



Engineering & Public Works Department

SUBJECT: Sidewalk and Curb Replacement Program

MEETING DATE: April 9, 2019

FROM: [Brigitte Berger-Raish](#), P.E., Director of Engineering & Public Works
[Dan Manis](#), P.E., Village Engineer
[Daniel Smith](#), Engineering Assistant

BUDGET IMPACT:	Contract Cost	\$157,541
	Available Budget	\$157,541
	Over/(Under) Budget	\$0

Recommended Motion

Move to approve a contract in the amount not-to-exceed \$157,541 with Schroeder & Schroeder, Inc., Skokie, IL, for the 2019 Sidewalk and Curb Replacement Program.

Background

The scope of work for the 2019 Sidewalk and Curb Replacement Program includes sidewalk replacement, curb and gutter repairs and driveway repairs at various locations throughout the Village. The program focuses on sidewalks with substantial tripping hazards due to differential settlement, heaving, or deterioration to ensure sidewalks are compliant with the American with Disabilities Act (ADA). Curb that has areas of missing or broken concrete will also be replaced. Engineering and Public Works Department staff evaluates approximately 1/5 of the Village's sidewalks and curbs on a rotating annual basis. In addition to sidewalk and curb inspections, Engineering and Public Works Department replaces all eligible sidewalk and curb hazards reported by residents regardless of the inspection zone. The focus of the sidewalk program is on tripping hazards 1-inch or greater.

This contract also includes concrete sidewalk, curb, driveway apron, and pavement repairs due to utility work completed by in-house water and sewer crews. When utility repairs are completed, the area on the surface disturbed by the work is temporarily patched until permanent repairs can be made with this contract.

Discussion

In 2017, the Village was one of five municipalities participating in the Municipal Partnering Initiative (MPI) concrete repairs bid that was led by the Village of Lincolnwood. The MPI allows area communities to collectively bid similar work to take advantage of economies of scale. The other communities participating in the 2017 bid were Glencoe, Kenilworth, and Winnetka. Based on the bidding results and research conducted by Engineering and Public Works staff, alternative bidding strategies for this contract were pursued for 2018.

In 2018, Engineering and Public Works staff sought vendor approval to participate in a different MPI group that included Glenview, Northfield, Mount Prospect, Arlington Heights, and Rolling Meadows. This group agreed to an extension with Schroeder and Schroeder, Inc. at 2017 unit pricing, which was lower than the pricing received from Schroeder and Schroeder, Inc. in the Village of Lincolnwood led MPI bid.

In 2019, the Village joined the MPI group led by the Village of Mount Prospect. Other participating communities in this group were Arlington Heights, Glenview, and Northfield. Bids were opened on March 4, 2019. The results of the bid opening are included in Attachment 1. The following shows a tabulation of historical pricing for Wilmette from 2013 through 2019.

Sidewalk Program Pricing History							
Item	2013	2014	2015	2016	2017	2018	2019
Sidewalk Removal & Replacement	\$4.19	\$4.18	\$5.85	\$5.50	\$6.50	\$5.18	\$6.00
Curb Removal & Replacement	\$12.75	\$13.00	\$16.00	\$18.00	\$18.00	\$20.12	\$22.50

Additionally, since 2018, concrete work which was traditionally done with a separate Street Patching Program for water and sewer repairs has been incorporated into this program to increase the volume of work in the contract for better overall unit pricing. The table below summarizes the difference in pricing for utility related concrete repairs from 2017, 2018 and 2019.

Street Patching Program Pricing			
Item	2017	2018	2019
Concrete Pavement Patch (per Square Yard)	\$125.00	\$55.33	\$60.00

Schroeder & Schroeder has worked well for the Village in the past several years, including the 2015, 2016, 2017 and 2018 sidewalk and curb replacement programs, the 2014, 2016 and 2018 alley programs, and the 2017 Brick Renovation project. For these reasons, the Engineering and Public Work Department recommends awarding the 2019 Sidewalk and Curb Replacement Program to Schroeder & Schroeder.

