



**Title:** Authorization to amend the design contract for the East Auburn Wetland Restoration Project

**Resolution number:** 24-063

**Prepared by:** Name: Rachel Baker  
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**Reviewed by:** Michael Hayman, Project Planning Director

**Recommended action:** The Board of Managers authorizes an amendment to the design contract for the East Auburn Wetland Restoration Project to accommodate higher than expected geotechnical costs and costs related to the project delay.

**Schedule:** March 2024 – Released RFP for design and engineering services  
May 2024 – Awarded contract for design and engineering services  
July 2024 – Project postponed due to wet conditions  
August 2024 – 30% Design update at Policy & Planning Committee meeting  
December 2024 – Geotechnical work scheduled  
Winter 2025 – 60-90% design  
Spring/Summer 2025 – bid solicitation and construction contracting

**Budget considerations:** Fund name and code: East Auburn Wetland Restoration (3160)  
Fund budget : \$550,000  
Expenditures to date: \$32,997.77  
Requested amount of funding: \$19,000

**Past Board action:**

Res # 24-032	Authorization contract execution for design of East Auburn Wetland Restoration Project in the Six Mile Creek – Halsted Bay Subwatershed
Res # 24-015	Ordering of the East Auburn Wetland Restoration Project and Authorization to Release a Request for Proposals for Design and Engineering Services
Res # 22-085	Authorization to Award Contract for East Auburn Wetlands Feasibility Study

Res # 22-063

Authorization to release a Request for Proposals for the East Auburn Wetlands feasibility study.

Res # 21-052

Authorization to Execute Contract for Assessment for the East Auburn Wetland Monitoring and Feasibility Support

**Background:**

The 2017 Watershed Management Plan (WMP) for the Minnehaha Creek Watershed District (MCWD) states that the main cause of impairments in East Auburn Lake is phosphorus being exported from nearby wetlands and entering the lake. The WMP also identifies the wetland systems between Wassermann Lake and East Auburn Lake (East Auburn Wetland or wetland) as a potential restoration opportunity to address nutrient export to East Auburn Lake.

In early 2023, MCWD contracted with Moore Engineering to complete a feasibility study that identified opportunities to address phosphorus export from East Auburn Wetland. The feasibility report identified hydrologic restoration of the wetland through the installation of an outlet control structure (sheet pile weir) as the most cost-effective and feasible opportunity to reduce nutrient export from the wetland system by approximately 50% to East Auburn Lake while restoring the wetland to a more natural hydrologic condition.

At the January 25, 2024 meeting, the Board received an update from staff on the outcomes of the feasibility study and staff's recent coordination to initiate project design with the City of Victoria (City), which owns the land on which the project will occur. The Board was informed that the City supports the District's project goals and wishes to facilitate project development and implementation, and potentially integrate trail improvements (boardwalk) along with the proposed outlet control structure.

On May 9, 2024, following a competitive request for proposal process, MCWD selected Moore Engineering as the consultant for the design of the outlet control structure, and a potential new boardwalk, in consideration of the water quality benefits to downstream East Auburn Lake.

In June 2024, Moore solicited quotes for geotechnical testing firms to collect geotechnical data that would support the structural design of the weir and boardwalk. A geotechnical investigation is crucial in understanding the underlying soils for sheet pile construction and helical pier depth for the boardwalk. Geotechnical costs were estimated by Moore to be around \$4,000, based on a previous project Moore completed earlier this year. All three firms who took part in Moore's competitive quote process provided quotes substantially above the estimated cost, ranging from \$11,500-\$12,750 for base bids and \$24,250 - \$27,340 for base bids and an alternative that included mats.

Due to above average precipitation levels throughout the months of June and July, geotechnical work completed during the summer would require expensive mats for the machinery. In consideration of the design engineer and their understanding of the site and its conditions, staff followed Moore's recommendation to pause the project until water levels in the wetland decline and the geotechnical evaluation can be completed without the use of the mats. Based on Moore's assessment of the quotes, it recommended the project team select American Engineering Testing, Inc. (AET) to complete the geotechnical work for \$12,750. AET was determined to have submitted a more responsive and complete quote for the work when compared to other proposals.

On August 9, 2024, MCWD staff received the 30% plan set and Hydraulics Report, an Engineer’s Opinion of Probable Cost (OPC) table, and a Wetland Delineation Report from Moore Engineering. At the August 22, 2024 Policy and Planning Committee meeting, staff gave a presentation outlining the preliminary design of both the weir and the boardwalk, and provided reflections on the decision to pause the project until conditions were more favorable to complete geotechnical evaluation.

During the project pause, staff have continued to have conversations with the permitting team in order to understand permit requirements for the project. Additionally, MCWD staff met with the City of Victoria (City) to receive their feedback on the initial boardwalk design, which was developed based on the City’s desired maintenance equipment. The City asked MCWD to create a leaner boardwalk design that will reduce the loading and thus reduce total costs, since the City owns and will fund construction of the boardwalk trail. The City indicated it would prefer to modify its maintenance equipment use, thus reducing the load requirements and overall cost to the trail. City staff also note that present transportation project costs are influencing its ability to identify available funds for 2025 construction. MCWD staff raised the idea of creative financing solutions in order for the City to include the boardwalk retrofit into its long-range capital improvement budget while being constructed with the overall wetland restoration effort. Staff at the city were amenable to those ideas.

