

FEASIBILITY STUDY

CITY OF MADISON LAKE 2015 UTILITY & STREET IMPROVEMENTS MADISON LAKE, MINNESOTA

January 5, 2015
Project No. 11-13324



I+S GROUP

info@is-grp.com + www.is-grp.com

Signature Sheet

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.



Christopher J. Larson, PE
Project Engineer
Reg. No. 48735

I+S Group, Inc.
115 East Hickory Street, Suite 300
Mankato, Minnesota 56001-3785

**Feasibility Study for City of Madison Lake 2015 Utility and Street Improvements
Madison Lake, Minnesota**

Engineer's Project Number: 11-13324

Dated this 5th day of January, 2015

Table of Contents	Page #
Introduction.....	1
Existing Conditions.....	2
Proposed Improvements	3
Project Design Phase.....	4
Project Financing & Summary of Estimated Project Costs.....	5
Preliminary Assessment Role	5
Minnesota Statute 429 Process and Proposed Schedule	6
Conclusion and Recommendations	6
Appendix A – Location Map.....	A
Appendix B – Existing Conditions.....	B
Appendix C – Proposed Improvements	C
Appendix D – Preliminary Opinion of Construction Cost	D
Appendix E – Preliminary Assessment Roll	E
Appendix F – Minnesota Statute 429 Assessment Process	F
Appendix G – Improvement Hearing Presentation.....	G

Introduction

I+S Group, Inc. (ISG) has prepared the following Feasibility Study for the proposed 2015 Utility and Street Improvements project for the City of Madison Lake, Minnesota, as requested by the City Council. This report will provide an initial analysis of the feasibility, cost-effectiveness, and necessity of the various proposed improvements.

In addition to the recommended improvements, preliminary estimated project costs, and proposed assessment roll, this report addresses the need for improvements resulting from the deteriorating infrastructure.

A portion of the costs associated with these improvements may be assessed to benefiting property owners adjacent to the improvements. Public assessments applied to the properties described within this report are subject to the requirements and schedule of events as mandated by Minnesota Statute, Chapter 429 (MS 429). This feasibility study is required by the MS 429 Statute and is part of the initial phase in the special assessment process.

Project Overview

The proposed project area is located within the City of Madison Lake, Minnesota city limits and generally includes 4thth Street, 5th Street, Chestnut Avenue, Spruce Avenue, and adjacent alleys within Block 17 & 18 of the Madison Lake Townsite plat, as indicated on the attached Location Map (see Appendix A). The proposed utility improvements include replacement and upgrade of the existing storm sewer and sanitary sewer infrastructures, replacement and upgrade of the existing watermains and the addition of three needed watermain loops.

Report Scope

As part of this feasibility study, ISG addresses the necessity for sanitary sewer, storm sewer, and watermain improvements, including the associated street improvements. Additional objectives detailed within this report include:

- Evaluate the need for the project.
- Determine necessary infrastructure improvements.
- Prepare an opinion of probable costs associated with the proposed improvements.
- Develop a proposed project schedule.
- Determine the overall feasibility of the proposed improvements.
- Determine the preliminary assessment amounts.

Existing Conditions

Existing Soils Data

Two shallow borings were completed on 4th Street and 5th Street along with some borings that were completed for another City project. The extent of the soil composition throughout the project area is not verified.

Existing Sanitary Sewer

The existing sanitary sewer mains within the project area are 8-inch diameter truss piping. All sewer within the project area was constructed in the mid-1970s. Much of the sanitary within the project area collects wastewater from the directly adjacent properties. The Chestnut Avenue sewer main also conveys wastewater flows from a larger upstream sewershed including all of the east side of Duck Lake and north of Minnesota Trunk Highway 60 (MN 60) within and east of the project area.

These sewers are in a deteriorated condition that includes sags, cracked pipe, offset joints, and other deficiencies. Over the last 15 years, the City has pursued an ongoing inflow and infiltration (I/I)

reduction program. Included in this program is the replacement or rehabilitation of deteriorated piping and manholes that contribute to I/I.

The 8-inch sewer appears to have sufficient capacity to serve the intended area with the exception of the Chestnut Avenue sanitary sewer. As previously mentioned, this sewer collects nearly all flows east of Main Street and north of TH 60. Additionally, the upstream service area of this pipe includes future development east of 1st Street and as far as north as the Pines subdivisions and the recently-annexed portions of upper Doran Drive.

Existing Watermain

While some improvements have been made over the last 15 years, the existing water system in the City of Madison Lake lacks necessary looping in key areas and is undersized in many locations. The watermain within upper 4th and 5th Streets is only four inches in diameter. The northern ends of the 4th and 5th Street mains are looped by a two-inch diameter main that runs along the vacated Vine Street right-of-way and under an existing garage. The watermain in Chestnut Avenue is 8-inch diameter and the watermain in lower 5th Street is believed to be 6-inch diameter. Both are believed to have been constructed around the same time as the upper 4th and 5th Street mains.

The Lake Street Area, which is essentially the entire area east of Third Street and south of TH 60, is served by a single 6-inch main under TH 60. Recent breaks in the 6-inch main have cut-off water to this area of town.

The Point Pleasant Road and Point Pleasant campground area are served by a single dead-end main that extends from Oak Avenue. Melwood Court, Sarah Circle, and southern Park Road properties are also served by a long dead-end main that extends from the southwest watermain loop in Madison Street.

Existing Storm Sewer

The upper project area lacks adequate drainage. Most of the drainage in the northern project area consists of old field tiles that were rerouted as the area developed. Spruce Avenue is a rural section with ditch drainage that drains through a culvert into backyards along 4th and 5th Streets. A significant amount of flow from north of the Sakatah Trail is also routed into this ditch and through the culvert.

A tile failure along 5th Street caused the yards of 404 4th Street and 401 5th Street to flood to the point that the sump pump of 404 4th Street was only cycling water and could not keep up. The basement flooded and much of the water entered the floor drain and thus the sanitary sewer system, resulting in a significant I/I spike. The tile was repaired, but it was evident that this tile was not in good condition. It also appears to be undersized.

Upper 5th Street drainage ultimately discharges to the TH 60 storm sewer infrastructure. While there have been minimal reported issues with drainage along TH 60, the analysis during the 2013/2014 CSAH 26 (Main Street) reconstruction project indicated that the TH 60 drainage infrastructure is undersized by today's MnDOT standards.

During the large rainfall events of June 2014, a storm sewer/tile line failed under lower 5th Street, south of TH 60. The City worked with the Federal Emergency Management Agency to temporarily repair the damage. Televising was included in the scope of the repairs. However, the results did not conclusively verify how far upstream the tile originates. The upper 5th Street storm is understood to drain to the TH 60 storm system. However, during the Main Street reconstruction project, a deep tile line was discovered and it appeared that the line crossed TH 60 at a deeper elevation than the TH 60 system. Since the grade of lower 5th Street drops dramatically south of TH 60, a similar situation may be present.

All of 4th Street drains directly to Madison Lake. This storm sewer crosses TH 60 and has experienced failures within the lower 4th Street segment.

The lack of proper drainage infrastructure limits the City's ability to enforce its illicit discharge ordinance since an adequate outlet for sump pump lines is not available.

Existing Streets, Alleys, Sidewalks, and Curb & Gutter

The existing streets located within the proposed project area are 22- to 23-foot wide bituminous surfacing. No curb & gutter exists within the project area, except for the western portion of Chestnut Avenue within the commercial area. The curb line along this portion of Chestnut is extremely flat and does not properly drain.

The existing alleys within Blocks 17 & 18 are gravel surfaced and do not have adequate drainage, particularly within Block 18.

Currently, the only existing sidewalk within the project area is along the north side of Chestnut Avenue in the commercial area. This sidewalk is in disrepair. The Sakatah Trail generally runs east-west and connects the northern part of the business district with the County Road 26 (1st Street) to the east. No designated pedestrian route connects the eastern residential neighborhoods with the downtown business area.

Proposed Improvements

Watermain Improvements

It is proposed to replace all watermain within the project area with 8-inch PVC. The loop connecting the north ends of 4th Street and 5th Street will be moved out of private property and to within the Spruce Avenue right-of-way.

To aid in providing temporary water service during construction and to permanently provide redundancy to the Lake Street Area, a watermain loop is proposed to be constructed along 1st Street from Chestnut Avenue to the south side of TH 60.

To improve water quality and provide redundancy to the southern tip of the City, two watermain loops are proposed along Pont Avenue. One will connect the northern end of Sarah Circle to Park Road and the other will connect Park Road to Point Pleasant Road.

Individual services will be replaced up to and including the curb stop, located approximately at the right-of-way line.

Sanitary Sewer Improvements

It is proposed to replace all sanitary sewer laterals within nearly the entire project area with 8-inch PVC. The sanitary sewer along Chestnut Avenue is proposed to be replaced with 10-inch PVC due to its function as a trunk main. Manholes will also be replaced with precast structures with watertight penetrations.

Sanitary services will be replaced up to the right-of-way line. During construction, it is proposed to televise all services to identify any potential sources of I/I. If an issue is discovered, the City can notify the property owner of it so that it can be corrected.

As will be further discussed, subsurface drainage along the lengths of the improved streets will be provided. These drains will also provide an outlet for sump pump discharges.

Drainage Improvements

The storm sewer within the project area shall be upsized to accommodate the 10-year design flow (10% chance of happening within given year). Storm sewer laterals will be extended to drain low and nuisance areas.

The culvert/tile discharge from the north side of the Sakatah Trail will be directly connected to the storm sewer system, instead of discharging to the bowl area between 4th & 5th Streets.

An overland overflow will be provided for the bowl area between 4th & 5th Streets to the extent possible. Limiting the amount of water discharge to the area will greatly reduce the frequency of flooding. An overland overflow will also limit the elevation the water can get within the bowl area before surface draining to the street(s) and southerly to the lake. The provision of this overflow may result in the lowering of portions Spruce Avenue. The extent to which Spruce Avenue can be lowered will need to be balanced with the access requirements for properties on the north side of the road as well as the need for temporarily detaining water on the north side.

Street, Alley, Sidewalk, and Curb & Gutter Improvements

It is proposed to reconstruct 4th Street, 5th Street, and most of Chestnut Avenue as a 32-foot wide urban section with concrete curb & gutter. This will provide adequate space for two-way traffic and parking on one side. Spruce Avenue will be constructed to a 24-foot wide urban section to provide adequate space for two-way traffic with no parking. The western portion of Chestnut Avenue would be slightly narrowed from 54-foot wide to 50-foot wide. The narrowing will come from the north edge to get the existing power poles behind the curb.

The pavement sections will generally include 3 ½ inches of bituminous pavement, 10 inches of aggregate base, and geotextile fabric. The subgrade will be moisture conditioned as necessary prior to placement of the street section. Consideration will be given to increasing the pavement section within the western portion of Chestnut to accommodate truck deliveries. Spruce Avenue reportedly receives additional out-of-town traffic, specifically farm equipment. City staff has indicated additional posting and enforcement of the weight restrictions.

The sidewalk on the west edge of Chestnut Avenue is proposed to be replaced. To connect the downtown business district with the eastern neighborhoods, it is proposed to continue easterly along the north edge of Chestnut with a designated pedestrian route.

The extent of curb & gutter to be added to Spruce Avenue will be limited to the segment from Main Street to approximately Fasnacht Park. The segment east of Fasnacht Park will receive a mill & overlay and limited base correction.

As previously mentioned, concrete curb & gutter will be added along all of the reconstructed streets. Curb & gutter is not proposed to be added to the mill & overlay section of Spruce Avenue. Chestnut Avenue, 4th Street, and 5th Street are all proposed to receive barrier style curb. Curb cuts and concrete aprons will be provided at all residential driveways.

The grading of Spruce Avenue will determine the style of curb to be provided. Depending on the back-slopes and adjacent ditch characteristics, drive-over or ribbon curb may be most appropriate.

At this time, the alleys within Blocks 17 & 18 are proposed to be paved in addition to the restoration that will be necessary for the utility improvements.

Project Design Phase

Geotechnical Evaluation

ISG recommends performing soil borings of a minimum depth of 25-feet below the roadway to provide a detailed soil analysis. This analysis will assist with verifying if the subgrade soils are suitable for the

intended roadway subgrade and utility bedding. The geotechnical evaluation will also provide pavement design parameters which will be utilized throughout the preliminary design process.

Agency Approvals & Permits

Approval and permits will be required from various agencies for the construction of the proposed utility and street improvements. This includes a General Construction Storm Water Permit from the Minnesota Pollution Control Agency (MPCA) as well as a Watermain Distribution Permit from the Minnesota Department of Health (MDH).

Storm Water Treatment

The MPCA requirements mandate that construction projects that create one or more acres of new impervious surface must provide some type of permanent storm water treatment facility to treat water prior to exiting the project site. At this time, no additional impervious surface is anticipated as a result of the proposed improvements and thus, no permanent storm water treatment facilities are expected.

Right-of-Way & Easements

It is anticipated that a majority of the proposed utility and street work will take place within the existing City/County right-of-way or within existing drainage and utility easements. If work will need to be performed on private property, permanent or temporary construction easements may be required during the construction process to provide the Contractor with adequate space to complete the necessary work. It appears that an easement may be required over the existing storm sewer at the south end of 4th Street that is to be replaced.

Staging of Construction

We understand that street reconstruction, although necessary, can cause some inconvenience to adjacent properties throughout the construction process. Special considerations will be made throughout the design phase to minimize disruption to property owners and businesses within the adjacent areas.

Construction of the watermain, sanitary sewer, and storm sewer will also be a challenging aspect of the project and will require a comprehensive staging plan to efficiently transfer service from the existing utilities to the new utilities. The staging will be discussed during the design phase to discern when and where to begin replacing the utilities.

I+S GROUP

Project Financing & Summary of Estimated Project Costs

It is anticipated that the project will be funded through a combination of sources, including special assessments. City staff has been working with the City's financial advisor to determine the best way to fund this project.

Outside funding may be available from FEMA as a mitigation measure for the 5th Street storm sewer work. It is also anticipated that low-interest loans will be available for a majority of the watermain work through the Minnesota Public Facilities Authority.

A detailed opinion of probable cost is included in the appendices and is summarized below.

Segment Description	Estimated Cost
Upper 5th	\$ 461,896.54
Upper 4th	\$ 585,107.56
Lower 5th	\$ 198,605.78
Lower 4th	\$ 133,090.81
Chestnut East (4th to 5th)	\$ 183,384.32
Chestnut Ave (Main to 5th)	\$ 183,578.51
Spruce (Main to Fasnacht Park)	\$ 330,681.50
Spruce Overlay	\$ 36,707.90
Block 17 Alley (Walnut to Chestnut)	\$ 40,442.50
Block 18 Alley (Chestnut to 4th St)	\$ 85,780.00
CSAH 26 Watermain Loop	\$ 74,817.50
Point Ave Watermain Loop	\$ 152,758.00
TOTAL	\$ 2,466,850.91

Minnesota Statute 429 Process and Proposed Schedule

A preliminary assessment roll was prepared in accordance with the City's assessment policy. In accordance with State Statute, the City is free to propose assessments as it deems necessary to fund the project. At this time, it is anticipated that the assessed amount will account for 31% of the total project cost.

In general, the City's assessment policy bases assessments on a front footage basis. The longest sides of corner lots are considered the side and are assessed at half of the footage. Utilities are assessed along the shortest side for properties with multiple sides adjacent to the utility improvements. The costs of reconstructed streets and utilities are assessed at 30%; the costs of new curb & gutter, new sidewalk, and alley pavement are assessed at 100%; the costs of reconstructed sidewalk is assessed at 50%.

