

MEETING DATE: April 14, 2016

TITLE: Authorization to Award Contract for 2016 Stormwater Pond Sediment Surveys

RESOLUTION NUMBER: 16-XXX

PREPARED BY: Laura Domyancich

E-MAIL: ldomyancich@minnehahacreek.org

TELEPHONE: 952-641-4582

REVIEWED BY: Administrator Counsel Program Mgr.: Tiffany Schaufler
 Board Committee Engineer Director of Planning: James Wisker

WORKSHOP ACTION:

<input checked="" type="checkbox"/> Advance to Board mtg. Consent Agenda.	<input type="checkbox"/> Advance to Board meeting for discussion prior to action.
<input type="checkbox"/> Refer to a future workshop (date): _____	<input type="checkbox"/> Refer to taskforce or committee (date): _____
<input type="checkbox"/> Return to staff for additional work.	<input type="checkbox"/> No further action requested.
<input type="checkbox"/> Other (specify): _____	

PURPOSE or ACTION REQUESTED:

Authorization to enter into a contract with Wenck Associates, Inc. for engineering services related to sediment surveys at seven ponds, including plotting, calculations, analysis of sediment samples, and report creation in the amount of \$36,430 and establish a not-to-exceed budget of \$40,073. (Contract budget amount is the maximum amount needed if all surveyed ponds need sediment analysis).

PROJECT/PROGRAM LOCATION: (See attached map.)

- Nokomis Amelia, Minneapolis
- Nokomis Gateway, Minneapolis
- Nokomis Knoll, Minneapolis
- Excelsior Pond, Saint Louis Park
- Glenbrook Pond, Wayzata
- County Road 6 Pond, Orono
- Gideon Glen Pond, Shorewood

PROJECT TIMELINE:

Sediment surveys to be completed during May with final completion of report by June 1, 2016.

PROJECT/PROGRAM COST:

Fund name and number: Project Maintenance and Land Management, 2003
Current budget: \$546,429
Expenditures to date: \$13,483
Requested amount of funding: \$40,073

PAST BOARD ACTIONS:

- RES 10-049, June 3, 2010, Contract with Wenck Associates for design and construction observation of stormwater pond dredging project
- RES 10-068, September 2, 2010, Contract for stormwater pond maintenance at Twin Lakes Pond and Amelia Pond
- RES 11-056, July 7, 2011, Authorization to Contract with Wenck Associates for Pond Sediment Surveys, to Solicit Bids for Regional Stormwater Pond Maintenance, and for Construction Management of Pond Maintenance
- RES 11-100, October 27, 2011, Authorization to Award Bid for the 2011-2012 Stormwater Pond Maintenance at Twin Lakes Pond, SW Calhoun Pond, and Gleason Lake Phase 2 Pond
- RES 13-045, April 25, 2013, Authorization to Award Contract to Wenck Associates, Inc. for Pond Sediment Surveys
- RES 14-045, May 8, 2014, Authorization to Award Contract for 2014 Pond Sediment Surveys to Wenck Associates, Inc.
- RES 15-022, March 26, 2015, Authorization to Award Contract for 2015 Stormwater Pond Sediment Surveys
- RES 15-093, November 12, 2015, Authorization to Award Contract for 2015-2016 Stormwater Pond Maintenance at Gleason North Ponds 2 and 3

SUMMARY: The District is responsible for the inspection and/or maintenance of 26 stormwater ponds through cooperative agreements (see **Attachment A**, Map.) The MCWD Board of Managers has established a policy that dictates cyclical investigation and maintenance of its stormwater management infrastructure. In 2011, the Project Maintenance and Land Management Program recommended pond sediment surveys of seven to ten ponds each year on a three-year rotation (see **Attachment B**, Pond Inventory / Status.) The Project Maintenance and Land Management Program budgets approximately \$193,000 for annual investigation and maintenance of these stormwater facilities. This maintenance is needed to ensure that regional ponds function as designed. Of the seven ponds recommended for Pond Sediment Surveys in 2016, Nokomis Amelia and Gateway ponds were last surveyed in 2010, the County Road 6 pond was last surveyed in 2011, Nokomis Knoll and Glenbrook ponds were last surveyed in 2013, and this will be the first sediment surveys in the Gideon Glen and Excelsior ponds.

Sample collection, handling, and analysis will be done for ponds identified by the surveys to need maintenance. The not-to-exceed (\$40,073) amount covers costs to analyze sediments for up to all seven ponds including standard contingency of 10%. The scope of services, which details tasks associated with performing the sediment surveys, can be viewed in **Attachment C**, Stormwater Pond Scope of Services.

ATTACHMENTS: **Attachment A:** Map, **Attachment B:** Pond Inventory / Status, **Attachment C:** Stormwater Pond Scope of Services.

