

November 11, 2022

Representatives
Pioneer-Sarah Creek Watershed
Management Commission
Hennepin County, Minnesota

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

### Dear Representatives:

A regular meeting of the Pioneer-Sarah Creek Watershed Management Commission will be held Thursday, November 17, 2022, at 6:00 p.m. This will be an **in-person** meeting held at Maple Plain City Hall, 5050 Independence Street, Maple Plain, MN.

A light supper will be served. RSVPs are requested so that the appropriate amount of food is available. At the time of your response, please let us know if you will be eating supper with us.

In order to ensure a quorum for the regular meeting, please telephone 763.553.1144 or email me at <a href="mailto:amy@jass.biz">amy@jass.biz</a> to indicate if you or your Alternate will be attending. It is your responsibility to ascertain that your community will be represented at the meeting

Regards,

Amy/A. Juntunen, Administrator

AAJ<sup>u</sup>tim

cc: Alternates

Paul Stewart, Kris Guentzel, HCEE

Brian Vlach, TRPD Joel Jamnik, Attorney Andrew Vistad, Hakanson-Anderson

City Clerks MPCA
Met Council BWSR
official newspapers DNR

Z:\Pioneer-SarahCreek\Meetings\Meetings 2022\11 notice.doc



ADMINISTRATIVE OFFICE: 3235 Fernbrook Lane N • Plymouth, MN 55447 763.553.1144 • Fax: 763.553.9326 • judie@jass.biz • www.pioneersarahcreek.org

# REGULAR MEETING AGENDA November 17, 2022 ● 6:00 p.m.

The meeting packet can be found on the Commission's website: http://pioneersarahcreek.org/pages/Meetings/

- 1. Call to Order.
- 2. Approve Agenda.\*
- 3. Consent Agenda.
  - a. October meeting minutes.\*
  - b. November Claims/Treasurer's Report.\*
- 4. Open forum.
- 5. Action Items.
  - a. 2022-010 Pioneer Highlands, Medina.\*
  - b. 2022-012 Bridgevine Subdivision, Independence.\*
  - c. Olsen Manure Bunker CIP Application and Funding Request.\*
- 6. Old Business.
  - Engineer's Estimate for GS68 (formerly JB gully stabilization)\*\*
- 7. New Business.
- 8. Watershed Management Plan.
- 9. Education.
- Grant Updates.
- 11. Communications.
- Staff Reports.
  - a. Engineer's Report.\*
  - b. HCEE Report.\*
  - c. TRPD Report.
- 13. Commissioner Reports.
- 14. Other Business.
- 15. Adjournment. (Next scheduled meeting: December 15, 2022). z:\Pioneer-SarahCreek\Meetings\Meetings 2022\11 agenda.docx



# REGULAR MEETING Minutes October 20, 2022

**1. CALL TO ORDER.** A regular meeting of the Pioneer-Sarah Creek Watershed Management Commission was called to order by Chair Joe Baker at 6:00 p.m., Thursday, October 20, 2022, at Maple Plain City Hall, 5050 Independence Street, Maple Plain, MN.

Present: Mark Workcuff, Greenfield; Joe Baker, Independence; Brenda Daniels, Loretto; Caitlin Cahill,

Maple Plain; Pat Wulff, Medina; John Tschumperlin, Minnetrista; Kris Guentzel, Hennepin County Environment and Energy (HCEE); Brian Vlach, Three Rivers Park District (TRPD);

Andrew Vistad, Hakanson-Anderson; and Amy Juntunen, JASS.

Also present: Steve Bohl, BohLand Development, Charlie Wieverslage, Sathre-Bergquist, and residents

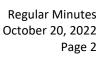
Randy Stinson, Martha McCabe and Mary Johnson for Project 2022-12 Bridgevine.

**2. AGENDA.** Motion by Cahill, second by Daniels to approve the agenda\* as presented. *Motion carried unanimously.* 

- **3. CONSENT AGENDA.** Motion by Daniels, second by Workcuff to approve the Consent Agenda as presented.
  - a. September Regular Meeting Minutes.\*
  - b. October Treasurer's Report/Monthly Claims \* totaling \$7,627.04.
- 4. OPEN FORUM.
- 5. ACTION ITEMS.
- a. 2019-008 Adams Pest Control, Medina.\* This project was reviewed and approved in 2019. Since then, there have been significant changes to the site layout plan, including an overall decrease in size. PSCWMO does not have jurisdiction regarding the eagle nest on the property but there would be a 600 ft setback required. In their findings dated October 6, 2022, Staff recommends approval with no contingencies. It is unknown whether the eagle nest on the property is still occupied.

Motion by Wulff, second by Cahill to approve project 2019-008 as presented. *Motion carried unanimously*.

b. 2022-012 Bridgevine, Independence.\* Bridgevine Subdivision is a 28-lot 47.5-acre residential development. The developer is seeking erosion and sediment control approval for a preliminary grading permit prior to receiving their full development permit. The residential property is located within the City of Independence. The existing site contains a mixture of woodland, meadow, a tree farm, and row crops. The site is adjacent to and drains to Lake Independence located on the northern boundary of the proposed subdivision, and Pioneer Creek located to the west of the development. The site drainage is directed to the north, east, and west into three existing gullies/ravines. The Commission's management plan requires





compliance for Erosion Control (Rule E). In their findings dated October 7, 2022, Staff recommends approval with three contingencies: 1) Providing an acceptable solution to address the erosion occurring in the onsite northern Gully identified as GS46, 2) The developer acknowledges that future comments to address stormwater concerns may cause changes to the provided grading plans, and 3) The Developer agrees to and will comply with all requirements of the watershed organization and NPDES and takes full responsibility to assure that any measures required by them be completely satisfied.

The developer is prepared to move forward with grading at this time with the understanding that future comments may require changes to the grading and they are proceeding at their own risk. A 2013 area stormwater assessment identifies a gully stabilization on this property that could reduce approximately 15 lbs of TP per year to Lake Independence. Current plans to divert stormwater from the development to the existing gullies do not meet Commission requirements for non-degradation. This may be an opportunity for the Commission to assist with installation of above-and-beyond BMPs/gully restoration to improve flow from this property. However, the Developer must cover the costs to meet Commission requirements for water quality and volume. Bohl suggested scheduling a site visit to discuss options and review current status of ravines and erosion. Erosion may be reduced with development as runoff is directed to streets and stormwater pond rather than through drain tile to the ravines as it does currently. There is a conservation easement over the ravine with no grading or tree removal in that area. Revised plans must be received by November 8 to be considered for approval at the Commission's November 17 meeting.

Johnson noted that the City will likely base its approval on the Commission's approval of this project. The Commission will uphold watershed standards for any project.

McCabe expressed concern that one ravine drains through her property to the west. The development will reduce volume to the ravine by approximately 30% and that may reduce erosion to that ravine. She also inquired whether the development will have sanitary sewer/septic and individual wells. This is not within the purview of the Commission. McCabe also commented that the City replaced the culvert flowing to her property under Budd Street and it is now eroding quite noticeably.

