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Feasibility Report For

2024 Street Reconstruction Project City of Maple Plain

November 2023

Submitted by:

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Certification

Feasibility Report

For

2024 Street Reconstruction Project

City of Maple Plain Maple Plain, MN 0C1.132036

November 2023

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.

By:

David P. Mat.

David P. Martini, P.E. License No. 26122

Date: November 21, 2023

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I. EXECUTIVE SUMMARY

A. Introduction

The impetus for this project is a request by the City of Maple Plain to evaluate infrastructure improvements in the project area. From an engineering standpoint, the proposed improvements are feasible, cost effective and necessary to maintain the City's existing infrastructure.

B. Proposed Improvements

The proposed improvements consist of reconstructing Independence Street, Bryant Street, Wyman Avenue, and mill and overlaying the Howard Avenue cul-de-sac. Concrete curb will be added to the project area where none exists. Sanitary sewer, watermain and services will be replaced in the project area.

C. Assessment Summary

Estimated assessments are combined between the two project areas; Bryant Street and Wyman Avenue Independence Street as Area 1, and Independence Street as Area 2.

35% of all project costs of standard width are proposed to be assessed on a unit basis. An equivalent residential front footage has been used to determine assessment "units" for non-residential properties. Where available, the sewer availability charge calculation has been used to determine the units, consistent with the City's unit assessment policy. The miscellaneous areas of Howard Avenue mill and overlay and Rainbow Park lot improvements will not be assessed per City policy. Properties receiving new utility services will be assessed for utilities. Corner lots that have previously been assessed for street improvements on a project within the last 10 years will not be assessed for the street and storm sewer improvements.

Assessment breakdown:

The estimated assessment rate for the proposed street and storm sewer improvements is \$12,320.84 per unit lot.

The estimated assessment rate for the proposed sanitary sewer improvements is \$3,701.89.

The estimated assessment rate for the proposed watermain improvements is \$4,882.82.

D. Funding Summary

The project costs are proposed to be apportioned as follows:

Total Project Cost	\$5,727,921.85
Sanitary Sewer Fund	\$628,369.22
Water Fund	\$828,823.74
Storm Sewer Fund	\$500,000.00
Capital Improvement Fund	\$1,859,962.07
Assessments ⁽¹⁾	\$1,910,766.82

⁽¹⁾ City Covers \$384,639.61 of this amount

II. INTRODUCTION

On August 28, 2023, the City Council authorized the preparation of a preliminary engineering report to analyze the reconstruction of the following streets:

- Bryant Street (from Wyman Ave. to Budd Ave.)
- Wyman Avenue (from Joyce St. to Bryant St.)
- Independence Street (from Budd Ave. to Howard Ave.)

Additionally, Howard Avenue north of Drake Street will be milled and overlaid and Rainbow Park lot off of Parkview Road will be paved and edged with concrete curb and gutter as part of the 2024 reconstruction project.

A. Scope

This report will determine the feasibility of reconstructing the above-mentioned streets. All existing infrastructure elements (street, utilities, etc.) within the project area were evaluated as part of this report.

The report will provide a description of the proposed improvements, an itemized cost estimate, a cost apportionment, and a preliminary assessment roll.

B. Background

Based on limited as-built information the City has for the proposed project area, it appears the majority of the improvements were originally constructed in the 1970's or earlier. It appears the roads have been overlayed at some point.

The existing pavements in a majority of the project area have deteriorated. There are many transverse and longitudinal cracks, areas of patching and crown deficiencies.

III. EXISTING CONDITIONS

The existing conditions are identified in Figure No. 2 & No. 3 in the Appendix.

Bryant Street is approximately 26-feet wide back of curb to back of curb. Wyman Avenue is currently 21-feet wide with no curb. The existing sanitary sewer is 8-inch vitrified clay pipe (VCP) and the watermain is 6-inch cast iron pipe (CIP). Storm sewer runs the length of Wyman Avenue, on Bryant Street from Wyman Avenue to Pioneer Avenue and from Prairieland Avenue to approximately Joyce Street. Drainage currently splits in three directions. Wyman Ave and Bryant to Pioneer drain through storm sewer that routes towards Halgren Road. Bryant from Pioneer to Joyce, drains north to the railroad ditch system and ultimately west. Bryant Street from Joyce Avenue to Budd Avenue drains east to Budd Avenue.

Independence Street is approximately 38.8-feet wide from back of curb to back of curb. The existing sanitary sewer is 8-inch vitrified clay pipe (VCP) and the watermain is 6-inch cast iron pipe (CIP). There is minimal existing storm sewer. Drainage on the project splits in the middle of the block. The west side of the street drains west and then to the north and is in the Pioneer Sarah Creek Watershed District and the east half of the block drains east and ultimately south along Howard Avenue.

IV. PROPOSED IMPROVEMENTS

The proposed project area is identified in Figure No. 1, No. 4 & No. 5 in the Appendix.

The proposed improvements are as follows:

A. Street and Storm Sewer

Area 1:

Bryant Street is proposed to be reconstructed with concrete B618 curb and gutter to a width

of 26-feet from back of curb to back of curb. Wyman Avenue is proposed to be reconstructed with concrete B618 curb to a width of 26-feet from back of curb to back of curb and reduce the existing ditch where possible. If conditions warrant, drain tile will be placed along both sides of the road and stubs would be provided at each property to allow a location to connect sump pump systems.

The proposed storm sewer improvements consist of adding additional inlets on Bryant Street and Wyman Avenue. Proposed additions can be seen in Figure No. 4 in the Appendix.

Area 2:

Independence Street is proposed to be reconstructed with concrete B618 curb and gutter to a width of 38.8-feet from back of curb to back of curb. If conditions warrant, drain tile will be placed along both sides of the road and stubs would be provided at each property to allow a location to connect sump pump systems.

The proposed storm sewer improvements consist of extending storm sewer on Independence Street to include additional catch basins and reduce overland flow on the roadway. Proposed additions can be seen in Figure No. 5 in the Appendix.

Miscellaneous Areas:

Proposed locations are shown in Figure No. 1.

No changes are proposed for Howard Avenue and a 1.5-inch mill and overlay will be completed to renew the pavement surface. Minor curb and gutter repairs will be made.

Rainbow Park lot off of Parkview Road will be converted from a gravel parking lot with timber edging to asphalt with curb and gutter edging. Additional stalls will be installed as space allows.

Summary:

For both reconstruction project areas, the updated national and local watershed district rules require that new and reconstructed impervious surface treat 0.5-inches of stormwater. This will require stormwater treatment facilities and will be evaluated more thoroughly during final design. Right of way is limited, so there will likely need to be easement acquisition to accomplish treatment needs.

Based on feedback from property owners regarding existing issues, additional storm sewer could be added to the project area in the design stage. The extent of drain tile in the project may also be adjusted based on property owner feedback.

The total estimated costs for the street and storm sewer improvements are \$3,486,086.53, broken down per area as follows:

Bryant Street and Wyman Avenue: \$2,111,205.47

Independence Street: \$1,261,417.50⁽¹⁾

⁽¹⁾ \$155,125.00 estimated cost for oversizing will not be assessed due to oversizing

Miscellaneous Areas (Howard Avenue Cul-De-Sac and Rainbow Park lot): \$113,463.56

B. Watermain

The proposed watermain improvements are identified in Figures No. 6 & No. 7 in the Appendix.

The proposed watermain improvements consist of replacing the existing watermain and water services to the curb stop within the project area. The proposed watermain will be 8-inch PVC pipe.

The total estimated project cost for the proposed watermain improvements is \$1,275,113.44,

broken down per area as follows:

Bryant Street and Wyman Avenue: \$875,089.69

Independence Street: \$400,023.75

C. Sanitary Sewer

The proposed sanitary sewer improvements are identified in Figure No. 8 & No. 9 in the Appendix.

The proposed sanitary sewer improvements consist of replacing the sanitary sewer and services to approximately 10-feet behind the curb in the project area. The proposed sanitary sewer main will be 8-inch PVC. Sanitary sewer services will be PVC and match the size of the existing service.

During construction, the condition of sanitary sewer services on private property will be evaluated to identify I&I issues. Property owners will be given the option of working with the contractor to replace the portion of the service line on private property and adding the cost of the replacement to the assessment for the property.

The total estimated project cost for the proposed sanitary sewer improvements is \$966,721.88, broken down per area as follows:

Bryant Street and Wyman Avenue: \$660,909.38

Independence Street: \$305,812.50

V. Special Assessments

Estimated assessments are combined between the two project areas; Bryant Street and Wyman Avenue as Area 1, and Independence Street as Area 2.

35% of all project costs of standard width are proposed to be assessed on a unit basis. An equivalent residential front footage has been used to determine assessment "units" for non-residential properties. Where available, the sewer availability charge calculation has been used to determine the units, consistent with the City's unit assessment policy. The miscellaneous areas of Howard Avenue mill and overlay and Rainbow Park lot improvements will not be assessed per City policy. Properties receiving new utility services will be assessed for utilities. Corner lots that have previously been assessed for street improvements on a project within the last 10 years will not be assessed for the street and storm sewer improvements.

