COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: 7/22/2019
AGENDA NUMBER: 10
FILE NUMBER: 19-102
ITEM: Goertz Culvert Installation

RECOMMENDATION: Approve with 4 Stipulations

APPLICANT: Maureen Goertz
9655 275th Avenue NE
North Branch, MN 55056

PURPOSE: Culvert replacement

LOCATION: 3915 133rd Ln NE
Ham Lake, MN 55304
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. The lands and waters that have been, or may be covered by the regional flood.
5. High water table, outwash and organic soils
6. High infiltration soils
7. Highly erodible soils
8. Excavation or filling or a combination of excavation and filling of sand or other excavation or fill material including the laying, repairing, replacing or enlarging of a culvert or an underground pipe or facility where it crosses a public ditch or waters of the state.
9. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Construction Plan (1 sheet); received 7/10/2019.

No Erosion and Sediment Control Map was included.

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 a public ditch on the property. The public ditch is County Ditch 59 according to the public drainage map. The approved/as-built elevations through this property are 892.8 ft MSL at the downstream end.

The ditch is a 1st order stream. The ditch serves the primary role of
a. Agricultural drainage

The ditch serves approximately 0 acres of agricultural land.
Land use in the area is toward residential.
There are no flooding concerns upstream and/or downstream.

The ditch has been inspected.
Existing elevations, slopes and condition of ditch are fair.
The ditch is not in need of repair.

Ditch Hydraulics: A crossing of the ditch is proposed. The proposed crossing involves the replacement of a culvert. The proposed culvert is of sufficient hydraulic capacity.

Erosion and Sediment Control: Soils affected by the proposal are Markey.
• Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading.
• Soil stockpiles have not been proposed to be fitted with sediment-trapping measures to prevent soil loss and do not have a note to stabilize within seven (7) days of inactivity.
• Adjacent properties and stormwater ponds are not protected from sediment deposition. Double row of perimeter control at waterbodies/creeks/wetlands
• Construction schedules detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases have not been provided.
• Stormwater runoff does not pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity. (Only applies if project is > 5 acres).
• Stabilization adequate to prevent erosion has not been provided at the outlets of Check outlets into stormwater practices. Into CD.
• All storm sewer inlets are not protected from sediment-laden water during construction.
• All work adjacent to water or related resource has not taken precautions to contain sediment, and stabilize the work area during construction.
• Provisions have not been made to minimize transport of sediment (mud) by runoff or vehicle tracking onto the paved surface.
• Provisions have not been made for cleaning road surfaces where sediment is transported by the end of the day.
• Construction entrance points are not clearly located on the erosion and sediment control plan.
• The erosion and sediment control plan does not provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices.
• Details not provided for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.)

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

Floodplain: There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 895.18 feet. The project does not propose to place fill within the floodplain. There are flooding concerns upstream or downstream.

Groundwater: Geotechnical information is not available.

The project site is not within the Emergency Response Area/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 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 property owner is the owner of the culvert and will be responsible for maintenance.

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 not required.

Drainage sensitive uses 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 a 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. The proposal will not cause extreme fluctuations of water levels or temperature changes.

**Impairments:** This project is not within one (1) mile of and drains to an Impaired Water.

There are no 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 not been delineated. The wetland boundary has not been checked.

The wetland is not a DNR protected water.

The total proposed wetland impact is 0 square feet. The culvert replacement is in kind.

**Wetland Replacement Plan:** A wetland replacement plan has not been submitted. and is not required.
**Wildlife:** The proposed project does not 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 not contacted the MDNR natural heritage or endangered species program and does not need to.

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

**Performance Escrow:** $2,022.50  
**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>Escrows: $2,000 + (0.05 ac * $500/ac) = $2,022.50</td>
<td>1. Receipt of escrows.</td>
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<td><strong>Stormwater &amp; Hydraulics:</strong> The technical assistant indicated installation of an 18” CMP with a total length of 30 FT. Revision submitted indicated the CMP will be 25 FT in total. It is unclear if the diameter is also being modified to 24”. LIDAR topography indicates a road crossing elevation of approximately 896.5 which results in a cover depth of 1.6 feet based on the profile.</td>
<td>2. Clarify the revised pipe size and length. 3. Confirm that the culvert cover and backfill are placed and compacted properly based on vendor specifications.</td>
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<td><strong>Soils &amp; Erosion Control:</strong> District requires an erosion control plan that complies with District rules to be submitted for construction or installation of crossings. No erosion control plan was provided.</td>
<td>4. Provide an erosion control plan that complies with District rules.</td>
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**RECOMMENDATION:** Approve with 4 Stipulations  
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2. Clarify the revised pipe size and length.  
3. Confirm that the culvert cover and backfill are placed and compacted properly based on vendor specifications.  
4. Provide an erosion control plan that complies with District rules.