The assessment process includes this report, the public improvement hearing, preparation of plans and specifications, construction, future public assessment hearing, and adoption of assessment rolls. This assessment process is outlined in further detail within Appendix F.

Conclusion and Recommendations

Based on the findings of this report, the proposed utility improvements and associated street improvements are necessary, feasible, and cost-effective from an engineering aspect. It is our recommendation that the City Council accept this feasibility study, order the improvement, and authorize the preparation of plans and specifications of the proposed project in accordance with Minnesota Statute 429.

The City may order only portions of the improvement or may condition the ordering of the improvement on further evaluation of certain aspects. The City may also order supplementary portions of the improvement at a later date.

Appendix A: Location Map



2015 UTILITY & STREET IMPROVEMENTS

ISG

Architecture
Engineering
Environmental
Planning

www.is-gp.com

THIS DOCUMENT IS THE PROPERTY OF IS GROUP, INC. THEY MAY NOT BE USED, COPIED OR DUPLICATED WITHOUT PRIOR WRITTEN CONSENT.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ LIC. NO. _____

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ LIC. NO. _____

PROJECT

LOCATION MAP

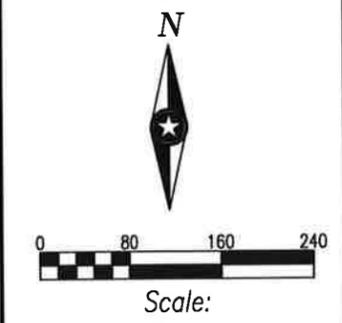
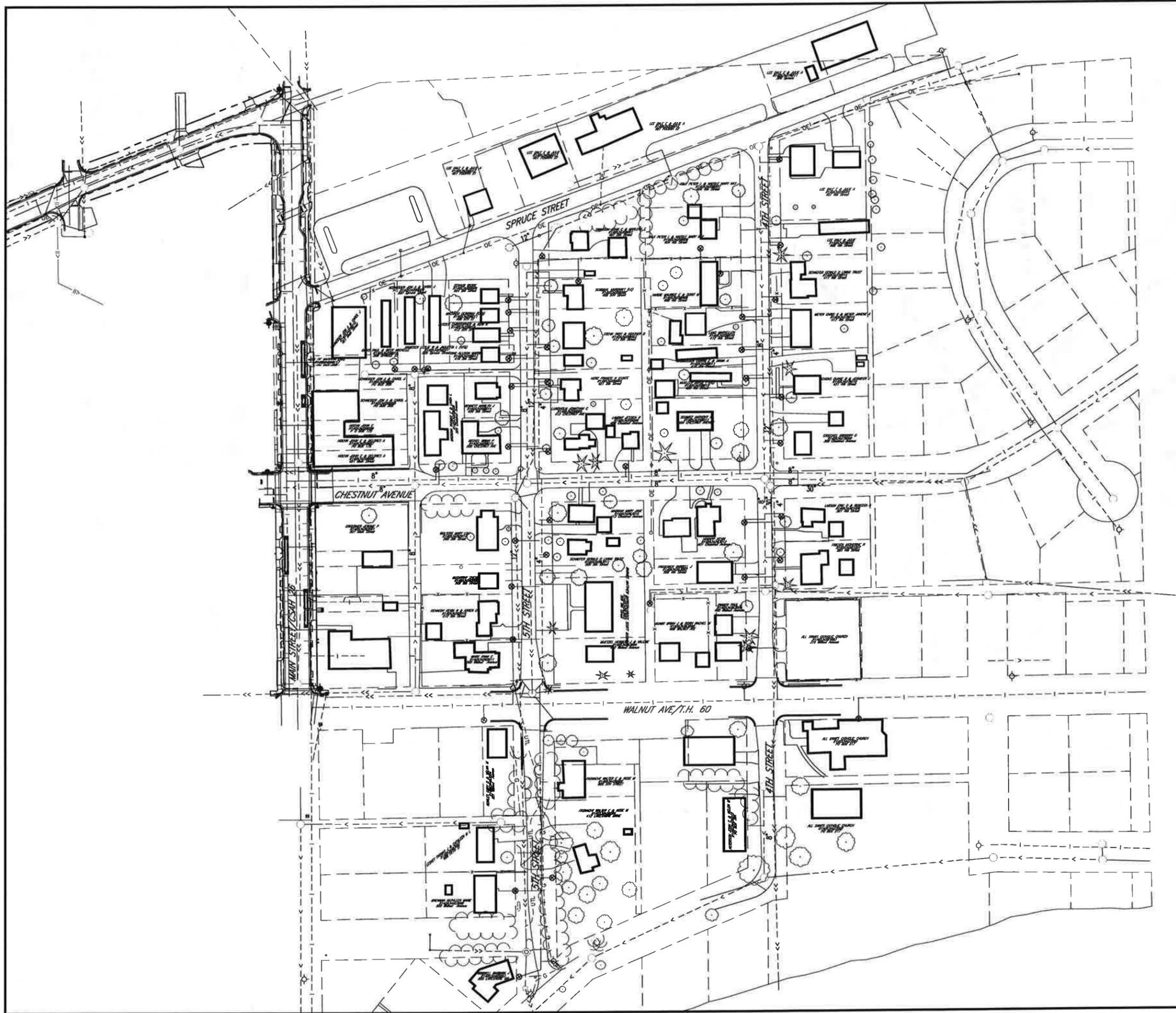
SHEET

1

PROJECT NO. 13304 CAD FILE NAME: 13304.PNT DATE: 11/16/2014 DRAWN BY: JAG

I+S GROUP

Appendix B: Existing Conditions



THIS DOCUMENT IS THE PROPERTY OF I+S GROUP, INC. AND MAY NOT BE USED, COPIED OR DUPLICATED WITHOUT PRIOR WRITTEN CONSENT.

PROJECT

2015 STREET IMPROVEMENTS

MADISON LAKE MINNESOTA

REVISION SCHEDULE		
NO	DATE	DESCRIPTION

PROJECT NO. 13324
 FILE NAME 13324-PRELIM
 DRAWN BY JAG
 DESIGNED BY CSJ
 REVIEWED BY CSJ
 ISSUE DATE --/--
 CLIENT PROJECT NO. --

TITLE
**4th, 5th, Spruce,
 & Chestnut
 Existing
 Conditions**

Appendix C: Proposed Conditions



ISG

Architecture
Engineering
Environmental
Planning

www.is-grp.com

I+S GROUP

N



Scale:

THIS DOCUMENT IS THE PROPERTY OF I+S GROUP, INC. AND MAY NOT BE USED, COPIED OR DUPLICATED WITHOUT PRIOR WRITTEN CONSENT.

PROJECT

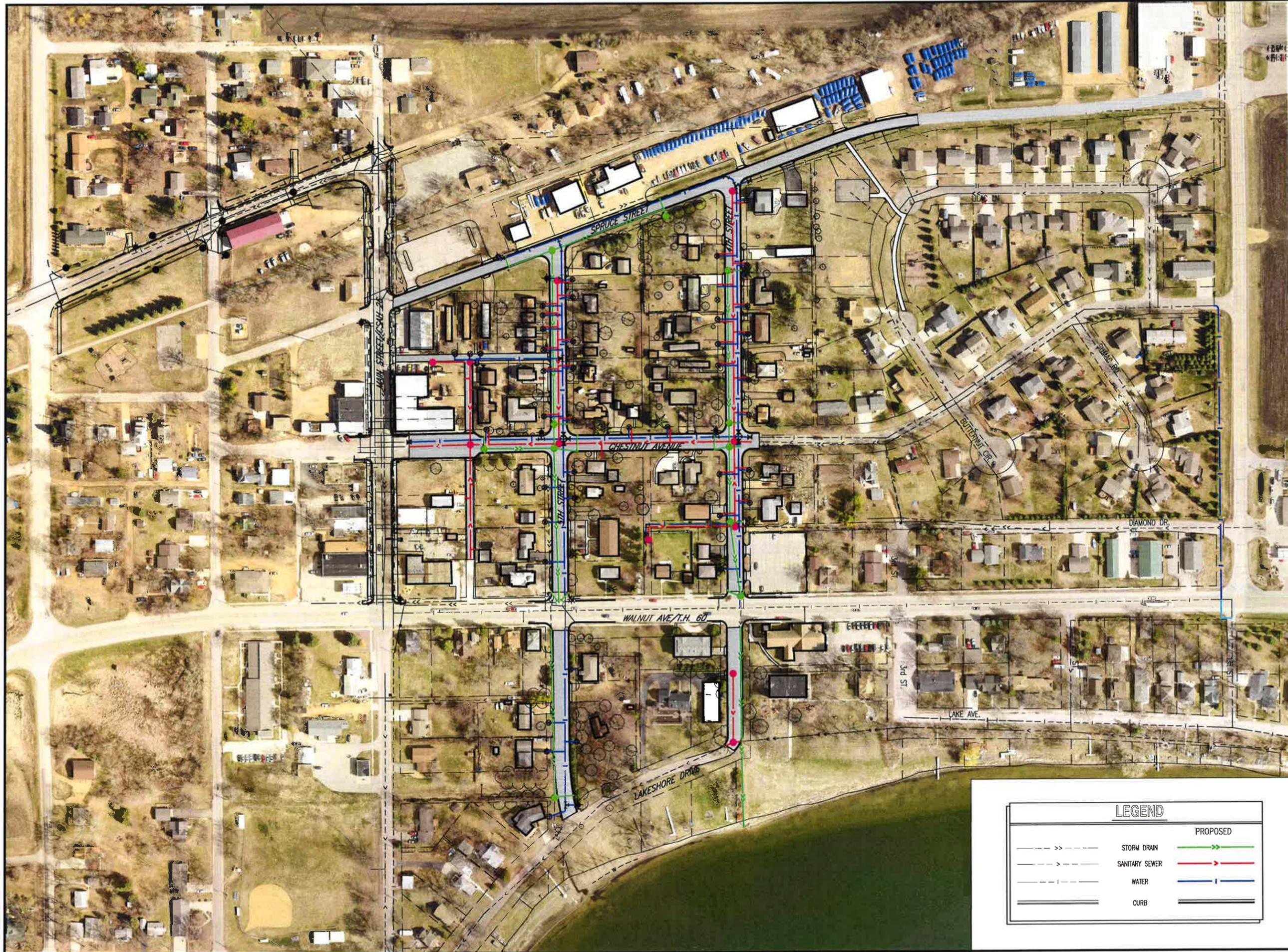
2015 STREET IMPROVEMENTS

MADISON LAKE MINNESOTA

REVISION SCHEDULE	
NO	DESCRIPTION

PROJECT NO. 13324
 FILE NAME 13324-POINTAVE.
 DRAWN BY JAG
 DESIGNED BY CSJ
 REVIEWED BY CSJ
 ISSUE DATE 1/05/15
 CLIENT PROJECT NO. -

TITLE
POINT AVENUE WATERMAIN



Scale:

THIS DOCUMENT IS THE PROPERTY OF I+S GROUP, INC. AND MAY NOT BE USED, COPIED OR DUPLICATED WITHOUT PRIOR WRITTEN CONSENT.

PROJECT

2015 STREET IMPROVEMENTS

MADISON LAKE MINNESOTA

NO	DATE	REVISION SCHEDULE	
		DESCRIPTION	

PROJECT NO. 13324
 FILE NAME 13324-PRELIM
 DRAWN BY JAG
 DESIGNED BY CSJ
 REVIEWED BY CSJ
 ISSUE DATE 1/05/15
 CLIENT PROJECT NO. -

TITLE

PROJECT AREA

SHEET

LEGEND	
--->---	STORM DRAIN
--->---	SANITARY SEWER
--- ---	WATER
====	CURB
--->---	PROPOSED
--->---	PROPOSED
--- ---	PROPOSED
====	PROPOSED

Appendix D: Preliminary Opinion of Probable Construction Cost



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Upper 5th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.16	\$ 25,600.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	0	\$ -	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	7	\$ 1,925.00	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	0	\$ -	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	1942	\$ 2,913.00	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	0	\$ -	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	35	\$ 105.00	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	2120	\$ 16,960.00	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	204	\$ 4,080.00	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	7.0	\$ 2,450.00	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	735	\$ 18,370.69	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	2657	\$ 4,650.17	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	2461	\$ 31,999.30	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	0	\$ -	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	2461	\$ 29,537.82	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	1400	\$ 11,550.00	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	5	\$ 375.00	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00	0	\$ -	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	4	\$ 2,400.00	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	2	\$ 1,200.00	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	230	\$ 10,350.00	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	0	\$ -	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	5	\$ 2,500.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	100	\$ 125.00	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS
 CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

				Upper 5th Street		Total Project Costs	
				Walnut Ave to Spruce St			
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	1	\$ 750.00	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00	4	\$ 600.00	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	2190	\$ 8,758.06	11212	\$ 44,847.15
SUBTOTAL					\$ 177,199.04		\$ 998,184.91
10% CONTINGENCY					\$ 17,720.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 194,919.04		\$ 1,098,054.91
SOFT COSTS					\$ 34,200.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 229,119.04		\$ 1,290,854.91

Curb & Gutter Construction							
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	1388	\$ 16,656.00	7937	\$ 95,244.00
SUBTOTAL					\$ 16,656.00		\$ 95,244.00
10% CONTINGENCY					\$ 1,670.00		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ 18,326.00		\$ 104,794.00
SOFT COSTS					\$ 3,300.00		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ 21,626.00		\$ 123,494.00

Sidewalk Construction							
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	150	\$ 600.00	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	8	\$ 280.00	72	\$ 2,520.00
SUBTOTAL					\$ 880.00		\$ 19,480.00
10% CONTINGENCY					\$ 90.00		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ 970.00		\$ 21,450.00
SOFT COSTS					\$ 200.00		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ 1,170.00		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS
 CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

Upper 5th Street	Total Project Costs
Walnut Ave to Spruce St	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
----------	-------------------	------	------------	----------	--------	----------	--------

Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	1321	\$ 4,623.50	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	6	\$ 1,050.00	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	80	\$ 2,000.00	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	0	\$ -	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	750	\$ 28,125.00	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	0	\$ -	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	18	\$ 3,600.00	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	12	\$ 3,000.00	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	3	\$ 750.00	13	\$ 3,250.00
SUBTOTAL					\$ 43,148.50		\$ 171,776.00
10% CONTINGENCY					\$ 4,320.00		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ 47,468.50		\$ 188,986.00
SOFT COSTS					\$ 8,400.00		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ 55,868.50		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00	690	\$ 690.00	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00	509	\$ 509.00	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00	1	\$ 250.00	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00	1	\$ 2,000.00	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00	1	\$ 500.00	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00	17	\$ 8,500.00	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00	0	\$ -	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00	30	\$ 810.00	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Upper 5th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
				Walnut Ave to Spruce St			
2504.603	8" Watermain Pipe	LF	\$ 30.00	785	\$ 23,550.00	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00	0	\$ -	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50	346	\$ 2,595.00	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00	3	\$ 4,050.00	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00	5	\$ 8,000.00	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00	3	\$ 9,900.00	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00	580	\$ 12,760.00	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00	17	\$ 4,250.00	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00	17	\$ 4,675.00	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00
SUBTOTAL					\$ 83,239.00		\$ 431,291.00
10% CONTINGENCY					\$ 8,330.00		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ 91,569.00		\$ 474,481.00
SOFT COSTS					\$ 16,100.00		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ 107,669.00		\$ 557,981.00