The 2019 Sidewalk and Curb Replacement Program will be completed in two phases. The contractor will mobilize in spring and again in the fall.

Budget Impact

The 2019 Sidewalk and Curb Replacement Program will be paid for as follows:

Description	Account Number	2019 Budget	Award Amount
Sidewalk Replacement	11202035-425000	\$74,200	\$67,200
Curb Replacement	11202035-425100	\$43,400	\$43,400
Street Patching – Sewer	40807090–421000	\$70,450	\$20,441
Street Patching – Water	41838090-421000	\$83,150	\$26,500
Total		\$267,900	\$157,541

The balance in the sidewalk replacement account will be used for sidewalk mud-jacking which is a nondestructive sidewalk rehabilitation treatment to mitigate the effects of differential displacement between sidewalk squares. Balances in the sewer and water patching account will be used for asphalt and brick pavement restoration as part of the Alley Reconstruction and Brick Renovation project.

Documents Attached

1. Bid Tabulation
2. CIP Detail Sheets

				A Lamp Concrete Contractors, Inc.		D'Land Construction, LLC		Schroeder & Schroeder, Inc.		Sumit Construction Co., Inc.	
Item Number	Item Description	Unit	Bid Quantity	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	Traffic Control and Protection for Temporary Detour	EACH	1	\$ 3,500.00	\$ 3,500.00	\$ 1,500.00	\$ 1,500.00	\$ 1,250.00	\$ 1,250.00	\$ 4,000.00	\$ 4,000.00
2	Arrow Board	CAL DAY	15	\$ 250.00	\$ 3,750.00	\$ 450.00	\$ 6,750.00	\$ 150.00	\$ 2,250.00	\$ 60.00	\$ 900.00
3	P.C.C. Pavement Patch, CL B (7")	SY	100	\$ 82.50	\$ 8,250.00	\$ 65.00	\$ 6,500.00	\$ 60.00	\$ 6,000.00	\$ 110.00	\$ 11,000.00
4	P.C.C. Pavement Patch, CL B, State & County Roads, Base Only (9")	SY	200	\$ 150.00	\$ 30,000.00	\$ 100.00	\$ 20,000.00	\$ 68.00	\$ 13,600.00	\$ 90.00	\$ 18,000.00
5	P.C.C. Driveway Pavement Removal and Replacement (6")	SY	200	\$ 62.50	\$ 12,500.00	\$ 65.00	\$ 13,000.00	\$ 56.00	\$ 11,200.00	\$ 82.00	\$ 16,400.00
6	P.C.C. Sidewalk Removal and Replacement (5-6")	SF	12000	\$ 7.35	\$ 88,200.00	\$ 7.35	\$ 88,200.00	\$ 6.00	\$ 72,000.00	\$ 11.00	\$ 132,000.00
7	P.C.C. Patio Removal and Replacement	SF	0	\$ 20.00	\$ -	\$ 20.00	\$ -	\$ 12.00	\$ -	\$ 20.00	\$ -
8	Combination Concrete Curb & Gutter Removal and Replacement (M3.12, B6.12, B6.18)	LF	2000	\$ 25.00	\$ 50,000.00	\$ 35.00	\$ 70,000.00	\$ 22.50	\$ 45,000.00	\$ 40.00	\$ 80,000.00
9	Combination Concrete Curb & Gutter Removal and Replacement (B6.24)	LF	0	\$ 35.00	\$ -	\$ 45.00	\$ -	\$ 35.00	\$ -	\$ 50.00	\$ -
10	Detectable Warning Fields	EACH	8	\$ 350.00	\$ 2,800.00	\$ 250.00	\$ 2,000.00	\$ 150.00	\$ 1,200.00	\$ 140.00	\$ 1,120.00
11	Detectable Warning Fields (Supplied by Municipality)	EACH	0	\$ 200.00	\$ -	\$ 150.00	\$ -	\$ 100.00	\$ -	\$ 80.00	\$ -
12	Reinforcement Bars, Epoxy Coated-Two Continuous No. 5	LF	0	\$ 10.00	\$ -	\$ 10.00	\$ -	\$ 2.00	\$ -	\$ 3.00	\$ -
13	Tree Grate Installation	EACH	0	\$ 1,350.00	\$ -	\$ 650.00	\$ -	\$ 250.00	\$ -	\$ 800.00	\$ -
Supp. Item	Valve Vaults, Manholes, Inlets, Catch Basins to be Adjusted	EACH	0	\$ 450.00	\$ -	\$ 650.00	\$ -	\$ 250.00	\$ -	\$ 450.00	\$ -
Supp. Item	Aggregate Base Course, Type B, 4-Inch	SY	0	\$ 6.50	\$ -	\$ -	\$ -	\$ 6.00	\$ -	\$ 6.75	\$ -
Supp. Item	P.C.C. Sidewalk Removal and Replacement (5-6"), State & County Road	SF	500	\$ 7.50	\$ 3,750.00	\$ 15.00	\$ 7,500.00	\$ 7.00	\$ 3,500.00	\$ 12.00	\$ 6,000.00
Bid Total					\$ 202,750.00		\$ 215,450.00		\$ 156,000.00		\$ 269,420.00

