COON CREEK WATERSHED DISTRICT PERMIT REVIEW

MEETING DATE: February 12, 2018
AGENDA NUMBER: 24
FILE NUMBER: 17-168
ITEM: Cedar Point Apartments

RECOMMENDATION: Table with 12 Stipulations

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

PURPOSE: 77,000 SQ FT (2 Buildings) 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

[Map Diagram]
EXHIBITS:
1. Construction Plan set (8 sheets); by G-Cubed Inc., dated 1/23/18, received 1/31/18.
3. Geotechnical Report; by CVT, dated 1/3/18, received 1/31/18.
4. Wetland Delineation Report: by Bopray Environmental, dated 12/12/17, received 12/14/17.

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 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 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.
• Adjacent properties and stormwater ponds 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 not 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 racking 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 not 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 does not require dewatering.

Floodplain: There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 892.8 feet. The project does propose to place fill within the floodplain. No calculations provided to determine impacts. There are flooding concerns downstream.

High Water Flooding: Information has been provided to substantiate low floor elevations. Low floor elevations do not 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>
</tr>
</thead>
<tbody>
<tr>
<td>Basins</td>
<td>4</td>
<td>Unknown</td>
</tr>
<tr>
<td>Pretreatment Devices</td>
<td>unknown</td>
<td>Unknown</td>
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</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 not achieved due to high groundwater, design may require drain tile. The stormwater management system utilizes filtration. 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 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 basins are not pretreated. All work adjacent to wetlands, waterbodies and water conveyance systems are not protected from erosion. The proposal may 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 and the delineation provided by Bopray Environmental.

**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:** $7650.00  
**Wetland Escrow:** $ N/A  
There are ditch liens on the property.

### ISSUES/CONCERNS:

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Escrows: $2,000 + (11.3 ac * $500/ac) = $7650.00</td>
<td>1. Receipt of escrows.</td>
</tr>
</tbody>
</table>
| **Stormwater & Hydraulics:**  
Construction plans do not show HWLs or EOFs for basins.  
Storm sewer outlet for 3P not shown on construction plans.  
Bottom contour of 891 not shown for 3P  
Infiltration (filtration) does not start at bottom of basins.  
Starting elevation of 892 for N-West pond in model is unclear.  
Outlet for N-East pond will be directed through curb cut, then into N-North basin prior to discharging to EOF. | 2. Provide updated construction plans that show the following items:  
a. EOFs  
b. HWLs  
c. Storm sewer outlet for 3P  
d. Bottom elevation for 3P  
3. Provide updated model that addresses:  
a. Filtration that starts at drain tile, not 0.00 feet and is directed to outlet, not discarded.  
b. Remove starting elevation of N-West pond.  
c. Outlet for N-East pond that represents the construction plans. |
<p>| <strong>Groundwater:</strong> Geotech Report indicates groundwater ranges from 886 to 891 on site. Three-foot separation from bottom | 4. Shallow groundwater indicates that basins will need to be designed for filtration, not infiltration. |</p>
<table>
<thead>
<tr>
<th>of infiltration basin to groundwater is not provided.</th>
<th>5. Provide 1-foot separation from EOFs and LFEs.</th>
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<tr>
<td>LFEs shown have 2-foot separation from HWL but also need to provide 1-foot separation from EOFs.</td>
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<tr>
<td><strong>Soils &amp; Erosion Control:</strong> District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity.</td>
<td>6. Updated Erosion Control Plan that addresses the following:</td>
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<tr>
<td>Infiltration basins are not protected from erosion and sedimentation during construction. After initial grading the District requires that infiltration basins be completely surround by erosion control measures to prevent the basin from clogging.</td>
<td>a. Note #4 on Erosion Control Sheet to stabilize vegetation within 7 days of rough grading or inactivity.</td>
</tr>
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<td>Stabilization adequate to prevent erosion has not been provided at the outlets of all storm sewer pipes.</td>
<td>b. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.</td>
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<tr>
<td>Construction entrances not clearly labeled on erosion control plan.</td>
<td>c. Provide stabilization at all outlets of storm sewer pipes.</td>
</tr>
<tr>
<td></td>
<td>d. Provide location of construction entrances on erosion control plan.</td>
</tr>
<tr>
<td><strong>Water Quality:</strong> All discharges into water quality basins are not pretreated.</td>
<td>7. Provide pretreatment at all entrances to water quality basins. Sumps and/or RainGuardians are two examples of pretreatment. A minimum of 4-foot depth is required to prevent resuspension.</td>
</tr>
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<td>Unclear if EOFs design includes erosion control measures.</td>
<td>8. EOF design will need to include erosion control measures. Enkamat is one example.</td>
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<td><strong>Maintenance:</strong> 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>9. Provide an O&amp;M Agreement that meets District requirements.</td>
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</tbody>
</table>
CD 41 (Sand Creek) requires a 200’ easement (100’ easement from centerline) downstream of Hwy 65.

10. Provide total of 200’ easement (100’ from centerline) for CD 41. Easement should be shown on grading plan as well as plat.

**Floodplain:** Ditch HWL is not shown on construction plans.

There is floodplain located on the property as shown on the attached sheet.

11. Ditch HWLs need to be provided on construction plans. The HWL for CD 41 (Sand Creek) is 892.8 and the HWL for private ditch (west of 3P) is 891.8.

12. Provide calculations for floodplain impacts and compensatory storage if required.

**RECOMMENDATION:** Table with 12 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Provide updated construction plans that show the following items:
   a. EOFs
   b. HWLs
   c. Storm sewer outlet for 3P
   d. Bottom elevation for 3P
3. Provide updated model that addresses:
   a. Filtration that starts at draintile, not 0.00 feet and is directed to outlet, not discarded.
   b. Remove starting elevation of N-West pond.
   c. Outlet for N-East pond that represents the construction plans.
4. Shallow groundwater indicates that basins will need to be designed for filtration, not infiltration.
5. Provide 1-foot separation from EOFs and LFEs.
6. Updated Erosion Control Plan that addresses the following:
   a. Note #4 on Erosion Control Sheet to stabilize vegetation within 7 days of rough grading or inactivity.
   b. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
   c. Provide stabilization at all outlets of storm sewer pipes.
   d. Provide location of construction entrances on erosion control plan.
7. Provide pretreatment at all entrances to water quality basins. Sumps and/or RainGuardians are two examples of pretreatment. A minimum of 4-foot depth is required to prevent resuspension.
8. EOF design will need to include erosion control measures. Enkamat is one example.
9. Provide an O&M Agreement that meets District requirements.
10. Provide total of 200’ easement (100’ from centerline) for CD 41. Easement should be shown on grading plan as well as plat.
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12. Provide calculations for floodplain impacts and compensatory storage if required.