COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: March 14, 2016
AGENDA NUMBER: 9
FILE NUMBER: 15 - 153
ITEM: 105th Ave NE Road Improvements

RECOMMENDATION: Approve with 2 Stipulations

APPLICANT: City of Blaine
Attn: Jean Keely
10801 Town Square Dr NE
Blaine, MN 55449

PURPOSE: Reconstruction of 105th Avenue NE

LOCATION: 105th Avenue NE between Central Ave (Hwy 65) to CSAH 52 (Radisson Rd), Blaine
APPLICABILITY:
1. Bridges and culverts (1.06 sub 1)
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 water that have been, or may be covered by the regional flood.
6. High water table, outwash and organic soils.
7. Any land alteration within 1 mile of an impaired water

EXHIBITS:
1. Drainage Design Report (includes HydroCAD model and construction plans) by WSB; dated August 3, 2015, received 11/24/2015.
2. Wetland Delineation Report; dated 7/21/15, received 8/31/15
3. Amended Wetland Delineation Report; dated 7/21/15, received 10/14/15
4. Wetland Application by WSB; dated 11/10/15, received 11/24/15

HISTORY & CONSIDERATIONS: The western portion of the project has high groundwater and is in a Drinking Water Source Management Area. The eastern portion of the project is within an airport fly zone that does not allow open water basins.

FINDINGS:
Ditches and Drainage: There is a public ditch on the property. The ditch is CD 41 (Sand Creek). The ditch has been inspected. The ditch was last inspected in 2015. There are approximately 0 acres of existing agricultural land affected by this ditch. There are no flooding concerns downstream. Alternatives to additional drainage considered and reviewed include storage, retention. The public ditch was last repaired in 2004. The ditch is not in need of repair. A 16.5 foot grass strip is not required.

Ditch Hydraulics:
No new crossing of ditch 41 is proposed.

Erosion and Sediment Control: Soils affected by the proposal are Isanti and Rice. Stabilizing vegetation is proposed for disturbed areas within two weeks of rough grading. Adjacent properties are protected from sediment deposition. All wetlands, waterbodies, ponds, infiltration basins and water conveyance systems are protected from erosion and sedimentation. Project site is greater than 1 acre; a NPDES permit is required.

Floodplain: There is floodplain on the property according to FEMA. The District Atlas 14 model predicts the 100-year elevation for the subwatershed at 898.0 feet on the south side of the project and 896.9 feet on the north side of the project. The total floodplain impact is unknown, figure provided had outdated floodplain location.
**Groundwater:** Geotechnical report was not provided. The site does not include groundwater sensitive areas. Information has not been provided and is not needed to substantiate low floor elevations, no buildings proposed.

The western quarter of the project is within a Municipal Drinking Water Supply Area (DWSMA). The project site is within the 10 Year Well Head Protection Area of the DWSMA. The proposal does not contain a land use discouraged or prohibited by the Safe Drinking Water Supply Act (SDSA). The project proposes to collect stormwater. The containment is a pond which is easily inspected and whose purpose is to intercept and treat stormwater.

**High Water Flooding:**
Information has not been provided to substantiate low floor elevations.

**Dewatering:**
The project will require dewatering. An assessment of risks to other water and related resources has been conducted. The depth of dewatering is estimated to be 8 to 9 feet. The estimated cone of depression is estimated to be less than 20 feet in diameter.

**Ground Water Dependent Water Resources:**
There are not Ground Water Dependent water resources within the cone of depression.

**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 proposed project does include a ditch maintenance easement or utility line crossings. A drainage and utility easement is provided for the storm water/infiltration ponds shown on the drainage plan. It is unknown if property owners affected by changes in drainage have been notified and have acknowledged the changes proposed.

The Owner of the Stormwater Management features and treatment practices is City of Blaine. City of Blaine agrees 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>Stormwater Pond</td>
<td>3</td>
</tr>
<tr>
<td>Catch Basins</td>
<td>72</td>
</tr>
</tbody>
</table>

The owner has submitted a Maintenance Plan for each Stormwater Treatment Practice. The Maintenance Plan is consistent with the NPDES permit and SWPPP for the City.
As part of their responsibilities as an MS4, the City agrees to maintain, in perpetuity, the Stormwater Treatment Practices in accordance with the approved maintenance plans and in a manner that will permit the Practices to perform the purposes for which they were designed and constructed.

