COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: March 25, 2019
AGENDA NUMBER: 10
FILE NUMBER: 19-058
ITEM: The Goddard School

RECOMMENDATION: Table with 12 Stipulations

APPLICANT: Michael Sokol/Twin Cities Brothers, LLC
8900 Ashley Ter.
Brooklyn Park, MN 55443

PURPOSE: Development of a child care center
10,060 SQ FT BUILDING ON 2.5 ACRE LOT

LOCATION: 126th Avenue NE and Central Avenue NE

APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. Any work within or adjacent to a Public ditch within the Watershed District.
3. One or more cumulative acres of land disturbance
4. High infiltration soils
5. Highly erodible soils
6. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Construction Plan set (6 sheets); by Plowe Engineering, dated 3/8/19, received 3/13/19.
4. Phase I Assessment; by Braun Intertec, dated 1/22/19; received 3/13/19
5. ALTA Survey, by E.G. Rud & Sons, Inc.; dated 1/11/19; received 3/13/19

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 not a public ditch on the property. County Ditch 60 is routed in a storm sewer and located in the 125th Avenue NE Right of way to the south of the property according to the public drainage map.

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

Erosion and Sediment Control: Soils affected by the proposal are Sartel, Lino, and Zimmerman.
- Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles have not been proposed.
- 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 no floodplain on the property according to the District model and FEMA.

**Groundwater:** Geotechnical information collected in February 2019 indicates groundwater elevation is present at about 10 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 proposed project is consistent with local planning and zoning. There is an approved local water plan.
Property owners affected by changes in drainage should be notified and acknowledge the changes proposed.

**Maintenance:** The owner of the Stormwater Management features and treatment practices is the owner. 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>1</td>
<td>Owner</td>
</tr>
<tr>
<td>Sumps</td>
<td>2</td>
<td>Owner</td>
</tr>
<tr>
<td>Rate Control Pond</td>
<td>2</td>
<td>Owner</td>
</tr>
</tbody>
</table>

A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice. The Maintenance Plan(s) are 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 not achieved. The stormwater management system utilizes sedimentation basin, and infiltration. Calculations have not been provided that illustrate the 1-inch infiltration volume is achieved below outlet.

Rate control is not being met.

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; however, the volume is minimal at the peak. 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 not designed correctly. 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 Sand Creek. Sand 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.

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: $3,150.00

Wetland Escrow: $ N/A

There are not ditch liens on the property.

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Escrows: $2,000 + (2.3 ac * $500/ac = $3,150.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>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.</td>
<td>2. Provide an O&amp;M Agreement that meets District requirements.</td>
</tr>
</tbody>
</table>

Stormwater & Hydraulics: The applicant is meeting the volume management requirement equivalent to

3. The applicant must provide a note on the construction plans that a post construction test on the infiltration
infiltrating 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.

The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. All projects in the Coon Creek Watershed District must meet this requirement.

Calculations were not provided to illustrate that the 1-inch volume management requirement is achieved below the outlet of the stormwater feature.

Proof of parking areas must be included in impervious calculations. Unclear if calculations include these areas.

### Soils & Erosion Control:

- District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity.

- Infiltration basins are not protected from erosion and sedimentation during construction. After initial grading the District requires that infiltration basins be completely surrounded by erosion control measures to prevent the basin from clogging.

- Perimeter control not provided on western side of construction entrance.

- Catch basin inlet protection not provided at three locations on 126th Ave NE.

- 4,020 square feet of impervious surface near the entrance from 125th Avenue is not captured and routed to the infiltration basin. If applicants cannot meet the volume management requirement due to site constraints in its entirety, they must meet it to the greatest extent practical and explain why it cannot be met.

- Provide calculations that illustrate 1-inch infiltration volume requirement is met below the outlet.

- Clarify if proof of parking areas are included in impervious calculations.

- Update construction plans to stabilize vegetation within 7 days of rough grading or inactivity.

- After initial grading, completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.

- Provide perimeter control on west side of construction entrance.

- Provide inlet protection on plan for CB on south side of 126th Ave NE and a note to provide protection to the two CB inlets west of the construction entrance.
<table>
<thead>
<tr>
<th>Water Quality:</th>
<th>The Goddard School, Page 7 of 7</th>
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<tbody>
<tr>
<td>All discharges into wetlands/water quality basins are pretreated. The sump manholes are not designed correctly for water quality treatment prior to discharge into a wetland or receiving water.</td>
<td>11. 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.</td>
</tr>
<tr>
<td>Phase I ESA identified three recognized environmental conditions (RECs). The location of the RECs is not clear. No Phase II was provided.</td>
<td>12. Provide figures showing location of RECs on the site, particularly in relation to stormwater features, or provide a completed Phase II ESA.</td>
</tr>
</tbody>
</table>

**RECOMMENDATION:** Table with 12 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Provide an O&M Agreement that meets District requirements.
3. 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.
4. 4,020 square feet of impervious surface near the entrance from 125th Avenue is not captured and routed to the infiltration basin. If applicants cannot meet the volume management requirement due to site constraints in its entirety, they must meet it to the greatest extent practical and explain why it cannot be met.
5. Provide calculations that illustrate 1-inch infiltration volume requirement is met below the outlet.
6. Clarify if proof of parking areas are included in impervious calculations.
7. Update construction plans to stabilize vegetation within 7 days of rough grading or inactivity.
8. After initial grading, completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
9. Provide perimeter control on west side of construction entrance.
10. Provide inlet protection on plan for CB on south side of 126th Ave NE and a note to provide protection to the two CB inlets west of the construction entrance.
11. 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.
12. Provide figures showing location of RECs on the site, particularly in relation to stormwater features, or provide a completed Phase II ESA.