



Title: Authorizing County Road 6 Pond Retrofit Design Contract

Resolution number: 24-031

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Recommended action: The Board of Managers authorizes contract execution for design of the County Road 6 (CR-6) Pond Retrofit Project

Schedule: May 2024: Project kickoff
Summer 2024: 30-60-90% design
Fall 2024: Bid solicitation and construction contracting
January 2025: Start construction

Budget considerations: Fund name and code: CR-6 Pond Retrofit (3159)
Fund budget: \$525,000
Expenditures to date: \$0
Requested amount of funding: disclosed under separate cover

Past Board action:

Res # 24-018	Ordering the County Road 6 Pond Retrofit Project and Authorizing Request for Proposals for Design and Engineering Services
Res # 23-018	Authorization to Execute a Contract for the County Road 6 Stormwater Pond Retrofit Feasibility Study
Res # 19-039	Authorization to Release RFP for Long Lake Creek Subwatershed Assessment
Res # 18-084	Authorization to Apply for BWSR CWF Competitive Grant Funding for Long Lake Creek Subwatershed Assessment.
Res # 18-066	Resolution of Support for the Long Lake Creek Subwatershed Partnership

Background:

In 1989, the Minnehaha Creek Watershed District (MCWD) with assistance from the Minnesota Pollution Control Agency (MPCA), through a Clean Water Partnership (CWP) grant, conducted a diagnostic study of Long Lake that characterized and quantified the causes contributing to the decline in water quality in the lake, developed numerical water quality goals, and determined performance standards for a plan to improve water quality and achieve the desired goals. This study, done with the support of local municipalities, laid the foundation for the projects undertaken by MCWD in the Long Lake area in the 1990s.

As a result of this study, the CR-6 pond, along with MCWD's Deerhill pond, were identified as regional treatment opportunities to reduce sediment and nutrient loading to Long Lake. The CR-6 pond was constructed in 1998 and

captures the drainage from two northern tributaries, treating 3,370 acres of runoff. The 2.5-acre pond was designed to remove approximately 50% of the total phosphorus load, when considered in conjunction with Deerhill pond, which was constructed upstream of the CR-6 pond in 1996. An easement, encompassing the full pond footprint, was obtained from the private landowner to ensure long-term maintenance, monitoring, and/or retrofits to the pond could be conducted.

Long Lake Creek Roadmap

Since 2018, MCWD, Long Lake Waters Association, and the cities of Long Lake, Medina, and Orono have been working together toward a common goal of addressing nutrient impairments in the Long Lake Creek Subwatershed. To support this mutual effort, MCWD obtained state grant funding in 2018 and led a subwatershed assessment to (1) provide a scientific understanding of the system, (2) identify cost-effective projects and strategies, and (3) develop an actionable roadmap for implementation for the municipal partners.

The roadmap identified 34 projects for advancement based on their cost-effectiveness and ability to implement. To prioritize these projects, a three-tiered strategy was developed:

1. Regional Stormwater Treatment
2. Landscape Projects
3. Internal Load Management

The enhancement or addition of regional stormwater facilities is recommended as the top priority due its ability to immediately and cost-effectively treat a large drainage area, while localized projects can continue to be implemented over time. The CR-6 pond was identified as one of two top-priority projects for near-term implementation.

Supporting the Roadmap's inclusion of the CR-6 pond as a priority opportunity, is the recent monitoring data that indicates the CR-6 pond has not been performing as originally designed. Despite being constructed 25 years ago, the pond has never required dredging and is currently approximately 16% full, suggesting a sediment accumulation rate of around 0.5% per year. Additionally, analysis of water quality sampling results suggests that, on average, the CR-6 pond is removing 30% of the incoming phosphorus load, with high concentrations of particulate phosphorus entering and exiting the system versus settling out in the pond. These datapoints underscore the necessity to assess the CR-6 pond for potential retrofit opportunities aimed at more effectively removing the fine particulate phosphorus.

Feasibility:

In April 2023, the Board authorized a contract with Stantec to conduct a feasibility study to evaluate potential retrofit opportunities. The scope of work included the refinement of the area's P8 model, on-site data collection, the identification of project concepts, and modeling of the project concepts. Retrofit methods explored through feasibility focused on maximizing particulate phosphorus removal, while maintaining the current easement footprint.

