COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: May 14, 2018
AGENDA NUMBER: 20
FILE NUMBER: 18-093
ITEM: Fridley Retail

RECOMMENDATION: Table with 7 Stipulations

APPLICANT: Gaughan Companies
56 East Broadway Ave., Suite 200
Forest Lake, Minnesota 55025

PURPOSE: 5,435 SQ FT Building and 6,005 SQ FT Building on 1.74 Acre Lot

LOCATION: NW of University Ave NE and 83rd Ave NE, Fridley, 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 Roshell Engineering, dated 5/2/2018, received 5/2/2018.
2. Stormwater Management Report; by Momentum Environmental, dated 5/2/2018, received 5/2/2018.

PREVIOUS ACTION TAKEN: This is a new application.

FINDINGS:
Pre-application Meeting: The project as submitted has 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 Lino, Isanti, and Zimmerman.

- 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 exist on site. The project may 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 Fridley; 1 ft above mottled soil or 100 yr.

Groundwater: Geotechnical information collected in February 2016 indicates long term groundwater elevation is present at 5 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.

Property owners affected by changes in drainage should be notified and acknowledge the changes proposed.
Maintenance: The Owner of the Stormwater Management features and treatment practices is Gaughan Companies. 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>
</tr>
</thead>
<tbody>
<tr>
<td>Biofiltration Basin</td>
<td>1</td>
<td>Gaughan Companies</td>
</tr>
<tr>
<td>Underground Chamber</td>
<td>1</td>
<td>Gaughan Companies</td>
</tr>
<tr>
<td>Pretreatment Devices</td>
<td>?</td>
<td>Gaughan Companies</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 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. Due to a high water table and marginal fill soils, infiltration is not feasible. The 1-inch filtration is achieved. The stormwater management system utilizes biofiltration basin and underground storage chamber.

Drainage sensitive uses do not exist downstream from the proposed site. The rate of post-development runoff from the site does exceed predevelopment rates for the 1 year storm event but is not expected to impact downstream properties. The rate of post-development runoff from the site does not exceed predevelopment rates for the 10, 25, and 100-year storm events. 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. 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 County Ditch 17 (Springbrook). County Ditch 17 is impaired for Aquatic Life (Macro-invertebrates)/Aquatic Recreation (E. coli). The major stressors are 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 not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey

**Wetland Replacement Plan:** A wetland replacement 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:** $ 2860.00

**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 + (1.72 ac * $500/ac = $2860.00</td>
<td>1. Receipt of escrows.</td>
</tr>
</tbody>
</table>

**Stormwater & Hydraulics:** The applicant is meeting the volume management requirement equivalent to filtrating runoff from the first inch of precipitation. A post construction test on the filtration basin will be required to verify the assumed filtration rates are obtained.

Clarification needed on biofiltration basin.

2. The applicant must acknowledge that they will conduct a post construction test on the filtration 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. Update biofiltration basin detail to include elevations. If soil media is modeled in HydroCAD, void space must be included.
**Soils & Erosion Control:** Filtration basins are not protected from erosion and sedimentation during construction. After initial grading the District requires that filtration basins be completely surrounded by erosion control measures to prevent the basin from clogging.

It is unclear if dewatering is needed during the construction of the proposed project.

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

**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.

4. After initial grading completely surround the proposed filtration basins with erosion control measures to prevent the basin from clogging.

5. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide well-field location, rates, discharge location, schedule and quantities.

6. Provide pretreatment device at inlet to biofiltration basin. Some pretreatment options include sumps, rain gaardians, micropools, and forebays. 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.

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

**RECOMMENDATION:** Table with 7 Stipulations

**Stipulations:**

1. Receipt of escrows.

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