



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday, January 15, 2020

Agenda Item

Item 6. F. - LMRWD Projects

Prepared By

Linda Loomis, Administrator

Summary

i. East Chaska Creek Stream Bank Stabilization

Staff is preparing a contract for this project.

ii. Seminary Fen Restoration Area C-2

The cooperative agreement for this project was presented at the December Board meeting and was tabled until the January meeting. The city has made some revisions and LMRWD Legal Counsel contributed a few edits. At the December meeting Manager Raby requested that language be added regarding obligations of each party if a situation arose similar to the previous Seminary Fen Ravine project, however, the agreement presented limits the LMRWD obligation to \$20,000 so I did not feel such language was necessary to this agreement. Such language may be appropriate if a construction project results from the Study. The Cooperative Agreement with exhibits is attached.

Attachments

COOPERATIVE AGREEMENT BETWEEN THE CITY OF CHASKA AND THE LOWER MINNESOTA RIVER WATERSHED DISTRICT

Recommended Action

Motion to authorize execution of Cooperative Agreement

COOPERATIVE AGREEMENT
BETWEEN THE CITY OF CHASKA AND
THE LOWER MINNESOTA RIVER WATERSHED DISTRICT

SEMINARY FEN C-2 RAVINE STUDY

This cooperative agreement is made by and between the City of Chaska, a Minnesota municipal corporation (the City), and the Lower Minnesota River Watershed District, a watershed district pursuant to Minnesota Statutes chapters 103B and 103D (LMRWD), to implement the Seminary Fen C-2 Ravine Study (the Study) in Chaska, Carver County, Minnesota. The purpose of the Study is to determine the causes of erosion, estimate the sediment contributions from the ravine, develop stabilization options, and provide a cost range for the alternatives and a cost estimate for the chosen option.

Recitals

WHEREAS, LMRWD has an approved water resources management plan pursuant to Minnesota Statutes section 103B.231 (the Plan) that has a goals to protect, improve and restore surface water quality through the use of High Value Resources Areas and to protect and manage unique natural resources and wetlands;

WHEREAS, the Seminary Fen Wetland Complex is a 600 acre complex in Carver County that is one of only 500 calcareous fens in the world and is one of the highest quality calcareous fens in southern Minnesota;

WHEREAS, Seminary Fen is both a unique natural resource and a wetland whose unique hydrology, soils plants and habitats are highly sensitive to water quality and sediment stress;

WHEREAS, the bluffs located north of Seminary Fen are highly prone to erosion due to sandy soils, groundwater discharges, naturally steep slopes and surface water flows. As a result several ravines have eroded and caused sediment plumes to enter the fringe of the wetland;

WHEREAS, the LMRWD and the City completed a project that stabilized the longest ravine, labeled C1, which was estimated to contribute 1,680 tons per year of sediment to the Seminary Fen complex;

WHEREAS, the LMRWD and the City would like to stabilize the next largest ravine, labeled C-2

WHEREAS, the capital improvement program in the Plan includes the Seminary Fen Ravine Site C-2 and C-3 studies, which will conduct a study to estimate the sediment contribution to Seminary Fen and provide approaches and cost estimates for correcting the erosion problems;

WHEREAS, in September 2019 Stantec Consulting Services, Inc. provided the City with a scope of services (the Scope) for the Study, attached hereto and incorporated herein as Exhibit A, which details the scope of services which includes: data collection and investigation tasks, survey and analysis,

hydrologic modeling, concept design for grade control and erosion protection, and meeting, reporting and project management tasks; and

WHEREAS, the LMRWD and the City are authorized by Minnesota Statutes section 471.59 to enter into this cooperative agreement for the Study

Agreement

NOW, THEREFORE, THE LMRWD AND THE CITY enter into this agreement to document their understanding as to the scope of the Study, reaffirm both parties commitment as to the general responsibilities for and tasks to be undertaken by the parties and facilitate communication and cooperation to successfully complete the Study.