Motion by Wulff, second by Daniels to approve project 2022-12 with three contingencies as noted above. *Motion carried unanimously.* 

c. Olsen Manure Bunker CIP Application and Funding Request.\* Guentzel is submitting a CIP application for this property on Pioneer Trail in Medina. The property houses 28 horses and currently has an open manure pile. The property drains to Lake Peter, which is impaired for nutrients. The application is for a 30' x 80' cement pad and four foot walls to allow manure storage for up to four months and to contain any runoff. The estimated cost for this manure bunker includes a 20% contingency due to the increasing costs of concrete. The total estimated cost is \$69,319 with the County and landowner each funding 10% / \$6,931.90, the Commission funding 25% / \$17,329.72 through CIP cost-share funds, and the Commissiong funding the balance 55% / \$38,125.45 through WBIF funding. The project expects to capture approximately 14 lbs of TP per year, understanding that not all 14 lbs would make it to Lake Peter. The cost per pound reduction on a 10-year lifespan is \$495, making it a high priority. This would be a project for spring/summer 2023. In the 2021 WBIF funding, \$35,000 was allocated to Spurzem chain BMPs, the remainder could be taken from funds



designated for Lake Independence. An O&M plan would be required for the project to ensure the bunker is used properly.

Wulff mentioned that this property already has a structure with a tarp cover on the north side of the barn. The previous owner of the property bagged and sold manure to locals and asked why that slab wasn't used for manure storage.

Guentzel was unsure if this is a private horse owner or a business for boarding horses. If this is a business, there is likely a Conditional Use Permit (CUP) associated with the property usage and may detail manure requirements. Commission funding should not be used to meet CUP requirements.

This item was tabled pending further information and will return at the November meeting.

**d. McCombs Project Increased Funding Request.\*** This project was approved by the Commission in October 2021. The project was substantially completed in August. Due to weather delays in project scheduling and some issues during installation, the project had a cost overrun of 40%.

The Commission had approved the project at \$30,177 total project cost with a split of 10% each for the landowner and the County, \$16,987 from leftover Baker Park Ravine project CWF grant, and Commission contribution from CIP at \$6,035. The total project cost was \$42,356.67. The landowner is on a fixed income and was not asked to contribute any additional funding and is now at 7% of project cost. The County will increase its funding to \$5,377.59 or 13%. There is \$300 left in the White Wetland Restoration project budget that could be used.

The County is requesting the Commission to increase its cost share in this project from \$6,035. to \$16,897.72. This project is anticipated to capture 5.29 tons of sediment and 10.91 pounds of total phosphorus per year over a 10-year life cycle, directly improving water quality to Lake Independence. Even at the higher cost, this is still a great value project.

Motion by Cahill, second by Daniels to approve the cost overrun and new Commission share at \$16,897.72 with the TAC to determine the allocation between CIP and WBIF funds. *Motion carried unanimously.* 

A TAC meeting was scheduled for November 29 at 10:00 a.m.

- 6. OLD BUSINESS.
- 7. NEW BUSINESS.
- 8. WATERSHED MANAGEMENT PLAN.
- 9. EDUCATION.
- 10. GRANT UPDATES.
- 11. COMMUNICATIONS.
- 12. STAFF REPORTS.
  - a. Engineer's Report.\* Staff is working with the engineer for the Pioneer Highlands



development to ensure they're meeting all applicable laws and statutes. Project reviews for two new developments in Greenfield are expected soon. Windsong Golf Club in Independence has submitted a project review for expansion. The grassed waterway/swale cost-share with the County in 2019-2020 was done with the expectation that the property would be developed. The County only participated in a 5% cost-share. Vistad will request the O&M agreement for that project for review.

- **b. HCEE Report.** Phone interviews for Paul Stewart's open position were conducted yesterday and today. This position should be filled in the next few weeks. HCEE equipment in Lake Independence had zebra mussels present when removed this year. The County has a Pledge Against AIS media kit that can be requested.
- c. TRPD Report. Vlach expressed appreciation to Wulff and LICA for the zebra mussel photos. He commented that when there are too many mussels to count on the plate the only advantage in continuing to put them out is to detect population crashes or for your own amusement. The recommended "dry time" for docks is 21 days before moving from one lake to another. The dry time for boats is recommended at seven days.

Zebra mussels were found in Fish Lake in Maple Grove for the first time this year. TRPD staff is concerned that the next lake infested will be Lake Sarah given the amount of boat traffic. Plates will be put out in 2023. Once the infestation is lake-wide, it is too late to treat.

Since TRPD signed the agreement with the Commission to perform the Lake Independence TMDL for \$30,000, the TRPD watershed modeler, Amy Timm, left to work for MPCA. Although Timm's position has been filled, the new employee does not have extensive modeling experience. The modeling for the update will now need to be outsourced to another firm, such as Stantec. This will increase costs by \$10,000 for the modeling. The original TMDL was based on unit area loads based on land use rather than actual modeling, so a new model would need to be completed.

The Commission directed Vlach to obtain official quotes for the modeling from Stantec. There is still good value in moving this TMDL update forward. Wulff noted that LICA may also be interested in contributing to the modeling.

#### 13. COMMISSIONER REPORTS.

- **a. Daniels** announced that she became a grandmother again! Her fifth grandchild was born during the meeting.
- **b. Baker** requested TRPD to do a cross-check survey of the weir at Lake Sarah. Paul Stewart wasn't able to update prior to his departure from HCEE and some markers weren't found.
- **c. Tschumperlin** reported that the grocery store development is moving forward. A traffic study assumes that the city roads could handle the increased traffic for the store, although the Highway 7 intersection is a concern since it is a single-lane roundabout. The two big road projects have been approved for 2023 and will include replacing the water main. Bid requests will be sent out in January.

### 14. OTHER BUSINESS.



The **next regular meeting** is scheduled for December 15, 2022 at Maple Plain City Hall.

**14. ADJOURNMENT.** There being no further business, the meeting was adjourned at 8:21 p.m.

Respectfully submitted,

Amy Juntunen Administrator AAJ:tim

Z:\Pioneer-SarahCreek\Meetings\Meetings 2022\10 Minutes PSC.docx

# Pioneer-Sarah Creek Watershed Cash Disbursements Journal

# For the Period From Nov 1, 2022 to Nov 30, 2022

Filter Criteria includes: Report order is by Date. Report is printed in Detail Format.

Date	Check #	Account ID	Line Description	Debit Amount	Credit Amount
11/17/22		51100	Administration	914.48	
		51100	Meeting-related	851.38	
		51100	Bookkeeping	257.41	
		51400	Website	55.30	
		51200	Project Review Support	43.72	
		52000	TAC and Convene	229.40	
		10100	Judie Anderson's Secretarial Service		2,351.69
11/17/22		64000	PSC Cost Share 2022 Lake Sarah CLP Treatment (25% of \$19,043.53 - total project cost \$29,043.53, net of grant \$10k)	4,760.88	
		56202	TRPD Cost Share 2022 Lake Sarah CLP Treatment (16.5% of total project cost \$29,043.53)	4,792.18	
		10100	Lake Sarah Improvement Association		9,553.06
	Total			11,904.75	11,904.75