Sanitary Sewer							
2104.501	Remove Sanitary Structure	EA	\$ 300.00	2	\$ 600.00	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	358	\$ 358.00	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	364	\$ 364.00	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	0	\$ -	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	11	\$ 5,500.00	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	358	\$ 10,740.00	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	0	\$ -	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	364	\$ 8,372.00	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	11	\$ 1,650.00	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Upper 5th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
2504.602	4" Pipe Plug	EA	\$ 30.00	11	\$ 330.00	40	\$ 1,200.00
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	24	\$ 6,240.00	128	\$ 33,280.00
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	2	\$ 1,500.00	11	\$ 8,250.00
2503.600	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00
SUBTOTAL					\$ 35,854.00		\$ 190,515.00
10% CONTINGENCY					\$ 3,590.00		\$ 19,070.00
CONSTRUCTION SUBTOTAL					\$ 39,444.00		\$ 209,585.00
SOFT COSTS					\$ 7,000.00		\$ 37,100.00
TOTAL SANITARY PROJECT COST					\$ 46,444.00		\$ 246,685.00

GENERAL & STREET COST	\$ 229,119.04	\$ 1,290,854.91
CURB & GUTTER COST	\$ 21,626.00	\$ 123,494.00
SIDEWALK COST	\$ 1,170.00	\$ 25,450.00
STORM COST	\$ 55,868.50	\$ 222,386.00
WATERMAIN COST	\$ 107,669.00	\$ 557,981.00
SANITARY SEWER COST	\$ 46,444.00	\$ 246,685.00
TOTAL PROJECT COST	\$ 461,896.54	\$ 2,466,850.91



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

				Upper 4th Street		Total Project Costs	
				Walnut Ave to Spruce St			
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.24	\$ 38,400.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	0	\$ -	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	5	\$ 1,375.00	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	0	\$ -	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	2438	\$ 3,657.00	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	0	\$ -	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	60	\$ 180.00	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	2530	\$ 20,240.00	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	257	\$ 5,140.00	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	8.0	\$ 2,800.00	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	916	\$ 22,907.22	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	3308	\$ 5,788.34	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	3045	\$ 39,585.00	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	0	\$ -	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	3045	\$ 36,540.00	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	1800	\$ 14,850.00	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	5	\$ 375.00	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00	0	\$ -	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	8	\$ 4,800.00	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	4	\$ 2,400.00	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	225	\$ 10,125.00	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	0	\$ -	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	5	\$ 2,500.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	100	\$ 125.00	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Upper 4th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
				Walnut Ave to Spruce St			
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	1	\$ 750.00	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00	8	\$ 1,200.00	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	2753	\$ 11,012.00	11212	\$ 44,847.15
SUBTOTAL					\$ 224,749.56		\$ 998,184.91
10% CONTINGENCY					\$ 22,480.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 247,229.56		\$ 1,098,054.91
SOFT COSTS					\$ 43,300.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 290,529.56		\$ 1,290,854.91

Curb & Gutter Construction							
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	1750	\$ 21,000.00	7937	\$ 95,244.00
SUBTOTAL					\$ 21,000.00		\$ 95,244.00
10% CONTINGENCY					\$ 2,100.00		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ 23,100.00		\$ 104,794.00
SOFT COSTS					\$ 4,100.00		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ 27,200.00		\$ 123,494.00

Sidewalk Construction							
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	150	\$ 600.00	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	8	\$ 280.00	72	\$ 2,520.00
SUBTOTAL					\$ 880.00		\$ 19,480.00
10% CONTINGENCY					\$ 90.00		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ 970.00		\$ 21,450.00
SOFT COSTS					\$ 200.00		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ 1,170.00		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS
 CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

Upper 4th Street	Total Project Costs
Walnut Ave to Spruce St	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
----------	-------------------	------	------------	----------	--------	----------	--------

Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	789	\$ 2,761.50	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	6	\$ 1,050.00	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	80	\$ 2,000.00	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	350	\$ 10,150.00	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	375	\$ 14,062.50	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	0	\$ -	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	36	\$ 7,200.00	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	24	\$ 6,000.00	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	3	\$ 750.00	13	\$ 3,250.00
SUBTOTAL					\$ 43,974.00		\$ 171,776.00
10% CONTINGENCY					\$ 4,400.00		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ 48,374.00		\$ 188,986.00
SOFT COSTS					\$ 8,500.00		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ 56,874.00		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00	1290	\$ 1,290.00	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00	397	\$ 397.00	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00	0	\$ -	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00	1	\$ 2,000.00	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00	3	\$ 1,500.00	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00	17	\$ 8,500.00	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00	0	\$ -	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00	30	\$ 810.00	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Upper 4th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
				Walnut Ave to Spruce St			
2504.603	8" Watermain Pipe	LF	\$ 30.00	952	\$ 28,560.00	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00	0	\$ -	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50	324	\$ 2,430.00	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00	3	\$ 4,050.00	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00	6	\$ 9,600.00	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00	3	\$ 9,900.00	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00	613	\$ 13,486.00	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00	17	\$ 4,250.00	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00	17	\$ 4,675.00	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00
SUBTOTAL					\$ 91,648.00		\$ 431,291.00
10% CONTINGENCY					\$ 9,170.00		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ 100,818.00		\$ 474,481.00
SOFT COSTS					\$ 17,700.00		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ 118,518.00		\$ 557,981.00

Sanitary Sewer							
2104.501	Remove Sanitary Structure	EA	\$ 300.00	3	\$ 900.00	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	914	\$ 914.00	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	546	\$ 546.00	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	2	\$ 1,000.00	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	16	\$ 8,000.00	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	950	\$ 28,500.00	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	0	\$ -	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	512	\$ 11,776.00	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	16	\$ 2,400.00	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Upper 4th Street		Total Project Costs	
				Walnut Ave to Spruce St		Quantity	Amount
2504.602	4" Pipe Plug	EA	\$ 30.00	16	\$ 480.00	40	\$ 1,200.00
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	48	\$ 12,480.00	128	\$ 33,280.00
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	4	\$ 3,000.00	11	\$ 8,250.00
2503.600	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00
SUBTOTAL					\$ 70,196.00		\$ 190,515.00
10% CONTINGENCY					\$ 7,020.00		\$ 19,070.00
CONSTRUCTION SUBTOTAL					\$ 77,216.00		\$ 209,585.00
SOFT COSTS					\$ 13,600.00		\$ 37,100.00
TOTAL SANITARY PROJECT COST					\$ 90,816.00		\$ 246,685.00

GENERAL & STREET COST	\$ 290,529.56	\$ 1,290,854.91
CURB & GUTTER COST	\$ 27,200.00	\$ 123,494.00
SIDEWALK COST	\$ 1,170.00	\$ 25,450.00
STORM COST	\$ 56,874.00	\$ 222,386.00
WATERMAIN COST	\$ 118,518.00	\$ 557,981.00
SANITARY SEWER COST	\$ 90,816.00	\$ 246,685.00
TOTAL PROJECT COST	\$ 585,107.56	\$ 2,466,850.91



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Lower 5th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.07	\$ 11,200.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	0	\$ -	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	0	\$ -	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	1	\$ 1,000.00	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	1197	\$ 1,795.50	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	0	\$ -	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	90	\$ 270.00	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	1165	\$ 9,320.00	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	120	\$ 2,400.00	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	4.0	\$ 1,400.00	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	395	\$ 9,881.55	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	1427	\$ 2,498.01	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	1310	\$ 17,033.55	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	0	\$ -	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	1310	\$ 15,723.27	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	850	\$ 7,012.50	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	2	\$ 150.00	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00	0	\$ -	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	2	\$ 1,200.00	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	1	\$ 600.00	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	62	\$ 2,790.00	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	0	\$ -	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	1	\$ 500.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	100	\$ 125.00	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Lower 5th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
				Walnut Ave to Lakeshore Dr			
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	1	\$ 750.00	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00	2	\$ 300.00	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	1266	\$ 5,062.91	11212	\$ 44,847.15
SUBTOTAL					\$ 91,012.28		\$ 998,184.91
10% CONTINGENCY					\$ 9,110.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 100,122.28		\$ 1,098,054.91
SOFT COSTS					\$ 17,600.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 117,722.28		\$ 1,290,854.91

Curb & Gutter Construction							
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	814	\$ 9,768.00	7937	\$ 95,244.00
SUBTOTAL					\$ 9,768.00		\$ 95,244.00
10% CONTINGENCY					\$ 980.00		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ 10,748.00		\$ 104,794.00
SOFT COSTS					\$ 1,900.00		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ 12,648.00		\$ 123,494.00

Sidewalk Construction							
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	150	\$ 600.00	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	8	\$ 280.00	72	\$ 2,520.00
SUBTOTAL					\$ 880.00		\$ 19,480.00
10% CONTINGENCY					\$ 90.00		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ 970.00		\$ 21,450.00
SOFT COSTS					\$ 200.00		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ 1,170.00		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS
 CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

Lower 5th Street	Total Project Costs
Walnut Ave to Lakeshore Dr	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
----------	-------------------	------	------------	----------	--------	----------	--------

Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	401	\$ 1,403.50	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	3	\$ 525.00	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	25	\$ 625.00	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	0	\$ -	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	350	\$ 13,125.00	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	0	\$ -	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	9	\$ 1,800.00	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	6	\$ 1,500.00	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	3	\$ 750.00	13	\$ 3,250.00
SUBTOTAL					\$ 19,728.50		\$ 171,776.00
10% CONTINGENCY					\$ 1,980.00		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ 21,708.50		\$ 188,986.00
SOFT COSTS					\$ 3,800.00		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ 25,508.50		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00	395	\$ 395.00	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00	176	\$ 176.00	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00	1	\$ 250.00	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00	1	\$ 2,000.00	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00	1	\$ 500.00	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00	5	\$ 2,500.00	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00	0	\$ -	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00	10	\$ 270.00	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Lower 5th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
2504.603	8" Watermain Pipe	LF	\$ 30.00	398	\$ 11,940.00	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00	0	\$ -	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50	90	\$ 675.00	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00	1	\$ 1,350.00	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00	1	\$ 1,600.00	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00	1	\$ 3,300.00	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00	198	\$ 4,356.00	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00	5	\$ 1,250.00	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00	5	\$ 1,375.00	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00
SUBTOTAL					\$ 32,137.00		\$ 431,291.00
10% CONTINGENCY					\$ 3,220.00		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ 35,357.00		\$ 474,481.00
SOFT COSTS					\$ 6,200.00		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ 41,557.00		\$ 557,981.00

Sanitary Sewer							
2104.501	Remove Sanitary Structure	EA	\$ 300.00	0	\$ -	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	0	\$ -	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	0	\$ -	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	0	\$ -	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	0	\$ -	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	0	\$ -	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	0	\$ -	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	0	\$ -	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	0	\$ -	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Lower 5th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
2504.602	4" Pipe Plug	EA	\$ 30.00	0	\$ -	40	\$ 1,200.00
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	0	\$ -	128	\$ 33,280.00
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	0	\$ -	11	\$ 8,250.00
2503.600	Granular Pipe Foundation	CY	\$ 20.00	0	\$ -	70	\$ 1,400.00
SUBTOTAL					\$ -		\$ 190,515.00
10% CONTINGENCY					\$ -		\$ 19,070.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 209,585.00
SOFT COSTS					\$ -		\$ 37,100.00
TOTAL SANITARY PROJECT COST					\$ -		\$ 246,685.00

GENERAL & STREET COST	\$ 117,722.28	\$ 1,290,854.91
CURB & GUTTER COST	\$ 12,648.00	\$ 123,494.00
SIDEWALK COST	\$ 1,170.00	\$ 25,450.00
STORM COST	\$ 25,508.50	\$ 222,386.00
WATERMAIN COST	\$ 41,557.00	\$ 557,981.00
SANITARY SEWER COST	\$ -	\$ 246,685.00
TOTAL PROJECT COST	\$ 198,605.78	\$ 2,466,850.91



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Lower 4th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.04	\$ 6,400.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	0	\$ -	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	0	\$ -	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	0	\$ -	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	744	\$ 1,116.00	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	0	\$ -	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	60	\$ 180.00	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	754	\$ 6,032.00	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	77	\$ 1,540.00	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	3.0	\$ 1,050.00	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	241	\$ 6,018.76	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	869	\$ 1,520.19	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	795	\$ 10,338.94	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	0	\$ -	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	795	\$ 9,543.64	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	550	\$ 4,537.50	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	2	\$ 150.00	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00		\$ -	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	0	\$ -	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	0	\$ -	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	27	\$ 1,215.00	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	0	\$ -	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	1	\$ 500.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	100	\$ 125.00	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Lower 4th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
				Walnut Ave to Lakeshore Dr			
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	1	\$ 750.00	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00	0	\$ -	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	807	\$ 3,226.79	11212	\$ 44,847.15
SUBTOTAL					\$ 54,243.81		\$ 998,184.91
10% CONTINGENCY					\$ 5,430.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 59,673.81		\$ 1,098,054.91
SOFT COSTS					\$ 10,500.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 70,173.81		\$ 1,290,854.91

Curb & Gutter Construction							
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	532	\$ 6,384.00	7937	\$ 95,244.00
SUBTOTAL					\$ 6,384.00		\$ 95,244.00
10% CONTINGENCY					\$ 640.00		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ 7,024.00		\$ 104,794.00
SOFT COSTS					\$ 1,300.00		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ 8,324.00		\$ 123,494.00

Sidewalk Construction							
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	150	\$ 600.00	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	8	\$ 280.00	72	\$ 2,520.00
SUBTOTAL					\$ 880.00		\$ 19,480.00
10% CONTINGENCY					\$ 90.00		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ 970.00		\$ 21,450.00
SOFT COSTS					\$ 200.00		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ 1,170.00		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS
 CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

Lower 4th Street	Total Project Costs
Walnut Ave to Lakeshore Dr	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
----------	-------------------	------	------------	----------	--------	----------	--------

Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	450	\$ 1,575.00	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	0	\$ -	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	0	\$ -	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	0	\$ -	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	0	\$ -	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	450	\$ 24,750.00	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	0	\$ -	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	0	\$ -	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	2	\$ 500.00	13	\$ 3,250.00
SUBTOTAL					\$ 26,825.00		\$ 171,776.00
10% CONTINGENCY					\$ 2,690.00		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ 29,515.00		\$ 188,986.00
SOFT COSTS					\$ 5,200.00		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ 34,715.00		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00	0	\$ -	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00	0	\$ -	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00	0	\$ -	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00	0	\$ -	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00	0	\$ -	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00	0	\$ -	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00	0	\$ -	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00	0	\$ -	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Lower 4th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
				Walnut Ave to Lakeshore Dr			
2504.603	8" Watermain Pipe	LF	\$ 30.00	0	\$ -	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00	0	\$ -	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50	0	\$ -	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00	0	\$ -	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00	0	\$ -	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00	0	\$ -	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00	0	\$ -	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00	0	\$ -	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00	0	\$ -	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00	0	\$ -	70	\$ 1,400.00
SUBTOTAL					\$ -		\$ 431,291.00
10% CONTINGENCY					\$ -		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 474,481.00
SOFT COSTS					\$ -		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ -		\$ 557,981.00

