# **Feasibility Report**

2023 Street Improvements Sunset Court, Sunrise Dr, and Spruce St

City of Little Canada October 12, 2022

#### Submitted by:

Bolton & Menk, Inc. 3507 High Point Drive Bldg. 1 Suite E130 Oakdale, MN 55128



Real People. Real Solutions.

# Certification

### **Feasibility Report**

For

### 2023 Street Improvements

## City of Little Canada, Minnesota Project No. 0N1.127995

October 12, 2022

#### **PROFESSIONAL ENGINEER**

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.

Signature: <u>StickAuturg</u> Typed or Printed Name: <u>Eric Seaburg, P.E.</u> Date: 10-12-2022 License Number: 53712

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#### I. INTRODUCTION

The City of Little Canada is planning rehabilitation efforts on several residential, collector, and commercial streets during the 2023 construction season, in accordance with the Capital Improvement Plan. The City's 2023 work plan includes proposed street and utility improvements to the following streets:

- 1.Sunset Court
- 2. Sunrise Drive
- 3.Spruce Street
- 4. Twin Lake Boulevard (detailed in a separate report)

Refer to Figure 1 in Appendix A for a depiction of the project areas.

See Figures 2A, 2B, and 2C in Appendix B for maps of the existing conditions on each street, respectively.

This report will review the existing conditions of each defined project area and discuss, in detail, the proposed improvements. The report will also provide preliminary cost estimates for the proposed improvements with financing for the projects coming from a combination of special assessments and the City's Infrastructure Capital Improvement Fund.

Informational meetings for each project area were held with affected property owners. There, the proposed project scope, costs, and funding sources were discussed with the opportunity for property owners to comment on the project and ask questions. The Sunrise Drive and Sunset Court projects had a joint informational meeting. Residents had general questions for project staff. A separate meeting was held with Spruce Street owners; again, there were limited questions for project staff and they appreciated being informed.

If the City elects to proceed with the proposed street and utility improvements described in this report, it is anticipated that construction would begin in 2023 as detailed in the project schedule found on Page 11.

#### II. SUNSET COURT

#### A. Background

Sunset Court is an urban residential street. Annual average daily traffic (AADT) data for this road is unavailable but assumed to be less than 1,000 vehicles per day classifying it as a low-volume road. Refer to Figure 1 in Appendix A for a depiction of the project location.

Over the years, Sunset Court has received crack seal and sealcoat treatments in an effort to prolong the life of the pavement. Annual pavement patching has also occurred as needed. The utility infrastructure has been maintained on a routine basis since construction.

#### **B. Existing Conditions**

1. Streets

Sunset Court is a bituminous roadway that measures 30 feet face of curb to face of curb. Sunset Court has surmountable concrete curb and gutter on the north and south sides. The pavement shows signs of wear and distress, including cracking and potholes, which are



**Exhibit 1 - Existing Sunset Court** 

typical for a pavement of this age. Refer to Figure 2A in Appendix A for a depiction of the existing utility infrastructure.

2. Watermain

The existing watermain is a 6-inch diameter ductile iron pipe (DIP) that extends west from Edgerton Street where it eventually loops along a side lot line to the Sunrise Drive cul-de-sac. The water system has performed well, and there are no known deficiencies with the system. Based on the age, type, and positive performance of the watermain, the useful life of the system is expected to outlast the pavement improvements described in this report.

3. Sanitary Sewer

The existing sanitary sewer contains segments of 8" and 15" vitrified clay pipe (VCP), 60" reinforced concrete pipe (RCP), and 8" DIP. City maintenance staff have noted no known deficiencies with the sanitary sewer system.

Bolton & Menk staff reviewed each of the sanitary sewer structures within the project area. The structures are precast concrete and in good to very good condition, but some minor improvements are recommended to ensure the system outlasts the pavement improvements proposed in this report.

4. Storm Sewer

The existing storm sewer system is composed of reinforced concrete pipe (RCP) varying in size from 12-inch diameter to 21-inch diameter. Stormwater is conveyed to 5 catch basins along existing curb & gutter before traveling through the pipe network where it outlets to 3 different detention ponds.

Bolton and Menk staff reviewed each of the storm sewer structures within the project area. The structures are precast and overall are in good condition but would need minor

improvements to ensure they outlast the pavement improvements proposed in this report.

#### C. Proposed Improvements

1. Street Improvements

Based on the pavement age and current distresses, the proposed street improvement for Sunset Court is a full depth reclamation (FDR).

Current pavement distress patterns indicate surface-level wear but no significant deterioration of the roadway base. Full depth reclamation is a cost-effective rehabilitation method that grinds the top 10-12 inches of existing bituminous pavement and aggregate base into a new aggregate that creates an improved foundation for 4 inches of new bituminous pavement.

In addition to pavement reclamation, curb and gutter that is cracked, weathered, or heaved will be removed and replaced with new curb and gutter. This improves stormwater conveyance to catch basins and prevents the intrusion of stormwater into the roadway base.

2. Watermain Improvements

The existing ductile iron watermain is in good condition and is proposed to be left in place. However, inspection and replacement of existing bolts at gate valves, hydrants, and mainline fittings is proposed. These features are typically the first to fail in the water system and proactive replacement of these bolts would limit the number of leaks and watermain breaks

3. Sanitary Sewer Improvements

The existing sanitary sewer network is in good condition and is proposed to be left in place. However, two structures may require some minor repairs to inverts and doghouses. Structures that receive new castings will also be fitted with exterior chimney seals to prevent inflow and infiltration (I/I).

4. Storm Sewer Improvements

Overall, the existing storm sewer system is in good condition and proposed to be left in place. However, it is proposed that a few structures receive new castings and/or lids. Remaining catch basins will receive inflow and infiltration (I/I) barriers along with minor repairs to inverts and doghouses.