Assessments break down:

The estimated assessment rate for the proposed street and storm sewer improvements is \$12,320.84 per unit lot.

The estimated assessment rate for the proposed sanitary sewer improvements is \$3,701.89.

The estimated assessment rate for the proposed watermain improvements is \$4,882.82.

Properties proposed to be assessed are shown in Figure No. 10 & 11 in the Appendix. A preliminary assessment roll is included in the Appendix. Actual assessments will be based on the final project costs and special benefit analysis. Some numbers in this report have been rounded.

VI. FUNDING

The project costs are proposed to be financed through the sale of Chapter 429 Improvement Bonds. The assessed portions of the project costs are proposed to be funded through the levying of special assessments to the benefiting properties.

The total estimated project costs for the proposed improvements are \$5,727.921.85, which includes an estimated 25 percent for soft costs. Itemized cost estimates have been included in the Appendix.

VII. ESTIMATED COSTS

A summary of the estimated funding apportionment for the proposed improvements is as follows:

Assessments ⁽¹⁾	\$1,910,766.82
Capital Improvement Fund	\$1,859,962.07
Storm Sewer Fund	\$500,000.00
Water Fund	\$828,823.74
Sanitary Sewer Fund	\$628,369.22
Total Project Cost	\$5,727,921.85
⁽¹⁾ City Covers \$384,639.61 of this amount	

VIII. CONCLUSION

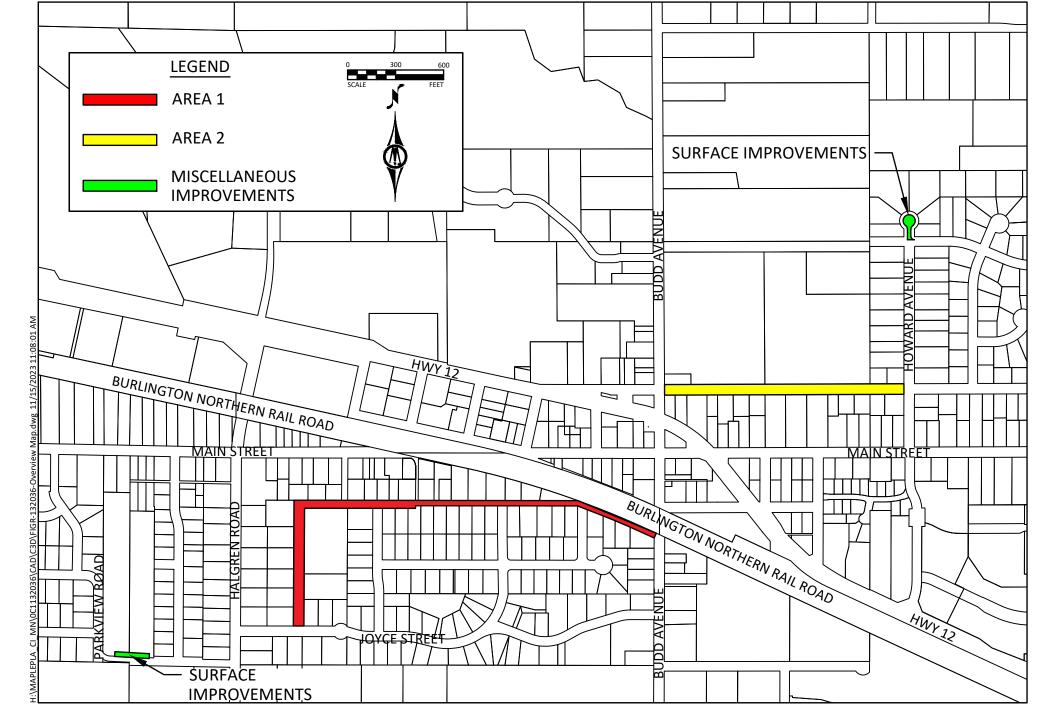
From an engineering standpoint, the proposed improvements are feasible, cost effective and necessary to maintain the City's existing infrastructure.

