COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: October 14, 2019
AGENDA NUMBER: 18
FILE NUMBER: 19-157
ITEM: City of Fridley Off-Site Storage

RECOMMENDATION: Approve with 5 Stipulations

APPLICANT: City of Fridley
7071 University Ave NE
Fridley, MN 55432

PURPOSE: Create an area for storage of miscellaneous construction materials and impound cars; 1.6 acres grading on 9.59-acre

LOCATION: 8296 Hickory Street, Fridley, MN

APPLICABILITY:
1. Within 1 mile of an impaired waters.
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. 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.
6. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Grading Plan (1 sheet); by City of Fridley, dated 8/12/19, received 10/2/19.
2. Erosion Control Plan (2 sheets); by City of Fridley, dated 8/12/19, received 10/2/19.
3. Construction Plan (12 sheets); by City of Fridley, undated, received 10/2/19
4. Stormwater Calculations and narrative; by City of Fridley, undated, received 10/2/19.
5. Geotechnical Map and Borings; by Braun Intertec, dated 11/26/18, received 10/2/19.

PREVIOUS ACTION TAKEN: This application was initially submitted on 8/12/19. The application was incomplete with 11 stipulations:

1. Receipt of escrows.
2. 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.
3. Update the HydroCAD model to use MSE 3 storm types.
4. Update grading to route the curb cuts as they are modeled or update the model to include the northwest part of the building and parking lot as draining to the infiltration basin.
5. Conduct infiltration tests in the proposed basin location to confirm assumed infiltration rates and complete drainage in 48 hours or less.
6. Provide construction details for the filtration basin, outlet control structure, and rip rap at FES.
7. Provide information regarding the air pipes and either reconfigure infiltration basin or confirm that no conflict exists.
8. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
10. Confirm groundwater elevation in the location of the infiltration basin. Ensure 3-foot separation is met between the bottom of the basin and groundwater.
11. Show the flood plain boundary and elevation on the construction plans.

FINDINGS:

Pre-application Meeting: The project as submitted has not 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 Zimmerman per the USDA soils maps. Soil borings indicate fill overlying native clays with some silt and sand with silt.
- 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 does not exist on site. The project does not require dewatering.

**Floodplain:** There is floodplain on the property according to the District model. The District’s floodplain elevation is at 860.4 feet. The project does not propose to place fill within the floodplain. The total floodplain impact is 0 acre-feet. The proposed impact is not within the floodway/flood fringe. Compensatory storage is not needed. There are no flooding concerns upstream or downstream.

**Groundwater:** Geotechnical information collected in November 2018 indicates long term groundwater elevation is present at 9-15 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 have not been notified or acknowledge the changes proposed.

**Maintenance:** The owner of the Stormwater Management features and treatment practices is the city of Fridley. 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>Basins</td>
<td>1</td>
<td>City of Fridley</td>
</tr>
</tbody>
</table>
As a requirement of the City’s MS4 program, the city will inspect and maintain the stormwater facilities. A maintenance plan has not been provided.

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 but not feasible due to high groundwater and clay soils. The stormwater management system utilizes a wet basin.

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. 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/stormwater basins 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 of and drains to an Impaired Water. The Impaired Water is CD 17. CD 17 is impaired for Aquatic Life and Aquatic Recreation. The major stressors are Total Suspended Solids (TSS), Total Phosphorus (TP) and E.coli. There is an EPA approved Total Maximum Daily Load (TMDL) and 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 not been delineated.

**Wetland Replacement Plan:** A wetland replacement plan has not been submitted and is not required.
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: $2,800
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 + (1.6 ac * $500/ac) = $2,800</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics: Emergency overflow above pipe outlet does not have spot elevations or erosion protection. Details not provided for basin. Existing curb cut on the north side of parking lot does not extend to the NWL of the basin.</td>
<td>2. EOF: a. Provide spot elevations to ensure overflow is graded for drainage to the east. b. Provide erosion control at broad crested weir outlet for long term functionality. 3. Provide details for basin with type of liner and excavation depths shown. 4. Extend riprap from existing curb cut on the north to the NWL of 860.0</td>
</tr>
<tr>
<td>Maintenance: A maintenance plan has not been provided.</td>
<td>5. Provide a Maintenance Plan for the Stormwater Treatment Practices (STPs)</td>
</tr>
</tbody>
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**RECOMMENDATION:** Approve with 5 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. EOF:
   a. Provide spot elevations to ensure overflow is graded for drainage to the east.
   b. Provide erosion control at broad crested weir outlet for long term functionality.
3. Provide details for basin with type of liner and excavation depths shown.
4. Extend riprap from existing curb cut on the north to the NWL of 860.0
5. Provide a Maintenance Plan for the Stormwater Treatment Practices (STPs)