5. Water Quality Improvements

Rehabilitation of Sunset Court will not trigger Ramsey-Washington Metro Watershed District (RWMWD) stormwater improvements. However, residents will be given the opportunity during final design to opt into the City's rain garden program. Any raingardens installed would be credited by the watershed towards other or future street improvement projects that trigger stormwater improvements.

#### **III. SUNRISE DRIVE**

#### A. Background

Sunrise Drive is an urban residential street. Annual average daily traffic (AADT) data for this road is unavailable but assumed to be less than 1,000 vehicles per day classifying it as a low-volume road. Refer to Figure 1 in Appendix A for a depiction of the project location.

Over the years, Sunrise Drive has received crack seal and sealcoat treatments in an effort to prolong the life of the pavement. Annual pavement patching has also occurred as needed. Similar maintenance on City utility infrastructure has occurred on the streets since their construction.

#### B. Existing Conditions

1. Streets

Sunrise Drive is a bituminous roadway that measures 30 feet from face of curb to face of curb and has surmountable concrete curb and gutter on the north and south sides. The pavement shows signs of wear and distress, including cracking and potholes, which are typical for a pavement of this age. Refer to Figure 2B in Appendix



Exhibit 2 - Existing Sunrise Drive

A for a depiction of the existing utility infrastructure.

2. Watermain

The existing watermain is a 6-inch diameter ductile iron pipe which stems south-east into the cul-de-sac from Sunset Court and continues south along the road. The water system has performed well, and there are no known deficiencies with the system. Based on the age, type, and positive performance of the watermain, the useful life of the system is expected to outlast the pavement improvements detailed in this report.

3. Sanitary Sewer

The existing sanitary system is an 8-inch diameter vitrified clay pipe that runs north to south where it eventually bends east into the system running underneath Edgerton Street. City maintenance personnel have noted no known deficiencies within the existing sanitary system. Additionally, Bolton and Menk staff reviewed each sanitary sewer structure within the project area. The structures are precast and found to be in good to very good condition. Based on the age, material, and historical performance, the sanitary sewer system is anticipated to outlast the pavement improvements described in this report.

4. Storm Sewer

The existing stormwater infrastructure in the project area is confined to the southern side of Sunrise Drive at the bend where the water runs along the curb and makes it way to those two structures. It then runs west where it drains into a detention pond. The segments are composed of reinforced concrete pipe with a 12-inch diameter.

City maintenance personnel have noted that there are no known deficiencies with the Prepared by: Bolton & Menk, Inc. SUNRISE DRIVE 2023 Street Improvements (Sunset Court, Sunrise Dr, Spruce St) | 0N1.127995 Page 4 storm sewer system. Bolton and Menk evaluated each of the storm sewer structures within the project area. The structures are precast and found to be in fair to good condition. Overall, the storm sewer system is expected to outlast the proposed pavement improvements.

#### C. Proposed Improvements

1. Street Improvements

Based upon the pavement age and distresses, the proposed street improvement for Sunrise Drive is a full depth reclamation (FDR). A depiction of the proposed street and utility improvements is shown in Figure (#) in Appendix A.

Current pavement distress patterns indicate surface-level wear but no significant deterioration of the roadway base. Full depth reclamation is a cost-effective rehabilitation method that grinds the top 10-12 inches of existing bituminous pavement and aggregate base into a new aggregate that creates an improved foundation for 4 inches of new bituminous pavement.

In addition to pavement reclamation, curb and gutter that is cracked, weathered, or heaved will be removed and replaced with new curb and gutter. This improves stormwater conveyance to catch basins and prevents the intrusion of stormwater into the roadway base.

2. Watermain Improvements

The existing ductile iron watermain is in good condition and is proposed to be left in place. Similarly, existing water services are proposed to be left in place. However, pavement rehabilitation provides an advantageous opportunity to perform preventative maintenance on the system before the new pavement is constructed.

Bolted connections at gate valves, hydrants, and mainline fittings are typically the features that fail first within the water system. Inspection and replacement of bolts at these critical locations is a proactive way to limit leaks and breaks in the system beneath the new pavement.

3. Sanitary Sewer Improvements

The existing sanitary sewer network is in good condition and is proposed to be left in place. In conjunction with the pavement rehabilitation, each sanitary sewer structure within the pavement will receive a new casting and adjustment to the new pavement elevation. New castings will also be fitted with exterior chimney seals to prevent I/I. Any necessary mud repairs to benches and inverts will also be performed at this time.

4. Storm Sewer Improvements

Overall, the existing storm sewer system is in good condition and proposed to be left in place.

5. Water Quality Improvements

Rehabilitation of Yorkton Ridge will not trigger Ramsey-Washington Metro Watershed District (RWMWD) stormwater improvements. However, residents will be given the opportunity during final design to opt into the City's rain garden program. Any raingardens installed would be credited by the watershed towards other or future street improvement projects that trigger stormwater improvements.

#### IV. SPRUCE STREET

#### A. Background

Spruce Street is an urban City-street that transitions into Ryan Drive which serves the Ryan Industrial Park. Annual average daily traffic (AADT) data for this road is unavailable but assumed to be less than 1,000 vehicles per day classifying it as a low-volume road. Refer to Figure 1 in Appendix A for a depiction of the project location.

Historically, Spruce Street has received crack seal and sealcoat treatments to prolong the useful life of the existing pavement. Annual pavement patching has also occurred as needed. The utility infrastructure has been maintained on a routine basis.

- Spruce Street was improved within the platted Ryan Drive Industrial Park in 2016
- A portion of Ryan Drive was rebuilt and raised in 2021 as a flood mitigation project by the Ramsey-Washington Metro Watershed District. This project also included the construction of a new box culvert to improve drainage underneath Ryan Drive.
- The remaining portions of Ryan Drive were improved in 2022 with an added sanitary sewer forcemain, storm sewer improvements, and a 2" mill and overlay.

