COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: August 12, 2019
FILE NUMBER: 19-019
ITEM: RMS Building Addition

RECOMMENDATION: Approve with 4 Stipulations

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

PURPOSE: Building Addition and Parking Lot Expansion
31,937 SQ FT building addition, parking lot expansion on
21 acre lot

LOCATION: Northwest of the intersection of Evergreen Blvd. and
85th avenue NW. South and east of Anoka CD 17.
APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. Any work within or adjacent to a Public ditch within the Watershed District.
3. Any work in or adjacent to wetlands, lakes or water courses
4. One or more cumulative acres of land disturbance
5. The lands and waters that have been, or may be, covered by the regional flood.
6. Appropriation and use of groundwater
7. Excavation or filling or a combination of excavation and filling of sand or other excavation or fill material including the laying, repairing, replacing or enlarging of a culvert or an underground pipe or facility where it crosses a public ditch or waters of the state.

EXHIBITS:
1. Review Plan set (3 sheets); by Stark Engineering, dated 7/31/2019, received 7/31/19.
2. Existing Conditions Survey (1 sheet) by Kramer Leas Deleo, dated March 26, 2019, received March 27, 2019.
PREVIOUS ACTION TAKEN: This application was initially submitted on 2/27/2019 but was deemed incomplete with the following stipulations:

1. Receipt of escrows.
2. Provide soil boring, test pit, or infiltrometer test in the location of all Stormwater Treatment Practices to determine infiltration rates.
3. More soil borings are needed to ensure a minimum of three (3) feet of separation from the seasonally saturated soils and the required infiltration practices.
4. If applicants cannot meet the volume management requirement due to site constraints in its entirety, they must meet it to the greatest extent practical and explain why it cannot be met.
5. Provide calculations that illustrate 1-inch infiltration volume requirement.
6. Provide proposed drainage areas and routing diagram.
7. Clarify sump depth. The district requires a minimum 4’ depth.
8. Provide agreement between RMS and landowner prior to work occurring on the adjacent property.
9. Update construction plans to stabilize vegetation within 7 days of rough grading or inactivity.
10. Provide a maximum slope of 3:1, armoring, or retaining walls to prevent excessive slope erosion and washout.
11. 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.
12. Update construction plans to show a designated construction entrance and street cleaning provisions.
14. Include inlet protection on all storm sewer inlets.
15. Provide redundant perimeter control adjacent to wetlands.
16. Provide details on rip-rap and inlet protections
17. Provide SHASM calculations for CBMH#5 showing 80% TSS removal.
18. Provide minimum 3-foot permanent pool depth and volume calculations to show adequate treatment for a 2.5-inch rainfall event.
19. Provide an O&M Agreement that meets District requirements.
20. Update Ditch 17 HWL on plans and show floodplain boundaries.
21. Provide calculations to satisfy discharges into wetlands found in table in 9.7 pg. 34 of CCWD rules.

FINDINGS:

Pre-application Meeting: The project as submitted has received a general review during a pre-application correspondence email.

Ditches: There is a public ditch on the property. The public ditch is County Ditch 17 according to the public drainage map. The observed elevations (2016) through this property are 866.58 ft MSL at the downstream end and 871.87 ft MSL at the upstream end.
The ditch is a 4th order stream. The ditch serves the primary role of

a. Trunk drainage system

The ditch serves approximately 0 acres of agricultural land.
Land use in the area is commercial and industrial.
There are flooding concerns upstream and/or downstream.

The ditch has been inspected.
Existing elevations, slopes and condition of ditch are good.
The ditch is not in need of repair. There is no proposed work within the ditch.

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

Erosion and Sediment Control: Soils affected by the proposal are Blomford, Braham, and Kratka.

- Stabilizing vegetation is proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles are not proposed as part of the project.
- 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 not 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 tracking 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.
- Details provided for ESC (riprap, perimeter control, inlet protection, etc.)

Dewatering: Shallow ground water does exist on site. The project may require dewatering.