Sidewalk Repair Program	2019	\$74,200
Streets, Sidewalks and Alleys	2020	\$76,300
	2021	\$78,400
	2022	\$80,500
	2023	\$82,600

- X Critical
 - Recommended
 - Contingent on Funding
-

Original Purchase Date & Cost

Unknown

Funding History

2018	\$72,100	Operating
2017	\$70,000	Operating
2016	\$70,000	Operating
2015	\$55,000	Operating
2014	\$20,000	Operating
2013	\$71,309	Operating
2012	\$27,281	Operating

Project Description & Justification

This project is for the replacement of public sidewalks in various parts of the Village that present a potential tripping hazard.

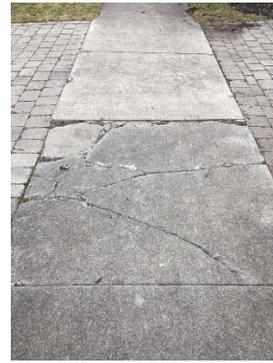
This is an annual maintenance program to repair damaged sections of sidewalk throughout the Village. The program focuses on replacing sidewalk with a tripping hazard of 1-1/2 inches or greater and also ensures sidewalks are compliant with the American with Disabilities Act (ADA). In addition to sidewalk inspections, the Engineering and Public Works Department repairs all eligible sidewalk hazards reported by residents. Sidewalks with minor cracks and/or ponding of water are not considered liability risks and thus are prioritized below trip hazards. Trip hazards are first temporarily repaired with an asphalt patch and then permanently repaired with the sidewalk program. It should be noted that the Engineering and Public Works Department also replaces sidewalks in conjunction with the street resurfacing project. There are five sidewalk inspection zones which are inspected and repaired on a rotating yearly cycle.



