

VLAWMO TECHNICAL COMMISSION MEETING
8:00 AM March 8, 2023

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

Action items: ✈

- I. **Call to Order – 8:00am – Chair Jesse Farrell**
- II. **Approval of Agenda**
- III. **Approval of Minutes (February 8, 2023)**
- IV. **Administration & Operations**
 - A. Financial Report for March and Authorization for Payment – Phil ✈ **pg. 9**
- V. **Programs**
 - A. Cost Share Packet Preview- Lauren **pg. 17**
- VI. **Projects**
 - A. Update Wilkinson BMP- Dawn **pg. 17, 20**
 - B. Amelia SLMR recommendation to the Board- Dawn ✈ **pg. 18**
 - C. Recognition of completion of the 15-year SLMP/SLMR effort - Dawn **pg. 18**
 - D. Update on WB Township Smart Irrigation Grant Application- Lauren **pg. 19, 27**
 - E. Update on City of Vadnais Heights Smart Irrigation Grant Application- Lauren **pg. 19, 29**
 - F. Update on Westfield Park Bioswale Grant Application- Lauren **pg. 19, 31**
- VII. **Commissioner Reports**
- VIII. **NOHOA**
- IX. **Ramsey Soil & Water Conservation Division**
- X. **St. Paul Regional Water Services**
- XI. **Public Comment**
- XII. **Next Meetings:** TEC: April 12th, Board Meeting: April 26th
- XIII. **Adjourn**

Upcoming Events:

WAV spring meeting: March 7th
Public meeting on Wilkinson Lake BMP
Project : March 22nd
Grant program open house: March 23rd
Landscaping guest speaker: April 11th
Raingardens 101: April 20th

**Vadnais Lake Area Water Management Organization
Technical Commission (TEC) Minutes
February 8th, 2022
Vadnais Heights City Hall, Council Chambers
800 County Road E East, Vadnais Heights, MN 55127**

Commission Members Present:

Jesse Farrell	Chair, Vadnais Heights (VH)
Gloria Tessier	Vice Chair, Gem Lake (GL)
Andy Nelson	Lino Lakes (LL)
Terry Huntrods	White Bear Lake (WBL)
Jami Philip	White Bear Township (WBT)

Absent: North Oaks Commissioner (unassigned)

Others in attendance: Phil Belfiori, Dawn Tanner, Brian Corcoran, Lauren Sampedro, Nick Voss (VLAWMO staff), Susan Miller (North Oaks Home Owners' Association), Julie Hupperts (NOHOA), Jeremy Erickson (SPRWS)

I. Call to Order

Chair Farrell called the meeting to order at 8:03 am.

II. Approval of Agenda

It was moved by Commissioner Tessier and seconded by Commissioner Huntrods to approve the February 8th, 2023, TEC agenda Vote: all aye. Motion passed.

III. Approval of Minutes (January 11, 2022)

It was moved by Commissioner Huntrods and seconded by Commissioner Nelson to approve the January 11th, 2023, meeting minutes as presented. Vote: all aye. Motion passed.

IV. Administration & Operations

A. Financial Report for February and Authorization for Payment

Administrator Belfiori outlined the structure of the financial report for new TEC members. Notable expenditures include SSU funds from the end of 2022, Watershed Partners, and Spent lime on Oak Knoll Pond. Administrator Belfiori noted that the budget is where it needs to be for the month of February.

Chair Farrell asked Administrator Belfiori to explain how the SSU is collected. Administrator Belfiori explained that the Board of Directors sets the approved budget rate

for the year and identifies the necessary SSU income to meet that budget. The Board approved SSU information from the budget is then sent to Ramsey and Anoka counties who administer the change. The income to VLAWMO comes in 3 installments Counties (approximately in June, Nov, Jan). This serves as VLAWMO's primary local income source. Belfiori also noted that the parcel charges in the SSU are based on an average stormwater runoff coefficient based on the size of the parcel and land use type. The charge is meant as a general representation of how much runoff is generated from that type of land use.

It was moved by Commissioner Tessier and seconded by Commissioner Huntrods to approve February financial report and authorization for payment. Vote: all aye. Motion passed.

B. February TEC Report to the Board

Administrator Belfiori outlined the February TEC Report to the Board. Highlights include the spent lime demonstration project in Oak Knoll Pond in White Bear Lake, inspections on the public drainage system, website renovation, and cost-share program projects beginning. Current efforts also include the 2022 audit.

It was moved by Commissioner Huntrods and seconded by Commissioner Nelson to approve the February TEC Report to the Board. Vote: all aye. Motion passed.

C. Revisit appointments and officers

Administrator Belfiori outlined the role of the treasurer, which is a role that reviews and fields questions on the treasurer report before it gets submitted into the TEC packet. Chair Farrell facilitated a discussion about the format of the TEC meetings including a space for questions, inquiry, and learning. He outlined the current roles and discussed a long-term vision of rotating through TEC roles.

It was moved by Commissioner Farrell and seconded by Commissioner Tessier to confirm the 2023 Technical Commission officer appointments. Vote: all aye. Motion passed.

V. Programs

A. Spring event calendar preview

Voss presented the spring 2023 activity calendar including webinars and in-person workshops. He also summarized recent MS4 partners efforts that were dispersed to VLAWMO's member communities, including resources for MS4 related newsletters, infographics, preparing for City clean-up days, and tools for promoting VLAWMO's spring workshops. No action item was included, item serves as informational.

B. Website update

Voss provided an update regarding the VLAWMO website renovation. VLAWMO and web consultants at HDR have completed a review of the old (existing website) and are currently shaping a wire frame mock-up webpage. The first phase of the renovated website is expected to launch in 2023.

Chair Farrell inquired about how hardcopy educational material is distributed to all of the cities and Township. Voss provided that hardcopies are delivered to most municipalities in person annually. Voss added that the City of Lino Lakes delivery has not been within this regular annual distribution but this is available by request.

Commissioner Nelson inquired if VLAWMO workshops are open to anyone. Voss responded that the workshops are open to everyone, but staff promote them more locally.

C. Cost Share updates

Sampedro provided an overview of three new potential Landscape Level 2 grant applications. Sampedro provided an update on the new efforts to establish a pilot demonstration project for smart irrigation in Vadnais Heights. Options include the Vadnais Heights City Hall/Fire Station or the Commons Park. A soil moisture controller and a weather-based controller will be used to analyze how irrigation water use and cost savings adjust based on the system's adaption to weather conditions. A second smart irrigation controller pilot program is also in progress in White Bear Township at Polar Lakes Park, the Township's administration office, and Columbia Park. Staff anticipate recommending a grant funding level of 90% for consideration at the February 22nd Board meeting.

Lastly, a Landscape Level 2 grant application is in progress for a bioswale at Westfield Park in Vadnais Heights. Sampedro provided the proposed design consisting of a 3,500 sq ft bioswale and 2,915 sq ft of native plants. Pending bids, staff anticipate recommending a 50% grant funding level for consideration at the February 22nd. Board meeting. Staff recommended support of these three projects moving forward to the Board meeting.

Chair Farrell inquired about how the irrigation controller pilot program might continue to other future projects. Sampedro provided that VLAWMO aspires to target more communities to expand the program, but is primarily focused on large spaces and systems for the time being.

Commissioner Nelson provided that it may be of interest to utilize Met Council Resources if individual residential property owners are to be targeted in this effort. He noted that in Lino Lakes the demand is quite high and creates a need for Lino Lakes to diversify its resources to provide them. Sampedro added the Landscape Level 1 grant program now allows residents to apply for smart irrigation projects, which can be another option.

Commissioner Nelson asked about the hybrid plant varieties in the proposed Westfield Park planting plan. Sampedro referred to Ramsey County Soil and Water Conservation Division's design practices of implementing certain cultivar species to support practical maintenance in public park spaces.

Chair Farrell commented that from his City perspective, robust irrigation controls would be valuable. He noted that Vadnais Heights' water use is generally quadrupled in the summer compared to winter.

VI. Projects

A. Deep Lake MOU with NOHOA and scope of work with NST

Tanner outlined that the current MOU is authorizing work that is resulting from recommendations provided in a prior prioritization study done by Natural Shore Technologies for the North Oaks Home Owners' Association (NOHOA). This study provided priority areas and cost estimates for restoration around Deep Lake. From it, VLAWMO selected wetland areas that VLAWMO can support in partnership with NOHOA. VLAWMO is recommending 50% (\$15,000) in support, which will be reimbursed to NOHOA following completion of the authorized scope. NOHOA is the lead in the effort. This MOU was approved and signed by the NOHOA Board in January.

Chair Farrell asked if NOHOA is exemplary compared to other organizations. Tanner explained that NOHOA does an excellent job, as do others with a similar focus in the metro and statewide, and that understanding the need to budget for and provide maintenance is critical in successful restoration over time. NOHOA understands this, does an excellent job of maintaining prior restoration projects, and is planning for long-term maintenance of this project over time as well.

It was moved by Commissioner Tessier and seconded by Commissioner Huntrods to recommend to the VLAWMO Board for authorization of the Deep Lake MOU with NOHOA at the February 22 meeting of the VLAWMO Board. Vote: all aye. Motion passed.

B. Wilksinson-Tamarack Lakes feasibility to treat internal load

VLAWMO staff worked with Barr Engineering to obtain a feasibility study, including sediment analysis, to determine if internal load treatment is advisable and cost effective for Wilkinson and Tamarack lakes, which are both impaired for nutrients. Tanner stated that this contract is consistent with the approved 2023 VLAWMO budget. Both lakes are priority areas for the small, priority watershed grant program. Internal load treatment may be recommended as a possible upcoming project.

Chair Farrel inquired about the depth and boat use of Wilkinson and Tamarack lakes. Tanner provided that the lakes are shallow. Wilkinson has an average depth of 3 feet. Tamarack has a maximum depth of 10 feet. Both vary somewhat by year. Wilkinson has limited paddling access and no motor activity. Tamarack has no boating nor paddling.

It was moved by Commissioner Huntrods and seconded by Commissioner Nelson to recommend to the VLAWMO Board authorization of the Barr Engineering scope of work at the February 22 meeting of the VLAWMO Board. Vote: all aye. Motion passed.

C. Rotary scope of work and MOU with the City of White Bear Lake for prioritization plan for wetland restoration

Tanner provided a hard-copy, updated and final version of the MOU that was provided in draft form in the packet.

