elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 email: judie@jass.biz www.elmcreekwatershed.org TECHNICAL OFFICE Barr Engineering 4300 Market Point Drive, Suite 200 Minneapolis, MN 55435 PH: 612.834.1060 Email; jHerbert@barr.com

December 2, 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**, **December 9, 2020, at 11:30 a.m. This will be a virtual meeting.**

Until further notice, all meetings will be held online to reduce the spread of COVID-19. To join a meeting, click <u>https://us02web.zoom.us/j/990970201?pwd=Vi95cWpFRUFiMTEweDdWR0V2MWRPdz09</u>, which takes you directly to the meeting.

OR, go to <u>www.zoom.us</u> and click **Join A Meeting**. The meeting ID is **990-970-201**. The passcode for this meeting is **water**.

If your computer is not equipped with audio capability, dial into one of these numbers:

+1 929 205 6099 US (New York)	+1 312 626 6799 US (Chicago)	+1 669 900 6833 US (San Jose)
+1 346 248 7799 US (Houston)	+1 253 215 8782 US	+1 301 715 8592 US

Meetings remain open to the public via the instructions above.

Please email me at <u>judie@jass.biz</u> to confirm whether you or your Alternate will be attending the regular meeting.

Thank you.

hidie Adeduson

Judie A. Anderson Administrator JAA:tim Encls: Meeting Packet cc: Alternates TAC Members

City Clerks

Jim Herbert Kris Guentzel Karen Galles

Joe Waln	
Brian Vlach	
Met Council	

James Kujawa	DNR
Diane Spector	BWSR
Official Newspaper	MPCA

Z:\Elm Creek\Meetings\Meetings 2020\11 Notice_reg meeting.docx

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 email: judie@jass.biz www.elmcreekwatershed.org TECHNICAL OFFICE Barr Engineering 4300 Market Point Drive, Suite 200 Minneapolis, MN 55435 PH: 612.834.1060 Email; jHerbert@barr.com

AGENDA

Regular Meeting December 9, 2020

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

Until further notice, all meetings will be held online to reduce the spread of COVID-19. To join this meeting, click <u>https://zoom.us/j/990970201</u> or go to <u>www.zoom.us</u> and click Join A Meeting. **The meeting ID is 990-970-201.** The passcode for this meeting is water.

If your computer is not equipped with audio capability, dial into one of these numbers:

+1 929 205 6099 US (New York)	+1 312 626 6799 US (Chicago)	+1 253 215 8782 US
+1 669 900 6833 US (San Jose)	+1 346 248 7799 US (Houston)	+1 301 715 8592 US

1. Call Regular Meeting to Order.

- a. Approve Agenda.*
- 2. Consent Agenda.
 - a. Minutes last Meeting.*
 - b. Treasurer's Report and Claims.*
- 3. Open Forum.
- 4. Action Items.
 - **a.** Project Reviews. *(see Staff Report and item 10 of the agenda)*
 - b. 2020 Work Plan in Review.*
- 5. Old Business.
 - **a.** Floodplain Mapping Project.
- 6. New Business.
- **7.** Communications.
 - a. Staff Report.*
- 8. Education.
 - a. WMWA next meeting January 12, 2021, at 8:30 a.m. This will be a virtual meeting. https://us02web.zoom.us/j/922390839?pwd=RU95T2ttL3FzQmxHcU9jcFhDdng1QT09 Meeting ID: 922 390 839 | Passcode: water | or dial into one of the numbers above.
- **9.** Grant Opportunities and Updates.

(over)

*in meeting packet **available at meeting or on website Regular Meeting Agenda – December 9, 2020 Page 2

10. Project Reviews.

			I RPFI			
Item No.	Α	E	RP D	AR	Project No.	Project Name
					W Denotes wetland project	
ah.				AR	2014-015	Rogers Drive Extension, Rogers.
ai.				AR	2015-030	Kiddiegarten Child Care Center, Maple Grove.
aj.				AR	2016-005W	Ravinia Wetland Bank Plan, Corcoran.
ak.				AR	2017-014	Laurel Creek, Rogers.
al.				AR	2017-029	Brayburn Trails, Dayton.
am.				AR	2017-039	Rush Creek Apartments, Maple Grove.
a.					2017-050W	Ernie Mayers Wetland/floodplain violation, Corcoran.
b.					2018-020	North 101 Storage, Rogers.
с.					2018-046	Graco, Rogers.
an.				AR	2018-048	Faithbrook Church Phase 2, Dayton.
ao.				AR	2019-001	Fernbrook View Apartments, Maple Grove.
ap.				AR	2019-002	Parkside Villas, Champlin.
aq.				AR	2019-021	Brenly Meadows, Rogers.
d.					2019-024	Boston Scientific, Maple Grove.
ar.				AR	2019-027	Havenwood at Maple Grove.
as.				AR	2019-032	OSI Expansion, Medina.
e.					2020-001	Outlot L, Markets at Rush Creek, Maple Grove.
f.					2020-002	Project 100, Maple Grove.
g.	А	Е			2020-008	lone Gardens, Dayton.
at.				AR	2020-009	Stetler Barn, Medina.
h.					2020-015	Dayton Interchange Business Center, Dayton.
i.					2020-016	Skye Meadow, Rogers.
j.		Е			2020-017	Meadow View Townhomes, Medina.
k.					2020-022	Elm Road Street & Utility Project, Maple Grove.
au.					2020-023	Ziegler Dayton Site Upgrades, Dayton.
Ι.					2020-025	Paulsen Farms, Corcoran.
av.					2020-027	Kariniemi Addition, Corcoran.
m.					2020-029	Sundance Greens 5th Addition, Dayton.
n.	А	Е			2020-030	Nelson International, Corcoran.
0.	А	Е			2020-032	Enclave Rogers - Commerce Boulevard, Rogers.
р.		Е			2020-033	Weston Woods, Medina.
q.	А	Е			2020-035	Presteng Residence, Corcoran.
r.					2020-036	Balsam Pointe, Dayton.
S.					2020-037	Rice Lake Elementary School Pond Excavation, Maple Grove.

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

11. Other Business.

12. Adjournment.

Z:\Elm Creek\Meetings\Meetings 2020\12 Regular Meeting Agenda.docx

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 email: judie@jass.biz www.elmcreekwatershed.org TECHNICAL OFFICE Barr Engineering 4300 Market Point Drive, Suite 200 Minneapolis, MN 55435 PH: 612.834.1060 email: jherbert@barr.com

Regular Meeting Minutes November 4, 2020

I. A virtual meeting of the Elm Creek Watershed Management Commission was called to order at 11:33 a.m., Wednesday, November 4, 2020, by Chair Doug Baines.

Present were: Bill Walraven, Champlin; Ken Guenthner, Corcoran; Doug Baines, Dayton; Dan Riggs, Maple Grove; Catherine Cesnik, Plymouth; Joe Waln, Barr Engineering; and Amy Juntunen and Judie Anderson, JASS.

Not represented: Medina and Rogers.

Also present: Kevin Mattson, Corcoran; Derek Asche and Mark Lahtinen, Maple Grove; Ben Scharenbroich, Plymouth; and Andrew Simmons, Rogers.

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

- **B.** Motion by Guenthner, second by Cesnik to approve the consent agenda:
 - 1. Minutes* of the October 14, 2020 regular meeting.
 - 2. November Treasurer's Report and Claims* totaling \$267,481.92.

Motion carried unanimously.

- II. Open forum.
- III. Action Items.
- IV. Old Business.
- V. New Business.

A. 2020 Administrative Budget.

Included in the meeting packet were a memo* from Anderson regarding the position of the administrative budget through October 27, 2020, and a spreadsheet* showing the administrative expenses by budget line item. She anticipates that the 2020 administrative budget will likely be overspent by approximately \$2,000 at year-end (the JASS January 2021 invoice). Areas where over-expenditure will likely occur are ordinary monthly expenses, Technical Advisory Committee (TAC) support, annual reporting and work plans, CIPs, and the floodplain mapping project. She assured the Commission that JASS will continue to be as dilligent as possible in keeping overruns to a minimum.

elm creek Watershed Management Commission

Regular Meeting Minutes – November 4, 2020 Page 2

B. Floodplain Mapping Project.

Included in the meeting were two letters regarding this project. The first,* sent to Nathan Campeau at Barr Engineering, requested Barr to cease work on this project effective immediately and stated that it is the Commission's intention to resolve the funding issues with the MnDNR before proceeding further with the project. The second letter,* addressed to Jeff Weiss at MnDNR, requests reimbursement of all eligible costs incurred to date.

VI. Communications.

A. November Staff Report.* Staff have been reaching out to the cities to collect the final recordations on the older projects remaining on the report.

B. October 28 Project Updates. In her report, Kirsten Barta, Hennepin County, provided an update on the projects the County is working on in the watershed.

1. There is one outstanding buffer case in Corcoran. The County and the Board of Water and Soil Resources (BWSR) will inspect the site next week to confirm compliance.

2. There is a large project taking place west of Jubert Lake in Corcoran that involves multiple components and landowners. Several grassed waterways, a sediment basin, and a water control structure are all in the process of being designed in partnership with the landowners.

3. A second project in Corcoran is currently under review by the city's WCA consultant to see if it is feasible to move forward.

4. Exclusion fencing and rotational grazing plan are being developed for a landowner in Corcoran to keep horses/goats out of an ephemeral wetland area during wet seasons. Some pasture improvements/refreshing will also be undertaken in the rest of the pasture.

5. Another project just north of Diamond Lake is taking shape to reduce manure runoff downhill into a wetland that feeds directly into the lake in Dayton.

6. Ditch inspections are tentatively scheduled for the middle of November for County Ditches 3 and 16 in Corcoran/Maple Grove. No work may be done on the ditches until they are inspected for baseline condition. Interested residents will be invited to schedule short meetings during the inspection with COVID precautions in place. Barta will include a ditch location map with her next report.

VII. Education and Public Outreach. The next West Metro Water Alliance (WMWA) meetings are scheduled for Tuesday, November 10, 2020, and Tuesday, December 8, 2020, at 8:30 a.m. These are both virtual meetings. The Zoom number is https://us02web.zoom.us/j/922390839. Or call in at any of these numbers using meeting ID: 922 390 839: (1) +1 301 715 8592 US (Germantown); (2) +1 312 626 6799 US (Chicago); (3) +1 929 205 6099 US (New York); or (4) +1 253 215 8782 US (Tacoma). The passcode is water.

VIII. Grant Opportunities and Project Updates.

Staff will retransmit information on the Hennepin County Opportunity Grant program following this meeting. The County is accepting applications for projects that protect and restore habitat, improve stormwater management, and reduce erosion and sedimentation. The **Natural Resources Opportunity Grant Program** is a non-competitive grant available to government organizations, non-profit organizations, businesses, and individuals looking to implement projects that preserve and restore the county's natural

elm creek Watershed Management Commission

Regular Meeting Minutes – November 4, 2020 Page 3

resources. Deadline for applications is December 2, 2020. For more information, contact Kris Guentzel at Hennepin County, Kristopher.Guentzel@hennepin.us.

IX. Other Business.

A. The **projects** listed on the following pages are discussed in the November Staff Report.

[Walraven arrived 11:42 a.m.]

B. Adjournment. There being no further business, motion by Guenthner, second by Cesnik to adjourn. *Motion carried unanimously*. The meeting was adjourned at 11:43 a.m.

Respectfully submitted,

Adeduson h. die

Judie A.Anderson Recording Secretary JAA:tim

Z:\Elm Creek\Meetings\Meetings 2020\November 4 2020 regular meeting minutes.docx

			I RPFI			
Item No.	Α	Е	RP D	AR	Project No.	Project Name
					W Denotes wetland project	
ah.				AR	2014-015	Rogers Drive Extension, Rogers.
ai.				AR	2015-030	Kiddiegarten Child Care Center, Maple Grove.
aj.			R	AR	2016-002	The Markets at Rush Creek, Maple Grove.
ak.				AR	2016-005W	Ravinia Wetland Bank Plan, Corcoran.
al.			R	AR	2016-047	Hy-Vee North, Maple Grove.
am.				AR	2017-014	Laurel Creek, Rogers.
an.				AR	2017-029	Brayburn Trails, Dayton.
ao.				AR	2017-039	Rush Creek Apartments, Maple Grove.
a.					2017-050W	Ernie Mayers Wetland/floodplain violation, Corcoran.
b.					2018-020	North 101 Storage, Rogers.
ap.			R	AR	2018-026	Windrose, Maple Grove.
с.					2018-046	Graco, Rogers
aq.				AR	2018-048	Faithbrook Church Phase 2, Dayton.
ar.				AR	2019-001	Fernbrook View Apartments, Maple Grove.
as.				AR	2019-002	Parkside Villas, Champlin.
at.				AR	2019-021	Brenly Meadows, Rogers.
d.					2019-024	Boston Scientific, Maple Grove.
au.				AR	2019-027	Havenwood at Maple Grove.
av.				AR	2019-032	OSI Expansion, Medina.
e.					2020-001	Outlot L, Markets at Rush Creek, Maple Grove.
f.					2020-002	Project 100, Maple Grove.
g.					2020-008	lone Gardens, Dayton.
aw.				AR	2020-009	Stetler Barn, Medina.
h.					2020-015	Dayton Interchange Business Center, Dayton.

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 – November 4, 2020 Page 4

i.			2020-016	Lennar Terr Road Development (Skye Meadow), Rogers.
j.			2020-017	Meadow View Townhomes, Medina.
k.			2020-022	Elm Road Area Street & Utility Project, Maple Grove.
ax.			2020-023	Ziegler Dayton Site Upgrades, Dayton.
Ι.			2020-025	Paulsen Farms, Corcoran.
m.		R	2020-026	Rogers HS Addition and Renovation, Rogers.
n.			2020-027	Kariniemi Addition, Corcoran.
0.		R	2020-028	Perl Gardens, Plymouth.
р.			2020-029	Sundance Greens 5th Addition, Dayton.
q.			2020-030	Nelson International, Corcoran.
r.		R	2020-031	EAW Chippewa Road Ext./Weston Woods development, Medina.
s.			2020-032	Enclave Rogers – Commerce Boulevard, Rogers.
t.			2020-033	Weston Woods, Medina.
u.	E	R	 2020-034	Erickson Residence, Corcoran.
v.			 2020-035	Presteng Residence, Corcoran.

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

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

	2020 Budget	Nov 2020	Dec 2020	2020 Budget YTD
EXPENSES				
Administrative	90,000	6,170.74	7,373.37	92,656.48
Watershed-wide TMDL Admin	300			0.00
Grant Writing	1,000			0.00
Website	3,000	38.35	21.45	2,884.05
Legal	2,000	31.00	248.00	418.50
Audit	5,000			6,000.00
Insurance	3,900			3,644.00
Miscellaneous/Contingency	1,000			0.00
Technical Support - HCEE	15,000			0.00
Floodplain Mapping	39,360	2,630.50	963.50	79,636.00
Project Review Technical (Job 300)	185,000	6,184.50	5,773.00	64,419.49
Other Technical (Jobs 100 & 200)	100,000	2,015.50	2,667.50	60,612.50
Project Reviews - Admin	15,000	723.14	2,007.00	9,142.07
WCA - Technical	3,000	120.17	2,012.20	0.00
WCA - Legal	500			0.00
WCA - Admin	1,000			0.00
Stream Monitoring USGS	24,000			20,940.00
Stream Monitoring TRPD	7,200			0.00
DO Longitudinal Survey	1,000			0.00
TMDL Follow-up - TRPD				0.00
Rain Gauge	1,000	31.12	28.71	333.87
	250	31.12	20.71	
Rain Gauge Network	100			0.00
Lakes Monitoring - CAMP	760			0.00
Lakes Monitoring - TRPD	0.400			
Sentinel Lakes	8,100			0.00
Additional Lake	2,500			0.00
Aquatic Vegetation Surveys	1,100			0.00
Wetland Monitoring (WHEP)	4,000			0.00
Education	3,000	45.94	70.44	1,874.87
WMWA General Activities	5,000			3,000.00
WMWA Educators/Watershed Prep WMWA Special Projects	4,500			2,000.00
Rain Garden Workshops/Intensive Bl	2,000 MPs 3,000			1,000.00 625.00
Education Grants	1,000			0.00
Macroinvertebrate Monitoring-River V				0.00
Projects ineligible for ad valorem	0			0.00
Studies / Project ID / SWA	0		15,267.50	18,302.92
Plan Amendment	2,000		. 0,201.00	1,409.24
Transfer to (from) Encumbered Fund				0.00
Transfer to (from) Capital Projects (se		249,611.13		250,054.13
Transfer to (from) Cash Sureties (see		-		2,386.70
Transfer to (from) Grants (see below)	•	-	-	0.00
To Fund Balance				0.00
TOTAL - Month		267,481.92	34,485.67	621,339.82
TOTAL Paid in 2020, incl late 2019 Expe	enses 1,012,505.00	708,938.47	743,424.14	2020 Paid

Elm Creek Watershed Management Commission Treasurer's Report

		2020 Budget	Nov 2020	Dec 2020	2020 Budget YTD
INCOME					
From Fund Balance					
Floodplain Modeling		39,360			
Project Review Fee		80,000	2,500.00		96,641.50
Return Project Fee					0.00
Water Monitoring - TRPD Co-o	p Agmt	5,500			0.00
WCA Fees		0			0.00
Return WCA Fee					0.00
Reimbursement for WCA Expe	nse				0.00
WCA Escrow Earned					0.00
Member Dues		237,300			237,300.00
Interest/Dividends Earned		8,250	22.29		5,317.09
Transfer to (from) Capital Proje	octs (see CIP Tr		83.54	138,593.83	293,690.01
Transfer to (from) Capital 110je		440,900	05.54	130,393.03	293,090.01
Transfer to (from) Grants (see		100,000			100,137.21
	DelOW)	100,000	-	-	0.00
Misc Income Total - Month			2 605 92	138,593.83	733,085.81
	Income	919,345.00	2,605.83 643,075.38	781,669.21	2020 Received
TOTAL Rec'd 2020, incl late 2019	Income		643,075.30	701,009.21	2020 Received
CASH SUMMARY		Balance Fwd			
Checking		0.00			
4M Fund		1,263,863.98	1,198,000.89	1,302,109.05	
Cash on Hand			1,198,000.89	1,302,109.05	
CASH SURETIES HELD		Balance Fwd			Activity 2020
WCA Escrows Received		11,494.47			0.00
WCA Escrow Reduced					2,386.70
Total Cash Sureties Held		11,494.47	9,107.77	9,107.77	
RESTRICTED / ENCUMBERE	D FUNDS	Balance Fwd			
Restricted for CIPs		765,131			765,131.00
Enc. Studies / Project Identifica Total Restricted / Encumbere		205,437			205,437.00
I ATAL RESTRICTED / Enclimper	ea Funas	970,568	970,568.00	970,568.00	
		/			
		,			
			Nov 2020	Dec 2020	2020 Budget YTD
GRANTS			Nov 2020	Dec 2020	
GRANTS	2		Nov 2020	Dec 2020	
GRANTS Fish Lake Alum Trmt Phase 2	2		Nov 2020	Dec 2020	YTD
GRANTS Fish Lake Alum Trmt Phase 2 Revenue	2		Nov 2020	Dec 2020	
GRANTS Fish Lake Alum Trmt Phase 2	2		Nov 2020	Dec 2020	YTD
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance					YTD 41,890.21
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance BWSR Watershed-based Fun					YTD 41,890.21
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance BWSR Watershed-based Fun Revenue					YTD 41,890.21
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance BWSR Watershed-based Fun Revenue Expense					YTD 41,890.21
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance BWSR Watershed-based Fun Revenue Expense Balance				- -	YTD 41,890.21
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance BWSR Watershed-based Fun Revenue Expense Balance DNR Floodplain Data				- -	YTD 41,890.21 - 41,890.21 - - -
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance BWSR Watershed-based Fun Revenue Expense Balance DNR Floodplain Data Revenue				- -	YTD 41,890.21
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance BWSR Watershed-based Fun Revenue Expense Balance DNR Floodplain Data Revenue Expense			- -	- -	YTD 41,890.21 - 41,890.21 - - - 58,247.00 -
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance BWSR Watershed-based Fun Revenue Expense Balance DNR Floodplain Data Revenue Expense Balance				- -	YTD 41,890.21 - 41,890.21 - - -
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance BWSR Watershed-based Fun Revenue Expense Balance DNR Floodplain Data Revenue Expense			- -	- -	YTD 41,890.21 - 41,890.21 - - - 58,247.00 - 58,247.00
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance BWSR Watershed-based Fun Revenue Expense Balance DNR Floodplain Data Revenue Expense Balance TOTAL GRANTS Revenue			- -	- -	YTD 41,890.21 - 41,890.21 - - - 58,247.00 -
GRANTS Fish Lake Alum Trmt Phase 2 Revenue Expense Balance BWSR Watershed-based Fun Revenue Expense Balance DNR Floodplain Data Revenue Expense Balance TOTAL GRANTS			-	- -	YTD 41,890.21 - 41,890.21 - - - 58,247.00 - 58,247.00