Sanitary Sewer							
2104.501	Remove Sanitary Structure	EA	\$ 300.00	2	\$ 600.00	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	194	\$ 194.00	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	64	\$ 64.00	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	2	\$ 1,000.00	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	0	\$ -	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	190	\$ 5,700.00	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	0	\$ -	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	0	\$ -	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	0	\$ -	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS
 2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Lower 4th Street		Total Project Costs	
				Quantity	Amount	Quantity	Amount
				Walnut Ave to Lakeshore Dr			
2504.602	4" Pipe Plug	EA	\$ 30.00	0	\$ -	40	\$ 1,200.00
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	20	\$ 5,200.00	128	\$ 33,280.00
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	2	\$ 1,500.00	11	\$ 8,250.00
2503.600	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00
SUBTOTAL					\$ 14,458.00		\$ 190,515.00
10% CONTINGENCY					\$ 1,450.00		\$ 19,070.00
CONSTRUCTION SUBTOTAL					\$ 15,908.00		\$ 209,585.00
SOFT COSTS					\$ 2,800.00		\$ 37,100.00
TOTAL SANITARY PROJECT COST					\$ 18,708.00		\$ 246,685.00

GENERAL & STREET COST	\$ 70,173.81	\$ 1,290,854.91
CURB & GUTTER COST	\$ 8,324.00	\$ 123,494.00
SIDEWALK COST	\$ 1,170.00	\$ 25,450.00
STORM COST	\$ 34,715.00	\$ 222,386.00
WATERMAIN COST	\$ -	\$ 557,981.00
SANITARY SEWER COST	\$ 18,708.00	\$ 246,685.00
TOTAL PROJECT COST	\$ 133,090.81	\$ 2,466,850.91



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

				Chestnut Ave		Total Project Costs	
				4th St to 5th St			
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.07	\$ 11,200.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	0	\$ -	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	5	\$ 1,375.00	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	0	\$ -	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	247	\$ 370.50	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	0	\$ -	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	0	\$ -	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	980	\$ 7,840.00	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	109	\$ 2,180.00	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	4.0	\$ 1,400.00	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	350	\$ 8,758.64	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	1266	\$ 2,215.04	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	1157	\$ 15,045.73	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	0	\$ -	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	1157	\$ 13,888.36	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	750	\$ 6,187.50	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	3	\$ 225.00	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00	0	\$ -	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	4	\$ 2,400.00	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	0	\$ -	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	47	\$ 2,115.00	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	0	\$ -	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	1	\$ 500.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	100	\$ 125.00	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

				Chestnut Ave		Total Project Costs	
				4th St to 5th St			
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	1	\$ 750.00	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00	4	\$ 600.00	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	1151	\$ 4,602.55	11212	\$ 44,847.15
SUBTOTAL					\$ 81,778.32		\$ 998,184.91
10% CONTINGENCY					\$ 8,180.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 89,958.32		\$ 1,098,054.91
SOFT COSTS					\$ 15,800.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 105,758.32		\$ 1,290,854.91

Curb & Gutter Construction							
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	743	\$ 8,916.00	7937	\$ 95,244.00
SUBTOTAL					\$ 8,916.00		\$ 95,244.00
10% CONTINGENCY					\$ 900.00		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ 9,816.00		\$ 104,794.00
SOFT COSTS					\$ 1,800.00		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ 11,616.00		\$ 123,494.00

Sidewalk Construction							
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	1865	\$ 7,460.00	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	16	\$ 560.00	72	\$ 2,520.00
SUBTOTAL					\$ 8,020.00		\$ 19,480.00
10% CONTINGENCY					\$ 810.00		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ 8,830.00		\$ 21,450.00
SOFT COSTS					\$ 1,600.00		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ 10,430.00		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Chestnut Ave	Total Project Costs
4th St to 5th St	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
----------	-------------------	------	------------	----------	--------	----------	--------

Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	0	\$ -	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	4	\$ 700.00	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	0	\$ -	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	0	\$ -	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	50	\$ 1,875.00	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	0	\$ -	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	18	\$ 3,600.00	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	0	\$ -	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	0	\$ -	13	\$ 3,250.00
SUBTOTAL					\$ 6,175.00		\$ 171,776.00
10% CONTINGENCY					\$ 620.00		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ 6,795.00		\$ 188,986.00
SOFT COSTS					\$ 1,200.00		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ 7,995.00		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00	406	\$ 406.00	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00	41	\$ 41.00	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00	1	\$ 250.00	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00	1	\$ 2,000.00	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00	0	\$ -	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00	2	\$ 1,000.00	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00	0	\$ -	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00	0	\$ -	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Chestnut Ave		Total Project Costs	
				Quantity	Amount	Quantity	Amount
2504.603	8" Watermain Pipe	LF	\$ 30.00	385	\$ 11,550.00	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00	0	\$ -	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50	90	\$ 675.00	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00	0	\$ -	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00	0	\$ -	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00	0	\$ -	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00	47	\$ 1,034.00	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00	2	\$ 500.00	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00	2	\$ 550.00	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00
SUBTOTAL					\$ 18,206.00		\$ 431,291.00
10% CONTINGENCY					\$ 1,830.00		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ 20,036.00		\$ 474,481.00
SOFT COSTS					\$ 3,600.00		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ 23,636.00		\$ 557,981.00

Sanitary Sewer							
2104.501	Remove Sanitary Structure	EA	\$ 300.00	0	\$ -	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	384	\$ 384.00	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	100	\$ 100.00	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	0	\$ -	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	3	\$ 1,500.00	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	0	\$ -	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	385	\$ 13,475.00	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	100	\$ 2,300.00	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	3	\$ 450.00	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Chestnut Ave		Total Project Costs	
				4th St to 5th St		Quantity	Amount
2504.602	4" Pipe Plug	EA	\$ 30.00	3	\$ 90.00	40	\$ 1,200.00
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	0	\$ -	128	\$ 33,280.00
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	0	\$ -	11	\$ 8,250.00
2503.600	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00
SUBTOTAL					\$ 18,499.00		\$ 190,515.00
10% CONTINGENCY					\$ 1,850.00		\$ 19,070.00
CONSTRUCTION SUBTOTAL					\$ 20,349.00		\$ 209,585.00
SOFT COSTS					\$ 3,600.00		\$ 37,100.00
TOTAL SANITARY PROJECT COST					\$ 23,949.00		\$ 246,685.00

GENERAL & STREET COST	\$ 105,758.32	\$ 1,290,854.91
CURB & GUTTER COST	\$ 11,616.00	\$ 123,494.00
SIDEWALK COST	\$ 10,430.00	\$ 25,450.00
STORM COST	\$ 7,995.00	\$ 222,386.00
WATERMAIN COST	\$ 23,636.00	\$ 557,981.00
SANITARY SEWER COST	\$ 23,949.00	\$ 246,685.00
TOTAL PROJECT COST	\$ 183,384.32	\$ 2,466,850.91



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

				Chestnut Ave		Total Project Costs	
				Main St to 4th St			
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.07	\$ 11,200.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	250	\$ 875.00	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	3	\$ 825.00	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	0	\$ -	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	86	\$ 129.00	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	0	\$ -	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	50	\$ 150.00	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	1100	\$ 8,800.00	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	66	\$ 1,320.00	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	3.5	\$ 1,225.00	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	384	\$ 9,612.05	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	1389	\$ 2,430.41	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	1285	\$ 16,702.24	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	0	\$ -	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	1285	\$ 15,417.45	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	650	\$ 5,362.50	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	3	\$ 225.00	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00	0	\$ -	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	2	\$ 1,200.00	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	1	\$ 600.00	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	35	\$ 1,575.00	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	0	\$ -	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	1	\$ 500.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	100	\$ 125.00	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
December 20, 2014

				Chestnut Ave		Total Project Costs	
				Main St to 4th St			
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	1	\$ 750.00	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00	2	\$ 300.00	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	777	\$ 3,108.85	11212	\$ 44,847.15
SUBTOTAL					\$ 82,432.51		\$ 998,184.91
10% CONTINGENCY					\$ 8,250.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 90,682.51		\$ 1,098,054.91
SOFT COSTS					\$ 15,900.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 106,582.51		\$ 1,290,854.91

Curb & Gutter Construction							
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	649	\$ 7,788.00	7937	\$ 95,244.00
SUBTOTAL					\$ 7,788.00		\$ 95,244.00
10% CONTINGENCY					\$ 780.00		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ 8,568.00		\$ 104,794.00
SOFT COSTS					\$ 1,500.00		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ 10,068.00		\$ 123,494.00

Sidewalk Construction							
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	1625	\$ 6,500.00	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	16	\$ 560.00	72	\$ 2,520.00
SUBTOTAL					\$ 7,060.00		\$ 19,480.00
10% CONTINGENCY					\$ 710.00		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ 7,770.00		\$ 21,450.00
SOFT COSTS					\$ 1,400.00		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ 9,170.00		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
December 20, 2014

Chestnut Ave	Total Project Costs
Main St to 4th St	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
----------	-------------------	------	------------	----------	--------	----------	--------

Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	0	\$ -	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	0	\$ -	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	40	\$ 1,000.00	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	250	\$ 7,250.00	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	0	\$ -	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	0	\$ -	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	9	\$ 1,800.00	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	6	\$ 1,500.00	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	0	\$ -	13	\$ 3,250.00
SUBTOTAL					\$ 11,550.00		\$ 171,776.00
10% CONTINGENCY					\$ 1,160.00		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ 12,710.00		\$ 188,986.00
SOFT COSTS					\$ 2,300.00		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ 15,010.00		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00	376	\$ 376.00	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00	34	\$ 34.00	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00	0	\$ -	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00	1	\$ 2,000.00	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00	1	\$ 500.00	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00	1	\$ 500.00	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00	0	\$ -	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00	0	\$ -	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Chestnut Ave		Total Project Costs	
				Main St to 4th St		Quantity	Amount
2504.603	8" Watermain Pipe	LF	\$ 30.00	338	\$ 10,140.00	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00		\$ -	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50	0	\$ -	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00	0	\$ -	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00	0	\$ -	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00	0	\$ -	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00	22	\$ 484.00	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00	1	\$ 250.00	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00	1	\$ 275.00	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00
SUBTOTAL					\$ 14,759.00		\$ 431,291.00
10% CONTINGENCY					\$ 1,480.00		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ 16,239.00		\$ 474,481.00
SOFT COSTS					\$ 2,900.00		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ 19,139.00		\$ 557,981.00

Sanitary Sewer							
2104.501	Remove Sanitary Structure	EA	\$ 300.00	1	\$ 300.00	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	331	\$ 331.00	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	34	\$ 34.00	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	1	\$ 500.00	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	1	\$ 500.00	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	0	\$ -	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	329	\$ 11,515.00	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	33	\$ 759.00	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	1	\$ 150.00	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

						Chestnut Ave		Total Project Costs	
						Main St to 4th St			
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount	Quantity	Amount
2504.602	4" Pipe Plug	EA	\$ 30.00	1	\$ 30.00	40	\$ 1,200.00		
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	12	\$ 3,120.00	128	\$ 33,280.00		
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	1	\$ 750.00	11	\$ 8,250.00		
2503.600	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00		
SUBTOTAL						\$ 18,189.00		\$ 190,515.00	
10% CONTINGENCY						\$ 1,820.00		\$ 19,070.00	
CONSTRUCTION SUBTOTAL						\$ 20,009.00		\$ 209,585.00	
SOFT COSTS						\$ 3,600.00		\$ 37,100.00	
TOTAL SANITARY PROJECT COST						\$ 23,609.00		\$ 246,685.00	

GENERAL & STREET COST	\$ 106,582.51		\$ 1,290,854.91
CURB & GUTTER COST	\$ 10,068.00		\$ 123,494.00
SIDEWALK COST	\$ 9,170.00		\$ 25,450.00
STORM COST	\$ 15,010.00		\$ 222,386.00
WATERMAIN COST	\$ 19,139.00		\$ 557,981.00
SANITARY SEWER COST	\$ 23,609.00		\$ 246,685.00
TOTAL PROJECT COST	\$ 183,578.51		\$ 2,466,850.91



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Spruce Ave	Total Project Costs
Main St to Fasnacht Park	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.17	\$ 27,200.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	0	\$ -	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	0	\$ -	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	0	\$ 200.00	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	251	\$ 376.50	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	0	\$ -	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	47	\$ 141.00	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	2850	\$ 22,800.00	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	224	\$ 4,480.00	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	10.5	\$ 3,675.00	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	863	\$ 21,575.00	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	3120	\$ 5,460.00	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	2849	\$ 37,037.00	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	0	\$ -	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	2849	\$ 34,188.00	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	2100	\$ 17,325.00	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	8	\$ 600.00	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00	1	\$ 600.00	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	4	\$ 2,400.00	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	1	\$ 600.00	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	13	\$ 585.00	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	20	\$ 1,100.00	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	2	\$ 1,000.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	100	\$ 125.00	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS
 CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

Spruce Ave Main St to Fasnacht Park						Total Project Costs	
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	1	\$ 750.00	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00	5	\$ 750.00	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	2033	\$ 8,132.00	11212	\$ 44,847.15
SUBTOTAL					\$ 191,099.50		\$ 998,184.91
10% CONTINGENCY					\$ 19,110.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 210,209.50		\$ 1,098,054.91
SOFT COSTS					\$ 36,800.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 247,009.50		\$ 1,290,854.91

Curb & Gutter Construction							
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	2061	\$ 24,732.00	7937	\$ 95,244.00
SUBTOTAL					\$ 24,732.00		\$ 95,244.00
10% CONTINGENCY					\$ 2,480.00		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ 27,212.00		\$ 104,794.00
SOFT COSTS					\$ 4,800.00		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ 32,012.00		\$ 123,494.00

Sidewalk Construction							
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	150	\$ 600.00	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	8	\$ 280.00	72	\$ 2,520.00
SUBTOTAL					\$ 880.00		\$ 19,480.00
10% CONTINGENCY					\$ 90.00		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ 970.00		\$ 21,450.00
SOFT COSTS					\$ 200.00		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ 1,170.00		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
December 20, 2014

Spruce Ave Main St to Fasnacht Park	Total Project Costs
--	---------------------

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
----------	-------------------	------	------------	----------	--------	----------	--------

Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	254	\$ 889.00	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	3	\$ 525.00	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	58	\$ 1,450.00	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	359	\$ 10,411.00	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	0	\$ -	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	0	\$ -	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	18	\$ 3,600.00	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	12	\$ 3,000.00	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	2	\$ 500.00	13	\$ 3,250.00
SUBTOTAL					\$ 20,375.00		\$ 171,776.00
10% CONTINGENCY					\$ 2,040.00		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ 22,415.00		\$ 188,986.00
SOFT COSTS					\$ 4,000.00		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ 26,415.00		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00	0	\$ -	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00	0	\$ -	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00	0	\$ -	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00	0	\$ -	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00	0	\$ -	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00	0	\$ -	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00	0	\$ -	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00	0	\$ -	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Spruce Ave Main St to Fasnacht Park						Total Project Costs	
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2504.603	8" Watermain Pipe	LF	\$ 30.00	539	\$ 16,170.00	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00	0	\$ -	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50	298	\$ 2,235.00	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00	0	\$ -	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00	0	\$ -	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00	0	\$ -	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00	0	\$ -	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00	0	\$ -	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00	0	\$ -	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00
SUBTOTAL					\$ 18,605.00		\$ 431,291.00
10% CONTINGENCY					\$ 1,870.00		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ 20,475.00		\$ 474,481.00
SOFT COSTS					\$ 3,600.00		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ 24,075.00		\$ 557,981.00

Sanitary Sewer							
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2104.501	Remove Sanitary Structure	EA	\$ 300.00	0	\$ -	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	0	\$ -	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	0	\$ -	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	0	\$ -	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	0	\$ -	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	0	\$ -	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	0	\$ -	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	0	\$ -	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	0	\$ -	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS
 2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