Appendix

Figures

Preliminary Cost Estimates

Preliminary Assessment Rolls



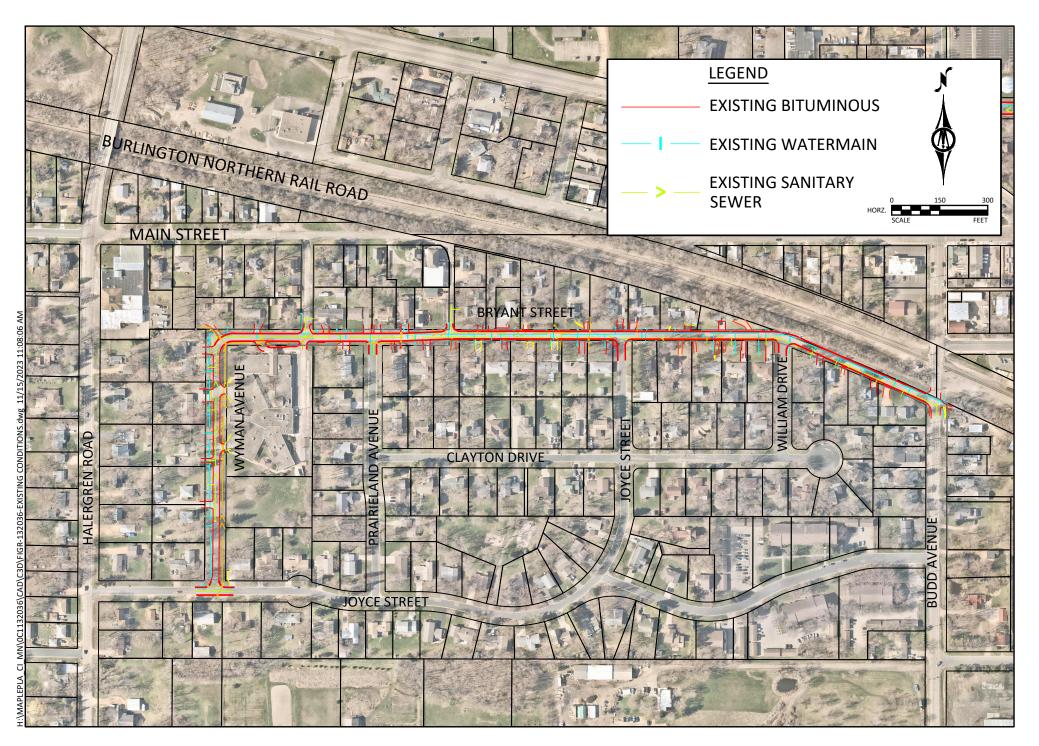
2024 STREET RECONSTRUCTION

MAPLE PLAIN



MAPLE PLAIN

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MAPLE PLAIN

November 2023

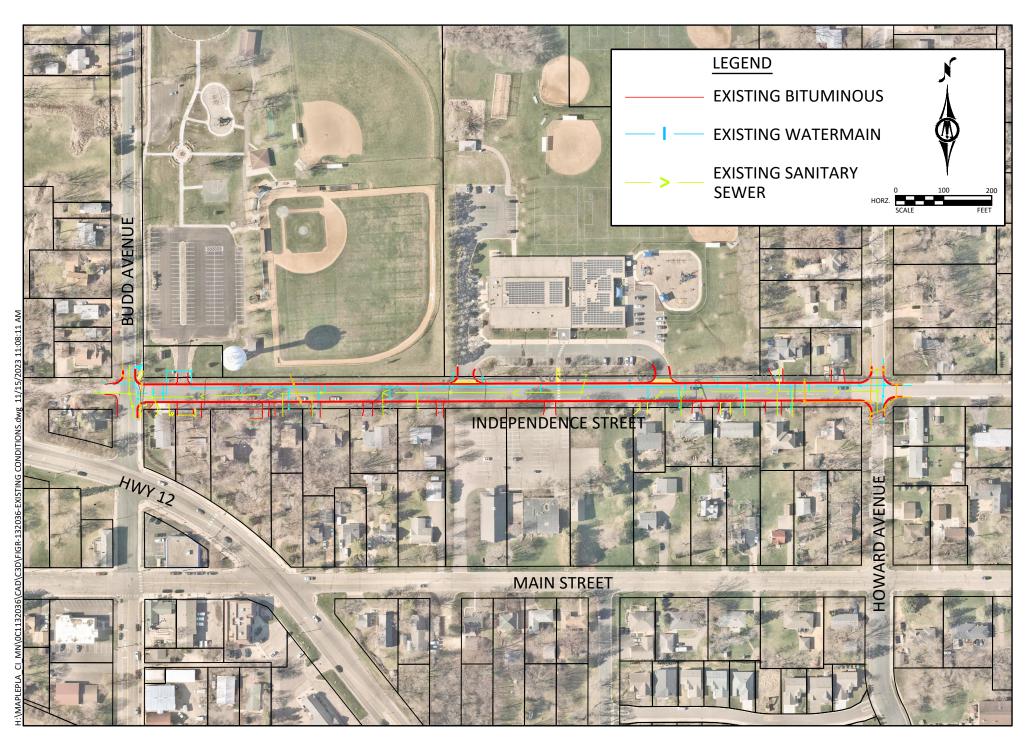




FIGURE 4: AREA 1 - PROPOSED PROJECT AREA IMPROVEMENTS

November 2023

MAPLE PLAIN

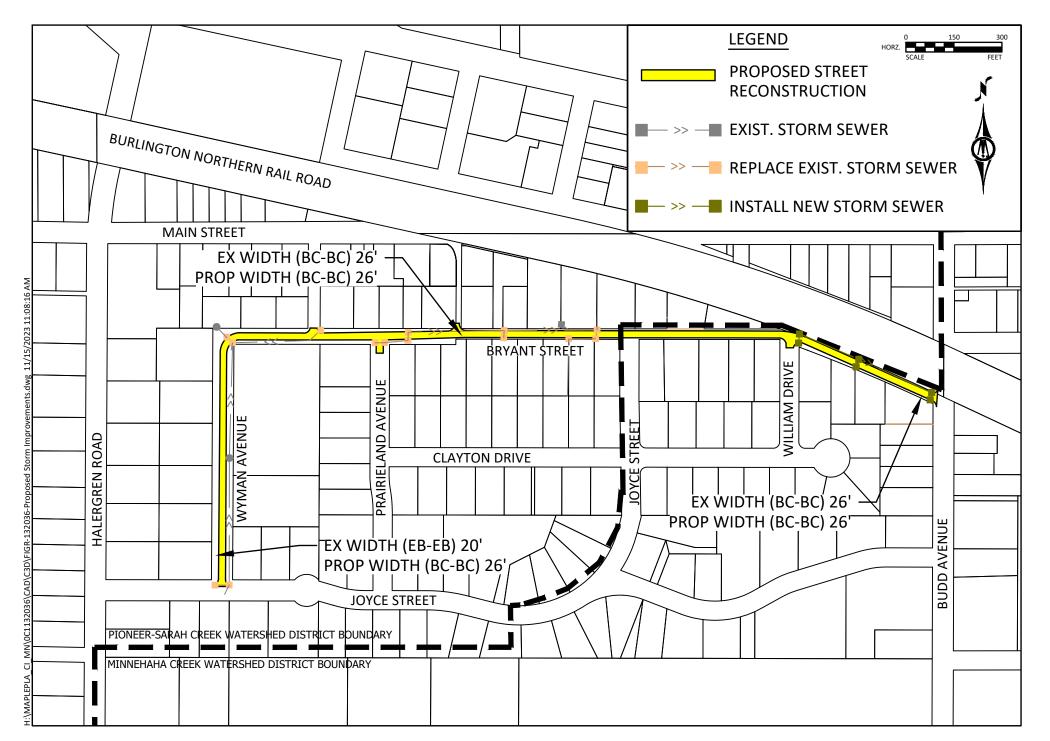
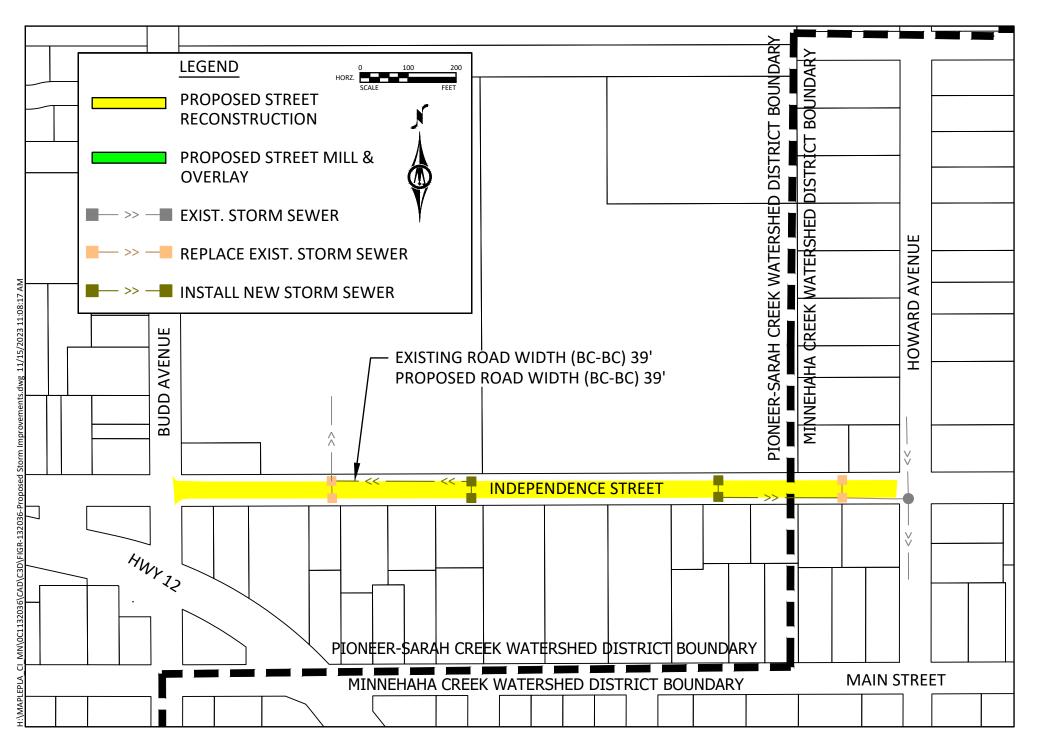
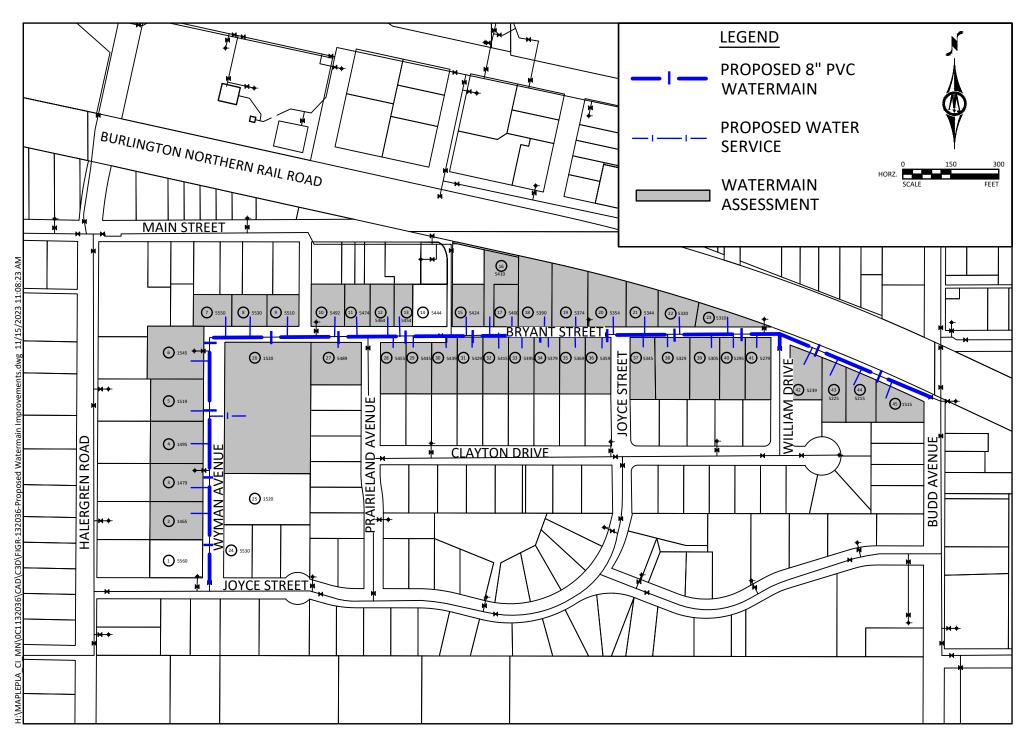


