COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: April 11th, 2016
AGENDA NUMBER: 9
FILE NUMBER: 16 - 039
ITEM: 169th Ave & Xylite St Reconstruction

RECOMMENDATION: Approve with 3 Stipulations

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

PURPOSE: Reconstruct ~3,500 LF of roadway, adding 1.12 acres of impervious

LOCATION: 169th Ave NE from Mankato St to Xylite St and Xylite St from 169th Ave to Crosstown Blvd (C.S.A.H 18) in Ham Lake
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) One or more cumulative acres of land disturbance.
4) The lands and water that have been, or may be covered by the regional flood.
5) Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Uses)
6) High water table, outwash and organic soils.
7) High infiltration soils.
8) Highly erodible soils

EXHIBITS:
2) Drainage Calculations by RFC dated 3/02/2016, received 3/02/16.
3) Drainage Summary (Existing, Proposed and Difference) by RFC dated 3/10/16
4) Wetland Permit application, dated March 11, 2016; received March 11, 2016
5) HydroCAD model output for 2004 Stokes Addition; dated March 2, 2016; received March 30, 2016
6) HydroCAD model output for Proposed Stokes Addition; dated March 2, 2016; received March 30, 2016
7) SHSAM Calculations for Standard Sumps; dated March 28, 2016; received March 30, 2016
HISTORY & CONSIDERATIONS: This project is a re-submittal of a 2015 project that was tabled in March of 2015. This is a redesign. Therefore, many of the comments in this report are regarding the new layout.
FINDINGS:
Ditches: There is not a public ditch on the property.

Erosion and Sediment Control: Soils affected by the proposal are Rifle and Zimmerman. Stabilizing vegetation is proposed for disturbed areas within two weeks (14 days) of rough grading. Adjacent properties and stormwater ponds are protected from sediment deposition. Project site is greater than 1 acre, an NPDES permit is required.

Floodplain: There is no floodplain on the property according to the District model and FEMA.

Groundwater: Geotechnical information and information on low floors has not been submitted and is not needed. The site is not within a Drinking Water Supply Management Area (DWSMA). The project does not require dewatering.

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: The Owner of the Stormwater Management features and treatment practices is the City of Ham Lake. Ham Lake is an MS4 and is required to maintain the Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sump Catch Basins</td>
<td>7</td>
</tr>
<tr>
<td>Stormwater Pond (Stokes Pond)</td>
<td>1</td>
</tr>
</tbody>
</table>

Inspection and maintenance of stormwater facilities will be the responsibility of the City of Ham Lake. As a requirement of the City’s MS4 program, the city will inspect and maintain the stormwater facilities.

Easements: The proposed project does not include ditch maintenance easement. 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 achieved. The stormwater management system utilizes wet ponds, and existing wetlands. 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 the proposed site. The rate of post-development runoff from the site does exceed predevelopment rates, or rates which would interfere with sensitive downstream land uses.
**Water Quality:** Information has been provided to show that the proposed project does not cause an exceedance of State water quality standards. The project will not contribute to the adverse impact of wetlands through inundation or volume of flow. All discharges into wetlands are pretreated by a sediment basin/water quality pond, and are designed correctly. 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.

**Wetlands:** Wetland 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 on October 27, 2014. The wetland boundary has been checked.

The wetland is not a DNR protected water. The project is not wetland dependent. The project is not exempt.

The total proposed wetland impact is 0.04 ac. The impact is through fill in 7 locations as shown below:

<table>
<thead>
<tr>
<th>Wetland ID</th>
<th>Type of Impact</th>
<th>Size of impact</th>
<th>Type of wetland</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>fill</td>
<td>247 sq. ft.</td>
<td>6/2</td>
</tr>
<tr>
<td>C</td>
<td>fill</td>
<td>117 sq. ft.</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>fill</td>
<td>435.6 sq ft</td>
<td>3</td>
</tr>
<tr>
<td>F</td>
<td>fill</td>
<td>405 sq. ft.</td>
<td>2</td>
</tr>
<tr>
<td>G</td>
<td>fill</td>
<td>35 sq. ft.</td>
<td>6/2</td>
</tr>
<tr>
<td>H</td>
<td>fill</td>
<td>96 sq. ft.</td>
<td>2</td>
</tr>
<tr>
<td>I</td>
<td>fill</td>
<td>435.6 sq ft</td>
<td>2</td>
</tr>
</tbody>
</table>

TEP members have been notified with a complete plan and have been requested to submit comments.

Four (4) alternatives, plus the proposed project, have been submitted. On-site sequencing does not apply. The avoidance alternatives are considered good faith efforts. None of the avoidance alternatives are considered feasible and prudent.

The applicant suggests that avoidance is not reasonable because there is no alternative. No alternative exists because:

1) The basic purpose of the project cannot reasonably be accomplished at an alternative site;
2) The basic purpose of the project cannot be accomplished by further design modification which would avoid wetland impacts; and
3) The applicant has made a good faith attempt in pursuing alternatives;
4) The applicant has demonstrated that the activity will minimize wetland impacts through:
a. modifying the size, scope, configuration, and density of the project, and
b. otherwise minimize wetland impacts.

Wetland Replacement Plan: A wetland replacement plan has been submitted. A replacement plan application has been submitted. A wetland replacement plan has been sent to TEP members for comment. Replacement is proposed to be through the Minnesota Wetland Road Replacement Program.

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. No substantial adverse alteration or significant detrimental impact on a species food supply, security or reproductive cycle or the alteration or removal of a plant species will occur.

There are not Ground Water Dependent water resources on site.

Performance Escrow: $6,210
Wetland Escrow: $ N/A

FINDINGS/ISSUES/CONCERNS:

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
</tr>
</thead>
</table>
| Water Quality: All discharges into wetlands are 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. | 1. Applicant shall provide calculations for the sizing of MH 111, CBMH 129, and MH 144 to meet the 80% removal efficiency requirement or add device to improve sediment capture.  
2. Applicant shall provide revised plans showing the revised sump sizes accordingly. |
| Wetlands: The applicant is proposing to fill 0.04 acres of wetland and use the BWSR Road Replacement Bank to mitigate the impacts. | 3. Proof of wetland replacement must be provided to the District. |
| Escrows: $2,000 + (8.42 ac * $500/ac) = $6,210.00 | 4. Receipt of escrows |

RECOMMENDATION: Approve with 4 Stipulations:
1. Receipt of escrows.
2. Applicant shall provide calculations for the sizing of MH 111, CBMH 129, and MH 144 to meet the 80% removal efficiency requirement or add device to improve sediment capture.
3. Applicant shall provide revised plans showing the revised sump sizes accordingly.
4. Proof of wetland replacement must be provided to the District.