COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE:  March 25, 2019
AGENDA NUMBER:  12
FILE NUMBER:  17-168
ITEM:  Cedar Point Apartments

RECOMMENDATION:  Approve with 5 Stipulations

APPLICANT:  Joel & Susan Peterson, Paul Anderson, Patricia Broker
            1153 116th Ave NE
            Blaine, MN 55434

PURPOSE:  49,812 SQ FT (1 Apartment Building) on 13 Acre Lot

LOCATION:  SW of 117th Ave NE and Ulysses St NE, Blaine 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 waters that have been, or may be covered by the regional flood.
5. High water table, outwash and organic soils

EXHIBITS:
1. Construction Plan set (15 sheets); by G-Cubed Inc., dated 3/11/19, received 3/12/19.
2. Parking and Floor Plan set (7 sheets); by CRW, dated 2/22/19, received 3/12/19.
4. Geotechnical Report; by CVT, dated 1/3/18, received 1/31/18.
5. Wetland Delineation Report; by Bopray Environmental, dated 12/12/17, received 12/14/17.

PREVIOUS ACTION TAKEN: The application was Tabled at the February 25th, 2019 meeting with 13 stipulations:

1. Receipt of escrows.
2. Remove fill from floodway or provide supporting documentation of no-rise analysis.
3. Clarify connectivity of floodplain compensatory storage to existing floodplain.
4. Provide details for each EOF with proposed elevations. Include length and width dimensions for each EOF detail.
5. Change existing condition curve numbers to HSG A.
6. Update plans to include soil decompaction details sufficient to reach “good” condition (i.e. scarify soil to 8” or more) or downgrade the proposed pervious area curve numbers in the HydroCAD model.

7. The applicant must acknowledge on the plan set 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.

8. Provide detail for infiltration control outlets.

9. Clarify purpose of 12”CMP stub at North-East infiltration basin. Include in HydroCAD as needed.

10. Provide details in compliance with MPCA Stormwater Manual and MNDOT specifications (2574.3 A, B) as appropriate.

11. Alter plans to provide for the following:
    a. Inlet protection for CB-11.
    b. Rip-rap or equivalent scour protection at rooftop drain outlets.
    c. Show silt fence along north bank of Ditch 41 (Sand Creek), at or above end of FES.

12. Provide an O&M Agreement that meets District requirements using current plans as an exhibit.

13. Provide note indicating applicant will provide an as-built for watermain that indicates 4-foot separation from approved ditch bottom (885.7 ft) was maintained.

**FINDINGS:**

**Pre-application Meeting:** The project as submitted has received a general review during a pre-application meeting.

**Ditches:** There is a public ditch on the property. The public ditch is County Ditch 41 (Sand Creek) according to the public drainage map. The approved elevations through this property are 885.5 ft MSL at the downstream end and 885.7 ft MSL at the upstream end. The existing conditions through this property are 886.3 ft MSL at the downstream end and 885.1 ft MSL at the upstream end and 0.8-0.6 ft variance from the approved elevations. The ditch is a 4th order stream. The ditch serves the primary role of trunk drainage system. The ditch serves approximately 0 acres of agricultural land. Land use in the area is toward commercial and residential. There are flooding concerns downstream. The ditch has been inspected. Existing elevations, slopes and condition of ditch are good condition. The ditch is not in need of repair. Alternatives to repair and additional drainage have been considered and reviewed.

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

**Erosion and Sediment Control:** Soils affected by the proposal are Markey, Isanti, Rifle and Zimmerman.

- Stabilizing vegetation is proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles have been proposed to be fitted with sediment-trapping measures and to be stabilized within 7 days of inactivity to prevent soil loss.
• 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.

Dewatering: Shallow ground water does exist on site. The project will require dewatering when connecting to existing watermain.

Floodplain: There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 892.8 feet for Sand Creek and 891.8 feet for the private ditch. The project does propose to place fill within the FEMA floodway; however, the Contractor will provide pre and post-development survey data to ensure that post-development conditions match the existing conditions. There are flooding concerns downstream.

