COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: August 26, 2019
AGENDA NUMBER: 8
FILE NUMBER: 19-154
ITEM: Catchers Creek West Utilities

RECOMMENDATION: Approve with 3 Stipulations

APPLICANT: City of Andover
1685 Crosstown Boulevard NW
Andover, MN 55304

PURPOSE: Street and Utility Construction for Catchers Creek West
Street and Utility servicing 9 single family lots
3.8 Acres Disturbed

LOCATION: 1049 Andover Blvd, Andover, MN
APPLICABILITY:
1. Within 1 mile of an impaired waters.
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 waters 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 Land Uses)

EXHIBITS:
1. Construction Plan set (13 sheets); by Carlson McCain dated August 5, 2019, received August 8, 2019.
2. Storm sewer area map and calculations; by Carlson McCain undated, received August 8, 2019.
PREVIOUS ACTION TAKEN: This is a new application. This permit is for the street and utility portion of Catchers Creek West, approved under PAN 19-033.

FINDINGS:

Pre-application Meeting: The project as submitted has not 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 are Lino, Rifle and Sartell.

- 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 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 is required at the edges of 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.
- 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 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 all Erosion and sediment control devices.

**Dewatering**: Shallow ground water does exist on site. The project will likely require dewatering.

**Floodplain**: There is floodplain on the property according to the District model. The District’s floodplain elevation is at 880.7 feet. The project does not propose to place fill within the floodplain.

**High Water Flooding**: Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Andover; 3 ft above mottled soils/groundwater, 2 ft over 100 yr.

**Groundwater**: Geotechnical information collected in December 2018 indicates long term groundwater elevation is present at 6-13 feet below the surface.

The project site is 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**: The owner of the Stormwater Management features and treatment practices is the City of Andover. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Inspection &amp; Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filtration Basins</td>
<td>2</td>
<td>City of Andover</td>
</tr>
<tr>
<td>Sumps</td>
<td>1</td>
<td>City of Andover</td>
</tr>
</tbody>
</table>

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:** The stormwater calculations for treatment and rate control are provided in the grading permit for this project, PAN 19-033. The following is a summary of the Stormwater & Hydrology section from the review of PAN 19-033:

Infiltration is not allowed within the project area due to it being within a DWSMA/WPA/ERA. The 1-inch filtration is achieved. The stormwater management system utilizes filtration. Calculations have been provided that illustrate the 1-inch filtration volume is achieved below outlet.

Drainage sensitive uses do exist downstream from the proposed site. The rate of post-development runoff from the site does exceed predevelopment rates by 0.15 cfs for the 2-year event and 0.09 cfs for the 10-year event; however, no adverse impacts are anticipated downstream. The project is meeting the drainage sensitive rate requirement for the areas draining to the basins. 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 the 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:** Water quality is provided under the site grading for this site, PAN 19-033. The following is the description under the Water Quality section of PAN 19-033:

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/stormwater basins are pretreated by a water quality pond/overland flow 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 of an Impaired Water. The Impaired Water is Coon Creek. Coon Creek is impaired for Aquatic Life (Macro-invertebrates) and Aquatic Recreation (E. coli). The major stressors are Total Suspended Solids (TSS), Total Phosphorus (TP), and E. coli. There is 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:** Wetlands do not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. Wetlands have been delineated under PAN 19-033. The wetland boundary has been checked.

**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 contacted the MDNR natural heritage or endangered species program for the site under PAN 19-033.

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:** $3,900

**Wetland Escrow:** $N/A

There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escrows: $2,000 + (3.8 ac * $500/ac) = $3,900</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td><strong>Soils &amp; Erosion Control:</strong> The plans do not show the locations or types of erosion and sediment control products or maintenance requirements</td>
<td>2. Provide Erosion and Sediment Control Plan to show all erosion and sediment control devices and their associated details along with the maintenance requirements.</td>
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<tr>
<td>It is unclear if dewatering is needed during the construction of the proposed project.</td>
<td>3. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide well-field location, rates, discharge location, schedule and quantities.</td>
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</tbody>
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**RECOMMENDATION:** Approve with 3 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Provide Erosion and Sediment Control Plan to show all erosion and sediment control devices and their associated details along with the maintenance requirements.
3. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide well-field location, rates, discharge location, schedule and quantities.