Date: April 21, 2020
To: $\quad$ Village President \& Board of Trustees
From: Michael Braiman, Village Manager
Subject: Engineering Program Analysis- Cost Savings for Consideration
At the April 14, 2020 Village Board meeting, staff presented cost saving options for this year's engineering program with the intent that contracts for the annual street resurfacing, alley and brick street maintenance programs would be on the April 28 agenda for approval.

As part of the April 14 discussion, staff identified approximately $\$ 220,000$ in recommended engineering program savings that would minimally impact the long-term condition of the Village's infrastructure. As part of the discussion, the Board requested options for additional savings that could be implemented later this year when the financial impact of COVID-19 may be better known. Accordingly, the engineering team has identified \$459,000 in additional savings that can be considered over the course of the next several months.

The table below summarizes the current staff recommendation as well as the additional savings and decision timelines. At this time, staff continues to recommend completing all planned work for the street resurfacing, alley maintenance and brick street maintenance programs with the option to defer portions of the work later this year.

| Description | Budget | Rec'd <br> Revised <br> Budget | Rec'd <br> Savings | Potential <br> Add'I <br> Savings | Decision Date <br> on Add'I <br> Savings/Work |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Street Resurfacing | $2,750,000$ | $2,699,000$ | 51,000 | 215,000 | June 9 |
| Alley Maintenance | 450,000 | 410,000 | 40,000 | 172,000 | June 9 |
| Brick Maintenance | 110,000 | 72,000 | 38,000 | 18,000 | July 14 |
| Street Patching | 92,000 | 92,000 | - | 23,000 | July 14 |
| Sidewalk Repclmnt. | 70,000 | 63,000 | 7,000 | 18,000 | July 14 |
| Pavement Marking | 50,000 | 50,000 | - | 13,000 | July 14 |
| Curb Replacement | 25,000 | 5,000 | 20,000 | - | July 14 |
| Pavement Rejuv. | 19,000 | - | 19,000 | - | July 14 |
| Crack Sealing | 25,000 | 25,000 | - | - | N/A |
| Traffic Calming | 25,000 | 1,000 | 24,000 | - | N/A |
| Road Engineering | 170,000 | 170,000 | - | - | N/A |
| Skokie Valley Trail ${ }^{1}$ | N/A | $\mathrm{N} / \mathrm{A}$ | 20,000 | - | N/A |
| Totals | $\mathbf{3 , 7 8 6 , 0 0 0}$ | $\mathbf{3 , 5 8 7 , 0 0 0}$ | $\mathbf{2 1 9 , 0 0 0}$ | $\mathbf{4 5 9 , 0 0 0}$ |  |

Yellow highlights = Contracts up for approval on April 28
Gray highlights $=$ Contracts already approved

[^0]Staff intends for the decision points regarding additional savings to be on the June 6 and July 14 Village Board agendas for consideration.

Additional details regarding the above analysis can be found in the attached table prepared by the engineering team. For the Board's reference, a draft of the street resurfacing and alley/brick street maintenance April 28 agenda items are also attached. Board members with questions regarding the action items for April 28 are encouraged to contact myself or Director of Engineering \& Public Works Brigitte Berger.

The construction contracts up for approval on April 28 will not be on the Consent Agenda and will follow a 2020 financial forecast presentation to provide additional context to the Village Board's deliberations.

