

# elm creek

## Watershed Management Commission

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August 1, 2018

Representatives  
Elm Creek Watershed Management  
Commission Hennepin County, MN

*The meeting packets may be found on the  
Commission's website:*  
[http://elm creek watershed.org/minutes--  
meeting-packets.html](http://elm creek watershed.org/minutes--meeting-packets.html)

Dear Representatives:

A **regular meeting** of the Elm Creek Watershed Management Commission will be held on **Wednesday, August 8, 2018, at 11:30 a.m.** in the Mayor's Conference Room at Maple Grove City Hall, 12800 Arbor Lakes Parkway, Maple Grove, MN.

Please email Tiffany at [tiffany@jass.biz](mailto:tiffany@jass.biz) to confirm whether you or your Alternate will be attending the regular meeting.

Thank you.

Regards,



Judie A. Anderson  
Administrator  
JAA:tim  
Encls: Meeting Packet

cc: Alternates	HCEE	BWSR	MPCA
Joel Jamnik	Diane Spector	Met Council	DNR
TRPD	Clerks	Official Newspaper	

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### Regular Meeting August 8, 2018 AGENDA

1. Call Regular Meeting to Order.
  - a. Approve Agenda.\*
2. Consent Agenda.
  - a. Minutes last Meeting.\*
  - b. Treasurer's Report and Claims.\*\*
3. Open Forum.
4. Action Items.
  - a. Project Reviews.\*
  - b. Crow River Clean-up Day.\*
5. Old Business.
  - a. Response to Hennepin County Board.
  - b. Livestock Management Policy.\*\*
6. New Business.
7. Local Plans.
  - a. Corcoran.\*
8. Communications.
9. Education.
  - a. WMWA Update.
10. Grant Opportunities and Updates.
  - a. Fish Lake Internal Phosphorus Loading Control.
    - 1) Pictorial update.\*\*
  - b. FEMA floodplain Mapping.
  - c. Diamond Lake SWA Grant Application – update.
  - d. 319 Small Watersheds Focus Program.
11. Project Reviews – *also see Staff Report.* \*
12. Other Business.
13. Adjourn.

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14. Project Reviews. (See Staff Report.*)						
a.					2013-046	Woods of Medina, Medina.
b.					2014-015	Rogers Drive Extension, Rogers.
c.					2015-004	Kinghorn Outlet A, Rogers.
d.				AR	2015-030	Kiddiegarten Child Care Center, Maple Grove.
e.		E			2016-002	The Markets at Rush Creek, Maple Grove.
f.					2016-005W	Ravinia Wetland Bank Plan, Corcoran.
g.					2016-040	Kinghorn 4th Addition, Rogers.

\*in meeting packet

\*\*available at meeting

h.					2016-047	Hy-Vee Maple Grove #1 (Hy-Vee Maple Grove North).
i.				AR	2016-052	The Woods at Rush Creek, Maple Grove.
j.				AR	2017-014	Laurel Creek, Rogers.
k.				AR	2017-016	Territorial Woods, Maple Grove.
l.				AR	2017-017	Mary Queen of Peace Catholic Church, Rogers.
m.				AR	2017-019	Medina Senior Living Community, Medina.
n.				AR	2017-021	Hindu Society of MN Staff Housing, Maple Grove.
o.				AR	2017-029	Brayburn Trails, Dayton.
p.				AR	2017-034	Plymouth Memory Care, Plymouth.
q				AR	2017-037	Corcoran L-80 Lift Station MCES Project 808520, Corcoran.
r.				AR	2017-038	Bass Lake Estates, Corcoran.
s.					2017-039	Rush Creek Apartments, Maple Grove.
t.					2017-044	Reserve at Medina 2nd Addition, Medina.
u.			R		2017-045	Fish Lake Estates, Maple Grove.
v.			R		2017-046W	Wessell Property Wetland Delineation, Corcoran.
w.			R		2017-048W	Ebert Parcel Wetland Delineation, Corcoran.
x.		E			2017-050W	Ernie Mayer Wetland/floodplain violation, Corcoran.
y.				AR	2018-001	Rush Creek Commons, Maple Grove.
z					2018-004	Rush Creek Restoration, Maple Grove.
aa.					2018-005	Sundance Greens, Dayton.
ab.					2018-007	Copper Creek of Nottingham, Maple Grove.
ac.			R		2018-008	Hayden Hills Golf Course, Dayton.
ad.					2018-013	Wayzata Elementary School #9, Plymouth.
af.					2018-014	Fenn Meadows 2nd Addition, Refuge at Rush Creek, Corcoran.
ag.				AR	2018-018	Summers Edge Phase II, Plymouth.
ah.					2018-020	North 101 Storage, Rogers.
ai.					2018-021	113th Lane Extension/Brockton/101, Rogers.
aj.					2018-022	Fernbrook Fields, Maple Grove.
ak.		E			2018-023	King Solutions Distribution Center, Dayton
al.		E	R		2018-024	Schober Wetland Delineation, Corcoran.
am	A	E			2018-025	Watten Wetland delineation/Replacement Plan, Corcoran.
an.	A	E			2018-026	Windrose, Maple Grove.
ao.	A	E			2018-027	CR202 Bridge, Dayton.
ap.					2018-028	Tricare Third Addition, Maple Grove.
aq.	A	E			2018-029	McConn, Plymouth
ar.					2018-030	Pineview Meadows, Dayton.
as.					2018-031	North Dayton Development Draft AUAR, Dayton.
at.		E			2018-032	Encore, Corcoran.
au.					2018-033	Cloquet Island Estates, Dayton.
av.					2018-034	Corcoran NE Trunk Sewer WCA No-Loss App, Corcoran.
aw.					2018-035	Edgewater East, Maple Grove.
ax		E			2018-036W	Dale Johnson Pond Excavation, Corcoran
ay					2018-037	Elm Creek Stream Restoration Reach D, Plymouth.
az						

A = Action item E = Enclosure provided I = Informational update will be provided at meeting RPFI - removed pending further information  
R = Will be removed RP= Information will be provided in revised meeting packet..... D = Project is denied AR awaiting recordation

\*in meeting packet  
\*\*available at meeting

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### Regular Meeting Minutes July 11, 2018

I. A **regular meeting** of the Elm Creek Watershed Management Commission was called to order at 10:31 a.m., Wednesday, July 11, 2018, in the Mayor's Conference Room, Maple Grove City Hall, 12800 Arbor Lakes Parkway, Maple Grove, MN, by Chairman Doug Baines.

Present were: Bill Walraven, Champlin; Sharon Meister, Corcoran; Doug Baines, Dayton; Joe Trainor, Maple Grove; Elizabeth Weir, Medina; Fred Moore, Plymouth; James Kujawa, Jason Swenson, and Kirsten Barta, Hennepin County Dept. of Environment and Energy (HCEE); Brian Vlach, Three Rivers Park District (TRPD); Jeff Weiss, Barr Engineering; Diane Spector, Wenck Associates; and Judie Anderson, JASS.

Also present: Todd Tuominen, Champlin; Kevin Mattson, Corcoran; Mark Lahtinen and Heather Albrecht, Maple Grove; Catherine Cesnik, Ben Scharenbroich and Trevor Cammack, Plymouth; Andrew Simmons, Rogers; and Justin Klabo, AEZS, and Craig Allen, GWSA, for item III.D.

A. Motion by Weir, second by Walraven to approve the **revised agenda**. \* *Motion carried unanimously.*

B. Motion by Weir, second by Walraven to approve the **minutes**\* of the June 13, 2018, regular meeting. *Motion carried unanimously.*

C. Motion by Walraven, second by Weir to approve the July **Treasurer's Report and Claims**\* totaling \$13,133.10. *Motion carried unanimously.*

### II. Open Forum.

A. Vlach presented TRPD's **2017 stream monitoring results**. He indicated that he would like to review Met Council's 2016 land use data to correlate with TRPD results. In the future, stream monitoring results will be presented in a more user-friendly way and uploaded to the Commission's website, perhaps as stream "report cards." Trend data will also be presented in the future.

B. Baines and Spector recapped the July 10 meeting of the Hennepin County Board Administrative Committee where the Commission's proposed **Minor Plan Amendment** was heard. A number of questions were brought forth by the Hennepin County Commissioners, including:

1. How are the WMOs (and the County) taking climate change and changing precipitation patterns into account; and
2. Are the projects being undertaken making a difference?

The Commissioners also queried about *flooding* issues.

Motion by Moore, second by Walraven to draft a letter of response to the Commissioners. *Motion carried unanimously.* Barta will provide the link to the tape of the meeting to Anderson for forwarding to the Elm Creek Commissioners and TAC members.

### III. Action Items.

A. **Project Review 2018-013 Wayzata Elementary School #9, Plymouth**. \* This site is the southwest 24-acre area of a 73-acre parcel located at CSAH 101 and Prairie Creeek Road. The property was subdivided into a phased 111 unit residential subdivision on 49 acres last year (ECWMC project 2017-036, The Enclave of Elm Creek) with this area to be reviewed and approved when submitted. Stormwater was designed and approved by the Commission with both projects as one management system, but the final plans for the school site had not been determined at the time of the



## elm creek Watershed Management Commission

Regular Meeting Minutes – July 11, 2018

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Enclave review. Approval for project 2017-036 was contingent upon, a) the school project review and approval or b) an alternative abstraction design being implemented in the residential project. This submittal is for the school project review and approval. The Commission review for the Elementary School site will be for rules D, E, F and I. Staff has reviewed revised plans and in their findings dated June 20, 2018, recommends approval conditioned on an approved stormwater basin operation and maintenance plan being recorded on the land title for this property within 90 days of the final plat recording. Motion by Moore, second by Walraven to approve Staff's recommendation, with the further condition that site grading in Medina cannot proceed until all WCA and grading regulations for the portion of the school site within the jurisdiction of the City of Medina are permitted by Medina. *Motion carried unanimously.*

**B. Project Review 2018-020 North 101 Storage, Rogers.\*** This is an existing 3-acre lot in the northwest corner of Highway 101 and CR144. The current land use is a combination of mini-storage units and outdoor storage. The site is proposed for complete demolition and the construction of seven new mini-storage buildings. Site plans must comply with Rules D and E. Because the project is disturbing over 50% of the site area (100% actual), Staff review was the same as for a new development and stormwater management plans must comply with all impervious areas, not just the new impervious area. In their findings dated July 9, 2018, Staff recommends approval pending final Staff approval of four items relating to abstraction requirements and the infiltration system. Motion by Moore, second by Weir to approve Staff's recommendation as stated in their findings. *Motion carried unanimously.*

**C. Project Review 2018-021 113th Lane Extension/Brockton/101, Rogers.\*** The City of Rogers is proposing to extend 113th Lane to provide a second access to the proposed second phase of the Laurel Creek Development. The proposed road will extend from Brockton Lane to the development entrance. It will include a 4-lane divided roadway from Brockton Lane to the development entrance; an off-road trail north of 113th Lane; and construction of an intersection to meet County turn lane requirements. The project will create 2.13 acres of new impervious surface. In their findings dated July 10, 2018, Staff recommends approval pending receipt of signed final plans. Motion by Moore, second by Walraven to approve Staff's recommendation. *Motion carried unanimously.*

**D. Project Review – Pine Meadows Development, Dayton.** At the June meeting, Dayton's City Engineer discussed this proposed development in northeast Dayton. He presented the City's position regarding the stormwater design for the proposed project. The proposed stormwater design results in a discharge from the site prior to the modelled 100-year event. City and Commission rules require rate control under post-developed conditions. The City is seeking a variance from the Commission for the following reasons.

**1.** The proposed stormwater system (extends and) utilizes an outlet partially constructed in 2007 as part of a City project. The outlet was installed at that time for the purpose of serving future development in the proposed location. The outlet is consistent with the current surface water management (comprehensive plan), which is sized appropriately to serve as an outlet under normal conditions, that is, for discharge during events smaller than the 100-year frequency.

**2.** This piped outlet, once extended, will be a direct connection from this development area to the Mississippi River. Additionally, any bypass flows due to obstruction or surcharging would continue overland directly to the river, without raising concern for potential localized flooding.

The City of Dayton is supportive of, and even promotes, extending and utilizing the proposed outlet to serve this area. It is consistent with the City's comprehensive stormwater plan and the City believes the risk of negative impacts downstream is low.

In their response to the City, Commission staff indicated the project as proposed could not be approved under current Commission rules. They cited the following:

**1.** If an outlet is provided for something under a 100-year event, where there is no discharge under a 100-year event today, the project is not compliant with Rule D. Rule D requires that the site discharge rates be maintained below the existing runoff rates for the 2, 10, and 100-year events in the developed condition. Constructing an outlet below the 100-year elevation would not comply with this requirement.

RULE D - STORMWATER MANAGEMENT

RULE E - EROSION AND SEDIMENT CONTROL

RULE F - FLOODPLAIN ALTERATION

RULE G - WETLAND ALTERATION

RULE H - BRIDGE AND CULVERT CROSSINGS

RULE I - BUFFERS

Nitro Software, Inc.  
100 Portable Document Lane

CHAMPLIN - CORCORAN - DAYTON - MAPLE GROVE - MEDINA - PLYMOUTH - ROGERS

Wendland

## elm creek Watershed Management Commission

Regular Meeting Minutes – July 11, 2018

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2. In addition to the runoff requirement, the site must meet the requirement that there is no net increase in TP or TSS discharge from the site in the post developed condition. Construction of an outlet will immediately increase these discharges which are essentially zero, assuming no discharge in a 100-year event today.

3. Staff do not believe the requirements for providing a landlocked basin are being followed. The rules state that outlets are allowed from Landlocked Basins if they: (1) Retain a hydrologic regime complying with flood-plain and wetland alterations. (2) Provide sufficient storage below the outlet run-out elevation to retain back-to-back 100-year, 24-hour rainfalls and runoff above the highest anticipated groundwater elevation and prevent damage to property adjacent to the basin. (3) Do not create adverse downstream flooding or water quality conditions.

Staff also noted that, at the time the storm sewer line was extended to this area in 2007, all of the above rules were in place in the Elm Creek Watershed, so these are not new requirements imposed by the latest generation plan.

At the June meeting, the Commissioners generally agreed that this is a case where a variance may be warranted, and directed Staff and the applicant to continue working on a potential variance request that would come to the Commission at a future meeting as part of the review of the project.

Motion by Trainor, second by Walraven to direct Staff to notify the applicant that if they want to begin grading prior to the Commission's decision on the site plan and a proffered variance request, they will need to 1) add a separate grading and erosion control review/approval request to their application or in a separate email and 2) provide the Commission with a letter stating they will assume any risks associated with meeting the Commission's final decision on the site plan and variance. *Motion carried unanimously.*

**E. Livestock Management Policy.\*** Following review and discussion of the draft policy and associated documents, Staff was directed to work with the cities and to return to the August meeting with a revised draft policy.

**F. Watershed-based Pilot Funding.\*** Included in the meeting packet were the minutes of the pre-convene planning meetings, the final list of projects and practices to be funded by the \$1,018,000 pilot program, as well as a July 3, 2018 memo from Wenck Associates describing the next steps.

The group of eleven watershed organizations decided to form a Steering Committee to guide the development and eventual implementation of a plan related to the Countywide Chloride Programming. As part of their discussions the Group of Eleven agreed to dedicate 10% of the funding to this program. The remainder of the funding will be distributed to the WDs and WMOs according to a formula that takes into account land area and taxable market value. The Riley-Purgatory-Bluff Creek Watershed District has agreed to be the lead agency and fiscal agent for the Steering Committee.

Hennepin County and Riley-Purgatory have asked each watershed organization to designate a person to represent them on the Steering Committee. Motion by Moore, second by Walraven to appoint Scharenbroich to be the Commission's representative. *Motion carried unanimously.* Any Commissioner may attend these meetings and serve as an Alternate.

**G. Diamond Lake Subwatershed Assessment.\*** In their July 9, 2018 letter to the Commission the City of Dayton is requesting the Commission to undertake a subwatershed assessment (SWA) of the Diamond Lake watershed. In order to obtain funding for the project, the City is also requesting that the Commission apply for an Accelerated Implementation Clean Water Fund Grant. If awarded, the Commission would be responsible for providing a 25% grant match and member cities within the subwatershed (Rogers and Dayton) would be responsible for 25% of that match.

Motion by Baines, second by Moore to approve this request and to authorize Staff to write a grant application for review at the August meeting. *Motion carried unanimously.* Barta volunteered to write the application. The SWA area will include downstream to French lake, stopping at Zanzibar Lane.

#### IV. New Business.

#### V. Water Quality.

#### VI. Grant Opportunities and Updates.

**A. Internal Phosphorus Loading Control in Fish Lake project.** Vlach will present a pictorial update at the August meeting.

## elm creek Watershed Management Commission

Regular Meeting Minutes – July 11, 2018

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**B. Rush Creek Headwaters Subwatershed Assessment project.\*** Comments received were mostly minor. The finalized report has been be uploaded onto the website, [http://www.elmcreekwatershed.org/uploads/5/8/3/0/58303031/rush\\_creek\\_headwaters\\_swa\\_final\\_july\\_2018\\_\\_1\\_.pdf](http://www.elmcreekwatershed.org/uploads/5/8/3/0/58303031/rush_creek_headwaters_swa_final_july_2018__1_.pdf). Wenck is also converting the GIS shapefiles of all the BMPs identified into kmz files, which can be imported into Google Earth, allowing Commission and city staff to access this information without having to use a GIS application.

Included in the meeting packet is a map\* depicting the proposed SWA schedule.

**C. 319 Small Watersheds Focus Program.** The Minnesota Pollution Control Agency (MPCA) is looking for interested watershed organizations to partner with in developing a long-term roadmap to support comprehensive implementation on a small-scale watershed. Selected “Focus Watersheds” will be prioritized to receive four 4-year grant awards to implement a series of projects outlined in the Focus grant workplan, provide a steady source of funding, focus implementation efforts, and achieve measurable water quality improvements on a specific waterbody. BMPs identified in the Rush Creek SWA may be good candidates for the program.

### VII. Education.

**A. West Metro Water Alliance (WMWA).** The next WMWA meeting is scheduled for 8:30 a.m., Tuesday, August 14, 2018, at Plymouth City Hall.

**B.** Included in the packet is a flyer\* announcing **the Level 1 Winter Maintenance for Roads workshop**, September 26, 2018, Crystal Community Center. The workshop is free, but registration is required. For more information, [laura.jester@keystonewaters.com](mailto:laura.jester@keystonewaters.com).

### VIII. Communications.

### IX. Other Business.

**A.** The following **projects** are discussed in the July Staff Report.\* ("W" denotes wetland project.)

1. 2013-046 Woods of Medina, Medina.
2. 2014-015 Rogers Drive Extension, Rogers.
3. 2015-004 Kinghorn Outlet A, Rogers.
4. 2015-030 Kiddiegarten Child Care Center, Maple Grove.
5. 2016-002 The Markets at Rush Creek, Maple Grove.
6. 2016-005W Ravinia Wetland Bank, Corcoran.
7. 2016-040 Kinghorn 4th Addition, Rogers.
8. 2016-047 Hy-Vee Maple Grove #1, Maple Grove.
9. 2016-052 The Woods at Rush Creek, Maple Grove.
10. 2017-014 Laurel Creek, Rogers.
11. 2017-016 Territorial Woods, Maple Grove.
12. 2017-017 Mary Queen of Peace Catholic Church, Rogers
13. 2017-019 Medina Senior Living Community, Medina.
14. 2017-021 Hindu Society of MN Staff Housing, Maple Grove.
15. 2017-029 Brayburn Trails, Dayton.
16. 2017-034 Plymouth Memory Care, Plymouth.
17. 2017-037 L-80 Lift Station MCES, Corcoran.
18. 2017-038 Bass Lake Estates, Corcoran.
19. 2017-039 Rush Creek Apartments, Maple Grove.
20. 2017-044 Reserve at Medina 2nd Addition, Medina.
21. 2017-045 Fish Lake Estates, Maple Grove.
22. 2017-046W Wessell Wetland Delineation, Corcoran.
23. 2017-048W Ebert Parcel Wetland Delineation, Corcoran.
24. 2017-050W Ernie Mayer Wetland/floodplain violation, Corcoran.\*

## elm creek Watershed Management Commission

Regular Meeting Minutes – July 11, 2018

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25. 2017-051 Mallard South 2nd Addition, Rogers.
26. 2017-053 Sunrise Solar Garden, Corcoran.
27. 2018-001 Rush Creek Commons, Maple Grove.
28. 2018-004 Rush Creek Restoration Project, Maple Grove.
29. 2018-005 Sundance Greens, Dayton.
30. 2018-007 Copper Creek of Nottingham, Maple Grove.
31. 2018-008 Hayden Hills Golf Course Subdivision, Dayton.
32. 2018-009 NW Greenway Trail Phase IV, Plymouth.
33. 2018-012 The Meadows Neighborhood Park, Plymouth.
34. 2018-013 New Wayzata Elementary School, Plymouth.\*
35. 2018-014 Fehn Meadows Second Addition, Corcoran.
36. 2018-015 Laurel Creek 2nd Addition, Rogers.
37. 2018-016W Krueger Wetland Delineation, Corcoran.
38. 2018-017W Larkin Road Wetland Delineation, Corcoran.
39. 2018-018 Summers Edge Phase III, Plymouth.
40. 2018-019W Fuss Wetland Delineation, Corcoran.
41. 2018-020 North 101 Storage, Rogers.\*
42. 2018-021 113th Lane Extension & Brockton Lane/CSAH 101 Intersection, Rogers.\*
43. 2018-022 Fernbrook Athletic Fields, Maple Grove.
44. 2018-023 King Solutions Distribution Center Addition, Dayton.
45. 2018-024W Schober Parcel Wetland Delineation, Corcoran.
46. 2018-025W Watten Wetland Delineation/Replacement Plan, Corcoran.
47. 2018-026 Windrose, Maple Grove.
48. 2018-027 CR 202 Elm Creek Bridge Replacement, Dayton.
49. 2018-028 Tricare Third Addition, Maple Grove.
50. 2018-029 McConn, Plymouth.

**B. Adjournment.** There being no further business, the meeting was adjourned at 12:57 p.m.

Respectfully submitted,



Judie A. Anderson, Recording Secretary

JAA:tim

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# SEPTEMBER 15TH CROW RIVER CLEAN-UP DAY

## Crow River 15th Annual Clean-Up Day

Get involved and volunteer your time on the Crow River Clean-Up Day throughout the Crow River Watershed. In 2017, over 116 volunteers and 50 businesses/organizations throughout the watershed participated in cleaning up 0.4 tons of trash. Let's double our participation and tons of trash for the 2018 event! Please contact the Crow River Organization of Water today to get your group involved.



**Get your Community  
Involved**

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**Make a Difference**

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**Better Water Quality**

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**Help the Environment**

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## CONTACT INFORMATION

Nicole Erickson

763-682-1933 Ext 2915

Nicole.Erickson@mn.nacdnet.net

<http://www.crowriver.org/>



# CROW

*Joint Powers*

## CROW RIVER ORGANIZATION OF WATER



311 BRIGHTON AVENUE, SUITE C

BUFFALO, MN 55313

PHONE: 763-682-1933, EXT. 3

FAX: 763-682-0262

July 17, 2018

Jim Kujawa  
Hennepin County  
701 Fourth Ave S, Suite 700  
Minneapolis, MN 55415-1600

Dear Mr. Kujawa:

The Crow River Organization of Water (CROW) would like to request \$500 for the Crow River Clean-Up Day from Elm Creek and the Pioneer-Sarah Creek Watershed Management Commissions. Last year's clean-up was a success and we are inviting you to help us with the 15<sup>th</sup> Annual Crow River Clean-Up Day. The clean-up is scheduled for Saturday September 15, 2018. Businesses, municipalities, non-profit groups and citizens will donate time, money, food and refreshments to make the Crow River Clean-Up Day a great success!

Utilizing donations from across the watershed, every volunteer was provided food, beverages and a t-shirt in the event. Our clean-up event needs 400 t-shirts price ranges from \$5.50 to \$8.50 depending on size for the volunteers. We recognize that budgets are stretched and limited, but a donation of \$500 will help purchase t-shirts and supplies. With Elm Creek and the Pioneer-Sarah Creek Watershed Management Commissions donation, your logo will be printed on the volunteer's t-shirts and listed as a sponsor in our promotional materials.

In total, over the past fourteen years, **3,386 citizens** from **30 communities** across the Crow River Watershed have donated their time to remove garbage and debris from the banks of the Crow River and its tributaries. These hardworking volunteers were able to remove **67 tons** of garbage from **503 miles** of shoreline.

Equally important to the amount of garbage removed from the river is the number of people and businesses willing to donate time, money or items to the event. It reflects the pride and indicates the Crow River is a resource worth protecting. This year we have the following communities participating: Hutchinson, Biscay, Brownston, Stewart, Delano, Forest City, Humphrey Arends County Park, St. Michael, Dayton, Hanover, New London, Paynesville, Rockford and Watertown.

The CROW appreciates your support in the preservation and restoration of the Crow River. Please contact me at 763-682-1933 ext. 2916 if you have any questions or need additional information. We would appreciate your support. Our success is reflected by the support we receive by the community and we can't do it without you!

Sincerely,

Diane Sander  
CROW Coordinator

**CROW** *Joint Powers Counties:* **CARVER · HENNEPIN · KANDIYOHI · MCLEOD · MEEKER · POPE · RENVILLE · SIBLEY · STEARNS · WRIGHT**

*Improving water quality in the Crow River Basin through educational outreach and collaboration with our partners and citizens.*

[WWW.CROWRIVER.ORG](http://WWW.CROWRIVER.ORG)

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### STAFF REPORT

August 1, 2018

**2013-046 Woods of Medina, Medina.** This is two parcels totaling 9.5 acres located east of CR 116 and south of Hackamore Road. The site is proposed to be developed into 16 single-family residential lots. In January 2015 the Commission approved this project with two conditions. Although this project has not been constructed, it is still active with the City of Medina and remains approved by the Commission until it becomes inactive with the City.

**2014-015 Rogers Drive Extension, Rogers.** This project involves improvements along Rogers Drive from Vevea Lane to Brockton Lane. The project is located east of I-94, south of the Cabela development. The total project area is 8.0 acres; proposed impervious surfaces total 5.6 acres. Site plans received July 1, 2014 meet the requirements of the Commission with the exception of the nutrient control. The Commission approved the site plan contingent upon the City deferring 4.6 lbs. of phosphorus for treatment in future ponding opportunities as the easterly corridor of Rogers Drive develops. 2.3 lbs. will be accounted for in the Kinghorn Spec. Building site plan, with 2.3 lbs. still outstanding. This item will remain on the report until the total deferral is accounted for.

**2015-004 Kinghorn Outlot A, Rogers.** This is a 31-acre site located between the Clam and Fed Ex sites on the west side of Brockton Road and I-94. The proposed site will have two warehouse buildings with associated parking and loading facilities. In June 2015 the Commission approved this project with three conditions. Revisions have yet to meet the Commission's approval conditions. This project was extended by the City of Rogers earlier this year. It will remain active on the Staff Report.

**2016-002 The Markets at Rush Creek, Maple Grove.** This is a proposal to develop 40 acres of a 123-acre planned unit development located in the southwest quadrant of the intersection of CSAH 101 and CSAH 10. County Ditch 16 (Maple Creek) runs along the south property line on this project. The 40-acre project area includes a Hy-Vee grocery store (16.8 acres), a Hy-Vee gas station (2.5 acres) and 11 outlots (18.76 acres). Right-of-way accounts for 2.3 acres. In May 2016 the Commission granted Staff authority to administratively approve the project and report any updates. City approvals remained active and the applicant extended the 15.99 deadline to October 2018. *Updated plans with some minor layout revisions were reviewed by Staff and administratively approved contingent upon the Operation and Maintenance Plan approval and recordings. This item will be moved to the Final Recordings section of this report.*

**2016-005W Ravinia Wetland Replacement Plan, Corcoran.** At their December 2016 meeting the Commission approved Staff's findings and recommendations on this wetland replacement plan. Final wetland impacts are 1.22 acres. Wetland credits created on site will be 4.01 acres. Excess credits of 0.75 acres are proposed to be used on Lennar's Laurel Creek development in Rogers (2017-014). All approval contingencies have been met and construction completed.. Vegetation planting and management took place throughout 2017. Barr Engineering will provide monitoring *starting in 2018*, to ensure the replacement meets the performance standards of the approved plans.

**2016-040 Kinghorn 4th Addition, Rogers.** This is a 13.7-acre parcel located in the northwest corner of the intersection of Brockton Lane and Rogers Drive. An industrial warehouse with 8.8 acres of new impervious area is proposed for the site. The plan includes the use of a NURP pond and a biofiltration basin to meet Commission requirements for rates, water quality and abstraction. The adjacent site is likely to be developed in the near future and some of the stormwater features were oversized to accommodate future development. In November 2016 the Commission approved the project conditioned on: 1) approval of only this phase; future phases will need additional review and approval; 2) final modifications to the hydrologic modeling; 3) additional details are provided for a proposed water re-use system; 4) an

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O&M Plan for the pond and biofiltration basin is completed and recorded on the final plat; 5) modification of the storm sewer system to maximize the area draining to the NURP pond; and 6) receipt and review of wetland-related documentation if wetlands are present. Condition #1 required no action, so has been met. Condition #2 has been met for the current design; however, any future design modifications will require additional review. Conditions #3-6 remain outstanding and are expected to be addressed during final design. Staff has discussed the project with the City and been in contact with the project engineer to receive an update, but no new information has been provided.

**2016-047 Hy-Vee North Maple Grove.** The applicant is proposing to disturb 13 acres of a 20.4-acre site located at the northeast corner of Maple Grove Parkway and 99th Avenue for the purpose of constructing a grocery store, fuel station, convenience store and parking facilities. Staff sent preliminary review comments and requested revisions on December 14. In their findings dated January 10, 2017, Staff recommended approval of this project subject to 1) receipt, approval, and recordation of an Operations and Maintenance Plan for the pond and the iron-enhanced filtration system, 2) revisions for items relating to buffer requirements and erosion and sediment control as enumerated in the findings, and 3) receipt of a signed and dated final plan set. The Commission approved Staff's recommendations at their January 11, 2017 meeting with the additional requirement that the Commission receive and comment on a WCA impact notice. No new information has been received to date.

**2017-039 Rush Creek Apartments, Maple Grove.** This project is located in the southwest quadrant of the intersection of Bass Lake Road (CSAH 10) and Troy Lane (CSAH 101). The project area is 8.2 acres in size and includes two phases of construction. Phase I is 236 apartment units located on 6.0 acres; Phase II is a future 76-unit apartment building located on 2.2 acres in Outlot C of this development. The Commission will review this project for conformance to rules D, E and I. Findings with no recommendations dated November 15, 2017, were provided to the applicant and City. The applicant requested and was granted an extension of the deadline (per MN statute 15.99) to December 31, 2018.

**2017-044 Reserve at Medina 2nd Addition, Medina.** Erosion control plans for the final buildout of this addition of the Reserve at Medina project were originally approved under permit #2013-002. This addition is located southeast of Hackamore Road and Pinto Drive (CR116), immediately east of the First Addition, and will allow for the construction of 46 new single-family homes. The plans are in conformance with the previously approved project and require small modifications in order for Staff to complete its administrative review. *Revised plans were submitted to staff on July 27, 2018. Staff will review and issue administrative approval if the revisions are complete.*

**2017-045 Fish Lake Estates, Maple Grove.** This is a small subdivision located at the intersection of the Weaver Lake Road entrance ramp to east bound I94 and Fish Lake Road East. The application is considered incomplete because the Commission has not received authorization from the City to proceed with its review. The City has concerns with the lot layout, wetland impacts and stormwater management. *Because of the lack of information and contact from the applicant or City, this item will be removed from the report.*

**2017-046W Wessell Property Wetland Delineation, Corcoran.** This is a wetland delineation received for the Commission's review and decision for a 155-acre site located in the northwest quadrant of Hackamore Road and CSAH 116. The WCA application notice has been issued. The application is considered incomplete at this time. Staff met with the delineator on-site and walked the wetland boundaries. Staff requested additional historic aerial photo reviews and a complete report prior to a final decision. *Because of the lack of information and contact from the applicant or City, this item will be removed from the report.*

**2017-048W Ebert Parcel Wetland Delineation, Corcoran.** This application was submitted without a final delineation report and is considered incomplete. The applicant requested the LGU look at the site prior to freeze up. Once a final report is received Staff will notice the delineation and move forward with the application. *Because of the lack of information and contact from the applicant or City, this item will be removed from the report.*

**2017-050W Ernie Mayer Wetland/floodplain violation, Corcoran.** The Commission was informed of a potential wetland violation occurring on four parcels in Corcoran. Initial site inspection appears to confirm the wetland violation. An access road was constructed from Larkin Road into these parcels. The road appears to be constructed in MN Wetland

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Conservation Act jurisdictional wetlands within the Rush Creek floodplain. A Technical Evaluation Panel (TEP) met onsite on December 11 to advise the Local Government Unit (the Commission) as to the extent of any violation and the development of a restoration order for any violation that has occurred on this site. An informational meeting with the TEP and applicant was held on January 30, 2018. Another TEP was held May 22, 2018, for the field investigation. In addition to the road work wetland filling, extensive ditching and drain tile installation was verified on site. All this work appears to be in violation of Commission permitting and WCA requirements. TEP findings were provided to all parties concerned. Mayers requested another TEP to provide additional information to the panel. *The TEP meeting was held on July 20. Some revisions to the impacts were accepted by the TEP, but the TEP found the original violations to the WCA still existed. A restoration order will be issued to Mayers giving him 30 days to respond or restore the violation areas to their original conditions. (July 20, 2018 TEP findings are included in the meeting packet.)*

**2018-004 Rush Creek Restoration Project, Maple Grove.** The City is proposing to restore 2,400 feet of Rush Creek just north of Territorial Road adjacent to the Enclave on Rush Creek development. This is within the Three River Parks corridor that was obtained when the development was platted and is being reviewed for compliance to the Commission's grading and floodplain requirements. Staff has completed its review. *This item was pulled from the agenda at the Commission's June meeting due to concerns from a partner agency. As of this report, no further progress or communication has occurred and this project will not be brought forward for the Commission's review until the parties have reached agreement on proceeding.*

**2018-005 Sundance Greens, Dayton.** This site consists of seven parcels totaling 310 acres. Approximately half is the Sundance Golf course and the other half is agricultural land. The applicant is proposing a long term, phased residential development with 665 residential units while maintaining a portion (9 of the 18 holes) of the golf course. Total new impervious area will be 71 acres. The site is being reviewed for Commission Rules D, F, and I. Staff's review and findings dated February 23, 2018 were provided to the City and applicant. Because the plans do not meet the Commission's requirements no recommendations were given. The decision deadline per MN 15.99 was extended by Staff to June 2, 2018 giving the applicant the opportunity to respond to their findings. The applicant requested and was granted an extension to *October 10, 2018. Revisions were received July 31.*

**2018-007 Copper Creek of Nottingham, Maple Grove.** This is a 4.03 acre in-fill project in the Nottingham development section of Maple Grove. It is located about 1/4 mile northeast of the intersection of Nottingham Parkway at Bass Lake Road along 73rd Place/Xene Lane cul-de-sac. Nine new single family residential lots are proposed. The current site plans dated February 12, 2018 do not meet the Commission's standards for water quality, abstraction and erosion controls. Staff's review and findings were sent to the City and applicant on March 6. The decision deadline per MN Statute 15.99 expired on June 20, 2018. *After numerous requestes to the City and the applicant, no new information has been received. Staff will notify the applicant and the City that the site plans do not meet the Commission's requirements and unless an extension to the 15.99 deadline is received by August 15, the application will be denied and a new application will have to be provided in order for this project to move forward.*

**2018-008 Hayden Hills Golf Course Subdivision, Dayton.** This is an 85 acre golf course that is proposed to be developed into 238 single family residential lots. The original submittal was received March 1 and all materials to complete the application were received on March 23. The proposed project meets the Commission's standards for water quality, runoff rates, and erosion control; however the proposed stormwater ponds will have a direct connection to the groundwater. In findings dated May 9, 2018, Staff recommended approval of the project with three conditions. The Commission approved Staff's recommendations and further recommended that a determination be made regarding the requirement of an operations and maintenance agreement and that the City carefully review the expressed drainage concerns. *All conditions for this project have been met. This item will be removed from the report.*

**2018-013 Wayzata Elementary School #9, Plymouth.** This site is the southwest 24-acre area of a 73-acre parcel. The property was subdivided into a phased 111 residential subdivision on 49 acres last year (ECWMC project 2017-036, The Enclave of Elm Creek) with this area site to be reviewed and approved when submitted. Stormwater was designed and approved by the Commission with both projects as one management system, but the final plans for the school site had

not been determined at the time of the Enclave review. The approval for project 2017-036 was contingent upon, a) the school project review and approval or b) an alternative abstraction design be implemented in the residential project. This submittal is for the school project review and approval. The Commission review for the Elementary School site will be for rules D, E, F and I. *At their July meeting, the Commission approved Staff's recommendation dated June 20, 2018, with the further condition that site grading in Medina cannot proceed until all WCA and grading regulations for the portion of the school site within the jurisdiction of the City of Medina are permitted by Medina.*

**2018-014 Refuge at Rush Creek (formerly Fehn Meadows 2nd Addition), Corcoran.** The site is currently a 63-acre agricultural property located west of Cain Road on CR 117. The applicant proposes to subdivide the site into 14-residential lots. Pubic road and trail access will impact one wetland basin in two location, totaling 15,687 SF of type 1 wetland impacts. Replacement at a 2:1 ratio in Bank Service Area (BSA) 7, Major Watershed 18-N.Fork Crow River is proposed. The wetland replacement plan has been noticed per WCA requirements. Staff has completed the project review. The TEP has discussed the wetland replacement plan and is in agreement that the sequencing analysis per WCA requirements is adequate and impacts are justified. They, as well as Commission Staff, have concerns about the location of the replacement wetlands. Commission guidelines are that 1:1 replacement be in the ElmCreek Watershed area or, if no credits are available, in Hennepin County. TEP concerns are that this site is in wetland BSA 20 and the replacement is proposed in BSA 18. Staff extended the review deadline to August 22, 2018. *A revised plan was received July 20, 2018. Updated findings and recommendations should be available for the Commission at their meeting.*

**2018-020 North 101 Storage, Rogers.** This is an existing 3-acre lot in the northwest corner of Highway 101 and CR144. The current land use is a combination of mini-storage units and outdoor storage. The site is proposed for complete demolition and the construction of seven new mini-storage buildings. Site plans must comply with Rules D and E. Because the project is disturbing over 50% of the site area (100% actual), Staff review will be the same as for a new development and stormwater management plans must comply with all impervious areas. *At their July meeting the Commission approved Staff findings dated July 9, 2018, pending four items relating to abstraction requirements and the infiltration system. No new information has been received as of this update.*

**2018-021 113th Lane Extension/Brockton/101, Rogers.** The City of Rogers is proposing to extend 113th Lane to provide a second access to the proposed second phase of the Laurel Creek Development. The proposed road will extend from Brockton Lane to the development entrance. It will include a 4-lane divided roadway from Brockton Lane to the development entrance; an off-road trail north of 113th Lane; and construction of an intersection to meet County turn lane requirements. The project will create 2.13 acres of new impervious surface. *The project was conditionally approved at the July Commission meeting. The conditions include submittal of signed final plans and finalization of the wetland mitigation plan. The project has been delayed until 2019, so submittals to meet the conditions have not yet been received.*

**2018-022 Fernbrook Fields, Maple Grove.** The City of Maple Grove is planning to construct athletic fields in the southwest intersection of 99th Avenue North and Fernbrook Lane. This project site is 19 acres in size and will consist of constructing four full-size, multi-purpose athletic fields. Staff site review will be for compliance with the Commission's Rules D, E and I. If findings and a recommendations were not available at the July meeting, the applicant requested administrative approval for their grading and erosion control plans assuming the risk of changes necessary to conform to the Commission's final decision. *Staff granted administrative approval to begin grading and erosion control on this site on July 20, 2018, along with a review that made no recommendation on the project. Staff is anticipating a revised submittal and will bring the project forward for a recommendation at the meeting if one is available.*

**2018-023 King Solutions Distribution Center, Dayton.** This site is in the Wicht industrial Park. A 97,750 SF commercial/industrial building and its associated parking and utility construction are proposed. Regional ponding was constructed as part of the overall stormwater management plan. Review will be for grading, erosion controls and conformance to the original stormwater management plan assumption. *Staff reviewed the plans and issued an administrative approval on July 23, 2018.*

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**2018-024 Schober Wetland Delineation, Corcoran** This is a 111-acre area west of Brockton Lane (CR 101) along Stieg Road. *Staff reviewed the delineation report and visited the site and found the boundaries (as revised) to be in compliance with the Commission's and WCA's requirements. The LGU decision was noticed per WCA requirements. This item will be removed from the report.*

**2018-025 Watten Wetland Delineation/Replacement Plan, Corcoran.** This is an application for a wetland boundary/type determination, wetland replacement plan and the sequencing analysis of said plan. This is a vacant 5-acre residential flag lot on CR 10. Kjolhaug Environmental Services did the wetland delineation on December 12, 2017 with a follow-up visit on May 2, 2018. Anderson Engineering completed the wetland replacement plan for construction of a residential gravel driveway (12' wide) for access to the buildable area. *4,422 SF (0.1015 acres) of one wetland basin will be impacted. 0.2030 acres of wetland banking credits are proposed to be purchased from B. Engstrom bank account 1643 (major watershed #20, BSA 7) for replacement of the impacts. Staff's findings and recommendations dated July 27, 2018 are provided in this month's packet. Staff recommends approval pending receipt of BWSR certification of 0.2030 acres of wetland credits transfer for 0.1015 ac. of impacts on this project.*

**2018-026 Windrose, Maple Grove.** This proposed 8.5-acre townhome site is in the east quadrant of CR 101 and Bass Lake Road. The stormwater management plans for this area were approved by the Commission for their 2nd Generation Watershed Management Plan under project 2009-004 (Hustad Property/Markets at Rush Creek), but never completely constructed. *Staff review dated July 20, 2018 recommends site plan approval contingent upon verification of the wetland approvals by the City of Maple Grove and the approval and recording of the operation and maintenance plan on the filter basins.*

**2018-027 CR202 Bridge, Dayton.** This is a replacement bridge on Elm Road in the Elm Creek Park Reserve. Staff has been working with the DNR and Hennepin County on the floodplain issues as they relate to the replacement. Staff review is for floodplain impacts, erosion and sediment controls. *Staff has completed its review and will be recommending approval at the August Commission meeting.*

**2018-028 Tricare Third Addition, Maple Grove** This is a 2.1-acre area that will be split out of an 85-acre parcel north of CR 30 at 96th Avenue and Dunkirk Lane. An 18,000 SF commercial retail building with its associated parking and utilities are proposed. The Commission's review will be for compliance to rules D, E and I. *Findings and a recommendation will be provided to the Commissioners at their meeting if available.*

**2018-029 McConn, Plymouth.** This is a 6-acre parcel proposed to be developed into eight residential lots. It is located on the north side of CR 47 between Vagabond and Urbandale Lanes. The Commission's review will be for compliance to rules D, E and I. *Staff has completed its review and will be recommending approval at the August Commission meeting.*

**2018-030 Pine Meadows, Dayton.** This is 38.25 acre, multiple parcel subdivision proposed to be developed into 84 residential lots. It is located south of Dayton River Road, between Pineview and Vinewood Lanes. This item has previously been discussed at the June and July 2018 Commission Meetings in regards to a variance from Commission rules related to a landlocked drainage area. *Staff is reviewing the plans and variance request based on plans submitted for review on July 11, 2018. Staff has also granted administrative approval for grading and erosion control to begin on the project site. Staff will provide a recommendation at the August Commission meeting, pending completion of its review under rules D, E, G, I and K.*

**2018-031 North Dayton AUAR, Dayton.** This is an Environmental Review document known as an Alternative Urban Area Review (AUAR) for a 560-acre area in the City of Dayton. It is similar in nature to an Environmental Impact Statement. The land in question is generally located north of North Diamond Lake Road, south of Dayton River Road, east of the Daytona Golf Club, and west of Oxbow Lane and the adjacent farmstead. Staff received the document for review on July 17, 2018. The review is for the conversion of the area to approximately 1500 to 1700 residential units and a commercial development area. *Staff will review the document for consistency with Elm Creek rules and comment on any other larger scale issues in the area.*

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**2018-032 Encore Development, Corcoran.** This is a 398 lot residential subdivision proposed on 226 acres. Plans were received for the project on July 13, 2018. *A wetland replacement plan for filling and mitigating 0.4263 acres of impacts was also submitted with the application.* The project is generally located west of Brockton Lane (101) and south of Steig Road, with a portion located north of Steig Road. *Because of the WCA noticing requirements, this item will not come to the Commission until their September meeting. The applicant requested prior approvals for grading the site. Staff will review the grading and erosion control plans and provide approval if: a) the plans meet the Commissions erosion control standards, b) the applicant understands they are responsible for any changes needed to achieve final approvals, and c) that no wetland impacts can occur directly or indirectly by their grading operations prior to final site plan approval.*

**2018-033 Cloquet Island Estates, Dayton.** This is a proposal to develop approximately 77 acres of farmland near the intersection of North Diamond Lake Road and Dayton River Road. It will include the construction of 193 single-family homes and increase impervious area by approximately 24.4 acres. Stormwater will be managed through seven wet detention ponds, one filtration bench, and one new infiltration bench. Staff is reviewing the plans at this time.

