













## VLAWMO TECHNICAL COMMISSION MEETING

**8:15 AM – February 12, 2025**

Vadnais Heights City Hall, Council Chambers, 800 County Road E East, Vadnais Heights, MN 55127

Action items: 

- I. **Call to Order – 8:15 am – Chair Ousky**
- II. **Approval of Agenda** 
- III. **Approval of Minutes (Jan. 8, 2025)** 
- IV. **Administration & Operations - Phil**
  - A. February Financial Report and Consider Authorization for Payment - Phil  **Pg. 6**
  - B. February TEC Report to the Board – Phil  **Pg. 13**
- V. **Programs – Lauren**
  - A. SHG 2025-01 Raeth Pollinator Garden  **Pgs. 14 & 21**
  - B. SHG 2025-02 Addis & Zink Native Plant Restoration  **Pgs. 14 & 30**
  - C. Update on FY '24-25 BWSR WBIF Grant Program Process **Pg. 15**
- VI. **Projects – Lauren, Dawn**
  - A. Sports Center Bioswale Partnership Project **Pg. 15**
  - B. Update on BWSR Accelerated Implementation Grant Application with City of VH **Pg. 16**
  - C. Update on WMP and Next TEC+ Meeting  **Pg. 16**
  - D. Update on Partnership with NOHOA for Deep Lake Shoreline Restoration **Pg. 16**
  - E. Tamarack Alum Amendment  **Pgs. 17 & 41**
  - F. SEH Memo on Potential Wilkinson Meander Project and Feasibility in Partnership with RCSWCD  **Pgs. 17 & 45**
  - G. Update on Rotary Park CPL Grant Process and MOU with City of WBL  **Pg. 18 & 53**
  - H. Carp Solutions 2024 Annual Report  **Pg. 18**
  - I. RCSWCD and Great River Greening Biochar Demonstration Event **Pg. 19**
- VII. **Commissioner Reports**
- VIII. **NOHOA**
- IX. **Ramsey Soil & Water Conservation Division**
- X. **St. Paul Regional Water Services**
- XI. **Public Comment**
- XII. **Next meetings:** Board Meeting: Feb. 26, 2025; TEC: March 12, 2025 (8:15 am); TEC+: April 9, 2025 (9:00 am)
- XIII. **Adjourn** 

**Vadnais Lake Area Water Management Organization  
Technical Commission (TEC) Minutes  
January 8, 2025  
Vadnais Heights City Hall, Council Chambers  
800 County Road E East, Vadnais Heights, MN 55127**

**Commission Members Present:**

Gloria Tessier	Gem Lake (GL)
Nick Ousky	Vadnais Heights (VH)
Jami Philip	White Bear Township (WBT)
Susan Miller	North Oaks (NO)
Terry Huntrods	City of White Bear Lake (WBL)
Tom Hoffman	City of Lino Lakes (LL)

**Others in attendance:** Phil Belfiori, Brian Corcoran, Angela Hugunin (VLAWMO staff); Jeremy Erickson, SPRWS; Ed Shapland.

**I. Call to Order**

Chair Tessier called the meeting to order at 8:31 am.

**II. Approval of Agenda**

It was moved by Commissioner Huntrods and seconded by Commissioner Miller to approve the January 8, 2025, TEC agenda. Vote: all aye. Motion passed.

**III. Approval of Minutes (December 11, 2024)**

It was moved by Commissioner Miller and seconded by Commissioner Ousky to approve the December 11, 2024, meeting minutes as presented. Vote: all aye. Motion passed.

**IV. Administration & Operations**

**A. January Financial Report and Consider Authorization for Payment**

Administrator Belfiori summarized the January financial statement as included in the meeting materials. He highlighted administrative costs from planning of the 2027-2036 Comprehensive Watershed Management Plan, work with Ramsey County on lake surveys, soil health grant reimbursement, and reimbursement to the City of Vadnais Heights for some of the Elmwood Park rain garden project.

Income included the stormwater utility revenue, interest, and grant revenue.

It was moved by Commissioner Philip and seconded by Commissioner Miller to approve the January Financial Report and authorize for payment. Vote: all aye. Motion passed.

## B. Technical Commission Officer Appointments

Administrator Belfiori outlined the Technical Commission roles. Commissioners discussed role allocation and responsibilities for 2025.

Chair: Nick Ousky  
Vice Chair: Gloria Tessier  
Financial Officer: Terry Huntrods  
Liason to the Board: Susan Miller

It was moved by Commissioner Philip and seconded by Commissioner Huntrods to confirm the TEC officer slate for 2025. Vote: all aye. Motion passed.

## C. Confirmation of 2025 TEC Meeting Dates

Administrator Belfiori asked the TEC to confirm whether the 2025 meetings should follow the same schedule and location as 2024.

It was moved by Commissioner Philip and seconded by Commissioner Miller to confirm the 2025 TEC meeting dates. Vote: all aye. Motion passed.

## D. 2025 Working Budget Overview

Administrator Belfiori outlined the working budget from the December 2024 Board meeting. The 2025 budget includes predominantly 2024 budget carry-over, grant revenue, and stormwater utility fees. Key 2025 approved projects on the budget include development of the Tamarack Alum project, City of Vadnais Heights Green Streets partnership for Greenhaven, East Vadnais Lake subwatershed resiliency project, Polar Lakes Park reuse project, second small watershed grant project design, a second resiliency study with City of Vadnais Heights, Landscape Level 2 grant program partnerships, North Oaks Company partnership and the development of the 2027-2036 VLAWMO watershed management plan, among others listed in the Board packet.

Chair Tessier thanked Administrator Belfiori.

## V. Projects

### A. Consider Ongoing Partnership Effort with NOHOA for Deep Lake Shoreline Restoration

Administrator Belfiori presented the summary memo of project monitoring for the deep-water wetland in 2024.

Commissioner Miller shared that this was likely the third year of this effort. Administrator Belfiori shared – and Commissioner Miller agreed – that this is an exciting project, a lake that gives more of a northern feel, especially after recent buckthorn removal.

Commissioner Miller shared a hope that in 2025 this project will reach all the way around the lake. Commissioner Miller has noticed lots of the vegetated growth planted by NST starting to take off. Administrator Belfiori thanked her for her leadership.

Commissioner Philip asked whether NOHOA will be responsible for upkeep and maintenance of this project. Commissioner Miller confirmed that NOHOA has budgeted for maintenance for the coming years, but the Board will need to have discussions for longer-term funding. She confirmed a commitment to maintenance for the coming years.

It was moved by Commissioner Philip and seconded by Commissioner Miller to recommend to the Board to partner with NOHOA for ongoing Deep Lake shoreline restoration work in 2025 as described above and authorize the updated MOU for 2025. Vote: all aye. Motion passed.

#### B. Wilkinson Deep-water Wetland Update: HEI Monitoring Memo for 2024

Administrator Belfiori shared that VLAWMO now has an analysis of this project. HEI anticipates better phosphorus intake once plants are more mature. He shared that they are seeing the beginnings of good momentum with this project.

#### C. Update on WMP – TEC + (today at 9am)

Administrator Belfiori shared that the TEC+ meeting will follow today's TEC meeting (starting at 9:00 am). TEC+ meeting materials were provided on December 23, 2024. The meeting will focus on the Section 3 draft of the 2027-2035 Watershed Management Plan. Completed comment tables are requested by January 15 (emailed to [dawn.tanner@vlawmo.org](mailto:dawn.tanner@vlawmo.org)).

It was moved by Commissioner Huntrods and seconded by Commissioner Philip to recommend to the Board approval of the batch of contracts provided in the packet: RCSWCD, Natural Shore Technologies, Sandstrom Land Management, and Carp Solutions. Vote: all aye. Motion passed.

#### D. Recent Awarding of CPL Grant for Rotary Nature Preserve Wetland Restoration

Administrator Belfiori shared word of the awarding of a CPL grant for the Rotary Nature Preserve Wetland Restoration. He thanked Connie and Dawn for their partnership and congratulated them on this award. He shared the 5-year plan to go into long-term plan of implementing wetland restoration. This work will need to continue with the Rotary Club and will eventually involve collaborative maintenance with volunteers.



Commissioner Miller inquired about the acreage of the park. Chair Tessier shared that it is 21 acres. Administrator Belfiori noted that it is a beautiful park in the middle of an urban area, an exciting space to maintain.

## **VI. Commissioner Reports**

None

## **VII. NOHOA**

None

## **VIII. Ramsey Soil & Water Conservation Division**

None

## **IX. St. Paul Regional Water Services**

None

## **X. Public Comment:**

None

## **XI. Next Meetings:**

TEC: February 12, 2025 at 8:15 a.m.; Board: February 26, 2025.

## **XII. Adjourn**

It was moved by Commissioner Huntrods and seconded by Commissioner Miller to adjourn the meeting at 8:53 am. Vote: all aye. Motion passed.

# VLAWMO Finance Summary: February 2025

Feb-25		Actual 2/1/25	Actual to Date	2025 Budget (June 2024 Board Approved)	Carry over from 2024 to 2025	Remaining in Budget	2025 Available (Dec. 2024 Board approved)	Act vs. Budget
<b>BUDGET #</b>	<b>INCOME</b>							
<b>5.11</b>	Storm Water Utility	\$6,151	\$528,269	\$1,202,703	\$0	\$674,434	\$1,202,703	44%
<b>5.12</b>	Service Fees			\$1,000	\$0	\$1,000	\$1,000	0%
<b>5.13</b>	Interest + mitigation acct	\$4,561	\$9,934	\$30,000	\$0	\$20,066	\$30,000	33%
<b>5.14</b>	Misc. income - WCA admin & other	\$3,000	\$3,000	\$3,000	\$0	\$0	\$3,000	100%
<b>5.15</b>	Other Income Grants/loan		\$5,021	\$238,960	\$0	\$233,939	\$238,960	2%
<b>5.16</b>	Transfer from reserves			\$1,180,708	\$180,796	\$1,361,504	\$1,361,504	0%
	<b>TOTAL</b>	<b>\$13,712</b>	<b>\$546,224</b>	<b>\$2,656,371</b>	<b>\$180,796</b>	<b>\$2,290,943</b>	<b>\$2,837,167</b>	<b>21%</b>
<b>EXPENSES</b>								
<b>3.1</b>	<b>Operations &amp; Administration</b>							
<b>3.110</b>	Office - rent, copies, post tel supplies	\$2,178	\$4,398	\$33,851	\$0	\$29,453	\$33,851	13%
<b>3.120</b>	Information Systems	\$2,015	\$3,586	\$33,850	\$0	\$30,264	\$33,850	11%
<b>3.130</b>	Insurance			\$12,000	\$0	\$12,000	\$12,000	0%
<b>3.141</b>	Consulting - Audit			\$23,000	\$0	\$23,000	\$23,000	0%
<b>3.142</b>	Consulting - Bookkeeping	\$45	\$92	\$1,500	\$0	\$1,408	\$1,500	6%
<b>3.143</b>	Consulting - Legal	\$810	\$810	\$8,000	\$0	\$7,190	\$8,000	10%
<b>3.144</b>	Consulting - Eng. & Tech.	\$220	\$220	\$50,000	\$0	\$49,780	\$50,000	0%
<b>3.150</b>	Storm Sewer Utility	\$214	\$5,397	\$22,500	\$0	\$17,103	\$22,500	24%
<b>3.160</b>	Training (staff/board)			\$18,000	\$0	\$18,000	\$18,000	0%
<b>3.170</b>	Misc. & mileage	\$57	\$156	\$7,276	\$0	\$7,120	\$7,276	2%
<b>3.191</b>	Administration - staff	\$52,442	\$81,135	\$470,287	\$13,165	\$402,317	\$483,452	17%
<b>3.192</b>	Employer Liability	\$14,220	\$22,581	\$144,579	\$0	\$121,998	\$144,579	16%
<b>3.2</b>	<b>Monitoring and Studies</b>							
<b>3.210</b>	Lake and Creek lab analysis			\$18,000	\$3,000	\$21,000	\$21,000	0%
<b>3.220</b>	Equipment			\$3,000	\$0	\$3,000	\$3,000	0%
<b>3.230</b>	Wetland assessment & management			\$10,000	\$0	\$10,000	\$10,000	0%
<b>3.240</b>	Watershed planning /special study		\$10,338	\$150,000	\$0	\$139,662	\$150,000	7%
<b>3.3</b>	<b>Education and Outreach</b>							
<b>3.310</b>	Public Education	\$2,000	\$2,000	\$6,000	\$0	\$4,000	\$6,000	33%
<b>3.320</b>	Comm., Outreach & Marketing	\$520	\$520	\$20,000	\$5,000	\$24,480	\$25,000	2%
<b>3.330</b>	Community Blue Ed Grant			\$12,000	\$0	\$12,000	\$12,000	0%
<i>Total Core functions: Ops, Monitoring, Education</i>		<i>\$74,721</i>	<i>\$131,233</i>	<i>\$1,043,843</i>	<i>\$21,165</i>	<i>\$933,775</i>	<i>\$1,065,008</i>	<i>12%</i>
<b>Capital Improvement Projects and Programs</b>								
<b>3.4</b>	<b>Subwatershed Activity</b>							
<b>3.410</b>	Gem Lake			\$25,000	\$0	\$25,000	\$25,000	0%
<b>3.420</b>	Lambert Creek			\$160,000	\$0	\$160,000	\$160,000	0%
<b>3.421</b>	Lambert Lake Loan			\$38,568	\$0	\$38,568	\$38,568	0%

3.425	Goose Lake			\$75,000	\$0	\$75,000	\$75,000	0%
3.430	Birch Lake	\$15,000	\$15,000	\$70,000	\$0	\$55,000	\$70,000	21%
3.440	Gilf Black Tam Wilk Amelia		\$10,324	\$375,000	\$100,000	\$464,676	\$475,000	2%
3.450	Pleasant Charley Deep	\$15,000	\$15,000	\$150,000	\$0	\$135,000	\$150,000	10%
3.460	Sucker Vadnais	\$43,906	\$43,906	\$250,000	\$0	\$206,094	\$250,000	18%
3.48	<b>Programs</b>							
3.480	Soil Health Grant		\$1,000	\$20,000	\$4,524	\$23,524	\$24,524	4%
3.481	Landscape 1			\$50,000	\$26,900	\$76,900	\$76,900	0%
3.482	Landscape 2/BWSR WBF	\$11,292	\$23,170	\$80,000	\$28,207	\$85,037	\$108,207	21%
3.483	Project Research & feasibility			\$5,000	\$0	\$5,000	\$5,000	0%
3.485	Facilities Maintenanc/ Pub. Ditch Main.	\$893	\$1,178	\$70,000	\$0	\$68,822	\$70,000	2%
3.5	<b>Regulatory</b>							
3.510	Engineer Plan review			\$5,000	\$0	\$5,000	\$5,000	0%
	<i>Total CIP &amp; Program</i>	<i>\$86,091</i>	<i>\$109,578</i>	<i>\$1,373,568</i>	<i>\$159,631</i>	<i>\$1,423,621</i>	<i>\$1,533,199</i>	<i>7%</i>
	<b>Total of Core Operations &amp; CIP</b>	<b>\$160,812</b>	<b>\$240,811</b>	<b>\$2,417,411</b>	<b>\$180,796</b>	<b>\$2,357,396</b>	<b>\$2,598,207</b>	<b>9%</b>

