COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: April 9, 2018
AGENDA NUMBER: 12
FILE NUMBER: 18-075
ITEM: Andover High School

RECOMMENDATION: Table with 9 Stipulations

APPLICANT: Anoka-Hennepin Public Schools
2727 Ferry Street North
Anoka, MN 55303

PURPOSE: Six building additions, driveway realignment and new parking

LOCATION: NE of Andover Blvd & Crosstown Blvd NW, 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
EXHIBITS:

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.

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

Erosion and Sediment Control: Soils affected by the proposal are Isanti, Sartell and Seeleyville.
- 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.
- 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 racking 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.

**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.

**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 March 2018 indicates long term groundwater elevation is present at 20 feet below the surface.

The project site is within the 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 Anoka-Hennepin Public Schools. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Basins</td>
<td>3</td>
<td>Anoka-Hennepin Public Schools</td>
</tr>
<tr>
<td>Pretreatment Device</td>
<td>?</td>
<td>Anoka-Hennepin Public Schools</td>
</tr>
</tbody>
</table>

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

Easements: The proposed project does not include a 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 at the existing infiltration basins. It is unknown if the 1-inch infiltration is achieved, additional information on water reuse is needed for the western portion of the project area. The stormwater management system utilizes infiltration, regional ponding and water reuse. 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 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:** 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 basins are not pretreated. 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 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 are 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:** Wetlands do not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey

**Wetland Replacement Plan:** A wetland replacement plan 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.

**Performance Escrow:** $5150.00  
**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 + (6.3 ac * $500/ac) = $5150.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> A post construction test on the infiltration basin will be required to verify the assumed infiltration rates are obtained.</td>
<td>2. 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>
<tr>
<td>No information provided for water reuse for western pond (1P) to meet volume management requirements.</td>
<td>3. Provide information/calculations for water reuse to meet volume management requirements for 1P.</td>
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<tr>
<td>Model uses Type-II rainfall distribution.</td>
<td>4. Update model to use MSE-3 rainfall distribution.</td>
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<tr>
<td>Updated/proposed storm sewer on south is unclear.</td>
<td>5. Provide additional information for storm sewer network on southern portion of project.</td>
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<tr>
<td>No information provided on construction plans for updates to existing basins 5P and 1P storm sewer outlets shown in HydroCAD model.</td>
<td>6. Provide details for new outlets for 5P and 1P on construction plans.</td>
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</tbody>
</table>
Tables provided for drainages area do not match HydroCAD model for “To 4P North Basin” in existing or proposed conditions.

**Water Quality:** All discharges into water quality basins are not pretreated.

8. Provide pretreatment into Infiltration Basin #4 along proposed storm sewer line. A sump at CB 1 may be an ideal location. If sump is proposed, provide calculations (SHASM can be used) to indicate sumps are appropriately sized to meet district removal rates of 80% TSS. A minimum of 4-foot depth is required to prevent resuspension.

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

9. Provide O&M agreement that meets District requirements.

**RECOMMENDATION:** Table with 9 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. 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.
3. Provide information/calculations for water reuse to meet volume management requirements for 1P.
4. Update model to use MSE-3 rainfall distribution.
5. Provide additional information for storm sewer network on southern portion of project.
6. Provide details for new outlets for 5P and 1P on construction plans.
7. Update summary tables to match HydroCAD model for 4P and total.
8. Provide pretreatment into Infiltration Basin #4 along proposed storm sewer line. A sump at CB 1 may be an ideal location. If sump is proposed, provide calculations (SHASM can be used) to indicate sumps are appropriately sized to meet district removal rates of 80% TSS. A minimum of 4-foot depth is required to prevent resuspension.
9. Provide O&M agreement that meets District requirements.