#### B. **Existing Conditions**

1. Streets

> Spruce Street is a bituminous roadway with an average width of 30 feet from face of curb to face of curb and has concrete curb & gutter throughout. The existing pavement within the project area shows signs of agerelated distress including cracking and potholing.

2. Watermain

> The existing watermain is a 12-inch diameter ductile iron pipe running south until it connects into the segment running parallel with South Owasso Boulevard.

3. Sanitary Sewer

> The existing sanitary sewer is served by Metropolitan Council running parallel with the road and consisting of 36-inch reinforced concrete pipe. 8-inch diameter ductile iron pipe extends from the Metropolitan Council line to serve #3065 and #3075. City maintenance personnel have noted no known deficiencies within the existing sanitary system. Additionally, Bolton and Menk staff reviewed the single sanitary sewer structure within the project area. The structure is precast and found to be in fair to good condition. Based on the age, material, and historical performance, the sanitary sewer system is anticipated to outlast the pavement improvements described in this report.

4. Storm Sewer

There are storm sewer catchment areas at both the northern and southern project extents. The storm sewer, catch basins, and culverts near the north project extent have Prepared by: Bolton & Menk, Inc. SPRUCE STREET



**Exhibit 3 - Existing Spruce Street** 

been modified in recent years to remove overland drainage and pipe more water to the Owasso Basin.

City maintenance personnel have noted that the northern catch basin configure lends itself to period clogging and flooding during storm events or spring thaw. Bolton and Menk evaluated each of the storm sewer structures within the project area. The structures are precast and found to be in fair to good condition. Overall, the storm sewer system is expected to outlast the proposed pavement improvements.

#### C. Proposed Improvements

1. Street Improvements

Based upon the pavement age and distresses, the proposed street improvement for Spruce Street is a full depth reclamation (FDR).

Current pavement distress patterns indicate surface-level wear but no significant deterioration of the roadway base. Full depth reclamation is a cost-effective rehabilitation method that grinds the top 10-12 inches of existing bituminous pavement and aggregate base into a new aggregate that creates an improved foundation for 4 inches of new bituminous pavement.

In addition to pavement reclamation, curb and gutter that is cracked, weathered, or heaved will be removed and replaced with new curb and gutter. This improves stormwater conveyance to catch basins and prevents the intrusion of stormwater into the roadway base.

2. Watermain Improvements

The existing ductile iron watermain is in good condition and is proposed to be left in place. Similarly, existing water services are proposed to be left in place.

Bolted connections at gate valves, hydrants, and mainline fittings are typically the features that fail first within the water system. Inspection and replacement of bolts at these critical locations is a proactive way to limit leaks and breaks in the system beneath the new pavement.

3. Sanitary Sewer Improvements

The existing sanitary sewer network is in good condition and is proposed to be left in place.

4. Storm Sewer Improvements

The existing storm sewer system is in good condition and proposed to be left in place. However, a new manhole is proposed where the catch basins and culverts meet near the northern project extent.

5. Water Quality Improvements

Rehabilitation of Spruce Street will not trigger Ramsey-Washington Metro Watershed District (RWMWD) stormwater improvements. However, business owners will be given the opportunity during final design to opt into the City's rain garden program. Any raingardens installed would be credited by the watershed towards other or future street improvement projects that trigger stormwater improvements.

## V. ESTIMATED COSTS

The estimated project cost to complete the improvements proposed herein are presented below. These costs include estimated construction costs, a 15% contingency, 18% engineering, and allowances for geotechnical investigations.

These cost estimates are based upon public construction cost information. Since the consultant has no control over the cost of labor, materials, competitive bidding process, weather conditions, and other factors affecting the cost of construction, all cost estimates are opinions for general information of the client and no warranty or guarantee as to the accuracy of construction cost estimates is made. It is recommended that costs for project financing should be based upon actual, competitive bid prices with reasonable contingencies.

Table 1: Estimated Cost Summary										
Item	Total Estimated Cost	Sunset Court	Sunrise Drive	Spruce Street						
Streets	\$574,716.22	\$207,352.18	\$142,484.86	\$224,879.19						
Sanitary Sewer	\$11,602.35	\$3,256.80	\$5,563.70	\$2,781.85						
Water Main	\$119,823.10	\$53,737.20	\$31,346.70	\$34,739.20						
Storm Sewer	\$45,988.73	\$11,249.53	\$0	\$34,739.20						
Total	\$752,130.40	\$275,595.71	\$179,395.26	\$297,139.44						

#### **VI. FINANCING**

**Street:** The City's Assessment Policy for rehabilitated urban streets outlines that 50% of street rehabilitation costs, including any cost associated with the repair of curb and gutter, shall be assessed to the benefited properties. The special assessment policy includes special provisions for corner lots, commercial properties, lots that have already been assessed, and minimum/maximum front footages; notes and adjustments for these parcels are listed in the Assessment Rolls in Appendix C. The remaining street costs will be funded using the City's Infrastructure Capital Improvement Fund.

Sunset Court and Sunrise Drive are recommended to be assessed on a *per unit* basis due to the similar size and use of the properties being assessed along each roadway. As such, parcels are assigned a unit count and in some cases adjusted in accordance with the special provisions described above. The total assessable cost is then divided among the total assessable units to determine a total assessable cost per unit.

Spruce Street is recommended to be assessed on a *per front footage* basis due to the varying property sizes along the roadway. The total assessable cost is divided by the total front footage to determine the per front foot assessment rate. This rate is multiplied by the assessable front footage of each parcel to determine the proposed assessment.

