

# elm creek Watershed Management Commission

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March 4, 2020

Representatives  
Elm Creek Watershed Management  
Commission Hennepin County, MN

*The meeting packet for this meeting may be  
found on the Commission's website:  
<http://www.elmcreekwatershed.org/minutes--meeting-packets.html>*

Dear Representatives:

A **regular meeting** of the Elm Creek Watershed Management Commission will be held on **Wednesday, March 11, 2020, at 11:30 a.m.** in the Mayor's Conference Room at Maple Grove City Hall, 12800 Arbor Lakes Parkway, Maple Grove, MN.

**The Technical Advisory Committee (TAC) will NOT MEET this month.**

Please email me at [judie@jass.biz](mailto:judie@jass.biz) to confirm whether you or your Alternate will be attending the TAC and the regular meetings.

Election of officers will occur at the regular meeting.

Thank you.

Regards,



Judie A. Anderson  
Administrator  
JAA:tim

Encls: Meeting Packet

cc:	Alternates	Jim Herbert	Joe Waln	James Kujawa	DNR
	TAC Members	Kris Guentzel	Brian Vlach	Diane Spector	BWSR
	City Clerks	Kirsten Barta	Met Council	Official Newspaper	MPCA

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### AGENDA Regular Meeting March 11, 2020

The meeting packet may be found on the Commission's website: <http://elm creek watershed.org/minutes--meeting-packets.html>

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.
  - a. James Fallon – USGS. *(See also item 4.b.)*
  - b. Teal Lake, Maple Grove\* – Nick Pederson. *(See also item 4.c.)*
  - c. 2020 Salt Symposium - Connie Fortin, Fortin Consulting. *(See also item 4d.)*
4. Action Items.
  - a. Election of Officers. *Nominees:*
    - 1) Doug Baines, Dayton, Chair.
    - 2) Liz Weir, Medina, Vice Chair.
    - 3) Bill Walraven, Champlin, Secretary.
    - 4) Ken Guenthner, Corcoran, Treasurer.
  - b. USGS 2020 Proposal.\*
  - c. 2020 CAMP - Teal Lake request.
  - d. Salt Symposium Sponsorship\* - *Connie Fortin, Fortin Consulting.*
  - e. Accept 2020 Projected Work Plan.\*
  - f. Project Reviews – *see Staff Report.\**
5. Old Business.
6. New Business.
7. Communications. *(Also see Staff Report. \*)*
  - a. MTDs update.\*
8. Education.
  - a. WMWA – next meeting is scheduled for April 14, 2020, at Plymouth Creek Center.
9. Grant Opportunities and Updates.

(over)

\*in meeting packet  
\*\*available at meeting or on website

**10. Project Reviews.**

Item No.	A	E	I   R PFI	AR	Project No.	Project Name
			RP   D			
					W Denotes wetland project	
ag			R	AR	2013-046	Woods of Medina, Medina.
ah.				AR	2014-015	Rogers Drive Extension, Rogers.
a.			R		2015-004	Kinghorn Outlet A, Rogers.
ai.				AR	2015-030	Kiddiegarten Child Care Center, Maple Grove.
aj.				AR	2016-002	The Markets at Rush Creek, Maple Grove.
ak.				AR	2016-005W	Ravinia Wetland Bank Plan, Corcoran.
b.			R		2016-040	Kinghorn 4 <sup>th</sup> Addition, Rogers.
al.				AR	2016-047	Hy-Vee North, Maple Grove.
am.				AR	2017-014	Laurel Creek, Rogers.
an.				AR	2017-029	Brayburn Trails, Dayton.
c.					2017-039	Rush Creek Apartments, Maple Grove.
d.					2017-050W	Ernie Mayers Wetland/floodplain violation, Corcoran.
ao.			R	AR	2018-018	Summers Edge Phase II, Plymouth.
e.					2018-020	North 101 Storage, Rogers.
ap.				AR	2018-026	Windrose, Maple Grove.
aq,				AR	2018-028	Tricare Third Addition, Maple Grove.
ar.				AR	2018-044	OSI Phase II, Medina.
f.					2018-046	Graco, Rogers
as.				AR	2018-048	Faithbrook Church Phase 2, Dayton.
at.				AR	2019-001	Fernbrook View Apartments, Maple Grove.
au.				AR	2019-002	Parkside Villas, Champlin.
av.				AR	2019-021	Brenly Meadows, Rogers.
aw.			R	AR	2019-022	Comlink Midwest, Corcoran.
ax.			R	AR	2019-023	99th Avenue Apartments, Maple Grove.
g.					2019-024	Boston Scientific, Maple Grove.
ay.					2019-027	Havenwood at Maple Grove.
h.					2019-028	Howell Meadows, Maple Grove.
i.					2019-030	Rolling Hills Acres, Corcoran.
j.					2019-031	Hassan Sand and Gravel Expansion, Rogers.
az.					2019-032	OSI Expansion, Medina.
k.					2020-001	Outlot L, Markets at Rush Creek, Maple Grove.
l.	A	E			2020-002	Project 100, Maple Grove.
m.	A	E			2020-003	Palisades at Nottingham Second Addn., Maple Grove.
n.		E			2020-004	Elm Road Area Project, Maple Grove.
o.					2020-005	Territorial Development Project EAW, Rogers.
p.		E			2020-006	Zachary Villas of Dayton
q.					2020-007	Pineview/Oakview Lanes North Improvements, Dayton.

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

**11. Other Business.**

Z:\Elm Creek\Meetings\Meetings 2020\03 Regular Meeting Agenda.docx

\*in meeting packet

\*\*available at meeting or on website

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

# elm creek

## Watershed Management Commission

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### Regular Meeting Minutes February 12, 2020

I. A regular meeting of the Elm Creek Watershed Management Commission was called to order at 11:30 a.m., Wednesday, February 12, 2020, 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; Ken Guenthner, Corcoran; Doug Baines, Dayton; Joe Trainor, Maple Grove; Elizabeth Weir, Medina; Catherine Cesnik, Plymouth; Kevin Jullie, Rogers; Kirsten Barta, Hennepin County Dept. of Environment and Energy (HCEE); Brian Vlach, Three Rivers Park District (TRPD); Jim Herbert and Joe Waln, Barr Engineering; James Kujawa, Surface Water Solutions; and Judie Anderson, JASS.

Also present: Todd Tuominen, Champlin; Kevin Mattson, Corcoran; Derek Asche and Mark Lahtinen, Maple Grove; Jake Gateman and Amy Riegel, Plymouth; Andrew Simmons, Rogers; and Nancy Bergstrand and Karson Frokjer, Weaver Lake Conservation Association.

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

B. Motion by Walraven, second by Guenthner to approve the **minutes**\* of the January 8, 2020 regular meeting. *Motion carried unanimously.*

C. Motion Walraven, second by Guenthner to approve the February **Treasurer's Report** and **Claims**\* totaling \$30,804.60. *Motion carried unanimously.*

### II. Open Forum.

### III. Action Items.

A. The following individuals were nominated to serve as officers in 2020:

- |  |  |
|--|--|
| 1. Doug Baines, Dayton, Chair.         | 2. Liz Weir, Medina, Vice Chair.       |
| 3. Bill Walraven, Champlin, Secretary. | 4. Ken Guenthner, Corcoran, Treasurer. |

Elections will occur at the March meeting.

[Weir arrived 11:41 a.m.]

### B. Project Reviews.

1. **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. Two warehouse buildings with associated parking and loading facilities are proposed. In 2015 the Commission approved this project with three conditions. Revisions have yet to meet the Commission's approval conditions. Because of the lack of activity, Staff recommends that this project be denied. Motion by Guenthner, second by Cesnik to deny approval of this project. *Motion carried unanimously.*

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

## elm creek Watershed Management Commission

Regular Meeting Minutes – February 12, 2020

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**2. 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. The plan includes the use of a NURP pond and a biofiltration basin to meet Commission requirements for rates, water quality and abstraction. In November 2016 the Commission approved the project with six conditions. Three conditions remain outstanding. Because of the lack of activity, Staff recommends that this project be denied. Motion by Guenthner, second by Cesnik to deny approval of this project. *Motion carried unanimously.*

**3. 2019-031 Hassan Sand and Gravel Expansion, Rogers.** The applicant is proposing to open a new mining operation just north and west of their existing site on CR 144 and Willandale Road. The Crow River runs along the northerly boundary of this property. Approximately 38 acres will be mined in phases over the next 5-10 years (depending on demand). The site plans propose to stay out of the bluff and setback zones along the river. During the mining operations runoff will be directed north into a sediment pond. From there the water runs approximately one-half mile north on a flat grade before entering the Crow River. The site plan triggers the Commission's Rules E, F, D, and I. In their findings dated January 17, 2020, Staff recommends approval conditioned upon (1) WCA requirements being met - the city must consult with the WCA Technical Evaluation Panel (TEP) to determine if there are impacts to Wetland A during the mining operations; (2) the City establishing a pre-development runoff rate standard for the 2, 10- and 100-year storm event for the existing discharge points from this site - before final restoration site work begins, the City require site plans that will provide equal to, or less than pre-development flows; and (3) the site abiding by all MPCA NPDES Nonmetallic mining activities General Permit Conditions. Motion by Guenthner, second by Weir to approve Staff recommendations. *Motion carried unanimously.*

**4. 2019-032 OSI Expansion, Medina.** This an existing business located in the northwest corner of Highway 55 and Arrowhead Drive. They are proposing to build an addition on the south side of their building and add parking to the north side of the site. This will create an additional 3.6 acres of new impervious area. This project triggers the Commission's review for Rules E, D, I and F. In their findings dated February 4, 2020, Staff recommends approval contingent upon receipt of O&M plans on the stormwater facilities that meet the Commission's requirements. Motion by Weir, second by Walraven to approve Staff's recommendation. *Motion carried unanimously.*

**C.** Included in the meeting packet was the **2019 Work Plan in Review**. It shows the activities undertaken by the Commission in 2019 in response to the draft Work plan approved by the Commission. Motion by Weir, second by Walraven to accept the 2019 Work Plan in Review pending comments received by February 28. *Motion carried unanimously.*

**D.** Also included in the meeting packet was the **2019 Fish Lake Internal Phosphorus Load Control Final Report**. Vlach provided a brief overview of the report. He indicated the lake will have to meet the state's water quality standards for several years before it can be de-listed from the MPCA's 303(d) impairment listing for aquatic recreational use due to excess nutrients. Motion by Weir, second by Guenthner to accept the report. *Motion carried unanimously.*

**E.** **Salt Symposium 2020** will be held August 5, 2020 in Medina. The host, Fortin Consulting, is seeking sponsorships. Staff have invited Connie Fortin to the March meeting to describe the event in more detail.

Riegel will report on the **Countywide Chloride Workgroup** next month. The next Workgroup meeting is scheduled for 1:30 p.m., February 18, 2020, at the Riley Purgatory Watershed District Office.

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RULE D - STORMWATER MANAGEMENT  
 RULE E - EROSION AND SEDIMENT CONTROL  
 RULE F - FLOODPLAIN ALTERATION

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RULE G - WETLAND ALTERATION  
 RULE H - BRIDGE AND CULVERT CROSSINGS  
 RULE I - BUFFERS

**elm creek Watershed Management Commission**

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**IV. Old Business.****V. New Business.**

**A.** Barta received two **Subwatershed Assessment (SWA) Cost Share Applications**. Each applicant is seeking 25% funding from the Commission, with the balance to be paid by the city or from grant funds received by the city.

**1. Weaver Lake, Maple Grove.** The total cost of this SWA is \$30,000; the City is requesting \$7,500 from the Commission. Weaver lake is located west of I-94 and is surrounded by residential neighborhoods and park land. The lake is not impaired but, in recent years, has been experiencing plant and algae growth issues. Work on this SWA would occur in 2020-2021. Motion by Weir, second by Walraven to approve this funding request. *Motion carried unanimously.*

**2. South Fork Rush Creek, Corcoran.** South Fork Rush Creek is located predominately in eastern Corcoran, with small portions in Medina and Maple Grove. It forms a confluence with the North Fork of Rush Creek in central Corcoran and flows into Elm Creek in the Elm Creek Park Reserve. The watershed is partially developed, with some remaining agricultural land and a mix of industrial/residential/commercial properties throughout. Rush Creek is listed as impaired for nutrients and bacteria. The total cost of this SWA is \$58,800, with the City requesting \$8,820 from the Commission. Work would begin in 2020. Motion by Weir, second by Walraven to approve this funding request. *Motion carried unanimously.*

**B. 2020 CAMP** (Citizens Assisted Monitoring Program). The Commission has budgeted the cost of monitoring one lake under the CAMP program in 2020. A decision on which lake to monitor must be made at the March meeting.

**VI. Communications.**

**A.** Included in the meeting packet is a copy of a July 2, 2019 memo from Barr Engineering regarding **Manufactured Treatment Devices (MTDs)**. MTDs are underground proprietary stormwater devices that typically include a filter system to enhance removal of trash, floatables, total suspended solids, phosphorus, and other contaminants. MTDs have been reviewed by WMOs and municipalities as alternatives to other practices due to space limitations or where stormwater ponds or infiltration and biofiltration systems may not be practical.

The Bassett Creek Watershed Management Commission (BCWMC) has formally requested the Minnesota Pollution Control Agency (MPCA) to evaluate the performance of various stormwater MTDs and include protocols for MTDs in the Minnesota Stormwater Manual. Bassett Creek, with Barr as its technical advisor, has been meeting with MPCA and others to further discuss this and other options. Brochures for selected MTDs are attached at the end of the Barr memo to better illustrate how these systems work.

Elm Creek Commission Staff have expressed interest in becoming more informed about this issue and recommend that the Commission authorize Barr to participate in future meetings on its behalf and share the cost with the BCWMC. Motion by Walraven, second by Trainor to approve Staff's recommendation and requesting Barr to maintain an expense log of this activity to monitor the associated costs. *Motion carried unanimously.* (Also refer to the February Staff Report for more information about MTDs.)

**elm creek Watershed Management Commission**

Regular Meeting Minutes – February 12, 2020

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**B. Elm Creek Floodplain Mapping.** Heather Hlavaty, Barr Engineering, provided an update on this project. It may be found in the February Staff Report. She estimates 14% of the budget has been expended to date.

**VII. Education and Public Outreach.**

**A.** Bassett Creek Watershed Management Commission is sponsoring a **Smart Salting workshop** at Plymouth City Hall on Friday, March 6, 2020. This is a Level 1 MPCA Certification Course for parking lots and sidewalks. It is free to attendees, but only two places remain open as of today.

**B. WMWA.\*** The **West Metro Water Alliance** met on Tuesday, February 11, 2020. (Their next meeting is scheduled for 8:30 a.m., Tuesday, March 10, 2020, at Plymouth City Hall. Please check for the location of the meeting room due to building remodeling.)

**1. Watershed PREP and Education and Outreach Events** Educators have confirmed several school visits for the spring semester. Amy Juntunen at JASS ([amy@jass.biz](mailto:amy@jass.biz)) has the up-to-date schedule\* in the event anyone wishes to sit in on a classroom session. It is also included in the meeting packet. A reminder that the educators are available to table at city and school events, contact Juntunen. The educators, working with local cable provider CCX Media, filmed one of their classroom presentations and are preparing a short promotional video for Watershed PREP for use both in marketing to schools in the four watersheds as well as informing other watersheds about the program. The video is still being edited but should be available soon.

**2. Website/Social Media.** Catherine Cesnik, the new WMWA Coordinator, will be refreshing the WMWA website, [westmetrowateralliance.org/](http://westmetrowateralliance.org/), and updating content. Any input is appreciated. In addition, Cesnik has now taken over social media posting duties. She has compiled a list of city contacts and will be reaching out to them over the next few months to better understand how WMWA can be a resource. The WMWA steering committee particularly discussed options to collaborate on the new or enhanced education and outreach requirements in the draft MN NPDES General Permit.

**3.** Cesnik and Juntunen are also continuing to collaborate with Rice Creek WD, Blue Thumb, and other interested parties to coordinate fabrication of a tabletop version of the popular **native plant roots display**.

**VIII. Grant Opportunities and Project Updates.****IX. Other Business.**

**A.** The **projects** listed on the following page are discussed in the February Staff Report.

**B. Adjournment.** There being no further business, the meeting was adjourned at 1:16 p.m.

Respectfully submitted,



Judie A. Anderson  
Recording Secretary  
JAA:tim

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



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Regular Meeting Minutes – February 12, 2020

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s.					2020-004	Elm Road Area Project, Maple Grove.

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



## Elm Creek Watershed Management Commission Treasurer's Report

		2020 Budget	Feb 2020	Mar 2020	2020 Budget YTD
<b>EXPENSES</b>					
Administrative		90,000	10,484.05	7,993.04	18,477.09
Watershed-wide TMDL Admin		300			0.00
Grant Writing		1,000			0.00
Website		3,000	81.25	245.40	326.65
Legal		2,000	31.00		31.00
Audit		5,000			0.00
Insurance		3,900	200.00	3,444.00	3,644.00
Miscellaneous/Contingency		1,000			0.00
Technical Support - HCEE		15,000			0.00
Floodplain Mapping 2019 HCEE			(2,283.66)		0.00
Floodplain Mapping		39,360	532.50	26,051.00	26,051.00
Project Reviews 2019 HCEE		0	10,659.56		0.00
Project Review Technical (Job 300)		185,000		8,354.00	8,354.00
Other Technical (Jobs 100 & 200)			847.00	10,567.00	10,567.00
Project Reviews - Admin		15,000	580.81	734.19	1,315.00
WCA - Technical		3,000	327.00		0.00
WCA - Legal		500			0.00
WCA - Admin		1,000			0.00
Stream Monitoring USGS		24,000			0.00
Stream Monitoring TRPD		7,200			0.00
DO Longitudinal Survey		1,000			0.00
TMDL Follow-up - TRPD		1,000			0.00
Rain Gauge		250	28.43	29.31	57.74
Rain Gauge Network		100			0.00
Lakes Monitoring - CAMP		760			0.00
Lakes Monitoring - TRPD					
Sentinel Lakes		8,100			0.00
Additional Lake		2,500			0.00
Aquatic Vegetation Surveys		1,100			0.00
Wetland Monitoring (WHEP)		4,000	4,000.00		0.00
Education		3,000	20.47	73.47	93.94
WMWA General Activities		5,000		3,000.00	3,000.00
WMWA Educators/Watershed Prep		4,500		2,000.00	2,000.00
WMWA Special Projects		2,000		1,000.00	1,000.00
Rain Garden Workshops/Intensive BMPs		3,000		875.00	875.00
Education Grants		1,000			0.00
Macroinvertebrate Monitoring-River Watch		3,000	3,000.00		0.00
Projects ineligible for ad valorem		0			0.00
Studies / Project ID / SWA		0			0.00
Plan Amendments		2,000			0.00
<i>Transfer to (from) Encumbered Funds (see below)</i>					0.00
<i>Transfer to (from) Capital Projects (see CIP Tr</i>		448,935	1,710.19		0.00
<i>Transfer to (from) Cash Sureties (see below)</i>			586.00	1,765.20	1,765.20
<i>Transfer to (from) Grants (see below)</i>		125,000	-	-	0.00
<i>To Fund Balance</i>					0.00
<b>TOTAL - Month</b>			<b>30,804.60</b>	<b>66,131.61</b>	<b>77,557.62</b>
<b>TOTAL Paid in 2020, incl late 2019 Expenses</b>		<b>1,012,505.00</b>	<b>132,069.33</b>	<b>198,200.94</b>	<b>2020 Paid</b>
			<b>2019 Activity</b>		

