COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: June 8, 2015
AGENDA NUMBER: 14
FILE NUMBER: 15 - 067
ITEM: CR 132 Culvert Replacement

RECOMMENDATION: Approve with 3 Stipulations

APPLICANT: Anoka County Highway Department
Attn: Matt Herzog
1440 Bunker Lk Blvd NW
Andover MN 55304

PURPOSE: 72” Culvert Replacement

LOCATION: 300’ East of Railroad Crossing on CR 132, Coon Rapids, MN
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. The lands and water that have been, or may be covered by the regional flood.
4. 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.
5. Endangered, Threatened or Special concern species, elements of communities.

EXHIBITS:
1. Permit Application for Crossing or Culvert Installation and required documents by Anoka County Highway Department, dated 5/14/15, received 5/14/2015.

HISTORY & CONSIDERATIONS:
This item has not been before the Board.

FINDINGS:
Ditches and Drainage: There is a public ditch on the property. The ditch is Springbrook. The ditch has not been inspected. There are approximately 0 acres of existing agricultural land affected by this ditch. There are flooding concerns downstream. There is no additional drainage as part of this project.

Floodplain: There is floodplain on the property according to FEMA. The District Atlas 14 model predicts the 100-year elevation for the subwatershed at 862.1 feet. The total floodplain impact is 0 acre-feet. Compensatory storage is not needed.

Groundwater: Surficial ground water is present at unknown feet. The site does not include groundwater sensitive areas. No buildings or infiltration proposed, information is not needed to substantiate low floor elevations.

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 proposed project does include a ditch maintenance easement or utility line crossings. It is not necessary to notify property owners affected by changes in drainage because this is a culvert replacement matching hydraulics.

Soils & Erosion Control: Soil affected by the proposal is Brahm. Stabilizing vegetation is not proposed for disturbed areas within two weeks of rough grading. Adjacent properties are protected from sediment deposition. All wetlands, waterbodies, ponds,
infiltration basins and water conveyance systems are protected from erosion and sedimentation. Project site is not greater than 1 acre; an NPDES permit is not required.

**Stormwater & Hydraulics:** The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation but is not required to for this type of project. 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. The applicant is proposing to replace the existing culvert with a hydraulically equivalent culvert. There is a downstream weir control structure in the Springbrook Nature Center at an elevation of 861.0’. This downstream weir structure will cause the proposed culvert to hold water.

**Water Quality:** Project does not include new impervious drainage areas greater than 1 acre. All discharges into wetlands are pretreated. 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.

**Wetlands:** Wetlands do not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey.

**Wildlife:** The site has also been identified as a Site of Moderate Biodiversity Significance in 1989. However, much of the site has been developed since 1989 so a Biological Assessment is not being required by the DNR.

**Performance Escrow:** $2,005.00

**ISSUES/CONCERNS:**

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<thead>
<tr>
<th><strong>Stormwater &amp; Hydraulics:</strong> Provide existing invert elevations to ensure there will be no changes in the hydraulics of the channel.</th>
<th>1. Provide additional information on pipe inverts:</th>
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<tbody>
<tr>
<td>Culvert Replacement figure provided shows outlet on the north side of the CR 132 and inlet on south side of CR 132. However, the flow of Springbrook Creek is to the south. The figure indicates that the pipe will be installed with a reverse grade. Note: the culvert will normally have 2.5’ of water in it due to the downstream Springbrook weir at 861.0 and the pipe</td>
<td>a. Existing invert elevations to ensure there will be no changes in the hydraulics of the channel.</td>
</tr>
<tr>
<td>b. Explanation on why inlet pipe has a lower elevation than outlet or correct figure to show outlet on the south side of CR 132 and inlet on the north side of CR 132.</td>
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inverts approximately 858.5.

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<tr>
<th>Soils &amp; Erosion Control: Stabilizing vegetation is not proposed for disturbed areas within two weeks of rough grading.</th>
<th>2. Provide note on Erosion Control Plan that stabilizing vegetation is proposed within 14 days of rough grading.</th>
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<tr>
<td>Escrow: $2,000 + (.01 ac * $500) = $2,005.00</td>
<td>3. Receipt of escrows.</td>
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</table>

**RECOMMENDATION:** Approve with 3 Stipulations

**Stipulations:**

1. Receipt of escrows of $2,005.00
2. Provide note on Erosion Control Plan that stabilizing vegetation is proposed within 14 days of rough grading.
3. Provide additional information on pipe inverts:
   a. Existing invert elevations - to ensure there will be no changes in the hydraulics of the channel.
   b. Explanation on why inlet pipe has a lower elevation than outlet, or correct figure to show outlet on the south side of CR 132 and inlet on the north side of CR 132.