COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: August 8, 2016
AGENDA NUMBER: 14
FILE NUMBER: 16-121
ITEM: Springbrook Nature Center- Phase II

RECOMMENDATION: Approve with 2 Stipulations

APPLICANT: City of Fridley
100 85th Ave NE
Fridley, MN 55432

PURPOSE: Construction of a playground and amphitheater

LOCATION: 100 85th Ave NE in Fridley, Minnesota
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 waters that have been, or may be covered by the regional flood.
4. Appropriation and use of groundwater
5. High water table, outwash and organic soils
6. High infiltration soils
7. Highly erodable soils
8. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1) Geotechnical report by AllPhase Companies, Inc, dated 12/10/14, received 6/20/16.
2) Hydrology Calculations by BKBM Engineers, dated 7/15/16, received 7/20/16.
3) Construction Plan set (4 sheets), dated 7/15/16, received 7/20/16.

PREVIOUS ACTION TAKEN: This is a new application. This is the second phase of the Springbrook Nature Center project which was approved by the CCWD Board on September 28, 2015.

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 17 (Springbrook) according to the public drainage map. Ditch 17 was established in 1892.
The observed elevations through this property are 859.8 ft -850.9 ft MSL and 0.37% slope. The ditch is a 4th order stream. The ditch serves the primary role of Storm water conveyance and Trunk drainage system. The ditch serves approximately 0 acres of agricultural land. Land use in the area is toward park and commercial. There are no flooding concerns upstream or 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 not been considered and reviewed.

**Ditch Hydraulics:** A crossing of the ditch is proposed.

**Erosion and Sediment Control:** Soil affected by the proposal is Zimmerman.
- Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading.
- 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 not exist on site. The project does not require dewatering.

**Floodplain:** There is floodplain on the property according to the District model and FEMA. The project does not propose to place fill within the floodplain. The total floodplain impact is 0 acre-feet. There are flooding concerns downstream.

**High Water Flooding:** Information has not been provided to substantiate low floor elevations and is not needed, no buildings proposed.
**Groundwater:** Geotechnical information collected in November 2014 indicates long term groundwater elevation is present at 10 -16 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.

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 Fridley. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pervious Pavers</td>
<td>1</td>
</tr>
</tbody>
</table>

Inspection and maintenance of stormwater facilities will be the responsibility of City of Fridley. As a requirement of the City’s MS4 program, the city will inspect and maintain the stormwater facilities.

**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 provided.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system utilizes pervious pavement and existing infiltration basins. 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. 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. There are no on-site constructed storm water conveyance channels proposed as part of this project.

**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 and drains to an Impaired Water. The Impaired Water is CD 17 (Springbrook). Springbrook 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 not 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. No wetland impacts are proposed.

**Wetland Replacement Plan:**
A wetland replacement plan has not been submitted and is not required as no impacts are proposed.

**Wildlife:** The proposed project does include the Blanding’s turtles (*Emydoidea blandingii*), a state-listed threatened species, which has been reported from the vicinity of the proposed project and may be encountered on site. The DNR has provided the applicant with information to protect the turtle.

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:** $2,465.00
**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><strong>Escrows:</strong> $2,000 + (.93 ac * $500/ac) = $2,465.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td><strong>Soils &amp; Erosion Control:</strong></td>
<td>2. Provide note on construction plans that requires stabilization vegetation within 7 days of rough grading or</td>
</tr>
<tr>
<td>District requires all stabilization vegetation be within seven (7) days of rough grading or</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RECOMMENDATION: Approve with 2 Stipulations

Stipulations:
1. Receipt of escrows.
2. Provide note on construction plans that requires stabilization vegetation within 7 days of rough grading or inactivity.