COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE:    March 12, 2018
AGENDA NUMBER:  16
FILE NUMBER:    18-054
ITEM:           Growing Generations

RECOMMENDATION:  Table with 6 Stipulations

APPLICANT:       Stonewood Properties
                  11015 Bell Oaks Rd
                  Eden Prairie, MN 55347

PURPOSE:         10,000 SQ FT Building on 1.9 Acre Lot

LOCATION:        W of Bluebird St NW and Crosstown Blvd NW
                 intersection, Andover, MN

APPLICABILITY:
1. One or more cumulative acres of land disturbance
2. High infiltration soils
3. Highly erodible soils
4. Endangered, Threatened or Special concern species, elements or communities
EXHIBITS:
1. Construction Plan set (9 sheets); by Plowe Engineering, dated 5/31/17, received 6/2/17.

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 Sartell.
- 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 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.
• 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 may meet the criteria for the City of Andover; 3 ft above mottled soils/groundwater, 2 ft over 100 yr. Model updates are needed.

Groundwater: Geotechnical information collected in June 1997 indicates long term groundwater elevation is present at 10 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>Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basins</td>
<td>1</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 maintenance access to all storm water management features is provided.

**Stormwater & Hydrology:** Infiltration is allowed within the project area but must be filtered first if runoff is from a road or parking lot. The 1-inch infiltration is not achieved. The stormwater management system utilizes infiltration basin and 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. The rate of post-development runoff from the site does 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. 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 by a sediment basin/water quality pond. 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 not within one (1) mile of an Impaired 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 include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors. The endangered or threatened species, rare natural community are the Dry Barrens Oak Savanna, Rhombic-petaled Evening Primrose and the Long-bearded Hawkweed. The applicant should contact the MDNR natural heritage or endangered species program.

**Performance Escrow:** $2810.00  
**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 + (1.62 ac * $500/ac) = $2810.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td><strong>Groundwater:</strong> Site location is within a Wellhead Protection Area. Therefore, runoff from parking lots and driving lanes must be filtered prior to infiltration. Runoff off of roofs does not require filtration.</td>
<td>2. Proposed infiltration must be designed with filtration prior to infiltration for runoff from parking lots and driving lanes.</td>
</tr>
<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> Proposed basin is designed as an infiltration basin. However, the model has a starting elevation above the proposed bottom elevation.</td>
<td>3. The proposed basin should have a starting elevation at the bottom if acting as an infiltration basin. If proposed basin will act as a wet basin, exfiltration needs to be removed and surface area needs to be included as impervious in drainage area ‘A.’ See Comment #2.</td>
</tr>
<tr>
<td><strong>Soils &amp; Erosion Control:</strong> Infiltration basins are not protected from erosion and sedimentation during construction. After initial grading the District requires that infiltration basins be completely surround by erosion control measures to prevent the basin from clogging.</td>
<td>4. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.</td>
</tr>
</tbody>
</table>
**Water Quality:** Discharge into the basin from CB4 does not have pretreatment. Pretreatment is required prior to infiltration and filtration basins.

5. 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.

**Wildlife:** The proposed project may include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

6. Provide documentation from the DNR if the proposed project includes endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors

**RECOMMENDATION:** Table with 6 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Proposed infiltration must be designed with filtration prior to infiltration for runoff from parking lots and driving lanes.
3. The proposed basin should have a starting elevation at the bottom if acting as an infiltration basin. If proposed basin will act as a wet basin, exfiltration needs to be removed and surface area needs to be included as impervious in drainage area ‘A.’ See Comment #2.
4. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
5. 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.
6. Provide documentation from the DNR if the proposed project includes endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors