

Watertown City Council

Date: February 12, 2019

Agenda Item:	Crow River Stabilization at Riverpointe
Request for Action:	Adopt Resolution #2019-25, Authorizing Solicitation of Quotes
Department:	Engineering

Background:

During the summer of 2018 staff had identified significant erosion along the Crow River adjacent to a portion of trail in the RiverPointe development. At the November 13, 2018 Work Session, Council was presented with several options which included: 1.) Rip-rap Armored Slope, 2.) Live Planting Slope Stabilization, 3.) Realign Trail away from Bank. Council had indicated that Rip-rap Armored Slope was preferred for this location because of the quick turn on construction which prevents loss of the existing trail and relatively low cost of \$35,000, which has since been added to the 2019 Capital Improvement Plan as project #CI098. The major concern from staff with this option was permitting with the DNR. Staff has since confirmed with the DNR that they would permit the work since there is active erosion and that if the work was less than 200' it would be except from needing a permit. The length of rip rap is approximately 180'.

Staff is anticipating that if authorized by Council that quotes could be received within two weeks and be ready for award at the second meeting in February. Around this time spring road restrictions may be starting or in place. If that is the case, the City may need to allow the trucks to use local roadways of River Parkway, Landings Lane, and Riverpointe Ct. when road restrictions are in place. Access to the site is from TH 25 which is 10-ton roadway and would not pose any permitting/load restriction issues. Historically the Crow River sees its spring high water crest in late March to early April, so it would be ideal if the rip rap is placed prior to mid-March which we would indicate to the constructors during quoting.

Staff is recommending authorization to solicit quotes for placement of rip rap along the Crow River to stabilize the eroded slope within the Riverpoint development.

Funding Source:

Capital Investment Fund>Project #CI098

Attachments:

Letter w/ stabilization options from Nov 13, 2018 Work Session

Resolution #2019-25



Real People. Real Solutions.

2638 Shadow Lane
Suite 200
Chaska, MN 55318-1172

Ph: (952) 448-8838
Fax: (952) 448-8805
Bolton-Menk.com

November 7, 2018

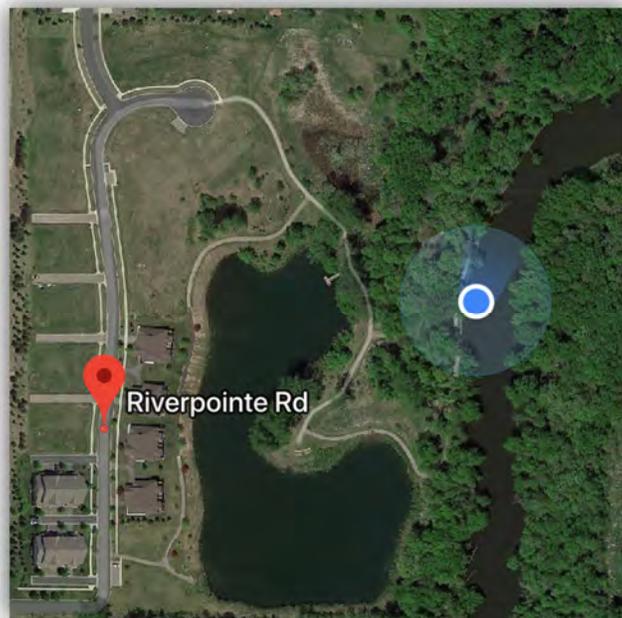
Shane Fineran
309 Lewis Ave S
PO Box 279
Watertown, MN

RE: Riverpointe Park Trail
City of Watertown

Dear Mr. Fineran:

As requested by staff we have reviewed a segment of trail in the Riverpointe Development that is adjacent to the South Fork of the Crow River and has seen ongoing erosion to the river bank the is now within feet of eroding away portions of the trail.

The general location of this condition is depicted below.



The bank has eroded such that the edge of the bituminous trail is nearly at the edge of the river bank, nearly undermining the trail and creating a potentially unsafe condition for trail users. Photos of the site conditions are shown below.