<b>Fund Balance</b>	1/1/2025	2/1/2025
4M Account	\$1,016,387	\$946,151
4M Plus Savings	\$252,767	\$253,708
Total	\$1,269,154	\$1,199,859

<b>Restricted funds</b>		2/1/2025
Mitigation Savings		\$0
Term Series		\$300,000

**Vadnais Lake Area Water Management Organization**  
**Check Detail**  
 January 9 through February 12, 2025

11:22 AM  
 02/04/2025

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Check	eft	01/23/2025	Reliance Standard		Checking - 1987		-428.30
				Insurance Benefit		-428.30	428.30
TOTAL						-428.30	428.30
Check	eft	01/23/2025	US Bank		Checking - 1987		-44.93
				3.142 · Bookkeeping help		-44.93	44.93
TOTAL						-44.93	44.93
Check	5926	02/12/2025	Dawn Tanner		Checking - 1987		-39.20
				3.170 · Misc. & mileage		-39.20	39.20
TOTAL						-39.20	39.20
Check	5927	02/12/2025	Town Law Center, PLLP		Checking - 1987		-810.00
				3.143 · Legal		-810.00	810.00
TOTAL						-810.00	810.00
Check	5928	02/12/2025	Ramsey County		Checking - 1987		-19,080.00
				3.482 · Landscape 2		-4,080.00	4,080.00
				3.430 · Birch Lake		-15,000.00	15,000.00
TOTAL						-19,080.00	19,080.00
Check	5929	02/12/2025	Houston Engineering, Inc		Checking - 1987		-892.50
				3.485 · Facilities & Maintenance		-892.50	892.50
TOTAL						-892.50	892.50
Check	5930	02/12/2025	Metro WaterShed Partners		Checking - 1987		-2,000.00
				3.310 · Public Education		-2,000.00	2,000.00
TOTAL						-2,000.00	2,000.00
Check	5931	02/12/2025	Hisdahl's Trophies		Checking - 1987		-52.02
				3.320 · Marketing		-52.02	52.02
TOTAL						-52.02	52.02
Check	5932	02/12/2025	North Oaks Home Owners Association		Checking - 1987		-15,000.00
				3.450 · Pleasant Charley Deep		-15,000.00	15,000.00
TOTAL						-15,000.00	15,000.00

<b>Check 5933 02/12/2025 City of Vadnais Heights</b>	<b>Checking - 1987</b>		<b>-53,296.00</b>
	Rent	-1,815.00	1,815.00
	Phone/Internet/Machine Overhead	-325.00	325.00
	Postage	-13.41	13.41
	Copies	-24.59	24.59
	3.460 · Sucker Vadnais	-43,906.30	43,906.30
	3.482 · Landscape 2	-7,211.70	7,211.70
TOTAL		<u>-53,296.00</u>	<u>53,296.00</u>
<b>Check 5934 02/12/2025 North Oaks News</b>	<b>Checking - 1987</b>		<b>-18.00</b>
	3.170 · Misc. & mileage	-18.00	18.00
TOTAL		<u>-18.00</u>	<u>18.00</u>
<b>Check 5935 02/12/2025 Metro - Inet</b>	<b>Checking - 1987</b>		<b>-2,015.00</b>
	IT Support	-1,697.00	1,697.00
	IT Support	-318.00	318.00
TOTAL		<u>-2,015.00</u>	<u>2,015.00</u>
<b>Check 5936 02/12/2025 City of White Bear Lake</b>	<b>Checking - 1987</b>		<b>-66,453.50</b>
	payroll	-52,441.99	52,441.99
	Administration FICA	-3,908.36	3,908.36
	Administration PERA	-3,933.17	3,933.17
	Insurance Benefit	-5,695.04	5,695.04
	Admin payroll processing	-254.92	254.92
	3.144 · Eng. & Tech.	-220.02	220.02
TOTAL		<u>-66,453.50</u>	<u>66,453.50</u>
<b>Check 5937 02/12/2025 Anoka County</b>	<b>Checking - 1987</b>		<b>-214.00</b>
	3.150 · Storm Sewer Utility	-214.00	214.00
TOTAL		<u>-214.00</u>	<u>214.00</u>

**Vadnais Lake Area Water Management Orga**  
**Profit & Loss**  
 January 9 through February 12, 2025

11:26 AM

02/04/2025

Cash Basis

Jan 9 - Feb 12, 25

<b>Ordinary Income/Expense</b>	
<b>Income</b>	
Misc.	3,000.00
<b>5.1 · Income</b>	
5.11 · Storm Water Utility	6,151.12
5.13 · Interest	4,560.78
<b>Total 5.1 · Income</b>	<u>10,711.90</u>
<b>Total Income</b>	<u>13,711.90</u>
<b>Gross Profit</b>	13,711.90
<b>Expense</b>	
<b>3.1 · Administrative/Operations</b>	
<b>3.110 · Office</b>	
Copies	24.59
Phone/Internet/Machine Overhead	325.00
Postage	13.41
Rent	1,815.00
<b>Total 3.110 · Office</b>	<u>2,178.00</u>
<b>3.120 · Information Systems</b>	
IT Support	2,015.00
<b>Total 3.120 · Information Systems</b>	<u>2,015.00</u>
3.142 · Bookkeeping help	44.93
3.143 · Legal	810.00
3.144 · Eng. & Tech.	220.02
3.150 · Storm Sewer Utility	214.00
3.170 · Misc. & mileage	57.20
<b>3.191 · Employee Payroll</b>	
payroll	52,441.99
<b>Total 3.191 · Employee Payroll</b>	<u>52,441.99</u>
<b>3.192 · Employer Liabilities</b>	
Admin payroll processing	254.92
Administration FICA	3,908.36
Administration PERA	3,933.17
Insurance Benefit	6,123.34
<b>Total 3.192 · Employer Liabilities</b>	<u>14,219.79</u>
<b>Total 3.1 · Administrative/Operations</b>	<u>72,200.93</u>
<b>3.3 · Education and Outreach</b>	
3.310 · Public Education	2,000.00
3.320 · Marketing	520.02
<b>Total 3.3 · Education and Outreach</b>	<u>2,520.02</u>
<b>3.4 · Capital Imp. Projects/Programs</b>	
3.430 · Birch Lake	15,000.00
3.450 · Pleasant Charley Deep	15,000.00

3.460 · Sucker Vadnais	43,906.30
<b>Total 3.4 · Capital Imp. Projects/Programs</b>	<b>73,906.30</b>
<b>3.48 · Programs</b>	
3.482 · Landscape 2	11,291.70
3.485 · Facilities & Maintenance	892.50
<b>Total 3.48 · Programs</b>	<b>12,184.20</b>
<b>Total Expense</b>	<b>160,811.45</b>
<b>Net Ordinary Income</b>	<b>-147,099.55</b>
<b>Net Income</b>	<b>-147,099.55</b>



**Vadnais Lake Area Water Management Organization**  
**Custom Transaction Detail Report**  
 December 1, 2024 through February 1, 2025

11:16 AM

02/04/2025

Accrual Basis

Type	Date	Num	Name	Memo	Account	Clr	Split	Amount	Balance
Dec 1, '24 - Feb 1, 25									
Credit Card Charge	12/02/2024		Google*SVCAPPS_VLAWM		US Bank CC	√	WEB	42.00	42.00
Credit Card Charge	12/09/2024		mn Department of Agriculture	renewal pest 2025 license	US Bank CC	√	3.160 · Training (staff/board)	15.33	57.33
Credit Card Charge	12/09/2024		University of Minnesota	Dawn communicating across cultures training	US Bank CC	√	3.160 · Training (staff/board)	480.00	537.33
Credit Card Charge	12/16/2024		Udemy Inc	Angela training	US Bank CC	√	3.160 · Training (staff/board)	27.08	564.41
Credit Card Charge	12/17/2024		Pryor Learning	trainings	US Bank CC	√	3.160 · Training (staff/board)	323.30	887.71
Transfer	12/20/2024			Funds Transfer	US Bank CC	√	Checking - 1987	-1,955.51	-1,067.80
Credit Card Charge	12/26/2024		Adobe "Creative Cloud		US Bank CC	√	Software	32.50	-1,035.30
Credit Card Charge	01/02/2025		Prairie Moon Nursery	city hall seed	US Bank CC	√	3.485 · Facilities & Maintenance	1,327.00	291.70
Credit Card Charge	01/02/2025		Ramsey County League of Local Governments	2025 RCLLG membership	US Bank CC	√	3.170 · Misc. & mileage	300.00	591.70
Credit Card Charge	01/02/2025		Google*SVCAPPS_VLAWM		US Bank CC	√	WEB	42.00	633.70
Credit Card Charge	01/03/2025		VHEDC	2025 partner for good cohort	US Bank CC	√	3.330 · Community Blue Education Grant	100.00	733.70
Credit Card Charge	01/03/2025		hologram	account refill	US Bank CC	√	3.210 · Lake & Creek lab analysis	30.00	763.70
Credit Card Charge	01/31/2025		Survey Monkey	2025 renewal	US Bank CC	√	3.320 · Marketing	468.00	1,231.70
								<b>1,231.70</b>	<b>1,231.70</b>
Dec 1, '24 - Feb 1, 25									

## TEC Report to Board - February 2025

Programs & Projects	Effort Level	Completion Date	Comments																								
	LOW																										
	MED																										
	HIGH																										
<b>Projects</b>				<b>Administration &amp; Operation</b>																							
E. Vadnais Lake Subwatershed Resiliency Study		Ongoing	Staff are continuing to work with the City of Vadnais Heights on Phase 2 of the study. Currently partnering on exploring additional state grant application for further investigation and construction plan development for the recommended BMPs identified in the study.	Audit		2024	Currently working on 2024 audit with CLA -anticipate bring brought to the April BOD meeting																				
Rotary Park partnership		2025-26	Phase 3 of partnership agreement with City of White Bear Lake is being considered at December TEC meeting	Budget		for 2026 budget	Starting work to review long range draft project partnership table with staff from partner organizations.																				
Polar Lake Park Reuse Study		2025	Contining to work with WB Township to investigate possible grant application opportunities	Personnel /HR		ongoing	staff continuing to pursuing training opportunities																				
MPCA 319 /Wilkinson Lake BMPs		ongoing	WQ monitoring complete, enhancement underway with NST. Planning underway for next round grant project.	SSU		ongoing	The approved 2024 SSU certifications have been submitted to Anoka and Ramsey County.																				
Pleasant Lake Carp Management		ongoing	Planning for 2025 is being considered at December TEC meeting	2027-2036 Watershed Mgmt. Plan		2023-2025	Draft phase and associated reviews underway.																				
Tamarack Alum Project		2024	Phase 1 of the project was completed in Oct. 2024. Temp. Access Agreement with Ramsey County considered at Dec. TEC meeting. Planning ongoing for spring when project resumes.																								
<b>Programs</b>				<b>FINANCIAL SUMMARY as of 2/1/2025</b>																							
City/Township MS4		Ongoing	Beginning work to determine needs of MS4 partners																								
Education/Outreach		Ongoing	Developing and drafting sections of 2024 annual report																								
Website		Ongoing	Current website continues to be updated as needed. New website planning underway.	4M Account (1.10)	4M Plus (1.23)	Total																					
WAV		Ongoing	Beginning work to determine volunteer events and opportunities	\$946,150	\$253,707	\$1,199,857																					
Cost Share & BWSR WBIF		Ongoing	2024 projects continue to be closed out. Grant applications are beginning to come in for consideration from 2024 site visits. Construction plans continue to be developed for a bioswale project at the White Bear Lake Sports Center. Continuing to work on WBIF workplan for February consideration.																								
GIS		Ongoing	Updating the online GIS viewer as needed.																								
Monitoring		Ongoing	2024 monitoring report complete. Planning 2025 season.																								
WCA		Ongoing	Administering WCA as needed.																								
				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Budget Summary</th> <th style="width: 15%;">Actual Expense YTD</th> <th style="width: 15%;">2025 Budget "working"</th> <th style="width: 15%;">Remaining in Budget</th> <th style="width: 10%;">% YTD</th> </tr> </thead> <tbody> <tr> <td>Operations</td> <td style="text-align: right;">\$131,233</td> <td style="text-align: right;">\$1,065,008</td> <td style="text-align: right;">\$933,775</td> <td style="text-align: center;">12%</td> </tr> <tr> <td>CIP</td> <td style="text-align: right;">\$109,578</td> <td style="text-align: right;">\$1,533,199</td> <td style="text-align: right;">\$1,423,621</td> <td style="text-align: center;">7%</td> </tr> <tr> <td><b>Total</b></td> <td style="text-align: right;"><b>\$240,811</b></td> <td style="text-align: right;"><b>\$2,598,207</b></td> <td style="text-align: right;"><b>\$2,357,396</b></td> <td style="text-align: center;"><b>9%</b></td> </tr> </tbody> </table>				Budget Summary	Actual Expense YTD	2025 Budget "working"	Remaining in Budget	% YTD	Operations	\$131,233	\$1,065,008	\$933,775	12%	CIP	\$109,578	\$1,533,199	\$1,423,621	7%	<b>Total</b>	<b>\$240,811</b>	<b>\$2,598,207</b>	<b>\$2,357,396</b>	<b>9%</b>
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## TEC Staff Memo – February 12, 2025

### IV. Administration & Operations

#### A. February Financial Report and Consider Authorization for Payment

Please find the February financial report and authorization to pay bills for consideration and approval.

#### B. February TEC Report to the Board

Please find the February TEC report to the Board attached in the ePacket for review and approval.

### V. Programs

#### A. SHG 2025-01 Raeth Pollinator Garden

Landowner Amanda Raeth submitted a Soil Health Grant application for a large pollinator garden that will replace turf grass totaling an area of about 1,140 sq ft in the City of Vadnais Heights. The property is located within a VLAWMO priority zone for volume reduction and in the subwatershed of Lambert Creek. Turf grass will be removed from the front lawn and replaced with a native plant pollinator garden, and additional native plants will be added to existing garden spaces to increase pollinator habitat. The landowner will also be replacing turf grass with bee lawn throughout her property through a Lawns to Legumes grant. The pollinator gardens and bee lawn will create significant pollinator habitat, reduce water use, and will provide outreach opportunities.

