COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: June 10, 2019
AGENDA NUMBER: 16
FILE NUMBER: 19-032
ITEM: CR Apartments Real Estate Equities

RECOMMENDATION: Table with 14 Stipulations

APPLICANT: Coon Rapids AH I, LLLP
579 Selby Ave
St. Paul, MN 55102

PURPOSE: Apartment building with surface parking and outdoor amenities

LOCATION: Northeast corner 94th Avenue NW & Springbrook Drive, Coon Rapids
APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. Any work within or adjacent to a Public ditch within the Watershed District.
3. Any work in or adjacent to wetlands, lakes or water courses
4. One or more cumulative acres of land disturbance
5. The lands and waters that have been, or may be covered by the regional flood.

EXHIBITS:
1. Construction Plan set (8 sheets); by Loucks, dated 3/12/19, received 5/28/19.
3. Site Assessment for Wetlands; by Kjolhaug Environmental, dated 5/20/19, received 5/28/19.
PREVIOUS ACTION TAKEN: This is a new application. It was previously submitted on 3/13/19 and incomplete with 9 items.

1. Receipt of escrows.
2. MPCA requires soil boring at filtration basin to indicate if there is separation from groundwater to design system as infiltration and not filtration.
3. The applicant must provide a note on the construction plans that a post construction test on the infiltration basin will be conducted 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. Update Stormwater Pollution Prevention Plan to meet District requirements:
   a. Stabilize soil stockpiles within 7 days of inactivity
   b. Show double row of perimeter control adjacent to Pleasure Creek
5. 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. Apply for DNR water appropriation permit.
6. Provide sump locations on utility plan with inverts and sizing.
7. Use MnDOT particle sizing to indicate sumps are appropriately sized to meet district removal rates of 80% TSS. Multiple sumps may be required. A minimum of 4-foot depth is required to prevent resuspension.
8. Provide an O&M Agreement that meets District requirements.
9. Provide wetland delineation report and gain approval from the LGU.

A Phase 1 and Phase 2 Environmental Site Assessment (ESA) have been completed for this project. The results of the Phase 2 ESA indicate that any soils excavated for construction at the Site should meet the MPCA criteria for off-site reuse as unregulated fill.

FINDINGS:

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

Ditches: There is a public watercourse on the property. The conveyance is Pleasure Creek according to the public drainage map. The most recent survey (2017) indicates the current elevation of the watercourse bottom to be 873.915.

The watercourse is a 3rd order stream. The ditch serves the primary role of
   a. Collector system

The watercourse is a DNR Public Water.

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

Erosion and Sediment Control: Soils affected by the proposal are Sartell and Seelyeville.
• 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 to prevent soil loss but have been proposed to be stabilized within 7 days of inactivity.
• 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.
• Details provided for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.)

Dewatering: Shallow ground water may 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 881.1 feet. The project does not propose to place fill within the floodplain. Compensatory storage is not needed. There are no flooding concerns upstream or 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 Coon Rapids; 3 ft above mottled, 2 ft above the 100 yr.

Groundwater: Geotechnical information collected in February 2019 indicates long term groundwater elevation is present at 12 to 27 feet below the surface.

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 not consistent with local planning and zoning. There is an approved local water plan.

**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>Inspection &amp; Maintenance Responsibility</th>
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</thead>
<tbody>
<tr>
<td>Filtration Chamber</td>
<td>2</td>
<td>Unknown</td>
</tr>
<tr>
<td>Sumps</td>
<td>5</td>
<td>Unknown</td>
</tr>
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</table>

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.

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 1.1-inch filtration is not achieved. The stormwater management system utilizes underground filtration chambers. 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 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 water quality basins are pretreated by a sump catch basin/manhole. 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 within one (1) mile of and drains to Impaired Waters. The Impaired Waters are Pleasure Creek and Springbrook Creek. Pleasure Creek and Springbrook Creek are impaired for Aquatic Life (Macro-invertebrates), Aquatic Recreation (E. coli). The major stressors are Total Suspended Solids (TSS), Total Phosphorus (TP), and E.coli. There is an EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for these waters.