11/11/2022 at 4:17 PM Page: 1



# Pioneer-Sarah Creek Watershed Management Commission 3235 Fernbrook Lane Plymouth, MN 55447

# 3235 Fernbrook Lane Plymouth MN 55447

November 11, 2022

O Administration					Total Project Area
General Administration		65.00	0.000		
Administrative	3.62	70.00	253.400		
Administrative	5.02	75.00	0.000		
Administrative - virtual	8.00	70.00	560.000		
Office Support	1.00	101.08	101.080		
Public storage	1.00	70.00	0.000		
Data Processing/File Mgmt		60.00	0.000		
Archiving		1.00	0.000	914.480	Administration
Reimbursable Expense					
Meeting packets, attendance, Minutes and Meeting	follow-up				
Administrative		65.00	0.000		
Administrative	5.81	70.00	406.700		
Admin - offsite	4.00	75.00	300.000	254 200	Meeting-related activitie
Reimbursable Expense	144.68	1.00	144.680	851.380	Meeting-related activities
Bookkeeping			0.000		
Bookkeeping		65.00	0.000		
Bookkeeping, budget, audit requests	1.58	70.00	110.600		
Treasurer's Reports	1.67	70.00	116.900 0.000		
Audit Prep		65.00	0.000		Bookkeeping/TRs
Audit Prep		70.00		057.440	Bookkeeping/TRs
Reimbursable Expense	29.91	1.00	29.910	257.410	Pookkeehilig/ 11/3
Website					
Weebly hosting - 1 year		1.00	0.000		
Pages, links, uploads		70.00	0.000	55.300	Website
Administrative	0.79	70.00	55.300	55.300	VVeosile
Project Reviews			0.000		
Administrative		65.00	35.000		
Administrative	0.50	70.00	0.000		
File Management/Archiving		65.00	8.720	43.720	Project Reviews
Reimbursable Expense	8.72	1.00	8.720	45.720	1 10,000110110110
TAC and Convene Meetings					
Secretarial		65.00	0.000		
Administrative	1.67	70.00	116.900		
Offsite - Virtual	1.50	75.00	112.500	000 400	TAC and Convene
Reimbursable Expense		1.00	0.000	229.400	I AC and Convene
2022 inv					
			2.351.690	2,351.690	
			2,001.000	_,	

# Lake Sarah Improvement Association

P.O. Box 25 Loretto, MN 55357



DATE: INVOICE #

**DATE:** October 17, 2022

710E #

2022-1 CLP Treatment

Pioneer-Sarah Creek Watershed Commission 3235 Fembrook Lane Plymouth, MN. 55447

Attn: Judie Anderson

DESCRIPTION	AMOUNT
PSCW Cost Share - 2022 Lake Sarah CLP Treatment (25% of total project cost, net of grants)	4,760.88
TRPD Cost Share - 2022 Lake Sarah CLP Treatment (16.5% of total project cost)	4,792.18
TOTAL	\$ 9,553.06

Make all checks payable to Lake Sarah Improvement Association

If you have any questions concerning this invoice, contact Mike Malone at mikemalone05@gmail.com

THANK YOU FOR YOUR SUPPORTI

Lake Sarah Improvement Association P.O. Box 25 Loretto, MN 55357

# Year 2022 Project Costs:

Amount	00.096	27,703.53	380.00	\$29,043.53	10,000.00 \$ 19,043.53
Invoice Date	5/19/22	5/27/22	6/21/22	Total - Gross cost	Total - Net costs
Invoice#	Sarah CLP	ASM040	Sarah		
Description	Early Spring CLP Plant Survey	Presentation at LSIA annual meeting Aquathol K and Tribune plus labor CLP treatment ASM040	CLP Post-Treatment survey (50% of cost)		MN DNR grant - West Sarah Lake
Рауее	AIS Consulting Services	AIS Consulting Services Aquatic Solutions of MN	AIS Consulting Services		



ADMINISTRATIVE OFFICE: 3235 Fernbrook Lane N • Plymouth, MN 55447

763.553.1144 • Fax: 763.553.9326 • Email: judie@jass.biz TECHNICAL OFFICE: 3601 Thurston Avenue • Anoka, MN 55303

Phone: 763-427-5860 • Fax: 763-427-0520 •

Email: andrewv@haa-inc.com

# <u>Pioneer Highlands</u> <u>Medina, Project #2022-010</u>

**Project Overview:** Pioneer Highlands is a 4 lot 67.00-acre residential development. The residential property is located within the City of Medina. The existing site is predominantly row crops with some vegetation located onsite in wetlands. The site is divided hydrologically into two parts with the northern portion draining north east into the Elm Creek Watershed. The southern portion of the site contains a closed wetland basin that ultimately drains into lake Spurzem. Current development plans do not depict any permeant stormwater management. Stormwater is proposed to be treated by providing additional wetland buffer. The Commission's management plan requires compliance for Stormwater Management (Rule D), Erosion Control (Rule E), and Buffer Strips (Rule I).

<u>Applicant:</u> Harry Schleeter - Onyx Investment, 1585 Medina Road, Medina, MN 55356. Phone: 612-860-0817. Email: beccarwash@msn.com

**Agent/Engineer:** Rose Lorsung, 565 North Greenleaf Drive, Egan, MN 55123 Phone: 952-457-7641. Email: rose@recreateluxuryhomes.com

#### **Exhibits**:

- 1) PSCWMC Request for Plan Review received July 13, 2022
- 2) Project review fees for project, \$3,900.00
- 3) Civil Plans, dated September 12, 2022
- 4) Drainage Summary, dated July 2, 2022
- 5) Wetland Delineation, dated September, 2018

### **Findings**:

- 1) A complete application was received July 13, 2022. Comments on the initial application were provided August 8<sup>th</sup>. Updated plans were received on September 27th. The initial 60-day decision period expires on September 12, 2022. The decision is extended an additional 60 days to November 11.
- 2) The applicant proposes to divide a 67.00-acre parcel into 4 rural type residential lots.
- 3) The City of Medina is the LGU in charge of administering the 1991 Wetland Conservation Act on this site.
  - o No wetland impacts are proposed as part of this development

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

- 4) Stormwater from the proposed development is split north and south and will flow into separate watersheds. The northern portion of the site drains generally to the north east into Rush Creek South Fork which is located within the Elm Creek Watershed. The southern portion of the site drains into a closed wetland that is located on the southern portion of the property. This wetland would ultimately flow to the west into an unnamed creek and into Lake Spurzem.
- 5) Stormwater abstraction is proposed to be handled by providing additional buffer. 190,200 square feet of additional wetland buffer is being established to provide the abstraction volume for the 1.92 Acres (83,635 sq. ft.). A wet pond has been provided to treat the water quality volume that is generated from the new impervious surfacing.

Drainage area to the North	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Pre-Development Rates	26.01	45.04	86.88
Post-Development Rates	14.97	38.36	86.71

Drainage area to the Closed Basin	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Pre-Development Rates	142.8	270.55	565.4
Post-Development Rates	128.0	252.1	554.3

Water Quality Calculations	Total Phosphorus (TP lb/yr)	Total Suspended Solids (TSS lb/yr)
Pre-Development Rates	2.33	769
Post-Development Rates	1.20	180

### **Erosion and Sediment Controls (Rule E):**

6) Land disturbing activities of greater than 1 acre, either individual or part of a larger common plan, require a SWPPP and are required to apply for a NPDES/SDS construction permit. The proposed development will cause more than 1 acre of disturbance a SWPPP narrative has been prepared.

# **Buffer Strips (Rule I):**

- 7) The minimum 25 foot buffers have been provided. To meet the abstraction requirements additional 190,200 square feet of buffer is being provided around onsite wetlands. The northern wetland an additional 80 foot buffer is being provided. The southern wetland has an additional 20 feet being provided.
- 8) A buffer establishment plan has been provided.