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Trail Looking South



Trail Looking North

We have also received input from the CCWMO and SWCD regarding potential repair solutions and funding options. There are currently three likely options that vary in costs, potential funding assistance, and time of delivery.

Option 1: Rip-Rap Armored Slope

Rip-rap has been installed in adjacent areas of the bank just upstream of this location as shown in the picture below:



The option to rip rap the slope would not qualify for any outside funding sources. Permitting of this option is also a challenge. Most permitting agencies do not prefer rip-rap stabilization in this situation due to its contribution to loss of plant/animal habitat and aesthetics along the river. If permissible by the DNR, the permitting process would likely take 60+ days. Another permitting concern is the placement of fill within the river and floodplain and the related FEMA permitting process. If permitted, this option to be constructed over the winter months when the river is low and access to the site would be frozen. The general location of rip rap placement is shown in the last figure in the document. This option is estimated to cost approximately \$30,000-\$35,000.

Option 2: Live Planting of Slope

Another option to stabilize the river bank is by reestablishment of vegetation. This typically includes engineered design of live stakes and root clusters of vegetation that are quick to stabilize and grow. This is the preferred option by most permitting agencies as it promotes plant/animal habitat along the river and is aesthetically pleasing. It is also most likely to get funded through competitive Conservative Partners Legacy Grant (CPLG) through the DNR and could also receive funding from the CCWMO and the SWCD. The CPLG grant would be open to

