Memorandum

To: Liz Stout, City of Minneapolis
From: Jeff Weiss, Barr Engineering
Subject: Bassett Creek Main Stem Stabilization Project - Project Update
Date: October 9, 2019
Project: 23271579

The Bassett Creek Main Stem Stabilization Project includes stabilization areas between Cedar Lake Road and the Bassett Creek Tunnel, and another area near the Fruen Mill. A significant portion of the project was scheduled to be completed on the property of Pioneer Paper Stock Co (Pioneer Paper); however, as was discussed at the September meeting of the Bassett Creek Watershed Management Commission (BCWMC) Pioneer Paper is no longer willing to provide access to complete the project. This memorandum provides a summary of answers to questions about the implications of this development.

**Question #1**

Are there impacts to contract with Sunram – is a change order needed? Will there be changes to the costs for the portion of the project that’s still getting implemented?

**Answer #1**

The project was originally scheduled for construction during the summer of 2018, but due to permitting issues with the US Army Corps of Engineers and the State Historic Preservation Office, it was postponed to the summer of 2019. Because of the year delay in the project, the Contractor has asked for a change order for 5% of the project cost to account for a cost of living increase and general inflation. Because the Pioneer Paper portion of the project will not be completed, this is not expected to result in an increase in the overall project cost.

**Question #2**

If the water stays high will construction still happen this winter?

**Answer #2**

Even if water levels stay relatively high, it will be possible to complete the work this winter. The Contractor is currently working on another creek project in Chanhassen which is expected to be finished by Thanksgiving. They are anticipating moving that crew back to Bassett Creek once the other project is finished.
Question #3

What are the implications of not installing VRSS along Pioneer Paper?

Answer #3

If no work at Pioneer Paper is completed, then that bank will still be susceptible to erosion. Barr and the city of Minneapolis are exploring ways to complete some stabilization in the area by exploring alternative access routes. This scenario would likely have stabilization measures be limited to riprap toe protection, but not include the VRSS lifts above the riprap. This is a less comprehensive solution, but the risk of future erosion would still be reduced. The work proposed with the reduced project scope will not have any additional negative impacts on the stream banks at the Pioneer Paper site beyond the existing erosion issues.

If no work at Pioneer Paper is completed and the bank continues to erode, then the expected change in pollutant loading to Bassett Creek as a result of the project will change as well. The following table summarizes the anticipated costs and pollutant reductions with and without the inclusion of the Pioneer Paper portion of the project.

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost</th>
<th>Annualized Cost</th>
<th>TSS reduction (lb/yr)</th>
<th>TP reduction (lb/yr)</th>
<th>$ / lb TSS</th>
<th>$ / lb TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original project</td>
<td>$399,909</td>
<td>$58,900</td>
<td>47,100</td>
<td>27.1</td>
<td>$1.25</td>
<td>$2,180</td>
</tr>
<tr>
<td>Project w/o Pioneer Paper</td>
<td>$206,909</td>
<td>$36,100</td>
<td>33,200</td>
<td>19.1</td>
<td>$1.09</td>
<td>$1,890</td>
</tr>
</tbody>
</table>

It should be noted that the annualized cost is based on estimates in the feasibility study, which had cost estimates generated per erosion site on the project. Because they were organized per site, it was possible to remove portions of the project not included in the final project, such as Alternative Bid items near the Fruen Mill. It was also possible to remove the Pioneer Paper site from the estimates above. The costs are from the Engineer’s Opinion of Probable Cost in the feasibility study. The bid prices were approximately 30% lower than the estimate in the feasibility study.