2020 Engineering Program Cost Saving Options

| Description | Budget | Rec'd Revised Budget | Rec'd Savings | Potential Additional Savings (only if needed) | Potential Additional Savings Comments | Construction Timing | Decision Timing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Street Resurfacing | \$2,750,000 | \$2,699,000 | \$51,000 | \$215,000 | Defer Sprucewood Lane (alternate 1) at $\$ 88 \mathrm{k}$, Washington Ave (alternate 2) at $\$ 80 \mathrm{k}$ and Sprucewood Drive (base bid) at $\$ 47 \mathrm{k}$ | May to September | 4/28 award \& 6/9 decision on additional savings |
| Alley Maintenance Program | \$450,000 | \$410,000 | \$40,000 | \$172,000 | Reduction of full alley at $\$ 118 \mathrm{k}$ and/or reduction of $1 / 2$ alley (alternate) at $\$ 54 \mathrm{k}$ | June to August | 4/28 award \& 6/9 decision on additional savings |
| Brick Street Maintenance | \$110,000 | \$72,000 | \$38,000 | \$18,000 | 25\% contract reduction | September | 4/28 award, 7/14 decision on additional savings |
| Street Patching | \$92,000 | \$92,000 | \$0 | \$23,000 | 25\% contract reduction | May - Phase 1 <br> Early Sept - Phase 2 | Awarded 3/10, 7/14 decision on additional savings |
| Sidewalk Replacment Program | \$70,000 | \$63,000 | \$7,000 | \$18,000 | 25\% contract reduction | April - Phase 1 August Phase 2 | Awarded 2/25, 7/14 decision on additonal savings |
| Pavement Marking Program | \$50,000 | \$50,000 | \$0 | \$13,000 | 25\% contract reduction | Late September to Early October | Awarded 3/10, 7/14 decision on additional savings |
| Curb Replacement | \$25,000 | \$5,000 | \$20,000 | \$0 | NA | April - Phase 1 August Phase 2 | Awarded 3/25, 7/14 decision to maintain savings |
| Pavement Surface Rejuvenation | \$19,000 | \$0 | \$19,000 | \$0 | NA | August | Contracted, 7/14 decision to cancel contract |
| Crack Sealing | \$25,000 | \$25,000 | \$0 | \$0 | NA | Late April or Early May | Awarded 2/25, proceeding with work |
| Traffic Calming Program | \$25,000 | \$1,000 | \$24,000 | \$0 | NA | NA | NA |
| Road Program Eng. Services | \$170,000 | \$170,000 | \$0 | \$0 | NA | NA | NA |
| Skokie Valley Bike Trail* | N/A | N/A | \$20,000 | \$0 | NA | NA | NA |
|  | 3,786,000 | 3,587,000 | 219,000 | 459,000 |  |  |  |

*The Skokie Valley Trail project is predominantly grant funded and the net cost to the Village in 2020 was to be $\$ 20,000$; the project has been deferred to 2021

## Request for Board Action

# Engineering \& Public Works Department 

Subject: 2020 Motor Fuel Tax (MFT) Road Program<br>Meeting Date: April 28, 2020<br>From: $\quad$ Brigitte Berger-Raish, P.E. Director of Engineering and Public Works Dan Manis, P.E., Village Engineer Ryan Kearney, P.E., Project Manager<br>Budget Impact:<br>Contract Cost: $\quad \$ 2,344,369$<br>Budget: $\quad \$ 2,400,000$<br>Over/(Under) Budget $(\$ 55,631)$

This item is of an immediate and critical nature to prevent further degradation of the Village's infrastructure; the construction must be performed during warm weather months and approval will provide for the project to start in May and completed by September 2020.

## Recommended Motion

Move to approve a contract in an amount not-to-exceed $\$ 2,344,369$ with J.A. Johnson Paving Co., Arlington Heights, IL, for the 2020 MFT Road Program.

## Background

The purpose of the Road Program is to rehabilitate Village-owned streets that are in very poor condition. The typical scope of work consists of intermittent curb and sidewalk improvements, minor utility repairs, pavement surface removal, pavement patching, hot-mix asphalt (HMA) binder and surface installation, and parkway restoration.

In 2019, the Village Board reviewed funding options for the Road Program and determined that an enhanced budget was necessary to improve the overall pavement condition of Wilmette roadways. As such, the Board committed to a $\$ 2.75$ million Road Program for 2020 as follows:

- Asphalt/Concrete Resurfacing: \$2,400,000
- Brick Overlay:
\$350,000
Note: The brick overlay work, while funded as part of the annual Road Program, has been bid as part of the alley and brick street maintenance contract which can be found in Agenda Item 6.42.

Additionally, the Village is now budgeting separately for necessary engineering services such as soil sampling and surveying to ensure full funding of the annual Road Program. For 2020, this cost is $\$ 170,000$ and is not part of this contract approval.

