COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: September 26, 2016
AGENDA NUMBER: 8
FILE NUMBER: 16-140
ITEM: Ironton Pedestrian Bridge

RECOMMENDATION: Approve with 4 Stipulations

APPLICANT: Tamame Omisame
285 Ironton St NE
Fridley, MN

PURPOSE: Bridge Crossing on Springbrook Creek

LOCATION: 285 Ironton St NE, Fridley MN
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. 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 or communities

EXHIBITS:
1) Project description and bridge material; by unknown, dated 8/31/16, received 8/31/16.
2) Certificate of Survey; by Carlson McCain, dated 8/12/15, received 8/31/16.
3) Geotechnical Report; by Interstate Geotechnical Engineering, Inc, dated 6/19/15, received 8/31/16.
HISTORY & CONSIDERATIONS: The proposed project is for the installation of a 4’ wide, 40’ long bridge over CD 17 (Springbrook Creek) that allows the property owner to access the back half of their lot. The bridge is located within the floodplain and may cause obstructions during high level rain events, similar to adjacent property owners existing bridge structures. If the District needs to access the creek for maintenance needs, the property owner will be required to remove the bridge at their own cost.

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 17 according to the public drainage map. County Ditch 17 was established in 1892. The 2011 observed ditch bottom elevation at this property is 847.1 ft MSL (NAVD 88). The ditch is a 4th order stream. The ditch serves the primary role of storm water conveyance and a trunk drainage system. The ditch serves approximately 0 acres of agricultural land. Land use in the area single family residential. There are flooding concerns downstream. The ditch has been inspected. Existing elevations, slopes and condition of ditch are fair. 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 proposed. The proposed crossing involves the installation of a bridge. The proposed bridge is of sufficient hydraulic capacity.

Erosion and Sediment Control: Soils affected by the proposal are Lino and Urban Soils.

- Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles not anticipated as part of this project.
- Adjacent properties and stormwater ponds are not 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 not been provided.
- Stormwater runoff does pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity.
- No pipe outlets are proposed as part of this project.
- No storm sewer inlets located near project area.
- All work adjacent to water or related resource has not taken precautions to contain sediment, and stabilize the work area during construction.
- Provisions have not been made to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface.
- Provisions have not been made for cleaning road surfaces where sediment is transported by the end of the day.
• Construction entrance points are not clearly located on the erosion and sediment control plan.
• The erosion and sediment control plan does not provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices.

Dewatering:
Shallow ground water does exist on site. It is unknown if the project requires dewatering.

Floodplain: There is floodplain on the property according to the District model and FEMA. The project does propose to place fill within the floodplain. The total floodplain impact is 0 acre-feet. Compensatory storage is not needed. There are no flooding concerns upstream and/or 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 April 2015 indicates long term groundwater elevation is present at 4.75 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). That use is:
• Storage, production, disposal or treatment of hazardous materials
• Dry cleaning, dyeing, printing, photo processing or any other uses of hazardous materials
• Disposal of septage or septic sludge
• Vehicle or equipment maintenance/fueling area
• Underground storage tanks
• Storage and use of petroleum products
• Chemical/pesticide/herbicide storage
• Storage and use of petroleum products exceeding fifty-five (55) gallons

The project does not propose a containment system and is not needed.

The project does not need a contingency plan for preventing hazardous materials from contaminating the shallow/surficial aquifer should flood, fire, wind or other natural catastrophe, equipment failure or releases occur.

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 not been notified and acknowledge the changes proposed.

Maintenance: No Stormwater Management features or treatment practices are proposed as part of this project

Easements: The proposed project does include ditch maintenance easement. A ditch maintenance easement has been provided.

Stormwater & Hydrology: Insignificant amount of impervious proposed as part of the project (bridge posts). Volume management requirements do not apply. 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. No increases in volume, velocity or peak water flow rates are expected as part of the project. Concentrated storm water leaving a site is discharged directly into a well-defined natural or man-made off-site receiving channel or pipe. No on-site constructed storm water conveyance channels are proposed as part of the 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. No discharges into wetlands are proposed. All work adjacent to wetlands, waterbodies and water conveyance systems are protected from erosion. The proposal will 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 County Ditch 17 (Springbrook Creek). CD 17 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 (bridge posts).

Wetlands: Wetland do not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. Wetlands have not been delineated. The most recent delineation was completed on DATE. The wetland boundary has not been checked.
**Wetland Replacement Plan:**
A wetland replacement plan has not been submitted and is not needed.

**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.
The endangered or threatened species, rare natural community are Dry Sand- Gravel Prairie (Southern)
The applicant has not contacted the MDNR natural heritage or endangered species program and is not required to for this project.

If the project is present, the project does not propose substantial adverse alteration or significant detrimental impact on a species or removal of a plant species will occur.

**Performance Escrow:** $2,000.50
**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><strong>Escrows:</strong> $2,000 + (.001 ac * $500/ac) = $2,000.50</td>
<td>1. Receipt of escrows.</td>
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<td><strong>Ditch Hydraulics:</strong> Bridge must be constructed to limit disturbance to existing creek and prevent scouring at bridge posts.</td>
<td>2. To prevent scouring at the bridge footings, the posts must be installed at a depth of 6 feet below the channel creek which corresponds to an elevation of 840.5 feet (NAVD 88). The bridge should also be constructed perpendicular to the creek flow.</td>
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| **Soils & Erosion Control:** No erosion control plan was submitted as part the project. | 3. Erosion Control plan needs to be submitted that includes the following information:  
   A. Statement that stabilization vegetation will take place within 7 days of rough grading or inactivity.  
   B. Silt fence upstream of Creek to prevent sediment from entering the Creek during construction activities.  
   C. Location of construction access and silt fence along access route to prevent runoff |
It is unclear if dewatering is needed during the construction of the proposed project.

| It is unclear if dewatering is needed during the construction of the proposed project. | 4. 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. |

**RECOMMENDATION:** Approve with 4 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. To prevent scouring at the bridge footings, the posts must be installed at a depth of 6 feet below the channel creek which corresponds to an elevation of 840.5 feet (NAVD 88). The bridge should also be constructed perpendicular to the creek flow.
3. Erosion Control plan needs to be submitted that includes the following information:
   A. Statement that stabilization vegetation will take place within 7 days of rough grading or inactivity.
   B. Silt fence upstream of Creek to prevent sediment from entering the Creek during construction activities.
   C. Location of construction access and silt fence along access route to prevent runoff onto adjacent property if vehicle access is needed for construction.
   D. Removal of any sediment accumulation on the road at the construction access as a result of the project.
4. 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.