Since pausing the project in August due to high water levels, overall inundation in the wetland has declined substantially. AET is scheduled to complete the geotechnical analysis in the first week of December. The quote provided by AET in June remains accurate for the December work but requires a budget amendment due to it being higher than available design contingency dollars.

Due to the higher-than-expected geotechnical costs, the City’s request for boardwalk design modifications, and additional coordination costs related to site access and a geotechnical bid addendum process, staff is requesting \$19,000 to be added to the design budget, as shown in the cost breakdown below and further detailed in the Moore Engineering memo (attached):

Contract amendments:

Task	Budget increase request	Reason
Geotechnical investigation	\$8,750	Higher than expected base bid
Boardwalk design	\$6,500	Alternate design per City request
Moore coordination	\$3,750	Additional meetings and coordination to complete geotechnical work

The East Auburn Wetland Restoration fund (3160) has available dollars to support this added cost and will not require a formal budget amendment to advance this effort.

**Supporting documents (list attachments):**

- East Auburn Wetland Restoration: Scope and Budget Update



## RESOLUTION

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**Resolution number:** 24-063

**Title:** Authorization to amend the design budget for the East Auburn Wetland Restoration Project

- WHEREAS the Minnehaha Creek Watershed District (MCWD) has developed a plan for the Six Mile Creek-Halsted Bay Subwatershed (SMCHB) that identifies implementation strategies to achieve MCWD's goals of protecting and improving water quality, water quantity, ecological integrity, and thriving communities through land use and water integration;
- WHEREAS the MCWD Watershed Management Plan (WMP) identifies the wetlands between Wassermann Lake and East Auburn Lake as the location of a capital investment to reduce watershed nutrient loading to improve water clarity and create a more abundant and diverse aquatic vegetation community in East Auburn Lake;
- WHEREAS in 2021 and 2022, MCWD staff conducted a refined water quality sampling, hydrology, and vegetation analysis in the wetland system between Wassermann Lake and East Auburn Lake to identify specific areas within the wetland responsible for the majority of the phosphorus export;
- WHEREAS the analysis indicated that the wetland cell (cell 1) at the outlet of Wasserman Lake is the primary driver of phosphorus export to East Auburn Lake, indicating total phosphorus concentration in groundwater is much greater than that in the stream channel and that the phosphorus in groundwater and wetland soil is mobilizing and exporting to downstream East Auburn Lake;
- WHEREAS on December 15, 2022, the MCWD Board of Managers approved a contract with Moore Engineering to conduct a feasibility study for the East Auburn Wetland Restoration;
- WHEREAS in October 2023, Moore Engineering delivered its final report to MCWD, assessing seven alternative approaches to nutrient reduction in the Cell 1 wetland, and identified hydrologic restoration of the wetland through the installation of an outlet control structure as the most feasible and cost-effective opportunity to reduce nutrient export to East Auburn Lake;
- WHEREAS on January 25, 2024, the Board of Managers reviewed the feasibility report and directed staff to continue partnership discussions with the City of Victoria to effectively advance the project;
- WHEREAS Victoria supports MCWD's project goals and wishes to facilitate project development and implementation, and potentially to integrate city trail improvements with the proposed outlet control structure;
- WHEREAS on February 26, 2024, the Victoria City Council adopted a resolution of support that expressed Victoria's support for the East Auburn Wetland Restoration project; authorized the MCWD to access city land within the project area to perform surveys and investigations for the purpose of project design; and authorized city staff to work with MCWD staff to develop project agreements, easements or other documents necessary for the District to construct and maintain the project on city land, and bring such documents forward for consideration by the Council;

WHEREAS on May 9, 2024, the MCWD Board of Manager authorized execution of a contract for design and engineering services for the East Auburn Wetland Restoration project with Moore Engineering;

WHEREAS as part of their proposal, Moore Engineering ran a competitive quote process for geotechnical engineering; all three firms who took part in Moore’s competitive quote process provided quotes substantially above the estimated cost;

WHEREAS Moore Engineering conducted a revised bid process through issuance of an addendum to determine costs for conducting the geotechnical work under wet conditions and based on revised bid prices, determined that any geotechnical work completed during the summer would require expensive mats for the machinery, nearly doubling the cost for the work;

WHEREAS the Board of Managers reviewed the 30% design memorandum and plan set for East Auburn Wetland Restoration at its August 22, 2024 Policy and Planning Committee meeting and agreed with the project team’s assessment that the project design effort should be paused until water levels in the wetland decline and geotechnical evaluation work can be completed without the addition of mats;

WHEREAS MCWD staff received feedback from the City of Victoria requesting a less robust boardwalk design which would reduce its overall portion of the project cost for the boardwalk update;