**2018-034W NE Trunk Sanitary Sewer, Corcoran.** This is an application from the City for a wetland determination of no-loss for temporary impacts to wetlands associated with installing this sewer line from the City of Rogers/Maple Grove/Dayton/Corcoran corner to the Encore development at Steig Road. Staff is awaiting site plans from the City before it begins processing the request.

**2018-035 Edgewater East, Maple Grove.** This is a 43-lot residential subdivision located on approximately 27 acres. The project is located near the northwest corner of Bass Lake Road and Brockton Lane. An incomplete application was submitted on July 16, 2018. The applicant was notified that the application was considered incomplete on July 17, 2018. No new information has been received to date.

**2018-036 D. Johnson Pond Excavation, Corcoran.** Johnson requested a pond excavation permit in a depression/type 1-2 wetland on his property. This is not regulated by the MN WCA, but the Commission regulates pond excavations where it is the LGU. A pond excavation permit was issued. This item will be removed from the report.

**2018-037 Elm Creek Restoration Reach D, Plymouth.** This project proposes to implement stream restoration along 3,850 feet of Elm Creek. Plans were received on July 25, 2018. Staff was unable to review the project plans in time for the August Commission meeting and will have its review completed for the September meeting.

**FINAL RECORDINGS ARE DUE ON THE FOLLOWING PROJECTS:** *Staff requested updates from the cities on June 6, 2018.*

**2015-030 Kiddiegarten Child Care Center, Maple Grove.** Approved December 9, 2015. If the City does not take over the operation and maintenance of the underground system and the sump catch basins, an O&M agreement for the underground trench/pond system must be approved by the Commission and the City and recorded with the title.

**2016-052 The Woods at Rush Creek, Maple Grove.** At their March 2017 meeting, the Commission approved Staff's findings and recommendations dated February 15, 2017. Outstanding items are the biofiltration pond, O & M plans, and recording.

**2017-014 Laurel Creek, Rogers.** At their June 14, 2017 meeting the Commission approved this project with four conditions. All contingency items have been provided with the exception of the O&M agreement which is being negotiated by the City as to whether the City or the HOA will be responsible for the operation and maintenance of the stormwater management facility. In his August 31, 2017 email, Andrew Simmons responded that the O&M agreement is still being negotiated.

**2017-016 Territorial Woods, Maple Grove.** Approved at the September 13, 2017 Commission meeting contingent upon receipt of an O & M agreement meeting the Commission's rules. The agreement was approved by the City and is in the process of being recorded.

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**2017-017 Mary Queen of Peace Catholic Church, Rogers.** At their June 14, 2017 meeting the Commission granted Staff approval authority pending satisfactory compliance with Staff's findings. All items from the findings have been completed with the exception of the O&M agreement for the stormwater facilities. In his August 31, 2017 email, Andrew Simmons responded that he has the O&M agreement in hand, just awaiting recordation. On June 7, 2018 Simmons reported that the *Church is in the process of revising stormwater management plan for site to include water reuse instead of biofiltration pond. Commission should receive a revised application in near future. There are also underlying utility easement issues with this project that are holding up the final recording of the plat against which to record the maintenance agreement.*

**2017-019 Medina Senior Community, Medina.** This item was approved at the Commission's September 2017 meeting subject to conditions. All of the conditions have been met with the submission of revised plans, with the exception of the final recordings of the O&M agreements and easements. *On June 6, 2018, city staff reported that the applicant is anticipated to be recording documents and starting construction in the summer.*

**2017-021 Hindu Society of MN, Maple Grove.** At their June 14, 2017 meeting, the Commission approved this project per Staff's recommendations. All the recommendations have been met with the exception of the O&M plan agreements.

**2017-029 Brayburn Trails, Dayton.** At their August 2017 meeting the Commission approved Staff's findings dated August 2, 2017 with five conditions. All of the conditions have been met with the submission of revised plans, with the exception of the final recordings of the O&M agreements and easements. On March 7, 2018, the City reported: final plat approval has not been granted, easements will be recorded as plats are approved. Ponds will be maintained by the City of Dayton. An agreement, and additional easement, will be required for a water re-use system within one of the ponds (between the City and HOA). This system is not part of the first addition – the timing of said improvements/agreement is unknown. Construction is expected to start in 2018.

**2017-034 Plymouth Memory Care, Plymouth.** This project was approved by the Commission at its September 2017 meeting subject to the receipt of an O&M agreement acceptable to the Commission. *On June 7, 2018, city staff reported that the applicant is working with them to finalize the maintenance agreement. It is anticipated the agreement will be recorded by July.*

**2017-037 Corcoran L-80 Lift Station, Corcoran.** Staff recommended the Commission approve this project contingent upon the project meeting the Commission wetland buffer requirements. This item was approved by the Executive Committee of the Commission in October 2017. Revised plans meet the Commission's buffer requirements with the exception of the final easement recordings. On March 6, 2018, city staff informed the Commission that they are working with a land surveyor and will complete the recordations before construction is completed.

**2017-038 Bass Lake Estates, Corcoran.** This is a proposed residential development consisting of 55 single family lots and one commercial lot on a 40-acre site. At their March 14, 2018 meeting, the Commission approved Staff's findings dated March 13, 2018 which recommended approval contingent upon the applicant recording the maintenance agreements and easements within 90 days of final plat recording.

**2018-001 Rush Creek Commons, Maple Grove.** Approved at the February 14, 2018 meeting contingent upon meeting the Commission's operation and maintenance requirements on the stormwater facilities, i.e., all ponds and biofiltration basins must have drainage and utility easements and operation and maintenance agreements over them. These must be recorded on the property title and a copy of the recordations must be provided to the Commission within 90 days after final plat approval.

**2018-001 Rush Creek Commons, Maple Grove.** Approved at the February 14, 2018 meeting contingent upon meeting the Commission's operation and maintenance requirements on the stormwater facilities, i.e., all ponds and biofiltration basins must have drainage and utility easements and operation and maintenance agreements over them. These must be recorded on the property title and a copy of the recordations must be provided to the Commission within 90 days after final plat approval.



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**2018-018 Summers Edge Phase III, Plymouth.** This is a 15-acre parcel located at the northeast corner of the intersection of Brockton Lane and Medina Road. The proposed development consists of 45 single-family homes on a parcel that is currently vacant. Staff review was for compliance with rules D, E, and I. The Commission approved Staff's recommendations dated June 12, 2018 at their June 13 meeting, subject to receipt of final easements over the wetland buffers within 90 days of final platting in a format acceptable to the Commission.

### **LOCAL PLANS**

**Maple Grove Draft Surface Water Management Plan.** Staff reviewed the City of Maple Grove's Draft Surface Water Management Plan dated January 2018. Their comments were included in their letter to the City dated March 7, 2018.

### **FEMA FLOODPLAIN MAPPING**

**Elm Creek Floodplain Mapping:** Staff has begun setting up the GIS information for the hydrology portion of the required modeling for this project. The Minnesota DNR has initiated its survey work for the project and anticipates starting to share survey data soon, which will allow work on the hydraulics modeling to commence.

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# elm creek

## Watershed Management Commission

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### **Fernbrook Athletic Fields** **Maple Grove, Project #2018-022**

**Project Overview:** This project proposes the construction of 4 artificial turf athletic fields along with approximately 200 parking stalls and necessary ingress and egress roadways on a 19 acre parcel. The project is located in the southeast quadrant of the intersection of Fernbrook Lane and 99<sup>th</sup> Ave North in the City of Maple Grove. The parcels the proposed project is located on (PID 0911922140004 and PID 0911922140005) have been in agricultural production prior to this development proposal in recent years. The site is surrounded by other athletic field, educational, and institutional facilities with the Maple Grove High School football stadium located to the south of the site, Fernbrook Elementary School and Playfields to the west, University of Minnesota Clinics to the north, and Maple Grove High School to the east. The site is being reviewed for conformance with Rules D (Stormwater Management), E (Erosion and Sediment Control), G (Wetland Alteration), and I (Buffer Strips).

**Applicant:** City of Maple Grove, Attn. Ken Ashfeld, 12800 Arbor Lakes Parkway, Maple Grove, MN 55369. Phone: 763-494-6351. Email: [kashfield@maplegrovmn.gov](mailto:kashfield@maplegrovmn.gov)

**Agent:** Stantec Consulting Services, Attn: Tyler Johnson, 2335 West Highway 36, Roseville, MN 55113. Phone: 651-636-4600. Email: [tyler.johnson@stantec.com](mailto:tyler.johnson@stantec.com)

#### **Exhibits:**

- 1) ECWMC Request for Plan Review and Approval, received May 21, 2018
- 2) Project review fees for institutional/governmental development on 19.0 acres (\$4750)
- 3) May 16, 2018 Memo/Narrative describing how the proposed project meets ECWMC standards and requirements.
- 4) Site plans, dated June 26, 2018
  - a. Sheet G001, Title Sheet
  - b. Sheet G002, Legend
  - c. Sheet G003, Storm Sewer Schedule
  - d. Sheet C001, Location Plan
  - e. Sheet C002, Removals Plan
  - f. Sheet C101, Typical Sections
  - g. Sheet C201, Temporary Site Erosion Control Plan
  - h. Sheet C202, Permanent Erosion Control Plan
  - i. Sheet C301-C302, Grading Plan

Fernbrook Athletic Fields  
 Maple Grove, Project 2018-022  
 July 12, 2018

- j. Sheet C303, Filtration Shelf and Pond
  - k. Sheet C401, Sanitary Sewer Plan and Profile
  - l. Sheet C402, Water Main Plan and Profile
  - m. Sheet C501-C505, Storm Sewer Plan and Profile
  - n. Sheet C601-C611, Street Plan and Profiles
  - o. Sheet C612, Trail Plan
  - p. Sheet C613-614, Field and Warm-up Area Details
  - q. Sheet C801-C802, Standard Details
  - r. Sheet C901-C903, Signing and Striping Plans
  - s. Sheet T901, Temporary Traffic Control
  - t. Sheet L101-202, Landscaping, Fencing, and Field Plans
  - u. Sheet L801-805, Misc Field Details
  - v. Sheets E001-602, Electrical Details
- 5) Existing Drainage Map, dated 6/28/2018
  - 6) Proposed Drainage Map, dated 6/28/2018
  - 7) Existing Conditions HydroCAD report, dated 6/28/18
  - 8) Proposed Conditions HydroCAD report, dated 6/28/18
  - 9) Geotechnical Report from Braun Intertec, dated April 19, 2018.
  - 10) NRCS Soils Report for the Site dated 2/12/2018
  - 11) Stormwater Management Plan Figure, dated May 18, 2018
  - 12) Joint Application Form for Activities Affecting Water Resources in Minnesota (WCA and Corps), dated 4/27/18
  - 13) Proposed Water Quality Calcs, dated 5/17/18

### **Findings:**

- 1) A complete set of plans was received on May 21, 2018. The ECWMC 60-day decision deadline per MN Statute 15.99 expires July 20, 2018. Staff will be extending this to the allowed 120 days under separate cover.
- 2) The existing site is bisected by a drainage divide. Runoff on the eastern 1/3rd of the site (approximately) drains to the east to storm sewer located in Fernbrook Drive. The other 2/3rds of the site drains to the west and west along 99<sup>th</sup> Avenue North. Ultimately, all of this water proceeds to the north/northeast and enters Elm Creek downstream in the vicinity of the intersection with CR 81 and Minnesota 610.
- 3) The project proposes to regrade the site to hold 4 athletic fields with a modified soil base for the artificial surface fields. In addition, approximately 200 parking spaces and proposed access drives to 99<sup>th</sup> Ave, Fernbrook Ave, and the adjacent school site are proposed as part of the project. The proposed project will add 4.6 acres of new impervious surfaces.
- 4) The project proposes to collect storm water runoff in an onsite filtration basin to provide water quality treatment and to meet the abstraction requirements of 1.1" over all new impervious areas on site. The basin is located in the southwestern portion of the site, and is proposed to be underlain with a 6" daintile and 18" of granular materials mixed with compost. In addition to the basin, three tree trenches are proposed in the parking area (as shown on Sheet C608 and C609).



Fernbrook Athletic Fields  
 Maple Grove, Project 2018-022  
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- a. Based on the storm sewer, it appears that there may be more tree trenches on the site that are not labeled as such on sheet C609. Applicant should clarify.
- 5) Abstraction Volume: Total new impervious area for the site is 4.6 acres, requiring 18,368 cubic feet of volume to be infiltrated or filtered to meet the 1.1" requirement from all new impervious surfaces. Infiltration is not being used on the site due to poor clay soils, and instead, a filtration pond and tree trenches are being proposed. The actual volume being proposed to be filtered appears to exceed the commission requirements, however, the calculations provided do not clearly demonstrate this is the case. Drawdown in the filtration features is proposed to be less than 48 hours, as required. Modifications and additional information required to satisfy the abstraction requirement are as follows:
  - a. Pretreatment of runoff prior to discharging to the filtration basin appears to be provided by sump manholes. Label the manholes and sump elevations on the project plans. We recommend some sort of device such as a SAFL baffle or other feature be installed in these manholes.
  - b. The abstraction table provided in the memo assumes the filtration volume is provided between elevations 922.0 and 926.0 feet in elevation. However, the plan details show the overflow elevation from the basin to be at 925.0 feet in elevation. The volume above the outlet should not be included the abstracted volumes.
  - c. The elevation of the overflow as shown on the project plans on sheet C303 do not match the details of the outlet as modeled in the HydroCAD report (923.0 versus 925.0.)
  - d. Assuming the overflow elevation is at 925.0, the volume shown in the tree trenches must be included in the abstraction volumes to demonstrate the volume is being met.
- 6) Nutrient and TSS loads: Based on the information provided, it is unclear if the Commission's Standard for Water Quality are met.
  - a. Pre-development phosphorus loads = unknown lbs/year
  - b. Post-development phosphorus loads = 9.3 lbs/year
  - c. Pre-development TSS loads = unknown lbs/year
  - d. Post-development TSS loads = 1260 lbs/year

#### Stormwater Management Summary;

Condition	TP Load (lbs/yr)	TSS Load (lbs/yr)	Abstraction (cu. ft.)	Filtration (cu. ft.)	Annual Volume (ac. ft.)
Pre-development (baseline)	?	?	N/A	N/A	?
Post-development without BMPs	11.0	2000			13.5
Post-development with BMPs	9.3	1260		?	11.7*
<b>Net Change</b>	?	?	N/A	?	N/A *

Fernbrook Athletic Fields  
Maple Grove, Project 2018-022  
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\*assumes up to 1.1” rainfall volume will remain on site. Filtration does not accomplish that.

Changes and modifications necessary for approval include:

- a. Provide Existing Conditions pollutant loading numbers for TP and TSS, consistent with Commission Guidance that can be found here:  
[http://www.elmcreekwatershed.org/uploads/5/8/3/0/58303031/phosphorus\\_loading\\_coefficients.pdf](http://www.elmcreekwatershed.org/uploads/5/8/3/0/58303031/phosphorus_loading_coefficients.pdf)
- b. Show that removals are met using just the filtration basin as presently designed or modify the calculations to show the tree trench removals in addition if needed.
- c. Provide the actual MIDS model file in addition to the MIDS model output for review.
- d. The narrative memo provided by the applicant for the review, under item j indicates that additional information needed to be added to the memo.

7.) Rate Controls meet the Commission’s standards.

	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
<b>Pre-Development Rates</b>	<b>19.6</b>	<b>31.3</b>	<b>54.2</b>
<b>Post-Development Rates</b>	<b>6.19</b>	<b>19.0</b>	<b>52.3</b>

8.) The City of Maple Grove is the LGU in charge of administering the Wetland Conservation Act on this site. Wetlands are proposed to be impacted on this site to construct one of the access roads into and out of the site. The applicant will need to follow all applicable WCA requirements, including sequencing on this site.

9.) Rule I. Several wetlands are located throughout the project site. ECWMC requires 25 foot buffers around wetlands on development sites. No buffers are shown on the project plans. To remedy this issue, the applicant must:

- a. Wetland buffers meeting the commission requirements must be shown on the project plans.

10.) Rule E. Erosion and Sediment Controls: An erosion control plan with temporary and permanent erosion control plans was included in the project plans. However, the SWPPP for the project was not submitted for review. To remedy this issue, the applicant should:

- a. Submit the SWPPP plan for comment and review.

### **Recommendation:**

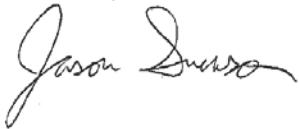
**No recommendation at this time.** Applicant should address the items under items 4a, 5a-d, 6a-d, 9a, and 10a, and resubmit for further review.

Staff notes the applicant has requested to grade the site prior to the full commission approval of the project. Based on its review, staff is comfortable with this request and grants the applicant the ability to begin grading prior to commission approval. The applicant shall acknowledge the

Fernbrook Athletic Fields  
Maple Grove, Project 2018-022  
July 12, 2018

risk that the commission may require changes to the site plans with its approvals, and any rework caused by these changes is the responsibility of the applicant.

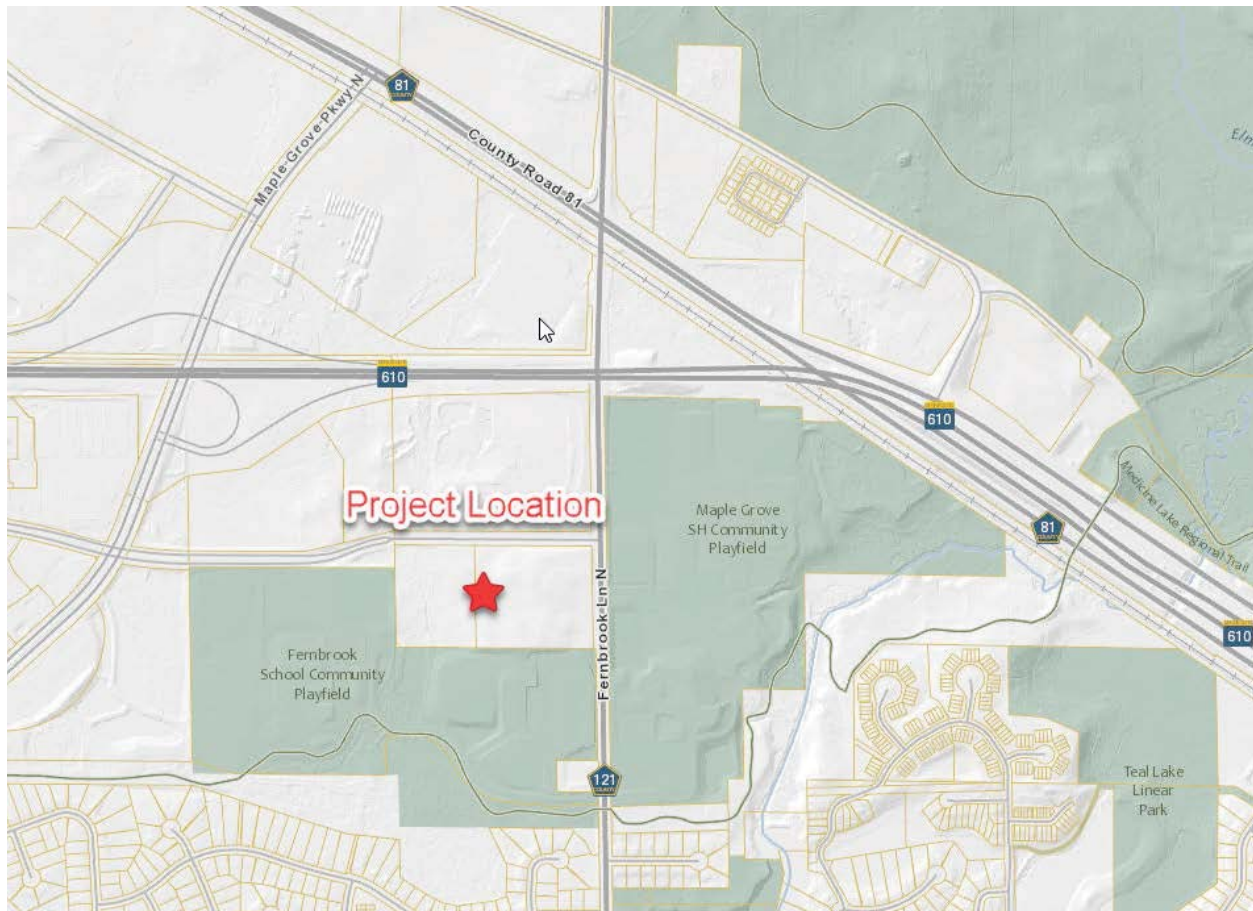
Hennepin County  
Department of Environment and Energy



July 12, 2018

Jason Swenson, P.E.  
Technical Advisor to the Commission

#### Site Location



Fernbrook Athletic Fields  
Maple Grove, Project 2018-022  
July 12, 2018

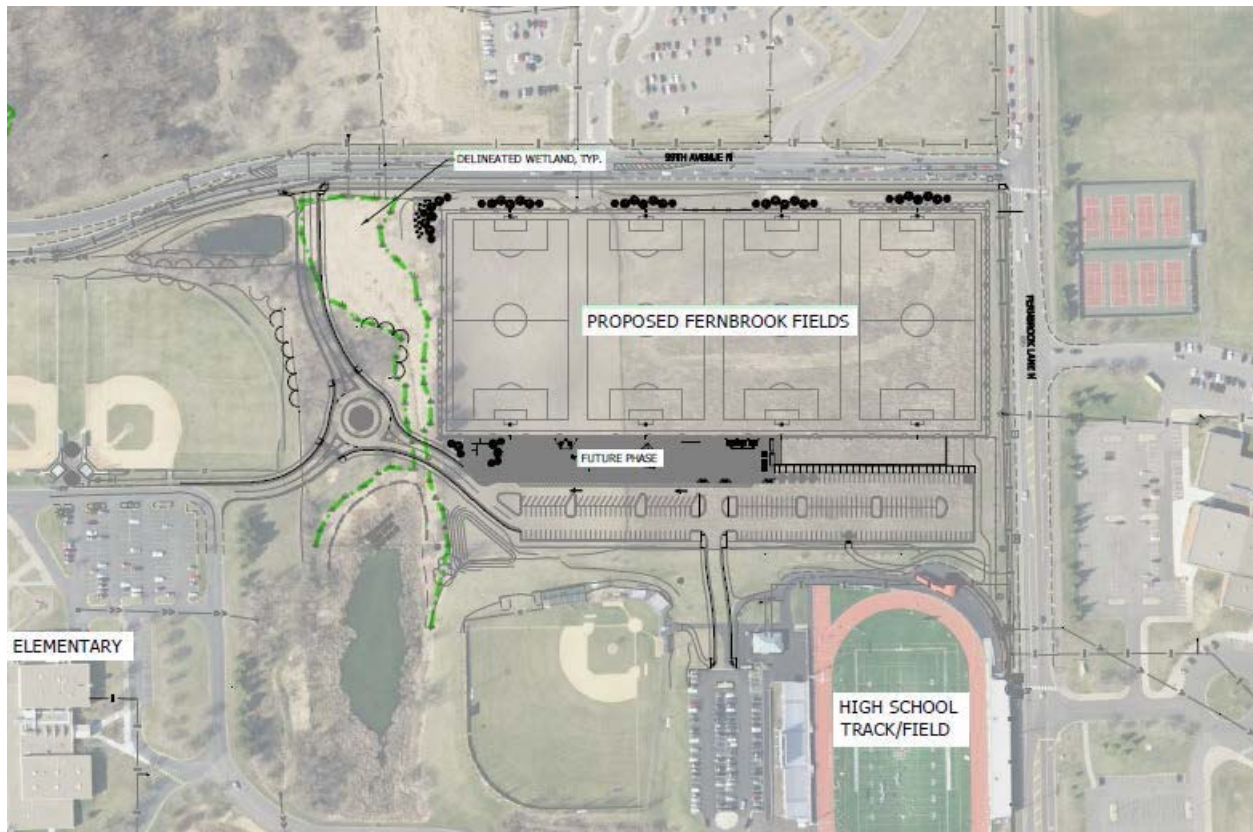
Drainage Directions



Overall Site Plan



Fernbrook Athletic Fields  
Maple Grove, Project 2018-022  
July 12, 2018



# elm creek

## Watershed Management Commission

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TECHNICAL OFFICE  
Hennepin County Public Works  
Department of Environment and Energy  
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Minneapolis, MN 55415  
PH: 612.596.1171  
E-mail: [jason.swenson@hennepin.us](mailto:jason.swenson@hennepin.us)

### **King Solutions Distribution Center Addition** **Dayton, Project #2018-023**

**Project Overview:** King Solutions has an existing distribution center located in the City of Dayton located on Holly Lane in the Wicht Industrial Park. The application is for a proposed expansion on the existing site, which will result in the construction of an approximately 98,000 square foot building and associated parking and trailer storage locations. The project is located on a 20.54 acre parcel that presently has an existing distribution center, some trailer storage and site access located on it. Portions of the trailer storage will be removed for the project. The project triggers the Commissions review requirements for Rule E, Erosion and Sediment Controls.

**Applicant:** King Solutions, Attn. Mike Patterson, 11011 Holly Lane N., Dayton, MN 55369. Phone: 763-428-5464.

**Agent:** RJ Marco, Attn. Jim Lee, 75 W. Viking Drive, Suite 104, Little Canada, MN 55117. Phone: 651-484-5635. Email: [jim@rjmarco.com](mailto:jim@rjmarco.com)

#### **Exhibits:**

- 1) ECWMC Request for Plan Review and Approval application, received June 6, 2018 with fees of \$1,433.
- 2) King Solutions Distribution Center Addition Plans dated June 1, 2018.
  - a. Sheet C1, Site Plan
  - b. Sheet C2, East Site Plan
  - c. Sheet C3, Existing Conditions
  - d. Sheet C4, Demolition Plans
  - e. Sheet C5, Grading and Drainage Plan
  - f. Sheets C6-C7, SWPPP
  - g. Sheet C8, Utility Plan
  - h. Sheet C9, Paving Plan
  - i. Sheet C10-C12, Details
  - j. Sheet L1-L2, Landscaping Plans

#### **Findings:**

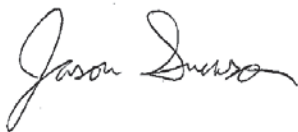
- 1) A complete application was received on June 11, 2018. The initial 60-day decision period per MN Statute 15.99 expires on August 10, 2018.

King Solutions Distribution Center Expansion  
Dayton Project 2018-023  
July 23, 2018

- 2) Over 80% of the existing site drains south to a regional storm pond constructed as part of the Wicht Industrial Park (ECWMC project 2006-021). The regional stormwater pond was designed to allow up to 75% impervious coverage on the parcels in the industrial park to control rate and water quality. The remainder of the site discharges to a wetland located on the eastern side of the site. All of the stormwater works its way easy under Holly Lane to Rush Creek.
- 3) This project will disturb 5.5 acres and create 1.71 acres of new impervious areas. All of the impervious areas are routed to the existing regional stormwater system. As proposed, the improvements result in a site that is 74% impervious, below the allowed 75% impervious for the site.
- 4) Stormwater management will not be part of this review. Adequate water quality and quantity treatments are in place from the complete developed site drains into existing stormwater treatment ponds that have the capacities designed to treat the added impervious areas to meet the Commissions stormwater standards. This site is being treated similarly to the other properties located in this industrial park, including ECWMC permits 2007-015 – King Solutions Distribution Center (which did show the future expansion potential), and 2014-030 – Dayton Industrial Park.
- 5) There are wetlands and buffers strips located on the project site. Review of the plans show that no wetland impacts are proposed as part of the project, and the existing buffer strips will remain adjacent to the wetlands with the use of retaining walls along a site access road.
- 6) No floodplain impacts are proposed as part of the project.
- 7) A complete SWPPP plan was provided as part of the plans for the project. Sediment controls will be provided including silt fence, inlet protection, and rock construction entrances. The plans as proposed meet the requirements of the ECWMC and satisfy Rule E, Erosion Controls.
- 8) No maintenance agreement is required as all stormwater is treated in previously constructed stormwater basins with their own maintenance agreements.
- 9) No discussion of how this site complies with the State NPDES Construction stormwater permit, Permanent Stormwater Management (Section III.D) is provided in the SWPPP. This is not a requirement of the ECWMC, but we recommend the applicant and city document how this site complies with the NPDES Construction Stormwater Permit Requirements

**Decision:**

Approval.



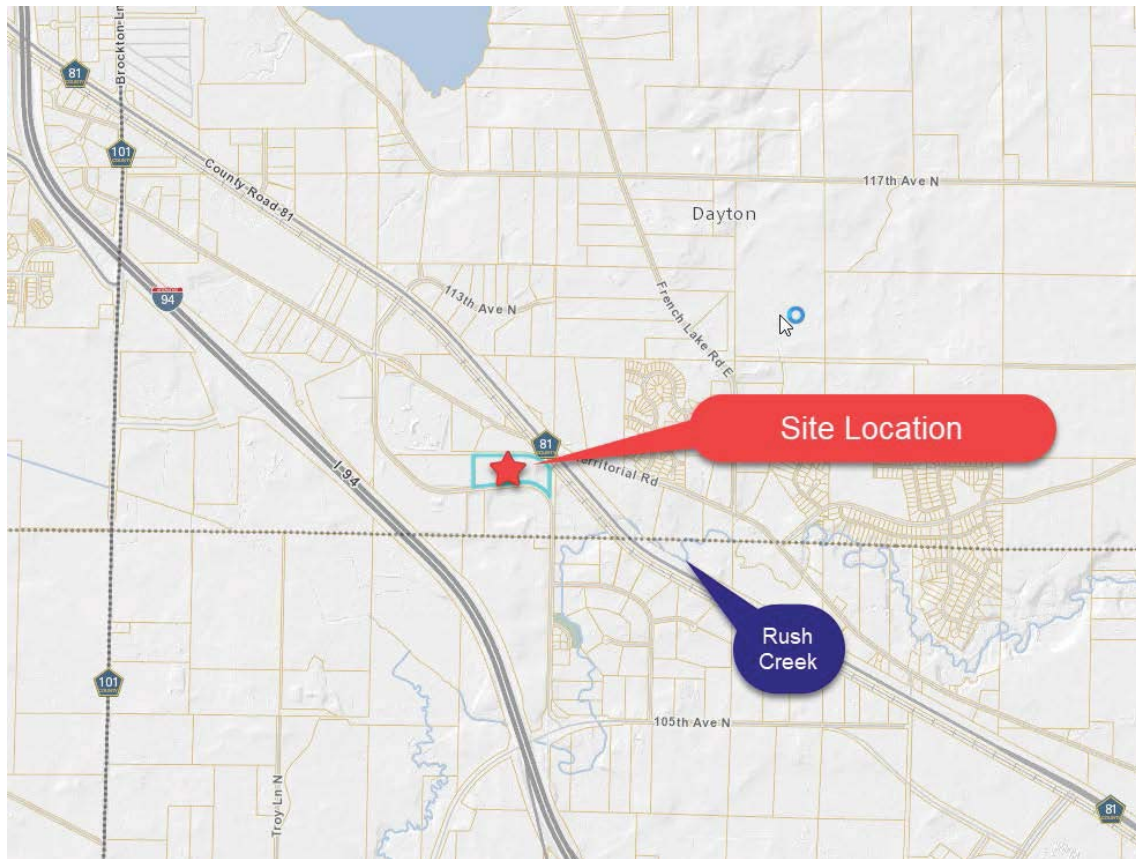
July 23, 2018

Hennepin County  
Department of Environment and Energy  
Advisor to the Commission



King Solutions Distribution Center Expansion  
Dayton Project 2018-023  
July 23, 2018

Site Location



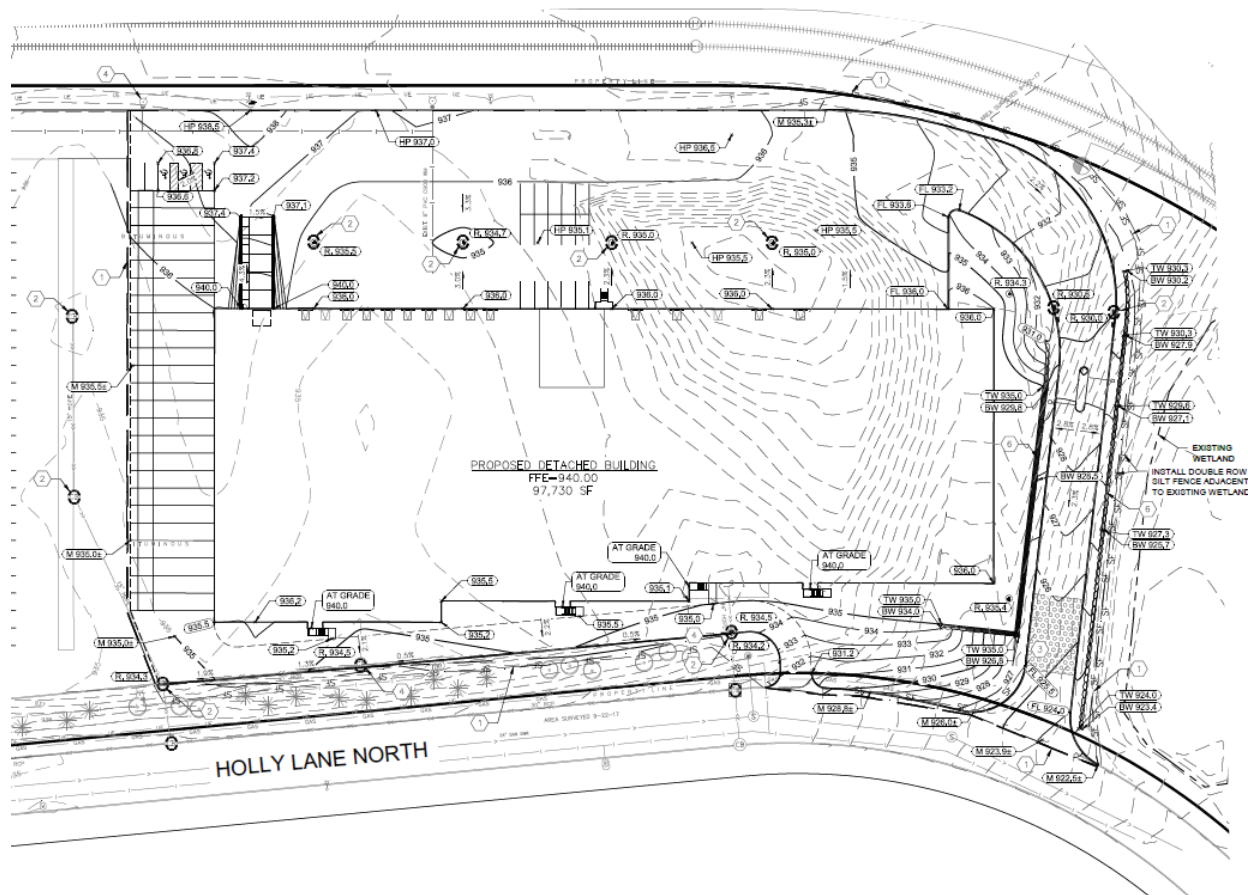
Aerial Photo





King Solutions Distribution Center Expansion  
Dayton Project 2018-023  
July 23, 2018

## Site Plan



# Minnesota Wetland Conservation Act

## Notice of Decision

Local Government Unit (LGU) <b>Elm Creek Watershed Management Commission</b>	Address <b>3235 Fernbrook Ln N, Plymouth, MN 55447</b>
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### 1. PROJECT INFORMATION

Applicant Name <b>Schober Parcel Wetland Delineation</b>	Project Name <b>Schober Parcel Wetland Delineation</b> (0111923430002, 0111923440001, part-111923410001)	Date of Application <b>June 18, 2018</b>	Application Number <b>2018-024W</b>
<input checked="" type="checkbox"/> Attach site locator map.			