FIGURE 5: AREA 2 - PROPOSED PROJECT AREA IMPROVEMENTS

MAPLE PLAIN



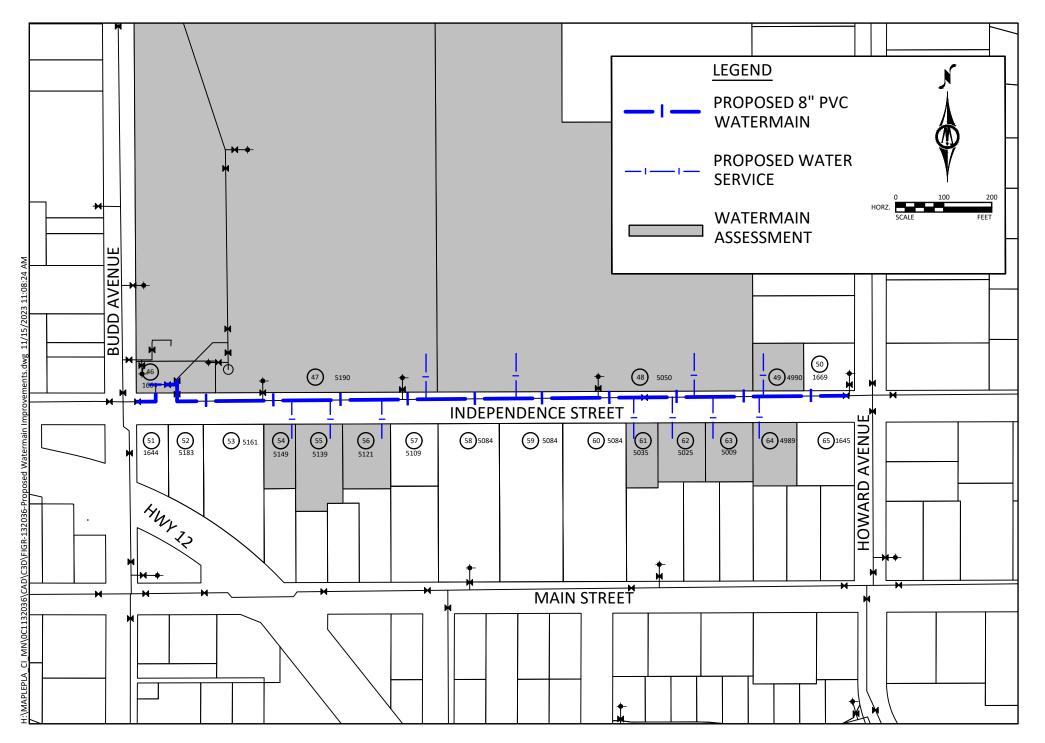
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2024 STREET RECONSTRUCTION

FIGURE 7: AREA 2 - PROPOSED WATERMAIN IMPROVEMENTS

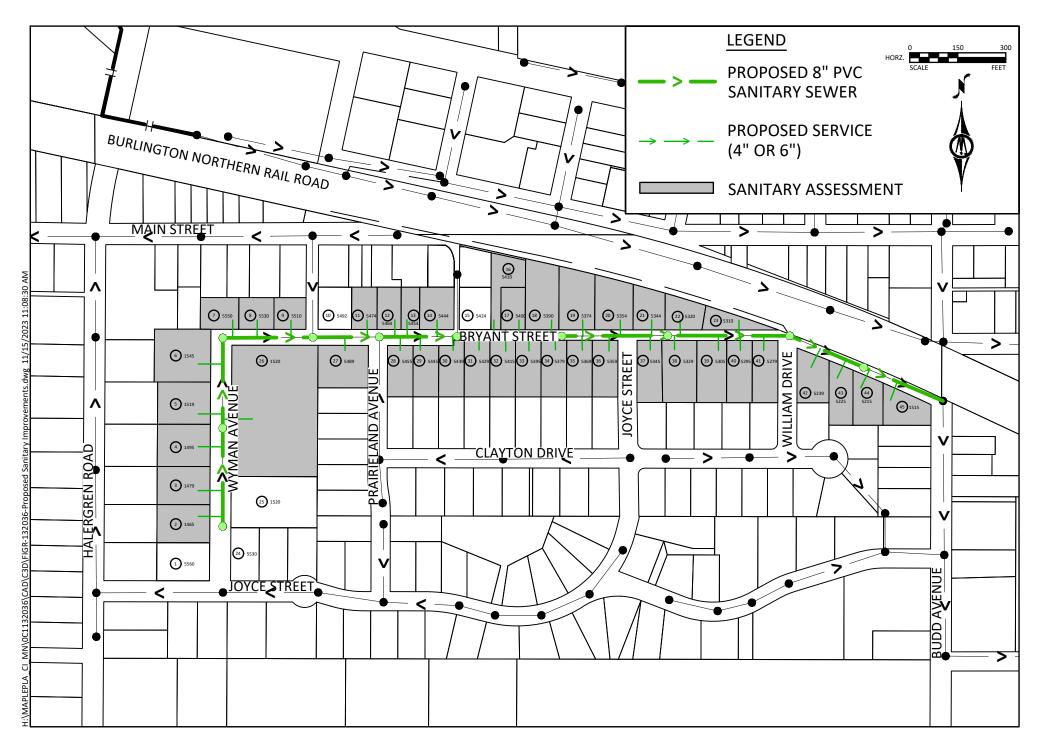
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2024 STREET RECONSTRUCTION

FIGURE 8: AREA 1 - PROPOSED SANITARY IMPROVEMENTS

MAPLE PLAIN



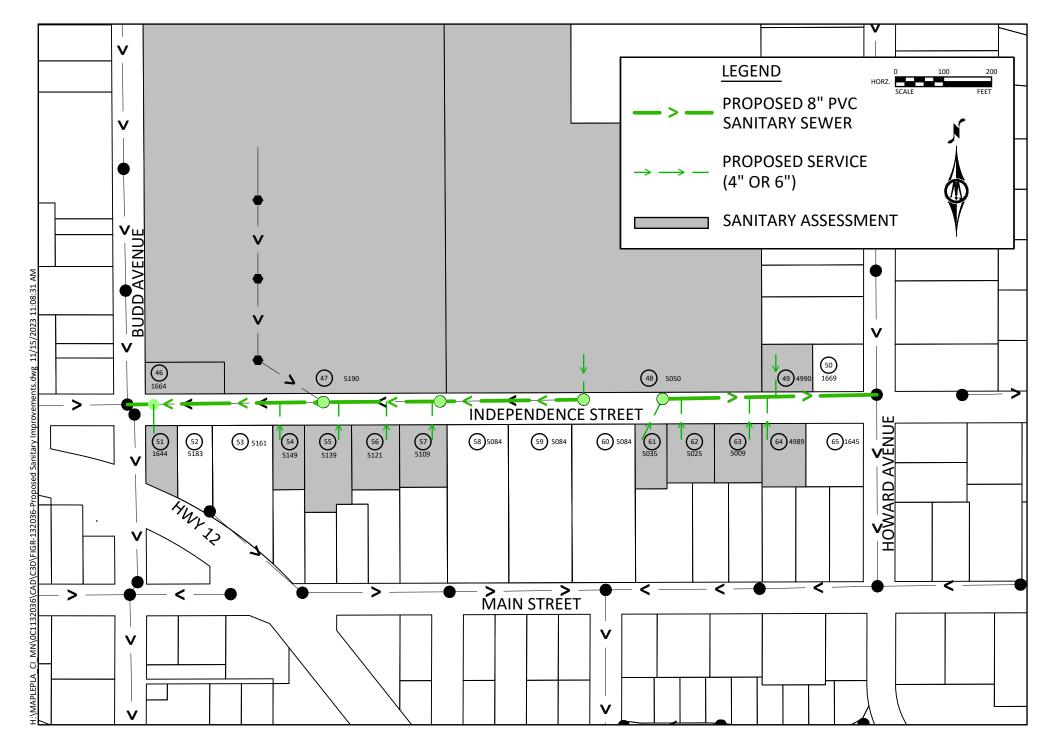


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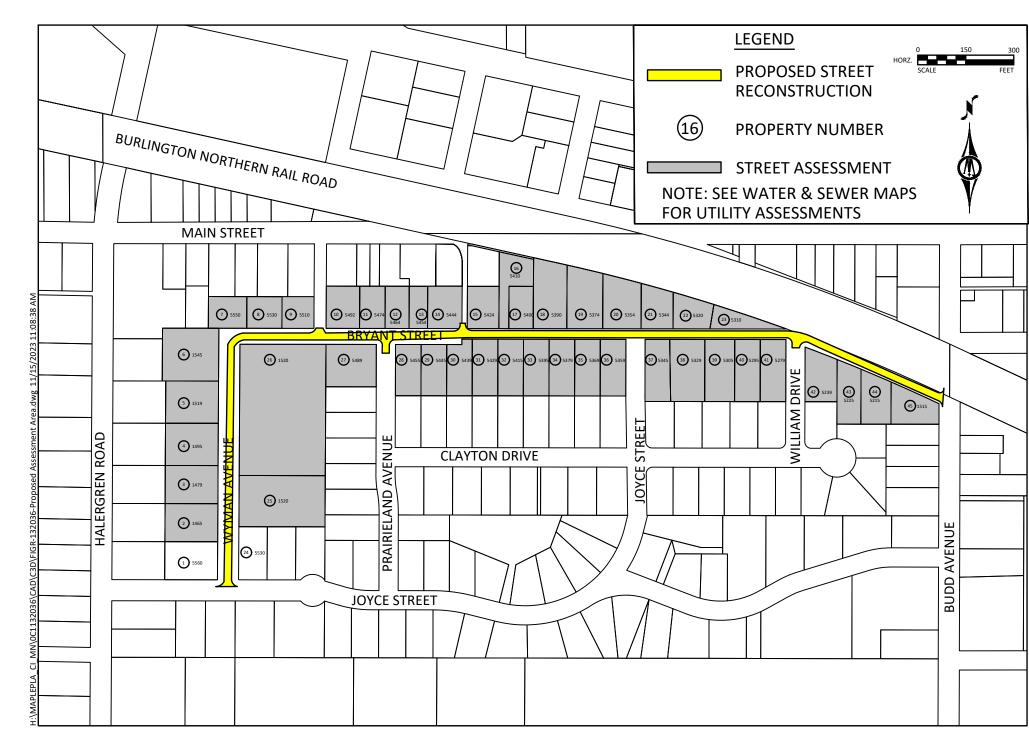
2024 STREET RECONSTRUCTION