There are new impervious surfaces proposed as part of this project.

**Wetlands:** Wetlands do exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. Wetlands have not been delineated. The wetland boundary has not been checked.

Pleasure Creek is a DNR protected water.

A wetland delineation has not been submitted. Wetland impacts are unknown.

**Wetland Replacement Plan:** A wetland replacement plan has not been submitted. It is unknown if it is required without a delineation.

**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 and is not required to.

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:** $4,250

**Wetland Escrow:** $N/A

There are not ditch liens on the property.

**ISSUES/CONCERNS:**

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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tr>
<td>Escrows: $2,000 + (4.5 ac. * $500/ac) = $4,250</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td><strong>Groundwater:</strong> According to ST-1, 3’ separation is not met between groundwater and GFE.</td>
<td>2. Raise GFE or provide approval from the City for not meeting 3’ separation from groundwater.</td>
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<td><strong>Stormwater &amp; Hydraulics:</strong> Filtration chambers are proposed on site.</td>
<td>3. Clarify why filtration is proposed. It appears that infiltration is feasible on site.</td>
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</table>
The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. Impervious area in DA-3P is not routed to a stormwater treatment system.

Mechanical sheet not provided.

HWL of the north and south filtration chambers are above the GFE.

Unable to verify if adequate filtration volume is provided below the outlet of the filtration chambers.

Adequate detail is not provided on filtration chambers to ensure constructability.

If filtration is used, an impermeable liner should be included around the filtration chambers.

<table>
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<tr>
<th>Soils &amp; Erosion Control:</th>
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<td>Dewatering is anticipated during construction.</td>
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<td>All discharges into water quality basins are pretreated by a sediment sump manhole. It is unknown if these sump manholes are designed correctly for water quality treatment prior to discharge into a receiving water.</td>
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<td>4. If applicants cannot meet the volume management requirement due to site constraints in its entirety, they must meet it to the greatest extent practical and explain why it cannot be met.</td>
<td>10. 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. Apply for DNR water appropriation permit.</td>
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<td>5. Provide Mechanical sheet to verify details of trench and roof drains.</td>
<td>11. Provide calculations (SHSAM can be used) to indicate sumps are appropriately sized to meet district removal rates of 80% TSS for OK110 particle size. A minimum of 4-foot depth is required to prevent resuspension.</td>
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A SAFL Baffle detail is included on sheet C8-1. However, no SAFL Baffles are called out on construction plans.

12. Update construction plans to indicate what structures the SAFL Baffles are to be installed in.

**Maintenance:** 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.

13. Provide an O&M Agreement that meets District requirements.

**Wetlands:** Wetlands may be present on the property. Wetland delineation report has been provided. The report is in the comment period.

14. Gain approval from the LGU Wetland delineation report.

**RECOMMENDATION:** Table with 14 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Raise GFE or provide approval from the City for not meeting 3’ separation from groundwater.
3. Clarify why filtration is proposed. It appears that infiltration is feasible on site.
4. If applicants cannot meet the volume management requirement due to site constraints in its entirety, they must meet it to the greatest extent practical and explain why it cannot be met.
5. Provide Mechanical sheet to verify details of trench and roof drains.
6. Provide details on the potential impacts of the HWL of the filtration chambers being above the GFE and/or provide approval from the City.
7. Provide the stage-storage curve for the north and south filtration chambers.
8. Provide details on how the storm sewer laterals will tie into the filtration chambers. Drain tile clean-outs should be shown on plans.
9. Update construction plans to include an impermeable liner around filtration chambers.
10. 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. Apply for DNR water appropriation permit.
11. Provide calculations (SHSAM can be used) to indicate sumps are appropriately sized to meet district removal rates of 80% TSS for OK110 particle size. A minimum of 4-foot depth is required to prevent resuspension.
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