COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: June 9, 2014
AGENDA NUMBER: 15
FILE NUMBER: 13-129
ITEM: Lawrence Estates

RECOMMENDATION: Table with 4 Stipulations

APPLICANT: Doug and JoAnn Lawrence
2477 Main Street NW
Coon Rapids MN 55448

PURPOSE: 10 unit single family development

LOCATION: North and South sides of 128th Avenue NW, Coon Rapids 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. Any activity involving drainage, filling or alteration of wetlands
4. One or more cumulative acres of land disturbance.
5. The lands and water that have been, or may be covered by the regional flood.
6. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Uses)
8. High infiltration soils.
9. Highly erodible soils
10. Any land alteration within 1 mile of an impaired water

EXHIBITS:
1. Plan Set by Hakanson Anderson, dated 4-1-14, received 4-2-14.
2. Floodplain Permit Application by Hakanson Anderson, dated 4-1-14, received 4-2-14.
4. Drainage Area exhibit by Hakanson Anderson dated 4-1-14, received 4-2-14.
5. Water quality and runoff calculations by Hakanson Anderson dated 4-1-14, received 4-2-14.
7. Updated Plan Set provided by Hakanson Anderson Associates, dated 4-1-14, received 5-28-14.

HISTORY & CONSIDERATIONS:
The applicant is proposing to develop a 10 unit single family development. The road and utilities through the proposed development were constructed in the early 1990’s. The higher areas on both sides of 128th Avenue are wooded while the low lands are currently being used for sod farming. The development will result in filling of floodplain and wetland on both sides of the road.

FINDINGS:
Ditches and Drainage: There is a public ditch on the property. The ditch is 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. The ditch was last repaired in 2001. The ditch is not in need of repair.
**Floodplain:** There is floodplain on the property according to FEMA. The District Atlas 14 model predicts the 100-year elevation for the subwatershed at 860.2 (NAVD 1988). The plans show the NGVD 1929 elevations of 859.9 feet for four parcels in Outlot A and 859.5 feet for six parcels in Outlot B. The total floodplain impact is 0.08 acre-feet, within the floodplain. Compensatory storage is provided.

**Groundwater:** Surficial ground water is present at 6.5 feet (852.6). The site does include groundwater sensitive areas. Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Coon Rapids (3 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 not include a ditch maintenance easement or utility line crossings. A drainage and utility easement is not provided for the stormwater/infiltration pond shown on the drainage plan.

**Soils & Erosion Control:** Soils affected by the proposal are Nymore and Alluvial land. Stabilizing vegetation is 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 exist down-stream from the proposed site. The project uses a filtration rate of 1.63 in/hr which is too high. The filtration bench should be re-sized using a lower filtration rate such as 0.8 in/hr that is still a Type A soil but at the lower end of the range.

**Water Quality:** Project does include new impervious drainage areas greater than 1 acre. All discharges into wetlands are not pretreated by a sediment basin/water quality pond.

**Wetlands:** Wetlands do exist on-site according to the 1987 Federal Manual and its associated supplement(s), NWI, and Soils Survey. The wetland boundary has been reviewed. The project is not exempt. The proposed project is not wetland dependent.

The applicant is proposing 21,795 square feet (0.50 acre) of wetland impacts in two locations under sequencing flexibility. Plans submitted in the application for the wetland impacts do contain a sequencing discussion or material to support the request for
sequencing flexibility. The TEP met on April 15, 2014 and discussed the need for the applicant to use another wetland bank since the one that is proposed has not been approved by the Army Corps of Engineers or provide financial assurance until the bank is approved.

**Wildlife:** The proposed project does not include endangered & threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas, wildlife travel corridors. No substantial adverse alteration or significant detrimental impact on a species food supply, security or reproductive cycle or the alteration or removal of a plant species will occur.

**Performance escrow:** $14,160.00

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<tr>
<th>ISSUES/CONCERNS:</th>
<th>NEED:</th>
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<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong></td>
<td>1. Re-size the filtration trench using a filtration rate of 0.8 in/hr.</td>
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<td>1. The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. 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. The project uses a filtration rate of 1.63in/hr which is too high. The filtration bench should be re-sized using a lower filtration rate such as 0.8 in/hr that is still a Type A soil but at the lower end of the range.</td>
<td>2. Provide an updated Plat with drainage easement for the filtration basin.</td>
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<td>2. Applicant has changed the drainage manholes to sump manholes. The sump manholes are 30” deep, and according to the PCA, the sump portion of the manhole should be at least 36” deep (3 ft.).</td>
<td>3. Increase the permanent pool depth of the sump manholes to be 36”.</td>
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<td><strong>Escrows:</strong></td>
<td>4. Receipt of escrows</td>
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<td>$2,000 + (24.32 acres x $500/acre)= $14,160.00</td>
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RECOMMENDATION: Table with 4 Stipulations

Stipulations:
1. Receipt of escrows.
2. Increase the permanent pool depth of the sump manholes to be 36”.
3. Provide an updated Plat with drainage easement for the filtration basin.
4. Re-size the filtration trench using a filtration rate of 0.8 in/hr.