1. **Study.** The Study elements are described in detail in and supported by the Scope (Exhibit A), which serves as the basis for the partner's agreement.
2. **Costs.** The Scope estimates the total cost for the study will be \$50,890, which includes reimbursable expenses, such as mileage, copying charges, etc.
 - 2.1 The City will be responsible for oversight and management of the Study.
 - 2.2 The LMRWD will be responsible for \$20,000 of the Study costs (to be paid to the City) and technical assistance and information to the city's consultant as requested.
 - 2.3 Upon completion and final acceptance of the Study and receipt of the accompanying documents, the LMRWD will reimburse the City within thirty (30) days.
 - 2.4 Each party will be bear the internal, administrative and incidental costs of fulfilling its responsibilities and obligations under this agreement, as well as the costs incurred in providing and conducting public education, outreach and meetings for the Study.
3. **The City's Specific Rights and Duties**
 - 3.1 The City has contracted with Stantec Consulting Services (Stantec), Inc. provide the services detailed in Exhibit A. Notwithstanding the foregoing, the City makes no warranty to the LMRWD regarding Stantec's or a third party's performance.
 - 3.2 The City will contract for Stantec's services and oversee the Study. The City may adjust the scope of service in consultation with the LMRWD, as long as the adjustments do not exceed the scope of rights granted under this agreement or create obligations not anticipated hereunder. If the City, in its judgment, should decide that the Study is infeasible prior to the obligations of any funds for the Study, the City may at its option declare this agreement rescinded and annulled. If the City so declares, all obligations herein, performed or not, will be voided.

4. **LMRWD Specific Rights and Duties.** On receipt of documentation of costs incurred and paid, LMRWD will reimburse the City as described in Section 2 of this agreement.

5. **General Terms**

5.1 INDEPENDENT RELATIONSHIP; LIABILITY. This agreement does not create a joint powers board or organization within the meaning of Minnesota Statutes section 471.59, and no party agrees to be responsible for the acts or omission of another pursuant to subdivision 1(a) of the statute. Only contractual remedies are available for the failure of a party to fulfill the terms of this agreement. The City and LMRWD enter this agreement solely for the purposes of improving the ecological health and condition of Seminary Fen. Accordingly, with respect to any and all activity undertaken pursuant to this agreement, the City and LMRWD (each party as an Indemnitor Party) agree to hold each other harmless, and defend and indemnify each other, their officers, employees and agents (individually, an Indemnified Party) from and against any and all liability, loss, claim, damage or expense (including reasonable attorney fees, costs and disbursements) that an Indemnified Party may incur as a result of the Study due to any negligent or willful act or omission by the Indemnitor Party or the Indemnitor Party's breach of any specific contractual duty. Notwithstanding the foregoing or any other provision of this agreement, the City's and LMRWD obligations under this paragraph will survive the termination of the agreement.

This agreement creates no right in and waives no immunity, defense or liability limitation with respect to any third party. As between the parties, only contract remedies are available for a breach of this agreement.

5.2 PUBLICITY AND ENDORSEMENT. Any publicity regarding the Study must identify the City and LMRWD as the sponsoring entities. For purposes of this provision, publicity includes notices, information pamphlets, press releases, research, reports, signs and similar public notices prepared by or for the City or LMRWD individually or jointly with others. Each party at its own cost, may develop, produce and after approval of the other party, distribute educational, outreach and publicity materials related to the Study.

5.3 DATA MANAGEMENT. All designs, written materials, technical data, research or any other work-in-progress will be shared between the parties to this agreement on request, except as prohibited by law. As soon as is practicable, the party preparing plans, specifications, contractual documents, materials for public communication or education will provide them to the other party for recordkeeping and other necessary purposes.

5.4 DATA PRACTICES. All data created, collected, received, maintained or disseminated for any purpose in the course of this agreement is governed by the Data Practices Act, Minnesota Statutes chapter 13, any other applicable state statute, or any state rules adopted to implement the act, as well as federal regulations on data privacy.

- 5.5 ENTIRE AGREEMENT. This agreement contains the complete and entire agreement between the parties relating to the subject matter hereof and supersedes all prior negotiations, agreements, representations and understandings, if any, between the parties respecting such matters. The recitals stated at the outset are incorporated into and a part of the agreement.
- 5.6 AMENDMENT. This agreement, as it may be amended in writing, constitutes the entire agreement between the City and LMRWD. Any amendment to this agreement will not be effective until it has been executed and approved by the same parties executing and approving the original agreement or their successors in office.
- 5.7 WAIVERS. The Waiver by the City and LMRWD of any breach or failure to comply with any provision of this agreement by the other party will not be construed as nor will it constitute a continuing waiver of such provision or a waiver of any other breach of or failure to comply with any other provision of this agreement.
- 5.8 NOTICES, COORDINATION. The City and LMRWD designate the following authorized representatives, each to serve as liaison to the other party for purposes of communication regarding the Study as provided in this agreement. Any written communication required under this agreement will be addressed to the other party as follows, except that any party may change its address for notice by so notifying the other party in writing:

City of Chaska

Matt Clark
City Engineer
One City Hall Plaza
Chaska, MN 55318
Phone: (952)448-9200
Email: MClark@chaskamn.com

Lower Minnesota River Watershed District

Linda Loomis
Administrator
112 East 5th Street, Suite 102
Chaska, MN 55318

- 5.9 TERM; TERMINATION. This agreement is effective on execution by both parties and will terminate once the final report is received or on the written agreement of the City and LMRWD.

