COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: January 28, 2019
AGENDA NUMBER: 15
FILE NUMBER: 18-203
ITEM: Springbrook Phase 3

RECOMMENDATION: Approve with 5 Stipulations

APPLICANT: Capstone Homes
14015 Sunfish Lake Boulevard
Suite 400
Ramsey, MN 55303

PURPOSE: Single Family Housing Development, 29 lots

LOCATION: West of Harpers Street NE and North of 128th Ave 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 water that have been, or may be covered by the regional flood.
5. Endangered, Threatened or Special concern species, elements of communities.

EXHIBITS:
1. Stormwater Management Plan by Loucks; dated 1/16/19, received 1/16/19.
2. Construction Plan set by Loucks; dated 1/16/19, received 1/16/19.
3. Geotechnical Report; by Braun Intertec, dated 12/8/14, received 11/14/18.
5. Wetland Replacement Plan, by Kjolhaug, dated 11/14/18, received 11/14/18.

PREVIOUS ACTION TAKEN: This is a new application for Phase 3. Phase 1 was reviewed under PAN 17-018 and Phase 2 was reviewed under PAN 18-028.

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 59-4 according to the public drainage map. The approved/as-built elevations through this property are 891.3 ft MSL at the downstream end and 891.6 ft MSL at the upstream end.
Existing elevations, slopes and condition of the ditch are 890.3 and represent a 1.2ft variance from the as-built elevations. Alternatives to repair and additional drainage have not been considered and reviewed.

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

a. Collector system

The ditch serves approximately 0 acres of agricultural land.
Land use in the area is toward residential.
There are no flooding concerns upstream and/or downstream.

The ditch has been inspected.
Existing elevations, slopes and condition of ditch are fair.
The ditch is not in need of repair.

**Ditch Hydraulics:** A crossing of the ditch is proposed for the project. The proposed crossing involves the installation of a bridge. It is unknown if the proposed bridge is of sufficient hydraulic capacity, no elevations provided.

**Erosion and Sediment Control:** Soils affected by the proposal are Isanti, Millerville, Markey 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 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 not 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 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 require
dewatering.

**Floodplain:** Floodplain: There is floodplain on the property according to the District
model and FEMA. The District’s floodplain elevation is at 895.9 feet. The project does
not propose to place fill within the floodplain. There are no flooding concerns upstream
or downstream.

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

**Groundwater:** Geotechnical information collected in November 2014 indicates long
term groundwater elevation is present at 2.5 to 12.5 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 consistent with local planning and
zoning. There is an approved local water plan.

Property owners affected by changes in drainage should been notified and acknowledge
the changes proposed.

**Maintenance:** The owner of the Stormwater Management features and treatment
practices is the City of Blaine. 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>Basin</td>
<td>1</td>
<td>City of Blaine</td>
</tr>
<tr>
<td>Sumps</td>
<td>2</td>
<td>City of Blaine</td>
</tr>
</tbody>
</table>

As a requirement of the City’s MS4 program, the city will inspect and maintain the
stormwater facilities.

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. Infiltration is not possible due to high water table. To reduce impacts to wetlands, sediment basins are proposed instead of infiltration or filtration.

Drainage sensitive uses do not exist downstream from the proposed site. The rate of post-development runoff from the site do 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 stormwater basins are pretreated by a sediment basin/water quality pond. 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 exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. Wetlands have been delineated. The most recent delineation was approved on 11/2/16. The wetland boundary has been checked.

The wetland is not a DNR protected water.

The total proposed wetland impact is 9,407 square feet. The impact is through fill in the locations as shown below:
TEP members have been notified with a complete plan and have been requested to submit comments. The project is not wetland dependent. The project is not exempt.

The applicant does not need to contact the DNR area hydrologist and does need to contact the Corps of Engineers.

Two alternatives, plus the proposed project, have been submitted. On-site sequencing does apply. The avoidance alternatives are considered good faith efforts. None of the avoidance alternatives are considered feasible and prudent.

1. The applicant suggests that avoidance is not reasonable because there is no alternative. No alternative exists because:
   1) The basic purpose of the project cannot reasonably be accomplished at an alternative site, alternative sites are not practical/prudent;
   2) The applicant has made a good faith attempt in pursuing alternatives

**Wetland Replacement Plan:** A wetland replacement plan has been submitted.

The wetland replacement plan has been sent to TEP members for comment. Replacement is proposed to be through purchasing wetland credits at a ratio of 2:1. The credits will be purchased through wetland bank #1537.

The TEP has not approved the wetland mitigation plan. Comments have been directed toward changing the plans of the filtration basin to not impact the wetland to the west through drainage. The current set of revised plans dated 1/16/19 has addressed these comments.
Wildlife: The proposed project does 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 contacted the MNDNR natural heritage or endangered species program. MNDNR has responded to the applicant and a Take permit has been issued.

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 other than what has been mitigated for.

Performance Escrow: $8,500
Wetland Escrow: $N/A

There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
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</thead>
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<td>Escrows: $2,000 + (13 ac * $500/ac) = $8,500</td>
<td>1. Receipt of escrows.</td>
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<td>Ditch Hydraulics: It is unknown if the proposed bridge is of sufficient hydraulic capacity, no elevations provided.</td>
<td>2. Add elevations to low chord of bridge and tie-in elevations to boardwalk design.</td>
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| Soils & Erosion Control: Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading. | 3. a. Update sheet C3.1, note #2 to stabilize vegetation within 7 days of rough grading or inactivity.  
      b. Provide landscape plan with vegetation in pond tolerant of inundation due to proximity to ditch and wetlands. |
| Landscape plan provided but insufficient. |  |
| Wetlands: TEP/LGU have not issued a decision on the Replacement Plan. | 4. a. Obtain TEP/LGU approval of the Replacement Plan  
      b. Provide proof of purchase for wetland credits. |
| Wetland credits are proposed to be purchased to replace the wetland impacts. | 5. Provide acceptable buffer plan with monuments delineated on grading plan. |
| No buffer plan provided | |

**RECOMMENDATION:** Approve with 5 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Add elevations to low chord of bridge and tie-in elevations to boardwalk design.
3. a. Update sheet C3.1, note #2 to stabilize vegetation within 7 days of rough grading or inactivity.  
   b. Provide landscape plan with vegetation in pond tolerant of inundation due to proximity to ditch and wetlands.
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b. Provide proof of purchase for wetland credits.
5. Provide acceptable buffer plan with monuments delineated on grading plan.