Type of Decision:

<input checked="" type="checkbox"/> Wetland Boundary or Type	<input type="checkbox"/> No-Loss	<input type="checkbox"/> Exemption	<input type="checkbox"/> Sequencing
<input type="checkbox"/> Replacement Plan	<input type="checkbox"/> Banking Plan		

Technical Evaluation Panel Findings and Recommendation (if any):

<input type="checkbox"/> Approve	<input type="checkbox"/> Approve with conditions	<input type="checkbox"/> Deny
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### 2. LOCAL GOVERNMENT UNIT DECISION


Date of Decision: <b>July 24, 2018</b>		
<input type="checkbox"/> Approved	<input checked="" type="checkbox"/> Approved with conditions (include below)	<input type="checkbox"/> Denied

LGU Findings and Conclusions (attach additional sheets as necessary):

This is three parcels with a combined total of 110.8-acres. It was delineated May 25, 2018 for the presence and extent of wetland. The property corresponded to Hennepin County PIDs 01-119-23-43-0002 and 01-119-23-44-0001 and a portion of 01-119-23-41-0001. Twelve (12) wetlands were identified using the current Corps of Engineers and MN WCA requirements. Ag areas were reviewed using MN BWSR aerial photo protocols. Boundaries were reviewed in the field by ECWMC staff and verified the first week of July. Wetland 21 boundary was revised to match the 931.0 contour, otherwise all other wetland boundaries were found to be delineated in accordance to the ECWMC requirements. The Wetland delineation report by Kjolhaug Environmental Services for the Schober Parcel dated June 14, 2018 is hereby approved as revised in figure 2, received July 12, 2018 (attached)

**Wetlands may not be impacted until all applicable conditions have been met!**

## LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as specified above. If additional details on the decision exist, they have been provided to the landowner and are available from the LGU upon request.		
Name <b>James C Kujawa</b>	Title <b>Technical Advisor to the LGU</b>	
Signature 	Date <b>July 24, 2018</b>	Phone Number and E-mail <b>612-348-7338</b> <b>James.Kujawa@hennepin.us</b>

**THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT.**  
Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

### 3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

Check one:

<input checked="" type="checkbox"/> Appeal of an LGU staff decision. Send petition and \$0 fee (if applicable) to: <b>Elm Creek Watershed Management Commission</b> <b>3235 Fernbrook Ln N</b> <b>Plymouth, MN 55447</b>	<input type="checkbox"/> Appeal of LGU governing body decision. Send petition and \$500 filing fee to: <b>Executive Director</b> <b>Minnesota Board of Water and Soil Resources</b> <b>520 Lafayette Road North</b> <b>St. Paul, MN 55155</b>
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### 4. LIST OF ADDRESSEES

<input checked="" type="checkbox"/> <b>SWCD TEP member: (email only) Stacey. Lijewski@co.hennepin.mn.us</b> <input checked="" type="checkbox"/> <b>BWSR TEP member: (email only) Ben Carlson (ben.carlson@state.mn.us).</b> <input type="checkbox"/> LGU TEP member (if different than LGU Contact): <input type="checkbox"/> DNR TEP member: <input checked="" type="checkbox"/> <b>DNR Regional Office (email only) Becky.Horton@state.mn.us</b> <input type="checkbox"/> WD or WMO (if applicable): <input checked="" type="checkbox"/> <b>Applicant: (email only) Paul Heuer; paul.heuer@pultegroup.com</b> <input checked="" type="checkbox"/> <b>City of Corcoran: Brad Marten bmartens@ci.corcoran.mn.us</b> <input checked="" type="checkbox"/> <b>Members of the public who requested notice (notice only) Kjolhaug Environmental Services. andrew@knolhaugenv.com</b> <input checked="" type="checkbox"/> <b>Corps of Engineers Project Manager (notice only).mvp-reg-inquiry@usace.army.mil</b> <input type="checkbox"/> <b>BWSR Wetland Bank Coordinator (wetland bank plan applications only)</b>
--

### 6. ATTACHMENTS

<p>In addition to the site locator map, list any other attachments:</p> <input checked="" type="checkbox"/> <b>Schober Wetland Delineation Report Parts I and II by Kjolhaug Environmental Services, dated June 14, 2018 With Revised Figure 2 (wetland 21 boundary revision)</b>
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# elm creek

## Watershed Management Commission

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E-mail: [james.kujawa@hennepin.us](mailto:james.kujawa@hennepin.us)

### **Watten Parcel Driveway-21155 CR 10** **Corcoran, Project #2018-025W**

**Project Overview:** This is an existing lot on CR 10 approximately 1/3 of mile east of Trail Haven Road in Corcoran. The project site is a vacant residential flag lot (PID 1511923340006) owned by Craig Watten who is proposing a driveway to access the southern portion of the lot for a future single-family residential home. The applicant is proposing to build a driveway that would cross and affect approximately 4,422 square feet of a wetland. As the Local Government Unit in charge of administering the MN Wetland Conservation Act for the City of Corcoran this project will be reviewed for compliance to the ECWMC and MN Wetland Conservation Act requirements. No other Elm Creek Watershed Management Commission rules apply to this application.

**Applicant:** Crain Watten, 1009 Prospect Street, Sault Ste Marie, MI 49783. Phone: 810-309-1521. Email: [craig.watten@outlook.com](mailto:craig.watten@outlook.com)

**Agent:** **Wetland Replacement Plan:** Anderson Engineering of MN, Attn. Ben Hodapp, 13606 1<sup>st</sup> Ave. N, Ste 100, Plymouth, MN 55441. Phone: 763-412-4005. Email: [bhodapp@ae-mn.com](mailto:bhodapp@ae-mn.com)  
**Wetland Delineation:** Kjolhaug Environmental Services, Attn. Adam Cameron, 2500 Shadywood Road #130, Orono, MN 55331. Phone: 952-401-8757. Email: [adam@kjolhaugenv.com](mailto:adam@kjolhaugenv.com)

#### **Exhibits:**

- 1) ECWMC Request for Plan Review and Approval and associated fees received June 20, 2018.
- 2) Correspondence from Anderson Engineering regarding wetland delineation and wetland replacement plan applications.
- 3) Watten Property Wetland Delineation Report by Kjolhaug Environmental Services dated May 3, 2018.
- 4) Craig Watten MN Joint Application for Activities Affecting Water Resources in MN by Anderson Engineering dated June 19, 2018.
- 5) Wetland Replacement Plan Addendum-Impact Quantity Change, Watten Parcel, by Anderson Engineering dated July 27, 2018.
- 6) ECWMC Notice of Project Application dated June 29, 2018.

**Findings:**

- 1) A complete application was received on June 20, 2018. The initial 60-day decision period per MN Statute 15.99 will expire on August 19, 2018.
- 2) This is an existing lot with no plat changes proposed. Our review will be for compliance with the ECWMC and State of MN wetland requirements
- 3) Per resolutions by the ECWMC and the City of Corcoran, the ECWMC is the LGU in charge of administering the MN WCA as amended within the City of Corcoran.
- 4) Wetland Replacement Plan Sequencing Analysis
  - a. Purpose and Need; the purpose of this project is to build a residential driveway (12-feet wide) to access the buildable portion of the vacant flag lot. Access is needed in order to construct and access the proposed house.
  - b. Avoidance; the wetland is in the 'stem' portion of the flag lot. It is not practicable to avoid wetland impacts. The applicant evaluated access easement from neighboring parcels and received no positive indications from neighboring landowners. Complete avoidance of the wetland would not meet the project's purpose and need.
  - c. Minimization; the proposed location of the driveway minimizes wetland impact to the greatest extent practicable by,
    - i. crossing the wetland area at the narrowest portion of the wetland,
    - ii. minimizing the width of the proposed driveway to the minimum required for safe vehicular passage,
    - iii. the 2:1 side slopes of the driveway are the steepest feasible slope for a gravel driveway of this type,
    - iv. the proposed design will maintain wetland hydrology through culvert(s) under the driveway,
    - v. temporary impacts will be minimized through the installation of silt fences and erosion control BMPS during construction.
  - d. Replacement of Impacts;
    - i. Wetland impacts will be 4,422 sq. ft. (0.1015 ac)
    - ii. 8,844 sq. ft. of replacement is proposed in BWSR certified wetland bank in Dayton. (Account #1643)
    - iii. A signed purchase agreement to purchase of 0.2030 acres (8,844 sq. ft.) wetland banking credits was part of the replacement plan submittal
- 5) Per the public notice requirements of the MN WCA, the ECWMC noticed the application on June 29, 2018 with comments requested prior to July 25, 2018.
- 6) One comment from the Area Wetland Specialist for the Board of Water and Soil Resources was received. He agreed with the delineation, sequencing analysis and replacement plan.
- 7) Staff reviewed the wetland delineation in the field and requested some minor adjustments to the boundary. Revisions were made by the applicant and approved by EC staff. Final boundaries are reflected in the replacement impacts above.
- 8) The application meets the standards and requirements of the MN Wetland Conservation Act and the Elm Creek Watershed Management Commission.



Watten Parcel Driveway Replacement Plan  
2018-025W, Corcoran  
July 27, 2018

- 9) Driveway construction cannot begin until the wetland impacts are rectified by receipt of a certified transfer of wetland banking credits to this project from the BWSR.
- a. If the applicant wishes to start construction prior to receiving certification from BWSR, a cash escrow or acceptable letter of credit for \$25,000 must be provided to the ECWMC administrative office.

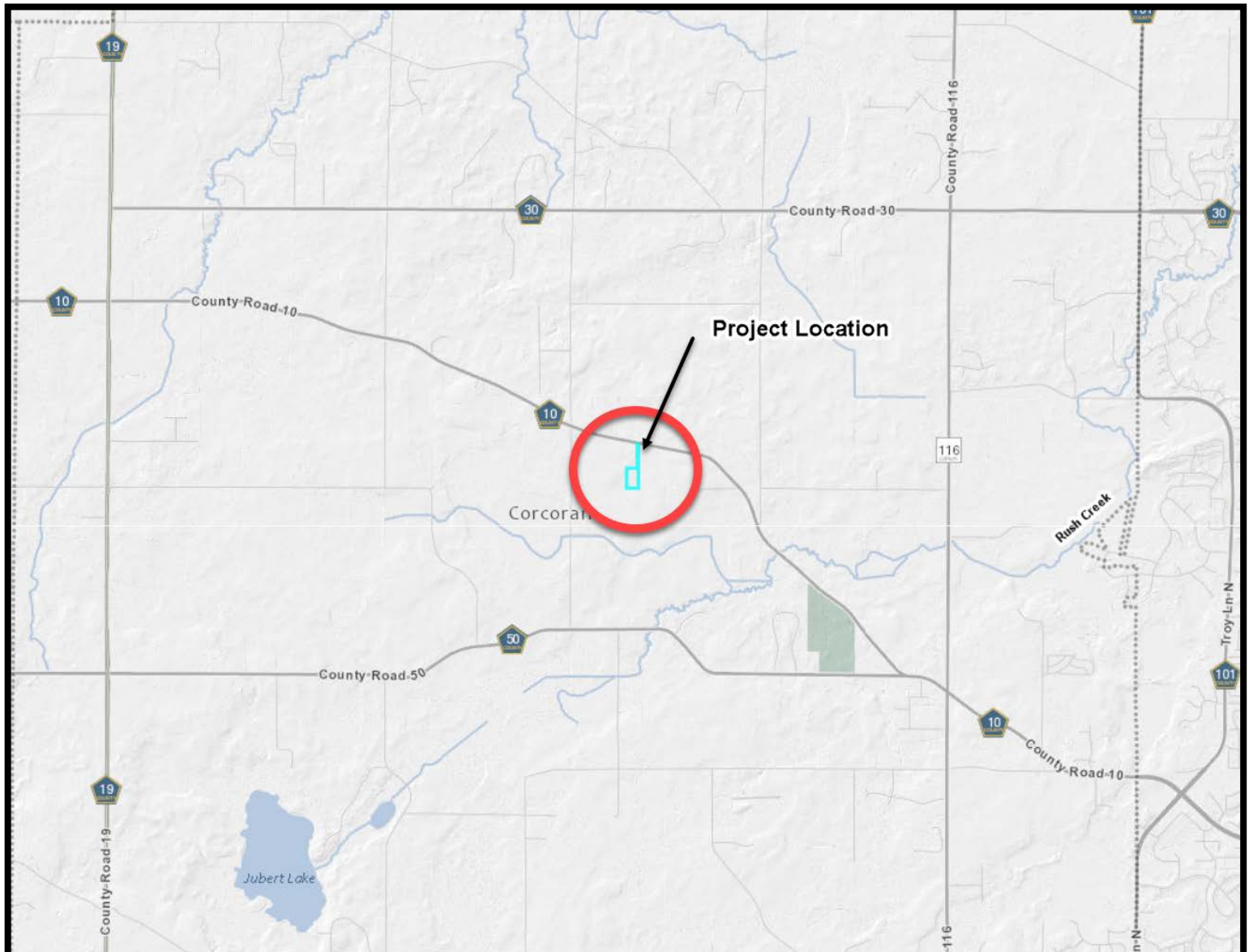
**Recommendation:** Approval pending receipt of BWSR certification of 0.2030 acres of wetland credits transfer for 0.1015 ac. of impacts on this project.

Hennepin County  
Department of Environment and Energy  
Advisor to the Commission



July 27, 2018

### Location Map



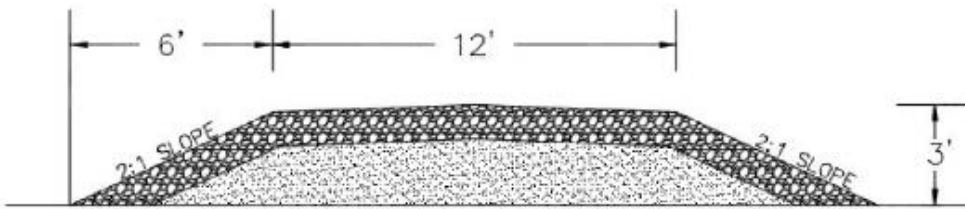
Watten Parcel Driveway Replacement Plan  
2018-025W, Corcoran  
July 27, 2018








Watten Parcel Driveway Replacement Plan  
2018-025W, Corcoran  
July 27, 2018

### GRAVEL DRIVE SECTION DETAIL



4,422 s.f.

### Legend

-  Project Parcel
-  Hennepin Co. Parcels
-  Wetland Boundary
-  Proposed Wetland Impact (4,422 s.f.)
-  Proposed Dwelling
-  Proposed Driveway

**PROJECT LOCATION**

**SOURCE:** MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering



# elm creek

## Watershed Management Commission

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PH: 612.348.7338  
E-mail: [james.kujawa@hennepin.us](mailto:james.kujawa@hennepin.us)

### Windrose Maple Grove, Project #2018-026

**Project Overview:** This 8.5 acre project is located NE of the intersection of CSAH 10 and 101 in Maple Grove. The applicant is proposing 79 townhomes on the site. The Commissions 3<sup>rd</sup> Generation Stormwater Management Plan requires our review for stormwater management (Rule D) and grading/erosion controls (Rule E).

**Applicant:** Pulte Homes of MN, LLC, Attn. Paul Heuer. 7500 Flying Cloud Drive, Suite 670, Eden Prairie, MN 55344. Phone: 952-229-0722. Email: [paul.heuer@pultegroup.com](mailto:paul.heuer@pultegroup.com)

**Agent/Engineer:** Alliant Engineering, Attn. David Nash, 733 Marquette Avenue, Suite 700, Minneapolis, MN 55402. Phone: 612-767-9327. Email: [dnash@alliant-inc.com](mailto:dnash@alliant-inc.com).

#### **Exhibits:**

- 1) ECWMC Request for Plan Review and Approval with fees (\$900) for 8.5-acre new, high-density residential development received June 22, 2018.
- 2) Windrose Concept Stage Plan, Development Stage Plan & Final Plat by Alliant Engineering, dated June 11, 2018.
  - a. Sheet 1 of 17, Cover Sheet
  - b. Sheet 2 of 17, Existing Conditions Survey
  - c. Sheet 3 of 17, Demolition Plan
  - d. Sheet 4 of 17, Preliminary Plat
  - e. Sheet 5 of 17, Overall PUD Plan
  - f. Sheet 6 of 17, Site Plan
  - g. Sheet 7 of 17, Grading, Drainage & Erosion Control Plan
  - h. Sheet 8 of 17 Erosion and Sediment Control Notes and Details
  - i. Sheet 9 of 17, Filtration Basin Details
  - j. Sheet 10 of 17, Street Profiles
  - k. Sheet 11 of 17, Sanitary Sewer and Water Main Plan
  - l. Sheet 12 of 17, Storm Sewer Plan
  - m. Sheet 13 of 17, Landscape Plan
  - n. Sheet 14 of 17, Landscape Notes & Details
  - o. Sheets 15 to 17 of 17, Construction Details.
- 3) Windrose Stormwater Management, Hydrologic and Hydraulic Study by Alliant Engineering dated June 11, 2018.

2018-026, Windrose  
Maple Grove  
July 20, 2018

- 4) ECWMC project files 2009-04, Markets at Rush Creek, 2017-039, Rush Creek Apartments and 2018-001, Rush Creek Commons.

**Findings:**

- 1) A complete application was received on June 22, 2018. The initial 60-day decision period per MN Statute 15.99, expires August 21, 2018.
- 2) The majority of this site (4.9 acres) drains to the SW under the CR 10/101 intersection, into regional pond #5. The SE portion of this site (2.7 acres) flows under CR 10 into regional pond #2. These two regional ponds were designed to meet the ECWMC rate control and nutrient requirements from this site.
- 3) The Windrose site plans are required to meet the abstractions and TSS standards from our 3<sup>rd</sup> Generation Rules and compliance to the original stormwater management design approved under prior projects (2018-001 and 2009-04)
- 4) Two new biofiltration basins will be constructed on the site for abstraction and TSS controls.
- 5) Pre and post-development rate controls for this site are as follows;

Regional Pond	2-year Flow Rate (cfs)		10-year Flow Rate (cfs)		100-year flow rate (cfs)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
Pond 5/Wetland C	2.2	1.91	5.6	5.0	21.6	20.2
Pond 2	1.4	1.3	4.3	3.9	11.8	11.6
Old Bass Lk Rd ditch	2.0	1.4	4.1	2.2	9.2	7.1

- 6) Pre and post-development Nutrient and TSS Loads for from this site are based on a mass-balance before and after construction (P8 model).

	Phosphorus Loads (lbs/year)		TSS (lbs./year)	
	Existing	Proposed	Existing	Proposed
Windrose	1.8	0.5	414	169

- 7) There will be 4.88 acres of new impervious areas. This translates into 19,500 cubic feet of abstraction (filter) volume required. Because of the high clay content of the natural soils on site, the applicant will utilize two-biofiltration basins with perforated tile underdrains for their abstraction requirements. Actual filter volume from the two new biofiltration basins will be 30,555 cubic feet. It will drain down in approximately 26 hours after a 1.1" storm event. This will meet the Commission abstraction standard.
- 8) No information was provided on the long-term operation and maintenance of the filtration basins on site. An approved operation and maintenance plan must be recorded on the land title to this property. The recorded document must be provided to the Commission for their records.
- 9) Grading and erosion control plans meet the Commission's standards.

2018-026, Windrose  
Maple Grove  
July 20, 2018

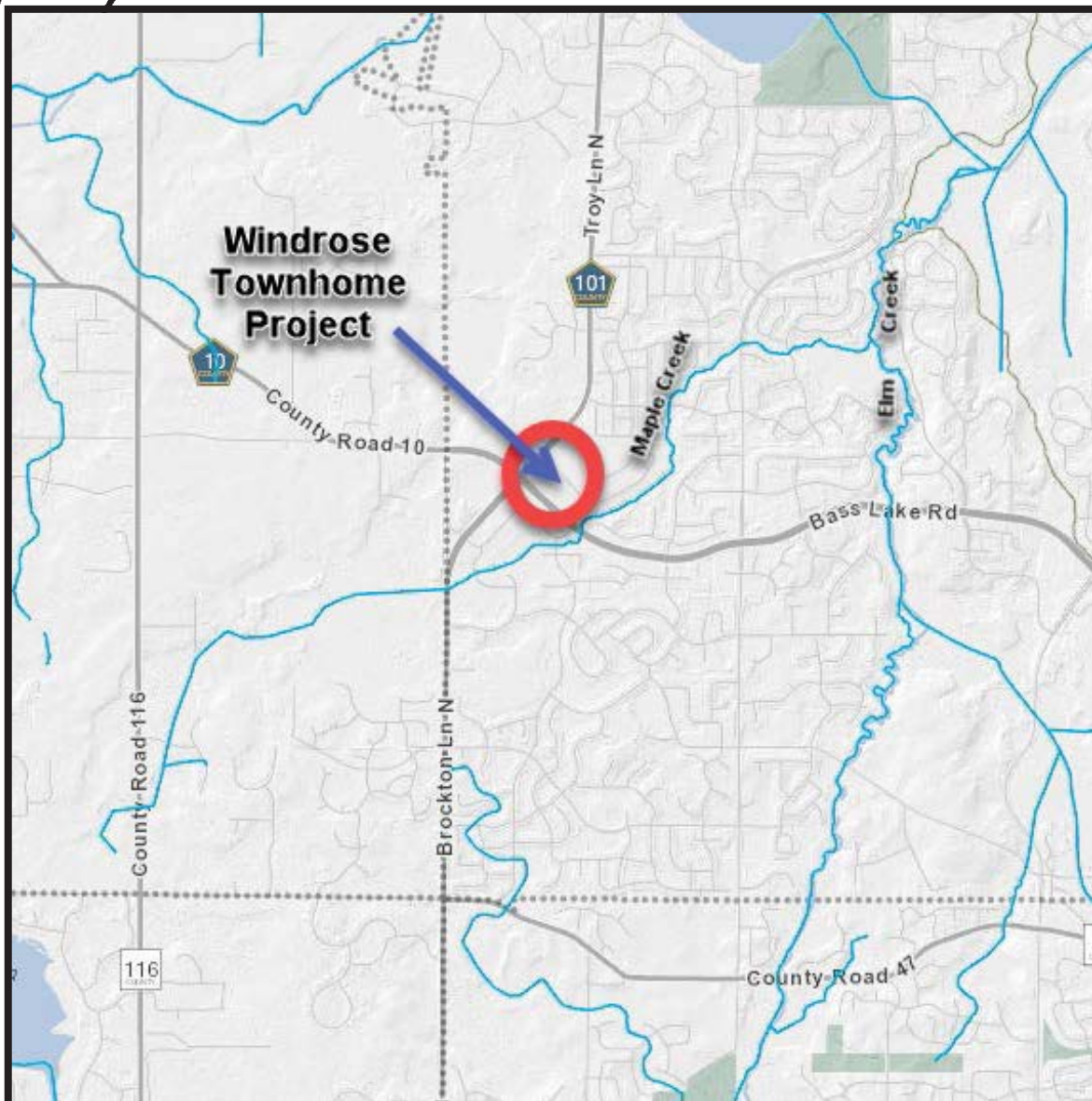
- 10) The City of Maple Grove is the LGU in charge of administering the MN Wetland Conservation Act on this site. A wetland is shown on the existing conditions survey. No wetland information has been received from the City. At this time EC staff assumes the wet area to be an inadvertent blockage due to previous project work on CR 101 and 10. The applicant must clarify or provide the appropriate wetland buffers per ECWMC requirements.
- 11) No FEMA or ECWMC floodplains are on this site.

**Recommendation:** Approval contingent upon verification of the wetland per item 10 and the approval and recording of the operation and maintenance plan on the filter basins.

Hennepin County  
Department of Environment and Energy  
Advisor to the Commission



July 20, 2018





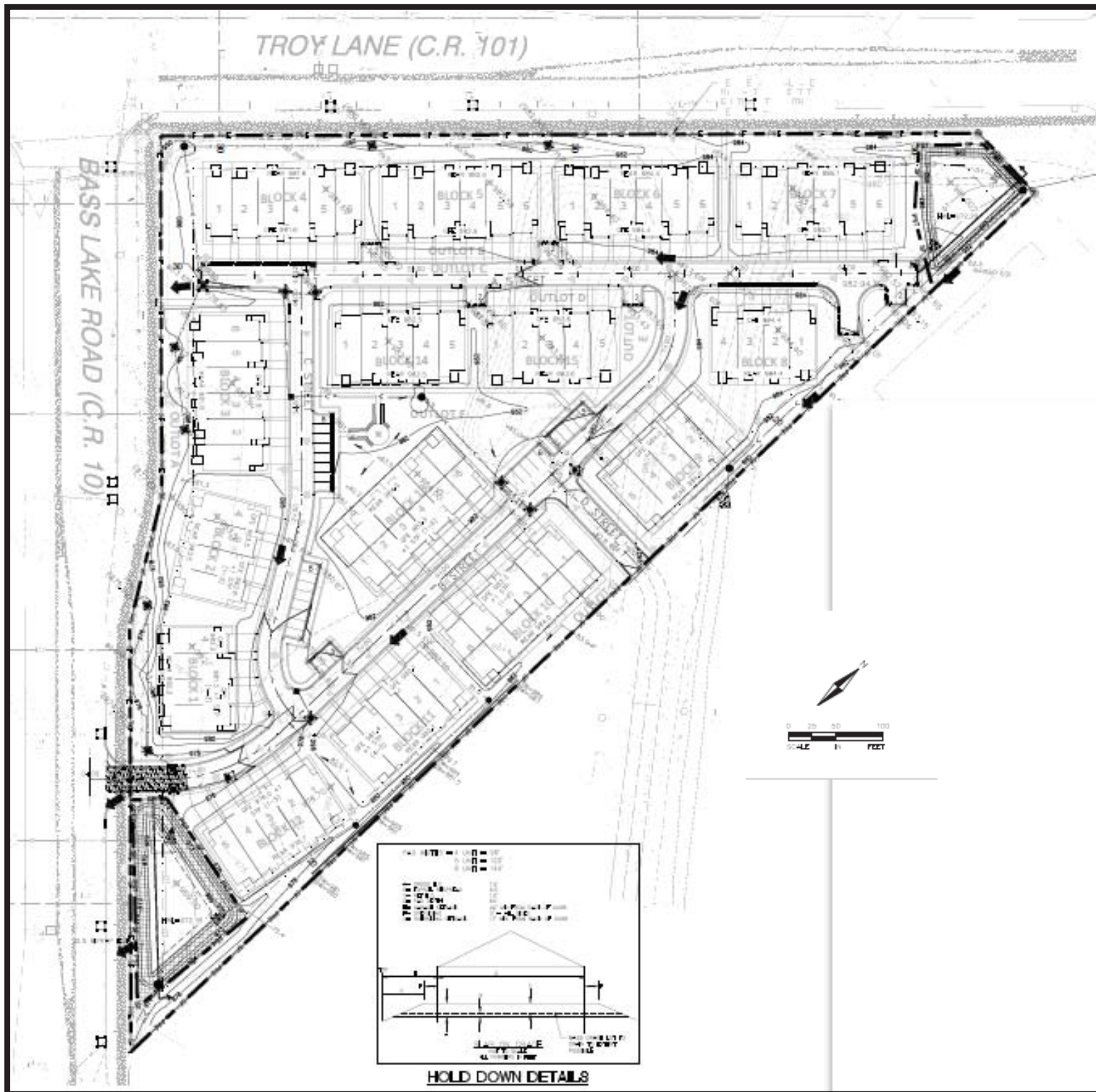
2018-026, Windrose  
Maple Grove  
July 20, 2018





2018-026, Windrose  
Maple Grove  
July 20, 2018

## Grading Plan



# elm creek

## Watershed Management Commission

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3235 Fernbrook Lane  
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PH: 763.553.1144  
E-mail: [judie@jass.biz](mailto:judie@jass.biz)

TECHNICAL OFFICE  
Hennepin County Public Works  
Department of Environment and Energy  
701 Fourth Ave. South, Suite 700  
Minneapolis, MN 55415  
PH: 612.596.1171  
E-mail: [jason.swenson@hennepin.us](mailto:jason.swenson@hennepin.us)

### **CR 202 Bridge Replacement** **Dayton, Project #2018-027**

**Project Overview:** This project is to replace the existing bridge over Elm Creek located in Elm Creek Regional Park in the City of Dayton. This is approximately  $\frac{3}{4}$  of mile west of Goose Lake Road or  $1\frac{1}{4}$  miles east of Fernbrook Lane on CR 202 (Elm Creek Road). The existing bridge is structurally deficient (currently carries a low weight capacity and significant restrictions) and functionally obsolete (no shoulders, narrow width, no sidewalk). The project proposes to replace the existing bridge with a Timber Slab Bridge. The project triggers the Commissions review requirements for Rule E, Erosion and Sediment Controls, Rule F, Floodplain Alteration, Rule G, Wetland Alterations, and Rule H, Bridge and Culvert Crossings.

**Applicant:** Hennepin County Public Works, Attn. John Ekola, 1600 Prairie Drive., Medina, MN 55340. Phone: 612-596-0370. Email: [john.ekola@hennepin.us](mailto:john.ekola@hennepin.us)

**Agent:** Hennepin County Public Works, Attn. John Ekola, 1600 Prairie Drive., Medina, MN 55340. Phone: 612-596-0370. Email: [john.ekola@hennepin.us](mailto:john.ekola@hennepin.us)

#### **Exhibits:**

- 1) ECWMC Request for Plan Review and Approval application, received June 22, 2018 with fees of \$1,050 (in process).
- 2) C.S.A.H. 202 / Hennepin County Project 0408 Plans dated June 11, 2018, totaling 87 Sheets.
- 3) Hydraulic Data Form Dated 6/11/2018
- 4) Minnesota DNR Public Waters DNR General Permit Authorization 208-02478 Dated 7/18/2018

#### **Findings:**

- 1) A complete application was received on June 22, 2018. The initial 60-day decision period per MN Statute 15.99 expires on August 21, 2018.
- 2) The project is located on Elm Creek at its crossing with Elm Creek Road. The approximate drainage area to Elm Creek at this location is 86.0 square miles.
- 3) This project will disturb 1.04 acres and create 0.30 acres of new impervious areas. Since less than 1 acre of new impervious surface area will be created by the project, Rule D, Stormwater Management is not triggered by this project, and no abstraction is required for the project.

- 4) The project also includes roughly 1200 feet (1.67 acres) of full depth road reclamation to replace existing bituminous pavement that is in poor condition. Road reclamation work also does not trigger Stormwater Management Review requirements.
- 5) The project proposes the complete replacement of the existing bridge in a similar location to the existing bridge. The bridge will be widened with 2-12' wide lanes and 6' wide shoulders, providing a safer bridge crossing for cars and pedestrians or bikers. In addition to the bridge crossing, the project will install 3 additional floodplain culverts under CR 202 that are not place today. The intent of these additional culverts is provide additional connectivity to Elm Creek's floodplain that does not exist today. The County has been working with the Minnesota DNR on implementation of these additional floodplain culverts as part of a DNR program to implement this type of crossing on a more regular basis across the State of Minnesota.
- 6) Rule E, Erosion and Sediment Controls: A complete SWPPP plan was provided as part of the plans for the project. Sediment controls will be provided including silt fence, inlet protection, and rock construction entrances. The following changes or modifications are needed to the SWPPP sheets as presented:
  - a. The disturbed area and impervious area as presented in the SWPPP does not match the numbers presented in the ECWMC application form. Review and revise for consistency.
  - b. There are impaired waters within 1 mile of the project, specifically Elm Creek is impaired for dissolved oxygen, which does require compliance with Appendix A of the Construction Stormwater Permit. Revise the section on Page 43 of the SWPPP to indicate this impairment.
  - c. The Narrative for the SWPPP (Page 42) indicates that Construction is proposed for the Winter of 2019 and completion will be in the summer of 2019. The dates do not appear to be correct.
- 7) Rule F, Floodplain Alteration: As proposed, the project proposes no change to the 100 year floodplain elevation through the reach as part of the project. The 100 year elevation as modeled is 863.09 (NAVD88 Datum). However, it appears that there is some floodplain fill impacts proposed, but no tabulation of the floodplain fill was provided for review.

Staff believes that as a whole, the project meets the intent of Rule F, floodplain alteration. There is no increase in flood stage as a result of the project, and additional encroachment into the floodplain is very unlikely given the setting in Elm Creek Regional Park. In addition, the added floodplain culverts installed as part of this project also provide an improved condition from what has been in place for many year

The following additional information is needed to complete the review is as follows:

- a. Provide a tabulation of floodplain fill located below the 100-year floodplain elevation of 863.09.
- 8) Rule G, Wetland Alterations: Impacts to wetlands are proposed as part of this project. Specifically, 0.04 acres of wetland are proposed to be permanently filled, and .05 acres are proposed to be disturbed temporarily during construction. Wetland permitting on this project is under the jurisdiction of the Minnesota DNR, and the DNR has approved the

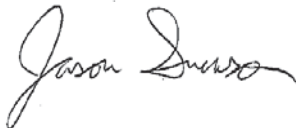
fill and impacts as proposed in its permit dated 7/18/2018. As such, the project meets the intent of Rule G of the ECWMC.

- 9) Rule H, Bridge and Culvert Crossings: The plans as proposed show no net change in the 100 year floodplain elevation. The project has obtained a permit from the Minnesota DNR for Work in Public Waters. An erosion and sediment control plan has been submitted and requires minor modifications. No water quality impacts appear to be proposed, and the solution with additional floodplain culverts appears to provide a low impact solution to the issues presented at this stream crossing. As such, the plans as presented meet the requirements of Rule H.
- 10) The erosion control details on page 46 appear to show that some disturbance may be needed adjacent to the USGS Gauging station located on the west bank of Elm Creek. The USGS should be notified as soon as possible about this potential encroachment to discuss how this may impact the gauging station.
- 11) Most projects of this type require a No-Loss certificate and then completing a LOMR (Letter of Map Revision) with FEMA for the changes to the floodplain. However, given that the floodplain maps will be updated for this area in the next year and a half, there is no need for the applicant to submit and complete a LOMA at this time.
- 12) As of the preparation of this memo, payment has not been received by the administrative office.

**Recommendation:**

We recommend approval of the project, subject to the following revisions and submittals being made:

- a. Items under 6a-c
- b. Items under 7a
- c. Item 12



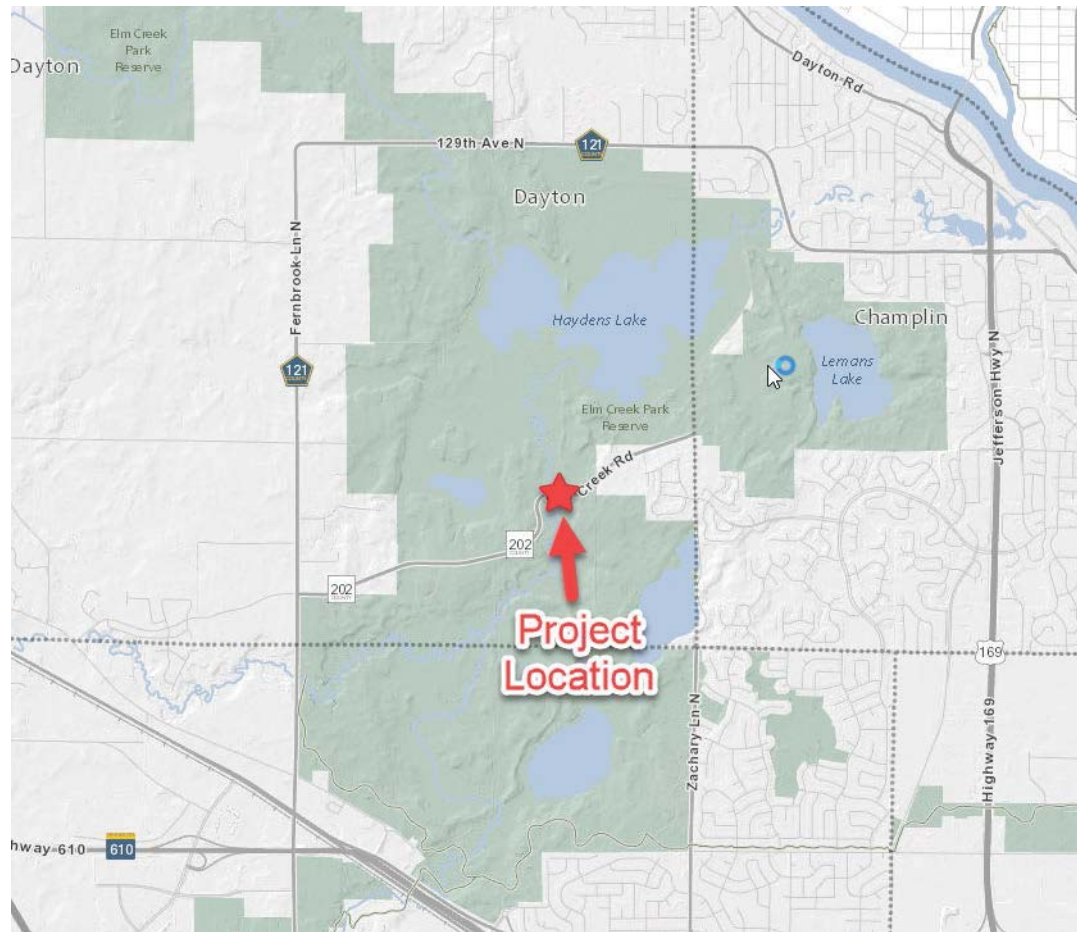
July 24, 2018

Hennepin County  
Department of Environment and Energy  
Advisor to the Commission



CR 202 Bridge Replacement  
Dayton Project 2018-027  
July 24, 2018

Site Location



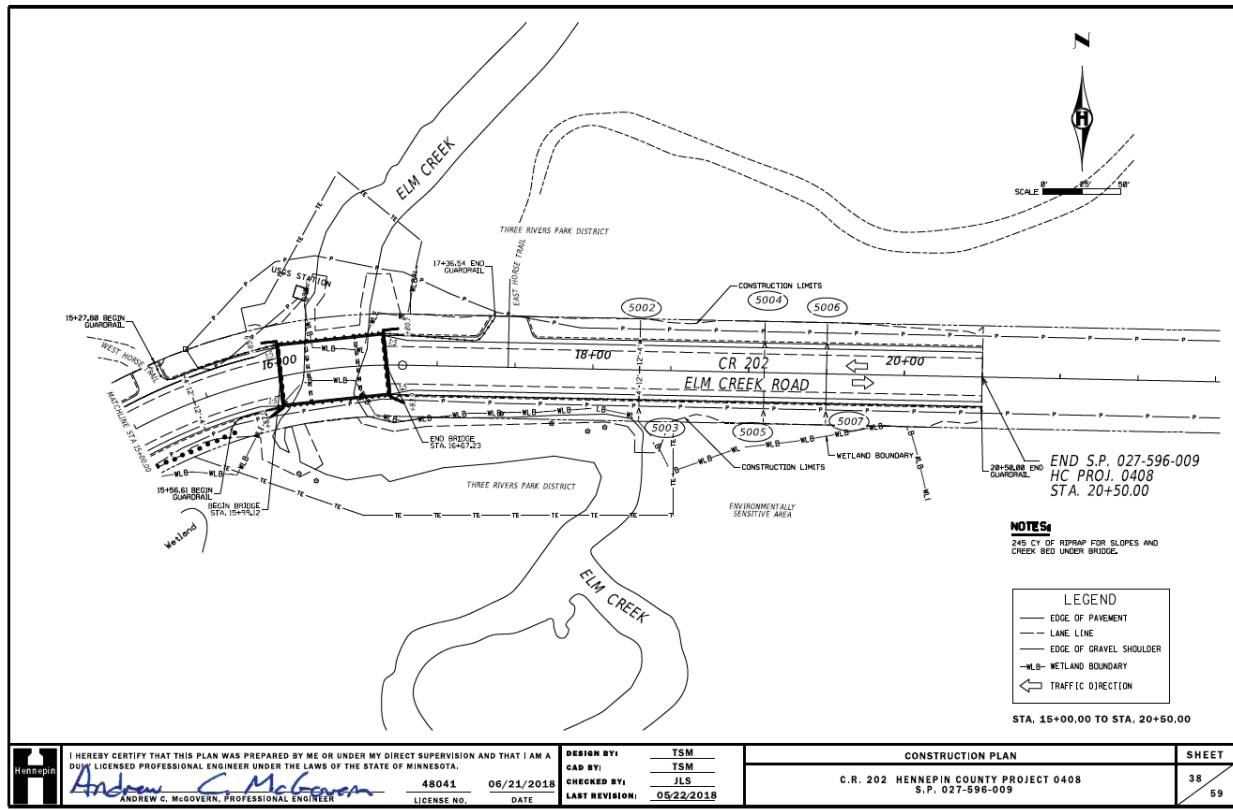
Aerial Photo



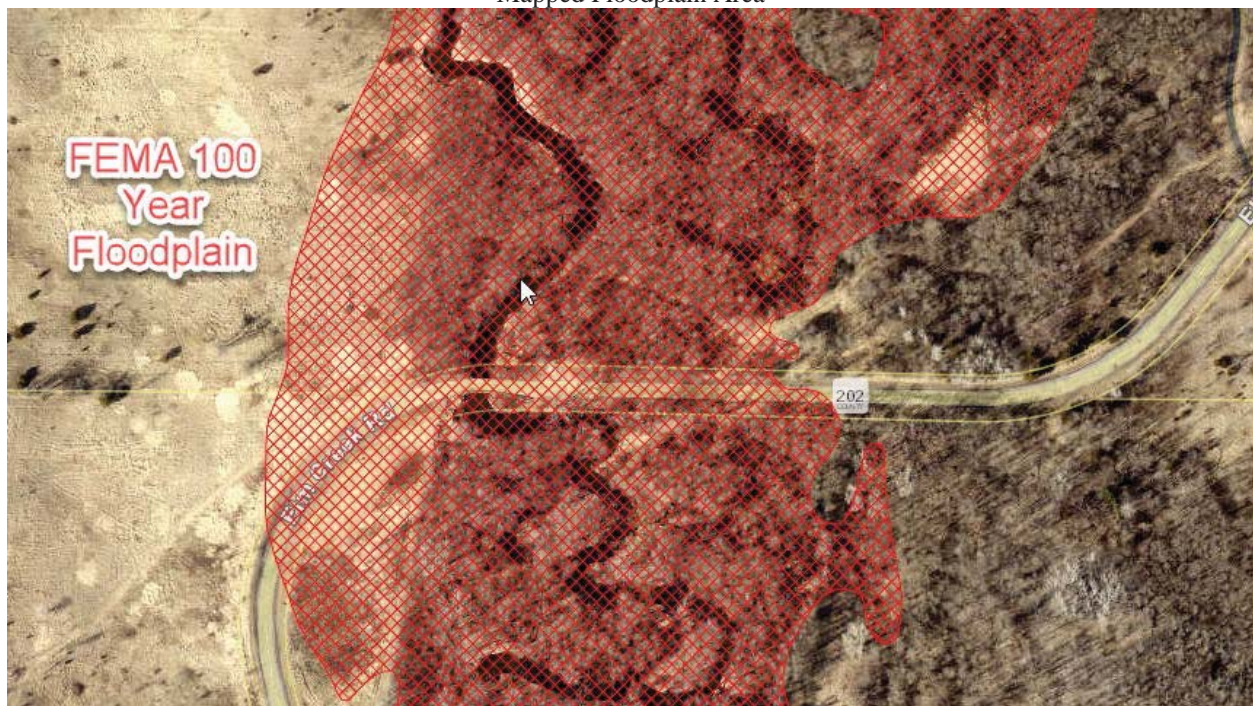


CR 202 Bridge Replacement  
Dayton Project 2018-027  
July 24, 2018

Site Plan



Mapped Floodplain Area



# elm creek

## Watershed Management Commission

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3235 Fernbrook Lane  
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Department of Environment and Energy  
701 Fourth Ave. South, Suite 700  
Minneapolis, MN 55415  
PH: 612.596.1171  
E-mail: [jason.swenson@hennepin.us](mailto:jason.swenson@hennepin.us)

### **McConn Parcel** **Plymouth, Project #2018-029**

**Project Overview:** This project is an 8 lot single family, medium density residential development located in the City of Plymouth. The 6 acre parcel the development is located on is just north of County Road 47, midway between County Road 101 and Troy Lane. Approximately 4.3 acres of the site are developable, and approximately 2.7 acres will be disturbed for the project. An extension of 61<sup>st</sup> Avenue, constructed as part of the Sands Parcel – The Fields at Meadow Ridge (ECWMC#2016-039) will continue through this development to County Road 47. This connection occurs on the east side of the parcel. Single family residential development also lies to the north and west of the proposed project, also part of ECWMC approved developments, dating back to pre-2010. The project triggers the Commissions review requirements for Rule D, Stormwater Management, Rule E, Erosion and Sediment Controls, Rule G, Wetland Alterations, and Rule I, Buffer Strips.