IN WITNESS WHEREOF, the parties have caused the agreement to be duly executed intending to be bounded thereby.

(Signature page follows)

CITY OF CHASKA

By: _____

Its _____

Date: _____

By: _____

Its _____

Date: _____

Approved as to form & execution:

City Attorney

**LOWER MINNESOTA RIVER
WATERSHED DISTRICT**

By: _____

Its _____

Date: _____

Approved as to form & execution:

District Attorney

EXHIBIT A

Seminary Fen C-2 Ravine Study Scope of Services



Stantec Consulting Services Inc.
733 Marquette Avenue Suite 1000, Minneapolis MN 55402-2309

September 11, 2019

City of Chaska
Attn. Mr. Matt Clark, PE – City Engineer
One City Hall Plaza
Chaska, MN 55318

Reference: *Seminary Fen C2 Ravine Study*

Dear Matt,

As requested, this letter provides a scope of services for the above referenced project.

Project Understanding

The City of Chaska is home of the Seminary Fen Wetland Complex. Seminary Fen, a 600-acre complex in Carver County, supports one of only 500 calcareous fens in the world and is one of the highest quality calcareous fens in southern Minnesota. Given this fact, and the fact that it supports dozens of rare, threatened, and special concern plant and animal species, it has been characterized as one of the most significant natural areas in the Twin Cities Metropolitan Area and is part of the Minnesota Department of Natural Resources Scientific and Natural Areas program. The Fen feeds Assumption Creek, one of the Metro Area's last known trout streams that supports naturally reproducing native brook trout. Assumption Creek then discharges to the nearby Minnesota River. The Fen's unique hydrology, soils, plants, and habitats are highly sensitive to water quality and sedimentation stress.

The bluffs located north of the Fen are highly prone to erosion due to sandy soils, groundwater discharges, naturally steep slopes, and surface water flows. As a result, several ravines have eroded and caused sediment plumes to enter the fringe of the wetland. The ravines are labeled C-1, C-2, and C-3 on the attached Figure 1. In 2016, Chaska and other funding partners completed a project that stabilized Ravine C-1, which is the longest of the ravines and was estimated to contribute 1,680 tons per year of sediment to the Seminary Fen complex. The sediment plume from this ravine measures 6 acres in size and had maximum sediment depth of four feet.

The City of Chaska and Carver County WMO (CCWMO) would like to stabilize the next largest ravine, C-2. As with Ravine C-1, this ravine has sandy slopes with groundwater discharging, making it prone to erosion which has caused significant slope failure. The direct drainage area is much smaller than that of Ravine C-1 but, due to the slope instability, the small drainage area still has resulted in severe erosion and sediment contributions to the Seminary Fen Wetland Complex. This ravine has a park that borders the west and north side. Flows from the park and residential area are captured in a manhole structure with a beehive inlet and discharge into the ravine via a pipe. Several houses along the bluff have roof drains that discharge to backyards that eventually reach the bluff area and have contributed to the erosion of the ravine.

The purpose of the Seminary Fen C-2 ravine study is to determine the causes of erosion, estimate the sediment contributions from the ravine, develop stabilization options, and provide a cost range for the alternatives and a cost estimate for the chosen option. This effort will help with future grant requests.

A detailed scope of services to meet the project understanding is provided below.

Scope of Services

Task 1: Collect Existing Information

We will collect existing information regarding the sewer location, storm pipe outfalls, and topography in an electronic format to be used as part of the analysis.

Task 2: Sediment Plume Investigation

Hand borings and elevations will be taken at the sediment plume location to estimate the size and volume of the plume within the wetland.

Task 3: Ravine Analysis

An inventory and analysis of the ravine will be completed as part of this task. This inventory will include site reconnaissance, photographs, and documentation of the causes of erosion. It will be used to assist in developing options for stabilization.

Task 4: Survey of Representative Cross-Sections and Ravine Profile

A detailed survey will not be completed as part of this phase of the project. Representative cross-sections of the main ravine and major side ravines will be taken along with a profile of the main ravine bottom. This information will be used to complete the preliminary ravine analysis and cost estimate.