The chart below displays the total area rehabilitated through this program since 2015:

| Road Program History |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Item | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ |
| Streets* $^{\text {(in square feet) }}$ | 129,469 | $\mathbf{1 2 3 , 1 9 7 ^ { \wedge }}$ | $\mathbf{1 6 9 , 6 5 5 ^ { \wedge }}$ | $197,301^{\wedge}$ | 86,256 |
| Equivalent Miles $^{+}$ | 0.94 | 0.90 | 1.24 | 1.44 | 0.63 |

* = These values do not include the roadways rehabilitated by other Village projects.
$\wedge=$ The value includes a street where the surface was converted back to brick pavers.
$+=$ At the Village average street width of 26 feet wide.
The total roadway rehabilitation area for this project is approximately 322,097 square feet. Another 14,567 square feet of roadway will be rehabilitated from asphalt to brick as part of the 2020 Alley \& Brick Street Reconstruction Program contract (Agenda Item 6.42) for a total area of 336,664 square feet and equivalence of 2.45 miles which represents nearly $4 \%$ of the locally maintained non-brick roadway network.

The Road Program is designed and managed by Engineering staff. The Village utilizes pavement evaluation software and field inspections to prioritize roadway rehabilitation needs. The following streets were selected for the 2020 program:

| Street | From | To |
| :--- | :--- | :--- |
| Greenleaf Ave. | 9th St. | 4th St. |
| Greenwood Ave. | Dartmouth Ave. | Hunter Rd. |
| Kenilworth Ave. | Locust Rd. | Princeton PI. |
| Maple Ave. | 4th St. | R\&R Tracks |
| Prairie Ave. | 15th St. | Wilmette Ave. |
| Princeton Pl. | End of Pavement | Greenwood Ave. |
| Sprucewood Dr. | Cul-de-sac | Sprucewood Rd. |
| Sprucewood Ln. ${ }^{2}$ | Cul-de-sac | Illinois Rd. |
| Washington Ave. | 8th St. | Sheridan Rd. |
| Washington Ave. ${ }^{1}$ | Sheridan Rd. | Michigan Ave. |
| Wilshire Dr. | Cul-de-sac | Wilshire Dr. E. |
| Wilshire Dr. E. | Wilshire Dr. W. | Glenview Rd. |
| Wilshire Dr. W. | Wilshire Dr. E. | Glenview Rd. |
| ${ }^{1}$ Alternate 1 Bid ${ }^{2}$ Alternate 2 Bid |  |  |

## Discussion

The bid document for the 2020 MFT Road Program was published on the Village website and advertised in the Illinois Department of Transportation (IDOT) Contractor's Bulletin on March 12, 2020. Bids were opened on April 2, 2020. The project had two (2) qualified bidders. The bid results are summarized below:

| Company | Base Bid | Alternate 1 | Alternate 2 | Base + Alt. 1 + Alt. 2 |
| :--- | ---: | ---: | ---: | ---: |
| J.A. Johnson Paving Co. | $\$ 2,177,103.76^{\star}$ | $\$ 79,652.80$ | $\$ 87,612.07$ | $\$ \mathbf{2 , 3 4 4 , 3 6 8 . 6 3}$ |
| Peter Baker \& Son Co. | $\$ 2,400,774.90$ | $\$ 88,847.40$ | $\$ 101,586.67$ | $\$ 2,591,208.97$ |
| Engineers' Estimate | $\$ 2,390,334.25$ | $\$ 87,396.50$ | $\$ 87,557.50$ | $\$ 2,565,288.25$ |

* As corrected
J.A. Johnson Paving Co. submitted the lowest qualified bid of $\$ 2,344,369$ (Base Bid plus Alternate 1 and Alternate 2). J.A. Johnson Paving Co. has previous construction experience in Wilmette, most recently serving as general contractor for the 2018 Road Program. The work at that time was completed to the satisfaction of Engineering staff. Based on their competitive bid and previous work experience, the Engineering and Public Works Department recommends awarding the 2020 MFT Road Program to J.A. Johnson Paving Co.


## Schedule

The 2020 MFT Road Program is scheduled to begin early-May and be completed by endSeptember 2020.

