COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: April 8, 2019
AGENDA NUMBER: 22
FILE NUMBER: 19-063
ITEM: NSC A3-A4 Artificial Turf Field

RECOMMENDATION: Table with 5 Stipulations

APPLICANT: National Sports Center
Attn: Neil Ladd
1700 105th Ave NE
Blaine, MN 55449

PURPOSE: Replace existing soccer fields with an artificial turf field

LOCATION: 1700 105th Ave NE, Blaine, MN 55449

APPLICABILITY:
1. Any work within or adjacent to a Public ditch within the Watershed District.
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.
EXHIBITS:

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 a private ditch on the property that drains to County Ditch 41.

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

Erosion and Sediment Control: Soils affected by the proposal are Rifle.
- Stabilizing vegetation is not 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 but do not have a note to stabilize within seven (7) days of inactivity.
- Adjacent properties, stormwater ponds, and stormwater conveyance systems 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 not 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 may require dewatering.

Floodplain: There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 898.4 feet. The project does propose to place fill within the floodplain. The total floodplain impact is unknown. The proposed impact is within the flood fringe. Compensatory storage is not provided. There may be flooding concerns upstream and downstream as a result of raising the field elevation.

High Water Flooding: Information substantiating low floor elevations is not required as no new structures are proposed.

Groundwater: Geotechnical information collected in October 2017. Water was not observed at the boring locations while drilling; therefore, it appears that groundwater was generally below the depths explored at the time of drilling.

The project site is not within the Emergency Response Area, 10 Year Well Head Protection Area, or 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: No Stormwater Management features are proposed as part of this project.

Easements: The proposed project does not include a ditch maintenance easement. A ditch maintenance easement is not required.

Stormwater & Hydrology: Infiltration may be allowed within the project area, three feet of separation from groundwater has not been substantiated for the entire project area. The 1-inch infiltration is achieved. The stormwater management system utilizes an artificial turf field infiltration 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 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 is not proposed as part of this project. 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. Discharges north to the private ditch and east to the stormwater pond are pretreated by the artificial turf field infiltration system which is 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 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. 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:** $4,500.00  
**Wetland Escrow:** $N/A  
There are not ditch liens on the property.

### ISSUES/CONCERNS:

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<th>ISSUE</th>
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<td>Escrows: $2,000 + (5 ac * $500/ac = $4,500.00)</td>
<td>1. Receipt of escrows.</td>
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| **Soils & Erosion Control:** Stabilizing vegetation is not 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 but do not have a note to stabilize within seven (7) days of inactivity. Adjacent properties, stormwater ponds, and stormwater conveyance systems are not protected from sediment deposition. All work adjacent to water or related resource has not taken precautions to contain sediment and stabilize the work area during construction. Eastern side of site is not protected from sediment runoff. Not all adjacent stormwater inlets are protected from sediment runoff. It is unclear if dewatering is needed during the construction of the proposed project. | 2. Update Erosion Control Plan to include the following:  
a. When construction activity will not resume for a period exceeding seven (7) calendar days, stabilize exposed soil areas (including stockpiles) immediately, and complete the stabilization not later than 7 days after construction activity has ceased.  
b. Add double row of perimeter control adjacent to the private ditch along the north portion of the site. Remove reference to County Ditch 41.  
c. Add double row of perimeter control adjacent to the ditch along the south portion of the site.  
d. Add silt fence to eastern side of site.  
e. Provide inlet protection for all catch basin inlets adjacent to site, including those on the opposite side of the road. |
| **Stormwater & Hydrology:** Three-feet of separation from the bottom of the | 3. 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.  
| | 4. Provide additional Geotechnical information substantiating 3 feet of |
infiltration sand to seasonal groundwater has not been substantiated for the outer portions of the field.

**Floodplain:** The project proposes to place fill within the Flood Fringe; however, the quantity of fill material is unknown.

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<th>separation from the seasonal groundwater elevation.</th>
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<td>5. Provide calculations quantifying the amount of fill to be placed within the Flood Fringe. Account for void space in granular material and drain tile system when performing calculations.</td>
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**RECOMMENDATION:** Table with 5 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Update Erosion Control Plan to include the following:
   a. When construction activity will not resume for a period exceeding seven (7) calendar days, stabilize exposed soil areas (including stockpiles) immediately, and complete the stabilization not later than 7 days after construction activity has ceased.
   b. Add double row of perimeter control adjacent to the private ditch along the north portion of the site.
   c. Add double row of perimeter control adjacent to the ditch along the south portion of the site.
   d. Add silt fence to eastern side of site.
   e. Provide inlet protection for all catch basin inlets adjacent to site, including those on the opposite side of the road.
3. 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.
4. Provide additional Geotechnical information substantiating 3 feet of separation from the seasonal groundwater elevation.
5. Provide calculations quantifying the amount of fill to be placed within the Flood Fringe. Account for void space in granular material and drain tile system when performing calculations.