

**RESOLUTION NO. 23-083
RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
BOARD OF MANAGERS**

Approving Task Order 36B

Manager _____ offered the following resolution and moved its adoption, seconded by Manager _____:

NOW THEREFORE BE IT RESOLVED that the Riley Purgatory Bluff Creek Watershed District Board of Managers hereby approves Task Order 36B for Barr Engineering to provide design and permitting services for the Bluff Creek Reach 5 Ecological Restoration Design.

The question was on the adoption of the resolution and there were ___ yeas and ___ nays as follows:

	<u>Yea</u>	<u>Nay</u>	<u>Abstain</u>	<u>Absent</u>
CRAFTON				
DUEVEL				
KOCH				
PEDERSEN				
ZIEGLER				

Upon vote, the president declared the resolution adopted.

Dated: December 13, 2023.

Dorothy Pedersen, Secretary

* * * * *

I, Dorothy Pedersen, secretary of the Riley Purgatory Bluff Creek Watershed District, do hereby certify that I have compared the above resolution with the original thereof as the same appears of record and on file with the District and find the same to be a true and correct transcription thereof.

IN TESTIMONY WHEREOF, I set my hand this ____ day of _____, 2023.

Dorothy Pedersen, Secretary

**TASK ORDER No. 36B – Upper Bluff Creek Reach 5 Restoration Design:
Design and Permitting Services
Pursuant to Agreement for Engineering Services
Riley Purgatory Bluff Creek Watershed District and BARR Engineering Company.**

This Task Order is issued pursuant to Section 1b of the above-cited engineering services agreement between the Riley Purgatory Bluff Creek Watershed District (District) and BARR Engineering Company (Engineer) and incorporated as a part thereof.

1. Description of Services:

Barr will work with District staff to complete the engineering design, ecological planning, and permitting, as well as provide private property owner support services to restore wetland and an approximately 1,000-foot reach of upper Bluff Creek, referred to as Reach 5, in Chanhassen, Minnesota. The project is located between Highway 5 and Highway 41 on property owned by multiple landowners, including both private owners and the City of Chanhassen (City). This portion of Bluff Creek was identified for restoration in the Creek Restoration Action Strategy (CRAS) and RPBCWD's capital improvement program in the 10-year plan in 2018. A subsequent 2020 update by RPBCWD staff identified Reach B5C of Bluff Creek as degraded and among the highest priorities for stabilization and/or restoration. Design would involve restoration of wetland hydrology, enhancement of plant biodiversity, and stabilization of the degraded creek, thus aligning with many of the District's goals identified in the 10-year plan. Project design would be followed by preparation of required permit applications and support the District's lead in obtaining easements in advance of project construction.

2. Scope of Services:

Engineer's services under this task order leverage the knowledge and lessons learned from recent RPBCWD restoration projects, including but not limited to Lower Riley Creek, Middle Riley Creek, Bluff Creek Tributary, Pioneer Trail Wetland, and Scenic Height Forest restorations. Task Order 36B scope of services shall include:

FINAL DESIGN AND PERMITTING ASSISTANCE

Final design and permitting assistance include multiple tasks in order to develop a resilient design. Key stakeholders (District, City, Met Council, Minnesota Department of Natural Resources [MNDNR], and U.S. Army Corps of Engineers [USACE]) have opportunity to provide input and feedback during the design process. These tasks are described below.

Task 1. Kick-off Meeting

A design kick-off meeting will be held with District, City, and Barr staff to discuss the overall project, intermediate deadlines, and deliverables for each deadline. The meeting will also provide an opportunity to define initial roles to be filled by District, City, and Barr staff.

Task 2. Site Visits and Data Collection

Site Visits: Barr staff will complete up to three site visits to verify suitability of proposed design elements and to complete field assessments necessary to assess wetland and Reach 5 channel conditions. It is anticipated that one site visit would be completed prior to 60% design and up to two additional site visits would be completed prior to final design. District staff will be notified of the site visits and invited to participate at their discretion.

Topographic Survey: Topographic survey of the project area will be completed by a subcontractor (HTPO, Inc. has frequently been involved in other watershed projects as a subcontractor) in the winter or spring of 2024. Barr staff will oversee the survey. Surveying tasks include:

- General topographic survey of project area.
- Cross-sections and centerline of the Reach 5 channel to confirm control elevations. This will include approximately 3,460 feet of the channel, including through the upstream wetland, and the two crossings at Galpin Boulevard and Arboretum Boulevard. Survey of the culverts includes both upstream and downstream inverts, notes on the culvert diameter, material, condition (i.e. open, crushed, 50% blocked, etc.), photos, and minimum overflow elevation.
- Survey of property boundaries to help develop legal easements of the work areas. The design will utilize LiDAR data outside of surveyed footprint.