Spruce Ave Main St to Fasnacht Park						Total Project Costs	
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2504.602	4" Pipe Plug	EA	\$ 30.00	0	\$ -	40	\$ 1,200.00
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	0	\$ -	128	\$ 33,280.00
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	0	\$ -	11	\$ 8,250.00
2503.600	Granular Pipe Foundation	CY	\$ 20.00	0	\$ -	70	\$ 1,400.00
SUBTOTAL					\$ -		\$ 190,515.00
10% CONTINGENCY					\$ -		\$ 19,070.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 209,585.00
SOFT COSTS					\$ -		\$ 37,100.00
TOTAL SANITARY PROJECT COST					\$ -		\$ 246,685.00

GENERAL & STREET COST	\$ 247,009.50	\$ 1,290,854.91
CURB & GUTTER COST	\$ 32,012.00	\$ 123,494.00
SIDEWALK COST	\$ 1,170.00	\$ 25,450.00
STORM COST	\$ 26,415.00	\$ 222,386.00
WATERMAIN COST	\$ 24,075.00	\$ 557,981.00
SANITARY SEWER COST	\$ -	\$ 246,685.00
TOTAL PROJECT COST	\$ 330,681.50	\$ 2,466,850.91



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Spruce Ave Fasnacht Park to 1st St	Total Project Costs
---------------------------------------	---------------------

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.03	\$ 4,800.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	0	\$ -	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	0	\$ -	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	0	\$ -	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	0	\$ -	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	1466	\$ 3,884.90	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	0	\$ -	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	0	\$ -	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	0	\$ -	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	0.0	\$ -	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	0	\$ -	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	0	\$ -	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	1466	\$ 19,058.00	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	0	\$ -	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	0	\$ -	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	0	\$ -	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	0	\$ -	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00	0	\$ -	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	0	\$ -	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	0	\$ -	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	0	\$ -	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	0	\$ -	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	1	\$ 500.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	100	\$ 125.00	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Spruce Ave Fasnacht Park to 1st St						Total Project Costs	
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	0	\$ -	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00	0	\$ -	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	0	\$ -	11212	\$ 44,847.15
SUBTOTAL					\$ 28,367.90		\$ 998,184.91
10% CONTINGENCY					\$ 2,840.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 31,207.90		\$ 1,098,054.91
SOFT COSTS					\$ 5,500.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 36,707.90		\$ 1,290,854.91

Curb & Gutter Construction							
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	0	\$ -	7937	\$ 95,244.00
SUBTOTAL					\$ -		\$ 95,244.00
10% CONTINGENCY					\$ -		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 104,794.00
SOFT COSTS					\$ -		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ -		\$ 123,494.00

Sidewalk Construction							
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	0	\$ -	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	0	\$ -	72	\$ 2,520.00
SUBTOTAL					\$ -		\$ 19,480.00
10% CONTINGENCY					\$ -		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 21,450.00
SOFT COSTS					\$ -		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ -		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS
 CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

Spruce Ave Fasnacht Park to 1st St	Total Project Costs
---------------------------------------	----------------------------

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
----------	-------------------	------	------------	----------	--------	----------	--------

Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	0	\$ -	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	0	\$ -	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	0	\$ -	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	0	\$ -	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	0	\$ -	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	0	\$ -	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	0	\$ -	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	0	\$ -	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	0	\$ -	13	\$ 3,250.00
SUBTOTAL					\$ -		\$ 171,776.00
10% CONTINGENCY					\$ -		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 188,986.00
SOFT COSTS					\$ -		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ -		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00	0	\$ -	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00	0	\$ -	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00	0	\$ -	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00	0	\$ -	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00	0	\$ -	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00	0	\$ -	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00	0	\$ -	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00	0	\$ -	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Spruce Ave Fasnacht Park to 1st St						Total Project Costs	
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2504.603	8" Watermain Pipe	LF	\$ 30.00	0	\$ -	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00	0	\$ -	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50	0	\$ -	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00	0	\$ -	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00	0	\$ -	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00	0	\$ -	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00	0	\$ -	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00	0	\$ -	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00	0	\$ -	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00	0	\$ -	70	\$ 1,400.00
SUBTOTAL					\$ -		\$ 431,291.00
10% CONTINGENCY					\$ -		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 474,481.00
SOFT COSTS					\$ -		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ -		\$ 557,981.00

Sanitary Sewer							
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2104.501	Remove Sanitary Structure	EA	\$ 300.00	0	\$ -	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	0	\$ -	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	0	\$ -	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	0	\$ -	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	0	\$ -	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	0	\$ -	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	0	\$ -	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	0	\$ -	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	0	\$ -	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS
 CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

Spruce Ave Fasnacht Park to 1st St						Total Project Costs	
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2504.602	4" Pipe Plug	EA	\$ 30.00	0	\$ -	40	\$ 1,200.00
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	0	\$ -	128	\$ 33,280.00
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	0	\$ -	11	\$ 8,250.00
2503.600	Granular Pipe Foundation	CY	\$ 20.00	0	\$ -	70	\$ 1,400.00
SUBTOTAL					\$ -		\$ 190,515.00
10% CONTINGENCY					\$ -		\$ 19,070.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 209,585.00
SOFT COSTS					\$ -		\$ 37,100.00
TOTAL SANITARY PROJECT COST					\$ -		\$ 246,685.00

GENERAL & STREET COST	\$ 36,707.90		\$ 1,290,854.91	
CURB & GUTTER COST	\$ -		\$ 123,494.00	
SIDEWALK COST	\$ -		\$ 25,450.00	
STORM COST	\$ -		\$ 222,386.00	
WATERMAIN COST	\$ -		\$ 557,981.00	
SANITARY SEWER COST	\$ -		\$ 246,685.00	
TOTAL PROJECT COST	\$ 36,707.90		\$ 2,466,850.91	



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Block 17 Alley	Total Project Costs
Walnut Ave to Chestnut Ave	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.07	\$ 11,200.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	0	\$ -	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	0	\$ -	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	0	\$ -	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	0	\$ -	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	0	\$ -	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	0	\$ -	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	235	\$ 1,880.00	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	8	\$ 160.00	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	0.0	\$ -	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	85	\$ 2,125.00	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	0	\$ -	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	0	\$ -	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	375	\$ 6,562.50	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	0	\$ -	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	0	\$ -	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	3	\$ 225.00	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00	0	\$ -	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	0	\$ -	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	0	\$ -	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	0	\$ -	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	0	\$ -	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	1	\$ 250.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	100	\$ 125.00	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Block 17 Alley Walnut Ave to Chestnut Ave						Total Project Costs	
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	1	\$ 750.00	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00		\$ -	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	70	\$ 280.00	11212	\$ 44,847.15
SUBTOTAL					\$ 23,557.50		\$ 998,184.91
10% CONTINGENCY					\$ 2,360.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 25,917.50		\$ 1,098,054.91
SOFT COSTS					\$ 4,600.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 30,517.50		\$ 1,290,854.91

Curb & Gutter Construction							
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	0	\$ -	7937	\$ 95,244.00
SUBTOTAL					\$ -		\$ 95,244.00
10% CONTINGENCY					\$ -		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 104,794.00
SOFT COSTS					\$ -		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ -		\$ 123,494.00

Sidewalk Construction							
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	0	\$ -	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	0	\$ -	72	\$ 2,520.00
SUBTOTAL					\$ -		\$ 19,480.00
10% CONTINGENCY					\$ -		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 21,450.00
SOFT COSTS					\$ -		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ -		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
December 20, 2014

Block 17 Alley	Total Project Costs
Walnut Ave to Chestnut Ave	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
----------	-------------------	------	------------	----------	--------	----------	--------

Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	0	\$ -	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	0	\$ -	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	0	\$ -	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	0	\$ -	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	0	\$ -	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	0	\$ -	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	0	\$ -	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	0	\$ -	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	0	\$ -	13	\$ 3,250.00
SUBTOTAL					\$ -		\$ 171,776.00
10% CONTINGENCY					\$ -		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 188,986.00
SOFT COSTS					\$ -		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ -		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00		\$ -	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00		\$ -	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00		\$ -	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00		\$ -	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00		\$ -	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00		\$ -	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00		\$ -	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00		\$ -	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Block 17 Alley Walnut Ave to Chestnut Ave						Total Project Costs	
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2504.603	8" Watermain Pipe	LF	\$ 30.00		\$ -	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00		\$ -	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50		\$ -	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00		\$ -	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00		\$ -	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00		\$ -	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00		\$ -	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00		\$ -	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00		\$ -	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00		\$ -	70	\$ 1,400.00
SUBTOTAL					\$ -		\$ 431,291.00
10% CONTINGENCY					\$ -		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 474,481.00
SOFT COSTS					\$ -		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ -		\$ 557,981.00

Sanitary Sewer							
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2104.501	Remove Sanitary Structure	EA	\$ 300.00	0	\$ -	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	180	\$ 180.00	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	78	\$ 78.00	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	0	\$ -	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	2	\$ 1,000.00	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	180	\$ 5,400.00	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	0	\$ -	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	19	\$ 437.00	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	2	\$ 300.00	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
December 20, 2014

						Block 17 Alley		Total Project Costs	
						Walnut Ave to Chestnut Ave			
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount	Quantity	Amount
2504.602	4" Pipe Plug	EA	\$ 30.00	2	\$ 60.00	40	\$ 1,200.00		
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	0	\$ -	128	\$ 33,280.00		
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	0	\$ -	11	\$ 8,250.00		
2503.600	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00		
SUBTOTAL						\$ 7,655.00		\$ 190,515.00	
10% CONTINGENCY						\$ 770.00		\$ 19,070.00	
CONSTRUCTION SUBTOTAL						\$ 8,425.00		\$ 209,585.00	
SOFT COSTS						\$ 1,500.00		\$ 37,100.00	
TOTAL SANITARY PROJECT COST						\$ 9,925.00		\$ 246,685.00	

GENERAL & STREET COST	\$ 8,482.03		\$ 1,290,854.91	
CURB & GUTTER COST	\$ -		\$ 123,494.00	
SIDEWALK COST	\$ -		\$ 25,450.00	
STORM COST	\$ -		\$ 222,386.00	
WATERMAIN COST	\$ -		\$ 557,981.00	
SANITARY SEWER COST	\$ 31,960.47		\$ 246,685.00	
TOTAL PROJECT COST	\$ 40,442.50		\$ 2,466,850.91	



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

				Block 18 Alley		Total Project Costs	
				Chestnut Ave to 5th St			
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.03	\$ 4,800.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	0	\$ -	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	0	\$ -	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	0	\$ -	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	0	\$ -	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	0	\$ -	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	0	\$ -	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	316	\$ 2,528.00	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	18	\$ 360.00	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	0.0	\$ -	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	126	\$ 3,150.00	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	0	\$ -	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	0	\$ -	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	496	\$ 8,680.00	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	0	\$ -	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	0	\$ -	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	3	\$ 225.00	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00	0	\$ -	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	0	\$ -	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	0	\$ -	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	0	\$ -	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	0	\$ -	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	1	\$ 250.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	100	\$ 125.00	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

				Block 18 Alley		Total Project Costs	
				Chestnut Ave to 5th St			
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	1	\$ 750.00	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00	0	\$ -	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	166	\$ 664.00	11212	\$ 44,847.15
SUBTOTAL					\$ 21,532.00		\$ 998,184.91
10% CONTINGENCY					\$ 2,160.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 23,692.00		\$ 1,098,054.91
SOFT COSTS					\$ 4,200.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 27,892.00		\$ 1,290,854.91

Curb & Gutter Construction							
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	0	\$ -	7937	\$ 95,244.00
SUBTOTAL					\$ -		\$ 95,244.00
10% CONTINGENCY					\$ -		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 104,794.00
SOFT COSTS					\$ -		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ -		\$ 123,494.00

Sidewalk Construction							
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	0	\$ -	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	0	\$ -	72	\$ 2,520.00
SUBTOTAL					\$ -		\$ 19,480.00
10% CONTINGENCY					\$ -		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 21,450.00
SOFT COSTS					\$ -		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ -		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS
 CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

Block 18 Alley	Total Project Costs
Chestnut Ave to 5th St	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
----------	-------------------	------	------------	----------	--------	----------	--------

Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	0	\$ -	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	0	\$ -	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	0	\$ -	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	0	\$ -	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	0	\$ -	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	0	\$ -	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	0	\$ -	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	0	\$ -	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	0	\$ -	13	\$ 3,250.00
SUBTOTAL					\$ -		\$ 171,776.00
10% CONTINGENCY					\$ -		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 188,986.00
SOFT COSTS					\$ -		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ -		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00	1	\$ 1.00	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00	264	\$ 264.00	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00	2	\$ 500.00	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00	1	\$ 2,000.00	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00	0	\$ -	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00	3	\$ 1,500.00	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00	0	\$ -	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00	0	\$ -	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Block 18 Alley		Total Project Costs	
				Chestnut Ave to 5th St		Quantity	Amount
2504.603	8" Watermain Pipe	LF	\$ 30.00	243	\$ 7,290.00	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00	0	\$ -	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50	0	\$ -	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00	0	\$ -	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00	1	\$ 1,600.00	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00	1	\$ 3,300.00	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00	37	\$ 814.00	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00	3	\$ 750.00	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00	3	\$ 825.00	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00
SUBTOTAL					\$ 19,044.00		\$ 431,291.00
10% CONTINGENCY					\$ 1,910.00		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ 20,954.00		\$ 474,481.00
SOFT COSTS					\$ 3,700.00		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ 24,654.00		\$ 557,981.00

Sanitary Sewer							
2104.501	Remove Sanitary Structure	EA	\$ 300.00	1	\$ 300.00	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	341	\$ 341.00	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	70	\$ 70.00	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	0	\$ -	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	7	\$ 3,500.00	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	354	\$ 10,620.00	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	0	\$ -	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	71	\$ 1,633.00	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	7	\$ 1,050.00	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS
 2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
 December 20, 2014

						Block 18 Alley	Total Project Costs	
						Chestnut Ave to 5th St		
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount	
2504.602	4" Pipe Plug	EA	\$ 30.00	7	\$ 210.00	40	\$ 1,200.00	
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	24	\$ 6,240.00	128	\$ 33,280.00	
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	2	\$ 1,500.00	11	\$ 8,250.00	
2503.600	Granular Pipe Foundation	CY	\$ 20.00	10	\$ 200.00	70	\$ 1,400.00	
SUBTOTAL							\$ 190,515.00	
10% CONTINGENCY							\$ 19,070.00	
CONSTRUCTION SUBTOTAL						\$ 28,234.00	\$ 209,585.00	
SOFT COSTS						\$ 5,000.00	\$ 37,100.00	
TOTAL SANITARY PROJECT COST						\$ 33,234.00	\$ 246,685.00	

GENERAL & STREET COST	\$ 11,218.90		\$ 1,290,854.91
CURB & GUTTER COST	\$ -		\$ 123,494.00
SIDEWALK COST	\$ -		\$ 25,450.00
STORM COST	\$ -		\$ 222,386.00
WATERMAIN COST	\$ 24,654.00		\$ 557,981.00
SANITARY SEWER COST	\$ 49,907.10		\$ 246,685.00
TOTAL PROJECT COST	\$ 85,780.00		\$ 2,466,850.91



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

CSAH 26 Watermain Loop	Total Project Costs
Chestnut Ave to Walnut Ave	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.04	\$ 6,400.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	0	\$ -	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	0	\$ -	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	0	\$ -	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	45	\$ 67.50	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	0	\$ -	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	90	\$ 270.00	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	0	\$ -	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	0	\$ -	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	0.0	\$ -	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	11	\$ 275.00	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	0	\$ -	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	90	\$ 1,170.00	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	0	\$ -	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	90	\$ 1,080.00	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	0	\$ -	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	0	\$ -	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00	0	\$ -	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	0	\$ -	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	0	\$ -	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	0	\$ -	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	0	\$ -	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	1.0	\$ 500.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	100	\$ 125.00	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