Task 5: Preliminary Analysis

We will complete hydrologic modeling for 2-, 10-, and 100-year storm events to determine the appropriate grade control, channel improvement, and slope stabilization methods.

We understand that there may be limited options for additional rate control in the watershed and will focus the improvements in the ravine, to improve its ability to handle the current flows. Hydrologic modeling outcomes will help determine what options can be considered for stabilizing the ravine bottom. Stabilization approaches will depend on flow rates and velocities and slope characteristics.

We will create a concept design for grade control and streambank erosion protection, along with a discussion of proposed improvements.

Task 6: Meeting with City and CCWMO Staff

We will meet with City and CCWMO staff to review the results of the analysis, discuss alternatives for consideration, and begin preparations for the report. We estimate 2 meetings will be necessary for this task.

Task 7: Report

A report will be developed that includes:

- Summary of existing conditions
- Analysis of the ravine erosion site
- Site location map and description of the ravine erosion site
- Plan view of the ravine site with potential improvements, along with discussion of the improvements
- Sketch details for ravine stabilization and grade-control options
- Determination if proposed improvements require permits and indicate regulatory authority

- Cost estimate
- Potential funding sources

Task 8: Project Management

Project management will involve work coordination for this project.

Schedule

Tasks 1 and 2 can begin within three weeks of authorization but the next tasks are more efficiently done with leaf-off conditions so could not be finished until November 1, 2019.

Compensation

Stantec will complete the tasks outlined in the Scope of Services for **an estimated fee of \$50,890**. This cost includes reimbursable expenses (mileage, copying charges, etc.).

Potential Additional Services

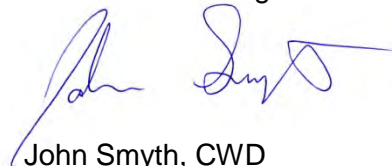
If authorized by the Client, Stantec may provide the following Additional Services to the client at an agreed to cost. These services may include but are not limited to the following.

- Field work, collecting, and/or providing additional information beyond that identified in the Scope of Services
- Meetings, response to comments, or coordination beyond that identified in the Scope of Services.
- Final Construction Plans
- Grant Applications
- Construction Observation

If you wish to proceed, please return a signed copy of this document to activate this Work Order. Thanks for a chance to continue to restore resources in Chaska. If you have any questions, please contact me at 612-712-2132 or john.smyth@stantec.com.

Sincerely,

Stantec Consulting Services Inc.

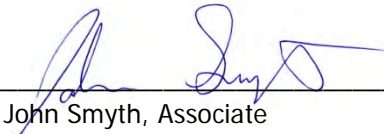


John Smyth, CWD
Water Resource Specialist
Associate

Attachment: Project Area Map

STANTEC

ACCEPTED BY CLIENT:

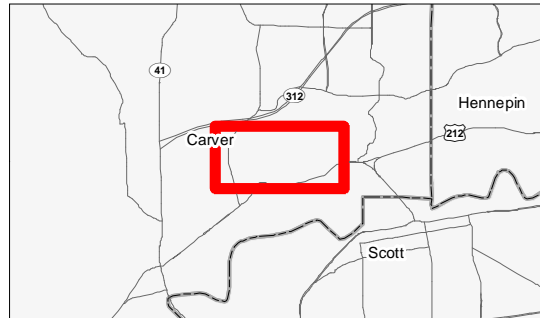
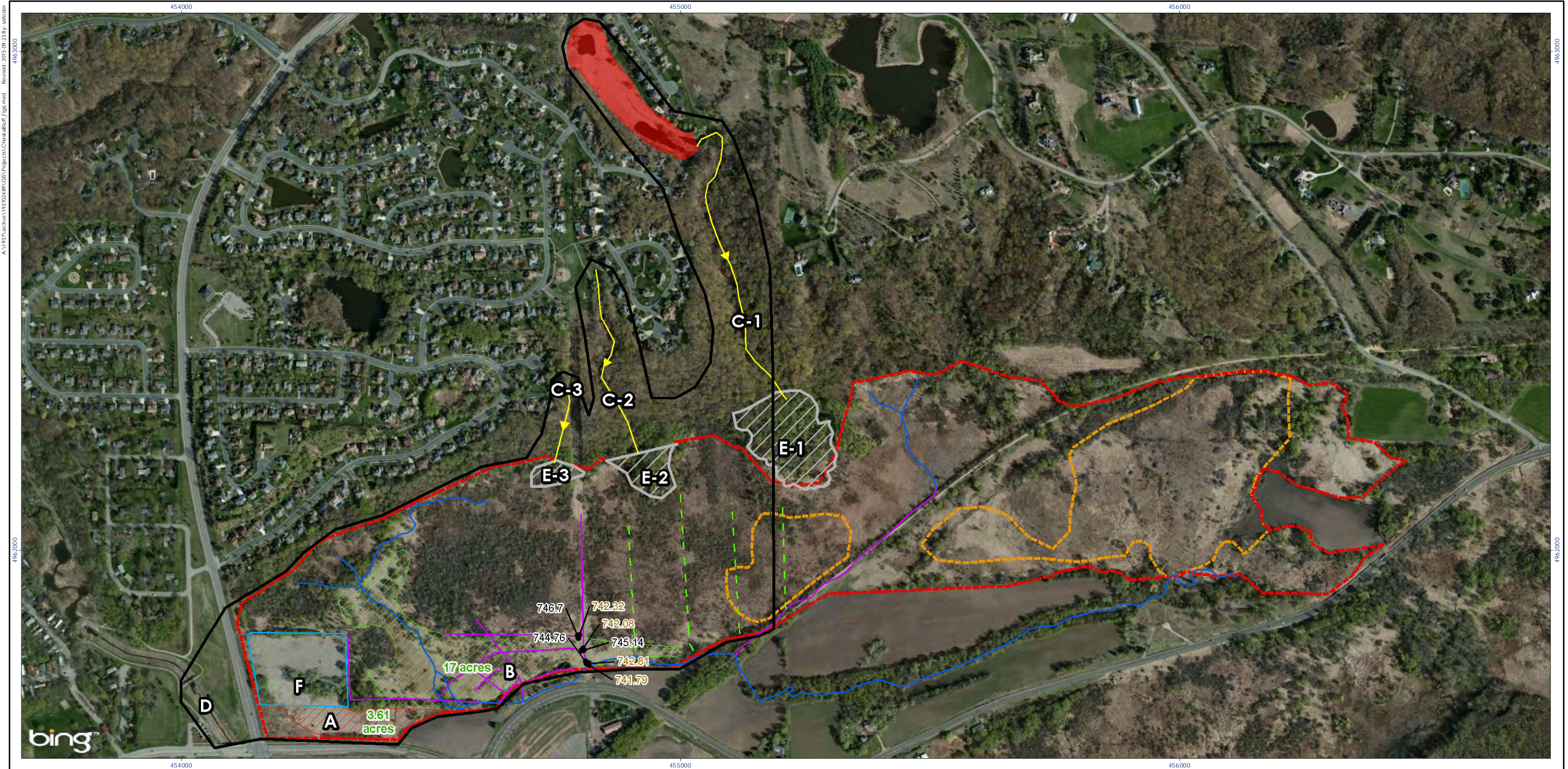
By  _____
John Smyth, Associate

Date 9/11/19 _____

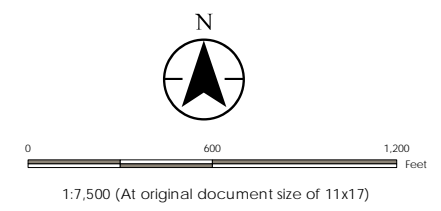
Print Name _____

Sign Name _____

Date _____



- Legend**
- Project Site
 - Seminary Fen Wetland Complex (B)
 - Calcareous Fen (Southeastern)
 - Sedimentation Plumes (E-1, E-2, E-3)
 - Barr Restoration and Management Data
 - Natural Drainageway
 - Potential Tile (No tile observed)
 - Surface Ditch
 - 745.14 Ditch Top Elevations
 - 742.32 Ditch Bottom Elevations
 - 2011 Wetland Restored (F)
 - Potential Purchase and Wetland Restoration Area (A)
 - Proposed Wetland Restoration Area (B)
 - Hazeltine Bluff Wetland
 - Ravines (C-1, C-2, C-3)



Notes
 1. Coordinate System: NAD 1983 UTM Zone 15N
 2. Data Sources Include: Stantec, USGS, and ESRI
 3. Orthophotography: Microsoft Corporation, with permission

Figure No. **1**
 Title **Seminary Fen Investigation Report For The Area Within Chaska**
 Client/Project **City of Chaska**
 Project Location **1116, R23, S34 C. of Chaska Carver Co., MN**
 193702489
 Prepared by CS on 2015-03-05
 Technical Review by JS on 2015-09-18



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