Tanner outlined the effort to work with the City of WBL to obtain a prioritization plan for wetland restoration work. This plan will provide recommendations for restoration of wetland areas and will include a timeline to begin after current upland and buffer restoration is scheduled to be completed. VLAWMO is planning to pay for prioritization study, consistent with the VLAWMO budget in 2023. Partnership wetland restoration work, expected to be cost shared with the City is tentatively planned to begin in 2025.

Commissioner Huntrods inquired about how this effort focused on the wetland area relates to the upland restoration and amur maple removal in other areas of Rotary Park.

Tanner explained that the City is independently working on upland areas, with some financial support from VLAWMO in the wetland buffer area, but the efforts are adjacent and complimentary.

It was moved by Commissioner Huntrods and seconded by Commissioner Tessier to recommend to the VLAWMO Board recommendation from the TEC to the VLAWMO Board for authorization of the MOU and scope of work at the February 22 meeting of the VLAWMO Board. Vote: all aye. Motion passed.

D. Wilkinson 319 update

Tanner provided a project update. An upcoming joint NRC/NEST meeting is coming up on Feb. 13, 2023. That will be presented on Zoom.

Memos are currently in prep by Houston including a preliminary design memo for the VLAWMO Board at the Feb. 22 meeting; a joint application for the Wetland Conservation Act (WCA); and a memo for permitting by the City of North Oaks for excavation, grading, erosion control, and a SWPPP. The preliminary design memo will be brought to the TEC in March. A community meeting is currently in planning stages and expected to happen in late March. An article announcing that meeting and providing a brief project update is approved for submission to North Oaks News on Feb. 14, a day after the official submission deadline.

E. Spent lime February 1st community meeting update

Tanner provided an update that 13 residents attended the Feb 1st spent lime community meeting with Greg Wilson of Barr Engineering in White Bear Lake. VLAWMO is now working to acquire temporary easement access from property owners with legal counsel preparing documents. Barr is continuing to hone in on an appropriate range for the spent lime dose, and working on remaining feasibility items in preparation for the project.

Chair Farrell commented that he admires the slow and careful approach to this effort.

F. Vadnais-Sucker Lakes Regional Park restoration update

Sampedro updated the TEC that Great River Greening has contracted with MNL and project work has begun in January 2023. A press release was submitted to Vadnais Heights Press and postcards were distributed to residents adjacent to the park.

I. Commissioner Reports

Chair Farrell noted that roughly half of the Vadnais Heights public works staff attended a recent Smart Salting training. A result that came from the training is an update on city snow plow blades to include rubber bushings. The City hopes that it will be an improvement in performance, a reduction in plow-related damage to infrastructure, while also providing water quality improvements.

II. NOHOA

None

III. Ramsey Soil & Water Conservation Division

None

IV. St. Paul Regional Water Services

None

V. Public Comment

None

VI. Next Meetings:

Next TEC meeting March 8th. Next BOD meeting February 22nd.

XIII. Adjourn

It was moved by Commissioner Huntrods and seconded by Chair Farrell to adjourn the meeting at 8:58 am. Vote: all aye. Motion passed.

Minutes compiled by Nick Voss.

DRAFT

VLAWMO Finance Summary: March 2023

Mar-23		Actual 3/1/23	Actual to Date	2023 Budget	Carry over from 2022 to 2023	Remaining in Budget	2023 Available	Act vs. Budget
BUDGET #	INCOME							
5.11	Storm Water Utility	\$0	\$10,891	\$1,090,887	\$0	\$1,079,996	\$1,090,887	1%
5.12	Service Fees	\$0	\$0	\$200	\$0	\$200	\$200	0%
5.13	Interest + mitigation acct	\$4,225	\$8,611	\$1,000	\$0	(\$7,611)	\$1,000	861%
5.14	Misc. income - WCA admin & other	\$0	\$0	\$3,000	\$0	\$3,000	\$3,000	0%
5.15	Other Income Grants/loan	\$25,524	\$69,693	\$385,284	\$0	\$315,591	\$385,284	18%
5.16	Transfer from reserves	\$0	\$0	\$294,364	\$231,999	\$526,363	\$526,363	0%
	TOTAL	\$29,749	\$89,195	\$1,774,735	\$231,999	\$1,917,539	\$2,006,734	5%
EXPENSES								
3.1	Operations & Administration							
3.110	Office - rent, copies, post tel supplies	\$2,135	\$6,350	\$28,181	\$0	\$21,831	\$28,181	23%
3.120	Information Systems	\$1,467	\$4,468	\$33,300	\$0	\$28,832	\$33,300	13%
3.130	Insurance	\$0	\$0	\$7,571	\$0	\$7,571	\$7,571	0%
3.141	Consulting - Audit	\$6,276	\$6,276	\$9,000	\$0	\$2,724	\$9,000	70%
3.142	Consulting - Bookkeeping	\$45	\$45	\$1,500	\$0	\$1,455	\$1,500	3%
3.143	Consulting - Legal	\$0	\$641	\$6,000	\$0	\$5,359	\$6,000	11%
3.144	Consulting - Eng. & Tech.	\$0	\$0	\$30,000	\$15,000	\$45,000	\$45,000	0%
3.150	Storm Sewer Utility	\$0	\$1,040	\$15,000	\$0	\$13,960	\$15,000	7%
3.160	Training (staff/board)	\$270	\$7,800	\$13,250	\$0	\$5,450	\$13,250	59%
3.170	Misc. & mileage	\$63	\$254	\$6,300	\$0	\$6,046	\$6,300	4%
3.191	Administration - staff	\$31,403	\$92,321	\$422,353	\$0	\$330,032	\$422,353	22%
3.192	Employer Liability	\$9,481	\$27,885	\$122,428	\$0	\$94,543	\$122,428	23%
3.2	Monitoring and Studies							
3.210	Lake and Creek lab analysis	\$0	\$0	\$18,000	\$0	\$18,000	\$18,000	0%
3.220	Equipment	\$115	\$115	\$3,000	\$1,000	\$3,885	\$4,000	3%
3.230	Wetland assessment & management	\$0	\$0	\$0	\$10,000	\$10,000	\$10,000	0%
3.240	Watershed planning /special study	\$0	\$0	\$10,000	\$5,000	\$15,000	\$15,000	0%
3.3	Education and Outreach							
3.310	Public Education	\$97	\$2,000	\$6,000	\$0	\$4,000	\$6,000	33%
3.320	Marketing	\$732	\$1,431	\$15,000	\$9,500	\$23,069	\$24,500	6%
3.330	Community Blue Ed Grant	\$0	\$0	\$8,000	\$0	\$8,000	\$8,000	0%
<i>Total Core functions: Ops, Monitoring, Education</i>		<i>\$52,085</i>	<i>\$150,626</i>	<i>\$754,883</i>	<i>\$40,500</i>	<i>\$644,757</i>	<i>\$795,383</i>	<i>19%</i>
Capital Improvement Projects and Programs								
3.4	Subwatershed Activity							
3.410	Gem Lake	\$0	\$0	\$15,000	\$10,000	\$25,000	\$25,000	
3.420	Lambert Creek	\$0	\$2,083	\$55,000	\$0	\$52,917	\$55,000	4%
3.421	Lambert Lake Loan	\$0	\$0	\$38,568	\$0	\$38,568	\$38,568	0%

3.425	Goose Lake	\$1,409	\$8,475	\$92,500	\$0	\$84,025	\$92,500	9%
3.430	Birch Lake	\$0	\$0	\$20,000	\$0	\$20,000	\$20,000	0%
3.440	Gilf Black Tam Wilk Amelia	\$23,529	\$27,808	\$157,500	\$43,000	\$172,692	\$200,500	14%
3.450	Pleasant Charley Deep	\$0	\$0	\$48,000	\$30,000	\$78,000	\$78,000	0%
3.460	Sucker Vadnais	\$1,570	\$1,570	\$35,000	\$28,000	\$61,430	\$63,000	2%
3.48	Programs							
3.480	Soil Health Grant	\$78	\$78	\$8,000	\$0	\$7,922	\$8,000	1%
3.481	Landscape 1	\$0	\$0	\$30,000	\$6,263	\$36,263	\$36,263	0%
3.482	Landscape 2/BWSR WBF	\$0	\$938	\$35,000	\$36,636	\$70,698	\$71,636	1%
3.483	Project Research & feasibility	\$0	\$0	\$5,000	\$0	\$5,000	\$5,000	0%
3.485	Facilities Maintenanc/ Pub. Ditch Main.	\$538	\$2,237	\$90,000	\$37,600	\$125,363	\$127,600	2%
3.5	Regulatory							
3.510	Engineer Plan review	\$0	\$0	\$5,000	\$0	\$5,000	\$5,000	0%
	<i>Total CIP & Program</i>	\$27,124	\$43,189	\$634,568	\$191,499	\$782,878	\$826,067	5%
	Total of Core Operations & CIP	\$79,209	\$193,815	\$1,389,451	\$231,999	\$1,427,635	\$1,621,450	12%

Fund Balance	2/1/2023	3/1/2023
4M Account	\$982,809	\$1,002,779
4M Plus Savings	\$229,232	\$230,027
Total	\$1,212,041	\$1,232,806

Restricted funds		3/1/2023
Mitigation Savings		\$21,014
Term Series		\$0

Vadnais Lake Area Water Management Organization
Check Detail
February 9 through March 8, 2023

9:46 AM
 03/01/2023

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Check	eft	02/09/2023	further		Checking - 1987		-6.00
						Insurance Ber	-6.00	6.00
TOTAL							-6.00	6.00
	Check	eft	02/21/2023	Reliance Standard		Checking - 1987		-312.17
						Insurance Ber	-91.50	91.50
						Insurance Ber	-220.67	220.67
TOTAL							-312.17	312.17
	Check	eft	02/21/2023	US Bank		Checking - 1987		-45.43
						3.142 · Bookk	-45.43	45.43
TOTAL							-45.43	45.43
	Check	5514	03/08/2023	CliftonLarsonAllen		Checking - 1987		-6,090.00
						3.141 · Audit	-6,090.00	6,090.00
TOTAL							-6,090.00	6,090.00
	Check	5515	03/08/2023	Metro Blooms		Checking - 1987		-600.00
						3.320 · Marke	-600.00	600.00
TOTAL							-600.00	600.00
	Check	5516	03/08/2023	VHEDC		Checking - 1987		-100.00
						3.320 · Marke	-100.00	100.00
TOTAL							-100.00	100.00
	Check	5517	03/08/2023	janelle green		Checking - 1987		-77.87
						3.480 · Soil H	-77.87	77.87
TOTAL							-77.87	77.87
	Check	5518	03/08/2023	Metro - Inet		Checking - 1987		-1,439.00
						IT Support	-1,439.00	1,439.00
TOTAL							-1,439.00	1,439.00
	Check	5519	03/08/2023	Houston Engineering, Inc		Checking - 1987		-23,528.92