# Elm Creek Watershed Management Commission Treasurer's Report

		2020 Budget	Feb 2020	Mar 2020	2020 Budget YTD
<b>INCOME</b>					
<i>From Fund Balance</i>					
Floodplain Modeling		39,360			
Project Review Fee		80,000	5,775.00		19,175.00
Return Project Fee					0.00
Water Monitoring - TRPD Co-op Agmt		5,500	5,000.00		0.00
WCA Fees		0			0.00
Return WCA Fee					0.00
Reimbursement for WCA Expense					0.00
WCA Escrow Earned					0.00
Member Dues		237,300	25,629.62		237,300.00
Interest/Dividends Earned		8,250	1,472.84		2,937.86
<i>Transfer to (from) Capital Projects (see CIP Tr</i>		448,935			0.00
<i>Transfer to (from) Cash Sureties (see below)</i>			-		
<i>Transfer to (from) Grants (see below)</i>		100,000	-	-	0.00
Misc Income					0.00
<b>Total - Month</b>			37,877.46	0.00	259,412.86
<b>TOTAL Rec'd 2020, incl late 2019 Income</b>		919,345.00	287,996.26	287,996.26	2020 Received
<b>CASH SUMMARY</b>		Balance Fwd			
Checking		0.00			
4M Fund		1,263,863.98	1,419,790.91	1,353,659.30	
<b>Cash on Hand</b>			1,419,790.91	1,353,659.30	
<b>CASH SURETIES HELD</b>		Balance Fwd			Activity 2020
WCA Escrows Received		11,494.47			0.00
WCA Escrow Reduced			586.00	1,765.20	2,351.20
<b>Total Cash Sureties Held</b>		11,494.47	10,908.47	9,143.27	
<b>RESTRICTED / ENCUMBERED FUNDS</b>		Balance Fwd			
<i>Restricted for CIPs</i>					0.00
<i>Enc. Studies / Project Identification / SWA</i>					0.00
<b>Total Restricted / Encumbered Funds</b>		0	0.00	0.00	
			2019 Activity		
			Feb 2020	Mar 2020	2020 Budget YTD
<b>GRANTS</b>					
<b>Fish Lake CWLA</b>					
Revenue					-
Expense					-
Balance			-	-	-
<b>Rush Creek SWA</b>					
Revenue					-
Expense					-
Balance			-	-	-
<b>BWSR Watershed-based Funding</b>					
Revenue					-
Expense					-
Balance			-	-	-
<b>TOTAL GRANTS</b>					
Revenue			-	-	-
Expense			-	-	-
Balance			-	-	-

## Elm Creek Watershed Management Commission Treasurer's Report

Claims Presented		General Ledger Account No	February	March	TOTAL
Campbell Knutson - Legal		521000			0.00
Connexus - Rain Gauge		551100		29.31	29.31
Barr Engineering					46,647.50
Floodplain Mapping		580440		26,051.00	
Project Review Technical (Job 300)		578050		8,354.00	
Other Technical (Jobs 100 & 200)		578050		10,567.00	
Ravinia Wetland Mitigation		240201		1,675.50	
Blue Thumb-Champlin Workshop Pmt 1		590002		875.00	875.00
League of MN Cities					3,444.00
LMC - Property, Liability Insurance		513000		3,444.00	
Shingle Creek WMO - WMWA					6,000.00
2020 WMWA General Expense		590001		3,000.00	
2020 WMWA Watershed PREP		590001		2,000.00	
2020 WMWA Special Projects		590001		1,000.00	
JASS					9,135.80
Administration		511000		7,350.64	
TAC Support		511000			
Annual Report		511000		642.40	
Website		581000		245.40	
Project Reviews		578100		734.19	
WCA		579000			
WCA Reimbursable Ravinia		240201		89.70	
Plan Amendment		541500			
Education		590000		73.47	
<b>TOTAL CLAIMS</b>					<b>66,131.61</b>



**Account Number:**  
**481113-238425**

item 02a

ELM CREEK WATERSHED MGMT ORG

## Monthly Statement

**Service Address**  
ELM CREEK RD  
DAYTON MN

### Billing Summary

Billing Date: Feb 17, 2020

Previous Balance	\$28.43
Payments - Thank You!	\$28.43
<b>Balance Forward</b>	<b>\$0.00</b>
<b>New Charges</b>	<b>\$29.31</b>

**Total Amount Due** **\$29.31**  
Payment must be received on or before March 13, 2020

Total Amount Due

\$29.31

Due Date

March 13, 2020

### Message Center

#### FREE, FREE is back

What's better than free? Free, Free. For a limited time, we are offering free Honeywell wi-fi thermostats and free installation. To qualify, you need to enroll in our Wi-Fi PowerNap® Air Conditioning program. Get all the details at [connexusenergy.com](http://connexusenergy.com).

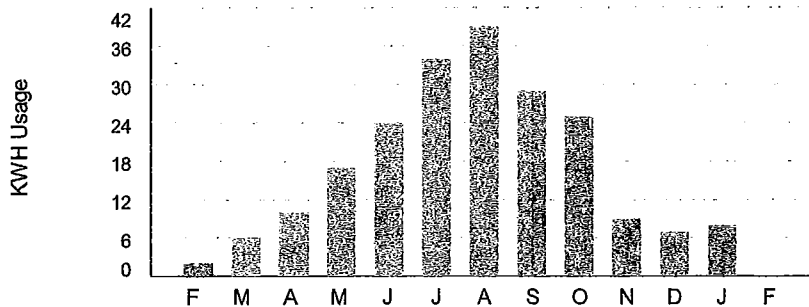
#### Connexus Annual Meeting

Save the date. Members are invited to attend our Annual Meeting on April 16. The meeting starts at 4 p.m. and will be held at Connexus Energy.

### Energy Comparison

Previous Months' Usage

Current Month's Usage



### How to contact us

Member Services / Moving - 763-323-2650  
Outages and Emergencies - 763-323-2660  
Hearing/Speech Impaired Call - 711 or 800-627-3529  
Email: [info@connexusenergy.com](mailto:info@connexusenergy.com)  
[www.connexusenergy.com](http://www.connexusenergy.com)  
Gopher State One Call - 811  
14601 Ramsey Boulevard, Ramsey, MN 55303

▼ Please detach at perforation and return this portion with a check or money order made payable to Connexus Energy ▼

TRA3-D-000146/000301 AGXXWM S1-ET-M1-C00001 1



Account Number:

481113-238425

Total Amount Due

\$29.31

Payment Due By

March 13, 2020



000146 1 MB 0.436 000146/000146/000301 002 02 AGXXWM  
ELM CREEK WATERSHED MGMT ORG  
3235 FERNBROOK LN N  
PLYMOUTH MN 55447-5325



Connexus Energy

PO Box 1808  
Minneapolis, MN 55480-1808

00002931 0004811130238425 000000 00000 000000000000 0000003



# INVOICE

Barr Engineering Co.  
 4300 MarketPointe Drive, Suite 200  
 Minneapolis, MN 55435  
 Phone: 952-832-2600; Fax: 952-832-2601  
 FEIN #: 41-0905995 Inc: 1966

Ms. Judie Anderson  
 Elm Creek Watershed Management  
 10801 Wayzata Boulevard  
 Minnetonka, MN 55305

February 28, 2020

Invoice No: 23271759.00 - 3

<b>Total this Invoice</b>	<b>\$26,051.00</b>
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## Regarding: Elm Creek Floodplain Mapping

This invoice is for professional services, which include the following:

- Subwatershed delineation and determination of hydrologic parameters
- Preparation of HEC-HMS hydrology model
- Documentation of model assumptions and identification of preliminary survey needs
- Calibration of the HEC-HMS model

Total Contract Budget	Total Prior Billing	Billing this Invoice	Total Billing to Date	Budget Remaining
\$90,945.00	\$1,973.50	\$26,051.00	\$28,024.50	\$62,920.50

## Professional Services from December 28, 2019 to February 21, 2020

Job: 100 Meetings

### Labor Charges

	Hours	Rate	Amount	
Principal				
Campeau, Nathan	.60	170.00	102.00	
Engineer / Scientist / Specialist III				
Weiss, Jeffrey	.50	140.00	70.00	
Engineer / Scientist / Specialist II				
Hlavaty, Heather	3.80	110.00	418.00	
Support Personnel II				
Nypan, Nyssa	.50	95.00	47.50	
	5.40		637.50	
<b>Subtotal Labor</b>				<b>637.50</b>
				<b>Job Subtotal</b>
				<b>\$637.50</b>

Job: 200 Data Collection and Organization

### Labor Charges

	Hours	Rate	Amount	
Principal				
Campeau, Nathan	.40	170.00	68.00	
Engineer / Scientist / Specialist II				
Hlavaty, Heather	2.60	110.00	286.00	
	3.00		354.00	
<b>Subtotal Labor</b>				<b>354.00</b>

PLEASE REMIT TO ABOVE ADDRESS and INCLUDE INVOICE NUMBER ON CHECK.

Terms: Due upon receipt. 1 1/2% per month after 30 days. Please refer to the contract if other terms apply.

	<b>Job Subtotal</b>	<b>\$354.00</b>
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Job: 400 Hydrologic Analysis

**Labor Charges**

	Hours	Rate	Amount	
Engineer / Scientist / Specialist IV				
Waln, Joseph	3.70	155.00	573.50	
Engineer / Scientist / Specialist III				
Fransen, Greg	9.20	130.00	1,196.00	
Engineer / Scientist / Specialist II				
Hlavaty, Heather	2.40	110.00	264.00	
Mullen, Ross	.90	120.00	108.00	
Vecchi, Anthony	197.50	100.00	19,750.00	
Engineer / Scientist / Specialist I				
Anderson, Edward	35.20	90.00	3,168.00	
	248.90		25,059.50	
<b>Subtotal Labor</b>				<b>25,059.50</b>
		<b>Job Subtotal</b>		<b>\$25,059.50</b>
		<b>Total this Invoice</b>		<b>\$26,051.00</b>

	Current	Prior	Total	Received	A/R Balance
<b>Invoiced to Date</b>	<b>26,051.00</b>	<b>1,973.50</b>	<b>28,024.50</b>	<b>532.50</b>	<b>27,492.00</b>

**Outstanding Invoices**

Invoice	Date	Balance
1	12/20/2019	1,441.00
<b>Total</b>		<b>1,441.00</b>

Thank you in advance for your prompt processing of this invoice. If you have any questions, please contact Heather Hlavaty, your Barr project manager at 952.842.3613 or email at [hhlavaty@barr.com](mailto:hhlavaty@barr.com).



# INVOICE

Barr Engineering Co.  
 4300 MarketPointe Drive, Suite 200  
 Minneapolis, MN 55435  
 Phone: 952-832-2600; Fax: 952-832-2601  
 FEIN #: 41-0905995 Inc: 1966

Ms. Judie Anderson  
 Elm Creek Watershed Management  
 10801 Wayzata Boulevard  
 Minnetonka, MN 55305

February 28, 2020  
 Invoice No: 23270F55.20 - 1

<b>Total this Invoice</b>	<b>\$18,921.00</b>
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**Regarding: Review of development permits for compliance with the Elm Creek Watershed Management Plan**

This invoice is for professional services, which include the following:

**Job 100 - Technical Services**

- TAC and WMC meeting preparation and attendance
- Pre-Project Review
- General administrative tasks (invoicing, project setup)

**Job 200 – Other Assistance**

- MTDs - coordination with administrator

**Job 300 – Project Reviews**

- 2018-033 Cloquet Island Estates
- 2019-026 Interstate Power Systems
- 2020-003 Palisades at Nottingham
- 2020-004 Elm Road Area

**Professional Services from December 28, 2019 to February 21, 2020**

Job: 100 Technical Services

**Labor Charges**

	Hours	Rate	Amount
Principal			
Herbert, James	19.10	200.00	3,820.00
Engineer / Scientist / Specialist IV			
Waln, Joseph	11.70	155.00	1,813.50
Engineer / Scientist / Specialist III			
Weiss, Jeffrey	8.50	140.00	1,190.00
Support Personnel II			
Nypan, Nyssa	1.80	95.00	171.00
	41.10		6,994.50
<b>Subtotal Labor</b>			<b>6,994.50</b>

**Subconsultant Charges**

Subconsultants	Surface Water Solutions	3,272.50
<b>Subtotal Subconsultant</b>		<b>3,272.50</b>

PLEASE REMIT TO ABOVE ADDRESS and INCLUDE INVOICE NUMBER ON CHECK.

Terms: Due upon receipt. 1 1/2% per month after 30 days. Please refer to the contract if other terms apply.



			<b>Job Subtotal</b>	<b>\$10,267.00</b>
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Job:	200	Other Assistance
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Task:	001	MTDs
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**Labor Charges**

	Hours	Rate	Amount	
Principal				
Herbert, James	1.50	200.00	300.00	
	1.50		300.00	
<b>Subtotal Labor</b>				<b>300.00</b>
			<b>Task Subtotal</b>	<b>\$300.00</b>
			<b>Job Subtotal</b>	<b>\$300.00</b>

Job:	300	Project Reviews
------	-----	-----------------

**Labor Charges**

	Hours	Rate	Amount	
Engineer / Scientist / Specialist IV				
Waln, Joseph	6.30	155.00	976.50	
Engineer / Scientist / Specialist III				
Weiss, Jeffrey	8.50	140.00	1,190.00	
	14.80		2,166.50	
<b>Subtotal Labor</b>				<b>2,166.50</b>

**Subconsultant Charges**

Subconsultants	Surface Water Solutions	6,187.50	
<b>Subtotal Subconsultant</b>			<b>6,187.50</b>
		<b>Job Subtotal</b>	<b>\$8,354.00</b>
		<b>Total this Invoice</b>	<b>\$18,921.00</b>

	Current	Prior	Total	Received	A/R Balance
<b>Invoiced to Date</b>	<b>18,921.00</b>	<b>0.00</b>	<b>18,921.00</b>	<b>0.00</b>	<b>18,921.00</b>

Thank you in advance for the prompt processing of this invoice. If you have any questions, please contact Joe Waln, your Barr project manager at 952.832.2984 or email at [jwaln@barr.com](mailto:jwaln@barr.com).



# INVOICE

Barr Engineering Co.  
 4300 MarketPointe Drive, Suite 200  
 Minneapolis, MN 55435  
 Phone: 952-832-2600; Fax: 952-832-2601  
 FEIN #: 41-0905995 Inc: 1966

Ms. Judie Anderson  
 Elm Creek Watershed Management  
 JASS-Watershed Administrators  
 3235 Fernbrook Lane  
 Plymouth, MN 55447

February 28, 2020

Invoice No: 23270F55.05 - 18

<b>Total this Invoice</b>	<b>\$1,675.50</b>
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## Regarding: Elm Creek Wetland Mitigation Monitoring

This invoice is for professional services related to Elm Creek Wetland Mitigation Monitoring project, which included the following tasks:

### Job 001 – Ravinia Wetland Mitigation

Task 003 –2019 Monitoring and Report

- Data management and reporting

### Professional Services from December 28, 2019 to February 21, 2020

Job:	001	Ravinia Wetland Mitigation
Task:	003	2019 Monitoring and Report

### Labor Charges

	Hours	Rate	Amount	
Engineer / Scientist / Specialist II				
Burgner, Brian	14.80	110.00	1,628.00	
Support Personnel II				
Nypan, Nyssa	.50	95.00	47.50	
	15.30		1,675.50	
<b>Subtotal Labor</b>				<b>1,675.50</b>
		<b>Task Subtotal</b>		<b>\$1,675.50</b>
		<b>Job Subtotal</b>		<b>\$1,675.50</b>
		<b>Total this Invoice</b>		<b>\$1,675.50</b>

	Current	Prior	Total	Received	A/R Balance
<b>Invoiced to Date</b>	<b>1,675.50</b>	<b>18,843.25</b>	<b>20,518.75</b>	<b>18,843.25</b>	<b>1,675.50</b>

Thank you in advance for the prompt processing of this invoice. If you have any questions, please contact Joe Waln, your Barr project manager at 952.832.2984 or email at [jwaln@barr.com](mailto:jwaln@barr.com).



Blue Thumb — Planting for Clean Water  
 (coordinated by Metro Blooms)  
 310 East 38<sup>th</sup> Street, Room 320  
 PO Box 17099,  
 Minneapolis, MN 55417  
 651-699-2426  
[bluethumb.org](http://bluethumb.org), [metroblooms.org](http://metroblooms.org)

## EDUCATIONAL SERVICES PROPOSAL

Issue Date: February 26, 2020

This Proposal is made as of the signed date below, between the West Mississippi and Elm Creek Watershed Management Commissions and Metro Blooms for Educational Program Services.

### CLIENT CONTACT INFORMATION

Judie Anderson, [judie@jass.biz](mailto:judie@jass.biz), West Mississippi and Elm Creek WMC  
 Roberta Colotti, [rcolotti@ci.champlin.mn.us](mailto:rcolotti@ci.champlin.mn.us); City of Champlin  
 Todd Tuominen, [ttuominen@ci.champlin.mn.us](mailto:ttuominen@ci.champlin.mn.us), City of Champlin

### METRO BLOOMS CONTACT INFORMATION

Director of Education: John Bly, [john@metroblooms.org](mailto:john@metroblooms.org), 612-314-3450

## SCOPE OF SERVICES

### Task 1 – Program Administration + Marketing **Cost: \$1,200**

(20 hours @ \$60/hour)

- Schedule and coordinate workshops, including location, logistics, Landscape Designers, Master Gardeners, and Master Water Stewards
- Set up and facilitate registration through [bluethumb.org](http://bluethumb.org) website and via phone
- Confirmation, reminder and follow up emails to participants, including “homework” prior to presentation
- Evaluation and reporting to City
- Creation and distribution of promotional materials, including press releases, social media, website promotions, and flyers if desired

### Task 2 – Workshop Presentation **Cost: \$1,900**

(20 hours @ \$95/hour)

- Prepare, update and present Resilient Yard Workshop, including Lawns to Legumes program and grant information in 2020.
- Workshop is an overview of sustainable landscape practices that contribute to a resilient yard, including raingardens, turf alternatives for clean water and habitat, trees, and native plantings. Focus on raingardens as the practice with the highest cost benefit.
- Following presentation, participants meet 1:1 with a Landscape Designer, Master Gardener, and/or Master Water Steward to discuss their site. Strive for 4:1 participant to designer ratio.

*Promoting gardens and recognizing gardeners who beautify our city landscape and heal and protect our environment, since 1983.*

Grow.Bloom.Inspire!

**Educational Materials****Cost: \$400**

(50 packets @ \$8/packet)

- Blue Thumb educational materials on Lawns to Legumes content, climate resilient yards, alternative turf, healthy soils, raingarden installation, trees and shrubs, plant selection and install/maintenance resources.
- Workshop supplies include graph paper, pencils, drawing materials, and access to Blue Thumb Guide to Raingardens and Sustainable Landcare Weed ID field guide at workshops.
- Education materials are distributed to all workshop participants at the workshop.

**Blue Thumb Partnership****\$1,000 value included in cost of workshop**

(2020 Partner Fee)

- Blue Thumb referral network, shared educational resources, promotions through bluethumb.org and blue thumb social media, and quarterly partner events
- Includes City of Champlin and Elm Creek/West Mississippi WMO fees

**Total Compensation****Cost: \$3500**

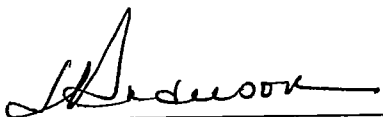
50% payment due upon agreement, with remaining 50% due upon completion.