				CSAH 26 Watermain Loop Chestnut Ave to Walnut Ave		Total Project Costs	
Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	0	\$ -	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00	0	\$ -	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	0	\$ -	11212	\$ 44,847.15
SUBTOTAL					\$ 9,887.50		\$ 998,184.91
10% CONTINGENCY					\$ 990.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 10,877.50		\$ 1,098,054.91
SOFT COSTS					\$ 2,000.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 12,877.50		\$ 1,290,854.91

Curb & Gutter Construction							
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	0	\$ -	7937	\$ 95,244.00
SUBTOTAL					\$ -		\$ 95,244.00
10% CONTINGENCY					\$ -		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 104,794.00
SOFT COSTS					\$ -		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ -		\$ 123,494.00

Sidewalk Construction							
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	0	\$ -	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	0	\$ -	72	\$ 2,520.00
SUBTOTAL					\$ -		\$ 19,480.00
10% CONTINGENCY					\$ -		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 21,450.00
SOFT COSTS					\$ -		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ -		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

CSAH 26 Watermain Loop	Total Project Costs
Chestnut Ave to Walnut Ave	

Item No.	Construction Item	Unit	Unit Price	Quantity	Amount	Quantity	Amount
----------	-------------------	------	------------	----------	--------	----------	--------

Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	0	\$ -	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	0	\$ -	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	0	\$ -	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	0	\$ -	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	0	\$ -	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	0	\$ -	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	0	\$ -	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	0	\$ -	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	0	\$ -	13	\$ 3,250.00
SUBTOTAL					\$ -		\$ 171,776.00
10% CONTINGENCY					\$ -		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 188,986.00
SOFT COSTS					\$ -		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ -		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00	0	\$ -	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00	0	\$ -	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00	0	\$ -	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00	0	\$ -	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00	2	\$ 1,000.00	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00	0	\$ -	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00	1	\$ 1,750.00	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00	0	\$ -	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	CSAH 26 Watermain Loop Chestnut Ave to Walnut Ave		Total Project Costs	
				Quantity	Amount	Quantity	Amount
2504.603	8" Watermain Pipe	LF	\$ 30.00	0	\$ -	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00	700	\$ 42,000.00	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50	200	\$ 1,500.00	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00	0	\$ -	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00	1	\$ 1,600.00	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00	0	\$ -	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00	0	\$ -	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00	0	\$ -	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00	0	\$ -	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00	0	\$ -	70	\$ 1,400.00
SUBTOTAL					\$ 47,850.00		\$ 431,291.00
10% CONTINGENCY					\$ 4,790.00		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ 52,640.00		\$ 474,481.00
SOFT COSTS					\$ 9,300.00		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ 61,940.00		\$ 557,981.00

Sanitary Sewer							
2104.501	Remove Sanitary Structure	EA	\$ 300.00	0	\$ -	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	0	\$ -	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	0	\$ -	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	0	\$ -	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	0	\$ -	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	0	\$ -	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	0	\$ -	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	0	\$ -	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	0	\$ -	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
December 20, 2014

Item No.	Construction Item	Unit	Unit Price	CSAH 26 Watermain Loop Chestnut Ave to Walnut Ave		Total Project Costs	
				Quantity	Amount	Quantity	Amount
2504.602	4" Pipe Plug	EA	\$ 30.00	0	\$ -	40	\$ 1,200.00
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	0	\$ -	128	\$ 33,280.00
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	0	\$ -	11	\$ 8,250.00
2503.600	Granular Pipe Foundation	CY	\$ 20.00	0	\$ -	70	\$ 1,400.00
SUBTOTAL					\$ -		\$ 190,515.00
10% CONTINGENCY					\$ -		\$ 19,070.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 209,585.00
SOFT COSTS					\$ -		\$ 37,100.00
TOTAL SANITARY PROJECT COST					\$ -		\$ 246,685.00

GENERAL & STREET COST	\$ 12,877.50		\$ 1,290,854.91
CURB & GUTTER COST	\$ -		\$ 123,494.00
SIDEWALK COST	\$ -		\$ 25,450.00
STORM COST	\$ -		\$ 222,386.00
WATERMAIN COST	\$ 61,940.00		\$ 557,981.00
SANITARY SEWER COST	\$ -		\$ 246,685.00
TOTAL PROJECT COST	\$ 74,817.50		\$ 2,466,850.91



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Point Ave Watermain Loop		Total Project Costs	
				Quantity	Amount	Quantity	Amount
General & Street Construction							
2021.501	Mobilization	EA	\$ 160,000.00	0.01	\$ 1,600.00	1.00	\$ 160,000.00
2104.501	Remove Existing Concrete Curb & Gutter	LF	\$ 3.50	0	\$ -	250	\$ 875.00
2104.501	Remove Tree	EA	\$ 275.00	0	\$ -	20	\$ 5,500.00
2104.501	Clear & Grub	AC	\$ 2,000.00	0.0	\$ -	1	\$ 1,200.00
2104.501	Remove Existing Bituminous Surface	SY	\$ 1.50	0	\$ -	6950	\$ 10,425.00
2104.501	Mill Existing Bituminous Surface (1")	SY	\$ 2.65	0	\$ -	1466	\$ 3,884.90
2104.513	Sawcut Existing Bituminous Surface	LF	\$ 3.00	75	\$ 225.00	507	\$ 1,521.00
2105.501	Common Excavation (P)	CY	\$ 8.00	0	\$ -	12050	\$ 96,400.00
2105.501	Common Borrow (Topsoil) (CV)	CY	\$ 20.00	0	\$ -	1083	\$ 21,660.00
2112.501	Subgrade Preparation	STA	\$ 350.00	0.0	\$ -	40	\$ 14,000.00
2211.503	Aggregate Base, Class 5 (CV) (P)	CY	\$ 25.00	325	\$ 8,125.00	4432	\$ 110,798.91
2511.515	Geotextile Filter, Type V	SY	\$ 1.75	0	\$ -	14036	\$ 24,562.15
2360.503	1.5" Type SPWEB340B, Bituminous Wear Course	SY	\$ 13.00	75	\$ 975.00	14534	\$ 188,944.76
2360.503	3" Type SPWEB340B, Bituminous Wear Course (Trail & Alleys)	SY	\$ 17.50	0	\$ -	871	\$ 15,242.50
2360.503	2" Type SPNWB330B, Bituminous Non-Wear Course	SY	\$ 12.00	75	\$ 900.00	13068	\$ 156,818.55
2360.503	7" Type SPWEB240B, Bituminous Wear Course (TH 60)	SY	\$ 75.00	0	\$ -	0	\$ -
2502.541	6" Perforated Pipe Drain	LF	\$ 8.25	0	\$ -	8100	\$ 66,825.00
2506.516	Tile Repairs	EA	\$ 75.00	0	\$ -	34	\$ 2,550.00
2506.516	Casting Assembly Neenah R-2573 w/ "Type B" Grate	EA	\$ 600.00	0	\$ -	1	\$ 600.00
2506.516	Casting Assembly MnDot 700-7 w/ 721 Grate	EA	\$ 600.00	0	\$ -	24	\$ 14,400.00
2506.516	Casting Assembly MnDot 700-7 w/ 715 Cover	EA	\$ 600.00	0	\$ -	9	\$ 5,400.00
2531.507	6" Concrete Driveway Pavement (Residential)	SY	\$ 45.00	0	\$ -	639	\$ 28,755.00
2531.507	8" Concrete Driveway Pavement (Commercial)	SY	\$ 55.00	0	\$ -	20	\$ 1,100.00
2563.601	Traffic Control	LS	\$ 500.00	1.0	\$ 500.00	20	\$ 10,000.00
2573.502	Perimeter Control	LF	\$ 1.25	0	\$ -	1100	\$ 1,375.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Point Ave Watermain Loop		Total Project Costs	
				Quantity	Amount	Quantity	Amount
2573.502	Temporary Rock Constuction Entrance	EA	\$ 750.00	0	\$ -	9	\$ 6,750.00
2573.530	Storm Drain Inlet Protection	EA	\$ 150.00	0	\$ -	25	\$ 3,750.00
2575.505	Sodding, Salt Resistant	SY	\$ 4.00	0	\$ -	11212	\$ 44,847.15
SUBTOTAL					\$ 12,325.00		\$ 998,184.91
10% CONTINGENCY					\$ 1,240.00		\$ 99,870.00
CONSTRUCTION SUBTOTAL					\$ 13,565.00		\$ 1,098,054.91
SOFT COSTS					\$ 2,400.00		\$ 192,800.00
TOTAL GENERAL & STREET PROJECT COST					\$ 15,965.00		\$ 1,290,854.91

Curb & Gutter Construction							
2531.501	Concrete Curb & Gutter, Design B618	LF	\$ 12.00	0	\$ -	7937	\$ 95,244.00
SUBTOTAL					\$ -		\$ 95,244.00
10% CONTINGENCY					\$ -		\$ 9,550.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 104,794.00
SOFT COSTS					\$ -		\$ 18,700.00
TOTAL CURB & GUTTER PROJECT COST					\$ -		\$ 123,494.00

Sidewalk Construction							
2531.507	5" Concrete Walk on Sand Base	SF	\$ 4.00	0	\$ -	4240	\$ 16,960.00
2531.618	Truncated Domes	SF	\$ 35.00	0	\$ -	72	\$ 2,520.00
SUBTOTAL					\$ -		\$ 19,480.00
10% CONTINGENCY					\$ -		\$ 1,970.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 21,450.00
SOFT COSTS					\$ -		\$ 4,000.00
TOTAL SIDEWALK PROJECT COST					\$ -		\$ 25,450.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Point Ave Watermain Loop		Total Project Costs	
				Quantity	Amount	Quantity	Amount
Storm							
2104.501	Remove Sewer Pipe (Storm)	LF	\$ 3.50	0	\$ -	3215	\$ 11,252.50
2104.501	Remove Drainage Structure (Storm)	EA	\$ 175.00	0	\$ -	22	\$ 3,850.00
2501.603	12" RCP CL V	LF	\$ 25.00	0	\$ -	283	\$ 7,075.00
2501.603	15" RCP CL V	LF	\$ 29.00	0	\$ -	959	\$ 27,811.00
2501.603	24" RCP CL III	LF	\$ 37.50	0	\$ -	1525	\$ 57,187.50
2501.603	36" RCP CL III	LF	\$ 55.00	0	\$ -	450	\$ 24,750.00
2506.501	Construct Drainage Structure, Type 1 C.B.	LF	\$ 200.00	0	\$ -	108	\$ 21,600.00
2506.501	Construct Drainage Structure, MnDot 48"	LF	\$ 250.00	0	\$ -	60	\$ 15,000.00
2506.516	Connect to Existing Storm Sewer	EA	\$ 250.00	0	\$ -	13	\$ 3,250.00
SUBTOTAL					\$ -		\$ 171,776.00
10% CONTINGENCY					\$ -		\$ 17,210.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 188,986.00
SOFT COSTS					\$ -		\$ 33,400.00
TOTAL STORM PROJECT COST					\$ -		\$ 222,386.00

Watermain							
2104.501	Remove Watermain	LF	\$ 1.00		\$ -	3158	\$ 3,158.00
2104.501	Remove Water Service Pipe	LF	\$ 1.00		\$ -	1421	\$ 1,421.00
2104.509	Remove Hydrant	EA	\$ 250.00		\$ -	5	\$ 1,250.00
2504.601	Temporary Water	LS	\$ 2,000.00		\$ -	6	\$ 12,000.00
2504.602	Connect to Inplace 8" Watermain	EA	\$ 500.00	4	\$ 2,000.00	12	\$ 6,000.00
2504.602	Connect to Inplace Water Service	EA	\$ 500.00	0	\$ -	45	\$ 22,500.00
2504.602	8"x8" Wet Tap & Valve	EA	\$ 1,750.00	0	\$ -	1	\$ 1,750.00
2504.603	6" Watermain Pipe	LF	\$ 27.00	14	\$ 378.00	84	\$ 2,268.00



I+S GROUP

OPINION OF PROBABLE COSTS

2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA

December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Point Ave Watermain Loop		Total Project Costs	
				Quantity	Amount	Quantity	Amount
2504.603	8" Watermain Pipe	LF	\$ 30.00	750	\$ 22,500.00	4390	\$ 131,700.00
2505.603	Bore 8" Watermain Pipe	LF	\$ 60.00	1010	\$ 60,600.00	1710	\$ 102,600.00
2504.608	Watermain Fittings (C153)	LBS	\$ 7.50	370	\$ 2,775.00	1718	\$ 12,885.00
2504.602	6" Gate Valve & Box	EA	\$ 1,350.00	1	\$ 1,350.00	8	\$ 10,800.00
2504.602	8" Gate Valve & Box	EA	\$ 1,600.00	6	\$ 9,600.00	20	\$ 32,000.00
2504.602	Hydrant	EA	\$ 3,300.00	2	\$ 6,600.00	10	\$ 33,000.00
2504.603	1" Water Service	LF	\$ 22.00	0	\$ -	1497	\$ 32,934.00
2504.603	1" Corporation Stop	EA	\$ 250.00	0	\$ -	45	\$ 11,250.00
2504.603	1" Curb Stop & Box	EA	\$ 275.00	0	\$ -	45	\$ 12,375.00
2451.507	Granular Pipe Foundation	CY	\$ 20.00	0	\$ -	70	\$ 1,400.00
SUBTOTAL					\$ 105,803.00		\$ 431,291.00
10% CONTINGENCY					\$ 10,590.00		\$ 43,190.00
CONSTRUCTION SUBTOTAL					\$ 116,393.00		\$ 474,481.00
SOFT COSTS					\$ 20,400.00		\$ 83,500.00
TOTAL WATERMAIN PROJECT COST					\$ 136,793.00		\$ 557,981.00

Sanitary Sewer							
2104.501	Remove Sanitary Structure	EA	\$ 300.00	0	\$ -	9	\$ 2,700.00
2104.501	Remove Sanitary Pipe	LF	\$ 1.00	0	\$ -	2702	\$ 2,702.00
2104.501	Remove Sanitary Service Pipe	LF	\$ 1.00	0	\$ -	1256	\$ 1,256.00
2503.602	Connect to Inplace 8" Sanitary	EA	\$ 500.00	0	\$ -	5	\$ 2,500.00
2503.602	Connect to Inplace Sanitary Service	EA	\$ 500.00	0	\$ -	40	\$ 20,000.00
2503.603	8" Sanitary Sewer Pipe (SDR-35)	LF	\$ 30.00	0	\$ -	2032	\$ 60,960.00
2503.603	10" Sanitary Sewer Pipe (SDR-26)	LF	\$ 35.00	0	\$ -	714	\$ 24,990.00
2503.603	4" PVC Sanitary Service	LF	\$ 23.00	0	\$ -	1099	\$ 25,277.00
2503.602	Sanitary Wye	EA	\$ 150.00	0	\$ -	40	\$ 6,000.00