November 2023



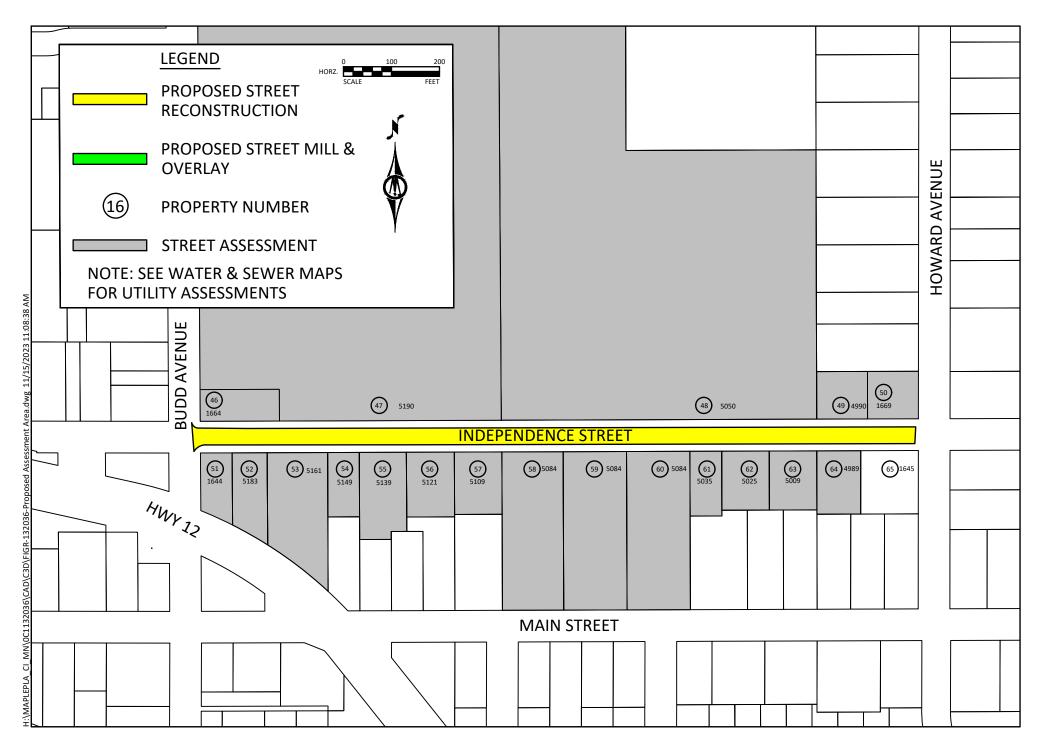


2024 STREET RECONSTRUCTION

FIGURE 11: AREA 2 - PROPOSED ASSESSMENT AREA 🎢

MAPLE PLAIN

November 2023



PRELIMINARY COST ESTIMATE

2024 STREET IMPROVEMENTS: AREA 1 CITY OF MAPLE PLAIN, MINNESOTA BMI PROJECT NO. 0C1.132036

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	BRYANT STREET & WYANT AVENUE				
	STREET AND STORM SEWER IMPROVEMENTS				
1	MOBILIZATION	1	LUMP SUM	\$135,000.00	\$135,000.00
2	TRAFFIC CONTROL	1	LUMP SUM	\$10,000.00	\$10,000.00
3	CLEARING & GRUBBING	1	LUMP SUM	\$10,000.00	\$10,000.00
4	MISC REMOVALS	1	LUMP SUM	\$5,000.00	\$5,000.00
5	SAWING BITUMINOUS (FULL DEPTH)	1,000	LIN FT	\$3.00	\$3,000.00
6	SAWCUT CONCRETE	50	LIN FT	\$7.00	\$350.00
7	REMOVE CONCRETE CURB (ANY TYPE)	4,600	LIN FT	\$5.00	\$23,000.00
8	REMOVE CONCRETE	1,500	SQ FT	\$2.00	\$3,000.00
9	COMMON EXCAVATION (CV) (P)	6,725	CU YD	\$26.50	\$178,212.50
10	SUBGRADE EXCAVATION (CV)	1,700	CU YD	\$28.00	\$47,600.00
11	GRANULAR BORROW (CV)	3,375	CU YD	\$32.00	\$108,000.00
12	GEOTEXTILE FABRIC TYPE V	10,100	SQ YD	\$2.50	\$25,250.00
13	AGGREGATE BASE CLASS 5 (100% CRUSHED)	4,300	TON	\$21.00	\$90,300.00
14	TYPE SP 9.5 WEAR COURSE MIX (2,B)	730	TON	\$105.00	\$76,650.00
15	TYPE SP 12.5 NON WEAR COURSE MIX (2,B)	975	TON	\$80.00	\$78,000.00
16	6" CONCRETE DRIVEWAY	3,100	SQ FT	\$14.00	\$43,400.00
17	8" CONCRETE DRIVEWAY	525	SQ FT	\$18.00	\$9,450.00
18	TYPE SP 9.5 WEAR COURSE MIX (2,B) (DRIVEWAY)	150	TON	\$195.00	\$29,250.00
19	CONCRETE CURB & GUTTER DESIGN B618	6,200	LIN FT	\$25.00	\$155,000.00
20	MAINTAIN MAIL SERVICE	1	LUMP SUM	\$7,500.00	\$7,500.00
21	ADJUST FRAME & RING CASTING	19	EACH	\$825.00	\$15,675.00
22	COMMON TOPSOIL BORROW (LV)	1,700	CU YD	\$42.00	\$71,400.00
23	LANDSCAPING	1	ALLOWANCE	\$7,500.00	\$7,500.00
24	SOD	10,000	SQ YD	\$9.00	\$90,000.00
25	REMOVE DRAINAGE STRUCTURE	13	EACH	\$700.00	\$9,100.00
26	REMOVE SEWER PIPE (STORM)	900	LIN FT	\$24.00	\$21,600.00
27	4" HDPE PERFORATED DRAINTILE	6,200	LIN FT	\$17.00	\$105,400.00
28	DRAINTILE CLEANOUT	18	EACH	\$100.00	\$1,800.00
29	RC PIPE SEWER DES 3006 CL V	1,200	LIN FT	\$100.00	\$120,000.00
30	CONNECT TO EXISTING STORM SEWER	3	EACH	\$2,400.00	\$7,200.00
31	CONSTRUCT DRAINAGE STRUCTURE DESIGN R-1 2'X3'	10	EACH	\$3,500.00	\$35,000.00
32	CONSTRUCT DRAINAGE STRUCTURE DESIGN 4020-48"	9	EACH	\$5,700.00	\$51,300.00
33	STORM SEWER TREATMENT (TREAT 140 CY)	1	LUMP SUM	\$25,000.00	\$25,000.00

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
33	SILT FENCE, TYPE MS	1,000	LIN FT	\$3.00	\$3,000.00
34	STORM DRAIN INLET PROTECTION	23	EACH	\$200.00	\$4,600.00
35	SEDIMENT CONTROL LOG TYPE STRAW	500	LIN FT	\$4.00	\$2,000.00
	ESTIMATED CONSTRUCTION COST				\$1,608,537.50
	CONTINGENCY (5%)				\$80,426.88
	TOTAL ESTIMATED CONSTUCTION COST				\$1,688,964.38
	PROJECT COSTS (25%)				\$422,241.09
	TOTAL ESTIMATED PROJECT COST				\$2,111,205.47
	SANITARY SEWER IMPROVEMENTS				
1	BYPASS PUMPING	1	LS	\$10,000.00	\$10,000.00
2	REMOVE EXISTING SANITARY SEWER (ANY TYPE, ANY SIZE)	4,000	LF	\$10.00	\$40,000.00
3	REMOVE SANITARY MANHOLE (ANY TYPE, ANY SIZE)	10	EACH	\$825.00	\$8,250.00
4	4" PVC, SERVICE PIPE	300	LF	\$40.00	\$12,000.00
5	6" PVC SERVICE PIPE	700	LF	\$50.00	\$35,000.00
6	SERVICE WYE	37	EACH	\$1,200.00	\$44,400.00
7	8" PVC, SDR 35	3,000	LF	\$85.00	\$255,000.00
8	SANITARY MANHOLE	10	EACH	\$5,000.00	\$50,000.00
9	CONNECT TO EXISTING SANITARY SEWER	4	EACH	\$2,000.00	\$8,000.00
10	CONNECT TO EXISTING SERVICE	37	EACH	\$700.00	\$25,900.00
11	SUBSURFACE INVESTIGATION	20	HOUR	\$575.00	\$11,500.00
12	TRENCH ROCK	100	TON	\$35.00	\$3,500.00
	ESTIMATED CONSTRUCTION COST				\$503,550.00
	CONTINGENCY				\$25,177.50
	TOTAL ESTIMATED CONSTUCTION COST				\$528,727.50
	PROJECT COSTS (25%)				\$132,181.88
	TOTAL ESTIMATED PROJECT COST				\$660,909.38
	WATERMAIN IMPROVEMENTS				
1	SUBSURFACE INVESTIGATION	20	HOUR	\$575.00	\$11,500.00
2	REMOVE WATERMAIN	3,350	LIN FT	\$10.00	\$33,500.00
3	REMOVE WATER SERVICE PIPE (INCLUDING CURB STOP)	39	EACH	\$575.00	\$22,425.00
4	REMOVE HYDRANT	6	EACH	\$600.00	\$3,600.00
5	REMOVE GATE VALVE & BOX	13	EACH	\$300.00	\$3,900.00
6	TRENCH ROCK	100	TON	\$35.00	\$3,500.00
7	TEMPORARY WATER SERVICE	1	LUMP SUM	\$38,000.00	\$38,000.00
8	CONNECT TO EXISTING WATERMAIN	6	EACH	\$2,300.00	\$13,800.00
9	6" GATE VALVE & BOX	7	EACH	\$3,000.00	\$21,000.00

