COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: February 26, 2018
AGENDA NUMBER: 10
FILE NUMBER: 18-048
ITEM: TH 65 SP 0208-149 & 157

RECOMMENDATION: Table with 7 Stipulations

APPLICANT: MnDOT
Attn: Hailu Shekur
1500 West County Road B-2
Roseville, MN 55113

PURPOSE: Turning lane upgrades and extensions for 18 intersections

LOCATION: Hwy 65 between 85th Ave N to County Rd 86
APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. Any work within or adjacent to a Public ditch within the Watershed District.
3. Any work in or adjacent to wetlands, lakes or water courses
4. One or more cumulative acres of land disturbance
5. The lands and waters that have been, or may be covered by the regional flood.
6. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Land Uses)
7. High water table, outwash and organic soils
8. High infiltration soils
9. Highly erodible soils
10. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Construction Plan set (drainage and erosion control sheets); by MnDOT, undated, received 2/14/18.
2. Project Narrative; by MnDOT, dated 2/13/18, received 2/14/18.

PREVIOUS ACTION TAKEN: This is a new application.

FINDINGS:
Pre-application Meeting: The project as submitted has not received a general review during a pre-application meeting.

Ditches: There is a public ditch on the property. The public ditch is County Ditch 59 (near the 143rd Ave project area) according to the public drainage map. The approved elevations through this property are 873.5 ft MSL at the downstream end and 873.6 ft MSL at the upstream end. The existing elevations are 875.1 ft MSL at the downstream end and 875.3 ft MSL at the upstream end and represent a 1.6-1.7 ft variance from the approved elevations. The ditch is a 5th order stream. The ditch serves the primary role of trunk drainage system. The ditch serves approximately 200+ acres of agricultural land in the nearby area. Land use in the area is toward residential and commercial. There are flooding concerns upstream and downstream. The ditch has been inspected. Existing elevations, slopes and condition of ditch are good. The ditch is not in need of repair. Alternatives to repair and additional drainage have been considered and reviewed.

Ditch Hydraulics: A crossing of a ditch is not proposed.

Erosion and Sediment Control: Soils affected by the proposal are Lino, Isanti, Markey, Millerville, Rifle, Sartell, Seeleyville and Zimmerman.
- Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles have been proposed to be fitted with sediment-trapping measures to prevent soil loss.
• Adjacent properties and stormwater ponds are not 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.
• Stabilization adequate to prevent erosion has been provided at the outlets of all storm sewer pipes.
• All storm sewer inlets are 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 may exist on site. The project does not require dewatering.

**Floodplain:** There is floodplain on the property according to the District model and FEMA at the 143rd Ave and 169th Ave project locations in Ham Lake. The District’s floodplain elevation and locations are shown below:
The project may propose to place fill within the floodplain. The total floodplain impact is unknown. There are flooding concerns upstream and downstream of portions of the project.

**High Water Flooding:** No structures proposed.
Groundwater: Geotechnical information was not provided.

Portions of the project site are within a 10 Year Well Head Protection Area or 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 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.

Property owners affected by changes in drainage should be notified and acknowledge the changes proposed.

Maintenance: The Owner of the Stormwater Management features and treatment practices is MnDOT. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infiltration Basins</td>
<td>4</td>
<td>MnDOT</td>
</tr>
</tbody>
</table>

As a requirement of MnDOT’s JPA, MnDOT will inspect and maintain the stormwater facilities.

Easements: The proposed project does not include ditch maintenance easement. A ditch maintenance easement is not required. A maintenance access to all storm water management features is provided.

Stormwater & Hydrology: Infiltration is allowed within the project area. The 1-inch infiltration is achieved to the maximum extent practicable. The stormwater management system utilizes infiltration. Stormwater leaving the site is discharged into a well-defined receiving channel or pipe and routed to a public drainage system.