Elm Creek Watershed Management Commission Treasurer's Report

Claims Presented	General Ledger Account No	November	December	TOTAL
Campbell Knutson - Legal	521000		248.00	248.00
Connexus - Rain Gauge	551100		28.71	28.71
Barr Engineering				9,404.00
Floodplain Mapping	580440		963.50	
Project Review Technical (Job 300)	578050		5,773.00	
Other Technical (Jobs 100 & 200)	578050		2,667.50	
Ravinia Wetland Mitigation	240201			
City of Maple Grove - Fish Lake SWA	585100		15,000.00	15,000.00
JASS				9,804.96
Administration	511000		6,035.39	
TAC Support	511000			
2020 Work Plan	511000		1,185.60	
Website	581000		21.45	
Project Reviews	578100		2,072.20	
Education	590000		70.44	
CIPs General	563001		267.50	
Floodplain Mapping Admin	511000		152.38	
TOTAL CLAIMS				34,485.67

Elm Creek Watershed Management Commission Treasurer's Report

NOV DEC TOTAL TOTAL ALL 2020 2020 YEARS		- 79,560.58	- 106.32	79,454.26		- 74,302.48	- 106.32	- 74,196.16		19.99 46.67 112,404.61	- 135.85	- 19.99 46.67 112,268.76		59.28 249,746.99			(249,611.13) - (249,551.85) -		13.33 31.11 74,937.85	- 135.85	- 13.33 31.11 74,802.00		90.50 337.80 74,931.51		- 90.50 337.80 74,816.33		120.68 450.41 99,911.76	- 115.18	- 120.68 450.41 99,796.58		90.50 337.80 74,931.51		- 90.50 337.80 74,816.33		7.50 12,419.79 26,268.71 26,268.71	- 102.77	7.50 12,419.79 26,268.71 26,165.94		23.06 38,164.97 80,721.54 80,721.54	
AUG SEP OCT 2020 2020 2020								•				•					(2				•				•				•				•				•			_
JUN JUL A 2020 2020 2										26.68		- 26.68		59.28			- 59.28		17.78		- 17.78		247.30		- 247.30		329.73		329.73		247.30		- 247.30		13,841.42		- 13,841.42		42,533.51	
MAY JU 2020 203								•				•	F				'				•	ŀ			'	F			'				'				•	ł		
APR 2020									T				1									Γ				1				Γ				Γ						
MAR 2020					T	l	l						T									Γ				T				Π				Γ						ĺ
FEB 2020					ľ	ľ	ľ			T												Γ								Π				Γ		Π				
JAN 2020					T	l	l						T									Γ				T								Γ						Í
ТОТАL 2019		(694.43)		(694.43)		(648.52)		(648.52)		10.83		10.83		24.08			24.08		7.22		7.22		74,593.71		74,593.71		99,461.35		99,461.35		74,593.71		74,593.71			102.77	(102.77)			
TOTAL 2018		(98.25)		(98.25)		(91.75)		(91.75)		112,347.11		112,347.11		249,663.63			249,663.63		74,899.52		74,899.52			115.18	(115.18)			115.18	(115.18)			115.18	(115.18)						•	
TOTAL 2017		80,353.26		80,353.26		75,042.75		75,042.75		•	135.85	(135.85)			135.86		(135.86)			135.85	(135.85)														•	•			•	
TOTAL 2016			106.32	(106.32)			106.32	(106.32)			•			•					•	•											,				•				•	
%age	16.296				15.219				25.714				57.143					17.143				30.000				40.000				30.000				8.983				27.604		ſ
Amount	80,312.00				75.000.00				r 112,500.00				250,000.00					75,000.00				3 75,000.00				100,000.00				75,000.00				26,513.00				r 81,471.00		
	2016-01 Fox Creek Phase 2 Bank Stab	Revenue	Expense	Balance	2016-05 Fish Lake Alum Trmt Phase 1	Revenue	Expense	Balance	2017-01 Fox Creek Phase 3 Streambar	Revenue	Expense	Balance	2017-03 Mill Pond Fishery & Habitat Re	Revenue	Expense	Payment to City	Balance	2017-04 Rain Garden at Independence	Revenue	Expense	Balance	2018-01 Rush Creek Ph 3 Main Stem S	Revenue	Expense	Balance	2018-03 Elm Creek Phase III Stream Re	Revenue	Expense	Balance	2018-04 Downs Road Trail Rain Garder	Revenue	Expense	Balance	2019-01 Rush Creek Main Stem Ph 3	Revenue	Expense	Balance	2019-04 Hickory Drive Stormwater Impr	Revenue	
CIPs	2016-	-			2016-			Ħ	2017-	-			2017-		Ш	-		2017-	-	ш		2018-		ш		2018-	-	ш		2018-		ш		2019-				2019-	-	l

CIPs		Amount	%age	TOTAL 2016	ТОТАL 2017	TOTAL 2018	ТОТАL 2019	JAN 2020	FEB M 2020 2	MAR AF 2020 20	APR MAY 2020 2020	47 JUN 20 2020	JUL 2020	AUG 2020	SEP 2020	ОСТ 2020	NOV 2020	DEC 2020	TOTAL 2020	TOTAL ALL YEARS
Ň	2019-05 Downtown Regional Stormwate	ate 28,079.00	9.514					F		-	╞					T				
	Revenue										\square		14,659.60				7.95	13,153.95	27,821.50	27,821.50
	Expense			-	•	-	102.77													102.77
	Balance					•	(102.77)			•	•		14,659.60		•		7.95	13,153.95	27,821.50	27,718.73
Ŋ.	2019-06 Elm Creek Restore Ph IV	159,075.00	53.899					Η	Η	Η	Н	Н				П				
	Revenue					ı							83,050.04				45.03	74,520.12	157,615.19	157,615.19
	Expense						102.78													102.78
	Balance						(102.78)		,		-	'	83,050.04	'			45.03	74,520.12	157,615.19	157,512.41
Ň	2020-01 Livestock Exclusions, Buffers,											L								
	Revenue								╞	╞										•
	Expense										-	_		147.67					147.67	147.67
	Balance									•	•	•		(147.67)					(147.67)	(147.67)
Ñ	2020-02 Agricultural BMPs Cost Share	6						T	F	┢	⊢					Ē				
	Revenue									$\left \right $										
	Expense								╞		╞			147.67					147.67	147.67
	Balance							,		-	'	,		(147.67)					(147.67)	(147.67)
Ň	2020-03 Enhanced Street Sweeper							F		-	╞					T				
	Revenue			•							\square								•	•
	Expense							Η			Н			147.66					147.66	147.66
	Balance					·				-	'	•		(147.66)					(147.66)	(147.66)
TOT/	TOTAL CIP							t	F	┢	┝	L				ſ		Γ		
Ľ	Revenue			249,795.17	494,329.63	436,392.95	458,031.53			•	•	.	155,012.64				83.54	138,593.83	293,690.01	2,063,809.42
Ш	Expense			812.59	407.56	570.54	411.10			•	•	•	•	443.00			•	•	443.00	8,872.57
<u>م</u>	Payments			245,276.36	1,836.48	322,859.09	352,173.28		-		-	•			•		249,611.13		249,611.13	1,171,756.34
	Balance			3,706.22	492,085.59	111,741.60	105,224.02			•	·	·	155,012.64	(443.00)			(249,527.59)	138,593.83	43,635.88	881,735.66
			Ţ																	
CLO	CLOSED PROJECT FUND		I							┨						T				
2	2014-02 Champlin Mill Pond Dam		Ī			82.31		╡	╉	╉	+					Ť				82.31
IN O	2015-01 Plymouth Elm Creek Restoration	tion				1,139.41	1	╡	1	┥	+					T				1,139.41
ιN	2014-01 Medina Tower Drive		Ī				120.35			╉						T				120.35
	Balance Closed Project Fund									╉	╉	-								1,342.07
LOT	TOTAL CIP & Closed Project Fund				Ī			t	╞	┢	┞	L				T				883 077 73
COM	COMPLETED PROJECTS \$0 BALANCE							t		\vdash	\vdash	L				ſ				
Ň	2016-02 Miss River Shore Repair/Stabilization	oilization				COMPLETE		ſ	╞	╞	┢					ľ				
2	2016-03 EC Dam at Mill Pond					COMPLETE		-												
2	2016-04 Rush Creek Main Stem Restoration	oration				COMPLETE														
2	2018-02 Elm Creek Reach D Stream Restoration	Restoration				COMPLETE														
								╡			┥					Ţ				

CAMPBELL KNUTSON Professional Association Attorneys at Law Federal Tax I.D. #41-1562130 Grand Oak Office Center I 860 Blue Gentian Road, Suite 290 Eagan, Minnesota 55121 (651) 452-5000

Elm Creek Watershed Management Commission c/o Judie A. Anderson, Exec. Secty. 3235 Fernbrook Lane Plymouth MN 55447 Page: 1 October 31, 2020 Account # 1448-0000G 223

RE: GENERAL MATTERS SERVICES RENDERED TO DATE:

10/21/2020	լլլ	Emails Judie re: grant agreement, cost overruns, options.	HOURS 0.40	62.00
10/26/2020	111	Telephone call and emails Judie re: grant/Barr matter.	0.70	108.50
10/27/2020	JJJ ⁻	Follow-up emails, review draft letters, respond to question regarding termination. AMOUNT DUE	<u>0.50</u> 1.60	77.50 248.00
		TOTAL CURRENT WORK		248.00
		PREVIOUS BALANCE		\$31.00
11/09/2020		Payment - thank you		-31.00
		TOTAL AMOUNT DUE		\$248.00

Amounts due over 30 days will be subject to a finance charge of .5% per month (or an annual rate of 6%). Minimum charge - 50 cents.

CAMPBELL KNUTSON Professional Association Attorneys at Law Federal Tax I.D. #41-1562130 Grand Oak Office Center I 860 Blue Gentian Road, Suite 290 Eagan, Minnesota 55121 (651) 452-5000

 Elm Creek Watershed Management Commission
 October 31, 2020

 c/o Judie A. Anderson, Exec. Secty.
 Account # 1448G

 3235 Fernbrook Lane
 Plymouth MN 55447

 SUMMARY STATEMENT
 SUMMARY STATEMENT

PREVIOUS BALANCE	FEES	EXPENSES	CREDITS	PAYMENTS	BALANCE
1448-0000 RE: GENER					
	VICES RENDER	0.00	0.00	-31.00	\$248.00
31.00	248.00	0.00	0.00	-31.00	φ240.00

Amounts due over 30 days will be subject to a finance charge of .5% per month (or an annual rate of 6%). Minimum charge - 50 cents.



Monthly Statement

Service Address

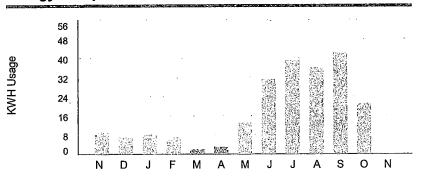
Account Number: 481113-238425

ELM CREEK WATERSHED MGMT ORG

ELM CREEK RD		Total Amount Due	Due Date
DAYTON MN		\$28.71	December 13, 2020
Billing Summary	Billing Date: Nov 17, 2020		
Previous Balance	\$31.12	Message Center	
Payments - Thank You!	\$31.12		
Balance Forward	\$0.00		
New Charges	\$28.71		
Total Amount Due	\$28.71		

Payment must be received on or before December 13, 2020

Energy Comparison Services 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 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-007333/006930 AGYW9B S1-ET-M1-C00002 1



Account Number:	
Total Amount Due	
Payment Due By	Dec

\$28.71 cember 13, 2020

______ 481113-238425

007333 1 AB 0.416 003336/007333/006930 026 02 AGYW9B ELM CREEK WATERSHED MGMT ORG 3235 FERNBROOK LN N PLYMOUTH MN 55447-5325

Connexus Energy PO Box 1808 Minneapolis, MN 55480-1808

00002871 0004811130238425 000000 00000 000000000 000001



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 Commission JASS-Watershed Administrators 3235 Fernbrook Lane Plymouth, MN 55447 December 2, 2020 Invoice No: 23271759.00 - 13

Total this Invoice \$963.50

Regarding: Elm Creek Floodplain Mapping

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

Develop final survey files for DNR

Total Contract	Total Prior	Billing this	Total Billing to	Budget
Budget	Billing	Invoice	Date	Remaining
\$90,945.00	\$80,646.00	\$963.50	\$81,609.50	

Professional Services from October 17, 2020 to October 26, 2020

ings Hours .10	Rate	Amount	
		Amount	
10			
10			
.10	100.00	10.00	
.80	95.00	76.00	
.90		86.00	
			86.00
	Job S	ubtotal	\$86.00
Survey Coordination			·
Hours	Rate	Amount	
.30	155.00	46.50	
.20	100.00	20.00	
. 3.00	120.00		
7.60		877.50	
			877.50
	Job S	ubtotal	\$877.50
	Total this	Invoice	\$963.50
	.90 Survey Coordination Hours .30 4.10 .20 3.00	.90 Survey Coordination Hours Rate .30 155.00 4.10 110.00 .20 100.00 3.00 120.00 7.60 Job S	.90 86.00 Job Subtotal Survey Coordination Hours Rate Amount .30 155.00 46.50 4.10 110.00 451.00 .20 100.00 20.00 3.00 120.00 360.00

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 <u>hhlavaty@barr.com</u>.



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 Commission JASS-Watershed Administrators 3235 Fernbrook Lane Plymouth, MN 55447 December 2, 2020 Invoice No: 23270F55.20 - 10

Total this Invoice \$

\$8,440.50

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

- Meetings
 - o preparing for WMC meeting
 - o attending WMC meeting
 - o updating staff report
- Pre-Project Review
 - o communicating with potential permit applicants regarding the following projects:
 - Erickson Residence
 - CSAH 10 Bridge
- Wetland Issues
 - o sharing Ernie Mayers review files 2017-050 with Wenck
- General administrative tasks
 - o coordinating with administrator
 - o helping setup new review fee administrative processes

Job 200 – Other Assistance

- MTDs
 - o none

Job 300 – Project Reviews

- Reviewing the following projects for compliance with stormwater and erosion control rules:
 - o 2020-008 Ione Gardens, Dayton
 - o 2020-016 Lennar Territorial Rd Development (Skye Meadows), Rogers
 - o 2020-017 Meadow View Town Homes, Medina
 - o 2020-030 Nelson International, Corcoran
 - o 2020-032 Enclave Rogers Commerce Blvd, Rogers
 - o 2020-033 Weston Woods, Medina
 - o 2020-034 Erickson Residence, Corcoran
 - o 2020-035 Presteng Residence, Corcoran
 - o 2020-036 Balsam Pointe, Corcoran

100

Professional Services from October 17, 2020 to November 27, 2020

Job:

Technical Services

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.

Project	23270F55.20	Elm Creek WMC 2020			Invoice	10
Task:	010	Meetings				
Labor Char	ges				. .	
			Hours	Rate	Amount	
-	er / Scientist / Special	ist IV	2.40	155.00	490 50	
Wa	aln, Joseph		3.10	155.00	480.50 480.50	
			3.10		460.50	480.50
	Subtotal	Lador				400.50
	tant Charges				222.02	
Subcor	nsultants				220.00	220.00
	Subtotal	Subconsultant				220.00
				Task S	ubtotal	\$700.50
 Task:	020	Pre-Project Review				
Labor Char	rges					
			Hours	Rate	Amount	
Princip						
	erbert, James		1.00	200.00	200.00	
-	er / Scientist / Special	list IV				
	aln, Joseph		.50	155.00	77.50	
-	er / Scientist / Special	list II				
	avaty, Heather		.70	110.00	77.00	
Suppor	rt Personnel II					
Bu	ırt, Deborah		.10	100.00	10.00	
			2.30		364.50	264 50
	Subtotal	Labor				364.50
Subconsul	tant Charges					
Subcor	nsultants				192.50	
	Subtotal	Subconsultant				192.50
				Task S	ubtotal	\$557.00
Task:	030	Wetland Issues	·			
	tant Charges					
	nsultants				192.50	
Bubeo		Subconsultant				192.50
				Task S	Subtotal	\$192.50
		Canard				
Task:	040	General				
Labor Cha	rges		Hours	Rate	Amount	
Princip	bal					
-	erbert, James		.70	200.00	140.00	
	eer / Scientist / Specia	list IV				
-	/aln, Joseph		3.80	155.00	589.00	
	eer / Scientist / Specia	alist II				
-	lavaty, Heather		2.00	110.00	220.00	

Project	23270F55.20	Elm Creek WMC 2020			Invo	ice 10
Suppor	t Personnel II					
	pan, Nyssa		.80	95.00	76.00	-
i vy	pun, nyssu		7.30		1,025.00	
	Subtotal	Labor				1,025.00
ubconsult	ant Charges					
Subcor	sultants				192.50	
	Subtotal	Subconsultant				192.50
				Task Su	ubtotal	\$1,217.50
				Job Su	ubtotal	\$2,667.50
lob:	300	Project Reviews				<u></u>
Task:	2008	2020-008 Ione Gardens				
Labor Char	ges		11	Rate	Amount	
Engino	er / Scientist / Specia	lict IV	Hours	Kale	Anount	
-	aln, Joseph	inst iv	.40	155.00	62.00	
•••	in, joseph		.40		62.00	
	Subtotal	Labor				62.00
Subconsult	ant Charges					
	nsultants				440.00	
	Subtotal	Subconsultant				440.00
				Task S	ubtotal	\$502.00
 Task:	2016	2020-016 Lennar Territor	ial Rd Develo	opment		
Subconsul	tant Charges					
Subcor	nsultants				330.00	
	Subtota	Subconsultant				330.00
				Task S	ubtotal	\$330.00
Task:	2017	2020-017 Meadow View	Townhomes			
Labor Cha	rges		Hours	Rate	Amount	
Enaine	er / Scientist / Specia	alist IV				
-	aln, Joseph		.50	155.00	77.50	
	·		.50		77.50	
	Subtota	Labor				77.50
Subconsul	tant Charges					
Subco	nsultants				385.00	
	Subtota	l Subconsultant				385.00
				Tack S	Subtotal	\$462.5

