COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: March 23, 2020
AGENDA NUMBER: 14
FILE NUMBER: 19-199
ITEM: Harpers Haven

RECOMMENDATION: Approve with 2 Conditions and 2 Stipulations

APPLICANT: Waters Edge Investment, LLC
Attn: Greg Peterson
4071 211th Lane
Oak Grove, MN 55303

PURPOSE: 14 Single family homes on 4.5 Acres

LOCATION: Harpers St & 128th Ave, Blaine MN

APPLICABILITY:
1. One or more cumulative acres of land disturbance
2. High infiltration soils
3. Highly erodible soils
4. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:

PREVIOUS ACTION TAKEN: This application was tabled at the March 9th, 2020 meeting with 7 conditions:
1. Receipt of escrows.
2. Include the Harpers Street Woods and Harpers Grove existing stormwater ponds in the HydroCAD model to analyze the impacts of the additional volume from this project. Both ponds should be modeled at their run-out elevation.
3. Provide results of Phase I Environmental Assessment.
4. Relocate rock construction entrance.
5. Provide calculations (SHSAM can be used) to indicate sumps are appropriately sized to meet district removal rates of 80% TSS for OK110 particle size. A minimum of 4-foot depth is required to prevent resuspension.
6. Provide an O&M Agreement that meets District requirements.
7. Provide details and locations for permanent signage around filtration practices to ensure their long-term operation. Detail to be provided by developer with wording...
to include “Infiltration Area. No Fill or Structures Allowed Within.” or use MnDOT standard sign X3-6a.

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 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 not 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.
- Stormwater runoff does not pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity and is not needed.
- 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 have been provided for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.)

Dewatering: Shallow ground water does not exist on site. The project does not anticipate dewatering.
**Floodplain:** There is no floodplain on the property according to the District model and FEMA.

**High Water Flooding:** Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Blaine; 2 ft above mottled, 2 ft above 100 yr.

**Groundwater:** Geotechnical information collected in November 2019 indicates long term groundwater elevation is present at 10-19 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 not include sites of historic or archeological significance.

**Local Planning & Zoning:** The applicant has applied to the City. The City has completed its review of the plans.

**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>Rain Guardian</td>
<td>1</td>
<td>Unknown</td>
</tr>
<tr>
<td>Sumps</td>
<td>2</td>
<td>Unknown</td>
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</table>

It is unknown who is 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. The Maintenance Plan is not consistent with District Maintenance standards for each STP.

**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. The 1-inch infiltration is met to the greatest extent practicable. The stormwater management system utilizes infiltration. Project is within the City of Blaine which has adopted the MIDS performance standard. The 1.1-inch infiltration is achieved to the greatest extent
practicable. Calculations have been provided that illustrate the 1.1-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 to the northwest and south and are not anticipated 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 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 via rain guardians and sump manholes, and they 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 may 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 not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. A wetland delineation has been conducted. The most recent delineation was approved on 11/21/19.

**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. The applicant has indicated that contact was made. MDNR has responded to the applicant on 12/12/2019.

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:** $4,100
**Wetland Escrow:** $N/A
There are not ditch liens on the property.
### ISSUES/CONCERNS:

<table>
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<th>NEED</th>
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<td><strong>Escrows:</strong></td>
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<td>$2,000 + (4.2 ac * $500/ac) = $4,100</td>
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### RECOMMENDATION: Approve with 2 Conditions and 2 Stipulations

**Conditions:**
1. Receipt of escrows.
2. Provide an O&M Agreement that meets District requirements.

**Stipulations:**
1. Submittal of as-buils for Infiltration Basin #100 and #200, Infiltration Basin #100 OCS, and pretreatment structures (MH #201 and #210).
2. Completion of a post construction infiltration test on Infiltration Basin #100 and #200 by filling the basin to a minimum depth of 6 inches with water and monitoring the time necessary to drain, or multiple double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test to witness the results.