Drainage sensitive uses do exist downstream from certain areas of the proposed project. The rate of post-development runoff from the site does may exceed predevelopment rates. However, the increase is not expected to 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 a site is discharged directly into a well-defined natural or man-made off-site receiving channel or pipe. No on-site constructed storm water conveyance channels are proposed as part of the project.
**Water Quality:** The proposed project may cause an exceedance of State water quality standards. The project may contribute to the adverse impact of wetlands through inundation or volume of flow. All discharges into wetlands are not pretreated by a sediment basin/water quality pond. All work adjacent to wetlands, waterbodies and water conveyance systems are protected from erosion. The proposal will may detrimentally affect the existing water quality of the receiving water. The proposal will not cause extreme fluctuations of water levels or temperature changes.

**Impairments:** Portions of the project are within one (1) mile of and drain to Impaired Waters. The Impaired Waters are CD 17 (Springbrook) and Coon Creek. CD 17 and Coon Creek are impaired for (Aquatic Life (Macro-invertebrates)/ Aquatic Recreation (E. coli). The major stressors are Total Suspended Solids (TSS)/ Total Phosphorus (TP)/E.coli. There are not EPA approved Total Maximum Daily Loads (TMDL) or Waste Load Allocations (WLA) for these waters.

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

**Wetlands:** Wetlands do exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. Wetlands have been delineated. The most recent delineation was completed in September 2017. MnDOT is their own LGU.

**Wetland Replacement Plan:** A wetland replacement plan has been submitted for informational purposes, MnDOT is its own LGU, WCA determination of impacts with replacement or bank withdrawal are currently underway.

**Wildlife:** The proposed project may include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors. The endangered or threatened species are Swamp Blackberry, Black Huckleberry, a bristle berry (*Rubus fulleri*), Long-bearded Hawkweed, Kinnickinnick Dewberry, Gopher snake. Cross-leaved Milkwort, Plains Hog-nosed Snake, Twisted Yellow-eyed Grass. The rare natural communities are Low Shrub Poor Fen Type and Dry Barrens Prairie (Southern Type). The applicant should contact the MDNR natural heritage or endangered species program.

**Performance Escrow:** $10,040.00

**Wetland Escrow:** $ N/A

There are not ditch liens on the property.

### ISSUES/CONCERNS:

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Escrows: $2,000 + (16.08 ac * $500/ac) = $10,040.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics:</td>
<td>2. Provide figure that shows new impervious at proposed project locations.</td>
</tr>
<tr>
<td>General value of new impervious provided. However, it is unclear where exact new</td>
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</tr>
</tbody>
</table>

There are not ditch liens on the property.
Impervious will be proposed and the impacts to adjacent property.

| **Soils & Erosion Control:** District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity. | 3. Update construction plans to stabilize vegetation within 7 days of rough grading or inactivity. |
| Infiltration basins are not protected from erosion and sedimentation during construction. After initial grading the District requires that infiltration basins be completely surround by erosion control measures to prevent the basin from clogging. | 4. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging. Need to be shown on construction plans. |

**Water Quality:** All discharges into wetlands/water quality basins are not pretreated by a sediment sump manhole. These sump manholes are not designed correctly for water quality treatment prior to discharge into a wetland or receiving water.

| 5. Provide calculations (SHASM can be used) to indicate sumps are appropriately sized to meet district removal rates of 80% TSS. A minimum of 4-foot depth is required to prevent resuspension. |

**Floodplain:** There is floodplain within the project boundary.

| 6. Grading plan that indicates whether the floodplain locations at the 143rd and 169th Ave project locations will be impacted. |

**Wildlife:** The proposed project may include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

| 7. Provide documentation from the DNR if the proposed project includes endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors |

**RECOMMENDATION:** Table with 7 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Provide figure that shows new impervious at proposed project locations.
3. Update construction plans to stabilize vegetation within 7 days of rough grading or inactivity.
4. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging. Need to be shown on construction plans.
5. Provide calculations (SHASM can be used) to indicate sumps are appropriately sized to meet district removal rates of 80% TSS. A minimum of 4-foot depth is required to prevent resuspension.

6. Grading plan that indicates whether the floodplain locations at the 143rd and 169th Ave project locations will be impacted.

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