COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: May 23, 2016
AGENDA NUMBER: 9
FILE NUMBER: 16-076
ITEM: Hoffman Lever St Culvert

RECOMMENDATION: Approve with 3 Stipulations

APPLICANT: Warren Hoffman
15740 Lexington Ave
Ham Lake MN 55304

PURPOSE: Installation of a 84” CMP Pipe on CD 44 near 152nd Ln and Lever Street NE, Ham Lake

LOCATION: CD 44 near 152nd Ln and Lever Street NE, Ham Lake
**APPLICABILITY:**
1) Bridges and culverts (1.06 sub 1)
2) Any work in or adjacent to wetlands, lakes or water courses.
3) Highly erodible soils

**EXHIBITS:**
1) Map showing location of the culvert; no date provided; received 5/16/2016
2) Lake Life Estates Record Plans; by Carlson Professional Services dated 4/27/2011; received 5/16/2016

**HISTORY & CONSIDERATIONS:** This is the first application for this site.

**FINDINGS:**

**Ditches:** There is a public ditch on the property. The public ditch is County Ditch 44 according to the public drainage map. County Ditch 44 was established in 1903. The ditch was last inspected in 2011. The ditch is not in need of repair.

The approved elevations and grades through this property are 888.29 ft NAVD 88 (D/S) and 888.32 ft NAVD 88 (U/S) and 0.04% slope. Existing elevations, slopes and condition of the ditch are fair and represent approximately a 0.5 ft variance from the approved elevations. Alternatives to repair and additional drainage have not been considered and reviewed.

The ditch is a second order stream. The ditch serves the primary role of
   a. Agricultural drainage
The ditch serves approximately 336 acres of agricultural land. Land use in the area is agriculture, vacant and single family residential. There are flooding concerns upstream and downstream.

A 16.5 foot grass strip is required. A 16.5 foot grass strip is present. The 16.5 foot grass strip has been inspected. (103E.075 subd 4) The grass strip is not in need of repair or maintenance.

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

**Erosion and Sediment Control:** Soils affected by the proposal are Markey and Lino. Stabilizing vegetation is not proposed for disturbed areas within 7 days of rough grading. Adjacent properties and stormwater ponds are not protected from sediment deposition. Project site is not greater than 1 acre, an NPDES permit is not required.

**Floodplain:** There is floodplain on the property according to the District model. The floodplain elevation is 894.7 according to the District XP-SWMM model. The project does propose to place fill within the floodplain. The total floodplain impact is negligible. The proposed impact is within the flood fringe. Compensatory storage is not provided and is not needed. There are flooding concerns upstream and/or downstream.

**Groundwater:** Geotechnical information has not been submitted and is not needed.

**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 is the applicant.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is not achieved and is not needed. Drainage sensitive uses exist downstream from the proposed site.

**Water Quality:** The proposed project does not cause an exceedence of State water quality standards. The project does not contribute to the adverse impact of wetlands through inundation or volume of flow. All work adjacent to wetlands, waterbodies and water conveyance systems are not protected from erosion. The proposal will not
detrimentially 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 (Macroinvertebrates) / 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.

The project does not propose site stabilization within 7 days after construction.

There are no new impervious surfaces proposed as part of this project.

**Wetlands:** Wetlands do not exist on-site according to 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 may include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

There are not Ground Water Dependent water resources on site.

No steps are proposed for avoiding or minimizing impacts.

**Performance Escrow:** $2,025.00

**Wetland Escrow:** N/A

There are not ditch liens on the property.

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**FINDINGS/ISSUES/CONCERNS:**

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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tr>
<td><strong>Ditches:</strong> The culvert installed is approximately 0.3 feet below the approved grade. This is not going to be a drainage constraint however as the culvert has plenty of capacity at 84 inches to pass flood flows.</td>
<td>No action necessary.</td>
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<tr>
<td><strong>Ditches:</strong> The culvert and crossing replaces the failing/failed crossing upstream at approximately station 125+00. The failed crossing must be removed.</td>
<td>1. Remove failing/failed crossing upstream of the proposed culvert (station 125+00)</td>
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<td><strong>Wildlife:</strong> The proposed project has the potential to include the threatened Black Huckleberry</td>
<td>2. Contact the DNR to have a DNR Natural Heritage</td>
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(Gaylussacia baccata).

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<th>Information System (NHIS) data review completed to determine if any records of state-protected species may be located within the boundary of this project.</th>
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**Escrows:** $2,000 + (0.05 ac * $500/ac) = $2,025.00

3. Receipt of escrows

**RECOMMENDATION:** Approve with 3 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Remove failing/failed crossing at station 125+00 upstream of proposed culvert.
3. Contact the DNR to have a DNR Natural Heritage Information System (NHIS) data review completed to determine if any records of state-protected species may be located within the boundary of this project.