The study was completed in September 2023, in which 12 initial concepts were considered, with five concepts carried forward for full evaluation, modeling, and cost development. An evaluation matrix was established to support a shared understanding of the strengths and weaknesses of each retrofit option and provide a clear recommendation. Key evaluation metrics included phosphorus reduction potential, capital costs and cost-effectiveness, operations and maintenance, and regulatory considerations. The final report identified the implementation of a gravity sand filter bench as the most cost-effective solution. The report estimated the filter bench to cost \$664,000 for design and construction with the opportunity to reduce loading to Long Lake by 67 pounds (lbs) of Total Phosphorus (TP) per year. In follow-up conversations with the Stantec, it was acknowledged that constructing the earthen berm to further define the pond's two cells, in concert with the filter bench, would greatly reduce the berm's estimated construction cost from \$206,000 down to \$68,000, while providing an additional 4-6 lbs of removal annually. Therefore, staff have recommended that these projects be pursued in combination, to provide stacked water quality benefits in a cost-effective manner.

In total, these retrofits are projected to remove 52-73 lbs of total phosphorus annually. The feasibility study estimates a total design and construction cost for the filter bench and berm of approximately \$738,000. The 2024 project budget, estimated and set prior to feasibility completion, was \$525,000, to be funded by means of the District ad valorem tax levy. Feasibility also indicated that both projects can be constructed inside MCWD's existing easement boundary and no

additional property or property rights are needed. Furthermore, early regulatory screening has not indicated any insurmountable obstacles for the project being constructed.

In preparation for the Board's consideration for formal ordering, on March 11, 2024, MCWD staff presented to the Orono City Council, who approved a resolution of support for the CR-6 Pond Retrofit Project. On March 28, 2024, the Board of Managers formally ordered the project and advanced the project into the design phase by authorizing the release of a request for proposals (RFP) for design and engineering services.

RFP Process

Scope

On March 29, 2024, MCWD distributed the RFP to its running list of more than 40 local and national design and engineering firms and posted to the MCWD website. The RFP noted a design budget of \$112,000 with a scope of work that includes (1) 30-60-90% design deliverables, (2) permitting support, (3) final plans and specifications, and (4) bid support. Proposers were also asked to provide a cost-estimate for construction oversight, which will be funded separately and negotiated once final plans have been developed. The deadline for submittal was Monday, April 22, 2024. MCWD received proposals from three firms: Merjent, Rani Engineering, and Stantec.

Proposal Evaluation

In the RFP, firms were advised that MCWD would select a consultant based on proposed methodology, experience, and cost. The Board may consider these factors as it chooses and select a consultant for the work on the basis of its judgment.

A team of three MCWD staff evaluated the written proposals. The team evaluated the firms based on the following:

- Project understanding
- Methods and approach
- Project team and experience
- Cost

After proposal review, MCWD often conducts interviews as an additional step in the evaluation process, and the RFP indicated the intent to do so here. These interviews serve to stress-test project understanding, to gain additional clarity on the proposed approach and associated deliverables, or to differentiate between firms whose proposals were deemed similar during proposal evaluation. In this instance, the review panel determined that interviews were not a necessary step in the selection process and was confident moving forward with a recommendation based on proposals alone. Counsel has advised that MCWD has the discretion to select a firm without interviews.

Recommendation

Staff is recommending that Stantec be selected as the consultant and awarded the contract for services detailed in the Stantec proposal, which is provided under separate cover to the Board of Managers. Stantec's proposal impressed with its thoroughness and clarity, demonstrating a strong understanding of the project's objectives, decision points, and challenges. Stantec laid out a comprehensive approach to optimizing the filter bench and berm design for water quality and water quantity benefits. In addition, it demonstrated a deep understanding of the permitting complexities and needs of this project and how it will work in coordination with MCWD to support this aspect of the project. Lastly, Stantec brings a strong team to the project, many of whom have contributed to the modeling and design efforts during the project's feasibility stage.

In accordance with Minnesota Statutes 13.591, subdivision 3(b), the submitted proposals will not be part of the public record until the contract has been executed. A copy of all submitted proposals will have been distributed to the Board of Managers, via email, for review prior to the May 9, 2024 meeting.

Next Steps

Following authorization to award the contract, staff will work with Stantec's project manager to finalize the scope of work and contract. Staff do not anticipate the scope requiring any substantive changes. The final contract will not exceed the amount set forth in the proposal. The design team is expected to initiate work by mid-May 2024.



RESOLUTION

Resolution number: 24-031

Title: Authorizing County Road 6 Pond Retrofit Design Contract

- WHEREAS in 1998, the Minnehaha Creek Watershed District (MCWD) constructed the Country Road 6 pond as a result of the Long Lake diagnostic study to reduce sediment and nutrient loading to Long Lake; and
- WHEREAS a regional partnership was formed in 2018 among the Cities of Medina, Long Lake and Orono, and the Long Lake Waters Association, to pursue water quality improvements in the Long Lake Creek Subwatershed;
- WHEREAS in 2018, with support from the partnership, MCWD obtained state grant funding and led a subwatershed assessment to provide a scientific understanding of the system as a whole, identify cost-effective projects and strategies, and develop an actionable roadmap for implementation;
- WHEREAS this work resulted in what is formally referred to as the Long Lake Creek Roadmap (Roadmap);
- WHEREAS the Roadmap identified 34 projects for advancement based on their cost-effectiveness and feasibility to implement. These projects were further categorized based on an implementation strategy, which includes (1) regional stormwater treatment, (2) landscape projects, and (3) internal load management;
- WHEREAS the enhancement and addition of regional treatment is recommended as the first priority due to the ability to cost-effectively treat a large drainage area while localized projects are implemented over time;
- WHEREAS the MCWD 2018-27 Watershed Management Plan (WMP), at Table 3.11, identifies for capital project implementation the construction of infiltration or filtration basins and devices within the Long Lake Creek Subwatershed to reduce nutrient loadings to Long Lake;
- WHEREAS the roadmap identified the County Road 6 (CR-6) Pond, located in the city of Orono on an easement already held by MCWD, as a regional stormwater opportunity that looks to retrofit the existing pond to enhance its performance (Project). The Project has since been included in the MCWD's Capital Improvement Plan (CIP) and budget to reduce nutrient loading to Long Lake;
- WHEREAS on April 13, 2023, the MCWD Board of Managers ("Board") approved a contract with Stantec to conduct a feasibility study to explore retrofit opportunities;
- WHEREAS in September 2023, Stantec delivered its final report to MCWD, assessing five project concepts that target particulate phosphorus removal, and identified the addition of a gravity sand filter bench as the most feasible and cost-effective opportunity to reduce phosphorus loading to downstream Long Lake;
- WHEREAS follow-up conversations with Stantec revealed that constructing an earthen berm to further define the pond's two cells, in concert with the filter bench, would greatly reduce the berm's estimated construction cost, while providing additional water quality benefit;
- WHEREAS on March 11, 2024, the Orono City Council adopted a resolution of support for the Long Lake Creek Subwatershed Partnership and the Project;

WHEREAS on March 14, 2024 the Board's Operations and Programs committee reviewed the feasibility study and staff's recommendation to pursue the two project concepts in combination for stacked water quality benefits;

WHEREAS on March 28, 2024, the Board of Managers formally ordered the CR-6 Retrofit Project and advanced the project into the design phase by authorizing the release of a request for proposals (RFP) for design and engineering services;

WHEREAS in response to the RFP, MCWD received written proposals from Merjent, Rani Engineering, and Stantec. MCWD staff evaluated written proposals based on project understanding, methods and approach, project team and experience, and cost;

WHEREAS on the basis of its evaluation of written proposals, staff recommends the selection of Stantec, based on its strong project understanding, detailed and comprehensive approach, and its experienced team;

WHEREAS the Board of Managers finds that the evaluation has been thorough and properly structured, and that the work proposed by Stantec is demonstrated to be competitive and within budget;

NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers authorizes the District Administrator, on advice of legal counsel, to execute a contract with Stantec for design and engineering services for the County Road 6 Pond Retrofit Project, in accordance with the developed scope of work as the Administrator may refine it, and in an amount not to exceed the amount set forth in the proposal, and authorizes the Administrator to execute contract amendments in his discretion up to an additional 10 percent, in aggregate, of the contract amount.

Resolution Number 24-031 was moved by Manager _____, seconded by Manager _____. Motion to adopt the resolution ___ ayes, ___ nays, ___ abstentions. Date: 5/9/2024

Secretary Date: _____