Soil Boring: One (1) soil boring will be collected by a subcontractor at the proposed wetland outlet structure to ensure suitable soils exist below the proposed structure. Barr staff will oversee the soil boring.

Tree Survey: The tree survey will be completed by the District and will be used to identify trees potentially impacted by the project. The tree survey will include tree location using a GPS with sub-meter accuracy, diameter, and species for all trees 3 inches or greater in diameter at breast height (DBH). The data will be included in the design drawings and will be used to help estimate project costs and project impacts. Barr will coordinate with District staff to define the extents of the tree survey area upon further definition of the project.

Wetland Delineation: The field wetland delineation will be completed by the District. The wetland delineation will be completed in accordance with the 1987 USACE Manual and relevant regional supplement.

A wetland delineation report will be developed by District staff, documenting the presence of wetlands and wetland types. A MNRAM will be completed as necessary. The District will provide a delineation report and a request for delineation concurrence to the Local Government Unit (LGU) responsible for administering the Minnesota Wetland Conservation Act – in this case, the city of Chanhassen. If, Barr will coordinate with the District to participate in one meeting with the Technical Advisory Panel to review the wetland delineation on-site. Findings of the wetland delineation will be used to inform project permitting.

Soil Sampling: RPBCWD staff will fund and collect representative soil samples along the reach to document pre-project soil health conditions, compaction and organic component. The district would send the samples to the Cornell Soil Lab ([Soil Health Analysis Packages | Cornell Soil Health Laboratory](#)) for analysis of the following one of their established soil health analysis testing packages (note Cornell charges between \$90-\$165 per sample analyzed). This information will help inform elements of the restoration design.

Phase I Environmental Site Assessment: Barr recommends completing a Phase I Environmental Site Assessment consistent with ASTM E1527 – 21 during the early stages of the project to better assess the risk that past environmental releases could impact the project cost and execution. The results of this assessment will help identify data gaps related to potential releases. If “Recognized Environmental Concerns” are identified in the Phase I (e.g., nearby tank leak, etc.), Barr will work with the Administrator to identify the timing for additional investigations to better determine

potential environmental costs. For example, a Phase II field investigation (drilling/sampling) would be recommended to assess if the impacts are present in the project area. Services for a Phase II assessment would require a contract amendment as they are not included in this task order. Barr staff will complete the Phase I assessment and provide a summary of the results in the form of a technical memorandum.

Cultural Resources Desktop Assessment: Barr will complete a Phase Ia cultural resources literature review and desktop assessment for the Project footprint as well as a one-mile study area. The literature review will focus on identifying previously recorded archaeological sites, historic architectural resources, and other cultural resources relevant to the Project. Barr will also access electronic records such as county histories, historic maps, historic aerials, and other informed sources for supporting data. Research will be conducted through an online data search utilizing the Minnesota Office of the State Archaeologist's online portal and the Minnesota State Historic Preservation Office's Statewide Historic Inventory (MnSHIP) portal.

Barr will focus on previously recorded cultural resources within one mile of the Project. The literature review will help determine whether the Project area has been previously investigated for cultural resources as well as anticipate the likelihood for encountering unidentified cultural resources within Project boundaries. The Literature Review can be used for state and/or federal agency coordination regarding how the Project may affect cultural resources. The deliverable will consist of a brief report. If agency consultation determines that a cultural resources investigation is required for the Project, Barr can provide this services under an amendment to this task order .

Task 3. Stakeholder Meeting with Permitting Agencies

District Staff will coordinate a meeting with key project stakeholders to facilitate early discussion about the project and identify critical stakeholder concerns. This task assumes one virtual stakeholder meeting at approximately 60% design with the District Staff, City, Met Council, MNDNR, USACE and any other public entities with a stake in the project. The kick-off meeting in Task 1 will help establish a tentative schedule for each meeting and identify key dates to provide notices and/or send information to stakeholders. It is assumed each agency stakeholder meeting will be approximately 1 hour long and held virtually.

