COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: January 14, 2018
AGENDA NUMBER: 25
FILE NUMBER: 18-214
ITEM: Stem Mississippi Riverbank Stabilization

RECOMMENDATION: Approve with 1 Stipulations

APPLICANT: Bryan Stem
10880 Mississippi Blvd NW
Coon Rapids, MN 55433

PURPOSE: 130 LF of riverbank stabilization

LOCATION: 250 feet south of 109th Ln NW and Mississippi Blvd NW NW, Coon Rapids MN

APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. Any work in or adjacent to wetlands, lakes or water courses
3. The lands and waters that have been, or may be covered by the regional flood.
4. High water table, outwash and organic soils
5. High infiltration soils
6. Highly erodible soils
7. Endangered, Threatened or Special concern species, elements or communities

**EXHIBITS:**

1. Construction Plan set (11 sheets); by WSB, dated 11/1/18, received 11/26/18.
2. Revised plan set (11 sheets); by WSB, 12/19/18, received 1/2/19.
3. Floodplain Calculations; by WSB, dated 1/3/19, received 1/3/18.
4. DNR Public Waters Work General Permit Authorization, Issued 12/04/18, received 12/04/18.

**PREVIOUS ACTION TAKEN:** This is a new application.

**FINDINGS:**

**Pre-application Meeting:** The project as submitted has received a general review during a pre-application meeting.

**Ditches:** There is not a public ditch on the property.
**Ditch Hydraulics:** A crossing of the ditch is not proposed.

**Erosion and Sediment Control:** Soils affected by the proposal are Kingsley and Langola.
- Stabilizing vegetation is proposed for disturbed areas within seven (7) days of rough grading.
- No soil stockpiles are proposed.
- Adjacent properties and stormwater ponds are protected from sediment deposition. Construction schedules detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases have been provided.
- No storm sewer outlets proposed as part of the project. All storm sewer inlets are not protected from sediment-laden water during construction.
- All work adjacent to water or related resource has taken precautions to contain sediment and stabilize the work area during construction.
- Provisions have been made to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface.
- Provisions have been made for cleaning road surfaces where sediment is transported by the end of the day.
- Construction entrance points are clearly located on the erosion and sediment control plan.
- The erosion and sediment control plan does provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices.

**Dewatering:** Shallow ground water does exist on site. The project does not require dewatering.

**Floodplain:** There is floodplain on the property according to FEMA. FEMA floodplain elevation is at 839.0 feet. The project does propose to place fill within the floodplain. The total floodplain impact is approximately 5,000 CF. The proposed impact is within the floodway. Compensatory storage is provided. There are no flooding concerns upstream or downstream.

**High Water Flooding:** No structures proposed as part of the project.

**Groundwater:** Geotechnical information was not provided and is not needed. No infiltration practices or structures proposed as part of the project.

The project site is within the 10 Year Well Head Protection Area/Drinking Water Supply Management Area.

The proposal does not contain a land use discouraged or prohibited by the Safe Drinking Water Supply Act (SDSA).
**Historic Sites:** The proposed project does not include known sites of historic or archeological significance.

**Local Planning & Zoning:** The proposed project is consistent with local planning and zoning. There is an approved local water plan.

**Maintenance:** No Stormwater Management features or treatment practices proposed as part of the project.

**Easements:** The proposed project does not include ditch maintenance easement. A ditch maintenance easement is not required.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. New site impervious consists of riprap on riverbank, no treatment required.

Drainage sensitive uses do not exist downstream from the proposed site. The rate of post-development runoff from the site does not exceed predevelopment rates, or rates which would interfere with sensitive downstream land uses. Properties and waterways downstream from the project are protected from erosion due to increases in the volume, velocity and peak water flow rates of stormwater runoff. Concentrated storm water leaving the site is discharged directly into a well-defined natural or man-made off-site receiving channel or pipe. All on-site constructed storm water conveyance channels are constructed to withstand the expected velocity from a 2-year frequency storm without erosion.

**Water Quality:** The proposed project does not cause an exceedance of State water quality standards. The project does not contribute to the adverse impact of wetlands through inundation or volume of flow. All work adjacent to wetlands, waterbodies and water conveyance systems are protected from erosion. The proposal will not detrimentally affect the existing water quality of the receiving water. The proposal will not cause extreme fluctuations of water levels or temperature changes.

**Impairments:** This project is within one (1) mile of and drains to an Impaired Water. The Impaired Water is Mississippi River. Mississippi River is impaired for (Aquatic Life (Macro-invertebrates)/ Aquatic Recreation (Fecal coliform). The major stressors are Total Suspended Solids (TSS)/ Total Phosphorus (TP)/Fecal coliform. There is not an EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for this water.

There are new impervious surfaces (riprap) proposed as part of this project.

**Wetlands:** Wetlands do not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. Wetlands have not been delineated.

The applicant does need to contact the DNR area hydrologist and the Corps of Engineers for work adjacent to the Mississippi River.
**Wetland Replacement Plan:** A wetland replacement plan has not been submitted and is not required

**Wildlife:** The proposed project does include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors. The applicant has contacted the MDNR natural heritage or endangered species program. The applicant has indicated that contact was made 12/19/18. MDNR has responded to the applicant.

If the project is present, the project does not propose substantial adverse alteration or significant detrimental impact on a species.

**Performance Escrow:** $2,130  
**Wetland Escrow:** $N/A  
There are not ditch liens on the property.

**ISSUES/CONCERNS:**

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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tr>
<td><strong>Soils &amp; Erosion Control:</strong> Erosion Control Plan is not adequate.</td>
<td>1. Provide Erosion Control Plan with the following information:</td>
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<td>a. Update construction plans to provide perimeter control at edge of water and edges of grading.</td>
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**RECOMMENDATION:** Approve with 1 Stipulations  
**Stipulations:**  
1. Provide Erosion Control Plan with the following information:
a. Update construction plans to provide perimeter control at edge of water and edges of grading.
b. Construction schedules detailing when sediment trapping measures will occur; stabilization of earthen structures.
c. Provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices.
d. Provide details of ESC (perimeter control, inlet protection, etc.)
e. Provide type of Seed Mix 1-4 identified by seed mix number.