I+S GROUP

OPINION OF PROBABLE COSTS
2015 INFRASTRUCTURE IMPROVEMENTS

CITY OF MADISON LAKE, MINNESOTA
December 20, 2014

Item No.	Construction Item	Unit	Unit Price	Point Ave Watermain Loop		Total Project Costs	
				Quantity	Amount	Quantity	Amount
2504.602	4" Pipe Plug	EA	\$ 30.00	0	\$ -	40	\$ 1,200.00
2506.603	Sanitary Manhole, MnDot 4007C w/ Mechanical Joint & Seals	LF	\$ 260.00	0	\$ -	128	\$ 33,280.00
2506.602	Casting Assembly MnDot 716 w/ Self Seal Cover	EA	\$ 750.00	0	\$ -	11	\$ 8,250.00
2503.600	Granular Pipe Foundation	CY	\$ 20.00	0	\$ -	70	\$ 1,400.00
SUBTOTAL					\$ -		\$ 190,515.00
10% CONTINGENCY					\$ -		\$ 19,070.00
CONSTRUCTION SUBTOTAL					\$ -		\$ 209,585.00
SOFT COSTS					\$ -		\$ 37,100.00
TOTAL SANITARY PROJECT COST					\$ -		\$ 246,685.00

GENERAL & STREET COST	\$ 15,965.00	\$ 1,290,854.91
CURB & GUTTER COST	\$ -	\$ 123,494.00
SIDEWALK COST	\$ -	\$ 25,450.00
STORM COST	\$ -	\$ 222,386.00
WATERMAIN COST	\$ 136,793.00	\$ 557,981.00
SANITARY SEWER COST	\$ -	\$ 246,685.00
TOTAL PROJECT COST	\$ 152,758.00	\$ 2,466,850.91

City of Madison Lake
2015 Street and Utility Improvements (4th & 5th Reconstruction)
Preliminary Assessment Roll
January 2, 2015

PIN	Property Address	Deedholder	Rounded Front Footage (ft)	Rounded Side Footage (ft)	Rounded Alley Footage (ft)	Total Assessment (Excludes Alley Pavement)	Total Alley Pavement Assessment	Total Assessment (Includes Alley Pavement)
R140534427002	600 3rd St	ALL SAINTS CATHOLIC CHURCH	186.00	0.00	0.00	\$ 19,284.57	\$ -	\$ 19,284.57
R140534256013	401 4th St	LEE DALE E & JULIE A	94.00	0.00	0.00	\$ 7,793.69	\$ -	\$ 7,793.69
R140534256014	401 4th St	LEE DALE E & JULIE A	349.00	0.00	0.00	\$ 28,936.13	\$ -	\$ 28,936.13
R140534278001	401 4th St	LEE DALE E & JULIE A	132.00	150.00	0.00	\$ 24,345.71	\$ -	\$ 24,345.71
R140534259007	404 4th St	FALK PETER L & NAEGLE MARY KAY	85.00	158.00	0.00	\$ 18,357.88	\$ -	\$ 18,357.88
R140534259008	404 4th St	FALK PETER L & NAEGLE MARY KAY	83.00	0.00	0.00	\$ 11,190.97	\$ -	\$ 11,190.97
R140534259009	408 4th St	HARDIE MAURICE E & DORIT M	81.00	0.00	0.00	\$ 10,921.31	\$ -	\$ 10,921.31
R140534278002	409 4th St	LEE DALE & JULIE	58.00	0.00	0.00	\$ 7,820.19	\$ -	\$ 7,820.19
R140534259010	412 4th St	LANG MARYELLEN	63.00	0.00	0.00	\$ 8,494.35	\$ -	\$ 8,494.35
R140534259011	416 4th St	RASMUSSEN CURTIS E & DIANA A	37.00	0.00	0.00	\$ 4,988.74	\$ -	\$ 4,988.74
R140534259012	420 4th St	MUELLER JOYCE I (LE)	50.00	0.00	0.00	\$ 6,741.55	\$ -	\$ 6,741.55
R140534279010	421 4th St	SCHONS DUANE B & JENNIFER J	80.00	0.00	0.00	\$ 10,786.47	\$ -	\$ 10,786.47
R140534279014	411 4th St	GARDEMANN DAVID	80.00	0.00	0.00	\$ 10,786.47	\$ -	\$ 10,786.47
R140534279015	417 4th St	MEYER CHRIS G & MEYER JANENE A	74.00	0.00	0.00	\$ 9,977.49	\$ -	\$ 9,977.49
R140534281026	501 4th St	LARSON ERIC D & REBECCA A	71.00	0.00	0.00	\$ 9,573.00	\$ -	\$ 9,573.00
R140534281027	505 4th St	FRIESEN KATHERINE R	78.00	0.00	0.00	\$ 10,516.81	\$ -	\$ 10,516.81
R140534263007	508 4th St	FREDERICK DARRELL J	42.00	0.00	0.00	\$ 5,662.90	\$ -	\$ 5,662.90
R140534427001	601 4th St	ALL SAINTS CATHOLIC CHURCH	93.00	0.00	0.00	\$ 9,642.28	\$ -	\$ 9,642.28
R140534430000	4th St	BAYVIEW	102.00	0.00	0.00	\$ 8,204.94	\$ -	\$ 8,204.94
R140534258016	401 Main St	SCHNEIDER JON A & CAROL J	99.00	0.00	0.00	\$ 5,718.02	\$ -	\$ 5,718.02
R140534258017	405 Main St	CITY OF MADISON LAKE	0.00	0.00	88.00	\$ 2,563.32	\$ 1,077.80	\$ 3,641.12
R140534258004	409 Main St	SCHNEIDER JON A & CAROL	0.00	0.00	24.00	\$ 5,126.64	\$ 2,155.60	\$ 7,282.24
R140534258005	409 Main St	SCHNEIDER JON A & CAROL	0.00	0.00	49.00	\$ 1,427.30	\$ 600.14	\$ 2,027.44
R140534258006	413 Main St	HOEHN JOHN C & DELORES A	0.00	0.00	24.00	\$ 699.09	\$ 293.94	\$ 993.03
R140534258007	421 Main St	MAXS MAIN STREET HARDWARE LLC	0.00	0.00	24.00	\$ 699.09	\$ 293.94	\$ 993.03
R140534258008	421 Main St	MAXS MAIN STREET HARDWARE LLC	153.00	0.00	24.00	\$ 14,654.94	\$ 293.94	\$ 14,948.88
R140534262001	501 Main St	GROEBNER JEROME P	152.00	0.00	75.00	\$ 12,604.55	\$ 1,496.83	\$ 14,101.38
R140534262003	513 Main St	CITY OF MADISON LAKE	0.00	0.00	0.00	\$ 564.01	\$ 498.94	\$ 1,062.95
R140534262013	515 Main St	CITY OF MADISON LAKE	0.00	0.00	50.00	\$ 1,128.02	\$ 997.89	\$ 2,125.90
R140534262005	517 Main St	CITY OF MADISON LAKE	0.00	0.00	25.00	\$ 564.01	\$ 498.94	\$ 1,062.95
R140534262006	525 Main St	CITY OF MADISON LAKE	0.00	0.00	124.00	\$ 2,030.43	\$ 1,796.19	\$ 3,826.62
R140534259001	401 5th St	SWANSON JOHN C & MARLENE T	93.00	160.00	0.00	\$ 18,914.49	\$ -	\$ 18,914.49
R140534258010	404 5th St	SCHAUB WAYNE	38.00	99.00	0.00	\$ 10,592.62	\$ -	\$ 10,592.62
R140534259002	405 5th St	SCHMAHL MARGARET (LE)	48.00	0.00	0.00	\$ 6,157.39	\$ -	\$ 6,157.39
R140534258011	408 5th St	MACHADO DEBORAH (CFD)	32.00	0.00	0.00	\$ 4,104.92	\$ -	\$ 4,104.92
R140534258012	412 5th St	BUTZER CHRISTOPHER & KERI R	32.00	0.00	0.00	\$ 4,104.92	\$ -	\$ 4,104.92
R140534259003	413 5th St	STEHR TROY & HEATHER D	100.00	0.00	0.00	\$ 12,827.89	\$ -	\$ 12,827.89
R140534258013	416 5th St	KING ALLISON MARTIN	34.00	0.00	100.00	\$ 4,361.48	\$ 1,224.77	\$ 5,586.25
R140534258014	420 5th St	BENNETT MARILYN J	74.00	0.00	76.00	\$ 9,492.64	\$ 930.83	\$ 10,423.46
R140534259004	421 5th St	HERZ FRANCIS H ESTATE	50.00	0.00	0.00	\$ 6,413.94	\$ -	\$ 6,413.94
R140534262014	500 5th St	WOLTERS MARY LOU	100.00	152.00	100.00	\$ 24,860.05	\$ 1,995.77	\$ 26,855.82
R140534263011	505 5th St	SCHAEFER GERALD O LIVING TRUST	71.00	0.00	0.00	\$ 9,107.80	\$ -	\$ 9,107.80

City of Madison Lake
 2015 Street and Utility Improvements (4th & 5th Reconstruction)
 Preliminary Assessment Roll
 January 2, 2015

PIN	Property Address	Deedholder	Rounded Front Footage (ft)	Rounded Side Footage (ft)	Rounded Alley Footage (ft)	Total Assessment (Excludes Alley Pavement)	Total Alley Pavement Assessment	Total Assessment (Includes Alley Pavement)
R140534262009	508 5th St	MCCARTHY SHEYNA	50.00	0.00	50.00	\$ 6,806.31	\$ 997.89	\$ 7,804.20
R140534263003	509 5th St	BARNES MATTHEW & KRISTIN, GROSS SCOTT & SANDRA	100.00	0.00	0.00	\$ 12,827.89	\$ -	\$ 12,827.89
R140534262010	512 5th St	KENNEDY KEVIN N & KAREN D	75.00	0.00	75.00	\$ 8,743.05	\$ 199.58	\$ 8,942.62
R140534426009	601 5th St	FASNACHT WALTER E & ROSE M	30.00	0.00	0.00	\$ 4,077.29	\$ -	\$ 4,077.29
R140534426002	605 5th St	FASNACHT WALTER E & ROSE M	49.00	0.00	0.00	\$ 6,659.57	\$ -	\$ 6,659.57
R140534403007	608 5th St	LESKEY THOMAS J & CATHLEEN M L	76.00	0.00	0.00	\$ 10,329.13	\$ -	\$ 10,329.13
R140534403008	612 5th St	BRENNAN KATHLEEN MARIE	75.00	0.00	0.00	\$ 10,193.22	\$ -	\$ 10,193.22
R140534279002	308 Chestnut Ave	STOECKEL GREGORY D	99.00	0.00	0.00	\$ 13,348.26	\$ -	\$ 13,348.26
R140534263012	401 Chestnut Ave	HODAPP KEVIN	150.00	95.00	0.00	\$ 22,487.48	\$ -	\$ 22,487.48
R140534259013	404 Chestnut Ave	SCHMITZ ANTHONY R	150.00	101.00	0.00	\$ 28,494.14	\$ -	\$ 28,494.14
R140534259006	408 Chestnut Ave	DORMAN JEREMY R & DARCY L	62.00	0.00	0.00	\$ 14,816.42	\$ -	\$ 14,816.42
R140534259005	412 Chestnut Ave	LUNDHOLM JONATHAN C	89.00	102.00	0.00	\$ 28,177.47	\$ -	\$ 28,177.47
R140534263010	413 Chestnut Ave	MADIGAN MARY JANE	54.00	152.00	0.00	\$ 16,734.65	\$ -	\$ 16,734.65
R140534258015	500 Chestnut Ave	BECKEL BRIAN P	74.00	80.00	0.00	\$ 22,011.37	\$ -	\$ 22,011.37
R140534258009	504 Chestnut Ave	MADIGAN THOMAS E & LINDA L	73.00	0.00	226.00	\$ 19,905.62	\$ 2,767.98	\$ 22,673.60
R140534256009	Spruce Ave	STATE OF MINNESOTA	263.00	0.00	0.00	\$ 8,387.04	\$ -	\$ 8,387.04
R140534276010	300 Spruce Ave	LEE DALE E & JULIE A	200.00	0.00	0.00	\$ 14,206.49	\$ -	\$ 14,206.49
R140534276011	300 Spruce Ave	LEE DALE E & JULIE A	99.00	0.00	0.00	\$ 7,032.21	\$ -	\$ 7,032.21
R140534258021	505 Spruce Ave	HANCOCK LESLIE W & JAQUETTA L (CFD)	43.00	0.00	43.00	\$ 6,772.33	\$ 526.65	\$ 7,298.98
R140534258020	507 Spruce Ave	SCHNEIDER JON A & CAROL J	43.00	0.00	43.00	\$ 6,772.33	\$ 526.65	\$ 7,298.98
R140534258019	509 Spruce Ave	DIRKS PAUL & BECK MICHELLE	46.00	0.00	0.00	\$ 6,985.42	\$ 526.65	\$ 7,512.08
R140534281003	316 Walnut Ave	ALL SAINTS CATHOLIC CHURCH	133.00	125.00	0.00	\$ 9,070.48	\$ -	\$ 9,070.48
R140534263009	400 Walnut Ave	ZIMMER PAUL J	143.00	0.00	0.00	\$ 9,242.09	\$ -	\$ 9,242.09
R140534426010	409 Walnut Ave	FASNACHT WALTER E & ROSE M	10.00	143.00	0.00	\$ 1,359.10	\$ -	\$ 1,359.10
R140534263004	412 Walnut Ave	MUETZEL HERBERT J & VALERIE	74.00	0.00	0.00	\$ 9,492.64	\$ -	\$ 9,492.64
R140534262011	500 Walnut Ave	WHITE RYAN C	73.00	152.00	74.00	\$ 9,364.36	\$ -	\$ 9,364.36
R140534403004	501 Walnut Ave	ROWLES GARY D & VELMA M	148.00	0.00	0.00	\$ 9,837.66	\$ -	\$ 9,837.66
R140534426012	400 Lakeshore Dr	PETERSON JOHN C & HELEN M	143.00	0.00	0.00	\$ 8,856.25	\$ -	\$ 8,856.25
R140534426004	412 Lakeshore Dr	FASNACHT WALTER E & ROSE M	267.00	0.00	0.00	\$ 17,786.96	\$ -	\$ 17,786.96
R140534405003	500 Lakeshore Dr	WORRELL BARBARA J	62.00	0.00	0.00	\$ 8,426.40	\$ -	\$ 8,426.40
R140534278004	450 Butternut Ln	CITY OF MADISON LAKE	46.00	0.00	0.00	\$ 3,880.57	\$ -	\$ 3,880.57
R140534278005	446 Lilac Ln	CITY OF MADISON LAKE	118.00	0.00	0.00	\$ 9,783.56	\$ -	\$ 9,783.56
Total						\$ 755,610.77	\$ 19,700.93	\$ 775,311.71
Total Project Cost						\$ 2,466,850.91		
Total Assessed						\$ 775,311.71		

City of Madison Lake
 2015 Street and Utility Improvements (4th & 5th Reconstruction)
 Preliminary Assessment Roll
 January 2, 2015

PIN	Property Address	Deedholder	Rounded Front Footage (ft)	Rounded Side Footage (ft)	Rounded Alley Footage (ft)	Total Assessment (Excludes Alley Pavement)	Total Alley Pavement Assessment	Total Assessment (Includes Alley Pavement)
Summary of Multi-Property Owners								
		ALL SAINTS CATHOLIC CHURCH	412.00	125.00	0.00	\$ 37,997.33	\$ -	\$ 37,997.33
		CITY OF MADISON LAKE	350.00	0.00	0.00	\$ 20,513.92	\$ 4,869.77	\$ 25,383.68
		FALK PETER L & NAEGLE MARY KAY	193.00	0.00	0.00	\$ 29,548.85	\$ -	\$ 29,548.85
		FASNACHT WALTER E & ROSE M	359.00	143.00	88.00	\$ 29,882.92	\$ -	\$ 29,882.92
		LEE DALE & JULIE	206.00	150.00	24.00	\$ 90,134.42	\$ -	\$ 90,134.42
		MAXS MAIN STREET HARDWARE LLC	158.00	310.00	123.00	\$ 15,354.02	\$ 587.89	\$ 15,941.91
		SCHNEIDER JON A & CAROL	231.00	0.00	24.00	\$ 19,044.30	\$ 3,282.39	\$ 22,326.68

