COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: May 13, 2019
AGENDA NUMBR: 28
FILE NUMBER: 19-092
ITEM: Coon Rapids Middle School Parking Expansion

RECOMMENDATION: Table with 7 Stipulations

APPLICANT: Anoka-Hennepin School District
2727 North Ferry Street
Anoka, MN 55303

PURPOSE: Parking lot expansion
0.95 acres new impervious area
2.2 acres disturbed

LOCATION: 11600 Raven Street NW, Coon Rapids, MN

APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. One or more cumulative acres of land disturbance

**EXHIBITS:**
1. Construction Plan set (6 sheets); by AJA dated March 22, 2019, received April 30, 2019.
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 not a public ditch on the property.

Erosion and Sediment Control: Soils affected by the proposal are Hubbard.
- Stabilizing vegetation is proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles have been proposed to be fitted with sediment-trapping measures to prevent soil loss and have a note to stabilize within seven (7) days of inactivity.
- Adjacent properties and stormwater ponds are 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 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 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 tracking onto the paved surface.
- Provisions have 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 provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices.
- Details provided for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.)

Dewatering: Shallow ground water does not exist on site. The project does not require dewatering.

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

Groundwater: Geotechnical information collected in October 2013 indicates long term groundwater elevation is deeper than 21 feet below ground surface.
A portion of the project site is within the Drinking Water Supply Management Area (DWSMA)/Wellhead Protection Area/Emergency Response 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 Anoka-Hennepin School District. 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>
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</thead>
<tbody>
<tr>
<td>Filtration Basin</td>
<td>1</td>
<td>Anoka-Hennepin School District</td>
</tr>
<tr>
<td>RainGuardians</td>
<td>2</td>
<td>Anoka-Hennepin School District</td>
</tr>
</tbody>
</table>

A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.

The STP is currently designed as a filtration basin with liner and underdrain due to the presence of a wellhead protection zone. However, the site is not in the emergency response area so the basin should be designed as an infiltration basin.

**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 current design is for a lined filtration basin. The design can be modified to allow infiltration.

The 1-inch filtration is achieved so it is assumed that the BMP can be modified to infiltration and will have the same volumes and calculations. 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 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 stormwater basins are pretreated by a sediment basin/water quality pond, and are designed correctly. No work adjacent to wetlands, waterbodies and water conveyance systems is proposed. 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 and drains to an Impaired Water. The Impaired Water is Coon Creek. Coon Creek is impaired for Macro-invertebrates and 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.

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

**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 not contacted the MDNR natural heritage or endangered species program and is not required to.

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:** $3,100  
**Wetland Escrow:** $N/A  
There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Escrows: $2,000 + (2.2 ac * $500/ac) = $3,100</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics: The site is in the Wellhead Protection Area but not within the Emergency Response Area. Infiltration is allowed in the Wellhead protection area abut not in the emergency response area.</td>
<td>2. The applicant must remove the liner from the proposed basin and modify the design to allow infiltration. 3. The applicant must provide a note on the construction plans that a post</td>
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A post construction test on the filtration basin will be required to verify the assumed filtration rates are obtained.

Compaction during construction on disturbed areas that are not paved caused higher runoff.

Type II rainfall distribution was used in HydroCAD.

construction test on the filtration basin will be conducted 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. Increase curve numbers by 1 HSG for disturbed areas or add a note to scarify the surface after reaching finished grade, even if topsoil is proposed.

5. Update HydroCAD model to use MSE-3 type rainfall.

Soils & Erosion Control: The soil borings provided were completed for a previous project and are not at the location of the proposed filtration basin. The Minnesota Stormwater Manual recommends a minimum 2 soil borings or test pits or 10 permeameter tests for infiltration basins between 1,000 and 5,000 square feet.

6. Complete soil borings, test pits, or permeameter tests to confirm infiltration rates, soil types and groundwater depth at the infiltration basin location.

Maintenance: A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.

7. Provide an O&M Agreement that meets District requirements.

RECOMMENDATION: Table with 7 Stipulations

Stipulations:

1. Receipt of escrows.
2. The applicant must remove the liner from the proposed basin and modify the design to allow infiltration.
3. The applicant must provide a note on the construction plans that a post construction test on the filtration basin will be conducted 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. Increase curve numbers by 1 HSG for disturbed areas or add a note to scarify the surface after reaching finished grade, even if topsoil is proposed.
5. Update HydroCAD model to use MSE-3 type rainfall.
6. Complete soil borings, test pits, or permeameter tests to confirm infiltration rates, soil types and groundwater depth at the infiltration basin location.

7. Provide an O&M Agreement that meets District requirements.