## Budget Impact

The 2020 Road Program is allocated to various accounts within the general and motor fuel tax funds. The general fund dollars have dedicated revenues allocated towards the annual road program. Work associated with this contract are a component of the below accounts and are within the FY 2020 budget.

| Description | 2020 <br> Budget | Contract <br> Amount | Account Number |
| :--- | :---: | :---: | :---: |
| Street Resurfacing (Dedicated General <br> Fund Revenue) | $\$ 1,200,000$ | $\$ 1,144,369$ | $11202035-425250$ |
| Motor Fuel Tax (MFT) | $\$ 1,200,000$ | $\$ 1,200,000$ | $22632070-470100$ |
| Total | $\$ 2,400,000$ | $\$ 2,344,369$ |  |

As discussed on page one, a portion of the 2020 Road Program is allocated to the Forest Avenue brick overlay which is included in Agenda Item 6.42.

COVID-19 Consideration: The contract award recommendation is for the entire bid amount; however, the Village Board may choose to reduce the scope of work included in the project. In June, staff will prepare options for up to $\$ 215,000$ in contract value reductions for Village Board consideration. Options will include deferral of Sprucewood Lane (Alternate 1) at \$88,000, Washington Ave (Alternate 2) at \$80,000 and Sprucewood Drive (base bid) at \$47,000.

## Documents Attached

1. Road Program Map
2. Bid Tabulations
3. 2020 CIP Sheets for Road Program


| Road Program | 2020 | \$ TBD | Dedicated/MFT |
| :--- | :--- | :--- | :--- |
| Streets, Sidewalks, and Alleys | 2021 | \$ TBD |  |
|  | 2022 | \$ TBD |  |
|  | 2023 | \$ TBD |  |
|  |  | 2024 | \$ TBD |
| X | Critical |  |  |
| - | Recommended |  |  |
| - | Contingent on Funding |  |  |

## Original Purchase Date \& Cost

Unknown

Funding History

| 2019 | $\$ 705,657$ |
| ---: | ---: |
| 2018 | $\$ 1,460,993$ |
| 2017 | $\$ 2,096,276$ |
| 2016 | $\$ 1,210,511$ |
| 2015 | $\$ 1,164,000$ |
| 2014 | $\$ 848,000$ |
| 2013 | $\$ 1,370,000$ |
| 2012 | $\$ 1,002,000$ |

Since 2014, the Village Board has worked to increase annual funding of the road program. With the passage of the $.75 \%$ increase in Home Rule Sales Tax in 2014, approximately $\$ 300,000$ of the proceeds was to the road program.


As part of the FY 2017 Budget, the Village Board committed to an annual $\$ 2$ million Road Program and increased the property tax rate by $0.90 \%$, as well as the local gasoline tax by $\$ 0.03$ for street improvements. In 2019, the Engineering Division surveyed all non-brick streets in the Village. These ratings are calculated from data obtained during routine in-house field inspections. The table below, developed by the Department, displays the various pavement surface conditions with their corresponding PCI ratings:

| Surface Condition | PCI Rating |
| :--- | :---: |
| Excellent | $100-86$ |
| Good | $85-71$ |
| Fair | $70-56$ |
| Poor | $55-41$ |
| Very Poor | $40-26$ |
| Serious | $25-0$ |

The 2019 condition survey found that the condition of the infrastructure has degraded faster than anticipated. The current overall PCI rating is 56 , indicating that the average pavement conditions are "fair" to "poor". This assessment would indicate that the program, as currently funded, is not adequately maintaining the Village's roadway assets.

## State of the Roads in 2019



Given the current condition of the Village's roadway system, the Village Board is holding a series of public meetings to consider how to improve the condition of the roads. Scenarios under consideration include but are not limited to the following:

| Annual Funding Levels* | Average PCI After |  |  |
| :---: | :---: | :---: | :---: |
|  | 5 Years | 10 Years | $\begin{gathered} 10 \text { Years w/ \$1.75M } \\ \text { of Retired Debt^ } \end{gathered}$ |
| \$3.5 Million <br> (Add. $\$ 1.65 \mathrm{M}$ annual funding) | $\begin{gathered} \hline 64 \\ \text { (FAIR-MID) } \\ \hline \end{gathered}$ | $\begin{gathered} 72 \\ \text { (GOOD-LOW) } \end{gathered}$ | $\begin{gathered} 79 \\ \text { (GOOD-MID) } \end{gathered}$ |
| \$2.75 Million <br> (Add. $\$ 900 \mathrm{k}$ annual funding) | $\begin{gathered} 60 \\ \text { (FAIR-LOW) } \\ \hline \end{gathered}$ | $\begin{gathered} 62 \\ \text { (FAIR-MID) } \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ \text { (FAIR-HIGH) } \\ \hline \end{gathered}$ |
| \$2.3 Million <br> (Add. \$450k annual funding) | $\begin{gathered} \hline 58 \\ \text { (FAIR-LOW) } \\ \hline \end{gathered}$ | $\begin{gathered} 57 \\ \text { (FAIR-LOW) } \end{gathered}$ | $\begin{gathered} \hline 63 \\ \text { (FAIR-MID) } \\ \hline \end{gathered}$ |
| \$2.0 Million <br> (Add. \$250k annual funding) | $\begin{gathered} 57 \\ \text { (FAIR-LOW) } \end{gathered}$ | $\begin{gathered} 54 \\ (\text { POOR-HIGH) } \end{gathered}$ | $\begin{gathered} 60 \\ \text { (FAIR-LOW) } \end{gathered}$ |
| * = Annual funding levels are based on 2019 construction costs; values above do not account for general inflation ( $+/-3 \%$ ), engineering costs ( $+/-5 \%$ ), local share for federal projects (recommend separate in future), other maintenance programs for pavement (separate), and maintenance on brick streets (separate). <br> $\wedge=$ Annual funding level value $+\$ 1.75 \mathrm{M}$ in 2027 and 2028 only. |  |  |  |

## Project Description \& Justification

The purpose of this program is to rehabilitate streets that are owned and maintained by the Village. The Road Program budget funds a variety of construction projects and services, including street resurfacing and reconstruction, surveying, materials testing, and other necessary engineering studies.

## Background

The Village currently maintains approximately 64 miles of non-brick public roadways, made up of the following surface types:

| Surface Type | Total Miles |
| :--- | :---: |
| Asphalt Cement (AC) | $>47$ miles |
| Asphalt Over Brick (ABR) | $>5$ miles |
| Asphalt Over Concrete (APC) | 7 miles |
| Concrete (PCC) | $<5$ miles |

Many of the Village's roads were built in the post-World War II development boom. From 1998 to 2008, the Village conducted an accelerated street resurfacing program each year to improve the overall average pavement condition to "good". At the end of the accelerated program in 2008, the Engineering Division recommended reducing the annual funding allocation from $\$ 3.1$ million to $\$ 2$ million, which was intended to maintain this condition level.

Since 2012, the annual expenditure on street resurfacing has averaged $\$ 1.2$ million per year. Part of this funding was allocated to federal projects for the Village's required local contribution (typically $30 \%$ of the total construction costs), as well as engineering services necessary for federally-funded street reconstruction projects. This reallocation of funds reduced the number of streets that could be rehabilitated as part of the Road Program. As a result, the overall pavement condition of Villageowned streets has dropped from "good" to "fair/poor". If this trend continues, the overall pavement condition is expected to reach "poor" status within the next five years.

To abate this, staff will focus future grant requests on large-scale resurfacing projects, instead of reconstruction projects like Central Avenue and Locust Road.

## Pavement Rehabilitation Strategy

The goal of this program is to rehabilitate streets with the worst pavement surfaces first, as well as to utilize outside funding sources as they become available. In 2013, the Engineering Division began using the pavement evaluation software PAVER ${ }^{\text {TM }}$ to help prioritize street rehabilitation needs. This software assigns a numeric value to each street, known as a PCI (pavement condition index) rating, which represents the current condition of the pavement surface.

The Department will conduct full roadway inventory inspections every three years, with more frequent evaluations for streets slated for rehabilitation within three to five years. This process will ensure that the street with the worst pavement conditions are rehabilitated first. The scope of work for the street resurfacing projects will include alternate bid options for area patching and additional blocks in order to maximize the program budget.

In 2002, the Village adopted a policy on rehabilitating brick streets that have been overlaid with asphalt. If the following requirements are met, the project scope of work would include removing the existing asphalt surface and reconstructing the street in brick, one block at a time:

- The street must contain original clay fired bricks.
- The street segment must be included in an annual rehabilitation program.
- More than $65 \%$ of the residents must be in favor of the brick street surface.
- A minimum of a contiguous three block segment must endorse the brick surface.
- The renovation plan be completed in shorter segments so the Road Program budget is not dominated by the rehabilitation of the brick street.