**Applicant:** R&R Island View, LLC, Attn. Ben Wikstrom 5032 Russel Ave South, Minneapolis, MN 55410. Phone: 612-801-7992. Email: [ben@lwestdev.com](mailto:ben@lwestdev.com)

**Agent:** Sathre-Bergquist, Attn. Tom Welshinger, 150 South Broadway, Wayzata, MN 55391. Phone: 952-476-6000. Email: [twelshinger@sathre.com](mailto:twelshinger@sathre.com)

#### **Exhibits:**

- 1) ECWMC Request for Plan Review and Approval application, received June 29, 2018 with fees of \$265.
- 2) Construction Plans for the McConn Parcel, dated 1/23/18, including sheets:
  - a. Sheet 1, Title Sheet
  - b. Sheets 2-4, Street Plans
  - c. Sheets 5-6, Sanitary Sewer and Watermain Plans
  - d. Sheets 7-8, Storm Plan
  - e. Sheet 9, Grading Plan
  - f. Sheet 10, Erosion Control Plan
  - g. Sheets 11-15, City Details
- 3) Specification Book for the McConn Parcel, Dated January 24, 2018
- 4) McConn Development Stormwater Management Plan, Prepared by AE2S, dated February 2018.

#### **Findings:**

- 1) A complete application was received on June 29, 2018. The initial 60-day decision period per MN Statute 15.99 expires on August 28, 2018.
- 2) The project consists of constructing an 8 lot single family residential development served by a cul-de-sac along with the continuation of 61<sup>st</sup> Ave through the site to County Road 47. A stormwater pond with a filtration bench will also be constructed to provide rate controls, water quality, and to meet the abstraction requirements.
- 3) Stormwater from this site will discharge to an existing wetland along the northern portion of the site. The wetland discharges to the west, and then south. Ultimately, stormwater discharges to the southeast and eventually enters Elm Creek in the Northwest Greenway Area.
- 4) This project will disturb 2.7 acres and create 1.43 acres of total impervious areas. Since greater than 1 acre of new impervious surface area will be created by the project, Rule D, Stormwater Management is triggered by this project. The project proposes to meet these requirements by constructing one water quality pond with a filtration bench to provide rate control, water quality, and to meet the abstraction requirements.
- 5) The City of Plymouth will provide the long term operation and maintenance on the permanent stormwater basins for this site.
- 6) Abstraction volume is being provided in a filtration bench adjacent to the wet detention pond on the site. Filtration is being used due to the poor soils for infiltration located on the project site. Due to shallow groundwater conditions on the site, the filtration benches are also proposed to be lined with clay, turning the benches into a filtration only type system. With 1.32 acres of new impervious surfaces being added to the site, approximately 5,270 cubic feet of abstraction is required. 5,600 cubic feet of filtration is being provided in the proposed filtration bench, and the bench is designed to draw down in less than 48 hours, meeting Commission requirements.
- 7) Nutrient and TSS loads meet the Commission's requirements:
  - a. Pre-development phosphorus loads = 1.3 lbs/year
  - b. Post-development phosphorus loads = 1.0 lbs/year
  - c. Pre-development TSS loads = 408 lbs/year
  - d. Post-development TSS loads = 165 lbs/year

**Stormwater Management Summary;**

<b>Condition</b>	<b>TP Load (lbs/yr)</b>	<b>TSS Load (lbs/yr)</b>	<b>Abstraction (cu. ft.)</b>	<b>Filtration (cu. ft.)</b>
Pre-development (baseline)	<b>1.3</b>	<b>408</b>	N/A	N/A
Post-development without BMPs	<b>3.5</b>	<b>1082</b>	-	-
Post-development with BMPs	<b>1.0</b>	<b>165</b>	-	<b>5600</b>

- 8) Rule E, Erosion and Sediment Controls: Erosion control details are shown on the grading plan sheets that address commission erosion control requirements. A SWPPP plan was not submitted as part of the project submittals.



- a. A SWPPP is required as part of the project submittal for a complete erosion control plan.
- 9) Rate Controls are met for the project site with all storm events discharge rates being lower under the proposed conditions than existing conditions.

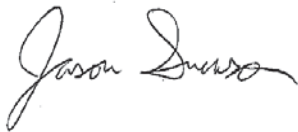
	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
<b>Pre-Development Rates</b>	<b>5.3</b>	<b>10.7</b>	<b>27.6</b>
<b>Post-Development Rates</b>	<b>3.9</b>	<b>10.6</b>	<b>26.7</b>

- 10) The proposed stormwater pond has a Normal Water Level of 962.0 and a 100 year HWL of 963.48. All proposed low floors for the adjacent homes exceed the 2 foot freeboard requirements of the ECWMC. The proposed outlet is a 24" RCP pipe discharging to a 4' Weir located in an outlet control structure, discharging through a 30-inch equivalent reinforced concrete arch pipe (RCPA). Under most storm events, the 24" inch inlet pipe is the restriction or control in the outlet structure.
- 11) Rule G, Wetland Alterations: Impacts to wetlands are proposed as part of this project. Specifically, 7,356 square feet of wetlands are proposed to be permanently filled for the construction of the extension of 61<sup>st</sup> Avenue. Plymouth is the WCA LGU for this area, and all wetland filling must follow and meet the requirements of the LGU. Staff assumes the City of Plymouth will properly address all fill as proposed by this project under the requirements of the Wetland Conservation Act.
- 12) Rule I, Buffer Strips. The plans as proposed appear to provide a 25 foot buffer as required adjacent to each of the wetlands located on the project site by using averaging. A check of the area provided in the buffers meets the minimum ECWMC requirements.
- 13)
- 14) There are no Floodplains located within the project site.

### **Recommendation:**

We recommend approval of the project, subject to the following revisions and submittals being made:

- a. Items under 8a

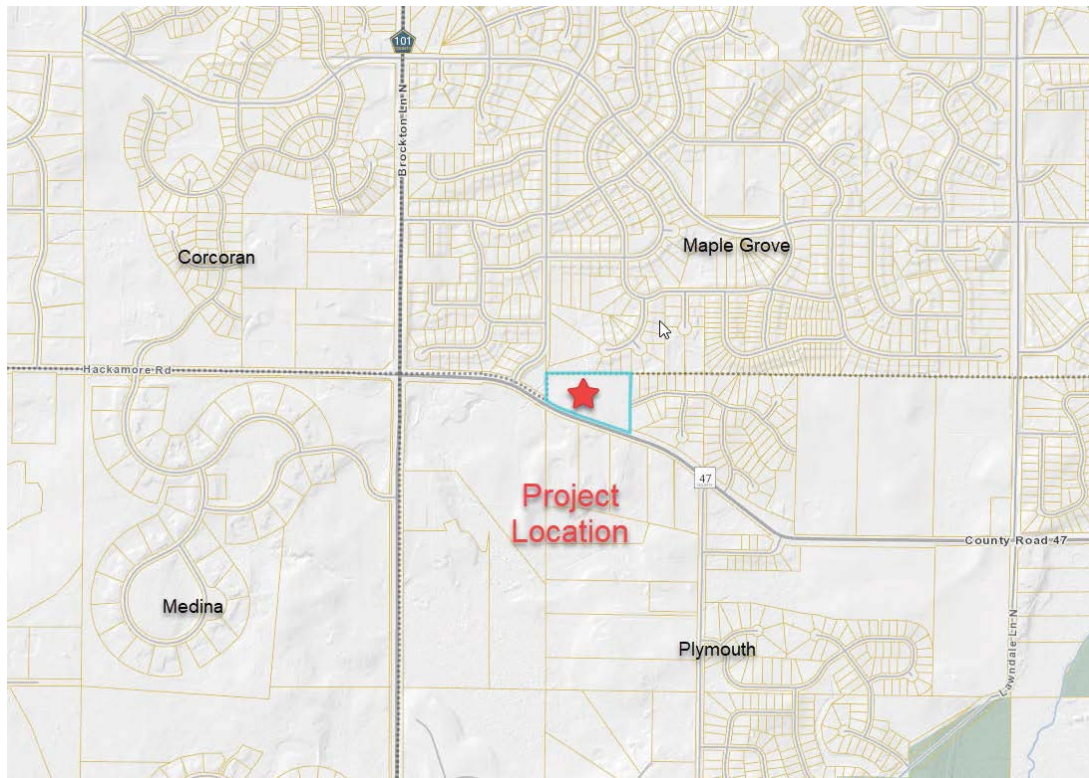


July 25, 2018

Hennepin County  
Department of Environment and Energy  
Advisor to the Commission

McConn Parcel  
Plymouth Project 2018-029  
July 25, 2018

Site Location



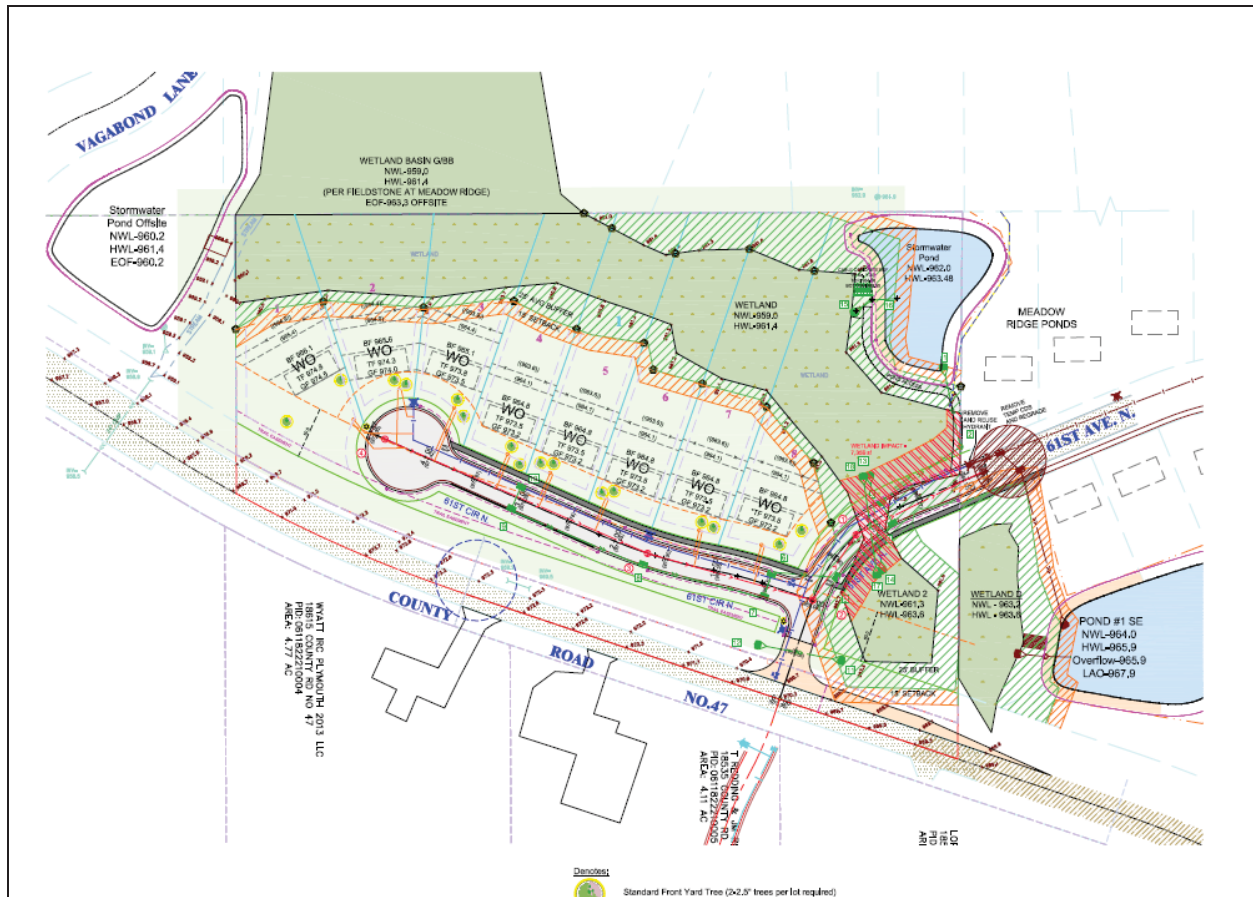
AerialPhoto





McConn Parcel  
Plymouth Project 2018-029  
July 25, 2018

## Site Plan



# Minnesota Wetland Conservation Act

## Notice of Application

Local Government Unit (LGU) <b>Elm Creek Watershed Management Commission</b>	Address <b>c/o JASS          3235 Fernbrook Lane,          Plymouth, MN 55447</b>
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### 1. PROJECT INFORMATION

Applicant Name <b>Pulte Group. Attn. Paul Heuer</b>	Project Name <b>Encore 1<sup>st</sup> Addition</b>	Date of Application <b>July 19, 2018</b>	Application Number <b>2018-032</b>
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Type of Application (check all that apply):

<input type="checkbox"/> Wetland Boundary or Type	<input checked="" type="checkbox"/> No-Loss	<input type="checkbox"/> Exemption	<input checked="" type="checkbox"/> Sequencing
<input checked="" type="checkbox"/> Replacement Plan	<input type="checkbox"/> Banking Plan		

Summary and description of proposed project (attach additional sheets as necessary):

The WCA Boundary/Type was approved by the LGU for this property on December 28, 2017. Pulte Group is proposing to develop a ~53-acre site in the City of Corcoran as Encore 1st Addition, that will include 78 single family residential homes and an amenity center, along with associated streets, utilities, and stormwater treatment features. A commercial outlot will also be located in the southeast portion of the site. This project proposes 0.4263-acre (18,570 sf) of permanent wetland impact within 4 separate wetland locations. Permanent wetland impacts are proposed to be replaced through the purchase of BWSR certified wetland bank credits. 1:1 ratio from wetland bank accounts 1427 (Anoka County) and 1:1 ratio from account 1518 (Hennepin County)
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### 2. APPLICATION REVIEW AND DECISION

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

Name and Title of LGU Contact Person <b>James C. Kujawa          Technical Advisor to the Commission</b>	Comments must be received by (minimum 15 business-day comment period): <b>August 27, 2018, 4:30 PM</b>
Address (if different than LGU)	Date, time, and location of decision: <b>September 12, 2018, 11:30 a.m. Mayor's Conference Room at Maple Grove City Hall, 12800 Arbor Lakes Pkwy, Maple Grove, MN</b>
Phone Number and E-mail Address <b>612-348-7338          James.kujawa@hennepin.us</b>	Decision-maker for this application: <input type="checkbox"/> Staff <input checked="" type="checkbox"/> Governing Board or Council

Signature:  Date: **July 24, 2018**



### 3. LIST OF ADDRESSEES

- ☒ **SWCD TEP member: (email only) Stacey. Lijewski@co.hennepin.mn.us**  
☒ **BWSR TEP member: (email only) Ben Carlson ([ben.carlson@state.mn.us](mailto:ben.carlson@state.mn.us))**  
☐ LGU TEP member (if different than LGU Contact):  
☐ DNR TEP member:  
☒ **DNR Regional Office (email only) [Becky.Horton@state.mn.us](mailto:Becky.Horton@state.mn.us)**  
☐ WD or WMO (if applicable):  
☒ **Applicant: (email only) [paul.heuer@pultegroup.com](mailto:paul.heuer@pultegroup.com)**  
☒ **City of Corcoran: Brad Marten [bmartens@ci.corcoran.mn.us](mailto:bmartens@ci.corcoran.mn.us)**  
☒ **Members of the public who requested notice (notice only) Kjolhaug Env. [melissa@kjolhaugenv.com](mailto:melissa@kjolhaugenv.com)**  
☒ **Corps of Engineers Project Manager (notice only) [mvp-reg-inquiry@usace.army.mil](mailto:mvp-reg-inquiry@usace.army.mil)**  
☐ **BWSR Wetland Bank Coordinator (wetland bank plan applications only)**

### 4. MAILING INFORMATION

- For a list of BWSR TEP representatives: [www.bwsr.state.mn.us/contact/WCA\\_areas.pdf](http://www.bwsr.state.mn.us/contact/WCA_areas.pdf)  
 ➤ For a list of DNR TEP representatives: [www.bwsr.state.mn.us/wetlands/wca/DNR\\_TEP\\_contacts.pdf](http://www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf)  
 ➤ Department of Natural Resources Regional Offices:

<u>NW Region:</u> Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	<u>NE Region:</u> Reg. Env. Assess. Ecol. Div. Ecol. Resources 1201 E. Hwy. 2 Grand Rapids, MN 55744	<u>Central Region:</u> Reg. Env. Assess. Ecol. Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	<u>Southern Region:</u> Reg. Env. Assess. Ecol. Div. Ecol. Resources 261 Hwy. 15 South New Ulm, MN 56073
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For a map of DNR Administrative Regions, see: [http://files.dnr.state.mn.us/aboutdnr/dnr\\_regions.pdf](http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf)

- For a list of Corps of Project Managers: [www.mvp.usace.army.mil/regulatory/default.asp?pageid=687](http://www.mvp.usace.army.mil/regulatory/default.asp?pageid=687)  
 or send to:  
 ➤

US Army Corps of Engineers  
 St. Paul District, ATTN: OP-R  
 180 Fifth St. East, Suite 700  
 St. Paul, MN 55101-1678

- For Wetland Bank Plan applications, also send a copy of the application to:  
 Minnesota Board of Water and Soil Resources  
 Wetland Bank Coordinator  
 520 Lafayette Road North  
 St. Paul, MN 55155

### 5. ATTACHMENTS

In addition to the application, list any other attachments:

- ☒ **Encore 1<sup>st</sup> Addition, Wetland Permit Application by Kjolhaug Environmental, dated July 19, 2018.**

☐

**Elm Creek Watershed Management  
Commission Pond Excavation  
Permit/No Loss**

**Applicant:** Mr. Dale H. Johnson (dalehjohnson@me.com)      **Phone:** 612 875-8991

**Address:** 23155 Oakdale Drive, Corcoran, MN 55374

**Project Location:** 23155 Oakdale Drive, Corcoran, MN 55374

**Project Number:** 2018-036W

**Date of Issue:** July 19, 2018

**By:** James C Kujawa, ECWMC Technical Advisor

**Findings:**

- 1) This permit is for the pond dimensions, locations and material disposal shown on the attached aerial photograph and typical cross section plan.
- 2) This project will be located in a type 1 / 2 wet meadow wetland. It is outside of any permanent or semi-permanently flooded areas and does not fall under the scope of the MN 1991 Wetland Conservation Act (as amended)

**Conditions:**

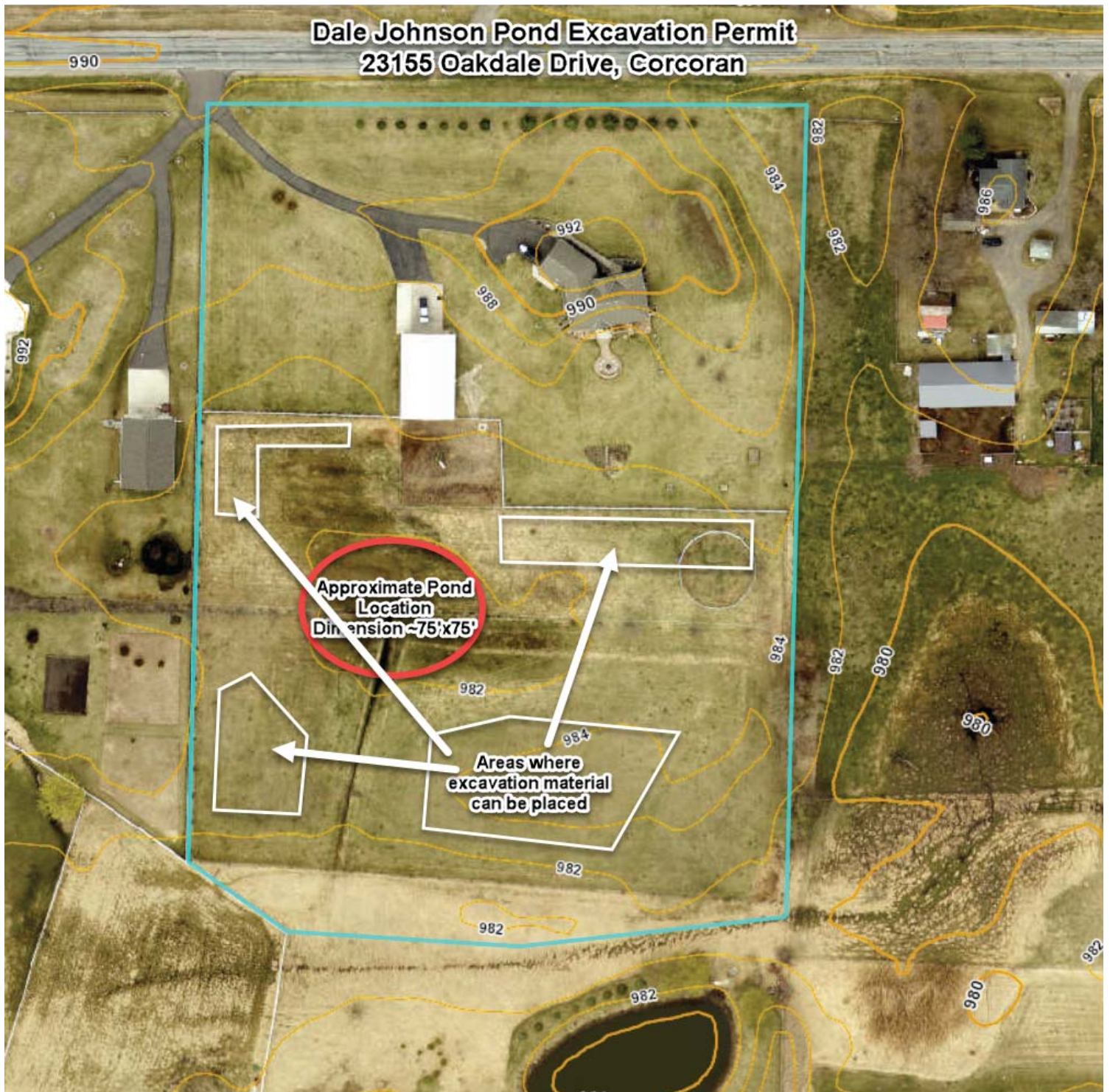
- 1) This pond excavation permit is valid for one year from the date of issuance.
- 2) **The Elm Creek Watershed Commission grants this permit in the interest of wildlife and conservation of our natural resources. Safety provisions on this project are the responsibility of the permittee. The Commission recommends the constructed side slopes on the pond are not steeper than 5:1 (5 foot horizontal to 1 foot vertical) in the interest of water safety and wildlife.**
- 3) Restoration on all disturbed areas must be accomplished within 72 hours after grading is completed. Seed and mulch requirements must meet current Minnesota Department of Transportation or Minnesota Board of Water and Soil Resources standard specifications. Control of weeds is the responsibility of the Permittee. Seed and vegetation maintenance suggestions are below.
- 4) Construction of the pond and disposal of material must not block or interfere with any existing drainage conveyance systems.
- 5) Unless otherwise noted, if this permit is for excavation within an existing wetland area, the following conditions must be adhered to:
  - All material excavated must be placed outside of any wetland areas
  - The excavation must not exceed 2 meters (6 feet 6 inches).
  - No excavation can take place within the permanently and semi-permanently flooded area of a type 3, 4 or 5 wetland.
- 6) This permit does not obviate any requirement for Federal assent from the U.S. Corps of Engineers, 1135 U.S. Post Office and Custom House, St. Paul, MN 55101 or the Minnesota Department of Natural Resources, 1200 Warner Road, St. Paul, MN 55106.
- 7) This permit is permissive only and shall not release the permittee from any liability or obligation imposed by Federal Law, Minnesota Statutes or local Ordinances relating to their work.
- 8) No changes shall be made, without written permission previously obtained from The Elm Creek Watershed Commission.

- 9) This permit may be terminated by the Elm Creek Watershed Commission at any time deemed necessary for the interest of public health and welfare, or for violation of any of the provisions of this permit or approved grading and erosion control plans.
- 10) Soil erosion must be controlled at all times. Failure to control erosion may result in an order to stop work until the appropriate measures are established. All erosion control must be in place and working order before site-grading activities begin.
- 11) The City of Corcoran may require a grading permit for this work. It is the responsibility of the Applicant to obtain said permit.

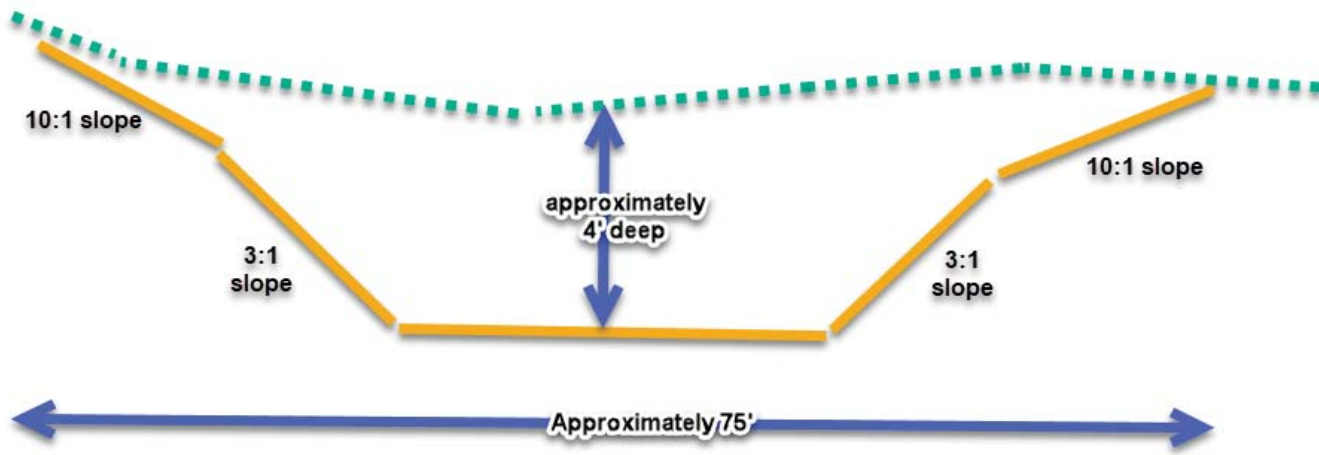
**Seeding Recommendations,** (seed mix information attached)

- 1) For wetter areas (0-12 inches of water)
  - a. BWSR/MNDOT mix 34-181
- 2) For wetland edges/disturbed areas around pond.
  - a. BWSR/MNDOT mix 33-261 or mix 34-271 or mix 34-171
- 3) For disturbed upland areas and where excess material is placed;
  - a. BWSR/MNDOT mix 35-221 or 35-241









Typical Pond Cross Section  
Dale Johnson  
23155 Oakdale Drive Corcoran  
(No Scale)

33-261

## Stormwater South &amp; West

Common Name	Scientific Name	Rate (kg/ha)	Rate (lb/ac)	% of Mix (% by wt)	Seeds/sq ft
big bluestem	<i>Andropogon gerardii</i>	2.24	2.00	5.72%	7.35
fringed brome	<i>Bromus ciliatus</i>	2.24	2.00	5.73%	8.10
bluejoint	<i>Calamagrostis canadensis</i>	0.07	0.06	0.18%	6.40
slender wheatgrass	<i>Elymus trachycaulus</i>	1.12	1.00	2.85%	2.53
Virginia wild rye	<i>Elymus virginicus</i>	1.68	1.50	4.28%	2.31
switchgrass	<i>Panicum virgatum</i>	0.43	0.38	1.07%	1.93
fowl bluegrass	<i>Poa palustris</i>	1.19	1.06	3.03%	50.70
Indian grass	<i>Sorghastrum nutans</i>	0.13	0.12	0.36%	0.55
prairie cordgrass	<i>Spartina pectinata</i>	0.43	0.38	1.07%	0.91
	<b>Total Grasses</b>	<b>9.53</b>	<b>8.50</b>	<b>24.29%</b>	<b>80.78</b>
awl-fruited sedge	<i>Carex stipata</i>	0.28	0.25	0.71%	3.10
dark green bulrush	<i>Scirpus atrovirens</i>	0.21	0.19	0.54%	31.70
woolgrass	<i>Scirpus cyperinus</i>	0.07	0.06	0.18%	39.00
	<b>Total Sedges and Rushes</b>	<b>0.56</b>	<b>0.50</b>	<b>1.43%</b>	<b>73.80</b>
Canada anemone	<i>Anemone canadensis</i>	0.08	0.07	0.19%	0.20
marsh milkweed	<i>Asclepias incarnata</i>	0.12	0.11	0.32%	0.20
leafy beggarticks	<i>Bidens frondosa</i>	0.12	0.11	0.31%	0.20
flat-topped aster	<i>Doellingeria umbellata</i>	0.07	0.06	0.17%	1.50
spotted Joe pye weed	<i>Eutrochium maculatum</i>	0.07	0.06	0.18%	2.19
autumn sneezeweed	<i>Helenium autumnale</i>	0.15	0.13	0.36%	5.97
obedient plant	<i>Physostegia virginiana</i>	0.08	0.07	0.21%	0.30
tall coneflower	<i>Rudbeckia laciniata</i>	0.08	0.07	0.21%	0.37
New England aster	<i>Symphotrichum novae-angliae</i>	0.08	0.07	0.19%	1.56
blue vervain	<i>Verbena hastata</i>	0.06	0.05	0.15%	1.85
golden alexanders	<i>Zizia aurea</i>	0.22	0.20	0.56%	0.79
	<b>Total Forbs</b>	<b>1.12</b>	<b>1.00</b>	<b>2.85%</b>	<b>15.13</b>
Oats or winter wheat (see note at beginning of list for recommended dates)		28.02	25.00	71.43%	11.14
	<b>Total Cover Crop</b>	<b>28.02</b>	<b>25.00</b>	<b>71.43%</b>	<b>11.14</b>
	<b>Totals:</b>	<b>39.23</b>	<b>35.00</b>	<b>100.00%</b>	<b>180.85</b>
<b>Purpose:</b>	Stormwater pond edges, temporarily flooded dry ponds, and temporarily flooded ditch bottoms.				
<b>Planting Area:</b>	Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces. Mn/DOT Districts 2(west), 3B, 4, Metro, 6, 7 & 8.				

34-171

## Wetland Rehabilitation

Common Name	Scientific Name	Rate (kg/ha)	Rate (lb/ac)	% of Mix (% by wt)	Seeds/ sq ft
Virginia wild rye	<i>Elymus virginicus</i>	3.36	3.00	56.61%	4.63
fowl bluegrass	<i>Poa palustris</i>	1.12	1.00	18.89%	47.80
	<b>Total Grasses</b>	<b>4.48</b>	<b>4.00</b>	<b>75.50%</b>	<b>52.43</b>
fox sedge	<i>Carex vulpinoidea</i>	0.22	0.20	3.85%	7.50
path rush	<i>Juncus tenuis</i>	0.18	0.16	3.03%	59.00
dark green bulrush	<i>Scirpus atrovirens</i>	0.40	0.36	6.70%	60.00
woolgrass	<i>Scirpus cyperinus</i>	0.09	0.08	1.51%	50.00
	<b>Total Sedges and Rushes</b>	<b>0.90</b>	<b>0.80</b>	<b>15.09%</b>	<b>176.50</b>
nodding bur marigold	<i>Bidens cernua</i>	0.15	0.13	2.45%	1.00
Water Horehound	<i>Lycopus americanus</i>	0.37	0.33	6.29%	23.15
blue monkey flower	<i>Mimulus ringens</i>	0.04	0.04	0.67%	30.00
	<b>Total Forbs</b>	<b>0.56</b>	<b>0.50</b>	<b>9.41%</b>	<b>54.15</b>
	<b>Totals:</b>	<b>5.94</b>	<b>5.30</b>	<b>100.00%</b>	<b>283.08</b>
<b>Purpose:</b>	Interseeding into establishing wetlands after weed control spraying. Also suitable for two to five year short term soil stabilization for areas with saturated soils.				
<b>Planting Area:</b>	Statewide				

34-181

## Emergent Wetland

Common Name	Scientific Name	Rate (kg/ha)	Rate (lb/ac)	% of Mix (% by wt)	Seeds/ sq ft
American slough grass	<i>Beckmannia syzigachne</i>	0.78	0.70	14.07%	12.92
tall manna grass	<i>Glyceria grandis</i>	0.28	0.25	4.98%	6.40
rice cut grass	<i>Leersia oryzoides</i>	0.34	0.30	5.93%	3.70
	<b>Total Grasses</b>	<b>1.40</b>	<b>1.25</b>	<b>24.98%</b>	<b>23.02</b>
river bulrush	<i>Bolboschoenus fluviatilis</i>	0.85	0.76	15.20%	1.20
bristly sedge	<i>Carex comosa</i>	0.20	0.18	3.63%	2.00
lake sedge	<i>Carex lacustris</i>	0.07	0.06	1.19%	0.24
tussock sedge	<i>Carex stricta</i>	0.04	0.04	0.77%	0.75
least spikerush	<i>Eleocharis acicularis</i>	0.11	0.10	1.94%	2.50
marsh spikerush	<i>Eleocharis palustris</i>	0.11	0.10	2.03%	1.90
Torrey's rush	<i>Juncus torreyi</i>	0.04	0.04	0.85%	25.00
Three-square bulrush	<i>Schoenoplectus pungens</i>	0.26	0.23	4.54%	1.00
soft stem bulrush	<i>Schoenoplectus tabernaemontani</i>	0.49	0.44	8.78%	5.00
woolgrass	<i>Scirpus cyperinus</i>	0.06	0.05	1.02%	32.00
	<b>Total Sedges and Rushes</b>	<b>2.24</b>	<b>2.00</b>	<b>39.95%</b>	<b>71.59</b>
Sweet flag	<i>Acorus americanus</i>	0.31	0.28	5.53%	0.67
common water plantain	<i>Alisma triviale</i>	0.45	0.40	8.00%	9.70
marsh milkweed	<i>Asclepias incarnata</i>	0.31	0.28	5.67%	0.50
broad-leaved arrowhead	<i>Sagittaria latifolia</i>	0.34	0.30	6.07%	6.80
giant bur reed	<i>Sparganium eurycarpum</i>	0.55	0.49	9.80%	0.09
	<b>Total Forbs</b>	<b>1.96</b>	<b>1.75</b>	<b>35.07%</b>	<b>17.76</b>
	<b>Totals:</b>	<b>5.60</b>	<b>5.00</b>	<b>100.00%</b>	<b>112.37</b>
<b>Purpose:</b>	Emergent wetland restoration for use in wetland mitigation, shoreline restoration, wet stormwater ponds where emergent vegetation is desired.				
<b>Planting Area:</b>	Statewide				



34-271

## Wet Meadow South &amp; West

Common Name	Scientific Name	Rate (kg/ha)	Rate (lb/ac)	% of Mix (% by wt)	Seeds/sq ft
fringed brome	<i>Bromus ciliatus</i>	1.23	1.10	9.18%	4.45
bluejoint	<i>Calamagrostis canadensis</i>	0.06	0.05	0.41%	5.00
Virginia wild rye	<i>Elymus virginicus</i>	1.12	1.00	8.37%	1.55
rice cut grass	<i>Leersia oryzoides</i>	0.28	0.25	2.07%	3.10
tall manna grass	<i>Glyceria grandis</i>	0.17	0.15	1.26%	3.90
fowl manna grass	<i>Glyceria striata</i>	0.11	0.10	0.83%	3.30
fowl bluegrass	<i>Poa palustris</i>	0.39	0.35	2.88%	16.50
	<b>Total Grasses</b>	<b>3.36</b>	<b>3.00</b>	<b>25.00%</b>	<b>37.80</b>
bristly sedge	<i>Carex comosa</i>	0.24	0.21	1.78%	2.36
pointed broom sedge	<i>Carex scoparia</i>	0.06	0.05	0.43%	1.60
awl-fruited sedge	<i>Carex stipata</i>	0.19	0.17	1.40%	2.10
tussock sedge	<i>Carex stricta</i>	0.03	0.03	0.21%	0.50
fox sedge	<i>Carex vulpinoidea</i>	0.16	0.14	1.13%	5.00
path rush	<i>Juncus tenuis</i>	0.04	0.04	0.34%	15.00
dark green bulrush	<i>Scirpus atrovirens</i>	0.20	0.18	1.48%	30.00
woolgrass	<i>Scirpus cyperinus</i>	0.09	0.08	0.67%	50.00
	<b>Total Sedges and Rushes</b>	<b>1.01</b>	<b>0.90</b>	<b>7.44%</b>	<b>106.56</b>
marsh milkweed	<i>Asclepias incarnata</i>	0.27	0.24	2.03%	0.43
common boneset	<i>Eupatorium perfoliatum</i>	0.02	0.02	0.18%	1.30
grass-leaved goldenrod	<i>Euthamia graminifolia</i>	0.01	0.01	0.06%	1.00
spotted Joe pye weed	<i>Eutrochium maculatum</i>	0.02	0.02	0.18%	0.75
autumn sneezeweed	<i>Helenium autumnale</i>	0.03	0.03	0.23%	1.30
sawtooth sunflower	<i>Helianthus grosseserratus</i>	0.04	0.04	0.30%	0.20
great lobelia	<i>Lobelia siphilitica</i>	0.02	0.02	0.13%	2.90
blue monkey flower	<i>Mimulus ringens</i>	0.01	0.01	0.07%	6.80
Virginia mountain mint	<i>Pycnanthemum virginianum</i>	0.07	0.06	0.53%	5.10
giant goldenrod	<i>Solidago gigantea</i>	0.02	0.02	0.14%	1.50
eastern panicled aster	<i>Symphyotrichum lanceolatum</i>	0.03	0.03	0.22%	1.50
red-stemmed aster	<i>Symphyotrichum puniceum</i>	0.19	0.17	1.42%	5.00
tall meadow-rue	<i>Thalictrum dasycarpum</i>	0.01	0.01	0.12%	0.11
blue vervain	<i>Verbena hastata</i>	0.15	0.13	1.12%	4.61
bunched ironweed	<i>Vernonia fasciculata</i>	0.03	0.03	0.28%	0.30
Culver's root	<i>Veronicastrum virginicum</i>	0.01	0.01	0.12%	4.20
golden alexanders	<i>Zizia aurea</i>	0.28	0.25	2.06%	1.00
	<b>Total Forbs</b>	<b>1.23</b>	<b>1.10</b>	<b>9.19%</b>	<b>38.00</b>
Oats or winter wheat (see note at beginning of list for recommended dates)		7.85	7.00	58.37%	3.12
	<b>Total Cover Crop</b>	<b>7.85</b>	<b>7.00</b>	<b>58.37%</b>	<b>3.12</b>
	<b>Totals:</b>	<b>13.45</b>	<b>12.00</b>	<b>100.00%</b>	<b>185.48</b>
<b>Purpose:</b>	Wet meadow / Sedge meadow reconstruction for wetland mitigation or ecological restoration projects				
<b>Planting Area:</b>	Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces. Mn/DOT Districts 2(west), 3B, 4, Metro, 6, 7 & 8.				