WHEREAS additional coordination costs due to the wet summer season and high-water levels in the wetland resulted in higher-than-expected geotechnical coordination costs by the design team;

**NOW, THEREFORE, BE IT RESOLVED** that the Minnehaha Creek Watershed District Board of Managers authorizes the District Administrator to amend the agreement between MCWD and Moore Engineering, Inc. (East Auburn Wetland Restoration Project) to include additional geotechnical engineering services, boardwalk design, and coordination in an amount not to exceed \$19,000;

Resolution Number 24-063 was moved by Manager \_\_\_\_\_, seconded by Manager \_\_\_\_\_. Motion to adopt the resolution \_\_\_ ayes, \_\_\_ nays, \_\_\_ abstentions. Date: November 21, 2024.

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

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# Memorandum

Date: November 14<sup>th</sup>, 2024

To: Rachel Baker, Planner – Project Manager, Minnehaha Creek Watershed District  
Michael Hayman, Director of Project Planning, Minnehaha Creek Watershed District

Prepared By: Jeff Madejczyk, Senior Project Manager  
Dan Elemen, PE

Project: East Auburn Wetland Restoration

Subject: Scope and Budget Update

We have prepared a summary of the additional efforts and out of scope work for the East Auburn Wetland Project. The additional efforts are related to two current items: Boardwalk Redesign and Geotechnical Investigation. There is also one known potential future item that could result in additional efforts. We have provided a summary of each item as well as the associated budget increase requested.

## Boardwalk Redesign

The boardwalk was designed based on parameters provided by the City of Victoria regarding the maintenance equipment that would be used. This resulted in an estimated cost for the boardwalk that is beyond what the City wants to spend on the project. Minnehaha Creek has reviewed the boardwalk design with the City and provided Moore with updated design parameters, which have been reviewed with Heyer Engineer. Heyer has estimated \$6,500 for the redesign with the new parameters for the boardwalk. This is essentially 90% of their original scope for the 30% design but is driven by the new specifications discussed with the City to reduce the overall cost of the boardwalk.

## Geotechnical Investigation

Moore had estimated \$4,000 in our proposal for this task based on a project we completed earlier this year for a sheet pile design as part of the wetland restoration. The cost for that wetland project was less than \$4,000 for the total scope. Bids for this project came back significantly higher ranging from \$11,500 to \$12,750. Based on discussions with the contractors that submitted the bids, their estimated schedule, and their understanding of the proposed work, it was determined to proceed with AET's bid of \$12,750 for the work. This is \$8,750 more than the original estimate in Moore's proposal for this task.

In addition to the higher bids for the geotechnical investigation, there has been a significant amount of additional coordination by Moore for this task. Including multiple site visits to meet with the contractors to get accurate estimates for the bid and with City staff to coordinate site access for performing the work due to the very wet conditions over summer 2024. There have been two additional meetings with MCWD to review the geotechnical scope, an additional RFQ update for the geotechnical work that had

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to be prepared and administered, and five additional site visits meeting with contractors and the City to coordinate the bid as well as access for the field work. The total amount of additional scope completed by Moore to coordinate the geotechnical investigation is \$3,750.

## Potential Future Out of Scope Task

There has been one coordination meeting with MCWD to discuss the potential water level impacts for a privately owned property adjacent to the northernmost cell of the wetland. At this point in time, this is the only other known project item that has the potential to create out of scope work beyond the current budget. Depending on the landowner's willingness to cooperate with MCWD, modeling needs to evaluate the issue, additional survey work, and whether or not this leads to redesign efforts, there could be additional scope and budget needed to address this item.

It is our understanding that additional work can be authorized at the Staff level if the efforts are within the 10% contingency of the contract amount. Moore estimates that if additional analysis is needed to evaluate the potential water level impacts to adjacent properties, it would include a combination of site survey, modeling updates, summary memo, and potential updates to the weir plans. At this time, we estimate that these efforts could be completed within the contingency amount for the contract (from \$6,200 - \$8,000), though this will be subject to how the analysis progresses as well as the comments and input from the private landowner.

Based on the above summary items, the total contract increase requested for the East Auburn Project is \$19,000 as shown in the table below. This does not include the additional scope that may be required to evaluate the water levels on adjacent properties.

<b>Task</b>	<b>Budget Increase Request</b>
Boardwalk Redesign	\$6,500
Geotechnical Contractor	\$8,750
Moore Coordination	\$3,750
<b>Total</b>	<b>\$19,000</b>

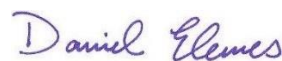
We appreciate this opportunity to review these project items with you. If you have questions or need additional supporting information for this request, please contact me via phone at 952-239-9464 or email at [jeff.madejczyk@mooreengineeringinc.com](mailto:jeff.madejczyk@mooreengineeringinc.com).

Thank you for your time.

Sincerely,



Jeff Madejczyk  
Senior Project Manager



Dan Elemen. P.E.  
Senior Water Resources Engineer