EIS ☐ Local Government Permit ☐ Research Project
☐ NEPA Checklist ☐ Other (describe) _____

☐ Check here if this project is funded through any of the following grant programs: Lessard-Sams Outdoor Heritage Council (L-SOHC), Conservation Partners Legacy (CPL), or Legislative-Citizen Commission on Minnesota Resources (LCCMR).

INFORMATION WE NEED FROM YOU:

1) **Enclose a map** of the project boundary/area of interest (topographic maps or aerial photos are preferred).
2) Please **provide a GIS shapefile*** (NAD 83, UTM Zone 15N) of the project boundary/area of interest.
3) List the following locational information* (attach additional sheets if necessary):

For Agency Use: TRS Confirmed ☐

For Agency Use: Region / MBS Status	County	Township #	Range #	Section(s) (please list **all** sections)

4) Please provide the following information (attach additional sheets if necessary):

Project Name:

Project Proposer:

Description of Project (including types of disturbance anticipated from the project):

Describe the existing land use of the project site. What types of land cover / habitat will be impacted by the proposed project?

List any waterbodies (e.g., rivers, intermittent streams, lakes, wetlands) that may be affected by the proposed project, and discuss how they may be impacted (e.g., dewatering, discharge, riverbed disturbance).

Does the project have the potential to affect any groundwater resources (e.g., groundwater appropriation, change in recharge, or contamination)?

To your knowledge, has the project undergone a previous Natural Heritage review? If so, please list the correspondence #: ERDB # _____. How does this request differ from the previous request (e.g., change in scope, change in boundary, project being revived, project expansion, different phase)?

To your knowledge, have any native plant community or rare species surveys been conducted within the site? If so, please list:

List any DNR Permits or Licenses that you will be applying for or have already applied for as part of this project:

INFORMATION WE PROVIDE TO YOU:

1) The response will include a Natural Heritage letter. If applicable, the letter will discuss potential effects to rare features.

☐ Check here if you are interested in a list of rare features in the vicinity of the area of interest but you do **not** need a review of potential effects to rare features. Please list the reason a review is not needed:

_____

2) Depending on the results of the query or review, the response may include an Index Report of known aggregation sites and known occurrences of federally and state-listed plants and animals* within an approximate one-mile radius of the project boundary/area of interest. The Index Report and Natural Heritage letter can be included in any public environmental review document.

3) A Detailed Report that contains more information on each occurrence may also be requested. Please note that the Detailed Report may contain specific location information that is protected under *Minnesota Statutes*, section 84.0872, subd. 2, and, as such, the Detailed Report may not be included in any public document (e.g., an EAW).

☐ Check here if you would like to request a Detailed Report. Please note that if the results of the review are 'No Effects' or a standard comment, a Detailed Report may not be available.

FEES / TURNAROUND TIME

There is a fee* for this service. Requests generally take **3-4 weeks** from date of receipt to process, and are processed in the order received.

I have read the entire form and instructions, and the information supplied above is complete and accurate. I understand that material supplied to me from the Natural Heritage Information System is copyrighted and that I am not permitted to reproduce or publish any of this copyrighted material without prior written permission from the DNR. Further, if permission to publish is given, I understand that I must credit the Minnesota Division of Ecological and Water Resources, Minnesota Department of Natural Resources, as the source of the material.

Signature (**required**)	Note: Digital signatures representing the name of a person shall be sufficient to show that such person has signed this document.

Mail or email completed form to:
Lisa Joyal, Endangered Species Review Coordinator
Division of Ecological and Water Resources
Minnesota Department of Natural Resources
500 Lafayette Road, Box 25
St. Paul, Minnesota 55155
Review.NHIS@state.mn.us

Online version of the form

Revised March 2, 2012

* Please see the instructions on page 3.

Instructions for the
Natural Heritage Information System (NHIS) Data Request Form

The Division of Ecological and Water Resources maintains the Natural Heritage Information System (NHIS), a collection of databases that provides information on Minnesota's rare plants and animals, native plant communities, and other rare features. The NHIS is continually updated as new information becomes available, and the Minnesota County Biological Survey (MBS) is a major source of this information.

- Use this form to request information on rare features within an approximate one-mile radius of an area of interest. You may reproduce this form for your own use or to distribute. An **electronic copy** of the form is available at the DNR's web site.

- If you are interested in obtaining the Rare Features Database electronically as a GIS shapefile, do not fill out this form. Please see this Natural Heritage Data document for more information on this option.

WHO IS REQUESTING THE INFORMATION?

- The person whose name is entered on the form under the "Who is Requesting the Information" section must sign the form as an acknowledgment of the State of Minnesota's copyright on all generated reports. All correspondence and invoices will be sent to this person. Please do not ask us to send this information to a different party.
- Please include a complete mailing address. Responses will be sent via email unless you specify differently.

INFORMATION WE NEED FROM YOU:

- Include a legible map (topographic maps or aerial photographs are preferred) clearly showing:

  1) location and boundaries of the project,
  2) associated infrastructure, and
  3) any waterbodies that may be affected by the proposed project.

- If the project boundary is large **or** complex, please provide a **GIS shapefile** (NAD 83, UTM Zone 15) of the project boundary/area of interest. Do not include any buffers. An additional "digitizing fee" may be charged for projects that require a substantial amount of time to digitize.
- Provide a complete list of sections that the proposed project or area of interest falls within. Do not include any buffer area. Please double-check this information. Incorrect sections can delay the processing of your request, and may result in an invalid review.
- Please provide a detailed **project description**, attaching separate pages to the form if necessary. Identify the type of development (e.g., housing, commercial, utility, ethanol facility, wind farm) being proposed, the size and # of units (if applicable), construction methods, and **any associated infrastructure** such as access roads, utility connections, and water supply and/or discharge pipelines.
- We cannot begin processing data requests until we receive all parts of the request, including a map and a completed, signed form.

INFORMATION WE PROVIDE TO YOU:

- The Natural Heritage review and database reports are valid for environmental review purposes for one year, and they are only valid for the project location and description provided on the form. Please contact Lisa Joyal at lisa.joyal@state.mn.us if project details change or if a data update is needed.
- Please note that the Natural Heritage review and database reports do not address/contain locations of the gray wolf (*Canis lupus*), state-listed as special concern, or Canada lynx (*Lynx canadensis*), federally-listed as threatened, as these species are not currently tracked in the Natural Heritage Information System. See page 4.

FEES / TURNAROUND TIME:

- There is a fee for this service. All fees are subject to change. The current fee schedule is available online. The minimum charge is $90.00, and increases based on the time it takes us to process the request (dependent upon project size and the results of the query). Please do not include payment with your request; an invoice will be sent to you.
- There is generally a **3-4 week turn-around time** to process requests.

PLEASE SEE NEXT PAGE FOR ADDITIONAL SOURCES OF INFORMATION

ADDITIONAL SOURCES OF INFORMATION:

- The DNR Rare Species Guide is the state's authoritative reference for Minnesota's endangered, threatened, and special concern species. It is a dynamic, interactive source that can be queried by county, ECS subsection, watershed, or habitat.

- Information on the gray wolf (*Canis lupus*):
  DNR website gray wolf Species Profile
  USFWS website Monitoring Report

- Information on the Canada lynx (*Lynx Canadensis*):
  DNR website Canada Lynx Species Profile
  USFWS website Canada Lynx profile

- Minnesota's Comprehensive Wildlife Conservation Strategy is an action plan focused on managing Minnesota's native animals whose populations are rare, declining, or vulnerable to decline. It identifies Species in Greatest Conservation Need and the Key Habitats that support them.

- The Minnesota Geospatial Commons allows users to download GIS shapefiles of MBS Sites of Biodiversity Significance, MBS Native Plant Communities, MBS Railroad Rights-of-Way Prairies, and Scientific and Natural Area Boundaries.

- Information on MBS Site Biodiversity Significance Ranks

- Information on MBS Native Plant Communities

- Questions? Please contact Lisa Joyal at 651-259-5109 or lisa.joyal@state.mn.us.