				Wilkinson 319	-21,245.66	21,245.66
				Wilk 319 cash	-2,283.26	2,283.26
TOTAL					<u>-23,528.92</u>	<u>23,528.92</u>
	Check	5520	03/08/2023 Barr Engineering Co	Checking - 1987		-2,744.00
				Oak Knoll	-1,174.00	1,174.00
				3.460 · Suckel	-1,570.00	1,570.00
TOTAL					<u>-2,744.00</u>	<u>2,744.00</u>
	Check	5521	03/08/2023 Press Publications	Checking - 1987		-235.09
				Oak Knoll	-235.09	235.09
TOTAL					<u>-235.09</u>	<u>235.09</u>
	Check	5522	03/08/2023 Kennedy & Graven, Chartered	Checking - 1987		-724.50
				3.141 · Audit	-186.30	186.30
				3.485 · Faciliti	-538.20	538.20
TOTAL					<u>-724.50</u>	<u>724.50</u>
	Check	5523	03/08/2023 City of Vadnais Heights	Checking - 1987		-2,134.55
				Rent	-1,715.00	1,715.00
				Phone/Interne	-305.00	305.00
				Postage	-34.32	34.32
				Copies	-80.23	80.23
TOTAL					<u>-2,134.55</u>	<u>2,134.55</u>
	Check	5524	03/08/2023 City of White Bear Lake	Checking - 1987		-40,566.16
				payroll	-31,403.26	31,403.26
				Administration	-2,282.96	2,282.96
				Administration	-2,355.24	2,355.24
				Insurance Ber	-4,479.78	4,479.78
				Admin payroll	-44.92	44.92
TOTAL					<u>-40,566.16</u>	<u>40,566.16</u>
	Check	5525	03/08/2023 Nicholas Voss	Checking - 1987		-417.00
				3.170 · Misc. &	-17.69	17.69
				3.160 · Trainir	-250.00	250.00
				3.320 · Marke	-32.19	32.19
				3.160 · Trainir	-20.00	20.00
				3.310 · Public	-97.12	97.12
TOTAL					<u>-417.00</u>	<u>417.00</u>

	Check	5526	03/08/2023 Brian Corcoran	Checking - 1987	-139.47
				3.170 · Misc. ξ	-24.24 24.24
				3.220 · Equipr	-115.23 115.23
TOTAL					<u>-139.47</u> 139.47
	Check	5527	03/08/2023 Dawn Tanner	Checking - 1987	-21.25
				3.170 · Misc. ξ	-21.25 21.25
TOTAL					<u>-21.25</u> 21.25

Vadnais Lake Area Water Management Organiz:
Profit & Loss
February 9 through March 8, 2023

9:51 AM

03/01/2023

Cash Basis

Feb 9 - Mar 8, 23

Ordinary Income/Expense	
Income	
Mitigation Interest	0.17
5.1 · Income	
5.13 · Interest	4,224.59
Total 5.1 · Income	<u>4,224.59</u>
6.6.6 · Grants	25,524.66
Total Income	<u>29,749.42</u>
Gross Profit	29,749.42
Expense	
3.1 · Administrative/Operations	
3.110 · Office	
Copies	80.23
Phone/Internet/Machine Overhead	305.00
Postage	34.32
Rent	1,715.00
Total 3.110 · Office	<u>2,134.55</u>
3.120 · Information Systems	
Hardware	27.98
IT Support	1,439.00
Total 3.120 · Information Systems	<u>1,466.98</u>
3.141 · Audit	6,276.30
3.142 · Bookkeeping help	45.43
3.160 · Training (staff/board)	270.00
3.170 · Misc. & mileage	63.18
3.191 · Employee Payroll	
payroll	31,403.26
Total 3.191 · Employee Payroll	31,403.26
3.192 · Employer Liabilities	
Admin payroll processing	44.92
Administration FICA	2,282.96
Administration PERA	2,355.24
Insurance Benefit	4,797.95
Total 3.192 · Employer Liabilities	<u>9,481.07</u>
Total 3.1 · Administrative/Operations	<u>51,140.77</u>
3.2 · Monitoring and Studies	
3.220 · Equipment	115.23
Total 3.2 · Monitoring and Studies	<u>115.23</u>
3.3 · Education and Outreach	
3.310 · Public Education	97.12
3.320 · Marketing	732.19
Total 3.3 · Education and Outreach	<u>829.31</u>

3.4 · Capital Imp. Projects/Programs	
3.425 · Goose Lake	
Oak Knoll	1,409.09
Total 3.425 · Goose Lake	<u>1,409.09</u>
3.440 · Gilfillan Black Tamarack Wilkin	
Wilk 319 cash match \$182,137	2,283.26
Wilkinson 319 grant 320705.50	21,245.66
Total 3.440 · Gilfillan Black Tamarack Wilkin	<u>23,528.92</u>
3.460 · Sucker Vadnais	<u>1,570.00</u>
Total 3.4 · Capital Imp. Projects/Programs	<u>26,508.01</u>
3.48 · Programs	
3.480 · Soil Health Grant	77.87
3.485 · Facilities & Maintenance	538.20
Total 3.48 · Programs	<u>616.07</u>
Total Expense	<u>79,209.39</u>
Net Ordinary Income	<u>-49,459.97</u>
Net Income	<u><u>-49,459.97</u></u>

Vadnais Lake Area Water Management Organization
Custom Transaction Detail Report
 January 1 through March 1, 2023

9:44 AM

03/01/2023

Accrual Basis

Type	Date	Num	Name	Memo	Account	Clr	Split	Amount	Balance
Jan 1 - Mar 1, 23									
Credit Card Charge	01/02/2023		Google*SVCAPPS_VLAWM		US Bank CC	√	WEB	42.00	42.00
Credit Card Charge	01/09/2023		adobe *photography plan		US Bank CC	√	Software	9.99	51.99
Credit Card Charge	01/12/2023		Gumroad Inc	Nick website training	US Bank CC	√	3.160 · Training (staff/board)	29.99	81.98
Credit Card Charge	01/19/2023		Survey Monkey	2023 renewal	US Bank CC	√	3.320 · Marketing	372.00	453.98
Transfer	01/20/2023			Funds Transfer	US Bank CC	√	Checking - 1987	-1,170.98	-717.00
Credit Card Charge	01/25/2023		Adobe "Creative Cloud		US Bank CC	√	Software	32.20	-684.80
Credit Card Charge	01/26/2023		Amazon.com	laptop battery Phil	US Bank CC	√	Hardware	49.99	-634.81
Credit Card Charge	02/02/2023		Google*SVCAPPS_VLAWM		US Bank CC	√	WEB	42.00	-592.81
Credit Card Charge	02/09/2023		Amazon.com	laptop memory - lauren	US Bank CC		Hardware	27.98	-564.83
Jan 1 - Mar 1, 23								-564.83	-564.83

TEC Staff Memo – March 8, 2023

IV. Administration & Operations

A. Financial Report for March and Authorization for Payment

Please find the March financial report and authorization to pay bills in the ePacket for review and approval.

V. Programs

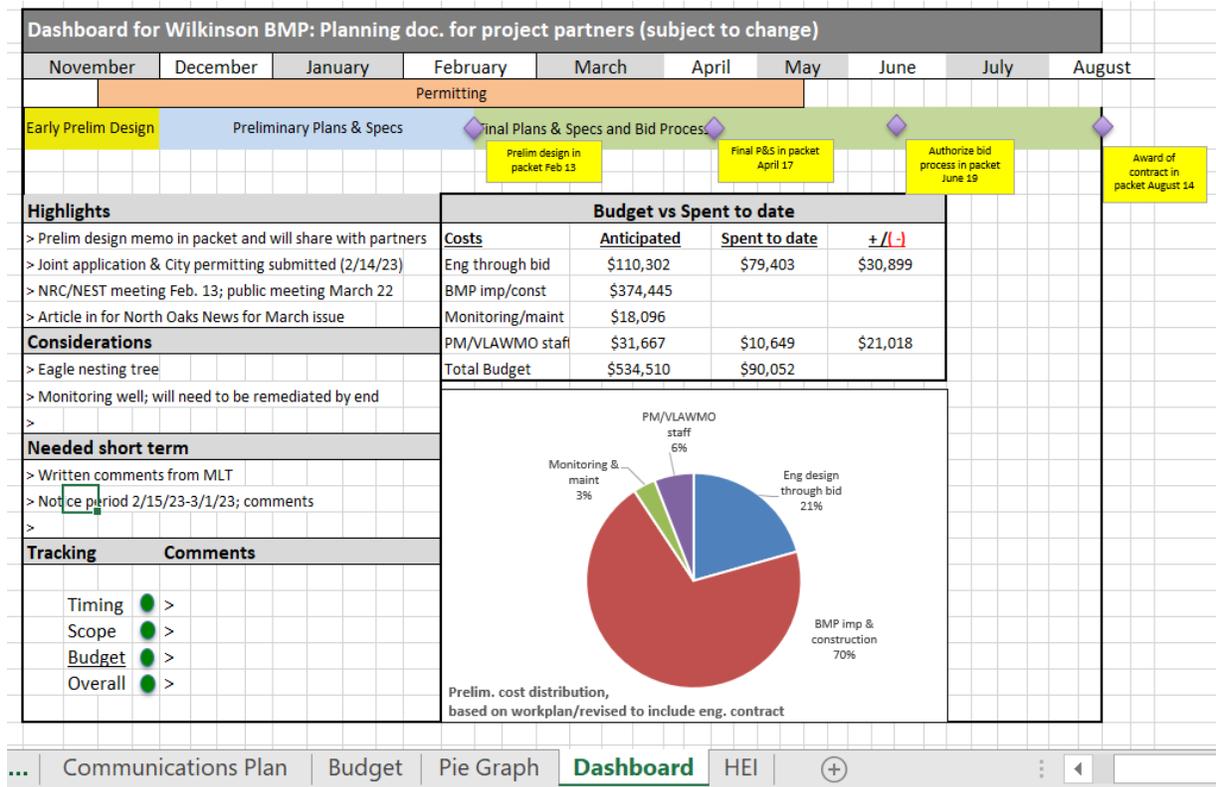
A. Cost Share Program Packet Preview

Lauren will provide a brief preview of this year's new cost share program packet that will be used for site visits for the Soil Health and Landscape Level Grant Programs. This packet of materials is also encouraged to be used as a resource for Minnesota Water Stewards and TEC members, which will be provided during the meeting.