**Recommendation**: Approval.

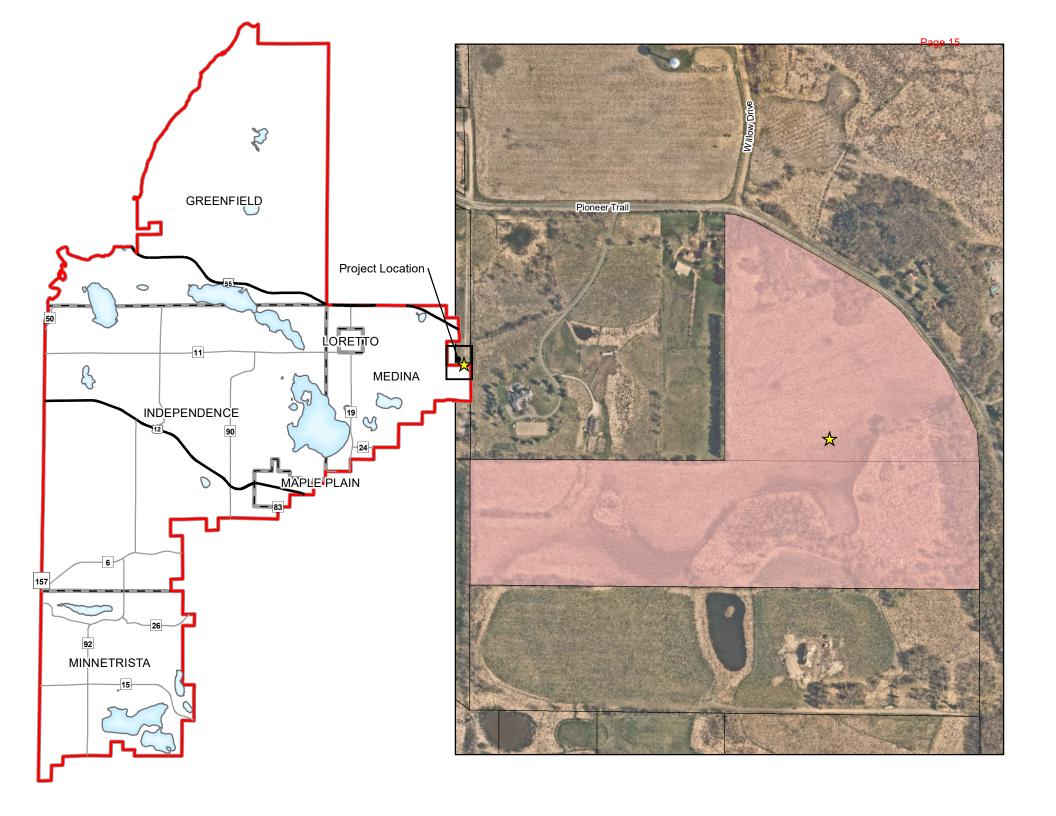
Advisor to the Commission

Charle Viste

Andrew Vistad, PE

November 7, 2022

Date



ADMINISTRATIVE OFFICE: 3235 Fernbrook Lane N • Plymouth, MN 55447 763.553.1144 • Fax: 763.553.9326 • Email: judie@jass.biz

TECHNICAL OFFICE: 3601 Thurston Avenue • Anoka, MN 55303

Phone: 763-427-5860 • Fax: 763-427-0520 •

Email: andrewv@haa-inc.com

# Bridgevine Subdivision Independence, Project #2022-012

<u>Project Overview:</u> Bridgevine Subdivision is a 28 lot 47.5-acre residential development. The residential property is located within the City of Independence. The existing site contains a mixture of woodland, meadow, a tree farm, and row crops. The site is adjacent to and drains to Lake Independence located on the northern boundary of the proposed subdivision, and Pioneer Creek located to the west of the development. The site drainage is directed in three directions, to the north into an existing gully, to the east into an existing gully, and to the west into an existing gully. The Commission's management plan requires compliance for Stormwater Management (Rule D), Erosion Control (Rule E), and Buffer Strips (Rule I).

<u>Applicant:</u> Steve Bohl, 849 Mill Street East, Wayzata, MN 55391. Phone: 952-473-2089 Email: steve@bohlanddevelopment.com

<u>Agent/Engineer:</u> Sathre-Berhquist, inc. attn Charles Wiemerslage, 14000 25<sup>th</sup> Ave N Suite 120, Plymouth, MN 55447. Phone: 922-476-6000. Email: cwiemerslage@sathre.com

### **Exhibits**:

- 1) PSCWMC Request for Plan Review received September 6, 2022
- 2) Project review fees for project, \$2150.00
- 3) Civil Plans, uncertified
- 4) Stormwater Management Plan, dated December 30, 2021, prepared by AE2S
- 5) Wetland Delineation Report, dated December 16, 2022

### **Findings**:

- 1) Am application was received September 6, 2022. The initial 60-day decision period expires on November 5, 2022. The fee provided was
- 2) The applicant proposes to divide a 47.5-acre parcel into 28 large shoreland residential lots.
- 3) The City of Independence is the LGU in charge of administering the 1991 Wetland Conservation Act on this site.
  - o No wetlands are proposed to be impacted from this project.
  - o Notice of decision was obtained November 10, 2018

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

- 4) The northern portion of the site stormwater flows through the site to the north, discharging into the existing on-site gully. Additionally, the south western portion and south eastern portion of the site discharge into offsite gullies. Both the onsite gully and south east offsite gully discharge into Lake Independence, the south west portion of the site discharges into a gully that leads flows into pioneer creek.
- 5) Stormwater is proposed to be managed by curb and gutter with inlets and storm sewer pipes. Two filtration basins and two rain gardens will be constructed as part of this development. The stormwater ponds are designed with a large wet basin that will overflow onto a bio-filtration bench.

Drainage area to Lake Independence	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Pre-Development Rates	28.8	59.0	134.0
Post-Development Rates	20.8	40.9	115.9

Drainage area to S Lake Shore Drive	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Pre-Development Rates	3.5	4.2	18.6
Post-Development Rates	2.8	4.2	16.7

Drainage area to Onsite Ravine	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Pre-Development Rates	24.3	49.4	110.4
Post-Development Rates	16.0	30.3	86.71

Drainage area to the Bake Park Ravine	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Pre-Development Rates	5.4	10.3	22.0
Post-Development Rates	1.9	6.1	13.4

Water Quality Calculations	Total Phosphorus (TP lb/yr)	Total Suspended Solids (TSS lb/yr)
Pre-Development Rates	12.5	3,780
Post-Development Rates	10.6	2,392

### **Erosion and Sediment Controls (Rule E):**

- 6) Land disturbing activities of greater than 1 acre, either individual or part of a larger common plan, require a SWPPP and are required to apply for a NPDES/SDS construction permit. The proposed development will cause more than 1 acre of disturbance and a SWPP has been provided.
- 7) A stabilization plan has been prepared and submitted to stabilize the onsite gully to prevent further erosion. The stabilization plan is proposing to construct vegetated toe armoring as well as constructing cross vanes to slow stream flow at strategic locations.

# **Buffer Strips (Rule I):**

8) The existing vegetated buffer adjacent to Lake Independence is not proposed to be disturbed.

**Recommendation**: Approval contingent upon recording of declaration, agreement and grant of easements regarding stormwater facilities and maintenance.