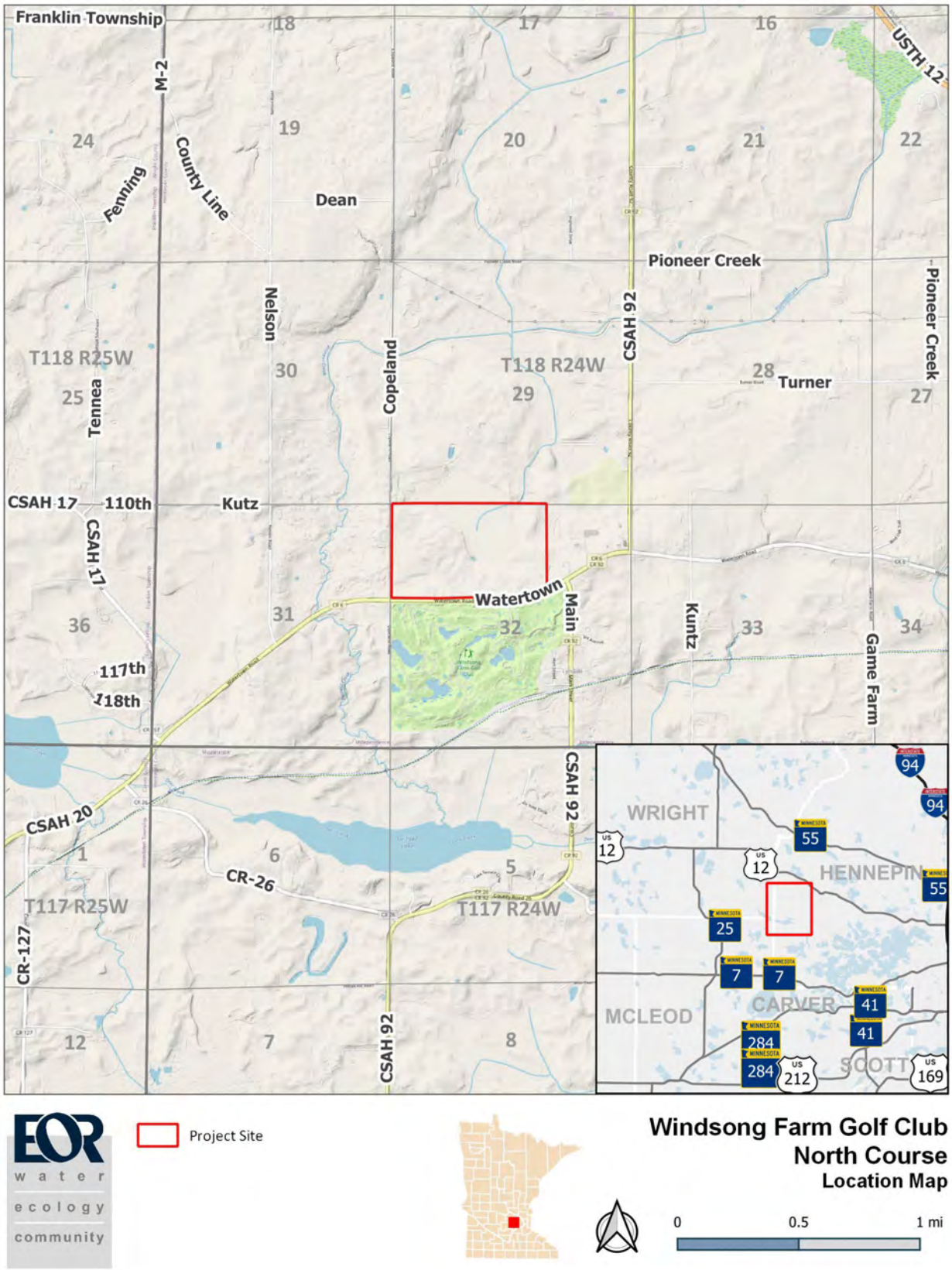


Figure 1. Location Map

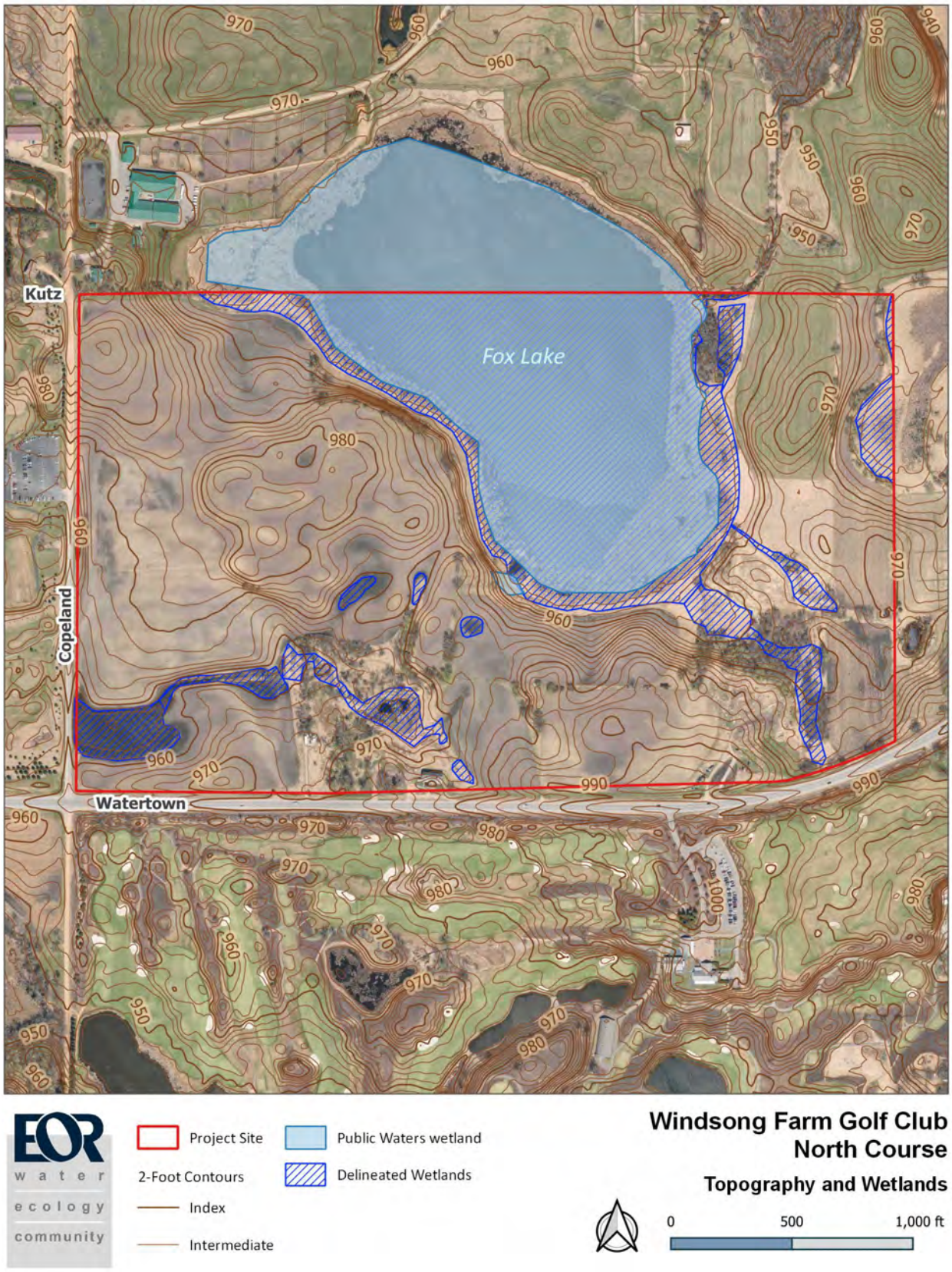


Figure 2. Site map with topography and wetlands.

APPENDIX F – USFWS IPAC RESOURCES LIST

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Hennepin County, Minnesota

Local office

Minnesota-Wisconsin Ecological Services Field Office

(952) 252-0092
(952) 646-2873

MAILING ADDRESS
4101 American Blvd E
Bloomington, MN 55425-1665

PHYSICAL ADDRESS

4101 American Blvd E
-}
Bloomington, MN 55425-1665

http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Northern Long-eared Bat Myotis septentrionalis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

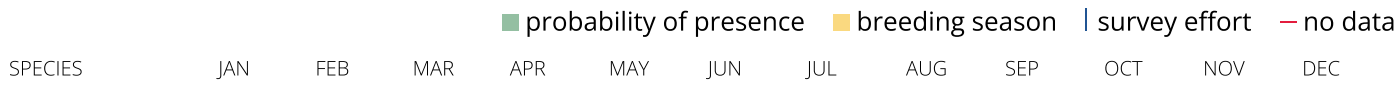
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

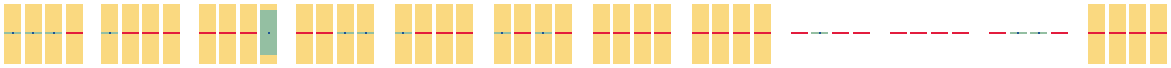
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a

starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

- PEM1A
- PEM1F
- PEM1C

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1A

FRESHWATER POND

PUBF

LAKE

L2ABH

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX G – PHASE 1A ARCHAEOLOGICAL SURVEY & SHPO REQUEST

A SHPO letter had not been received at time of writing.

memo

Project Name |	Windsong Farm Golf Club North Course	**Date** |	02.02.22
To / Contact info |	Jon Dailing, Windsong Farm Golf Club, 18 Golf Walk, Maple Plain, MN 55359		
Cc / Contact info |	Chris Long and Derek Lasch, Emmons & Olivier Resources, Inc.		
From / Contact info |	Will Martin, CEP, RPA, Emmons & Olivier Resources, Inc.		
Regarding |	Phase IA archaeological and desktop assessment – Independence, Hennepin County, Minnesota		

BACKGROUND

I have completed a Phase IA cultural and archaeological resources desktop assessment for the abovementioned project. This review is designed to support the Environmental Assessment Worksheet being developed for the project at the direction of the City of Independence and pursuant to Minnesota Administrative Rules 4410.5000.

The proposed golf course expansion is located north of and adjacent to the Windsong Farm Golf Club in Independence, Minnesota (Figure 1). The project area is the NW¼ NW¼ and E½ NE¼ of Section 32, Township 118 North, Range 24 West. The project proponent purposes to construct an 18-link golf course on a 127.2-acre tract of land (Figure 2). The golf course expansion will occur on six privately-held parcels comprised mostly of agricultural land in corn- soybean rotation. These six parcels comprise Study Area. In addition to agricultural land, the parcels also contain Maple-Oak-Ash forest uplands, prairie uplands, wetland sloughs, and prairie-pothole depressional wetlands. The Study Area is at the northeast corner of Watertown and Copeland roads.

The Study Area is composed of a series of depressional wetland sloughs amid moderately sloped rolling hills. The NRCS Engineering Toolbox analysis indicates that some of the depressional sloughs, including about two thirds of the Study Area, drain towards Fox Lake, while the remainder of the Study Area drains off site to the west. Both drainages converge in Pioneer Creek which is located west and north of the Study Area. The steepest contours are along the southern and eastern shores of the lake.

The upland soils within the project area are fairly tight soils; comprised of loams to clay loams while wetland soils are dominated by peaty muck. The parent soil within the wetlands is properly classified as muck (Table 1 – Figure 3).

Table 1. Soils and Hydric Rating within project vicinity

Soil Symbol	Soil Name	Context	Parent Material	Drainage Class
L16A	Muskego, Blue Earth, and Houghton Soils, Ponded	Marsh on moraines	Organic material over coprogenous earth	Very Poorly Drained
L22C2 **L22D2**	Lester loam, 6 to 10 percent slopes	Ground moraines and slopes	Fine-loamy till	Well Drained
L23A	Cordova loam	Drainageways on moraines	Till	Poorly Drained
L24A	Glencoe clay loam, depressional,	Depressions	Local alluvium over till	Very Poorly Drained

Soil Symbol	Soil Name	Context	Parent Material	Drainage Class
L25A	Le Sueur loam, 1 to 3 percent slopes	Ground moraines and slopes	Fine-loamy till	Somewhat Poorly Drained
L36A	Hamel, overwash-Hamel complex,	Ground moraines	Colluvium over till	Somewhat Poorly Drained
L37B	Angus loam, morainic, 2 to 5 percent slopes	Ground moraines and slopes	Fine-loamy till	Well Drained
L49A	Klossner soils, depressional, 0 to 1 percent slopes	Depressions on moraines	Organic material over till	Very Poorly Drained

STUDY OBJECTIVES

The objectives of this study are to assist the project proponent with the long-term planning of the project and to provide information needed to complete the environmental review and permitting of the project. Consequently, the goals of this study were to:

- ✓ Determine if any property currently listed on the National Register is located within the Study Area;
- ✓ Determine if a professional archaeologist or historian has inventoried any portion of the Study Area;
- ✓ Review pertinent historic documents to determine if any unrecorded historic-period resource could have been within the Study Area; and
- ✓ Provide a basic, preliminary review of the Study Area's geomorphology to ascertain the potential for buried archaeological deposits.