This policy was endorsed by the Municipal Services Committee in 2012, 2015, 2016, and 2019. The 700 block of Forest Avenue is currently proposed for brick rehabilitation in 2020.

## Project Update

The Village Board is in the process of reviewing funding for this program.

## Project Alternative

The alternative to pavement rehabilitation is patching on an emergency basis. While patching will slow down the progression of potholes, it creates joints in the pavement that will eventually result in further deterioration. The second alternative is not to perform any roadway maintenance, which will result in total pavement failure. Once the roadway base is impacted from lack of maintenance, the road has to be reconstructed typically at three to four times the cost of resurfacing.

The Village Board approved a Special Service Areas (SSA) policy in 2016 which allows residents to petition for their street rehabilitation to be accelerated at a shared cost.

## Operating Budget Impact

Is this purchase routine $X$ or $\qquad$ non-routine?

| ROUTINE |  |
| :--- | :--- |
| Department Budget | General Fund Capital |
| Account Number Description | Road Program |
| Account Number | $11202035-80100$ |

## SECTION 20-00207-00-PV

BID TABULATION - BASE BID
DATE: APRIL 2, 2020

| BASE BID |  |  |  |  | ENGINEER'S ESTIMATE OF COST |  |  | J.A. JOHNSON PAVING CO. |  |  |  | PETER BAKER \& SON CO. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NO. | ITEM NO. | ITEMS | UNIT | QUANTITY | UNIT COST |  | OTAL COST | UNIT COST |  | TOTAL COST |  | UNIT COST |  | TOTAL COST |  |
| 1 | 20100210 | TREE REMOV OVER 15 | UNIT | 29 | \$50.00 | \$ | 1,450.00 | \$ | 34.00 | \$ | 986.00 | \$ | 110.00 | \$ | 3,190.00 |
| 2 |  | TEMPORARY FENCE | EACH | 505 | \$100.00 | \$ | 50,500.00 | \$ | 45.00 | \$ | 22,725.00 | \$ | 100.00 | \$ | 50,500.00 |
| 3 | 20101100 | TREE TRUNK PROTECTION | EACH | 120 | \$85.00 | \$ | 10,200.00 | \$ | 85.00 | \$ | 10,200.00 | \$ | 150.00 | \$ | 18,000.00 |
| 4 |  | TREE ROOT PRUNING | EACH | 505 | \$105.00 | \$ | 53,025.00 | \$ | 30.00 | \$ | 15,150.00 | \$ | 90.00 | \$ | 45,450.00 |
| 5 |  | TREE CANOPY PRUN 1-10 | EACH | 56 | \$90.00 | \$ | 5,040.00 | \$ | 75.00 | \$ | 4,200.00 | \$ | 46.00 | \$ | 2,576.00 |
| 6 |  | REM \& DISP UNS MATL | CUYD | 434 | \$65.00 | \$ | 28,210.00 | \$ | 10.00 | \$ | 4,340.00 | \$ | 50.00 | \$ | 21,700.00 |
| 7 |  | TRENCH BACKFILL | CU YD | 329 | \$44.00 | \$ | 14,476.00 | \$ | 15.00 | \$ | 4,935.00 | \$ | 1.00 | \$ | 329.00 |
