COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: June 26, 2017
AGENDA NUMBER: 9
FILE NUMBER: 13-129
ITEM: Lawrence Estates Subdivision

RECOMMENDATION: Approve with 2 Stipulations

APPLICANT: Lawrence Properties 1, LLC
2477 Main Street NW
Coon Rapids, MN 55448

PURPOSE: 10 Lots on 3.7 Acres

LOCATION: NE of Coon Creek Blvd and Main St NW in Coon Rapids, Minnesota

APPLICABILITY:
1. Within 1 mile of an impaired water.
2. Any work in or adjacent to wetlands, lakes or water courses
3. One or more cumulative acres of land disturbance
4. The lands and waters that have been, or may be covered by the regional flood.
5. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Land Uses)
6. High water table, outwash and organic soils
7. High infiltration soils
8. Highly erodible soils

EXHIBITS:
1. Plan Set by Hakanson Anderson, dated 4-1-14, received 4-2-14.
2. Floodplain Permit Application by Hakanson Anderson, dated 4-1-14, received 4-2-14.
4. Drainage Area exhibit by Hakanson Anderson dated 4-1-14, received 4-2-14.
5. Water quality and runoff calculations by Hakanson Anderson dated 4-1-14, received 5-26-17.

PREVIOUS ACTION TAKEN: This project was approved on June 9, 2014 but was not constructed. No alterations have been made to the design since the approval and meets current District requirements.

FINDINGS:
Pre-application Meeting: The project as submitted has received a general review during a pre-application meeting.
**Ditches:** There is not a public ditch on the property. The public ditch is County Ditch 54-1 according to the public drainage map. The approved/as-built elevations through this property are 850.4 ft MSL at the downstream end and 850.5 ft MSL at the upstream end. The approved elevations and grades through this property are 850.4 ft MSL and 0.0006% slope. Existing elevations, slopes and condition of the ditch are 851.3 ft MSL and represent a 0.001% variance from the as-built elevations. Alternatives to repair and additional drainage have been considered and reviewed.

The ditch is a 5th order stream. The ditch serves the primary role of

a. Trunk drainage system

The ditch serves approximately 93 acres of agricultural land.
Land use in the area is toward Single Family Residential, Vacant, and Agriculture.
There are flooding concerns upstream and downstream.

The ditch has been inspected.
Existing elevations, slopes and condition of ditch are good.
The ditch is not in need of repair.
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 Nymore and Alluvial.

- 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.
- 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. Dewatering may be required.

Floodplain: There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 859.1 feet. The project does propose to place fill within the floodplain. The total floodplain impact is 2,339 cubic feet. The proposed impact is within the floodway. Compensatory storage is provided. There are flooding concerns 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 November 2013 indicates long term groundwater elevation is present at 6.5 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).

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.

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

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basins</td>
<td>1</td>
<td>City of Coon Rapids</td>
</tr>
<tr>
<td>Sumps</td>
<td>2</td>
<td>City of Coon Rapids</td>
</tr>
</tbody>
</table>

As a requirement of the City’s MS4 program, the city will inspect and maintain the stormwater facilities.
Easements: The proposed project does include ditch maintenance easement. 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 achieved. The stormwater management system utilizes filtration. 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 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. 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 of 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 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 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 October 20, 2010. The wetland boundary has been checked.

The total proposed wetland impact is 0.5 acre. The impact is through fill and excavation in Type 1,2 floodplain forest/fresh meadow wetland.

**Wetland Replacement Plan:** A wetland replacement plan has been submitted. Replacement is proposed to be through purchasing wetland credits at a ratio of 2:1. The credits will be purchased through wetland bank #1044, Anoka County, Major Watershed 20, Bank Service Area 7. The TEP has approved the wetland mitigation plan.
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: $3,869.50 paid
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>Soils &amp; Erosion Control:</td>
<td>It is unclear if dewatering is needed during the construction of the proposed project.</td>
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<tr>
<td></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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</tbody>
</table>

RECOMMENDATION: Approve with 1 Stipulations

Stipulations:
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.