Total Assessed	\$ 775,311.71
Total Project Cost	\$ 2,466,850.91
Percent Assessed	31%

Non-assessed (City Costs)	\$ 1,691,539.21
City Assessments	\$ 25,383.68
Total City Cost	\$ 1,716,922.89

Appendix E: Preliminary Assessment Roll

Appendix F: Minnesota Statute 429 Assessment Process



I+S GROUP

2015 Utility & Street Improvements

City of Madison Lake, Minnesota
Minnesota Statute 429 Assessment Process

Required Step	By	Date Completed	Comments
Initiation of Project	City Council	Completed	By Petition or Council Action
Ordering Preparation of Feasibility Report	City Council	Completed	
Collect Data and Prepare Feasibility Report	City Engineer	Completed	Data collection includes site survey and evaluation of sanitary sewer televising
Calling Hearing on Improvement	City Council	Completed	
Published Notice of Hearing on Report	City Clerk	Completed	Notice must be published twice, at least a week apart, with the last publication appearing at least three days prior to hearing.
Mailed Notice of Hearing on Improvement	City Clerk	Completed	Notice must be mailed at least ten days prior to hearing.
Resolution Receiving Report	City Council	January 5, 2015	
Present Feasibility Report	City Engineer	January 5, 2015	Provides Preliminary Estimates of Assessment
Improvement Hearing	City Council	January 5, 2015	
Resolution Ordering Improvement and Preparation of Plans and Specifications	City Council	January 5, 2015	
Prepare Plans and Specifications	City Engineer	January - February 2015	
Present Plans and Specifications	City Engineer	March 2015	
Resolution Approving Plans and Specifications and Ordering Advertisement for Bids	City Council	March 2015	
Advertise for Bids	City Clerk, City Engineer	March 2015	3 Weeks Advertising
Open Bids	City Clerk, City Engineer	March 2015	
Resolution Awarding Contract	City Council	April 2015	
Begin Construction	Contractor	June 2015	
End Construction	Contractor	October 2015	
Prepare Assessment Roll	City Clerk, City Engineer	October 2015	
Resolution Declaring Cost to be Assessed and Ordering Preparation of Proposed Assessment	City Council	October 2015	
Resolution for Hearing on Proposed Assessment	City Council	October 2015	
Published Notice of Hearing on Proposed Assessments	City Clerk	October 2015	Published at least once, at least two weeks prior to hearing.
Mailed Notice of Hearing on Proposed Assessments	City Clerk	October 2015	Notice must be mailed at least two weeks prior to hearing.
Assessment Hearing	City Council	November 2015	
Resolution Adopting Assessment	City Council	November 2015	
Final Completion	Contractor	June 2016	Completion of Final Paving Lift

Appendix G: Improvement Hearing Presentation

2015 Utility & Street Improvements
 Improvement Hearing – January 5, 2015




PROJECT AREA




EXISTING WASTEWATER FLOWS

- ~ City experiences relatively high wastewater flows due to clear water entering the sanitary collection system through inflow and infiltration (I/I)
- ~ Excess flows result in additional conveyance and treatment expenses; Interconnection Agreement with the City of Mankato requires that the City work towards I/I reduction
- ~ High flows can also cause basement back-ups
- ~ Several reports have identified the sewers within the project area to be susceptible to I/I due to the age and condition of the sanitary sewer as well as the lack of an adequate storm sewer outlet for sump pump discharges



EXISTING SANITARY SEWER

- ~ Existing sewer within the project area installed in mid-1970s
- ~ Sewer televised and shown to be in poor condition
 - Cracked, sagged, offset joints, etc.



EXISTING WATER SYSTEM

- ~ Poor water quality and inadequate fire flows have been experienced in some areas of town
- ~ 2004 Report Identified Recommended Improvements to the City's water supply and distribution system
 - New Municipal Well; constructed in 2010
 - New Water Tower; constructed in 2012
 - Replacement and looping of watermains; partially completed through various projects
- ~ Some dead-end and undersized watermains still remain



EXISTING WATER SYSTEM

- ~ 4th and 5th Street Watermains are 4-inch diameter
 - Looped at north end by a 2-inch main under existing structure
- ~ Lake Street area served entirely by long dead-end main
- ~ Sarah Circle, southern Park Road, and Melwood Court served by long dead-end main
- ~ Point Pleasant Road, Point Avenue, and Point Pleasant campground served by long dead-end main
- ~ Watermain within project area is circa 1975 and 6-inch diameter



EXISTING DRAINAGE

- ~ Area north of Sakatah Trail drains to south side of Spruce Avenue
 - Normally drained by 5th Street Storm Sewer
 - 5th Street Storm Sewer cannot keep up during large events, resulting in flooding on the south side of Spruce Avenue
- ~ Upper 5th Street storm sewer drains to Highway 60 storm system
 - Storm sewer collapsed in 2010 resulting in upstream flooding
- ~ Lower 5th Street storm sewer failed during June 2014
 - Televising indicates storm sewer drains an area north of Highway 60, but blockages precluded the upstream end from being located.
- ~ 4th Street storm sewer drains entire residential area east of 4th Street and discharges directly to Madison Lake
- ~ Chestnut Avenue and Block 17 & Block 18 Alleys experience poor drainage due to flat grades and lack of storm sewer



EXISTING STREETS

- ~ Pavement within project area in poor condition
- ~ Road sections lack subsurface drainage, making them more susceptible to frost action
- ~ Roads lack curb & gutter and are not wide enough to allow two-way traffic and one-side parking



PROPOSED IMPROVEMENTS

- ~ Sanitary Sewer Reconstruction
- ~ Watermain Reconstruction
- ~ Watermain Looping
- ~ Storm Sewer Reconstruction
- ~ Street Reconstruction
- ~ Curb & Gutter Construction
- ~ Subsurface Drainage Construction



SANITARY SEWER IMPROVEMENTS

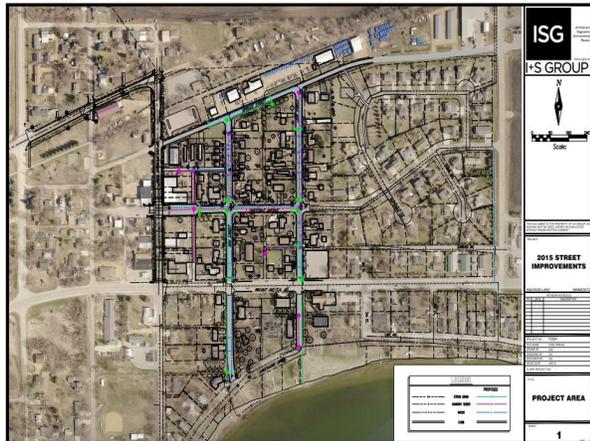
- ~ Sanitary sewer to be replaced:
 - 4th Street from Highway 60 to Spruce Avenue and north of Lakeshore Drive
 - 5th Street from Chestnut Avenue to Spruce Avenue
 - Chestnut Avenue from Main Street to 4th Street
 - Within alleys of Blocks 17 & 18
- ~ All sewer to be 8-inch PVC except for Chestnut Avenue would be 10-inch PVC based on existing and future service area.
- ~ Services will be replaced up to the right-of-way
 - Services will be televised during construction to inspect for leaks or other sources of I/I




WATERMAIN IMPROVEMENTS

- ~ All existing watermain within the project area will be replaced with 8-inch mains for improved fire protection and water quality
- ~ Services will be replaced up to and including the curb stop, approximately at the property line
- ~ Loop connecting north end of 4th & 5th Streets will be relocated to Spruce Avenue right-of-way
- ~ Loop to be added along 1st Street between Chestnut Avenue and Highway 60 to provide redundancy to Lake Street area and aid in the provision of temporary water service during construction to the eastern portion of the City
- ~ Loops to be added between Sarah Circle & Park Road and between Park Road & Point Pleasant Road to provide redundancy and improve water quality in these areas

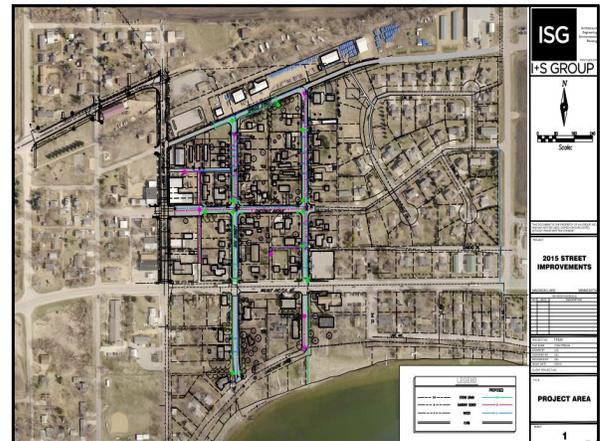




DRAINAGE IMPROVEMENTS

- Typical design standards require drainage infrastructure to be designed for a 10-year rainfall event (10% chance of occurring within a given year)
- Drainage from north of Sakatah Trail to be tied directly into storm sewer systems
- Overland overflows to be provided to provide secondary drainage of bowl area between 4th & 5th Streets
 - Spruce Avenue could be lowered in some locations as a result
- Subdrainage to be added along each street will also provide outlet for sump pump discharges

ISG
I+S GROUP



STREET IMPROVEMENTS

- Streets to be reconstructed with urban sections, including concrete curb & gutter
- 4th & 5th Streets and most of Chestnut Avenue to be 32-foot wide to allow two-way traffic and parking on one side
- Western portion of Chestnut Avenue within commercial area to be slightly narrowed such that the power poles are located behind the curb
- Spruce Avenue to be 24-foot wide to allow two-way traffic
- Depending on soil conditions, pavement sections will likely include:
 - Subgrade Preparation
 - Geotextile Fabric
 - 10 inches MnDot Class 5 Aggregate Base
 - 3.5 inches Bituminous Pavement

ISG
I+S GROUP

STREET IMPROVEMENTS

- ~ Eastern portion of Spruce Avenue to receive mill & overlay
- ~ Portions of Spruce Avenue may be slightly lowered in order to accommodate provision of overflow for bowl area
 - Lowering of road to be balanced with needs for detaining water on north side of Spruce Avenue and with the driveway grades and access requirements of the business on north side of Spruce Avenue

ISG
I+S GROUP

SUBSURFACE DRAINAGE IMPROVEMENTS

- ~ 6-inch perforated drain tile will be installed behind the curb for the entire length of the street
 - Tile will remove moisture from the street section, making it less susceptible to frost action
- ~ 4-inch service stubs will be provided to each property for the connection of sump pump discharge lines

ISG
I+S GROUP

ALLEY & SIDEWALK IMPROVEMENTS

- ~ Existing gravel alleys within Blocks 17 & 18 to be paved in addition to the necessary trench restoration from utility improvements
- ~ Pedestrian Ramps to be reconstructed in accordance with current ADA standards
- ~ Pedestrian route to be added to north side of Chestnut Avenue

ISG
I+S GROUP

OPINION OF PROBABLE COST

~ Total Estimated Project Cost, including contingency & soft costs:

Segment Description	Estimated Cost
Upper 5th	\$ 461,896.54
Upper 4th	\$ 585,107.56
Lower 5th	\$ 198,605.78
Lower 4th	\$ 133,090.81
Chestnut East (4th to 5th)	\$ 183,384.32
Chestnut Ave (Main to 5th)	\$ 183,578.51
Spruce (Main to Fasnacht Park)	\$ 330,681.50
Spruce Overlay	\$ 36,707.90
Block 17 Alley (Walnut to Chestnut)	\$ 40,442.50
Block 18 Alley (Chestnut to 4th St)	\$ 85,780.00
CSAH 26 Watermain Loop	\$ 74,817.50
Point Ave Watermain Loop	\$ 152,758.00
TOTAL	\$ 2,466,850.91

ISG
I+S GROUP

PROJECT COSTS & FUNDING

- ~ Estimated costs based on recent bid results. Actual costs will be based on bid results and actual construction quantities. Costs include contingencies for unforeseen circumstances and soft costs such as surveying, engineering, contract administration, etc.
- ~ Potential outside funding available for 5th Street Storm Sewer Improvements and watermain looping and replacement
- ~ A portion of project costs to be specially assessed to the benefitted properties in accordance with the Minnesota Statute 429

ISG
I+S GROUP

SPECIAL ASSESSMENTS

- ~ Preliminary Assessment Roll calculated based on City's assessment policy
- ~ Footages
 - Side footage on corner lots defined as the longest side and shall be assessed at 50% of the footage, or a minimum of 75 feet
 - Utilities to be assessed along shortest frontage only
- ~ Watermain loops not assessed
- ~ Mill & Overlay segment of Spruce Avenue not assessed

ISG
I+S GROUP



SPECIAL ASSESSMENTS

- ~ 30% of utility costs to be assessed on a front footage basis
- ~ 30% of street costs to be assessed on a front footage basis
- ~ 50% of reconstructed sidewalk to be assessed on a front footage basis
- ~ 100% of new sidewalk to be assessed on front footage basis
- ~ 100% of alley pavement costs to be assessed on front footage basis
- ~ 30% of reconstructed curb & gutter costs to be assessed on a front footage basis
- ~ 100% of new curb & gutter costs to be assessed on front footage basis




PROJECT PROCEDURE & SCHEDULE

- ~ City Council to Pass Resolution Ordering Feasibility Study – *Complete*
- ~ City Engineer to Prepare the Feasibility Study - *Complete*
- ~ City Council to Pass Resolution Calling for Public Hearing – *Complete*
- ~ City Council to Pass Resolution Receiving Feasibility Study – *Anticipated Tonight*
- ~ City Council to Hold Public Hearing on Improvement – *Tonight*
- ~ City Council to Pass Resolution Ordering the Improvement and Preparation of Plans and Specifications – *Anticipated Tonight*
- ~ City Engineer to Prepare Plans & Specifications – *Anticipated January – February 2015*




PROJECT PROCEDURE & SCHEDULE

- ~ City Council to Pass Resolution Approving Plans & Specifications and Ordering Advertisement for Bids – *Anticipated February 2015*
- ~ City to Open Bids – *Anticipated March 2015*
- ~ City Council to Pass Resolution Receiving Bids and Awarding Contract – *Anticipated March 2015*
- ~ Begin Construction – *Anticipated May 2015*
- ~ Construction Substantially Complete – *Anticipated October 2015*
- ~ City Council to Pass Resolution Calling for Hearing on Special Assessments – *Anticipated October 2015*
- ~ City Council to Hold Assessment Hearing – *Anticipated November 2015*
- ~ City Council to Pass Resolution Adopting Assessments – *Anticipated November 2015*
- ~ Final Construction Final Complete – *Anticipated June 2016*




SPECIAL ASSESSMENTS

- ~ Assessments will appear on 2016 Property Tax Statements
- ~ Assessments assumed to be over a 15 year term at an interest rate of 5%, but actual term and interest rate will be dependent on the actual bond rates and terms obtained by the City
- ~ Assessments can be deferred in accordance with Minnesota Statute 435
 - Owner is 65 years of age or older or retired by virtue of a permanent and total disability
 - Owner is a member of the Minnesota National Guard or other military reserves who is ordered into active military service
- ~ Preliminary Assessment Roll provides estimate of the amount to be assessed to each property