| 8 |  | TOPSOIL F \& P VAR DP | CU YD | 170 | \$37.00 | \$ | 6,290.00 | \$ | 10.00 | \$ | 1,700.00 | \$ | 24.50 | \$ | 4,165.00 |
| 9 |  | SEEDING, SPECIAL | SQ YD | 1,796 | \$8.00 | \$ | 14,368.00 | \$ | 5.00 | \$ | 8,980.00 | \$ | 5.00 | \$ | 8,980.00 |
| 10 |  | SODDING, SPECIAL | SQ YD | 3,727 | \$13.00 | \$ | 48,451.00 | \$ | 13.00 | \$ | 48,451.00 | \$ | 14.85 | \$ | 55,345.95 |
| 11 | 28000510 | INLET FILTERS | EACH | 157 | \$100.00 | \$ | 15,700.00 | \$ | 125.00 | \$ | 19,625.00 | \$ | 210.00 | \$ | 32,970.00 |
| 12 |  | AGG SUBGRADE IMPROVE | CUYD | 184 | \$55.00 | \$ | 10,120.00 | \$ | 10.00 | \$ | 1,840.00 | \$ | 100.00 | \$ | 18,400.00 |
| 13 |  | AGG BASE CSE B | CUYD | 367 | \$60.00 | \$ | 22,020.00 | \$ | 10.00 | \$ | 3,670.00 | \$ | 80.00 | \$ | 29,360.00 |
| 14 | 35800100 | PREPARATION OF BASE | SQ YD | 333 | \$2.50 | \$ | 832.50 | \$ | 1.50 | \$ | 499.50 | \$ | 6.00 | \$ | 1,998.00 |
| 15 | 40600275 | BT MATLS PR CT | POUND | 5,543 | \$0.50 | \$ | 2,771.50 | \$ | 0.01 | \$ | 55.43 | \$ | 0.01 | \$ | 55.43 |
| 16 | 40600290 | BIT MATLS TACK CT | POUND | 27,092 | \$0.50 | \$ | 13,546.00 | \$ | 0.01 | \$ | 270.92 | \$ | 0.01 | \$ | 270.92 |
| 17 | 40600982 | HMA SURF REM BUTT JT | SQ YD | 333 | \$10.00 | \$ | 3,330.00 | \$ | 1.00 | \$ | 333.00 | \$ | 5.00 | \$ | 1,665.00 |
| 18 | 40602978 | HMA BC IL-9.5 N50 1.5 | TON | 2,298 | \$82.00 | \$ | 188,436.00 | \$ | 83.00 | \$ | 190,734.00 | \$ | 87.00 | \$ | 199,926.00 |
| 19 | 40603080 | HMA BC IL-19.0 N50 3.0 | TON | 349 | \$75.00 | \$ | 26,175.00 | \$ | 80.00 | \$ | 27,920.00 | \$ | 87.00 | \$ | 30,363.00 |
| 20 | 40604060 | HMA SC IL-9.5 D N50 1.5 | TON | 2,298 | \$92.50 | \$ | 212,565.00 | \$ | 85.00 | \$ | 195,330.00 | \$ | 87.00 | \$ | 199,926.00 |
| 21 | 40604060 | HMA SC IL-9.5 D N50 2.0 | TON | 661 | \$98.00 | \$ | 64,778.00 | \$ | 85.00 | \$ | 56,185.00 | \$ | 87.00 | \$ | 57,507.00 |
| 22 | 40800050 | INCIDENTAL HMA SURF | TON | 107 | \$150.00 | \$ | 16,050.00 | \$ | 51.00 | \$ | 5,457.00 | \$ | 100.00 | \$ | 10,700.00 |
| 23 | 42400200 | PC CONC SIDEWALK 5 | SQ FT | 40,149 | \$6.25 | \$ | 250,931.25 | \$ | 6.50 | \$ | 260,968.50 | \$ | 5.75 | \$ | 230,856.75 |
| 24 | 42400300 | PC CONC SIDEWALK 6 | SQ FT | 10,038 | \$7.25 | \$ | 72,775.50 | \$ | 7.25 | \$ | 72,775.50 | \$ | 5.95 | \$ | 59,726.10 |
| 25 |  | DETECTABLE WARNINGS | SQ FT | 740 | \$36.00 | \$ | 26,640.00 | \$ | 35.00 | \$ | 25,900.00 | \$ | 30.00 | \$ | 22,200.00 |
| 26 | 44000100 | PAVEMENT REM | SQ YD | 2,076 | \$19.50 | \$ | 40,482.00 | \$ | 10.00 | \$ | 20,760.00 | \$ | 13.00 | \$ | 26,988.00 |