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
10	8" GATE VALVE & BOX	11	EACH	\$3,800.00	\$41,800.00
11	HYDRANT	6	EACH	\$7,400.00	\$44,400.00
12	HYDRANT EXTENSION	2	LIN FT	\$1,500.00	\$3,000.00
13	GATE VALVE EXTENSION	3	LIN FT	\$500.00	\$1,500.00
14	6" PVC, C900 WATERMAIN	150	LIN FT	\$65.00	\$9,750.00
15	8" PVC, C900 WATERMAIN	3,350	LIN FT	\$70.00	\$234,500.00
16	INSULATION	10	SY	\$66.00	\$660.00
17	WATERMAIN FITTINGS	2,000	POUND	\$15.00	\$30,000.00
18	1" COPPER WATER SERVICE, TYPE K	900	LIN FT	\$58.00	\$52,200.00
19	1" CURB STOP & BOX	39	EACH	\$900.00	\$35,100.00
20	1" CORPORATION STOP	39	EACH	\$750.00	\$29,250.00
21	CONNECT TO EXISTING SERVICE	39	EACH	\$700.00	\$27,300.00
22	ADJUST GATE VALVE & BOX	11	EACH	\$550.00	\$6,050.00
	ESTIMATED CONSTRUCTION COST				\$666,735.00
	CONTINGENCY				\$33,336.75
	TOTAL ESTIMATED CONSTUCTION COST				\$700,071.75
	PROJECT COSTS (25%)				\$175,017.94
	TOTAL ESTIMATED PROJECT COST				\$875,089.69
	AREA 1: TOTAL ESTIMATED PROJECT COST				\$3,647,204.53

PRELIMINARY COST ESTIMATE

2024 STREET IMPROVEMENTS: AREA 2 CITY OF MAPLE PLAIN, MINNESOTA BMI PROJECT NO. 0C1.132036

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	INDEPENDENCE STREET				
	STREET AND STORM SEWER IMPROVEMENTS				
1	MOBILIZATION	1	LUMP SUM	\$75,000.00	\$75,000.00
2	TRAFFIC CONTROL	1	LUMP SUM	\$5,000.00	\$5,000.00
3	CLEARING & GRUBBING	1	LUMP SUM	\$5,000.00	\$5,000.00
4	MISC REMOVALS	1	LUMP SUM	\$5,000.00	\$5,000.00
5	SAWING BITUMINOUS (FULL DEPTH)	425	LIN FT	\$3.00	\$1,275.00
6	SAWCUT CONCRETE	75	LIN FT	\$7.00	\$525.00
7	REMOVE CONCRETE CURB (ANY TYPE)	3,100	LIN FT	\$5.00	\$15,500.00
8	REMOVE CONCRETE	1,300	SQ FT	\$2.00	\$2,600.00
9	SALVAGE & REINSTALL MULCH	60	SQ FT	\$2.00	\$120.00
10	COMMON EXCAVATION (CV) (P)	4,600	CU YD	\$30.00	\$138,000.00
11	SUBGRADE EXCAVATION (CV)	1,200	CU YD	\$28.00	\$33,600.00
12	GRANULAR BORROW (CV)	2,350	CU YD	\$32.00	\$75,200.00
13	GEOTEXTILE FABRIC TYPE V	700	SQ YD	\$2.50	\$1,750.00
14	AGGREGATE BASE CLASS 5 (100% CRUSHED)	3,100	TON	\$21.00	\$65,100.00
15	TYPE SP 9.5 WEAR COURSE MIX (2,B)	550	TON	\$105.00	\$57,750.00
16	TYPE SP 12.5 NON WEAR COURSE MIX (2,B)	725	TON	\$80.00	\$58,000.00
17	6" CONCRETE DRIVEWAY	1,800	SQ FT	\$14.00	\$25,200.00
18	8" CONCRETE DRIVEWAY	530	SQ FT	\$18.00	\$9,540.00
19	TYPE SP 9.5 WEAR COURSE MIX (2,B) (DRIVEWAY)	90	TON	\$195.00	\$17,550.00
20	CONCRETE CURB & GUTTER DESIGN B618	3,100	LIN FT	\$25.00	\$77,500.00
21	MAINTAIN MAIL SERVICE	1	LUMP SUM	\$5,000.00	\$5,000.00
22	ADJUST FRAME & RING CASTING	4	EACH	\$825.00	\$3,300.00
23	COMMON TOPSOIL BORROW (LV)	675	CU YD	\$42.00	\$28,350.00
24	LANDSCAPING	1	ALLOWANCE	\$5,000.00	\$5,000.00
25	SOD	4,000	SQ YD	\$9.00	\$36,000.00
26	REMOVE DRAINAGE STRUCTURE	4	EACH	\$700.00	\$2,800.00
27	REMOVE SEWER PIPE (STORM)	230	LIN FT	\$24.00	\$5,520.00
28	4" HDPE PERFORATED DRAINTILE	3,100	LIN FT	\$17.00	\$52,700.00
29	DRAINTILE CLEANOUT	9	EACH	\$400.00	\$3,600.00
30	RC PIPE SEWER DES 3006 CL V	825	LIN FT	\$100.00	\$82,500.00
31	CONNECT TO EXISTING STORM SEWER	2	EACH	\$2,400.00	\$4,800.00
32	CONSTRUCT DRAINAGE STRUCTURE DESIGN R-1 2'X3'	4	EACH	\$3,500.00	\$14,000.00
33	CONSTRUCT DRAINAGE STRUCTURE DESIGN 4020-48"	4	EACH	\$5,700.00	\$22,800.00

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
34	STORM SEWER TREATMENT (TREAT 97 CY)	1	LUMP SUM	\$20,000.00	\$20,000.00
35	SILT FENCE, TYPE MS	700	LIN FT	\$3.00	\$2,100.00
36	STORM DRAIN INLET PROTECTION	13	EACH	\$200.00	\$2,600.00
37	SEDIMENT CONTROL LOG TYPE STRAW	200	LIN FT	\$4.00	\$800.00
	ESTIMATED CONSTRUCTION COST				\$961,080.00
	CONTINGENCY (5%)				\$48,054.00
	TOTAL ESTIMATED CONSTUCTION COST				\$1,009,134.00
	PROJECT COSTS (25%)				\$252,283.50
	TOTAL ESTIMATED PROJECT COST				\$1,261,417.50
	SANITARY SEWER IMPROVEMENTS				
1	BYPASS PUMPING	1	LS	\$5,000.00	\$5,000.00
2	REMOVE EXISTING SANITARY SEWER (ANY TYPE, ANY SIZE)	1,950	LF	\$10.00	\$19,500.00
3	REMOVE SANITARY MANHOLE (ANY TYPE, ANY SIZE)	5	EACH	\$825.00	\$4,125.00
4	4" PVC, SERVICE PIPE	375	LF	\$40.00	\$15,000.00
5	6" PVC SERVICE PIPE	175	LF	\$50.00	\$8,750.00
6	SERVICE WYE	9	EACH	\$1,200.00	\$10,800.00
7	8" PVC, SDR 35	1,400	LF	\$85.00	\$119,000.00
8	SANITARY MANHOLE	5	EACH	\$5,000.00	\$25,000.00
9	CONNECT TO EXISTING SANITARY SEWER	2	EACH	\$2,000.00	\$4,000.00
10	CONNECT TO EXISTING SERVICE	11	EACH	\$700.00	\$7,700.00
11	SUBSURFACE INVESTIGATION	20	HOUR	\$575.00	\$11,500.00
12	TRENCH ROCK	75	TON	\$35.00	\$2,625.00
	ESTIMATED CONSTRUCTION COST				\$233,000.00
	CONTINGENCY (5%)				\$11,650.00
	TOTAL ESTIMATED CONSTUCTION COST				\$244,650.00
	PROJECT COSTS (25%)				\$61,162.50
	TOTAL ESTIMATED PROJECT COST				\$305,812.50
	WATERMAIN IMPROVEMENTS				
1	SUBSURFACE INVESTIGATION	20	HOUR	\$575.00	\$11,500.00
2	REMOVE WATERMAIN	1,575	LIN FT	\$10.00	\$15,750.00
3	REMOVE WATER SERVICE PIPE (INCLUDING CURB STOP)	16	EACH	\$575.00	\$9,200.00
4	REMOVE HYDRANT	3	EACH	\$600.00	\$1,800.00
5	REMOVE GATE VALVE & BOX	9	EACH	\$300.00	\$2,700.00
6	TRENCH ROCK	100	TON	\$35.00	\$3,500.00
7	TEMPORARY WATER SERVICE	1	LUMP SUM	\$15,000.00	\$15,000.00
		3	EACH	\$2,300.00	¢6 000 00
8	CONNECT TO EXISTING WATERMAIN	5	LAON	φz,300.00	\$6,900.00