The landowner has already been communicating with her neighbors who are eager to watch the progress of her project. She is also planning to paint a pollinator mural on her wood fence facing the street and a matching painting on her mailbox for further pollinator awareness. She has also been in contact with the Prairie Yard and Garden Show to potentially feature her property on a future episode. The landowner has started prepping her yard for the plantings last fall by scalping the yard to remove turf grass and sheet mulching. Mulch was added from on-site tree removal and chipping. The grant would cover the native plantings, which the landowner will be installing herself with her spouse. The total estimated project cost is \$1,675.

**Requested action:** Staff recommends approval of SHG 2025-01 in the amount of \$1,250.

#### B. SHG 2025-02 Addis & Zink Native Plant Restoration

Landowners David Addis and Mary Zink submitted a Soil Health grant application for a native plant restoration totaling an area of about 3,000 sq ft in the City of North Oaks. The property is located in the Gilfillan-Tamarack-Black-Wilkinson-Amelia subwatershed. The landowners have completed significant work removing invasive buckthorn and amur maple on their property. Native plant seed mix and native shrubs and trees will be added to restore the native plant community on

the northwest and southwest sides of the property. The native plants will help stabilize the bare soil from the invasive species removal and will also increase pollinator habitat. The landowners will also add additional seed mix to an existing prairie area to enhance pollinator habitat. The project area is directly next to a neighborhood walking path and the landowners have already engaged in conversations with their neighbors about the project. If approved, the landowners are interested in being a future grant program tour spot.

The landowners will be hiring Outback Nursery & Landscaping for the site preparation and installation work. Site preparation will include additional weeding to ensure native plant establishment. Cover crop, erosion control logs, and mulch will be added in the sloped native plant seed mix areas to ensure site stabilization while the seed establishes. The grant would cover the costs of the native shrubs, trees, and seed mix. The total estimated project cost is \$23,282.78.

**Requested action:** Staff recommends approval of SHG 2025-02 in the amount of \$1,000.

**C. Update on FY '24-25 BWSR WBIF Grant Program Process**

VLAWMO and partners have almost completed the fiscal year 2024-2025 BWSR WBIF program process to secure the allocated funding for the Vadnais Lake Area Watershed Planning Area of \$147,921. VLAWMO held a convene meeting on November 4, 2024 with BWSR, RCSWCD, and City staff from Lino Lakes, White Bear Lake, and Vadnais Heights. At the convene meeting partners determined by consensus VLAWMO would serve as grantee/fiscal agent for the grant and provide the 10% match for the grant. Partners also agreed to focus the WBIF funding on supplementing the VLAWMO Landscape Level 2 grant program for large-scale partnership projects. After the meeting VLAWMO submitted a funding request to BWSR and they approved the funding request on December 5, 2024. The next steps are to submit a work plan and sign a grant agreement with BWSR. The work plan and grant agreement will be presented at the February Board meeting with a recommendation to approve and sign the grant agreement.

**VI. Projects**

**A. Sports Center Bioswale Partnership Project**

VLAWMO, the City of White Bear Lake, and RCSWCD entered into a MOU for partnering on a potential bioswale project at the White Bear Lake Sports Center off of Hwy 96. About 18 acres of stormwater runoff currently flows through an existing swale that drains directly to the southern lobe of Birch Lake. The goals of the project are to improve water quality and reduce and slow stormwater runoff as much as possible before it drains to Birch Lake. SRF Consulting Group (SRF) was selected to conduct feasibility work to assess potential stormwater best management practices for the area and create construction plans. A bioswale with filter media and pretreatment structures was determined to be the most

feasible BMP due to limited infiltration potential of the underlying soils. SRF is currently finalizing 100% construction plans. The project is expected to go out for bid this month. A grant application will likely be complete and ready for consideration by the TEC and Board by spring/summer of this year.

**B. Update on BWSR Accelerated Implementation Grant Application with City of VH**

At the September 11, 2024 TEC meeting, staff provided information about the BWSR Accelerated Implementation Grant opportunity and VLAWMO's partnership with the City of Vadnais Heights on applying for the grant. The City and VLAWMO provided a proposal to explore the feasibility of pursuing a Green Street with stormwater BMPs for the City's future Greenhaven Drive street project. VLAWMO is happy to share that the City of Vadnais Heights was notified the grant application was approved for \$250,000! VLAWMO staff are currently assisting the City with the next step of writing a work plan. Staff will provide an update on the work completed with this grant and the partnership at a future TEC meeting.

**C. Update on WMP and Next TEC+ Meeting**

VLAWMO staff and HEI continue work on the WMP, sections 1-4. Sections 1 and 2 have been updated following input received as part of the TEC+ meeting in November and written comments received. Updated sections 1 and 2 are included in the packet and a request is requested to bring these sections to the Board at the regular meeting in February.

The next TEC+ meeting is anticipated to be scheduled for April 9, 2025 (9:00 am). The draft section and comment table will be provided at least a week in advance of the meeting. Completed comment tables are requested by April 16 (emailed to [dawn.tanner@vlawmo.org](mailto:dawn.tanner@vlawmo.org)).

**Linked Attachments:**

- Section 1 draft of the WMP:  
[https://www.vlawmo.org/index.php/download\\_file/5092/](https://www.vlawmo.org/index.php/download_file/5092/)
- Section 2 draft of the WMP:  
[https://www.vlawmo.org/index.php/download\\_file/5093/](https://www.vlawmo.org/index.php/download_file/5093/)

**Requested action:** Staff request a recommendation to present sections 1 and 2 of the draft WMP to the Board at the meeting on February 26, 2025.

**D. Update on Partnership with NOHOA for Deep Lake Shoreline Restoration**

In January, the TEC made the recommendation to the Board to partner with NOHOA for ongoing Deep Lake shoreline restoration work in 2025 as described [in the packet] and authorize the updated MOU for 2025.

VLAWMO staff met with project partners onsite during January. The NOHOA signed MOU is anticipated at the time of packet preparation. An update on the MOU status will be provided at the TEC meeting.

**E. Tamarack Alum Amendment**

An amendment has been negotiated, reviewed by legal counsel, approved by project partners, and signed by LRI to continue with phase 2 of the alum treatment in Tamarack Lake during spring 2025. The cost for phase 2 is \$26,180, which is an increase of \$600, reflecting current market conditions and pricing received by LRI in January.

LAKE RESTORATION, INC.					
YOUR LOCAL AQUATIC EXPERTS SINCE 1977					
Lake: Tamarack			County: Ramsey		
Barr Engineering Company Attn: Greg Wilson 4300 MarketPointe Drive, Suite 200 Bloomington, MN 55435					
Lake Restoration Unit Prices -- 2025 Spring Alum Treatment For Tamarack Lake:					
Item	Description	Unit	Estimated Quantity	Unit Price	Extension
2.1	Mobilization/Demobilization to Tamarack Lake	EA	1	\$11,580	\$11,580
2.2	Aluminum Sulfate Application to Tamarack Lake	Pounds	20,000	\$0.73	\$14,600
Total Price					\$26,180

**Attachment:**

- Tamarack Lake amendment for phase 2 alum signed by LRI

**Requested action:** VLAWMO staff request a recommendation to the Board to authorize and sign the Tamarack Lake contract amendment at its regular meeting in February.

**F. SEH Memo on Potential Meander Project and Feasibility in Partnership with RCSWCD**

VLAWMO, RCSWCD, and SEH have completed their partnership project to conduct feasibility for geotechnical and survey for a potential project to the north of the Wilkinson deep-water wetland. A final memo was received by VLAWMO in December and shared with RCSWCD. Future potential project steps are yet to be determined and will include NOC as the landowner and a primary potential project part

**Attachment:**

- Wilkinson Lake Field Investigations SEH memo

**Requested action:** VLAWMO staff request a recommendation to the Board to accept the Wilkinson Lake Field Investigations SEH memo. Staff also request approval to share the memo with NOC.

#### **G. Update on Rotary Park CPL Grant Process and MOU with City of WBL**

In January, VLAWMO staff notified the TEC that the Rotary Park wetland restoration project/CPL grant was selected for funding by the MN DNR. Staff and the City of WBL have continued working together to prepare materials and accept the grant contract with MN DNR. An MOU between VLAWMO and the City of WBL has been drafted to specify party responsibilities related to this 4-year grant effort, following 1-year project work, and 10-year initial maintenance partnership.

#### **Attachments:**

- MN DNR/CPL grant workplan (linked: [https://www.vlawmo.org/index.php/download\\_file/5094/](https://www.vlawmo.org/index.php/download_file/5094/))
- MOU with the City of WBL Restoration of the Rotary Nature Preserve Wetland
- NST Rotary Nature Preserve Wetland - Plant Community Assessment and Management Recommendations (linked: [https://www.vlawmo.org/index.php/download\\_file/4804/](https://www.vlawmo.org/index.php/download_file/4804/))
- NST Budget Addendum to the report titled, “Rotary Nature Preserve Wetland – Plant Community Assessment and Management Recommendations.”

**Requested action:** VLAWMO staff request a recommendation to the Board to authorize and sign the grant contract with the MN DNR/CPL program for the Rotary Nature Preserve Wetland Restoration in partnership with the City of WBL, and authorize signing the MOU and returning the fully executed MOU to the City of WBL.

#### **H. Carp Solutions 2024 Annual Report**

VLAWMO received the year-end report from Carp Solutions. 2024 was a successful year of carp removals, and spring preparation work is underway, as described previously to the TEC.

#### **Linked Attachment:**

- 2024 Pleasant Lake System Carp Management Report: [https://www.vlawmo.org/index.php/download\\_file/5095/](https://www.vlawmo.org/index.php/download_file/5095/)

**Requested action:** VLAWMO staff request a recommendation to the Board to accept the 2024 Pleasant Lake System Carp Management Report.



**I. RCSWCD and Great River Greening Biochar Demonstration Event**

RCSWCD partnered with Great River Greening to conduct a biochar production demonstration using a large on-site kiln that was deployed for the event. Many local communities are working to address what to do with large amounts of woody debris as a result of Ash tree removal due to invasive emerald ash borer infestations and invasive Buckthorn. Biochar is one possible use for this material. Biochar is produced by burning wood at high controlled temperatures. Producing biochar onsite is a fairly new strategy to use the woody debris in a productive way that provides media for biochar filters, soil amendments, and other biochar uses. The demonstration was conducted at Battle Creek Regional Park.

Additional demonstration events are being held in the metro and greater MN by Great River Greening and their partners. If TEC members are interested in attending, let VLAWMO staff know and request additional details/meeting locations. Registration is required for these events. Due to parking limitations and site size registration is limited to 60 participants at each event.

Upcoming event dates are: Wednesday February 26<sup>th</sup> (Lakeville), Wednesday March 5<sup>th</sup> (Elysian), and Thursday March 6<sup>th</sup> (Rice).

Kiln set-up at Battle Creek Regional Park;  
kiln is double-sided so that it is insulated by warmed air



Burning was conducted in a single day, smoke was minimal, steam with some smoke resulted when water was applied at the end of the firing, and finished biochar was raked onto the site where preparation had been conducted



Finished biochar at the end of the firing in the kiln





# Soil Health Grant Application



Submit completed application to:  
 Lauren Sampedro  
 lauren.sampedro@vlawmo.org

## Applicant Information:

Name:	Amanda Raeth
Address:	4510 Oakhurst Avenue
City/Township, State, Zip:	Vadnais Heights, MN 55127
Phone:	480-206-8682
Email:	amanda.raeth@gmail.com



## Project Summary:

ESTIMATED TOTAL PROJECT COST ( <b>\$</b> )	\$1675
AMOUNT REQUESTED ( <b>\$1,000 MAX</b> or <b>\$1,250</b> in Priority Area)	\$1250
EXPECTED PROJECT COMPLETION (Month, Year)	June 2025

### PROJECT TYPE:

- Downspout/Small Raingarden
- Native Restoration/Pollinator Garden
- Turfgrass Replacement
- Other

If other, please describe the proposed project: \_\_\_\_\_

## Project Background:

Describe your property. What is the purpose of your project?  Does your property connect to a lake, stream, ditch, or wetland in VLAWMO?	see attached
---	--------------

## Project Background: Continued

<p>Describe how your project will support the goals of the Soil Health Grant Program.  (See grant policy)</p>	<p>see attached</p>
<p>Briefly describe the planned installation and maintenance activities for your project.</p>	<p>see attached</p>

## Project Specifications:

<p>TOTAL PROPERTY AREA (Acres)</p>	<p>1/4 acre property</p>
<p>Total PROJECT SIZE (SQ FT)</p>	<p>approx. 1140 sq ft</p>
<p>IF APPLICABLE: DEPTH OF RAINGARDEN BASIN (Inches)</p>	<p>n/a</p>



## Required Attachments:

- ⇒ Detailed drawing or plan of the proposed project.
- ⇒ Detailed project budget estimate with itemized costs and materials that equal your total estimated cost.

# VLAWMO Soil Health Grant Agreement



## It is understood that:

1. The grantee is responsible for maintaining the project for at least 5 years after its installation. VLAWMO is not responsible for completing maintenance activities.
2. The grantee will participate in VLAWMO's outreach and project sharing efforts.
3. A project may be visited and inspected by a VLAWMO representative during the 5-year maintenance period.
4. Grant awards will expire within 1 year of grant approval unless the project is extended with VLAWMO approval.

The applicant's signature indicates their agreement to the above terms and certifies the grant application information is true and accurate. A VLAWMO staff signature will constitute an approved and executed grant agreement between the grantee and the VLAWMO.

<b>Applicant/Grantee</b>	
Signature <u>Amanda Raeth</u>	Date <u>1/10/2025</u> <del>9/29/2024</del>
Print <u>Amanda Raeth</u>	
<b>VLAWMO Staff</b>	
Signature _____	Date _____
Print _____	

## VLAMO Application

- Describe your property.
- What is the purpose of your project?
- Does your property connect to a lake, stream, ditch or wetland in VLAMO?

Our property is not directly next to a lake, stream, ditch or wetland, but it is in the VLAMO priority zone. We have two large silver maple trees in the backyard and one small Northwood maple tree in the front yard. The yards are turf grass and there are a couple garden areas in the backyard as well as a round garden in the front yard. Most of the existing plants are hostas, but there are several other plant types mixed in too. The purpose of my project will be to establish a native planting pollinator garden and raise awareness for VLAMO and pollinator friendly plantings.

- Describe how your project will support the goals of the Soil Health Grant Program.

Our project will protect soil health and water quality by capturing excess rainwater runoff from the roof and lawn to be absorbed by plant roots in the new native pollinator garden. Our project will benefit the watershed through soil stabilization and slowing the movement of water across our yard, which will prevent much of it from going into the street gutters and storm drains. Native plants will support pollinators and other wildlife, attracting and feeding birds as well.

