

Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Company (Jessica Olson, P.E. and Karen Chandler, P.E.)
Subject: Item 5B – Consider Approval of Engineering Services Scope and Budget for Bassett Creek Main Stem Restoration Project, Regent Avenue to Golden Valley Road (CR-M 2024)
BCWMC March 20, 2025 Meeting Agenda
Date: March 13, 2025

5B. Consider Approval of Engineering Services Scope and Budget for Bassett Creek Main Stem Restoration Project, Regent Avenue to Golden Valley Road (CR-M 2024)

Recommendations:

1. Consider approving the scope of work and \$603,000 total project budget (\$530,000 base project budget and \$73,000 contingency budget) presented in this memorandum and direct the Commission Engineer to prepare final design, develop plans and specifications, and provide permitting assistance, bidding assistance and construction services for the Bassett Creek Main Stem Restoration, Regent Avenue to Golden Valley Road (CR-M 2024), tentatively scheduled for construction in winter 2025-2026; and restoration, planting and native vegetation establishment in 2026-2028. The Commission Engineer will seek authorization from the Commission Administrator before proceeding with the work associated with the contingency budgets.

Background

At the September 21, 2023 meeting, the Commission passed resolution 23-06 officially ordering the Bassett Creek Main Stem Restoration Project (2024 CIP Project CR-M), at an estimated cost of \$2,241,000. The project's funding sources include:

- Up to \$1,741,000 available to the Commission through a Hennepin County tax levy on watershed taxpayers (CIP levy), with \$434,000 levied in 2023 for collection in 2024, \$653,500 levied in 2024 for collection in 2025, and an estimated \$653,500 to be levied in 2025 for collection in 2026.
- Up to \$200,000 from the Commission's Closed Project Account.
- \$200,000 from the City of Golden Valley's portion of the Commission's Channel Maintenance Fund.
- Up to \$100,000 from the City of Golden Valley's capital improvement program.

The Commission executed a cooperative agreement with the City of Golden Valley (City) that specifies the Commission will provide engineering services for the project and the City will bid, award, and administer construction of the project. The engineering services provided by the Commission Engineer include project design, preparation of bid documents, assisting with community engagement, preparation of exhibits for necessary property rights, permitting and environmental review, construction observation, environmental oversight, and inspections, all in cooperation and close coordination with the City. The City will use its best efforts to obtain property rights for the project, advertise for bid and award contracts for the work, administer the construction of the project, and pay the contractor. The Commission will reimburse the City for all eligible project costs as outlined in the cooperative agreement.

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The Commission completed a feasibility study in June 2023 (Feasibility Report for Bassett Creek Main Stem Restoration, Regent to Golden Valley Road, June 2023) that identified, mapped, and prioritized stream sections in need of restoration along a 7,000-foot section of Bassett Creek (known as Ĥaĥá Wakpádaŋ in the Dakota language) in Golden Valley from Regent Avenue to Golden Valley Road. At their June 15, 2023 meeting, the Commission approved the implementation of "alternative 3," to stabilize all eroding streambanks including those ranked high, medium, and low priority. The project is expected to reduce pollution in Ĥaĥá Wakpádaŋ / Bassett Creek and downstream in the Mississippi River by an estimated 82 lbs. of total phosphorus and 136,000 lbs. of total suspended solids on an average annual basis.

The feasibility report for the project will form the basis of the project design. The feasibility report and further project information can be found online at [Bassett Creek Watershed Management Commission :: Bassett Creek Restoration Project: Regent Ave. to Golden Valley Rd.](#)

Proposed Scope of Work

Below is a summary of the work scope components for this project:

