COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: October 10, 2016
AGENDA NUMBER: 14
FILE NUMBER: 16-123
ITEM: Coon Rapids Public Works Building

RECOMMENDATION: Table with 5 Stipulations

APPLICANT: City of Coon Rapids
11155 Robinson Drive
Coon Rapids, MN 55433

PURPOSE: Public works building water main and parking lot expansion

LOCATION: 1831 111th Ave NW
APPLICABILITY:
1. One or more cumulative acres of land disturbance
2. Endangered, Threatened or Special Concern Species

EXHIBITS:
1) Stormwater Management Report by City of Coon Rapids; dated 9/26/16, received 9/27/16.
2) Construction Plan set (4 sheets) by City of Coon Rapids; dated 9/26/16, received 9/27/16.

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 not a public ditch on the property.

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

Erosion and Sediment Control: Soils affected by the proposal is Nymore and Cut & Fill.
- 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.
• 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 not been provided.
• Stormwater runoff does not pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity.
• 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 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: It is unknown if shallow ground water exists on site. Dewatering is not anticipated.

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

High Water Flooding: Information has not been provided to substantiate low floor elevations and is not needed, no buildings proposed.

Groundwater: Geotechnical information was not provided.

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.

Property owners affected by changes in drainage have been notified and acknowledge the changes proposed.

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

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
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<tbody>
<tr>
<td>Basin</td>
<td>1</td>
</tr>
<tr>
<td>Sumps</td>
<td>2</td>
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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 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. The stormwater management system utilizes filtration. 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. 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 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 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 not 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 Coon Creek. Coon Creek is impaired for (Aquatic Life (Macro-
invertebrates) / Aquatic Recreation (E. coli)). The major stressors of Total Suspended Solids (TSS) / Total Phosphorus (TP) / E.coli. There is not an EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for this water.

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

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

**Wetland Replacement Plan:**
A wetland replacement plan has not been submitted and is not needed.

**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 endangered or threatened species, rare natural community is Blanding’s Turtle (*Emydoidea blandingii*).

The applicant has not contacted the MDNR natural heritage or endangered species program. However, the site has been disturbed and does not propose substantial adverse alteration or significant detrimental impact on the species.

**Performance Escrow:** $2,970.00
**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 + (1.94 ac * $500/ac) = $2,970.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics: The bottom surface area in the HydroCAD model is not correct.</td>
<td>2. Update HydroCAD model with bottom surface area shown on plan set. Currently 0.05 ac but should be closer to 0.005 ac.</td>
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<tr>
<td>Applicant must acknowledge that an infiltration test is required to show the application rate is consistent with the 0.59 cfs used in the model (approximately 10 in/hr).</td>
<td>3. The applicant must acknowledge that they will conduct a post construction test on the infiltration basin by filling the basin to a minimum depth of 6 inches with water and monitor the time necessary to drain. The Coon Creek Watershed District shall be notified prior to the test to witness the results.</td>
</tr>
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| Soils & Erosion Control: Additional information is needed to meet District’s Soil and Erosion Control requirements. | 4. Provide additional soil and erosion control measures noted above in the Soils & Erosion control section including:  
- Stabilizing vegetation proposed for disturbed areas within seven (7) days of rough grading.  
- Note whether soil stockpiles are proposed and if they will be fitted with sediment-trapping measures to prevent soil loss.  
- BMP completely surrounding the filtration basin  
- Construction schedules detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases  
- Provisions for cleaning road surfaces where sediment is transported by the end of the day.  
- Provisions for repair and maintenance of all temporary and permanent erosion and sediment control practices. |
| Water Quality: SHASM should be updated to incorporate accurate site information. | 5. Update SHASM with the following info:  
- Update outlet pipe to 12” for all sump sizes  
- Update impervious %, CN and average slope to be consistent with HydroCAD. |

**RECOMMENDATION:** Table with 5 Stipulations  
**Stipulations:**  
1. Receipt of escrows.  
2. Update HydroCAD model with bottom surface area shown on plan set.  
3. The applicant must acknowledge that they will conduct a post construction test on the infiltration basin by filling the basin to a minimum depth of 6 inches with water and monitor the time necessary to drain. The Coon Creek Watershed District shall be notified prior to the test to witness the results.  
4. Provide additional soil and erosion control measures noted above in the Soils & Erosion control section including:
- Stabilizing vegetation proposed for disturbed areas within seven (7) days of rough grading.
- Note whether soil stockpiles are proposed and if they will be fitted with sediment-trapping measures to prevent soil loss.
- BMP completely surrounding the filtration basin
- Construction schedules detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases
- Provisions for cleaning road surfaces where sediment is transported by the end of the day.
- Provisions for repair and maintenance of all temporary and permanent erosion and sediment control practices.

5. Update SHASM with the following info:
   - Update outlet pipe to 12” for all sump sizes
   - Update impervious %, CN and average slope to be consistent with HydroCAD.