



SCOPE OF SERVICES

ARBOR BLUFF STREAM STABILIZATION DESIGN & CONSTRUCTION MANAGEMENT SERVICES

OVERVIEW OF PROJECT SCOPE: In August 2024, City of Shakopee staff contacted EOR to discuss a potential stream stabilization project within the Arbor Bluff development located south of Valley View Road and west of Mystic Lake Drive South (Figure 1). Following a meeting with city staff to review project details, it was requested EOR prepare a scope of services to complete a topographic and geomorphic stream survey, draft design and final construction plans, develop construction quantities, review streamflow modeling, complete any necessary permits, and provide construction management services such as bidding and construction oversight to implement the project.

The following scope outlines the anticipated tasks, hours, and schedule to complete a field survey, develop draft and final construction plans, estimate quantities, obtain all necessary permits, manage bidding and construction administration, and provide construction management services.

It is anticipated that field surveys and draft plans will be completed in the fall/winter of 2024 with construction implementation in the summer of 2025.

PROJECT TEAM

City of Shakopee	
PROJECT LEAD:	Kirby Templin, Water Resource – Environmental Engineer
<i>OTHER STAFF:</i>	
EOR	
PROJECT LEAD (HRS):	Mike Majeski (127)
<i>OTHER STAFF(HRS):</i>	Dan Mossing (287), Nick Hayden (14), Carl Almer (24), Jimmy Marty (2)



Figure 1. Approximate location of proposed Arbor Bluff Stream Stabilization project (blue polygon).

SUMMARY OF TASKS

TASK 1: Topographic Survey & Geomorphic Data Analysis	
SUMMARY:	EOR will conduct a geomorphic stream survey including stream bed and water elevation profiles, channel cross sections, and collect survey-grade topographic data to inform the project design.
DELIVERABLES:	1) Topographic & Geomorphic Stream Survey 2) Develop Existing Channel Profiles and Cross Sections 3) RIVERMorph Data Analysis
TIMELINE:	October – November 2024
ESTIMATED COSTS:	\$5,300

TASK 2: Design Services	
SUMMARY:	EOR will develop draft and final construction plans, review streamflow rates using XPSWMM and HEC-RAS modeling, complete model updates based on the proposed development, develop construction quantity and cost estimates, draft project specifications and a stormwater pollution prevention plan (SWPPP), and prepare a construction project manual.
DELIVERABLES:	1) Draft Plans (30%, 60%, 90%, 99%) 2) Final Plans & Construction Documents 3) Engineers Estimate of Probable Cost (30%, 60%, 90%, 99%) 4) SWPPP Document 5) Project Manual (Includes City/ MNDOT Specs)
TIMELINE:	November 2024 – February 2025
ESTIMATED COSTS:	\$37,900
TASK 3: Permitting & Related Services	
SUMMARY:	EOR will obtain all permits required for the project including any federal, state, and local permits.
DELIVERABLES:	1) USACE Joint Application 2) Other Permit Applications, as needed 3) MNDNR Natural Heritage Information System (NHIS) Rare Features Review
TIMELINE:	February 2025
ESTIMATED COSTS:	\$5,000
TASK 4: Construction Administration & Oversight	
SUMMARY:	Construction management services will include construction administration and bidding (quotes or public bid), prepare contractor recommendation, conduct a pre-construction meeting, preparation of addendum(s), answer contractor questions, review materials submittals, provide construction oversight (including tree harvest), project close-out inspection, preparation of contractor punch list as needed, and complete an as-built record drawing.
DELIVERABLES:	1) Request for Quotes or Utilize Quest CDN for Public Bids 2) Pre-Construction Meeting Minutes 3) Tree Marking and Oversight of Harvest 4) Construction Oversight Notes & Images 5) Construction Close-Out Punchlist 6) As-built Record Drawing
TIMELINE:	April – August 2025
ESTIMATED COSTS:	\$40,000

ESTIMATED COST SUMMARY

DESCRIPTION	HOURS/ QUANTITY	ESTIMATED COST
TASK 1: Topographic Survey & Geomorphic Data Analysis	25	\$5,300
TASK 2: Design Services	199	\$37,900
TASK 3: Permitting & Related Services	26	\$5,000
TASK 4: Construction Administration & Oversight	204	\$40,000
EXPENSES: Mileage Equipment Rental	***Included in Task 1 & 4 estimated costs***	
TOTAL		\$88,200

NOTE: Actual costs may differ from the estimated task costs, but the project will not exceed the TOTAL.

ASSUMPTIONS: The estimated cost summary for the execution of the tasks in this Scope of Services is based upon the following assumptions:

- 1) The stream is not a public water resource as indicated by City of Shakopee staff; therefore, a Minnesota DNR Public Waters Work Permit will not be required for the project.
- 2) A wetland delineation was previously conducted at the site. City of Shakopee staff to provide EOR the wetland delineation data to advance project design and construction plans.
- 3) City of Shakopee staff to provide all relevant Arbor Bluff development data (grading plans, tree inventory, XPSWMM H&H model for existing and proposed conditions).
- 4) A MNDNR No-Rise analysis will not be required since there is no mapped FEMA floodplain along the stream. However, EOR staff will utilize the existing XPSWMM model (modified per Arbor Bluff design consultant) and HEC-RAS to determine discharge rates through the stream channel and ensure there is no change to the existing 100-year HWL.
- 5) EOR staff to provide construction oversight services throughout project construction. It is anticipated project construction will take 3 weeks to complete, weather dependent. City staff will provide limited, routine field inspection services such as checking sediment control measures after rainfall during idle periods.

SIGNATURES: The services described in this Scope of Services are being provided in accordance with the Master Agreement For Professional Consulting Services between the City of Shakopee and EOR dated August 7, 2024. Any changes to the project team, tasks, deliverables, timeline, or total cost will require a signed amendment/update to this Scope of Services.

City of Shakopee

Signature: _____
Name: Matt Lehman
Title: Mayor
Date: _____

Signature: _____
Name: Bill Reynolds
Title: City Administrator
Date: _____

Emmons & Olivier Resources, Inc.

Signature:  _____
Name: Carl K. Almer
Title: Water Resources Lead
Date: September 6, 2024