VI. Projects

A. Update on Wilkinson BMP

Since the February TEC meeting, Houston has provided 60% preliminary design, which is included in the packet. The preliminary design has been provided to the VLAWMO Board, NOC project partners, MLT, and City of North Oaks. VLAWMO staff and HEI presented a project update to the joint meeting of the North Oaks Natural Resources Commission and NOHOA NEST Committee on February 13, 2023. That meeting was recorded; a link is available by request from the City of North Oaks. The joint application for WCA was submitted by Houston and noticed by VLAWMO. The comment period closed on March 1, 2023. A project update article was published in the March issue of North Oaks News and included an announcement for the upcoming public meeting, scheduled for March 22 at 7:00 pm. The City of North Oaks checked out the community room at 100 Village Center Drive for the meeting, which will be presented by VLAWMO staff and HEI.



B. Amelia SLMR Recommendation to the Board

The Amelia Sustainable Lake Management Report (SLMR) is linked here for TEC review: https://www.vlawmo.org/index.php/download_file/4403/

The completion of this plan marks the final SLMP/SLMR for VLAWMO lakes. The development of the SLMR for Amelia was especially informative as it included a meeting with residents living around the lake with a chance for VLAWMO staff to hear directly from lakeshore owners, included the identification of an invasive Flowering rush infestation that is planned for treatment in partnership with RCSWCD and Anoka Conservation District, and illuminated a VLAWMO connection to Aldo Leopold, among other planning and survey work.

Requested action: VLAWMO staff request a recommendation by the TEC to the Board for authorization/finalization of the Amelia SLMR and inclusion on the VLAWMO website.

C. Recognition of completion of the 15-year SLMP/SLMR Completion

The completion of the Amelia SLMR is notable because it wraps up a process begun around 2009 for VLAWMO to develop and SLMP/SLMR for each VLAWMO lake. These were done to provide a synthesis of knowledge compiled to date and provide planning for future projects. A short presentation will be included to the TEC during the meeting.

D. Update on White Bear Township Smart Irrigation Grant Application

White Bear Township submitted a Landscape Level 2 Grant application for installing smart irrigation controllers at the three public park properties in the Township discussed at the last TEC meeting which include Polar Lakes Park, the Township administration building, and Columbia Park. The projects will involve updating the existing irrigation systems at these three properties with newer-technology Hunter smart irrigation controllers, which are a weather-based controller. It is anticipated these controllers will result in a reduction in groundwater usage over an area of 46 acres. The Township received a bid from Conserva Irrigation for the project at \$37,375.00 and another from Peterson Companies at \$14,388.00. The estimated project cost and grant award were based on the low bid of \$14,388.00. Staff recommended a 90% grant funding level up to \$12,949.20 to the Board of Directors at their February 28th meeting and the Board approved the application.

E. Update on City of Vadnais Heights Smart Irrigation Grant Application

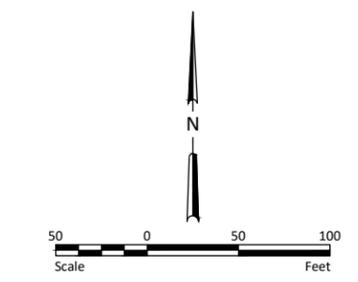
The City of Vadnais Heights submitted a Landscape Level 2 Grant application for installing smart irrigation controllers at two public properties in the City including the City Hall and the Commons Community Park. The project will involve updating the existing irrigation systems at City Hall with a Baseline smart irrigation controller, which is a soil moisture-based controller, and a newer-technology Hunter smart irrigation controller at Community Park, which is a weather-based controller. It's anticipated that these controllers will result in a reduction in groundwater usage over an area of 20 acres. The City received one bid for the project from Peterson Companies totaling \$8,013.00. Staff recommended a 90% funding level of \$7,211.70 to the Board of Directors at their February 28th meeting and the Board approved the application.

F. Update on Westfield Park Bioswale Grant Application

Since the last TEC meeting, bids were received for the Westfield Park Landscape Level 2 Grant application, and the City of Vadnais Heights submitted the application. The estimated project cost and grant award were based on the low bid of \$31,998.17. Staff recommended a 50% grant funding level up to \$15,994.09 to the Board of Directors at their February 28th meeting and the Board approved the application.

- VII. Commissioner Reports
- VIII. NOHOA
- IX. Ramsey County Soil & Water Conservation Division
- X. St. Paul Regional Water Services
- XI. Public Comment
- XII. Next Meetings: TEC: April 12th, Board Meeting: April 26th
- XIII. Adjourn

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- LEGEND:**
- x - CONSTRUCTION FENCE
 - - - WETLAND BOUNDARY
 - - - EXISTING FENCE
 - ⊗ EAGLE'S NEST BUFFER - NO ENTRY
 - 900 - - EXISTING GROUND - CONTOURS

No.	Revision	Date	By

PRELIMINARY
NOT FOR CONSTRUCTION



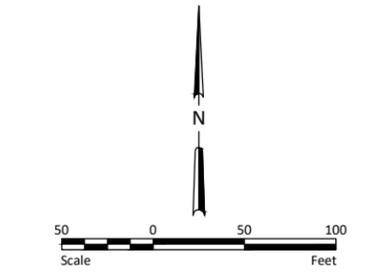
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WILKINSON LAKE BMP
VADNAIS LAKE AREA WATER MANAGEMENT ORGANIZATION
NORTH OAKS, MINNESOTA

EXISTING CONDITIONS
PROJECT NO. 7057-0014

SHEET
1
pg. 020

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- LEGEND:**
- - - CONSTRUCTION FENCE
 - - - WETLAND BOUNDARY
 - ⊠ EAGLE'S NEST BUFFER - NO ENTRY
 - ▨ CLASS III RIPRAP
 - ⋯ TEMPORARY CONSTRUCTION EASEMENT
 - ▨ TEMPORARY CONSTRUCTION PATH
 - - - SILT FENCE
 - - - EXISTING FENCE
 - 900 - - - EXISTING GROUND - CONTOURS
 - 900 — PROPOSED GRADING - CONTOURS

- PROPOSED GRADES:**
- ▨ EL. 898
 - ▨ EL. 896 - EL. 898
 - ▨ EL. 895 - EL. 896
 - ▨ EL. 894 - EL. 895
 - ▨ EL. 890 - EL. 894
 - ▨ EL. 890