Project	23270F55.20	Elm Creek WMC 2020			Invoice	10
Labor Charg	es					
			Hours	Rate	Amount	
Engineer	/ Scientist / Special	ist IV				
-	n, Joseph		3.90	155.00	604.50	
			3.90		604.50	
	Subtotal	Labor				604.50
				Task Sı	ubtotal	\$604.50
Fask:	2032	2020-032 Enclave Rogers	– Commerce	e Blvd		
Labor Charg	es					
			Hours	Rate	Amount	
Engineer	r / Scientist / Specia	ist IV				
Walı	n, Joseph		1.00	155.00	155.00	
Engineer	r / Scientist / Specia	list II				
Hlav	aty, Heather		6.00	110.00	660.00	
			7.00		815.00	
	Subtotal	Labor				815.00
Subconsulta	nt Charges					
Subcons	-				55.00	
		Subconsultant				55.00
				Task S	ubtotal	\$870.00
 Task:	2033	2020-033 Weston Woods				
Labor Charg	jes					
			Hours	Rate	Amount	
Enginee	r / Scientist / Specia	list IV				
Wal	n, Joseph		.50	155.00	77.50	
			.50		77.50	
	Subtotal	Labor				77.50
Subconsulta	nt Charges					
Subcons	-				1,677.50	
	Subtotal	Subconsultant				1,677.50
				Task S	ubtotal	\$1,755.00
	. <u></u>					
Task:	2034	2020-034 Erickson Reside	nce			
		2020-034 Erickson Reside				
		2020-034 Erickson Reside	Hours	Rate	Amount	
	jes	2020-034 Erickson Keside				
Labor Char <u>c</u> Principa	jes	2020-034 Erickson Reside		Rate 200.00	Amount 60.00	
Labor Charg Principa Her	jes I		Hours .30	200.00	60.00	
Labor Char <u>c</u> Principa Her Enginee	ges I bert, James		Hours .30 2.00		60.00 310.00	
Labor Char <u>c</u> Principa Her Enginee	ges I bert, James r / Scientist / Specia		Hours .30	200.00	60.00	
Labor Charg Principa Her Enginee	ges I bert, James r / Scientist / Specia	list IV	Hours .30 2.00	200.00	60.00 310.00	370.00
Labor Char <u>c</u> Principa Her Enginee Wal	ges I bert, James Ir / Scientist / Specia In, Joseph Subtotal	list IV	Hours .30 2.00	200.00	60.00 310.00	370.00
Her Enginee	ges I bert, James Ir / Scientist / Specia In, Joseph Subtotal ant Charges	list IV	Hours .30 2.00	200.00	60.00 310.00	370.00

Project	23270F55.20	Elm Creek WMC 2020			Inv	oice 10
				Task Subtotal		\$452.50
Task:	2035	2020-035 Presteng Resi	dence			. <u></u>
Labor Char	ges					
			Hours	Rate	Amount	
Enginee	er / Scientist / Specia	list IV				
-	In, Joseph		1.80			
			1.80		279.00	
	Subtotal	Labor				279.00
Subconsult	ant Charges					
Subcon	Subconsultants				440.00	
	Subtotal	Subconsultant				440.00
				Task Si	ubtotal	\$719.00
 Task:	2036	2020-036 Balsam Pointe				
Labor Char	ges					
			Hours	Rate	Amount	
Engine	er / Scientist / Specia	list IV				
Wa	In, Joseph		.50	155.00	77.50	
			.50		77.50	
	Subtotal	Labor				77.50
				Task Subtotal Job Subtotal Total this Invoice		\$77.50
						\$5,773.00
						\$8,440.50
		Current	Prior	Total	Received	A/R Balance
		Guilent				

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 <u>jwaln@barr.com</u>.



3235 Fernbrook Lane Plymouth MN 55447

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

		2-Dec-20		
				Total by
				Project Area
Administrative	1.58	60.00	94.80	,
Administrative	43.04	65.00	2,797.60	
Admin - virtual	0.66	70.00	46.20	
Office Support	12.00	200.00	2,400.00	
Storage Unit	1.00	144.76	144.76	
Data Processing/File Mgmt	0.66	60.00	39.60	
File Management		60.00	0.00	
Archiving		60.00	0.00	
Admin - Reimbursable Expense	512.43	1.00	512.43	6,035.390
Website		60.00	0.00	
Website	0.33	65.00	21.45	
Web Domain, hosting		1.00	0.00	21.450
Annual Reporting/Work Plans		60.00	0.00	
2020 Work Plan	18.24	65.00	1,185.60	
Annual Reporting/Work Plan - Reimbursable Expense		1.00	0.00	1,185.600
Project Reviews - Secre		60.00	0.00	
Project Reviews - Admin	22.96	65.00	1,492.40	
Project Reviews - Reimbursable Expense	579.80	1.00	579.80	2,072.200
Education - Secretarial		60.00	0.00	
Education - Admin		65.00	0.00	
Education - Admin virtual - Blue Thumb Partner Event	1.00	70.00	70.00	70.440
Education - Reimbursable Expense	0.44	1.00	0.44	70.440
CIPs - General - Secretarial		60.00	0.00	
CIPs - Administrative	4.00	65.00	260.00	
CIPs- Offsite Admin		70.00	0.00	
CIPs - reimbursables	7.50	1.00	7.50	267.500
Floodplain mapping - admin		60.00	0.00	
Floodplain administrative	2.28	65.00	148.20	
Floodplain mapping reimbursable expense	4.18	1.00	4.18	152.380

Invoice Total

9,804.960



12800 Arbor Lakes Parkway, Maple Grove, MN 55369-7064

763-494-6000

October 15, 2020

Ms. Judie Anderson Elm Creek Watershed Management Commission 3235 Fernbrook Lane North Plymouth, MN, 55447

SUBJECT: FISH LAKE SUBWATERSHED ASSESSMENT (MAPLE GROVE) REIMBURSEMENT

Dear Judie,

Enclosed are invoices from WSB & Associates for the Fish Lake Sub-watershed Assessment totaling \$34,958.50. The City of Maple Grove is requesting reimbursement of \$15,000.00 per the terms of the Cooperative Agreement for the Fish Lake Sub-watershed Assessment.

Please let me know if you have any questions. Thank you for funding this important project.

Sincerely,

euch asche

Derek Asche Water Resources Engineer City of Maple Grove

enc

OK Lo pay Spederson 12/02/2020

Fish Lake Lake Subwatershed Assessment Costs

Vendor	Design & Engineering	Amount
WSB	Professional Services	\$1,034.00
WSB	Professional Services	\$2,419.50
WSB	Professional Services	\$1,576.00
WSB	Professional Services	\$5,273.00
WSB	Professional Services	\$6,140.25
WSB	Professional Services	\$2,837.00
WSB	Professional Services	\$4,927.00
WSB	Professional Services	\$2,589.50
WSB	Professional Services	\$1,606.50
WSB	Professional Services	\$765.00
WSB	Professional Services	\$1,620.25
WSB	Professional Services	\$4,170.50
	WSB WSB WSB WSB WSB WSB WSB WSB WSB WSB	WSBProfessional ServicesWSBProfessional Services

Total

\$34,958.50

.

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 email: judie@jass.biz www.elmcreekwatershed.org TECHNICAL OFFICE Barr Engineering 4300 Market Point Drive, Suite 200 Minneapolis, MN 55435 PH: **612.834.1060** email: jherbert@barr.com

STAFF REPORT

December 2, 2020

2017-050W Ernie Mayers Wetland/floodplain violation, Corcoran. The City of Corcoran contacted a. 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 placed an order of abeyance (stay) on the appeal looking for a resolution between the LGU and Mayers. Because a resolution was not forthcoming, BWSR has granted the request for appeal. It will hold a pre-hearing conference after a copy of the record of decision has been provided. The record of decision was sent to BWSR by Corcoran on October 12, 2020. The purpose of the pre-hearing conference is to seek informal settlement if possible, define who the active parties are, define what the WCA issues under appeal are, define what constitutes the record, establish a schedule for filing written briefs, and set a time and date for oral arguments. Basically, the first written brief is filed by the appellant, the responding brief is filed by the City of Corcoran, and the final reply brief is filed by the appellant. Then oral arguments, in much the same order as the written briefs, will be heard by the BWSR's Dispute Resolution Committee. The Dispute Resolution Committee's recommendation will be brought to the full BWSR board for decision. In November Staff provided historic information to the City of Corcoran for the timeline prior to January 2019 when the Commission was the LGU.

b. 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 abstration 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. *No updates this month.*

c. 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 2018 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.

d. 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 addition. About 1.9 acres of the site will be disturbed and 1.06 acres of impervious surface will be added. This project was being reviewed for com-

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

pliance with 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 providing 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 have developed an overall stormwater management alternatives for this and potential future projects. They are still deciding the best approach to move forward before providing us the final stormwater management plans. Staff made preliminary comments on the draft plans *in September* and await the final submittal to determine compliance with this project and their future expansions.

e. 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 located 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 with Rules D and E. On January 23, 2020, Staff administratively approved this project contingent upon receipt of a dated and signed set of final development stage plans. On December 2, 2020, Staff informed the applicant that, per Commission rules, unless the Commission is in receipt of this information by January 23, 2021, this approval will expire and the applicant will have to begin the review process again.

f. 2020-002 Project 100, Maple Grove, renamed *Minnesota Health Village (MHV).* 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.

<u>Phase I site plans</u> consists of mass grading of approximately 35 acres in the southeast portion of the site to accommodate street and utilities, 383 parking stalls for the existing hospital and future building in this area. The Commission reviewed the concept plan for compliance with Rule D. In addition, it reviewed Phase I for compliance with Rules D, E, G and I. At their March 2020 meeting the Commission approved this project contingent upon the following conditions: Phase I site plans: (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 and (2) City, MN WCA, and Commission compliance on any wetland impacts must be adhered to. These two items remain outstanding.

<u>Concept Site Plans</u>: The overall stormwater management concept plan design meets the Commission's standards provided. (1) 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) Commission Project review and approval are required when future site development triggers a review. These two items are considered on-going and will come forward as this site develops. No other information is necessary at this time.

For Phase I and the Concept Plans: The Commission recommends the management of stormwater runoff to minimize the impacts of the application of chloride compounds on water resources by minimizing their use on roads, parking lots, sidewalks and other impervious surfaces. Toward that end, the Commission requests that existing and future landowners develop and implement a chloride management plan on all pri-

Italics indicates new information

vate parking and walking areas within this project to minimize chloride runoff into surface water on site. The primary element of such a plan is implementation and application of salt to these surfaces by an applicator with MPCA Level 1 Certification in Snow & Ice Control Best Practices.

Note: The City of Maple Grove is looking at the feasibility to consolidate as many of the regional ponds for this site as possible while continuing to meet the regulations and goals of the approved plans. Commission staff will work with the City to ensure the Commission's requirements and approvals are compliant with any changes. This will be on-going as the site develops. *No new information was received in October.*

g. 2020-008 Ione Gardens, Dayton. This project is located at the northwest intersection of CSAH 144 (Diamond Lake North) and 12 (Dayton River Road). The site is three agricultural properties totaling 48.29 acres. 112 new single-family residential lots creating 16.84 acres of new impervious surface area are proposed for this development. The Commission's review was for compliance with Rules D, E, G, and I. At their October 2020 meeting the Commission approved Phase I grading on the north 14 acre area on the condition that: a) the applicant accepts any and all risks for any changes required to obtain final approval by the Commission and b) that the City of Dayton grants approvals for said grading, and to deny the remainder of the application unless the applicant extends the review deadline beyond the current October 21, 2020 deadline. The applicant extended the deadline to November 30, 2020. Updated site plans received November 16, 2020 meet the contingencies of the Commission approval with the exception of the post development infiltration basin percolation test requirements. Staff recommends the Commission approve the updated plans contingent upon post-development percolation tests being provided on infiltration basins to demonstrate the constructed infiltration rate meets or exceeds the design infiltration rates.

h. 2020-015 Dayton Interchange Business Center, Dayton. Scannell Properties is proposing to develop a 12-acre parcel of agricultural land into a 124,000 SF office/warehouse building with related infrastructure, creating 6.2 acres of new impervious area. This site is located west of CR 81 and north of Territorial Road near Holly Lane. The site plan triggers a Commission review for conformance with Rules D, E, G, and I. No recommendations are provided to the Commission at this time. The project review deadline was extended by the applicant to November 30, 2020.

i. 2020-016 Skye Meadows, Rogers. Lennar Corporation is proposing to construct a residential development on 130 acres along Territorial Road. The site consists of six separate parcels located both north and south of Territorial Road (CR116) just west of Tilton Trail. 363 single-family residential units are proposed, creating 38.73 acres of new impervious areas in seven phases. The Commission's review will be for conformance to Rules D, E, F, G, and I for all seven phases. Informational findings are included in this month's packet. The applicant requested administrative approval for the grading and erosion control approvals on Phase 1A. Phase 1A does meet the Commission's requirement but the overall development site plans do not. Technical staff approved Phase 1A grading and erosion control contingent upon: (a) the applicant accepting all risks for any changes required to obtain final approval by the Commission, and (b) the City of Rogers granting approvals for said grading. *The applicant has extended the Commission decision decision deadline to February 17, 2021, per MN Statute 15.99.*

j. 2020-017 Meadow View Townhomes, Medina. This is a 22-acre site located south of Meander Road and north of Highway 55. Lennar Homes is proposing to build 125 townhomes with their necessary infrastructure on this site. A complete application was received May 29, 2020. The plans call for 7.64 acres of new impervious areas. The Commission's review was for conformance to Rules D, E, F, G, and I. At their October meeting, the Commission approved Staff's finding dated September 30, 2020, contingent upon

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

(1) The mean (average) depth on the west wet-detention pond must be 4.0' or deeper; (2) Buffer strip monumentation and vegetation maintenance plans must conform to the Commission's requirements; (3) An operation and maintenance agreement of the stormwater ponds and irrigation system must be approved by the City and the Commission. Said agreement must be recorded on the property title with a copy of the recorded document provided to the Commission; and (4) Erosion and sediment controls must conform to Commission requirements. *Since the approval, the City of Medina has requested the applicant provide abstraction by irrigation only, thus eliminating one filter basin. Staff reviewed the changes and found the updates in compliance with the Commission's original approvals for stormwater management and administratively approved the plans contingent upon item (3) above and added the condition that design information on the irrigation pump and augmentation water source must be provided within six months of this approval. Updated findings and decision information are provided in this month's packet.*

k. 2020-022 Elm Road Street and Utility Project, Maple Grove. This project encompasses the street and utility work for the Elm Road Development and street improvements for Elm Road between Vicksburg and Lawndale Lanes. The Commission approved the site plans and street and utility work for the Elm Road Development under project 2020-004. Elm Road construction from Vicksburg to Comstock Lane (stations 159+92-133+00) was part of 2020-004 approvals. This project review covers the Elm Road street and storm sewer work proposed by the City of Maple Grove between Comstock and Lawndale Lanes (Stations 133+00-100+85) and triggers Commission rules D, E, F, G and H. Project review and findings were approved by the Commission at their August 2020 meeting. Approval is contingent upon the DNR permitting of the new Elm Creek culverts and an accounting of the net decrease in floodplain storage. The floodplain storage numbers have been received, but the DNR permit is still under review.

I. 2020-025 Paulsen Farms, Corcoran. This is an 88-acre parcel located south of CR30 and east of Bechtold Road. Twenty (20) single family rural residential lots with 5.2 acres of new impervious areas are proposed on this site. This project triggered Rules D, E, and I. At their October 2020 meeting the Commission approved Staff's findings dated September 23, 2020 contingent upon: (1) rate control at culvert #3 must be equal to or less than pre-development rates for all storm events; (2) buffer strip monumentation conforms to the Commission's requirements; and (3) an operation and maintenance agreement must be created and approved by the City and the Commission. Said agreement must be recorded on the property title with a copy of the recorded document provided to the Commission. *This project has been put on hold by the applicant. They have been informed that the approval expires October 14, 2021.*

m. 2020-029 Sundance Greens 5th Addition. This project is part of a larger residential development that was reviewed and approved as the Sundance Greens Development (Project #2018-005). The full development covers 310 acres west of County Road 121 (Fernbrook Lane N.) in and around the Sundance Green Golf Course. The full development will construct 645 new single-family homes with 100 units proposed as a senior housing facility. The 5th Addition will grade 75 acres for 212 lots. This review will check consistency of the stormwater management plans that were previously approved and erosion controls. This project can be administratively approved by Staff. As of the October update, additional erosion and sediment controls were necessary before Staff can approve the project. *No updates were received in November.* Staff extended the decision deadline to December 29, 2020.

n. 2020-030 Nelson International, Corcoran. This project would construct a new semi-truck and trailer dealership and center on a 22.4-acre site. The project will disturb 9.5 acres and create 6.6 acres of impervious surface. The existing condition is a single-family residence with 0.4 acres of impervious. The application was reviewed for Rules D, E, G, and I. *Staff recommend approval contingent on submission and approval of an*

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

operation and maintenance agreement with the City of Corcoran, and that a subsequent addition to the proposed structure shall be submitted for administrative review.

o. 2020-032 Enclave Rogers – Commerce Boulevard., Rogers. This project would create an apartment complex on a 3.3-acre site. The existing condition is undeveloped. The project will disturb the entire site and create 2.15 acres of impervious surface. The applicant is proposing an iron enhanced sand filter to meet Total Phosphorus removal requirements. The site is within two of the three outlots created as part of the adjacent former Lowe's development. The application was reviewed for Rules D and E. Staff granted administrative approval for grading contingent on applicant accepting risk for changes required for final approval and on approval from City for grading activities. Staff recommends approval with those conditions, as well as submission of an operations and maintenance manual for stormwater features, minor updates to the SWPPP.

p. 2020-033 Weston Woods, Medina. This project would create 150 residential units on a 135-acre site. The existing condition is undeveloped. The project will disturb 49.2 acres and create 17.4 acres of impervious area. *Draft findings are included in the meeting packet*.

q. 2020-035 Presteng Residence, Corcoran. This is a 3.84-acre lot that is proposed to be graded to accommodate the Presteng home. Located on Lot 1, Block 1, Schmids Hidden Valley Second Addition, south of Oakdale Drive approximately 1/4 mile east of Bechtold Road, the project triggers the Commission's rules because it disturbs more than 1.0 acres of land during construction. *Findings and a recommendation are included in the meeting packet. Staff recommends approval pending receipt of a certificate of survey with lowest most floor verification at or higher than 950.7 elevation.*

r. 2020-036 Balsam Pointe, Dayton. This project would create residential lots on a 10-acre site. The existing condition is undeveloped. The project will disturb the entire site and create 5.3 acres of new impervious. The application is being reviewed for Rules D, E, G, and I. Additional information has been requested from the applicant before Staff can complete the review.

s. 2020-037 Rice Lake Elementary School Pond Excavation, Maple Grove. This project would construct two new buildings, a parking lot, and play areas. The project will disturb approximately 4.7 acres and create 1.1 acres of new impervious. The application was received a week prior to the Commission meeting.

FINAL RECORDINGS OR OTHER DOCUMENTATION ARE DUE ON THE FOLLOWING PROJECTS: (Staff reached out to the cities for updates on these projects on October 27, 2020.)

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.

