COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: December 9, 2013
AGENDA NUMBER: 14
FILE NUMBER: 13-109
ITEM: Bent Creek Shores

RECOMMENDATION: Table with 5 Stipulations

APPLICANT: Boulder Contracting, LLC
2322 171\(^{st}\) Ave NE
Ham Lake MN 55304

PURPOSE: Proposed development of 6 family homes

LOCATION: Crooked Lake Boulevard just south of Bunker Lake Boulevard in Andover, MN
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 water that have been, or may be covered by the regional flood.
5. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Uses)
6. High infiltration soils.
7. Highly erodible soils

EXHIBITS:
1. Preliminary Stormwater Report; from Civil Site Group; dated 11/8/2013; received 11/19/2013
2. Infiltration rate determination rate report; from Interstate Geotechnical Engineering, Inc.; Dated 11/1/2013; received 11/19/2013
3. Subsurface Geotechnical Investigation; from Interstate Geotechnical Engineering, Inc.; dated 11/3/2013; received 11/19/2013
4. Plan set; from Civil Site Group; dated 11/8/2013; received 11/19/2013
5. Wetland Delineation Report; dated 9/9/13; received 9/9/13

HISTORY & CONSIDERATIONS:

There was an existing house on this site that has been removed.

FINDINGS:
Ditches and Drainage: There is a public ditch on the property. The ditch is County Ditch 57. The ditch has not been inspected. The project site is tributary to County Ditch 57. The trend in land use for this drainage area is toward residential. There are flooding concerns downstream. Alternatives to additional drainage considered and reviewed include storage, and infiltration.

Floodplain: There is floodplain on the property according to FEMA. The District Atlas 14 model predicts the 100-year elevation for the subwatershed at 864.1 feet. The total floodplain impact is 0 acre-feet, within the flood/fringeway. Compensatory storage is not needed.

The applicant is required to run the 100-year elevation for interior ponds using the NOAA Atlas 14 information as shown in the following web link.
http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=mn

Groundwater: Ground water is present at 12 to 15 feet deep (858 feet). The site does not include groundwater sensitive areas. Information has been provided to substantiate low floor elevations. Low floor elevations meet the criteria for the City of Andover 3 ft above mottled soil elevation.
**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 provided for the storm water/infiltration ponds shown on the drainage plan. Property owners affected by changes in drainage have not been notified and have not acknowledged the changes proposed.

**Soils & Erosion Control:** Soils affected by the proposal are Nymore, NyB and Alluvial Land. 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 protected from erosion and sedimentation. Project site is greater than 1 acre; an NPDES permit is required.

**Stormwater & Hydraulics:** The applicant is not 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 exist down stream 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.

**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:** $3,700

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<th>ISSUES/CONCERNS:</th>
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<td><strong>Stormwater &amp; Hydraulics:</strong> The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. The</td>
<td>1. All stormwater calculations performed on projects in the District must be done using Atlas 14 rainfall depths.</td>
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provided calculation accounts for all of the impervious area. However, the regulatory volume of flow does not reach the proposed infiltration basins. Most of the proposed impervious is in the front of the houses, which drain to the streets. The runoff that actually gets to the basins is only what falls on the backyard portion of the rooftop and the back yard itself. All projects in the Coon Creek Watershed District must meet this requirement. If applicants cannot meet this requirement due to site constraints in its entirety, they must meet it to the greatest extent practical and explain why it cannot be met.

2. There is no acknowledgment from the applicant that they will conduct a post construction infiltration test.

Soils & Erosion Control:
There is no statement provided to the grading and/or the erosion plan that states that all rough graded areas will be stabilized within 14 days.

3. A statement must be added to the grading and/or the erosion plan that states that all rough graded areas will be stabilized within 14 days.

Escrows:
$1,500 + (3.7 \times $500/acre) = $3,700

4. Submit escrow

RECOMMENDATION: Table with 5 Stipulations

Stipulations:
1. Receipt of escrows.
2. 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.
3. Provide stormwater runoff calculations that show the site is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation.
4. Provide rate control calculations that use Atlas 14 rainfall depths.
5. Provide a statement on the grading/Erosion control plan sheets that states that stabilizing vegetation will be provided within 14 days.