RESOLUTION

RESOLUTION NUMBER: 16-XXX

TITLE: Authorization to Award Contract for 2016 Stormwater Pond Sediment Surveys

WHEREAS, the Minnehaha Creek Watershed District (MCWD) engages in regional capital improvement projects as described in its Water Resources Management Plan; and

WHEREAS, the MCWD has constructed or maintains regional treatment facilities at Nokomis Amelia, Gateway, and Knoll ponds, the Excelsior pond, Glenbrook pond, County Road 6 pond, and Gideon Glen pond; and

WHEREAS, these facilities need maintenance to continue functioning as designed; and

WHEREAS, the Project Maintenance and Land Management Program annually budgets for, inspects, and maintains regional stormwater infrastructure on a pre-determined, cyclical basis; and

WHEREAS, Wenck Associates, Inc. has surveyed some of the above ponds in the past and has specific knowledge on the ponds and the past maintenance; and

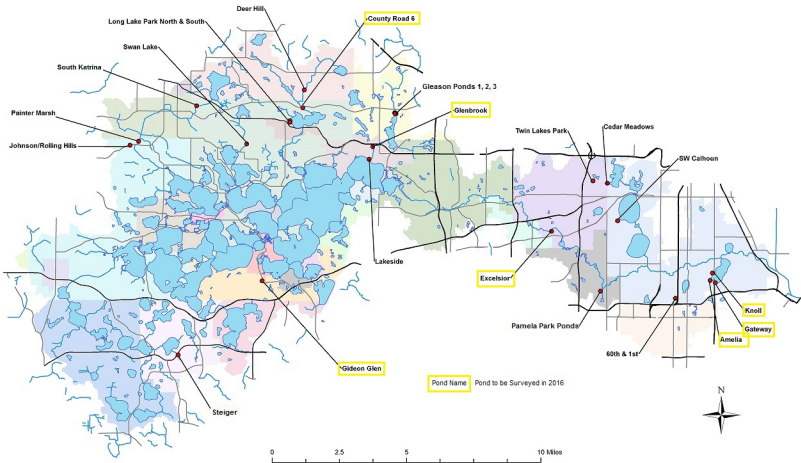
WHEREAS, internal Governance Policy #6 provides for a competitive process when purchasing any professional service in excess of \$25,000, but staff recommends, and the Board finds, that it is appropriate to deviate from that policy in light of Wenck's unique knowledge of the hydrologic and hydraulic behavior of the Minnehaha Creek watershed and the organizational goals of the District, as well as its work to date in monitoring stormwater ponds in the District, which together make Wenck uniquely qualified to develop a sound product cost-effectively; and

NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers authorize the District Administrator to execute a contract with Wenck Associates, Inc. for the amount of \$36,430 and authorize the administrator to execute change orders as necessary up to a not-to-exceed amount of \$40,073 for the survey of seven ponds, composite sediment samples analyzed for up to seven ponds, and a technical memo summarizing results of the analysis.

Resolution Number 16-XXX was moved by Manager _____, seconded by Manager _____.
 Motion to adopt the resolution ___ ayes, ___ nays, ___ abstentions. Date: April ____, 2016.

 Secretary Date: _____

Attachment A: MCWD Stormwater Ponds



Attachment B: Pond Inventory and Status

Subwatershed & Pond	Installed	Last Surveyed	Last Survey Results	Next Survey	Year Dredged	Cost	Amt. Removed (yd ³)	Maint. Responsibility
Minnehaha Creek								
60th and 1st Pond	2000	2013	N Bay: 0' sediment; SW Bay: ~3.1'; SE Bay: ~0.8'	2017				Minneapolis
Cedar Meadows-Basin 1	1996	2014	Insignificant amount	2017	2004	\$41,574	2750	MCWD
Excelsior Pond	2013			2016				MCWD
Nokomis-Amelia	2001	2010	Maintenance needed	2016	2011	\$48,175	2147	MCWD
Nokomis-Gateway	2001	2010	2% wet volume lost	2016				MCWD
Nokomis-Knoll	2001	2013	W Bay: ~0.2' of sediment; Central Bay: ~0.2' ; E Bay: ~0.7'	2016				MCWD
SW Calhoun-Cells 1	1999	2014	Maintenance needed	2017	2012	\$116,039	2024	MCWD
SW Calhoun-Cells 2	1999	2011	Insignificant amount		2004			MCWD
Pamela Park cell 1	2001	2015	36% accumulated sediment	2018				Edina first, then MCWD
Pamela Park cell 2	2001	2015	21% accumulated sediment	2018				"
Pamela Park cell 3	2001	2015	Insignificant amount	2018				"
Twin Lakes Pond	1996	2014	4% accumulated sediment	2017	2012	\$99,359	2080	MCWD
Long Lake Creek								
County Road 6 Pond	1998	2011	Insignificant amount	2016				MCWD
Deer Hill Pond-North	1996	2013	~0.4' depth of sediment	2018				MCWD
Deer Hill Pond-South	1996	2007	Insignificant amount	2018				MCWD
Long Lake Park North	1996	2014	Insignificant amount	2017	2004	\$16,578	2410	MCWD
Long Lake Park South	1996	2014	Insignificant amount	2017	2006			MCWD
Gleason Lake Creek								
Gleason Lake North 1	1995	2015	0% accumulated sediment	2018	2012	\$62,995	900	MCWD
Gleason Lake North 2	2008	2015	57% accumulated sediment	2018	2016	\$45,064	892	MCWD
Gleason Lake North 3	2008	2015	68% accumulated sediment	2018	2016			MCWD
Glenbrook Pond	1994	2013	W Pond: ~0.6' of sediment; Central Pond: ~1.0'; E Pond ~2.4'	2016				Wayzata
Lake Minnetonka								
Lakeside Pond	1994	2014	30% wet volume lost	2017				Wayzata
Gideon Glen	2006			2016				Shorewood
Swan Lake	2008	2014		2017				MCWD
Painter Creek								
Johnson/ Rolling Hills	2008	2015	21% accumulated sediment	2018				MCWD
Painter Marsh	1985	2015	23% accumulated sediment	2018				MCWD
South Katrina Pond	1985	2015	5% accumulated sediment	2018				MCWD
Six Mile Creek								
Steiger Wetland Pond	1989	2015	Maintenance needed; 75% accumulated sediment					MCWD/Victoria