**Schedule**

Metro Blooms will begin providing services for this project upon signature of this agreement, for the abovementioned workshops intended to be scheduled between February 10 and April 30, 2020.

**Client's Responsibilities**

- The Client shall work with Metro Blooms to schedule the workshops, reserve the space, ensure a screen or blank wall to project a presentation on, and notify Metro Blooms if a projector and/or screen is required.
- The Client shall assist with workshop promotions, including if applicable, newsletters, website, and social media.



Client Signature

02-27-2020

Date

Elm Creek \$875  
West Miss \$875

**CONNECTING & INNOVATING**  
SINCE 1913**Invoice**

Page 1 of 3

**Member Name and Address**

Elm Creek Watershed  
Management Commission  
3235 Fernbrook Lane North  
Plymouth, MN 55447-5325

**Invoice Date**

02/26/2020

**Agent**

Arthur J Gallagher Risk Management Services Inc  
3600 American Blvd W Ste 500  
Bloomington, MN 55431-4502  
(952)358-7500

**Account Number:** 10002968  
**Account Type** Property/Casualty Coverage Premium  
**Current Balance:** \$ 3,444.00  
**Minimum Due:** \$ 3,444.00  
**Due Date:** 04/10/2020

Summary of activity since last Billing Invoice	Date	Activity	Account Balance	Minimum Due
		Previous Invoice Balance	2,665.00	
		Payments Received	-.00	
		Total of Transactions and Fees shown on reverse or attached	3,444.00	
See reverse side and attachments for additional information		Current Balance	\$ 3,444.00	\$ 3,444.00

Detach and return this Payment Coupon with your payment	Account Number	Invoice Date	Due Date	Current Balance	Minimum Due
	10002968	02/26/2020	04/10/2020	\$ 3,444.00	3,444.00
					Amount Enclosed
				\$	

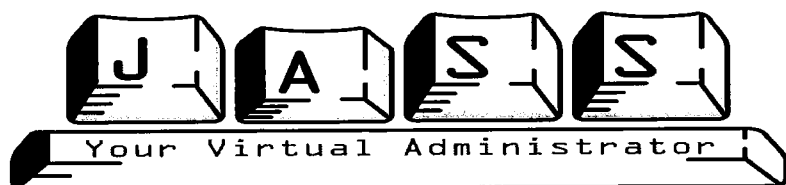
**Member Name** Elm Creek Watershed Management Commission

**BILLING INVOICE - Return stub with payment - make checks payable to:**

Mail payment  
7 days before  
Due Date to  
ensure timely  
receipt

League of MN Cities Insurance Trust P&C  
c/o Berkley Risk Administrators Company  
222 South Ninth Street, Suite 2700  
P.O. Box 581517  
Minneapolis, MN 55458-1517





3235 Fernbrook Lane  
Plymouth MN 55447

Elm Creek Watershed Management Commission  
3235 Fernbrook Lane  
Plymouth, MN 55447

5-Mar-20

Total by  
Project Area

Administrative	4.51	60.00	270.60	
Administrative	63.35	65.00	4,117.75	
Admin - Offsite	4.55	70.00	318.50	
Office Support	10.00	200.00	2,000.00	
Storage Unit	1.00	134.42	134.42	
Data Processing/File Mgmt	0.25	60.00	15.00	
File Management	1.59	60.00	95.40	
Archiving		60.00	0.00	
Admin - Reimbursable Expense	398.97	1.00	398.97	7,350.640
Admin - TAC support		60.00	0.00	
Admin - TAC support		65.00	0.00	
Admin - TAC support offsite		70.00	0.00	
TAC Support - Reimbursable Expense		1.00	0.00	0.000
Website	2.92	60.00	175.20	
Website	1.08	65.00	70.20	
Website - Reimbursable Expense		1.00	0.00	
Web Domain, hosting		1.00	0.00	245.400
Annual Reporting/Work Plans		60.00	0.00	
Annual Reporting/Work Plans	9.46	65.00	614.90	
Annual Reporting - Reimbursable Expense	27.50	1.00	27.50	642.400
Project Reviews - Secre		60.00	0.00	
Project Reviews - Admin	6.59	65.00	428.35	
Project Reviews - Admin offsite		70.00	0.00	
Project Reviews - Admin - File Mgmt		55.00	0.00	
Project Reviews - Reimbursable Expense	305.84	1.00	305.84	734.190
WCA - Secre		60.00	0.00	
WCA - Admin <b>RAVINIA</b>	1.38	65.00	89.70	
WCA - Reimbursable Expense		1.00	0.00	89.700
WCA - Secre - reimbursable		55.00	0.00	
WCA - Admin - reimbursable Mayers		60.00	0.00	
WCA - Reimbursable Expense -Mayers		1.00	0.00	0.000
Education - Secretarial		60.00	0.00	
Education - Admin		65.00	0.00	
Education - Admin Offsite - Blue Thumb Partner Event	0.75	70.00	52.50	
Education - Reimbursable Expense	20.97	1.00	20.97	73.470

Invoice Total

9,135.800



**From:** Nick Pederson <pederson.nick@gmail.com>  
**Sent:** Wednesday, March 04, 2020 7:26 PM  
**To:** Judie Anderson <Judie@jass.biz>  
**Subject:** Teal Lake Participation and Sponsorship request for CAMP funding

Hi Judie,

Here is our write up as requested. A number of us will be at the meeting next week.

---

The Teal Lake Conservation Association is interested in participating in the Metropolitan Council's Citizen-Assisted Monitoring Program (CAMP) to assess the water quality conditions of Teal Lake and is reaching out to Elm Creek Watershed Management Commission to request sponsorship.

Teal Lake is located just south of the intersection of Elm Creek Boulevard and County Road 81. The water surface area is approximately 9.6 acres and the waterbody's maximum depth is approximately 13 feet. The water level of the lake is controlled mainly by weather conditions (snowmelt, rainfall, and evaporation) and by the outlet structure located in the northwest corner of the lake. From the outlet structure, storm sewer conveys flows from Teal Lake to a nearby stormwater pond, which ultimately flows to Elm Creek.

In October 2019, the Teal Lake Conservation Association held a group meeting to discuss the community's concerns related to the water quality of Teal Lake. The thirteen members present at the meeting discussed their personal observations of lake health throughout various lengths of time living on the lake (44 residential homes are located around the lake). Overall, the general consensus was that lake productivity has increased over the years with a higher prevalence of "weeds" and that fish kills appear to occur more frequently. The group discussed their initial long-term goals for Teal Lake, which include:

- Reducing nutrient inputs to the lake to limit productivity (e.g., filamentous algae) and promote a healthy aquatic ecosystem
- Vegetation management to remove aquatic invasive species (e.g., curly-leaf pondweed)
- Promoting a healthy fishery
- Promoting environmental education and engaging homeowners in the watershed to participate in monitoring and addressing water quality concerns

In order to achieve these long-term goals, the group understands the importance of obtaining water quality monitoring data to inform which management efforts will be effective in establishing a healthy ecosystem. The Association recently discovered the CAMP program and thinks that this program could be an exceptional way to get members directly involved in promoting lake health and provide our group, which has limited funds, with the opportunity to develop a water quality baseline for our lake. The Association is also hoping that the Elm Creek Watershed Management Commission will find the Teal Lake water quality data helpful in understanding stormwater loading to Elm Creek.

Thank you for your help and looking forward to meeting the larger group next week.

Best,

Nick Pederson  
612.965.1144  
Teal Lake Resident:  
9456 Rosewood Ln N  
Maple Grove, MN 55369

## U.S. Geological Survey

In Cooperation with  
The Elm Creek Watershed Management Commission

## Summary of Data Program for 2020 Fiscal Year (October 1, 2019 through September 30, 2020)

The U.S. Geological Survey will operate a streamgage for computation of streamflow, and collect and analyze water-quality samples manually and by automated sampler. Provisional and approved data will be published at [http://waterdata.usgs.gov/mn/nwis/nwisman/?site\\_no=05287890](http://waterdata.usgs.gov/mn/nwis/nwisman/?site_no=05287890).

Streamflow computation

A streamgage will be maintained and operated. Discharge measurements will be made to define changes to the stage-discharge relation over the range of flows that occur in order to compute an accurate record of streamflow.

Manual samples

Twelve manual samples will be collected using USGS protocols to obtain samples representative of the stream cross section. Samples will be collected approximately monthly to represent the variations in hydrologic conditions that occur during the year. Physical measurements and laboratory analyses of chemicals to be determined are listed in Table 1.

Automatic samples

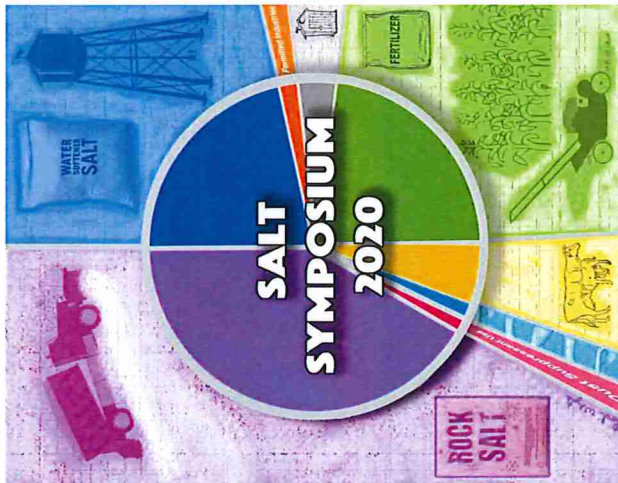
A refrigerated automatic sampler will be used to collect 8 composited samples of runoff events. Composite samples will be discharge-weighted and collected during increasing or peak streamflow, when many selected concentrations are expected to be greatest. Samples will be analyzed for the same constituents as manual samples (table 1), excluding volatile suspended solids, water temperature, and dissolved oxygen. Automated sampling will focus on spring-snowmelt (after ground frost and sampler line thaw), and on rainfall runoff, when much of the annual load of many constituents are transported. To minimize nutrient degradation, samples will be processed within 48-72 hours of initial sample collection. The rising limb of hydrographs can exceed 72 hours at Elm Creek, so samples from such rises may be split to minimize nutrient degradation. Consequently, 8 samples may be analyzed in less than 8 runoff events. **If there are opportunities to sample more events, additional auto-samples may be authorized by ECWMC with an amended agreement at a cost of \$1,280 per composite sample.** One quality-assurance sample will be collected to assess cleaning techniques or analytical replication. Program costs are shown in Table 2.

Table 1. Laboratory analyses and physical measurements to be determined at Elm Creek near Champlin, MN

Laboratory Analyses	
Nutrients	Chemical oxygen demand
Total phosphorus	Dissolved chloride
Dissolved phosphorus	
Total ammonia plus organic nitrogen	Physical Measurements
Dissolved ammonia nitrogen	Water temperature (excluding auto-samples)
Dissolved nitrite plus nitrate nitrogen	Specific conductance
Total suspended solids	pH
Volatile suspended solids (excluding auto-samples)	Dissolved oxygen (excluding auto-samples)

Table 2. Program for Federal Fiscal Year 2020

Activity	Total Cost	ECWMC Share	USGS Share
Gaging-station operation, maintenance and daily discharge computation	\$16,840	\$8,820	\$8,020
Water-quality sampling and chemical analyses	\$22,840	\$12,120	\$10,720
<b>TOTAL Fiscal Year 2020</b>	<b>\$39,680</b>	<b>\$20,940</b>	<b>\$18,740</b>



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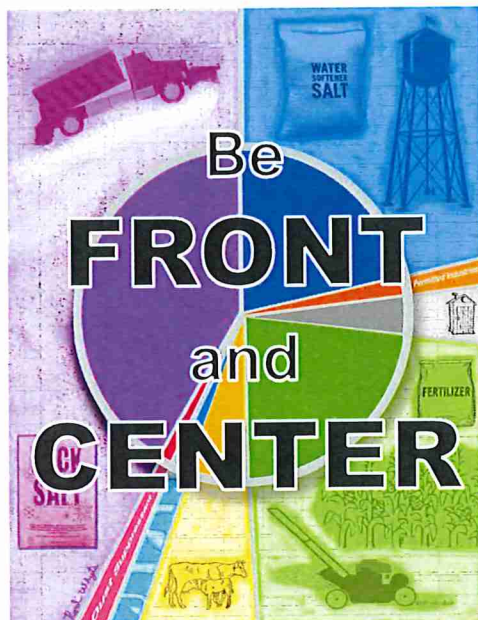
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# elm creek

## Watershed Management Commission

z:\Elm Creek\Work Plans\2020 Projected Work Plan March 3.doc

### PROJECTED 2020 WORK PLAN

Minnesota Rule 8410.0150 requires the Commission to submit to the Board of Water and Soil Resources a financial report, activity report and audit report for the preceding fiscal year. 8410.0150 Subp. 3 outlines the required content of the annual activity report. It includes an assessment of the previous year's annual work plan and development of a projected work plan for the following year.

The Commission's Third Generation Watershed Management Plan identifies issues, priorities and goals for the ten-year period 2015-2024.

1. Continue to review local development/redevelopment plans for conformance with the standards outlined in the Commission's Third Generation Watershed Management Plan. *Review the current project review fee schedule for fiscal conformity*
2. Continue to partner with the Three Rivers Park District (TRPD) to share in the costs of conducting lake and stream monitoring in the watershed. Under a five-year cooperative agreement approved in 2018 TRPD will be responsible for monitoring three of twelve sampling stations every year for continuous flow and monitor water quality nutrient data upon request from the Commission. TRPD will also be responsible for monitoring four of fifteen lakes in the Elm Creek watershed annually plus other specific lakes that have been approved for monitoring by the Commission. In addition, under the cooperative agreement, the Commission and the Park District will provide financial support to assist the monitoring efforts of the USGS stream gauging station on Elm Creek within the Elm Creek Park Reserve.
3. Fund the monitoring of one lake through Metropolitan Council's Citizen Assisted Monitoring Program (CAMP).
4. Continue to operate the monitoring station in Champlin in cooperation with the United States Geological Survey (USGS).
5. Promote river stewardship through Hennepin County's RiverWatch program with three sites in 2020.
6. Participate in the MN Wetland Health Evaluation Program (WHEP) with four wetlands in 2020.
7. Conduct the biennial solicitation of interest proposals for administrative, legal, technical and wetland consultants. *This process will be repeated in 2021.*
8. Continue as a member of the West Metro Water Alliance (WMWA).
9. Promote "Lawns to Legumes," a program for residents to seed their lawns with a bee lawn mix, targeting habitat for the Rusty-patched bumblebee, an endangered species. The Board of Water and Soil Resources (BWSR) will run the program with funding coming to Hennepin County serving as a Conservation District.
10. Sponsor Rain Garden Workshops as part of the Commission's Education and Public Outreach Program. The workshops are presented by Metro Blooms. *Champlin will host a Resilient Yard Workshop including the Lawns to Legumes program in 2020.*
11. Continue as a member of Blue Thumb and WaterShed Partners and a partner in the NEMO (Nonpoint Education for Municipal Officials) program.

12. Continue to work in partnership with the University of Minnesota's agriculture specialist to help build relationships with the agricultural community in the watershed in order to achieve TMDL load reductions.
13. Work with the Hennepin County Rural Conservation Specialist. Assist landowners in identifying BMPs for implementation throughout the watershed. Work with member cities to identify projects that will result in TMDL load reductions.
14. Send call out to member cities, requesting them to provide updates to the projects already included on the Commission's Capital Improvement Program (CIP) as well as inform the Commission of new projects that they would like to have considered for inclusion on the CIP. Hold public meeting, adopt amendment to the Third Generation Watershed Management Plan, conduct public hearing, and certify levy to Hennepin County. (See 15, below.)
15. Undertake high priority projects identified in the Rush Creek Headwaters Subwatershed Assessment. *2020 proposed activity could include grassed waterways, alternate/closed tile intakes, manure management projects, grazing plans and exclusion fencing.*
16. Continue to support City-sponsored projects using the ad valorem funding mechanism. Conduct public hearing for identified projects.
17. Adopt a 2021 operating budget.
18. Continue to populate and maintain the Commission's website [www.elmcreekwatershed.org](http://www.elmcreekwatershed.org) to provide news to residents, students, developers and other individuals interested in the water resources of the watershed.
19. Publish an annual activity report summarizing the Commission's yearly activities and financial reporting.
20. For the 2020-2021 biennium of the Watershed-Based funding program BWSR decided to allocate the funds based on major watershed divides. Elm Creek is in the Mississippi West Major Watershed (MWW) which will be allocated \$874,153. A partnership must be developed consisting of at least one representative from each watershed district, watershed management organization, soil and water conservation district, county and at least two municipalities within the MWW. The partnership will coordinate development of a watershed-based budget for submittal to BWSR for approval. Funds become available July 1, 2020. Grants from these funds expire December 31, 2023
21. Continue to update the Special Flood Hazard Areas on the FEMA Floodplain maps located within the watershed into current modeling packages. The total budget for this project in Elm Creek is \$92,772.45 and does not require a local match. The term of the contract extends into the year 2020.
22. Support the City of Maple Grove and its partners as they undertake a subwatershed assessment for Weaver Lake.
23. Support the City of Corcoran and its partners as they undertake a subwatershed assessment for the South Fork of Rush Creek. A small portion of the South Fork also flows through the cities of Maple Grove and Medina.
24. Support the City of Dayton and its partners to continue efforts for completion of the Diamond Lake subwatershed assessment.
25. Minnesota's New Buffer Initiative requires public waters in the state - lakes, rivers and streams - to be surrounded by vegetated buffers 50-feet wide (on average) and public ditches to have 16.5-foot wide buffers as well. *Buffer review will be completed for Champlin, Dayton, Maple Grove, and Plymouth in 2020.*



# elm creek

## Watershed Management Commission

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### STAFF REPORT

March 4, 2020

- a. 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. Two warehouse buildings with associated parking and loading facilities are proposed. 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 in 2019. *Because of the lack of activity this project was denied at the February 12, 2020 meeting and will be removed from the report.*
- b. 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. 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 this future development. In November 2016 the Commission approved the project with six conditions. Three conditions remain outstanding and are expected to be addressed during final design: 4) an O&M Plan for the pond and biofiltration basin must be 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. Staff has discussed the project with the City and been in contact with the project engineer to receive an update. *Because of the lack of activity this project was denied at the February 12, 2020 meeting and will be removed from the report.*
- c. 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 the City. The applicant requested and was granted an extension of the deadline per MN statute 15.99 to December 31, 2019. A new layout and project application were submitted to Maple Grove in January 2019 and the project is still considered active by the City. Staff extended the deadline on this project to December 31, 2020.
- d. 2017-050W Ernie Mayers Wetland/floodplain violation, Corcoran.** The City of Corcoran contacted the Commission in December 2017 concerning drainage complaints on Mayers' property. Technical Evaluation Panels (TEPs) were held in 2017 and 2018 to assess the nature and extent of the violations and a restoration order was issued to Mayers. On October 30, 2018, an appeal of the restoration order was received by BWSR. BWSR issued an order of abeyance (stay) on the appeal until April 1, 2019. An application for a replacement plan was received from Mayers on January 29, 2019. It addresses the wetland fill (4:1 replacement request) and drain tile (disable existing tile) impacts, but requests additional time to

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submit an application to address the ditch (WCA jurisdiction) and floodplain (Commission jurisdiction) impacts. A TEP was held February 28, 2019 to address the replacement plan and provide guidance to the LGU. The City of Corcoran assumed WCA LGU responsibilities for this project March 1, 2019. Corcoran and BWSR have extended the decision process until July 30, 2019. An updated replacement plan was received by the City of Corcoran on July 24, 2019. A TEP was held on August 13 to discuss the plan. Corcoran extended the deadline for their decision to November 21, 2019. A new no-loss and replacement plan was received by the LGU on November 14, 2019. The TEP recommended and the LGU denied the application. Mayers appealed the decision. A TEP was held on January 30, 2020 to discuss possible resolutions to the appeal. *As of this update, no solution has been obtained.*

**e. 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 construction of seven new mini-storage buildings. At their July meeting the Commission approved Staff findings dated July 9, 2018, pending four items relating to abstraction requirements and the infiltration system. *The applicant requested and was granted an extension to December 31, 2020, provided the review process with the City of Rogers does not expire.*

**f. 2018-046 Graco Expansion, Rogers.** This project is the expansion of an existing building. The site is located in an area that has regional ponding provided for rate control purposes, but needs to account for water quality and abstraction requirements on site prior to discharging offsite as part of the improvements. The Commission granted conditional approval at their October meeting. Conditions of approval were to submit a SWPPP plan meeting requirements, clarify maintenance responsibilities for the iron enhanced sand filter, and a letter from the City of Rogers stating their intentions to provide the water quality deficit in an upcoming project. Staff confirmed several minor plan revisions remain in conformance with the original approval. This item will remain on the Staff report until such time as the water quality deficit has been made up.