No.	Revision	Date	By

PRELIMINARY
NOT FOR CONSTRUCTION



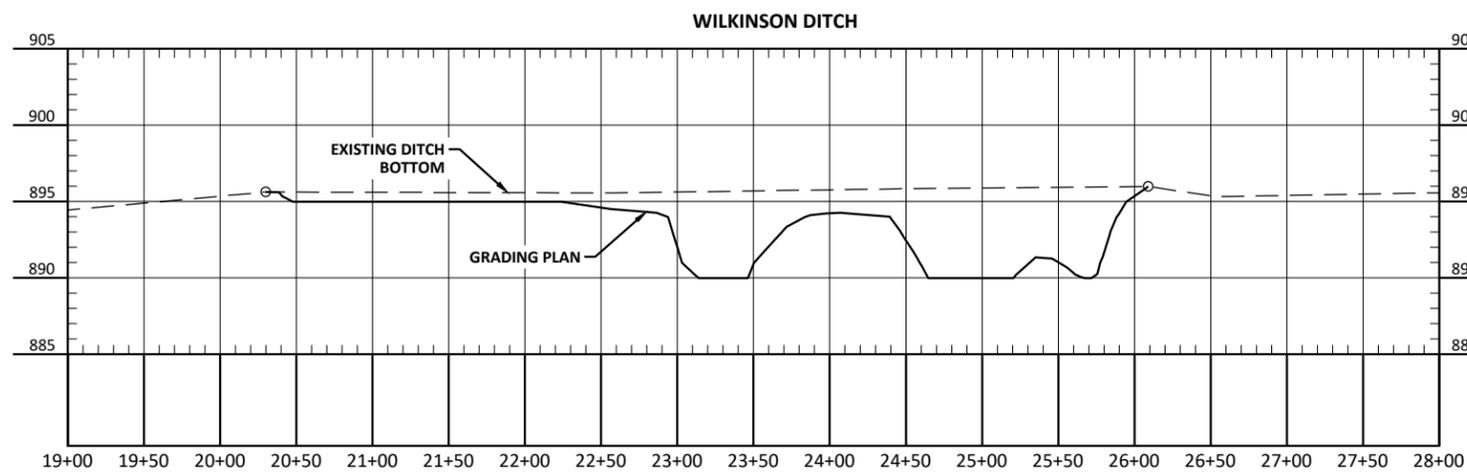
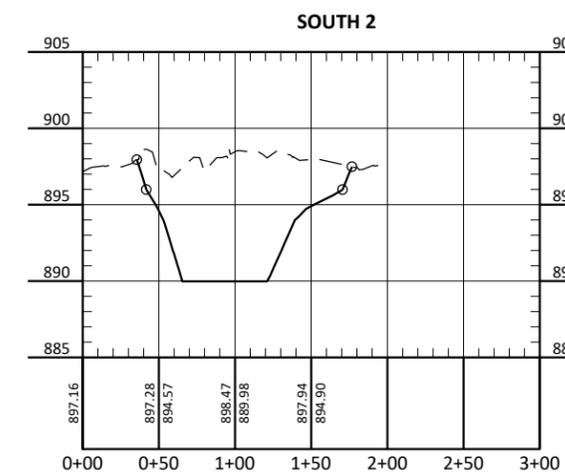
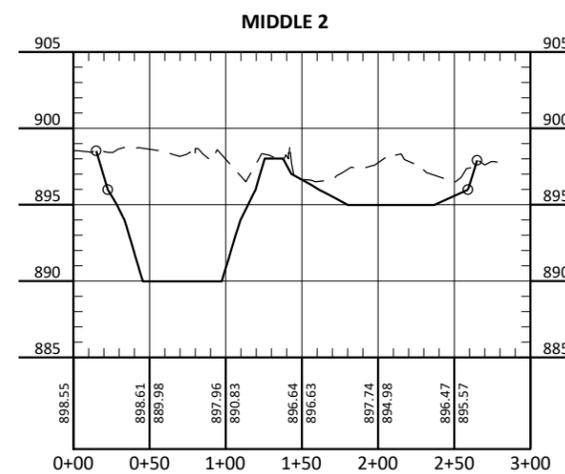
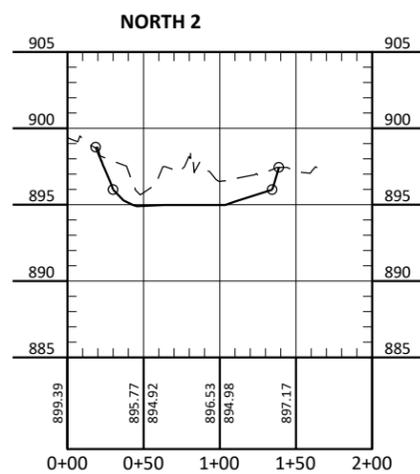
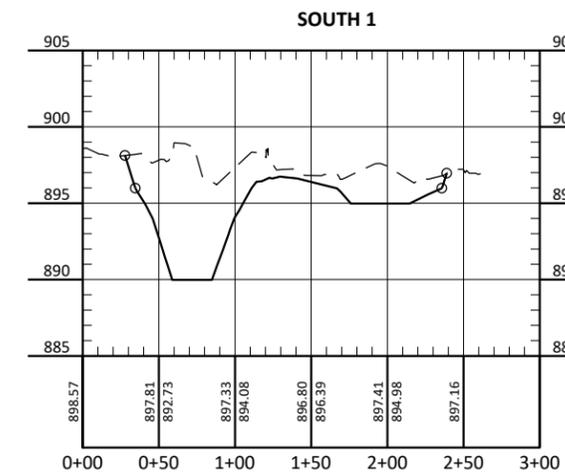
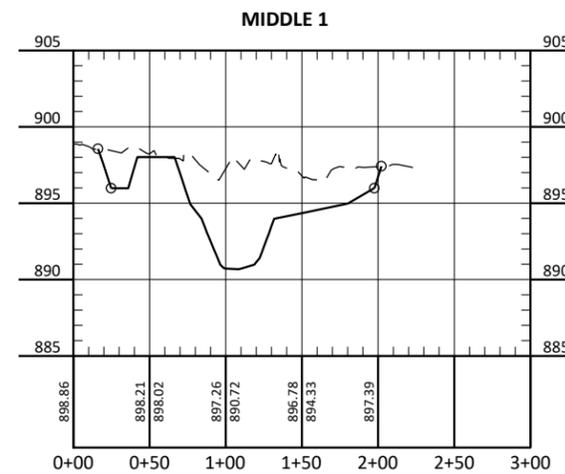
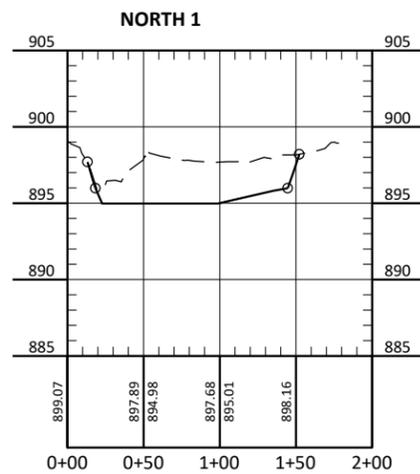
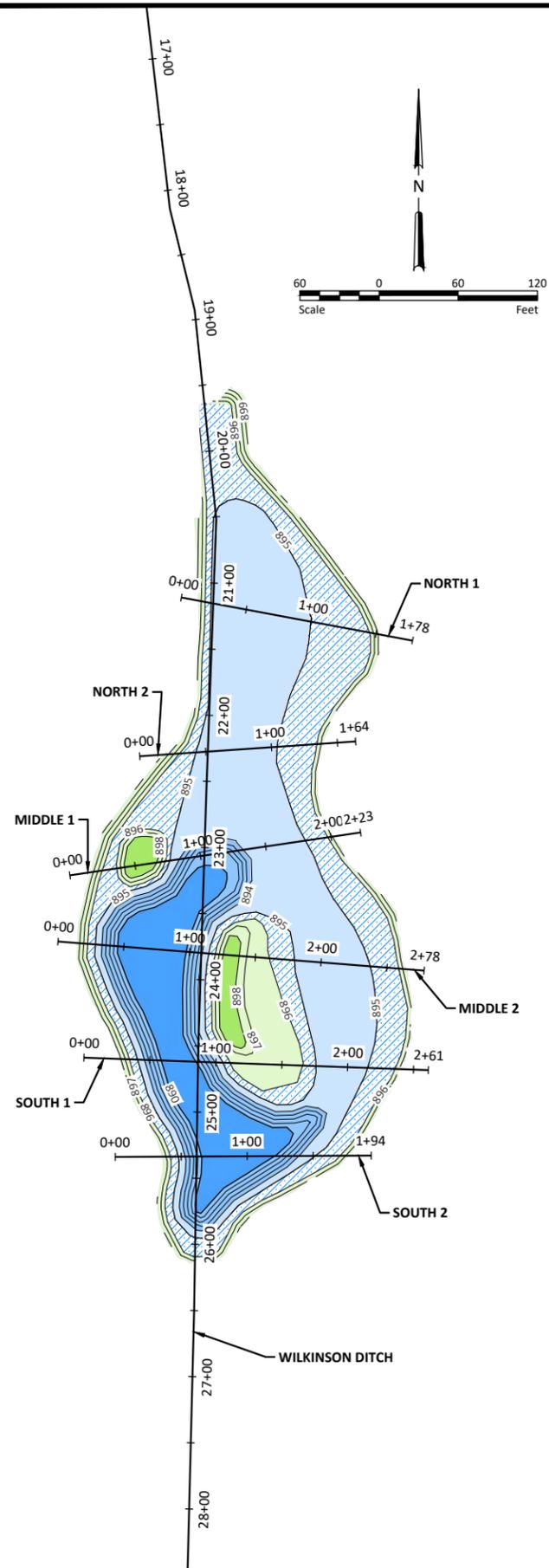
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Scale: AS SHOWN

WILKINSON LAKE BMP
VADNAIS LAKE AREA WATER MANAGEMENT ORGANIZATION
NORTH OAKS, MINNESOTA

GRADING PLAN
PROJECT NO. 7057-0014

SHEET
2
pg. 021

H:\JBA\7057\7057_0014_WilkinsonLakeBMP\CAD\Plans\7057-0014_Cross Section.dwg:3 CROSS SECTIONS-2/13/2023 1:37 PM-(klund)



No.	Revision	Date	By

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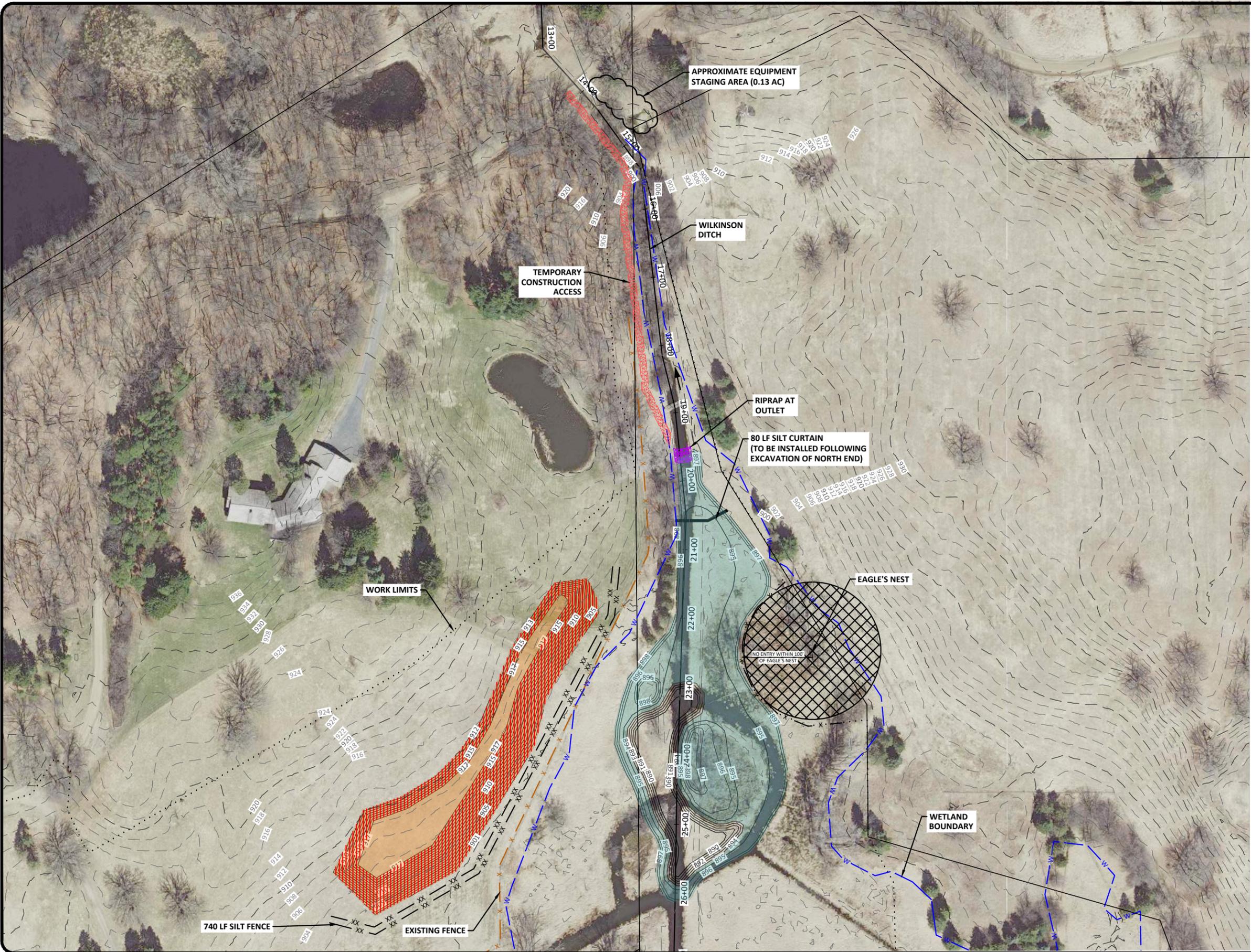
Drawn by
KJL
Date
02-10-2023
Checked by
Date
AS SHOWN

WILKINSON LAKE BMP
VADNAIS LAKE AREA WATER MANAGEMENT ORGANIZATION
NORTH OAKS, MINNESOTA

CROSS-SECTIONS
PROJECT NO. 7057-0014

SHEET
3
pg. 022

H:\JBA\7000\7057_0014_WilkinsonLakeBMP\CAD\Plans\7057-0014_Wilkinson Lake BMP.dwg 4 EROSION CONTROL PLAN-2/13/2023 1:37 PM-(klund)



- LEGEND:**
- EROSION CONTROL BLANKET
 - WETLAND SEEDING PLAN: PRAIRIE MOON NURSERY CUSTOM SEED MIX AS SPECIFIED IN ORDER #23862
 - SPOIL PILE SEEDING PLAN: MNDOT 35-221 DRY PRAIRIE GENERAL, OR SIMILAR
 - SILT FENCE - DOUBLE CONTAINMENT
 - WETLAND BOUNDARY
 - EAGLE'S NEST BUFFER - NO ENTRY
 - EXISTING FENCE
 - CLASS III RIPRAP
 - TEMPORARY CONSTRUCTION EASEMENT
 - CONSTRUCTION ACCESS PATH
 - 900 -- EXISTING GROUND - CONTOURS
 - 900 — PROPOSED GRADING - CONTOURS
1. SEE SHEET 5 FOR EROSION CONTROL DETAILS.
 2. SEE SHEETS 6 & 7 FOR SWPPP REQUIREMENTS.