Easements: The proposed project does not require a ditch maintenance easement. A maintenance access to all storm water management features is provided. Inspection and maintenance of stormwater facilities will be the responsibility of City of Blaine.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1 inch infiltration is achieved. The stormwater management system utilizes sedimentation basin, and wet ponds. 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 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.

**Water Quality:** Project does not include new impervious drainage areas greater than 1 acre. The proposed project does not cause an exceedence of State water quality standards. The project does 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 within one (1) mile and drains to an Impaired Water. The Impaired Water is Pleasure Creek. Pleasure Creek is impaired for Aquatic Life (Macroinvertebrates). The project does not discharge to Pleasure Creek. There are no new impervious surfaces proposed as part of this project.

**Wetlands:** Wetland exists on-site according to the 1987 Federal manual, NWI, and Soil Survey. Wetlands have not been delineated. The wetland boundary has been checked. The wetland is not a DNR protected water.

The total proposed wetland impact is 13,939 sf. The impact is through fill in 7 locations as shown below:

<table>
<thead>
<tr>
<th>Wetland</th>
<th>Size of Impact</th>
<th>Type</th>
<th>Type of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland B</td>
<td>0.04 ac</td>
<td>Type 3</td>
<td>Fill</td>
</tr>
<tr>
<td>Wetland C</td>
<td>0.04 ac</td>
<td>Type 3</td>
<td>Fill</td>
</tr>
<tr>
<td>Wetland C</td>
<td>0.02 ac (temporary)</td>
<td>Type 3</td>
<td>Fill</td>
</tr>
<tr>
<td>Wetland D</td>
<td>0.05 ac</td>
<td>Type 1</td>
<td>Fill</td>
</tr>
<tr>
<td>Wetland F</td>
<td>0.08 ac (temporary)</td>
<td>Type 3</td>
<td>Fill</td>
</tr>
<tr>
<td>Wetland G</td>
<td>0.03 ac</td>
<td>Type 1</td>
<td>Fill</td>
</tr>
<tr>
<td>Wetland H</td>
<td>0.06 ac</td>
<td>Type 1</td>
<td>Fill</td>
</tr>
</tbody>
</table>
The wetland delineation report has been reviewed and approved by the TEP. The de minimis is 400 sf. The proposed project results in wetland impact greater than 10,000 sf over the de minimis.

The project is not exempt.

The applicant does not need to contact the DNR area hydrologist but does need to contact the Corps of Engineers.

Two (or more) 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 feasible or prudent because there is no alternative. No alternative exists because the basic purpose of reconstruction and improvement of 105th Ave cannot be accomplished at an alternative site.

The wetland impacts have been reviewed by the TEP. Wetland impacts have been approved by TEP members. Receipt of TEP member signatures is still needed, but in progress.

**Wetland Replacement Plan:** A wetland replacement plan and application has been submitted for the Local Road Replacement Program for .22 acres. 0.1 acres (4,365 sf) does not qualify for Local Road Replacement. The balance of the wetland impact is proposed to be mitigated through creation/restoration.

**Wildlife:** The proposed project does not include endangered or threatened species, rare natural communities, groundwater dependent natural resources, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

**Performance Escrow:** $10,705.00
**Wetland Escrow:** $0

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th><strong>Wetlands:</strong> The applicant is proposing to permanently impact 0.22 ac of wetland for the project. The TEP has approved the wetland impacts, but is awaiting TEP member signatures.</th>
<th>1. TEP approval has been granted, pending receipt of signatures.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Escrow:</strong> $2,000 + (17.41 ac * $500/ac) = $10,705.00</td>
<td>2. Receipt of escrows.</td>
</tr>
</tbody>
</table>
RECOMMENDATION: Approve with 2 Stipulations

Stipulations:
1. TEP approval has been granted, pending receipt of signatures.
2. Receipt of performance escrow: $10,705.00