COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: August 13, 2018
AGENDA NUMBER: 24
FILE NUMBER: 18-128
ITEM: Radisson Woods on Main

RECOMMENDATION: Table with 8 Stipulations

APPLICANT: Shade Tree Construction
Attn: Mark Strandlund
1696 229th Lane NE
Bethel, MN

PURPOSE: 5 single family homes on 60 acres

LOCATION: NE of Radisson Road and Main Street, Blaine 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. One or more cumulative acres of land disturbance
4. The lands and waters that have been, or may be covered by the regional flood.
5. High water table, outwash and organic soils
6. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Construction Plan set (4 sheets); by Plowe Engineering, dated 6/2/18, received 7/11/18.
2. Preliminary Plat; by E.G. Rud 7 Sons, Inc., dated 4/5/18, received 7/11/18.
3. Soil boring memorandum (2 borings); by Tradewell Soil Testing, dated 2/10/17, received 7/11/18.
4. Test Pit Geotechnical Report (3 pits); by Haugo GeoTechnical Services, LLC, dated 7/31/18, received 8/1/18.
PREVIOUS ACTION TAKEN: This is a new application.

FINDINGS:
Pre-application Meeting: The project as submitted received a general review during a pre-application meeting on January 26, 2018.

Ditches: There are public ditches on the property. The public ditches are County Ditch 59-9 and 59-9D according to the public drainage map. The as-built elevations of 59-9 through this property are 895.395 ft MSL at the downstream end and 896.043 ft MSL at the upstream end. No inspections of 59-9D have occurred on the property, the constructed ditch ends north of the property.

There are no approved elevations and grades through this property. Alternatives to repair and additional drainage have been considered and reviewed. The ditch is a 1st order stream. The ditch serves the primary role of storm water conveyance.

The ditch serves approximately 0 acres of agricultural land. Land use in the area is toward residential and wetlands. 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.

Ditch Hydraulics: A crossing of the ditch is not proposed.

Erosion and Sediment Control: Soils affected by the proposal are Lino, Isanti and Rifle.

- Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles have not 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 not been provided.
- 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 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. The project does not require dewatering.

**Floodplain:** There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 897.8 feet. The project does not propose to place fill within the floodplain. There are no flooding concerns upstream or downstream.

**High Water Flooding:** Information has been provided to substantiate low floor elevations. Low floor elevations do not meet the criteria for the City of Blaine; 2 ft above mottled, 2 ft above 100 yr. Mottles were found 8” and 12” below the surface.

**Groundwater:** Geotechnical information collected in February 2017 indicates long term groundwater elevation is present at 9 feet below the surface.

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 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 should be notified and acknowledge the changes proposed.

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

Easements: The proposed project does include a ditch maintenance easement. A ditch maintenance easement is required.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is achieved via overland flow.
Drainage sensitive uses do not exist downstream from the proposed site. The rate of post-development runoff from the site may exceed predevelopment rates. However, rates are not expected to interfere with 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 not 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 not within one (1) mile of an Impaired 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. The most recent delineation was completed on May 2, 2017. The wetland boundary has been checked. A Notice of Decision concurring with the wetland boundary was issued June 1, 2017.

The wetland is not a DNR protected water. The total proposed wetland impact is 0 square feet. One temporary impact is shown below.
**Wetland Replacement Plan:** A wetland replacement plan has not been submitted and is not required.

**Wildlife:** The proposed project does 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 Autumn Fimbry (*Fimbristylis autumnalis*), Cross-leaved Milkwort (*Polygala cruciate*) and an area of High Biodiversity Significance (a site containing very good quality occurrences of the rarest species, high-quality examples of rare native plant communities, and/or important functional landscapes). The applicant has contacted the MDNR natural heritage or endangered species program. The applicant has indicated the contact was made prior to 8/1/2018. The NHIS Data request form submitted with the application was undated and unsigned.

If the project is present, the project may propose substantial adverse alteration or significant detrimental impact on a species or removal of a plant species will occur.

**Performance Escrow:** $3,115.00

**Wetland Escrow:** $ N/A

There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tr>
<td><strong>Escrows:</strong> Performance: $2,000 + (2.23 ac * $500/ac = $3,115.00**</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td>Wetland:</td>
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| **Ditches:** Multiple ditch crossings by utilities are proposed. No information regarding depth of utilities or location of crossing was provided. | 2. Provide depth of directionally bored utilities.  
3. As-built will need to be provided that ensures there is a minimum of a 4-foot separation from the bottom of the approved or as-built ditch elevations to the top of utilities. |
| **Soils & Erosion Control:** Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading. Soil stockpiles have not been proposed to be fitted with sediment-trapping measures to prevent soil loss. Construction schedules detailing when sediment trapping measures will occur; | 4. Provide erosion control plan with the following statements:  
a. Stabilize vegetation within 7 days of rough grading or inactivity.  
b. Soil stockpiles to be fitted with sediment-trapping measures to prevent soil loss.  
c. Construction schedules detailing when sediment |
stabilization of earthen structures and the general timing of construction phases have not been provided.

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.

The erosion and sediment control plan does not provide redundant perimeter control in areas with less than a 50 foot natural buffer.

**Floodplain:** Low floors do not meet City requirements of 2 feet above mottled soils according to SB #2 (mottles at 902.6) and SB#1 (mottles at approx. 901.5).

**Wetland:** Length and size of temporary wetland impacts is not stated.
Method of wetland restoration is not provided.

**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.

- trapping measures will occur; stabilization of earthen structures and the general timing of construction phases
- d. Provisions to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface.
- e. Provisions for cleaning road surfaces where sediment is transported by the end of the day.
- f. Construction entrance clearly located
- g. Repair and maintenance of all temporary and permanent erosion and sediment control practices.
- h. Provide redundant BMPs in areas with less than a 50 foot natural buffer.

5. Provide LFEs that meet City of Blaine requirements regarding separation between mottled soils.

6. Clarify length and size of temporary wetland impacts.
7. Provide details regarding wetland restoration.

8. Provide documentation from the DNR if the proposed project includes endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.
**RECOMMENDATION:** Table with 8 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Provide depth of directionally bored utilities.
3. As-built will need to be provided that ensures there is a minimum of a 4-foot separation from the bottom of the approved or as-built ditch elevations to the top of utilities.
4. Provide erosion control plan that meets District requirements.
   a. Stabilize vegetation within 7 days of rough grading or inactivity.
   b. Soil stockpiles to be fitted with sediment-trapping measures to prevent soil loss.
   c. Construction schedules detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases.
   d. Provisions to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface.
   e. Provisions for cleaning road surfaces where sediment is transported by the end of the day.
   f. Construction entrance clearly located.
   g. Repair and maintenance of all temporary and permanent erosion and sediment control practices.
   h. Provide redundant BMPs in areas with less than a 50 foot natural buffer.
5. Provide LFEs that meet City of Blaine requirements.
6. Clarify length and size of temporary wetland impacts.
7. Provide details regarding wetland restoration.
8. Provide documentation from the DNR if the proposed project includes endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.