No.	Revision	Date	By

PRELIMINARY
NOT FOR CONSTRUCTION



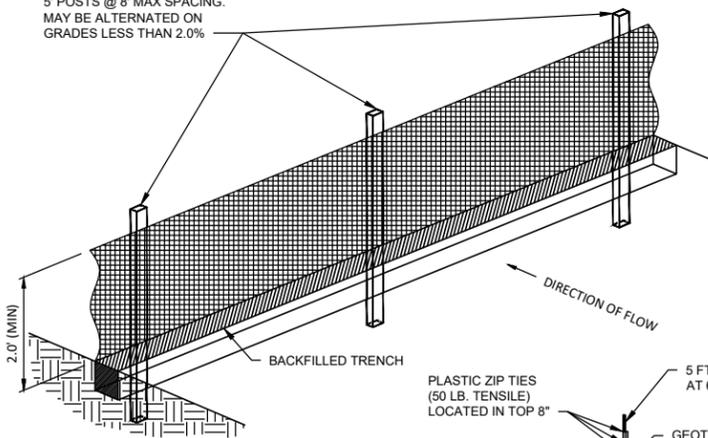
Drawn by KJL	Date 02-10-2023
Checked by	Scale AS SHOWN

WILKINSON LAKE BMP
VADNAIS LAKE AREA WATER MANAGEMENT ORGANIZATION
NORTH OAKS, MINNESOTA

EROSION CONTROL PLAN
PROJECT NO. 7057-0014

SHEET
4
pg. 023

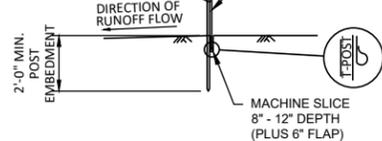
5' POSTS @ 8' MAX SPACING.
MAY BE ALTERNATED ON
GRADES LESS THAN 2.0%



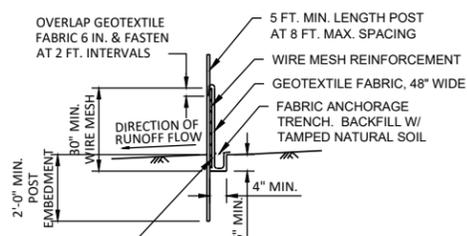
PLASTIC ZIP TIES
(50 LB. TENSILE)
LOCATED IN TOP 8"

5 FT. MIN. LENGTH POST
AT 6 FT. MAX. SPACING

GEOTEXTILE FABRIC, 36" WIDE



STANDARD MACHINE SLICED

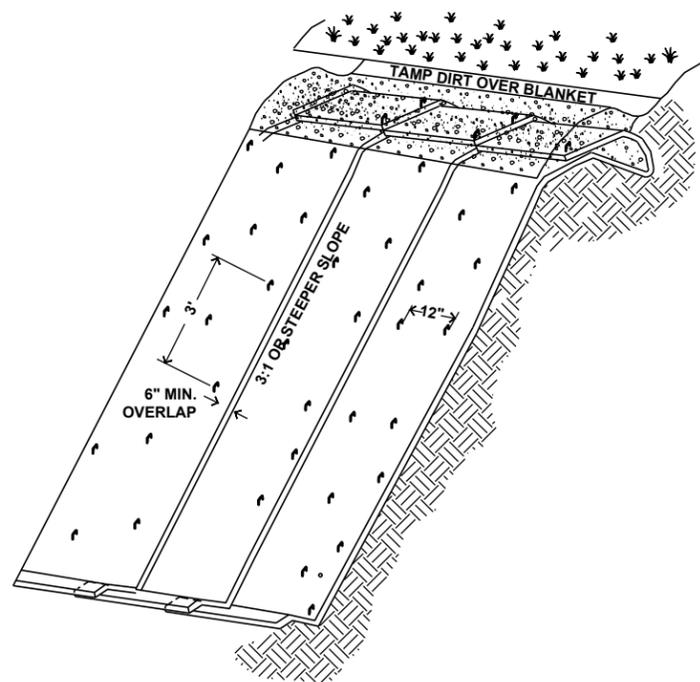


HEAVY DUTY

NOTE:
SILT FENCE TO BE STANDARD UNLESS ACTUAL SITE
CONDITIONS REQUIRE HEAVY DUTY FENCE PER
BMP'S OR INDICATED ON PLANS.

SILT FENCE

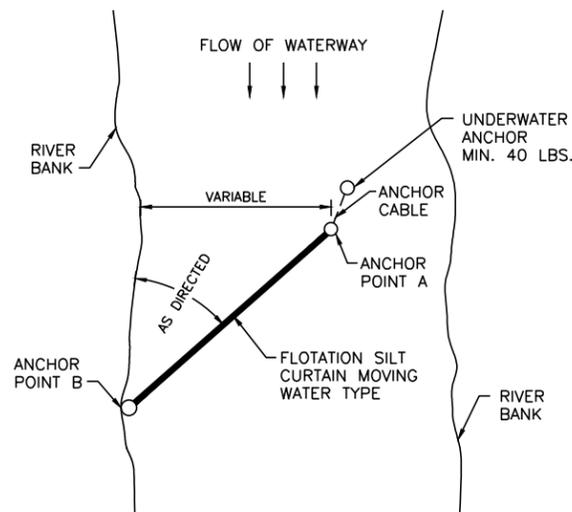
NOT TO SCALE



NOTE: BLANKET INSTALLED AT LOCATIONS AS INDICATED BY THE ENGINEER.

EROSION CONTROL BLANKET FOR BANK REPAIR

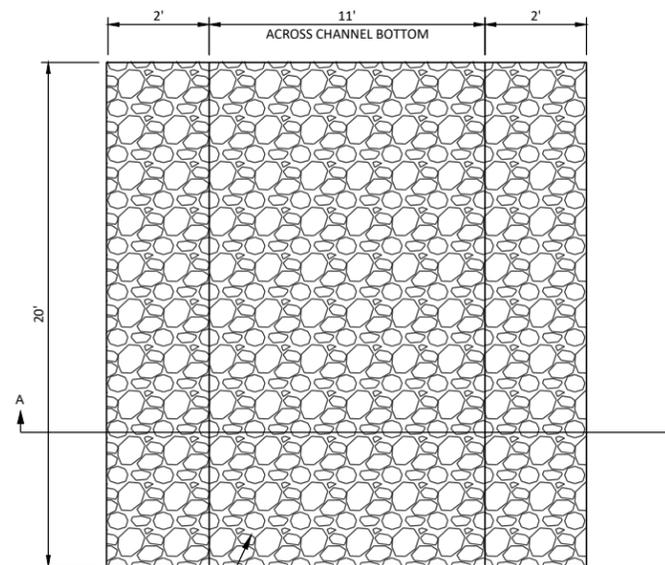
NOT TO SCALE



DESIGN CRITERIA:
MAXIMUM WATER DEPTH: 12'
MAXIMUM WATER VELOCITY: 7 FT./SEC.

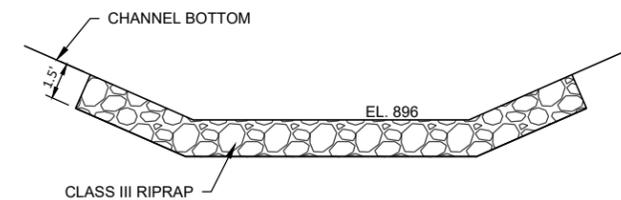
**PLAN VIEW OF SILT CURTAIN -
MOVING WATER**

NOT TO SCALE



CLASS III RIPRAP
NOT MORE THAN
1 CY PER RUNNING FT.

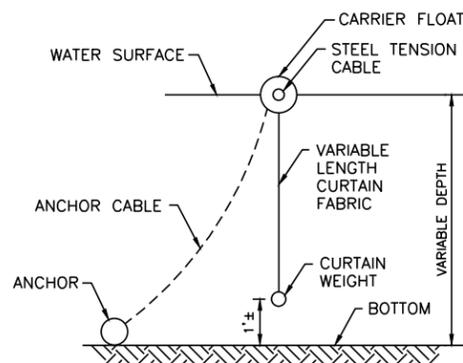
PLAN VIEW



SECTION A-A

RIPRAP DETAIL

NOT TO SCALE



FLOTATION SILT CURTAIN DETAIL

NOT TO SCALE

H:\JBM\7000\7057\7057_0014_WilkinsonLakeBMP\CAD\Plans\7057-0014_Details and SWPPP.dwg-5 DETAILS-2/13/2023 1:37 PM-(klund)

No.	Revision	Date	By

PRELIMINARY
NOT FOR CONSTRUCTION



Drawn by KJL	Date 02-10-2023
Checked by AN	Scale AS SHOWN

WILKINSON LAKE BMP
VADNAIS LAKE AREA WATER MANAGEMENT ORGANIZATION
NORTH OAKS, MINNESOTA

SWPPP NARRATIVE
PROJECT NO. 7057-0014

SHEET

6
pg. 024

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

GENERAL CONSTRUCTION ACTIVITY INFORMATION

PROJECT NAME: WILKINSON LAKE BEST MANAGEMENT PRACTICES

1. DESCRIBE PROJECT LOCATION:

ADDRESS OR DESCRIBE AREA: QUARTER-QUARTER NENW, SECTION 9 (T30 R22) IN NORTH OAKS

CITY OR TOWNSHIP: NORTH OAKS

STATE: MN ZIP CODE: 55127 COUNTY: RAMSEY

LATITUDE/LONGITUDE OF APPROXIMATE CENTROID OF PROJECT: 45.1052°/-93.0610°

2. DESCRIBE THE CONSTRUCTION ACTIVITY:

THE WILKINSON LAKE BEST MANAGMENT PRACTICES PROJECT WILL CONSIST OF WETLAND EXCAVATION AND TREE REMOVAL AS SPECIFIED IN THE PLANS. REMOVED SEDIMENT AND EXCESS BANK MATERIAL WILL BE SPOIL BANKED ON THE WEST SIDE OF THE WETLAND AND DISTURBED AREAS RE-VEGETATED.