**g. 2019-024 Boston Scientific Weaver Lake Road, Building 2 East Addition, Maple Grove.** Boston Scientific is building an addition on the east side of Building 2 to provide more production and office space for their existing facility. The project includes moving the existing service drive and site utilities on the east side of Building 2 to the east within the BS property to create space for the building addition. About 1.9 acres of the site will be disturbed and 1.06 acres of impervious surface will be added. This project was reviewed for compliance to Rules D, E, F, and I. Based on Staff findings dated September 11, 2019, at their September 11, 2019 meeting the Commission approved the project contingent upon: 1) a site plan that provides the irrigation areas to be irrigated by the new system and 2) an operation and maintenance plan for the irrigation system approved by the City and the Commission and recorded on the land title. The applicant and their engineer are pursuing overall stormwater management alternatives for this project and potential future projects. Updates will be provided to the Commission when the applicant resolves how they would like to proceed.

**h. 2019-028 Howell Meadows, Maple Grove.** This is a 5.3-acre site located east of Brockton Lane (CR 101) at 64th Avenue. It is a remnant piece of property surrounded by the Fieldstone development on the north, south and east with the City of Corcoran and the Ravinia Development across Brockton Lane to the west. The site is proposed to be subdivided into ten residential lots. The project will create a total of 1.505 acres of new impervious areas. This site plan triggered the Commission's review for conformance to Rules D, E and I. At their November 2019 meeting the Commission approved this project per Staff's findings dated November 6, 2019 contingent upon LGU approval of WCA wetland impacts/replacement plans. *All contingencies have been met. This item will be removed from the report.*

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**i. 2019-030 Rolling Hills Acres, Corcoran.** This is a 40.8-acre rural agriculture parcel located a mile north of Highway 55 on the east side of Rolling Hills Road. There is an existing home site in the far southwest corner of the parcel. The project proposes to subdivide the property into 4 large single-family lots ranging from 6.9 acres to 12.7 acres in size. The project will create approximately 0.5 acres of new impervious area. There are wetlands and floodplains on this site. The site plan triggers the Commission's review for conformance to Rules E, I, and F. Because there are no grading or floodplain impacts proposed, Staff approved this project contingent upon: 1) A planting plan of native vegetation being developed for the wetland buffer areas that are not in permanent vegetation at this time. 2) A permanent vegetation cover plan being developed to control erosion and sedimentation on this site. *No new information has been received.*

**j. 2019-031 Hassan Sand and Gravel Expansion, Rogers.** The applicant is proposing to open a new mining operation just north and west of their existing site on CR 144 and Willandale Road. The Crow River runs along the northerly boundary of this property. Approximately 38 acres of the land will be mined in phases over the next 5-10 years (depending on demand). The site plans propose to stay out of the bluff and setback zones along the river. During the mining operations runoff will be directed north into a sediment pond. From there the water runs approximately one-half mile north on a flat grade before entering the Crow River. The site plan triggers the Commission's Rules E, F, D, and I. *At their February 2019 meeting the Commission approved this project with the following conditions; 1) WCA requirements must be met, The city consults with the WCA Technical Evaluation Panel to determine if there are impacts to Wetland A during the mining operations, 2) The City establishes a pre-development runoff rate standard for the 2, 10- and 100-year storm event for the existing discharge points from this site, 3) Before final restoration site work begins, the City require site plans that will provide equal to, or less than pre-development flows, and 4) The site abides by all MPCA NPDES Nonmetallic mining activities General Permit Conditions.*

**k. 2020-001 Outlot L, Markets at Rush Creek, Maple Grove.** Outlot L is a 1.55-acre lot located in The Markets at Rush Creek (Hy-Vee South) PUD development. This project is just west of the Hy-Vee gas station and south of CR10. A 12,000 SF multi-tenant building and associated parking is proposed for this site. Stormwater management for this lot is part of the regional stormwater system approved by the Commission for project 2016-002. Commission rules require compliance for Rules D and E.. On January 23, 2020, Staff administratively approved this project contingent upon receipt of a dated and signed set of the final development stage plans. *No new information has been received.*

**l. 2020-002 Project 100, Maple Grove.** Ryan Companies is proposing to develop 100.6 acres of agricultural land into a mixed-use development consisting of office, medical, hospital, multi-family residential and senior living facilities. This site is situated between I-610 to the north, I-94 to the west and the Maple Grove Hospital to the east. The applicant is looking for approval of a regional stormwater management system to address the Commission's present-day requirements throughout the timeline for all the phases of this development. Additionally, they are requesting grading and erosion control approvals for Phase I of the development. Phase I consists of mass grading approximately 35 acres in the southeast portion of the site. This will accommodate street and utilities, 383 parking stalls for the existing hospital and future building in this area. The Commission will be reviewing the concept plan for compliance with Rule D. In addition, it will review Phase I for compliance with Rules D, E, G and I.. *Staff's findings are included in this month's packet.*

*Staff recommends approval of Phase I site plans based on the following conditions; 1) Feasibility to infiltrate stormwater in the filter bench areas of ponds 1 and 2 must be determined. If infiltration is considered feasible, design revisions and compliance with MPCA infiltration design criteria is required. 2) Pond 2 must meet ECWM/NURP mean average depth requirement of 4.0'. 3) If the City of Maple Grove does not provide long*

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term operation and maintenance on the stormwater facilities, an operation and maintenance plan and agreement must be approved by the City and the Commission and recorded on the land title. A copy of the recorded document must be provided to the Commission within 90 days of the final plat filing with Hennepin County. 4) Maple Grove, MN WCA and Commission compliance on any wetland impacts must be adhered to. 5) SWPPP or erosion control plans must meet the Commission's standards.

Approval of concept site plans based on the following conditions; 1) Overall stormwater management concept plan design meets the Commission's standards; 2) Feasibility to infiltrate stormwater in the future filter bench areas and biofiltration basins must be determined. If infiltration is considered feasible, design revisions and compliance with MPCA infiltration design criteria is required, and 3) Commission project review and approval are required when future site development triggers a review.

**m. 2020-003 Palisades at Nottingham Second Addition, Maple Grove.** This is a 4.05 acre in-fill project in the Nottingham development section of Maple Grove. It is located at the 73rd Place/Xene Lane Cul-de-sac about one-quarter mile northeast of the intersection of Nottingham Parkway at Bass Lake Road. Nine new single-family residential lots are proposed creating 28,440 SF of new impervious areas. This review is for compliance to the Commission's Rules D, E and I. Staff's findings are included in this month's packet. Staff recommends approval, contingent upon; 1) Determination of infiltration capabilities, 2) Feasibility to infiltrate stormwater in the future filter bench areas must be determined. If infiltration is considered feasible, design revisions and compliance with MPCA infiltration design criteria is required and 3) Final erosion and sediment control approval by the Commission's technical advisor.

**n. 2020-004 Elm Road Area Project, Maple Grove.** This is approximately 53 acres consisting of nine large residential parcels proposed to be developed into 106 single-family residential lots. It is located along Elm Road near the border of Plymouth. No recommendations are available to the Commission at the time of this update. Staff's review and finding are included in this month's packet.

**o. 2020-005 Territorial Road EAW, Rogers.** This is a statutory EAW review. It is located on the north and south sides of CR 116 just west of its intersection with Tilton Trail. Lennar Corporation is proposing to construct a residential development on 148.5 acres. The project includes 190 single-family units of three models, 48 twin home units, and 124 townhome units of two sizes for a total of 362 units. Construction will also include stormwater infrastructure, internal roads, and utilities. Staff will provide comments based on the Commissions 3rd Generation Plan.

**p. 2020-006 Zachary Villas of Dayton, Dayton.** This project consists of three parcels that total 5.74 acres located just south of Diamond Lake Road on the border with Champlin. Fourteen (14) single family residential lots are proposed. Staff will review for compliance to the Commissions 3rd Generation Stormwater Management Plan, Appendix C, Rules E. If available Staff's findings and a recommendation will be provided to the Commission prior to their meeting.

**q. 2020-007 Pineview and Oakview Lanes North Improvements, Dayton.** The City of Dayton will be upgrading these two roadways and the intersection with Co Rd 121 because of increased traffic volumes. Site plans were not received in time to review for the March meeting. Staff expects a review and recommendation will be available at the April meeting.

**FINAL RECORDINGS OR OTHER DOCUMENTATION ARE DUE ON THE FOLLOWING PROJECTS:** *(Staff reached out to the cities for updates on these projects on March 4, 2020.)*

**ag. 2013-046 Woods of Medina, Medina.** In January 2015 the Commission approved this project with two conditions. This project remained active throughout this period with the final plat recently approved by the City. No significant changes were made to the original plans. The two conditions were 1) compliance to the WCA requirements and 2) final approval and recording of the O & M plans. The WCA condition has been met with only the O&M plan condition remaining. On October 2, 2019 Dusty Finke reported that the City has approved the final plat. The applicant is trying to begin construction in fall 2019. The City has also received confirmation of their wetland credit purchase and is awaiting their signature on the Maintenance Agreement. *Finke reported on March 4, 2020 that the O&M plan had been recorded in February. This item will be removed from the report.*

**ah. 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 met 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.

**ai. 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. On February 5, 2019 Derek Asche contacted the owner requesting a copy of the recorded maintenance agreement. No update was available on July 2, 2019.

**aj. 2016-002 The Markets at Rush Creek, Maple Grove.** This is a proposal to develop 40 acres of a 123-acre PUD located in the southwest quadrant of the intersection of CSAH 101 and CSAH 10. In 2016 the Commission granted Staff authority to administratively approve the project and report any updates. Updated plans with some minor layout revisions were reviewed by Staff and administratively approved on July 24, 2018, contingent upon the Operation Manager requesting a copy of the recorded maintenance agreement. *On March 4, 2020, Derek Asche reported that the agreement has been signed but not yet recorded. The City will have the document recorded to satisfy the final condition of this project.*

**ak. 2016-005W Ravinia Wetland Replacement Plan, Corcoran.** In December 2016 the Commission approved Staff's 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 is completed.. Vegetation planting and management took place throughout 2017. Barr Engineering is providing monitoring to ensure the replacement meets the performance standards of the approved plans. Their first annual report was submitted to the US Army Corps of Engineers on February 7, 2019. Kevin Mattson indicated on October 2, 2019 that no further updates are available.

**al. 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. In findings dated January 10, 2017, Staff recommended approval of this project subject to three conditions. 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. (Also see Project 2019-023 99th Avenue Apartments. That project is part of this PUD and had the same requirements prior to approval.) *WCA, Buffer easement protection and updated grading plans were received and approved by the Commission in February. As of this update, the final outstanding item is the operation and maintenance agreement.*

**am. 2017-014 Laurel Creek, Rogers.** In June 2017 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

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the City as to whether the City or the HOA will be responsible for the operation and maintenance of the stormwater management facility. On August 31, 2017, Andrew Simmons responded that the O&M agreement is still being negotiated.

**an. 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 except for 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 was expected to start in 2018.

On February 7, 2019, Jason Quisberg provided the following information: The 1st Addition was scaled back from what was proposed; associated construction activity is significantly completed. Extension of trunk utilities through Sundance Golf Course are complete. The proposed 2nd Addition is under review. Improvements to 117th Avenue (East French Lake Road to Fernbrook Lane) will be part of the work done with the 2nd Addition. Construction is anticipated to start this spring. Pond easements are being recorded with the platting process for each addition (those [that are] part of the 1st Addition are in place). The water re-use system is not part of the 2nd Addition (will be with future addition).

**ao. 2018-018 Summers Edge Phase III, Plymouth.** The Commission approved Staff's recommendations at their June 13, 2018 meeting, subject to receipt of final easements over the wetland buffers within 90 days of final platting in a format acceptable to the Commission. *On October 2, 2019 Ben Scharenbroich provided a signed copy of the final plat. This item will be removed from the report.*

**ap. 2018-026 Windrose, Maple Grove.** The Commission approved Staff's finding and recommendations dated July 20, 2018. Final plan approval is 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. On February 5, 2019 Derek Asche reported that the City will receive the agreement for the filter basins with the grading permit application.

**aq. 2018-028 Tricare Third Addition, Maple Grove** In their findings dated August 7, 2018, Staff recommended approval contingent on approval and recordation of the O&M plan on the filter basins. The Commission further recommended that the City consider an oil/debris type of separator in the parking lot manhole. It is a condition of the grading permit that the maintenance agreement is provided. No update was available on July 2, 2019.

**ar. 2018-044 OSI Phase II, Medina.** Staff findings dated October 9, 2018 were approved by the Commission at their October meeting contingent upon receipt of an approved stormwater system O&M plan being recorded on the property title. On October 2, 2019 Dusty Finke reported that the City is still awaiting final plat for this project.

**as. 2018-048 Faithbrook Church, Phase 2, Dayton.** This is an application for review of an expansion of an existing church located northeast of the intersection of Fernbrook Lane and Elm Creek Road. The Commission approved this project at their November meeting conditioned upon receipt of a SWPPP meeting NPDES requirements and the City accepting maintenance responsibility or recording a modified O&M plan for the stormwater features on the site in a form acceptable to the Commission. On February 7, 2019, Jason Quisberg reported that this project has gone idle; it is believed to be due to funding needs of the applicant. It was expected activity would resume in Spring 2019.

**at. 2019-001 Fernbrook View Apartments, Maple Grove.** This is a 4.85-acre rural residential lot located at the northeast intersection of CSAH 81 and Fernbrook Lane. The applicant proposes to construct a 2-story, 42-unit apartment building. This project was approved at the February 2019 Commission meeting with the following conditions: 1) the applicant pursue utilizing water from the NURP pond for irrigation needs for this property; 2) long term operation and maintenance on the stormwater basin must be addressed; 3) mean average pond depth must meet the Commission standard; 4) pond filter bench details must be provided. With the exception of the O&M plans, these conditions have been met by the applicant. This project was approved by the Commission's technical advisor per the updated project review dated February 5, 2020.

**au. 2019-002 Parkside Villas, Champlin.** This is two adjacent rural parcels totaling 13.9 acres that are proposed to be split into 56 single-family residential lots. It is located on the east side of Goose Lake Road just south of its intersection with Elm Road (CR 202). The review is for compliance with Commission's Rules D and E. At their February 2019 meeting the Commissioners approved Staff's findings dated January 29, 2019, contingent on 1) a long term O&M agreement on the stormwater basin and irrigation system being provided and recorded on the property title and 2) the applicant working with the City and Three Rivers Park District to safely outlet the pond water below the trail system adjacent to the property line.

**av. 2019-021 Brenly Meadows, Rogers.** This is a 38-unit townhome project proposed on 6.9 acres north of 129th Avenue about 1/3 mile west of Main Street. It triggered the Commission's review for Rules D, and E. This item was approved by the Commission at their August 2019 meeting, contingent upon O & M plan requirements for the stormwater pond and irrigation system.

**aw. 2019-022 Comlink Midwest (CML Holdings LLC), Corcoran.** This is an existing 16.5-acre lot located in the southeast quadrant of County Roads 19 and 10 in Burschville. The present land use is about 13 acres of cropland and 3.5 acres of wetland/farmstead/meadow. The applicant proposes to construct three new commercial/ industrial buildings with adjacent parking and storage areas, creating approximately 5.5 acres of new impervious area. The Commission approved site plans per Staff's recommendations dated August 6, 2019 which were contingent upon an Operation and Maintenance agreement being approved by the City and the Commission and recorded on the property title. *On March 4, 2020, Kevin Mattson provided copies of the recorded documents. This item will be removed from the report.*

**ax. 2019-023 99th Avenue Apartments, Maple Grove.** This is part of a 20.4-acre PUD proposed on the Hy-Vee North property located at the southeast corner of Maple Grove Parkway and MNDOT Highway 610. The site is proposed to be divided into two parcels. The west parcel will be approximately 12.0 acres and be used for the Hy-Vee development. This apartment project comprises the eastern 8.42 acres. The Hy-Vee development was reviewed and approved by the Commission under project 2016-047 and is considered active by the City of Maple Grove. This apartment project was part of the overall stormwater management plan and PUD factored into the Commission's approval but was not proposed for construction at that time. A stormwater facility along the ROW of Highway 610 was approved as part of a shared facility to manage stormwater from both projects. The PUD will create 12.25 acres of new impervious surface (about 60% impervious cover). The apartment site plans trigger the Commission's review for Rules D, E, and I. At their September 11, 2019 meeting the Commission approved Staff's findings dated September 4, 2019, wherein they recommended approval of the project contingent upon: 1) a City and Commission approved stormwater system operation and maintenance plan being recorded on the property title, and 2) restrictive covenants outlining the buffer installation, management, and performance standards being received and recorded on the property title. The covenants may allow a signage structure per the location and dimensions (4'x10') provided for on the site plan. *On March 4, 2020, Derek Asche supplied copies of the recorded documents. This item will be removed from the report.*

**ay. 2019-027 Havenwood at Maple Grove.** This is a 5.6-acre site located at the northwestern intersection of Bass Lake Road (CR10) and Troy Lane (CR101). The site is proposed to be subdivided into two lots. The southerly lot will be 4.5-acres with a 150-unit senior living facility. The remaining outlot (~1.3 acres) is anticipated to be a daycare facility. In their findings dated October 17, 2019, Staff recommended approval contingent upon the irrigation pond and system having an operation and maintenance plan approved by the City and Commission and recorded on the title for this property. A copy of the recorded document must be provided to the Commission.

**az. 2019-032 OSI Expansion, Medina.** This an existing business located in the northwest corner of Highway 55 and Arrowhead Drive. They are proposing to build an addition on the south side of their building and add parking to the north side of the site, creating an additional 3.6 acres of new impervious area. In their findings dated February 4, 2020, Staff recommended approval contingent upon receipt of O& M plans on the stormwater facilities that meet the Commission's requirements. *Derek Asche reported on March 4, 2020, that recordation of the O&M plans is still pending.*



### **BUFFER REVIEW**

In 2020, another one-third of the County will be reviewed for buffer violations. This will include Dayton, Plymouth, Maple Grove, and Champlin. Owners of parcels found to be newly out of compliance will be notified and given a chance to take corrective action before being referred to BWSR for enforcement.

