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Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Company
Subject: Item 6B – BCWMC Review of City of Robbinsdale Local Surface Water Management Plan
Date: February 11, 2010
Project: 23/27 0051 2010 072

6B. BCWMC Review of City of Robbinsdale Local Surface Water Management Plan

Recommendation: The Commission forward these comments to the City of Robbinsdale regarding the BCWMC's review of the city's Local Surface Water Management Plan, and the Commission consider approval of the city's LSWMP upon receipt of the city's responses to the issues outlined in this memorandum.

We have reviewed the City of Robbinsdale's updated *Local Surface Water Management Plan (LSWMP)* for conformance with the BCWMC Watershed Management Plan (Plan).

Overall, the LSWMP addresses most of the BCWMC's requirements. An important element of the LSWMP is the identification of the City's responsibility to create a number of ordinances to implement the goals and policies outlined in the LSWMP (Table 8.1).

Metropolitan Council Comments:

In their December 24, 2009 letter to the BCWMC (attached), the Metropolitan Council stated that the city's LSWMP is consistent with the Council's *Water Resources Management Policy Plan*.

BCWMC Staff Comments

Staff has reviewed the city's LSWMP based on a comparison of the LSWMP with the BCWMC Plan requirements. Staff comments follow and are listed in Table 1. This memo concludes with additional staff comments comparing the LSWMP to statutory requirements (which are also in the BCWMC Plan). Comments in **bold** indicate issues where revisions to the LSWMP are required or recommended.

Table 1. Comparison of BCWMC Plan Requirements with the Robbinsdale LSWMP Elements.

BCWMC Local Plan Requirement/Expectation	Robbinsdale LSWMP Review
<p>1. Classify water bodies into one of four BCWMC management categories (Level I – IV) based on water quality goals and recreational uses of the water bodies (Section 4.2.2.1, policy B).</p>	<p>Requirement met.</p> <p>Policy 11.1 of the LSWMP states that the city adopts the management classifications of the BCWMC and lists Grimes Pond, North Rice Pond and South Rice Pond as Level III water bodies. Policy 11.1 also refers to Table 4-3 of the BCWMC WMP (Water Quality Goals for Water Body Classifications).</p>
<p>2. Implement (with BCWMC) the water quality improvement options listed in Table 12-2 (Section 4.2.2.1, policy D).</p>	<p>The BCWMC Plan 10 year CIP (Table 12-2) includes the Grimes Pond wet detention pond (project GR-2). Table 12-3 (potential future projects) includes a possible alum treatment for North and South Rice Ponds (project GR-3).</p> <p>Issue 10 of Table 6.2 of the LSWMP states possible corrective actions to improve the water quality of Grimes Pond, North Rice Pond and South Rice pond include evaluating in-lake alum treatments to reduce nutrient release from bottom sediments and evaluating the feasibility of construction water quality basins at four locations (along west side of BN RR between 34th and 35th Ave, along the east side of the BN RR at 33rd Ave, in the northeast corner of South Halifax Park, and along the east side of BN RR between 27th and 26th Ave). Issue 10 of Table 6.2 needs to identify the water quality basin construction project as BCWMC CIP project GR-2. Project GR-2 also needs to be added to Table 8.4 (Storm Water System Improvement Activities), with implementation proposed for in 2016. Section 8.8 (Financing) of the LSWMP needs to also discuss that the BCWMC is the source of funding for project GR-2 and that the BCWMC funding is provided through an ad valorem tax collected by Hennepin County.</p> <p>Additionally, Section 4.10 of LSWMP cites the BCWMC's 1997 Rice and Grimes Pond plan including in-pond alum treatment.</p>
<p>3. List the impaired waters in BCWMC that affect the city, acknowledge the need for a TMDL study at some point in the future, and identify the city's role in completing and/or implementing TMDL studies. In BCWMC, the impaired waters are Bassett Creek, Medicine Lake, Northwood Lake, Parkers Lake, Sweeney Lake, and Wirth Lake (Section 4.2.2.1, policy G).</p>	<p>Sections 2.7.6 and 6.5 in the LSWMP list the impaired waters in Robbinsdale and in downstream receiving waters in adjacent communities. The table does not include the following lakes/impairments:</p> <ul style="list-style-type: none"> - Wirth Lake (Golden Valley), which is impaired for nutrients/eutrophication and biological indicators. Areas of Robbinsdale may become tributary to Wirth Lake during extreme flooding events.