35-221

## Dry Prairie General

Common Name	Scientific Name	Rate (kg/ha)	Rate (lb/ac)	% of Mix (% by wt)	Seeds/ sq ft
big bluestem	<i>Andropogon gerardii</i>	0.78	0.70	1.92%	2.57
side-oats grama	<i>Bouteloua curtipendula</i>	3.36	3.00	8.22%	6.61
blue grama	<i>Bouteloua gracilis</i>	0.56	0.50	1.37%	7.35
kalm's brome	<i>Bromus kalmii</i>	0.82	0.73	2.00%	2.14
nodding wild rye	<i>Elymus canadensis</i>	1.12	1.00	2.74%	1.91
junegrass	<i>Koeleria macrantha</i>	0.28	0.25	0.69%	18.37
little bluestem	<i>Schizachyrium scoparium</i>	3.36	3.00	8.22%	16.53
Indian grass	<i>Sorghastrum nutans</i>	0.78	0.70	1.92%	3.09
prairie dropseed	<i>Sporobolus heterolepis</i>	0.13	0.12	0.34%	0.73
	<b>Total Grasses</b>	<b>11.21</b>	<b>10.00</b>	<b>27.42%</b>	<b>59.30</b>
blue giant hyssop	<i>Agastache foeniculum</i>	0.07	0.06	0.17%	2.07
lead plant	<i>Amorpha canescens</i>	0.10	0.09	0.26%	0.42
butterfly milkweed	<i>Asclepias tuberosa</i>	0.07	0.06	0.17%	0.10
Canada milk vetch	<i>Astragalus canadensis</i>	0.07	0.06	0.18%	0.40
bird's foot coreopsis	<i>Coreopsis palmata</i>	0.07	0.06	0.16%	0.21
white prairie clover	<i>Dalea candida</i>	0.07	0.06	0.15%	0.39
purple prairie clover	<i>Dalea purpurea</i>	0.21	0.19	0.51%	1.02
Canada tick trefoil	<i>Desmodium canadense</i>	0.07	0.06	0.18%	0.13
stiff sunflower	<i>Helianthus pauciflorus</i>	0.07	0.06	0.17%	0.09
rough blazing star	<i>Liatris aspera</i>	0.04	0.04	0.12%	0.25
wild bergamot	<i>Monarda fistulosa</i>	0.07	0.06	0.15%	1.42
stiff goldenrod	<i>Oligoneuron rigidum</i>	0.07	0.06	0.15%	0.83
large-flowered beard tongue	<i>Penstemon grandiflorus</i>	0.07	0.06	0.17%	0.32
black-eyed susan	<i>Rudbeckia hirta</i>	0.35	0.31	0.84%	10.32
gray goldenrod	<i>Solidago nemoralis</i>	0.04	0.04	0.10%	3.86
heath aster	<i>Symphyotrichum ericoides</i>	0.04	0.04	0.10%	2.58
smooth aster	<i>Symphyotrichum laeve</i>	0.07	0.06	0.17%	1.26
hoary vervain	<i>Verbena stricta</i>	0.15	0.13	0.34%	1.29
	<b>Total Forbs</b>	<b>1.68</b>	<b>1.50</b>	<b>4.09%</b>	<b>26.96</b>
Oats or winter wheat (see note at beginning of list for recommended dates)		28.02	25.00	68.49%	11.13
	<b>Total Cover Crop</b>	<b>28.02</b>	<b>25.00</b>	<b>68.49%</b>	<b>11.13</b>
	<b>Totals:</b>	<b>40.91</b>	<b>36.50</b>	<b>100.00%</b>	<b>97.39</b>
<b>Purpose:</b>	General dry prairie mix for native roadsides, ecological restoration, or conservation program plantings.				
<b>Planting Area:</b>	Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces. Mn/DOT Districts 2(west), 3B, 4, Metro, 6, 7 & 8.				

35-241

## Mesic Prairie General

Common Name	Scientific Name	Rate (kg/ha)	Rate (lb/ac)	% of Mix (% by wt)	Seeds/sq ft
big bluestem	<i>Andropogon gerardii</i>	2.24	2.00	5.48%	7.35
side-oats grama	<i>Bouteloua curtipendula</i>	1.79	1.60	4.39%	3.53
kalm's brome	<i>Bromus kalmii</i>	0.56	0.50	1.37%	1.47
nodding wild rye	<i>Elymus canadensis</i>	1.31	1.17	3.20%	2.23
slender wheatgrass	<i>Elymus trachycaulus</i>	1.12	1.00	2.73%	2.53
switchgrass	<i>Panicum virgatum</i>	0.07	0.06	0.17%	0.32
little bluestem	<i>Schizachyrium scoparium</i>	1.79	1.60	4.39%	8.82
Indian grass	<i>Sorghastrum nutans</i>	2.24	2.00	5.48%	8.82
prairie dropseed	<i>Sporobolus heterolepis</i>	0.08	0.07	0.18%	0.39
	<b>Total Grasses</b>	<b>11.21</b>	<b>10.00</b>	<b>27.39%</b>	<b>35.46</b>
blue giant hyssop	<i>Agastache foeniculum</i>	0.07	0.06	0.15%	1.82
lead plant	<i>Amorpha canescens</i>	0.07	0.06	0.15%	0.25
common milkweed	<i>Asclepias syriaca</i>	0.04	0.04	0.10%	0.06
butterfly milkweed	<i>Asclepias tuberosa</i>	0.04	0.04	0.10%	0.06
Canada milk vetch	<i>Astragalus canadensis</i>	0.07	0.06	0.17%	0.39
white prairie clover	<i>Dalea candida</i>	0.07	0.06	0.17%	0.44
purple prairie clover	<i>Dalea purpurea</i>	0.21	0.19	0.51%	1.03
Canada tick trefoil	<i>Desmodium canadense</i>	0.07	0.06	0.18%	0.13
stiff sunflower	<i>Helianthus pauciflorus</i>	0.07	0.06	0.17%	0.09
ox-eye	<i>Heliopsis helianthoides</i>	0.15	0.13	0.34%	0.29
rough blazing star	<i>Liatris aspera</i>	0.03	0.03	0.08%	0.18
great blazing star	<i>Liatris pycnostachya</i>	0.03	0.03	0.09%	0.13
wild bergamot	<i>Monarda fistulosa</i>	0.07	0.06	0.17%	1.61
stiff goldenrod	<i>Oligoneuron rigidum</i>	0.07	0.06	0.17%	0.94
black-eyed susan	<i>Rudbeckia hirta</i>	0.35	0.31	0.86%	10.56
heath aster	<i>Symphyotrichum ericoides</i>	0.03	0.03	0.09%	2.30
smooth aster	<i>Symphyotrichum laeve</i>	0.07	0.06	0.17%	1.26
blue vervain	<i>Verbena hastata</i>	0.04	0.04	0.12%	1.50
hoary vervain	<i>Verbena stricta</i>	0.07	0.06	0.17%	0.64
golden alexanders	<i>Zizia aurea</i>	0.07	0.06	0.15%	0.23
	<b>Total Forbs</b>	<b>1.68</b>	<b>1.50</b>	<b>4.11%</b>	<b>23.89</b>
Oats or winter wheat (see note at beginning of list for recommended dates)		28.02	25.00	68.50%	11.14
	<b>Total Cover Crop</b>	<b>28.02</b>	<b>25.00</b>	<b>68.50%</b>	<b>11.14</b>
	<b>Totals:</b>	<b>40.91</b>	<b>36.50</b>	<b>100.00%</b>	<b>70.49</b>
<b>Purpose:</b>	General mesic prairie mix for native roadsides, ecological restoration, or conservation program plantings.				
<b>Planting Area:</b>	Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces. Mn/DOT Districts 2(west), 3B, 4, Metro, 6, 7 & 8.				

# elm creek

## Watershed Management Commission

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### ADMINISTRATIVE OFFICE

3235 Fernbrook Lane  
Plymouth, MN 55447  
PH: 763.553.1144  
FAX: 763.553.9326  
E-mail: [judie@jass.biz](mailto:judie@jass.biz)

### TECHNICAL OFFICE

Hennepin County, Environment and Energy Dept.  
701 Fourth Avenue South, Suite 700t  
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FAX: 612.348.8532  
E-mail: [James.kujawa@hennepin.us](mailto:James.kujawa@hennepin.us)

## Markets at Rush Creek Maple Grove, 2016-002

**Project Overview:** This is a proposal to develop 40 acres out of a 123 acre planned unit development located on the southwest quadrant of the intersection of CSAH 101 and CSAH 10. County Ditch 16 (Maple Creek) runs along the south property line on this project. The 40-acre project area includes a Hy-Vee grocery store (16.8 acres), a Hy-Vee gas station (2.5 acres) and 11 outlots (18.76 acres). Right of way accounts for the remaining 2.3 acre. This review is for compliance to the Commission's Rule D (Stormwater Management), Rule E (Erosion and Sediment Control), Rule F (Floodplain), and Rule I (Buffer Strips).

**Applicant & Agent.** Hy-Vee, Inc. 5820 Weston Parkway, West Des Moines, Iowa 50266. Phone: (515) 267-2800. Email: [JStein@hy-vee.com](mailto:JStein@hy-vee.com)

**Engineering/Agent.** Alliant Engineering, Attention Dave Nash, 233 Park Avenue South, Suite 300, Minneapolis MN 55415. Phone: (612) 767-9327. Email: [dnash@alliant-inc.com](mailto:dnash@alliant-inc.com)

### **Exhibits:**

1. Request for plan review, received on February 8, 2016.
2. Application fee of \$10,250 received February 17, 2016.
3. Complete plans were received on February 17, 2016.
4. Stormwater Management Plan, Markets at Rush Creek (Hy-Vee Site) Development Stage Preliminary Plat/PUD Submittal, dated April 20, 2016, updated July 2, 2018 and July 23, 2018..
5. MN 15.99 extensions to October 2018.
6. Development Stage PUD Plan Sheets for Hy-Vee (Civil Plans only) - dated February 2, 2016, latest revision of July 2, 2018.

C0.0	Cover Sheet	C6.0-C6.3	Civil Details
C1.0	Existing Conditions	L1.0-L1.3	Landscape Plan
C2.0	Overall Concept Plan	L2.0-L2.3	Photometric Plan
C3.0-C3.2	Site Plan		
C4.0-C4.4	Grading Plan/Bio-filtration Plan		
C5.0-C5.2	Utility Plan		

### **Findings:**

#### **General:**

1. Per MN Statute 15.99 the initial 60-day project review deadline is April 17, 2016. An extension was requested from the applicant until October 2018
2. The Hustad Markets at Rush Creek PUD project received preliminary approvals by the Commission in 2009 (Project 2009-004). That site plan consisted of mixed uses including a grocery store, retail shops and office buildings. A single family residential development and



higher density residential homes were proposed in the south and northwest quadrant of the site. Development of the retail portion of the site did not occur and expired at the City.

3. The construction of Bass Lake Road and CSAH 101 was completed by the City of Maple Grove in 2010 as part of the original PUD layout design. Three ponds associated with the roadways and regional ponding were also constructed at that time.
4. In 2013 the Hamlets at Rush Creek single family residential development was submitted and approved by the ECWMC under project 2013-014. The City of Maple Grove approved the final plat at that time. This site was graded in 2016.
5. The 40 acre site plan being reviewed by the ECWMC will include the two Hy-Vee lots (grocery store and gas station convenience store) plus the internal roadway system and 11 remaining outlots (Outlots A, B, C, D, E, F, G, H, I, J and K). This is generally the area located between County Ditch 16, Bass Lake Road and County Road 101.
6. This site drains to the southeast into Hennepin County Ditch #16 (Maple Creek). From there it drains north approximately 2 miles before it runs into Elm Creek in the Nottingham neighborhood.
7. The outlot areas that are part of this approval must be reviewed by the Commission for erosion and sediment controls and consistency with the approved plan when they are developed in the future.
8. The applicant proposes to incorporate four biofiltration areas and expand the ponding and filtration capacity to Regional Pond 2 (existing) located on the eastern side of the site.

#### Wetlands:

9. This 40 acre site plan does not impact wetlands. The remaining wetland areas in the 83 acres outside of this development are regulated by the City of Maple Grove (the LGU administering the Wetland Conservation Act within its jurisdictional boundary).
10. Hennepin County Ditch #16 that runs through this site is not considered a wetland, but it must have a 16.5' buffer according to MN State law. The site plans provide for a 16.5' buffer along the top edge of the ditch. The wetland areas in the SW corner of this site are protected by existing wetland buffers established at the time the Hamlets at Rush Creek was approved in 2013.

#### Floodplains:

11. There is a small FEMA flood zone A (no base flood elevation established) on the southwest corner of the project area, within Wetland A. There are no Elm Creek Watershed Management Commission designated floodplain elevations on this site. We recommend the applicant or City of Maple Grove obtain a FEMA Conditional Letter of Map Revision to establish an elevation for the 100 year storm event for this area.

#### Stormwater Management Plan:

12. The four biofiltration ponds and the addition of a stilling basin will reduce the post development rates to below pre development runoff rates. This will meet the Commission's standards.

Rate Control Table

	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
<b>Pre-Development Rates</b>	36.9	74.8	151.2
<b>Post-Development Rates</b>	32.5	72.1	136.8

Volume Abstraction and Water quality modeling.

13. Based on the amount of impervious area proposed for this project, (28.5 acres) abstraction requirements for 1.1" of volume over the new impervious areas is 2.61-acre feet.
- Actual filter volume for 4 filter basins on this site will be 2.70 acre feet.
  - Drawdown times for the filter basins will be 48 hours or less.
14. Phosphorus and TSS post development loads will be less than pre-development loads per the following table (P8 models used for pre and post development);

Condition (based on 41.4 acres)	TP Load (lbs/yr)	TSS Load (lbs/yr)	Abstraction (cu. ft.)	Biofiltration (cu. ft.)
Pre-development (baseline)	42.8	9,652	N/A	-
Post-development without BMPs	149.6	64,462	N/A	113,691*
Post-development with BMPs	25.6	2,372	N/A	117,829
<b>Net Change</b>	<b>-17.2</b>	<b>-7,280</b>	<b>N/A</b>	<b>+4,138</b>
* Required abstraction based on 28.5 acres of new impervious areas.				

Grading and Erosion Control Plans

- 14) Grading and erosion control plans meet the Commission standards.

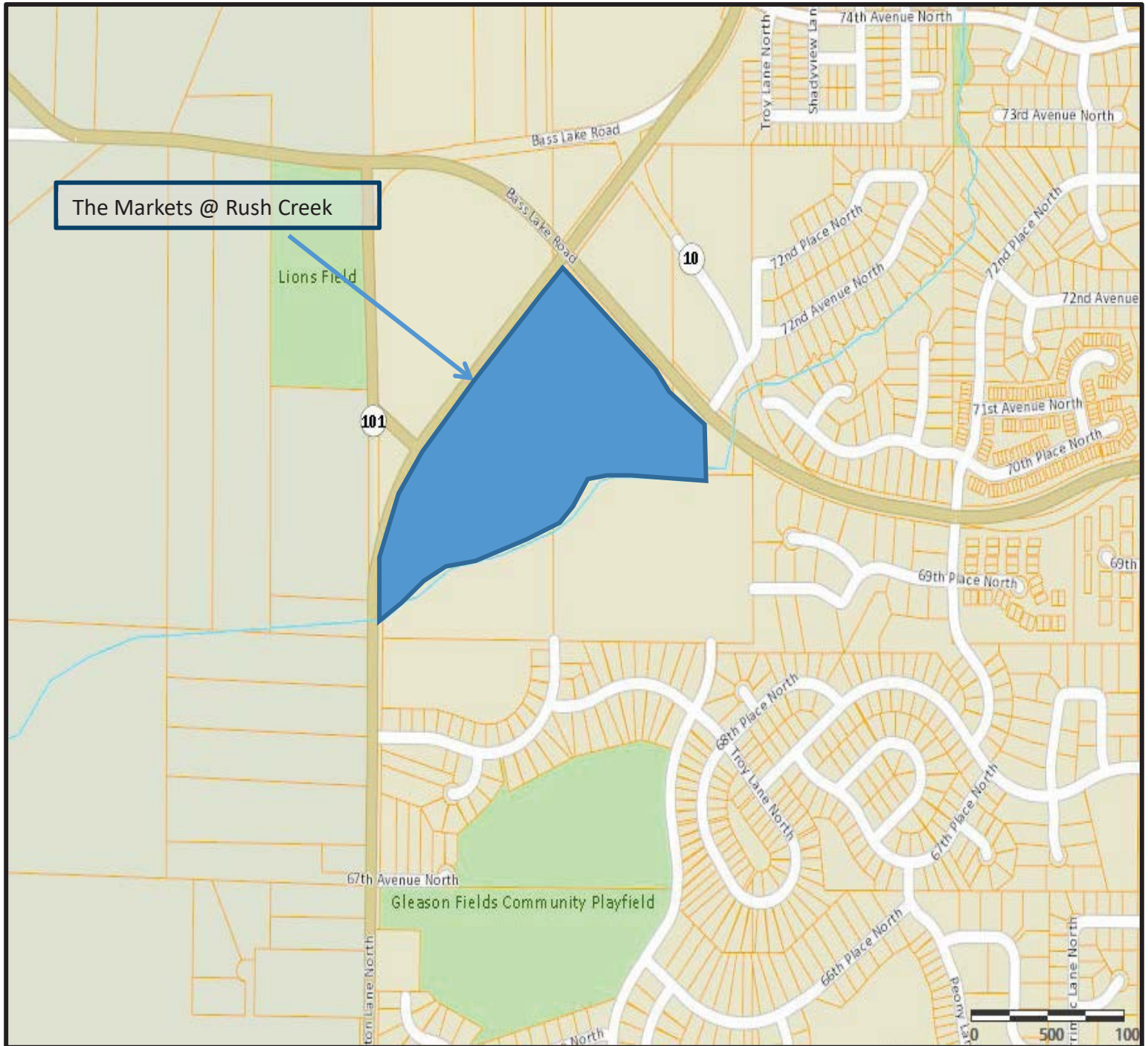
**Decision:** In May 2016, the Commission granted staff authority to administratively approve the project and report any updates. Extensions to the MN 15.99 statute along with revisions to the site plans meet the Commission's standards and conditions from May 2016. Staff hereby approves this site plan under the condition that an approved operation and maintenance plan on the stormwater management system is approved and recorded on the land title to this property.



July 24, 2018  
 Date

James C. Kujawa  
 Technical Advisor to the Commission

## SITE LOCATION





Markets at Rush Creek (2016-002)  
July 24, 2018  
Page 5

**Project Area**

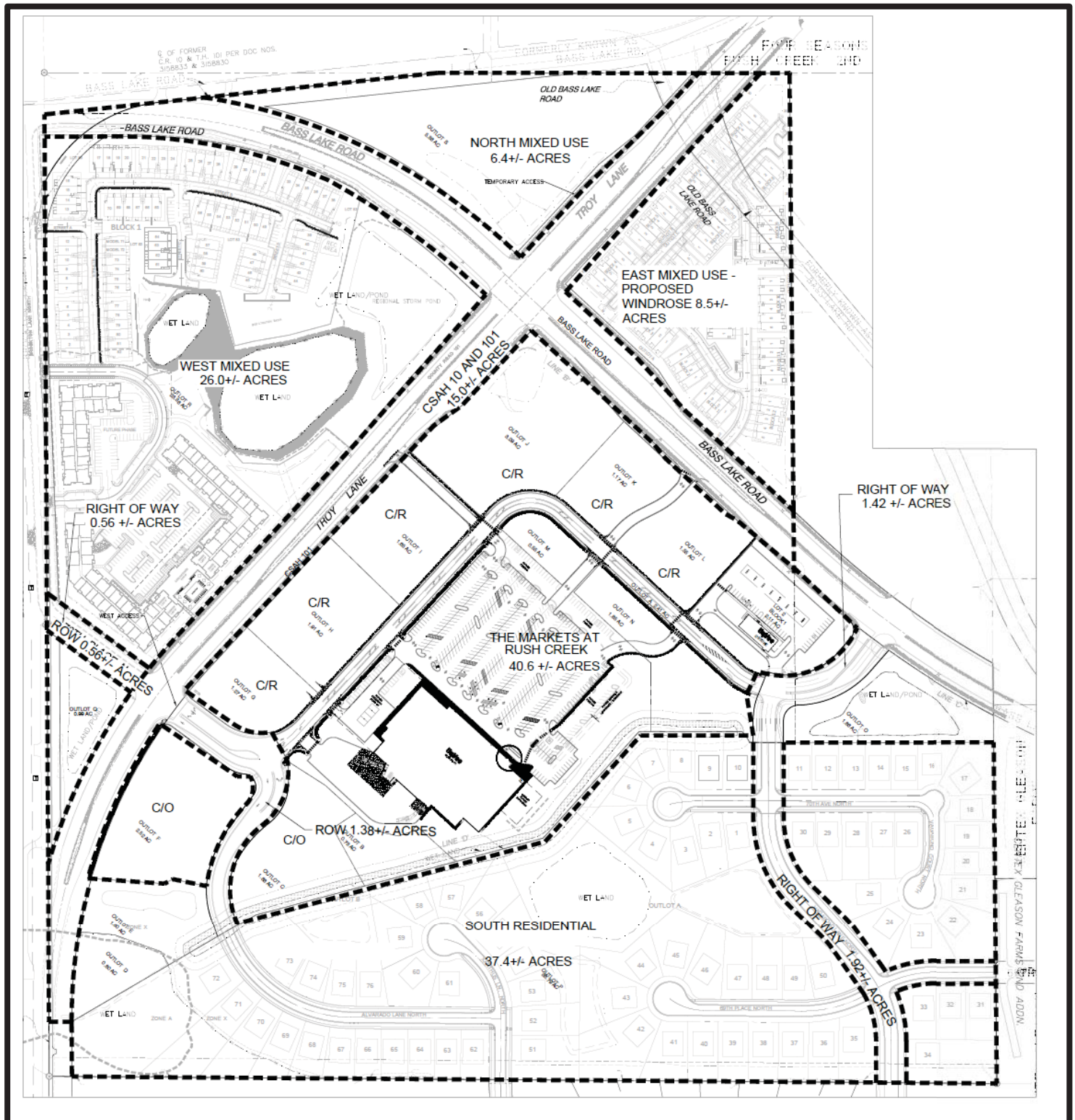


Markets at Rush Creek (2016-002)

July 24, 2018

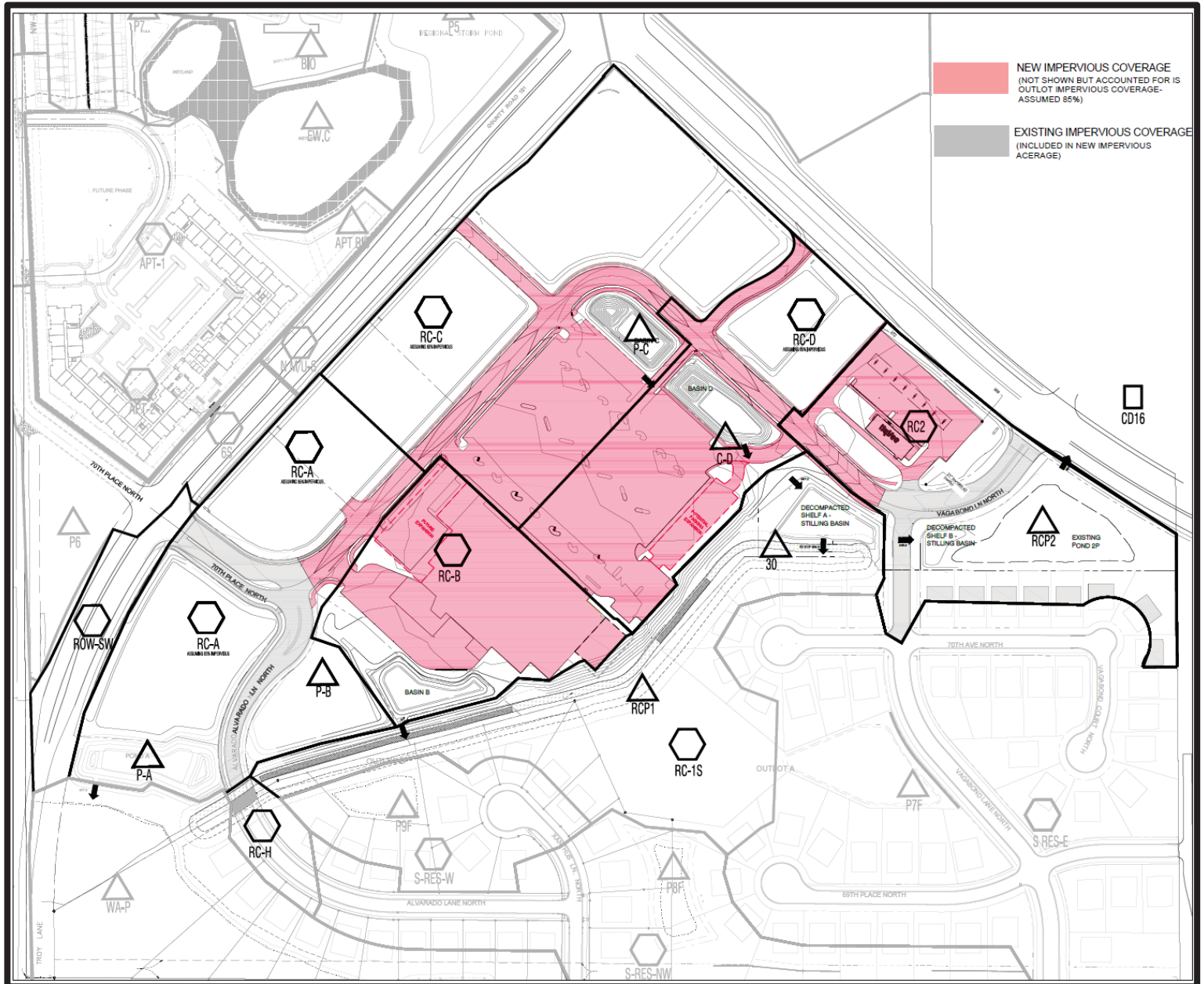
Page 6

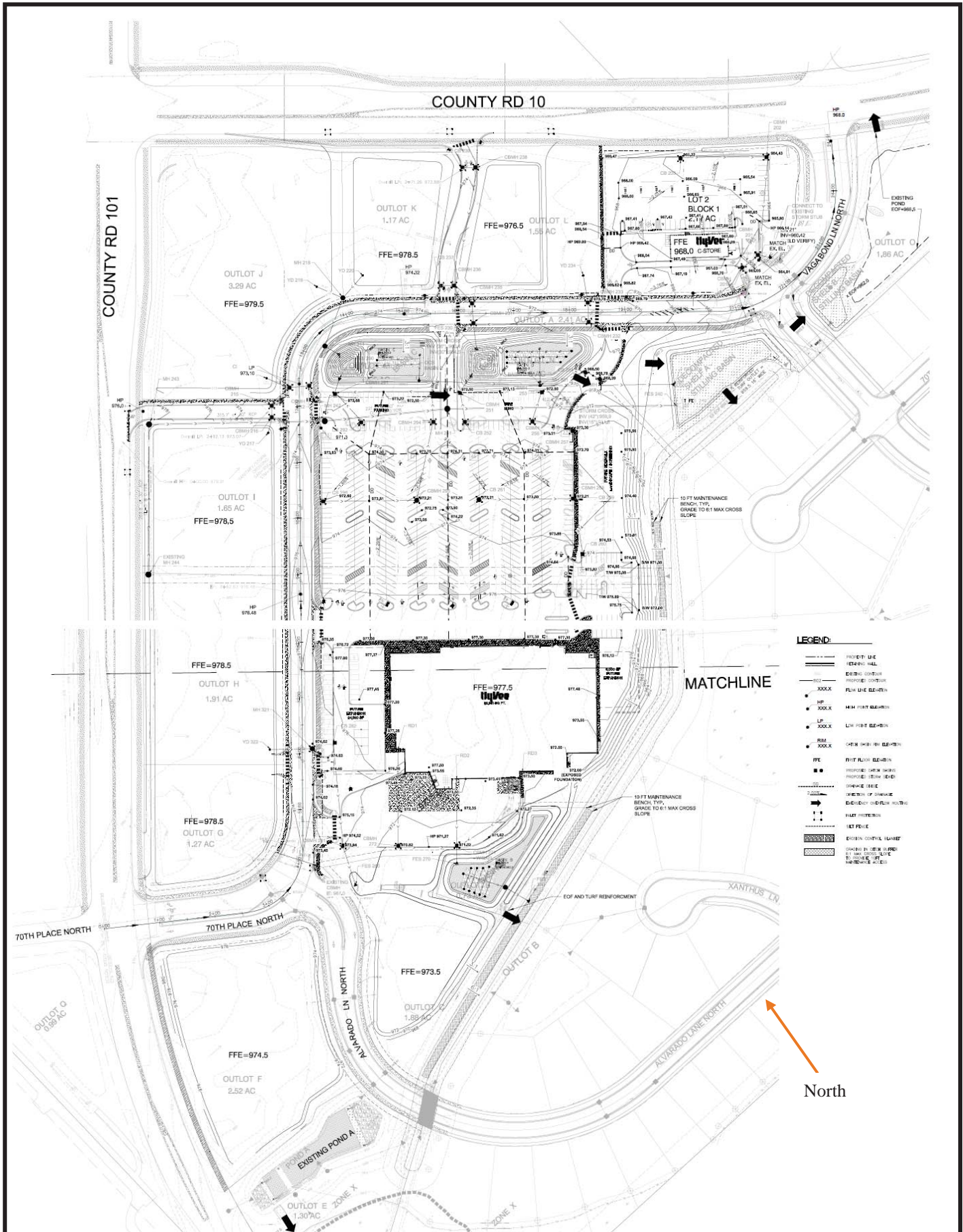
## Overall PUD Plan





### Impervious Area Assumptions







## Ernie Mayers TEP Findings July 20, 2018

### **Background**

The Elm Creek Watershed Management Commission is the Local Government Unit (LGU) in charge of administering the 1991 Wetland Conservation Act (as amended) in the City of Corcoran. A cease and desist order (F890599734501) was issued to Mr. Mayers in December 2017 on Hennepin County Parcels 2811923410009, 2811923130002, 2711923220002, 27119320002, and 2811923220002.

On Friday July 20, 2018 at 10:00 a.m., the Technical Evaluation Panel for the Elm Creek Watershed Management Commission met at the Corcoran City Hall to receive additional information from Mr. Mayers and his consultant as it relates to the ditching, road access and tile work that was outlined in the TEP findings of May 22, 2018.

TEP members present were:

Ben Carlson (BWSR)  
Stacey Lijewski (Hennepin Co. SWCD)  
James Kujawa (ECWMC-LGU)  
Jason Spiegel, (MN DNR) from approximately 11:00 to 12:35.

Others present were:

Ernie Mayers  
Leah Weyandt DNR (Conservation Officer)  
Ben Hodapp, (Anderson Engineering)  
Kevin Mattson (City of Corcoran) from approximately 11:45 to 12:35.  
Jason Swenson (Hennepin County/ECWMC)

Ben Hodapp provided the TEP his Memo dated July 19, 2018. Mr. Hodapp went through his impact review (see Exhibit A) and answered the TEP questions as they related to his memo. The following information and TEP conclusions were as a result of this meeting. The areas mentioned in these findings are based on the areas in Mr. Hodapp's memo dated July 19, 2018.

**Area 1**; This corresponds to the entry road construction at Larkin Road and the impacts the TEP determined in their May 22, 2018 memo vs additional topography surveying, field investigation and an offsite hydrology determination conducted by Anderson Engineering.

- The original TEP conclusion was that there was 2,349 sq. ft. of impacts from the road fill along with approximately 0.55 acres of impacts due to ditching.
- The Anderson engineering analysis on the road fill impacts determined the road work in this area does not appear to overlap into the adjacent wetland boundary and that the drainage ditch improvements appear to have increased the drainage effect on the wetland onsite.

**Area 1**, TEP discussion and conclusion.

- Based on the Anderson Engineering survey, analysis of the soils and historic review of this area, The TEP agrees with the conclusion of Anderson Engineering on the roadway impact for area one, resulting in no impacts from the road fill itself.

- The TEP also agreed with the Anderson Engineering conclusion on the impacts from ditch construction, which resulted in a drainage effect on the wetland adjacent to the road.
- The TEP stands by its original recommendations on the ditch work, and that the ditch must be restored to its original elevation prior to the ditch work Mr. Mayers did in this area. In its May 22, 2018 findings the TEP concluded if the original ditch elevations couldn't be determined, the ditch shall match the existing grade line in the wetland area. It can then be gradually dug, up to, 1.0' below the existing sod line elevations along the tree line.

**Area 2:** This corresponds to the field access improvements just northwest of Area 1. In the May 22, 2018 findings, the TEP referred to this area as the southerly stub road of the road access work.

- The May 22, 2018 TEP concluded there was 1,283 sq. ft. of wetland impacts from the access road work.
- Anderson Engineering concluded there is 825 sq. ft. of wetland impacts based on their survey of the site in relation to the wetland determination boundary. Anderson Engineering assumed the old field road was considered non-wetland because of a 28' long, 15" diameter corrugated metal pipe present in the adjacent upland area during field review.

**Area 2** discussions and conclusion:

- The TEP considered the information provided by Anderson Engineering and determined their original findings of 1,283 sq. ft. of wetland impacts was a more accurate representation of the impacts to this area.
- The TEP based their decision on the fact that the impacts from the road boundaries were similar to the TEP's original conclusion and GPS survey in their May 22, 2018 findings. Although there was most likely a road and culvert crossing where the TEP concluded there is wetland impacts, this area shows consistent wetland signatures as far back as 1981 in historic aerial photos. Specifically this area does not meet the exemption criteria based on WCA rule 8420.0420, Exemption Standards, for subpart 2, Agriculture activities or subpart 3. Drainage (2) *impacts resulting from maintenance or repair of existing drainage systems, other than public drainage systems, when maintenance or repair does not drain wetlands that have existed for more than 25 years before the proposed impacts.*
- The TEP believes the road crossing at the old culvert area should be considered a wetland based on historic aerial photo reviews which shows consistent wetland signatures in the culvert area.

**Area 3:** This corresponds to the field access improvements in the NE corner of the road improvements. The May 22, 2018 TEP findings referred to this area as the northerly terminus area of the access road.

- In the May 22, 2018 findings the TEP concluded there was 5,842 sq. ft. of wetland impacts from this section of the access road.
- Anderson Engineering determined there is 3,712 sq. ft. of wetland impacts from this section of the access road.

### Area 3 discussions and conclusion

- The TEP agreed with Anderson Engineering based on their more detailed site survey of the work and the probability of an error in the TEP's GPS work near some fill placement south of the access road impacts. This was also clarified to the TEP by the Anderson Engineering sample point and survey of said point showing the a portion of the area the TEP had as impacts was actually outside of the wetland boundary.
- The TEP agrees with the Anderson Engineering analysis that the actual impacts in this area for the purpose of the restoration order will be 3,712 sq. ft.

**Areas 4 and 5:** This corresponds to the newly constructed ditch area between Hennepin County Ditch #3 running south approximately 1,175 feet, then southeasterly approximately 525 feet, for a total length of 1,700.

- In the May 22, 2018 findings, the TEP concluded;
  - The new section of the ditch south of the overflow swale from MN DNR wetland 420W, never connected directly into Hennepin County Ditch #3,
  - That the north-south ditch work under the power line (power poles #1 to #4 in the May TEP findings) should be restored to pre-construction elevations, and
  - The southeasterly portion of the ditch work should be restored to pre-construction elevations terminating at the existing elevation at the existing power pole (labeled power pole #4 in the TEP May findings) in MN DNR wetland 420.
- Anderson Engineering provided a copy of the N1/2 of Section 27, T119, R23 plat map from Bernard H. Larson, County Surveyor, Hennepin County MN (see Appendix 4-1 in July 19, 2018 Anderson Memo). This plat map does not have a date on it, but marks the ditch section as the South Fork of Rush Creek and has "aerial photo 1956" indicated along the overflow swale area.
- Mr. Mayers and Anderson Engineering stated that this plat map shows the ditch work that Mr. Mayers did was historically connected into the existing overflow swale from DNR wetland 420W approximately 520 feet south of Hennepin County Ditch #3. (This swale roughly corresponds to power pole #2 in the May 22, 2018 TEP findings)

### Areas 4 and 5 discussion and conclusion.

- The TEP disagreed with Mr. Mayers and Anderson Engineering's conclusion that the ditch work was historically connected based on the following items.
  - The map that was provided in Appendix 4-1 states it is not a legally reconstructed plat map or drainage analysis.
  - Aerial photo reviews from 1953 to 1964 (see Exhibit B) do not show this connection. You would expect to see a clear ditch outline (similar to Hennepin County Ditch #3 in each photo) and connection in an aerial photo taken before and after the plat map was put together.
- The TEP stands by their original conclusions in their May 22, 2018 findings.

**Areas 6 and 7.** This area corresponds to 8" plastic drain tile that runs east from the existing farm ditch and Kalk Road.

- In their May 22, 2018 findings, the TEP concluded the drain tile was placed in an area that was not historically drained and must be removed or disabled. They also concluded

that a non-perforated drain tile can be placed in this area to intercept and convey the excess water from Kalk Road to the farm ditch but cannot intercept any other water.

- Mr. Mayers and Anderson Engineering provided USDA, NRCS correspondence dated June 3, 1996, September 3, 1998, November 16, 2006 and September 17, 2010, EJ Mayer correspondence dated November 7, 2007 and Drainage System Worksheet dated 2008 (see appendix 5-1 of the Anderson Engineering memo dated July 19, 2018)

#### Areas 6 and 7 discussion and conclusion.

- After discussions with Mr. Mayers and Anderson Engineering and the TEP, the TEP did not find any evidence of the correspondence or permissions from the NRCS/FSA/USDA gave permission or allowed a drainage system to be placed in the area of concern. In fact the correspondence from the NRCS in reference to a maintenance request from Mr. Mayers, dated September 3, 1998 specifically states, "Tile cannot be placed going east towards Kalk road."
- The TEP concluded that their original findings from May 22, 2018 are correct and that the FSA/NRCS/USDA has never granted permission for a drain tile in this area.
- One item that the TEP would like to bring to Mr. Mayers and his consultants attention would be the potential of this area being eligible for an agriculture bank wetland. Based on the NRCS wetland determination (for the wetland area drained by drain tile on the east side) it would likely qualify for replacement in a BWSR agriculture bank (FWP). Mr. Mayers could potentially buy credits to replace the impacted wetland area that was drained. A replacement ratio would likely be in the 1:1 to 1.5 to ratio. Since this is a violation that amount would double to 2:1 or 3:1. The area drained was approximately 11 +/- acres.