### **ELM CREEK FLOODPLAIN MAPPING PROJECT**

Heather Hlavaty at Barr Engineering provided the following update for March:

#### **Work conducted over the last month:**

1. Subwatershed delineation and determination of hydrologic parameters
2. Preparation of HEC-HMS hydrology model
3. Documentation of model assumptions and identification of preliminary survey needs
4. Calibration of the HEC-HMS model
5. HEC-HMS hydrology model QAQC
6. Draft HEC-HMS hydrology submission to the DNR, sent on March 3, 2020

#### **Work that is anticipated to occur over the next month:**

1. Receive review comments from the DNR on the draft HEC-HMS model submittal
2. Begin development of HEC-RAS hydraulics model
3. Identify survey needs for HEC-RASM model

#### **Data/input we are waiting on from others**

1. Nothing at this time

**Budget spent through 3/3/2020:** \$ 32,182.50 (65% remaining)

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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

*Italics indicates new information*

*indicates enclosure*

**From:** Jim Herbert <JHerbert@barr.com>  
**Sent:** Thursday, March 05, 2020 1:46 PM  
**To:** Judie Anderson <Judie@jass.biz>  
**Cc:** Joe J. Waln <JWaln@barr.com>; 'James Kujawa' <surfacewatersolutions@outlook.com>  
**Subject:** FW: Manufactured treatment devices - meeting with Seth Brown

Judie,

Following are notes from the initial work group meeting prepared by the MPCA. The objective of the meeting was to prepare an agenda for the upcoming March 12 meeting with Seth Brown with The National Stormwater Testing and Evaluation for Products and Practices (STEPP). - Jim

Jim Herbert, PE  
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 Senior Civil Engineer  
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If you no longer wish to receive marketing e-mails from Barr, respond to [communications@barr.com](mailto:communications@barr.com) and we will be happy to honor your request.

**From:** Trojan, Mike (MPCA) <[mike.trojan@state.mn.us](mailto:mike.trojan@state.mn.us)>  
**Sent:** Tuesday, March 3, 2020 6:31 AM  
**Subject:** Manufactured treatment devices - meeting with Seth Brown

A group of about a dozen folks met on Monday the 2nd to discuss the upcoming meeting with Seth Brown and discuss issues for moving forward on addressing manufactured treatment devices. Seth is actively working with others on the STEPP effort. Details for the meeting with Seth are below. Please let me know if you will be attending the meeting in person so I can have a badge made for you. There is a phone option.

Meeting date: Thursday March 12  
 Time: 2-3 PM  
 Location: MPCA St. Paul office; room 600  
 If participating by phone: 888-742-5095; conf code 6174773681

In addition to questions Seth may have for us, here are some discussion points for the March 12 meeting.

- Overview of where STEPP is at
- Thoughts on Washington's TAPE and NJDEP's NJCAT; I sense from our discussions there is a preference for field-tested devices in MN, which means TAPE
- Other entities nationwide using TAPE and how they address the items below
- Testing protocols/standards, particularly for phosphorus
- Our concerns with dissolved P and how these might be addressed, if at all, with STEPP
- Thoughts on sizing for MTDS and translation into annual removal numbers
- Maintenance
- Would STEPP be interested in a MN pilot

At the end of the March 2 meeting, the workgroup agreed with the need to continue working together. We'll have a better idea of what that workgroup needs to do following the March 12 meeting.

Thanks  
 Mike

# elm creek

## Watershed Management Commission

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### **Project 100** (2/24/20 revision)

### **Maple Grove, Project #2020-002**

**Project Overview:** Ryan Companies is proposing to develop 100.6 acres of agricultural land into a mixed-use development consisting of office, medical, hospital, multi-family residential and senior living facilities. This site is situated between I-610 to the north, I-94 to the west and the Maple Grove Hospital to the east. The applicant is looking for approval of a regional stormwater system to address the Commission's requirements on the current and future phases of this development. Additionally, they are requesting grading and erosion control approvals for phase I on the site. Phase I consists of mass grading approximately 35 acres in the SE portion of the site to accommodate streets and utilities, 383 parking stalls for the existing hospital and future building in this area. The Commission will be reviewing the concept plan for stormwater management (Rule D). In addition, it will review Phase I for stormwater management (Rule D), wetland alterations (Rule G), buffer strips (Rule I) and erosion and sediment controls (Rule E).

**Applicant and Agent:** Ryan Companies US, Inc., Attention Chad Lockwood, 533 South Third Street, Suite 100, Minneapolis, MN, 55415. Phone; 612-492-4204. Email; [chad.lockwood@ryancompanies.com](mailto:chad.lockwood@ryancompanies.com).

### **Exhibits:**

- 1) A complete ECWMC application received January 21, 2020.
  - a. ECWMC Request for Review and Approval dated December 16, 2019.
  - b. City of Maple Grove authorization dated January 7, 2020
  - c. Project review fee, \$12,300.00 for 100.6 acres of site work on a commercial/industrial project received January 21, 2020
  - d. Site plan design submittal via email on January 21, 2020.
- 2) Project 100 Concept Stage Plans with latest revision date of February 24, 2020
  - a. Sheet C001, Cover Sheet
  - b. Sheet C100, Concept Existing Conditions and Removal Plan
  - c. Sheet C300, Concept Site Plan,
  - d. Sheet C301, Concept Lot Layout Plan
  - e. Sheet C400, Concept Grading and Drainage Plan,
  - f. Sheet C500 Concept Utility Plan.
- 3) Phase I Improvements dated December 16, 2019 with latest revision date of February 24, 2020.
  - a. Sheet C001, Cover Sheet
  - b. Sheet C100, Removal Plan
  - c. Sheet C200, Erosion Control Plan
  - d. Sheets C300 & 301, Site plans
  - e. Sheets C400 to C404, Grading Plans
  - f. Sheets C500 to C502, Utility Plans

- g. Sheets C600 to C602, Civil Details
  - h. Sheets L101 to L104, Landscape Plans.
  - i. Sheet CL500, Landscape Plan Details.
  - j. Sheet E100, Photometric Plan.
- 4) Project 100 Stormwater Management Plan dated December 16, 2019 with latest revision date of February 24, 2020.
  - 5) MIDS files for Biofiltration Areas 4,5,6, & 8, and Stormwater Ponds 1, 2, 3, & 7.
  - 6) Project 100 Soil Boring Sketch/Logs by Braun Intertec dated April 4, 2019, revised May 5, 2019.
  - 7) MN Health Village Final Plat, 2 of 2 sheets.
  - 8) Minnesota Health Village Preliminary Plat, 1 of 1 sheet dated December 5, 2019 with last revision date of February 17, 2020.
  - 9) Project 100 Alta/NSPS Land Title Survey, 5 of 5 sheets dated May 1, 2019.
  - 10) Project 100 Tree Survey, 3 of 3 sheets dated May 2, 2019, final revision dated June 20, 2019.
  - 11) City submittal information including;
    - a. Owner Authorization Letter
    - b. Cover Letter
    - c. Project Narrative
    - d. Application Fees, City & ECWMC
    - e. Legal Description, Existing,
    - f. Light Fixture Cut Sheets
    - g. Non-residential PUD Application
    - h. T-Zone Impacts
  - 12) Phase I Project 100 Stormwater Compliance, Stormwater Pollution Prevention Plan Narrative dated February 24, 2020.
  - 13) Correspondence from Ryan Companies dated February 24, 2020;
    - a. Project 100 Non-Residential PUD (Concept Stage) Rezoning, and Final Plat Applications Response to City's Conditions of Approval.
    - b. Project 100 Elm Creek Watershed Review Response to Watershed Comments.

**Findings:**

- 1) A complete application was received January 21, 2020. The initial decision period deadline per MN Statute 15.99 is March 21, 2020.
- 2) This review will be for;
  - a. Rule D, stormwater management for Phase I and the regional stormwater system proposed in the concept plan. Specific volume, water quality and water rate controls are determined per drainage areas based on the stormwater management plan date listed in the exhibits above.
  - b. Rule E, erosion and sediment control for the Phase I site plans.
  - c. Rule I, Wetland Buffer for Phase I
  - d. Rule G, Wetland Alteration for Phase I.
- 3) Future ECWMC approvals will be necessary if development triggers the Commission's threshold for review.

**Stormwater Management-(Rule D)**

- 4) Existing and proposed drainage patterns remain essentially the same. The southerly 4/5 (~80 acres) of this site drains into the DNR protected water course that runs along the westerly side of the project. From there it runs under I-94 at the Maple Grove Parkway

bridge before it continues along the ROW area where it enters Rice Lake on the west side of I-94. The northerly 1/5 (~20 acres) of the site runs north into the I-610 ROW where it flows north into the Rush Creek floodplain area in the NE corner of the I-610/I-94 intersection.

- 5) For stormwater management, three (3) biofiltration basins are proposed for the developed areas draining north toward Rush Creek. For the southerly areas, four (4) stormwater ponds and one biofiltration basin are proposed before the water enters the DNR water course running through the site.

Peak Runoff Rate Flow Analysis (100.6-acre area-Regional System);

- 6) Pre and post development conditions will meet the Commission's rate control requirements. They are as follows;

Runoff Rate Summary

		2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
<b>North Rush Creek Watershed</b>	<b>Pre-Development Rate. (21.35 acres)</b>	<b>27.6</b>	<b>50.2</b>	<b>99.4</b>
	<b>Post-Development Rates (19.28 acres)</b>	<b>5.9</b>	<b>17.1</b>	<b>48.9</b>
<b>South Elm Creek Watershed</b>	<b>Pre-Development Rates (79.25 acres)</b>	<b>45.1</b>	<b>87.5</b>	<b>283.2</b>
	<b>Post-Development Rates (81.33 acres)</b>	<b>11.0</b>	<b>36.4</b>	<b>75.5</b>

Abstraction Analysis (100.6-acre area-Regional System);

- 7) Applicant proposes to utilize biofiltration and take advantage of infiltration where feasible. No infiltration information was provided for review.
- 8) Based on the soil borings, approximately 1/2 of the soil borings have 3' or more of a coarser soil classification within their logs. The present assumptions are that infiltration as part of the abstraction credits is not feasible. It appears that infiltration may be a feasible alternative on portions of this site with coarser soils in their profiles. Specifically log numbers 9 and 10 for basins 5 and 6; logs 28, 29 and 30 on basins 7 and 1; and logs 42, 44 and 45 on basins 2 and 3.
- 9) Based on the current stormwater management plan and site design information, the applicant has not demonstrated that infiltration is not practical or infeasible. Additional measures (per ECWMC appendix C, Rule D), are necessary to come into compliance with the Commission standard including;
  - a. Infiltration feasibility determinations by a geotechnical/soils engineer when conditions permit. Feasibility must be based on soils infiltration testing conducted to a minimum depth of 5' below the bottom of the proposed filters. Soil testing must be per MPCA recommendations
  - b. Per the final infiltration feasibility analysis;
    - o If infiltration is considered feasible, design revisions and compliance with MPCA infiltration design criteria is required.

- If infiltration is not feasible, proposed filtration design and credits (see item 11 below) are adequate.
- 10) Overall impervious areas will be 65.5% of the site area. Impervious areas draining into the Rush Creek Watershed will be 15.42 acres. Impervious areas draining into the Elm Creek Watershed will be 50.44 acres. For 1.1" of runoff from impervious surfaces, the total abstraction volume stored on this site must be 6.0372-acre feet or 262,980 cubic feet.
- 11) Total filtered abstraction proposed will be 7.144-acre feet or 311,700 cubic feet. A breakdown of the proposed abstraction volumes per pond/basin are as follows;
  - a. Stormwater Pond 1 111,900 cu. ft. proposed, 94,100 cu. ft. required.
  - b. Stormwater Pond 2 21,400 cu. ft. proposed, 21,400 cu. ft. requires.
  - c. Stormwater Pond 3 44,000 cu. ft. proposed, 43,500 cu. ft. required.
  - d. Biofiltration Area 4 24,200 cu. ft. proposed, 21,000 cu. ft. requires.
  - e. Biofiltration Area 5 22,400 cu. ft. proposed, 19,600 cu. ft. required.
  - f. Biofiltration Area 6 25,200 cu. ft. proposed, 21,000 cu. ft. required.
  - g. Stormwater Pond 7 47,900 cu. ft. proposed, 31,300 cu. ft. required.
  - h. Biofiltration Area 8 14,700 cu. ft. proposed, 14,500 cu. ft. required.
- 12) Skimmer outlets must be provided on the future filter basins
- 13) Drain tile pipes in the bench or filtration areas have no slope. The option exists to achieve minor grades on the tile lines if the pipes bypass the outlet control structures and drain directly into the wetland or watercourse on pond 1 ( $\pm 912.0$ ) and watercourse on pond 2 ( $\pm 911.0$ ). Appropriate outlet structures (steel or concrete pipes with rodent guards) would need to be installed.
- 14) Drawdown times for all filter bench and biofiltration volumes are designed to be less than 48 hours.
- 15) Adequate pre-treatment is provided with forebays at the inlets to all biofiltration basins. Forebay volumes were designed to 10% of the total volume required for abstraction on each basin.

Water Quality Analysis (100.6-acre area-Regional System)

- 16) Phosphorus and suspended sediment loads were analyzed using the MPCA MIDS calculator.
  - a. ECWMC analysis of pre-existing conditions
    - $Tp=58.8$  lbs./year
    - $TSS= 7382$  lbs./year
  - b. The applicant analyzed 83 acres on the post-development conditions draining to the stormwater facilities. EC staff analysis of remaining 18 acres. The total of the two are as follows;
    - $Tp=46.8$  lbs./year
    - $TSS= 4078$  lbs./year
- 17) Pond 2 does not meet ECWM/NUPR mean average depth (Cumulative volume/surface area at NWL) requirement of 4.0' (2.9' actual).
- 18) If the City of Maple Grove does not provide long term operation and maintenance on the stormwater facilities, an operation and maintenance plan and agreement must be approved by the City and ECWMC and recorded on the land title. A copy of the

recorded document must be provided to the Commission within 90 days of the final plat filing with Hennepin County.

#### Water Quality Summary

<b>Condition (based on 4.4 acres)</b>	<b>TP Load (lbs/yr)</b>	<b>TSS Load (lbs/yr)</b>	<b>Filtration (cu. ft.)</b>	<b>Annual Volume (ac. ft.)</b>
Pre-development (baseline)	<b>58.8</b>	<b>7,382</b>	<b>N/A</b>	<b>49.80</b>
Post-development without BMPs	<b>122.5</b>	<b>22,243</b>	<b>262,980</b>	<b>150.0</b>
Post-development with BMPs	<b>46.8</b>	<b>4,078</b>	<b>311,700</b>	<b>133.1</b>
<b>Net Change</b>	<b>-12.0</b>	<b>-3,304</b>	<b>-48,720</b>	<b>+84.3</b>

#### **Floodplain/Stream Crossing (Rules F & H)**

- 19) There are no FEMA or ECWMC floodplains within this development.
- 20) When the access road to west side of the DNR protected watercourse is constructed, approval from the ECWMC will be required. If needed, HydroCAD analysis is available on this stream corridor from the UBOL94 project (EC#2019-005)

#### **Wetlands/Buffers (Rules G & I)**

- 21) One wetland (0.09 acres) is proposed to be impacted during Phase I.. The City of Maple Grove is the LGU in charge of administering the MN WCA for this site. No notice of application or decision has been received as of this review.
- 22) Future wetland and watercourse buffers must average 25 feet wide and be at least 10' wide at the narrowest point.
- 23) Future wetland buffer areas that are not covered by permanent vegetation must be seeded into native vegetation. Said plan must be provided on future site plans.
- 24) Note, future concept plans show extensive grading within wetlands and wetland buffer areas.
  - a. ECWMC buffer compliance will be required at the time these sites are graded or developed.
    - o Where grading occurs in buffers, any slope steeper than 6:1 must add 5 feet to the buffer for each 1-foot decrease horizontally (i.e. 5:1 slope = 30', 4:1=35')
  - b. MN WCA and ECWMC compliance on any wetland impacts must be adhered to.

#### **Grading, Erosion and Sediment Control Plans (Rule E)**

- 25) The following items must be addressed in the SWPPP and/or erosion control plans.
  - a. Temporary sediment basin outlet standard details.
  - b. Remaining undisturbed areas not being placed into cropland, must be seeded down to a pasture mix or a similar, long term permanent vegetative cover.
  - c. Areas where infiltration testing or infiltration basins are located must be restricted from heavy equipment at the time of construction.



**Recommendation:**

Approval of Phase I site plans based on the following conditions;

- 1) Feasibility to infiltrate stormwater in the filter bench areas of ponds 1 and 2 must be determined. If infiltration is considered feasible, design revisions and compliance with MPCA infiltration design criteria is required.
- 2) Pond 2 must meet ECWM/NUPR mean average depth requirement of 4.0'.
- 3) If the City of Maple Grove does not provide long term operation and maintenance on the stormwater facilities, an operation and maintenance plan and agreement must be approved by the City and ECWMC and recorded on the land title. A copy of the recorded document must be provided to the Commission within 90 days of the final plat filing with Hennepin County.
- 4) Maple Grove, MN WCA and ECWMC compliance on any wetland impacts must be adhered to.
- 5) SWPPP or erosion control plans must meet the Commission's standards.

Approval of concept site plans based on the following conditions;

- 1) Overall stormwater management concept plan design meets the Commission's standards provided;
  - a. Feasibility to infiltrate stormwater in the future filter bench areas and biofiltration basins is determined. If infiltration is considered feasible, design revisions and compliance with MPCA infiltration design criteria is required.
- 2) ECWMC Project review and approval are required when future site development triggers a review.

