COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: July 10, 2017
AGENDA NUMBER: 10
FILE NUMBER: 17-115
ITEM: Culvert Replacement CD 11 at Naples Street

RECOMMENDATION: Approve with 2 Stipulations

APPLICANT: City of Ham Lake
15544 Central Ave NE
Ham Lake, MN 55304

PURPOSE: Culvert Replacement on CD 11 at Naples Street

LOCATION: Naples Street and County Ditch 11, Ham Lake, MN

APPLICABILITY:
1. Any work within or adjacent to a Public ditch within the Watershed District.
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. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Land Uses)
5. 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.

EXHIBITS:
1. Technical Memo; by Wenck, dated 6/13/16, received 6/14/16.
3. Construction Plan set (5 sheets); by RFC Engineering, Inc., dated 6/14/17, received 6/14/17.

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 11 according to the public drainage map. Ditch 11 was established in 1891. The ditch has been inspected. The ditch was last inspected in 2016. The approved elevations through this property are 890.69 ft MSL at the downstream end and 890.72 ft MSL at the upstream end (1988 datum). The 2016 observed elevations through this property are 891.8ft MSL at the downstream end and 892.0 ft MSL at the upstream end (1988 datum). Existing elevations represent a 1.1-1.3 foot variance from the approved elevations. Alternatives to repair and additional drainage have been considered and reviewed. The ditch is a 4th order stream. The ditch serves the primary role of agricultural drainage and collector system. The ditch serves approximately 432 acres of agricultural land. Land use in the area is agriculture and single family residential. There are flooding concerns upstream and downstream. The ditch was last repaired in 2016. Alternatives to repair and additional drainage have not been considered and reviewed. The ditch is not in need of repair. Existing elevations, slopes and condition of ditch are good.

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: Soil affected by the proposal is Isanti.
• Stabilizing vegetation is 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.
• 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 and is not needed.
• No additional storm sewer affected during construction of the project.
• All work adjacent to water or related resource has 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 racking 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 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.

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. The District’s floodplain elevation is at 898.8 feet on the upstream end and 857.3 feet on the downstream end of the culvert. The total floodplain impact is 0 acre-feet within the floodway.

Groundwater: Surficial ground water is present at unknown feet. The site does not include groundwater sensitive areas. No buildings or infiltration proposed, information is not needed to substantiate low floor elevations.

The site is not within a Municipal Drinking Water Supply Area (DWSMA).

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.

Maintenance: No stormwater management features or treatment practices proposed as part of the project.

Easements: The proposed project does include a ditch maintenance easement or utility line crossings.
**Stormwater & Hydrology:** Infiltration is allowed within the project area but is not required for this project.

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.

**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 not within one (1) mile of an Impaired Water.

There are no new impervious surfaces proposed as part of this project.

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

**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.

**Performance Escrow:** $2,004.50

**Wetland Escrow:** $ N/A

There are not ditch liens on the property.

**ISSUES/CONCERNS:**

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<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Escrows: $2,000 + (.009 ac * $500/ac) = $2,004.50</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td>Soils &amp; Erosion Control: Soil stockpiles have not been proposed to be fitted with sediment-trapping measures to prevent soil loss. Provisions have not been made to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface.</td>
<td>2. Provide updated erosion control plan with the following information:</td>
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<tr>
<td></td>
<td>a. Provide note that soil stockpiles have been proposed to be fitted with sediment-trapping measures to prevent soil loss.</td>
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<td>b. Provide a note that any sediment tracked onto the</td>
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<td>Provisions have not been made for cleaning road surfaces where sediment is transported by the end of the day.</td>
<td>street from construction activities will be removed on a daily basis.</td>
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<td>Ditch was last excavated in 2016 however it remains unknown if ditch cleaning is required to tie into Ditch 11.</td>
<td>c. Coordinate with the District if ditch cleaning is required to daylight new culvert.</td>
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**RECOMMENDATION:** Approve with 2 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Provide updated erosion control plan with the following information:
   a. Provide note that soil stockpiles have been proposed to be fitted with sediment-trapping measures to prevent soil loss.
   b. Provide a note that any sediment tracked onto the street from construction activities will be removed on a daily basis.
   c. Coordinate with the District if ditch cleaning is required to daylight new culvert.