Task 4. Optional Minnesota Stream Quantification Tool (SQT) Analysis

As an optional task, the current version of the SQT will be used to determine an existing condition functional category (e.g., hydrology, hydraulic, and geomorphic) score (ECS) for Reach 5, as well as a proposed conditions score (PCS) to be achieved post-construction. As part of the USACE's review and permitting process, they have indicated a strong preference for using the SQT to evaluate changes in ecosystem functions (functional lift) related to channel improvements associated with projects of this nature.

Included in this task is a site visit to establish existing condition functional category scores (e.g., hydrology) for the Reach 5 channel and estimate its potential functional lift. The results of the SQT analysis will be used to inform the proposed design.

Task 5. Preliminary (60%) Design and Opinion of Probable Cost

The preliminary design will be advanced based on District, City, and stakeholder input.

Hydraulic modeling will be conducted to inform the wetland and stream restoration design. In particular, it will be used to evaluate flows, water depths, velocities, and existing and proposed erosive forces. This will help to develop proposed restoration measures that can withstand anticipated creek flows while minimizing impacts to adjacent private properties. It will also be used to design the wetland outlet structure features so that the proposed design will provide improved wetland hydrology and water quality benefits while minimizing potential impacts to adjacent private properties.

The 60% design drawings will be provided electronically in pdf format to the District Administrator and City for additional feedback. A preliminary opinion of probable construction cost will also be prepared. The design drawings are anticipated to include site grading/excavation, erosion preventions and sediment control, removals, diverse vegetation restoration, stormwater pollution prevention plan (SWPPP), and details plan sheets. It is assumed that comments will be provided within two weeks of submitting the drawings.

Task 6. EAW Preparation

An Environmental Assessment Worksheet (EAW) will likely be required for this project due to the potential length of affected stream channel and restoration of upstream wetland. The EAW will be prepared based on the project concept described in the Ecological Enhancement Plan with access accounted for to the extent feasible at the time of preparation. The allocated budget and process outlined below is based on the wetland delineation, Phase I cultural and historical assessment, and Phase I environmental site assessment being sufficient for EAW and all permit application development. If it is determined there is less than 1 acre of total impact to public waters, then an EAW would not be required by Mn Rule 4410.4300 Subp. 27 and this task might be eliminated and permit applications will be submitted sooner.

This scope of services allots time for Barr to provide procedural support to the Responsible Government Unit (RGU) tasked with administering the EAW process. Per Minnesota Rules, the project requires an EAW under Subpart 27 (i.e. more than 1 acre of impact to a public water) and the local government unit responsible for administering the Wetland Conservation Act (WCA) shall be the EAW RGU. As such, the RGU for this project would be the City. To support the City, Barr will facilitate the following items in addition to preparation of the EAW:

- Revisions to the Draft EAW based on District and City review comments. It is assumed the City will deem the Draft EAW complete after one iteration of comments and associated updates.
- Barr will facilitate EAW submittal to the Minnesota Environmental Quality Board (EQB) for publication in the EQB Monitor, which initiates a 30-day public review and comment period.
- Barr will support the City by preparing responses to comments received during the EAW public review period.
- Barr will prepare a finding of facts and EIS decision document for the City's review and approval. The City and District will be responsible for presenting this document should the City decide to bring the decision before City Council. This scope of services presumes

that the resulting Record of Decision (ROD) will determine that the project does not have potential for significant environmental effects, and that an Environmental Impact Statement (EIS) will not be required.

- Barr will facilitate submittal of the City's EIS need determination to the EQB to finalize the EAW process.

After the ROD is issued, permit applications can be submitted.

Task 7. Permitting Assistance

Barr will complete permit applications for the project, including the development of a stormwater pollution prevention plan (SWPPP). A MNDNR Work in Public Waters Permit, WCA Permit and USACE Section 404 Permit may be required, as well as local permits such as the RPBCWD and City permits. Because the MndNR's Work in Public Waters permit will address District's Rules E (dredging), F (shoreline and streambank stabilization), and G (waterbody crossing and structures), the scope presumes a separate District permit will not be required to address these rules. This scope of work includes completing permitting materials for compliance with RPBCWD's rules B (floodplain), C (erosion prevention and sediment control) and D (wetland and creek buffers). Since wetlands were not previously assessed using MnRAM, MnRAM assessments for the delineated wetlands will be required to facilitate District permitting for wetland buffer determinations.

The District's timely review of permit application materials prior to submittal and designation of Barr as its authorized agent for permitting (as applicable) will allow Barr to submit permit applications and maintain the project efficiency and schedule. To further facilitate timely submittal of permit applications, permit fees will be paid by Barr and invoiced to the District as a direct expense in addition to the estimated budget for this task order.