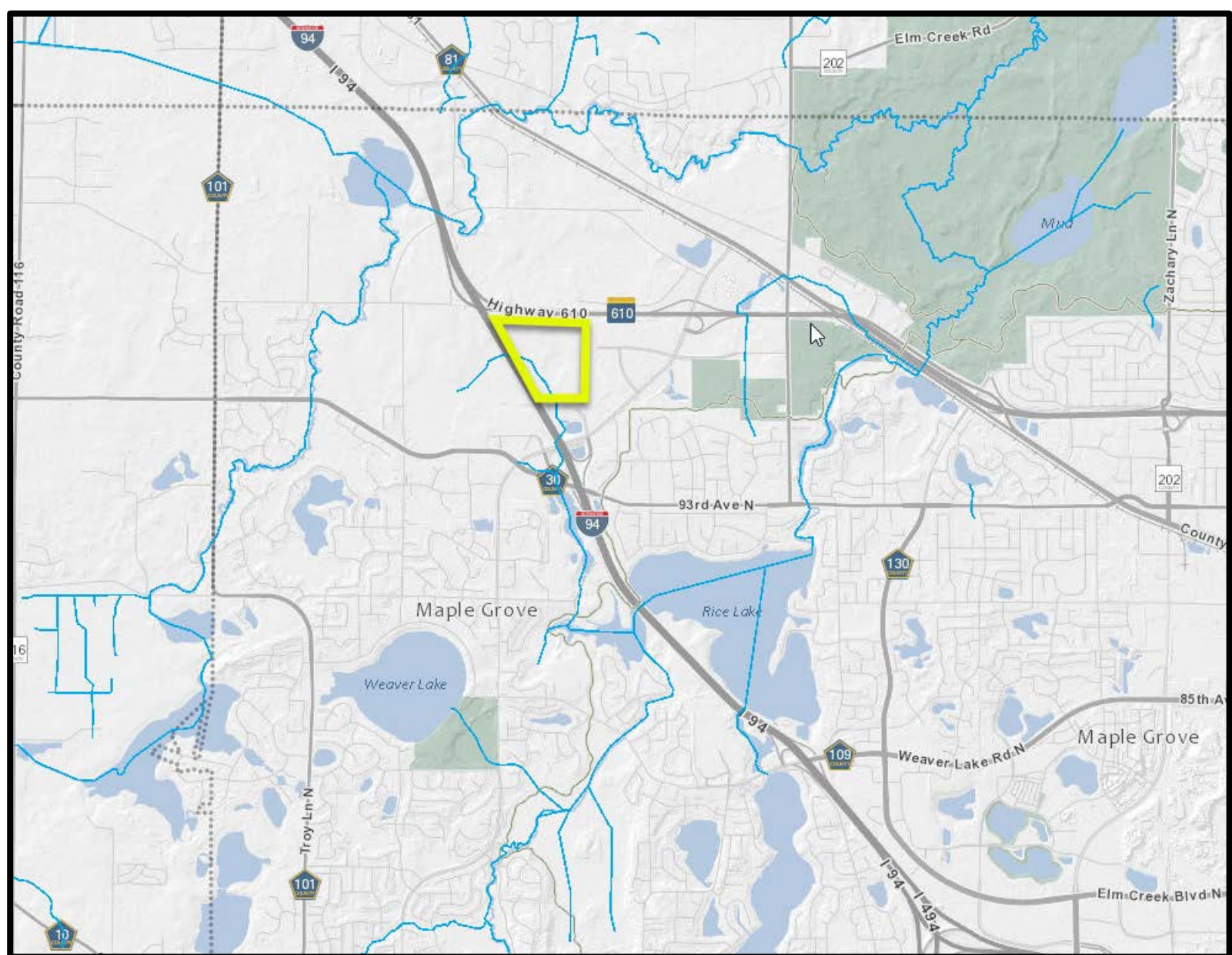
Technical Advisor



James C. Kujawa  
Surface Water Solutions LLC

February 28, 2020  
Date

## Location Map





## 2018 Aerial Photograph

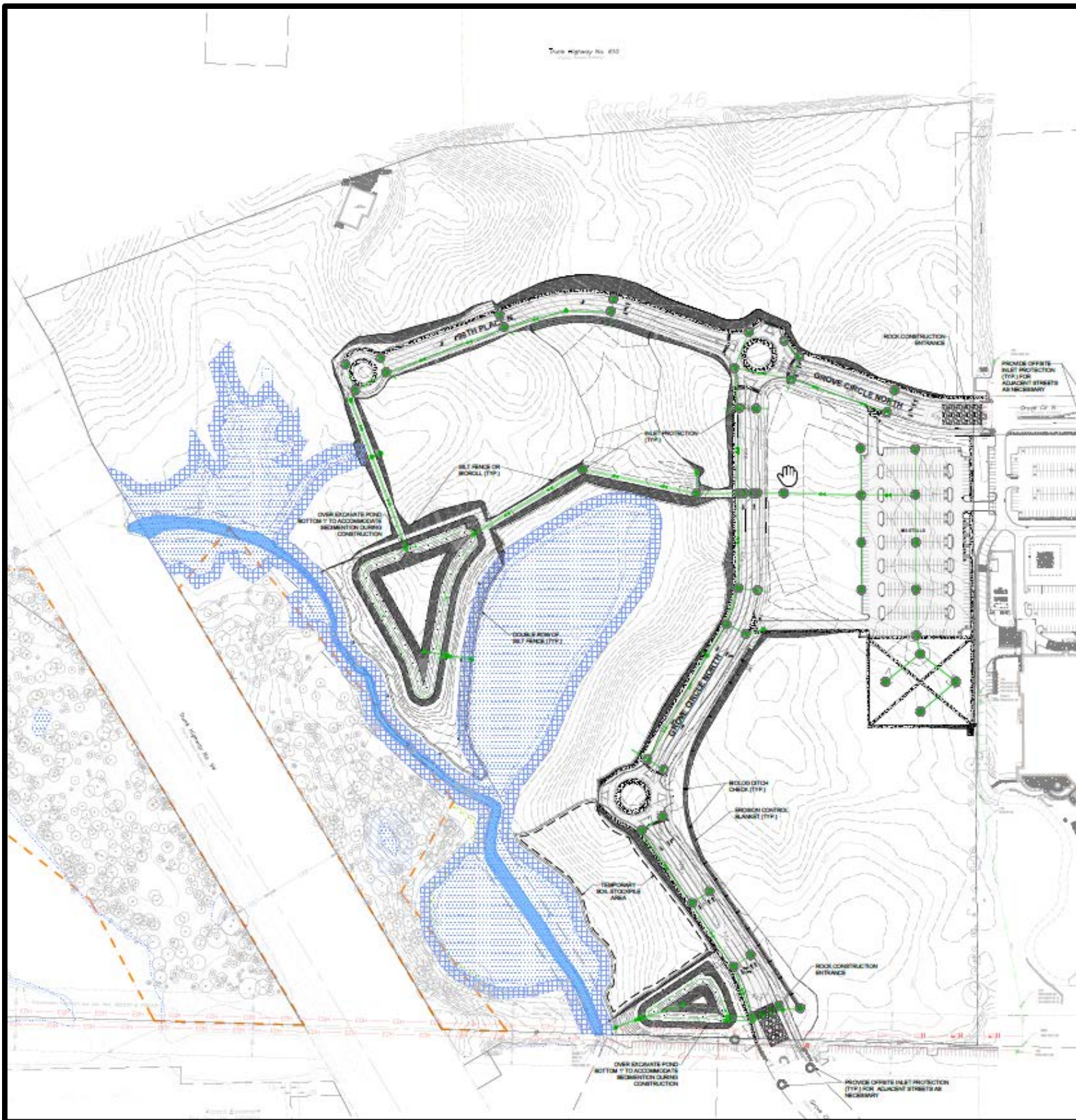




## Overall Concept Plan



## Phase I Grading



# elm creek

## Watershed Management Commission

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### **Palisades at Nottingham 2<sup>nd</sup> Addition** **Maple Grove, Project #2020-003**

**Project Overview:** This is a 4.05 acre in-fill project in the Nottingham development section of Maple Grove. It is located at the 73<sup>rd</sup> Place/Xene Lane Cul-de-sac about ¼ mile northeast of the intersection of Nottingham Parkway at Bass Lake Road. Nine (9) new single-family residential lots are proposed creating 47,127 sq. ft. of new impervious areas. This review will be for compliance to the Commissions 3<sup>rd</sup> Generation Stormwater Management Plan, Appendix C, Rule D (Stormwater Management), Rule E (Erosion and Sediment Controls) and Rule I (Wetland Buffers)

**Applicant:** Zehnder Homes Inc., Attention Eric Zehnder, 14240 23<sup>rd</sup> Ave. N, Plymouth, MN 55447. Phone; 651-303-5747. Email; [ericzehnder@zehnderhomes.com](mailto:ericzehnder@zehnderhomes.com)

**Agent:** Landform, Attention Randy Hedlund, 580 Dodge Ave., Suite 15, Elk River, MN 55330. Phone: 612-638-0251. Email; [rhedlund@landform.net](mailto:rhedlund@landform.net).

#### **Exhibits:**

- 1) A complete ECWMC application received January 24, 2020.
  - a. ECWMC Request for Review and Approval dated January 6, 2020.
  - b. City of Maple Grove authorization for review, dated January 23, 2020
  - c. Project review fee, \$550.00 for 4.05 acres, residential site development project received January 24, 2020
  - d. Site plan design submittal via email on January 23, 2020.
- 2) Palisades at Nottingham Second Addition Site Plans by Landform Engineering dated February 11, 2020 with last revision date of February 14, 2020 except as noted.
  - a. Sheet C0.1, Title Sheet
  - b. Sheet C0.2, Preliminary Plat dated January 31, 2018
  - c. Sheet C1.1, Existing Conditions,
  - d. Sheet C3.1, Grading Plan,
  - e. Sheets C3.2 & C3.3, SWPP Plan
  - f. Sheet C4.1, Utility Plan
  - g. Sheets C7.1 & C7.2, Details
  - h. Sheets L1.1 & L1.2, T-Zone Exhibit and Preservation
  - i. Sheet L2.1, Landscape Plan.
  - j. Sheets 1 & 2 of 2, Palisades at Nottingham Second Addition Plat Sheets.
- 3) Stormwater Narrative Report by Landform dated February 12, 2020, including soil borings, hydrology and water quality design information.
- 4) Separate correspondence to the City and Watershed from Landform, both dated February 14, 2020.



**Findings:**

- 1) A complete application was received January 21, 2020. The initial decision period deadline per MN Statute 15.99 is March 21, 2020.
- 2) This site drains to the north via existing storm sewer pipe eventually reaching ( $\pm 4,000$  feet) Elm Creek just south of Weaver Lake Road.
- 3) There are no floodplains, or stream crossing within this site area.

**Stormwater Management (Rule D)**

- 4) One wet detention pond with a filter bench is proposed for stormwater management for most of the runoff from this site.
- 5) The City of Maple Grove agrees to operate and maintain stormwater facilities on this site.

**Abstraction controls**

- 6) There will be 47,127 sq. ft. of new impervious areas on this site. Abstraction volumes must be 4,320 cubic feet or greater to meet the Commission requirements.
- 7) Filtration in lieu of infiltration is proposed on-site.
- 8) Based on the current stormwater management plan and site design information, the applicant has not demonstrated that infiltration is not practical or infeasible. Additional measures (per ECWMC appendix C, Rule D), are necessary to come into compliance with the Commission standard including;
  - a. Infiltration feasibility determinations by a geotechnical/soils engineer when conditions permit. Feasibility must be based on soils infiltration testing conducted to a minimum depth of 5' below the bottom of the proposed filter bench. Soil testing must be per MPCA recommendations
  - b. Per the final infiltration feasibility analysis;
    - i. If infiltration is considered feasible, design revisions and compliance with MPCA infiltration design criteria is required.
    - ii. If infiltration is not feasible, proposed filtration design and credits per item 9 below are adequate.
- 9) One wet detention pond with a filter bench is proposed to filter the required abstraction volume.
  - a. Water will flow into the filter bench at a 962.9 elevation. The water filtration volume will be between the elevations of 962.9 (filter bench elevation) and 963.4 (primary outlet elevation).
    - i. Volume of storage will be 7,035 cubic feet.
    - ii. Drawdown will occur in approximately 32.6 hours.

**Water Quality Controls;**

- b. Pre vs Post development TSS and TP loads were modeled using P8 as follows;
  - i. TP, pre-existing = 1.23 lbs./year. Post-development = 0.74 lbs./year
  - ii. TSS, Pre-existing = 349 lbs./year. Post-development = 208 lbs./year.

### Stormwater Summary

<b>CONDITION (4.05 AC.)</b>	<b>TP LOAD (LBS/YR)</b>	<b>TSS LOAD (LBS/YR)</b>	<b>FILTRATION (CU. FT.) (47,127 SQ. FT. IMPERVIOUS)</b>	<b>ANNUAL VOLUME (AC. FT.)</b>
<b>Pre-development (baseline)</b>	<b>1.23</b>	<b>349</b>	<b>N/A</b>	<b>1.54</b>
<b>Post-development without BMPs</b>	<b>2.52</b>	<b>797</b>	<b>4,320</b>	<b>6.58</b>
<b>Post-development with BMPs</b>	<b>0.74</b>	<b>208</b>	<b>7,035</b>	<b>6.58</b>
<b>Net Change</b>	<b>-0.49</b>	<b>-141</b>	<b>-2715</b>	<b>+5.04</b>

### Rate Controls

- 10) Pre and post development rate controls meet the Commission's requirements.
- Summary information below looks at the total peak flows for Subcatchments 1S, 2S, 3P & 4S before development and Subcatchments 1S, 5S & 1P after development.

### Rate Control Summary

	<b>2-yr (cfs)</b>	<b>10-yr (cfs)</b>	<b>100-yr (cfs)</b>
<b>Pre-Development Rates</b>	<b>3.50</b>	<b>7.76</b>	<b>18.12</b>
<b>Post-Development Rates</b>	<b>2.81</b>	<b>7.36</b>	<b>16.97</b>

### Wetland Buffers (Rule I)

- 11) The City of Maple Grove is the LGU in charge of administering the Wetland Conservation Act on this site. One wetland is identified along the extreme north edge of the property. Approximately 0.01 acre of this wetland is in this development. The remaining 0.5 acres are off site.
- The applicant is establishing a 35' buffer around the on- and off-site portions of this wetland that extends into this development.
  - Buffer monumentation is provided.
  - Wetland buffer establishment meets the Commission requirements per Rule I.

### Erosion and sediment control plans (Rule E)

- 12) Provide inlet protections on the existing storm sewer CBMH 119A.
- 13) If the permanent pond will be utilized as a temporary sediment pond, a specific sequencing plan must be developed addressing filter bench protections, final cleanout and stabilization.

**Recommendations:** Approval, contingent upon;

- 1) Determination of infiltration capabilities.
  - a. Feasibility to infiltrate stormwater in the future filter bench areas must be determined. If infiltration is considered feasible, design revisions and compliance with MPCA infiltration design criteria is required.
- 2) Final erosion and sediment control approval by the ECWMC technical advisor.

Advisor to the Commission

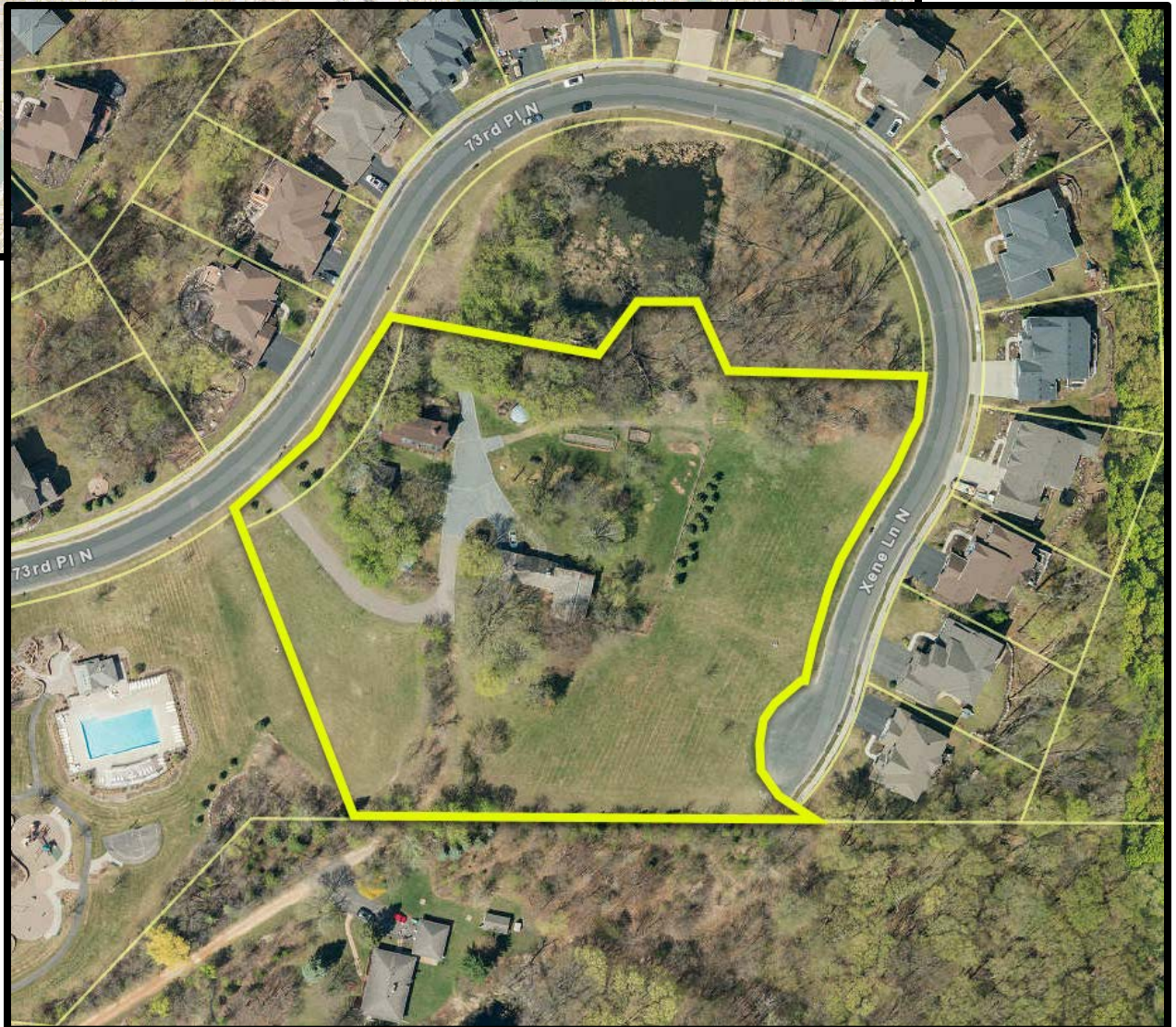
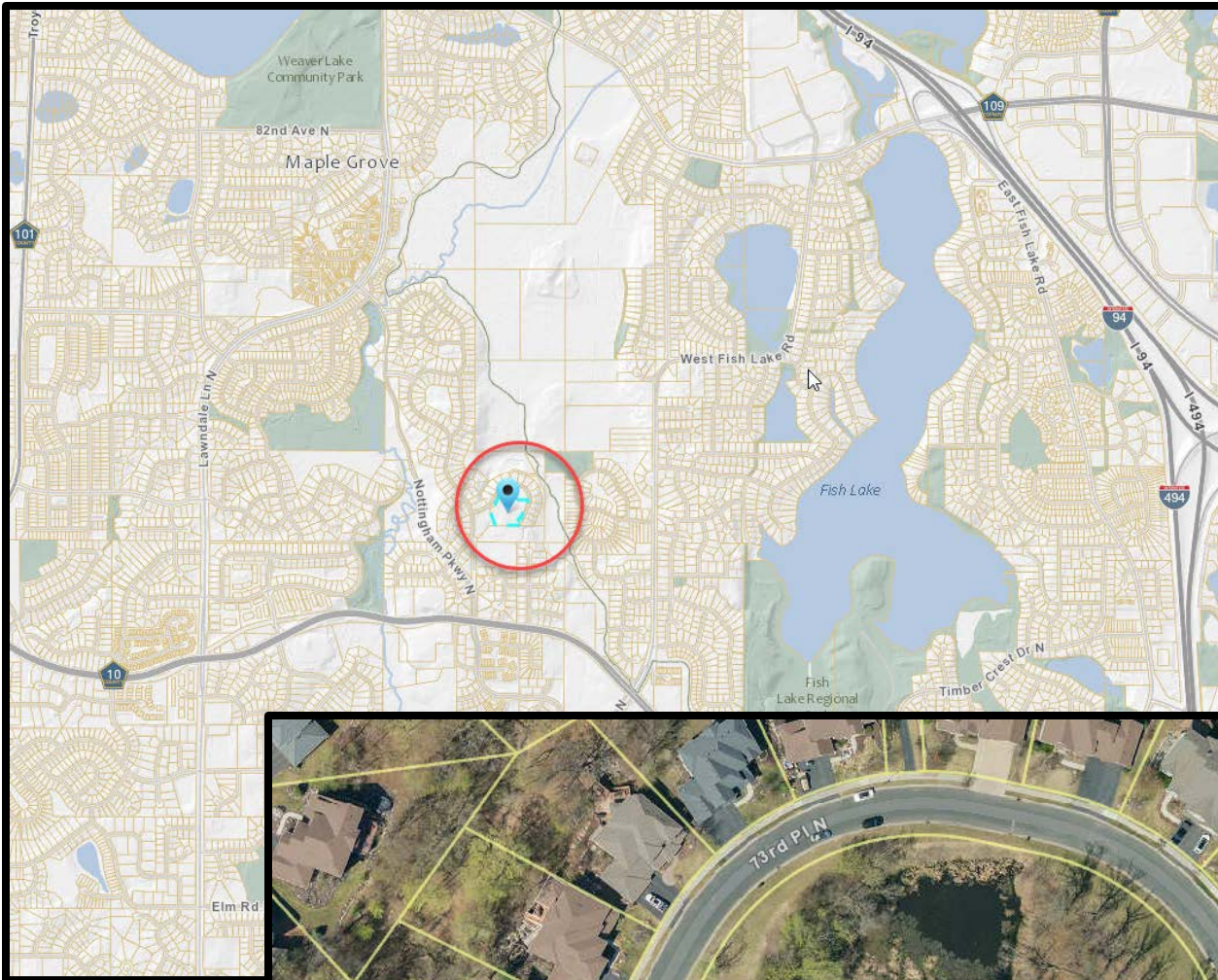


