COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: October 8, 2018
AGENDA NUMBER: 16
FILE NUMBER: 18-179
ITEM: Legacy Christian Academy Building Addition

RECOMMENDATION: Approve with 5 Stipulations

APPLICANT: Meadow Creek Church
3037 Bunker Lake Blvd
Andover, MN 55304

PURPOSE: Building Addition

LOCATION: 3037 Bunker Lake Blvd, Andover, MN

APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. Any work in or adjacent to wetlands, lakes or water courses.
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 Nymore and Rifle.
- 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 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: 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 August, 2018 indicates long term groundwater elevation is present at 12-15 feet below the surface.

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.
**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>
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<tbody>
<tr>
<td>Sumps</td>
<td>4</td>
<td>City of Andover</td>
</tr>
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</table>

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

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 not provided.

**Stormwater & Hydrology**: Stormwater requirements are not applicable. The project disturbs less than 1 acre.

Drainage sensitive uses do not exist downstream from the proposed site. The rate of post-development runoff from the site does exceed predevelopment rates but will not have adverse impacts on downstream properties. 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 wetlands are pretreated by a sump 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)/Aquatic Recreation (E. coli). The major stressors are Total Suspended Solids (TSS)/Total Phosphorus (TP)/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 exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. Wetlands have not been delineated. The wetland boundary has not been checked. No wetland impacts are proposed.

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

**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.

**Performance Escrow:** $2,375
**Wetland Escrow:** $N/A

There are ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
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<th>NEED</th>
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<tr>
<td><strong>Escrows:</strong> $2,000 + (0.75 ac * $500/ac) = $2,375</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> Type II rainfall distribution was used in the HydroCAD model.</td>
<td>2. Update HydroCAD model using MSE 3 rainfall distribution.</td>
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</table>
| **Soils & Erosion Control:** Provisions have not been made for cleaning road surfaces where sediment is transported by the end of the day. The erosion and sediment control plan does not provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices. Not all catch basins are protected | 3. Update construction plans to include the following:  
  a. Provisions for cleaning road surfaces where sediment is transported by the end of the day.  
  b. Provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices.  
  c. Provide inlet protection on STM/MH #2  
  d. Provide riprap at all flared end sections. |
**Water Quality:**
Clarification is needed on sumps for catch basins 1-4.

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<td>4.</td>
<td>Update construction plans to include sump depths for catch basins 1-4. A minimum of 4’ sump is required to prevent resuspension and meet requirements for discharging to a wetland.</td>
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**Maintenance:** It is unknown who will be responsible for the inspection and maintenance of stormwater facilities. A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.

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<td>5.</td>
<td>Provide an O&amp;M Agreement that meets District requirements.</td>
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**RECOMMENDATION:** Approve with 5 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. Update HydroCAD model with MSE 3 rainfall distribution.
3. Update construction plans to include the following:
   a. Provisions for cleaning road surfaces where sediment is transported by the end of the day.
   b. Provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices.
   c. Provide inlet protection on STM/MH #2
   d. Provide riprap at all flared end sections.
4. Update construction plans to include sump depths for catch basins 1-4. A minimum of 4’ sump is required to prevent resuspension and meet requirements for discharging to a wetland.
5. Provide an O&M Agreement that meets District requirements.