COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: March 13, 2017
AGENDA NUMBER: 13
FILE NUMBER: 17-048
ITEM: Primary Automation

RECOMMENDATION: Table with 6 Stipulations

APPLICANT: Stone Construction
2181 107th Lane
Blaine, MN 55449

PURPOSE: Building Addition

LOCATION: Southeast corner of 134th and Aberdeen, Ham Lake
APPLICABILITY:
1. One or more cumulative acres of land disturbance
2. High infiltration soils
3. Highly erodible soils

EXHIBITS:
1. Construction Plan set (7 sheets); by Hakanson Anderson, dated 2/28/17, received 2/28/17.
3. SHASM calculations; by Hakanson Anderson, dated 2/28/17, received 2/28/17.

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: Soil affected by the proposal is Zimmerman.
- 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 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 not 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 not 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 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.

Dewatering: Shallow ground water does not exist on site. Dewatering is not anticipated.

Floodplain: There is no floodplain on the property according to the District model and FEMA. There are no flooding concerns upstream or downstream.

High Water Flooding: Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Ham Lake; 1 ft above mottled soil or 100 yr.

Groundwater: Geotechnical information was not provided and is not needed.

The site is within a Municipal Drinking Water Supply Area (DWSMA).

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.

Property owners affected by changes in drainage have not been notified and acknowledge the changes proposed.

**Maintenance:** The Owner of the Stormwater Management features and treatment practices is Primary Automation. 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>Sumps</td>
<td>3</td>
</tr>
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</table>

Inspection and maintenance of stormwater facilities will be the responsibility of Primary Automation. 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 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 via a regional infiltration basin. The stormwater management system utilizes regional ponding. 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. Impervious calculations need to be provided to ensure rates meet the overall drainage requirements for the site which were based on 85% imperviousness. 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 cause an exceedance of State water quality standards. The project does contribute to the adverse impact of wetlands through inundation or volume of flow. All discharges into basins are pretreated and are not designed correctly. All work adjacent to wetlands, waterbodies and water conveyance systems are not protected from erosion. The proposal will 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 not within one (1) mile of an Impaired 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.

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: $2,655.00  
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 + (1.31 ac * $500/ac) = $2,655.00</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td>Stormwater &amp; Hydraulics: Site was included in overall drainage plans for existing basins north and northeast of the Site at 85% impervious.</td>
<td>2. In order to meet rate control, calculations need to be provided that show the overall site development (Lots 1 &amp; 2) will not exceed 85% impervious.</td>
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<td>Model provided does not reflect elevations for proposed on-site storm sewer.</td>
<td>3. Update model to reflect proposed storm sewer elevations.</td>
</tr>
<tr>
<td>Soils &amp; Erosion Control: Erosion Control does not meet District requirements.</td>
<td>4. Update erosion control plan with the following items:</td>
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<tr>
<td></td>
<td>a. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.</td>
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<td>b. Provide note that all soil stockpiles must be fitted with sediment-trapping measures to prevent soil loss.</td>
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<td>c. Provide inlet protection at CB across from proposed driveway on north side of 134th.</td>
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<td>d. Extend silt fence to southern side of proposed CB on south side.</td>
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side of project.
e. Include statement that provisions have been made for cleaning road surfaces where sediment is transported by the end of the day.

<table>
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<th>Water Quality:</th>
<th>SHASM calculations were provided. However, no inputs were provided to check the results and the pipe diameter was not changed from default values to reflect site design.</th>
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<td>5. Provide inputs used in SHASM and update pipe diameters to reflect proposed on-site storm sewer. A minimum of 4 foot depth is required to prevent resuspension. MNDOT sand particle file is acceptable.</td>
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<td>Maintenance:</td>
<td>A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.</td>
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<td>6. Provide an O&amp;M Agreement that meets District requirements.</td>
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**RECOMMENDATION:** Table with 6 Stipulations

**Stipulations:**

1. Receipt of escrows.

2. In order to meet rate control, calculations need to be provided that show the overall site development (Lots 1 & 2) will not exceed 85% impervious.

3. Update model to reflect proposed storm sewer elevations.

4. Update erosion control plan with the following items:
   a. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.
   b. Provide note that all soil stockpiles must be fitted with sediment-trapping measures to prevent soil loss.
   c. Provide inlet protection at CB across from proposed driveway on north side of 134th.
   d. Extend silt fence to southern side of proposed CB on south side of project.
   e. Include statement that provisions have been made for cleaning road surfaces where sediment is transported by the end of the day.

5. Provide inputs used in SHASM and update pipe diameters to reflect proposed on-site storm sewer. A minimum of 4 foot depth is required to prevent resuspension. MNDOT sand particle file is acceptable.

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