The goals of this study were accomplished using a variety of methods and approaches, specifically:

- An on-line literature search and review of records found at the Office of the State Archaeologist (OSA) Portal (https://osa.gisdata.mn.gov/OSAportal)
- An on-line literature search and review of records and county histories at the National Register and the Minnesota State Register (https://npgallery.nps.gov/NRHP/BasicSearch/)
- A review of Minnesota State Historic Preservation data collected for the Study Area;
- A review of historical aerial photographs of the proposed Study Area; and
- Review supplementary GIS data to determine the potential for archaeological and cultural resources.

RESULTS

Based on a review of historic orthographic photographs and other historic documents reviewed for this study, the immediate environ has been used for agricultural production since at least 1930s.

National Register Properties

Authorized by the NHPA and administered by the National Park Service in collaboration with the Minnesota State Historic Preservation Office (MnSHPO), the National Register is the official list of the country's historic places worthy of preservation and recognition. In Hennepin County, there are over

185 properties currently listed on the National Register. No National Register property occurs within to the proposed project area. The nearest National Register properties are Eagle Newspaper Office, the Delano Village Hall, and the Simon Weldele House in Delano in neighboring Wright County. These three historic properties are approximately 3.9 miles north, northwest of the Study Area.

Previous Cultural and Archaeological Resources Inventories

According to the Office of the State Archaeologist (OSA), no previous cultural resources inventories or investigations have been performed within or proximal to the Study Area, and no archaeological investigations appear to have been performed within a 1-mile area surrounding the Study Area.

Archaeological Resources

Previously Recorded Archaeological Sites

Archaeological sites are locations containing material evidence of past human use and can include prehistoric archaeological sites dating from 14,000 to 15,000 years ago up to modern industrial sites dating into the 1950s or 1960s. No archaeologic sites have been recorded within or proximal to the Study Area. The nearest archaeological resource is Site 21HE0171 – the Burkett Site – located approximately 1.5 miles north of the Study Area. This archaeological site is reported as an undisturbed, sparse cultural material scatter with potential mounds positioned on an upland landform on the edge of a basing. Other previously reported archaeological sites within a 2-mile radius include Sites 21CR0066, 21CR0067 (Lukes Mounds), 21HE0172, and 21HE0176.

Archaeological Site Potential

According to the Minnesota Department of Transportation (MNDOT) Model Phase 4 Survey Implementation Model (MM4), the Study Area the uplands above Fox Lake have a moderate to high potential for archaeological sites, but ground immediately around Fox Lake has a low potential. The southern one-third of the Study Area and the slopes directly above the lave have an unknown potential for prehistoric archaeological sites (Figure 4).

The 1855 General Land Office original survey plat for the township showed no potential historic or archaeological resources findings within proximity to the Study Area, including structures. It also indicated that the entire project area was within a large marshy wetland community. City and County histories consulted revealed no historically significant people, events, or structures associated with the Study Area.

Except for Fox Lake and a farmstead noted on the southern edge of the property immediately north of Watertown Road, the Study Area was in continuous row crop-production from at least the late 1930s up to the present day.

Geoarchaeological Context

The Study Area is within an upland landscape dominated by row-crop production. Given its upland landscape position associated with loamy glacial till and mucky soils and history of intense, repeated agricultural use, there is limited potential for intact, subsurface archaeological deposits to be present within the proposed golf course should archaeological resources be identified during an intensive inventory of the Study Area. In the unlikely event that archaeological resources are identified, it is

likely artifacts and other associated signatures would be limited to a deflating, surface or near-surface context within historically cleared and plowed soils.

Historical Resources

The MnSHPO did not identify any previously recorded historic structures, buildings, trails, roads, or objects within or proximal to the Study Area.

A farmstead is noted immediately north of Watertown Road on plats, maps, and historical aerial imagery consulted for the project. The associated house was demolished sometime around 2012 or 2013. The dilapidated barn is still extant, though in poor condition. None of the other outbuildings noted on the historical buildings are standing. A cell tower was placed on the western edge of the property around 2003 or 2004.

Cemeteries

Chapter 307.28 of the Minnesota Statues protects unmarked human remains, graves, and cemeteries. Overlays for the Swedish / Swedish Evangelical Lutheran cemetery(ies) and the Schoffer Grave overlap the Study Area. The Oakland Cemetery is located approximately 1,000 feet southwest of the Study Area.

CONCLUSIONS

A Phase IA archaeological and cultural resources assessment was conducted for the proposed Windsong Golf Course Expansion in Independence, Minnesota. This study showed:

- No properties currently listed on the National Register are located within or proximal to the Study Area;
- The Study Area has not been previously inventoried for archaeological resources.
- No previously recorded archaeological sites have been identified within or proximal to the project area.
- The Study Area is assessed as having a moderate to high potential for precontact archaeological sites on upland landforms overlooking Fox Lake; a low potential on the wetland fringes of Fox Lake; and an undetermined probability on the southern one-third of the Study Area and the moraine slopes directly above the lake;
- Mapped soils across of the property are loamy glacial tills and mucks, with limited potential for intact, subsurface archaeological deposits, layers, or signatures;
- The only extent structure present within the project area or evident on historical aerial imagery examined for this study is a wood-framed barn located immediately north of Watertown Road. All of the other associated buildings and structures on the farmstead have been removed over the past 10 to 12 years. This barn has not been recorded with the MnSHPO. It is a common-style barn that is in poor condition. It is not likely a significant historical resource.

RECOMMENDATIONS

Based on the results of this initial assessment, no additional cultural or archaeological work or stipulations are recommended at this time. The property is in an upland setting covered with shallow

till soils and has been in continuous row-crop production for 100 years or disturbed by residential construction. The one extant structure is a common architectural type that is in poor condition.

This review should not be construed as clearance under Section 106 of the *National Historic Preservation Act* in the event that all or parts of the project area are federalized. The federal agency responsible for the project funding or permitting – in consultation with MnSHPO – would make this determination based on the information developed in this report.

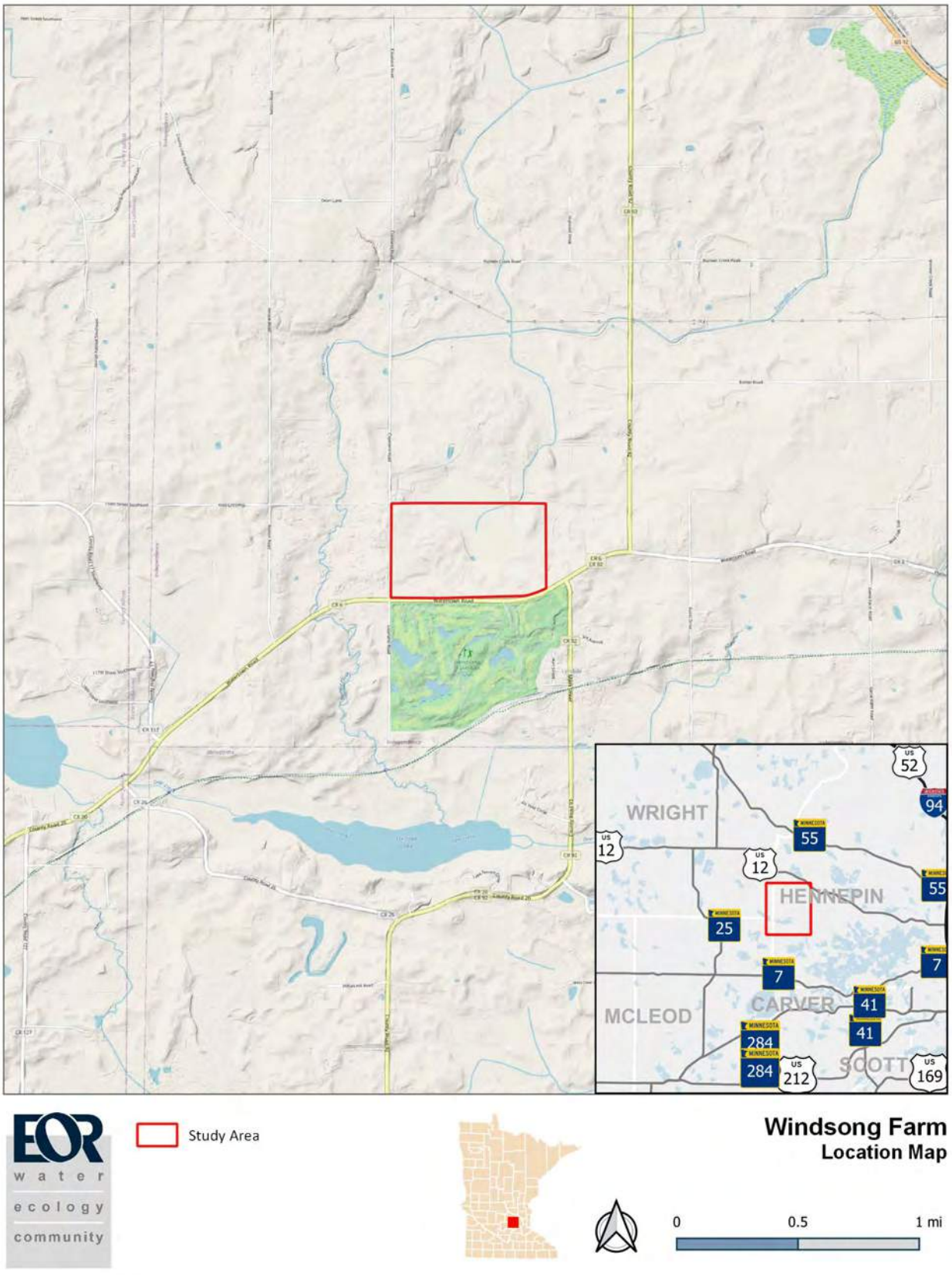


Figure 1 – Project Location.

