COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: June 27, 2016
AGENDA NUMBER: 10
FILE NUMBER: 16-094
ITEM: Deer Haven Hills 9th Addition

RECOMMENDATION: Table with 6 Stipulations

APPLICANT: Steen Enterprises
2745 Bunker Lake Blvd NE
Ham Lake MN 55304

PURPOSE: Development of two single family residential lots

LOCATION: South of the Intersection of Yancy Street NE and 146th Ave NE in Ham Lake, Minnesota

APPLICABILITY:
1. Any work within or adjacent to a Public ditch within the Watershed District.
2. Any work in or adjacent to wetlands, lakes or water courses
3. One or more cumulative acres of land disturbance
4. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Land Uses)
5. High water table, outwash and organic soils
6. High infiltration soils
7. Highly erodible soils
8. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1) Preliminary Plat by E.G Rud and Sons; No Date; Received 6/15/2016
2) Plan Set by Plowe; dated 6/14/2016; Received 6/15/2016
3) Drainage Calculations by Plowe; dated 6/14/2016; received 6/15/2016
HISTORY AND CONSIDERATIONS:
These residential lots are being placed on the existing, pre-platted outlot B of the Deer Haven Hills 6th Addition. The primary drainage to the street is directed to the existing storm sewer system that is directed to two existing stormwater ponds developed for the Deer Haven hills Development. Rate Control is accounted for in these ponds.

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 Lino.
- 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.
• Stormwater runoff does pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity.
• Stabilization adequate to prevent erosion has not 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 not 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. It is unclear if dewatering is needed.

**Floodplain:** There is no floodplain on the property according to the District model and FEMA.

**High Water Flooding:**
Information has not been provided to substantiate low floor elevations. Low floor elevations do not meet the criteria for the City of Ham Lake; 1 ft above mottled soil or 100 yr.

**Groundwater:** Geotechnical information collected in May 2016 indicates long term groundwater elevation is present at 1.5 to 3.7 feet below the surface.

The site is not within a Municipal Drinking Water Supply Area (DWSMA).

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).

Underground storage tanks are not proposed.

Storage and use of petroleum products exceeding fifty-five (55) gallons are not proposed.
**Historic Sites:** The proposed project does not include sites of historic or archeological significance.

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

**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 the City of Ham Lake (City). 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>Filtration/Bioretention Basin</td>
<td>1</td>
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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 provided.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is met to the maximum extent practicable. The stormwater management system utilizes filtration, 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 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. However, the volume of increase is insignificant given the majority of the connected impervious is treated in regional ponds.

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. There are no discharges into wetlands. 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 and drains to an Impaired Water. The Impaired Water is County Ditch 59 (Coon Creek). Coon Creek is impaired for (Aquatic Life (Macro-invertebrates) / Aquatic Recreation (E. coli)). The major stressors of 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:** 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 and 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 is the Black Huckleberry (*Gaylussacia baccata*).

The applicant has not contacted the MDNR natural heritage or endangered species program.

**Performance Escrow:** $2,550.00
**Wetland Escrow:** N/A
There are not ditch liens on the property.

**ISSUES/CENTRENS:**

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<th>ISSUE</th>
<th>NEED</th>
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<tr>
<td><strong>Soils &amp; Erosion Control:</strong> It is unclear if dewatering is needed during the construction of the proposed project.</td>
<td>1. 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.</td>
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<tr>
<td>It is unclear where the construction entry points are and whether the appropriate erosion control measures are being met.</td>
<td>2. Provide locations for construction entry on plans.</td>
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**Groundwater:**
The low floor elevation shown on the plans for block 1 lot 1 is 895.0 and the mottled soil elevation, which is an indication of high groundwater, adjacent to that location is 894.4. According to the rules of the District and the City of Ham Lake, low floors must be a minimum of 1 foot above the mottled soil elevation.

3. Provide low floor elevations for all proposed lots that are a minimum of 1 foot above the mottled soil elevation.

**Stormwater & Hydrology:**
A post construction test must be conducted on the infiltration/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.

4. 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.

**Wildlife:**
The project has the potential to include the endangered or threatened species, rare natural community Black Huckleberry (*Gaylussacia baccata*).

5. Contact the DNR to have a DNR Natural Heritage Information System (NHIS) data review completed to determine if any records of state-protected species may be located within the boundary of this project.

**Escrows:**
$2,000 + (1.1 \text{ ac} \times $500/\text{ac}) = $2,550.00

6. Receipt of escrows

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**RECOMMENDATION** Table with 6 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. 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.
3. Provide locations for construction entry on plans.
4. Provide low floor elevations for all proposed lots that are a minimum of 1 foot above the mottled soil elevation.
5. 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.
6. Contact the DNR to have a DNR Natural Heritage Information System (NHIS) data review completed to determine if any records of state-protected species may be located within the boundary of this project.