**Water, Sewer, and Storm:** This project includes only minor water, sanitary, and storm sewer repairs. As such, in accordance with the City's Special Assessment Policy, water, sanitary, and storm sewer improvements will not be assessed. Instead, they will be funded by the City's Infrastructure Capital Improvement Fund.

#### A. Special Assessment – Street Costs Assessed

The unit assessments discussed below are estimates. At the conclusion of construction, City staff will tabulate actual/final project costs and use those costs as the basis for the levied assessments. An Assessment Hearing will be held by the City Council to share these costs with the residents.

1. Sunset Court

A per unit assessment method is being utilized for Sunset Court due to the consistency of adjacent property sizes and uses.

The estimated per policy assessments for street improvements are:

• Unit Assessment Rate \$8,639

Appendix C identifies the Assessment Roll and benefiting properties.

2. Sunrise Drive

A per unit assessment method is being utilized for Maple Lane – Jackson Street due to the consistency of adjacent property sizes and uses.

The estimated per policy assessments for street improvements are:

• Unit Assessment Rate \$7,915

Appendix C identifies the Assessment Roll and benefiting properties.

3. Spruce Street

A per front foot assessment method is being utilized for Spruce Street due to the varying property sizes.

The estimated per policy assessments for street improvements are:

Unit Assessment Rate \$134.50 / Front Foot

Appendix C identifies the Assessment Roll and benefiting properties.

#### B. Financing Summary

The financing summaries shown below are based on the City's Special Assessment Policy as described in the previous sections.

Location	Total Estimated Cost	Infrastructure Capital Improvement Fund	Assessments							
Sunset Court										
Street	\$207,352.18	\$103,684.18	\$103,668.00							
Sanitary Sewer	\$3,256.80	\$3,256.80								
Watermain	\$53,737.20	\$53,737.20								
Storm Sewer	\$11,249.53	\$11,249.53								
	\$275,595.71	\$171,927.71	\$103,668.00							
	Sunrise Dri	ve								
Street	\$142,484.86	\$71,249.86	\$71,235.00							
Sanitary Sewer	\$5,563.70	\$5,563.70								
Watermain	\$31,346.70	\$31,346.70								
Storm Sewer	\$0.00	\$0.00	\$0.00							
	\$179,395.26	\$108,160.26	\$71,235.00							
	Spruce Stre	eet								
Street	\$224,879.19	\$112,439.59	\$112,439.59							
Sanitary Sewer	\$2,781.85	\$2,781.85								
Watermain	\$34,739.20	\$34,739.20								
Storm Sewer	\$34,739.20	\$34,739.20								
	\$297,139.44	\$184,699.84	\$112,439.59							
Total:	\$752,130.40	\$464,772.29	\$287,358.11							

### **VII. PROJECT SCHEDULE**

The proposed project schedule is shown below:

Neighborhood Open House	September 26, 2022
Receive Feasibility Report, Call for Improvement Hearing*	October 12, 2022
Mail Improvement Hearing Notice	October 13, 2022
Advertise Improvement Hearing in Pioneer Press Newspaper	October 19 & 26, 2022
Improvement Hearing, Order Project*	November 30, 2022
Approve Plans and Specifications, Authorize Bidding*	January 11, 2023
Bid Opening	February 15, 2023
Receive Bids and Award Project *	March 8, 2023
Begin Construction	May 2023
Final Completion	August 2023
Advertise Assessment Hearing in Pioneer Press Newspaper	September 13, 2023
Mail Assessment Hearing Notice	September 13, 2023
Assessment Hearing*	October 9, 2023

\* Denotes Council action items

#### **VIII. EASEMENTS AND PERMITS**

It is expected that all the proposed improvements will be limited to the existing City right-of-way and easements. No additional right-of-way, easements, or permits would be required for construction of these improvements.

#### IX. CONCLUSION

From an engineering standpoint, this project as proposed is feasible, cost effective, and necessary. It can best be accomplished by letting competitive bids for the work under one contract in order to complete the work in an orderly and efficient manner. The City will have to determine the economic feasibility of the proposed improvements.