- Briefly describe the planned installation and maintenance activities for your project.

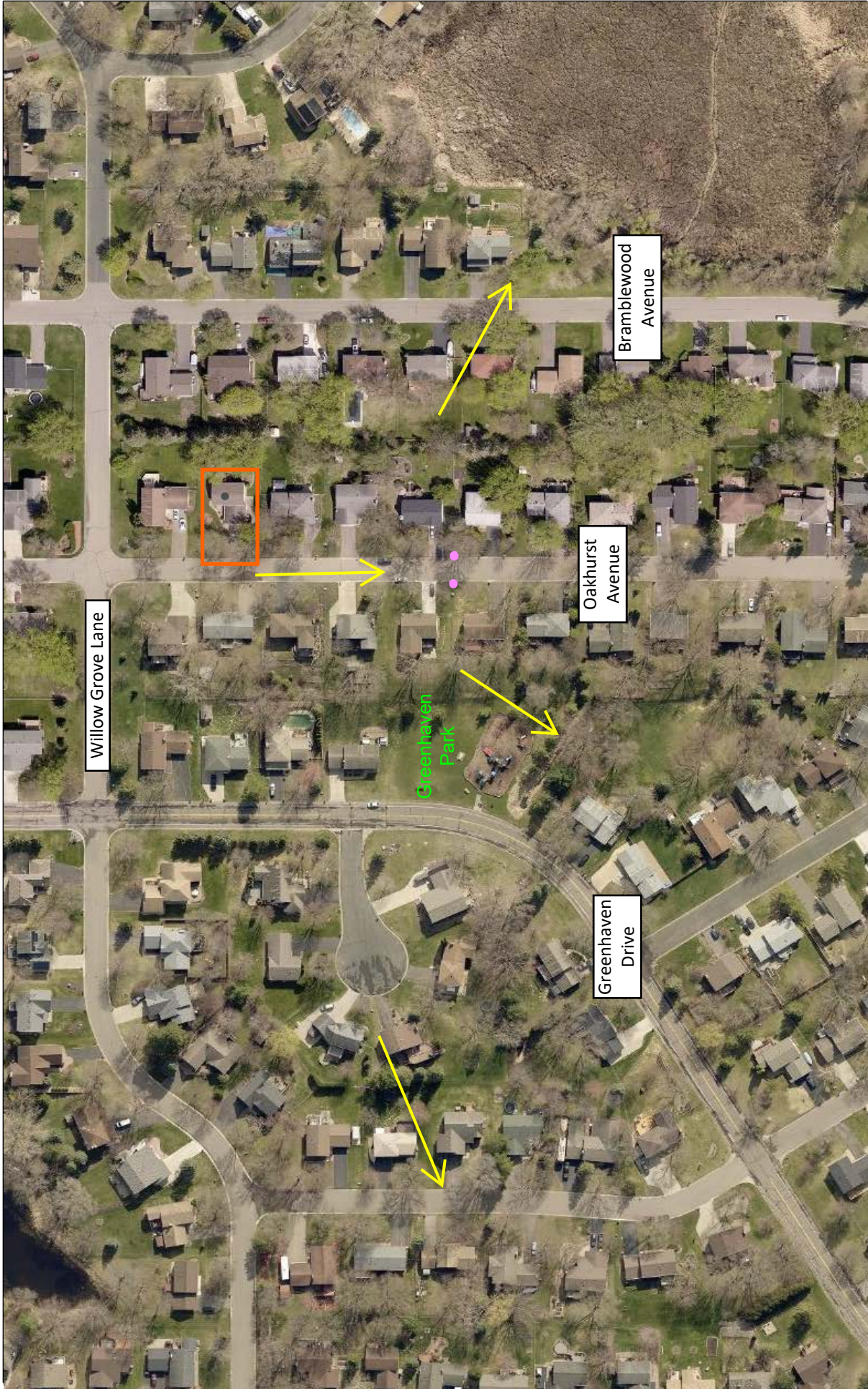
VLAMO funding, if approved, will go toward the installation of a large native pollinator garden on the North side of our front yard. This pollinator garden will be approximately 40 x 27 feet. We will also add native pollinator plants to the round garden in the front yard since we recently removed some of the hostas that were struggling in a full sun environment. We will be adding 4 native pollinator shrubs to the front yard as well. We will also be converting as much turn grass as possible to pollinator friendly, drought tolerant, bee lawns (with future Lawns to Legumes funding hopefully). One of the large silver maple trees in our backyard needs to be cut down for safety concerns unfortunately (scheduled for October 29th), and the tree company has agreed to leave us the woodchips to use on the new pollinator gardens. The existing Northwood maple tree in the front yard was planted incorrectly and the tree company will be digging it up and fixing the roots so we can plant it near to where the large silver maple tree will be removed in the backyard. We'll be scalping the pollinator garden area this Fall, layering cardboard and topping with woodchips, so the garden area is ready to plant in the Spring. I will also look into seeing if my finished project will qualify as a Monarch Way Station or Garden for Wildlife with the National Wildlife Federation, and if so, will post those signs in my yard to raise more awareness.

I will photograph the project to share with VLAMO throughout the process. In addition to the native plantings, I'll also be painting a pollinator mural on my wood fence bin hide and painting the mailbox and post to match. Hopefully the murals will also raise pollinator awareness. I want to show my neighborhood that pollinator projects are not only beautiful, but functional for both the homeowner, city/county and the wildlife, especially birds and pollinators.

For maintenance, I'm looking forward to smart planting practices, utilizing a matrix of native flowering plants and native grasses that together will prevent weeds which will reduce the ongoing maintenance of the projects. I'll water everything as needed both for initial establishment and ongoing growth and understand the needs of the plants to not water them more than is needed. I will of course weed the areas regularly and provide natural mulch/woodchips.



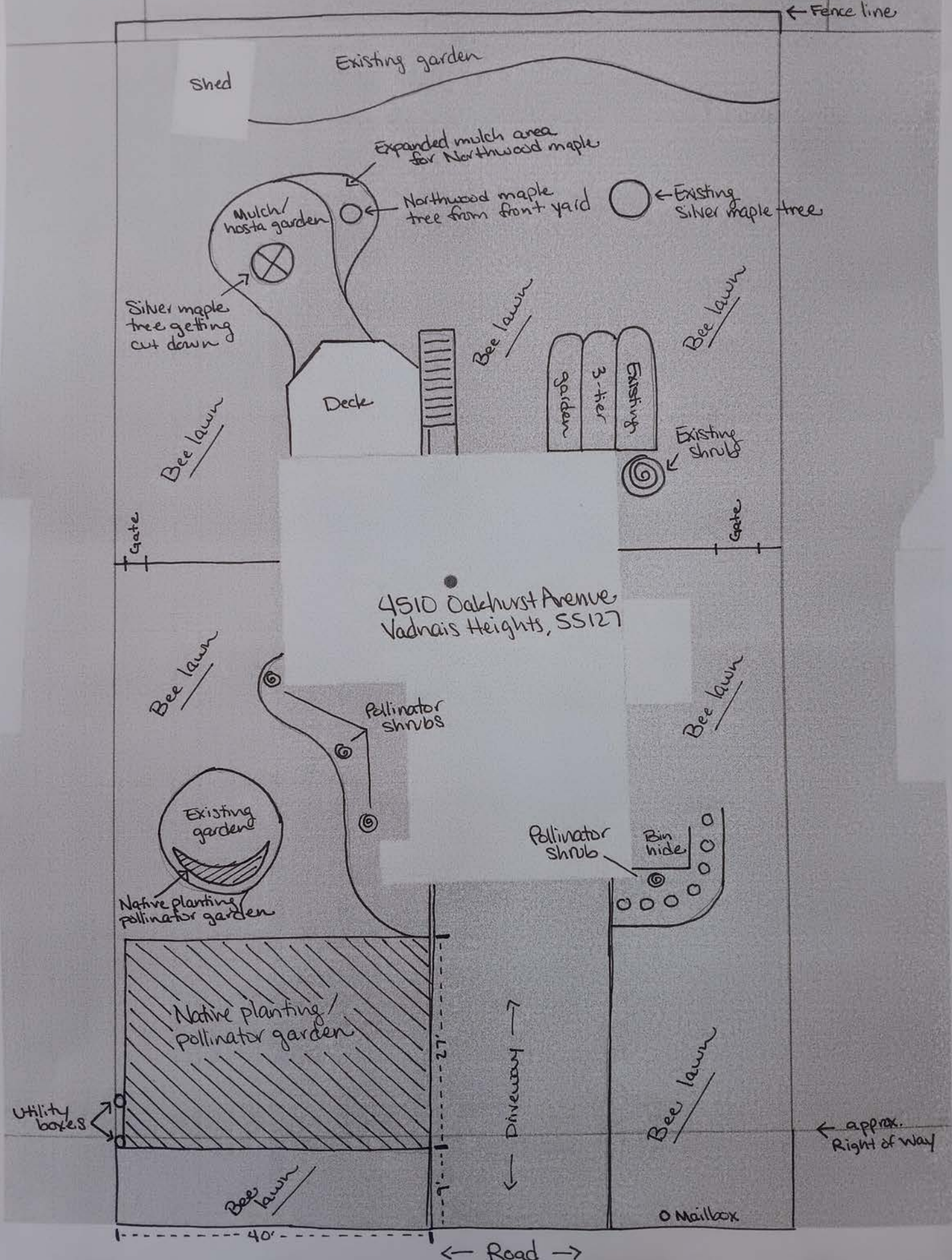
# SHG 2025-01 Raeth Pollinator Garden Application



1:1,128  
 0 0.01 0.02 0.04 mi  
 0 0.01 0.02 0.04 km

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, County of Ramsey, Esri, HERE, Garmin, GeoTechnologies, Inc., County of Ramsey, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA | ArcGIS Web AppBuilder





## VLAMO Project Budget Estimate

### **Native Pollinator Garden (504 plants needed: 28- 18 packs @ \$50 average per pack = \$1400)**

- 40x27 feet area, 18 inch border all around, 16 inch plant spacing, plant packs 3.5 inch size each
- 8 packs each of Spring, Summer and Fall blooming forbs plus 2 packs of each type of grass

- Asters
- Black-Eyed Susan Goldstrum
- Blanket Flower Hybrids
- Blazing Stars
- Butterfly Milkweed
- Columbines
- Dotted Blazing Star
- Foxglove Beardtongue
- Fragrant Giant Hyssop
- Garden Phlox
- Harebells
- Hoary Puccoon
- Hoary Vervain
- Large-Flowered Beardtongue
- Northern Bedstraw
- Prairie Phlox
- Prairie Smoke
- Prairie Wild Onion
- Purple Coneflower
- Purple Poppymallow
- Rough Blazing Star
- Sedum Autumn Joy
- Shooting Stars
- Sundial Lupine
- White Wild Indigo
- Wild Bergamot
- Wild Lupine
- Wood Betony
- Little Bluestem (grass)
- Junegrass OR Plains Oval Sedge (grass)

### **Native Pollinator Ground Cover for Round Garden (\$81)**

- Spotted Bee Balm (6 pack @ \$16.99)
- Creeping Phlox (4- 1 gallon @ \$9.99/each = \$40)
- Purple Lovegrass (pricing from Prairie Nursery) (3- 3" @ \$7.99/each = \$24)

### **Native Shrubs (2 gallon size @ \$16.99 each = \$68)**

- Red Twig Dogwood
- Dwarf Bush Honeysuckle
- New Jersey Tea
- False Indigo

### **Additional Notes**

- Pollinator Garden prices obtained from Gertens
- Native plant species are contingent on availability and might change

### **Total Cost**

- \$1549 + (8.13% tax = \$126) = \$1675



# V.A. Raeth Pollinator Garden

## SHG 2025-01 Grant Application

**Lauren Sampedro**  
**TEC Meeting**  
**2/12/2025**

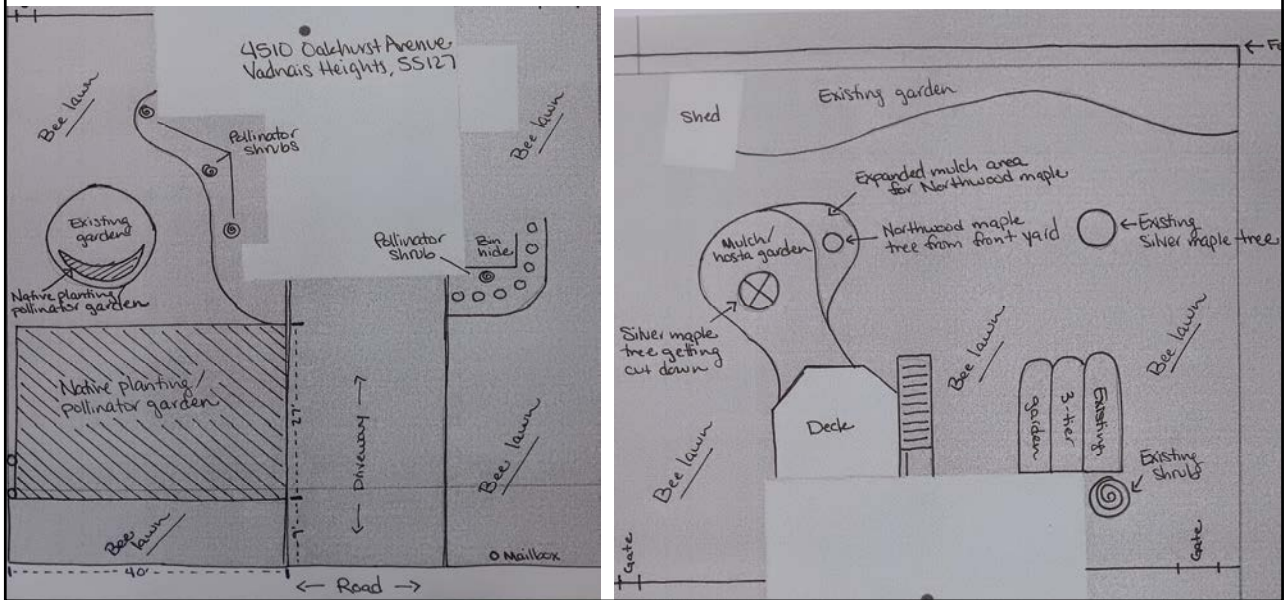


## SHG 2025-01 Location Aerial





## Proposed Plan



# Soil Health Grant Application



Submit completed application to:  
 Lauren Sampedro  
 lauren.sampedro@vlawmo.org

## Applicant Information:

Name:	Addis, David and Zink, Mary
Address:	30 Mallard Road
City/Township, State, Zip:	North Oaks, MN 55127
Phone:	651-246-6138
Email:	addiszink@gmail.com



