

LOWER MINNESOTA RIVER WATERSHED DISTRICT

**Spring Creek Sites 1 and 2 Design and Construction Stabilization Project**

Workplan—December 1, 2022

*Spring Creek Sites 1 and 2 Design and Construction Stabilization Project is located in the City of Carver. Previous studies recommend channel erosion countermeasures, including riprap, Bio-D block, native plantings, removal of failing concrete walls, cross vanes, and reconnection to the floodplain. Site 1 is located at 112 5th Street West, and Site 2 is located at 404 Broadway. The Lower Minnesota River Watershed District (LMRWD) will work with a consultant from the consultant pool to develop final construction plans for the stabilization of Sites 1 and 2. A vegetation assessment will also be performed to inventory existing vegetation and inform the stabilization plans for Sites 1 and 2.*

**Summary**

<i>Outcome:</i>	Final design and construction of bank stabilization measures at Spring Creek Sites 1 and 2
<i>Project Partners:</i>	Sites 1 and 2 landowners; Carver Soil and Water Conservation District; Engineering consultant
<i>Timeline for Completion:</i>	March 2023–September 2024
<i>Total Fees:</i>	\$29,078
<i>Total Expenses:</i>	\$112,000
<i>Total Project Budget:</i>	\$141,078

**Objective 1. Project Management**

*Task 1-1: Project plan development and project management.* Finalize the workplan, assign project tasks, determine whether additional resources are needed, set dates for deliverables, generate and maintain project schedule, and conduct monthly invoicing. Young Environmental will develop a request for design and construction for the LMRWD consultant pool, review proposals, and recommend the best consultant to move forward with. Young Environmental will execute the consultant contract, including specific deliverables.

*Task 1-2: Project kickoff meeting.* After a consultant is chosen for design, Young Environmental will host a project kickoff meeting with the Carver Soil and Water Conservation District (SWCD), the LMRWD, and the consultant to introduce the project team, reaffirm or modify the scope of work and schedule, and review the preliminary data needs. This task includes developing a meeting agenda and summary.

*Task 1-3: Board updates.* Young Environmental will provide two update memos to the LMRWD board summarizing project progress and recommendations as necessary.

*Timeline for Completion:* August 2023–September 2024

*Deliverables:* project approach and schedule, executed contract with engineering consultant, meeting agendas and summaries, invoices, board updates

*Young Environmental Budget:* \$5,044

## **Objective 2. Data Collection and Field Work**

*Task 2-1: Data collection.* Use available background resource information and modeling developed as part of the Spring Creek Hydrology Review in January 2022. This task also includes reviewing and verifying the data used in the original study and updating data where needed.

*Task 2-2: Vegetation assessment.* Perform an inventory of the existing vegetation within Sites 1 and 2. Both desirable and invasive species will be inventoried to determine existing vegetation that will be preserved and areas where removal of terrestrial invasive species is required. The vegetation information collected during the assessment will inform the stabilization and site restoration plans that will be developed in Task 3-1.

*Task 2-3: Topographic survey.* Complete a topographic survey near Sites 1 and 2 to support detailed design development and hydraulic updates if necessary. Bathymetric data may be necessary to characterize the channel.

*Timeline for Completion:* June–October 2023

*Deliverables:* data matrix, survey data, maps, photographs

*Young Environmental Budget:* \$0

*Consultant Budget:* \$44,000

## **Objective 3. Final Engineering Design**

*Task 3-1: Engineering design.* This task includes using the vegetation assessment and new topographic and bathymetric data to support the development of final design plans for stabilization measures at Sites 1 and 2, final specifications, preparation of a technical design memorandum, and engineers' opinion of probable construction costs (EOPCC). An engineering consultant will be chosen from the LMRWD pool and will be expected to submit 60 percent, 90 percent, and final plans to the LMRWD for review and concurrence.

*Task 3-2: Hydraulic analysis.* This task includes updating the hydraulic model with new topographic and bathymetric data as necessary and developing a proposed hydraulic model based on the proposed stabilization measures.

*Task 3-3: Permitting.* Young Environmental will develop a permit matrix to identify specific permit requirements, prepare and submit applicable permit applications based on the final design plans, and review and share agency comments with the appropriate project partners for resolution. This task includes coordination with identified agencies to present the project and confirm permit requirements and timelines.

*Task 3-4: Design review.* Young Environmental will review the design, hydraulic model, and construction plans and provide comments and feedback for incorporation. Reviews will be completed at 60 percent, 90 percent and final submittal. Young Environmental will work closely with the consultant to ensure that LMRWD scope and goals are being met.

*Task 3-5: Coordination with project team.* Young Environmental will host and facilitate three meetings with the consultant (60 percent, 90 percent, and final submittal) to communicate project progress, discuss issues encountered, develop potential solutions, and share any new information. This task includes developing meeting agendas and summaries.

*Timeline for Completion:* October 2023–February 2024

*Deliverables:* final construction plans, hydraulic modeling, EOPCC, specifications, technical design memorandum, permit matrix, permit applications

*Young Environmental Budget:* \$15,038

*Consultant Budget:* \$25,000

#### **Objective 4. Construction Administration**

*Task 4-1: Preparation of bid package.* This task includes preparing the bid package for advertisement. The bid package will include all relevant specifications, contract documents, and final signed construction plans.

*Task 4-2: Bid opening.* This task includes facilitating the bid opening and award and execution of the construction contract.

*Task 4-3: Construction administration.* This task includes receiving and responding to contractor questions throughout the entire bidding process as well as during construction and at closeout; providing project inspection during construction; providing weekly summary reports during construction; and providing construction closeout documents after the successful completion of all activities.

*Task 4-4: Construction management.* Young Environmental will facilitate construction coordination activities to ensure the LMRWD scope and goals are being met. This task includes attending the bid opening, recommending the best contractor for the project, facilitating document signatures, and answering contractor and consultant questions when necessary.

*Timeline for Completion:* March–September 2024

*Deliverables:* bid package, construction summary reports, closeout documents

*Young Environmental Budget:* \$4,588

*Consultant Budget:* \$43,000