Appendix A: Preliminary Cost Estimates

#### SPRUCE STREET IMPROVEMENTS - PRELIMINARY COST ESTIMATE

BMI PROJECT NUMBER: 0N1.127995

9/21/2022

ITEM NO.		MNDOT DESCRIPTION	NOTES	UNIT	UNIT COST	SPRUCE	ICE STREET	
	SILCING				2001	QUANTITY	AMOUN	
ART 1: STRE	ETS							
1	2021.501	MOBILIZATION		LS	\$13,000.00	1	\$13,000.00	
2	2104.503	REMOVE CURB & GUTTER (SPOT REPAIR)		LF	\$11.00	530	\$5 <i>,</i> 830.0	
3	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT		SY	\$20.00	50	\$1,000.0	
4	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT		SY	\$25.00	30	\$750.00	
5	2105.604	FINISH GRADING		SY	\$2.00	2900	\$5,800.00	
6	2105.607	SUBGRADE EXCAVATION (SPOT CORRECTION)		CY	\$35.00	100	\$3,500.0	
7	2105.607	SUBGRADE CORRECTION - CLASS 5		CY	\$35.00	100	\$3,500.00	
8	2123.610	STREET SWEEPER (WITH PICKUP BROOM)		HOUR	\$180.00	10	\$1,800.00	
9	2130.501	WATER FOR DUST CONTROL		MGAL	\$40.00	30	\$1,200.00	
10	2215.504	FULL DEPTH RECLAMATION		SY	\$5.00	2896	\$14,480.00	
11	2232.604	EDGE MILL BITUMINOUS SURFACE		SY	\$20.00	70	\$1,400.00	
12	2331.603	JOINT ADHESIVE (MASTIC)		LF	\$1.00	1741	\$1,741.00	
13	2357.506	BITUMINOUS MATERIAL FOR TACK COAT		GAL	\$3.50	210	\$735.00	
14	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)		TON	\$95.00	367	\$34,865.00	
15	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2,E), DRIVEWAY		TON	\$225.00	10	\$2,250.0	
16	2360.509	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)		TON	\$95.00	367	\$34,865.0	
17	2531.503	CONCRETE CURB & GUTTER - SURMOUNTABLE (HAND POUR)		LF	\$35.00	520	\$18,200.0	
18	2531.604	8" CONCRETE VALLEY GUTTER		SY	\$105.00	30	\$3,150.00	
19	2531.504	6" CONCRETE DRIVEWAY PAVEMENT		SY	\$105.00	30	\$3,150.0	
20	2563.601	TRAFFIC CONTROL		LS	\$3,500.00	1	\$3,500.00	
21	2573.501	EROSION CONTROL SUPERVISOR		LS	\$1,500.00	1	\$1,500.00	
22	2573.502	STORM DRAIN INLET PROTECTION		EACH	\$225.00	7	\$1,575.00	
23	2575.504	FILTER TOPSOIL BORROW (LV)		CY	\$50.00	25	\$1,250.00	
24	2575.604	FLEXTERRA HYDROMULCH, SEED MIX 25-151, FERTILIZER		SY	\$5.00	230	\$1,150.00	
			REETS - CON	ISTRUCTIC	N SUBTOTAL		\$160,193	
				+15% C	ONTINGENCY		\$24,029	
		PART	1: STREETS -	CONSTRU	CTION TOTAL		\$184,220	
				+18%	ENGINEERING		\$33,160	
				G	EOTECHNICAL		\$7,500	
			PART 1: ST		OJECT TOTAL		\$224,87	
PART 2: SANI	TARY SEWER							
25	2104.502	REMOVE FRAME AND RING CASTING (SANITARY)		EACH	\$350.00	1	\$350.0	
26	2506.502	NEW RINGS AND CASTING (SANITARY)		EACH	\$1,250.00	1	\$1,250.0	
27	2506.602	CHIMNEY SEAL (INFI-SHIELD)		EACH	\$450.00	1	\$450.0	
		PART 2: SANITARY	SEWER - CON				\$2,05	
					ONTINGENCY		\$308	
		PART 2: SANIT	ARY SEWER -				\$2,35	
							\$42	
				10,01			γ <del>-1</del> 2-	

PART 2: SANITARY SEWER - PROJECT TOTAL

\$2,782

#### **SPRUCE STREET IMPROVEMENTS - PRELIMINARY COST ESTIMATE**

BMI PROJECT NUMBER: 0N1.127995

9/21/2022

ITEM NO.	MNDOT SPEC.NO	DESCRIPTION	NOTES	UNIT	UNIT COST	SPRUCE STREET		
						QUANTITY	AMOUNT	
PART 3: WATI	1	I			Γ.	n – – – –		
28	2504.602	REMOVE AND REPLACE HYDRANT & VALVE BOLTS		EACH	\$2,500.00	2	\$5,000.00	
29	2504.602	REMOVE AND REPLACE GATE VALVE BOLTS		EACH	\$2,500.00	2	\$5,000.00	
30	2504.602	REMOVE AND REPLACE FITTING BOLTS		EACH	\$2,500.00	4	\$10,000.00	
31	2504.602	REMOVE & REPLACE GATE VALVE BOX		EACH	\$1,400.00	4	\$5,600.00	
		PART 3: WATERM	AIN - CON				\$25,600	
					ONTINGENCY		\$3,840	
		PART 3: WAT	TERMAIN-		CTION TOTAL		\$29,440	
					INGINEERING		\$5,299 <b>\$34,739</b>	
	PART 3: WATERMAIN - PROJECT TOTAL							
PART 4: STOR	-	Γ			[	0		
32	2104.502	REMOVE CASTING & RINGS (STORM)		EACH	\$350.00	2	\$700.00	
33	2503.602	2'X3' CB RING SEAL (FLEX-SEAL)		EACH	\$850.00	2	\$1,700.00	
34	2506.602	NEW RINGS AND CASTING (STORM)		EACH	\$1,250.00	2	\$2,500.00	
35	2506.602	PATCH DOGHOUSE (STORM)		EACH	\$150.00	2	\$300.00	
36	2506.602	PATCH INVERT (STORM)		EACH	\$200.00	2	\$400.00	
37	2506.602	INSTALL DRAINAGE STRUCTURE AT LOW POINT		LS	\$20,000.00	1	\$20,000.00	
		PART 4: STORM SEV	NER - CON	STRUCTIO	N SUBTOTAL		\$25,600	
				+15% C	ONTINGENCY		\$3,840	
		PART 4: STORN	A SEWER -	CONSTRU	CTION TOTAL		\$29,440	
				+18% E	INGINEERING		\$5,299	
		PART 4:	STORM SI	EWER - PR	OJECT TOTAL		\$34,739	
PROJECT SUB	TOTALS (CON	STRUCTION ONLY)						
PART "1" -	STREETS						\$184,220	
PART "2" -	SANITARY SE	WER					\$2,358	
PART "3" -		\$29,440						
PART "4" -	STORM SEW	ER					\$29,440	
CONSTRUCTIO	ON TOTAL						\$245,457	
ENGINEER	NG						\$44,182	
GEOTECHN	IICAL						\$7,500	
PROJECT TOT	AL						\$297,139	

#### SUNRISE DRIVE IMPROVEMENTS - PRELIMINARY COST ESTIMATE

BMI PROJECT NUMBER: 0N1.127995

9/21/2022

ITEM NO.	MNDOT SPEC.NO	DESCRIPTION	NOTES	UNIT	UNIT COST	SUNRIS	E DRIVE
						QUANTITY	AMOUNT
PART 1: STREE	TS	1				II	
1	2021.501	MOBILIZATION		LS	\$9,000.00	1	\$9,000.00
2	2104.503	REMOVE CURB & GUTTER (SPOT REPAIR)		LF	\$11.00	440	\$4,840.00
3	2104.603	SALVAGE AND REINSTALL DRIVEWAY PAVERS		LS	\$2,000.00	1	\$2,000.00
4	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT		SY	\$20.00	30	\$600.00
5	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT		SY	\$25.00	30	\$750.00
6	2105.604	FINISH GRADING		SY	\$2.00	1390	\$2,780.00
7	2105.607	SUBGRADE EXCAVATION (SPOT CORRECTION)		CY	\$35.00	50	\$1,750.00
8	2105.607	SUBGRADE CORRECTION - CLASS 5		CY	\$35.00	50	\$1,750.00
9	2123.610	STREET SWEEPER (WITH PICKUP BROOM)		HOUR	\$180.00	10	\$1,800.00
10	2130.501	WATER FOR DUST CONTROL		MGAL	\$40.00	15	\$600.00
11	2215.504	FULL DEPTH RECLAMATION		SY	\$5.00	1390	\$6,950.00
12	2232.604	EDGE MILL BITUMINOUS SURFACE		SY	\$20.00	50	\$1,000.00
13	2331.603	JOINT ADHESIVE (MASTIC)		LF	\$1.00	878	\$878.00
14	2357.506	BITUMINOUS MATERIAL FOR TACK COAT		GAL	\$3.50	100	\$350.00
15	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)		TON	\$95.00	176	\$16,720.00
16	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2,E), DRIVEWAY		TON	\$225.00	6	\$1,350.00
17	2360.509	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)		TON	\$95.00	194	\$18,430.00
18	2531.503	CONCRETE CURB & GUTTER - SURMOUNTABLE (HAND POUR)		LF	\$35.00	440	\$15,400.00
19	2531.504	6" CONCRETE DRIVEWAY PAVEMENT		SY	\$105.00	30	\$3,150.00
20	2563.601	TRAFFIC CONTROL		LS	\$3,500.00	1	\$3,500.00
21	2573.501	EROSION CONTROL SUPERVISOR		LS	\$1,500.00	1	\$1,500.00
22	2573.502	STORM DRAIN INLET PROTECTION		EACH	\$225.00	2	\$450.00
23	2575.504	FILTER TOPSOIL BORROW (LV)		СҮ	\$50.00	20	\$1,000.00
24	2575.504	SODDING TYPE LAWN		SY	\$15.00	195	\$2,925.00
		PART 1: STRE	ETS - CON	STRUCTIO	N SUBTOTAL		\$99,473
				+15% C	ONTINGENCY		\$14,921
		PART 1:	STREETS -	CONSTRU	CTION TOTAL		\$114,394
				+18% E	NGINEERING		\$20,591
				GI	OTECHNICAL		\$7,500
		P.	ART 1: STF	REETS - PR	OJECT TOTAL		\$142,485
PART 2: SANIT	ARY SEWER					11	
25	2104.502	REMOVE FRAME AND RING CASTING (SANITARY)		EACH	\$350.00	2	\$700.00
26	2506.502	NEW RINGS AND CASTING (SANITARY)		EACH	\$1,250.00	2	\$2,500.00
27	2506.602	CHIMNEY SEAL (INFI-SHIELD)		EACH	\$450.00	2	\$900.00
		PART 2: SANITARY SEV	VER - CON	STRUCTIO	N SUBTOTAL		\$4,100
				+15% C	ONTINGENCY		\$615
		PART 2: SANITAR	Y SEWER -	CONSTRU	CTION TOTAL		\$4,715
				+18% E	NGINEERING		\$849
25 26	2104.502 2506.502	NEW RINGS AND CASTING (SANITARY) CHIMNEY SEAL (INFI-SHIELD) PART 2: SANITARY SEV		EACH EACH STRUCTIO +15% C CONSTRU	\$1,250.00 \$450.00 N SUBTOTAL ONTINGENCY CTION TOTAL	2 2	

PART 2: SANITARY SEWER - PROJECT TOTAL

\$5,564

#### SUNRISE DRIVE IMPROVEMENTS - PRELIMINARY COST ESTIMATE

BMI PROJECT NUMBER: 0N1.127995

9/21/2022

ITEM NO.	MNDOT SPEC.NO	DESCRIPTION	NOTES	UNIT	UNIT COST	SUNRIS	E DRIVE
						QUANTITY	AMOUNT
PART 3: WAT	ERMAIN						
28	2504.602	REMOVE AND REPLACE HYDRANT & VALVE BOLTS		EACH	\$2,500.00	2	\$5,000.00
29	2504.602	REMOVE AND REPLACE GATE VALVE BOLTS		EACH	\$2,500.00	2	\$5,000.00
30	2504.602	REMOVE AND REPLACE FITTING BOLTS		EACH	\$2,500.00	3	\$7,500.00
31	2504.602	REMOVE & REPLACE GATE VALVE BOX		EACH	\$1,400.00	4	\$5,600.00
		\$23,100					
				+15% C	ONTINGENCY		\$3,465
		PART 3: WA	FERMAIN-	CONSTRU	CTION TOTAL		\$26,565
				+18% E	INGINEERING		\$4,782
		PART	3: WATERI	MAIN - PR	OJECT TOTAL		\$31,347
PROJECT SUB	TOTALS (CON	ISTRUCTION ONLY)					
PART "1" -	STREETS						\$114,394
PART "2" -	SANITARY SE	WER					\$4,715
PART "3" -	PART "3" - WATERMAIN						
CONSTRUCTIO	ON TOTAL						\$145,674
ENGINEER	ING						\$26,221
GEOTECH	NICAL						\$7,500