## Project Summary:

ESTIMATED TOTAL PROJECT COST (\$)	\$23,282.78
AMOUNT REQUESTED (\$1,000 MAX or \$1,250 in Priority Area)	\$1,000
EXPECTED PROJECT COMPLETION (Month, Year)	June 2025

### PROJECT TYPE:

- Downspout/Small Raingarden
- Native Restoration/Pollinator Garden
- Turfgrass Replacement
- Other

If other, please describe the proposed project: \_\_\_\_\_

## Project Background:

Describe your property. What is the purpose of your project? Does your property connect to a lake, stream, ditch, or wetland in VLAWMO?	1.3 acre home site in residential area. Property abutts both Mallard and Robb Farm Roads. Extensive buckthorn and 5 mature amur maples were removed from the NW side of property by our manual labor. Contiguous to this area S to SW behind the home the property is a mix of trees, grasses & native vegetation. There is a wetland just across Robb Farm Rd
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## Project Background: Continued

<p>Describe how your project will support the goals of the Soil Health Grant Program. (See grant policy)</p>	<p>We have removed all the buckthorn from our property, 98% on the NW side of property, ~3000 sq ft, the proposed project site. Mature, heavily seeding Amur maples also taken out of several wetlands close by. We also are removing creeping charlie and some spurge. We hope to do our small part in improving water quality and soil health by replacing vegetation with native shrubs, plants, and flowers. It is also very imp't to us to support pollinators as I am dtr of a beekeeper and David is a retired one</p>
<p>Briefly describe the planned installation and maintenance activities for your project.</p>	<p>The installation will be done by professional landscapers with native vegetation experience. The plan includes mulching and access so that we can provide water and removal of invaders in the crucial early years. We have a neighborhood walking trail on the project perimeter and many neighbors are already engaged in what we are doing. This access will also be good for VLAWMO tours!</p>

## Project Specifications:

<p>TOTAL PROPERTY AREA (Acres)</p>	<p>1.3 acres</p>
<p>Total PROJECT SIZE (SQ FT)</p>	<p>Approx 3000 sq ft</p>
<p>IF APPLICABLE: DEPTH OF RAINGARDEN BASIN (Inches)</p>	<p>NA</p>



## Required Attachments:

- ⇒ Detailed drawing or plan of the proposed project.
- ⇒ Detailed project budget estimate with itemized costs and materials that equal your total estimated cost.

# VLAWMO Soil Health Grant Agreement



**It is understood that:**

1. The grantee is responsible for maintaining the project for at least 5 years after its installation. VLAWMO is not responsible for completing maintenance activities.
2. The grantee will participate in VLAWMO's outreach and project sharing efforts.
3. A project may be visited and inspected by a VLAWMO representative during the 5-year maintenance period.
4. Grant awards will expire within 1 year of grant approval unless the project is extended with VLAWMO approval.

The applicant's signature indicates their agreement to the above terms and certifies the grant application information is true and accurate. A VLAWMO staff signature will constitute an approved and executed grant agreement between the grantee and the VLAWMO.

**Applicant/Grantee**

Signature David Addis & Mary Zink Date 01/01/2025

Print David Addis and Mary Zink

**VLAWMO Staff**

Signature \_\_\_\_\_ Date \_\_\_\_\_

Print \_\_\_\_\_



# SHG 2025-02 Addis & Zink Native Plant Restoration Application



1:1,128

0 0.01 0.01 0.02 mi

0 0.01 0.02 0.04 km

Flow Arrows



Ramsey County Parcels



Project Location

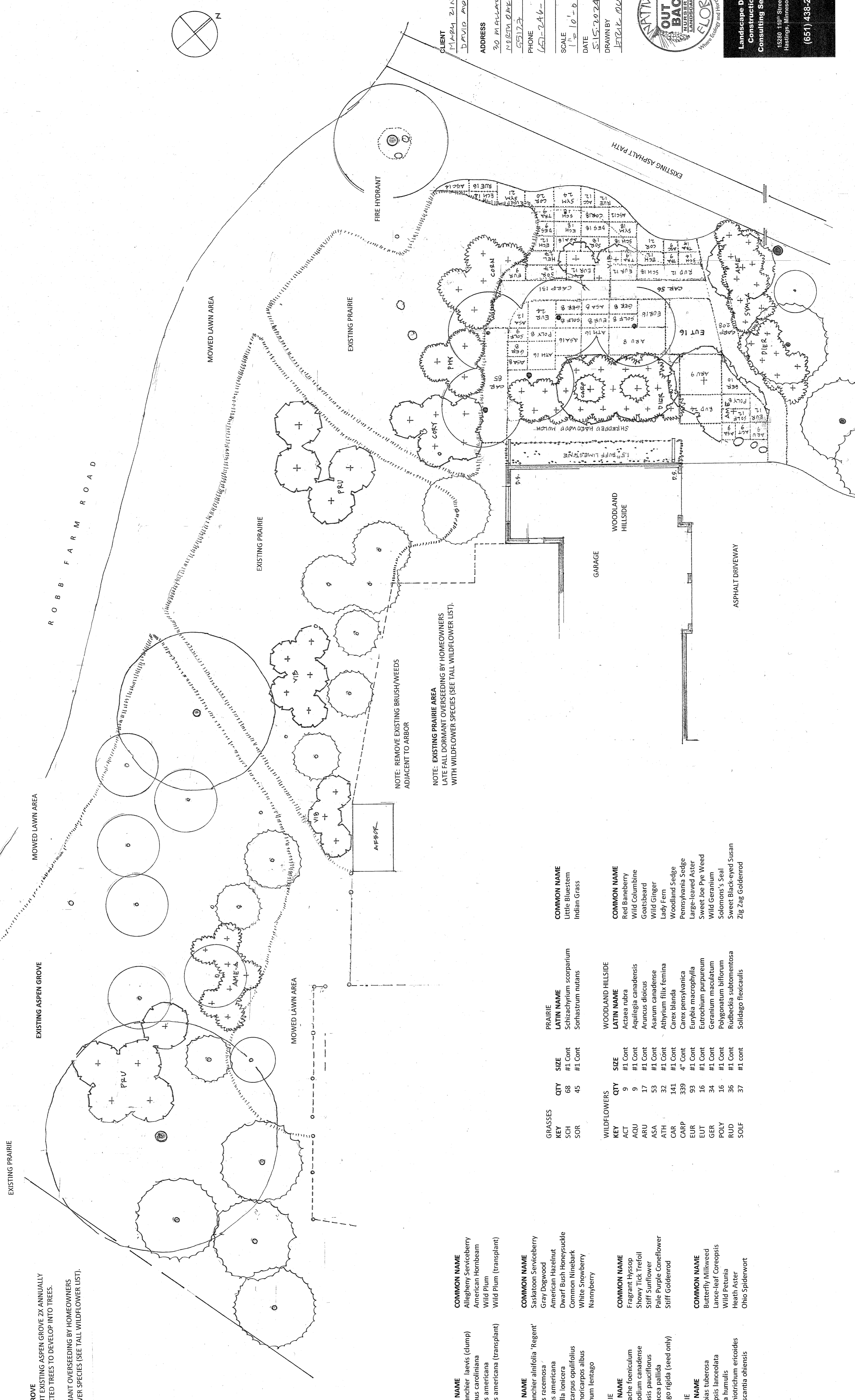
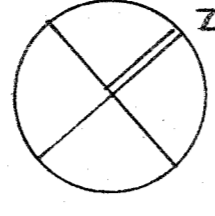


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# LANDSCAPE PLAN

POLLINATOR & BIRD FRIENDLY  
NATIVE PLANTINGS



NOTE: ASPEN GROVE  
MOW/BRUSH CUT EXISTING ASPEN GROVE 2X ANNUALLY  
TO ALLOW SELECTED TREES TO DEVELOP INTO TREES.  
  
LATE FALL DORMANT OVERSEEDING BY HOMEOWNERS  
WITH WILDFLOWER SPECIES (SEE TALL WILDFLOWER LIST).

NOTE: REMOVE EXISTING BRUSH/WEEDES  
ADJACENT TO ARBOR  
  
NOTE: EXISTING PRAIRIE AREA  
LATE FALL DORMANT OVERSEEDING BY HOMEOWNERS  
WITH WILDFLOWER SPECIES (SEE TALL WILDFLOWER LIST).

## PLANT SCHEDULE

TREES	KEY	QTY	SIZE	LATIN NAME	COMMON NAME
	AME	3	#25 Cont	Amelanchier alnifolia	Regent
	CARP	2	#15 Cont	Cornus racemosa	Gray Dogwood
	PRU	5	#5 Cont	Cornus americana	American Hazelnut
	PRU	4	3'-4'	Dicentra spectabilis	Dwarf Bush Honeysuckle
	SYM	3	#5 Cont	Physocarpus opulifolius	Common Ninebark
	SYM	3	#2 Cont	Symphoricarpos albus	White Snowberry
	VIB	11	#5 Cont	Viburnum lentago	Nannyberry
	AME-A	7	#5 Cont	Amelanchier alnifolia	Regent
	CORN	5	#5 Cont	Cornus racemosa	Gray Dogwood
	CORY	5	#7 Cont	Corylus americana	American Hazelnut
	DIER	23	#5 Cont	Dicentra spectabilis	Dwarf Bush Honeysuckle
	PHY	3	#5 Cont	Physocarpus opulifolius	Common Ninebark
	SYM-A	9	#2 Cont	Symphoricarpos albus	White Snowberry
	VIB	11	#5 Cont	Viburnum lentago	Nannyberry
	ACT	9	#1 Cont	Actaea rubra	Red Baneberry
	ACU	9	#1 Cont	Aquilegia canadensis	Wild Columbine
	ARU	17	#1 Cont	Aruncus dioicus	Goatsbeard
	ASA	53	#1 Cont	Asarum canadense	Lady Fern
	ATH	32	#1 Cont	Athyrium filix femina	Woodland Sedge
	CAR	141	#1 Cont	Carex pensylvanica	Pennsylvania Sedge
	CAR	339	4" Cont	Carex blanda	Large-leaved Aster
	EUR	93	#1 Cont	Eurochium purpureum	Sweet Joe Pye Weed
	EUT	16	#1 Cont	Eutrochium maculatum	Wild Geranium
	GER	34	#1 Cont	Geranium maculatum	Solomon's Seal
	POLY	16	#1 Cont	Polygonatum biflorum	Sweet Black-eyed Susan
	RUD	36	#1 Cont	Rubus occidentalis	Zig Zag Goldenrod
	SOLF	37	#1 cont	Solidago flexilis	Zig Zag Goldenrod
	ASC	47	4" Cont	Asclepias tuberosa	Butterfly Milkweed
	COR	59	3.5" Cont	Coreopsis lanceolata	Lance-leaf Coreopsis
	RUE	28	3.5" Cont	Ruellia humilis	Wild Petunia
	SYM	63	3.5" Cont	Symphoricarpos ericoides	Heath Aster
	TRA	42	3.5" Cont	Tradescantia ohiensis	Ohio Spiderwort

GRASSES	KEY	QTY	SIZE	PRAIRIE	COMMON NAME
	SCH	68	#1 Cont	Schizachyrium scorpiarium	Little Bluestem
	SOR	45	#1 Cont	Sorghastrum nutans	Indian Grass
	ACT	9	#1 Cont	Actaea rubra	Red Baneberry
	ACU	9	#1 Cont	Aquilegia canadensis	Wild Columbine
	ARU	17	#1 Cont	Aruncus dioicus	Goatsbeard
	ASA	53	#1 Cont	Asarum canadense	Lady Fern
	ATH	32	#1 Cont	Athyrium filix femina	Woodland Sedge
	CAR	141	#1 Cont	Carex pensylvanica	Pennsylvania Sedge
	CAR	339	4" Cont	Carex blanda	Large-leaved Aster
	EUR	93	#1 Cont	Eurochium purpureum	Sweet Joe Pye Weed
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	GER	34	#1 Cont	Geranium maculatum	Solomon's Seal
	POLY	16	#1 Cont	Polygonatum biflorum	Sweet Black-eyed Susan
	RUD	36	#1 Cont	Rubus occidentalis	Zig Zag Goldenrod
	SOLF	37	#1 cont	Solidago flexilis	Zig Zag Goldenrod

WOODLAND HILLSIDE	KEY	QTY	SIZE	LATIN NAME	COMMON NAME
	ACT	9	#1 Cont	Actaea rubra	Red Baneberry
	ACU	9	#1 Cont	Aquilegia canadensis	Wild Columbine
	ARU	17	#1 Cont	Aruncus dioicus	Goatsbeard
	ASA	53	#1 Cont	Asarum canadense	Lady Fern
	ATH	32	#1 Cont	Athyrium filix femina	Woodland Sedge
	CAR	141	#1 Cont	Carex pensylvanica	Pennsylvania Sedge
	CAR	339	4" Cont	Carex blanda	Large-leaved Aster
	EUR	93	#1 Cont	Eurochium purpureum	Sweet Joe Pye Weed
	EUT	16	#1 Cont	Eutrochium maculatum	Wild Geranium
	GER	34	#1 Cont	Geranium maculatum	Solomon's Seal
	POLY	16	#1 Cont	Polygonatum biflorum	Sweet Black-eyed Susan
	RUD	36	#1 Cont	Rubus occidentalis	Zig Zag Goldenrod
	SOLF	37	#1 cont	Solidago flexilis	Zig Zag Goldenrod

SHRUBS	KEY	QTY	SIZE	LATIN NAME	COMMON NAME
	AME	3	#25 Cont	Amelanchier alnifolia	Regent
	CARP	2	#15 Cont	Cornus racemosa	Gray Dogwood
	PRU	5	#5 Cont	Cornus americana	American Hazelnut
	PRU	4	3'-4'	Dicentra spectabilis	Dwarf Bush Honeysuckle
	PHY	3	#5 Cont	Physocarpus opulifolius	Common Ninebark
	SYM	3	#2 Cont	Symphoricarpos albus	White Snowberry
	VIB	11	#5 Cont	Viburnum lentago	Nannyberry

CLIENT: MARY ZIEM  
DANIEL AND S  
ADDRESS: 20 W CLEAR RD  
ROBB FARMS, MN  
55172  
PHONE: (651) 246-6138  
SCALE: 1" = 10'-0"  
DATE: 5/15/2024  
DRAWN BY: BETTIE MILES