2016 Surveys
2017 Surveys
2018 Surveys

Updated 4/6/2016

Proposal



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To: Laura Domyancich, Minnehaha Creek Watershed District

From: Kirby Templin, Wenck Associates, Inc.

Date: March 28, 2016

Subject: Proposal and Scope of Services for 2016 Stormwater Pond Sediment Surveys and Sampling

Scope of Work

In the interest of improving stormwater treatment throughout the Minnehaha Creek watershed, the District has implemented 30 stormwater ponds which it also manages. These ponds are surveyed on a three year rotation to measure sediment accumulation. Ponds are surveyed in the spring to determine the need for pond dredging to remove sediment. Sediment samples are collected and analyzed for specific parameters for the ponds identified for dredging. If needed, ponds are scheduled for dredging during the following winter, which will restore the permanent pool volume and capacity to manage water quality.

Wenck Associates, Inc. has prepared the following Scope of Services to provide a cost estimate of the sediment surveys and subsequent sample analysis. In 2016, 7 ponds will be surveyed to measure sediment accumulation. Ponds with sediment accumulation greater than 50% of the permanent pool volume will be sampled and analyzed for various compounds in preparation for pond dredging. The ponds identified for dredging will be excavated in the winter of 2016-2017.

The cost estimate for these services is provided in Table 1 below. Each task includes the expected minimum level of effort using the most efficient discounted hourly rates that are currently used by MCWD along with direct expenses covering mileage, survey equipment, etc. It is anticipated the scope of work, including reporting, will be completed by June 1st, 2016.

Table 1. Cost Estimate for Sediment Surveys and Sampling at Seven Ponds – March 2016

Task	Hours/Rate	Description	Cost
Grid Surveys	85/\$105	Summer surveys of sediment depth, gps coordinates for 7 sites	\$10,095*
Plot Data, Calculations, Drawings	57/\$118	Volume calculations and drawings for 7 sites	\$6,740*
Technical Report	14/\$129	Report on survey and sampling results, analysis of results to be completed by 6/1/2016**	\$1,800*
Sample Collection Laboratory Coordination	32/\$104	Sample Collection, composting, delivery, and handling	\$3,555*
Sieve Analysis	\$210/Sample	Grain size analysis	\$3,360***
Sample Analysis	\$680/Sample	Analytical work: For ponds with significant sediment accumulation, testing for parameters listed below.	\$10,880***
Total Cost		Not to exceed for project	\$36,430

* Estimated cost per task. The total payment for all tasks not to exceed the total cost.

** Technical Report to supply sufficient data to develop scope of maintenance for bid.

*** The number of samples required for each pond are based on the surface area of the pond. (Nokomis - Amelia 2 Samples, Nokomis - Gateway 2 Samples, Nokomis - Knoll 2 Samples, Excelsior Pond 2 Samples, Glenbrook Pond 3 Samples, County Road 6 Pond 3 Samples, Gideon Glen 2 Samples)

Parameter List for Task 6		Ponds to be Surveyed
Arsenic	Total Phosphorus	Nokomis – Amelia, Minneapolis
Cadmium	Nitrate + Nitrite	Nokomis – Gateway, Minneapolis
Chromium III	Ammonia-Nitrogen	Nokomis – Knoll, Minneapolis
Chromium VI	Total Kjeldahl Nitrogen	Excelsior Pond, Saint Louis Park
Copper	PCBs (Total)	Glenbrook Pond - Wayzata
Lead	Total Organic Carbon	County Road 6 Pond – Orono
Mercury	PAHs	Gideon Glen - Shorewood
Nickel	Zinc	
Selenium		

Laura Domyancich
Minnehaha Creek Watershed District
March 28, 2016



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Wenck appreciates the opportunity to provide you with our proposal. If you have any questions or comments regarding this proposal, please call me at (763) 252-6834.

If this proposal is acceptable, please sign and return.

Sincerely,

Wenck Associates, Inc.

A handwritten signature in black ink, appearing to read 'Kirby Templin', is written over a horizontal line.

Kirby Templin, PE
Water Resources Engineer

Accepted By:

Minnehaha Creek Watershed District

Laura Domyancich, Project and Land Technician

(Date)