Permit applications will be prepared following completion of 60% design. Due to the potential magnitude of impacts to public waters and needed USACE section 404 approval, it is anticipated that permitting may take up to 180 days for full approval and authorization to complete the work.

Task 8. Final Engineering and 90% Design

After gaining additional input from stakeholders regarding the advanced design, Barr will continue to refine the design and prepare the 90% drawings and opinion of cost for review by District and City staff.

Task 9. Final Construction Drawings and Engineer's Opinion of Probable Cost

Upon review and approval of the 90% design by District staff, Barr will complete the final construction drawings (bid-ready). Upon completion of the final design, Barr will prepare an Engineer's Opinion of Probable Cost. This cost estimate will accompany the finished plan set for final approval by the District.

Task 10. Technical Specifications and Construction Documents

Barr will provide technical specifications and a bidding form for the project. Barr will develop technical specification sections using Construction Specifications Institute (CSI) format including all "upfront" sections such as general conditions, supplementary conditions, summary of work and those related to bidding and contracting. The development of the technical specification will be coordinated with the District Administrator and Counsel. Barr assumes specifications will be in CSI

format with Engineers Joint Contract Documents Committee (EJCDC) general conditions. Specifications will be provided for review in conjunction with the Final Construction Drawings and include up to one set of revisions.

Task 11. Private Property Owner Agreement Support

Barr will assist District staff's lead in facilitating a one-on-one meeting with private property owners adjacent to the project to discuss potential implications on their properties, such as access, construction, maintenance, and buffer dedication. These meetings will occur early in the design phase with findings used to inform access and easement agreement development. It is assumed each property owner meeting will be approximately 1 hour long and will occur either on-site at the property, at the District's office, or virtually. As shown in the figure below, the 100-year flood elevation in the wetland extends onto over 40 properties (highlighted in teal).

For this reason, the wetland restoration design will seek to prevent increases in the 100-year flood elevation. For budgeting purposes, it is assumed that approximately 10 properties will experience a rise in the 10-year flood elevation, thus requiring easement agreements. Further modeling during the design phase may result in fewer or more properties being impacted by the design. For example, if climate resiliency to extreme storm events is incorporated into the project, additional properties and coordination would be implicated and require an amendment to this task order. Additional funds for easement support or a revision in the design may be necessary.



District staff will coordinate with affected property owners (up to 10) to assist District legal counsel in developing easement agreements to allow for the ecological enhancement and maintenance of upper Bluff Creek and associated wetland. This task will be led by District staff and counsel, but Barr staff will support by providing input on technical components during development of the agreement, as well as figures and other support, as requested. Provided figures will include an exhibit showing existing and proposed 1-, 10-, and 100-year inundation extents within the wetland. The individual agreement will specify the responsibilities of each organization, as well as the long-term inspection and maintenance of the restoration efforts.

Because the level of effort associated with this task is dependent on the number of affected parcels and agreeability of the affected property owners, Barr has allocated an allowance of up to 120 hours (approximately 12 hours x 10 property owners) to provide the District with support as requested for meeting attendance and easement development. Should support beyond the allowance be requested by the District, Barr will provide the services on a time and expense basis pursuant to Section 1a of the above-cited engineering services agreement between the District and Barr.

Task 12. QA/QC Review

Barr will leverage other experienced wetland and stream restoration staff not directly involved in the design of the project to provide QA/QC review at the 60%, 90% and final design phases.

In addition, Barr will implement QA/QC processes for permitting document and private property owner support tasks. As part of QA/QC for these items, work products will be reviewed by a qualified senior team member prior to submittal to the District for review.

Task 13. Project Management

Project management is a key component to help meet project milestones. In addition, project management will help make sure the work meets the expectations of District staff and other stakeholders and that work is completed in a satisfactory manner within the project timeline and within the agreed-upon budget.

Barr will continue to provide updates to the project team that document project progress and coordinate tasks and assist District staff in updating the project website. Barr will provide the District with monthly progress reports and budget status updates as part of the monthly invoicing process. Barr will solicit District Staff feedback on an ongoing basis to maintain clear and timely communication.

