COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: May 22, 2017
AGENDA NUMBER: 16
FILE NUMBER: 16-162
ITEM: Red Fox Hollow 2nd

RECOMMENDATION: Approve with 1 Stipulation

APPLICANT: Property Revolutions Nine, LLC
11781 194th Ave NW
Elk River, MN 55330

PURPOSE: 23 SF Lots on 68.5 acres

LOCATION: East of Lexington Ave NE between 136th and 138th Ave NE, Ham Lake

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. High water table, outwash and organic soils
8. High infiltration soils
9. Highly erodible soils
10. 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:

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 a public ditch on the property. The public ditch is County Ditch 44-7 according to the public drainage map. The ditch was last inspected in 2016. The approved elevations through this property are 890.4 ft MSL at the downstream end and 890.9 ft MSL at the upstream end. The observed elevations and grades through this property are 888.2 ft MSL at the downstream end and 889.3 ft MSL at the upstream end. Existing elevations of the ditch represent a 2.2-1.6 feet (below) variance from the approved. Alternatives to repair and additional drainage have been considered and reviewed. The ditch is a 3 order stream. The ditch serves the primary role of an agricultural drainage and collector system. The ditch serves approximately 428 acres of agricultural land. Land use in the area is toward agricultural. There are flooding concerns upstream and downstream. Existing elevations, slopes and condition of ditch are good. The ditch is not in need of repair.

Ditch Hydraulics: A crossing of the ditch is proposed. The proposed crossing involves the replacement of a culvert. The proposed culvert is of sufficient hydraulic capacity.

Erosion and Sediment Control: Soils affected by the proposal are Lino, Isanti, Rifle 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. The project may require dewatering.

Floodplain: There is floodplain on the property according to the District model and FEMA at 895.3 feet. The project does propose to place fill within the floodplain. The total floodplain impact is 154 CY. The proposed impact is within the flood fringe. Compensatory storage has been 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 Ham Lake; 1 ft above mottled soil or 100 yr.

Groundwater: Geotechnical information collected in December 2016 did not indicate long term groundwater elevation. Based on aerial images, water surface elevation in adjacent basin is approximately 892 feet.

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 been notified and acknowledge the changes proposed.

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

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<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Maintenance Responsibility</th>
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<tbody>
<tr>
<td>NURP pond</td>
<td>3</td>
<td>City of Ham Lake</td>
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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 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 achieved through a filtration bench. The stormwater management system utilizes filtration, and wet ponds. 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 from the overall site. 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 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 Coon Creek. Coon Creek is impaired for Aquatic Macro-invertebrates. 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: 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 22, 2016. The wetland boundary has been checked and approve by the TEP. The wetland is not a DNR protected water.

The total proposed wetland impact is approximately 100 square feet. Impact meets the de minimus of 400 sf. The project is not wetland dependent.

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: $14,000
Wetland Escrow: $ N/A

There are not ditch liens on the property.

**ISSUES/CONCERNS:**

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<th>ISSUE</th>
<th>NEED</th>
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<tr>
<td>Escrows: $2,000 + (24 ac * $500/ac) = $14,000</td>
<td>1. Receipt of escrows.</td>
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</tbody>
</table>

**RECOMMENDATION:** Approve with 1 Stipulation

**Stipulations:**

1. Receipt of escrows.