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
10	8" GATE VALVE & BOX	6	EACH	\$3,800.00	\$22,800.00
11	HYDRANT	3	EACH	\$7,400.00	\$22,200.00
12	HYDRANT EXTENSION	1	LIN FT	\$1,500.00	\$1,500.00
13	GATE VALVE EXTENSION	1	LIN FT	\$500.00	\$500.00
14	6" PVC, C900 WATERMAIN	100	LIN FT	\$65.00	\$6,500.00
15	8" PVC, C900 WATERMAIN	1,575	LIN FT	\$70.00	\$110,250.00
16	INSULATION	30	SY	\$66.00	\$1,980.00
17	WATERMAIN FITTINGS	600	POUND	\$15.00	\$9,000.00
18	1" COPPER WATER SERVICE, TYPE K	400	LIN FT	\$58.00	\$23,200.00
19	1" CURB STOP & BOX	11	EACH	\$900.00	\$9,900.00
20	1" CORPORATION STOP	11	EACH	\$750.00	\$8,250.00
21	CONNECT TO EXISTING SERVICE	12	EACH	\$700.00	\$8,400.00
22	ADJUST GATE VALVE & BOX	9	EACH	\$550.00	\$4,950.00
	ESTIMATED CONSTRUCTION COST				\$304,780.00
	CONTINGENCY (5%)				\$15,239.00
	TOTAL ESTIMATED CONSTUCTION COST				\$320,019.00
	PROJECT COSTS (25%)				\$80,004.75
	TOTAL ESTIMATED PROJECT COST				\$400,023.75
	AREA 2: TOTAL ESTIMATED PROJECT COST				\$1,967,253.75

PRELIMINARY COST ESTIMATE

2024 STREET IMPROVEMENTS: MISCELLANEOUS AREAS CITY OF MAPLE PLAIN, MINNESOTA BMI PROJECT NO. 0C1.132036

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	HOWARD AVENUE CUL-DE-SAC				
1	MOBILIZATION	1	LUMP SUM	\$3,000.00	\$3,000.00
2	TRAFFIC CONTROL	1	LUMP SUM	\$1,000.00	\$1,000.00
3	MILL BITUMINOUS PAVEMENT (1.5" DEPTH)	700	SY	\$4.00	\$2,800.00
4	REMOVE CONCRETE CURB (ANY TYPE)	50	LIN FT	\$15.00	\$750.00
5	CONCRETE CURB & GUTTER DESIGN B618 (HAND WORK)	50	LIN FT	\$80.00	\$4,000.00
6	TYPE SP 9.5 WEAR COURSE MIX (2,B)	64	TON	\$105.00	\$6,720.00
7	COMMON TOPSOIL BORROW (LV)	6	CU YD	\$42.00	\$252.00
8	LANDSCAPING	1	ALLOWANCE	\$500.00	\$500.00
9	SOD	25	SQ YD	\$15.00	\$375.00
	ESTIMATED CONSTRUCTION COST				\$19,397
	CONTINGENCY (5%)				\$970
	TOTAL ESTIMATED CONSTUCTION COST				\$20,367
	PROJECT COSTS (25%)				\$5,092
	TOTAL ESTIMATED PROJECT COST				\$25,458.56
	RAINBOW PARK PARKING LOT				
1	MOBILIZATION	1	LUMP SUM	\$4,000.00	\$4,000.00
2	TRAFFIC CONTROL	1	LUMP SUM	\$500.00	\$500.00
3	COMMON EXCAVATION (P)	80	CU YD	\$26.50	\$2,120.00
4	AGGREGATE BASE CLASS 5 (100% CRUSHED)	80	CU YD	\$21.00	\$1,680.00
5	TYPE SP 9.5 WEAR COURSE MIX (2,B)	125	TON	\$195.00	\$24,375.00
6	CONCRETE CURB & GUTTER DESIGN B618	275	LIN FT	\$80.00	\$22,000.00
7	COMMON TOPSOIL BORROW (LV)	35	CU YD	\$42.00	\$1,470.00
8	LANDSCAPING	1	ALLOWANCE	\$500.00	\$500.00
9	SOD	135	SQ YD	\$15.00	\$2,025.00
	ESTIMATED CONSTRUCTION COST				\$58,670
	CONTINGENCY (20%)				\$11,734
	TOTAL ESTIMATED CONSTUCTION COST				\$70,404
	PROJECT COSTS (25%)				\$17,601
	TOTAL ESTIMATED PROJECT COST				\$88,005.00
	MISCELLANEOUS: TOTAL ESTIMATED PROJECT COST				\$113,463.56

