COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: January 5, 2014
AGENDA NUMBER: 16
FILE NUMBER: 14 - 151
ITEM: Johnsville Elementary School Addition

RECOMMENDATION: Table with 7 Stipulations

APPLICANT: Anoka-Hennepin School District 11
2727 N Ferry St
Anoka MN 55303

PURPOSE: Addition to elementary school and playground area

LOCATION: 991 125th Avenue Northeast, Blaine
APPLICABILITY:
1. Any work within or adjacent to a Public Ditch within the Watershed District.
2. One or more cumulative acres of land disturbance.
3. The lands and water that have been, or may be covered by the regional flood.
4. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Uses)
5. High water table, outwash and organic soils.
6. High infiltration soils.
7. Highly erodible soils

EXHIBITS:
3. Plan set (C0.1, C1.2, and C1.3), by Anderson-Johnson Associates, dated 12/12/14, received 12/30/14.

HISTORY & CONSIDERATIONS:

FINDINGS:

Ditches and Drainage: There is a public ditch on the property. The ditch is County Ditch No. 60. The ditch has been inspected. The trend in land use for this drainage area is toward residential and commercial. There are no flooding concerns downstream. The public ditch was last repaired in 1975. The ditch is in need of repair.

Floodplain: There is a floodplain on the property according to FEMA. The District Atlas 14 model predicts the 100-year elevation for the subwatershed at 897.8 feet. Compensatory storage is not needed.

Groundwater: Surficial ground water is present at 889 feet. The site does not include groundwater sensitive areas. Information has not been provided to substantiate low floor elevations and is not needed because the work is at grade construction. Low floor elevations meet the criteria for the City of Blaine (2 ft. above mottled soil elevation, 2 ft. above 100-year).

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: The proposed project does include a ditch maintenance easement or utility line crossings. A drainage and utility easement is not provided for the infiltration pond shown on the drainage plan.

Soils & Erosion Control: Soils affected by the proposal are Seelyeville muck, Markey muck, Isanti and Zimmerman. Stabilizing vegetation is not proposed for disturbed areas within two weeks of rough grading. Adjacent properties are protected from sediment deposition. All wetlands, waterbodies, ponds, infiltration basins and water conveyance systems are not protected from erosion and sedimentation. Project site is greater than 1 acre; an NPDES permit is required.

Stormwater & Hydraulics: The applicant is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. Stormwater leaving the site is discharged into a well-defined receiving channel or pipe and routed to a public drainage system. 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.

Water Quality: Project does not include new impervious drainage areas greater than 1 acre. Project does not discharge into wetlands. 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.

Wetlands: Wetlands do exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. No wetland impacts are proposed.

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.

Performance Escrow: $2,750.00

ISSUES/CONCERNS:

| Floodplain: The proposed plans show that there is grading below the Atlas 14 model 100-year elevation of 897.8. There was no floodplain impact volume provided to show what the proposed net impact to the floodplain is. | 1. Provide floodplain impact volume to show what the proposed net impact will be. |
| Stormwater & Hydraulics: The applicant is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation but needs to field verify the infiltration rate or use the state standard. | 2. HydroCAD model (Pond names correspond to HydroCAD model):  
a. Use 0.45 in/hr as the infiltration rate site. The soils under the infiltration basin are classified as SP-SM. According to the MN Stormwater Pollution Manual, SM soils infiltrate at a rate of 0.45 in/hr. |
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<td>A post construction test on the infiltration basin will be required to verify the assumed infiltration rates are obtained. The applicant must acknowledge that they will conduct a post construction test on the infiltration basin 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.</td>
<td>3. The applicant must acknowledge that they will conduct a post construction test on the infiltration basin 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.</td>
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| Soils & Erosion Control: Infiltration basins are protected from erosion and sedimentation during construction. Stormwater catch basins are not protected from erosion and sedimentation during construction. Stabilizing vegetation is required within two weeks of the completion of rough grading. | 4. After initial grading, completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.  
5. Include a note to the plans that requires stabilizing vegetation to be used in disturbed areas within two weeks of rough grading.  
6. Add inlet protection to all catch basins within the construction limits.  
6a. Inlet protection needed for existing inlets (3) and proposed inlets (4). |
| Escrows: $2,000 + (1.75 ac + $500/ac) = | 7. Receipt of escrows. |
RECOMMENDATION: Table with 7 Stipulations

Stipulations:

1. Receipt of escrows.
2. Provide floodplain impact volume to show what the proposed net impact will be.
3. The applicant must acknowledge that they will conduct a post construction test on the infiltration basin 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. After initial grading, completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
5. Include a note to the plans that requires stabilizing vegetation to be used in disturbed areas within two weeks of rough grading.
6. Add inlet protection to all catch basins within the construction limits.
   a. Inlet protection needed for existing inlets (3) and proposed inlets (4).
7. HydroCAD model (Pond names correspond to HydroCAD model):
   b. Use 0.45 in/hr as the infiltration rate site. The soils under the infiltration basin are classified as SP-SM. According to the MN Stormwater Pollution Manual, SM soils infiltrate at a rate of 0.45 in/hr.