Floodplain: There is floodplain on the property according to the District model. The District’s floodplain elevation for Ditch 17 to the north of the property ranges from about
869 to 871. The project does not propose to place fill within the floodplain. Compensatory storage is not needed. 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 Coon Rapids; 3 ft above mottled, 2 ft above 100 yr.

**Groundwater:** Geotechnical information collected in October 2014 indicates groundwater elevation is present at 2 to 8 feet below the surface, corresponding to elevations ranging from 862 to 868. Additional information collected in April 2019 indicates groundwater is around 864 to 869.

The project site is not within the Emergency Response Area, 10 Year Well Head Protection Area, or the 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:** It is unknown if the proposed project is consistent with local planning and zoning. No application has been submitted to the city officials. There is an approved local water plan.

Property owners affected by changes in drainage have not been notified or 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>
<th>Inspection &amp; Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pond</td>
<td>2</td>
<td>RMS Company</td>
</tr>
<tr>
<td>Swale</td>
<td>1</td>
<td>RMS Company</td>
</tr>
<tr>
<td>Sump Manhole</td>
<td>1</td>
<td>RMS Company</td>
</tr>
</tbody>
</table>

A maintenance agreement has not been executed for the updated site plan. The applicant has submitted a Maintenance Plan for each Stormwater Treatment Practice for proposed site plan. The Maintenance Plan is not consistent with District Maintenance standards for each STP.
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 not provided.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is achieved; however, high groundwater may prevent infiltration in all areas. The stormwater management system utilizes a stormwater pond and rain garden.

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 not protected from erosion due to increases in the volume, velocity and peak water flow rates of stormwater runoff. Concentrated storm water leaving the 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 wetlands/stormwater basins 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 of and drains to an Impaired Water. The Impaired Water is County Ditch 17. County Ditch 17 is impaired for Macro-invertebrates and E. coli. The major stressors are Total Suspended Solids (TSS), Total Phosphorus (TP) and E. coli. There is an EPA approved Total Maximum Daily Load (TMDL) and Waste Load Allocation (WLA) for this water.

There are new impervious surfaces proposed as part of this project.

**Wetlands:** Wetlands 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 12/06/14. The wetland boundary has been checked.

The wetland is not a DNR protected water.

The applicant does need to contact the DNR area hydrologist and the Corps of Engineers.

**Wetland Replacement Plan:** A wetland replacement plan has not been submitted and 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. The applicant has not contacted the MDNR natural heritage or endangered species program and is not required to.

If the project is present, the project does not propose substantial adverse alteration or significant detrimental impact on a species or removal of a plant species will occur.

Performance Escrow: $4,150; $2,000 + (4.3 ac * $500/ac) = $4,150 (received 4/29/19 #4066)
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>Soils &amp; Erosion Control: Infiltration basins are not protected from erosion and sedimentation during construction. After initial grading the District requires that infiltration basins be completely surrounded by erosion control measures to prevent the basin from clogging.</td>
<td>1. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging and depict this on the plans.</td>
</tr>
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<td>Stormwater and Hydraulics: Geotech report does indicate groundwater at 864.4 at proposed north basin. However, aerial images indicate groundwater is closer to 868 for the ditch as well as the recently constructed swale.</td>
<td>2. Its recommended to assume north basin will be a wet basin and adjust HydroCAD to have a starting water surface elevation and ensure the EOF can handle flow from large storm events. 3. Update plans to indicate a wet basin</td>
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<td>Maintenance: A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.</td>
<td>4. Provide the updated O&amp;M Agreement that meets District requirements.</td>
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RECOMMENDATION: Approve with 4 Stipulations
Stipulations:
1. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
2. Its recommended to assume north basin will be a wet basin and adjust HydroCAD to have a starting water surface elevation and ensure the EOF can handle flow from large storm events.
3. Update plans to indicate a wet basin
4. Provide the updated O&M Agreement that meets District requirements.