COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: June 27, 2016
AGENDA NUMBER: 19
FILE NUMBER: 16-075
ITEM: RMS Building Addition

RECOMMENDATION: Table with 8 Stipulations

APPLICANT: RMS Company
8600 Evergreen Blvd
Coon Rapids, MN 55433

PURPOSE: Clearing and grubbing for future building and parking lot expansion.

LOCATION: NW Quadrant of Evergreen Blvd and 85th Ave NW, Coon Rapids
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. High water table, outwash and organic soils
5. High infiltration soils
6. Highly erodible soils
7. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1) Geotechnical Report by CVT; dated 10/16/14, received 6/15/16.
2) Title Curvey by KLD; dated 6/8/15, received 6/15/16.
3) Review Plan (2 sheets) by Stark Engineering; dated 6/15/16, received 6/15/16.
4) HydroCAD Model by Stark Engineering; dated 6/14/16, received 6/15/16.
5) Email from MNDNR Regarding NHIS; dated 6/14/16, received 6/14/16.

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 a public ditch on the property. The public ditch is County Ditch 17 (Springbrook) according to the public drainage map. County Ditch 17 was established in 1892. The 2011 observed elevations through this property are 865.7 ft
MSL at the downstream end (station 85+49) and 867.8 ft MSL at the upstream end (station 94+92). The ditch is a 4th order stream. The ditch serves the primary role of storm water conveyance and a trunk drainage system. The ditch serves approximately 0 acres of agricultural land. Land use in the area is commercial and industrial. The ditch has been inspected (103E.075 subd 4). Existing elevations, slopes and condition of ditch are good. The ditch is not in need of repair. The 16.5 foot grass strip has been inspected (103E.075 subd 4). The grass strip is not in need of repair or maintenance. There are no flooding concerns upstream or downstream. Alternatives to repair and additional drainage have been considered and reviewed.

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

**Erosion and Sediment Control:** Soils affected by the proposal are Blomford, Braham, Kratka 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.
- 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 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. It is unknown if dewatering is required.
**Floodplain:** There is floodplain on the property according to the District model and FEMA. The project does not propose to place fill within the floodplain. There are no flooding concerns upstream or downstream.

**High Water Flooding:**
Information is not needed to substantiate low floor elevations, slab on grade proposed.

**Groundwater:** Geotechnical information collected in October 2014 indicates long term groundwater elevation is present at approximately 2.5 to 8 feet below ground 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).

**Historic Sites:** The proposed project does not include sites of historic or archeological significance.

**Local Planning & Zoning:** The proposed project is not consistent with local planning and zoning. There is an approved local water plan.

Property owners affected by changes in drainage have been notified and acknowledge the changes proposed.

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

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>Infiltration Swale</td>
<td>1</td>
</tr>
<tr>
<td>Sump</td>
<td>3</td>
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</table>

Inspection and maintenance of stormwater facilities will be the responsibility of RMS Company. 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 include ditch maintenance easement. A ditch maintenance easement is 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 swales and
wetlands. 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 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. No proposed on-site constructed storm water conveyance channels.

**Water Quality:** The proposed project does not cause an exceedance of State water quality standards. The project may contribute to the adverse impact of wetlands through inundation or volume of flow. All discharges into wetlands are pretreated by a sediment basin/water quality pond, and are 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 within one (1) mile and drains to 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 of 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:** Wetland do exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. Wetlands have been delineated. The most recent delineation was completed on September 23, 2014. The wetland boundary has been checked.

The wetland is not a DNR protected water.

The total proposed wetland impact is 0 square feet.

**Wetland Replacement Plan:**
A wetland replacement plan has not been submitted and is not required.

**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.
The endangered or threatened species, rare natural community is Lake Bed and a Dry Sand – Gravel Prairie.
The applicant has contacted the MDNR natural heritage or endangered species program. The applicant has indicated that contact was made June 8, 2016. MDNR has responded to the applicant indicating the native plant community is not on the site.

**Performance Escrow:** $4,150.00  
**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 + (4.3 ac * $500/ac) = $4,150</td>
<td>1. 1. Receipt of escrows.</td>
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<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> The applicant is not meeting the volume</td>
<td>2. If applicants cannot meet this requirement due to site constraints</td>
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<tr>
<td>management requirement equivalent to infiltrating runoff from the first</td>
<td>in its entirety, they must meet it to the greatest extent practical and</td>
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<td>inch of precipitation of the entire new/redeveloped impervious surfaces.</td>
<td>explain why it cannot be met.</td>
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<td>All projects in the Coon Creek Watershed District must meet this</td>
<td></td>
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<td>requirement.</td>
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<td>The HydroCAD model indicates that the HWL will increase by approximately</td>
<td>3. Show entire extent of basin, including spot elevations if necessary,</td>
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<td>1 foot from existing to proposed conditions for the wetland. Grading</td>
<td>to illustrate proposed HWL impacts on adjacent property.</td>
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<tr>
<td>plan does not show entire extent of basin to indicate if basin has</td>
<td></td>
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<td>capacity for increased HWL.</td>
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<td><strong>Soils &amp; Erosion Control:</strong> Infiltration swale is not protected from</td>
<td>4. After initial grading, completely surrounded the proposed infiltration swale with erosion control measures to prevent the basin from clogging.</td>
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<tr>
<td>erosion and sedimentation during construction. After initial grading</td>
<td></td>
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<tr>
<td>the District requires that infiltration basins be completely surrounded</td>
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<td>by erosion control measures to prevent the basin from clogging.</td>
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<td>It is unclear if dewatering is needed during the construction of the</td>
<td>5. Provide statement whether dewatering will be required for the</td>
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<tr>
<td>proposed project.</td>
<td>construction of the proposed project. If yes, provide well-field</td>
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<td></td>
<td>location, rates, discharge location, schedule and quantities.</td>
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<td><strong>Water Quality:</strong> Discharge into infiltration swale needs to be</td>
<td>6. Provide pretreatment into infiltration swale.</td>
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<td>pretreated to ensure long term infiltration ability. Pretreatment</td>
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<td>measure must achieve an 80% TSS removal.</td>
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</table>
Calculations were not provided that indicate SUMPs meet district standards of 80% TSS removal.

7. Provide calculations (SHASM can be used) to indicate sumps are appropriately sized to meet district removal rates of 80% TSS.

The project may contribute to the adverse impact of wetlands through inundation or volume of flow.

8. Increasing outlet appears to increase WSE by at least 1 foot for all storm events and therefore probably the NWL causing additional inundation of additional area.

**RECOMMENDATION:** Table with 8 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. If applicants cannot meet this requirement due to site constraints in its entirety, they must meet it to the greatest extent practical and explain why it cannot be met.
3. Show entire extent of basin, including spot elevations if necessary, to illustrate proposed HWL impacts on adjacent property.
4. After initial grading, completely surrounded the proposed infiltration swale 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 into infiltration swale.
7. Provide calculations (SHASM can be used) to indicate sumps are appropriately sized to meet district removal rates of 80% TSS.
8. Increasing outlet appears to increase WSE by at least 1 foot for all storm events and therefore probably the NWL causing additional inundation of additional area.