1) Project Coordination and Project Meetings

- a) Kick-off meeting with BCWMC staff, commissioners, and City staff to review project expectations, schedule, and scope. The Commission Engineer will prepare and distribute the agenda, attend the meeting, and provide meeting notes for the kick-off meeting.
- b) Meeting with BCWMC staff and City communications and equity staff to discuss ideas for public engagement (virtual). The Commission Engineer will develop the agenda in coordination with City staff, attend the meeting and provide meeting notes.
- c) Utility coordination meeting (virtual).. The Commission Engineer will develop the agenda in coordination with City staff, attend the meeting and provide meeting notes.
- d) 50% design review meeting with BCWMC staff, commissioners, City staff, Metropolitan Council Environmental Services (MCES) staff, and Three Rivers Park District (TRPD) staff and preparation of meeting notes (virtual). This meeting would take place before BCWMC Meeting #1 and after preliminary 50% plans are developed.
- e) BCWMC Meeting #1: Commission meeting to present 50% design plans, including memo and presentation.
- f) 90% design review meeting with BCWMC staff, commissioners, City staff, MCES staff, and TRPD staff and preparation of meeting notes (virtual). This meeting would take place before BCWMC Meeting #2 and after preliminary 90% plans are developed.
- g) BCWMC Meeting #2: Commission meeting to present 90% design plans, including memo and presentation.
- h) BCWMC Meeting #3: Commission meeting to present final report upon project completion.

Meetings related to bidding and construction are incorporated under other tasks.

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2) Public Engagement/Communications

The Commission Engineer will coordinate with the BCWMC Administrator, City staff, and TRPD staff to determine the best means to gather public input on project plans and keep the public informed during construction. Engagement will include adjacent property owners, nearby residents, park users, and the larger community including underserved groups. The BCWMC and City staff will collaborate and coordinate to lead and facilitate the public engagement efforts together. The budget for this task includes time to prepare for and attend two public meetings, including preparing handouts and displays, and preparing materials to assist City staff and the Commission Administrator in their meetings/interviews with individuals or small groups, potentially as outlined in the BCWMC's Incentive Policy for Participation in Input-Gathering Activities (December 15, 2022). The first public meeting would take place after 50% design plans are complete, likely prior to the Commission meeting to present the 50% plans. The second public meeting would take place after 90% design plans are complete, prior to the Commission meeting to present the 90% plans. This task also includes assisting with updates to the Golden Valley and BCWMC project webpages and responses to public questions and comments. City staff and the BCWMC Administrator will coordinate meeting set-up, facilitation, and expenses. The City can host and disseminate information through its website, media channels and platforms.

3) Permitting

Based on the concepts developed, input from agency meetings that were held during the feasibility study, and follow up communications with agency staff, below is a list of anticipated permitting and approvals that will be required for the project before construction can begin. Per the Commission Engineer's recent email communications with Minnesota Department of Natural Resources (MDNR) staff, an Environmental Assessment Worksheet (EAW) will not be required for this project. The estimated costs include payment of anticipated permit fees. The City will designate the Commission Engineer as its agent for permitting, as applicable, allowing Barr to coordinate directly with regulatory agencies as questions arise.

- a) *Minnesota Wetland Conservation Act (WCA) Approval* - The City is the Local Government Unit (LGU) for the project location. The Minnesota Board of Water and Soil Resources (BWSR) oversees administration of the WCA statewide. While the desktop wetland evaluation completed in the feasibility study indicates wetlands of varying types and sizes along the length of the creek, the Commission Engineer will complete the joint application form and submit for approval, assuming that the entire project footprint above the MDNR ordinary high water level (OHWL) is wetland and requesting a no-loss determination.
- b) *US Army Corps of Engineers (USACE) permit (Section 404 Permit and Section 401 Certification)*
– The Commission Engineer will submit the joint permit application to both the LGU and the USACE. It is likely the proposed project would fall under a USACE Nationwide Permit (either NWP 27, Aquatic Habitat Restoration or NWP 13, Bank Stabilization). However, it is ultimately up to the discretion of the USACE. USACE decisions on Nationwide permits typically happen within 90 days of submittal. It is assumed that compensatory wetland mitigation will not be required for this project.
 - i) *Section 106: National Preservation Act* – Section 106 of the National Historic Preservation Act and its implementing regulations 36 Code of Federal Regulations (CFR) Part 800 (Section 106) requires that federal agencies assess the effects of their projects on cultural

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resources eligible for or listed in the National Register of Historic Places (NRHP). Section 106 applies to any federal agency undertaking that has the potential to affect NRHP-eligible or listed cultural resources, should they be present. The project will seek permitting from the USACE, thereby constituting an undertaking subject to Section 106. As a result, the Commission Engineer will update the cultural resources literature review completed in 2022 for the feasibility study. The literature review will focus on identifying previously recorded archaeological sites, historic structures, and other cultural resources relevant to the project area. The Commission Engineer will also access county records, historic maps, historic aerials, and other informed sources for supporting data as necessary. Research will be conducted through a review of Minnesota's Statewide Historic Inventory Portal (MnSHIP), and the online Portal maintained by the Office of the State Archaeologist (OSA). The literature review completed for the feasibility study in 2022 indicates that two previously recorded cultural resources appear to be within or directly adjacent to the project area. The updated literature review will include any additional cultural resources that have been documented after the 2022 review.