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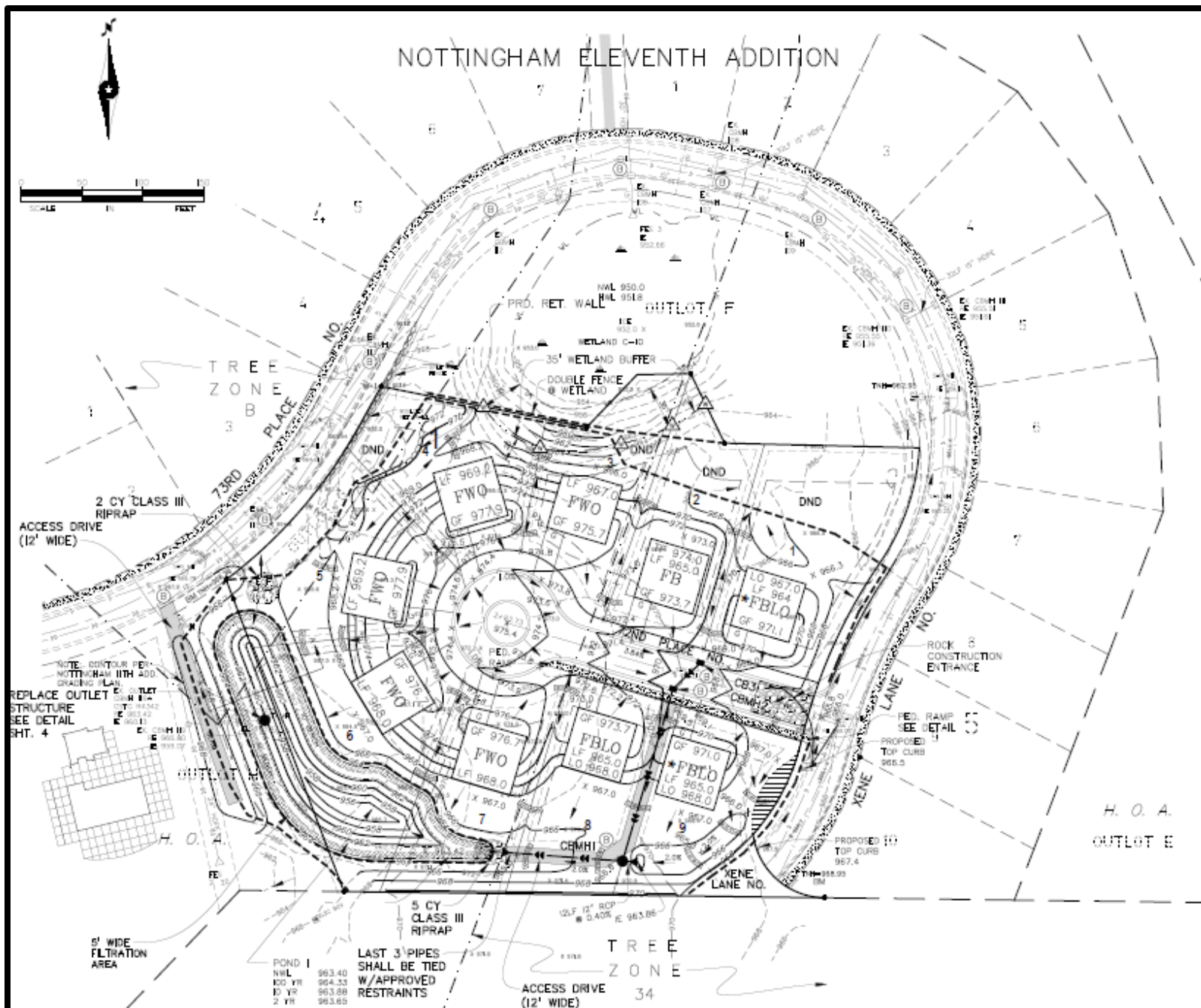
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Date



## Location Map







# elm creek

## Watershed Management Commission

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### **Elm Road Area Project** **Maple Grove, Project #2020-004**

**Project Overview:** This is 9 rural residential parcels totaling approximately 60 acres in size. It is proposed to be developed into 107 single family residential lots in two phases. Phase 1 is 75 lots with an amenity/pool lot. Phase 2 will be 31 additional lots to the west of phase I. The project is located along Elm Road just west of the Vicksburg Lane/CR 47 intersection near the border of Plymouth. The Commission Standards require review for Stormwater Management (Rule D), Erosion and Sediment Control (Rule E) and Wetland Alteration and Buffer Strips (Rules G & I), Floodplain (Rule F) and Stream Crossings (Rule H).

**Applicant:** Elm Road South Inc., Attention Jake Walesch, 10850 Old County Road, Suite 200, Plymouth, MN 55441. Phone: 763-360-1307. Email; [nate@gonyeacompany.com](mailto:nate@gonyeacompany.com).

**Agent:** Sathre-Bergquist Inc., Attention Eric Johnson, 150 Broadway Ave. S, Wayzata, MN 55391. Phone: 952-476-6000. Email: [ejohnson@sathre.com](mailto:ejohnson@sathre.com).

#### **Exhibits:**

- 1) A complete ECWMC application received February 3, 2020.
  - a. ECWMC Request for Review and Approval dated December 5, 2019.
  - b. City of Maple Grove authorization for review, dated January 27, 2020
  - c. Project review fee, \$5,125.00 for 60.48 acres, residential site development project received February 3, 2020
  - d. Site plan design submittal via email link on January 29, 2020 and February 18, 2020.
- 2) Elm Road Area Project, Preliminary Site Plans by Sathre-Bergquist, Inc. dated December 4, 2019 with last revision date of February 17, 2020 unless otherwise noted.
  - a. Sheet SP, Preliminary Site Plan
  - b. Sheet PH, Phasing Plan
  - c. 3 of 3 Sheets, Alta/MSPS Land Title Survey (dated September 10, 2019)
  - d. 2 of 2 Sheets, Preliminary Plat dated November 27, 2019 with latest revision date February 4, 2020.
  - e. Sheets ST1 to ST5, Preliminary Street Plan, Elm Road.
  - f. Sheets SW1 to SW4, Preliminary Sanitary Sewer & Watermain Plan
  - g. Sheets SS1 to SS4, Preliminary Storm Sewer Plan.
  - h. Sheets GP1 to GP8, Preliminary Grading Plan.
  - i. Sheets ER1 to ER6, Preliminary Erosion Control Plan
  - j. Sheet W1, Wetland Impact Plan with latest revision date of January 17, 2020.
  - k. Sheets TP1 to TP3, Tree Preservation Plan.
  - l. SWPPP Plans. 3 of 3 sheets.



- 3) Elm Road Development Stormwater Management Plan by Advanced Engineering and Environmental Services, Inc, dated December 2019, updated January 17, 2020.
  - a. Elm Road P8 model information.
- 4) Copy of memo from Sathre-Bergquist dated February 17, 2020 responding to water resource review comments from the City of Maple Grove, dated December 17, 2019.
- 5) Elm Road Area Lot Tabulation Information from Sathre-Bergquist dated December 4, 2019.

**Findings:**

- 1) A complete application was received February 3, 2020. The initial decision period deadline per MN Statute 15.99 is April 3, 2020.
- 2) The complete site consists of 9 parcels totaling 59.1 acres proposed to be developed in two phases into 107 single family residential lots with one amenity/pool lot. It will create 18.45 acres of new impervious areas.
- 3) There are five wetlands delineated on these nine parcels. Four impacts that total 18,727 sq. ft. are proposed. Maple Grove is the Local Government Unit in charge of administering the MN WCA in their jurisdiction. No wetland replacement plan has been received to date. This review will evaluate the current wetland buffer plan based on the assumption WCA noticing and decision from the LGU will occur prior to grading and no changes will occur to the current wetland grading plans.
- 4) Plans submitted provide for grading and some realignment of Elm Road between Vicksburg Lane and Lawndale Lane (5,900 feet). Along the Elm Road plan proposal, there will be wetland, floodway and floodplain impacts. These impacts need to be addressed to conform to the Commission's standards for Rules E, F, G and H. An accounting of the new impervious areas must also be assessed for potential stormwater management requirements. In discussions with the applicant and City it was determined that the Elm Road grading and erosion controls west of station 30+00 are not part of this review and will occur under a separate project submittal.
- 5) The stormwater and grading review assume Phases 1 and 2 will be mass graded within one year of the ECWMC approval. If this does not occur, a new application or an extension to any ECWMC approvals will be required.

**Stormwater Management (Rule D)**

- 6) There are three wet-detention ponds and three filtration basins proposed for stormwater management on this site to comply with the Commission's stormwater requirements.
- 7) The City of Maple Grove operates and maintains stormwater facilities in residential areas. This must be confirmed by the City, or the applicant will be required to provide a recorded O & M agreement between the property owners and the City for said work.
- 8) The existing land use that are the bases to determine the pre-development conditions used approximately 50% of the site as agricultural land (RNC = 85). Based on aerial photo reviews and runoff curve number differences, pastureland-continuously grazed (RCN 74) seems more appropriate for most of the ag land use

**Abstraction controls**

- 9) There will be 18.45 acres of new impervious areas from this project. Abstraction volumes must be 74,909 cubic feet or greater to meet the Commission requirements.

- 10) Soil conditions on site have not been evaluated for their feasibility to infiltrate. NRCS soil survey information alone, is not accurate enough to eliminate infiltration from the stormwater design options. Soil borings and the infiltration capabilities at the basins must be provided to eliminate infiltration as an option.
- 11) Filtration volumes proposed in the three filter basins will be 92,478 cubic feet. This will meet the Commission's abstraction conditions contingent upon;
- Soil borings eliminating infiltration options
  - Confirmation that the filter basin 1 structure top of weir is at 925.6 (note that the detail in SWMP indicates no weir or slot but has a top of weir at 925.6)
  - Sump manholes are provided at CBMH's C2, C3, A4 and A5 on Elm Road near Vicksburg Ln.
  - Provide skimmer structures on FES C4 (pond 1E) and FES J5 (pond 1W)

Water Quality Controls.

- 12) Water quality controls will occur using the following permanent stormwater measures.
- Wet Ponds 1E, 1W, and 2
  - Filter Basin 1 (receives water from Ponds 2 and 1E), Filter basin 1E (receives water from pond 1E) and Filter basin 1W (receives water from pond 1W).
    - Iron enhances (5% by weight) sand filter trenches will be utilize over the drain tile to enhance dissolved phosphorus treatment.
  - TP pre-development= 16.5 lbs./year. Post Development = 10.3 lbs./year
  - TSS pre-development = 5,213 lbs./year. Post-development = 1,604 lbs./year.
- 13) Water quality (Tp and TSS) will meet the Commission requirements contingent upon;
- P8 pre-existing RCN revisions (per item #7)
  - Pond #2 revised to meet NURP mean average depth of 1 meter or greater.
  - Filter bench drain tile is recommended to meet the following details;
    - Underdrains constructed with Schedule 40 or SDR smooth wall PVC pipe (or a similar pipe and corresponding 'n' value)
    - Minimum 3" #57 (3/4-1") stone around the pipe
    - Minimum 2" chocking stone (1/2" minus)
    - Minimum 0.5% pipe slope
    - One underdrain for every 1000 sq. ft. of surface area.
    - Use solid sections of non-perforated PVC piping and watertight joints where the underdrain system passes below berms and makes the connection to OCS 1.
    - Provide the locations of the drainpipe and cleanouts on the utility plan.

Water Quality Summary Table 1

<b>CONDITION (59.1 AC.)</b>	<b>TP LOAD (LBS/YR)</b>	<b>TSS LOAD (LBS/YR)</b>	<b>FILTRATION (CU. FT.) (18.45 AC. IMPERVIOUS)</b>	<b>ANNUAL VOLUME (AC. FT.)</b>
<b>Pre-development (baseline)</b>	<b>16.5</b>	<b>5,213</b>	<b>N/A</b>	<b>675.84</b>
<b>Post-development without BMPs</b>	<b>44.3</b>	<b>13,804</b>	<b>74,909</b>	<b>1873.84</b>
<b>Post-development with BMPs</b>	<b>10.3</b>	<b>1,604</b>	<b>92,478</b>	<b>1873.84</b>
<b>Net Change</b>	<b>-6.2</b>	<b>-3,609</b>	<b>--17,569</b>	<b>+1,198</b>

### Rate Controls

- 14) There are 4 main discharge points that were used to compare pre- and post-development discharge rates from this site. These were to the east under Vicksburg Lane, to the southwest, under 63<sup>rd</sup> Ave., to the northwest into an existing wet/low area off site and to the north.
- 15) For all the discharge points from this site, post-development runoff rates for the 2-, 10- and 100-year events are less than pre-development rates. They are as follows;

	2-Year (2.87") Runoff Rate (cfs)		10-Year (4.28") Runoff Rate (cfs)		100-year (7.29") Runoff Rate (cfs)	
	Pre-Dev	Post-	Pre-Dev	Post-	Pre-Dev	Post-
East Watershed	41.8	28.3	85.7	80.7	189.6	178.6
Southwest Watershed	58.9	38.1	111.1	88.4	228.3	183.7
Northwest Watershed	11.2	9.5	24.5	22.3	56.8	54.9
North Watershed	14.0	12.2	34.3	28.0	86.5	67.6

- 16) Rate controls will meet the Commission's requirements contingent upon;
- Pre-development land use re-analysis per item #7.
  - Plan sheets show HWL on wetlands 1 and 3 differ from the HydroCAD information. Wetland 1 shows 925.2 on plan sheet vs 925.4 in HydroCAD and Wetland 3 is 920.8 vs 920.6 in HydroCAD.

### Wetlands and Wetland Buffers (Rules G & I)

- 17) The City of Maple Grove is the LGU in charge of administering the Wetland Conservation Act on this site. The wetland delineation for this site was approved in November of 2019. A replacement plan has not been noticed as of this review.
- 18) The Commission requires wetland buffers widths that are 10' minimum and 25' average. This requirement is met on wetland 1 only if the pond access road is constructed with a pervious surface (note that gravel road surfaces are considered impervious)
- 19) Monumentation plans meet the Commission's requirements.
- 20) Drain tile routing from filter basin 1E must be non-perforated south of the access road adjacent to Wetland 1. We recommend periodic cleanouts along this line.

### Erosion and sediment control plans (Rule E)

- 21) Because of amount of elevation difference throughout this site, maintaining drainage while controlling erosion and sediment during the various phases of construction will be difficult. Prior to storm sewer instillation, ponding from grading will occur near lot 85 (~5 acres), lots 94 and 95 (~3 acres), lots 23 and 28 (~5 acres), and Lots 1 and 62 (~10 acres). Providing temporary ponding or outlet pipes or diversions to route the water into temporary sediment pond will be needed to maintain dry working conditions. Please address sequencing of activities and methods that will be used to accomplish this.
- 22) Ditch checks should be placed at the limits of grading in the existing gullies on lots 77 and 79.
- 23) Pond 1W is marked as a temporary pond on the erosion control plans, but Ponds 1E and 2 are not. The SWPPP and erosion control plans must be marked accordingly.

- 24) Temporary/permanent pond construction sequencing and temporary pipe details must be provided in the SWPPP or erosion control plans.