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BCWMC Local Plan Requirement/Expectation	Robbinsdale LSWMP Review
4. Identify the water bodies where water quality monitoring is undertaken by the city and by others (Section 4.2.2.1, policy I).	Requirement met. Section 2.7.1 in the LSWMP identifies those water bodies where water quality monitoring occurs and provides links to the agencies with monitoring data.
5. Identify any proposed capital improvement projects beyond those listed in Table 12-2 and Table 12-3, and/or the proposed movement of a water quality improvement project from Table 12-3 to Table 12-2 (Section 4.2.2.1, policy J).	Requirement met. Table 8.4 of the LSWMP (Storm Water System Improvement Activities Table) identifies construction of water quality improvement BMPs in conjunction with Oakdale, Chowen, Drew, Ewing, France (Lowry to Oakdale), Halifax (35 th to 36 th Ave) and Indiana (35 th to 36 th Ave) Avenues reconstruction. Also listed in Table 8.4 are installation of CDS unit to address specific water quality issues in a downstream waterbody and remove sediment deltas from ponds identified in the regular pond inspections. It is recommended that the types of water quality BMPs associated with the road reconstruction, the location of the CDS unit installations and the location(s) of the pond sediment removal be specified, if known at this time.
6. Comply with the BCWMC's requirement that all regulated stormwater be treated to Level I standards throughout the watershed (Section 4.2.2.2, policy A).	Requirement met. Policy 3.11 of the LSWMP states that all stormwater activities within the jurisdiction of the BCWMC will be treated to Level 1 standards and cites the BCWMC's "requirements" document as a resource.
7. City shall adopt an ordinance that enforces the Minnesota State Law limiting the use of lawn fertilizers containing phosphorus.	Requirement met. Policy 14.6 and Appendix C of the LSWMP states the City will develop and implement an ordinance to address the proper application of pesticides, herbicides, and fertilizers through internal City staff training and public education. It is recommended that the development of this ordinance be included in the City's Official Control Implementation Actions (Table 8.1).

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<p>8. Comply with the BCWMC's requirement that there be no increase in phosphorus load (non-degradation) for redevelopment projects that result in increased impervious surface (Section 4.2.2.4, policy A).</p>	<p>Policy 3.2 of the LSWMP states that the City will require BMPs necessary to maintain or reduce current phosphorus loads, where feasible. Policy 3.4 states that BMPs must be used so that there is no increase in pollutant load over existing conditions for sites that do not trigger the NPDES construction site permit. Policy 3.9 states that redevelopment projects that propose to increase the existing impervious area by any amount shall provide water quality treatment for all areas of site disturbance in conformance with BCWMC standards.</p> <p>One or more of these policies needs to be revised to state that there will be no increase in phosphorus load (non-degradation) for redevelopment projects that result in increased impervious surface.</p>
<p>9. Include a buffer policy for land adjacent to water resources (including wetlands) (Section 4.2.2.3, policy A; and Section 8.2.2, policy D).</p>	<p>Policy 10.1 (and Appendix C) in the LSWMP states that the City will develop an ordinance to address wetland management, including wetland buffer standards, that are consistent with the requirements of BCWMC. Section 6.3.2 states that Robbinsdale adopts the wetland buffer standards in the Comprehensive General Guidance Manual for MnRAM, version 3.0. Table 6.2 in the LSWMP (Storm Water Management Issues and Possible Correction Actions) lists encouraging buffers between maintained lawns and waterbodies as a possible corrective action to improve water quality in Bassett Creek.</p> <p>It is recommended that the development of this ordinance be included in the City's Official Control Implementation Actions (Table 8.1).</p>
<p>10. Acknowledge control and responsibility for shoreland regulation (Section 4.2.2.3, policy G).</p>	<p>Tables 3.1 and 6.1 of LSWMP states that there are no official City controls or ordinance for shoreland protection and that DNR regulations apply. Goal 12 in Section 7.9 of the LSWMP refers to the conservation and protection of shoreland areas and states that new development and redevelopment proposals must be consistent with DNR Shoreland Protection Regulations.</p> <p>The LSWMP needs to be revised to clarify the status of shoreland regulation in the city (e.g., how will the city enforce DNR shoreland protection regulations without a shoreland ordinance).</p>