Figure 2 – Project Overview.

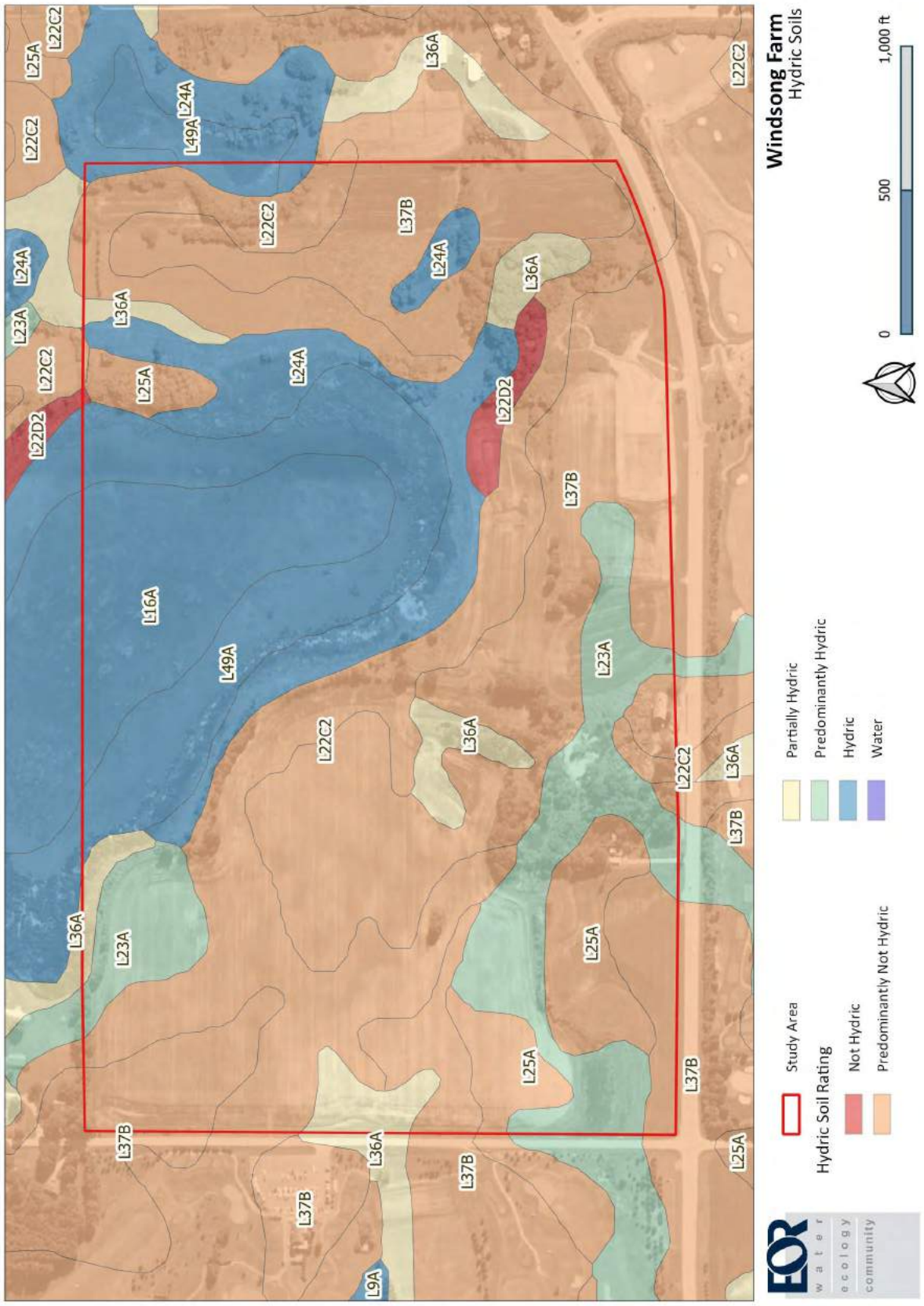


Figure 3 – Project Soils.

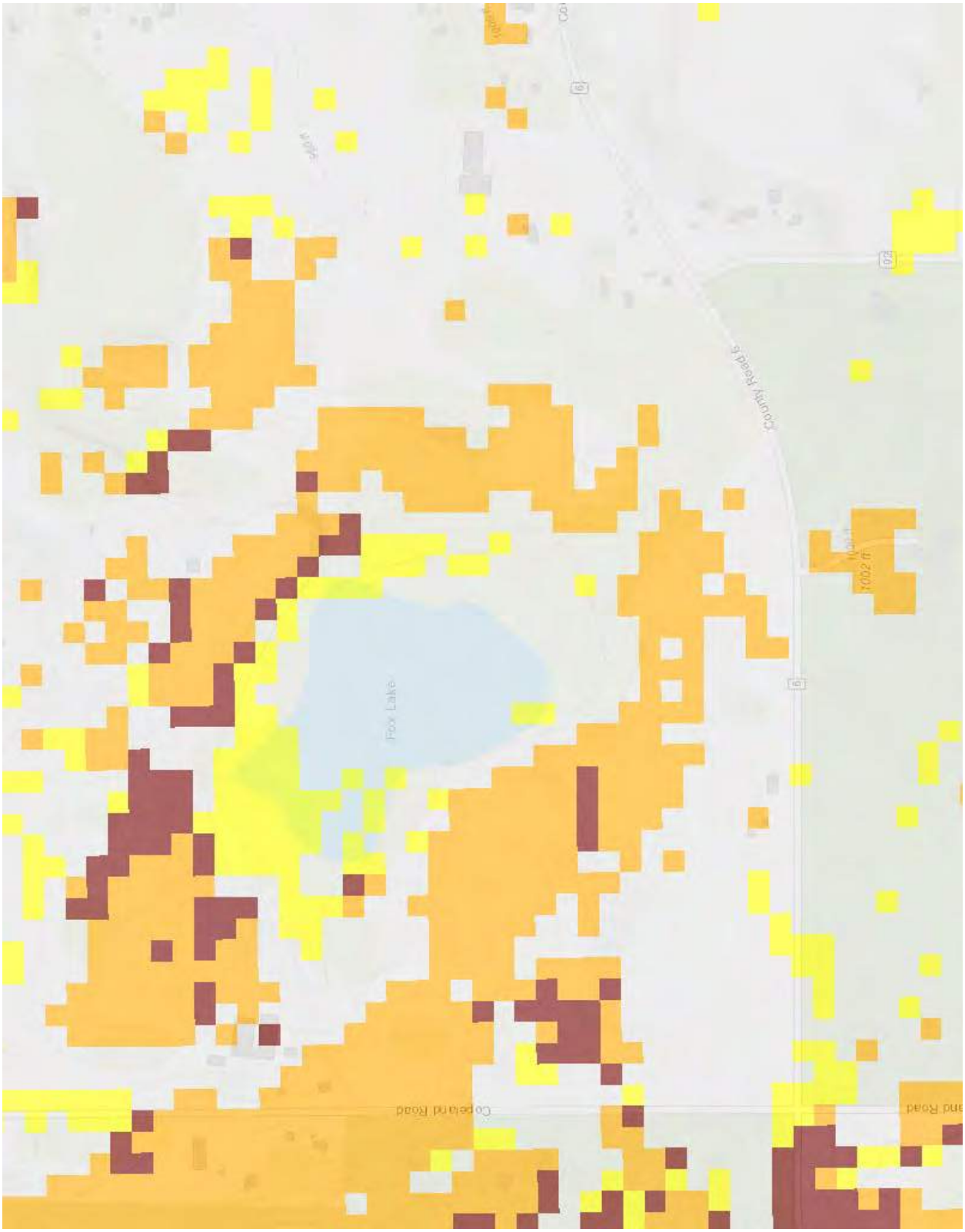


Figure 4 – Archaeological Site Potential (Yellow = Low; Tan = Moderate; Brown = High; Gray = Undetermined)

DEPARTMENT OF ADMINISTRATION
STATE HISTORIC PRESERVATION OFFICE

March 1, 2022

Will Martin
Senior Environmental Planner
Emmons & Oliver Resources, Inc.
1002 Quartz Avenue
Boone, IA 50036

RE: Windsong Farm Golf Club North Course
Proposed golf course expansion
T118 R24 S32, Independence, Hennepin County
SHPO Number: 2022-0810

Dear Will Martin:

Thank you for consulting with our office during the preparation of an Environmental Assessment Worksheet for the above-referenced project. Although the Phase Ia report provides useful information, we disagree with the conclusion. Due to the nature and location of the proposed project, we recommend that a Phase I archaeological survey be completed. The survey must meet the requirements of the Secretary of the Interior's Standards for Identification and Evaluation and should include an evaluation of National Register eligibility for any properties that are identified. For a list of consultants who have expressed an interest in undertaking such surveys, please visit the website **preservationdirectory.mnhs.org**, and select "Archaeologists" in the "Search by Specialties" box.

We will reconsider the need for survey if the project area can be documented as previously surveyed or disturbed. Any previous survey work must meet contemporary standards. **Note:** plowed areas and right-of-way are not automatically considered disturbed. Archaeological sites can remain intact beneath the plow zone and in undisturbed portions of the right-of-way.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36 CFR § 800. If this project is considered for federal financial assistance, or requires a federal permit or license, then review and consultation with our office will need to be initiated by the lead federal agency. Be advised that comments and recommendations provided by our office for this state-level review may differ from findings and determinations made by the federal agency as part of review and consultation under Section 106.

If you have any questions regarding our review of this project, please contact Kelly Gragg-Johnson, Environmental Review Program Specialist, at kelly.graggjohnson@state.mn.us.

Sincerely,

Sarah J. Beimers
Environmental Review Program Manager

APPENDIX H – TRAFFIC MEMO

MEMORANDUM

To: John Dailing
Fox Lake LLC

From: Jack Olsson, PE
Kimley-Horn and Associates, Inc.

Date: February 24, 2022

Subject: Traffic Memorandum – Windsong Farm EAW
Independence, MN

INTRODUCTION

Kimley-Horn was hired by Fox Lake LLC to provide engineering services to assist with the completion of an Environmental Assessment Worksheet (EAW) for a proposed 18-hole golf course expansion in Independence, Minnesota in Hennepin County. In particular, Kimley-Horn was requested to provide assistance with responding to the Transportation section of the EAW (Section 18).