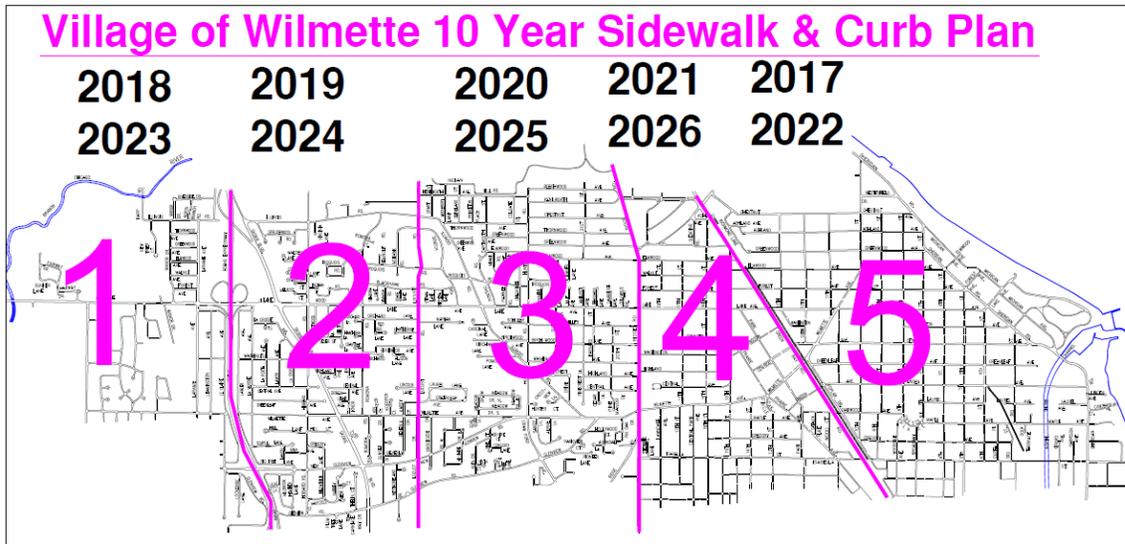
Sidewalk with 1.5" trip hazard



Missing sidewalk



Broken sidewalk with trip hazard



In an effort to incorporate more cost saving opportunities, the Engineering & Public Works Department will also include concrete mud-jacking and sidewalk grinding as options for sidewalk rehabilitation.

Project Update

The funding amount of \$82,600 has been added to 2023. An annual inflation factor of 3% is included.

Project Alternative

The alternative is to patch the sidewalks with asphalt. This will result in increased maintenance (the asphalt will not last more than a season) and it will cost more to replace sidewalks in the long term. Furthermore, the asphalt patches are considered aesthetically unpleasing by some residents.

Operating Budget Impact

Is this purchase *routine* X or non-routine ?

ROUTINE	
Department Budget	Engineering
Account Number Description	Sidewalk Repair Program
Account Number	11202035-425000

Pavement Marking Program	2019	\$53,000	Operating
Streets, Sidewalks and Alleys	2020	\$54,500	
	2021	\$56,000	
	2022	\$57,500	
X Critical	2023	\$59,000	
- Recommended			
- Contingent on Funding			

Original Purchase Date & Cost

Unknown

Funding History

2018	\$51,500
2017	\$50,000
2016	\$50,000
2015	\$40,000
2014	\$20,000
2013	\$20,000
2012	\$20,000
2011	\$40,000

Project Description & Justification

This safety program is for restriping pavement markings throughout the Village.

The pavement marking program stripes existing and new lane lines, center lines, school crosswalks, railroad crossings, stop bars, edge lines, and speed humps on Village streets. Pavement markings provide benefit to motorists, pedestrians and cyclists. The deterioration of pavement markings on Village streets varies. The life cycle of thermoplastic pavement marking on major streets is between two to five years and the life cycle for water-based paint pavement marking is yearly. The life cycle on residential streets is between five and eight years. Traffic volume and weather contribute the most to the deterioration of pavement marking (snowplows, salt, and rough pavements). Pavement marking is mandated by the Federal Highway Administration in the Manual for Uniform Traffic Control Devices (MUTCD) and the State of Illinois.

Staff determined that the previous funding level of \$20,000 was inadequate to keep up with the amount of striping needed on an annual basis. As a result, a detailed pavement marking inventory was completed in 2009 to quantify the amount of annual striping necessary to maintain adequate pavement markings on Village streets.

In recent years a large number of streets were striped as a part of traffic calming plans. Hunter Road, for example, was striped with centerlines, edge lines, and parking lanes for purposes of lane delineation and traffic calming. Also, concrete surfaces require epoxy pavement markings, which are

approximately double in cost. Concrete speed bumps and concrete bridges require extensive striping with epoxy material. Winter weather and excessive snow plowing have contributed to reduced striping visibility throughout the Village. Finally, arterial striping on high volume roads such as Sheridan Road, Lake Avenue, Ridge Road, Green Bay Road, and Glenview Road (west of Skokie) has been added to the Village street system, increasing the footage of pavement marking required every two to three years. Pavement marking is a safety element of road maintenance.

Project Update

The funding request of \$59,000 has been added to 2023.