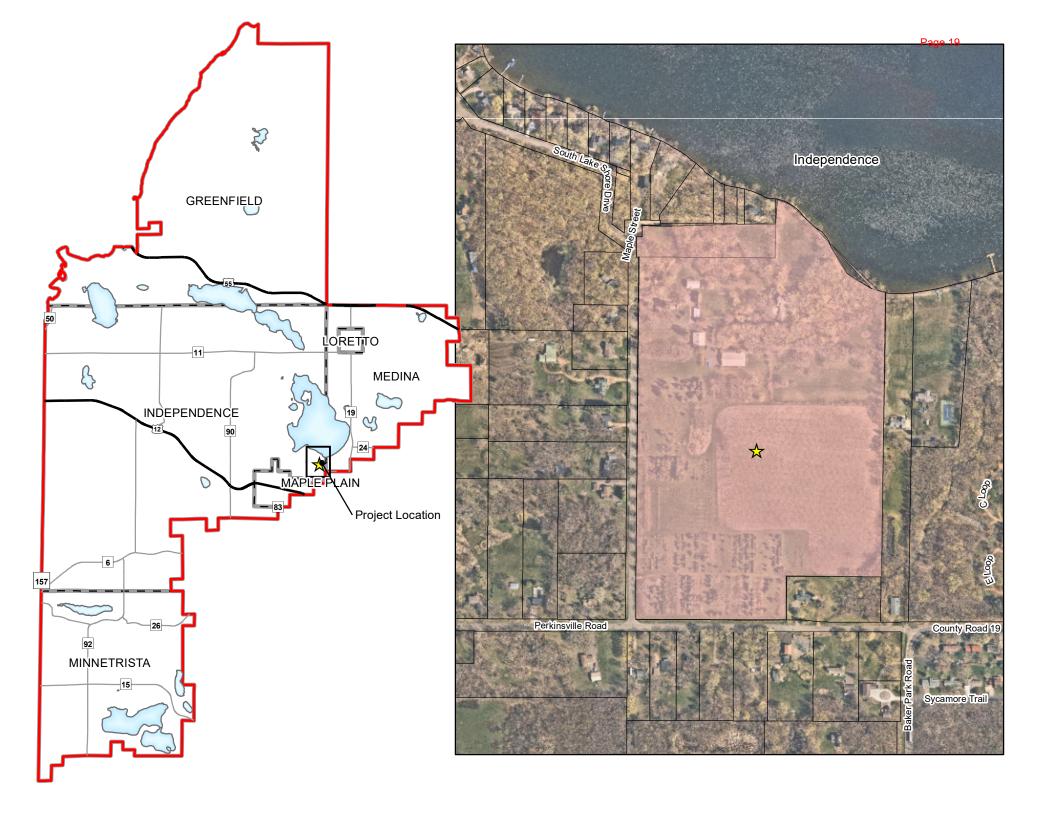
Advisor to the Commission

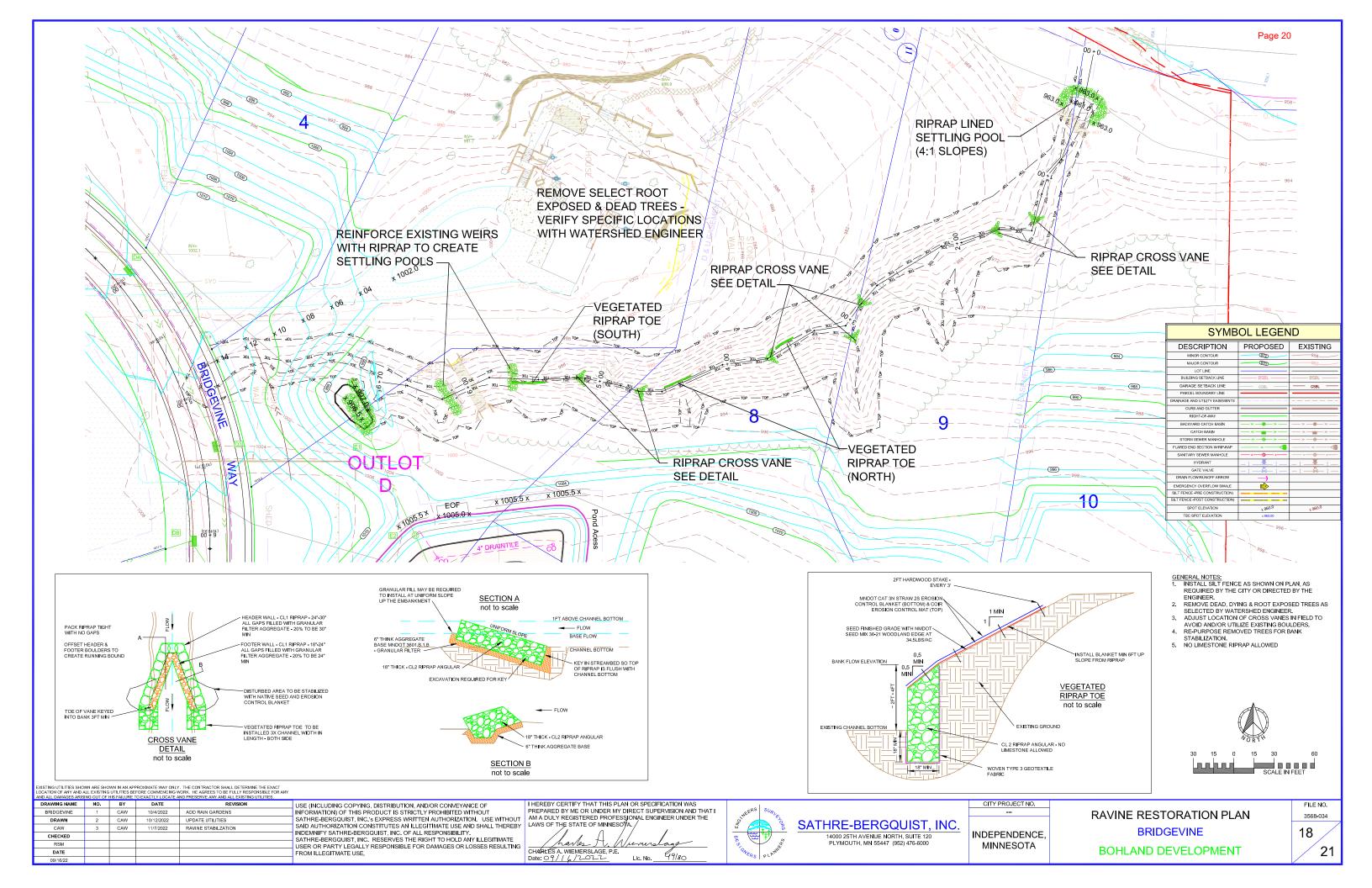
Charle Vite

Andrew Vistad, PE

November 7, 2022

Date





# HENNEPIN COUNTY MINNESOTA

DATE: November 10, 2022

TO: Pioneer-Sarah Creek Watershed Management Commission

FROM: Kevin Ellis and Kris Guentzel; Hennepin County Department of Environment and Energy

RE: REQUESTED COMMISSION ACTION, Olson Manure Bunker

# **Project Overview**

Hennepin County staff have been working with Randall Olson at 4550 Pioneer Trail in Medina. Mr. Olson is the owner of the property and operates a horse boarding facility that, on average, has 28 horses on site. These horses produce approximately 55 pounds of manure per day which is currently being stored on an uncovered dry stack with no measures to contain excess runoff. County staff began working with the landowner and our engineer (Mike Candler at Wright Soil and Water Conservation District) to outline design options to address manure storage on site so it can be stored without runoff concerns before being hauled away.