The golf course expansion is planned to occur on the parcel of land north of Watertown Road (County State Aid Highway 6) roughly between Main Street (County State Aid Highway 92) and Copeland Road. Watertown Road is a two-lane undivided road that had an annual average daily traffic volume of 6,900 vehicles per day in 2018[1]. The land use of the parcel today is agricultural, with a portion of the land being used as a parking area which connects to the existing Windsong Farm Golf Club through a paved trail that goes under Watertown Road.

This memorandum documents the site access, on-site parking, availability of alternative transportation modes in the area, and the anticipated trip generation, distribution, and assignment of the proposed golf course. Additionally, the memorandum will summarize the impact of the project on traffic congestion in the area and any improvements that would be implemented to mitigate these impacts, if applicable.

BACKGROUND INFORMATION

SITE ACCESS

There are approximately five existing driveways to the parcel along Watertown Road. One of these driveways provides access to the existing grass/gravel parking lot on the site, three of the driveways provide access to a barn, and one of the driveways provides access to an existing cell tower. There are no driveways along Copeland Road. The proposed golf course expansion would maintain the driveways to the cell tower and the parking lot as well as one of the driveways to the barn that would become a maintenance building for the golf course. All other road accesses will be eliminated. The proposed site plan showing these accesses is provided as an attachment to this memorandum.

[1] According to the Minnesota Department of Transportation's Traffic Mapping Application.

PARKING

The existing grass/gravel parking lot on the site has a maximum capacity of 92 parking spaces. This parking lot is currently being utilized to provide overflow parking for the existing golf course south of Watertown Road, but the lot has never been at full capacity.

With the development of the site, the existing parking lot is proposed to be relocated approximately 500 feet to the east. This lot would maintain approximately the same number of parking spaces as the current parking lot. In addition to this parking lot, a narrow parking strip would be added to the west of the parking lot driveway that would provide approximately 10-15 additional parking spaces. This new parking area would be accessed from the same driveway on Watertown Road.

ALTERNATIVE TRANSPORATION MODES

There are currently no pedestrian or bicycle facilities along the parcel on Watertown Road or Copeland Road due to the location's rural setting. Additionally, there is no transit service that is provided to this area of Hennepin County. Because of this, it is assumed that all trips to the site would be vehicle trips.

SITE TRAFFIC

TRIP GENERATION

The trip generation for the proposed golf course was calculated based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* using land use code 430 (Golf Course).

Table 1 provides the trip generation for the proposed golf course. It is anticipated to generate 32 vehicle trips in the AM peak hour, 52 vehicle trips in the PM peak hour, and 547 daily trips. The number of daily trips that would be generated by the golf course on Watertown Road would be less than a 10% increase of daily traffic volumes experienced on the roadway. Additionally, the number of trips in the peak hour accessing the parking lot would be less than one vehicle entering or leaving the site per minute during either peak hour.

Table 1 – Trip Generation

Land Use Description	ITE Code	Intensity / Units	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Golf Course	430	18 Holes	547	25	7	32	27	25	52

These trip generation numbers correspond to the site traffic generated during the peak hour of the surrounding roadway network (i.e. Watertown Road) since this is when the largest impact on the network would occur. The maximum traffic generated by the site in one hour may occur outside of this timeframe, but even then, the total number of trips generated would not exceed 66 total trips (31 entering and 35 exiting).

DISTRIBUTION AND ASSIGNMENT

The distribution of site traffic onto the surrounding roadway network and intersections was based on current traffic patterns, surrounding demographics, and a general assessment of the major regional roadways surrounding the study area. The following trip distribution was assumed:

- 70% from/to the east on Watertown Road

- 10% from/to the south on Main Street
- 10% from/to the west on Watertown Road
- 10% from/to the north on County State Aid Highway 92

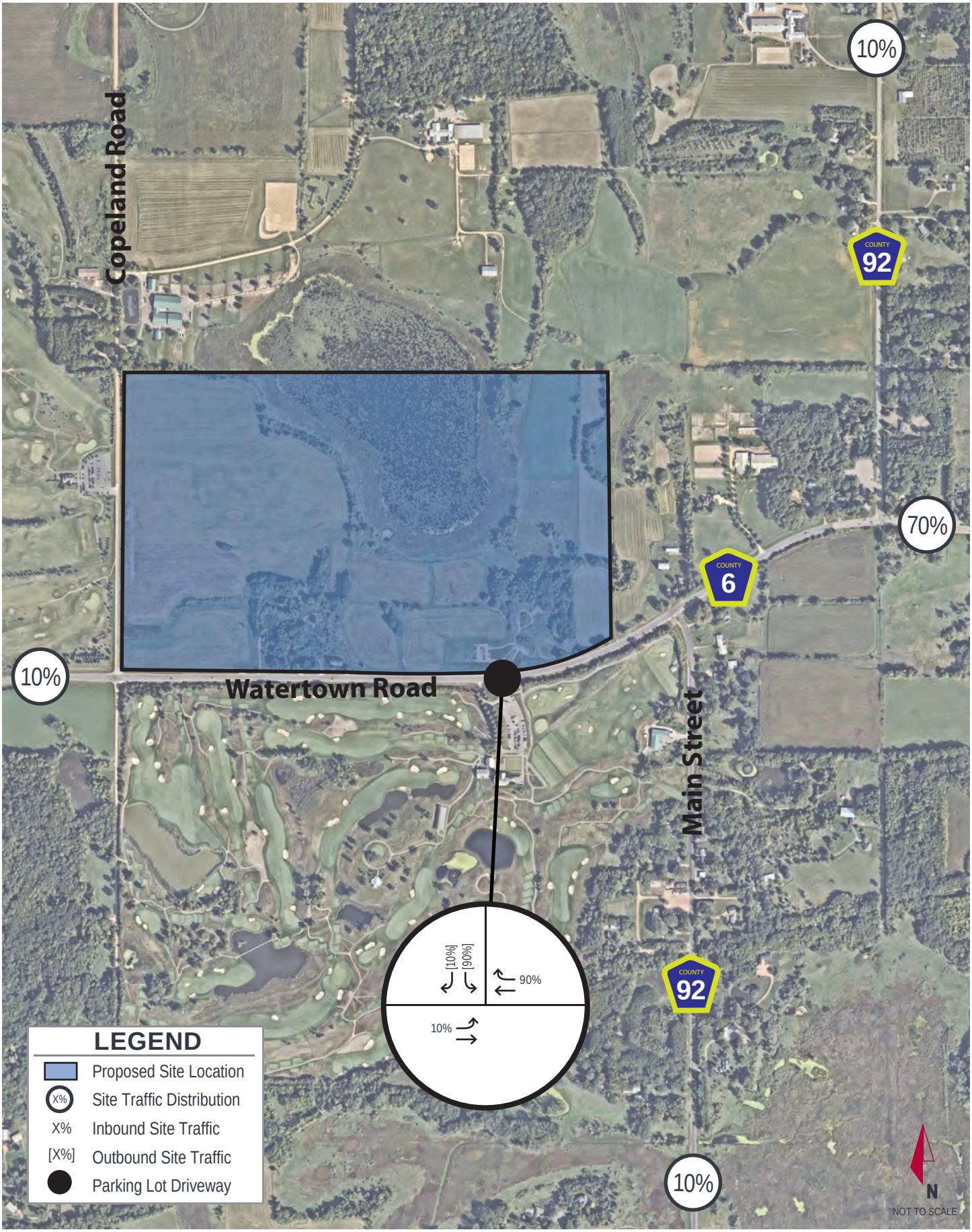
The vehicle site trip distribution at the parking lot driveway is shown in **Exhibit 1** and the vehicle trip assignment is provided in **Exhibit 2**. Based on the anticipated turning movements shown in **Exhibit 2**, it is not anticipated that there will be a significant impact to traffic operations on Watertown Road at the parking lot driveway. Additionally, because the traffic volumes turning in at the parking lot driveway are low (i.e. less than 25 vehicles per hour from either direction during both peak hours), right- and left-turn lane treatments into the parking lot are not warranted.

CONCLUSION

Kimley-Horn was hired by Fox Lake LLC to provide engineering services to assist with the completion of an Environmental Assessment Worksheet (EAW) for a proposed 18-hole golf course expansion in Independence, Minnesota in Hennepin County. The proposed site is currently undeveloped except for an existing parking lot with 92 spaces that would be maintained but relocated on the site as part of the project. In addition, approximately 10-15 new parking spaces would be added on the site. There are approximately five existing driveways to the parcel from Watertown Road, and the redevelopment would maintain only three of these accesses.

Due to the lack of pedestrian and bicycle facilities along the parcel and the lack of transit service in the area, all trips accessing the site are anticipated to be vehicle trips. The proposed golf course is anticipated to generate 547 daily trips, 32 AM peak hour trips, and 52 PM peak hour. The site generated daily trips would represent an increase in traffic volumes of less than 10% on Watertown Road. It is not anticipated that there will be a significant impact to traffic operations on Watertown Road with the addition of the site traffic, and no mitigations are expected to be needed due to the additional traffic.