PRELIMINARY ASSESSMENT ROLL 2024 STREET IMPROVEMENTS CITY OF MAPLE PLAIN, MINNESOTA 11/15/2023

PROP.						FRONT	STREET	SANITARY	WATER	STREET	SANITARY	WATERMAIN	TOTAL
NO.	OWNER	OWNER ADDRESS	PROPERTY ADDRESS	P.I.D.	NOTES	FOOT	UNIT	UNIT	UNIT	ASSESSMENT (UNIT)	ASSESSMENT (UNIT)	ASSESSMENT (UNIT)	ASSESSMENT (UNIT)
1	GREGORY R KRUEGER	5560 JOYCE ST	5560 Joyce Street	2511824220033		119	0	0	0	\$0.00	\$0.00	\$0.00	\$0.00
2	ROBERT A KRUMM	5726 DRAKE DR	1465 Wyman Avenue	2511824220032		119	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
3	MARIAN M KRUMM	5726 DRAKE DR	1479 Wyman Avenue	2511824220031		119	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
4	D S RUHLAND & A D RUHLAND	1495 WYMAN AVE	1495 Wyman Avenue	2511824220108		132	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
5	LEVI A JOHNSON	1519 WYMAN AVE	1519 Wyman Avenue	2511824220010		132	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
6	HALVOR E & BEVERLY J JERDE	1545 WYMAN AVE	1545 Wyman Avenue	2511824220112		165	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
7	JENNIFER M NEPPER	8103 ITHACA LN N MAPLE GROVE MN 55311	5550 Bryant Street	2511824220075		87	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
8	MADELINE FROST	5530 BRYANT ST	5530 Bryant Street	2511824220077		110	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
9	DUWAYNE FRIESEN	5510 BRYANT ST	5510 Bryant Street	2511824220076		100	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
10	DEBRA M GJERSTAD	5492 BRYANT ST	5492 Bryant Street	2511824220072		104	1	0	1	\$12,320.84	\$0.00	\$4,882.82	\$17,203.66
11	B J HARMON & R HARMON	5474 BRYANT ST	5474 Bryant Street	2511824220074		80	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
12	RONALD E STEFFENHAGEN ET AL	5464 BRYANT ST	5464 Bryant Street	2511824220073		75	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
13	WAYNE DEARTH	5454 BRYANT ST	5454 Bryant Street	2511824220098		58	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
14	AMY STEFANIAK/DANIEL WARNER	5444 BRYANT ST	5444 Bryant Street	2511824220071		108	1	1	0	\$12,320.84	\$3,701.89	\$0.00	\$16,022.73
15	PETER PREUS	5424 BRYANT ST	5424 Bryant Street	2511824220070		99 31	1	0	1	\$12,320.84	\$0.00	\$4,882.82	\$17,203.66
16	OTTO J DOEHLING III	5410 BRYANT ST	5410 Bryant Street	2511824220117		31	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
17	KERI E SIDLE/DANIEL J SIDLE	5400 BRYANT ST	5400 Bryant Street	2511824220116		76	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
18	KATHRYN HOLIDA	5390 BRYANT ST	5390 Bryant Street	2511824210070		105	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
19	J P CANTINE & N B CANTINE	5374 BRYANT ST	5374 Bryant Street	2511824210071		112	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
20	WILLIAM D CARLSON	5354 BRYANT ST	5354 Bryant Street	2511824210078		120	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
21	RICHARD C SUNDBERG	PO BOX 340 LUTSEN MN 55612	5344 Bryant Street	2511824210073		100	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
22	MANN J NORDIN	5320 BRYANT ST	5320 Bryant Street	2511824210075		115	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
23	STEVEN E ZABEL	5310 BRYANT ST	5310 Bryant Street	2511824210076		240	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
24	JOHN COLVILLE SMITH	5530 JOYCE ST	5530 Joyce Street	2511824220028		166	0	0	0	\$0.00	\$0.00	\$0.00	\$0.00
25	HAVEN HOMES INC	4848 GATEWAY BLVD	1520 Wyman Avenue	2511824220114		160	1	0	0	\$12,320.84	\$0.00	\$0.00	\$12,320.84
26	ELIM HOMES INC	7171 OHMS LANE EDINA MN 55439	1520 Wyman Avenue	2511824220027	(1)	679	12	12	12	\$147,850.04	\$44,422.67	\$58,593.83	\$250,866.54
27	KEVIN & RAMONA HAWKINSON TRS	5489 BRYANT ST	5489 Bryant Street	2511824220005		157	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
28	J D ALLEN & D J ALLEN	5455 BRYANT ST	5455 Bryant Street	2511824220080		80	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
29	A W GOOD & J L GOOD	5445 BRYANT ST	5445 Bryant Street	2511824220004		80	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
30	K A & B J SCHMID	5439 BRYANT ST	5439 Bryant Street	2511824220003		80	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
31	B M DAY & B R DAY	5429 BRYANT ST	5429 Bryant Street	2511824220002		80	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
32	JANET G FLAHERTY	5415 BRYANT ST	5415 Bryant Street	2511824220001		80	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
33	MICHAEL BUSHA/KARA D LANDON	5395 BRYANT ST	5395 Bryant Street	2511824210018		80	1	1	1	\$12,320.84	\$3,701.89	\$4.882.82	\$20,905.55
34	R K ALLEN/R R ALLEN/V J OAS	5379 BRYANT ST	5379 Bryant Street	2511824210017		80	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
35	R S RADUENZ & C L JERDE	5369 BRYANT ST	5369 Bryant Street	2511824210016			1	1	1	\$12,320.84	\$3.701.89	\$4.882.82	\$20,905,55
36	GRAYDON L BRYANT	5359 BRYANT ST	5359 Bryant Street	2511824210015		80 80	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
37	CHRISTOPHER G BRYANT	5345 BRYANT ST	5345 Bryant Street	2511824210109		77	1	1	1	\$12,320.84	\$3.701.89	\$4.882.82	\$20.905.55
38	ELIZABETH CAROL ALLEN	5329 BRYANT ST	5329 Bryant Street	2511824210108		110	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
39	JODY L FRAHM	5305 BRYANT ST	5305 Bryant Street	2511824210107			- 1	1		\$12,320.84	\$3,701.89	\$4.882.82	\$20,905,55
40	A J HEITZ & B K HEITZ	5295 BRYANT ST	5295 Bryant Street	2511824210013		93 80	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
41	GARY LAWRENCE/SARA LAWRENCE	5279 BRYANT ST	5279 Bryant Street	2511824210012		80	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
42	C P EHLEN/K M CRYSLER-EHLEN	5239 BRYANT ST	5239 Bryant Street	2511824210011		107	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
43	MARLENE SCHULTZ	5215 BRYANT ST	5225 Bryant Street	2511824210010		81		- 1	-	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
	SCOT SCHULTZ	3165 LAKESHORE AVE	5215 Bryant Street	2511824210009		102			1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
45	R & R STEVENSON	10308 W KELSO DR SUN CITY AZ 85351	1515 Budd Avenue	2511824210001		164		- 1		\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
46	CITY OF MAPLE PLAIN	PO BOX 97 MAPLE PLAIN MN 55359-0097	1664 Budd Avenue	2411824430005	(2)	165	1.6	1.6	-	\$19,713.34	\$5,923.02	\$7,812.51	\$33.448.87
40	CITY OF MAPLE PLAIN	PO BOX 97 MAPLE PLAIN MN 55359-0097	5190 Independence Street	2411824430004	(2)	462	4.5	4.5	4.5	\$55,443.76	\$16,658.50	\$21,972.69	\$94.074.95
	SCHOOL DIST NO 278	685 N OLD CRYSTAL BAY RD LONG LAKE MN 55356	5050 Independence Street	2411824430003	(2)	657	6.4	6.4	6.4	\$78,853.35	\$23,692.09	\$31,250.04	\$133,795.49
40 49	MICHAEL D SLONEKER	PO BOX 64	4990 Independence Street	2411824430003		106	0.4 1	0.4 1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
49 50	DON R JOHNSON	1669 HOWARD AVE	1669 Howard Avenue	2411824440093		100	1	0	0	\$12,320.84	\$0.00	\$0.00	\$12.320.84
50	THERESA L GUALTIERI	1644 BUDD AVE N	1644 Budd Avenue	2411824440094		106	1		0	\$12,320.84	\$3,701.89	\$0.00	\$16,022.73
52	D L LILLESTOL/M M LILLESTOL	176 CIRCLE A DRIVE S WAYZATA MN 55391	5183 Independence Street	2411824430021		73		1 0	0	\$12,320.84	\$0.00	\$0.00	\$12,320.84
52	NEIL J & KATHERINE J VASSAR	5161 INDEPENDENCE ST	5161 Independence Street	2411824430020		126	1	0	0	\$12,320.84	\$0.00	\$0.00	\$12,320.84
53 54	SANDRA M KEIGHLEY	5161 INDEPENDENCE ST	5161 Independence Street	2411824430019			1 1	1		\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
54 55	N ALTAVILLA & A ALTAVILLA	5139 INDEPENDENCE ST	5139 Independence Street	2411824430025 2411824430015		66 98	1	1	1	\$12,320.84 \$12,320.84	\$3,701.89 \$3,701.89	\$4,882.82 \$4,882.82	\$20,905.55
	KAYLA & BRANDON M EZUCK	5139 INDEPENDENCE ST	5121 Independence Street	2411824430015		98 100	1	1 1	1	\$12,320.84 \$12,320.84	\$3,701.89 \$3,701.89	\$4,882.82 \$4,882.82	\$20,905.55
50	NATES & DIVANDON IN ELUCK	STET INDER LINDENCE ST	STET muchendence street	2711024430014	I	100	L ¹	1 1	T	4.020,320,04	50,101.05	v 4 ,002.02	ə20,505.55

PRELIMINARY ASSESSMENT ROLL 2024 STREET IMPROVEMENTS CITY OF MAPLE PLAIN, MINNESOTA 11/15/2023

PROP. NO.	OWNER	OWNER ADDRESS	PROPERTY ADDRESS	P.I.D.	NOTES	FRONT FOOT	STREET UNIT	SANITARY UNIT	WATER UNIT	STREET ASSESSMENT (UNIT)	SANITARY ASSESSMENT (UNIT)	WATERMAIN ASSESSMENT (UNIT)	TOTAL ASSESSMENT (UNIT)
57	ALLISON M STREICH TRUST	5109 INDEPENDENCE ST	5109 Independence Street	2411824430011		99	1	1	0	\$12,320.84	\$3,701.89	\$0.00	\$16,022.73
58	CHRIST LUTHERAN CHURCH	5084 MAIN ST E	5084 Main Street East	2411824430010	(2)	128	1.3	0	0	\$16,017.09	\$0.00	\$0.00	\$16,017.09
59	CHRIST LUTHERAN CHURCH	5084 MAIN ST E	5084 Main Street East	2411824430008	(2)	132	1.3	0	0	\$16,017.09	\$0.00	\$0.00	\$16,017.09
60	CHRIST LUTHERAN CHURCH	5084 MAIN ST E	5084 Main Street East	2411824430009	(2)	132	1.3	0	0	\$16,017.09	\$0.00	\$0.00	\$16,017.09
61	S M SMITH & S SMITH	5035 INDEPENDENCE ST	5035 Independence Street	2411824430023		66	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
62	ZACHARY LEE PIKULA	5025 INDEPENDENCE ST	5025 Independence Street	2411824430027		99	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
63	D M BLAZEVIC & T M MOON	5009 INDEPENDENCE ST	5009 Independence Street	2411824430029		99	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
64	JAMES RIVERS & GRETA RIVERS	4989 INDEPENDENCE ST	4989 Independence Street	2411824440092		92	1	1	1	\$12,320.84	\$3,701.89	\$4,882.82	\$20,905.55
65	CHRISTOPHER J DOYLE	1645 HOWARD AVE	1645 Howard Avenue	2411824440091		120	0	0	0	\$0.00	\$0.00	\$0.00	\$0.00
_	CITY OF MAPLE PLAIN				(3)	515	8	17.9	18.9	\$98,566.69	\$66,263.81	\$92,285.29	\$257,115.79
			TOTALS:			3507	91.4	91.4	91.4	\$1,126,124.46	\$338,352.66	\$446,289.70	\$1,910,766.82

NOTES:

(1) BASED ON SEWER AVAILABILITY CHARGE (SAC)

(2) BASED ON SERVET AVAILABILET CLARKE (SAC)
(2) BASED ON FRONT FOOTAGE AVERAGE OF 102-FT
(3) EQUIVALENT UNITS COVERED BY CITY, INCLUDES RAILROAD FRONTAGE CONVERTED TO 5 R.E.D.