If the USACE determines an archeological survey is necessary, the Commission Engineer will develop a scope of work for a Phase I archaeological reconnaissance and technical report for the project. The cost of this work would range from approximately \$10,000 to \$15,000; however, cost will be dependent on guidance from the USACE (shown as contingency budget item 3(A) in cost estimate table).

- c) *United States Fish and Wildlife Service (USFWS)* – The federal government protects federally listed species under the Endangered Species Act and requires consideration of the impacts on these species for projects involving federal permits. The feasibility study identified one federally listed species and one proposed threatened species potentially occurring in the project area: respectively, the northern long-eared bat (*Myotis septentrionalis*) and the monarch butterfly (*Danaus Plexippus*).
- d) *MDNR public waters work permit* – *Ѓаѓа Wakpádaŋ* / Bassett Creek is a public watercourse, so the proposed work will require a MDNR public waters work permit. The Commission Engineer will prepare and submit this permit application.
 - i) *Minnesota's Threatened and Endangered Species* – State-listed species are protected, and the impacts on these species must be considered for state-level permitting requirements. One state-listed threatened species occurs within one mile of the project area: the Blanding's Turtle.
- e) *Minnesota Pollution Control Agency (MPCA) permitting* – this project is anticipated to disturb more than one (1) acre of upland and therefore requires a National Pollutant Discharge Elimination System / State Disposal System Construction Stormwater (CSW) General Permit issued by the MPCA. The CSW requires the preparation of a stormwater pollution prevention plan (SWPPP); the Commission Engineer will prepare a SWPPP for the project. The contractor will be responsible for obtaining the CSW permit.

- f) *BCWMC floodplain requirements* – The Commission Engineer will refine the existing XP-SWMM model for ĤaĤá Wakpádaŋ / Bassett Creek during the design process to demonstrate that the project does not increase flood elevations. The stability of design elements will also be evaluated using refined model velocities.
- g) *City permits* – The City requires a Stormwater Management Permit for land-disturbing activities that remove soils or vegetation, including but not limited to clearing, digging, dredging, draining, or filling. This project exceeds the thresholds that trigger this permit. The City also requires a Right-of-Way Management Permit to access and work in City easements and rights-of-way. The contractor will obtain all required City permits as part of the project.

4) Site Visits and Data Collection

- a) The Commission Engineer will complete up to two site visits to verify suitability of proposed design elements, evaluate current channel geomorphic parameters, and photograph any changed conditions since the feasibility study was conducted. The Commission Engineer will coordinate with City staff should they wish to participate in the site visits.
- b) The Commission Engineer will complete a survey of the channel, obtaining detailed topographic and bathymetric data through the reaches where restoration measures and/or construction access are planned. Additionally, the Commission Engineer will survey visible/detectable property boundary markers within or adjacent to the proposed work areas to facilitate preparation of property access agreements. Survey equipment is anticipated to include a total station, survey-grade GPS, and an unmanned aerial vehicle (UAS) with Lidar equipment. We assume that City staff will send letters to all properties in advance of the UAS flight and notify city police prior to the effort.
- c) The Commission Engineer will assess the potential for contamination in the project area as a follow-up to the desktop review in the feasibility study. The Commission Engineer will conduct a file review of MPCA regulatory files associated with a fuel oil release at ISD 281 Noble Elementary School, which was identified during the feasibility study as having the potential to impact the site (LS0021641 and SA0010038). If the regulatory file review indicates it is unlikely that contamination from the release has impacted the creek, additional environmental investigation will likely not be warranted; however, the Commission Engineer will develop a construction contingency plan (CCP) to provide guidance on how to proceed if unexpected contamination is encountered during construction. If the MPCA file review indicates contamination from the release may have impacted the creek, the Commission Engineer will develop a scope of work and plan for soil sampling. The cost of soil sampling and analysis could range from approximately \$15,000 to approximately \$30,000; however, cost will be dependent on the results of the MPCA file review, the number of samples, and the types of laboratory analysis (shown as contingency budget item 4(A) in cost estimate table). If contamination is identified during sampling, next steps would include enrolling the site in MPCA's Voluntary Remediation Program and developing a Response Action Plan (RAP) to address the contamination during construction. The Commission Engineer will develop costs for sampling, MPCA program enrollment and RAP preparation if they become necessary. It is likely that grant funding is available through the MN

