COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: October 9, 2017
AGENDA NUMBER: 17
FILE NUMBER: 17-186
ITEM: Blaine Hotel

RECOMMENDATION: Table with 12 Stipulations

APPLICANT: Elevage Development Group, 117 Holdings LLC
Attn: Corey Burstad
10901 Baltimore St NE
Blaine, MN 55449

PURPOSE: 14,000 SQ FT Building on 1.6 Acre Lot

LOCATION: South of intersection of 107th Ave NE and Baltimore St NE, Blaine, MN

APPLICABILITY:
1. One or more cumulative acres of land disturbance
2. High water table, outwash and organic soils
3. High infiltration soils
4. Highly erodible soils

EXHIBITS:
1. Construction Plan set (6 sheets); by EricksonCivil, dated 9/15/17, received 9/22/17.
2. Stormwater Management Report; by EricksonCivil, dated 9/15/17, received 9/22/17.

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: Soils affected by the proposal are Isanti and Markey.
- Stabilizing vegetation is not 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 Blaine; 2 ft above mottled, 2 ft above 100 yr.

Groundwater: Geotechnical information collected in July 2017 indicates long term groundwater elevation is present at 7 - 9.5 feet below the surface.

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 should be notified and acknowledge the changes proposed.

**Maintenance:** The Owner of the Stormwater Management features and treatment practices is unknown. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Maintenance Responsibility</th>
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<tbody>
<tr>
<td>Rain Garden</td>
<td>1</td>
<td>Unknown</td>
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<tr>
<td>Sumps</td>
<td>3</td>
<td>Unknown</td>
</tr>
<tr>
<td>Underground Storage</td>
<td>1</td>
<td>Unknown</td>
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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 not achieved. The stormwater management system utilizes rain gardens and underground storage systems. 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 may 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 infiltration systems are not pretreated and are not 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 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 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:** $2,800.00  
**Wetland Escrow:** $ N/A  
There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
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<th>ISSUE</th>
<th>NEED</th>
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<tr>
<td>Escrows: $2,000 + (1.6 ac * $500/ac) = $2,800.00</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> Based on SB-3 and nearby regional basins, seasonal high groundwater appears to be at approximately 895 which will prevent underground storage chamber functioning as an infiltration system.</td>
<td>2. Drain tile will need to be provided at underground storage system to ensure drawdown of system.</td>
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</tbody>
</table>
| Underground infiltration system:  
  a. only shows 3 pipes on the construction plans but has 4 pipes in the HydroCAD model.  
  b. Invert in HydroCAD model is 897.0 but should be 895.5 according to the details. | 3. Provide consistent information between construction plans and HydroCAD model for underground infiltration system. |
| Unclear how runoff from the east side of hotel will be directed to sumps for treatment. Northeastern portion appears to drain to existing raingarden. | 4. Show how runoff from east is directed to sumps for treatment. |
| Infiltration Basin:  
  a. HydroCAD model has the existing/proposed rain garden to 902.0 but it is unclear how the surface area was determined and if basin is contained on property.  
  b. Based on Rim elevations of 901.2/901.13 in existing driveway, | 5. Unclear if there is additional runoff into existing raingarden on the east. If there is, model rain garden to indicate if rain garden has capacity.  
  6. Show extent and clarify construction of infiltration basin contours (900 and 902) with spot elevations. |
contour 900 for rain garden does not appear to be constructible.

**Drainage Map:**
- P2 & P3 appear to be mislabeled on drainage map.
- E3 & P4 are not shown in their entirety on drainage map. Unclear why E3 has 0% impervious.

A post construction test on the infiltration basin will be required to verify the assumed infiltration rates are obtained.

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<td>7.</td>
<td>Update Drainage Map to include all of E3 &amp; P4.</td>
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<td>8.</td>
<td>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.</td>
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<td><strong>Soils &amp; Erosion Control:</strong> District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity.</td>
<td>9. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.</td>
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<td>10. 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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<td><strong>Water Quality:</strong> Sumps provided as treatment for area P3, however, no calculations have been provided to indicate sediment removal %</td>
<td>11. 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.</td>
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<td><strong>Maintenance:</strong> 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.</td>
<td>12. Provide an O&amp;M Agreement that meets District requirements.</td>
</tr>
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</table>
**RECOMMENDATION:** Table with 12 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Drain tile will need to be provided at underground storage system to ensure drawdown of system.
3. Provide consistent information between construction plans and HydroCAD model for underground infiltration system.
4. Show how runoff from east is directed to sumps for treatment.
5. Confirm the existing rain garden doesn’t have additional inflow. If more area is flowing into the rain garden provide calculations or design showing water quality goals are met.
6. Show extent and clarify construction of infiltration basin contours (900 and 902) with spot elevations.
7. Update Drainage Map to include all of E3 & P4.
8. 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.
9. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.
10. 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.
11. 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.
12. Provide an O&M Agreement that meets District requirements.