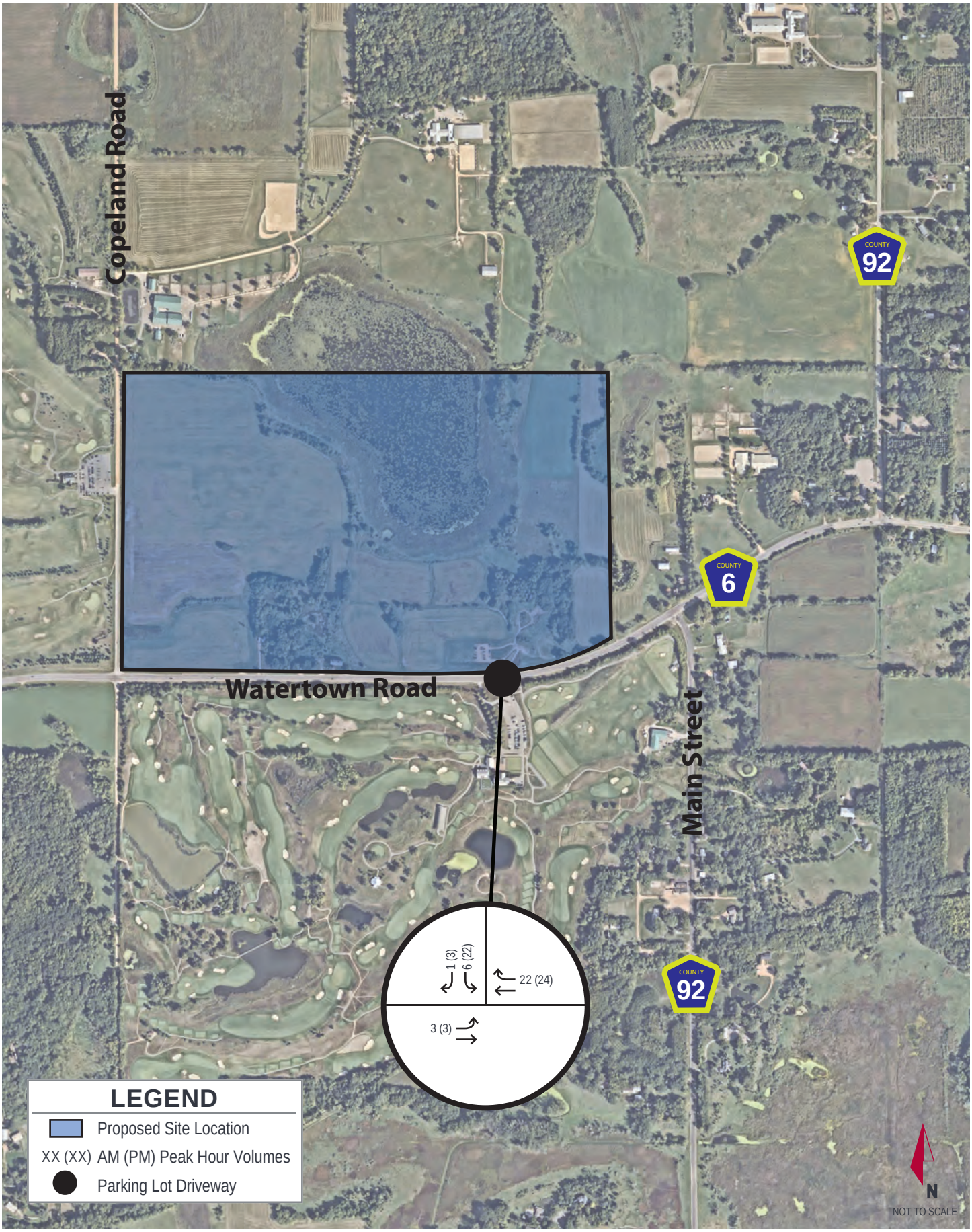
EXHIBITS



Kimley»Horn

EXHIBIT 1

SITE TRIP DISTRIBUTION
PROPOSED WINDSONG FARM GOLF COURSE



Kimley»Horn

EXHIBIT 2

SITE TRIP ASSIGNMENT

PROPOSED WINDSONG FARM GOLF COURSE

ATTACHMENT – SITE PLAN

Date: 12/10/2021 Time: 11:14:13 AM Author:
Document Path: C:\Users\MRogers\OneDrive - Emmons & Olivier Resources, Inc\Desktop\ImpactMap.mxd

EOR
water
ecology
community

Legend

- Existing Parcels
- Project Area
- Delineated Wetlands
- Proposed Turf Limits*
- Tree Removal Impacts (TBD)
- Cart Path Bridges
- Cart Paths
- Proposed Irrigation Lake
- Proposed Building
- Exisitng Cell Tower
- Proposed ParkingLot/Road

*All areas between proposed turf limits and wetlands to be revegetated

Windsong Farm Golf Club
North Course Plan

0 180 360 Feet

City of Independence

Request for a Variance from the Side Yard Setback for the Property Located 190 County Road 92 N.

To:	Planning Commission
From:	Mark Kaltsas, City Planner
Meeting Date:	April 19, 2022
Applicant:	Derek Onischuk
Owner:	Derek Onischuk
Location:	190 County Road 92 N.

Request:

Derek Onischuk (Applicant/Owner) is requesting that the City consider the following action for the property located at 190 County Road 92 N. (PID No. 32-118-24-44-0003) in Independence, MN:

a. A variance for a reduced side yard setback to allow the construction of an addition to the existing home located on the property.

Property/Site Information:

The subject property is located at 190 County Road 92 N. The property is on the east side of County Road 92 N., south of County Road 6 and just south of the Luce Line Trail. There is an existing home on the subject property.

Property Information: ***190 County Road 92 N.***
Zoning: *AG – Agriculture*
Comprehensive Plan: *AG - Agriculture*
Acreage: 11.25 *acres*

190 County Road 92 N. (blue line)

Discussion:

The applicant is seeking approval to construct a four-season porch on the north side of the existing home. The applicant approached the City about the potential to encroach into the side yard setback along the north property line. The existing home is currently located approximately 30 feet off of the north property line. The City requires a side yard setback of 30 feet for properties zoned AG-Agriculture. The proposed four-season porch addition would encroach into the side yard setback approximately 22 feet with a remaining building setback of 8 feet from the property line.

The resulting variance to the side yard setback would be 22 feet. The required setbacks for properties zoned AG-Agriculture are as follows:

Front Yard Setback:

Required: 85 feet from centerline or 51 feet from the ROW
Existing: ~200 from front property line

Rear Yard Setback:

Required: 40 feet
Existing: ±775 feet

Side Yard Setback (South Side):
Required: 30 feet
Existing: ±395 feet

Side Yard Setback (North Side):
Required: 30 feet
Existing: 30 feet
Proposed: 8 feet (variance of 22 feet)

There are several factors to consider relating to granting a variance. The City's ordinance has established criteria for consideration in granting a variance.

520.21. Standards for granting variances. Subdivision1. 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. Residential use of the property is consistent with the AG-Agriculture District.

b. The character of the surrounding area is residential. The proposed screen porch addition is generally in keeping with the residential uses on properties in the surrounding area.

c. The property is located south of the Luce Line Trail. There is a sliver of private property located north of the subject property; however, it is likely not buildable as there would be no way to locate a structure on the portion of property directly north due to requisite setbacks. The area north of the existing structure is wooded and generally screened from the view of any surrounding structures.

d. The applicant is noting that the interior configuration of the existing home better accommodates the expansion of a four-season porch to the south as proposed.

There are several additional items that could be considered by the City:

1. Staff discussed alternative options for locating the screen porch in compliance with applicable setbacks with the applicant. The applicant noted that the general interior configuration of the home would best support the proposed porch location.

2. The applicant could locate a detached accessory structure on this property in the general location of the proposed screen porch up to the requisite setbacks (15 feet).

Ultimately the City will need to find that the criteria for granting a variance have been met by the applicant. The existing home is located against the south property line setback with no room to expand to the north. Due to the configuration of the house on the property and the interior layout there are some limitations to add this type of addition without impacting function of the existing structure/use. The setback of the proposed porch from County Road 92 N. and the natural screening and buffering that exists between this and the surrounding properties appear to help mitigate the potential impacts.

Public Comments:

The City has not received any written or verbal correspondence at the time this report was prepared.

Recommendation:

Staff is seeking a recommendation or direction from the Planning Commission pertaining to the request for a variance. Should the Planning Commission consider granting a variance, the following findings and conditions should be considered.

1. The proposed Variance request meets all applicable conditions and restrictions stated in Chapter V, Section 520.19, Procedures on variances, in the City of Independence Zoning Ordinance.

2. 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 four-season porch addition to be added onto the existing home.

    b. The alignment of the proposed porch with the side of the home and the proposed building architecture and exterior finishes appears to mitigate some of the potential impacts resulting from the addition.

    c. The character of the surrounding area is agriculture. The proposed four-season porch addition and would be in keeping and consistent with the surrounding uses found in this area of the City.

3. The variance will permit a 22-foot reduction (from 30 feet to 8 feet) to the north side yard setback to allow the proposed four-season porch to be added onto the existing structure as depicted on the site plan and building plans attached hereto as Exhibit A. Any modification changes or alteration to the structure that does not meet applicable setbacks in the future would require additional review and approval in the form of a variance.

Attachments:

1. Application
2. Survey
3. Porch Plans/Elevations

CITY OF INDEPENDENCE MINNESOTA

Applicant Information		**Owner Information**	
Name:	Derek Onischuk	Name:	Derek Onischuk
Address:	190 Count Rd 92 N Independence, Minnesota 55359	Address:	190 Count Rd 92 N Independence, Minnesota 55359
Primary Phone:	6122450305	Primary Phone:	6122450305
Email:	deliciousdsbbq@outlook.com	Email:	deliciousdsbbq@outlook.com

Property Address:

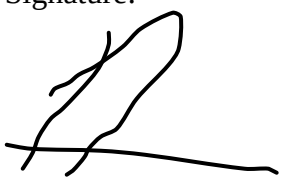
PID:

Planning Application Type: Variance

Description:

Supporting Documents: Site Survey (Existing Conditions), Site Survey (Proposed Conditions), Building Plans