Assumptions

Barr has made several assumptions about the scope of work items in this agreement. Assumptions relating to individual work tasks are listed above in the task detailed descriptions. However, additional assumptions that do not correspond with a single work task are listed below:

- The anticipated services include in this task order are based on the preliminary ecological enhancement concepts in the June 2022 Bluff Creek Reach 5 Ecological Enhancement Plan.
- No property acquisition will be needed for the project.
- The District will provide all available and applicable GIS and CAD files to Barr in an electronic format.
- All services related to preparation of a maintenance plan are excluded from this current task order.
- If specialty subcontracting services are needed (e.g., cultural resources specialist, surveyor, etc.), Barr will seek approval by the District Administrator prior to engaging a subcontractor. A subcontractor mark-up of 10% will be used to cover additional risks and costs of sub-consultants on design projects.
- The proposed budget includes costs for mileage reimbursement for site visits and additional data collection, as needed. Mileage will be charged according to the United States Business Standard Mileage Rate established by the IRS.

3. Deliverables:

The following deliverables will be prepared and provided to the District:

- Kickoff meeting agenda and notes
- Topographic survey data incorporated into design drawings
- Agency stakeholder meeting agendas, materials preparation, and meeting minutes (up to 2 meetings)
- Phase I Environmental Site Assessment technical memorandum
- Cultural Resources Desktop Assessment Report
- 60% design drawings and Engineer's Opinion of Probable Cost (PDF, up to 30 sheets)
- MnDNR Work in Public Waters, USACE, SWPPP, District, and City permit applications

- 90% design drawings and Engineer’s Opinion of Probable Cost (PDF, up to 48 sheets)
- Final design drawings and Engineer’s Opinion of Probable Cost (PDF, up to 48 sheets)
- Technical specifications and provisions
- Contract documents for the bid process
- Up to 10 legal descriptions for private property owner easements
- An exhibit showing existing and proposed 1-, 10-, and 100-year inundation extents within the wetland

4. Budget:

Services under this Task Order will be compensated for in accordance with the engineering services agreement and will not exceed \$243,700, without authorization by the Administrator or Board of Managers except as footnoted below. Barr understands the importance of working as efficiently as possible while providing the services needed for design and construction of a resilient project. Therefore, we will look for cost saving during the entire design process to avoid unneeded duplication of past efforts, such as having District staff collect data. The following table provides a breakdown of the anticipated cost for major tasks associated with scope of services describe above.

Task	Task Description	Anticipated Budget	Anticipated Completion Date
1	Kick-off Meeting	1,400	Winter 2023
2	Site Visits and Data Collection (soil boring, topographic survey, Phase I ESA, cultural resources assessment)	62,300	Summer 2024
3	Stakeholder Meetings with Permitting Agencies	4,000	Summer 2024
4	SQT Analysis (optional)	13,200	Summer 2024
5	60% Design and Opinion of Probable Cost	40,200	Winter 2025
6	EAW Preparation	15,300	Fall 2024
7	Permitting Assistance ¹	30,200	Fall 2024
8	90% Design and Opinion of Probable Cost	19,400	Spring 2025
9	100% Design and Opinion of Probable Cost	11,900	Summer 2025
10	Technical Specifications and Construction Documents	14,800	Spring/ Summer 2025
11	Private Property Owner Agreement Support ²	20,000	Winter/Spring 2025
12	QA/QC Review	4,000	Ongoing
13	Project Management	7,000	Ongoing
Task Order 36B Total^{1, 2}		243,700	

¹ To facilitate timely submission and publication, permitting and ad fees will be paid by the Barr and invoiced to the District as a direct expense in addition to the estimated budget listed above.

² Because the level of effort associated with this task is dependent on the agreeability of the affected property owners, Barr has allocated a budget allowance for this task. Should support beyond the allowance be requested and approved by the District Administrator, Barr will provide the services on a time and expense basis.

5. Schedule and Assumptions Upon Which Schedule is Based

The project schedule is based on the substantial construction occurring during the winter of 2025, with final site restoration being completed in Spring 2026. The schedule outlined above assumes project initiation will occur in November 2023. The schedule may be modified depending on actual

initiation of project work, stakeholder reviews, permit approvals, and stakeholder coordination efforts. The schedule will be further developed as part of project initiation and reviewed with the District as part of Task 1.

IN WITNESS WHEREOF, intending to be legally bound, the parties here to execute and deliver this Agreement.

CONSULTANT

**RILEY PURGATORY BLUFF CREEK
WATERSHED DISTRICT**

By _____

By _____

Its Vice President _____

Its _____

Date:

Date:

APPROVED AS TO FORM & EXECUTION
