



Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Co.
Subject: Item4D – BNSF Bridge 1.7 (L.S. 202) – Minneapolis, MN
BCWMC May 18, 2017 Meeting Agenda
Date: May 10, 2017
Project: 23270051 2017 2116

4D BNSF Bridge 1.7 (L.S. 202) – Minneapolis, MN BCWMC 2017-09

Summary:

Proposed Work: Removal of existing bridge and fill embankment above the existing culverts

Basis for Commission Review: Work in the floodplain

Impervious Surface Area: No change

Recommendation: Conditional Approval

General Background & Comments

This project was originally submitted to, and approved by the Commission in 1995 but never completed. The proposed project essentially includes completing the 1995 project consisting of the removal of an existing BNSF bridge and filling the embankment above the existing culverts for Bassett Creek. The project is located in the Bassett Creek Main Stem subwatershed. The proposed project results in 0.2 acres of disturbance and no change in impervious surface. The applicant has coordinated with the Commission Engineer to provide an acceptable design for completion of the 1995 project within the framework of the current BCWMC Requirements.

Floodplain

The current floodplain elevation at the Theodore Wirth Park inundation area is 826.0 feet NGVD29 (826.2 feet NAVD88). The proposed, but not yet adopted, XPSWMM (Atlas 14 precipitation) floodplain elevation at the Theodore Wirth Park inundation area is 226.5 feet NGVD29 (826.5 feet NAVD88). The plans indicate that a floodplain elevation of 826.5 feet NAVD88 was assumed by the applicant to simplify calculations, as this elevation corresponds to the top of the ballast. Assuming a floodplain elevation of 826.5 feet NAVD88, the applicant indicated that there will be a cut of 99 cubic yards in the floodplain and a fill of 213 cubic yards in the floodplain for a permanent net fill of 114 cubic yards of fill in the floodplain.

This project was previously approved in 1995 and evaluations of the hydraulics of the Bassett Creek system in this area indicate that the area is controlled by the various conveyances under and across Hwy. 55. The proposed completion of the 1995 project will not impact floodplain elevations, therefore additional floodplain mitigation is not required.

Wetlands

The project appears to involve work adjacent to wetlands. The City of Minneapolis is the LGU for administering the Minnesota Wetland Conservation Act of 1991.

Stormwater Management

The drainage patterns under existing and proposed conditions will remain the same; this project will not result in changes to land use or topography.

Water Quality Management

The project does not trigger water quality review or treatment to MIDS performance goals.

Erosion and Sediment Control

Since the project involves more than 200 cubic yards of fill, the proposed project must meet the BCWMC erosion and sediment control requirements. Proposed temporary erosion and sediment control features include sediment control logs. Permanent erosion and sediment control features include seeding and erosion control blankets.

Recommendation







Conditional approval based on the following comments:

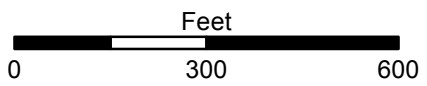
1. Vehicle tracking of sediment from the construction site must be minimized by installing rock construction entrances, rumble strips (mud mats), wood chips, wash racks, or equivalent systems at each site access. Rock construction entrances must have a minimum height of 6 inches above the adjacent roadway and a wash-off berm with a minimum height of 2 feet above the adjacent roadway and with maximum side slopes of 4:1. An allowable alternative to the wash-off berm is to install mud mats across the entire width of the rock construction entrance, over at least 50% of the length of the rock construction entrance, and centrally placed within the total length of the rock construction entrance.
2. The following erosion and sediment control comments must be added to the plans:
 - a. Require that soils tracked from the site be removed from all paved surfaces within 24 hours of discovery throughout the duration of construction.
 - b. Specify that all exposed soil areas must be stabilized as soon as possible, but in no case later than 14 days after the construction activity has temporarily or permanently ceased or within 7 days if the project is within 1 mile of a special or impaired water.
 - c. Provide a temporary vegetative cover consisting of a suitable, fast-growing, dense grass-seed mix spread at a minimum at the MnDOT-specified rate per acre. If temporary cover is to remain in place beyond the present growing season, two-thirds of the seed mix shall be composed of perennial grasses.
3. Revised Drawings (paper copy and final electronic files) must be provided to the BCWMC Engineer for final review and approval.

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Imagery Source: Aerial Express (2009)

-  Project Location
-  Bassett Creek
-  WMC Boundary
-  Major Subwatershed
-  Municipality
-  Stream



**LOCATION MAP
APPLICATION 2017-09
BNSF Bridge 1.7 (L.S. 202)
Minneapolis, MN**