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Brownfields program or the Hennepin County Environmental Response Fund for investigation and clean-up, if the amount of contamination is significant.

5) Preparation of Design Plans and Specifications

The Commission Engineer will build upon the feasibility study concept design to develop the project design, including two plan sets: one for Phase One to include heavy equipment construction, including earthwork and structure placement, and one for Phase Two to include site restoration and vegetation establishment with a multi-year vegetation management component. The Commission Engineer will prepare documents to be used for bidding and construction.

- a) *Construction Drawings*: The Commission Engineer will develop the following and provide to the Commission Administrator and City staff for review and comment:
- i. 50% design plans and memo to the Commission
 - ii. 90% design plans and memo to the Commission
 - iii. 100% plans for bidding and construction
 - iv. Following each submittal, the Commission Engineer will edit the plans based on reviews from City staff, Commission Administrator and the Commission.

Anticipated drawings for Phase One include:

- Cover sheet
- Construction SWPPP
- Construction notes and general notes
- Estimated quantities
- Existing conditions, removals, and erosion control plan
- Site access & traffic control plan (if necessary)
- Plan and profile sheets with stream structures and grading plans
- Stream cross-sections
- Project details
- Restoration plans

Anticipated drawings for Phase Two include:

- Cover sheet
- Estimated quantities
- Project details
- Vegetation establishment plan(s)

- b) *Specifications*: The Commission Engineer will develop separate contract “front-end” documents (starting with City standard specifications and making any required updates) for Phase One and Phase Two including instructions to bidders, bid form, contract (form of agreement), performance and payment bonds, general and supplementary conditions, etc., and technical specifications for the 90% and 100% submittals.
- c) *Easement acquisition and other property access*: The Commission Engineer will prepare and provide exhibits to City staff to support the City’s efforts throughout development of the design plans to obtain all property rights necessary for project implementation. Exhibits will include property boundaries, based on GIS parcel data and plat maps, and approximate locations of project components including construction access routes, as well as proposed temporary and

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permanent easement boundaries and legal descriptions. City staff will take the lead on sending letters and engaging with property owners. These maps will not constitute or represent boundary surveys for the impacted parcels.

- d) *Engineer's opinion of cost:* The Commission Engineer will prepare an engineer's opinion of probable construction costs for the 50%, 90% and 100% submittals. The Commission Engineer will report the opinion of costs to the Commission in a unit price and total cost format.
- e) *Pollutant removal estimates update:* This scope includes additional refinements to the pollutant removal estimates for total phosphorous (TP) and total suspended solids (TSS) based on final design components and the incorporated constructed improvements. The Commission Engineer will incorporate the TP and TSS pollutant removal evaluation results into the 50% and 90% design submittal memos to the Commission.

6) Bidding Services

This scope includes the following bidding services:

- a) Prepare bidding documents and issue addenda, as necessary
- b) Attend a pre-bid meeting, as necessary
- c) Coordinate with City staff to respond to questions from prospective bidders and prepare any required addenda. Post the bid via QuestCDN online bidding and administer the bidding process with the City.
- d) Prepare the bid tabulation and assist City staff with review of bids, checking references, and selection of a contractor.