Name: Riverpointe Park Trail

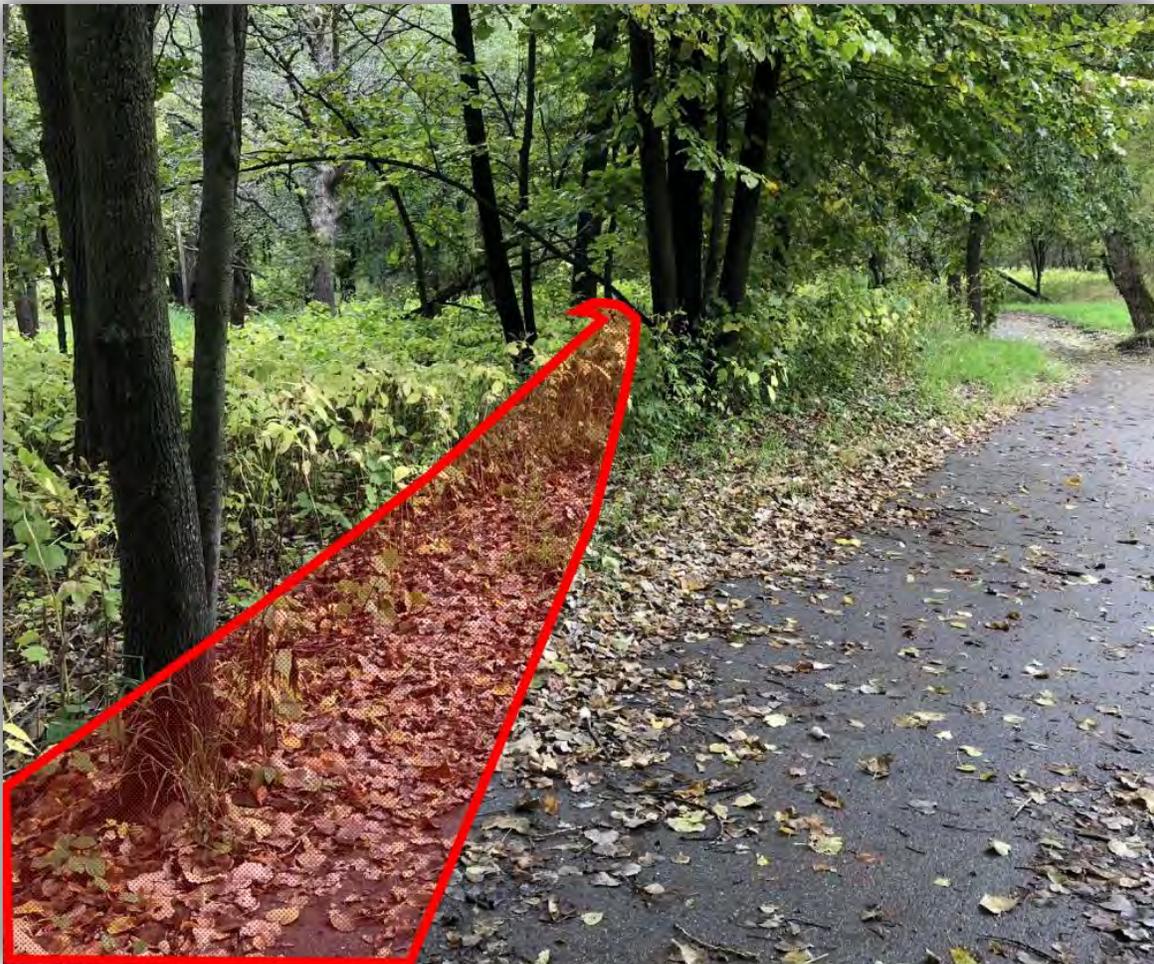
Date: November 7, 2018

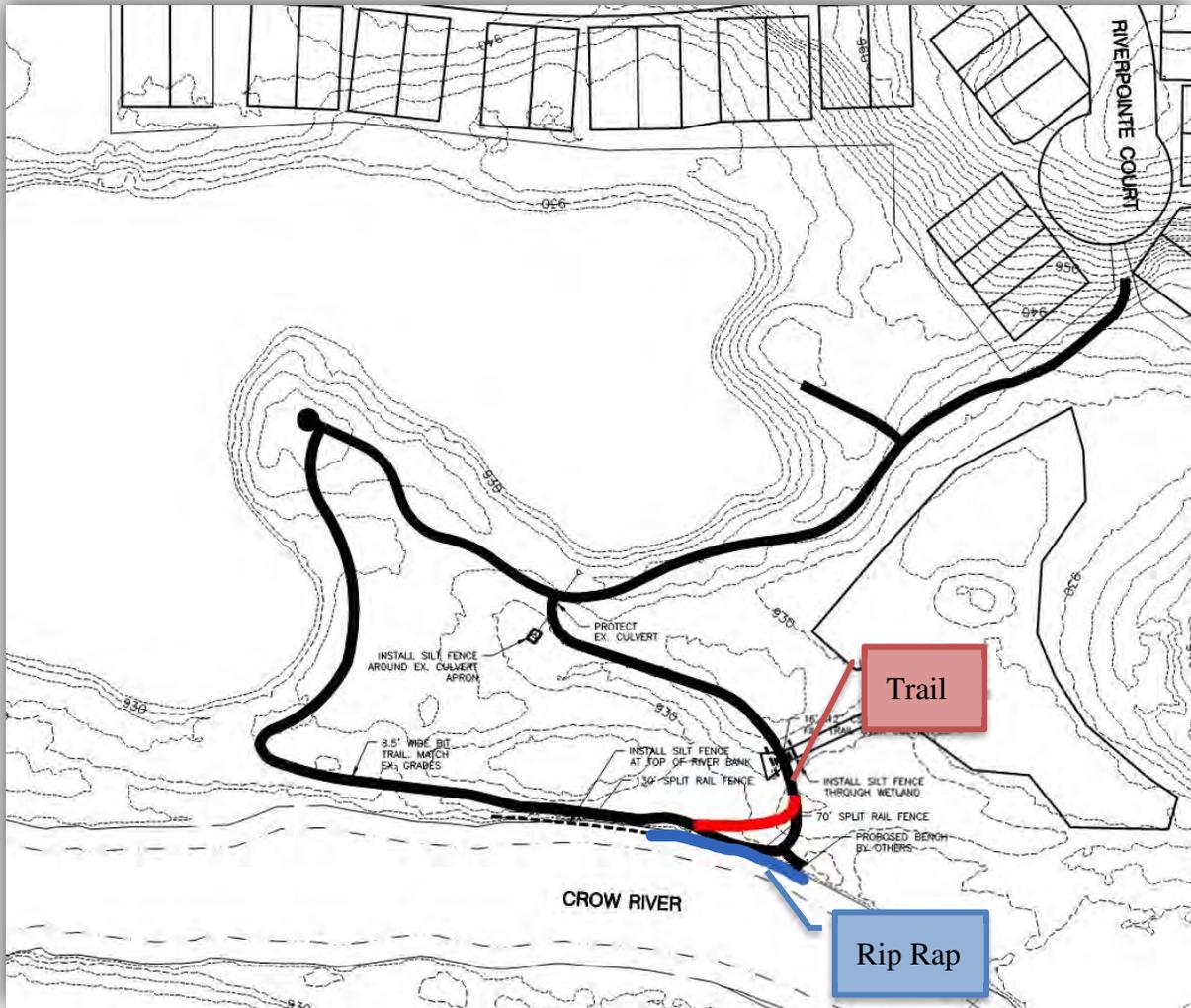
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applications around September of 2019 and requires a 10% match of non-state funds. Due to the funding cycles, construction would only be able to begin in 2020 and the trail is not anticipated to last that long with the current rate of bank erosion. This type of project will take a full permitting review process and will require longer term maintenance to ensure the vegetation continues to establish and grow. This option would also be at risk of the river levels rise during construction or prior to the vegetation being fully stabilized. This option is estimated to cost approximately \$50,000. If outside funding sources are secured this could have a City share of approximately \$5,000-\$10,000.

