Exhibit A

MINNEHAHA CREEK WATERSHED DISTRICT
QUALITY OF WATER QUALITY OF LIFE

Scope of Work Report

2013 Minnehaha Creek Restoration Project - Reach 14

1. PURPOSE: Identify the plan, scope, technical requirements**,** schedule and preliminary budget for the Minnehaha Creek Reach 14 Restoration Project.

2. REFERENCES: MCWD and others have undertaken a number of projects and programs which will contribute to the Project:
   a) MCWD Hydraulic, Hydrologic, Pollutant Loading Study, 2003
   b) MCWD Minnehaha Creek Stream Assessment, 2004
   c) MCWD Hydrodata Monitoring (flow and grab samples)
   d) MCWD Stream Restoration/Stabilization feasibility studies for Reaches 7 and 8 and Methodist Hospital project
   e) Draft Minnehaha Creek/Lake Hiawatha TMDL study, 2010

3. GENERAL BACKGROUND:
   a) Authorization: The 2007 Comprehensive Water Resources Management Plan provides authority for development and implementation of the project.
   b) Plan Amendment: None
   c) MCWD Fund Budget: $896,000.00

3.1 BACKGROUND

Reach 14 of Minnehaha Creek extends from France Avenue South to 54th Street West, a total of approximately 4,118 feet in length. A map of this stream reach is included at the end of this report. Reach 14 has two distinct subreaches with highly contrasting riparian zones. The upper 900 feet is wooded, the riparian zone and channel assume a high quality, natural appearance. The remainder of the channel is highly managed with riprap banks and turf grass.

Very little wildlife habitat is present in this reach, it is primarily mowed yards. However, the forested section provides some habitat. About 30% of the reach is shaded by tree cover. The reach scored a 5.8 on the Stream Visual Assessment Protocol index evaluated as part of the *Minnehaha Creek Stream Assessment*, mainly due to areas with poor-quality riparian vegetation.

The goals of this project as outlined in the MCWD Comprehensive Water Resources Management Plan are to:

- Stabilize streambanks, preferably with bioengineering, to reduce erosion
- Improve riparian zone with native vegetation
- Improve fish and macroinvertebrate habitat
- Improve in Stream Visual Assessment Protocol index to a score greater than 6.0

3.2 PROJECT DELIVERABLES (CONTRACT SERVICES):
MCWD will contract the services of a CONSULTANT in order to complete a number of task items (detailed below):

a) **Initial Project Meeting**: CONSULTANT will meet with MCWD Staff to discuss the details of the overall streambank restoration project. CONSULTANT will review all relevant technical and other background material related to the project and understand the intent and goals of the MCWD regarding the project.

b) **Evaluation of Existing Conditions**: CONSULTANT will utilize all available information to evaluate the causes of any existing erosion problems and what is needed to address those causes. This evaluation shall include analysis of the quality of riparian zone vegetation and in-stream habitat. This task will include a site visit with MCWD Staff. The results of this exercise will be summarized in a memorandum and utilized in task c.

c) **Feasibility Draft Report**: CONSULTANT will assess the effects of peak flows and erosive forces on streambanks and streambed throughout the project area. Identify location, size, technical criteria and other design elements of Best Management Practices (BMP's) appropriate to restore and stabilize the streambank. BMP's will be selected based on the ability to achieve District Goals, enhance stream corridor function, and aesthetically and technically augment existing streambanks. BMP's selected must meet the technical standards of all relevant review agencies.

The entire reach should be assessed; however, the wooded upstream portion will likely only require a cursory assessment. The primary focus of the study will be on the more highly modified downstream section of the reach. The results of the Feasibility Draft Report will be summarized and submitted for MCWD Staff review.

d) **Draft Feasibility Meeting/Presentation**: MCWD Staff will present the results of the Feasibility Draft Report to the MCWD Board of Managers. CONSULTANT will coordinate development of the presentation and discussion with MCWD Staff prior to the meeting.

e) **Feasibility Final Report**: CONSULTANT will utilize input on the draft report to complete a final report. In addition to the elements described in the draft report, the final report will contain the following:

- Map of proposed project area or identified locations of restoration. Hard copy and portable document format (pdf) that includes the following:
    a. Aerial photo
    b. Existing water resource features
    c. Parcel lines using existing parcel data
    d. Size, type and location of restored features throughout the proposed project area

- Electronic ArcGIS files (including metadata): i.e. shape files, line and point files, layer files (all of which correspond to hard copy version, etc.)