**Recommendations:** None currently.

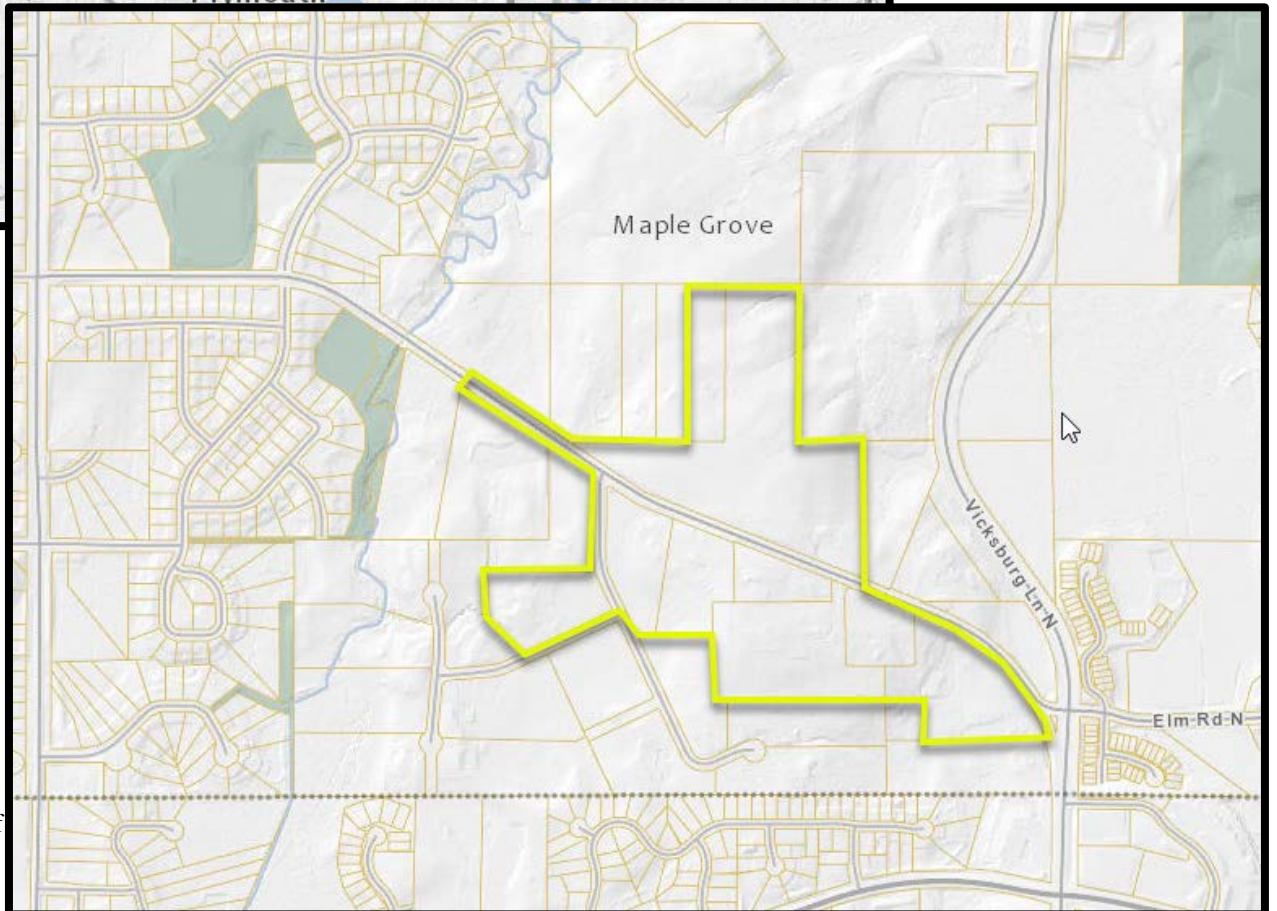
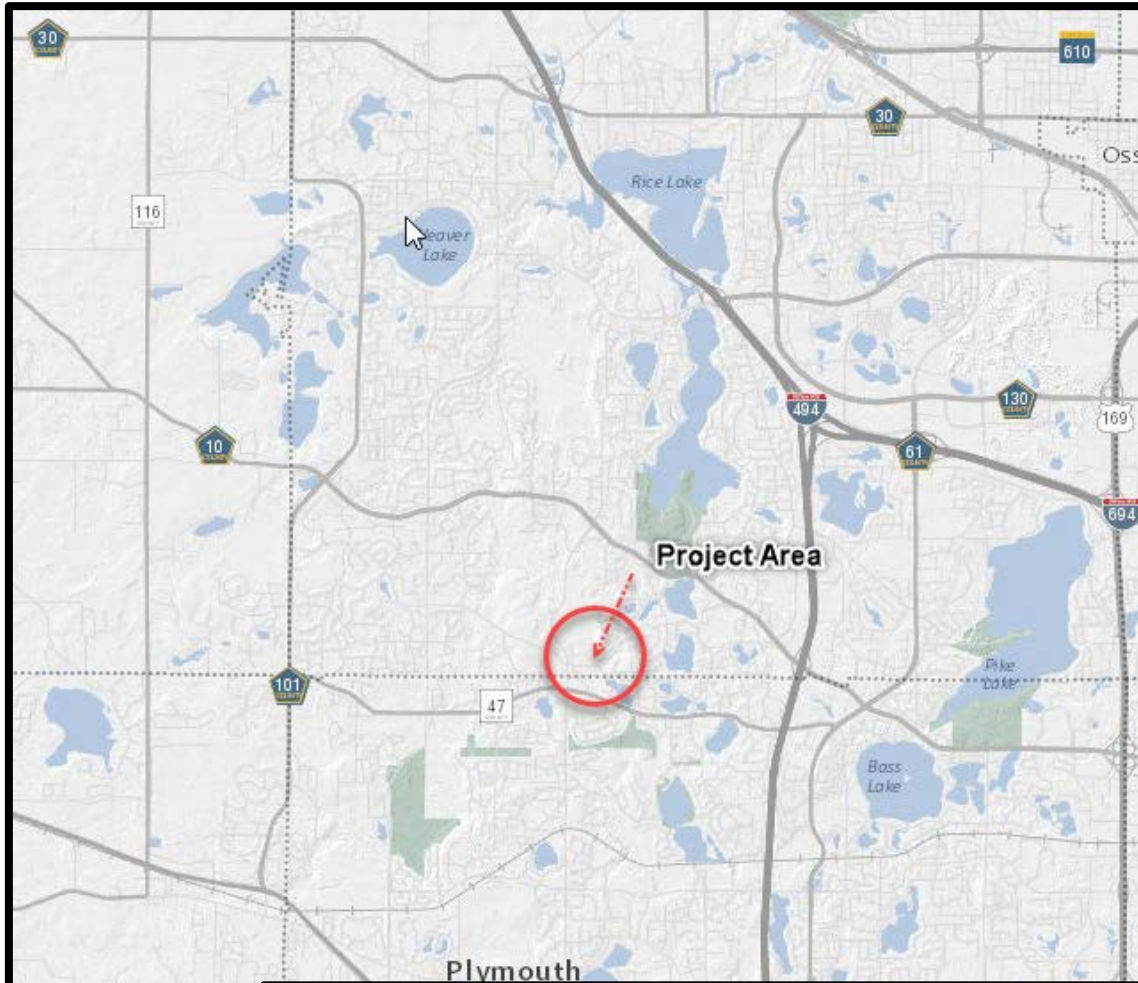
Advisor to the Commission



Surface Water Solutions LLC

February 19, 2020

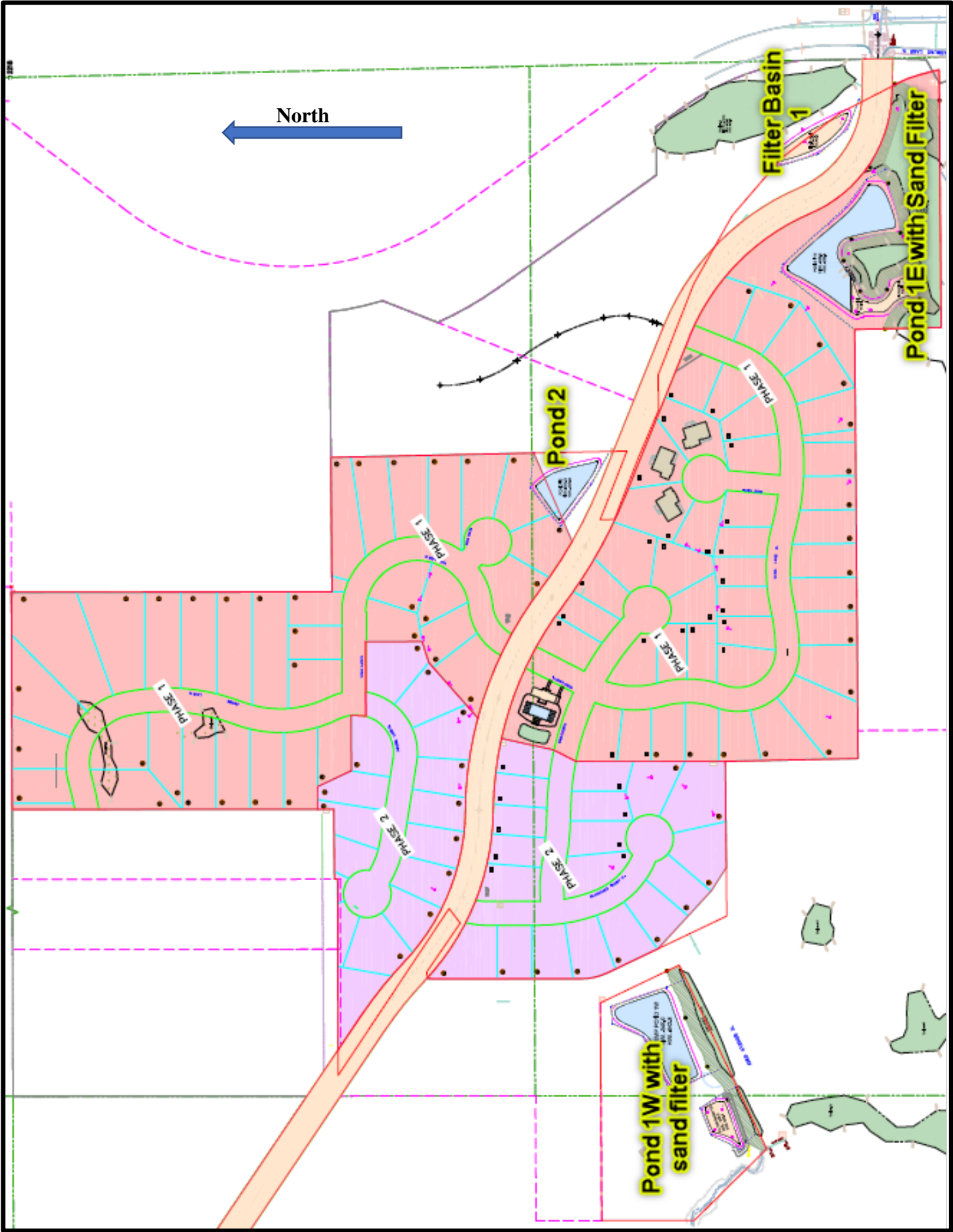
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# elm creek

## Watershed Management Commission

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### **Zachary Villas of Dayton** **Dayton, Project #2020-006**

**Project Overview:** This is 3 parcels that total 5.74 acres located just south of Diamond Lake Road on the border with Champlin. Fourteen (14) single family residential lots are proposed. This review will be for compliance to the Commissions 3<sup>rd</sup> Generation Stormwater Management Plan, Appendix C, Rule D (Stormwater Management) and Rule E (Erosion and Sediment Controls)

**Applicant:** Zachary Villas Homeowners Association, P.O. Box 43008, Brooklyn Park, MN 55443. Phone: 612-867-6533. Email: [meadowcreek51@hotmail.com](mailto:meadowcreek51@hotmail.com)

**Agent:** Sathre-Bergquist, Inc. 150 Broadway Ave. S., Wayzata, MN 55391. Phone: 952-476-6000. Email: [mvangilder@sathre.com](mailto:mvangilder@sathre.com)

#### **Exhibits:**

- 1) A complete ECWMC application received February 27, 2020.
  - a. ECWMC Request for Review and Approval dated February 24, 2020.
  - b. City of Dayton authorization for review, dated February 27, 2020
  - c. Project review fee, \$650.00 for 5.74 acres, residential site development project received February 27, 2020.
  - d. Hard and electronic site plan information submittal received February 27, 2020.
- 2) Zachary Villas of Dayton Site Plans by Sathre-Bergquist, Inc., dated November 22, 2019, with last revision date of February 5, 2020.
  - a. Sheet 1 of 12, Title Sheet
  - b. Sheet 2 of 12, Final Street Plan,
  - c. Sheet 3 of 12, Final Sanitary Sewer & Watermain Plan
  - d. Sheet 4 of 12, Final Storm Sewer Plan
  - e. Sheet 5 of 12, Final Grading Plan
  - f. Sheet 6 of 12, Final Erosion Control Plan
  - g. Sheets 7 to 12 of 12, City Details.
- 3) Juettner Parcels Stormwater Management Plan by Advanced Engineering and Environmental Services dated February 7, 2020.

#### **Findings.**

- 1) A complete application was received February 27, 2020. The initial decision period deadline per MN Statute 15.99 is April 27, 2020.
- 2) There are no FEMA or Elm Creek floodplains, streams or wetlands on this site.

### **Stormwater Management (Rule D)**

- 3) The majority of this site drains to two existing depressional areas within it. Because of the sandy soil conditions, there is little to no water that flows off it, including the 100-year events
- 4) Two infiltration ponds are proposed to recreate the existing runoff conditions.
- 5) If the City of Dayton does not operate or maintains the stormwater facilities on site, the applicant will be required to provide a recorded O & M agreement between the property owners and the City for said work.

### **Abstraction and Water Quality Controls**

- 6) 1.302 acres of new impervious areas will be created on site.
- 7) Abstraction through infiltration is proposed.
- 8) Required abstraction is 5,200 cubic feet.
- 9) Actual abstraction will be 35,800 cubic feet.
- 10) Per ECWMC Rule D, e) i) Full infiltration of 1.1 inches of runoff from all impervious surfaces will satisfy the ECWMC requirements for no-net increase in TP and TSS.
  - a. Full abstraction will occur on this site.
- 11) One additional sump manhole at CBMH 3 is required.

### **Rate and High-Water Controls**

- 12) A summary of peak flows for the 2, 10 and 100-year storm events is provided below.

Rate Control Summary

	<b>2-yr (cfs)</b>	<b>10-yr (cfs)</b>	<b>100-yr (cfs)</b>
<b>East-Pre-Development (2.78 Acres)</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>East Post-Development (0 Acres)</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>West Pre-Development (6.3 Acres)</b>	<b>1.4</b>	<b>2.1</b>	<b>4.2</b>
<b>West Post Development (9.08 Acres)</b>	<b>1.4</b>	<b>2.0</b>	<b>4.0</b>

- 13) Because of the potential for flooding, the existing homes along the west side of this site where analyzed for critical high-water events. The lowest floor on the existing home adjacent to the pond was determined to be at an elevation of 861.1. With the expansion of the storage area in the new pond design, there will be improvements to the freeboard depths on all the critical storm events as summarized in the following table.



Critical Basin Elevations

West Pond	Pond Elevation 100 Year Event	Freeboard to lowest floor	Pond Elevation - 100 year Back to Back Event	Freeboard to lowest floor
Pre-Development	961.3	+0.2'	962.1	+1.0'
Post Development	958.7	-2.4'	860.8	-0.3'

\*lowest floor elevation = 861.1

- 14) The majority of the site is considered landlocked. The proposed plan meets the following Commission requirements on landlocked areas
- The basin retains a hydrologic regime complying with floodplain alterations.
  - The basin provides 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.
  - The design does not create adverse downstream flooding or water quality conditions.
- 15) Proposed full basement low-floor elevations do not meet the Commissions floodplain requirements. To meet the 2.0-foot freeboard low-floor elevation requirements.
- Lots 1 thru 6 must have low floor elevation of 960.7 or higher.
  - Lots 10, 11, 12 and 13 at 963.9 or higher.

**Erosion and sediment control plans (Rule E)**

- 16) Erosion and sediment controls meet the Commission standards.

**Recommendations:** None currently.

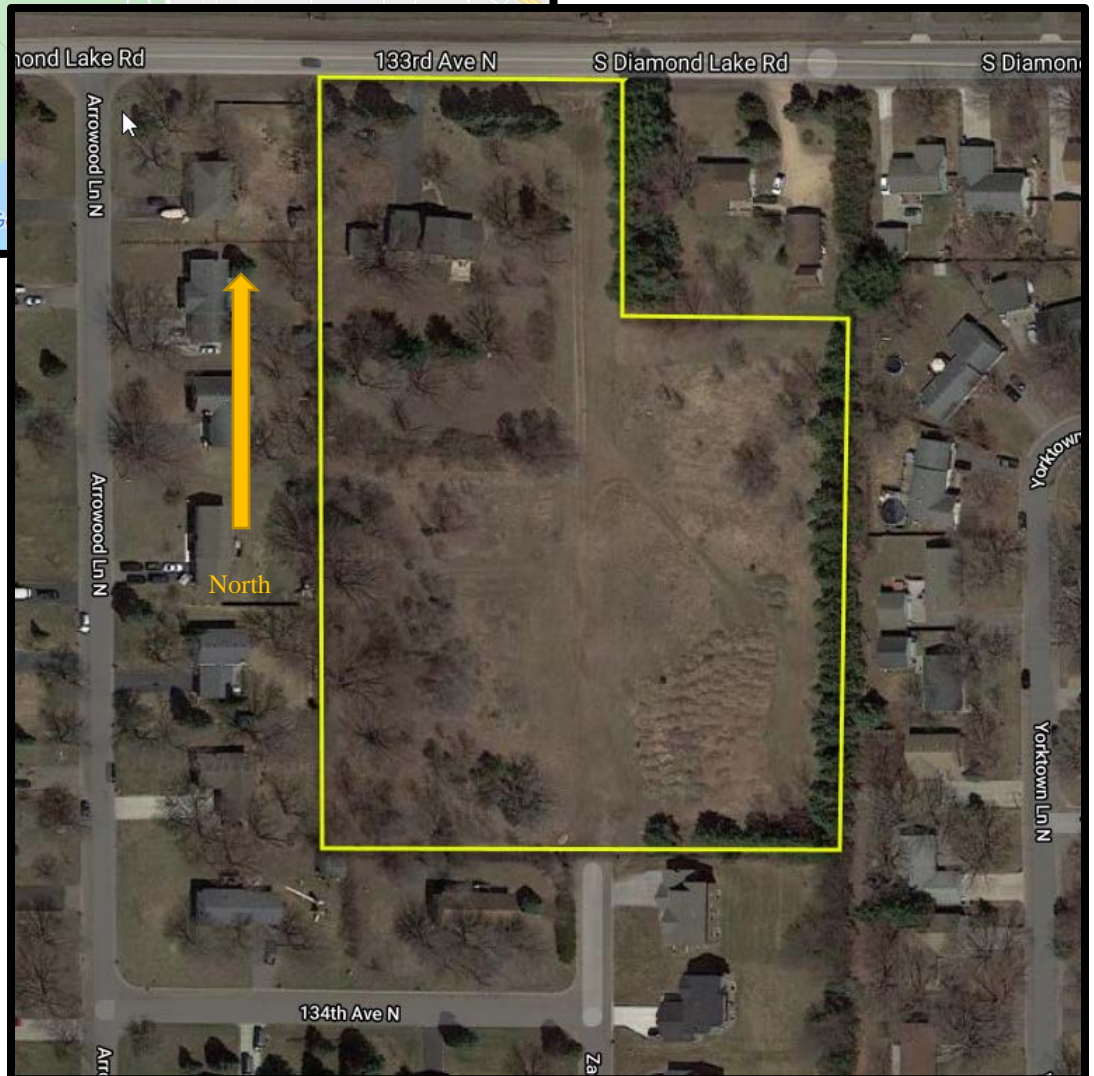
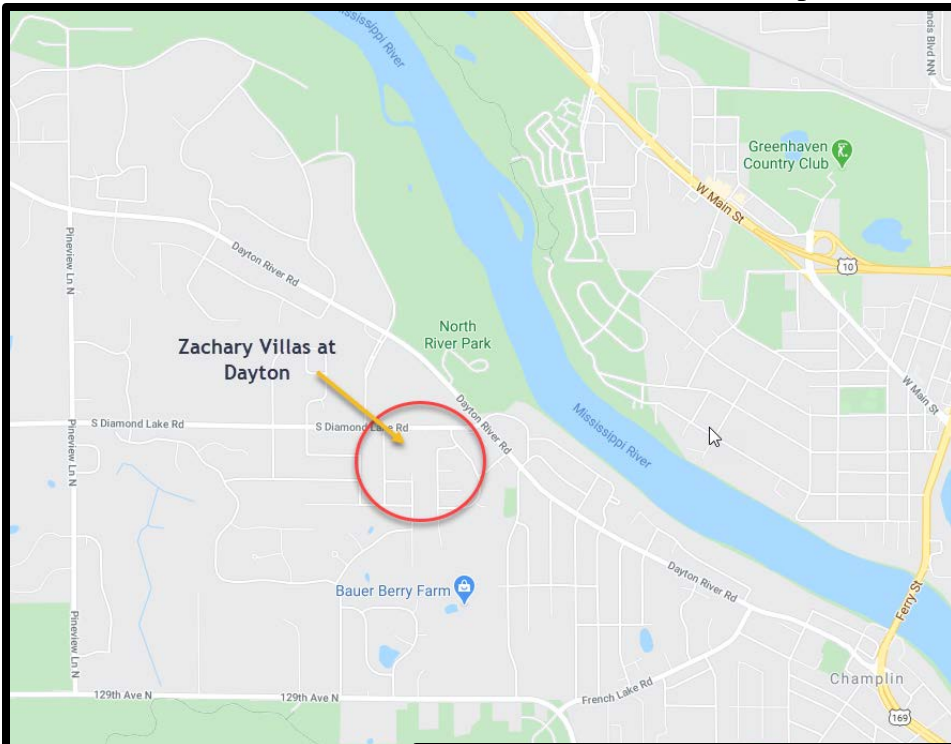
Advisor to the Commission



Surface Water Solutions

March 4, 2020  
Date

### Location Map



## Grading & Drainage Plan