**OUT BACK LANDSCAPING**  
Native Landscaping and Horticulture

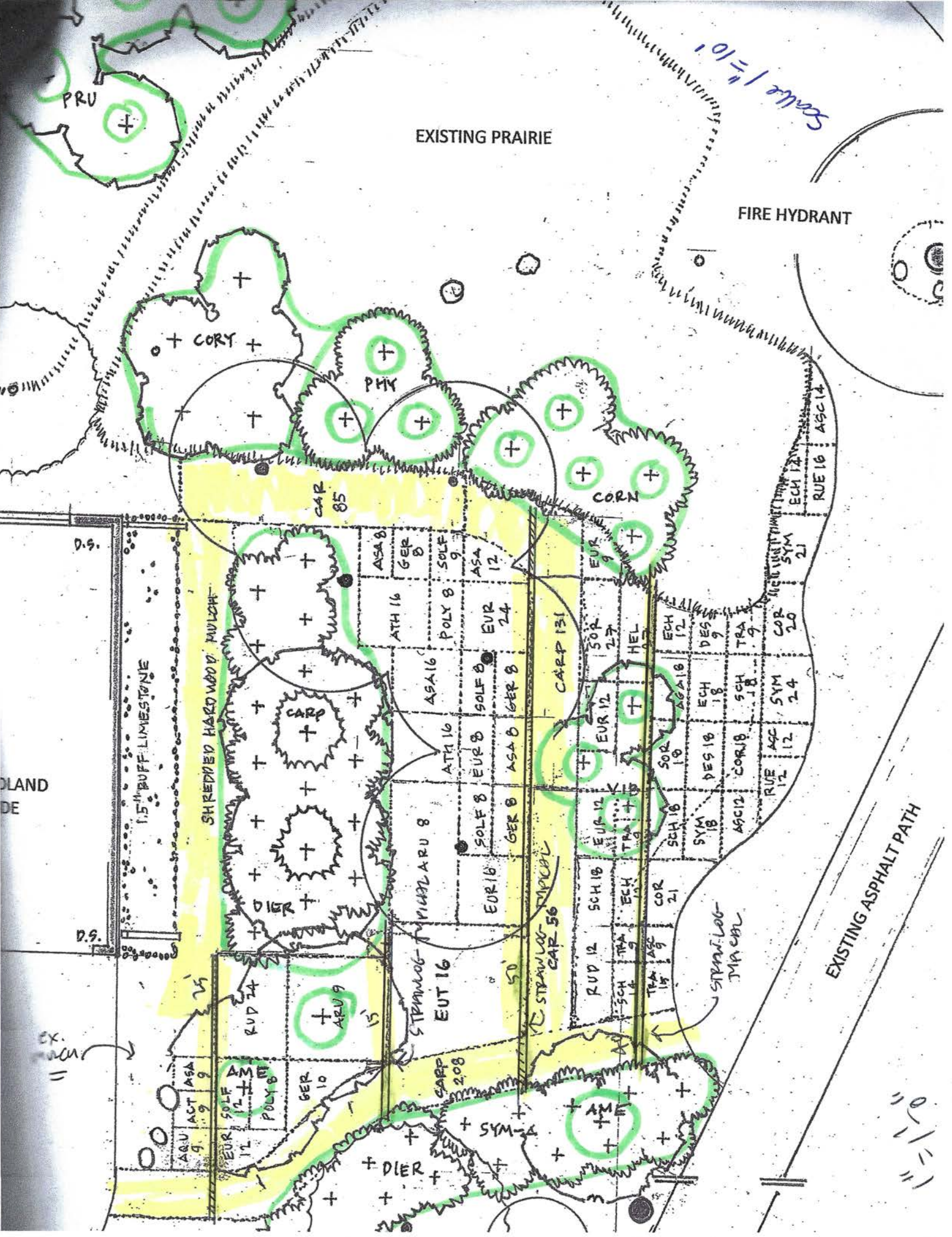
**Landscaping Design Construction & Consulting Services**  
15280 11th Street South  
Hastings, Minnesota 55033  
(651) 438-2771



Scale 1" = 10'

EXISTING PRAIRIE

FIRE HYDRANT





Out Back Nursery & Landscaping  
 15280 110<sup>th</sup> Street South  
 Hastings, MN 55033

651-438-2771 ext.12  
 651-438-3816 fax  
 erik@outbacknursery.com

Attached Notes

**Proposal No. 4021**

**12.31.2024**

Revised 1.21.2025

Mary Zink & David Addis  
 30 Mallard Road  
 North Oaks, MN 55127  
 651-246-6138  
 addiszink@gmail.com

**As per Landscape Plan**

**Pollinator and Bird Friendly Native Plantings**

Note: Proposed Native Seeding Area (Originally Hillside Perennial Area on Plan)

QTY	SIZE	NAME	MATERIAL	LABOR
<b>Site Prep:</b>				
650	s.f.	Apply/spot treat Creeping Charlie ( <i>Glechoma hederacea</i> ) with triclopyr 2 applications	35.39	255.30
1345	s.f.	Hand weeding Note: hand weed around existing large crabapple trees/Cottonwood		765.90
1716.5	s.f.	Dingo/rototilling: mechanically remove weeds Note: Soil loosening; raked out bed		1,446.70
2	c.y.	1.5" sized Buff Limestone (190 s.f.) Note: top dress over existing decorative stone; 3" depth-along garage	138.30	340.40
1	load	Delivery of Materials		172.50
		On-site Plant Layout		162.60

QTY	SIZE	NAME	MATERIAL	LABOR
<b>Planting/Seeding-Hillside Area path</b>				
9	c.y.	Shredded Hardwood Mulch (867 s.f.)	324.00	1,148.85
1	load	Delivery of Materials		172.50

QTY	SIZE	NAME	MATERIAL	LABOR
<b>Deer Exclusion Fences</b>				
11	Roll	5' x 50 Welded Wire Fence	1,062.38	936.10
98	unit	6' Studded T Post 1.25#	771.25	901.60
392		Cable Ties fasteners Labor		901.60
4	bag	100pk Black Cable Ties 11"	57.60	
2	load	Material Pickup		230.00
1	load	Delivery of Materials		172.50
<b>Exclusion pens (Hillside area)</b>				
14.5	c.y.	Shredded Hardwood Mulch	552.00	1,850.93
1	load	Delivery of Materials		172.50

**Deer Exclusion Fence Materials per Areas**

PRU (group of 4 on-site transplants)  
 2 rolls Welded Wire Fence (6' diameter)  
 16 Stakes  
 64 Cable Ties (4 per stake)  
 1.5 c.y. Mulch (4' diameter per plant)

**CORY-PHY-CORN**

3 rolls Welded Wire Fence (single perimeter)  
 25 Stakes  
 100 Cable Ties (4 per stake)  
 2 c.y. Mulch (4' diameter per plant)

**VIB (group of 3; Hillside perennial area)**

1 roll Welded Wire Fence (single perimeter)  
 9 Stakes  
 36 Cable Ties (4 per stake)  
 .5 c.y. Mulch (4' diameter per plant)

**AME (individual trees; Hillside perennial area)**

1 roll Welded Wire Fence (6' diameter each)  
 8 Stakes  
 32 Cables Ties (4 per stake)  
 1 c.y. Mulch (6' diameter per plant)

**DIER-CARP (Hillside perennial area)**

2 Roll Welded Wire Fence (single perimeter)  
 20 Stakes  
 80 Cables Ties (4 per stake)  
 5 c.y. Mulch

**DIER – AME - SYM-A (Hillside perennial area)**

2 rolls Welded Wire Fence (single perimeter)  
 20 Stakes  
 80 Cable Ties (4 per stake)  
 4.5 c.y. Mulch



TREES

KEY	QTY	SIZE	LATIN NAME	LABOR	MATERIAL
AME	3	#25 Cont	Amelanchier laevis (clump)	1293.75	765.90
CARP	2	#15 Cont	Carpinus caroliniana	434.70	340.40
PRU	4	3'-4'	Prunus americana (transplant)		193.20

SHRUBS

KEY	QTY	SIZE	LATIN NAME	LABOR	MATERIAL
CORN	5	#5 Cont	Cornus racemosa	195.50	241.50
CORY	5	#7 Cont	Corylus americana	249.85	241.50
DIER	23	#5 Cont	Diervilla lonicera	899.30	1110.90
PHY	3	#5 Cont	Physocarpus opulifolius	117.30	144.90
SYM-A	9	#2 Cont	Symphoricarpos albus	351.90	434.90
VIB	3	#5 Cont	Viburnum lentago	124.20	145.06

QTY	SIZE	NAME	MATERIAL	LABOR
1	load	Material Pick-up (Plants)		115.00
1	load	Delivery of Materials (Plants)		172.50

**Seed & Materials**

Prairie Area 380s.f.

QTY	SIZE	NAME	MATERIAL	LABOR
1000	s.f.	Shortgrass inexpensive prairie seed mix	80.50	340.40
500	s.f.	Seed mix filler/rice hulls	38.64	

Woodland Area 580 s.f.

QTY	SIZE	NAME	MATERIAL	LABOR
1000	s.f.	Shady Woodland Mix	434.70	680.80
1000	s.f.	Seed mix filler/rice hulls	48.30	
1	lb	Annual Rye Grass (960 s.f.)	3.22	

Note: Includes overseeding as needed

6	roll	Straw Wattle 9" dia.x 25' (63.60 each) (5 stakes per roll)	381.60	510.60
2	bundle	Wood stakes (40.23 each) (25 stakes/bundle)	80.46	
2	2.5 cuft	bag EZ Straw seeding mulch with tack (20.90 each)	82.70	170.20
1	load	Material Pick-up		115.00
1	load	Delivery of Materials/Mobilization		172.50

**Project Total: \$23,282.78**

Payment Terms: 50% down payment with signed contract; balance due upon completion of work.

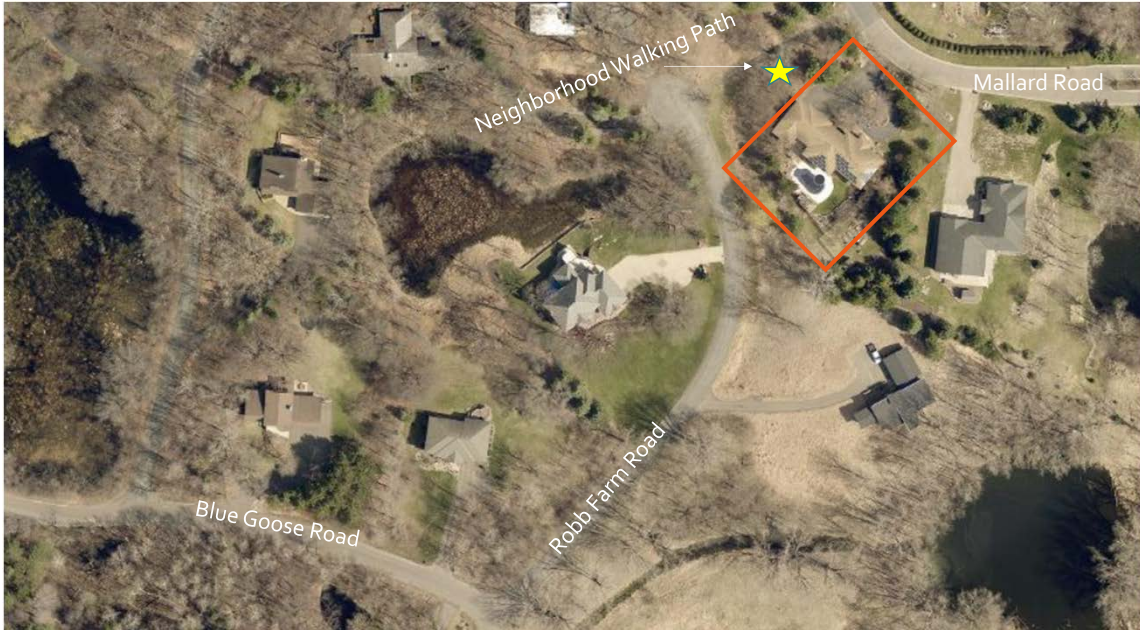
# V.B. Addis & Zink Native Plant Restoration

## SHG 2025-02 Grant Application

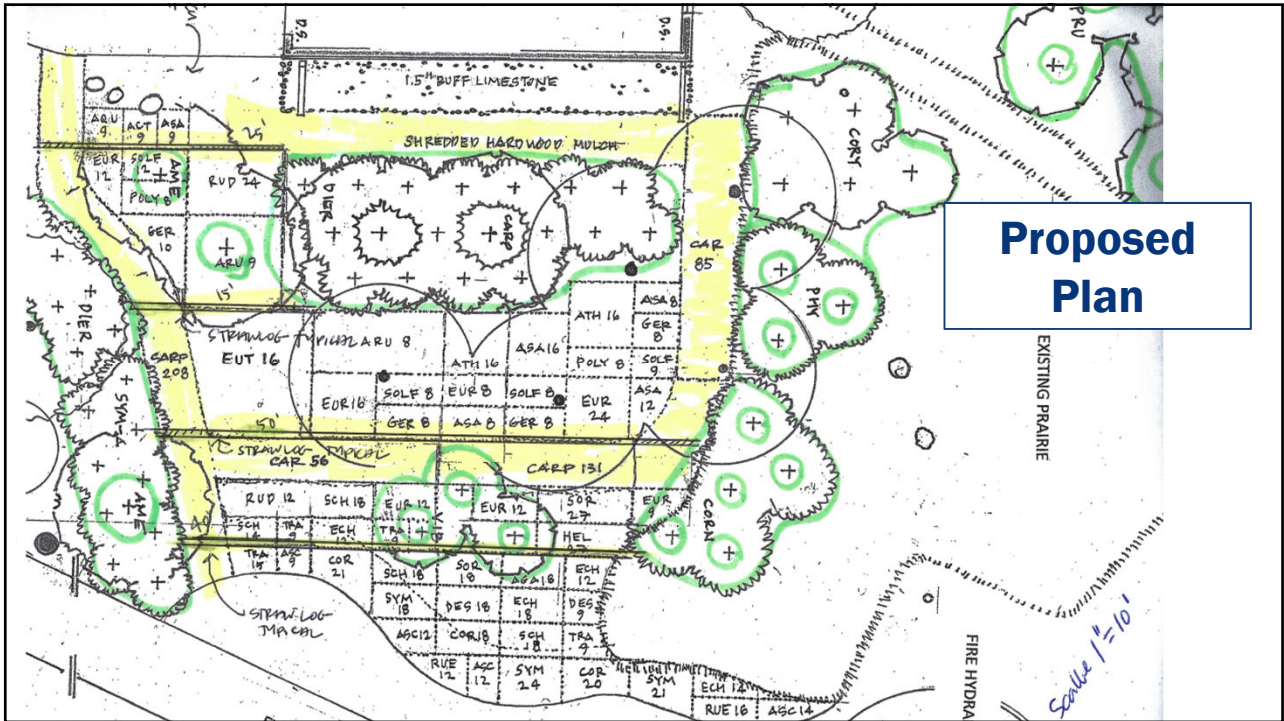
**Lauren Sampedro**  
**TEC Meeting**  
**2/12/2025**



### SHG 2024-09 Location Aerial



# Existing Area





**FIRST AMENDMENT TO THE CONTACTOR SERVICES AGREEMENT**  
(Tamarack Lake Alum Treatment Project)

This First Amendment (“**Amendment**”) is made and entered into this \_\_\_ day of \_\_\_\_\_, 2025 by and between the Vadnais Lake Area Water Management Organization (“**VLAWMO**”) and Lake Restoration, Inc. (“**Contractor**”).