Project Alternative

The striping is contracted out and is performed using thermoplastic and epoxy material. Public Works does not have the equipment to install thermoplastic or epoxy striping. Thermoplastic or epoxy will last approximately five times longer than water-based paint. In order to increase the amount of pavement marking footage installed by public works, additional personnel and a budget increase for materials to do the striping would be necessary.

Operating Budget Impact

Is this purchase *routine* X or *non-routine*?

ROUTINE	
Department Budget	Engineering
Account Number Description	Pavement Marking Program
Account Number	11202035-425220

Curb Replacement Program	2019	\$43,400	Operating
Streets, Sidewalks and Alleys	2020	\$44,700	
	2021	\$45,900	
	2022	\$47,100	
	2023	\$48,300	

- Critical
- X Recommended
- Contingent on Funding

Original Purchase Date & Cost

Unknown

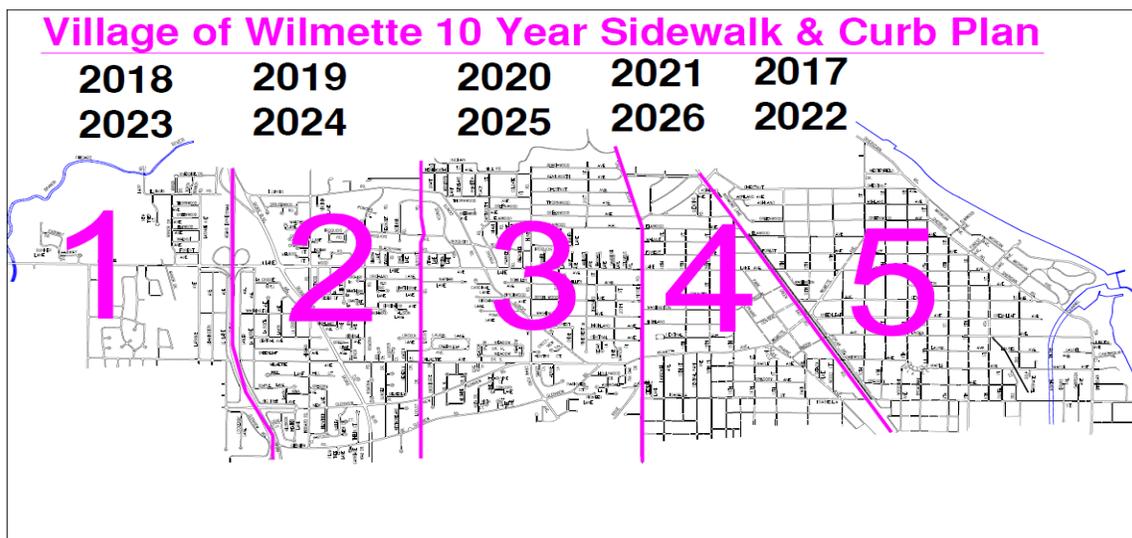


Funding History

2018	\$42,200	Operating
2017	\$40,000	Operating
2016	\$40,000	Operating
2015	\$10,000	Operating
2014	\$8,000	Operating
2013	\$20,000	Operating
2012	\$8,448	Dedicated Revenues

Project Description & Justification

This project funds the annual maintenance program to replace non-functional, hazardous, broken and missing curbs throughout the Village. It is for the replacement of curbs and gutters that no longer facilitate positive drainage and/or has deteriorated in various locations throughout the Village. The Village staff evaluates curbs on a five year rotating cycle in conjunction with the Sidewalk Program.





Broken and missing curb with potential to damage vehicles

Project Update

The funding amount of \$48,300 has been added to 2023. An annual inflation factor of 3% is included.

Project Alternative

The alternative is not to replace curbs. Curbs that result in poor street drainage will cause accelerated deterioration of the edge of pavement resulting in potholes and the necessity for additional maintenance.

Operating Budget Impact

Is this purchase *routine* X or *non-routine*?

ROUTINE	
Department Budget	Engineering
Account Number Description	Curb Replacement Program
Account Number	11202035-425100