- Preliminary/concept project plans and specifications suitable to be used to finalize design and specifications for construction.

- A technical assessment of benefits regarding post-restoration reduction in erosion, vegetative enhancement of the riparian zone, and in-stream habitat improvements. Secondary benefits such as aesthetic benefits and educational opportunities should also be noted.

- A detailed cost-estimate that itemizes the projected costs of implementation for each individual BMP within the project area. Cost-estimates must also include estimated long-term management costs projected annually.

- An operations and maintenance plan which provides for short-term maintenance of vegetation and other necessary project components included in the construction contract as well as long-term management of the project area by MCWD.

- A detailed narrative which provides the reader with background on the water quality issues in Minnehaha Creek, justification of how the siting and specifications of the proposed project were selected and integrated within the watershed, and how the project assists MCWD in achieving its goals for Minnehaha Creek.

e) **Final Feasibility Meeting/Presentation**: CONSULTANT will provide one presentation to the MCWD Board of Managers summarizing the results of the Final Engineering and Design Report. CONSULTANT will coordinate development of the presentation and discussion with MCWD Staff prior to the meeting.

f) **Technical Data Acquisition**: CONSULTANT will acquire additional technical data necessary to assess the feasibility of proposed alternatives.

3.3 TECHNICAL CRITERIA

MCWD has not designated specific models or other technical criteria for the project.

3.4 SUBMITTAL FORMAT

All work submitted under this Scope of Work shall be submitted in the following formats:

a) The draft report shall be prepared using Microsoft Word processing software. Hard-copy submittals shall be on 8.5- by 11.0-inch white paper with accompanying electronic copies on compact disk. The report shall use the "Times New Roman" 12 font. The left-hand margin shall be 1 inch to allow for binding of the report.

b) The final report shall be prepared in a Microsoft Word-compatible publishing format identified by the CONSULTANT and approved by MCWD Staff.

c) All drafts and final reports will be free of any corporate logos or commercial identification. MCWD will allow for identification of the plan author at the beginning of the report and credited references where necessary and appropriate.

d) The CONSULTANT will submit one hardcopy and two electronic copies of the draft report for review. Electronic copies must be submitted on compact disk.

e) The CONSULTANT will submit one hardcopy and two electronic copies of the Final report. Electronic copies must be submitted on compact disk and consist of a contiguous file of the plan and associated appendices.

f) The CONSULTANT will submit electronic ArcGIS files (including metadata): i.e. shape files, metadata in reference to shape files, line and point files, layer files (which correspond to hard copy version, etc.)

4.0 SCHEDULE & BUDGET: CONSULTANT will develop a schedule and budget for task item identified in Section 3.2. Payments from MCWD will be issued per the project schedule and budget identified by the CONSULTANT in hourly payments upon the certification of completion of identified tasks. At the time of the writing of this report, initial construction of the proposed improvements is anticipated to begin in 2013 with design work and planning on-going throughout 2011-2012. Additional design and construction management services will be acquired through a separate contract following approval and acceptance of the Feasibility Final Report by the MCWD Board of Managers.

5.0 MCWD STAFF ROLES

- **Planning**: Facilitate execution of cooperative/funding agreements, budget, coordinate contracts and agreements with MCWD Legal Counsel, review and approve project design, certify payments per the Funding Agreement, and provide GIS support

- **Project Manager**: Review construction documents, bid package, project schedule; conduct and coordinate bid-letting, project oversight; review and approve construction invoices and contractor management
- **Water Quality Specialist**: Determine if additional pre-construction and post-construction monitoring will be needed to assess project success
- **Permitting**: Review preliminary and final plans for compliance with MCWD permit requirements, identify permitting agencies who require additional approvals and coordinate pre-application meetings for the project team
- **Education & Communications**: Create project education-communications strategy, design and contract creation of educational materials for the project, coordinate education strategy with property owners, identify milestones for and issue press releases as appropriate

6.0 PROJECT FUND BUDGET (MCWD FUND NO. 4xxx):

Feasibility	**(FY 2011)**	**$25,000.00**
Total	**(FY 2013)**	**$896,000.00**

MINNEHAHA CREEK WATERSHED DISTRICT

Stream Assessment - Lower Minnehaha Creek

Wenck Associates, Inc. Environmental Engineers
1800 Pioneer Creek Center P.O. Box 249 Maple Plain, MN 55359-0249

JAN 2004

Sheet 9