



December 10, 2020

Ms. Linda Loomis, Administrator
Lower Minnesota River Watershed District
112 E. 5th Street, #102
Chaska, Minnesota 55318

Re: Reroute Stormwater to Protect Historic Sites Project Storm-19-003

Dear Linda:

I am pleased to inform you the Amazon Stormwater Diversion Project is complete. After many years of planning and with the cooperation of stakeholders, such as the Lower Minnesota River Watershed District, the stormwater formerly eroding the protected Steele Mounds burial grounds and the Minnesota River banks in Shakopee has been successfully diverted.

I am requesting on behalf of the City of Shakopee for reimbursement of \$35,000 from the Lower Minnesota River Watershed District, as agreed upon for this project. Attached is the LMRWD Amazon Funding Review Request dated August 1, 2019, for your reference.

Please do not hesitate to contact me with any questions or concerns.

Thank you and the Lower Minnesota River Watershed District for your contribution to this project.

Kind regards,

Kirby Templin,
Environmental Engineer - Water Resources
City of Shakopee
(952) 233 – 9372
KTemplin@ShakopeeMN.gov

Technical Memorandum

To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

From: Shane Soukup, Water Resources Scientist
Della Schall Young, CPESC, PMP

Date: August 1, 2019

Re: Amazon Stormwater Reroute Project—City of Shakopee Funding Review Request

The City of Shakopee (“City”) has requested funding from the Lower Minnesota River Watershed District (“District”) for the Amazon Stormwater Reroute Project (“Project”). The proposed project information is presented in the WSB & Associates Feasibility Study—Reroute Stormwater to Protect Historic Sites, dated February 14, 2019. Below is a summary of the Project and Young Environmental Consulting Group’s (Young Environmental) recommendations.

The City is seeking to improve stormwater management near the Amazon Distribution Center by rerouting stormwater discharge away from historic sites. It has assessed three options. The preferred option involves rerouting stormwater through the ravine located on the east end of the Three Rivers Park District property adjacent to Murphy’s Landing off Hwy 101 in Shakopee, MN. This option routes the stormwater through a combination of existing and new drainage networks. WSB & Associates Feasibility study suggests that because of the long flow route and attenuation of stormwater, the ravine may not need to be stabilized or improved.

To determine how much to contribute to the Project, Barr Engineering Company (“Barr”) assessed the work required today by the District to restore and/or stabilize the ravine. Staff from the City, Barr, and Young Environmental, and the District’s administrator walked the ravine on May 23, 2019. During the field walk on May 23, the ravine was observed and assessed for any current erosion issues. A headcut and spring were noted approximately 100 feet upstream of the banks of the Minnesota River. Increased flow to the ravine is likely to accelerate the migration of the headcut upstream. These additional flows may exacerbate the erosion of the ravine and increase sediment load

into the Minnesota River. Barr proposes stabilizing the current erosion issues within the ravine. This can be accomplished by installing a grade control at or just downstream of the headcut. The grade control may be in the form of a constructed riffle, which will be contoured to keep flows in the center of the channel while also allowing spring water to exit the spring unimpeded.

The total cost estimate to stabilize the ravine is \$34,437—\$10,000 for engineering design costs and \$24,437.40 for construction costs. Stabilizing the ravine addresses the following water resources issues and goals highlighted in the District Watershed Management Plan (“Plan”):

- Issue 3: Water Quality
- Issue 5: Erosion and Sediment Control
- Goal 2: Surface Water Management—to protect, improve, and restore surface water quality
- Goal 4: Unique Natural Resources Management—to protect and manage unique natural resources (reducing sediment loading into the Minnesota River is beneficial for aquatic habitat)
- Goal 7: Erosion and Sediment Control—to manage erosion and control sediment discharge

Conclusion and Recommendations

The Project embodies the District’s strategy to partner with the local government to leverage resources to protect, preserve, and manage water and natural resources within the District. Although it is low on the list of 2019 funding priorities, the Project aligns well with the priority to remedy erosion issues in the District and addresses the Plan’s goals. Young Environmental recommends contributing \$35,000 to the City’s Project. As a condition for accepting the District’s contribution, the City should be asked to share the following information with the District:

- Final option selected, designed, and constructed
- Funding contributors
- Final plans