COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: October 8, 2012
AGENDA NUMBER: 8
FILE NUMBER: 12 - 087
ITEM: Blaine Senior Living

RECOMMENDATION: Table with 6 Stipulations

APPLICANT: Solution Blue, Inc.

PURPOSE: New site development with building, parking lot and stormwater infrastructure including two infiltration basins.

LOCATION: South of Main Street, West of Cloud Drive NE and north of 124th Court NE in Blaine, MN.
APPLICABILITY:
1. One or more cumulative acres of land disturbance.

EXHIBITS:
1. Preliminary Construction Plans (3 sheets) by Solution Blue Inc. dated 8-17-12 and 9-21-12.

HISTORY & CONSIDERATIONS: The project is a part of the Lakes North/Industrial development which was previously approved and permitted.

FINDINGS:

Ditches and Drainage: There is not a public ditch on the property. The project site is tributary to County Ditch 41-7. The trend in land use for this drainage area is toward open space and commercial. There are no flooding concerns downstream. Alternatives to additional drainage considered and reviewed include storage and retention.

Floodplain: There is no floodplain on the property according to FEMA. The District model predicts the 100-year elevation for the subwatershed at 896.3 feet. The total floodplain impact is zero acre-feet, within the flood/fringeway. Compensatory storage is not needed.

Groundwater: Surficial ground water is present between approximately 891 and 893. 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 Blaine (2 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 storm water/infiltration ponds shown on the drainage plan. The applicant is proposing the use of an Operations and Maintenance agreement to provide access to the bio-retention facilities. Changes in drainage have not been proposed.

Soils & Erosion Control: Soils affected by the proposal are Isanti and Rifle. 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 do 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.

**Water Quality:** Project does include new impervious drainage areas greater than 1 acre. All discharges into wetlands are pretreated by a sediment basin/water quality pond and are 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 or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or 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.

**Wetlands:** Wetlands do not exist on-site according to the 1987 Federal Manual, NWI and Soils Survey.

**Escrows:** Escrows have not been paid.

**Performance Escrow;** $1500 + (10 acre *200/acre) = $3,500.00

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<th>ISSUES/CONCERNS</th>
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<td><strong>Escrows:</strong> Escrows have not been paid.</td>
<td><strong>Performance Escrow;</strong> $1500 + (10 acre *200/acre) = $3,500.00</td>
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<td><strong>Maintenance:</strong> The applicant is proposing the use of an Operations and Maintenance agreement to provide access to the bio-retention facilities.</td>
<td>The applicant must fully execute the O&amp;M agreement prior to issuance of a CCWD permit</td>
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<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.</td>
<td>Provide construction plans along with stormwater runoff calculations that show the site is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation over the</td>
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Parking lot runoff to the east is 12,717 sf that doesn’t receive any volume reduction. 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.

It is unclear how the 0.4cfs infiltration rate was determined. Based on the site soils an infiltration rate of up to 1.63 in/hr can be used unless the applicant has other testing data to justify a greater rate.

A post construction test on the infiltration basin will be required to verify the assumed infiltration rates are obtained. 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.

The north basin HydroCAD model input does not match the grading plan. The grading plan shows a basin bottom of 897 while the model has a bottom on 896.

| CONCLUSIONS: | This project does not meet District standards. Performance Escrows must be submitted prior to issuance of a Permit. |
| RECOMMENDATION: | Table with 6 Stipulations |
| Stipulations: | |
| 1. | Receipt of escrows. |
| 2. | The applicant must fully execute the O&M agreement prior to issuance of a CCWD permit |
| 3. | Provide construction plans along with stormwater runoff calculations that show the site is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation over the entire site. |
| 4. | Provide documentation to justify the infiltration rate proposed. |
| 5. | 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.

6. Update the permit submittal so the grading plan matched the HydroCAD model.