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

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. 2016-005W 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.

ak. 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 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.

al. 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 had been 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 spring 2019. 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 additions).

am. 2017-039 Rush Creek Apartments, Maple Grove. At their May 13, 2020 meeting the Commission accepted Staff's findings dated April 29, 2020 and approved this project contingent upon: (a) Maintenance access to the stormwater ponds must be provided and (b) The O&M plan for the stormwater management systems (biofiltration basin) must be provided for the Commission's approval. Said plans must be recorded on the property title and a copy of the recorded document must be provided to the Commission. Item (a) has been resolved. *The agreement was received in the Commission office on November 4, 2020. This item will be removed from the report.*

an. 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 2018 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.

ao. 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.

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

ap. 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 Rules D and E. At their February 2019 meeting the Commis sioners 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 proerty line.

aq. 2019-021 Brenly Meadows, Rogers. This is a 38-unit townhome project proposed on 6.9 acres north of 129th Avenue about one-third 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.

ar. 2019-027 Havenwood at Maple Grove. This is a 5.6-acre site located at the northwest 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 copyof the recorded document must be provided to the Commission.

as. 2019-032 OSI Expansion, Medina. This an existing business located in the northwest corner of Highway 55 and Arrowhead Drive. The applicant is proposing to build an addition on the south side of the 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. *Dusty Finke reported on March 4, 2020, that recordation of the O&M plans is still pending.*

at. **2020-009 Stetler Barn, Medina.** This site disturbs approximately 3.5 acres and must meet Commission Rules D, E, and I. Because of the limited available space for pasture, paddocks and land application of manure, understanding how these components will be managed is also an important part of the review. A complete plan was received on April 22, 2020. At their May 13, 2020 meeting the Commission approved this project contingent upon: 1) The landowner continuing to work with the U of M Extension Office and Hennepin County Rural Conservationist to finalize composting, pasture and paddock management plans and 2) A long-term pond/basin operation and maintenance plan and agreement with the City of Medina being approved by the City of Medina and the Commission. The agreement must be recorded on the land title with a copy of the recorded agreement provided to the Commission.

au. 2020-023 Ziegler, Dayton. This is an existing 4.73-acre commercial parcel located on Territorial Road near Holly Lane close to the Maple Grove/Dayton border. Currently the property consists of a building with bituminous drive and parking areas and a large gravel storage yard. The applicant is proposing to utilize the existing building, construct an additional commercial building, expand the bituminous parking lot, and add gravel lots for merchandise display and storage. It triggers Commission rules D, E, G, and I. The Commission approved this project at their August 2020 meeting contingent upon wetland permitting being obtained and an Operation & Maintenance agreement per the Commission's standards being recorded on the land title. *As of this update, the wetland permit has been approved, but the O&M plan has yet to be received.*

av. 2020-027 Kariniemi Addition, Corcoran. This is a 12.7-acre parcel located on Lot 3, Block 1 of the Rolling Hills Acres subdivision (ECWMC Project 2019-030) about a mile north of Highway. 55 on the east side of Rolling Hills Road. The applicant proposes to create three lots with a shared driveway for access along the northerly portion of the property. Project work will disturb 2.6 acres and create 0.83 acres of new impervious areas. This project was approved by the Commission at their September 2020 meeting pending receipt of O & M plans.

ELM CREEK FLOODPLAIN MAPPING PROJECT

Work has been suspended on this project.

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

Italics indicates new information

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

elm creek Watershed Management Commission

DRAFT December 2, 2020

Review and comment is requested by January 5, 2021

PROJECTED-2020 WORK PLAN IN REVIEW

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 tenyear 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.

a. Review the current project review fee schedule for fiscal conformity. The Technical Advisory Committee (TAC) reviewed the current project review fee schedule. The members of the TAC compared the fees collected by the Commission for development review projects to the expenses incurred for the review of these projects with the goal of collecting appropriate fees to cover the cost of reviewing projects for compliance with watershed rules. The TAC recommended to the Commission, and the Commission approved on September 9, 2020, the following changes to the project review fees structure:

1) Move from the current fee structure to a more flexible escrow structure where applicants will be required to fund the cost of the review in full.

2) Collect a 10% administration fee and a 15% technical service fee to help offset the cost of administrative needs and questions submitted to the Commission prior to a formal application.

3) Limit the amount of time Commission technical advisors spend on pre-project Q & A to two hours.

The revised fee schedule, along with its Policy on Project Review Fees, which was also approved on September 9, 2020, were transmitted to the member cities by the Commission on September 18, 2020

b. Review local development/redevelopment plans for conformance with the standards outlined in the Commission's Third Generation Watershed Management Plan. As of this date, thirty-seven projects, along with six carry-over projects, were reviewed by the Commission in 2020. The Commission does not have a permit program.

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. 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. *In 2020 the Park District monitored Diamond Creek (DC), Rush Creek main stem (RT), and Elm Creek above Rice Lake (EC77). In addition* TRPD monitored Diamond, Fish, and Weaver lakes and the main basin of Rice Lake and continued its support of the USGS stream gauging station in Champlin.

3. Fund the monitoring of one lake through Metropolitan Council's Citizen Assisted Monitoring Program (CAMP). Teal Lake in Maple Grove was monitored by members of the Teal Lake Conservation Association in 2020. Results of the 2020 monitoring will be provided in the 2020 CAMP Report, available in 2021 at https://metrocouncil.org/Wastewater-Water/Services/Water-Quality-Management/Lake-Monitoring-Analysis/Citizen-Assisted-Monitoring-Program.aspx.

4. Continue to operate the monitoring station in Champlin in cooperation with the United States Geological Survey (USGS). Both grab samples and storm runoff samples were collected and analyzed for various parameters. Real time data from the monitoring station is available on the Internet at http://waterdata.usgs.gov/mn/nwis/uv/?site_no=05287890&PARAmeter_cd=00065,00060.

5. Promote river stewardship through Hennepin County's RiverWatch program with three sites in 2020. *Due to the COVID-19 pandemic, volunteer macroinvertebrate monitoring was not conducted in 2020.*

6. Participate in the MN Wetland Health Evaluation Program (WHEP) with four wetlands in 2020. *Likewise, citizen volunteers were not recruited for wetland monitoring in 2020 due to the pandemic.*

7. Conduct the biennial solicitation of interest proposals for administrative, legal, technical and wetland consultants. *This process will be repeated in January 2021.*

8. Continue as a member of the West Metro Water Alliance (WMWA). The Commission continued its membership in WMWA. Dayton representative and Commission Chairman Doug Baines represented the Commission at WMWA's monthly meetings and Plymouth Commissioner Catherine Cesnik served as the Alliance's Project Coordinator.

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. *(See 10., below.)*

10. Sponsor workshops as part of the Commission's Education and Public Outreach Program. The workshops are presented by Metro Blooms. *Champlin hosted a* Resilient Yard/Turf Alternatives Workshop on *April 14, 2020. The workshop introduced the audience to the four planting types promoted through the* Lawns to Legumes Program. *Due to the pandemic, content was presented through an online platform. While only five attendees were from the Champlin area, the workshop reached 37 residents from across the metro area and two folks from Brainerd and Winona were also among the attendees. The City intends to continue replaying the workshop on QCTV for Champlin residents. Attendees rated this new format as "above-average" or excellent. Eighty percent indicated they are likely to install pollinator habitat within a year; 39% responded that they are likely/very likely to install a raingarden within two years; and 93% indicated they were likely/very likely to install native plants in their yards this year.*

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. *COVID-19 also limited the work of the U of M ag specialist within the watershed. No projects were completed in 2020.*

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. The following projects were identified in 2020:

a. A large project taking place west of Jubert Lake in Corcoran involves multiple components and landowners. Several grassed waterways, a sediment basin, and a water control structure are being designed in partnership with the landowners, with implementation expected in 2020-2021.

b. A second project in Corcoran is currently under review by the city's WCA consultant for feasibility.

c. Exclusion fencing and rotational grazing plan are being developed for a landowner in Corcoran to keep horses/goats out of an ephemeral wetland area during wet seasons. Some pasture improvements/refreshing will also be undertaken in the rest of the pasture.

d. A project just north of Diamond Lake has been identified to reduce manure runoff downhill into a wetland that feeds directly into the lake in Dayton.

e. Inspection of County Ditches 3 and 16 in Corcoran/Maple Grove will occur to determine their baseline condition prior to remedial working being performed.

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. *Three projects,* (1) the Elm Road Area Stream Restoration project in Champlin, (2) the Corcoran City Hall Parking Lot project, and (3) the Elm Creek Stream Restoration Phase IV Hayden Lake Outfall project in Champlin, were added to the CIP in 2020. The Rush Creek South Improvement project in Maple Grove, was removed from the CIP and the timing for the Fox Creek South Pointe project in Rogers was shifted from 2019 to 2021. In addition, more specificity was added to two projects, (1) Livestock Exclusions, Buffers, and Stabilizations and (2) Agricultural BMPs Cost Share, both in the Rush Creek Subwatershed. The Minor Plan Amendment to make these updates was adopted by the Commission at a public meeting held on June 10, 2020. (Also see 16, 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. (See 13, above.)

16. Continue to support City-sponsored projects using the ad valorem funding mechanism. Conduct public hearing for identified projects. A public hearing was held on September 9, 2020, whereat the following projects were certified for County ad valorem levy: Project 2020-01 Livestock Exclusions, Buffers, Stabilizations in the cities of Corcoran and Rogers; Project 2020-02 Agricultural Best Management Practices Cost-Share in the cities of Corcoran and Rogers; and Project 2020-03 Enhanced Street Sweeper in the City of Plymouth. The total amount of the levy was \$137,562.

17. Adopt a 2021 operating budget. At its June 10, 2020 regular meeting the Commission approved a 2021 operating budget totaling \$700,510. To fund this budget, the Commission approved member assessments of \$237,300, a zero increase over the current year's assessments.

18. Continue to populate and maintain the Commission's website <u>www.elmcreekwatershed.org</u> to provide news to residents, students, developers and other individuals interested in the water resources of the watershed. <u>Analytics will be added to this task.</u>

19. Publish an annual activity report summarizing the Commission's yearly activities and financial reporting. The Commission's 2019 Annual Activity Report was accepted by the Commission at its April 8, 2020 meeting and submitted to the Board of Water and Soil Resources (BWSR) as prescribed by MN Rules. The Commission's 2019 Annual Audit Report was accepted by the Commission at its June 10, 2020 and submitted to the State Auditor online per compliance guidelines.

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. *The Commission submitted two projects, Rush Creek Restoration and Elm Creek Restoration with requests of \$200,000 and \$300,000, respectively. The Commission was awarded a total of \$281,996.20.*

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. Work on this project was initiated by Hennepin County Environment and Energy. As a result of a change in personnel at HCEE, the Commission contracted with Barr Engineering to complete the project. As work progressed, it was determined that the budget for this project would be overspent and work was suspended pending resolution of this issue.

22. Support the City of Maple Grove and its partners as they undertake a subwatershed assessment for Weaver Lake. The City of Maple Grove applied and was approved for funding in February 2020 by the Commission for an assessment of the subwatershed draining to Weaver Lake, to be completed by WSB at a total cost of \$30,000. The Commission will pay 25% (\$7,500), with the City paying the remainder. A draft of the assessment has been completed and is out for review by the Weaver Lake Improvement Association. Comments are expected back in January.

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. The City of Corcoran applied and was approved for funding in February 2020 by Commission for an assessment of the subwatershed draining to the South Fork of Rush Creek, to be completed by Wenck Associates at a total cost of \$58,800. The Commission will pay 14% (\$8,820), with the proceeds from a Clean Water Fund Grant (or similar) and the cities of Corcoran, Medina, and Maple Grove paying the remainder. Kevin

24. Support the City of Dayton and its partners to continue efforts for completion of the Diamond Lake subwatershed assessment. The City of Dayton applied and was approved for funding by the Commission in March 2019 for an assessment of the subwatershed draining to Diamond Lake, to be completed by Wenck Associates at a total cost of \$55,000. The Commission will pay 15% (\$7,500), with the proceeds from a Clean Water Fund (or similar), Three Rivers Park District, and the cities of Dayton and Rogers paying the remainder. Nico

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. By late October 2020, one outstanding buffer case in Corcoran remained. The City, Hennepin County, and BWSR staff plan to make an inspection in November to determine compliance.*

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 email: judie@jass.biz www.elmcreekwatershed.org

TECHNICAL OFFICE Barr Engineering 4300 Market Point Drive, Suite 200 Minneapolis, MN 55435 PH: 612.834.1060 Email; jHerbert@barr.com

<u>Ione Gardens</u> <u>Dayton, Project #2020-008</u>

Project Overview: This project is located at the NW intersection of CSAH 144 (Diamond Lake North) and 12 (Dayton River Road) in Dayton. It is three agricultural properties totaling 48.29 acres in size. The project will develop 112 new single-family residential lots creating 16.84 acres of new impervious surface area.

This project will trigger the Commission's Appendix C Rules and Standards as indicated below.

- X Rule D Stormwater Management
- X Rule E Erosion and Sediment Control
- Rule F Floodplain Alterations
- X Rule G Wetland Alteration
 - Rule H Bridge and Culvert Crossings
- X Rule I Buffer Strips

<u>Applicant:</u> Dehn Development LLC, Attention Tom Dehn, 6781 Highway 10, Ramsey, MN 55303. Phone: 612-328-2215. Email: <u>tom.dehn@powerlodge.com</u>

<u>Agent:</u> Campion Engineering, Attention Marty Campion, 1800 Pioneer Creek Center, Maple Plain, MN 55359. Phone: 763-479-5172. Email: <u>mcampion@campioneng.com</u>

Exhibits:

- 1) ECWMC Request for Plan Review and Approval dated March 4, 2020. \$4,000 project review fee received March 10, 2020
- 2) Ione Gardens Grading Set by Campion Engineering Services dated March 4, 2020 revised November 5, 2020
 - a. Sheet 1 of 16, Cover Sheet
 - b. Sheet 2 of 16, Existing Conditions
 - c. Sheets 3 to 5 of 16, Grading Plans
 - d. Sheets 6 to 8 of 16, Storm Water Pollution Prevention Plans
 - e. Sheet 9 to 13 of 16, Tree Inventory and Removal Plans.
 - f. Sheet 14 of 16, Grading & SWPPP Notes
 - g. Sheet 15 of 16, Details
 - h. Sheet 16 of 16, Hold Down Details
- 3) Ione Gardens Construction Set by Campion Engineering Services dated August 14, 2020.
 - a. Sheet 1 of 20, Cover Sheet

- b. Sheet 2 of 20, Existing Conditions
- c. Sheet 23 of 20, Composite Utility Plan
- d. Sheets 4 to 7 of 20, Sanitary Sewer & Watermain Plans
- e. Sheets 8 to 12 of 20, Street and Storm Sewer Plans and Details
- f. Sheets 13 to 15 of 20, Storm Water Pollution Prevention Plans
- g. Sheets 15 to 20 of 20, Plan Notes and Details
- Ione Gardens Stormwater Management Plan by Civil Methods Inc. updated September 21, 2020
- 5) Ione Gardens geotechnical exploration report by Haugo GeoTechnical Services dated March 2, 2020 with additional soil infiltration tests for borings holes 5, 12 and 13, by Haugo GeoTechnical Services dated March 5, 2020
- 6) Cloquet Island Estates ECWMC project file 2018-033
- 7) MN WCA Notice of Decision, Cloquet Island Estates, dated June 4, 2019
- 8) Kjolhaug Environmental Services, Cloquet Island Estates Wetland Replacement Plan Figure 4, Proposed Wetland and Tributary Impacts, no date

Findings:

- 1) A complete application was received on March 10, 2020. Decision deadlines per MN 15.99 has been extended to November 30, 2020
- 2) The existing land use is primarily agriculture cropland (37 acres) with approximately 4.5 acres of farmsteads/homesites and the remainder being trees/grassland (~6.0 acres) and one wetland basin 0.5 acres in size
- 3) The drainage patterns consist of:
 - a. The east 24 acres drain into depressional landlocked areas with no runoff.
 - b. The north 14 acres drain into depressional areas with no runoff except during a 100-year storm event.
 - c. The remaining 15 acres drains into the existing wetland in the SW corner of this development.
 - d. Water that does flow from this site will enter the Mississippi River about 800' east of CSAH 12.
 - e. Pre- and post-development drainage patterns will generally stay the same.
 - f. Most soils on this site have high (>2.0 inches/hour) infiltration rates.

Stormwater Management (Rule D)

- 1) To manage the stormwater on this site, the applicant proposes the following:
 - a. Construct one wet detention pond in the SW corner of this project that will drain into the existing wetland. This wetland outlets into an existing storm sewer system located in the adjacent development. That pipe has been designed to receive water from this site and flow north into an existing stormwater system.
 - b. Construct one wet-detention pond that will route low flows (<10-year events) to an infiltration pond along CSAH 12. Higher storm flows (>50-year events) will be routed east into the infiltration pond, with some overflow west into the storm sewer system in the existing development west of this site.
 - c. Construct an infiltration pond on the north side of the site that will outlet into an existing drainage swale that runs under CSAH 12 before running into the

Mississippi River. This pond is landlocked until approximately a 50- to 100-year storm event.

- d. Infiltration basins will have pre-treatment of sediment by the design and construction of forebays, vegetated swales, and sump/baffle structures.
- 2) The City of Dayton will provide the long-term operation and maintenance on the stormwater facilities for this site. No additional agreements will be necessary
- 3) ACTION REQUIRED: Post-development percolation tests must be provided on infiltration basins to demonstrate the constructed infiltration rate meets or exceeds the design infiltration rates (4.15 inches per hour)

Abstraction Controls

- 1) Plans meet the Commission's requirements for abstraction volume controls
- 2) Development creates 16.84 acres of new impervious area
- 3) Abstraction volume requirements will be 67,232 cubic feet
- 4) Actual abstraction proposed will be by infiltrating in excess of 242,629 cubic feet in infiltration basins 2iP and 3iP
 - a. Ground water was not encountered in the soil borings (21' depth) on the basins
 - b. Drawdown times will be less than 1.0 hours on both infiltration basins for the 1.1inch storm event
- 5) Abstraction controls are summarized in Table 1 below

Water Quality Controls

- 1) Water quality controls **meet** the Commission's requirements for water quality
- 2) Water quality will be provided through a combination of wet detention (NURP) ponds and the infiltration basins
- 3) To compare pre- vs post-development conditions water quality the MPCA MIDS calculator was used
 - a. Pre-development conditions considered the following:
 - i. That there is no discharge of phosphorus or suspended solids from 36.8 acres on this site because of existing landlocked areas and infiltration.
 - ii. There will be discharge of phosphorus and suspended solids on the remaining 15.2 acres that drain into the existing wetland in the SW corner on this site
 - b. Post-development conditions considered the following:
 - i. Because of infiltration, there will be no discharge for the water quality storm events for 35.4 acres of this site directed to the north and east infiltration basin
 - ii. Water quality modeling was analyzed for the remaining 16.53 acres that drain southwest and west from this project
- 4) Water quality controls are summarized in Table 1 below

Table 1 Stormwater Summary

Condition (16.5 acres)	TP load (lbs/year) ⁽¹⁾	TSS load (lbs/year) ⁽¹⁾	Abstraction (cubic feet) ⁽²⁾	Annual volume (acre-feet) ⁽¹⁾
Pre-development (baseline)	8.8	2380	N/A	N/A
Post-development without BMPs	11.2	2038	67,232	6.04
Post-development with BMPs	8.2	1092	242,629	13.75
Net Change	-0.6	-1,288	+175,397	+7.71

(1) TP/TSS and annual volume loads discharged only to the SW wetland and west from this site. TP and TSS annual volume loads for other drainage areas are controlled from infiltration.

