COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: March 25, 2019
AGENDA NUMBER: 7
FILE NUMBER: 19-055
ITEM: A&C Metal

RECOMMENDATION: Table with 18 Stipulations

APPLICANT: A&C Metals Sawing, Inc.
9170 Davenport St. NE
Blaine, MN 55449

PURPOSE: 18,560 SQ FT BUILDING ON 3.63 ACRE LOT

LOCATION: 9170 Davenport St. NE, Blaine, MN 55449

APPLICABILITY:
1. Any work in or adjacent to wetlands, lakes or water courses
2. One or more cumulative acres of land disturbance
3. High infiltration soils.
4. Within one mile of an impaired water.
EXHIBITS:

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 not a public ditch on the property.

Ditch Hydraulics: A crossing of the ditch is not proposed.
**Erosion and Sediment Control:** Soils affected by the proposal are 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.
- 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 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 tracking 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 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 no floodplain on the property according to the District model and FEMA.

**Groundwater:** Geotechnical information collected in September 2018 indicates long term groundwater elevation is present at 4-8 feet below the surface.

The project site is within the Emergency Response 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 must acknowledge the changes proposed.

Maintenance: The owner of the Stormwater Management features and treatment practices is Unknown. The Stormwater Treatment Practices (STPs) consisting 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 Basins</td>
<td>2</td>
<td>Unknown</td>
</tr>
<tr>
<td>Sumps</td>
<td>1</td>
<td>Unknown</td>
</tr>
<tr>
<td>RainGuardians</td>
<td>3</td>
<td>Unknown</td>
</tr>
<tr>
<td>Underground Detention</td>
<td>1</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.

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 not allowed within the project area due to location within an ERA. Based on current design, the 1-inch infiltration is achieved but will require a redesign. The stormwater management system utilizes infiltration basin and underground detention system. Calculations have been provided that illustrate the 1-inch infiltration volume is achieved below outlet.

Drainage sensitive uses do not exist downstream from the proposed site. The rate of post-development runoff from the site does 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 not 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 constructed 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. All discharges into wetlands/stormwater basins are pretreated by a sediment basin/water quality pond and are not designed correctly. All work adjacent to wetlands, waterbodies and water conveyance systems are not protected from erosion. A 25 ft. buffer strip is required. 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 of an Impaired Water but does not drain to it.

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 June 1, 2019. The wetland boundary has been checked. A notice of decision was issued on 8/20/18. The wetland is not a DNR protected water.

The total proposed wetland impact is 400 square feet. The impact is through fill in one location as shown below:

![Wetland Diagram]

The de minimis is 0 sq. ft. (type 2, 4,370 square feet previously impacted). TEP members have been notified with a complete plan and have been requested to submit comments.

The project is not wetland dependent.

The project is not exempt.

The applicant does not need to contact the DNR area hydrologist and the Corps of Engineers.

Two or more alternatives, plus the proposed project, have not been submitted. On-site sequencing does apply. No avoidance alternatives have been submitted.
Wetland Replacement Plan: A wetland replacement plan has not been submitted and is required. A replacement plan application has not been submitted. The wetland replacement plan has not been sent to TEP members for comment. The TEP has not approved the wetland mitigation plan.

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 applicant has not contacted the MDNR natural heritage or endangered species program.

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: $3,150.00 (graded area not provided, estimated 100,000 sq. ft.)
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>Escrows: $2,000 + (2.3 ac * $500/ac = $3,150.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>General: Area of site and graded area were not included on application</td>
<td>2. Provide size of properties and graded area.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics: For infiltration basin #1, 910 contour and HydroCAD model do not appear to be consistent. 909.5 outlet not shown.</td>
<td>3. Add spot elevations to indicate 909.5 outlet and spot elevations of 910 contour at IB#1.</td>
</tr>
<tr>
<td></td>
<td>4. Provide HydroCAD model of full basin build-out.</td>
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<tr>
<td></td>
<td>5. Due to location within an ERA, either a higher-level engineering review of infiltration must be completed and then approved by the City of Blaine or the infiltration basins and underground storage chamber must be lined and converted to filtration.</td>
</tr>
<tr>
<td></td>
<td>6. Provide detail for filtration basin.</td>
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</tbody>
</table>
CB on west side of property is noted as being plugged.

Unclear on impacts to wetland, full drainage area does not appear to be included.

Detail for Rain Guardian installation not provided.

In current design infiltration basin #2 will collect untreated stormwater runoff from 92rd Ave NE cul-de-sac.

**Soils & Erosion Control:**

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

South end of the project site is adjacent to a wetland. Double row of perimeter control is not provided.

SWPPP plan indicated removal of tracked sediment by sweeping. However, it does not indicate this will be done by the end of the day.

Sediment control protection from on-site construction activities is not provided for the infiltration practices and is required.

**Water Quality:** The sump manhole is not designed correctly for water quality treatment.

25-foot wetland buffer not provided.

7. Clarify if plugged basin is non-functioning and no longer acts as a drainage collection point or if it is temporarily non-functioning and will be cleaned for future use.

8. Subwatersheds should be adjusted for the following areas to determine true impacts to wetlands WSE:
   a. Drainage into IB#2 should include runoff from 92nd Ave NE cul-de-sac unless curb is being installed.
   b. Based on standard drainage practices, E4/A1/A4/A6 should include partial roof runoff from adjacent properties. Based on staff observations full roof runoff should be included for E3.


10. Provide curb or pretreatment on southwest side of infiltration basin #2.

11. 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.

12. Provide double row of silt fence in area adjacent to wetland.

13. Indicate in SWPPP plan that tracked sediment will be removed by the end of the day.


15. Provide calculations (SHSAM can be used to indicate sumps are appropriately sized to meet district removal rates of 80% TSS. A
| **Maintenance:** | 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. |
| **Wetlands:** | A wetland impact of 400 square feet is proposed. De minimis criteria do not apply due to previous impacts of 4,970 square feet within this wetland basin. Wetland replacement is required. |

| **1.** | Receipt of escrows. |
| **2.** | Provide size of properties and graded area. |
| **3.** | Add spot elevations to indicate 909.5 outlet and spot elevations of 910 contour. |
| **4.** | Provide HydroCAD model of full basin build-out. |
| **5.** | Due to location within an ERA, either a higher-level engineering review of infiltration must be completed and then approved by the City of Blaine or the infiltration basins and underground storage chamber must be lined and converted to filtration. |
| **6.** | Provide detail for filtration basin. |
| **7.** | Clarify if plugged basin is non-functioning and no longer acts as a drainage collection point or if it is temporarily non-functioning and will be cleaned for future use. |
| **8.** | Subwatersheds should be adjusted for the following areas to determine true impacts to wetlands WSE:  
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   b. Based on standard drainage practices, E4/A1/A4/A6 should include partial roof runoff from adjacent properties. Based on staff observations full roof runoff should be included for E3. |
| **9.** | Provide Rain Guardian installation detail. |
| **10.** | Provide curb or pretreatment on southwest side of infiltration basin #2. |
| **11.** | 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. |
| **12.** | Provide double row of silt fence in area adjacent to wetland. |

**RECOMMENDATION:** Table with 18 Stipulations
13. Indicate in SWPPP plan that tracked sediment will be removed by the end of the day.
15. Provide calculations (SHSAM can be used) to indicate sumps are appropriately sized to meet district removal rates of 80% TSS. A minimum of 4-foot depth is required to prevent resuspension.
16. Provide wetland buffer or request a variance from the wetland buffer requirement.
17. Provide an O&M Agreement that meets District requirements.
18. Provide a wetland replacement plan for TEP approval.