PROJECT AREAS

1. TOTAL AREA TO BE DISTURBED (ACRES): 10.4

2. PRE-CONSTRUCTION IMPERVIOUS SURFACE (ACRES): 0.0

3. POST-CONSTRUCTION IMPERVIOUS SURFACE (ACRES): 0.0

4. TOTAL NEW IMPERVIOUS SURFACE (ACRES): 0.0

RECEIVING WATERS

SURFACE WATERS WITHIN ONE MILE OF PROJECT BOUNDARY (AERIAL RADIUS MEASUREMENT) THAT WILL RECEIVE STORMWATER FROM THE SITE OR DISCHARGE FROM PERMANENT STORMWATER MANAGEMENT SYSTEM:

WATER BODY ID	NAME OF WATER BODY	TYPE	SPECIAL WATER	IMPAIRED WATER
62-0043-00	WILKINSON LAKE	LAKE	NO	YES

CONTACT INFORMATION

PROJECT OWNER: VADNAIS LAKE AREA WATER MANAGEMENT ORGANIZATION
DAWN TANNER
800 CO. RD. E EAST
ST. PAUL, MN 55127

CONTRACTOR: TO BE DETERMINED

DESIGN OF CONSTRUCTION SWPPP

DESIGN OF CONSTRUCTION SWPPP COMPLETED BY:

AARON ZIGAN
HOUSTON ENGINEERING
7550 MERIDIAN CIRCLE NORTH - SUITE 120
MAPLE GROVE, MN 55369
PHONE: (763) 493-4522

PROJECT INFORMATION

1. CHAIN OF RESPONSIBILITY: OWNER AND CONTRACTOR ARE COPERMITEES FOR THE MINNESOTA GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY. THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL ASPECTS OF THE MINNESOTA GENERAL PERMIT AT ALL TIMES UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA. THE CONTRACTOR WILL DEVELOP A CHAIN OF COMMAND WITH ALL OPERATORS ON THE SITE TO ENSURE THAT THE SWPPP WILL BE IMPLEMENTED AND STAY IN EFFECT UNTIL THE CONSTRUCTION PROJECT IS COMPLETE, THE ENTIRE SITE HAS UNDERGONE FINAL STABILIZATION, AND A NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED TO THE MPCA.

2. TRAINING DOCUMENTATION: CONTRACTOR SHALL LIST PEOPLE REQUIRING TRAINING PER PART III.F.1, DATES OF TRAINING AND NAME OF INSTRUCTOR(S) AND ENTITY PROVIDING TRAINING, CONTENT OF TRAINING COURSE OR WORKSHOP INCLUDING THE NUMBER OF HOURS OF TRAINING. THE OWNER SHALL BE PROVIDED WITH A COPY OF THE TRAINING DOCUMENTATION BEFORE THE START OF CONSTRUCTION ON THE PROJECT.

PROJECT INFORMATION

1. ENVIRONMENTALLY SENSITIVE AREAS:

A. IMPAIRED WATERS: THE DITCH SYSTEM DISCHARGE IS WITHIN ONE MILE OF IMPAIRED WATERS (WILKINSON LAKE). WILKINSON LAKE IS IMPAIRED FOR NUTRIENT EUTROPHICATION BIOLOGICAL INDICATORS AND HAS A USEPA-APPROVED TMDL. THIS IMPAIRMENT IS CONSIDERED NON-CONSTRUCTION RELATED.

B. SPECIAL WATERS: THERE ARE NO SPECIAL WATERS WITHIN ONE MILE OF THE DISCHARGE FOR WILKINSON LAKE.

C. WETLANDS: SEGMENTS OF THE WORK LIMITS CROSS WETLANDS. WORK SHALL CONFORM TO STATE AND FEDERAL WETLAND LAWS.

D. KARST AREAS: THERE ARE NO KNOWN KARST AREAS WITHIN THE PROJECT BOUNDARY.

E. CALCAREOUS FENS: THERE ARE NO KNOWN CALCAREOUS FENS WITHIN THE PROJECT BOUNDARY.

F. ENDANGERED OR THREATENED SPECIES: THERE ARE NO KNOWN ENDANGERED OR THREATENED SPECIES WITHIN THE PROJECT BOUNDARY.

G. HISTORIC PLACES OR ARCHEOLOGICAL SITES: THERE ARE NO KNOWN HISTORIC PLACES OR ARCHEOLOGICAL SITES WITHIN THE PROJECT BOUNDARY.

H. STEEP SLOPES: SLOPES 1:3 (V:H) OR STEEPER IN GRADE ARE CONFINED TO THE SLOPES OF THE PUBLIC DRAINAGE SYSTEM.

2. SOIL TYPES.

THE SOIL REMOVAL WILL GENERALLY CONSIST OF LOAM, CLAY LOAM, SILTY CLAY LOAM, SANDY LOAM, AND MUCK. ESTIMATED PARTICLE SIZE RANGING FROM 0.0001 MM TO 0.5MM.

3. ORDER OF CONSTRUCTION ACTIVITIES:

- A. INSTALL EROSION AND SEDIMENT CONTROL MEASURES.
- B. PROCEED WITH REMOVAL OF TREES FROM WETLAND, DITCH, RESLOPED BANKS, AND SPOIL BANK AREAS. WORK FROM DOWNSTREAM TO UPSTREAM TO REMOVE SEDIMENT AND SOIL FROM WETLAND AND PLACE IN SPOIL BANK AREAS.
- C. STABILIZE AREAS DISTURBED WITH TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
- D. COMPLETE PERMANENT RESTORATION WITH EROSION AND SEDIMENT CONTROL MEASURES.

EROSION PREVENTION PRACTICES

- 1. STABILIZATION MUST BE INITIATED IMMEDIATELY AND NO LATER THAN 14 DAYS CALENDAR DAYS WHENEVER ANY CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED ON ANY PORTION OF THE SITE. STABILIZATION MEANS THE EXPOSED GROUND SURFACE HAS BEEN COVERED BY APPROPRIATE MATERIALS SUCH AS MULCH, STAKED SOD, RIPRAP, EROSION CONTROL BLANKET, MATS OR OTHER MATERIAL THAT PREVENTS EROSION FROM OCCURRING. GRASS, AGRICULTURAL CROP OR OTHER SEEDING ALONE IS NOT STABILIZATION. MULCH MATERIALS MUST ACHIEVE APPROXIMATELY 90 PERCENT GROUND COVERAGE (TYPICALLY 2 TON/ACRE).
- 2. STABILIZATION OF THE NORMAL WETTED PERIMETER OF THE LAST 200 LINEAR FEET OF TEMPORARY OR PERMANENT DRAINAGE DITCHES OR SWALES THAT DRAIN WATER FROM THE SITE MUST OCCUR WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE.
- 3. STORMWATER CONVEYANCE CHANNELS MUST BE ROUTED AROUND UNSTABILIZED AREAS. EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED ALONG THE LENGTH OF THE CONVEYANCE CHANNEL AND AT ANY OUTLET.

SEDIMENT CONTROL PRACTICES

1. SEDIMENT CONTROL PRACTICES MUST BE ESTABLISHED ON ALL DOWN GRADIENT PERIMETERS AND BE LOCATED UP GRADIENT OF ANY BUFFER ZONES. THE PERIMETER SEDIMENT CONTROL PRACTICE MUST BE IN PLACE BEFORE ANY UP GRADIENT LAND-DISTURBING ACTIVITIES BEGIN. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION.

2. RE-INSTALL ALL SEDIMENT CONTROL PRACTICES THAT HAVE BEEN ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY HAS BEEN COMPLETED. COMPLETE ANY SHORT-TERM ACTIVITY THAT REQUIRES REMOVAL OF SEDIMENT CONTROL PRACTICES AS QUICKLY AS POSSIBLE. RE-INSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE.

3. ALL STORM DRAIN INLETS MUST BE PROTECTED BY APPROPRIATE BMPS DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. INLET PROTECTION MAY BE REMOVED FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (STREET FLOODING/FREEZING) HAS BEEN IDENTIFIED BY THE PERMITTEE OR THE JURISDICTIONAL AUTHORITY. THE PERMITTEE MUST DOCUMENT THE NEED FOR REMOVAL AND RETAIN THE RECORD WITH THE SWPPP.

4. TEMPORARY SOIL STOCKPILES MUST HAVE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS, AND CANNOT BE PLACED IN ANY NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS, OR CONDUITS AND DITCHES UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER.

5. WHERE VEHICLE TRAFFIC LEAVES ANY PART OF THE SITE (OR ONTO PAVED ROADS WITHIN THE SITE) A VEHICLE TRACKING BMP, APPROVED BY THE ENGINEER, MUST BE INSTALLED TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE. STREET SWEEPING MUST BE USED IF SUCH VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE STREET.

6. SOIL COMPACTION MUST BE MINIMIZED AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL. MINIMIZING SOIL COMPACTION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA OF THE SITE DICTATES THAT IT BE COMPACTED.

CONTROL OF WATER

1. WORK IN DRY CONDITIONS.

2. PUMPING, IF NECESSARY, SHALL BE PROVIDED AND CONDUCTED AT DISCHARGE RATES THAT DO NOT ERODE SOIL MATERIAL. DISSIPATION BMP'S SHALL BE IMPLEMENTED TO MITIGATE SOIL EROSION.

INSPECTIONS AND MAINTENANCE

1. THE CONTRACTOR SHALL IDENTIFY THE INDIVIDUAL(S) CERTIFIED AS A SITE MANAGER FOR OVERSEEING IMPLEMENTATION OF, REVISING, AND AMENDING THE SWPPP AND PERFORMING INSPECTIONS.