(2) Abstraction volumes from all 48.3 acres

Rate Controls

- 1) Rate Controls will **meet** the Commission's requirements
- 2) A summary of peak flows for the 2, 10 and 100-year storm events is provided below in Table 2

Discharge Offsite Drainage Areas	Area (Acres)	Condition	2-year (cfs)	10-year (cfs)	100-year (cfs)
West	28.3	Existing	2.9	11.2	30.0
	29.7	Proposed	2.9	9.5	29.7
	+1.4	Change	0	-1.7	-0.3
North	14.3	Existing	0	0	2.7
	5.1	Proposed	0	0	1.8
	-9.2	Change	0	0	-0.9
East	22.6	Existing	0	0	0
	30.4	Proposed	0	0	0
	+7.8	Change	0	0	0

Table 2Rate Control Summary

High-Water Elevations vs Lowest Most Floor Elevations

1) Proposed ponding and basin elevations provide the necessary 2.0-foot separation between the high-water elevation (HWL) and the lowest most floor elevation on proposed homes.

NOTE: The lowest floor elevation to the existing home on Lot 1, Block 1 appears be lower than 2 feet above the critical event 100-year elevation for Pond Basin 1P and the southwest wetland basin. Because development improves (lowers) the high-water elevations on the adjacent basin by 1.4 feet, this is acceptable. Pre- vs post-development elevations on this basin/ponding area are as follows:

- a. Pre-development HWL of the existing SW wetland is 867.20
- b. Post-development HWL of the new basin (basin 1) and the wetland is 865.84
- 2) All other proposed basement elevations provide the 2.0 feet of freeboard necessary above the adjacent pond 100-year elevations.
- 3) Note, because high water levels are determined by the rate of infiltration in the stormwater basins, a post-development percolation test must be performed on each infiltration basin to demonstrate the constructed infiltration rate meets or exceeds the design infiltration rates (4.15 inches/hour).

Basin	Pond Elevation 100 Year Event	Lowest Most Floor Allowed	
SW Wetland	865.7	867.7	
Basin 1P	865.8	867.8	
Basin 2P	862.9	864.9	
Basin 2iP	861.0	863.0	
Basin 3iP	864.2	866.2	

4) Critical high-water elevations are summarized in Table 3 below.

Table 3Critical Basin Elevations Summary

Wetland Alterations (Rule G)

- 1) Wetland alterations meet the Commission's requirements
- 2) The City of Dayton is the Local Unit Government (LGU) in charge of administering the Wetland Conservation Act on this site
 - a. As part of the Cloquet Island Estates project, 13,675 square feet impacts were approved to the existing wetland in the SW corner of this site
 - b. Cloquet Island Estates impacts were approved by Dayton on June 4, 2019
 - c. Replacement will take place by purchasing BWSR wetland bank credits within banking service area (BSA) 7, watershed 20 and Hennepin County at a 2:1 ratio
 - d. The City of Dayton stormwater management plan, rules and ordinances are compliant with the ECWMC wetland alterations rule G

Buffer Strips (Rule I)

- 1) Buffer strips **meet** the Commission's requirements
- 2) A 25' buffer is proposed outside of the right-of-way on the remaining wetland proposed for the SW corner of this project

Ione Gardens Dayton Project 2020-008 November 17, 2020

- a. Preliminary wetland buffers widths meet the Commissions requirements
- b. Wetland buffer monumentation must be provided to comply with Commission requirements

Erosion and sediment control plans (Rule E)

1) Grading and erosion control plans **meet** the Commission's erosion and sediment control rules

Commission Decision on October 14, 2020.

- Approval for Phase I site plans
- Future phasing will be denied at this time unless the applicant extends the decision deadline per MN statutes (Note, applicant extended deadline to November 30, 2020)

Recommendations on remaining phases

- Approval contingent upon:
 - Post-development percolation tests are provided on infiltration basins to demonstrate the constructed infiltration rate meets or exceeds the design infiltration rates

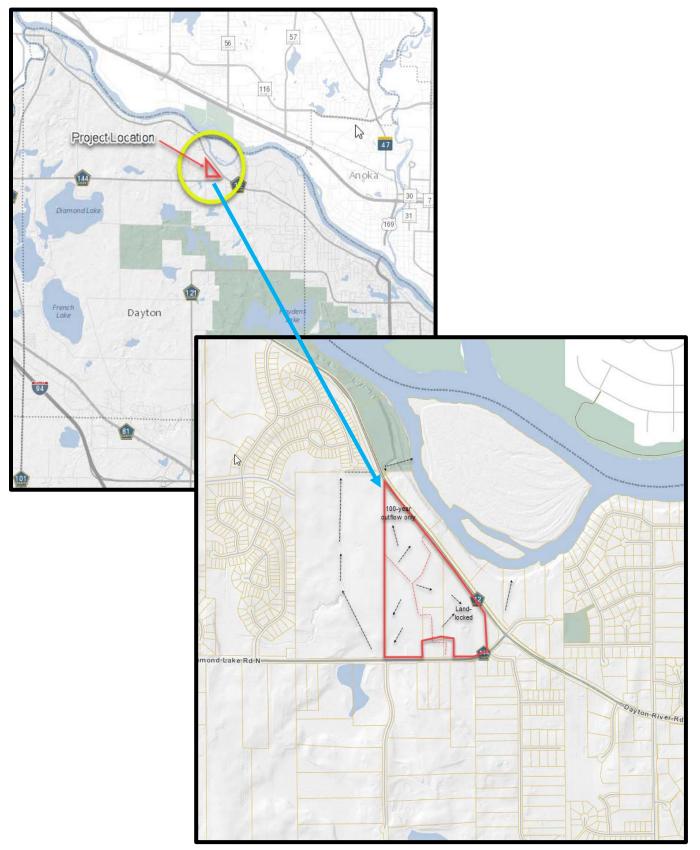
On Behalf of Barr Engineering Advisor to the Commission

James C. Kujawa Surface Water Solutions LLC

Attachments:

- Figure 1 Location Maps
- Figure 22018 Aerial Photograph
- Figure 3 Overall Site/Grading Plan

November 17, 2020 Date Ione Gardens Dayton Project 2020-008 November 17, 2020



Ione Gardens Dayton Project 2020-008 November 17, 2020

Figure 1 Location Maps





2018 Aerial Photograph

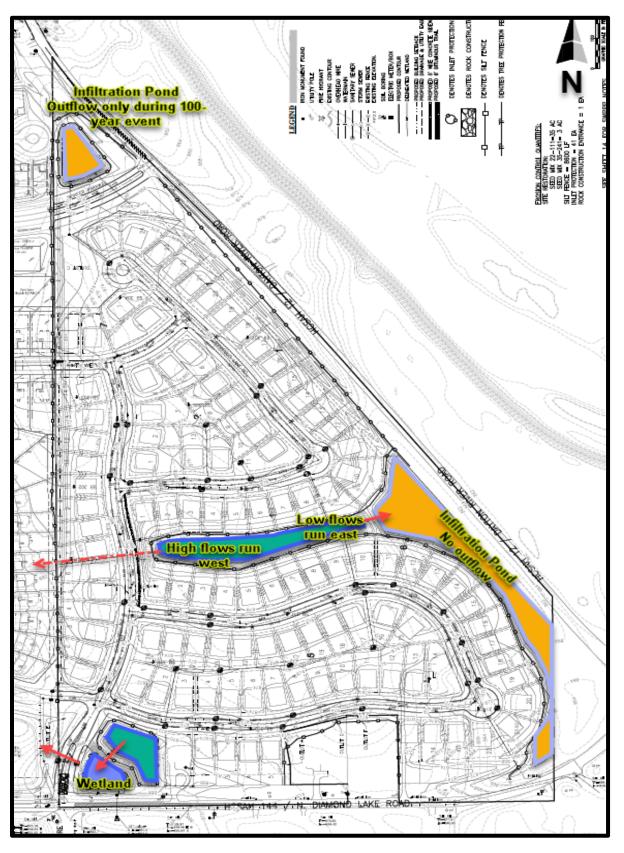


Figure 3Overall Site/Grading Plan

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 email: judie@jass.biz www.elmcreekwatershed.org TECHNICAL OFFICE Barr Engineering 4300 Market Point Drive, Suite 200 Minneapolis, MN 55435 PH: 612.834.1060 Email; jHerbert@barr.com

<u>Meadow View</u> <u>Medina, Project #2020-017</u>

Project Overview: This is a 22-acre project located south of Meander Road and north of Hwy 55. Lennar Homes is proposing to build 125 townhomes with their necessary infrastructure on this site. The plans call for 7.78 acres of new impervious areas.

This project will trigger the Commission's Appendix C Rules and Standards as indicated below.

- X Rule D Stormwater Management
- X Rule E Erosion and Sediment Control
- X Rule F Floodplain Alterations
- X Rule G Wetland Alteration
- Rule H Bridge and Culvert Crossings
- X Rule I Buffer Strips

Applicant & Agent: Lennar Homes, Attention Paul Tabone, 16305 36th Ave. N. Suite 600, Plymouth, MN 55443. Phone: 952-249-3075. Email: paul.tabone@lennar.com

<u>Agent/Engineer:</u> ISG, Attention Jerremy Foss, 7900 International Drive, Suite 550, Minneapolis, MN 55425. Phone: 952-426-0699. Email: <u>Jerremy.foss@ISGInc.com</u>

Exhibits:

- 1) ECWMC Request for Plan Review and Approval dated and received May 19, 2020
- 2) Authorization to review received via email by the City of Medina May 18, 2020
- 3) Project review fees, \$2,375.00 received May 29, 2020
- 4) Lennar Homes Meadow View Preliminary Plat site plan submittal by ISG. Dated August 12, 2020, except as noted.
 - a. Sheet 1 of 49 Title Sheet
 - b. Sheet 2 of 49, Phasing Plan
 - c. Sheet 3 of 49, Estimated Quantities
 - d. Sheets 4 to 12 of 49, Construction Notes and Site Details
 - e. Sheets 13 to 15 of 49, Utility Schedule
 - f. Sheet 16 of 49, SWPPP Narrative, Latest revision date of October 14, 2020
 - g. Sheets 17 to 19 of 49, Stormwater Pollution Prevention Plan SWPPP Notes and Details. Latest revision date of October 14, 2020

- h. Sheet 22 of 49, Existing Site Removal Plan
- i. Sheets 23 to 25 of 49, Site Utility Plans
- j. Sheet 26 of 29, Hydrant Coverage and Fire Truck Plan
- k. Sheets 27 to 36 of 49, Planned Street and Utility Construction.
- 1. Sheets 37 to 39 of 49, Storm Drain Details
- m. Sheets 39 and 40 of 49, Grading Plan. Latest revision date of October 27, 2020
- n. Sheet 41 of 49, Grading Plan (West). Latest revision date of October 14, 2020
- o. Sheet 42 of 49, Wetland Buffer Plan. Latest revision date of October 14, 2020
- p. Sheet 43 of 49, Buffer Seeding Notes. Latest revision date of October 14, 2020
- q. Sheet 44 of 49, Signage Plan
- r. Sheets 45 to 49 of 49, Landscape Plan
- 5) Lennar Homes Meadowview Development Stormwater Management Report by ISG dated October 27, 2020
 - a. HydroCAD existing conditions (print date August 4, 2020) and proposed conditions (print date August 11, 2020) with existing and proposed drainage maps
 - b. Geotechnical Evaluation Report by STS Consultants dated May 7, 2020
 - c. MPCA Wet Basin Sizing
 - d. Ramsey Washington Metro Watershed District Stormwater Reuse Calculator
 - e. MIDS Calculations
- 6) LGU MN WCA Notices
 - a. Meadow View Replacement Plan Decision dated September 21, 2020
 - b. Rolling Green Property, Wetland Boundary/Type Decision dated July 13, 2020
 - c. Meadow View Wetland Replacement Plan Notice of Application dated August 12, 2020
 - d. Meadow View Wetland Boundary/Type Decision dated May 4, 2020
- 7) Meadow View Compensatory Storage Exhibit received via email September 14, 2020.
- Meadowview draft stormwater operation and maintenance agreement received October 28, 2020
- 9) Meadowview PondNet Spreadsheet, received October 28, 2020

Findings:

General

- 1) Since the October 2020 Commission approval, the City of Medina requested the applicant to provide abstraction by irrigation only, thus eliminating the filter basin. This review is for the updated changes from the applicant dated October 14 and October 27, 2020.
- 2) This project was approved by the ECWMC on October 14[,] 2020 with the following conditions.
 - a. The mean (average) depth on the west wet-detention pond must be 4.0' or deeper.
 - b. Buffer strip monumentation and vegetation maintenance plans must conform to the Commission's requirements.
 - c. An operation and maintenance agreement of the stormwater ponds must be approved by the City and Commission. Said agreement must be recorded on the property title with a copy of the recorded document provided to the Commission.
 - d. Erosion and sediment controls must conform to the Commission's requirements.

- A complete application was received on May 29, 2020. The decision period per MN Statute 15.99 was on October 20, 2020. The project decision was rendered October 14, 2020.
- 4) Drainage on this site flows into Elm Creek in the NW corner of the intersection of CR 116 and Hwy 55.
- 5) The Hennepin County Soil Survey shows Shorewood silty clay loams and Hamel complex in this area. Geotechnical soil borings show clay loam soils with poor infiltration capabilities and high-water tables.
- 6) The City of Medina requires that landowners assume responsibility for the long-term operation and maintenance of the stormwater basins. An O & M agreement must be approved by the City and Watershed and recorded within 90-days after final plat approval on the title to this property. A copy of the recorded agreements must be provided to the Commission. Note, the agreement must provide for operation and maintenance on the irrigation pump system.
- 7) Three wetland impacts will occur on this development. Filling 6,867 square feet of wetlands in three areas has been approved by the City of Medina (LGU) for this site plan.

Stormwater Management (Rule D)

General

- 1) Existing Site Area = 22.58 acres of agriculture uses
 - a. no impervious areas
 - b. ~17 acres cropland and 5 acres meadow/hay/wetland
- 2) Proposed Site Area = 22.58 acres of residential townhomes
 - a. 8.55 acres impervious areas
 - b. 14.80 acres grass cover
- 3) All homes on site are proposed as slab-on-grade construction. Lowest most floors will meet the Commission's requirements for 2.0-foot freeboard above the 100-year elevations on adjacent ponds, wetlands, and storm basins
- 4) Design changes requested by the City of Medina converted the east basin from a biofiltration basin to a wet detention pond. The westerly basin will remain the same and be constructed as a wet detention pond with stormwater used for irrigation on the homeowner's association property.
- 5) REQUIRED ACTION: Design information on the irrigation pump and augmentation water source must be provided.

Rate Controls

- 1) Rate controls meet the Commission's requirements
- 2) Overall peak flows will be controlled at the two pond discharge points. These flow south and east into the Elm Creek floodplain wetland for about 300 feet before entering the creek
- 3) Table 1 shows the existing and proposed flow rates from this site

Table 1Rate Control Summary

		2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
South/East to	Pre-Development	39.7	79.4	144.9
Elm Creek	Post-Development	10.9	30.7	65.3
(23.25 Acres)	Change	-28.8	-48.7	-79.6

Abstraction Controls

- 1) Abstraction controls **do not meet** the Commission's requirement.
- 2) After development there will be 8.55 acres of new impervious area.
- 3) True abstraction will not occur because soil infiltration rates (based on geotechnical report) are too low to absorb a 1.1-inch rainfall event over 48 hours.
- 4) In lieu of true abstraction, the west wet detention pond will use stormwater for irrigating 7.8 acres of the homeowner's association property.
 - a. The west wet-detention pond will provide irrigation volume of 81,239 cubic feet (1.86-acre feet) per year based on the Ramsey-Washington Metro Watershed Organization Reuse Credit Calculator
- 5) Table 2 summarizes the abstraction controls provided on this site plan.
- 6) REQUIRED ACTION: Design information on the irrigation pump and augmentation water source must be provided.
- 8) REQUIRED ACTION: A copy of the recorded operation and maintenance plan agreements must be provided to the Commission. The agreement must provide for operation and maintenance on the irrigation pump system.

Water Quality Controls

- 1) Water quality controls **meet** the Commission's requirements.
- 2) Table 2 summarizes the total phosphorus (TP) and total suspended solids (TSS) leaving this site before and after development.

ANNUAL **ABSTRACTION CONDITION TSS LOAD TP LOAD** VOLUME⁽²⁾ (CU. FT.)⁽¹⁾ (22.6 AC.) (LBS/YR) (LBS/YR) (AC. FT.) **Pre-development** 18.47 N/A 3,481 12.81 (baseline) **Post-development** 21.22 3,855 34,140 26.01 without **BMPs Post-development** 81,239⁽³⁾ 4.94 310 12.32 with **BMPs Net Change** -13.5 -3,171 +47,099 -0.49

Table 2Stormwater Summary

(1) 8.55 acres impervious areas

(2) Based on ECWMC staff analysis

(3) Irrigation reuse

Buffer Strips (Rule I).

- 1) Buffer strip information on the SWPPP narrative and details dated October 14, 2020 **meet** the Commission's requirements.
- 2) The Commission requires a 25-feet average and 10-feet minimum buffer width for all wetlands.
 - a. Where slopes within a buffer are graded, any final slope steeper than 6:1 must increase buffer widths 5 feet horizontally for every 1 foot of vertical increase (i.e., 5:1=30 feet, 3:1 = 45 feet average)
- 3) Wetland buffers average 35 feet wide along the Elm Creek wetland basin and 25 feet on the interior wetland basin. This complies with the Commission's buffer width requirement.
- 4) Wetland buffer areas are shown to be restored and maintained with native vegetation for a minimum of 2 full growing season after planting. This meets the Commission's buffer vegetations standard for native seed.
- 5) Wetland buffer monumentation locations meet the Commission's requirements.

Wetland Alterations (Rule G)

- 1) Wetland alterations **meet** the Commission's requirements.
- 2) The City of Medina is the LGU in charge of administering the MN Wetland Conservation Act. Three wetland impacts are proposed that will fill 6,867 square feet.
 - a. The City of Medina's wetland and zoning codes follow the Commission's wetland alteration rules.
 - b. Wetland replacement plans have been approved by the City of Medina (LGU).
- 3) RECOMMENDATION: We recommend the normal water level (NWL) of wetland 2A be determined with an outlet pipe established at said elevation routed to CBMH A-8A.

Floodplain Alterations (Rule F).

- 1) The floodplain alteration plan **meets** the Commission's requirements.
- 2) The Elm Creek Watershed and Meadow View stormwater management plans have the base flood elevation (BFE) at 982.26 for the section of Elm Creek that runs along the south and easterly area of this site.
- 3) Floodplain impacts will occur along the fringe area of the Elm Creek floodplain.
 - a. Estimated floodplain fill below 982.3 will be 213 cubic yards.
 - b. Compensatory floodplain mitigation will be 396 cubic yards.

Erosion and Sediment Control (Rule E)

1) Erosion and sediment controls **meet** the Commission's requirements.

Decision from Elm Creek Commissioners on October 14, 2020

Approval contingent upon: (*NOTE conditions 1,2 and 4 have been met with updated plans)

- 1) *The mean (average) depth on the west wet-detention pond must be 4.0' or deeper.
- 2) *Buffer strip monumentation and vegetation maintenance plans must conform to the Commission's requirements.

- 3) An operation and maintenance agreement of the stormwater ponds must be approved by the City and ECWMC. Said agreement must be recorded on the property title with a copy of the recorded document provided to the ECWMC.
- 4) *Erosion and sediment controls must conform to the ECWMC requirement.