\$179,395

PROJECT TOTAL

#### SUNSET COURT IMPROVEMENTS - PRELIMINARY COST ESTIMATE

BMI PROJECT NUMBER: 0N1.127995

9/21/2022

ITEM NO.	MNDOT SPEC.NO	DESCRIPTION	NOTES	UNIT	UNIT COST	SUNSET	COURT	
						QUANTITY	AMOUNT	
PART 1: STREE	PART 1: STREETS							
1	2021.501	MOBILIZATION		LS	\$13,000.00	1	\$13,000.00	
2	2104.503	REMOVE CURB & GUTTER (SPOT REPAIR)		LF	\$11.00	320	\$3,520.00	
3	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT		SY	\$20.00	40	\$800.00	
4	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT		SY	\$25.00	30	\$750.00	
5	2105.604	FINISH GRADING		SY	\$2.00	2930	\$5,860.00	
6	2105.607	SUBGRADE EXCAVATION (SPOT CORRECTION)		CY	\$35.00	100	\$3,500.00	
7	2105.607	SUBGRADE CORRECTION - CLASS 5		CY	\$35.00	100	\$3,500.00	
8	2123.610	STREET SWEEPER (WITH PICKUP BROOM)		HOUR	\$180.00	10	\$1,800.00	
9	2130.501	WATER FOR DUST CONTROL		MGAL	\$40.00	35	\$1,400.00	
10	2215.504	FULL DEPTH RECLAMATION		SY	\$5.00	2930	\$14,650.00	
11	2232.604	EDGE MILL BITUMINOUS SURFACE		SY	\$20.00	50	\$1,000.00	
12	2331.603	JOINT ADHESIVE (MASTIC)		LF	\$1.00	1595	\$1,595.00	
13	2357.506	BITUMINOUS MATERIAL FOR TACK COAT		GAL	\$3.50	210	\$735.00	
14	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)		TON	\$95.00	371	\$35,245.00	
15	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2,E), DRIVEWAY		TON	\$225.00	6	\$1,350.00	
16	2360.509	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)		TON	\$95.00	371	\$35,245.00	
17	2531.503	CONCRETE CURB & GUTTER - SURMOUNTABLE (HAND POUR)		LF	\$35.00	320	\$11,200.00	
18	2531.504	6" CONCRETE DRIVEWAY PAVEMENT		SY	\$105.00	30	\$3,150.00	
19	2563.601	TRAFFIC CONTROL		LS	\$3,500.00	1	\$3,500.00	
20	2573.501	EROSION CONTROL SUPERVISOR		LS	\$1,500.00	1	\$1,500.00	
21	2573.502	STORM DRAIN INLET PROTECTION		EACH	\$225.00	5	\$1,125.00	
22	2575.504	FILTER TOPSOIL BORROW (LV)		CY	\$50.00	15	\$750.00	
23	2575.504	SODDING TYPE LAWN		SY	\$15.00	140	\$2,100.00	
		PART 1: STRE	ETS - CON	STRUCTIO	N SUBTOTAL		\$147,275	
				+15% C	ONTINGENCY		\$22,091	
		PART 1:	STREETS -	CONSTRU	CTION TOTAL		\$169,366	
				+18% E	INGINEERING		\$30,486	
				GI	OTECHNICAL		\$7,500	
		P/	ART 1: STF	REETS - PR	OJECT TOTAL		\$207,352	
PART 2: SANIT	ARY SEWER							
24	2104.502	REMOVE FRAME AND RING CASTING (SANITARY)		EACH	\$350.00	1	\$350.00	
25	2506.502	NEW RINGS AND CASTING (SANITARY)		EACH	\$1,250.00	1	\$1,250.00	
26	2506.602	CHIMNEY SEAL (INFI-SHIELD)		EACH	\$450.00	1	\$450.00	
27	2506.602	PATCH DOGHOUSE (SANITARY)		EACH	\$175.00	2	\$350.00	
		PART 2: SANITARY SEV	VER - CON	STRUCTIO	· · ·		\$2,400	
+15% CONTINGENCY							\$360	
		PART 2: SANITARY	SEWER -	CONSTRU	CTION TOTAL		\$2,760	
				+18% 8	NGINEERING		\$497	
		PART 2: SA	NITARY SI	EWER - PR	OJECT TOTAL		\$3,257	

