COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: December 9, 2019
AGENDA NUMBER: 16
FILE NUMBER: 19-096
ITEM: JSN Properties Farm

RECOMMENDATION: Tabled with 10 Stipulations

APPLICANT: JSN Properties
Attn: Jesse Neumann
18651 Buchanan Street
East Bethel, MN 55011

PURPOSE: Site grading for two buildings, parking/drive areas, and outdoor riding arena

LOCATION: 1002 173rd Avenue NE, Ham Lake, MN 55304
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. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Construction Plan set (3 sheets); by Carlson McCain, dated 11/26/19, received 11/26/19.
3. NHIS Letter; by MN DNR, dated 11/21/19, received 11/26/19.
4. WCA Notice of Decision; dated 7/25/19, received 11/26/19.
5. USACE Concurrence Letter; dated 10/29/19, received 11/26/19.
6. Rare Plant Survey; by Midwest Natural Resources, dated 7/29/19, received 11/26/19.

PREVIOUS ACTION TAKEN: This is a new application.

FINDINGS:
Pre-application Meeting: The project as submitted has received a general review during a pre-application meeting.

Ditches: There is a public ditch on the property. The public ditch is County Ditch 58-6 according to the public drainage map. The approved/as-built elevations through this property are 897.29 ft MSL at the downstream end and 897.42 ft MSL at the upstream end.
The ditch is a 1st order stream. The ditch serves the primary role of Agricultural drainage. The ditch serves approximately 50 acres of agricultural land. Land use in the area is toward agricultural and residential. There are no flooding concerns upstream or downstream.

The ditch has been inspected.

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

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

- Stabilizing vegetation is proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles have been proposed to be fitted with sediment-trapping measures to prevent soil loss and do have a note to stabilize within seven (7) days of inactivity.
- 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.
- 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 tracking 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.
- Details provided for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.)

**Dewatering:** Shallow ground water may exist on site. The project may require dewatering.

**Floodplain:** There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 903.6 feet. The project does not propose
to place fill within the floodplain. Compensatory storage is not needed. There are no flooding concerns upstream or downstream.

**High Water Flooding:** Information to substantiate low floor elevations is not required.

**Groundwater:** Geotechnical information collected in November 2019 indicates long term groundwater elevation is present at 5.5 feet below the surface.

The project site is not within the Emergency Response Area, 10 Year Well Head Protection Area, or 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 not been notified and acknowledge the changes proposed.

**Maintenance:** The owner of the Stormwater Management features and treatment practices is JSN Properties. The Stormwater Treatment Practices (STPs) consist of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Inspection &amp; Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infiltration Basin</td>
<td>1</td>
<td>JSN Properties</td>
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A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice. It is unknown if the Maintenance Plan(s) is consistent with District Maintenance standards for each STP.

Easements: The proposed project does include ditch maintenance easement. The STP is located within the ditch maintenance easement.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system utilizes infiltration. Calculations have been provided that illustrate the 1-inch infiltration volume is achieved below outlet.

Drainage sensitive uses do 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. 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 may 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/stormwater basins are pretreated via overland flow. All work adjacent to wetlands, waterbodies and water conveyance systems are protected from erosion. The proposal may 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 delineation was approved on 9/5/19.

There are no wetland impacts proposed or identified.

**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 applicant has contacted the MDNR natural heritage or endangered species program. MDNR has responded to the applicant on November 21, 2019, correspondence # ERDB 202000118

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:** $3,050.00

**Wetland Escrow:** $ N/A

There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td><strong>Escrows:</strong> $2,000 + (2.10 ac * $500/ac) = $3,050.00</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td><strong>Local Planning &amp; Zoning:</strong> It is unknown if the proposed project is consistent with local planning and zoning.</td>
<td>2. Provide confirmation from the city they have received an application for review.</td>
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<td><strong>Groundwater:</strong> Geotechnical report was not provided. Groundwater elevations provided are not final and subject to change.</td>
<td>3. Provide final Geotechnical Report.</td>
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<tr>
<td><strong>Soils and Erosion Control:</strong> District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity. District requires double row of perimeter control adjacent to waterbodies/creeks/wetlands. It is unclear if dewatering is needed during the construction of the proposed project.</td>
<td>4. Update Turf Establishment Notes and SWPPP (During Construction, Note #5) to stabilize disturbed soils within 7 days of rough grading or inactivity. 5. Update erosion control plan to include a double row of silt fence adjacent to the ditch. Extend the silt fence to the northeast along the ditch to the end of the infiltration basin. 6. 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.</td>
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<td><strong>Stormwater &amp; Hydrology:</strong> The applicant is meeting the volume management requirement equivalent to infiltrating the runoff from the first inch of precipitation. A post construction test on the infiltration basin will be required to verify the assumed infiltration rates are obtained.</td>
<td>7. The applicant must provide a note on the construction plans that a post construction test on the infiltration basin will be conducted by filling the basin to a minimum depth of 6 inches with water and monitor the time necessary to drain. The Coon Creek Watershed District shall be notified prior to the test to witness the results.</td>
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<td><strong>Maintenance:</strong> It is unknown who will be responsible for the inspection and maintenance of stormwater facilities. A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.</td>
<td>8. Provide an O&amp;M Agreement that meets District requirements. 9. Modify the basin location to be outside of the ditch easement to allow for future ditch maintenance without obstructions.</td>
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</table>
The stormwater BMP is located within the ditch easement. The easement is 100 foot centered on ditch 58-6.

**Wildlife:** The property does include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

10. Provide verification from the DNR they have received the Rare species report and concur with the findings.

**RECOMMENDATION:** Tabled with 10 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. Provide confirmation from the city they have received an application for review.
4. Update Turf Establishment Notes and SWPPP (During Construction, Note #5) to stabilize disturbed soils within 7 days of rough grading or inactivity.
5. Update erosion control plan to include a double row of silt fence adjacent to the ditch. Extend the silt fence to the northeast along the ditch to the end of the infiltration basin.
6. 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.
7. The applicant must provide a note on the construction plans that a post construction test on the infiltration basin will be conducted by filling the basin to a minimum depth of 6 inches with water and monitor the time necessary to drain. The Coon Creek Watershed District shall be notified prior to the test to witness the results.
8. Provide an O&M Agreement that meets District requirements.
9. Modify the basin location to be outside of the ditch easement to allow for future ditch maintenance without obstructions.
10. Provide verification from the DNR they have received the Rare species report and concur with the findings.