BCWMC Local Plan Requirement/Expectation	Robbinsdale LSWMP Review
<p>11. Comply with the BCWMC Plan’s goals and policies regarding water quality (Section 4.2.2.2 Policy A, Section 4.2.2.4, policies A & C), flooding and rate control (contained in Section 5.0 of the Plan) (Section 5.2.2.2, policies C & N) acknowledging BCWMC’s authority to review improvements, developments and redevelopment projects and that cities are to forward such projects to the WMO for review.</p>	<p>The LSWMP acknowledges the BCWMC water quality performance standards and references the <i>Requirements for Improvements and Development Proposals</i> (July 17, 2008, as revised) in Policy 3.11. Policy 3.9 of the LSWMP partially addresses the BCWMC non-degradation requirement for increased impervious area. Section 6.6 of the LSWMP acknowledges the BCWMC’s authority to review projects within the city. Policy 13.8 of the LSWMP states that the City will forward development plans to the watersheds for their review and inform the applicant of the applicable stormwater management requirements. Appendix C compares the design standards of the city and the WMOs. The table also lists when project reviews are required for each entity; however, for BCWMC the list is incomplete. Appendix C needs to be revised to 1) include all of the types of projects that require Commission review and 2) clarify the Commission standards for non-degradation, infiltration/filtration, wet ponds, rate control, and floodplain alteration. Section 3.0 of the BCWMC’s Requirements for Improvements and Development Proposals (July 17, 2008, as revised) lists the types of projects requiring BCWMC review.</p> <p>Several of the flood control policies (Section 7.3) in the LSWMP are consistent with the flooding and rate control requirements of the BCWMC. The LSWMP, however, does not define permissible floodplain land uses. It is recommended that the LSWMP include a policy describing permissible floodplain land uses or stating compliance with the BCWMC requirements and referencing those requirements.</p> <p>Policy 3.2 in the LSWMP emphasizes BMPs to reduce stormwater runoff, where feasible, consistent with the flooding and rate control requirements of the BCWMC. It is recommended that a similar policy be included in the Water Quantity policies section of the LSWMP.</p>
<p>12. Acknowledge city’s responsibility for implementing BCWMC’s development policies (Section 5.2.2.2. Policy B).</p>	<p>Section 6.6 of the LSWMP states that the goal of the plan is to be compatible with the regulatory programs of the BCWMC. Policy 13.8 states that the city will coordinate project reviews with BCWMC. Refer to comment 11 for revisions required for Appendix C.</p>
<p>13. Identify any proposed changes to the BCWMC flood control project system (Section 5.2.2.1, a number of policies).</p>	<p>Requirement met. There are no BCWMC flood control projects in the City.</p>