#### **Recommendations**

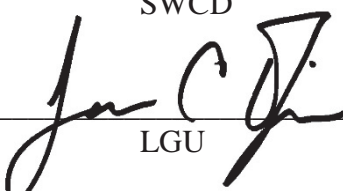
Based on the information provided by Mr. Ernie Mayers and Anderson Engineering at the July 20, 2018 TEP, the TEP recommends a restoration order be issued to Mr. Mayers with the following requirements.

- 1) Restore all ditch work ditch to pre-construction elevations or as determined in the TEP ditch findings from the May 22, 2018
- 2) Remove and restore wetland impacts from the access road construction as determined in road access work findings above or replace wetland road impacts at a ratio twice the replacement ration otherwise required. Total road access impacts are determined to be 4,995 square feet.
- 3) Restore the ditch section near the entry road to its historic elevations as determined by the TEP findings from May 22, 2018.
- 4) Disable the existing drain tile and inlets installed between the ditch and Kalk Road by removing the tile and inlets or by other methods approved by the LGU.
- 5) The work must be completed by August 30, 2018.



**Technical Evaluation Panel Member Signatures/date**

Note: all TEP signatures on file at LGU

<hr/> <div style="text-align: center;"> <p>SWCD</p>  <p>LGU</p> </div> <hr/>	<hr/> <p>Date</p> <hr/> <p><b><u>July 25, 2018</u></b></p> <hr/> <p>Date</p>
<hr/> <p>BWSR</p> <hr/>	<hr/> <p>Date</p> <hr/>
<hr/> <p>DNR</p> <hr/>	<hr/> <p>Date</p> <hr/>

# Exhibit A

## MEMORANDUM **Exhibit A**

**To:** Ernie Mayers  
**From:** Benjamin Hodapp, PWS, Environmental Group Lead  
**Date:** July 19, 2018  
**Subject:** Impact Review – 21600 Larkin Road, Corcoran, Minnesota

### **BACKGROUND:**

Anderson Engineering (Anderson) was retained to perform field and desktop review of conditions within the defined investigation area at the agricultural parcel located at 21600 Larkin Road, Corcoran, Hennepin County, Minnesota (see Investigation Area Figure—Areas 1 to 7). Specifically, Anderson was requested to assess potential impacts to aquatic resources as a result of activities conducted during 2017 including field access drive construction and ditch maintenance. Also, Anderson was tasked to research and provide historic supporting information pertaining to ditch maintenance and tile maintenance.

### **AREA 1**

Area 1 is located northeast of the intersection of Larkin Road and Willow Drive and contains potentially two impact issues: (1) direct wetland impact due to fill placement associated with field access improvements, and (2) impact due to increased drainage scope and effect from ditch improvements (Investigation Area, Area 1).

An offsite hydrology/wetland determination utilizing available historical aerial photos was completed for years 1999, 2008, 2009, 2011, 2012, 2013, and 2015. This analysis revealed that normal year wet signatures appropriate for estimating wetland boundary extents was present in 2009 and 2011 aerial photographs (Appendix 1-1, Aerials). An average offsite wetland determination boundary of the two wetland extents was calculated using GIS analysis (Appendix 1-2, Offsite Wetland Determination). A topographic land survey of Area 1 was completed and identifies the elevation and location of the field access improvement and water conveyance features (Appendix 1-2, Existing Conditions Survey). The topographic survey and pre-construction LIDAR elevations were compared and found to be in general agreement (Appendix 1-2, Elevation Comparison). The offsite wetland determination was superimposed on the topographic survey (Appendix 1-3, Wetland Boundary). Generally, the 975-contour elevation was determined to be a reasonable and conservative estimate of the wetland boundary.

Field investigation was conducted July 12, 2018, consisting of four routine sample points investigating the east and west side of the field access (Appendix 1-3, Wetland Boundary). All four samples points were determined not to support wetland conditions (Appendix 1-3, Wetland Boundary, Data Sheet, Photos 1-3) further supporting that the 975-contour elevation is a reasonable wetland boundary.

During field investigation, drainage feature had a measured depth of approximately 3 feet below ground surface (Appendix 1-3, Photo 6).

Based on all available information, the surveyed roadway improvement does not appear to overlap the adjacent wetland boundary, thus fill has not been placed in wetland. Improvement to the drainage ditch from approximately 1 foot to approximately 3 foot below ground surface appears to have likely increased the drainage effect, thus impacting the wetland.

**AREA 2**

Area 2 is located northwest of Area 1 and is associated with field access improvements (Investigation Area, Area 2). Aerial photo review shows a historic 10-to-11-foot-wide field access road present for decades prior to 2017 improvement activities (Appendix 2-1, Aerials). The historic field access utilized a 28' long, 15" diameter corrugated metal pipe which deteriorated due to age and cattle. The old pipe was present in the adjacent upland area during field review of Area 2 on July 12, 2018. The improved field access road extent was located utilizing a Trimble Geo XH sub-meter GPS unit and the pre-access drive improvement wetland boundary was digitized (Appendix 2-1, Digitized Wetland Extent). Based on this review, approximately 302 square feet of fill has been placed outside of the historic field access extent, in the wetland (Appendix 2-1, Wetland Impact). Approximately 523 square feet of fill associated with new culvert replacement has been placed outside of the historic field access extent, in the wetland (Appendix 2-1, Wetland Impact).

**AREA 3**

Area 3 is located northeast of Area 2 and is associated with the placement of fill related to field access improvements (see Investigation Area, Area 3, below). The wetland was previously delineated by Anderson Engineering on August 22, 2016 and submitted under a separate cover. Fill spanning the wetland was located July 12, 2018 using a Trimble Geo XH sub-meter GPS unit handheld GPS unit. A total of 3,712 square feet of fill was determined to be located within the wetland extent as delineated in 2016. In addition, a sample point was taken near the area to document an area of no recent fill within the soil profile (Appendix 3-1, Data Sheet, Photo 1).

The following table summarizes direct wetland fill impacts at Areas 1,2, and 3:

Area	Finding
1	No fill impact; likely drainage impact due to ditch improvement
2	825 square feet of impact due to fill
3	3,712 square feet of impact due to fill
<b>Total</b>	<b>4,537 square feet of fill impact</b>

**AREA 4 AND AREA 5**

Additional information obtained from Hennepin County is included in Appendix 4-1 as follows:

- Hennepin County Plat Bernard H Larson, N1/2,S27,T119, R23

**AREA 6 AND AREA 7**

Additional information obtained from USDA from the producer tract file is included in Appendix 5 as follows:

- USDA, NRCS correspondence dated June 3, 1996
- USDA, NRCS correspondence dated September 3, 1998
- USDA, NRCS correspondence dated November 16, 2006
- EJ Mayer correspondence dated November 7, 2007
- Drainage System Worksheet dated 2008
- USDA, NRCS correspondence dated September 17, 2010



## ENCLOSURES

### Appendix 1-1

- Offsite Hydrology/Wetland Determination Review
  - Aerials
  - Environmental
  - Offsite Wetland Determination
  - Wetland Hydrology from Aerial Imagery – Recording Form

### Appendix 1-2

- Existing Conditions Survey, dated July 17, 2018
- Topographic Elevation Comparison

### Appendix 1-3

- Wetland Boundary
- Data Sheets
- Precipitation Worksheet
- Photos

### Appendix 2-1

- NWI
- Aerials
- Digitized Wetland Extent
- Wetland Impact

### Appendix 3-1

- Wetland Impact
- Data Sheet
- Photos

### Appendix 4-1

- Hennepin County Plat Bernard H Larson, N1/2, S27, T119, R23

### Appendix 5-1

- USDA, NRCS correspondence dated June 3, 1996
- USDA, NRCS correspondence dated September 3, 1998
- USDA, NRCS correspondence dated November 16, 2006
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Based on all available information, the surveyed roadway improvement does not appear to overlap the adjacent wetland boundary, thus fill has not been placed in wetland. Improvement to the drainage ditch from approximately 1 foot to approximately 3 foot below ground surface appears to have likely increased the drainage effect, thus impacting the wetland.

**AREA 2**

Area 2 is located northwest of Area 1 and is associated with field access improvements (Investigation Area, Area 2). Aerial photo review shows a historic 10-to-11-foot-wide field access road present for decades prior to 2017 improvement activities (Appendix 2-1, Aerials). The historic field access utilized a 28' long, 15" diameter corrugated metal pipe which deteriorated due to age and cattle. The old pipe was present in the adjacent upland area during field review of Area 2 on July 12, 2018. The improved field access road extent was located utilizing a Trimble Geo XH sub-meter GPS unit and the pre-access drive improvement wetland boundary was digitized (Appendix 2-1, Digitized Wetland Extent). Based on this review, approximately 302 square feet of fill has been placed outside of the historic field access extent, in the wetland (Appendix 2-1, Wetland Impact). Approximately 523 square feet of fill associated with new culvert replacement has been placed outside of the historic field access extent, in the wetland (Appendix 2-1, Wetland Impact).

**AREA 3**

Area 3 is located northeast of Area 2 and is associated with the placement of fill related to field access improvements (see Investigation Area, Area 3, below). The wetland was previously delineated by Anderson Engineering on August 22, 2016 and submitted under a separate cover. Fill spanning the wetland was located July 12, 2018 using a Trimble Geo XH sub-meter GPS unit handheld GPS unit. A total of 3,712 square feet of fill was determined to be located within the wetland extent as delineated in 2016. In addition, a sample point was taken near the area to document an area of no recent fill within the soil profile (Appendix 3-1, Data Sheet, Photo 1).

The following table summarizes direct wetland fill impacts at Areas 1,2, and 3:

Area	Finding
1	No fill impact; likely drainage impact due to ditch improvement
2	825 square feet of impact due to fill
3	3,712 square feet of impact due to fill
<b>Total</b>	<b>4,537 square feet of fill impact</b>

**AREA 4 AND AREA 5**

Additional information obtained from Hennepin County is included in Appendix 4-1 as follows:

- Hennepin County Plat Bernard H Larson, N1/2,S27,T119, R23

**AREA 6 AND AREA 7**

Additional information obtained from USDA from the producer tract file is included in Appendix 5 as follows:

- USDA, NRCS correspondence dated June 3, 1996
- USDA, NRCS correspondence dated September 3, 1998
- USDA, NRCS correspondence dated November 16, 2006
- EJ Mayer correspondence dated November 7, 2007
- Drainage System Worksheet dated 2008
- USDA, NRCS correspondence dated September 17, 2010

## ENCLOSURES

### Appendix 1-1

Offsite Hydrology/Wetland Determination Review

Aerials

Environmental

Offsite Wetland Determination

Wetland Hydrology from Aerial Imagery – Recording Form

### Appendix 1-2

Existing Conditions Survey, dated July 17, 2018

Topographic Elevation Comparison

### Appendix 1-3

Wetland Boundary

Data Sheets

Precipitation Worksheet

Photos

### Appendix 2-1

NWI

Aerials

Digitized Wetland Extent

Wetland Impact

### Appendix 3-1

Wetland Impact

Data Sheet

Photos

### Appendix 4-1

Hennepin County Plat Bernard H Larson, N1/2, S27, T119, R23

### Appendix 5-1

USDA, NRCS correspondence dated June 3, 1996

USDA, NRCS correspondence dated September 3, 1998

USDA, NRCS correspondence dated November 16, 2006

EJ Mayer correspondence dated November 7, 2007

Drainage System Worksheet dated 2008

USDA, NRCS correspondence dated September 17, 2010





**Legend**

□ Hennepin Co. Parcels

— Field Access

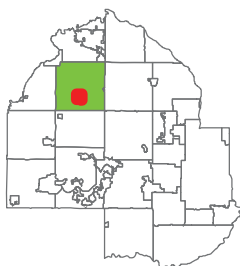
→ Ditch

**PROJECT LOCATION**

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

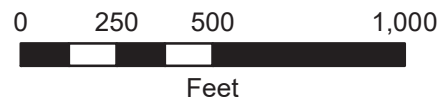


**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 500 feet



**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**



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**INVESTIGATION AREAS**  
**MAYERS PROPERTY**

## Appendix 1-1





**Legend**

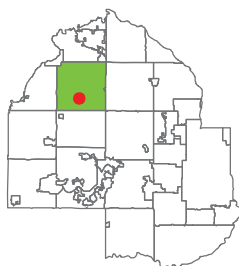
Yellow line: Hennepin Co. Parcels

**PROJECT LOCATION**

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

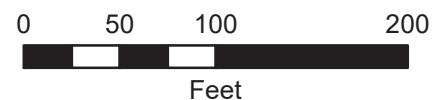


**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 100 feet



**21600 Larkin Road**  
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**1999 FSA AERIAL**  
**MAYERS PROPERTY**  
**AREA 1**

AE Comm.# 14451 Date: 8/16/2016 By: JLA



**Legend**

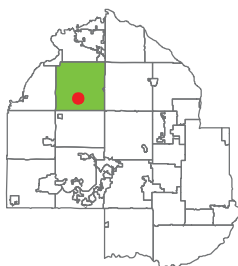
Yellow line: Hennepin Co. Parcels

**PROJECT LOCATION**

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

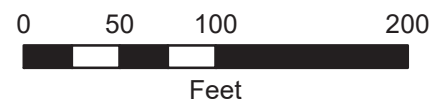


**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 100 feet



**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
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**2008 FSA AERIAL**  
**MAYERS PROPERTY**  
**AREA 1**

AE Comm.# 14451 Date: 8/16/2016 By: JLA



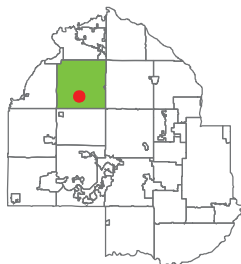


### PROJECT LOCATION

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering



Hennepin County  
State of Minnesota



City of Corcoran  
Hennepin County, MN

1 in = 100 feet



0 50 100 200  
Feet

21600 Larkin Road  
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PID: Multiple



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## 2009 HENNEPIN CO. AERIAL MAYERS PROPERTY AREA 1

AE Comm.# 14451 Date: 8/16/2016 By: JLA

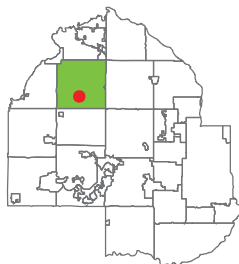


### PROJECT LOCATION

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering



**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 100 feet



0 50 100 200  
Feet

**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**



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**2011 FSA AERIAL**  
**MAYERS PROPERTY**  
**AREA 1**

AE Comm.# 14451 Date: 8/16/2016 By: JLA





**Legend**

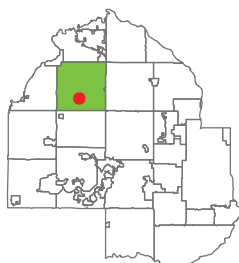
Yellow line: Hennepin Co. Parcels

**PROJECT LOCATION**

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

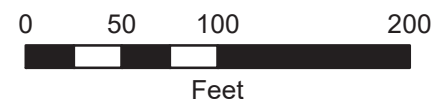


**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 100 feet



**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
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**2012 MnGEO AERIAL**  
**MAYERS PROPERTY**  
**AREA 1**

AE Comm.# 14451 Date: 8/16/2016 By: JLA

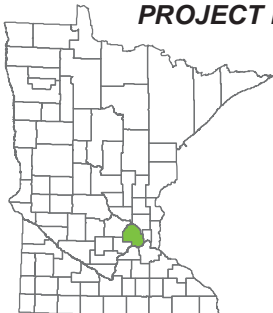


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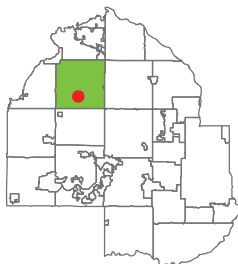
□ Hennepin Co. Parcels

### PROJECT LOCATION

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering



**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 100 feet



0 50 100 200  
Feet

**21600 Larkin Road**  
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**2013 FSA AERIAL**  
**MAYERS PROPERTY**  
**AREA 1**

AE Comm.# 14451 Date: 8/16/2016 By: JLA



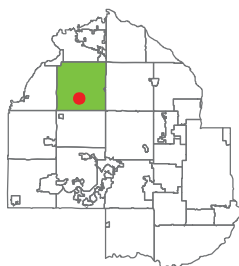


### PROJECT LOCATION

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

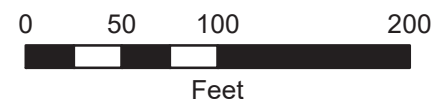


**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 100 feet



**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**



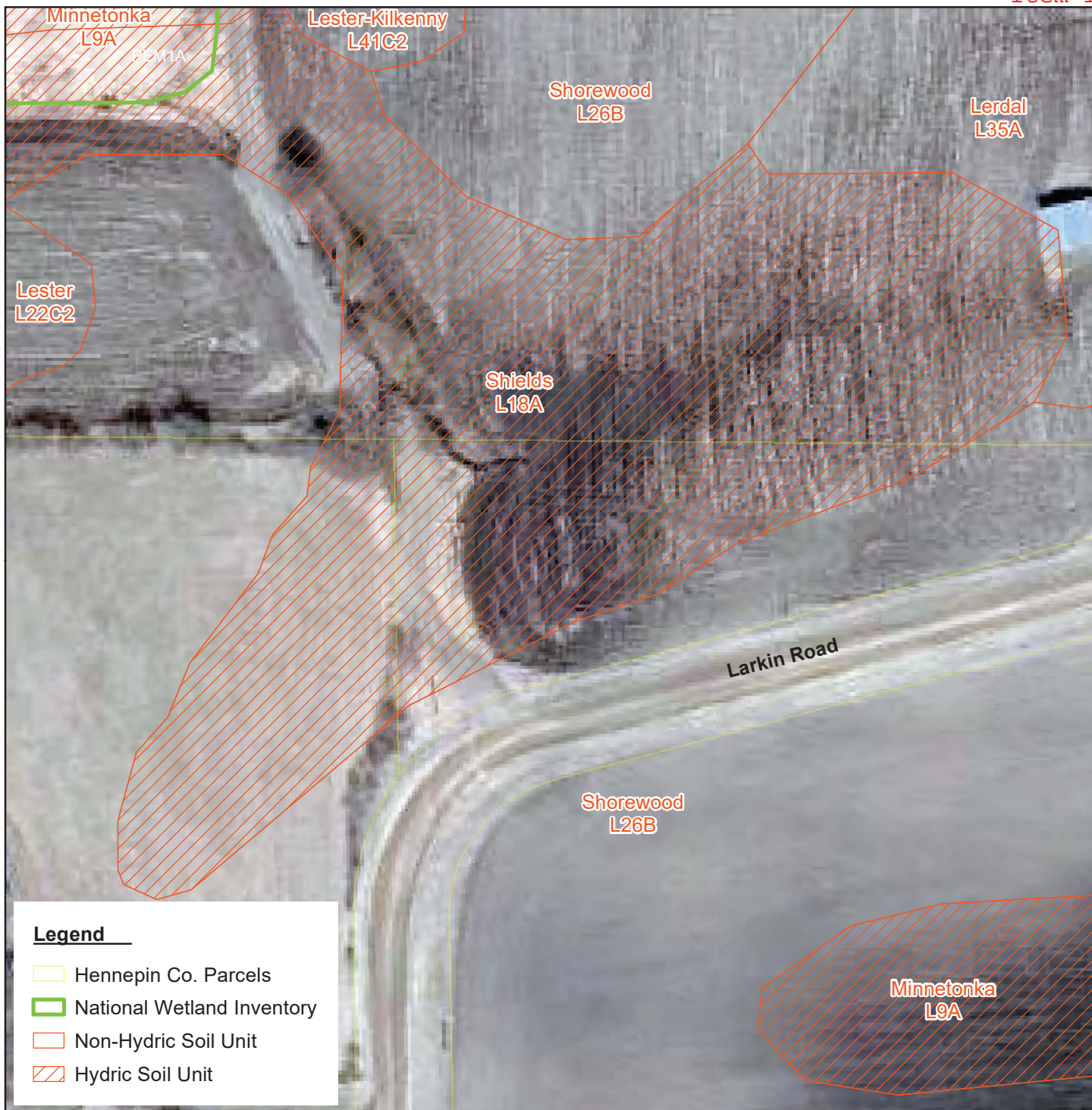
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## 2015 HENNEPIN CO. AERIAL MAYERS PROPERTY AREA 1

AE Comm.# 14451 Date: 8/16/2016 By: JLA





### Legend

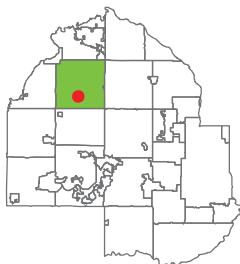
- Hennepin Co. Parcels
- National Wetland Inventory
- Non-Hydric Soil Unit
- Hydric Soil Unit

### PROJECT LOCATION

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

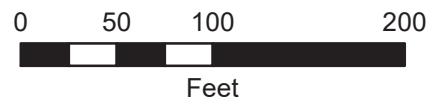


Hennepin County  
State of Minnesota



City of Corcoran  
Hennepin County, MN

1 in = 100 feet



21600 Larkin Road  
Corcoran, Hennepin County, MN  
PID: Multiple



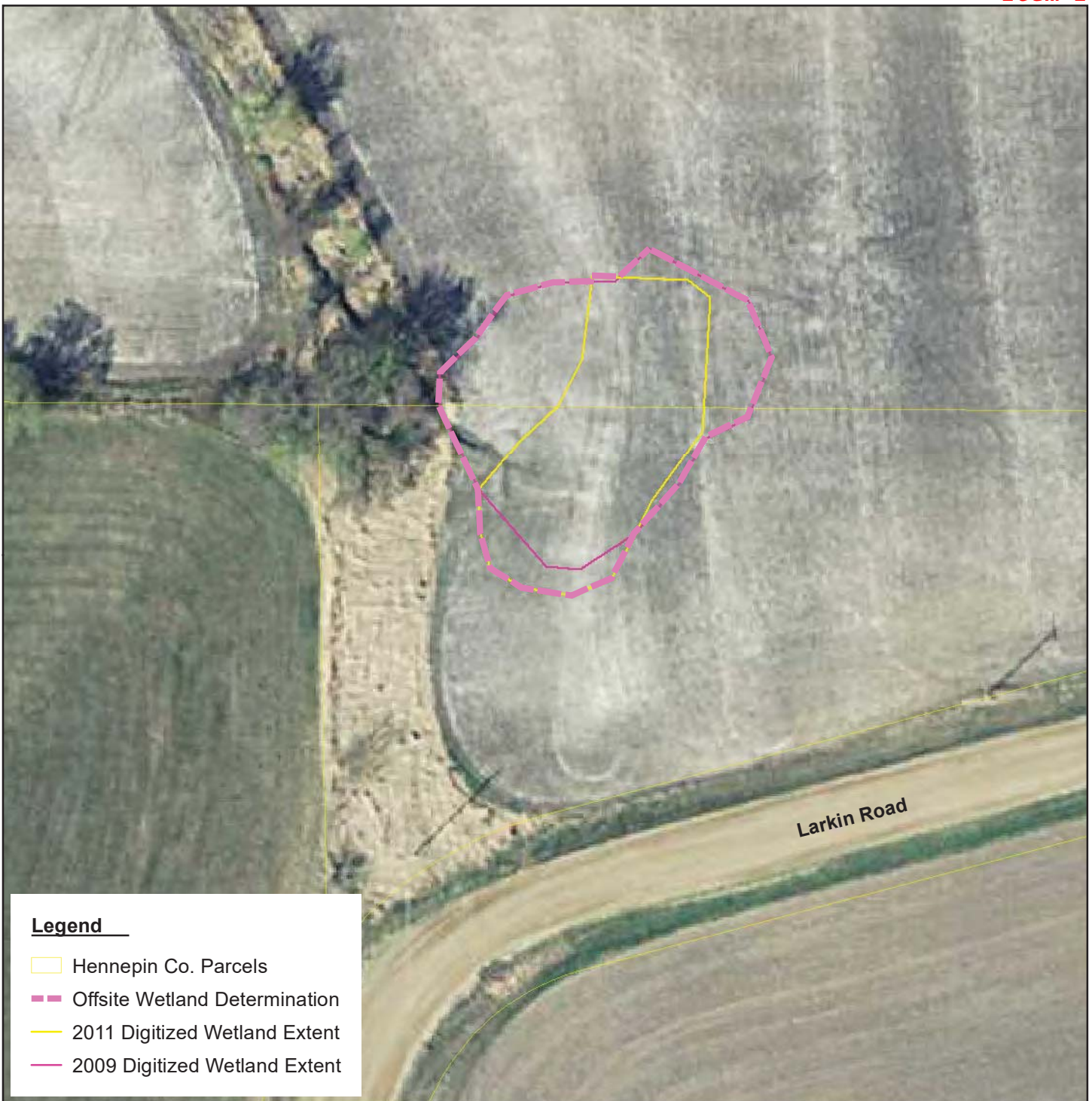
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**ENVIRONMENTAL  
MAYERS PROPERTY  
AREA 1**

AE Comm.# 14451 Date: 8/16/2016 By: JLA





**Legend**

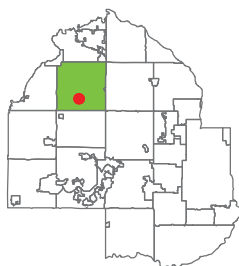
- Hennepin Co. Parcels
- Offsite Wetland Determination
- 2011 Digitized Wetland Extent
- 2009 Digitized Wetland Extent

**PROJECT LOCATION**

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

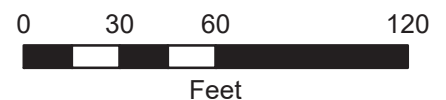


**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 60 feet



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**OFFSITE WETLAND DETERMINATION**  
**MAYERS PROPERTY**  
**AREA 1**

AE Comm.# 14451 Date: 8/16/2016 By: JLA

**Wetland Hydrology from Aerial Imagery - Recording Form**

**Project:** Mayers Property - Larkin Road, Corcoran  
**Comm #:** 14451

**Date:** 7/18/2018  
**Legal:** S 28, T 119N, R23W

**County:** Hennepin  
**45.087, -93.589**

Image Date	Image Source	Climate Condition (wet, dry, normal)	Image Interpretation							
			Area A	Area B	Area C	Area D	Area E	Area F	Area G	Area H
2015	Henn Co.	Wet	SS							
2013	FSA	Normal	NV							
2012	MnGEO	Normal	NV							
2011	FSA	Normal	WS							
2009	Henn Co.	Normal	WS							
2008	FSA	Dry	NV							
1999	FSA	Normal	NV							

Number of Normal 5  
 Number with wet signatures 2  
 Percent with wet Signatures 40%

**Acronyms:**

WS-wetland signature

SS-soil wetness signature

CS-crop stress

NC-not cropped

AP-altered pattern

NV-nomal vegetatic cover

DO - drowned out

SW-standing water

NSS-no soil wetness signature



## Wetland Hydrology from Aerial Imagery - Recording Form

Project: Mayers Property - Larkin Road, Corcoran

Date: 7/18/2018

County: Hennepin

Comm #: 14451

Legal: S 28, T 119N, R23W

45.087, -93.589

## Decision Matrix.

Hydric Soils Present	NWI Mapped	Percent with wet signatures from Exhibit 1	Field Verification Required	Wetland ?
YES	Yes	>50%	No	Yes
YES	Yes	30-50%	No	Yes
YES	Yes	<30%	Yes	Yes if other hydrology
YES	No	>50%	No	Yes
YES	No	30-50%	Yes	Yes if other hydrology
YES	No	<30%	No	No
No	Yes	>50%	No	Yes
No	Yes	30-50%	No	Yes
No	Yes	<30%	No	No
No	No	>50%	Yes	Yes if other hydrology
No	No	30-50%	Yes	Yes if other hydrology
No	No	<30%	No	No

TABLE 1.

Area	Hydric Soils Present	NWI Mapped	Percent with wet signatures from Exhibit 1	Other Hydrology Indicators Present <sup>1</sup>	Wetland?
A	Y	NWI Mapped	40.00%	Y	Y

<sup>1</sup> Answer N/A if field verification is not required and was not conducted

## Appendix 1-2

EXISTING CONDITIONS SURVEY

SURVEY FOR: **ERNIE MAYERS**

SITE LOCATION: Intersection of Willow Trail and Larkin Road, Carcoran, Hennepin County, Minnesota.  
PROPERTY DESCRIPTION:  
Section 28, Township 119 North, Range 23 West, Hennepin County, Minnesota, lying northerly of Larkin Road.

CERTIFICATION:

I hereby certify that this map 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.

Dated: July 17, 2018

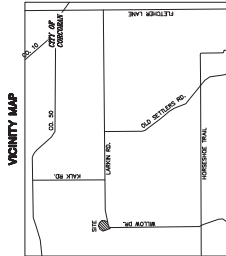
Anderson Engineering of Minnesota, LLC

EXHIBIT

by: Jack Balke  
Minnesota License No. 20281

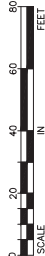
NOTES:

1. The horizontal datum and bearings are based on the Hennepin County Coordinate System NAD83(2011).
2. The vertical datum is NAVD83.
3. The location and extent of underground utilities, if shown, are based upon above ground evidence. This survey is not intended to provide information on the location, depth, size and type of underground utilities. Verification of the existence and location of all utilities should be obtained from the utility owners prior to any construction. If the location of utilities is confirmed prior to any demolition or construction, the location of utilities shall be confirmed prior to any demolition or construction.
4. No title work was provided for the preparation of this survey to verify the legal description or the existence of any easements or encumbrances.



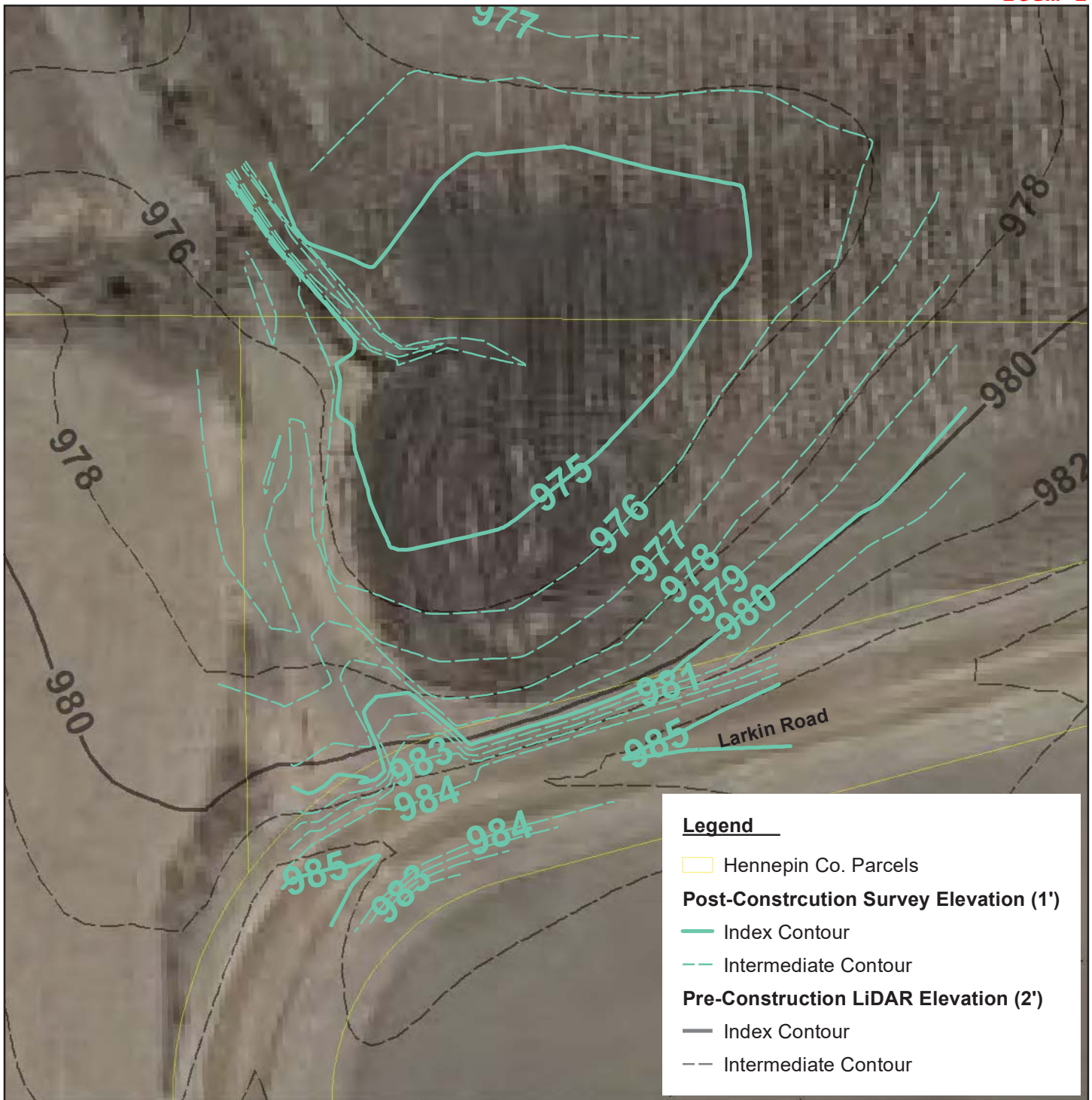
LEGEND

- > CULVERT
- DT POWER POLE
- POWER POLE ANCHOR
- SON
- OVERHEAD WIRES
- STORM SEWER
- GRAVEL SURFACE



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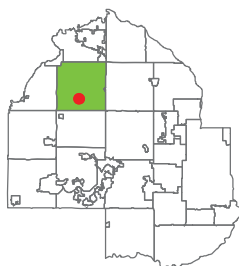


**PROJECT LOCATION**

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering



**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 60 feet



0 30 60 120  
Feet

**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**



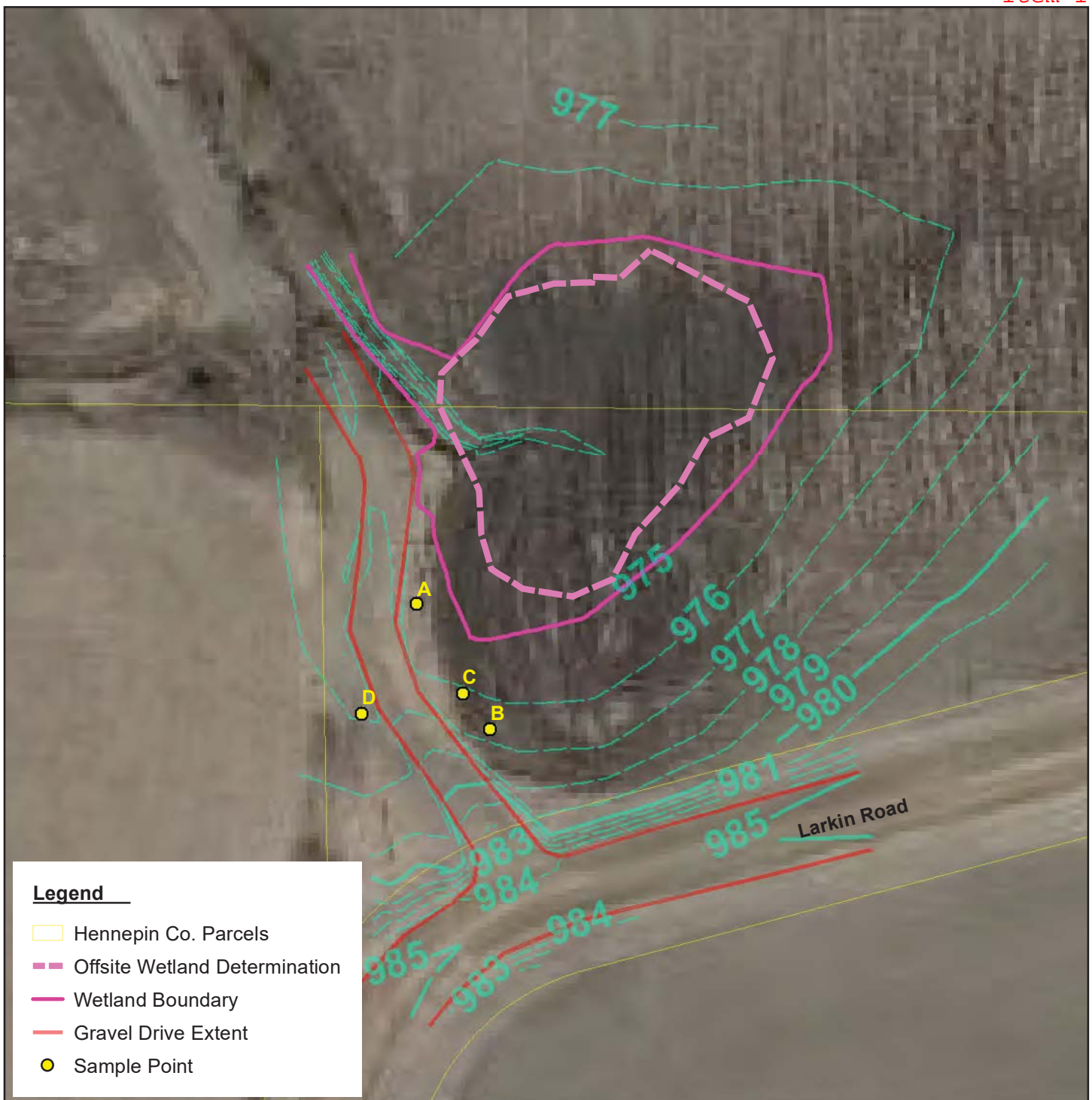
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## ELEVATION COMPARISON MAYERS PROPERTY AREA 1

AE Comm.# 14451 Date: 8/16/2016 By: JLA

## Appendix 1-3

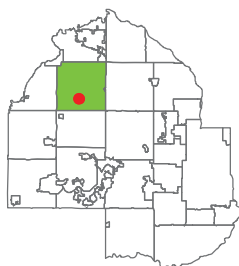


### PROJECT LOCATION

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

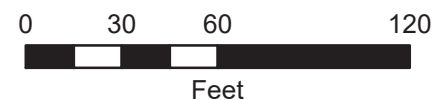


Hennepin County  
State of Minnesota



City of Corcoran  
Hennepin County, MN

1 in = 60 feet



21600 Larkin Road  
Corcoran, Hennepin County, MN  
PID: Multiple



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## WETLAND BOUNDARY MAYERS PROPERTY AREA 1

AE Comm.# 14451 Date: 8/16/2016 By: JLA

# WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21600 Larkin Road City/County: Corcoran/Hennepin Sampling Date: 07/12/2018  
 Applicant/Owner: Ernie Mayer State: MN Sampling Point: A  
 Investigator(s): B. Hopapp, A. Yellick, J. Aden Section, Township, Range: Sec. 28, Twp. 119 N, Rng. 23 W  
 Landform (hillside, terrace, etc.): Moraine Local relief (concave, convex, none): None  
 Slope (%): 0-1 Lat: 43.885228 Long: -92.488215 Datum: \_\_\_\_\_  
 Soil Map Unit Name: Shields silty clay loam (L18A) NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? is X No \_\_\_\_\_

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: Hydrology indicator was not met; area is not a wetland.	

## VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15 feet</u> )			
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
		=Total Cover		
Herb Stratum	(Plot size: <u>5 feet</u> )			
1. <u>Phalaris arundinacea</u>		100	Yes	FACW
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
		100 =Total Cover		
Woody Vine Stratum	(Plot size: <u>30 feet</u> )			
1. _____				
2. _____				
		=Total Cover		

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>100</u>	x 2 = <u>200</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>200</u> (B)
Prevalence Index = B/A = <u>2.00</u>	

**Hydrophytic Vegetation Indicators:**

\_\_\_\_ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

\_\_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>

\_\_\_\_ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

\_\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No \_\_\_\_\_

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





# WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21600 Larkin Road City/County: Corcoran/Hennepin Sampling Date: 07/12/2018  
 Applicant/Owner: Ernie Mayer State: MN Sampling Point: B  
 Investigator(s): B. Hopapp, A. Yellick, J. Aden Section, Township, Range: Sec. 28, Twp. 119 N, Rng. 23 W  
 Landform (hillside, terrace, etc.): Moraine Local relief (concave, convex, none): None  
 Slope (%): 0-1 Lat: 43.885228 Long: -92.488215 Datum: \_\_\_\_\_  
 Soil Map Unit Name: Shields silty clay loam (L18A) NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? is \_\_\_\_\_ No X

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: Area is cropped and normal circumstances are not present. No indicators met; area is not a wetland.	

## VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
			=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15 feet</u> )			
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
			=Total Cover	
Herb Stratum	(Plot size: <u>5 feet</u> )			
1. <u>Glycine max</u>		60	Yes	UPL
2. <u>Phalaris arundinacea</u>		20	Yes	FACW
3. <u>Asclepias syriaca</u>		6	No	FACU
4. <u>Solidago gigantea</u>		6	No	FACW
5. <u>Symphyotrichum ericoides</u>		6	No	FACU
6. <u>Melilotus officinalis</u>		2	No	FACU
7. _____				
8. _____				
9. _____				
10. _____				
		100	=Total Cover	
Woody Vine Stratum	(Plot size: <u>30 feet</u> )			
1. _____				
2. _____				
			=Total Cover	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>26</u>	x 2 = <u>52</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>14</u>	x 4 = <u>56</u>
UPL species <u>60</u>	x 5 = <u>300</u>
Column Totals: <u>100</u> (A)	<u>408</u> (B)
Prevalence Index = B/A = <u>4.08</u>	

**Hydrophytic Vegetation Indicators:**

\_\_\_ 1 - Rapid Test for Hydrophytic Vegetation

\_\_\_ 2 - Dominance Test is >50%

\_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>

\_\_\_ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

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

**SOIL**Sampling Point:   B  

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-37	10YR 2/1	100					Loamy/Clayey	
37-44	10YR 5/4	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

**HYDROLOGY**

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

# WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21600 Larkin Road City/County: Corcoran/Hennepin Sampling Date: 07/12/2018  
 Applicant/Owner: Ernie Mayer State: MN Sampling Point: C  
 Investigator(s): B. Hopapp, A. Yellick, J. Aden Section, Township, Range: Sec. 28, Twp. 119 N, Rng. 23 W  
 Landform (hillside, terrace, etc.): Moraine Local relief (concave, convex, none): None  
 Slope (%): 0-1 Lat: 43.885228 Long: -92.488215 Datum: \_\_\_\_\_  
 Soil Map Unit Name: Shields silty clay loam (L18A) NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? is \_\_\_\_\_ No X

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: Area is cropped and normal circumstances are not present. No indicators met; area is not a wetland.	

## VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15 feet</u> )			
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
		=Total Cover		
Herb Stratum	(Plot size: <u>5 feet</u> )			
1. <u>Phalaris arundinacea</u>		60	Yes	FACW
2. <u>Glycine max</u>		20	Yes	UPL
3. <u>Eleocharis palustris</u>		2	No	OBL
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
		82 =Total Cover		
Woody Vine Stratum	(Plot size: <u>30 feet</u> )			
1. _____				
2. _____				
		=Total Cover		

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>2</u>	x 1 = <u>2</u>
FACW species <u>60</u>	x 2 = <u>120</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>20</u>	x 5 = <u>100</u>
Column Totals: <u>82</u> (A)	<u>222</u> (B)
Prevalence Index = B/A = <u>2.71</u>	

**Hydrophytic Vegetation Indicators:**

\_\_\_\_ 1 - Rapid Test for Hydrophytic Vegetation

\_\_\_\_ 2 - Dominance Test is >50%

\_\_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>

\_\_\_\_ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

\_\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

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



**SOIL**Sampling Point:   C  

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-37	10YR 2/1	100					Loamy/Clayey	
37-44	10YR 5/4	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

**HYDROLOGY**

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21600 Larkin Road City/County: Corcoran/Hennepin Sampling Date: 07/12/2018  
 Applicant/Owner: Ernie Mayer State: MN Sampling Point: D  
 Investigator(s): B. Hopapp, A. Yellick, J. Aden Section, Township, Range: Sec. 28, Twp. 119 N, Rng. 23 W  
 Landform (hillside, terrace, etc.): Moraine Local relief (concave, convex, none): None  
 Slope (%): 0-1 Lat: 43.885228 Long: -92.488215 Datum: \_\_\_\_\_  
 Soil Map Unit Name: Shields silty clay loam (L18A) NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? is X No \_\_\_\_\_

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: Hydric soil indicator was not met; area is not a wetland.	

## VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u>Acer negundo</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
		<u>10</u>	=Total Cover	
<b>Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)</b>				
1. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>50</u> x 2 = <u>100</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>70</u> (A) <u>170</u> (B) Prevalence Index = B/A = <u>2.43</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
		_____	=Total Cover	
<b>Herb Stratum (Plot size: <u>5 feet</u>)</b>				
1. <u>Phalaris arundinacea</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 <sup>1</sup> _____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Asclepias syriaca</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
3. <u>Solidago gigantea</u>	<u>10</u>	<u>No</u>	<u>FACW</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
		<u>60</u>	=Total Cover	
<b>Woody Vine Stratum (Plot size: <u>30 feet</u>)</b>				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____
2. _____	_____	_____	_____	
		_____	=Total Cover	
Remarks: (Include photo numbers here or on a separate sheet.)				

**SOIL**Sampling Point:   D  

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-37	10YR 2/1	100					Loamy/Clayey	
37-44	10YR 5/4	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	---

Remarks: \_\_\_\_\_

**HYDROLOGY**

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: \_\_\_\_\_

Remarks: \_\_\_\_\_

# Minnesota State Climatology Office

State Climatology Office - DNR Division of Ecological and Water Resources

University of Minnesota

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## Precipitation Worksheet Using Gridded Database

### Precipitation data for target wetland location:

county: **Hennepin** township number: **119N**  
 township name: **Corcoran** range number: **23W**  
 nearest community: **Dupont** section number: **28**

### Aerial photograph or site visit date:

**Thursday, July 12, 2018**

### Score using 1981-2010 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	first prior month: <b>June 2018</b>	second prior month: <b>May 2018</b>	third prior month: <b>April 2018</b>
estimated precipitation total for this location:	<b>3.75R</b>	<b>2.69R</b>	<b>2.29R</b>
there is a 30% chance this location will have less than:	3.25	2.34	1.84
there is a 30% chance this location will have more than:	5.04	4.05	2.98
type of month: <b>dry</b> <b>normal</b> <b>wet</b>	<b>normal</b>	<b>normal</b>	<b>normal</b>
monthly score	<b>3 * 2 = 6</b>	<b>2 * 2 = 4</b>	<b>1 * 2 = 2</b>
multi-month score: <b>6 to 9 (dry)</b> <b>10 to 14 (normal)</b> <b>15 to 18 (wet)</b>	<b>12 (Normal)</b>		

### Other Resources:

- [retrieve daily precipitation data](#)
- [view radar-based precipitation estimates](#)
- [view weekly precipitation maps](#)
- [Evaluating Antecedent Precipitation Conditions](#) (BWSR)





Photo 1, Area A (Viewing North)



Photo 2, Area A (Viewing South)





Photo 3, Area A (Viewing Northwest)



Photo 4, Area A (Viewing Northeast)





Photo 5, Area A – Drainage Feature (Viewing West)



Photo 6, Area A – Drainage Feature (Viewing Northwest)

## Appendix 2-1

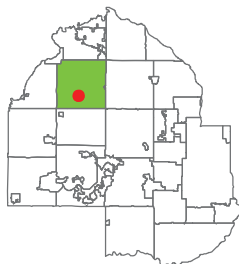


**PROJECT LOCATION**

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering



**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 100 feet



0 50 100 200  
Feet

**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**

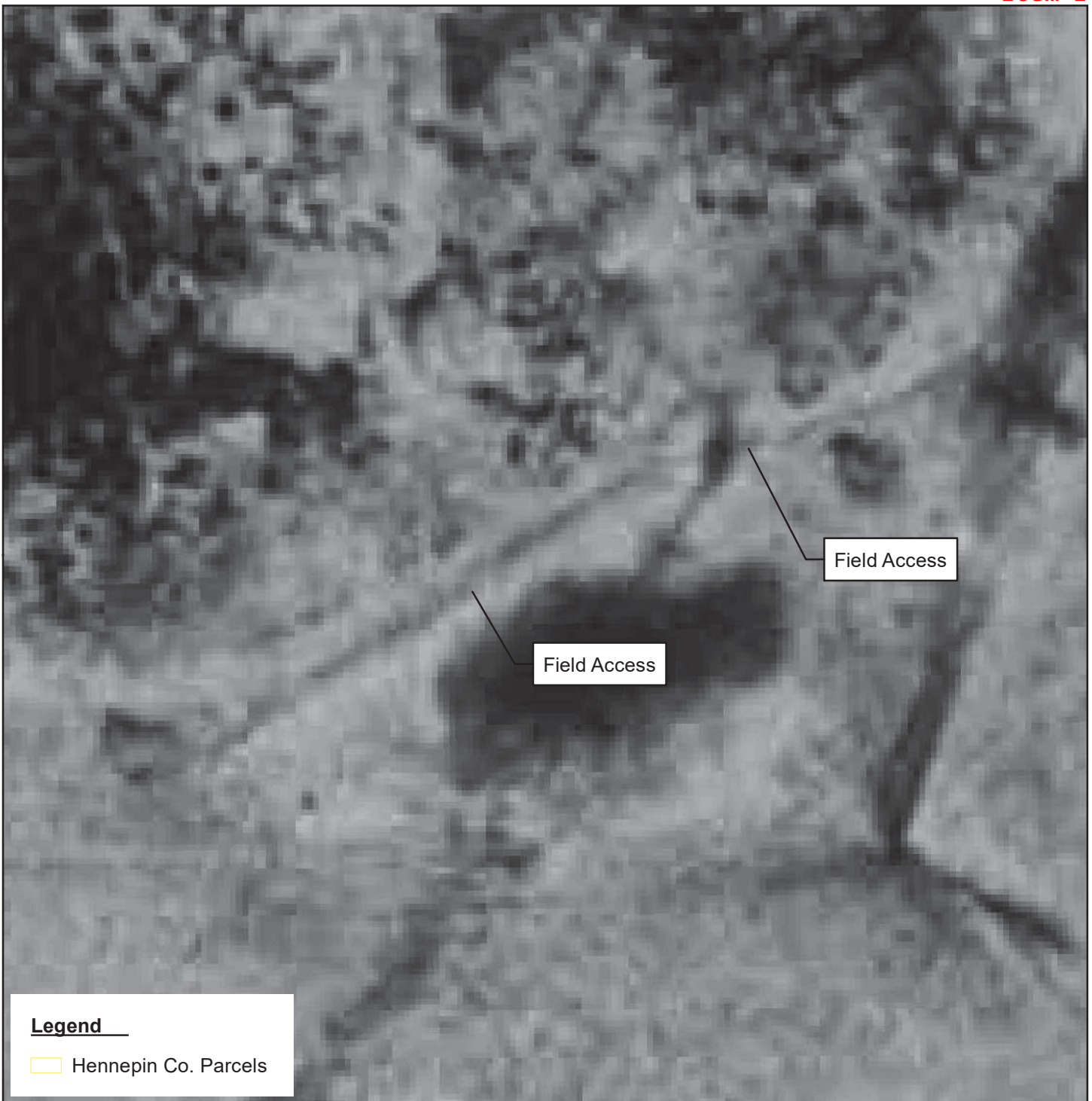


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**NWI**  
**MAYERS PROPERTY**  
**AREA 2**

AE Comm.# 14451 Date: 8/16/2016 By: JLA



**Legend**

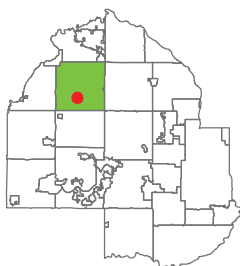
□ Hennepin Co. Parcels

**PROJECT LOCATION**

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

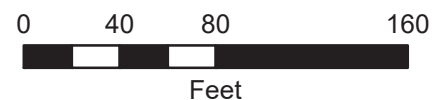


**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 80 feet



**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**



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**1991 FSA AERIAL**  
**MAYERS PROPERTY**  
**AREA 2**

AE Comm.# 14451 Date: 8/16/2016 By: JLA





**Legend**

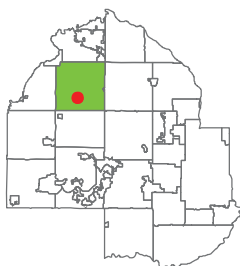
■ Hennepin Co. Parcels

**PROJECT LOCATION**

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

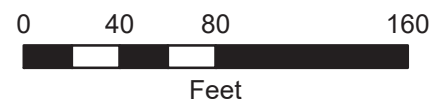


**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 80 feet



**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**



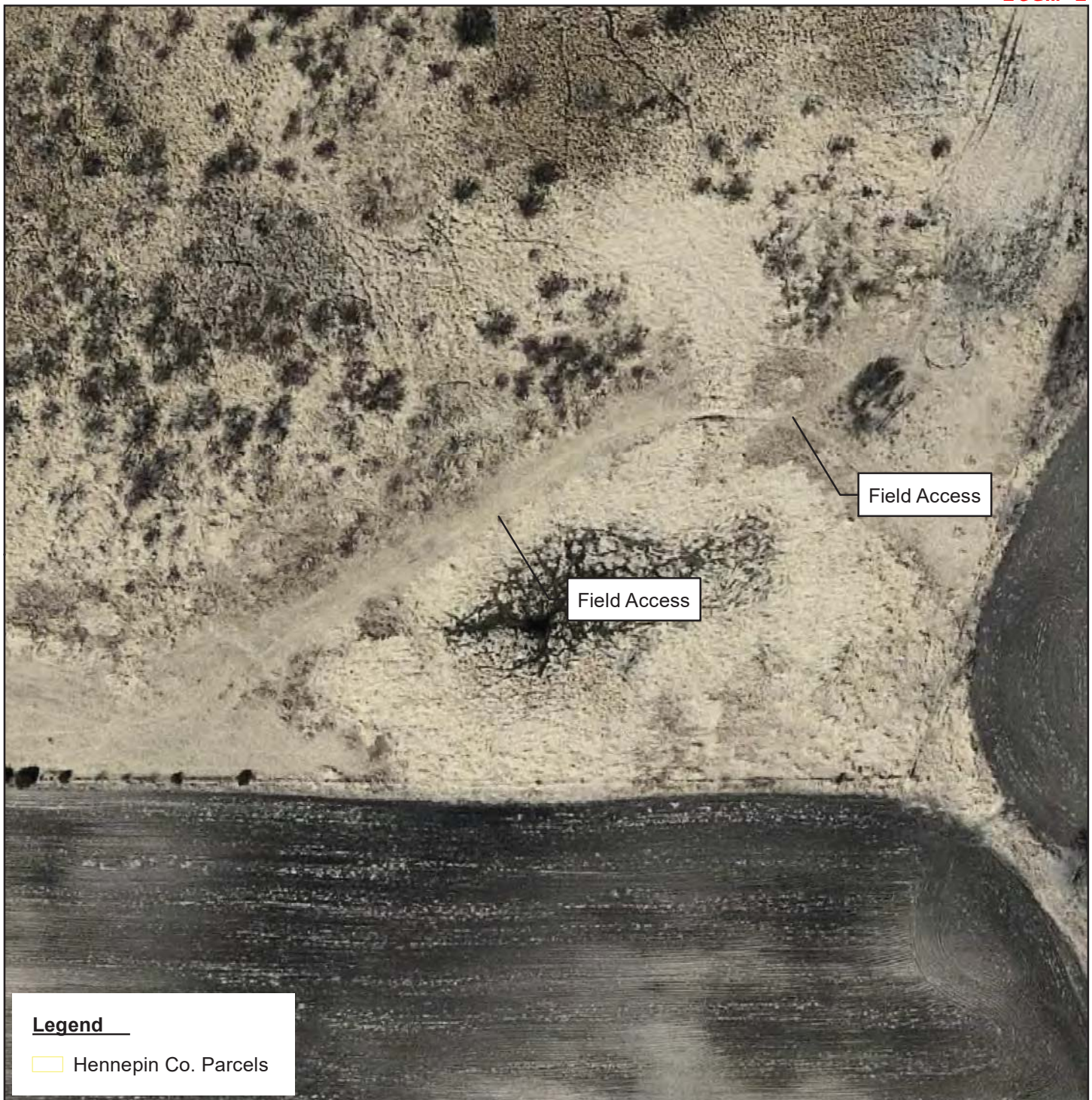
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**2002 HENNEPIN CO. AERIAL**  
**MAYERS PROPERTY**  
**AREA 2**

AE Comm.# 14451 Date: 8/16/2016 By: JLA





### Legend

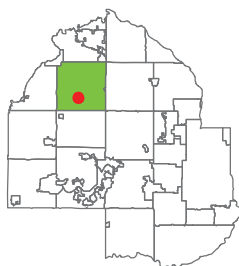
□ Hennepin Co. Parcels

### PROJECT LOCATION

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

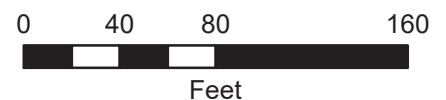


**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 80 feet



**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**



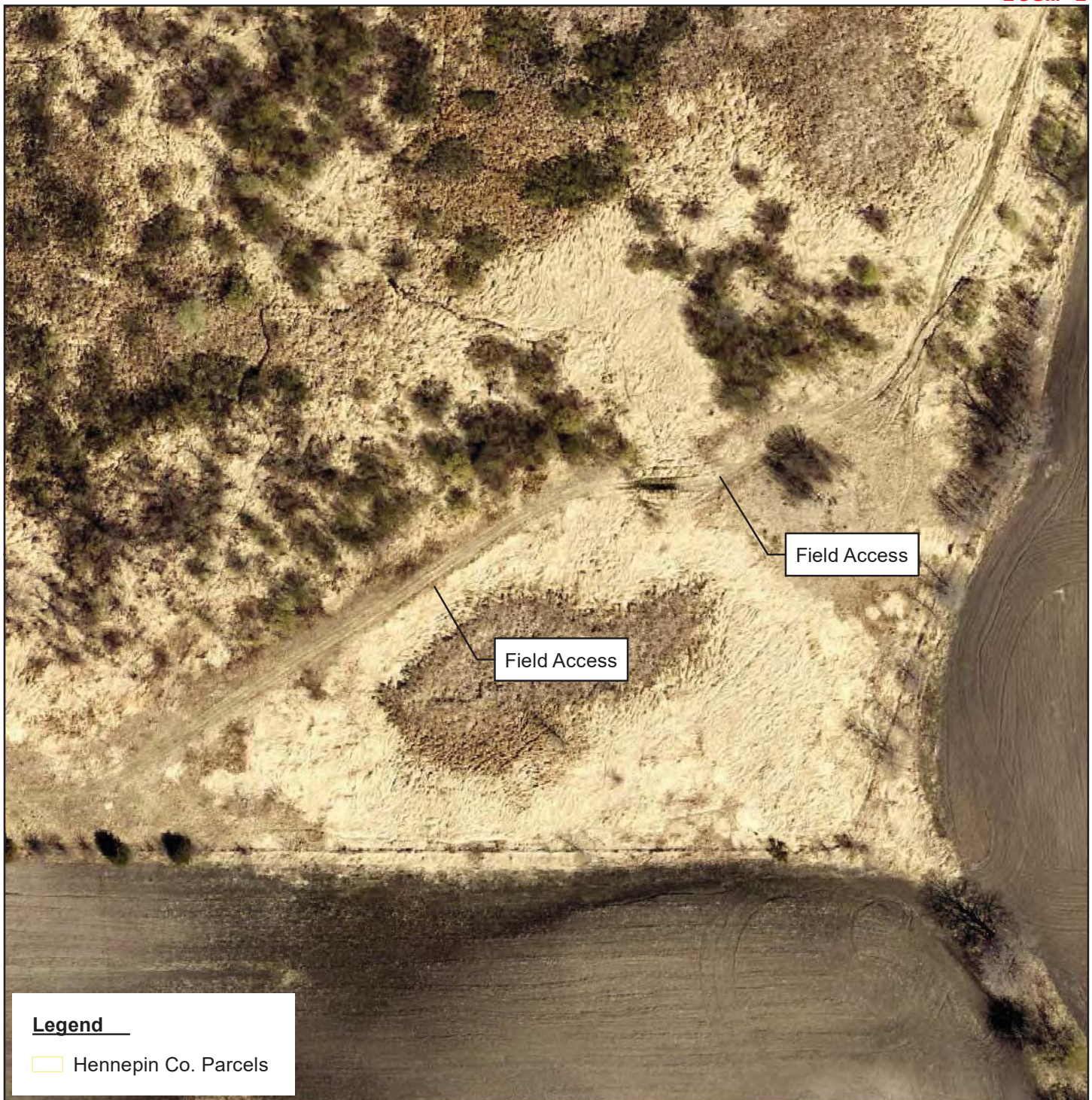
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## 2009 HENNEPIN CO. AERIAL MAYERS PROPERTY AREA 2

AE Comm.# 14451 Date: 8/16/2016 By: JLA





### Legend

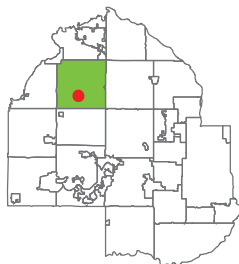
□ Hennepin Co. Parcels

### PROJECT LOCATION

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering



**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 80 feet



0 40 80 160  
Feet

**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**



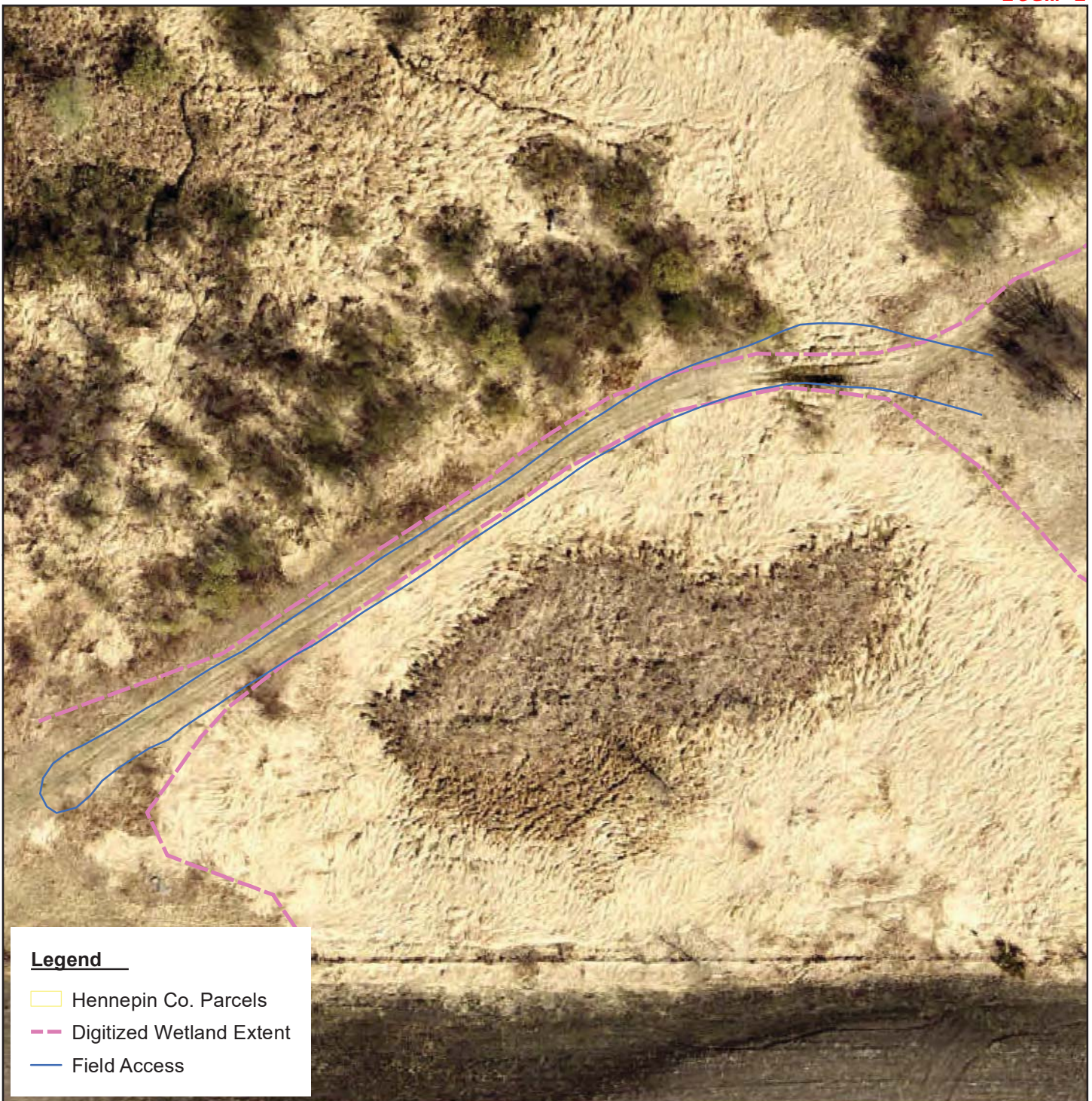
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## 2015 HENNEPIN CO. AERIAL MAYERS PROPERTY AREA 2

AE Comm.# 14451 Date: 8/16/2016 By: JLA





**Legend**

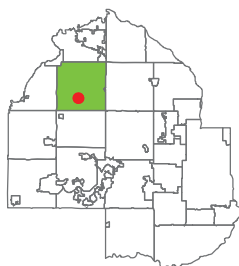
- Hennepin Co. Parcels
- Digitized Wetland Extent
- Field Access

**PROJECT LOCATION**

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

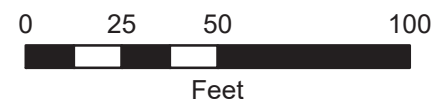


**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 50 feet



**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**



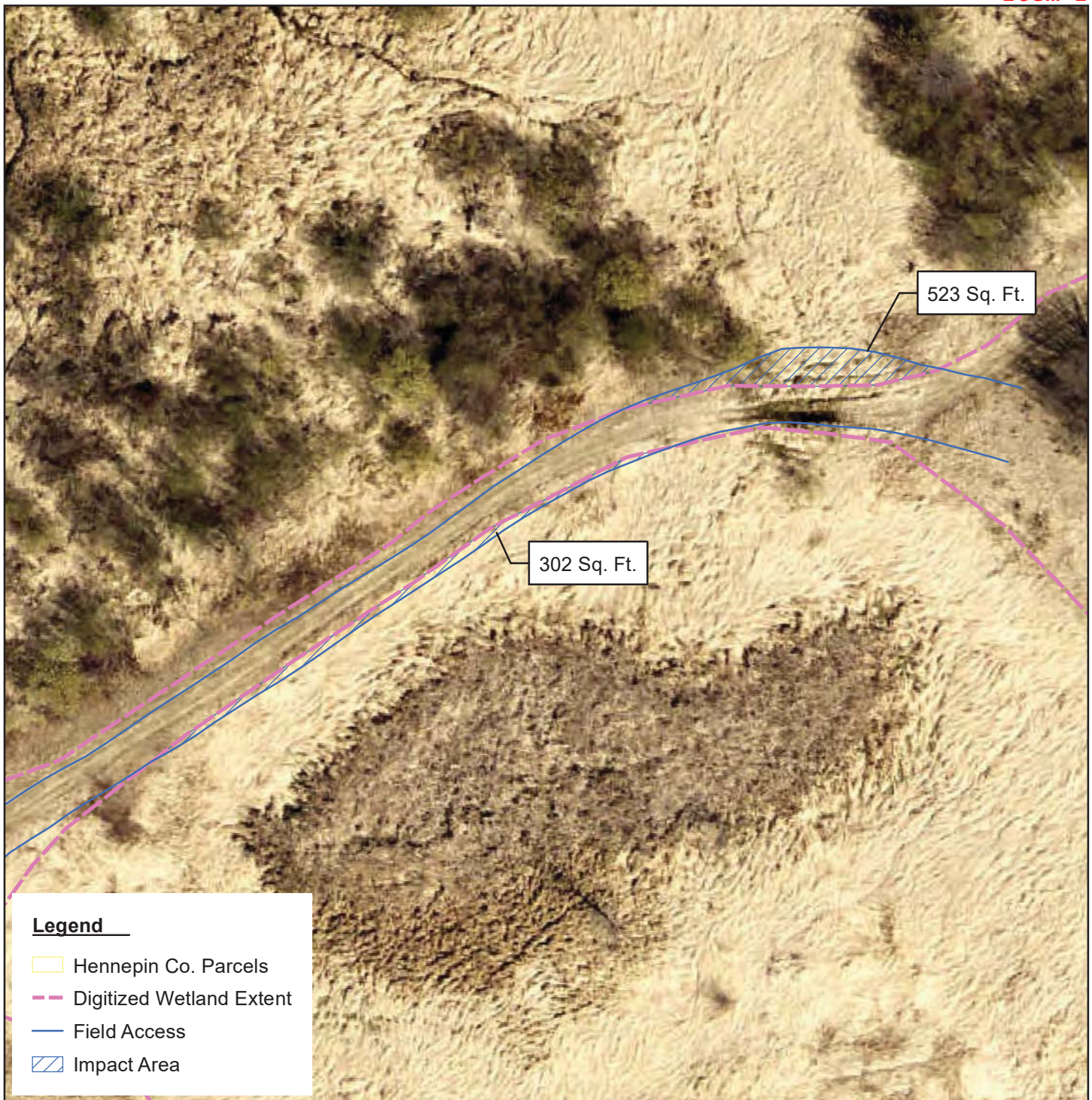
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**DIGITIZED WETLAND EXTENT**  
**MAYERS PROPERTY**  
**AREA 2**

AE Comm.# 14451 Date: 8/16/2016 By: JLA





### Legend

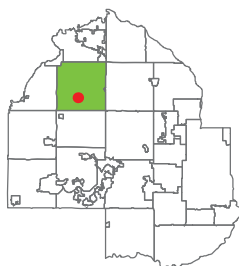
- Hennepin Co. Parcels
- Digitized Wetland Extent
- Field Access
- Impact Area

### PROJECT LOCATION

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering



**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 40 feet



0 20 40 80  
Feet

**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**



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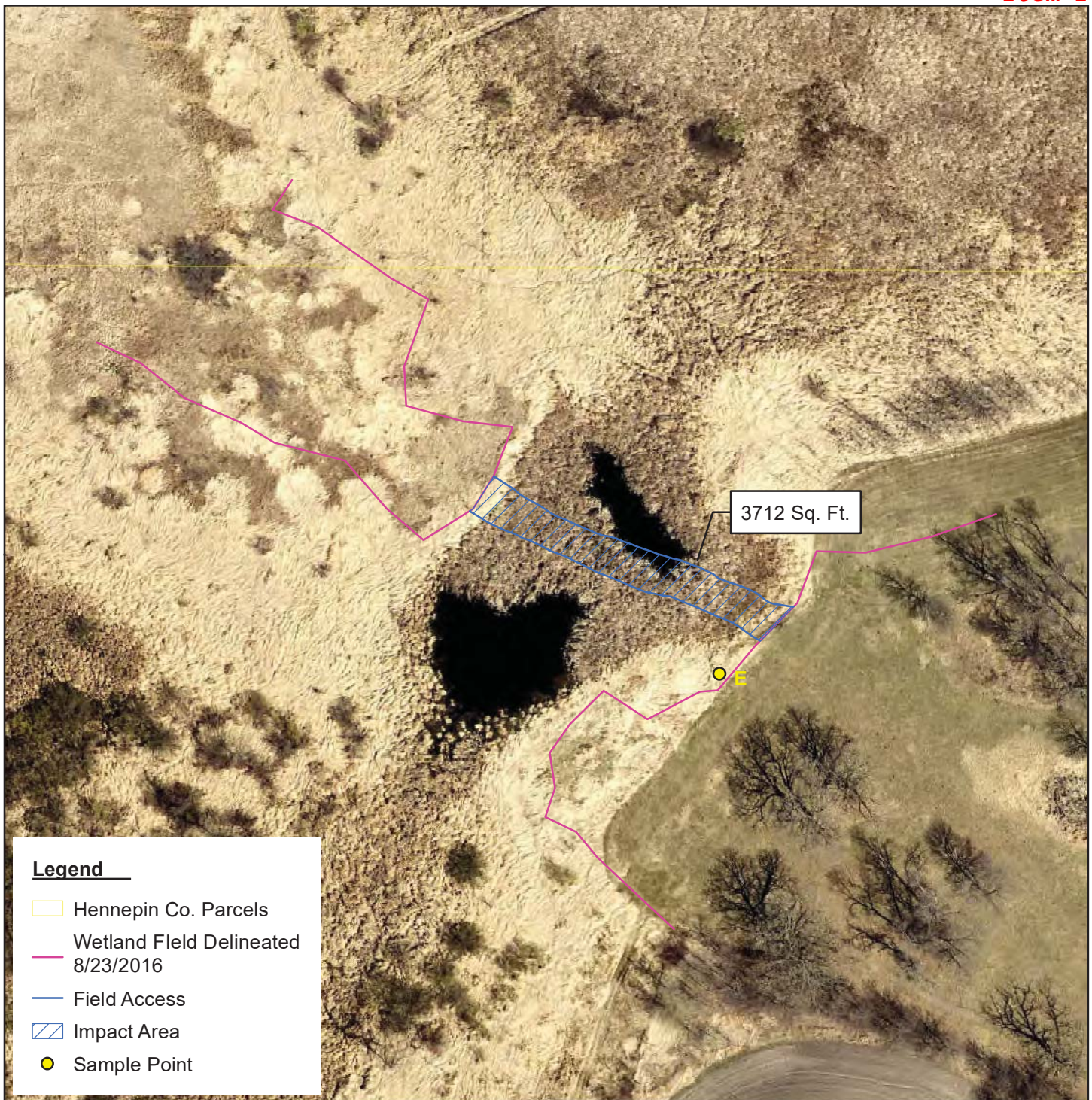
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## WETLAND IMPACT MAYERS PROPERTY AREA 2

AE Comm.# 14451 Date: 8/16/2016 By: JLA



## Appendix 3-1



### Legend

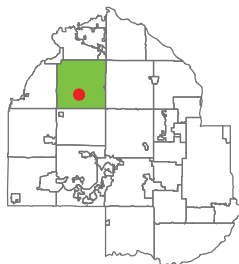
- Hennepin Co. Parcels
- Wetland Field Delineated 8/23/2016
- Field Access
- Impact Area
- Sample Point

### PROJECT LOCATION

SOURCE: MN DNR, USDA, ESRI, TIGER, Bing, Hennepin Co., Anderson Engineering

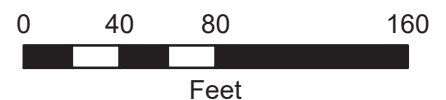


**Hennepin County**  
State of Minnesota



**City of Corcoran**  
Hennepin County, MN

1 in = 80 feet



**21600 Larkin Road**  
**Corcoran, Hennepin County, MN**  
**PID: Multiple**



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## WETLAND IMPACT MAYERS PROPERTY AREA 3

AE Comm.# 14451 Date: 8/16/2016 By: JLA



## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 21600 Larkin Road City/County: Corcoran/Hennepin Sampling Date: 07/12/2018  
 Applicant/Owner: Ernie Mayer State: MN Sampling Point: E  
 Investigator(s): B. Hopapp, A. Yellick, J. Aden Section, Township, Range: Sec. 28, Twp. 119 N, Rng. 23 W  
 Landform (hillside, terrace, etc.): Moraine Local relief (concave, convex, none): None  
 Slope (%): 0-9 Lat: 43.885228 Long: -92.488215 Datum: \_\_\_\_\_  
 Soil Map Unit Name: Klossner muck (L49A) NWI classification: PEM1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)

Are Vegetation \_\_\_\_\_, Soil X, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? is X No \_\_\_\_\_

Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____
Remarks: Soil is disturbed due to area historic use as a cattle stock pond (ca. 1950s). All indicators met; area is a wetland.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30 feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1. _____																					
2. _____																					
3. _____																					
4. _____																					
5. _____																					
		=Total Cover																			
<b>Sapling/Shrub Stratum</b>	(Plot size: <u>15 feet</u> )				<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>15</u></td> <td>x 1 = <u>15</u></td> </tr> <tr> <td>FACW species <u>80</u></td> <td>x 2 = <u>160</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>195</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.95</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>15</u>	x 1 = <u>15</u>	FACW species <u>80</u>	x 2 = <u>160</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>195</u> (B)	Prevalence Index = B/A = <u>1.95</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>15</u>	x 1 = <u>15</u>																				
FACW species <u>80</u>	x 2 = <u>160</u>																				
FAC species <u>0</u>	x 3 = <u>0</u>																				
FACU species <u>5</u>	x 4 = <u>20</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>100</u> (A)	<u>195</u> (B)																				
Prevalence Index = B/A = <u>1.95</u>																					
1. _____																					
2. _____																					
3. _____																					
4. _____																					
5. _____																					
		=Total Cover																			
<b>Herb Stratum</b>	(Plot size: <u>5 feet</u> )				<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</u> <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Phalaris arundinacea</u>		<u>75</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Typha angustifolia</u>		<u>15</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Solidago gigantea</u>		<u>5</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Asclepias syriaca</u>		<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. _____																					
6. _____																					
7. _____																					
8. _____																					
9. _____																					
10. _____																					
		<u>100</u> =Total Cover																			
<b>Woody Vine Stratum</b>	(Plot size: <u>30 feet</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																
1. _____																					
2. _____																					
		=Total Cover																			
Remarks: (Include photo numbers here or on a separate sheet.)																					



**SOIL**Sampling Point: E

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-24	10YR 2/1	100					Loamy/Clayey	
24-25	10YR 5/4	100	10YR 4/6	3	C	M	Loamy/Clayey	Distinct redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input type="checkbox"/>
---	--

Remarks:  
Soil is disturbed due to area historic use as a cattle stock pond (ca. 1950s). Hydric soil indicators would likely be present if the area was not disturbed, based on our best professional judgement.

**HYDROLOGY**

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



Photo 1, Area C – Sample Point E (Viewing Northwest)



Photo 2, Area C – Sample Point E Soil Profile

## Appendix 4-1



## Appendix 5-1

U.S. DEPARTMENT OF AGRICULTURE

DATE

## REFERENCE SLIP

May 20, 2011

TO

Ernest J. Mayers  
 21300 Larkin Rd  
 Hamel, MN 55340-9353

☐ ACTION☐ NOTE AND RETURN☐ APPROVAL☐ PER PHONE CALL☒ AS REQUESTED☐ RECOMMENDATION☐ FOR COMMENT☐ REPLY FOR SIGNATURE OF☐ FOR INFORMATION☐ RETURNED☐ INITIALS☐ SEE ME☐ NOTE AND FILE☐ YOUR SIGNATURE

REMARKS

Ernie,  
 A copy of the  
 letter you requested  
 from your file.  
 this is the letter  
 you wrote to NRCS  
 District Conservationist  
 in 2007.

FROM

John Cullen  
 Area Resource Conservationist

NOV 07 2007

11-2-07

NRCS

George Montgomery

Regarding FSA AD-1026, Tract 134

This area proposed to tile is wetter than what it was in the past because a tile was installed in Kalk Rd which dumps water into this area and the housing higher up to the east drain water through my property. This is considered an invasion of my property.

A tile starting at Kalk Rd going west to a drainage ditch can take care of the invading water.

An existing tile to the west end of the proposed area was exposed.

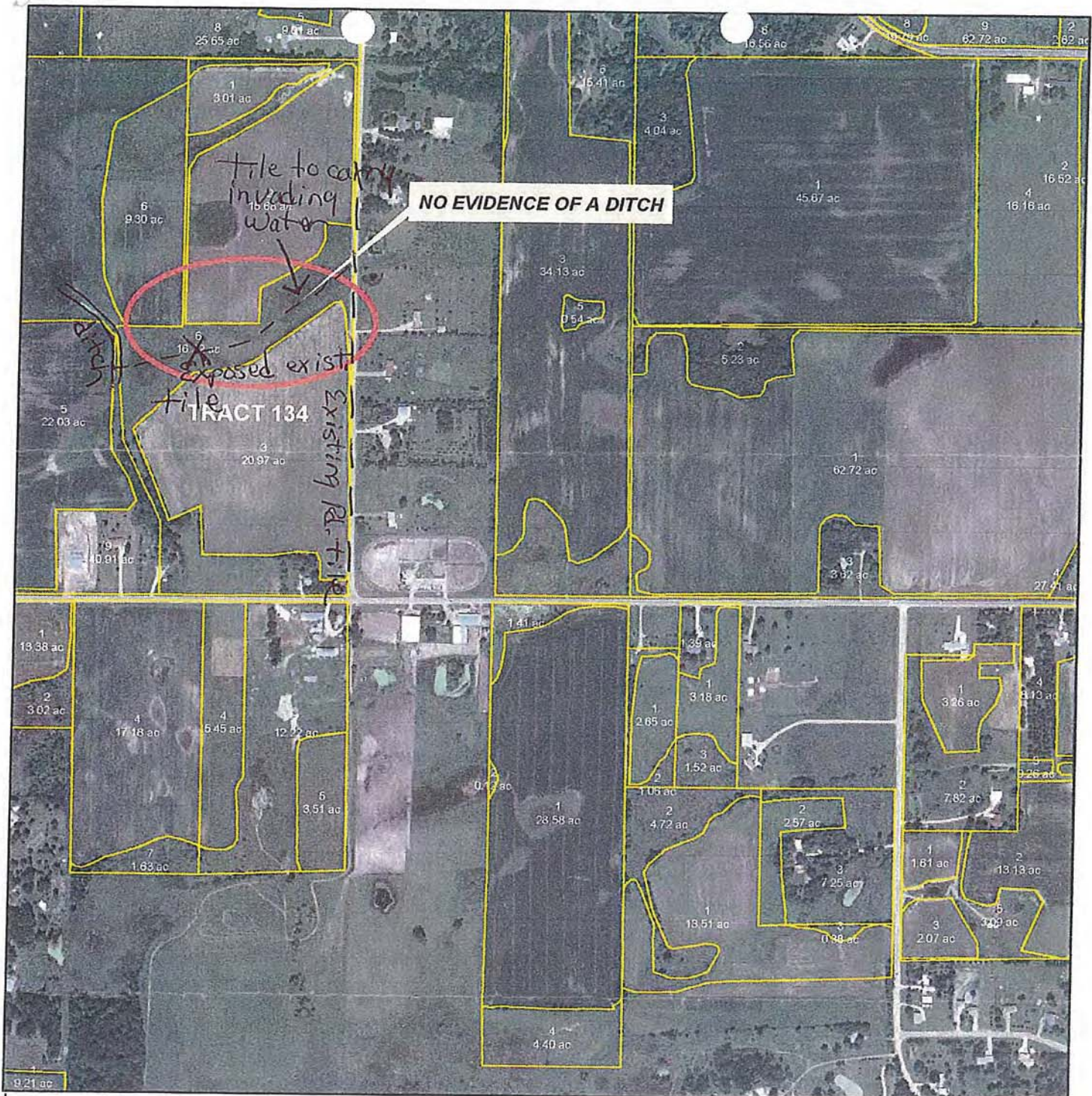
I do not consider this a wet land draining project. This is a water correction or management project.

