COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: May 22, 2017
AGENDA NUMBER: 10
FILE NUMBER: 16-102
ITEM: Quail Creek 10th Addition

RECOMMENDATION: Approve with 3 Stipulations

APPLICANT: PSG Bridger, LLC
8354 N Via Mia
Scottsdale, AZ 85258

PURPOSE: Proposed site development for 96 single family homes and associated infrastructure.

LOCATION: Approximately 2 miles north of Interstate 35W and half mile east of Radisson Road in the City of 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. Appropriation and use of groundwater
6. High water table, outwash and organic soils
7. High infiltration soils
8. Highly erodible soils
9. Excavation or filling or a combination of excavation and filling of sand or other excavation or fill material including the laying, repairing, replacing or enlarging of a culvert or an underground pipe or facility where it crosses a public ditch or waters of the state.
10. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1) Stormwater Management Plan, dated 10/12/2016 prepared by Carlson McCain, received 10/12/2016
2) Construction Plan set (15 Sheets) prepared by Carlson McCain, dated 10/12/2016, received 10/12/2016
3) SWPPP prepared by Carlson McCain, dated 10/12/2016, received 10/12/2016
PREVIOUS ACTION TAKEN: This application was taken to the July 26, 2016 board meeting. It was tabled with the following 9 stipulations:
1. Receipt of escrows.
2. Provide culvert inverts at approved ditch elevation. Inverts should be at 893.8 US and 893.7 DS (1929 datum).
3. Update model to provide consistent information between model and grading plan for total and proposed impervious areas.
4. Outlets of Pond 100 and Pond 200 need to have riprap at downstream inverts to prevent erosion at wetlands.
5. Provide SWPPP that addresses all items under the Erosion and Sediment Control section above.
6. Provide utility plan with storm sewer details.
7. Provide O&M agreement for infiltration basins and specify owner of basins.
8. TEP approval of the Wetland Replacement Plan
9. DNR approval to modifications to the rare natural community

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, 59-8 and 59-9 according to the public drainage map. The approved/as-built elevations through this property are 894.7 ft MSL at the downstream end and 898.4 ft MSL at the upstream end.

The existing elevations and grades through this property are 898.4 ft MSL and 0.11% slope. Alternatives to repair and additional drainage have been considered and reviewed.

The ditch is a 3rd order stream. The ditch serves the primary role of
   a. Storm water conveyance
   b. Collector system

The ditch serves approximately 8.867 acres of agricultural land.
Land use in the area is open space.
There are no flooding concerns upstream or downstream.

The ditch has been inspected.
Existing elevations, slopes and condition of ditch are good.
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 proposed. The proposed crossing involves the installation of a culvert. The proposed culvert is of sufficient hydraulic capacity.

**Erosion and Sediment Control:** Soils affected by the proposal are Lino, Isanti, Rifle and Zimmerman.

- 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.
- 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.
- Stormwater runoff does pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity.
- 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 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 groundwater does exist on site. It is unknown whether this project will need dewatering.

**Floodplain:** There is floodplain on the property according to the District model but not FEMA. The project does propose to place fill within the floodplain. It is unknown if there will be floodplain impacts, no calculations were provided. The proposed impact is within the flood fringe. Compensatory storage has not been calculated. There are no flooding concerns upstream and/or downstream.

**High Water Flooding:** Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Blaine; 1 ft above mottled, 2 ft above 100 yr.
**Groundwater:** Geotechnical information collected in June 2016 indicates long term groundwater elevation is present at 7 feet below the surface.

The site is not within a Municipal Drinking Water Supply Area (DWSMA).

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 have been notified and acknowledge the changes proposed.

**Maintenance:** The Owner of the Stormwater Management features and treatment practices will be the Homeowners Association (HOA). The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infiltration Basins</td>
<td>7</td>
</tr>
<tr>
<td>Stormwater Ponds</td>
<td>2</td>
</tr>
<tr>
<td>Deep Water Basin</td>
<td>1</td>
</tr>
</tbody>
</table>

Inspection and maintenance of stormwater facilities will be the responsibility of the HOA. A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice. It is unknown if the Maintenance Plan is consistent with District Maintenance standards for each STP.

**Easements:**

The proposed project does include a ditch maintenance easement. 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 achieved. The stormwater management system utilizes wet ponds and infiltration basins. 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. No proposed on-site constructed storm water conveyance channels are proposed for this project.

**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 wetlands are pretreated by a sediment basin/water quality pond, and are designed correctly. 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 and drains to 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 completed on July 27, 2015. The wetland boundary has been checked.

The wetland is not a DNR protected water.

The total proposed wetland impact is 0.4706 acres. The impact is through fill in 9 locations as shown below:
The proposed project results in wetland impact greater than 10,000 sf over the de minimis. TEP members have been notified with a complete plan and have submitted comments.

There is also temporary indirect impact to wetland that contains threatened and endangered species (30 days). The indirect impact is through dewatering. The TEP has reviewed the groundwater analysis and the analysis of the resiliency of these plants and is comfortable that no permanent adverse impact will occur as a result of the dewatering. The DNR has informally commented that it believes any disruptions or temporary impacts could be minimized by delaying the dewatering until fall.

A wetland monitoring plan has been received to evaluate the cone of depression created by dewatering and possible temporary impacts to nearby wetlands. Staff is waiting to receive a dewatering and excavation schedule for the area.

The project is not wetland dependent. The project is not exempt. The applicant does need to contact the Army 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.

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 available, alternative sites are not practical/prudent;
   2) The applicant has made a good faith attempt in pursuing alternatives;
3) The applicant has demonstrated that the activity will minimize wetland impacts through:
   a. modifying the size, scope, configuration, and density of the project,
   b. attempted to remove or accommodate site constraints including zoning, infrastructure, access, or natural features, and
   c. otherwise minimize wetland impacts.

Wetland Replacement Plan:
A wetland replacement plan has been submitted. A replacement plan application has been submitted. The wetland replacement plan has been sent to TEP members for comment.

Replacement is proposed to be through purchasing wetland credits through the City of Blaine at a ratio of 2:1. The Blaine Economic Development Authority (EDA) has approved the wetland credit purchase at their November 3, 2016 meeting.

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 endangered or threatened species, rare natural community are *Xyris torta* (Endangered), *Viola lanceolata* (Threatened), *Fimbristylis autumnalis* (Special Concern), *Rubus stipulatus* (Proposed Endangered, Globally Rare), *Rubus vermontanus* (Proposed Threatened), *Rubus dissensus* (Not Listed, Very Rare in Minnesota).

The applicant has contacted the MDNR natural heritage or endangered species program.

The applicant has indicated that contact was made August 1, 2013.

The MDNR has requested a Threatened and Endangered Species report from the applicant. A replacement plan for activities that involve taking species listed as threatened or endangered in parts 6134.0200 to 6134.0400 must be denied unless the DNR commissioner issues a permit.

Performance Escrow: $58,000.00
Wetland Escrow: N/A
There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escrows: $2,000 + (112 ac * $500/ac) = $58,000.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Soils &amp; Erosion Control: Storm sewer table provided is unclear how modeled outlets are reflected on table.</td>
<td>2. Provide final storm sewer information to compare with model.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Wetlands: The City of Blaine has approved the purchase of the wetland credits from the City’s bank.</td>
<td>3. Proof of purchase of wetland credits must be provided to CCWD</td>
</tr>
</tbody>
</table>

**RECOMMENDATION:** Approve with 3 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. Provide final storm sewer information to compare with model.
3. Proof of purchase of wetland credits must be provided to CCWD
Floodplain Figure (88 Datum)