BCWMC Local Plan Requirement/Expectation	Robbinsdale LSWMP Review
<p>14. Acknowledge city’s responsibility for maintaining its stormwater management system, for cleaning the BCWMC flood control project features, and for stream maintenance and repairs that are primarily aesthetic improvements (Section 5.2.2.1, policy F, Section 7.2.2, policy J, and Section 12.4.1).</p>	<p>Requirement met.</p> <p>Goal 7 of the LSWMP is to maintain the function and effectiveness of storm water management structures through monitoring and maintenance. Section 8.6 and Table 8.3 discuss operations and maintenance of the City’s storm water system, including excavation of accumulated sediments from ponds.</p> <p>There are no BCWMC flood control projects or BCWMC streams in the City.</p>
<p>15. City must require project proposers to apply BMPs to reduce runoff volume to the maximum extent practical. (Section 5.2.2.2. Policy D).</p>	<p>Requirement met.</p> <p>Policies 4.2 and 4.3 state that for new and redevelopment, at least ½-inch of runoff must be infiltrated where site conditions allow. Policy 3.2 of the LSWMP states that the City “...will require BMPs necessary to maintain or reduce...stormwater runoff volume loads...where feasible.” This policy does not specify project proposers as the responsible parties. It is recommended that a policy with similar intent be included in the Water Quantity policy section of the LSWMP.</p>
<p>16. City must require rate control in conformance with the flood control project system design and the BCWMC Watershed Management Plan.</p>	<p>Requirement met.</p> <p>Policy 1.2 limits runoff to existing rates for the 2-year, 10-year, and 100-year 24-hour events. Section 2.3 of the LSWMP emphasizes the use of infiltration as the preferred method of stormwater management.</p>
<p>17. Incorporate the BCWMC’s adopted 100-year floodplain elevations for the BCWMC’s trunk system (Section 5.2.2.2, policy F).</p>	<p>Requirement met.</p> <p>The LSWMP adopts the BCWMC 100-yr floodplain elevations and lists those elevations for Grimes Pond, North Rice Pond and South Rice Pond in Policy 2.7 and references Table 5-3 of the BCWMC WMP. Section 2.7.5 also references Table 5-3.</p>
<p>18. Meet policies regarding allowed land uses, structures, non-conforming uses and filling in established floodplains (Section 5.2.2.2. Policies G, H, and I),</p>	<p>Policy 2.5 states that the City will not allow encroachment into City stormwater facilities that reduces flood storage volumes without compensatory storage being provided.</p> <p>The LSWMP does not address permitted land uses within the floodplain, or reference the policies of the BCWMC regarding this issue. The floodplain-related policies of the BCWMC are not referenced within the LSWMP.</p>

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19. Meet the BCWMC's requirement that the lowest floor of all permanent structures be at least 2 feet above the established 100-year floodplain elevation and incorporate this requirement into city ordinances (Section 5.2.2.2, policy J).	Requirement met. Policy 2.3 meets this requirement.
20. Describe existing and proposed city ordinances, permits, and procedures for addressing erosion and sediment control and preparation of erosion control plans (Section 6.2.2, policy G).	Requirement met. Table 3.1 states that the applicable city erosion control ordinance is City Code 510.15, Subd. 4; however the performance standards of this ordinance are not summarized in the LSWMP. It is recommended that the performance standards are summarized in Section 6.0 of the LSWMP.
21. Comply with the BCWMC Plan's goals and policies regarding erosion and sediment control (contained in Section 6.0 of the Plan) (Section 6.2.2, policy H).	Policy 6.1 and Table 8.1 of the LSWMP state that the City will update its erosion and sediment control ordinance to comply with regulatory requirements.
22. Complete and update inventories of significant erosion and sedimentation areas along the Bassett Creek trunk system and share this information with BCWMC. Only those areas identified in such an inventory are eligible for BCWMC funding (Section 7.2.2, policy F).	Requirement met. Robbinsdale does not contain portions of the Bassett Creek trunk system.
23. Comply with the BCWMC Plan's goals and policies regarding stream restoration (contained in Section 7.0 of the Plan) (Section 7.2.2, policy N).	Requirement met. No BCWMC streams in Robbinsdale.
24. Cities shall have a buffer policy for all water resources in their respective stormwater management plans.	Section 6.3.2 and Appendix B adopt the wetland buffer standards as presented in the <i>Comprehensive General Guidance Manual</i> for MnRAM, version 3.0; however, the LSWMP does not identify specific buffer requirements for other water resources.
25. Acknowledge city or BCWMC responsibility as LGU for the Wetland Conservation Act (Section 8.2.2, policy F).	Requirement met. Sections 3.7 and 6.3 of the LSWMP states that the BCWMC and SCWMC have responsibility as the Local Government Unit (LGU) for the Wetlands Conservation Act in Robbinsdale. Section 6.3 also states that the City intends to update city code to include wetland management requirements, which reflect consistency with SCWMC and BCWMC rules and specifically reference the roles of these Commissions in WCA administration in the City. In Section 6.3.1 and Policy 10.2 Robbinsdale defers WCA administration and enforcement to BCWMC and SCWMC.