Note; Grading and erosion controls were administratively approved by technical staff September 30, 2020 on the condition that:

- a. the applicant accepts all risks for any changes required to obtain final approval by the Commission, and
- b. the City of Medina grants approvals for said grading

Decision for updated plan set received October 28, 2020.

Approval contingent upon:

- 1) Design information on the irrigation pump and augmentation water source must be provided.
- 2) An operation and maintenance agreement of the stormwater ponds must be approved by the City and Commission. The agreement must provide for operation and maintenance on the irrigation pump system. Said agreement must be recorded on the property title with a copy of the recorded document provided to the Commission.

On Behalf of Barr Engineering Advisor to the Commission

James C. Kujawa Surface Water Solutions LLC

Attachments

Figure 1	Location Map
Figure 2	2018 Aerial Photograph
Figure 3	Grading and Drainage Plan

December 2, 2020 Date

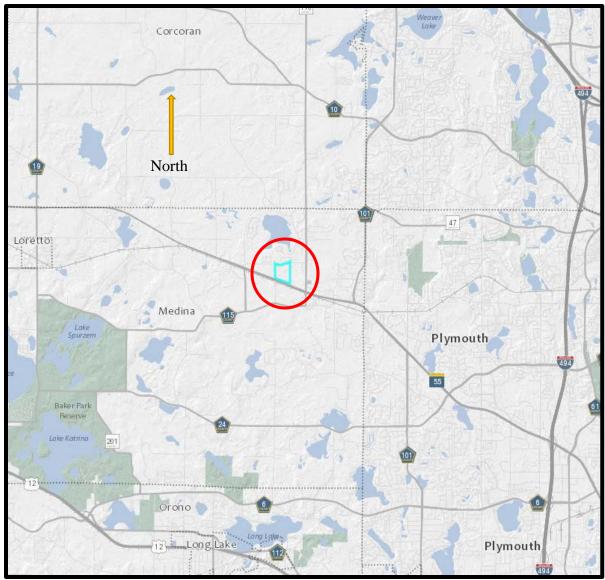


Figure 1 Location Map

Meadow View, Medina 2020-017 December 2, 2020

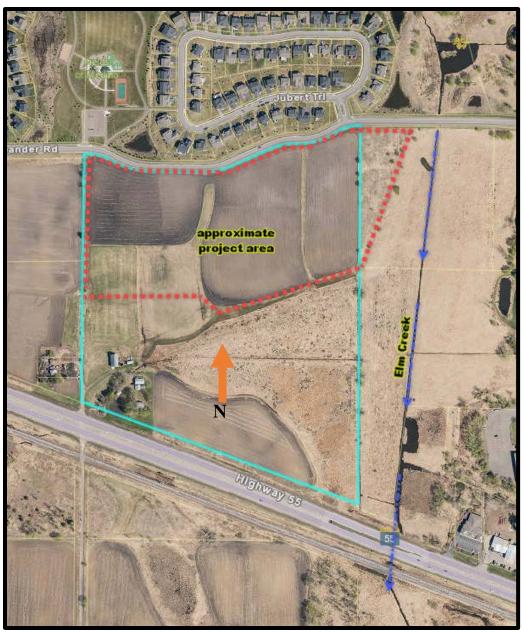


Figure 22018 Aerial Photograph

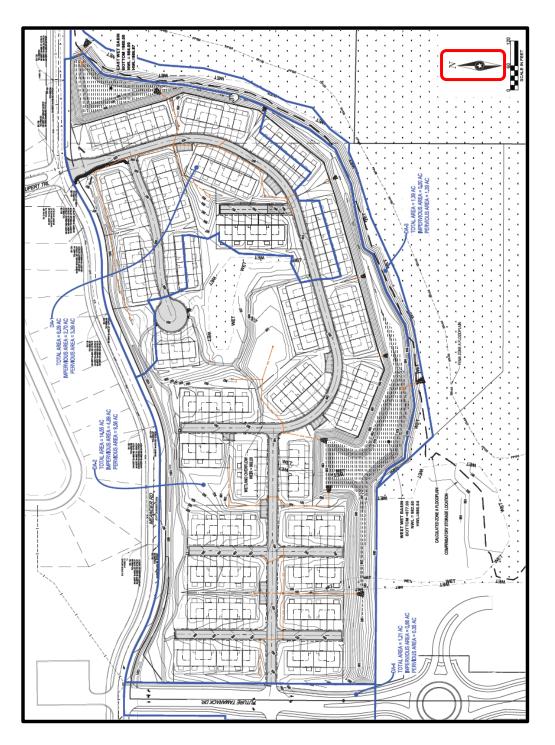


Figure 3, Grading and Drainage Plan

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 email: judie@jass.biz www.elmcreekwatershed.org TECHNICAL OFFICE Barr Engineering 4300 Market Point Drive, Suite 200 Minneapolis, MN 55435 PH: 612.834.1060 Email: jHerbert@barr.com

Nelson International <u>Corcoran, Project #2020-030</u>

Project Overview: The Nelson International project will construct an industrial building with loading docks, drive aisles, and parking at a site in Corcoran, MN along County Road 101. The project site is 10.5 acres. The total impervious area proposed to be constructed on site is 6.62 acres.

This project will trigger the Commission's Appendix C Rules and Standards as indicated below.

- X Rule D Stormwater Management
- X Rule E Erosion and Sediment Control
- Rule F Floodplain Alterations
- X Rule G Wetland Alteration
- Rule H Bridge and Culvert Crossings
- X Rule I Buffer Strips

<u>Applicant:</u> Nelson Leasing, Inc. - Ryan Nelson, 2700 E US-12, Willmar, MN 56201. Phone: 320-235-2770. Email: <u>ryannelson@nelsonleasing.com</u>.

Engineer/Agent: Val Anderson, Loucks, 7200 Hemlock Lane North, Suite 300, Minneapolis, MN 55369. Phone: 763-496-6728. Email: <u>vanderson@loucksinc.com</u>.

Exhibits:

- 1) Transmittal letter
- 2) Site Location Map
- 3) ECWMC Request for Plan Review and Approval and fee of \$5,800 were received on September 22, 2020
- 4) Storm Water Management Plan, prepared by Loucks dated March 12, 2020 (revised October 2, 2020)
 - a. Stormwater Requirements Summary
 - b. Stormwater Management Analysis and Results
 - c. Existing and Proposed HydroCAD drainage areas
 - d. Proposed drainage areas for stormsewer sizing
 - e. HydroCAD modeling report for existing and proposed conditions
 - f. Stormsewer design spreadsheet

- g. MIDs modeling report for existing and proposed conditions
- h. Hydraulic analysis report
- i. Geotechnical Report by American Engineering Testing, Inc. dated April 15, 2020
- 5) Nelson International Option C Demolition and Grading Plans dated May 19, 2020 (revised August 27, 2020)
- 6) Wetland Permit Application dated April 23, 2020
- 7) WCA Application Summary and TEP Findings dated September 16, 2020
- 8) TEP Notice of Decision for WCA Application dated September 18, 2020
- 9) Nelson International Construction Plan Set (12 sheets) dated May 19, 2020 (revised October 5, 2020)
- 10) SWPPP (Sheet C3-3 of the Plans) and Narrative dated September 22, 2020

Findings:

General

- 1) A complete application was received October 5, 2020.
- 2) The existing site consists of an agricultural field, single resident, and outbuildings.
- 3) The proposed site will consist of an industrial building with loading rocks, drive aisles, and parking.
- 4) The development will create 6.63 acres of impervious area.
- 5) The site drains to an existing wetland to the west and involves the disturbance/fill in three wetlands. The applicant submitted a Wetland Replacement Plan to the TEP.
 - a. The Applicant will minimize impacts as much as possible, resulting in an impact area of 1.0758 acres to Wetland 2.
 - b. The Applicant proposes to replace for wetland impacts by purchasing credits at a 2:1 ratio from banks within the same Major Watershed (20) and BSA (7) as the impacts, split between two banks, one in Hennepin County and one in Anoka County. A total of 2.1516 credits are proposed to be purchased from Banks #1643 and 1409 (1.0758 acres each). A signed purchase agreement with each bank was provided with the application.
 - c. The TEP agreed that the Applicant adequately addressed TEP comments and, therefore, recommended approval of the Application for Replacement Plan.
- 6) This property drains to the west and northwest approximately one mile before entering Rush Creek near Brockton Lane N.
- 7) There are no Elm Creek Watershed jurisdictional floodplains, or steam crossing within this site area.
- 8) Plans indicate that the proposed building will be expanded in the future.

Rule D - Stormwater Management

- 1) The entire site is 10.5 acres. The impervious area will increase from 0.1 acres to 6.62 acres (63-percent of site area).
- 2) The soils on the site are predominantly Hydrologic Soil Group Type D.

- 3) Soil borings indicate clay soils.
- 4) Stormwater will be managed on the site through two NURP stormwater ponds with filtration benches.

Water Quality Controls

- 1) Plans **meet** the Commission's requirements for abstraction.
- 2) Water quality and volume loads are estimated using the MIDs calculator.
- 3) Post-development total suspended solids (TSS) and total phosphorous (TP) loads will be less than pre-development loads.
- 4) Table 1 summarizes TP and TSS from this site before and after development.

Table 1 Water Quality Summary

Condition (10.5 acres)	TP load (lbs/year)	TSS load (lbs/year)
Pre-development	4.9	883
Post-development	4.6	330
Net Change	-0.3	-553
Post-Development Load Reduction	-6%	-63%

Abstraction Controls

- 1) Plans **meet** the Commission's requirements for abstraction controls.
- 2) New impervious areas will be 6.62 acres requiring 26,438 cubic feet of abstraction.
- 3) Soils are unsuitable for infiltration. The Applicant proposes using filtration benches around the constructed stormwater ponds to meet the abstraction requirement.
- 4) The filtration bench in Pond #1 will provide 21,870 cubic feet of treatment, and the filtration bench in Pond #2 will provide 6,558 cubic feet of treatment to a total of 28,428 cubic feet of filtration, exceeding the abstraction requirement.
- 5) Pretreatment is provided by sump structures before stormsewer pipes outlet to the ponds.
- 6) Table 2 summarizes filtration volumes provided for abstraction controls for this site.

Table 2Abstraction Summary

Condition	Filtration (cubic feet) ⁽¹⁾	Annual volume (acre-feet)
Pre-development (baseline)	N/A	5.0
Post-development without BMPs	26,438	16.0
Post-development with BMPs	28,428	13.2
Net Change	+1990	+8.2

Rate Controls

- 1) Plans **meet** the Commission's requirements for rate control.
- 2) Rate controls meet the Commission's standards as the peak runoff rates leaving the site for the 2-, 10-, and 100-year events are all less than peak rates for existing conditions.
- 3) Table 2 summarizes the total peak flows leaving the site before and after development.

Discharge Offsite Drainage Areas	Area (Acres)	Condition	2-year (cfs)	10-year (cfs)	100-year (cfs)
South	2.1	Existing	2.8	5.4	11.6
	0.5	Proposed	1.1	2.0	4.2
	-1.6	Change	-1.7	-3.4	-7.4
North	2.7	Existing	3.5	15.4	15.2
	1.1	Proposed	0.9	2.0	4.6
	-1.6	Change	-2.6	-13.4	-10.6
West	5.7	Existing	3.9	8.9	21.3
	8.9	Proposed	2.4	8.6	20.5
	+3.2	Change	-1.5	-0.3	-0.8

Table 2 Rate Control Summary

Rule E - Erosion and Sediment Control

- 1) Plans **meet** the Commission's requirements for erosion and sediment control.
- 2) The erosion and sediment control plan is consistent with current best management practices.

Rule G - Wetland Alterations

- 1) Plans **meet** the Commission's requirements for wetland alterations.
- 2) The development will cause the removal of Wetlands 2 to the south and portions of Wetlands 1 (east) and 3 (north). The removal of this wetland will be mitigated by purchase of wetland bank credits by the owner.

<u> Rule I – Buffer Strips</u>

- 1) Plans **meet** the Commission's requirements.
- 2) Three wetlands exist on site.

- 3) The wetland to the southeast of the site will be filled and removed as part of the development. Wetland mitigation credits will be used to offset the impacts.
- 4) Buffers and buffer signage are provided according to the required 25-foot average and 10-foot minimum width for sites discharging to the west and north wetlands.

Recommendation to the Elm Creek Commissioners

Approval contingent on the following:

- 1) An operation and maintenance agreement must be created and approved by the City and ECWMC. Said agreement must be recorded on the property title with a copy of the recorded document provided to the ECWMC.
- 2) Subsequent phases of the project (planned building addition) are to be submitted for administrative review of erosion control and stormwater management.

h Jhoh

Joseph J. Waln, P.E. Barr Engineering Co. Advisor to the Commission

Attachments

- Figure 1 Location Map
- Figure 2 2020 Aerial Imagery
- Figure 3 Existing Drainage Pattern Map
- Figure 4 Proposed Drainage Pattern Map
- Figure 5 Grading and Drainage Plan

November 4, 2020 Date Nelson International Corcoran, Project #2020-030 November 4, 2020

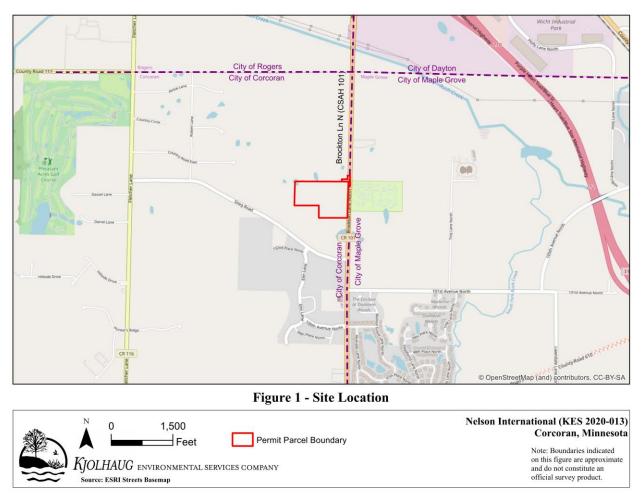


Figure 1 - Site Location Map

Nelson International Corcoran, Project #2020-030 November 4, 2020



Figure 2 – 2020 Aerial Imagery

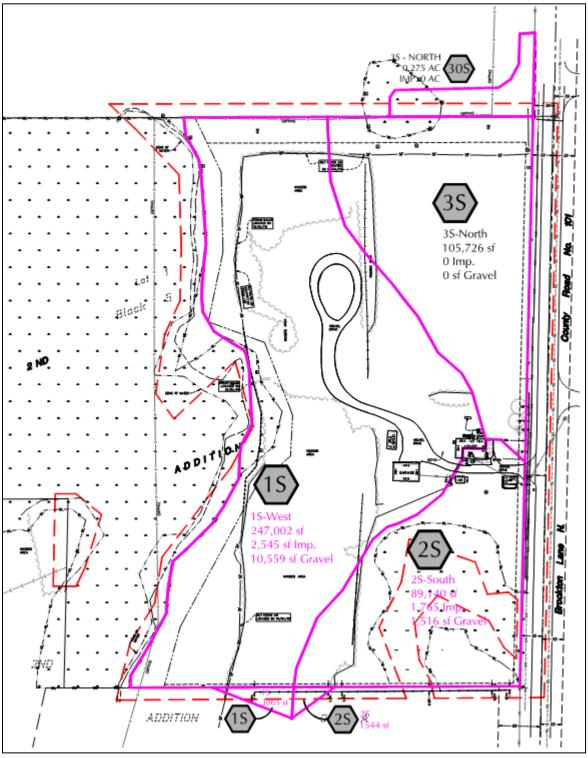


Figure 3 Existing Drainage Pattern Map

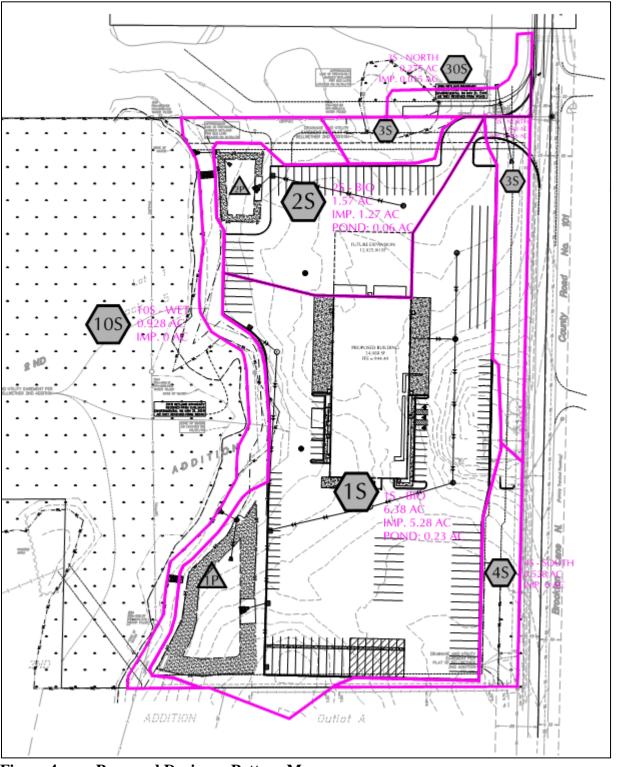


Figure 4 Proposed Drainage Pattern Map

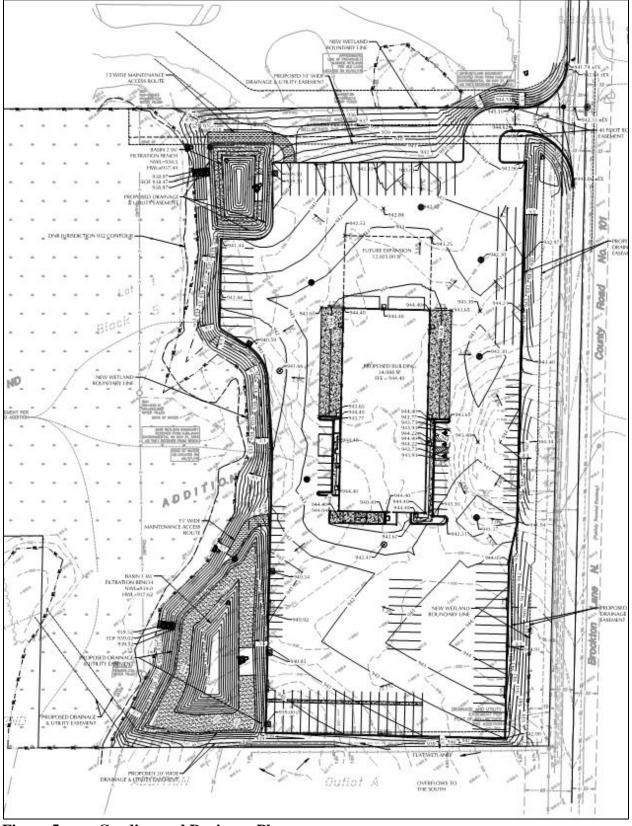


Figure 5 Grading and Drainage Plan

Page 10 of 10

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 email: judie@jass.biz www.elmcreekwatershed.org TECHNICAL OFFICE Barr Engineering 4300 Market Point Drive, Suite 200 Minneapolis, MN 55435 PH: 612.834.1060 Email: jerbert@barr.com