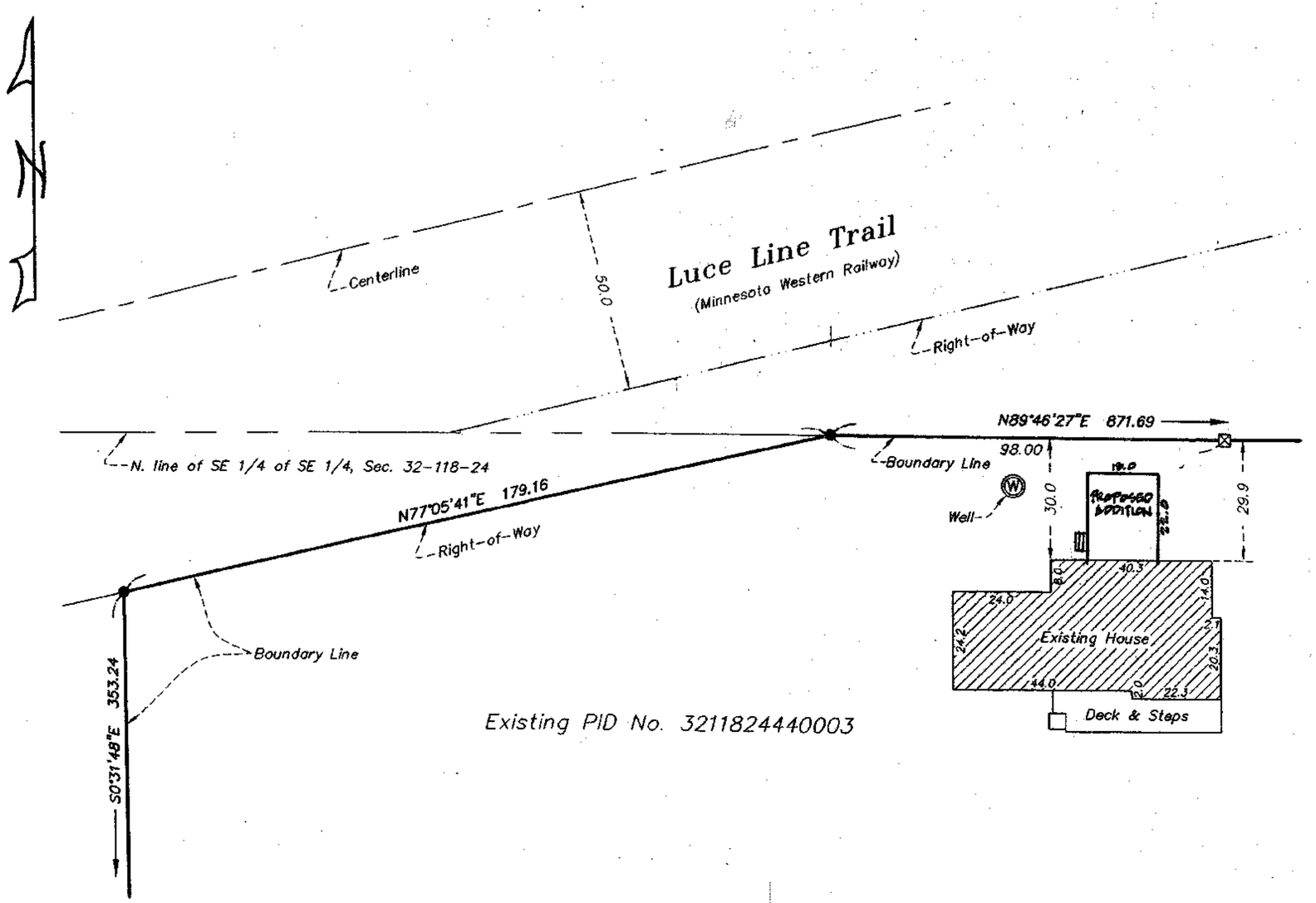
Signature:



Building Permit Survey

Prepared for:

Derek Onischuk



Existing PID No. 3211824440003

Site Address:
190 Co. Rd. 92 N.
Minnetrista, MN 55359

Boundary Description (supplied by client)
That part of the Southeast Quarter of the Southeast Quarter of Section 32, Township 118 North, Range 24 West of the 5th Principal Meridian, lying North of the South 862.00 feet of said Southeast Quarter of the Southeast Quarter, EXCEPT that part of said Southeast Quarter of the Southeast Quarter described as follows: Beginning at the Northwest corner of said Southeast Quarter of the Southeast Quarter; thence South along the West line of said Southeast Quarter of the Southeast Quarter a distance of 100 feet; thence Northeasterly to a point in the North line of said Southeast Quarter of the Southeast Quarter distant 445 feet East of said Northwest corner; thence westerly along said North line to the point of beginning; ALSO EXCEPT that part of the West 270 feet of said Southeast Quarter of the Southeast Quarter lying North of a line described as follows: Commencing at the point of intersection of the southerly right-of-way line of the Luce Line Trail (formerly the Minnesota Western Railway) with the West line of said Southeast Quarter; thence Southerly along said West line a distance of 294 feet to the point of beginning of the line being described; thence deflecting left 90 degrees to the East line of said West 270 feet, and there ending, EXCEPT road, Hennepin County, Minnesota.

Note:
This survey is intended to show only a portion of the subject property and does not indicate its entirety. This survey does not purport to show all improvements on the subject property.

Bearings based on assumed datum.

Legend

- ● Found Iron Monument
- ⊠ Set Lath

SCALE

30 0 15 30 60

1 inch = 30 feet

SCHOBORG LAND SERVICES INC.

763-972-3221 8997 Co. Rd. 13 SE
www.SchaborgLand.com Delano, MN 55328

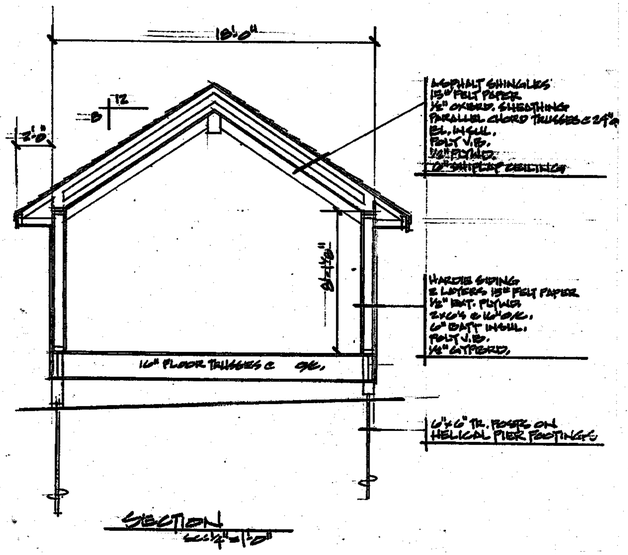
I hereby certify that this certificate of survey was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

Paul B. Schoborg

Paul B. Schoborg

Date: FEBRUARY 19 2021 Registration No. 14700

Job Number:	9224
Survey Date:	2/17/21
Drawing Name:	onischuk.dwg
Drawn by:	DMS
Revisions:	



SECTION
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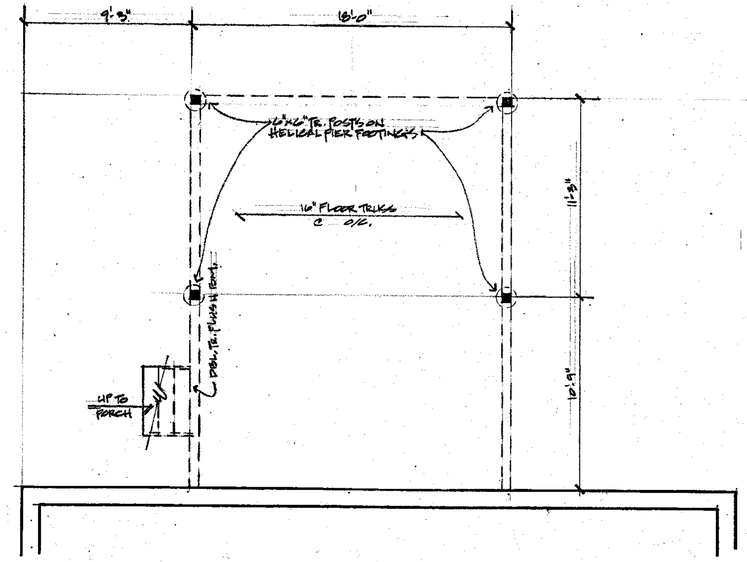

FOOTING PLAN
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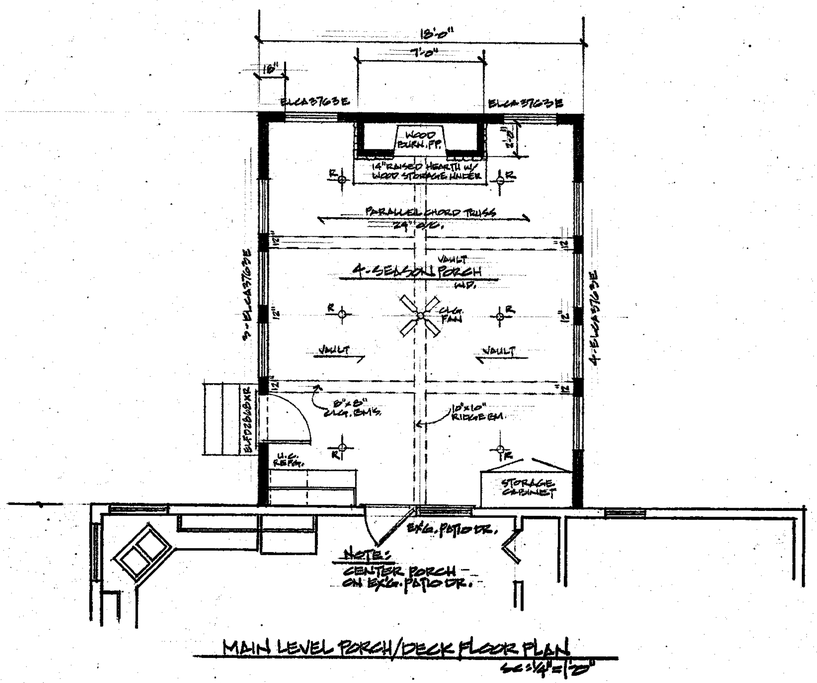
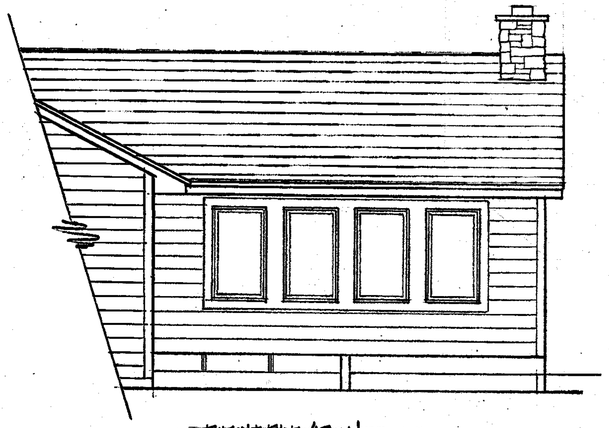


MAIN LEVEL PORCH/DECK FLOOR PLAN
SC: 1/4"=1'-0"

- Marvin elevate casement windows and door.
- Hardie siding.
- Wood burning fireplace w/ thin cut stone to ceiling , 14" raised limestone hearth w/ wood storage below ,reclaimed wood mantle.
- 5" white oak character grade wood floor.
- 6" white shiplap ceiling.
- 3" paint grade hookstrip casing.
- 5" paint grade hookstrip base.
- Ceiling beams by distressed City Millwork.
- Dry bar w/ enameled base cabinet and upper , granite top and under counter refg.
- Storage cabinet enameled.
- Ceiling fan and six recessed lights.
- Wood steps down to grade.