High Water Flooding: Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Blaine; 2 ft above mottled, 2 ft above 100 yr, foot above EOF.

Groundwater: Geotechnical information collected in November 2017 indicates long term groundwater elevation is present at 3-13 1/2 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 not 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 unknown. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Maintenance Responsibility</th>
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</thead>
<tbody>
<tr>
<td>Basins</td>
<td>3</td>
<td>Unknown</td>
</tr>
<tr>
<td>RainGuardians (Bunker)</td>
<td>4</td>
<td>Unknown</td>
</tr>
<tr>
<td>Sumps</td>
<td>5</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.

Easements: The proposed project does include ditch maintenance easement. A ditch maintenance easement is 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 achieved. The stormwater management system utilizes infiltration basins. 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. 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 stormwater leaving the site is discharged directly into a well-defined natural or man-made off-site receiving channel or pipe. All on-site constructed stormwater 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 basins are pretreated. 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. CCWD issued a Notice of Decision on 1/22/18

Wetland Replacement Plan: A wetland replacement plan 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.

Performance Escrow: $5,820.00
Wetland Escrow: $ N/A
There are ditch liens on the property.

ISSUES/CONCERNS:

<table>
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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Escrows: $2,000 + (7.64 ac * $500/ac) = $5,820.00</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td><strong>Floodplain:</strong></td>
<td>2. Provide survey data of existing</td>
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<td></td>
<td>conditions prior to any work occurring</td>
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<td></td>
<td>adjacent to or within the FEMA floodway.</td>
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<td>Riprap is proposed to be placed within</td>
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<tr>
<td></td>
<td>the FEMA floodway of County Ditch 41.</td>
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<tr>
<td></td>
<td>a. Provide survey data for the northern</td>
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<td>portion of County Ditch 41 from top of</td>
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<td>bank to centerline at 25-foot increments</td>
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<td>along the ditch starting at the Ulysses</td>
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<td>Street culvert (as no work is proposed</td>
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<td>on the south side of CD 41, survey data</td>
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<td>between centerline and the south bank is</td>
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<td>not required)</td>
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<td>b. Provide survey data at the specific</td>
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<td>location for the proposed culvert</td>
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<td>discharging the North-North basin</td>
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<td>c. Once work has completed, provide</td>
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<td>survey data demonstrating the post-</td>
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development conditions of CD 41 match the pre-development (existing) conditions

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<tr>
<th><strong>Soils &amp; Erosion Control:</strong></th>
<th>3. Provide rip-rap or equivalent scour protection at roof drain outlets.</th>
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<tbody>
<tr>
<td>Stabilization/scour protection not provided at roof drain outlets.</td>
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<th><strong>Stormwater &amp; Hydraulics:</strong></th>
<th>4. The applicant must acknowledge on the plan set 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.</th>
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<td>The applicant is meeting the volume management requirement equivalent to 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.</td>
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<th><strong>Maintenance:</strong></th>
<th>5. Provide an O&amp;M Agreement that meets District requirements using current plans as an exhibit.</th>
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<td>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>
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</table>

**RECOMMENDATION:** Approve with 5 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. Provide survey data of existing conditions prior to any work occurring adjacent to or within the FEMA floodway. Provide survey data for post-development conditions once work has completed. To do this:
   a. Provide survey data for the northern portion of County Ditch 41 from top of bank to centerline at 25-foot increments along the ditch starting at the Ulysses Street culvert (as no work is proposed on the south side of CD 41, survey data between centerline and the south bank is not required)
   b. Provide survey data at the specific location for the proposed culvert discharging the North-North basin
   c. Once work has completed, provide survey data demonstrating the post-development conditions of CD 41 match the pre-development (existing) conditions
3. Provide rip-rap or equivalent scour protection at roof drain outlets.
4. The applicant must acknowledge on the plan set 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.
5. Provide an O&M Agreement that meets District requirements using current plans as an exhibit.