COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: July 8, 2013
AGENDA NUMBER: 14
FILE NUMBER: 13 - 069
ITEM: Twin City Broadband

RECOMMENDATION: Table with 8 Stipulations

APPLICANT: Twin City Broadband

PURPOSE: Twin City Broadband is proposing to construct a new operations building on an existing industrial lot. The proposed project includes a 26,400 square foot building along with bituminous parking areas, concrete curb and gutter, and one infiltration pond.

LOCATION: 17226 Lincoln Street NE in the City of Ham Lake, Anoka, Minnesota
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. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Uses)
5. High infiltration soils.
6. Highly erodible soils.

EXHIBITS:
1. Coon Creek Watershed District Submittal and Site Stormwater Management Plan, Dated 6/25/2013, Received 6/26/2013
2. Large set of Construction Plans – Sheets 1, C2, C3, C4, A1, A2, A3 and L1, Dated 6/24/2013, Received 6/26/2013
3. Small set of Construction Plans – Sheets 1, C2, C3, C4, A1, A2, A3 and L1, Dated 6/24/2013, Received 6/26/2013

HISTORY & CONSIDERATIONS: This project is a commercial industrial proposal on the previously approved and permitted Landborg industrial development. Previous approvals and permits for the Industrial development have expired. This project has not been reviewed by the Board.

FINDINGS:
Ditches and Drainage: There is a public ditch adjacent to the property. The ditch is County Ditch 58-6. The ditch has been inspected. The project site is a tributary to County Ditch 58-6. The trend in land use for this drainage area is toward residential, commercial and industrial. There are no flooding concerns downstream.

Floodplain: There is no floodplain on the property according to FEMA. The District XP-SWMM TP-40 model predicts the 100-year elevation for the subwatershed at 902.3 feet. The District XP-SWMM Atlas 14 model predicts the 100-year elevation for the subwatershed at 902.6 feet. The total floodplain impact is 0 acre-feet, within the flood/fringeway. Compensatory storage is not needed.

The applicant is advised to determine the 100-year elevation for interior ponds using the NOAA Atlas 14 information as shown in the following web link.
http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=mn

Groundwater: Surficial ground water is present between 900.8 feet to 902.22 feet. The site does not include groundwater sensitive areas. Information has been provided to substantiate low floor elevations. Low floor elevations meet the criteria for the City of Ham Lake (1 ft above mottled soil elevation, 1 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 storm water/infiltration pond shown on the drainage plan. Property owners affected by changes in drainage have been notified and have acknowledged the changes proposed.

Soils & Erosion Control: Soils affected by the proposal are Lino, 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 not 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 downstream from the proposed site. The rate of post development runoff from the site does 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 not pretreated by a sediment basin/water quality pond and are not designed correctly. 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.

Wildlife: The proposed project does not include endangered & threatened species, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas, wildlife travel corridors. The site does not include rare natural communities. 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.

Wetlands: Wetlands do exist on-site according to the NWI, Soil Survey and the 1987 Manual. The site was mass graded as a part of the previously approved and permitted Andover Station North.

There are no proposed wetland impacts.

Escrows: Escrows have not been paid.
Performance Escrow: $1500 + ($200 per acre * 5 acres) = $2,500.00
<table>
<thead>
<tr>
<th>ISSUES/CONCERNS</th>
<th>Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Escrows:</strong> Escrows have not been paid.</td>
<td><strong>Performance Escrow:</strong> $1500 + ($200 per acre * 5 acres) = $2,500.00</td>
</tr>
<tr>
<td><strong>Maintenance:</strong> An easement or Operations and Maintenance agreement needs to be executed to assure continued function of the infiltration basin.</td>
<td>Provide an easement around the infiltration basins or an Operations and Maintenance Agreement.</td>
</tr>
<tr>
<td><strong>Soils &amp; Erosion Control:</strong> Infiltration basins are not protected from erosion and sedimentation during construction. After initial grading, the District requires that infiltration basins be completely surrounded by erosion control measures to prevent the basin from clogging.</td>
<td>After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.</td>
</tr>
<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> 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 can not meet this requirement due to site constraints in its entirety, they must meet it to the greatest extent practical and explain why it can not be met. Drainage area 4S, a portion of the driveway, is directed off site and is not infiltrated. The site grading could be adjusted so the driveway entrance is a high point and directs the majority of watershed 4S through the parking lot to the infiltration basin. The applicant is not meeting the rate control requirement. The stormwater runoff is directed to a regional pond to address rate control. The initial design of the regional pond accounted for a smaller area of runoff from the proposed site, Lot 3 Block 1, at a CN much lower than the proposed development. It is not clear if the infiltration pond was designed correctly. The applicant informs</td>
<td>Correct the input parameters in HydroCAD of the proposed infiltration basin to verify that the proposed infiltration basin is designed correctly to meet the volume management requirement of infiltration runoff from the first inch of precipitation. Investigate alternative grading options for subwatershed 4S to minimize untreated stormwater runoff from the site. Correct watershed boundary’s to reflect the drainage from the roof. Provide stormwater runoff calculations that show the site is meeting the rate control requirements. The area in the sediment fore bay should not be considered in the area of the</td>
</tr>
</tbody>
</table>
us that the area of the sediment fore bay was included in the calculations however the storage volume was not. The applicant should expect that the sediment fore bay will eventually get clogged with sediments from runoff and that area will not be able to infiltrate the stormwater runoff.

infiltration basin for infiltration purposes.

The applicant must acknowledge that they will conduct a post construction test on the infiltration basin. The Coon Creek Watershed District shall be notified prior to the test to witness the results.

Water Quality: The slope of the roof indicates runoff which is accounted for in watershed 1S will actually drain to the northeast and not to the proposed infiltration basin.

Clarify tributary areas for modeling purposes.

CONCLUSIONS: This project does not meet District standards. Items listed should be provided prior to additional Board review.

RECOMMENDATION: Table with 8 Stipulations

Stipulations:
1. Receipt of escrows.
2. Provide an easement around the infiltration basins or an Operations and Maintenance Agreement.
3. After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
4. Correct the input parameters in HydroCAD of the proposed infiltration basin to verify that the proposed infiltration basin is designed correctly to meet the volume management requirement of infiltration runoff from the first inch of precipitation. Investigate alternative grading options for subwatershed 4S to minimize untreated stormwater runoff from the site.
5. Correct watershed boundary’s to reflect the drainage from the roof.
6. Provide stormwater runoff calculations that show the site is meeting the rate control requirements.
7. The area in the sediment fore bay should not be considered in the area of the infiltration basin for infiltration purposes.
8. The applicant must acknowledge that they will conduct a post construction test on the infiltration basin. The Coon Creek Watershed District shall be notified prior to the test to witness the results.