During the preliminary design process, staff determined that the size of the bunker would need to be able to hold approximately 5,673 cubic feet of manure for four months between hauling. In order to hold this amount of manure, weighing approximately 141,680 pounds, the bunker was proposed to by 30' x 80' with 4' walls and a 12' apron. A roof for a structure of this size would not be cost efficient, so it was proposed that a heavy tarp be added on top to protect the manure from precipitation and wind.

Preliminary designs were completed in late summer 2022, at which time Hennepin County contacted Mr. Olson to approve the designs and accept bids for the work.

The final designs were included with October commission meeting materials.

Temperatures are too cold to pour concrete, so installation isn't anticipated until late spring 2023.

# **Responses to Commissioner Questions**

During the October 20, 2022 Commission meeting, commissioners had several questions they asked staff to look into before they could make a decision to financially support this project. Below are those questions, along with responses gathered by staff:

1) **Question**: Is there a conditional use permit and is the landowner violating that permit – what conditions are in the permit should one exist?



- a. **Answer**: This parcel is subject to Planned Unit Development. This designation allows for 28 horses to be kept on the property and that manure must be disposed of by a method approved by the City and Minnesota Pollution Control Agency and in an approved location once every six months. Landowner is currently following these rules and notes that he is hauling manure more frequently than every six months.
- 2) **Question:** There's a covered structure north of the barn Commissioner Wulff thought that it already stores manure as folks would often buy manure there for their gardens. What's the use of that facility?
  - a. **Answer**: The structure north of the barn is used to store hay in a dry area free of wind or precipitation. It does not seem that this structure was used for manure storage in the past, either. It would not be recommended that this structure be used for future manure storage since it does not have an impermeable floor.
- 3) **Question**: Is this consistent with the manure management ordinance in the City? Does the city require a bunker or similar practice for a business with this many horses?
  - a. **Answer**: Manure management guidelines set by the city, especially in regard to the Planned Unit Development, are fairly broad. However, there is some language in the Medina City Code that requires a manure bunker to be constructed to reduce impact of runoff. It is unclear if this is actually being enforced. Currently following up with city staff for confirmation.

Commissioners also asked about appropriate financial contributions for this project. The cost share is established based on the priority watershed and by the conditions in the Watershed Services Agreement. This project is in a priority watershed, draining to several priority waterbodies, including Peter Lake, Spurzem Creek, and Lake Independence. Therefore, a 90-10 cost share was recommended for this project, where the landowner contributes at least 10% of installation costs.

# **Project Funding and Commission Request**

Both state and local funds are available for this work. State funds include watershed-based implementation funds (WBIF), allocated to the Pioneer-Sarah Creek Watershed Management Commission (PSCWMC) by the Board of Water and Soil Resources (BWSR), to implement best management practices in the Spurzem Creek subwatershed.

Hennepin County staff are requesting the Commission support this project using those state funds along with Commission's Capital Improvement Program (CIP) funds. The table below outlines the County's requested funding breakdown, and includes contributions from both the county and the landowner.

# Design and Project Development Costs

Project Cost	Landowner	County *	Commission	Commission (thru CIP)
\$4,542	\$0	\$4,542	\$0	\$0
% of Design + Development Costs	0%	100%	0%	0%

<sup>\* 68</sup> hours of time at rates of \$63.83 for Paul Stewart and Kevin Ellis, \$75.00 for Mike Candler

### Installation Costs

Project Cost	Landowner	County	Commission	Commission (thru CIP)
\$69,319	\$6,931.90	\$6,931.90	\$38,125.45	\$17,329.75
% of Installation Cost	10%	10%	55%	25%

The County is requesting full Commission CIP funding (i.e. 25%) because this project is cost-effective and directly improves water quality to several priority waterbodies including Peter Lake, Spurzem Creek, and Lake Independence, by reducing nutrient loading.

This project is anticipated to capture 47 lbs of nitrogen per year and 14 lbs of total phosphorus per year. The County estimated annual operations and maintenance to be \$550 dollars over the 10-year design lifetime. Therefore, life cycle cost-effectiveness is \$499/lb total phosphorus removed, which puts this practice in line with the Top 50 most cost-effective practices identified in the Spurzem Creek Subwatershed Assessment.

In summary, County staff are requesting the Pioneer-Sarah Creek Watershed Management Commission support project implementation through the following

- \$38,125.45 from WBIF dollars
- \$17,329.75 from CIP funds

# Ехнівіт А

# Pioneer-Sarah Creek Watershed Management Commission Capital Improvement Project Submittal

(This submittal will be rated on its completeness and adherence to the goals of the Commission.

A second page may be used to provide complete responses.)

City		Hennepin County			
Contac	t Name	Kris Guentzel			
Teleph	one	612-596-1171			
Email		Kristopher.guentzel@hennepin.us			
Addres	S	701 4 <sup>th</sup> Ave. S., Minneapolis 55415			
Project	Name	Olsen Manure Bunker			
	1. Is project in Member's CIP? ( ) yes (X ) no Proposed CIP Year = 2022				
	2. Has a feasibility study or an engineering report (circle one) been done for this project? ( ) yes ( X ) no But surveyed and engineering work has to complete final designs.				
	<u> </u>		Amount		
	Total Estimated P	•	\$69,319.00		
		ommission Share (up to 25%, not to exceed \$250,000)	\$17,329.72		
		g Sources (name them) County	\$6,931.90		
	Landowner		\$6,931.90		
		lased Implementation Funds	\$38,125.45		
	3. What is the scope of the project? Cover and better manage manure pile to minimize nutrient runoff on the Olsen property at 4550 Pioneer Trail in Medina, which is an operating horse boarding facility with approximately 28 horses.				
	4. What is the purpose of the project? What water resource(s) will be impacted by the project? The project will reduce nitrogen and phosphorus runoff from a currently uncovered manure pile on the property, thereby reducing nutrient runoff to several nutrient-impaired waterbodies. These include Lake Peter, Spurzem Lake, Half Moon Lake, and Lake Independence.				
	5. What is the anticipated improvement that would result from the project? (Include size of area treated and projected nutrient reduction.) This project will improve water quality in Lake Peter by reducing phosphorus loading by 14 pounds per year, directly addressing the nutrient impairment for the north bay of the lake. Considering the 10-year design lifetime and anticipated maintenance costs, life cycle cost-effectiveness is \$499 per pound of total phosphorus retained. This will address other nutrient impairments on downstream lakes, including Spurzem, Half Moon, and Independence.				
	6. How does the project contribute to achieving the goals and programs of the Commission? Goal 1c of the 4 <sup>th</sup> generation plan is to 'Meet state water quality standards in the following lakes Independence,'. Goal 2 is to "Work in a coordinated way with urban and rural property owners, cities lake associations, public and private entities, Hennepin County, and TRPD building partnerships to conserve our water and natural resources and deliver implementation projects." This project also addressed numerous Goal Areas in the 4 <sup>th</sup> generation plan. The project will cost-effectively address a nutrient runoff that may have otherwise reached Lake Peter and likely other downstream lakes.				
0/10	7. Does the project result from a regulatory mandate? ( ) yes ( X ) no How?				
0/10/20	Independence <u>nutrient impairment</u> , along with nutrient impairments in Lakes Peter, Spurzem, and Half Moon in the <u>Pioneer-Sarah Creek TMDL.</u>				
0/10/20	9. Does the proje	ct have an educational component? ( ) yes ( X ) no Describe.			
0/10	10. Do all the LGI	Js responsible for sharing in the cost of the project agree to go forward	with this project?		
	(X ) yes ( )	(X) yes () no Identify the LGUs. PSCWMC, Hennepin County, City of Medina			
10/20	11. Is the project i	in all the LGUs' CIPs? ( ) yes (X ) no			