Thank you

Ernie Mayers

Ph-612-490-0115





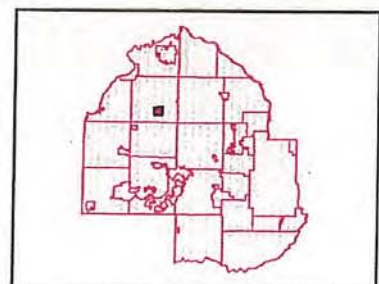
**Hennepin County, MN**

**Corcoran**

**T119 R023 S27**

2003 Ortho Imagery

0 330 660 Feet  
1:7,920



Aug 14, 2007

Maps are for graphical purposes only. They do not represent a legal survey. While every effort has been made to ensure that these data are accurate and reliable within the limits of the current state of the art, NRCS cannot assume liability for any damages caused by any errors or omissions in the data, nor as a result of the failure of the data to function on a particular system. NRCS makes no warranty, expressed or implied, nor does the fact of distribution constitute such a warranty.

CLU Field Boundaries





United States  
Department of  
Agriculture

Natural  
Resources  
Conservation  
Service

14855 Highway 10  
Elk River, MN 55330-7606  
(612) 241-1170  
FAX (612) 241-1161

---

June 3, 1996

Mr. Ernie Mayers  
21300 Larkin Road  
Hamel, MN 55340-9353

RE: Drainage Maintenance Request - T134

Dear Ernie:

Enclosed please find a copy of the AD-1026 you signed May 20th. I have approved your request to create a new drainage system based on an old wetland determination.

Placing tile near the existing ditch on the north edge of field 2 is approved. Tile should be placed at the same depth as the old ditch. I took several soil borings in the ditch after we spoke last Friday and found approximately 1.5 feet of sediment in the ditch bottom. If the new tile is placed 1.5 feet below the existing ditch elevation, it should not effect any upstream wetlands.

Woody vegetation can be removed from the ditch in order to facilitate surface water drainage. Grass cover should be maintained in the ditch to prevent gully erosion from occurring.

You indicated you may clean ditches in your pasture. Maintenance of existing drainage systems on these areas is approved to the original scope and effect of the system. Improvement of the drainage system is not allowed if you want to remain eligible for USDA farm programs. Please complete and return the Drainage System Worksheet for the existing ditch system in your pasture. Return the worksheet in the enclosed envelope.

If you have any questions or concerns, please feel free to contact me.

Sincerely,

Edward J. Musielewicz  
District Conservationist

cc. file  
Ellen Sones, Hennepin Conservation District



United States  
Department of  
Agriculture

Natural  
Resources  
Conservation  
Service

14855 Highway 10  
Elk River, MN 55330-7606  
(612) 241-1170  
FAX (612) 241-1161

CERTIFIED MAIL

September 3, 1998

Mr. Ernie Mayers  
21300 Larkin Road  
Corcoran, MN 55340

RE: Final Wetland Determination and Request for Drainage Maintenance, T-134 and 136,  
Corcoran Sections 27 and 28, Hennepin County, MN

Dear Mr. Mayers:

This letter is in response to your request for a field review of the preliminary wetland determination for the above mentioned tract(s). Specifically, you had questions about areas inventoried as wetland in your pastures. The enclosed NRCS-CPA-026E form outlines changes made to the determination as a result of the review.

#### CHANGE IN WETLAND DESIGNATION

The wetland designations in the pastured areas have been changed to farmed wetland pasture (FWP). The boundaries of these wetlands have also been revised to better reflect upland areas within your pastures. Existing drainage systems on FWP areas can be maintained, but not improved, in order to remain eligible for USDA benefits.

If you do not agree with this final technical wetland determination you may elect to appeal to the Farm Service Agency County Committee at the address listed below. An appeal to the County Committee must be received within 30 days of the date of this letter. If you elect to appeal to the County Committee, NRCS will forward a copy of our administrative record for their use in deciding the appeal.

Sherburne-Anoka-Hennepin Farm Service Agency  
14855 Highway 10  
Elk River, MN 55330-1170

#### MAINTENANCE REQUEST

The ditch on the west side of the farmed wetland pasture between fields 2 and 3 (T-134) can be replaced with tile. The tile shall be placed in the ditch bottom and the ditch shall be filled in with spoil side cast into the wetland from previous clean out operations. Tile cannot be placed going east towards Kalk road.

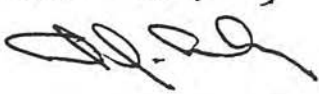
The shallow swale found north of the south property line in the farmed wetland pasture south of the barn can be cleaned out. Soil borings found approximately 0.5 ft. of spoil in the bottom of the swale. Spoil shall be side cast away from the swale, but shall not be spread into the FWP. If you wish to place a tile line to replace the swale, it can be placed adjacent to the existing swale and at the same elevation.



Several depressions were seen within the FWP. Tile cannot be placed through these depressions, but a surface inlet is allowed in the depressions if placed at the same elevation as the swale.

Before undertaking any drainage maintenance, contact the Sherburne-Anoka-Hennepin FSA office to request approval of the activity. If you have any questions, please feel free to contact me.

Sincerely,



Edward J. Musielewicz  
District Conservationist

Enc.

cc:

Sherburne-Anoka-Hennepin FSA  
file

U.S. DEPARTMENT OF AGRICULTURE  
 NATURAL RESOURCES CONSERVATION SERVICE

NRCS-CPA-026E  
 8-95

HIGHLY ERODIBLE LAND AND WETLAND  
 CONSERVATION DETERMINATION

Owner: Mayers, Ernie  
 County: Hennepin

Tract: 134  
 Request Date: 07/25/97 FSA Farm No.:

Farm: HERNMAY

Wetlands Explanation

Wetland

Label Explanatory Comments

- W- Farmed Wetland;  
 Description: An area that is farmed, was manipulated prior to 12/23/85, but still meets wetland criteria; Authorized Cropping: May be farmed as it was before 12/23/85; Authorized Maintenance: May be maintained to the extent that existed before 12/23/85 if "as built" records exist or may be maintained to 12/23/85 condition if no "as built" records exist; If you plan to clear, drain, fill, level or manipulate these areas contact NRCS\* and COE\*\*.
- WP Farmed Wetland Pasture;  
 Description: An area that is pasture or hayland, manipulated before 12/23/85, still meets wetland criteria and is not abandoned; Authorized Cropping: May be used as it was before 12/23/85 for either forage or agricultural commodity production; Authorized Maintenance: May be maintained to the extent that existed before 12/23/85 if "as built" records exist or may be maintained to 12/23/85 condition if no "as built" records exist; If you plan to clear, drain, fill, level or manipulate these areas contact NRCS\* and COE\*\*.
- I Not Inventoried;  
 Description: An area where no wetland determination has been completed; Authorized Cropping: May be farmed as long as no woody vegetation is removed and no hydrologic manipulation is undertaken; Authorized Maintenance: Request determination from NRCS\* prior to initiating any manipulation; If you plan to clear, drain, fill, level or manipulate these areas contact NRCS\* and COE\*\*.
- C/NW Prior Converted Cropland/Non-Wetland;  
 Description: An area that contains both prior converted cropland and non-wetland; Authorized Cropping: No restrictions; Authorized Maintenance: No restrictions unless the manipulation would convert adjacent wetland labels.



U.S. DEPARTMENT OF AGRICULTURE  
 NATURAL RESOURCES CONSERVATION SERVICE

NRCS-CPA-026E  
 8-95

HIGHLY ERODIBLE LAND AND WETLAND  
 CONSERVATION DETERMINATION

Name: Mayers, Ernie  
 County: Hennepin

Tract: 134 Farm: HERNMAY  
 Request Date: 07/25/97 FSA Farm No.:

Section I - Highly Erodible Land

Fields in this section have undergone a determination of whether they were highly erodible land (HEL) or not; fields for which an HEL Determination has not been completed are not listed. In order to be eligible for USDA benefits, person must be using an approved conservation system on all HEL.

Field	HEL (Y/N)	Sodbusted (Y/N)	Acres	Determination Date
1	N	N	3.0	11/22/88
2	N	N	15.3	11/22/88
3	N	N	20.4	11/22/88
4	N	N	4.5	11/22/88
5	N	N	3.3	11/22/88

Section II - Wetlands

Fields in this section have had wetland determinations completed. See the Wetlands Explanation section for additional information regarding allowable activities under the wetland conservation provisions of the Farm Bill and Section 404 of the Clean Water Act.

Field	Wetland Label	Acres	Determination Date	Certification Date
1	W	0.1	12/08/97	12/08/97
1	PC/NW	2.9	12/08/97	12/08/97
2	FW	1.5	12/08/97	12/08/97
2	PC/NW	13.8	12/08/97	12/08/97
3	PC/NW	20.4	12/08/97	12/08/97
4	PC/NW	4.5	12/08/97	12/08/97
5	PC/NW	3.3	12/08/97	12/08/97
PAST	NI	12.5	09/03/98	09/03/98
PAST	FWP	11.0	09/03/98	09/03/98
UN	W	0.5	09/03/98	09/03/98
UN	NI	7.2	09/03/98	09/03/98



U.S. DEPARTMENT OF AGRICULTURE  
 NATURAL RESOURCES CONSERVATION SERVICE

NRCS-CPA-026E  
 8-95

HIGHLY ERODIBLE LAND AND WETLAND  
 CONSERVATION DETERMINATION

Name: Mayers, Ernie  
 County: Hennepin

Tract: 134  
 Request Date: 07/25/97 FSA Farm No.:

Farm: HERNMAY

Wetlands Explanation

Wetland  
 Label Explanatory Comments

Wetland;  
 Description: An area that meets the wetland criteria including  
 wetland farmed under natural conditions. Includes abandoned wetland  
 resulting from abandonment of other wetland labels; Authorized  
 Cropping: May be farmed under natural conditions without removal of  
 woody vegetation; Authorized Maintenance: At level needed to  
 maintain original system on related farmed wetland, farmed wetland  
 pasture, and prior converted cropland. Must not convert additional  
 wetlands or exceed "original scope and effect"; If you plan to  
 clear, drain, fill, level or manipulate these areas contact NRCS\* and  
 COE\*\*.

Natural Resources Conservation Service  
 \* Corps of Engineers

Remarks  
 ETLAND DETERMINATIONS HAVE BEEN REVISED AFTER FIELD VISIT BY FIELD OFFICE  
 TAFF.

I certify that the above determinations are correct and were conducted in  
 accordance with policies and procedures contained in the National Food  
 Security Act Manual.

Signature Designated Conservationist

Date

Edward Musielewicz

Sep 03, 1998

All USDA programs and services are available without regard to race, color,  
 national origin, religion, sex, age, marital status, or handicap.



= WETLAND      CW = CONVERTED WETLAND  
 = FARMED WETLAND      NA = NON-AGRICULTURAL  
 = NON-WETLAND      AW = ARTIFICIAL WETLAND

NHEL = NON-HIGHLY ERODIBLE      MNC, MM, MAR = SPECIAL COND. (SEE NRCS)  
 PC = PRIOR CONVERTED WETLAND      NC = NON-CROPLAND  
 BCW = EX-PT CONVERTED WETLAND      NI = NON-INVENTORIED

UNTY

NOT TO REPRODUCED  
 SCALE MAY 1998

CROP  
 YEAR

PHOTO  
 NO

Hennepin

E5

WARNING: Contact NRCS before draining, dredging, filling, or leveling any wet areas or wetland coded fields or improving, modifying, or maintaining an existing drainage system.





U.S. DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE

NRCS-CPA-026E  
8-95

HIGHLY ERODIBLE LAND AND WETLAND  
CONSERVATION DETERMINATION

Name: Mayers, Ernie  
County: Hennepin

Tract: 134 Farm: HERNMAY  
Request Date: 07/25/97 FSA Farm No.:

Section I - Highly Erodible Land

Fields in this section have undergone a determination of whether they were highly erodible land (HEL) or not; fields for which an HEL Determination has not been completed are not listed. In order to be eligible for USDA benefits, a person must be using an approved conservation system on all HEL.

Field	HEL (Y/N)	Sodbusted (Y/N)	Acres	Determination Date
1	N	N	3.0	11/22/88
2	N	N	15.3	11/22/88
3	N	N	20.4	11/22/88
4	N	N	4.5	11/22/88
5	N	N	3.3	11/22/88

Section II - Wetlands

Fields in this section have had wetland determinations completed. See the Wetlands Explanation section for additional information regarding allowable activities under the wetland conservation provisions of the Farm Bill and Section 404 of the Clean Water Act.

Field	Wetland Label	Acres	Determination Date	Certification Date
1	W	0.1	12/08/97	12/08/97
1	PC/NW	2.9	12/08/97	12/08/97
2	FW	1.5	12/08/97	12/08/97
2	PC/NW	13.8	12/08/97	12/08/97
3	PC/NW	20.4	12/08/97	12/08/97
4	PC/NW	4.5	12/08/97	12/08/97
5	PC/NW	3.3	12/08/97	12/08/97
PAST	NI	12.5	09/03/98	09/03/98
PAST	FWP	11.0	09/03/98	09/03/98
UN	W	0.5	09/03/98	09/03/98
UN	NI	7.2	09/03/98	09/03/98



U.S. DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE

NRCS-CPA-026E  
8-95

HIGHLY ERODIBLE LAND AND WETLAND  
CONSERVATION DETERMINATION

Name: Mayers, Ernie  
County: Hennepin

Tract: 134  
Request Date: 07/25/97 FSA Farm No.:  
Farm: HERNMAY

Wetlands Explanation

Wetland

Label Explanatory Comments

- FW Farmed Wetland;  
Description: An area that is farmed, was manipulated prior to 12/23/85, but still meets wetland criteria; Authorized Cropping: May be farmed as it was before 12/23/85; Authorized Maintenance: May be maintained to the extent that existed before 12/23/85 if "as built" records exist or may be maintained to 12/23/85 condition if no "as built" records exist; If you plan to clear, drain, fill, level or manipulate these areas contact NRCS\* and COE\*\*.
- FWP Farmed Wetland Pasture;  
Description: An area that is pasture or hayland, manipulated before 12/23/85, still meets wetland criteria and is not abandoned; Authorized Cropping: May be used as it was before 12/23/85 for either forage or agricultural commodity production; Authorized Maintenance: May be maintained to the extent that existed before 12/23/85 if "as built" records exist or may be maintained to 12/23/85 condition if no "as built" records exist; If you plan to clear, drain, fill, level or manipulate these areas contact NRCS\* and COE\*\*.
- NI Not Inventoried;  
Description: An area where no wetland determination has been completed; Authorized Cropping: May be farmed as long as no woody vegetation is removed and no hydrologic manipulation is undertaken; Authorized Maintenance: Request determination from NRCS\* prior to initiating any manipulation; If you plan to clear, drain, fill, level or manipulate these areas contact NRCS\* and COE\*\*.
- PC/NW Prior Converted Cropland/Non-Wetland;  
Description: An area that contains both prior converted cropland and non-wetland; Authorized Cropping: No restrictions; Authorized Maintenance: No restrictions unless the manipulation would convert adjacent wetland labels.

U.S. DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE

NRCS-CPA-026E  
8-95

HIGHLY ERODIBLE LAND AND WETLAND  
CONSERVATION DETERMINATION

Name: Mayers, Ernie  
County: Hennepin

Tract: 134  
Request Date: 07/25/97

Farm: HERNMAY  
FSA Farm No.:

Wetlands Explanation

Wetland

Label      Explanatory Comments

W      Wetland;  
Description: An area that meets the wetland criteria including wetland farmed under natural conditions. Includes abandoned wetland resulting from abandonment of other wetland labels; Authorized Cropping: May be farmed under natural conditions without removal of woody vegetation; Authorized Maintenance: At level needed to maintain original system on related farmed wetland, farmed wetland pasture, and prior converted cropland. Must not convert additional wetlands or exceed "original scope and effect"; If you plan to clear, drain, fill, level or manipulate these areas contact NRCS\* and COE\*\*.

\* Natural Resources Conservation Service

\*\* Corps of Engineers

Remarks

WETLAND DETERMINATIONS HAVE BEEN REVISED AFTER FIELD VISIT BY FIELD OFFICE STAFF.

I certify that the above determinations are correct and were conducted in accordance with policies and procedures contained in the National Food Security Act Manual.

Signature Designated Conservationist

Date

  
Edward Musielewicz

Sep 03, 1998

All USDA programs and services are available without regard to race, color, national origin, religion, sex, age, marital status, or handicap.



## United States Department of Agriculture



Natural Resources Conservation Service  
14855 Highway 10  
Elk River, MN 55330-7606

*Helping People  
Help the Land*

Phone: (763) 241-1170  
FAX: (763) 241-1161

November 16, 2006

Ernest Mayers  
21300 Larkin Road  
Hamel, MN 55340

Dear Mr. Mayer:

You have indicated your intention to perform drainage maintenance activity on an existing drainage system that has not been previously evaluated by NRCS by checking yes on USDA form AD-1026 to question 10c.

Maintenance of existing drainage systems installed prior to December 23, 1985 and maintenance of existing drainage systems installed after December 23, 1985 that were previously evaluated and sanctioned by NRCS are exempt from the wetland compliance provisions.

NRCS will not perform any additional review or evaluation of your proposed maintenance activity. It is your responsibility to restrict all drainage activity to only that allowable under the maintenance exemption to the wetland compliance provisions. The drainage maintenance exemption requirements have been defined on the attached Drainage Maintenance Fact Sheet.

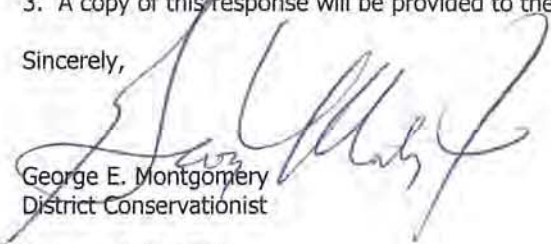
It is your responsibility to document and retain records of all drainage maintenance activities. This information can be documented on the Drainage Worksheets (enclosed) available at your USDA Service Center. Please note that if you are proposing to perform drainage maintenance relying on information from a non-certified wetland determination that there may be additional unidentified wetlands or the wetland boundaries indicated on the existing non-certified determination may be smaller or larger than currently indicated.

If you are uncertain as to whether your proposed drainage activities will meet the definition of maintenance, I recommend that you update your AD-1026 response by checking yes to either question 10a or question 10b. Checking either of these questions will result in NRCS conducting a review of your proposed activity including a scope and effect evaluation of your proposed actions.

This information applies to the 1985 Food Security Act (FSA) as amended. **Other federal, state or local permits or restrictions may apply to activities impacting wetlands. It is the responsibility of the participant to obtain other necessary permits. Contact the Army Corps of Engineers for Clean Water Act permits, the Local Government Unit (LGU) for State Wetland Conservation Act permits, and the Minnesota Department of Natural Resources for protected water permits prior to initiating wetland activities.** You can contact these agencies using the "Minnesota Combined Project Application Form" available from the LGU.

If you have any questions on this information or require additional assistance please contact me at (763) 241-1170 ex. 3. A copy of this response will be provided to the county Farm Services Agency (FSA).

Sincerely,



George E. Montgomery  
District Conservationist

cc: S-A-H FSA  
Enclosures



## United States Department of Agriculture



Natural Resources Conservation Service  
14855 Highway 10  
Elk River, MN 55330-7606

*Helping People  
Help the Land*

Phone: (763) 241-1170  
FAX: (763) 241-1161

## **Maintenance Exemption Fact Sheet**

When you check "YES" to question 10c on the AD-1026 form you are indicating that your drainage activity is maintenance. Maintaining or cleaning out drainage ditches or tile systems that existed prior to December 23, 1985 is exempt under the USDA wetland compliance provisions, provided the work meets requirements defined as maintenance. If your intended drainage activities are related only to maintaining drainage systems that were in place as of December 23, 1985 that have NOT been previously evaluated by NRCS you can self identify that the proposed actions meet the requirements defined as maintenance and will not result in a potential compliance violation.

### **Self Identification Requirements for Drainage Maintenance**

1. Maintaining the drainage system in place as of December 23, 1985 means that the scope and effect of the maintenance activity will not result in an improved drainage condition to that which functioned on December 23, 1985. These actions could include;
  - existing drainage ditches can be cleaned out but not deepened or widened beyond the original constructed dimensions and;
  - existing tile systems can be fixed (fixing existing tile systems can include repair, rehabilitation and replacement) as long as the depth, size, and grade of the tile are not deepened or increased.
2. Drainage maintenance may be restricted in drainage systems that have insufficient management or on lands that not been used to produce an agricultural commodity, for any 5-year period. These lands could be considered abandoned which would result in a loss of drainage maintenance provisions.
3. Drainage maintenance will need to be documented. USDA has "Drainage Maintenance Worksheets" available for you to record and retain with your drainage history records.

If you check question 10c "yes" you are identifying that the ditching, dredging, tiling and/or other activities being done on your land is for the purpose of maintaining existing drainage improvements that were in place on December 23, 1985 and that the result of the maintenance activity will not improve the effect of that existing drainage. You also understand that for the area where maintenance will occur records will be retained to document the completed maintenance activities. Further you understand that the area where maintenance activities will occur does not include any non-cropland areas or land that meets the "abandonment" criteria.

**If you are uncertain if your drainage activity meets the requirements defined as maintenance, please address your questions to your local NRCS staff.**

This information applies to the 1985 Food Security Act (FSA) as amended. Other federal, state or local permits or restrictions may apply to activities impacting wetlands. It is the responsibility of the participant to obtain other necessary permits. Contact the Army Corps of Engineers for Clean Water Act permits, the Local Government Unit (LGU) for State Wetland Conservation Act permits, and the Minnesota Department of Natural Resources for protected water permits prior to initiating wetland activities. The participant can contact these agencies using the "Minnesota Combined Project Application Form" available from the LGU.



# **HIGHLY ERODIBLE LAND CONSERVATION (HELIC) AND WETLAND CONSERVATION (WC) CERTIFICATION**

(See Page 2 for Handwriting, Public Access and Privacy Act Statements)

<b>1. Name of Producer</b> ERNEST J. MAYERS	<b>2. L.D. Number (Last 4 digits only)</b> 9425	<b>3. Crop Year</b> 2007																		
<b>4. Do you have any interest in land that produces or could produce an agricultural commodity? If "YES", or, if you are a Farm Loan Applicant continue with Item 5. If "NO", and you are not a Farm Loan Applicant, go to Item 12 and sign and date.</b>																				
<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 50px;">YES</td> <td style="width: 50px;">NO</td> </tr> <tr> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> </table>			YES	NO	<input checked="" type="checkbox"/>	<input type="checkbox"/>														
YES	NO																			
<input checked="" type="checkbox"/>	<input type="checkbox"/>																			
<b>5. For farm loan applicants only: Will you conduct any activities for fish production, traps, vineyards, etc., or other non-agricultural purposes on lands for which a wetland determination has not been determined?</b>																				
<b>6. Are you a landlord or tenant on any farm? If so, provide the number or contact your County FSA office. (Contact your county FSA office if you are unsure of the number.)</b>																				
<b>7. Do any of your landlords refuse to comply with HELIC or WC County FSA Office before completing this form?</b>																				
<b>8. List affiliated persons with farming interests. See Page 2.</b>																				
<b>9. During the crop year entered in Item 3, did you or anyone perform any activities to:</b>																				
<b>10. Since December 23, 1995, or during anyone perform any activities to:</b> A. Create new drainage systems, been evaluated by NRCS? If "A" B. Improve or modify an existing C. Maintain an existing drainage system: Maintenance is the repair, or currently in agricultural production a reconstruct or maintain the canal.	11-16-06  Ernie mayers indicated via telephone conversation that he should have checked to a Yes instead	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> <tr> <td>Agricultural</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>ad, or will</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> <tr> <td>(has NOT)</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> <tr> <td>Wetlands</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Is a person to lose or costs</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> </table>		YES	NO	Agricultural	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ad, or will	<input type="checkbox"/>	<input type="checkbox"/>	(has NOT)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is a person to lose or costs	<input type="checkbox"/>	<input type="checkbox"/>
	YES	NO																		
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Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>																		
Is a person to lose or costs	<input type="checkbox"/>	<input type="checkbox"/>																		
<b>11. If "YES" to Items 9, 10A and/or 10B:</b> A. Farm and/or tract/field number: B. Activity: <u>CLEAN EXISTING</u> C. Current land use (specify crops): D. County: <u>HANCOCK</u>																				
<b>A "YES" answer in Items 9, B or 10 - conduct a certified wetland determination.</b>																				
<b>Continuous AD-1026 Certificate</b> I have read the AD-1026 certification of compliance with the determination is made that results in:																				
• I agree to the terms and conditions responsible for any non-compliance. • I agree that I will file a revised provisions. • I understand that affiliated persons result in loss of eligibility to pay																				
<b>12. Signature of Producer</b> <u>Ernie Mayers</u>																				
<b>13. Return to NRCS (Completed by FSA)</b> Sign and date if a NRCS determination needed for any reason including a answer in Items 9, B, 10A, 10B, or 1																				

ORIGINAL - FSA COPY ☐NRCS COPY ☐ ☒PRODUCER'S COPY ☐



## DRAINAGE SYSTEM WORKSHEET

NAME _____	TELEPHONE NO. _____
ADDRESS _____	FSA TRACT NO. _____
	FSA FIELD NO. _____
REASON FOR COMPLETING FORM:	
_____ WOULD LIKE TO MAINTAIN DITCH OR TILE SYSTEM	PLANNED DATE _____
_____ WOULD LIKE TO ADD/INSTALL NEW DITCH OR TILE	PLANNED DATE _____
_____ WOULD LIKE WETLAND CLASSIFIED BASED ON DRAINAGE SYSTEM OR FOR DOCUMENTATION	
PURPOSES	
_____ OTHER _____	PLANNED DATE _____

Described drainage or alterations that was done in the wet area before December 23, 1985. Please complete to the best of your knowledge. Also, use an aerial photograph to mark in present and/or proposed tile lines and ditches.

### TILE DRAINS

DATE INSTALLED <u>2008</u>	ORIGINAL DEPTH <u>4' / New tile - 3'</u>
SIZE OF TILE <u>6 inch</u>	SPACING <u>plastic</u>
ARE TILE INLETS PRESENT? <u>yes</u> (IF YES, LOCATE TILE INLETS ON MAP)	
LOCATE TILE OUTLET ON MAP AND DESCRIBE <u>tile dumps into the Co. ditch on the west side.</u>	
HAVE YOU DONE ANY MAINTENANCE IN THE PAST? <u>yes</u>	
IF YES, LIST WHAT TYPE OF MAINTENANCE WAS PERFORMED AND DATE <u>Cleaned the county ditch on the west end</u>	

### SURFACE DITCHES

DATE INSTALLED _____	ORIGINAL TOP WIDTH _____
ORIGINAL DEPTH _____	CURRENT TOP WIDTH _____
CURRENT DEPTH _____	
LOCATE DITCH OUTLET ON MAP AND DESCRIBE _____	
HAVE YOU DONE ANY MAINTENANCE IN THE PAST? _____ IF YES, LIST WHAT TYPE OF MAINTENANCE WAS PERFORMED AND DATE _____	

### YOUR DRAINAGE PLAN

DESCRIBE YOUR PLANNED DRAINAGE, MODIFICATIONS, OR REPAIR; AND SHOW ON AERIAL PHOTOGRAPH <u>Replace an existing tile from Kalk Rd. to the Co. Ditch on the west side.</u>	
IF DITCH(S) ARE TO BE CLEANED, COMPLETE THE FOLLOWING:	
AMOUNT OF MATERIAL TO BE REMOVED FROM THE DITCH BOTTOM _____	SIDESLOPES _____
WHAT WILL BE DONE WITH THE SPOIL _____	
ARE THERE CULVERTS IN THE DRAINAGE SYSTEM? <u>No</u> (IF YES, SHOW LOCATION ON MAP)	
WILL THE CULVERTS BE ALTERED? _____ (IF YES, EXPLAIN) _____	

Maintenance of existing drainage is approved based on information provided by you on the Drainage System Worksheet. If any work exceeds the scope and effect of the original drainage system, then the area will be classified as a Converted Wetland (CW). I hereby certify that the above information is true and correct to the best of my knowledge and belief.

Signature of Operator/Owner \_\_\_\_\_ Date \_\_\_\_\_

RETURN FORM TO: NATURAL RESOURCES CONSERVATION SERVICE, 14855 HIGHWAY 10, ELK RIVER, MN 55330

**SEE THE BACK OF THIS FORM FOR DITCH CROSS SECTION INFORMATION**



## United States Department of Agriculture



Natural Resources Conservation Service  
Room 650, Earle Brown Tower  
6120 Earle Brown Drive  
Brooklyn Center, MN 55430-2195

Phone: (763) 566-2941  
FAX: (763) 566-3468

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June 30, 2010

Mr. Ernest Mayers  
21300 Larkin Road  
Hamel, MN 55340

Dear Mr. Mayers,

This letter responds to your appeal regarding the Converted Wetland (CW) designation for wetland 0A on Tract Number 134 located in Section 27 of T119N R23W (Corcoran Twp). A field visit was made by NRCS staff on June 4, 2010, to review your concerns regarding excess water moving onto your property. Included in the site review were Mary Monte, District Conservationist, Elk River; John Crellin, Area Resource Conservationist, Brooklyn Center; Craig Peterson, Area Engineer, Brooklyn Center; Pete Weikle, Acting Area Resource Soil Scientist, Brooklyn Center; Jazmine Garner, Student Intern, Brooklyn Center; and Winnie Chen, Wetland Biologist, Brooklyn Center.

The staff from the Brooklyn Center Area Office reviewed your appeal letter sent to the State Conservationist, William Hunt. In your letter, you stated that the pasture has become wetter due to the construction of ponds on the east side of Kalk road and drain tiles installed in Kalk road directing water onto your property.

During the site visit, you determined that the area in question was wet, but restated your belief that the site has become and continues to get wetter due to the combined effects of the drain tile installed in Kalk Road and the ponds constructed on the east side of Kalk road.

Our field review did not substantiate these features are causing your property to become wetter. However, if you still believe that additional water is coming from the road or ponds, it could be intercepted and discharged via a non-perforated tile, which would divert any additional water from impacting your site.

Currently the site is determined as a CW2008 due to installation of the tile and the surface intakes. The new tile line was installed on your site in 2008 through the center of the area previously designated by NRCS as a Farmed Wetland Pasture (FWP). Two surface water inlets were also installed to help remove standing water.

*Helping People Help the Land*


An Equal Opportunity Provider and Employer

During the field visit, you had stated that an old tile had been found in the wetland. If the presence of this old tile is confirmed through an on-site excavation, the new tile would not be considered an improvement if it was installed at approximately the same depth, grade, and location as the old tile and the outlet was not improved. However, if the new tile deviated in its physical location from the mentioned "old tile" this would likely be considered an improvement to the site and thus is not permitted. If this is the case the new tile will need to be removed.

We encourage you to contact Mary Monte at the Elk River Field Office to set up an appointment to identify the findings of an existing tile line. The staff will then determine if the new tile is an improvement or considered system maintenance. Even if installation of the new tile is considered maintenance for the drainage system, the two surface intakes are new. The intakes are considered an improvement and need to be removed.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy A. Wilson". The signature is stylized with a large, loopy initial "T" and a distinct "W".

TIMOTHY A. WILSON  
Assistant State Conservationist (FO)

cc: Mary Monte, District Conservationist, NRCS, Elk River, MN  
Winnie Chen, Wetland Biologist, NRCS, Brooklyn Center, MN

# Exhibit B





Exhibit B

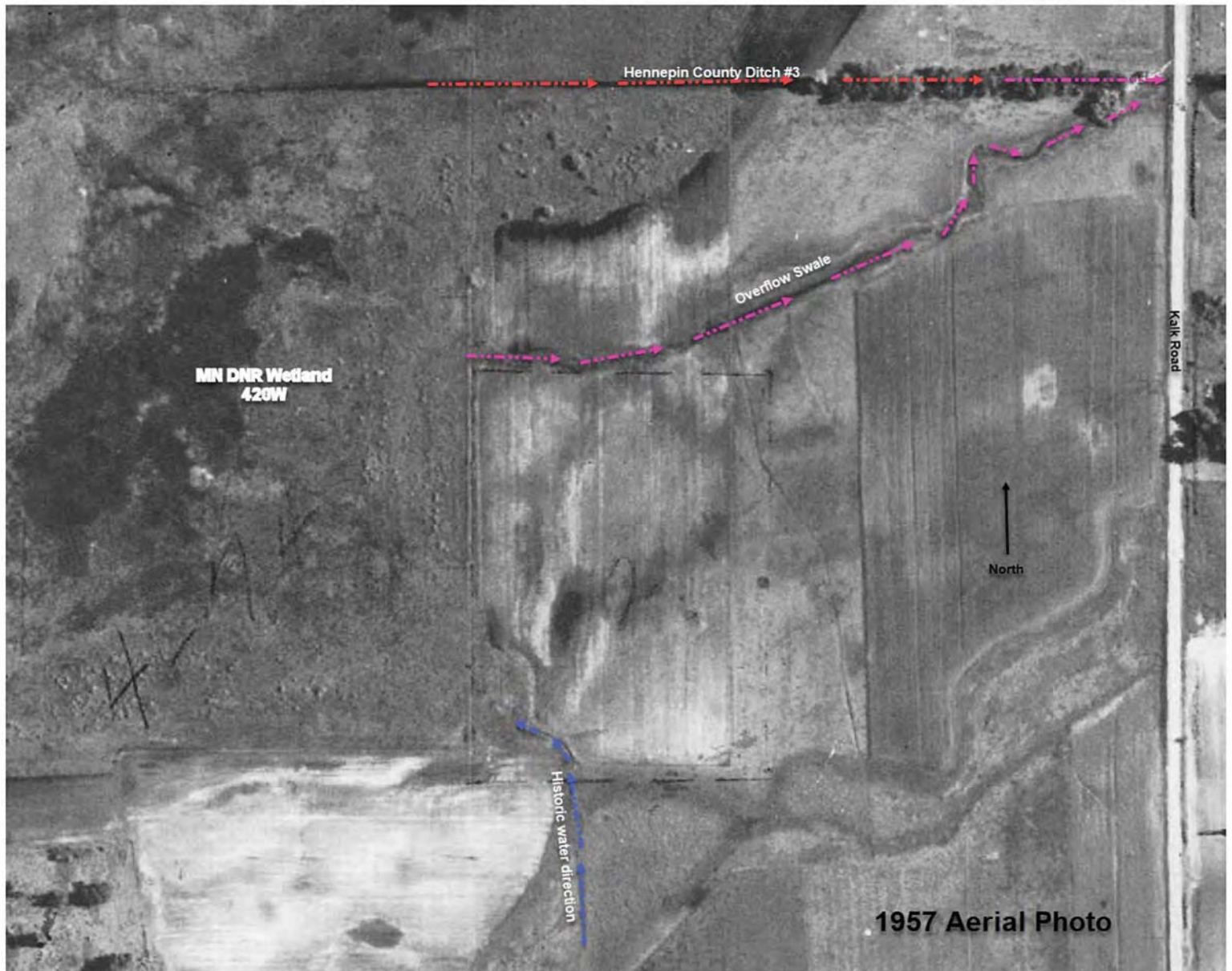


Exhibit B



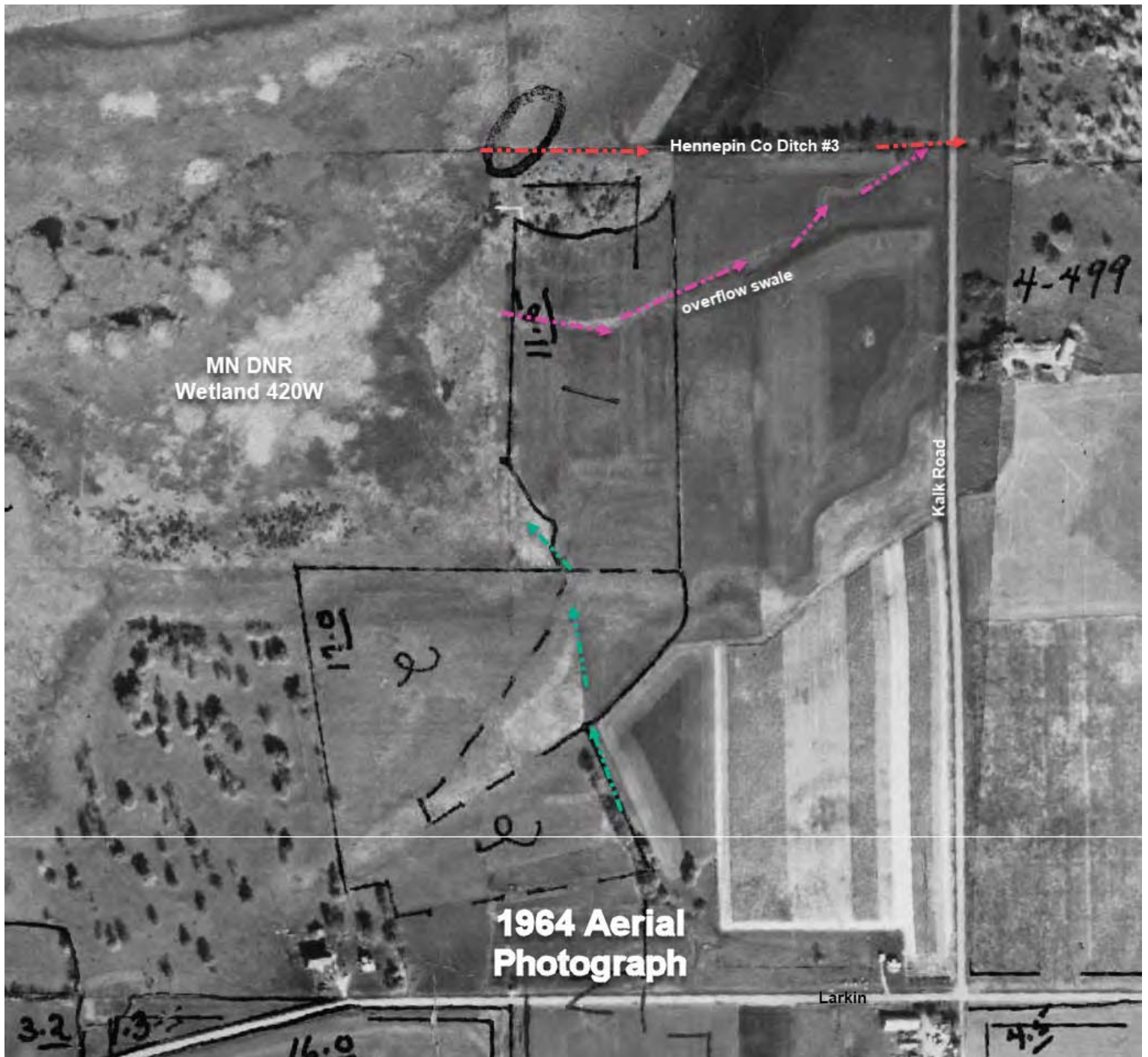


Exhibit B