COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: November 12, 2019
AGENDA NUMBER: 14
FILE NUMBER: 19-202
ITEM: Andover YMCA Addition

RECOMMENDATION: Approve with 6 Stipulations

APPLICANT: City of Andover
Attn: Dave Berkowitz
1685 Crosstown Blvd NW
Andover, MN 55304

PURPOSE: Building Addition on South side of YMCA

LOCATION: NW of Crosstown Blvd and Hanson Blvd, Andover MN
APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. High infiltration soils
3. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Construction Plan set (2 sheets); by 292 Design Group, dated 9/13/19, received 10/16/19.
2. Stormwater Management Report; by AJA, dated 9/20/19, received 10/16/19.

PREVIOUS ACTION TAKEN: This is a new application.

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 Sartell.
- Stabilizing vegetation is 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 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 not 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 exist on site. The project may require 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 Andover; 3 ft above mottled soils/groundwater, 2 ft over 100 yr.
**Groundwater:** Geotechnical information collected in March of 2019 (soil boring logs by Intertek PSI included in the 19-057 submittal) indicates long term groundwater elevation is present at 13-16 feet below the surface.

The project site is 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 proposed project is consistent with local planning and zoning. There is an approved local water plan.

**Maintenance:** There are no stormwater management or treatment practices being constructed as part of this project. The project is using the 19-057 Andover YMCA stormwater management system. Infiltration basin I-6 has become partially clogged since construction in 2004 and holds water and has cattail growth.

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 that is within the ERA. This project proposes to use the stormwater management system proposed in the 19-057 submittal. The stormwater management plan for 19-057 accounted for the new impervious that is proposed as part of this project. The 1.1-inch infiltration is achieved.

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 not pretreated by a sediment basin/water quality pond, and are not 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 an Impaired Water. The Impaired Water is Coon Creek. Coon Creek is impaired for Aquatic Life (Macro-invertebrates)/Aquatic Recreation (E. coli). The major stressors are Total Suspended Solids (TSS)/Total Phosphorus (TP)/E.coli. There is an EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for this 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. 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 and does not need to.

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**: $2,250.00

**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>Escrows: $2,000 + (0.5 ac * $500/ac) = $2,250.00</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td>Stormwater &amp; Hydraulics: It is unclear how roof runoff from the proposed south building addition will be routed to infiltration basin I6.</td>
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| Soils & Erosion Control: Erosion Control Plan does not meet District requirements. | 3. Update erosion control plan with the following:  
a. Stabilize any soil stockpiles within 7 days of inactivity.  
b. Clearly show construction |
It is unclear if dewatering is needed during the construction of the proposed project.

4. 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.

**Water Quality:** Existing Basin I-6 is in a moderately vulnerable ERA and appears to be partially clogged and seems to not completely drain. Per the MPCA construction stormwater permit, the MS4 permittee must perform or approve a higher level of review sufficient to provide a functioning treatment system to prevent adverse impacts to groundwater.

All discharges into wetlands/water quality basins are/are not pretreated by a sediment sump manhole. These sump manholes are not designed correctly for water quality treatment prior to discharge into a wetland or receiving water.

5. Perform a higher level of review to confirm that the infiltration basin will meet the requirements of the permit.

   a. If the city does not approve the basin based on the higher level of engineering review, model the basin as a pond with a permanent pool at the bottom within the clogged area to determine whether the site can function with the basin as a wet pond with infiltration above the clogged portion and ensure that the basin meets the criteria for a wet sedimentation basin.

   b. If the city approves the basin based on the higher level of engineering review, perform pond maintenance to remove the sediment and deposited material so that the basin functions as an infiltration basin.

6. 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.

**RECOMMENDATION:** Approve with 6 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Clarify how roof runoff from the proposed south building addition will be routed to infiltration basin I6.
3. Update the Erosion Control Plan with the following:
a. Stabilize any soil stockpiles within 7 days of inactivity.
b. Clearly show construction entrances on the plans.

4. 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.

5. Perform a higher level of review to confirm that the infiltration basin will meet the requirements of the permit.
   a. If the city does not approve the basin based on the higher level of engineering review, model the basin as a pond with a permanent pool at the bottom within the clogged area to determine whether the site can function with the basin as a wet pond with infiltration above the clogged portion and ensure that the basin meets the criteria for a wet sedimentation basin.
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