**RECITALS**

- A. The parties entered into a Contractor Services Agreement dated August 28, 2024 (“**Agreement**”) to have the Contractor conduct up to four phases of alum applications to equal the full treatment on Tamarack Lake (the full treatment dose was determined in the feasibility study by Barr Engineering, which is part of the Agreement).
- B. The Contractor provided the phase 1 application in 2024 and the parties are planning to have the Contractor provide the phase 2 application during spring 2025.
- C. The parties desire to update the rates in the Agreement for the phase 2 application to be provided in 2025.
- D. The updated rates for 2025 are attached hereto as Exhibit A (“2025 Rates”).

**AMENDMENT**

In consideration of the mutual promises and agreements made between the parties regarding this matter, the parties hereby agree to amend the Agreement as follows:

- 1. Phase 2 Application. The parties agree that the 2025 Rates shall apply to the phase 2 alum application to be performed by the Contractor on Tamarack Lake, and that the 2025 Rates replace the rates contained in Exhibit B of the Agreement for the purposes of the phase 2 application. VLAWMO agrees to pay the Contractor based on the 2025 Rates for the phase 2 application.
- 2. Good Faith Negotiations. The parties agree to negotiate in good faith to agree upon amendments for the remaining phases of the project, the timing of which is contingent upon monitoring data and the project engineer’s recommendation.
- 3. No Other Amendments. This Amendment, which includes the recitals and the exhibit, is limited to updating the unit price amounts for phase 2 and negotiating in good faith regarding the rates for future phases. This Amendment does not modify any other provisions of the Agreement, all of which continue to remain in effect.

IN WITNESS THEREOF, the parties hereto have executed this Amendment as of the day and year written above.



**VLAWMO:**

By: \_\_\_\_\_  
Board Chair

By: \_\_\_\_\_  
Administrator

Date: \_\_\_\_\_

**Contractor:**

By: Paul Webster  
V.P. Sales and Marketing

Date: 01/28/2025

**EXHIBIT A**  
2025 Rates

[attached hereto]

# LAKE RESTORATION, INC.

YOUR LOCAL AQUATIC EXPERTS SINCE 1977



01/23/2025

Lake: Tamarack

County: Ramsey

Barr Engineering Company  
Attn: Greg Wilson  
4300 MarketPointe Drive, Suite 200  
Bloomington, MN 55435

## Lake Restoration Unit Prices - 2025 Spring Alum Treatment For Tamarack Lake:

Item	Description	Unit	Estimated Quantity	Unit Price	Extension
2.1	Mobilization/Demobilization to Tamarack Lake	EA	1	\$11,580	\$11,580
2.2	Aluminum Sulfate Application to Tamarack Lake	Pounds	20,000	\$0.73	\$14,600
<b>Total Price</b>					<b>\$26,180</b>

VLAWMO:

By: \_\_\_\_\_

Its: \_\_\_\_\_

Signed, \_\_\_\_\_

Contractor:

By: Paul Kretsch

Its: V.P. Sales & Marketing

Paul Kretsch

Signed, \_\_\_\_\_





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## MEMORANDUM

TO: Ann White Eagle, Ramsey County SWCD Director  
Phil Belfiori, Administrator  
Dawn Tanner, Program Development Coordinator

FROM: Emily Jennings (Lic. MN)

DATE: December 19, 2024

RE: Wilkinson Lake Field Investigations  
SEH No. RAMSE 180686 14.00

SEH performed field investigations for a potential meander project on the south side of Wilkinson Lake including a survey of water levels within the stream area and geotechnical evaluation. The field data is intended to provide further information on the constructability of the potential meander. The overall project is being led by the Vadnais Lake Area Water Management Organization (VLAWMO) however Ramsey County SWCD funded the field investigations described herein. For more information on the project background, refer to the Task Order No. 2023-02: Wilkinson Meander Concept Analysis Memo dated May 20, 2024.

### Survey Collection

On November 8, 2024, SEH survey staff collected survey data of the existing stream channel and the Wilkinson Lake outlet. Figure 1 shows the ground and water elevations collected. The lowest outlet weir elevation was recorded at 894.56 so we assume that this elevation is approximately the normal water level of the lake. During the time data was collected, the water elevation near the outlet was recorded at 895.30. This is not surprising to assume the lake level remains high following several months of wet and rainy conditions.

The collected data shows that the existing stream channel from the outfall north of private drive to the boardwalk (approximately 1,290 feet long) is quite flat, ranging in elevation at the thalweg from 895.0 to 892.1 (channel slope of 0.2%). The elevations taken at the outfall confirm the observation that there is some minor erosion occurring at the outfall location. Additionally, the cross-sectional information collected also suggests that the stream may be incised. The water surface elevations throughout the stream were similar (water elevation slope <0.1%) during the survey collection, with stream depth varying from approximately 1-2 feet, deepening as it approaches the boardwalk. The collected data suggests that the ditch equalizes with the anticipated lake normal water level approximately 200 feet north of the outfall. It is reasonable to assume that this elevation spreads out further north, similar to the pattern of the LiDAR contours. The approximated lake level elevation contour is shown in Figure 1.

### Geotechnical Evaluation

The geotechnical site observations and considerations are summarized in the attached preliminary geotechnical memo.



### Constructability and Final Recommendations

As indicated in the geotechnical considerations memo, high groundwater and soft terrain is expected in the potential meander area. Specialized equipment may be necessary to complete construction. However, weather conditions may play a significant role in the success of means and methods. Due to the uncertainty of the constructability within the wet areas, it is suggested that the any construction near the boardwalk or other inundated areas be avoided.

The recommended alignment for a potential meander is one similar to the main option as shown in the concept alignment noted as a “third” option (Figure 4 in Wilkinson Meander Concept Analysis Memo modified for this memo and attached). The oxbow remains optional while the add alternate is not recommended.

This configuration, coupled with data collected in the field, would result in the following:

- A reduction in proposed meander length from 2,400-2,600 feet to approximately 1,300 feet
- A reduction in estimated pollutant removals

Reducing the meander length to just the upstream segment removes a large portion of the floodplain available to the system. However, the expected normal water level of the lake area appears to be much further south than anticipated, resulting in less floodplain area than initially thought. Pollutant removal estimates were initially based on the connection to this floodplain using a weighted average flow available to the floodplain (more flow = more pollutant loading available for removal). Due to the decrease in floodplain area and suspected flow path of water within the floodplain relative to the revised meander configuration, our qualitative assessment based on engineering judgement is that there is now reduced flow available to the floodplain (less flow = less pollutant removal). Revised estimates following the methodology described within the Wilkinson Meander Concept Analysis Memo and aforementioned engineering judgement are a removal of 53 pounds of Total Phosphorus (TP) and 7.8 tons of Total Suspended Solids (TSS) annually. The recommendation for sampling and monitoring to better refine these removals and removal potential in the future remains.

It is also recommended that VLAWMO speak with contractors and operators of specialized equipment used in wetland construction for their expertise on the challenges and opportunities within the project area.

EKJ

### Attachments

Preliminary Geotechnical Memo

Figure 1 – Wilkinson Lake Field Investigation

Figure 4B – Meander Option 3 (Figure 4 in Wilkinson Meander Concept Analysis Memo modified for this memo)

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## MEMORANDUM

TO: Ann White Eagle, Ramsey County SWCD Director  
Phil Belfiori, Administrator  
Dawn Tanner, Program Development Coordinator

FROM: Brett W. Larsen, PE (Lic.MN)

DATE: December 6, 2024

RE: Wilkinson Lake - Preliminary Geotechnical Considerations  
SEH No. RAMSE 180686 14.00

This memo is intended to provide a summary of the Wilkinson Lake geotechnical site observations and hand auger probes and to provide considerations for construction of the proposed stream meander project through the existing wetland.

### BACKGROUND

Wilkinson Lake is a shallow body of water, with an average depth of 2 feet and surface area of approximately 90 acres. It is surrounded by wetlands. A stream which flows from south to north through the southernmost wetland complex before entering Wilkinson Lake is being considered for a potential meander.

SEH previously provided feasibility recommendations for restoration of the stream through the wetland to improve channel geomorphology, habitat, and water quality. Refer to SEH Memo for Task Order No. 2023-02 Wilkinson Meander Concept Analysis dated June 25, 2024, for additional discussion of the proposed meander concept and figures which illustrate alignment of the proposed meander.

### WETLAND OBSERVATIONS OF SUBSURFACE CONDITIONS

Based on review of geologic maps, the wetland complex, through which the proposed stream meander will extend, is anticipated to consist of Seeleyville muck which is typically characterized poorly drained peat and organic soils. A Preliminary Geotechnical Investigation of the accessible areas in vicinity of the proposed meander was recommended as part of the next steps from the previous SEH memo. Due to wet and soft conditions anticipated, hand equipment was proposed to collect subsurface information within the wetland near the proposed meander alignment. The hand auger consisted of a 4-inch diameter bucket-type auger.

On September 9, 2024, SEH staff visited the site to attempt site exploration of the wetland. At that time standing water was observed just off the edge of the access road. Since this was notably higher than it had been observed during other periods of observation, a decision was made to delay field exploration.

Following weeks of warm and dry weather with minimal rainfall, SEH staff returned to the site on October 18, 2024. Generally, standing water levels had receded from areas observed during the September site visit but the proposed project area remained saturated, as shown in Figure 1.



**Figure 1. Wet conditions observed during October 18, 2024, Visit**

Four (4) hand auger borings (HAB's) were performed within the wetland as shown in locations in Figure 2.



**Figure 2. Hand auger locations performed on October 18, 2024**



It should be noted that hand auger borings could not be completed along the entire proposed meander due to site access, standing water, and soft ground. Locations were selected based on accessibility and proximity to the proposed alignment. Our HAB's were completed in the south portion of the meander in the general location of Options 2 and 3. The HAB's were advanced in intervals of approximately 5 inches to discretely sample and observe soil conditions as shown in Figure 3. Hand augers were desired to maximum depth of 4 feet but due to the high groundwater and soft soils, the holes were prone to collapsing. Hand augers were terminated at depths ranging from about 2 ½ to 3 feet.



**Figure 3. Hand auger advancement for sampling of wetland soils**

The conditions observed at each of the hand auger locations were similar. Surficial root zone overlying decomposed (sapric) peat. Sapric peat is the most decomposed where plant structure is no longer visible, and it contains little to no intact plant fiber. Table 1 summarizes the depths and observations of soils from the hand auger holes.

**Table 1. Summary of Subsurface Condition Observations from Hand Augers**

Hand Auger Location	Surficial Root Zone Thickness (in)	Depth <sup>1</sup> of Water (in)	Depth <sup>1</sup> of Termination of Hand Auger (in)	Description of Material underlying root zone
HA1	11	7	29	Black to dark brown, sapric peat
HA2	10	0	30	Black to dark brown, sapric peat
HA3	5	6	30	Black to dark brown, sapric peat
HA4	9	9	39	Black to dark brown, sapric peat
1. Depth as measured below existing ground surface at the time the hand auger was performed.				



## WETLAND CONSTRUCTION CONSIDERATIONS

The site exploration confirms presence of significant peat deposits in area of the proposed stream meander which extend to depths greater than proposed for excavation of the channel. The presence of deep peat deposits presents constructability and design challenges for the project. Peat is characterized as having low shear strength (in this case ability to support construction equipment and to resist scour), high compressibility, and high water content.

Construction of the proposed stream meander will primarily involve excavating the existing surficial root zone and portions of underlying peat to develop a new channel. The new channel is expected to extend approximately 2 feet below the existing ground surface. Based on observations at the site, this will require complete removal of the existing root mat and extend below groundwater depending on the time of year the excavations are performed.

The existing root mat once removed will expose soft saturated peat which will be highly susceptible to disturbance under construction traffic and provide minimal support to construction equipment or laborers. Any construction in the wetland will require construction matting to support the weight of construction equipment. Usage of low ground contact (tracked) construction equipment is also recommended. Since even installation and movement of matting may be prohibitive usage of amphibious excavators could be considered. These excavators are equipped with specialized undercarriage which includes floatation ballast and hydraulic systems to operate in soft terrain.

