COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: March 27, 2017
AGENDA NUMBER: 10
FILE NUMBER: 17-055
ITEM: Kuehn Roof Systems

RECOMMENDATION: Approve with 2 Stipulations

APPLICANT: Kuehn Roof Systems
14815 Aberdeen St NE
Ham Lake, MN

PURPOSE: Construction of a 3,024 sq ft storage building on 1.3 Acre Lot

LOCATION: 14815 Aberdeen St NE, north of Baltimore St NE in Ham Lake, Minnesota.
APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. High water table, outwash and organic soils.
3. High infiltration soils.

EXHIBITS:

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 and Zimmerman.
- 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 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.
- No storm sewer pipes are associated with the project.
- 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 may exist on site. The project may require dewatering.

**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 submitted a is not needed.

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).

**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: No Stormwater Management features or treatment practices are included as part of the project.

Easements: The proposed project does not include ditch maintenance easement. A ditch maintenance easement is not required.

Stormwater & Hydrology: Infiltration is allowed within the project area. The 1-inch infiltration is achieved to the maximum extent practicable. The stormwater management system utilizes overland flow. 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 exist downstream from the proposed site. The rate of post-development runoff from the site does not 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. No discharges into wetlands or basins are proposed. 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 and drains to an Impaired Water. The Impaired Water is Coon Creek. Coon Creek is impaired for (Aquatic Life (Macro-invertebrates)/Aquatic Recreation (E. coli)). The major stressors are Total Suspended Solids (TSS)/Total Phosphorus (TP)/E.coli. There is not 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 per the 1987 Federal manual, NWI, PWI and Soil Survey.
**Wetland Replacement Plan:** A wetland replacement plan has not been submitted and is not needed.

**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:** $2,150.00
**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 + (0.30 ac * $500/ac) = $2,150.00</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td>Soils &amp; Erosion Control: Erosion Control plan does not meet District standards.</td>
<td>2. Updated erosion control plan with the following: a. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity. b. Provide construction entrance location. If entrance is on east side of project, provide additional sediment trapping devices at downstream end of ditch culvert to prevent sedimentation of existing ditch. c. 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>District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity.</td>
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<td>Construction entrance is unclear.</td>
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<td>It is unclear if dewatering is needed during the construction of the proposed project.</td>
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</tbody>
</table>

**RECOMMENDATION:** Approve with 2 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. Updated erosion control plan with the following:
   a. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.
   b. Provide construction entrance location. If entrance is on east side of project, provide additional sediment trapping devices at downstream end of ditch culvert to prevent sedimentation of existing ditch.
c. 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.