RIGHT ELEVATION
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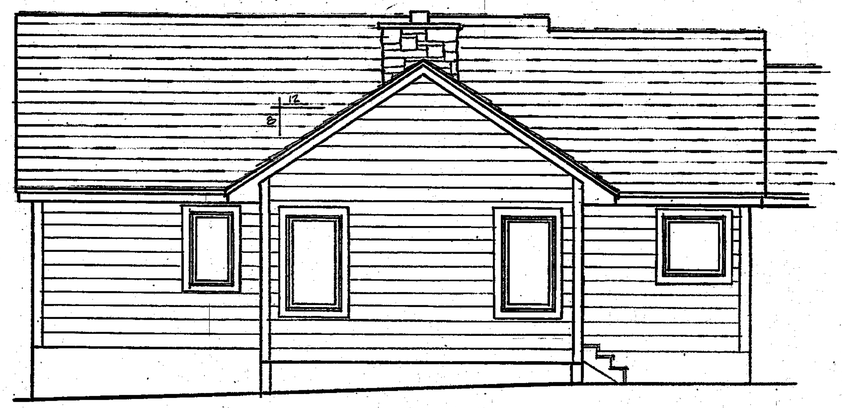
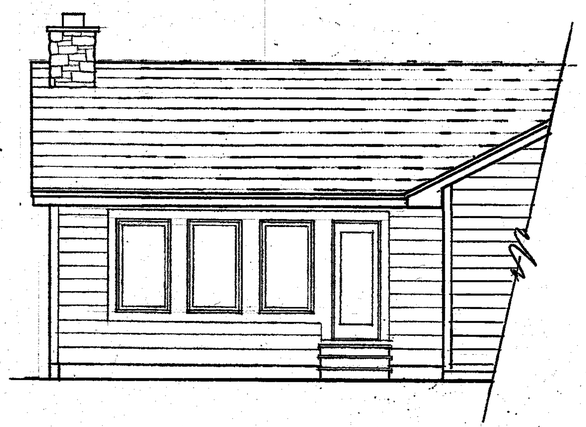


REAR ELEVATION



LEFT ELEVATION

DEREK & ELLEN
ONISCHUK
190 CTY. RD. 92 N.
HASTINGS, MN

PAGE
1
OF 1

City of Independence

Request for a Minor Subdivision to Permit a Lot Line Rearrangement Necessary for the Highway 12/County Road 92 N. Project

To:	Planning Commission
From:	Mark Kaltsas, City Planner
Meeting Date:	April 19, 2022
Applicants:	Hennepin County
Owners:	Kimberly Gayle Reed
Location:	2510 County Road 92 N.

Request:

Hennepin County (Applicant) is requesting the following minor subdivisions relating to the Highway 12/County Road 92 improvement project in Independence, MN:

a. 2510 County Road 92 N. (PID No. 16-118-24-33-0003)

Property/Site Information:

The subject property is generally located at the intersection of County Road 92 N. and Highway 12. The property has the following site characteristics:

Property Information: **2510 County Road 92 N.**
Zoning: *Agriculture*
Comprehensive Plan: *Agriculture*

Discussion:

Hennepin County has been working on the acquisition of properties associated with the Highway 12/CSAH 92 realignment and overpass project. The properties have now been acquired by the County, but a formal approval of the actual subdivision is still required by the City. The City reviewed and approved a number of properties in the fall of 2021. There was one additional property that was identified that was left out of the previous approvals and is required to be formally approved by the City. The subdivision is unique in that the property being broken off will be used for right of way (combined with the existing right of way) for the state highway or county road. No new property is being created as a result of the requested subdivision.

A portion of parcel at 2510 County Road 92 N. was acquired in fee through condemnation as part of the safety improvements at County Road 92 where it intersections with U.S. Highway 12. MnDOT requires that property that abuts their highways be acquired in fee. Hennepin County did the acquisition, Independence is also a partner in the project.

The City has reviewed the requested subdivision and found it to be in keeping with the reviewed property acquisitions necessary to construct the new road improvements. The detail of the subdivision is provided on the attached survey.

Other Considerations:

1. The City does not have an administrative or other process for considering the subdivision of property. All subdivisions are required to go through the requisite process.

2. No new parcels are being created as a result of the proposed subdivisions.

3. No new non-conformities are being created as a result of the proposed subdivision. The frontage requirements, applicable setbacks and minimum lot sizes are not being compromised in the after condition as a result of the proposed subdivisions.

Summary:

The requested minor subdivision of the subject property does not appear to create any adverse conditions in the after condition. The proposed subdivision appears to meet all of the applicable standards of the City's zoning and subdivision ordinance.

Neighbor Comments:

The City has not received any written or verbal comments regarding the proposed subdivisions.

Recommendation:

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

1. The proposed Minor Subdivision 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 subdivisions which includes the following:

        - Prepare the requisite documents and legal descriptions needed to record all documents with Hennepin County.

3. 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 Exhibit

CITY OF INDEPENDENCE MINNESOTA

Applicant Information

Name:	Hennepin County
Address:	1600 Prairie Drive Medina, Minnesota 55340
Primary Phone:	612-596-0328
Email:	jane.heins@hennepin.us

Owner Information

Name:	Kimberly Gayle Reed, Trustee
Address:	2510 County Road 92 North Independence, Minnesota 55359
Primary Phone:	612-865-4035
Email:	smokeypondfarm@gmail.com

Property Address:

PID:

Planning Application Type: Subdivision

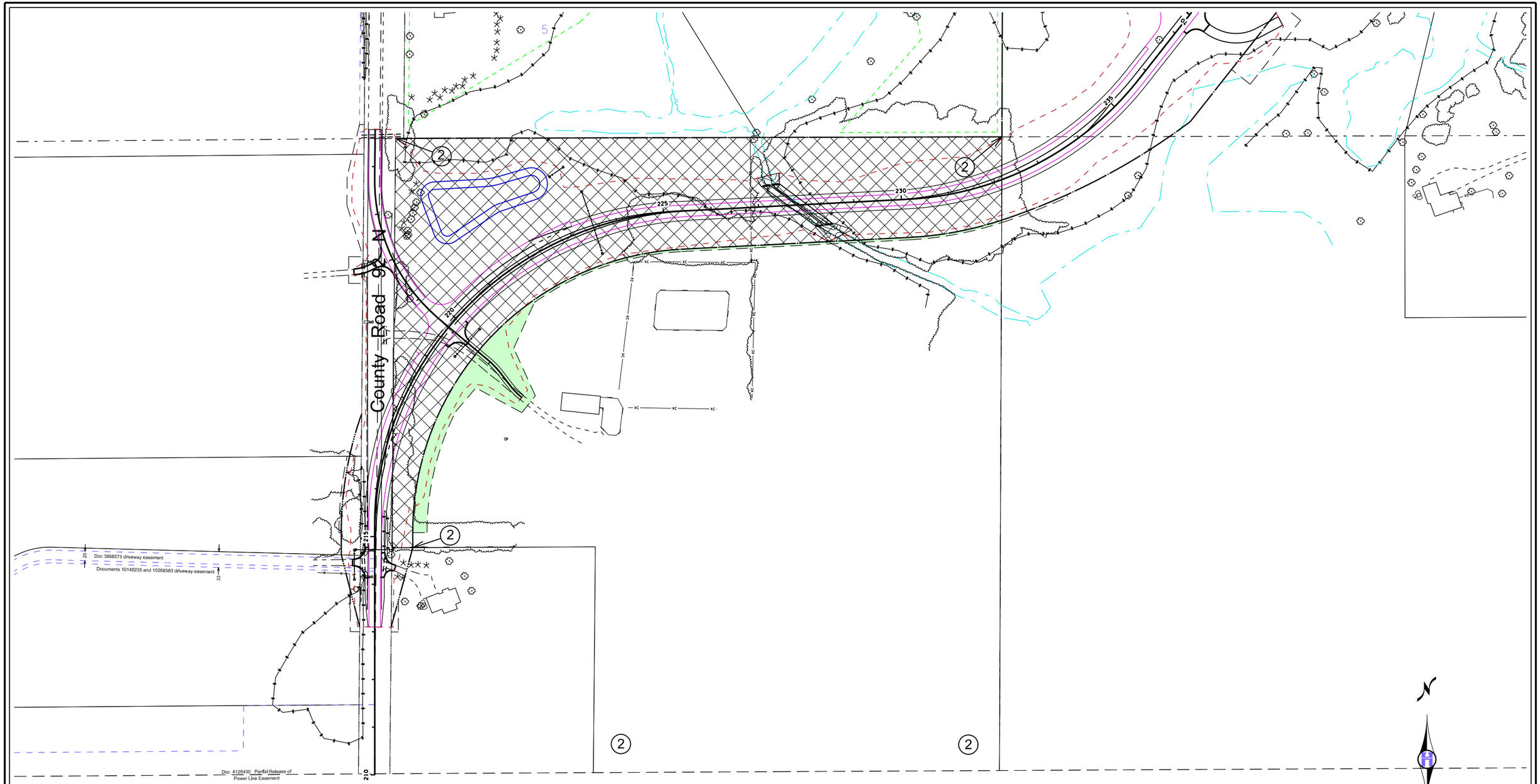
Subdivision Type: Minor Subdivision (3 lots or less)

Description:

Supporting Documents: Site Survey (Proposed Conditions)

Signature:

Jane Heins



Construction Limits
Edge of Travel Lane
Pond
Existing Drainage and Utility Easement

Fee Taking = 386,076 sq ft
8.86 acres

Temporary Construction Easement = 32,554 sq ft

0 100 200

August 25, 2020

Parcel Area: 34.36 acres
1,496,556 sq ft

HENNEPIN COUNTY LAND ACQUISITION GROUP

1600 Prairie Drive
Medina, MN 55340

OWNER: Reed Trustees, Kimberly Gayle
ADDRESS: 2510 Co Rd No 92 N
Independence
PID: 16-118-24-33-0003

PARCEL 2

CSAH 92
PROJECT 1611