Enclave Rogers

City of Rogers Project #2020-032

Project Over	rview:				
Location:	Rogers, MN along Commerce Boulev	ard			
Purpose:	Enclave-Rogers is a proposed apartment complex on Commerce Boulevard in Rogers,				
		two of the three outlots created as part of the			
	-	. The project site is 3.32 acres. The total impervious			
	area proposed to be constructed on s				
WMC Rules	X Rule D Stormwater Manag				
Triggered:	X Rule E Erosion and Sedim				
	Rule F Floodplain Alteratio				
	Rule G Wetland Alteration				
	Rule H Bridge and Culvert	Crossings			
	Rule I Buffer Strips				
Applicant:	Enclave Companies	Attention:			
Address:	12nd Street N Suite 102	Phone: 701-212-8110			
		Email:			
<u>Agent:</u>	Houston Engineering, Inc.	Attention: Brian Pattengale			
Address:	1401 21 st Avenue N	Phone: 701-237-5065			
	Fargo, ND 58102	Email: bpattengale@houstoneng.com			
Exhibits:	Description	Date Received			
Application	Complete ECWMC Application				
	ECWMC Request for Review a	and Approval			
	🛛 City authorization: Rogers, N	1N			
	⊠ Review fee: \$1,000				
	Project Documents (site plans	s, reports, models, etc.)			
Submittals	, , , , , , , , , , , , , , , , , , ,				
	IC Request for Plan Review and Approva	al and fee of \$1,000 were received on October 1,			
2. Gradii					
	5 5	Houston Engineering dated September 3, 2020			
(revise	ed October 29, 2020)				
a.	Stormwater Requirements Summary				
b. Stormwater Management Analysis and Results					
D.	c. Geotechnical Report by Northern Technologies LLC. dated March 9, 2020				
	3 ,	hnologies LLC. dated March 9, 2020			

- e. MIDs modeling report for existing and proposed conditions
- f. Stormsewer sizing spreadsheet
- 4. MIDs modeling inputs Document
- 5. Enclave Rogers Construction Plan Set (20 sheets) dated June 19, 2020 (revised October 23, 2020)
- 6. Lowe's Construction Plan Set (7 sheets)
- 7. Email Response to Commission Comments received on October 29, 2020

Findings

<u>General</u>

- 1. A complete application was received September 18, 2020.
- 2. The existing site is Outlot 1 and Outlot 2 created as part of the former Lowe's development to the north. The existing site is undeveloped and consists of grass and small trees.
- 3. The proposed site will consist of a multi-story apartment building with surface parking lot.
- 4. The development will create 2.15 acres of impervious area on the 3.32 acres site. Because rate control was managed for the site as part of the Lowe's development, only a proposed conditions HydroCAD output is provided.
 - a. The regional stormwater pond downstream of the site was sized with the assumption that Outlots 1, 2, and 3 have a total impervious percentage of 87%. The existing development in Outlot 3 and the proposed Enclave – Rogers site (Outlots 1 and 2) will be approximately 65% impervious, which is less than the assumptions used to size the pond. Existing and proposed MIDS calculations are provided for phosphorus requirements.
 - b. ACTION REQUIRED Ensure proposed impervious of 2.15 acres is consistent in modeling, plans, SWPPP, and report.
- 5. The site drains to the north into an existing 30-inch stormsewer which discharges to a regional detention pond on the north side of the Lowe's development.
- 6. The applicant proposes to use iron-enhanced sand within an underground filtration chamber for phosphorus reduction.
- 7. There are no Elm Creek Watershed jurisdictional floodplains, wetlands, or steam crossings within the site.
- 8. Approximately 5 acres of adjacent land consisting of turf grass, trails, and ballfields drain into the project site. The off-site flows will be routed to the proposed stormsewer and will outlet into the regional detention pond adjacent to the Lowe's site.

Rule D – Stormwater Management (plans)

General

- 1. The entire site is 3.32 acres. The impervious area will increase from 0.0 acres to 2.15 acres (65-percent of site area).
- 2. The soils on the site are predominantly Hydrologic Soil Group Type D.
- 3. Soil borings indicate clay soils.
- 4. Stormwater will be managed on the site through one underground iron-enhanced sand filtration system.

Low Floor Elevations

1. The 100-year flood elevation in the underground storage chamber is more than 2.0 feet below the FFE of the proposed building.

Water Quality Controls

- 1. Plans **meet** the Commission's requirements for abstraction.
- 2. Water quality and volume loads are estimated using the MIDs calculator.
- 3. Post-development total suspended solids (TSS) and total phosphorous (TP) loads will be less than pre-development loads.
- 4. Table 1 summarizes TP and TSS from this site before and after development.

Table 1 Water Quality Summary

Condition	TP Load (lbs/year)	TSS Load (lbs/year)	Filtration (cubic feet) ⁽¹⁾
Pre-development (baseline)	1.49	272	0
Post-development without BMPs	4.26	774	0
Post-development with BMPs	1.12	92	8,584
Net Change	-3.14	-682	8,584
Post-development Load Reduction	74%	88%	

(1) 2.15 acres of new impervious. A HydroCAD output for the 1.1-inch event was provided to show that the proposed filtration system contains all runoff from a 1.1-inch event over the proposed impervious surface before discharging over the outlet weir.

Rate Controls

- 1. Rate control for the site was provided by the Lowe's development. Therefore, demonstration of existing vs. proposed rate control is not required.
- 2. The applicant provided proposed HydroCAD model output for the 1.1-inch, 10-year, and 100-year events which are summarized in Table 2.

Table 2	Rate of Discharge Leaving Site - Click or tap here to enter text.	

Condition	Area	10-year	100-year
	(acres)	(cfs)	(cfs)
Proposed	2.62	19.1	33.6

Abstraction Controls

- 1. Plans meet the Commission's requirements for abstraction controls.
- 2. New impervious areas will be 2.15 acres requiring 8,584 cubic feet of abstraction.
- 3. Soils are unsuitable for infiltration. The Applicant proposes using an underground iron-enhanced sand filtration system, sumped manholes, and a vegetated swale on the east side of the site to meet the abstraction requirement.

- 4. A HydroCAD output for the 1.1-inch event was provided to show that the proposed filtration system contains all runoff from a 1.1-inch event over the proposed impervious surface before discharging over the outlet weir.
- 5. Pretreatment is provided by sump structures before storm sewer pipes outlet to the underground filtration system.
 - a. ACTION REQUIRED CBMH-107 indicates a sump elevation that is the same as the pipe inverts. Please update to an elevation with at least a 3.0-foot sump before entrance into the underground filtration system.
- 6. Table 1 summarizes filtration volumes provided for abstraction controls for this site.

Rule E – Erosion and Sediment Control (plans)

- 1. Plans meet the Commission's requirements for erosion and sediment control.
- 2. The erosion and sediment control plan is consistent with current best management practices.

Recommendations

 \Box None \boxtimes Approve with Conditions \Box Approve \Box Deny

Conditions for Approval

- 1. Grading is administratively approved by technical staff on the condition that:
 - a. the applicant accepts all risks for any changes required to obtain final approval by the ECWMC, and
 - b. the City of Rogers grants approvals for said grading.
- 2. O&M consistent with the MPCA guidance for iron-enhanced sand filters and underground storage chambers is conducted.
- 3. Update hydrology report to:
 - a. Ensure proposed impervious of 2.15 acres is consistent in modeling, plans, SWPPP, and report.
- 4. Update SWPPP to:
 - a. A sump elevation for CBMH-107 that is at least 3.0-feet below downstream pipe invert.

hh

Joseph J. Waln, PE Barr Engineering Co. Advisor to the Commission

December 2, 2020 Date

Attachments

- Figure 1 Location Map
- Figure 2 Aerial Imagery
- Figure 3 Existing Drainage Pattern Map
- Figure 4 Proposed Drainage Pattern Map
- Figure 5 Stormwater Drainage Plan

Enclave Rogers City of Rogers Project #2020-032 December 2, 2020

Figure 1 Site Location Map

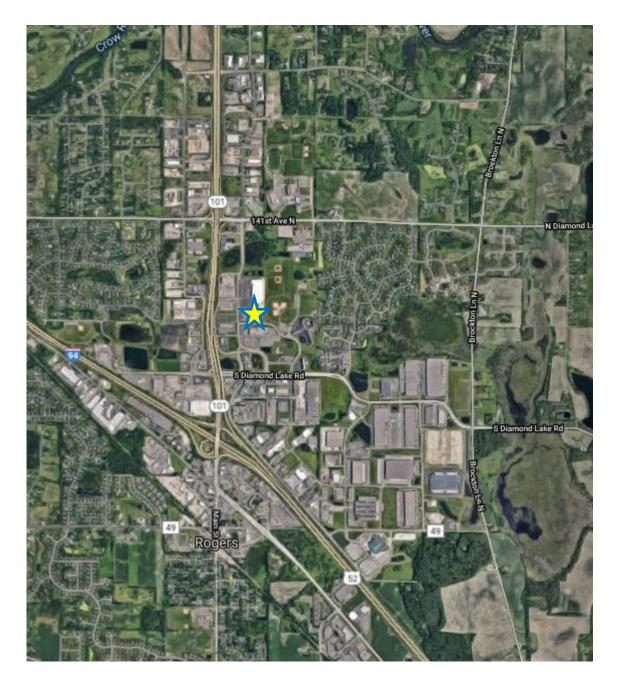


Figure 2 Aerial Imagery



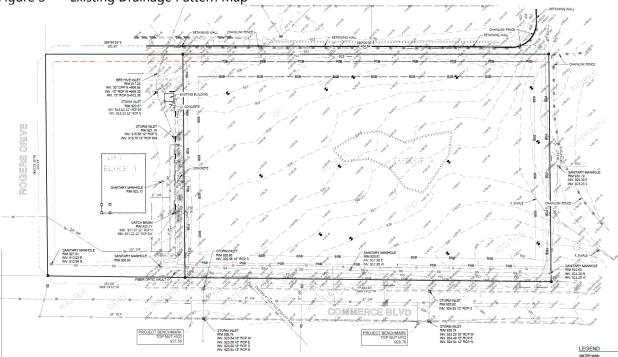
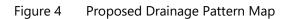
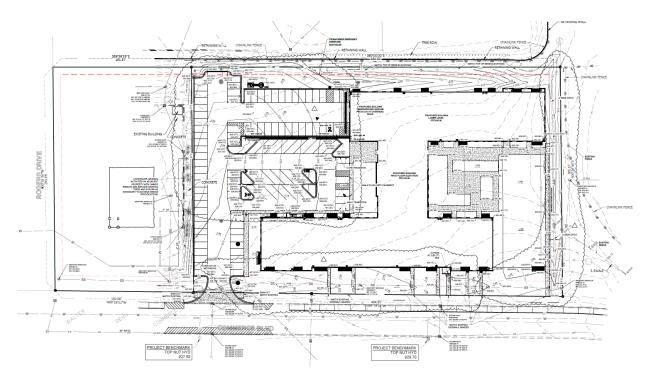
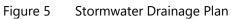
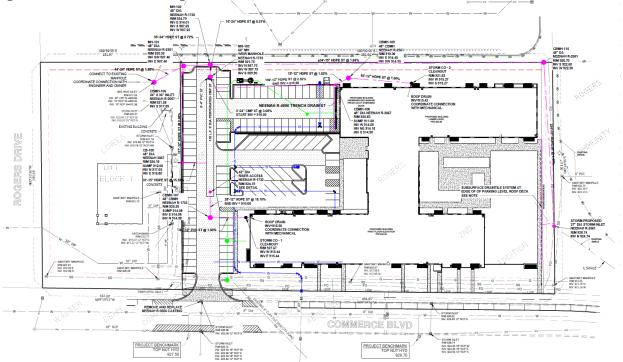


Figure 3 Existing Drainage Pattern Map









elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 email: judie@jass.biz www.elmcreekwatershed.org TECHNICAL OFFICE Barr Engineering 4300 Market Point Drive, Suite 200 Minneapolis, MN 55435 PH: 612.834.1060 Email; jHerbert@barr.com

<u>Weston Woods</u> <u>Medina, Project #2020-033</u>

Project Overview: This is a 139-acre project found north of Hwy 55 and east of Mohawk Drive. There are 108 attached residential units, 42 detached single-family lots, and 30,000 square feet of commercial building space. Site development will include removal of an existing building site, grading, and installation of municipal sewer and water, streets, and stormwater systems. The Chippewa Road extension/connection will also be part of this project and review. The site plans will create 17.4 acres of new impervious area.

This project will trigger the Commission's Appendix C Rules and Standards as shown below.

- X Rule D Stormwater Management
- X Rule E Erosion and Sediment Control
- X Rule F Floodplain Alterations
- X Rule G Wetland Alteration
- X Rule H Bridge and Culvert Crossings
- X Rule I Buffer Strips

<u>Applicant & Agent:</u> Mark Smith, 2120 Otter Lake Drive, St. Paul, MN 55110. Phone: 612-490-0558. Email: <u>markmoeindc@aol.com</u>

<u>Agent/Engineer:</u> Landform, Attention Randy Hedlund, 105 South Fifth Avenue, Suite 513, Minneapolis, MN 55401. Phone: 612-638-0260. Email: <u>rhedlund@landform.net</u>

Exhibits:

- 1) ECWMC Request for Plan Review and Approval dated September 30, 2020, received October 5, 2020
- 2) Authorization to review by the City of Medina dated October 1, 2020
- 3) Project review fees, \$13,750 received with the application on October 5, 2020
- 4) Weston Woods of Medina Site Plans by Landform, dated September 28, 2020
 - a. Sheet C0.1, Civil & Landscape Title Sheet
 - b. Sheets C0.2 & C0.3, Preliminary Plat
 - c. Sheet C1.1, Existing Conditions.
 - d. Sheets C2.1 & C2.2, Site Plans.
 - e. Sheets C3.0 to C3.7, Grading Drainage & Erosion Control

- f. Sheet C3.8, MN SWPPP Notes
- g. Sheets C4.1 & C4.2, Utilities.
- h. Sheets C7.1 to C7.3, Civil Construction Details
- i. Sheets L1.1 to L1.3, Tree Preservation Plan
- j. Sheets L2.1, L2.2 and L7.1, Landscape Plans and Details
- 5) Weston Woods of Medina Stormwater Management Report by Landform dated September 29, 2020
 - a. HydroCAD existing conditions and proposed conditions corresponding drainage maps
 - b. Abstraction, water quality and storm sewer design information.
- 6) P8 water quality model by Landform dated September 29, 2020
- 7) Draft Soil Boring Logs and location sketch by Braun Intertec, dated September 22, 2020
- 8) Draft Floodplain Analysis at Chippewa Road and Arrowhead Drive by WSB Engineering

Findings:

General

- 1) A complete application was received on October 5, 2020. The decision period per MN Statute 15.99 expires on December 4, 2020.
- 2) Drainage on this site flows east into DNR wetland 27-493W. From there it flows north into the Rush Creek watershed.
- 3) DNR Wetland 27-493 is within a FEMA/ECWMC Zone A floodplain. Zone A is described as an area subject to inundation by the 1-percent annual chance flood event, but a detailed analysis has not been performed to determine a base flood elevation.
- 4) The Hennepin County Soil Survey and on-site soil boring show all on-site soils to have high clay content, high water tables, slow to impervious materials or a combination of these characteristics.
- 5) The City of Medina requires that landowners assume responsibility for the long-term operation and maintenance of the stormwater basins. An O & M agreement must be approved by the City and Watershed and recorded within 90-days after final plat approval on the title to this property. A copy of the recorded agreements must be provided to the Commission.
- 6) A wetland replacement plan has not been received as of this report update. The EAW for Chippewa Road/Weston Woods estimated wetland impacts to be 3.9723 acres for Chippewa Road and 0.7907 acres for Weston Woods.

Stormwater Management (Rule D)

General

- 1) Existing Site Area = 139 acres of mixed wetland/woodland/grassland/agriculture uses.
 - a. 1.86 acres impervious areas
- 2) Proposed Site Area = 139 acres residential home sites and Chippewa Road Extension.
 - a. 19.63 acres impervious areas

- 3) Net new impervious area equals 17178 acres which results in an abstraction requirement of 1.62 acres feet or 70,095 cubic feet.
- 4) To manage stormwater a series of fourteen (14) ponding basins will be constructed throughout the site to intercept 18.00 out of the 19.63 acres of impervious areas from this project.
- 5) Skimming of floatables and oils will be provided by submerging the pond outlet pipes.

Minimum Floor Elevations

- ACTION REQUIRED: Homes next to wetlands and ponding basins must have their lowest most floor elevations (<u>not openings</u>) 2.0 feet or higher than the 100-year water elevation. Lowest most floor elevations (based on HydroCAD 7.30" rainfall event) must be as shown in Table 1.
- 2) ACTION REQUIRED: Wetland 5a and 5b must be modeled to determine the 100-year elevation at the culvert under Short Way Road.

Basin	100-year Elevation	Minimum Lowest Floor Elevation	Basement Below Requirement
Pond 3P	986.9	988.9	Lots 13 and 14
Pond 5P	985.0	987.0	Lots 33 and 34
Pond 11eP	984.2	986.2	Lots 25 to 28
Wetland 1f	986.8	988.8	Lot 5
Pond 13P	988.0	990.0	Lots 3 and 4
Pond 14P	985.9	987.9	Lot 9
Pond 20P	986.2	988.2	Lots 1 to 3
Wetlands 5a and 5b	Not determined	Not determined	

Table 1Minimum Lowest Floor Elevations

Rate Controls

- 1) Rate controls **meet** the Commission's requirements.
- 2) Overall peak flows will be controlled by the ponding on site and the DNR wetland discharge points.
- 3) Table 2 shows the existing and proposed flow rates from the north and south DNR wetland discharge points and the before and after rates from the DNR wetland complex before it flows north into County Ditch 16.

Primary Discharge Point	Area (Acres)	Condition	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
South Discharge	565.0	Pre-Development	93.3	172.5	355.1
	561.4	Post-Development	80.8	145.4	286.9
	-3.6	Change	-12.5	-27.1	-68.2
North Discharge	570.0	Pre-Development	186.2	336.4	680.1
	573.6	Post-Development	158.4	273.7	562.4
	+3.6	Change	-27.8	-62.7	-117.7
DNR Wetland Discharge	1135.1	Pre-Development	8.9	14.3	29.2
	1135.1	Post-Development	8.6	14.1	29.2
	0	Change	-0.3	-0.2	0

Abstraction Controls

- 1) Abstraction controls **do not meet** the Commission's requirement.
- 2) After development there will be 17.78 acres of new impervious area.
- 3) Soil borings confirm high-clay content soils unsuitable for infiltration.
- 4) A combination of stormwater reuse for irrigating 30.5 acres properties is propose to meet the Commission's abstraction requirments.
 - a. Stormwater ponds 1P and 20P are proposed to be utilized for irrigation water.
 - i. Pond 1P will irrigate 18.75 acres and utilize 249,773 cubic feet of stormwater.
 - ii. Pond 20P will irrigate 11.79 acres and utilize 46,958 cubic feet of stormwater.
 - b. ACTION REQUIRED: Additional details on the irrigation system pump and water augmentation are required on the site plans.
 - c. ACTION REQUIRED: An irrigation system operation and maintenance schedule must be determined and included in the operation and maintenance agreement.
 - 5) Table 3 summarizes the abstraction controls provided on this site plan.

Water Quality Controls

- 1) Water quality controls **do not meet** the Commission's requirements.
- 2) ACTION REQUIRED. Thirteen (13) of the stormwater ponds do not meet the Commission's requirements for a mean average depth of 4.0 feet on wet detention ponds.
- 3) ACTION REQUIRED: P8 post-development total phosphorus loads are higher than predevelopment loads. Phosphorus loads after development must be less than or equal to phosphorus loads before development.