1-34	(For TAC use)		
	12. Does project improve water quality? (0-10)	15. Promote groundwater recharge? (0-3)	
	13. Prevent or correct erosion? (0-10)	16. Protect and enhance fish and wildlife habitat? (0-3)	
	14. Prevent flooding? (0-5)	17. Improve or create water recreation facilities? (0-3)	
TOTAL (po	SS 114)		

Z:\Pioneer-SarahCreek\CIPs\Exhibit A.doc

#### **MEMORANDUM**

TO: Pioneer-Sarah Creek Watershed Management Commission

FROM: Andrew Vistad, Hakanson-Anderson

DATE: October 7, 2022 SUBJECT: Staff Report

#### 1.-8. See Previous Staff Report

- 9. **2019-08 Adams Pest Control, Medina.** Adam's Pest Control is planning to expand their current Medina facility. This property is located on the north side of State Highway 55, just west of Willow Drive. The entire parcel is 46-acres, but only the southern portion (Lot 1-26.6 acres) is being proposed for development at this time. This site plan consists of two new buildings which includes an office building and a warehouse/maintenance building with parking. This project will disturb 10.9 acres and create 4.6 acres of new impervious areas. The Commission's stormwater management plan requires compliance with Rules D, E, F and I.
- 10. **2022-01 Bushwood Hills Reserve.** is a 5 lot 34.8-acre residential development located in the City of Greenfield. The development is proposing to handle stormwater rate control with 4 Biofiltration basins located within the development. The bio-filtration basins and land use change are expected to reduce phosphorus runoff by 52% and total suspended solids runoff by 58%. Additionally, the bio-filtration basins are providing some abstraction that is working to reduce the volume of runoff that is leaving the site. The engineer has supplied a SWPPP for the development that meets all watershed rules. This project was reviewed for Rule D, Rule E, and Rule I.
- 11. 2022-002 Huotari Residence. Jeff Huotari has submitted a permit application for the construction of a driveway, residential dwelling, and septic system. The application was a requirement as a result of a wetland TEP meeting that determined that a portion of the installed drive had impacted an on-site wetland. The residential lot is located along County Road 11 south of Lake Rebecca. The project will disturb approximately 1 acre of land. This project was reviewed for Rule E.
- 12. **2022-003** Hilltop Prairie. The Hilltop Prairie development is a 13 lot 62.6-acre residential development located in the City of Independence. The development is proposing to handle stormwater rate control with 4 NURP basins located within the development. Due to confining soils and high groundwater levels infiltration or filtration is not feasible. The applicant is creating sections of tree preservation and is also providing additional buffer to gain abstraction credits to offset the lack of infiltration. Additional wetland buffer and tree preservation generate 0.5" of credit over their proposed areas. Stormwater ponds within the development will be maintained by the property owners, an operations and maintenance declaration has been obtained and well be recorded with the lots. Water quality modeling for the site indicates that a 33% reduction in total phosphorus and a 60% reduction in total suspended solids will be achieved. This project was reviewed for Rule D, Rule E, and Rule I.

RULE G - WETLAND ALTERATION

- 13. 2022-004 8395 Ox Yoke Circle. Plan Pools has applied for a permit for floodplain alteration to construct an inground pool. The pool is located in the rear yard of a private residence located north of Ox Yoke Lake. Due to the pool being located within the FEMA floodplain compensatory storage is required such that no net fill is placed within the floodplain. This project was reviewed for Rule F.
- 14. 2022-05 Koch Farm, Sanctuary. The Koch Farm Sanctuary development is a 33 lot 141.4-acre residential development located in the City of Independence. The development is proposing to handle stormwater rate control with 9 NURP basins located within the development. Due to confining soils and high groundwater levels infiltration or filtration is not feasible. The applicant is creating sections of tree preservation and is also providing additional buffer to gain abstraction credits to offset the lack of infiltration. Additional wetland buffer and tree preservation generate 0.5" of credit over their proposed areas. Stormwater ponds within the development will be maintained by the property owners/HOA, an operations and maintenance declaration has been obtained and well be recorded with the lots. Water quality modeling for the site indicates that a 32% reduction in total phosphorus and a 56% reduction in total suspended solids will be achieved. A stream crossing for a mixed use path that connects this development with the development to the south was required by the City of Independence. This project was reviewed for Rule D, Rule E, Rule H, and Rule I.
- 15. 2022-06 Creekside Meadows, is a 15 lot 79.2 acre residential development located within the City of Greenfield. The development is proposing to handle stormwater with 3 biofiltration basins. The bio-filtration basins and land use change are expected to reduce phosphorus runoff by 48% and total suspended solids runoff by 41%. Additionally, the bio-filtration basins are providing some abstraction that is working to reduce the volume of runoff that is leaving the site. The engineer has supplied a SWPPP for the development that meets all watershed rules. The developer has not supplied a buffer maintenance plan that outlines establishing the new wetland buffers. The project was reviewed for Rule D, Rule E, and Rule I.
- 16. 2022-07 7655 County Road 15, is a residential dwelling construction that is in close proximity to the wetland surrounding Whale Tail Lake. The home builder is proposing to build a residential home, septic sites, and relocate an existing driveway. The proposed building pad is located greater than 100 feet away from the wetlands and silt fence is being provided down gradient from all earth moving activity.
- 17. 2022-09 Gale Woods Accessibility, is a project from TRPD that is proposing ADA improvements to the boat launch located at the Gale Woods Farm located on the south eastern side of the south bay of Whaletail Lake in Minnetrista. The project is proposing to create ADA accessible parking spaces to access the boat landing and pier. The project is located with in the floodplain for Lake Whaletail,

- 18. \*2022-10 Pioneer Highlands, is a 67 acre rural residential development located in the city of Medina. The development is located roughly half in the Pioneer Sarah Creek Watershed and half in the Elm Creek Watershed. It was agreed that the project would need to obtain a permit from only PSC WMC providing communication with the Elm Creek watershed engineer. The site contains a large closed basin wetland on site. Ultimately the site would drain to both Spurzem Creek and Rush Creek South Fork. Additional wetland buffer was provided to meet stormwater abstraction requirements, to meet state stormwater requirements a wet sedimentation basin is being created to treat the stormwater generated from the shared private drives and some of the residences. The project was reviewed for Rule D, Rule E, and Rule I.
- 19. 2022-11 Burgess Residence, is a residential dwelling construction that is in close proximity to the wetland surrounding Schwappauff Lake. The home builder is proposing to build a residential home, septic sites, and driveway. The proposed building pad is located greater than 100 feet away from Schwappauff Lake and silt fence is being provided surrounding all earth moving activity. The project was reviewed for Rule E.
- 20. \*2022-12 Bridgevine Subdivision, is a 47.5 acre residential subdivision located within the City of Independence on the south shoreline of Lake Independence. The development is proposing to handle stormwater via curb and gutter with inlets and storm sewer. There will be 2 filtration basins and 2 rain gardens located within the development that will capture and treat the water quality volume before being discharged. The site generally flows in 3 directions, to the north discharging into an onsite gully that is identified in the Lake Independence and Lake Sarah SRA as GS46. The eastern part of the site discharges into an offsite gulley that is also identified in the Lake Independence and Lake Sarah SRA as GS50 or the Baker Park Ravine, which has recently been stabilized by a project lead by TRPD. The western portion of the site discharges under South Lake Shore Drive into an existing gully that eventually discharges into Pioneer Creek. The developmer has revised and resubmitted plans that address the erosion that is taking place in GS46. A SWPPP has been provided and has been reviewed. The project was reviewed for Rule D, Rule E, and Rule I.
- 21. 2022-12 Bridgevine Grading Permit, is a 47.5 acre residential subdivision located within the City of Independence on the south shoreline of Lake Independence. The developer has obtained a grading permit from the City of Independence to comment with grading activities relating to the Bridgevine subdivision project. To facilitate the developer will the take the appropriate time to address some site concerns a grading permit will allow them to start construction. The project was reviewed for Rule E.
- **22. 2022-13 Promise Hill Residence,** is a large signle family residential dwelling demolition and construction that will cause the disturbance of over 1 acre of land. The existing building and