2. THE CONTRACTOR SHALL IDENTIFY THE INDIVIDUAL(S) CERTIFIED AS A BMP INSTALLER FOR PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPS.

3. INSPECTIONS WILL BE CONDUCTED AT LEAST ONE TIME PER WEEK AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.50 INCH IN 24 HOURS.

4. WHERE PARTS OF THE CONSTRUCTION SITE HAVE UNDERGONE FINAL STABILIZATION, BUT WORK REMAINS ON OTHER PARTS OF THE SITE, INSPECTIONS OF THE STABILIZED AREAS MAY BE REDUCED TO ONCE PER MONTH.

5. WHERE WORK HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, THE REQUIRED INSPECTIONS AND MAINTENANCE SCHEDULE MUST BEGIN WITHIN 24 HOURS AFTER RUNOFF OCCURS AT THE SITE OR 24 HOURS PRIOR TO RESUMING CONSTRUCTION, WHICHEVER COMES FIRST.

6. ALL PERIMETER CONTROL DEVICES MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ONE-HALF (1/2) OF THE HEIGHT OF THE DEVICE. THESE REPAIRS MUST BE MADE BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR THEREAFTER AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

7. SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS, MUST BE INSPECTED FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION.

8. CONSTRUCTION SITE VEHICLE EXIT LOCATIONS MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING ONTO PAVED SURFACES. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES BOTH ON AND OFF SITE WITHIN 24 HOURS OF DISCOVERY.

9. ALL INFILTRATION AREAS MUST BE INSPECTED TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITY IS REACHING THE INFILTRATION AREA. ALL INFILTRATION AREAS MUST BE INSPECTED TO ENSURE THAT EQUIPMENT IS NOT BEING DRIVEN ACROSS THE INFILTRATION AREA.

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No.	Revision	Date	By

PRELIMINARY
NOT FOR CONSTRUCTION



Drawn by KJL	Date 02-10-2023
Checked by	Scale AS SHOWN

WILKINSON LAKE BMP
VADNAIS LAKE AREA WATER MANAGEMENT ORGANIZATION
NORTH OAKS, MINNESOTA

SWPPP NARRATIVE
PROJECT NO. 7057-0014

SHEET
6
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STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE (CONTINUED)

POLLUTION PREVENTION MANAGEMENT MEASURES

THE FOLLOWING POLLUTION PREVENTION MANAGEMENT MEASURES SHALL BE IMPLEMENTED ON THE SITE AND SHALL BE A LUMP SUM PAYMENT:

1. BUILDING PRODUCTS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS, PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS MUST BE UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY A SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
2. HAZARDOUS MATERIALS, TOXIC WASTE, (INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) MUST BE PROPERLY STORED IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE OR HAZARDOUS MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH.7045 INCLUDING SECONDARY CONTAINMENT AS APPLICABLE.
3. SOLID WASTE MUST BE STORED, COLLECTED AND DISPOSED OF PROPERLY IN COMPLIANCE WITH MINN. R. CH.7035.
4. PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY IN ACCORDANCE WITH MINN. R. CH.7041.
5. REASONABLE STEPS SHALL BE TAKEN TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED INCLUDING THE USE OF DRIP PANS OR ABSORBENTS UNLESS INFEASIBLE. FUELING MUST BE CONDUCTED IN A CONTAINED AREA UNLESS INFEASIBLE. ADEQUATE SUPPLIES MUST BE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND AN APPROPRIATE DISPOSAL METHOD MUST BE AVAILABLE FOR RECOVERED SPILLED MATERIALS. REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN. STAT. § 115.061, USING DRY CLEAN UP MEASURES WHERE POSSIBLE.
6. WASHING THE EXTERIOR OF VEHICLES OR EQUIPMENT ON THE PROJECT SITE MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF FROM THE WASHING AREA MUST BE CONTAINED IN A SEDIMENT BASIN OR OTHER SIMILARLY EFFECTIVE CONTROLS AND WASTE FROM THE WASHING ACTIVITY MUST BE PROPERLY DISPOSED OF. STORE AND PROPERLY USE THE SOAPS, DETERGENTS, OR SOLVENTS. NO ENGINE DEGREASING IS ALLOWED ON SITE.
7. EFFECTIVE CONTAINMENT SHALL BE PROVIDED FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE CONSTRUCTION ACTIVITY. THE LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND, AND THE CONTAINMENT MUST BE DESIGNED SO THAT IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA RULES. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR DISPOSAL OF CONCRETE AND OTHER WASHOUT WASTES.
8. IN THE EVENT OF A SPILL, THE CONTRACTOR WILL MAKE THE APPROPRIATE NOTIFICATION(S) TO THE MPCA, CONSISTENT WITH THE FOLLOWING PROCEDURES:

 SPILLS OF PETROLEUM IN A QUANTITY GREATER THAN 5 GALLONS MUST BE REPORTED IMMEDIATELY TO THE MINNESOTA DUTY OFFICER.

 SPILLS OF ANY QUANTITY OF ALL OTHER CHEMICALS OR MATERIALS WHICH MAY CAUSE POLLUTION OF WATERS OF THE STATE MUST BE REPORTED IMMEDIATELY TO THE MINNESOTA DUTY OFFICER.

 REPORTABLE SPILLS SHOULD BE DIRECTED TO THE MINNESOTA DUTY OFFICER BY IMMEDIATELY CALLING THE FOLLOWING NUMBERS: (651) 649-5451 OR (800) 422-0798.

FINAL STABILIZATION

- FINAL STABILIZATION IS NOT COMPLETE UNTIL ALL OF THE FOLLOWING REQUIREMENTS ARE COMPLETE:
1. ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND ALL SOILS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH DENSITY OVER THE ENTIRE PVIOUS SURFACE AREA, OR OTHER EQUIVALENT MEANS NECESSARY TO PREVENT SOIL FAILURE UNDER EROSION CONDITIONS.
 2. ALL TEMPORARY SYNTHETIC AND STRUCTURAL EROSION PREVENTION AND SEDIMENT CONTROL BMPs (SUCH AS SILT FENCE) HAVE BEEN REMOVED. BMPs DESIGNED TO DECOMPOSE ON SITE (SUCH AS SOME COMPOST LOGS) MAY BE LEFT IN PLACE.
 3. FOR CONSTRUCTION PROJECTS ON AGRICULTURAL LAND (E.G., PIPELINES ACROSS CROP, FIELD PASTURE OR RANGE LAND) THE DISTURBED LAND HAS BEEN RETURNED TO ITS PRECONSTRUCTION AGRICULTURAL USE.

EROSION AND SEDIMENT CONTROL QUANTITY SUMMARY AND BMP SCHEDULE		
DESCRIPTION	UNITS	QUANTITY
SILT FENCE	L F	1480
SEEDING & MULCH (P)	ACRE	3.0
EROSION CONTROL BLANKETS	S Y	5,250

AMENDMENTS

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NORTH OAKS, MINNESOTA

SWPPP NARRATIVE
PROJECT NO. 7057-0014

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Update on White Bear Township Smart Irrigation Controllers LL2 2023-01 Grant Application

Lauren Sampedro
TEC Meeting
3/8/2023



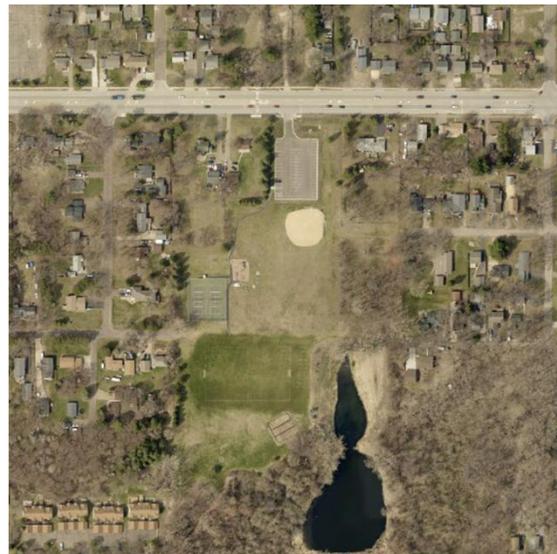
LL2 2023-01 Location Aerials



Polar Lakes Park & WBT Admin Building



Columbia Park



Scope of Work



- **Polar Lakes Park:**
 - Install 2 Hunter ACC2 controllers and cell modules
 - Install 2 flow sensors
- **Township Administration Building:**
 - Install Hunter ICC2 controller and cell module
 - Install flow sensor
- **Columbia Park:**
 - Install Hunter ACC2 controller and cell module
 - Install flow sensor
- **Training time**

Total Bid from Conserva Irrigation: \$37,375.00

Total Bid from Peterson Companies: \$14,388.00

Update on City of Vadnais Heights Smart Irrigation Controllers LL2 2023-02 Grant Application

Lauren Sampedro
TEC Meeting
3/8/2023



LL2 2023-02 Location Aerials



City Hall



Community Park



Scope of Work



- **City Hall:**
 - Install Baseline controller and cell module
 - Install flow sensor and soil moisture sensor
- **Community Park:**
 - Install Hunter ACC2 controller and cell module
 - Install flow sensor
- **Training time**

Total Bid from Peterson Companies: \$8,013.00

Update on City of Vadnais Heights Westfield Park Bioswale LL2 2023-03 Grant Application

Lauren Sampedro
TEC Meeting
3/8/2023



Planting Plan

PLANT SCHEDULE					
ID	Qty	Latin Name	Common Name	Size	Spacing (ft)
P2	110	Carex vulpinoidea	Fox Sedge	4" Pot	2
P4	64	Eupatorium 'Phantom'	Phantom Joe-Pye Weed	4" Pot	2
P5	96	Iris versicolor	Blue Flag Iris	4" Pot	2
P8	109	Rudbeckia subtomentosa	Sweet Black-Eyed Susan	4" Pot	2
P9	81	Andropogon gerardi	Big Bluestem	4" Pot	2
P16	43	Sorghastrum nutans	Indian Grass	4" Pot	2
P20	72	Schizachyrium scoparium	Little Bluestem	4" Pot	2
P25	64	Echinacea purpurea	Purple Coneflower	4" Pot	2
S6	20	Rhus aromatica 'Gro-low'	Gro-Low Sumac	2 Gallon	4
S9	7	Aronia melanocarpa 'Autumn Magic'	Autumn Magic Chokeberry	2 Gallon	4
666		TOTAL PLANTS			

