



Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 4G: Plymouth 2022 Street Reconstruction – Plymouth, MN
BCWMC February 16, 2022 Meeting Agenda
Date: February 9, 2022
Project: 23270051 2022 2274

4G Plymouth 2022 Street Reconstruction – Plymouth, MN BCWMC 2021-34

Summary:

Proposed Work: Street reconstruction, including water main, sanitary sewer, and storm sewer improvements

Project Proposer: City of Plymouth

Project Schedule: 2022 Construction

Basis for Review at Commission Meeting: Linear project with more than five acres of disturbance

Impervious Surface Area: Decrease approximately 0.42 acres

Recommendation: Approval

General Project Information

The proposed linear project is in the City of Plymouth at various locations within the Plymouth Creek and Medicine Lake South subwatersheds. The proposed linear project includes reconstruction of City of Plymouth streets and utility improvements, including water main, sanitary sewer, and storm sewer, resulting in 9.8 acres of grading (disturbance). The proposed linear project creates 5.63 acres of fully reconstructed impervious surfaces and a decrease of 0.42 acres of impervious surfaces, from 6.05 acres (existing) to 5.63 acres (proposed).

The initial submittal was received on January 6, 2022. The BCWMC engineer reviewed the submittal and provided comments to the City on January 12, 2022. The applicant addressed the comments and submitted revised plans for review.

Floodplain

The proposed linear project does not involve work in the BCWMC 100-year floodplain; therefore, BCWMC floodplain review is not required.

Wetlands

The City of Plymouth is the local government unit (LGU) responsible for administering the Wetland Conservation Act; therefore, BCWMC wetland review is not required.

Rate Control

The proposed linear project does not create one or more acres of net new impervious surfaces; therefore, BCWMC rate control review is not required.

Water Quality

The proposed linear project does not create one or more acres of net new impervious surfaces; therefore, BCWMC water quality review is not required. However, the proposed linear project includes five manholes with four-foot sumps and SAFL baffles for pretreatment of water before discharging to nearby water bodies. In addition, the City of Plymouth is working with property owners to install two raingardens for additional water quality treatment. The City of Plymouth has outlined potential locations for raingardens ranging from low to high priority as seen in the attached figure. Final selection of raingardens will be based on property owners' interest and anticipated water quality benefits. Once locations are chosen, the city will update the Commission.






Erosion and Sediment Control

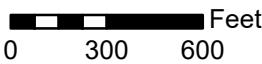
The proposed linear project results in one or more acres of land disturbance; therefore, the proposed project must meet the BCWMC erosion and sediment control requirements. Proposed temporary erosion and sediment control features include rock construction entrances, silt fence, riprap and storm drain inlet protection. Permanent erosion and sediment control features include stabilization with hydroseed and sod.

Recommendation

We recommend that the Commission approve the project plans as submitted on January 28, 2022.



-  Project Location
-  Municipality
-  BCWMC Legal Boundary
-  Major Subwatershed
-  BCWMC Hydrologic Boundary



BCWMC #2021-34
 PLYMOUTH 2022 STREET
 RECONSTRUCTION PROJECT
 Plymouth, MN

LOCATION MAP

2022 Reconstruction Project

Possible Rain Garden Locations



Green = Highest Priority
 Yellow = Medium Priority
 Orange = Lower Priority

Legend

- BAP
- EAP
- Storm_CatchBasin
- Storm_Manhole
- Storm_Outlet
- Storm_Sumps
- Storm_Main
- Storm_Culvert

Surface Water Resources

Feature_Ty

- Water Quality Pond
- Wetland
- Wetland Mitigation
- Lakes
- Parcels

Scale: 0 4590 180 270 Feet

Compass: N, S, E, W