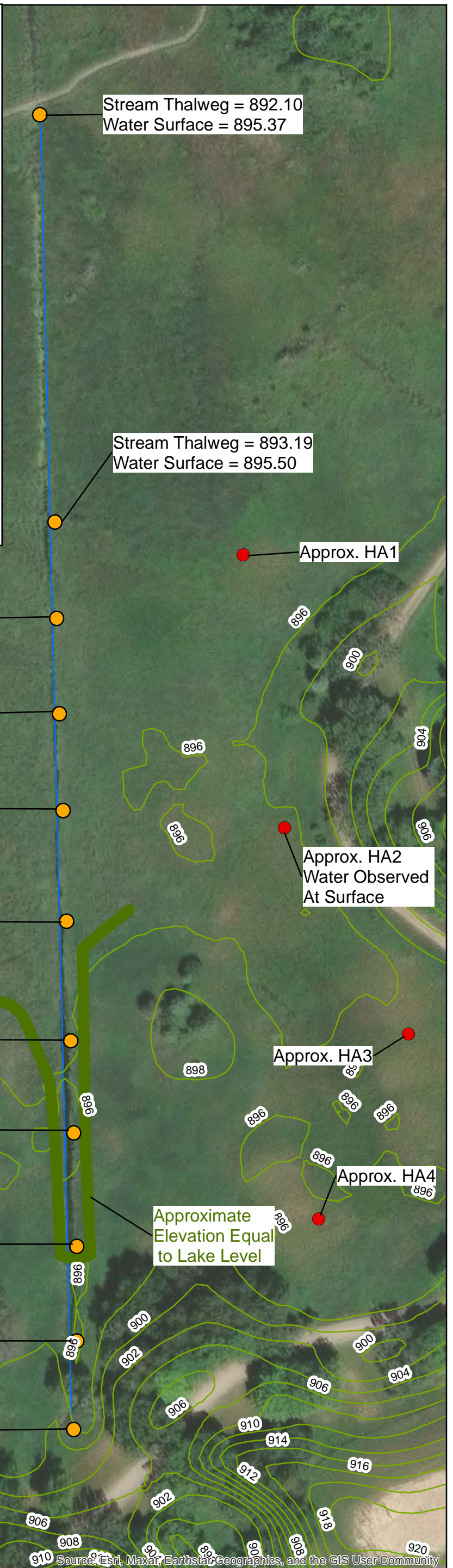
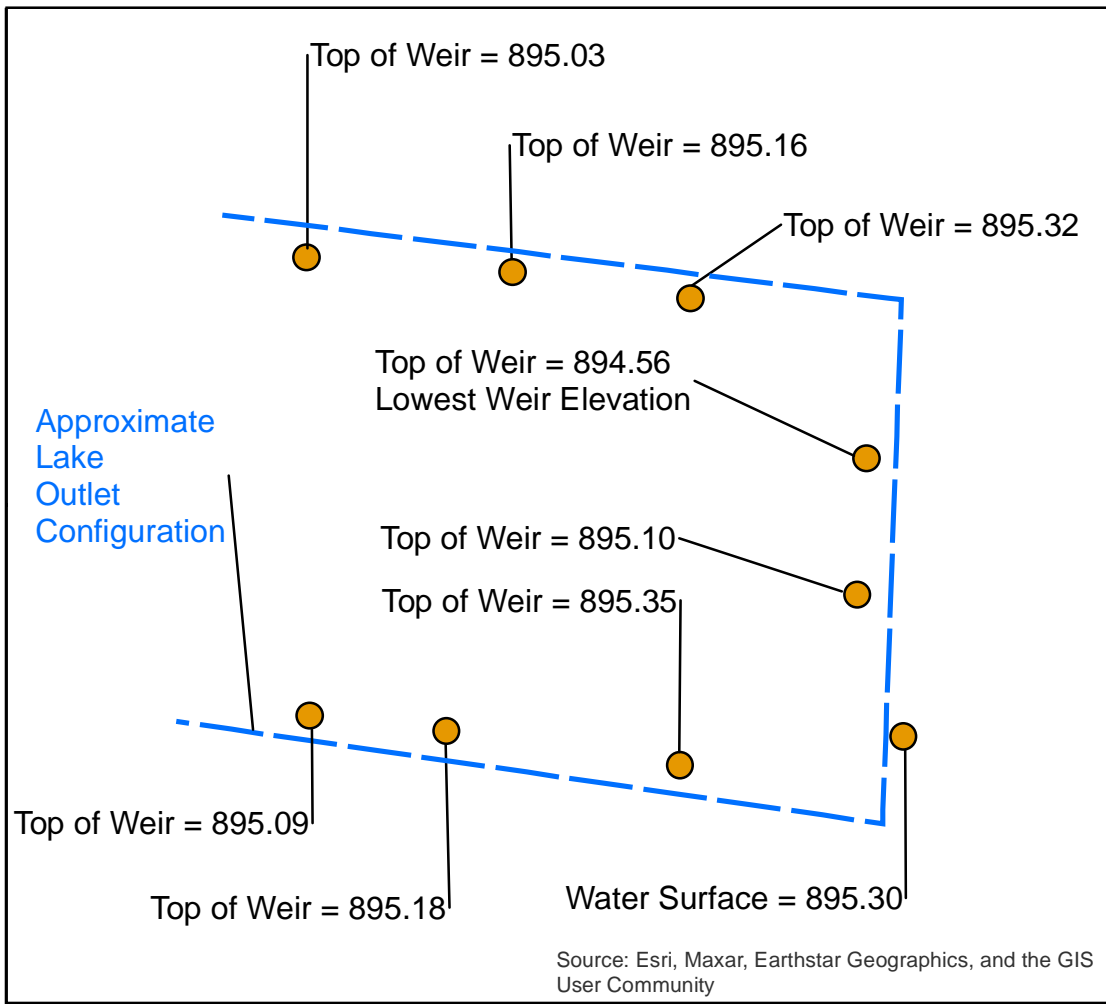
Material which is excavated from the new channel alignment will need to be removed and relocated in upland areas to reduce disturbance to the wetland. To reduce geotechnical instability, the meander banks should be constructed no steeper than 10H:1V. Initial excavation of the slopes is anticipated to be challenging due to saturation and high groundwater level within the wetland. It is recommended that the meander be constructed in the dry. Strong consideration should be made to restrict work within wetland to periods of drought or during winter when water levels are anticipated to be lowest, and the ground is frozen. If construction proceeds during wet periods of the year and/or when the water level is high, contractors will need to be prepared to lower groundwater in localized areas of planned excavations.

The peat once exposed along the steam banks and where it remains as the meander bed substrate will be highly susceptible to scour and erosion. Once the channel is graded the banks should be covered as quickly as possible with seed and erosion control fabric. Where peat/muck remain in the meander bed, consideration should be given to the potential for increased sediment loading during bankflow discharge which may cause aggradation or degradation of the stream. Meander design should take this into account as changes to the stream that increase slope or water depth can increase shear stress, thus increasing erosion of the banks and bed.

bwl

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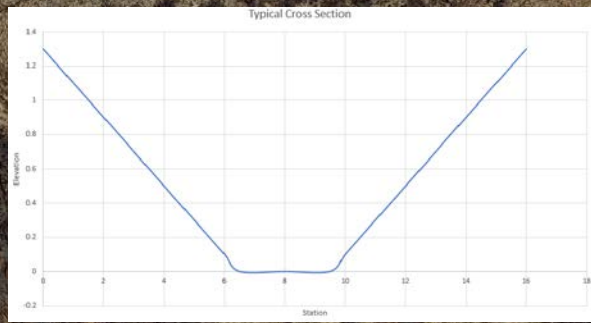
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			Project: RAMSE 180686 Print Date: 12/17/2024	<h2>Wilkinson Lake</h2> <h3>Field Investigation</h3> <p>VLAWMO</p>	<h1>Figure 1</h1>
			Map by: ejennings Projection: Source:		

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



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Approximate 895 Contour


Possible earlier termination of meander main option

**Legend**

- Add Alternate
- Main Option
- Main Option - Oxbow

0 100 200 400 Feet



	Project: VADLA 171749 Print Date: 5/17/2024	<b>Meander Option 3</b> Wilkinson Meander Feasibility North Oaks, MN	<b>Figure 4B</b>
	Map by: mchristenson Projection: Ramsey County Source: UMN, MnDNR		

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



**Memorandum of Understanding Between the City of  
White Bear Lake and the Vadnais Lake Area Water Management  
Organization Regarding Restoration of the Rotary Nature Preserve Wetland**

This Memorandum of Understanding (“**MOU**”) is made and entered into by and between the City of White Bear Lake (“**City**”) and the Vadnais Lake Area Water Management Organization (“**VLAWMO**”), each acting by and through its duly authorized governing bodies.

**RECITALS**

- A. The City and VLAWMO have partnered successfully on three sequential, prior phases of restoration at the Rotary Nature Preserve (“**Rotary Park**”), including upland and buffer areas, most recently including formal partnership into 2025.
- B. The City and VLAWMO partnered to complete a 5-year (2025-2029) Rotary Park wetland vegetation management plan and budget sheet, which is attached hereto as Exhibit A, (“**Study**”) for the restoration of 21 acres of wetland in Rotary Park (“**Project**”) with the contractor (“**Contractor**”) selected to conduct the Project.
- C. The City Council considered the Study at its March 28, 2023 meeting and agreed to move forward with the Study and Project (Resolution No. 13171).
- D. The completed Study was presented to the VLAWMO Board at its February 21, 2024 regular meeting, and submission of the grant proposal to complete the work described in the Study was authorized by the VLAWMO Board at its August 28, 2024 regular Board meeting:

Director Rafferty moved and Director Riedesel seconded authorization of VLAWMO and the City of WBL to submit a grant proposal to CPL for restoration of wetlands in Rotary Park, consistent with the prioritization study and budget prepared by NST, to begin in 2025.
- E. VLAWMO, in partnership with the City, submitted a Conservation Partners Legacy (CPL) grant (“**Grant**”) proposal with the Minnesota Department of Natural Resources that requested funding to complete four years of the phased activities described in the Study.
- F. The Grant provides \$110,250 in grant funding and requires an in-kind/cash match from the City and VLAWMO of \$12,250 (\$9,750 cash match to be shared equally between VLAWMO and the City and \$2,500 in-kind contribution by VLAWMO).
- G. The City and VLAWMO were notified in December 2024 that the Grant proposal was selected for funding and are in the process of taking the steps necessary to accept the Grant (as of January 2025).
- H. The City and VLAWMO included funding for the cash match portion of the Grant in the current 2025 budgets and commit to including funding for the remaining years identified in the Grant agreement through and including the 2028 annual budget.
- I. The City and VLAWMO also commit to including funding in their respective budgets and working together in good faith to develop an agreement, at a later date, for year five (2029) work as defined in the approved Study.



- J. Annual maintenance for the Project, estimated at \$4,000-\$8,000 in the Study, would begin in year six (2030).
- K. Both parties wish to clearly define their respective roles in implementing the activities described in the Grant workplan.

## **AGREEMENT**

In consideration of the mutual promises made herein, the parties agree as follows:

- 1. City Responsibilities. City agrees to do each of the following:
  - a. Collaborate to provide input to VLAWMO for Project management and oversight.
  - b. Attend meetings and participate in discussions related to Project planning.
  - c. Approves the activities in the Grant workplan to be conducted on Rotary Park.
  - d. Provide land access to VLAWMO and the Contractor to conduct the Project as set out below.
  - e. Provide Project outreach and education including but not limited to erecting signage.
  - f. Reimburse VLAWMO for 50% of cash match (\$9,750 total cash match; 50% = \$4,875).
  - g. Work together in good faith to develop an agreement, at a later date, for year five (2029) work as defined in approved Study.
  - h. Work together in good faith to develop an agreement, at a later date, for the initial 10 years of maintenance (2030-2039) of the Project, as defined in approved Study. Partners plan to share maintenance costs 50/50, with an anticipated amount not-to-exceed \$8,000 per year, unless an increase is mutually agreed upon by both partners to accommodate specific needs identified by the contractor conducting maintenance at the site.
  - i. Contract for the initial 10 years of maintenance (2030-2039) of the Project.
  - j. Prepare and provide an invoice annually for reimbursement to VLAWMO for 50% of the maintenance costs.
  
- 2. VLAWMO Responsibilities. VLAWMO agrees to do each of the following:
  - a. Project management and oversight of Grant workplan activities.
  - b. Enter into a contract/letter agreements for each of the four years of the Grant (2025-2028) with the Contractor to complete the Project and pay for services included in the contract.
  - c. Complete grant administration and reporting.
  - d. Attend meetings and participate in discussion related to Project planning.
  - e. Assist the City with Project outreach and education.
  - f. Conduct, document, and submit documentation to CPL for the in-kind match of \$2,500.
  - g. Prepare and provide an invoice for reimbursement to the City for 50% of cash match (\$9,750 total cash match; 50% = \$4,875).
  - h. Work together in good faith to develop an agreement, at a later date, for the year five (2029) work as defined in approved Study.
  - i. Work together in good faith to develop an agreement, at a later date, for the initial 10

years of maintenance (2030-2039) of the Project, as defined in approved Study. Partners plan to share maintenance costs 50/50, with an anticipated amount not-to-exceed \$8,000 per year, unless an increase is mutually agreed upon by both partners to accommodate specific needs identified by the contractor conducting maintenance at the site.

3. License for Access. The City hereby grants VLAWMO, the Contractor, and their respective employees and agents a license to access Rotary Park at all reasonable times and as may reasonably be needed to undertake and complete the work on the restoration project as described in the Grant workplan and in the Study.
4. Term. This MOU is effective on the date of the last party to execute it. This MOU shall terminate upon completion and successful close-out of the Grant.
5. Legal Compliance. Each party is responsible for complying with all applicable federal, state, and local laws, rules, regulations, and ordinances in carrying out their respective obligations under this MOU.
6. Entire Agreement; Amendments. This MOU constitutes the entire agreement between the parties regarding this matter. No amendments to this MOU are valid unless they are in writing and signed by both parties.

IN WITNESS WHEREOF, the parties have caused this MOU to be executed by their duly authorized representatives and is effective as of the date of the last party to execute it.

**City of White Bear Lake**

**Vadnais Lake Area Watershed  
Management Organization**

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
Chairperson

\_\_\_\_\_  
City Manager

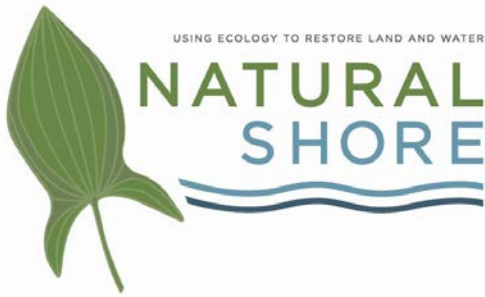
\_\_\_\_\_  
Administrator

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**EXHIBIT A**  
Project Plan

[attached hereto]



**Date:** December 14, 2023

**To:** Dawn Tanner, Natural Resources Specialist, VLAWMO

**Memo Description:** Budget Addendum to the report titled, “Rotary Nature Preserve Wetland – Plant Community Assessment and Management Recommendations.” Please refer to page 18 of the report for a detailed summary of restoration tasks.

**Preliminary Restoration Schedule with Associated Budget:**

Task #	Plant Comm.	Restoration Elements	Cost Est.	Timeline
1	WMn82b and MRn93	Spot herbicide, weed whip, and cut cattail below water level – outlier patches	\$25,000 - \$30,000	2025
2	Perimeter around WMn82b stands	Target RCG/PL and RCG/PL/CT stands around WMn82b		
3,5	RCG, MRn93 and WMn82b1	Spring/summer mowings and fall herbicide treatments - RCG		
1	WMn82b and MRn93	Spot herbicide, weed whip, and cut cattail below water level – outlier patches	\$25,000 - \$30,000	2026
2	Perimeter around WMn82b stands	Target RCG/PL and RCG/PL/CT stands around WMn82b		



3	MRn93 and WMn82b1	Site prep. - seed and plant – erosion control		
5	RCG (NE section closest to parking area	Site prep. - seed and plant – erosion control	\$30,000	2027
6	RCG/PL and RCG/PL/CT	Treat test plots in the northwest portions of the wetland		
5	RCG (Eastern side parallel to walking path	Site prep. - seed and plant – erosion control	\$30,000	2028
6	RCG/PL and RCG/PL/CT	Area scope and restoration approach based on test area results	\$30,000	2029

**NOTES:**

Maintenance costs are not included above. Once, restoration is initiated, annual maintenance activities would range from \$4,000-\$8,000, depending coverage and the invasive weed response to initial control efforts.

Purple loosestrife beetle rearing can be performed by volunteers, thus it is not included in the budget summary above.

Restoration efforts past 2029 will be shaped by restoration results and pilot test results that take place in the RCG/PL and RCG/PL/CT meadows (northwest section of the wetland).