7) Construction Services

This scope includes the following construction services:

- a) *Pre-construction Meeting:* City staff will host a pre-construction meeting. The Commission Engineer will prepare and distribute the agenda, attend the meeting, and provide meeting minutes for the pre-construction meeting.
- b) *Construction Progress Meetings:* This scope includes budget for up to 76 hours for the Commission Engineer to attend weekly construction progress meetings, and prepare agendas and meeting notes.
- c) *Construction Observation:* This scope includes budget for up to 760 hours for the Commission Engineer to observe the CIP project features during the construction phase of the project—40 hours per week for up to 18 weeks during heavy-equipment construction phase and 20 hours per week for up to 2 weeks during vegetation establishment and site restoration phase.
- d) *Survey and Construction Staking:* The Contractor will provide all construction-related survey and construction staking for the project. The Commission Engineer will provide design survey data and CAD drawing files to the Contractor upon request.
- e) *Construction Administration:* The Commission Engineer will provide the following services:
 - i. *Submittals:* Coordinate with City staff to manage submittals (any products or documentation requiring the engineer's review and/or approval) including tracking, review, resubmittals and approvals.

- ii. Pay applications: Coordinate with City staff to manage and review pay applications, including verification of pay quantities.
 - iii. Change orders: Coordinate with City staff to review contractor's change order requests and assist City with preparation of all change orders.
 - iv. Updates and modifications: Coordinate with City staff to prepare and distribute updated construction documents for any changes made during construction. This assumes the changes are small adjustments to the design and not substantial changes in construction scope or duration.
 - v. Contractor communication: Coordinate with the City staff to communicate with the contractor to clarify plans and specifications and answer questions that arise during construction.
- f) *Record drawings*: The Commission Engineer will receive record survey information from the Contractor. The Commission Engineer will prepare record drawings following completion of the work and will provide the record drawings to the Commission and City.
- g) *Contingency Environmental Soil Testing and Management during Construction*: If contaminated material is encountered during construction, the Commission Engineer will develop an additional scope and budget for recommended soil sampling and analysis (see contingency budget item 7(A) in cost estimate table).

8) Project Management

The Commission Engineer will manage project scheduling and budgeting, in close coordination with City staff and the Commission Administrator, and prepare and send bi-weekly project email updates that briefly summarize:

- a) Work completed since the previous updates
- b) Upcoming work
- c) Information, data or actions needed from others

Deliverables

The Commission Engineer will provide the Commission and the City with the following deliverables during the proposed work:

- a) 50%, 90% and 100% construction drawings
- b) 90% and 100% specifications
- c) 50%, 90% and 100% opinions of cost
- d) Memos to the Commission accompanying the 50% and 90% construction plans. The memos will describe the CIP project, how the CIP project follows or departs from the feasibility study, estimated project costs, and the water quality impacts.
- e) Presentations for the Commission meetings to present the 50% and 90% construction plans
- f) Graphics and materials for community engagement and public information efforts.

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- g) Exhibits for property rights and access.
- h) Record drawings
- i) Project meetings including kick-off meeting; pre-design meetings with utility representatives, City communications and equity staff; interim design meetings with Commission and City staff; Commission meetings; pre-bid meeting; pre-construction meeting; and construction progress meetings, including agendas and meeting notes or minutes
- j) Project email updates

Cost Estimate

The table below summarizes our cost estimate for the scope of work outlined above.

Tasks	Estimated Total
1) Project Coordination and Project Meetings	\$22,000
2) Public Engagement	\$17,000
3) Permitting	\$21,000
4) Site Visits and Data Collection	\$29,000
5) Design	\$192,000
6) Bidding Services	\$12,000
7) Construction Services	\$204,000
8) Project Management	\$33,000
Subtotal Base Project Budget	\$530,000
3(A) Contingent Budget for Phase I Archeological Survey	\$15,000
4(A) Contingent Budget for Environmental Investigation	\$28,000
7(A) Contingent Budget for Addressing Contamination During Construction	\$30,000
Subtotal Contingency Budget	\$73,000
Total Project Budget	\$603,000

The Commission Engineer will seek authorization from the Commission Administrator before proceeding with the work associated with the contingency budgets.

Schedule

The Commission Engineer will complete the tasks and milestones outlined in the scope of work on the following schedule.

Tasks and milestones	Estimated Schedule
Design – complete 50% plans for review and permitting	Summer 2025
Permitting	Summer / Fall 2025
Design – complete 90% plans for review	Fall 2025
Design – complete 100% plans for review	Fall 2025
Bidding	Fall 2025
Construction	Fall / Winter 2025/2026
Restoration, Planting and Vegetation Establishment	2026-2028
Record construction drawings, final restoration, project closeout	Fall / Winter 2026