RULE G - WETLAND ALTERATION

RULE H - BRIDGE AND CULVERT CROSSINGS

driveway contains approximately 0.75 acres of impervious surfacing, the new structure and driveway will contain approximately 0.70 acres of impervious surfacing resulting in a decrease of 0.05 acres of impervious surfacing. The project was reviewed for Rule E.

- 23. 2022-14 Hidden Lake Channel Excavation, is a 2,138 cubic yard channel excavation with in Lake Independence. The excavation has been permited through the DNR and was reviewed by the DNR Area Hydrologist. The Channel was initially excavated in the 1960s and was permitted for future maintenance. The channel has over time filled with sediment that the residents desire to remove. Spoils from the project will be land applied on a property adjacent to the channel excavation. The site has been reviewed and approved by the area hydrologist and is determined to be outside the 100-year floodplain. The project was reviewed for Rule E and Rule F.
- **24. 2022-15 Schaffer Residence,** is a residential dwelling construction that is located on the shore of Hafften Lake. The home builder is proposing to build a residential home, septic sites, and driveway as well as some lot grading to provide some flat yard space. The proposed building pad is located greater than 100 feet away from Hafften Lake and silt fence is being provided surrounding all earth moving activity. The project was reviewed for Rule E.
- 25. 2022-16 West Lindgren Channel Excavation, is a 1,338 cubic yard channel excavation with in Lake Independence. The excavation is in the process of being permitted through the DNR and is being reviewed by the DNR Area Hydrologist. The Channel was initially excavated in the 1960s and was permitted for future maintenance. The channel has over time filled with sediment that the residents desire to remove. Spoils from the project will be land applied on a property adjacent to the channel excavation. The spoils site has not yet been determined. Once the site is chosen it will be reviewed by the DNR area hydrologist and PSC technical advisor to ensure the spoils are not placed within the 100-year floodplain. The project was reviewed for Rule E and Rule F.
- 26. **2022-17 Kettering Creek 2nd,** is a 32 lot 9.29-acre residential development located within the City of Greenfield. The development is proposing to handle stormwater with a biofiltration basin. The development appears to be part of an existing development that was initially constructed in 2004. Stormwater from the site flows away in 4 general directions predominantly to the north and to the south. All of the stormwater from the site eventually converges within the Crow River. The project documentation contains some modeling errors and inconsistences that need to be addressed. Additionally, the plans do not contain a SWPPP. The project was reviewed for Rule D, Rule E, and Rule I.
- 27. **2022-18 Windsong Golf Club Expansion,** is a 125-acre golf club expansion project for the Windsong Farm Golf Club located in the City of Independence. The project has been recently

reviewed by the City of Independence and has not fully addressed the stormwater management for the increased impervious surfacing that will be created. A SWPPP has been provided but is missing curcial information and BMPs that are required as a result of the size of disturbance and that the site eventually discharges into an impaired water, Pioneer Creek. The project triggers review for Rule D, Rule E, Rule F, and Rule I.

# HENNEPIN COUNTY MINNESOTA

DATE: November 10, 2022

TO: Pioneer-Sarah Creek Watershed Management Commission

FROM: Kris Guentzel and Kevin Ellis; Hennepin County Department of Environment and Energy

RE: November Commission Project, Program, Outreach, and Grant Updates

# **Conservation Specialist Hiring**

Finalist interviews occurred both virtually and in person November 3<sup>rd</sup>-4<sup>th</sup>. A final candidate was chosen and an offer provided the week of November 7-11. We're hoping to have this person on staff in December, but no later than early January.

Thanks to Joe Baker for serving on the interview panel!

# **County Q3 Invoice**

County staff submitted a 3<sup>rd</sup> quarter (Q3) invoice for time and costs incurred from July 1 – September 30 of this year. Costs billed in that invoice are outlined below. 'Tasks' refer to tasks as outlined in our Watershed Services Agreement with the Commission.

- 1) Task 2: \$5,817.87, which represents less then 50% of the value incurred, up to the not-to-exceed (NTE) amount for this task. As the NTE has been reached, no additional costs will be billed in Q4.
- 2) Task 3: Commission share for the McComb Gully Stabilization and White Wetland Restoration projects. These includes a combination of the amounts from Commission CIP as well as both excess Baker Park Clean Water Funds and Watershed Based Implementation Funds (WBIF) from the Board of Water and Soil Resources (BWSR).
  - a. *Please note*: the cost breakdown from each fund, as listed in the invoice, is subject to change. During the October 20 Commission meeting, the Commission directed staff to choose which fund was most appropriate but allocated the full amount for payment to the County.

Staff still need to submit the final progress report for the Baker Park Clean Water Fund and understand no final payment can be provided to the County until funds are provided to the Commission by BWSR.



### **Subwatershed Assessments**

### **Spurzem Creek Subwatershed Assessment**

<u>Update:</u> Comments were provided by several city staff. Comments were generally minor and/or editorial but did provide helpful feedback for BMP placement and efficacy. These still need be incorporated into a final draft, which will be provided to stakeholders to post to their websites (or use as they see fit).

### Lake Rebecca Subwatershed Assessment

<u>Update:</u> The County's consultant has substantially completed the hydrologic and hydraulic (H&H) modeling and BMP report. The H&H model was recently provided to TRPD to assist in their engineering of the outlet channel into the lake. Staff are anticipating a draft version of the BMP assessment in the next month. The contract includes a third phase to support survey and design of projects to get work closer to shovel-ready, which is expected to be completed this fall and early winter.

# **Projects & Outreach**

### Lake Independence/Remaining Baker Park Ravine CWF Funds

a. 2772 Becker Road, Independence

<u>Update:</u> Project close-out fully complete. BWSR reporting only remaining administrative task.

b. 2000 Block Independence Road, Independence

<u>Update:</u> Project close-out fully complete. BWSR reporting only remaining administrative task.

### Lake Rebecca/Zuhrah Shrine Horsemen (ZSH) (4505 CR 92, Independence) BMPs

<u>Update:</u> Zuhrah is working with NRCS to potentially improve their grazing operations and nutrient management. Drainage repair engineering and design was included in the Lake Rebecca Subwatershed Assessment Phase 3 work and is expected to occur this fall and early winter.

### Pioneer Trail Manure Bunker, Medina (west of Lake Peter)

<u>Update:</u> County staff have engaged Medina staff concerning their manure ordinances and what, if any, existing local regulations the landowner needs to meet for manure management. An updated Request for Commission Action in the Board packet includes responses received to Commissioner questions on this and other topics.