COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: April 28, 2014
AGENDA NUMBER: 15
FILE NUMBER: 14-046
ITEM: Woods at Quail Creek 3rd Addition

RECOMMENDATION: Table with 7 Stipulations

APPLICANT: Lennar Homes
16305 36th Ave N
Suite 600
Plymouth MN 55446-4270

PURPOSE: Development of 32 single family homes of the 3rd Addition of the Woods of Quail Creek

LOCATION: Xylite Street north of Main St, 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. High water table, outwash and organic soils.
5. High infiltration soils.
6. Highly erodible soils
7. Endangered, Threatened or Special concern species, elements of communities.

EXHIBITS:
1. Soil Boring Report by American Engineering Testing, Inc. dated 3-15-04, received 4-2-14
2. Wetland Permit Application by Kjolhaug Environmental Services Company, dated 4-1-14, received 4-2-14.
3. Grading and Erosion control Plans by Hedlund Engineering, dated 3-31-14, received 4-2-14

HISTORY & CONSIDERATIONS:
This is the 3rd Addition of the Woods at Quail Creek development. The storm water ponding was constructed as part of the Woods of Quail Creek 2nd Addition.

FINDINGS:
Ditches and Drainage: There is a public ditch on the property. The ditch is County Ditch 59, Branch 4 and Branch 8. The ditch has been inspected. The project site is tributary to County Ditch 59. The trend in land use for this drainage area is toward open space and residential. The public ditch was last repaired in 2005. The ditch is not in need of repair.

Floodplain: There is no 100 year floodplain on the property according to FEMA. The District Atlas 14 model predicts the 100-year elevation for the subwatershed at 897.4 feet. The total floodplain impact is 0 acre-feet, within the flood fringe. Compensatory storage is not needed. Walk out elevations for three lots 1, 5 and 6 Block 3 east of Alamo Street and south of 128th Street are 899.0, and are not greater than 2 feet above from the 100-year floodplain elevation as required by the City of Blaine.

Atlas 14 was run for the site producing an elevation on the rate control pond of 897.9. All low floors surrounding the pond are 2’ above 897.9.

Groundwater: Borings show ground water present at 890.5 based on soil boring 5. However, the site grading and piping will lower this to 897.5. The site does include groundwater sensitive areas. Information has been provided to substantiate low floor elevations. Low floor elevations do not meet the criteria for the City Blaine (2 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: A drainage and utility easement is not provided for the infiltration or detention basin shown on the drainage plan.

Soils & Erosion Control: Soils affected by the proposal are Isanti and Zimmerman. 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 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 not exist downstream from the proposed site. Previous stormwater calculations for Phase 2 and 3 were submitted and show that 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 include new impervious drainage areas greater than 1 acre. All discharges into wetlands are pretreated by an average 20’ wetland buffer. The water coming into the infiltration basin is not pretreated. 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.

Wetlands: Wetlands do exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. The wetland boundary has been reviewed and wetland replacement plan has been approved.

The applicant is proposing 15,617 square feet (0.3585 acre) of wetland impact in one location 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.

Wetland Replacement: The applicant is proposing replacement of impacted wetlands at a 2:1 ratio. The applicant is proposing mitigation via wetland bank credits. The TEP has approved utilization of a wetland bank for the 31,324 square foot replacement.
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 includes the threatened Blanding’s Turtle (*Emydoidea blandingii*). It is recommended that the applicant review and implement the recommendations from the literature by the DNR for avoiding and minimizing impacts to the threatened species.

**Performance Escrow:** $7,300.00  
**Wetland Escrow:** $25,700.00

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<th>ISSUES/CONCERNS:</th>
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<td><strong>Floodplain:</strong> Three parcels east of Alamo Street and south of 128th Street have walkout elevations of 899.0 while the Atlas 14, 1988 datum model calculates an 897.4 100-year.</td>
<td>1. Ground floor elevations need to be raised to 2 ft above the 100-year elevation 897.4 for lots 1, 5 and 6 Block 3.</td>
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<td><strong>Maintenance:</strong> A drainage and utility easement is not provided for the infiltration or detention basin shown on the drainage plan.</td>
<td>2. Provide a drainage easement for the infiltration basin and stormwater pond on the drainage plan.</td>
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<td><strong>Water Quality:</strong> The water coming into the infiltration basins need to be pretreated by a stormwater quality unit (SQU) either in the manhole just prior to entry in to the infiltration basin or at the outlet of the pipe to avoid sediment deltas.</td>
<td>3. 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.</td>
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<td><strong>Wetlands:</strong> Wetlands do exist on-site according to the 1987 Federal manual,</td>
<td>4. Provide pretreatment SQU prior to discharging in to the infiltration basins.</td>
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<td>5. The wetland bank credits must be purchased from another bank or</td>
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NWI, PWI and Soil Survey. The wetland boundary has been reviewed. The project is not exempt.

| Wildlife: The proposed project includes the threatened Blanding’s Turtle (Emydoidea blandingii). | financial assurance must be provided until the bank is ACOE approved.

| Escrows: $2,000 + (10.6 ac x $500/ac) = $7,300 | 6. Implement measures to avoid and minimize impacts to the threatened species.

| Wetland Escrow: $500 + (.72 ac x $35,000/ac) = $25,700 | 7. Receipt of Escrows

**RECOMMENDATION:** Table with 7 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 a drainage easement for the infiltration basin and stormwater pond on the drainage plan.
4. Ground floor elevations need to be raised to 2 ft above mottled soil elevation of 898 feet and/or 2 ft above 100-year flood elevation of 896.8 feet as required by the City of Blaine.
5. Provide pretreatment SQU prior to discharging into the infiltration basins.
6. The wetland bank credits must be purchased from another bank or financial assurance must be provided until the bank is ACOE approved.
7. Implement measures to avoid and minimize impacts to the threatened species.