Option 3: Realign Trail away from Bank

This option would involve realigning the trail to the west further away from the bank. This would require removal of approximately 10 trees, common excavation to cut in the trail section, removal of the existing trail, and restoration. This option would not be eligible for any outside funding. The realignment is generally depicted in the two figures below:





The permitting requirement for this option are minimal if no fill is brought in to raise the trail and therefore require FEMA permits to fill within the floodplain. This option is estimated to cost approximately \$30,000-\$35,000.

Recommendation:

Based on the above information, it is recommended to pursue Option 3: Realign Trail away from Bank. The option will be able to be completed in 2019, will maintain the natural look and feel of the river bank, will rely on existing mature vegetation to provide stabilization between the new trail and river bank. The project could also be packaged with other CIP projects within the City such as the 2019 Mill & Overlay project.

Name: Riverpointe Park Trail

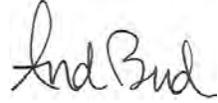
Date: November 7, 2018

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If you have any questions or comments regarding the above, please do not hesitate to contact me at 952-448-8838.

Respectfully Submitted,

Bolton & Menk, Inc.

A handwritten signature in black ink that reads "And Bud". The signature is written in a cursive, flowing style.

Andrew L. Budde, P.E.

City Engineer

**CITY OF WATERTOWN
RESOLUTION NO. 2019-25**

**RESOLUTION APPROVING THE SOLICITATION FOR QUOTES FOR THE RIVERPOINTE
SHORELINE STABILIZATION PROJECT**

WHEREAS, the City of Watertown (the “City”) builds and maintains trail ways for the benefit of the public; and

WHEREAS, the City has determined that the integrity of the trail segment adjacent to the South Fork Crow River is compromised due to shoreline erosion; and

WHEREAS, the City has determined that the preferred mitigation effort is to extend approximately 180’ of armored rip-rap to stabilize and protect this train infrastructure; and

WHEREAS, the City has budgeted for this project effort as project #CI098 in the 2019 Capital Investment Plan; and

NOW, THEREFORE, BE IT RESOLVED, the City Council directs staff to prepare plans and a request for quote to place approximately 180’ of armored rip-rap along the shore of the South Fork Crow River; and

BE IT FURTHER RESOLVED, , that the City Council of the City of Watertown, Minnesota, hereby approves the solicitation of quotes uotes for the 2019 Riverpointe Shoreline Stabilization Project.

Adopted by the City Council of the City of Watertown this 12th day of February, 2019.

Steve Washburn, Mayor

ATTEST: _____
Lynn Tschudi, Clerk/Treasurer