#### SUNSET COURT IMPROVEMENTS - PRELIMINARY COST ESTIMATE

BMI PROJECT NUMBER: 0N1.127995

9/21/2022

ITEM NO.	MNDOT SPEC.NO	DESCRIPTION	NOTES	UNIT	UNIT COST	SUNSET	COURT
PART 3: WATE	RMAIN					QUANTIT	AWIOUNT
28	2504.602	REMOVE AND REPLACE HYDRANT & VALVE BOLTS		EACH	\$2,500.00	3	\$7,500.00
29	2504.602	REMOVE AND REPLACE GATE VALVE BOLTS		EACH	\$2,500.00	3	\$7,500.00
30	2504.602	REMOVE AND REPLACE FITTING BOLTS		EACH	\$2,500.00	6	\$15,000.00
31	2504.602	REMOVE & REPLACE GATE VALVE BOX		EACH	\$2,400.00	4	\$9,600.00
	200	PART 3: WATERM	AIN - CON	-	. ,		\$39,600
					ONTINGENCY		\$5,940
		PART 3: WAT	FERMAIN-		CTION TOTAL		\$45,540
				+18% E	NGINEERING		\$8,197
		PARTS	3: WATERI	MAIN - PR	OJECT TOTAL		\$53,737
PART 4: STOR	M SEWER						
32	2104.502	REMOVE CASTING & RINGS (STORM)		EACH	\$350.00	2	\$700.00
33	2503.602	2'X3' CB RING SEAL (FLEX-SEAL)		LF	\$850.00	5	\$4,250.00
34	2506.602	NEW RINGS AND CASTING (STORM)		EACH	\$1,250.00	2	\$2,500.00
35	2506.602	PATCH DOGHOUSE (STORM)		EACH	\$150.00	2	\$300.00
36	2506.602	PATCH INVERT (STORM)		EACH	\$200.00	2	\$400.00
37	2506.602	REPAIR STEP (STORM)		EACH	\$140.00	1	\$140.00
		PART 4: STORM SEV	VER - CON	STRUCTIO	N SUBTOTAL		\$8,290
				+15% C	ONTINGENCY		\$1,244
		PART 4: STORM	1 SEWER -	CONSTRU	CTION TOTAL		\$9,534
				+18% E	NGINEERING		\$1,716
		PART 4:	STORM SE	WER - PR	OJECT TOTAL		\$11,250
PROJECT SUB	FOTALS (CON	STRUCTION ONLY)					
PART "1" -	STREETS						\$169,366
PART "2" -	SANITARY SE	WER					\$2,760
PART "3" -	WATERMAIN						\$45,540
PART "4" -	PART "4" - STORM SEWER						
CONSTRUCTION TOTAL							\$227,200
ENGINEER	NG						\$40,896
GEOTECHN	IICAL						\$7 <i>,</i> 500
PROJECT TOTA	PROJECT TOTAL						

Appendix B: Figures

# **2023 Street Improvements**

Little Canada MN



Figure 1: Project Locations October 2022



# Little Canada MN



# Figure 2: Sunset Court Existing Conditions October 2022



# **2023 Street Improvements**

Little Canada MN



Figure 3: Sunrise Drive Existing Conditions October 2022



# **2023 Street Improvements**

Little Canada MN



Figure 1: Spruce Street Existing Conditions October 2022



Appendix C: Preliminary Assessment Roll

# **2023 Street Improvements**

Little Canada MN



**Spruce Street - Assessable Properties** July 2022



#### PRELIMINARY ASSESSMENT ROLL SPRUCE STREET

Total Street Cost Assessable Street Cost (50%)	Assessable Street Cost (50%)	Assessment
		Rate Per LF
\$224,879	\$112,440	\$67.49

Parcel	Parcel ID	Site Address	Owner	Front Footage	Assessable Front Footage	Proposed Assessment
1	062922210040	0 SPRUCE ST	OWASSO LLC	376	376	\$25,376.52
2	062922210042	3065 SPRUCE ST	STOCKNESS PROPERTIES LLC	250	250	\$16,872.69
3	062922210041	3075 SPRUCE ST	NEI PROPERTIES LLC	210	210	\$14,173.06
4	062922210030	3066 SPRUCE ST	QUALITY REAL ESTATE PTNER LLC	830	830	\$56,017.32
			Totals:	1,666	1,666	\$112,439.59

Little Canada MN



**Sunrise Drive - Assessable Properties** July 2022



# PRELIMINARY ASSESSMENT ROLL SUNRISE DRIVE

Total	Streets Cost	Assessable Street Cost (5		Total Units	Policy Unit Asso	essment
\$	142,485			9.0	\$7,915.00	
Parcel #	Parcel ID	Site Address	Units	Policy Unit Assessment	Proposed Assessment	Note
1	082922240016	2439 SUNRISE DR	1	\$7,915.00	\$7,915.00	
2	082922240015	2449 SUNRISE DR	1	\$7,915.00	\$7,915.00	
3	082922240032	2451 SUNRISE DR	1	\$7,915.00	\$7,915.00	
4	082922240031	2455 SUNRISE DR	1	\$7,915.00	\$7,915.00	
5	082922240030	2459 SUNRISE DR	1	\$7,915.00	\$7,915.00	
6	082922240029	2466 SUNRISE DR	1	\$7,915.00	\$7,915.00	
7	082922240028	2460 SUNRISE DR	1	\$7,915.00	\$7,915.00	
8	082922240014	2452 SUNRISE DR	1	\$7,915.00	\$7,915.00	
9	082922240013	2440 SUNRISE DR	1	\$7,915.00	\$7,915.00	
					\$71,235.00	

Little Canada MN



Sunset Court - Assessable Properties July 2022



#### PRELIMINARY ASSESSMENT ROLL SUNSET COURT

Total Streets Cost \$207,352		Assessable Street Cost (50%) \$103,676		Total Units	Policy Unit Assessment \$8,639.00	
				12.0		
Parcel #	Parcel ID	Site Address	Units	Policy Unit Assessment	Proposed Assessment	Note
1	082922240027	2485 EDGERTON ST	1	\$8,639.00	\$8,639.00	
2	082922240048	2448 SUNSET CT	1	\$8,639.00	\$8,639.00	
3	082922240037	2438 SUNSET CT	1	\$8,639.00	\$8,639.00	
4	082922240038	2428 SUNSET CT	1	\$8,639.00	\$8,639.00	
5	082922240039	2420 SUNSET CT	1	\$8,639.00	\$8,639.00	
6	082922240046	2411 SUNSET CT	1	\$8,639.00	\$8,639.00	
7	082922240045	2421 SUNSET CT	1	\$8,639.00	\$8,639.00	
8	082922240044	2427 SUNSET CT	1	\$8,639.00	\$8,639.00	
9	082922240043	2437 SUNSET CT	1	\$8,639.00	\$8,639.00	
10	082922240047	2441 SUNSET CT	1	\$8,639.00	\$8,639.00	
11	082922240041	2447 SUNSET CT	1	\$8,639.00	\$8,639.00	
12	082922210043	2439 SUNSET CT	1	\$8,639.00	\$8,639.00	
I					\$103,668.00	