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BCWMC Local Plan Requirement/Expectation	Robbinsdale LSWMP Review
26. Comply with the BCWMC Plan's goals and policies regarding wetland management (contained in Section 8.0 of the Plan) (Section 8.2.2, policy G).	Requirement met. The policies included in Section 7.9 of the LSWMP are generally consistent with the BCWMC Plan. Policy 10.1 (and Appendix C) in the LSWMP states that the City will develop an ordinance to address wetland management, including wetland buffer standards, that are consistent with the requirements of BCWMC.
27. Describe status of wellhead protection planning, if applicable (Section 9.2.2, policy C).	Requirement met. Robbinsdale completed a wellhead protection plan in April 2007 (Section 2.5) and Policy 5.1 refers to the policies and recommendations set forth in the wellhead protection plan.
28. Each city is required to prepare a local plan. (Section 12.1.2).	Requirement met.
29. The permitting process used by the local government should be outlined in the SWMP. (Section 12.4)	Requirement met. The process is summarized in Section 3.1 of the LSWMP.
30. Meet the Requirements of Local Watershed Management Plans for identification of regulated areas (Section 12.4.1).	Requirement met. Regulated areas are presented in the inventory section of the LSWMP (Section 2) and associated figures.

Other Statutory Requirements for Local Watershed Management Plans

31. Along with the above specific requirements from the BCWMC Plan, local watershed management plans are required to conform to Minnesota law (Minnesota Statutes 103B.235), Minnesota rules (Minnesota Rules 8410.0160 and 8410.0170), and the BCWMC Plan. The rules (Minnesota Rules 8410.0160) require (in part) that:

“Each local plan must include sections containing a table of contents; executive summary; land and water resource inventory; establishment of goals and policies; relation of goals and policies to local, regional, state, and federal plans, goals, and programs; assessment of problems; corrective actions; financial considerations; implementation priorities; amendment procedures; implementation program; and an appendix. Each community should consider including its local plan as a chapter of its local comprehensive plan.”

These requirements are met by the LSWMP.

32. In accordance with Minnesota rules (Minnesota Rules 8410.0100, Subp. 6), the BCWMC requires that local plans “...assess the need for periodic maintenance of public works, facilities and natural conveyance systems and specify any new programs or revisions to existing programs needed to accomplish its goals and objectives.” The local plans must also assess, at a minimum, the following maintenance issues, also taken from Minnesota rules (Minnesota Rules 8410.0100, Subp. 6):

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- The need and frequency for street sweeping of public and private streets and parking lots.
- The need and frequency for inspecting stormwater outfalls, skimmers, sumps, and ponds.
- The adequacy of maintenance programs for stormwater facilities and water level control structures owned by both the city and private parties.
- The need for other maintenance programs as considered necessary.

These requirements are met by the LSWMP (see item 14 above).

33. Besides the above maintenance issues, local water management plans will be required to assess the following (taken from MN Rules 8410.0100, Subp. 6):

- The need to establish local spill containment cleanup plans.
- The need for any other necessary management programs.

These requirements are met by the LSWMP.

34. The BCWMC's general standards for local water management plans are as follows (taken from Minnesota Statutes 103B.235, Subd. 2):

- Describe existing and proposed physical environment
- Define drainage areas and the volume rates and paths of stormwater
- Identify areas and elevations for stormwater storage adequate to meet the performance standards established in the BCWMC Plan.
- Identify regulated areas.
- Set forth and implementation program, including a description of official controls and, as appropriate, a capital improvement program.

These requirements are met by the LSWMP with the exception of the following issues:

Stormwater flow directions are not specified in Figure 2.7 (which includes storm sewer data and storm sewersheds). It is recommended that flow directions be added to Figure 2.7.