- 4) ACTION REQUIRED: Pond 11eP. The water flows between the inlet and outlet will short circuit, not providing the water quality treatment available in this pond. A greater separation between the inlet and outlet pipes is necessary.
- 5) Table 3 summarizes the total phosphorus (TP) and total suspended solids (TSS) leaving this site before and after development as determined by the applicants P8 and Ramsey Washington stormwater reuse credit calculator.

CONDITION (139 AC.)	TP LOAD (LBS/YR)	TSS LOAD (LBS/YR)	ABSTRACTION (CU. FT.) ⁽¹⁾	ANNUAL VOLUME ⁾ (AC. FT.)
Pre-development (baseline)	60.8	17,199	N/A	66.1
Post-development without BMPs	105.8	33,467	70,995	105.5
Post-development with BMPs	68.7	15,973	296,731 ⁽²⁾	105.5
Net Change	+7,9	-1,226	+208,736	+39.4

Table 3Stormwater Summary

(1) 17.78 acres new impervious areas

(2) irrigation reuse on 30.5 acres.

Buffer Strips (Rule I).

- 1) Buffer strips **do not meet** the Commission requirements.
- 2) The ECWMC requires a 25-feet average and 10-feet minimum buffer width for all wetlands.
 - a. Where slopes within a buffer are graded, any final slope steeper than 6:1 must increase buffer widths 5 feet horizontally for every 1 foot vertical increase (i.e., 5:1=30 feet, 3:1 = 45 feet average).
- Based on Sheets C2.1 and C2.2, buffer widths will meet the Commission's requirements. Wetland buffer widths average 25 feet or wider. The narrowest buffer width is on wetland 1h at 20 feet wide.
- 4) ACTION REQUIRED: All disturbed areas and areas not meeting the Commission's natural vegetation criteria for buffers must be restored with native vegetation.
- 5) ACTION REQUIRED: Native vegetation restoration on wetland buffer areas shall be maintained and replanted as needed for a duration of not less than the first two full growing seasons after planting.
- 6) ACTION REQUIRED: Wetland buffer monumentation locations must be provided on the site plans.

Wetland Alterations (Rule G)

- 1) Wetland alterations **do not meet** the Commission's requirements.
- 2) The City of Medina is the LGU in charge of administering the MN Wetland Conservation Act.

- 3) ACTION REQUIRED. The final wetland replacement plan has not been sent for review and comment. Affects to wetlands will be approximately 0.8 acres on the Weston Woods site and 4.0 acres for Chippewa Road construction Wetland replacement plans must be approved by the City of Medina (LGU).
 - a. The City of Medina's wetland and zoning codes follow the ECWMC wetland alteration rules.

Floodplain Alterations (Rule F).

- 1) Floodplain alterations **do not meet** the Commission's requirements.
- 2) DNR Wetland 27-493W is classified as a Zone-A Area. Zone A area is defined as an area subject to inundation by the 1-percent annual chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevation (BFE) has been determined.
- 3) The City of Medina supplied an analysis of Zone A areas for this site as part of the project submittal. The draft analysis established a BFE at 981.5 in the south basin (south of Chippewa Rd ROW) and 979.2 in the north basin (North of Chippewa Rd ROW) on this flood zone area. This analysis by the City is considered the latest most up to date study and will be used to determine floodplain impacts from this project.
- 4) ACTION REQUIRED: Floodplain impacts will occur along the Chippewa Road corridor and must be accounted for and mitigated per the Commission Rule F requirement.

Erosion and Sediment Control (Rule E)

- 1) Erosion and sediment controls **do not meet** the Commission's requirements.
- 2) ACTION REQUIRED: Identify temporary sediment basins and outlet pipe details.

Recommendation to the Elm Creek Commissioners

None currently.

On Behalf of Barr Engineering Advisor to the Commission

James C. Kujawa Surface Water Solutions LLC

Attachments

- Figure 1 Location Map 1
- Figure 2 Location Map 2

Figure 3 2018 Aerial Photograph

Figure 3 Grading and Drainage Plan

November 1, 2020 Date

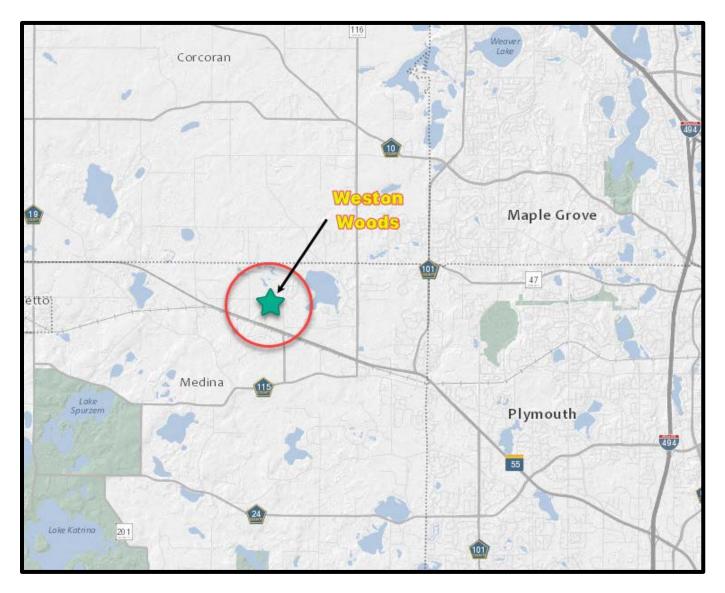


Figure 1 Location Map 1

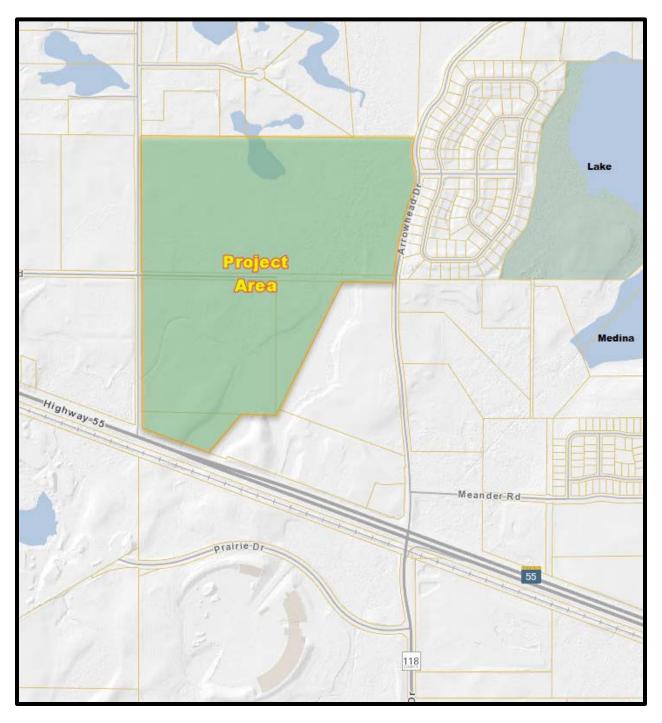


Figure 2 Location Map 2



Figure 3 2018 Aerial Photo

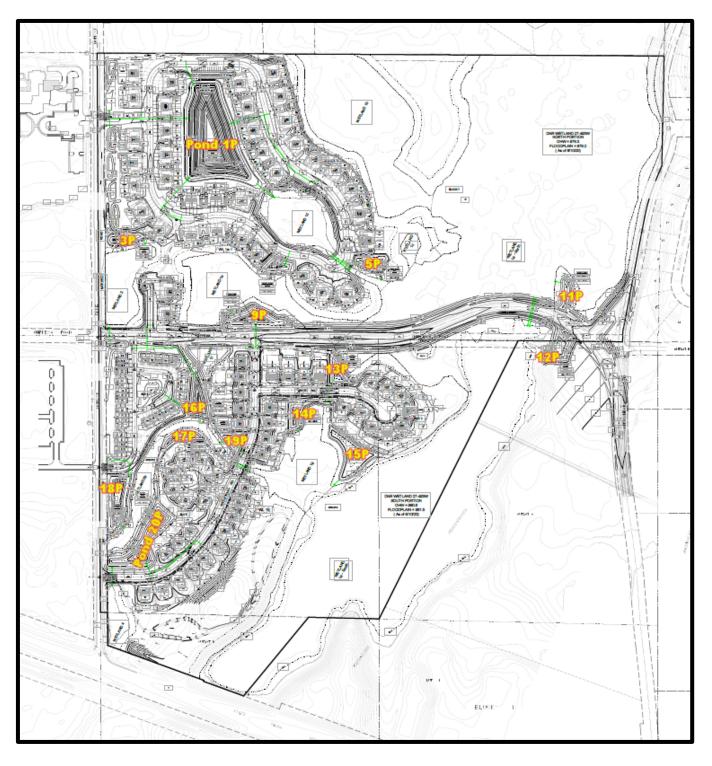


Figure 4 Grading and Drainage Plan

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 email: judie@jass.biz www.elmcreekwatershed.org TECHNICAL OFFICE Barr Engineering 4300 Market Point Drive, Suite 200 Minneapolis, MN 55435 PH: 612.834.1060 Email; jHerbert@barr.com

Daniel Presteng Residence Corcoran, Project #2020-035

Project Overview: This is a 3.84-acre lot that is proposed to be graded to accommodate the Presteng home. It is located south of Oakdale Drive and approximately ¹/₄ mile east of Bechtold Road on Lot 1, Block 1, Schmids Hidden Valley Second Addition. The project triggers the Commission's rules because it disturbs more than 1.0 acres of land during construction.

This project will trigger the Commission's Appendix C Rules and Standards as indicated below.

- X Rule D Stormwater Management
- X Rule E Erosion and Sediment Control Phase 1A
 - Rule F Floodplain Alterations
 - Rule G Wetland Alteration
 - Rule H Bridge and Culvert Crossings
 - Rule I Buffer Strips

Applicant & Agent: Daniel Presteng, 4745 Goldenrod Lane N., Plymouth, MN 55442. Phone: 763-807-2202. Email: <u>dpresteng@hotmail.com</u>

Exhibits:

- 1) ECWMC Request for Plan Review and Approval dated September 23, 2020, received October 13, 2020.
- 2) Project review fees, \$450.00 received May 14, 2020.
- 3) Schmids Hidden Valley Second Addition ECWMC project file 2012-035.

Findings:

General

- 1) A complete application was received on October 13, 2020. The decision period per MN Statute 15.99 expires December 12, 2020.
- 2) Drainage on this site is to the north into a series of drain tiles, ditches, and wetlands before entering the North Fork of the Rush Creek near County Road 117.

- a. There is a drain tile system that appears to run through this parcel. Topographic maps indicate it runs from a depressional area tile inlet near the middle of the property to the road ditch at CR 117 in the NW corner of the property.
- b. RECOMMENDATION: If a map of the drain tile system does not already exist, one can be created during home construction. Strategic holes can be dug with the home excavation equipment near the NW corners of the property to determine the tile location, depth, diameter, and materials. A map of the discoveries can then be produced for future reference.
- 3) There are no wetlands on this parcel.
- 4) There are no FEMA or ECWMC flood zones on this

Stormwater Management (Rule D)

- 1) Stormwater management does not meet the Commission requirements.
- 2) No stormwater management was provided or is proposed for this site.
- 3) The change in land use from crop land to a large lot residential home was analyzed for stormwater management by ECWMC staff.
 - a. The depressional area was assumed to have a 6" surface inlet tile for its discharge pipe.
- 4) REQUIRED ACTION: Lowest most floor elevation must be on the certificate of survey. Estimated minimum low floor elevation must meet the Commission requirement of 2.0' above the 100-year flood elevation. See table 1 below.
 - a. Based on staff's analysis the 100-year high water elevation of the depressional area will be 948.7. The low floor elevation must be 2.0 feet above the low floor elevation.

Table 1Minimum Lowest Floor Elevations

Basin	100-year Elevation	Minimum Lowest Floor Elevation
6"-tile Inlet depressional area	948.7	950.7

Table 1Rate Control Summary

Primary Discharge Points	Area (Acres)	Conditions	2-year Event (cfs)	10-year Event (cfs)	100-year Event (cfs)
North	6.05	Existing	5.9	10.2	19.3
	6.05	Proposed	4.0	7.5	15.2
	0	Change	-1.9	-2.7	-4.0

1) The rate control analysis for this parcel is summarized in Table 1 above. Rate Controls meet the Commission's requirements.

2) There will be no stormwater facilities on site that will require an operation and maintenance agreement.

Abstraction Controls

- 1) Abstraction controls **meet** the Commission's requirements.
- 2) Total new impervious area will be 9,620 square feet. This requires 882 cubic feet of abstraction per the Commission rule.
- 3) Abstraction is accomplished on this site by the disconnection of the impervious area from a water resource or discharge point. Staff guidelines provide a disconnection credit for impervious area flows over at least of 75 feet of permanent vegetation for sheet flows of water or 300 feet for channelized flows. This home site meets those criteria.

Water Quality Controls

- 1) Overall water quality controls **meet** the Commission's requirements.
 - a. Table 3 summarizes the overall phosphorus and total suspended solids leaving the site before and after development.
- 2) Changes is land use from cropland to lawn/permanent vegetation and 0.2 acres of impervious areas along with the disconnected flows from the impervious areas will reduce TP and TSS on this parcel as shown below.

CONDITION (3.8 AC.)	TP LOAD (LBS/YR)	TSS LOAD (LBS/YR)	ABSTRACTION (CU. FT.) ⁽¹⁾	ANNUAL VOLUME (AC. FT.)
Pre-development (baseline)	2.85	564	N/A	2.10
Post-development without BMPs	2.1	373	882	2.51
Post-development with BMPs	2.1	375	882 ⁽²⁾	2.51
Net Change	-0.75	-191	0	+0.41

Table 3Overall Site Plan Stormwater Summary

(1) 0.2 acres new impervious

(2) Abstraction credits from disconnection of impervious surfaces

Erosion and Sediment Controls for Phase 1A. (Rule E)

- 1) No erosion controls are proposed.
- 2) RECOMMENDATION: See certificate of survey (figure 3) for suggested erosion control locations and practice.

Presteng Residence, Corcoran 2020-035 November 12, 2020

<u>Recommendation</u>: Approval pending receipt of certificate of survey with lowest most floor verification at or higher than 950.7 elevation.

On Behalf of Barr Engineering Advisor to the Commission

~ ()

James C. Kujawa Surface Water Solutions LLC

November 12, 2020 Date

Figure 1 - Location Maps Figure 2 - 2018 Aerial Photo with drainage patterns Figure 3 - Certificate of Survey/Topography.

Recommended Erosion Controls

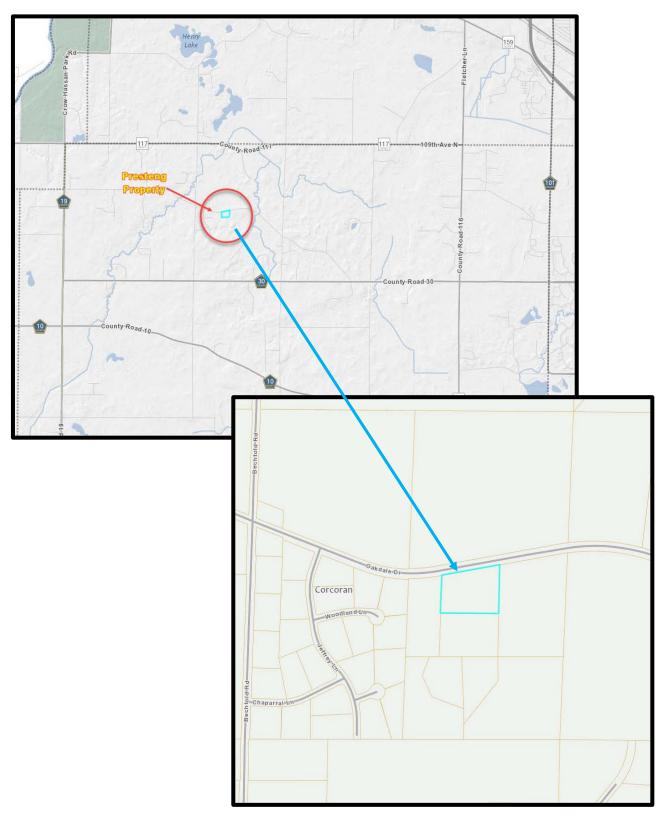


Figure 1 Location Maps

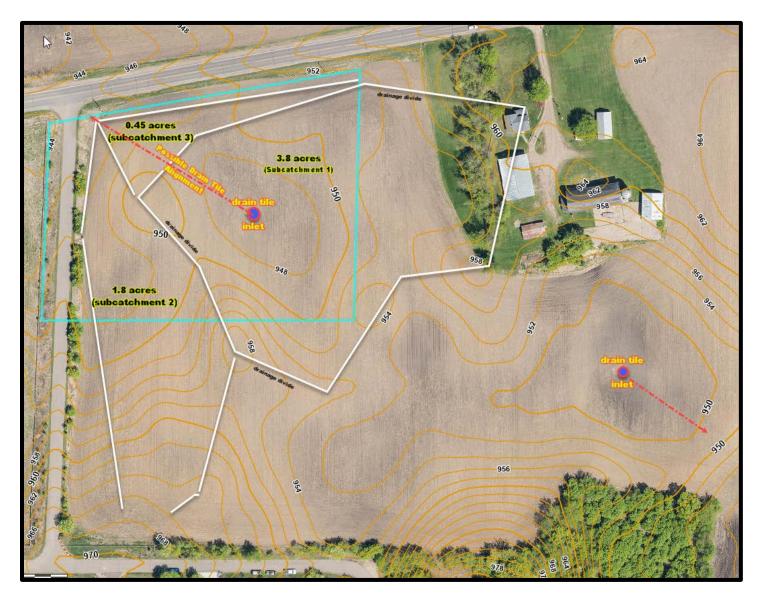


Figure 2 2018 Aerial Photo with drainage patterns

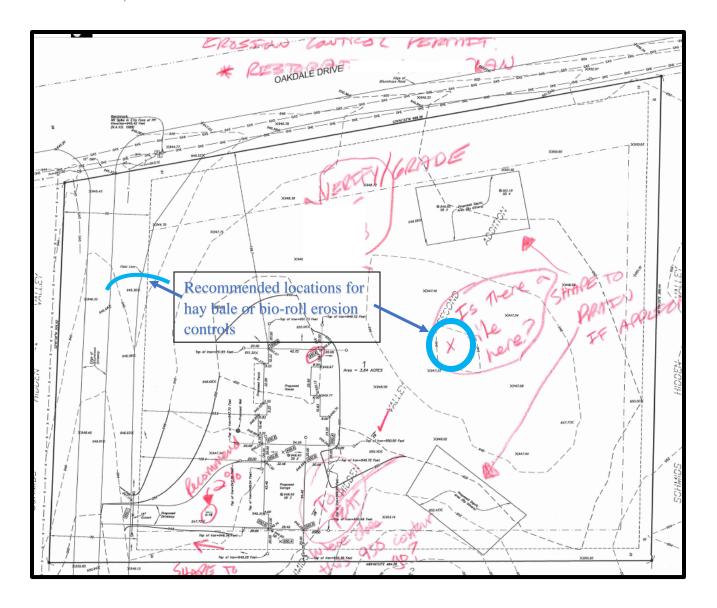


Figure 3Certificate of Survey/Topography and Recommended Erosion Controls
(Note: red lines were on plans when received from applicant)