| 27 |  | HMA SURF REM 0.75 | SQ YD | 3,824 | \$3.00 | \$ | 11,472.00 | \$ | 2.05 | \$ | 7,839.20 | \$ | 2.20 | \$ | 8,412.80 |
| 28 |  | HMA SURF REM 2.75 | SQ YD | 27,347 | \$4.00 | \$ | 109,388.00 | \$ | 4.50 | \$ | 123,061.50 | \$ | 5.15 | \$ | 140,837.05 |
| 29 |  | COMB CC\&G REM \& REPL | FOOT | 10,796 | \$27.00 | \$ | 291,492.00 | \$ | 30.50 | \$ | 329,278.00 | \$ | 29.00 | \$ | 313,084.00 |
| 30 | 44000600 | SIDEWALK REM | SQ FT | 50,187 | \$3.00 | \$ | 150,561.00 | \$ | 1.10 | \$ | 55,205.70 | \$ | 1.20 | \$ | 60,224.40 |
| 31 | 44200934 | CL B PATCH T2 8 | SQ YD | 10 | \$99.00 | \$ | 990.00 | \$ | 80.00 | \$ | 800.00 | \$ | 150.00 | \$ | 1,500.00 |
| 32 | 44200942 | CL B PATCH T3 8 | SQ YD | 20 | \$93.00 | \$ | 1,860.00 | \$ | 70.00 | \$ | 1,400.00 | \$ | 125.00 | \$ | 2,500.00 |
| 33 | 44200944 | CL B PATCH T4 8 | SQ YD | 123 | \$86.00 | \$ | 10,578.00 | \$ | 70.00 | \$ | 8,610.00 | \$ | 100.00 | \$ | 12,300.00 |
| 34 | 44201672 | CL D PATCH T2 2 | SQ YD | 59 | \$40.00 | \$ | 2,360.00 | \$ | 45.00 | \$ | 2,655.00 | \$ | 65.00 | \$ | 3,835.00 |
| 35 | 44201674 | CL D PATCH T3 2 | SQ YD | 77 | \$35.00 | \$ | 2,695.00 | \$ | 32.50 | \$ | 2,502.50 | \$ | 42.00 | \$ | 3,234.00 |
| 36 | 44201676 | CL D PATCH T4 2 | SQ YD | 349 | \$30.00 | \$ | 10,470.00 | \$ | 27.50 | \$ | 9,597.50 | \$ | 33.00 | \$ | 11,517.00 |
| 37 | 44201717 | CL D PATCH T2 6 | SQ YD | 28 | \$50.00 | \$ | 1,400.00 | \$ | 60.00 | \$ | 1,680.00 | \$ | 112.00 | \$ | 3,136.00 |
| 38 | 44201721 | CL D PATCH T3 6 | SQ YD | 78 | \$51.00 | \$ | 3,978.00 | \$ | 58.00 | \$ | 4,524.00 | \$ | 95.00 | \$ | 7,410.00 |
| 39 | 44201723 | CL D PATCH T4 6 | SQ YD | 304 | \$52.00 | \$ | 15,808.00 | \$ | 56.00 | \$ | 17,024.00 | \$ | 82.00 | \$ | 24,928.00 |
| 40 |  | STORM SEW REM \& REPL 10 | FOOT | 16 | \$500.00 | \$ | 8,000.00 | \$ | 545.00 | \$ | 8,720.00 | \$ | 250.00 | \$ | 4,000.00 |
| 41 |  | STORM SEW REM \& REPL 12 | FOOT | 16 | \$525.00 | \$ | 8,400.00 | \$ | 565.00 | \$ | 9,040.00 | \$ | 265.00 | \$ | 4,240.00 |
| 42 |  | CB TA 4 DIA T1F | EACH | 6 | \$4,800.00 | \$ | 28,800.00 | \$ | 4,700.00 | \$ | 28,200.00 | \$ | 3,900.00 | \$ | 23,400.00 |
| 43 |  | MAN TA 4 DIA T1F CL | EACH | 1 | \$5,000.00 | \$ | 5,000.00 | \$ | 6,950.00 | \$ | 6,950.00 | \$ | 4,700.00 | \$ | 4,700.00 |
| 44 |  | INLETS TA T1F | EACH | 3 | \$1,900.00 | \$ | 5,700.00 | \$ | 1,750.00 | \$ | 5,250.00 | \$ | 2,800.00 | \$ | 8,400.00 |
| 45 |  | FR \& GRATES T3 | EACH | 10 | \$650.00 | \$ | 6,500.00 | \$ | 425.00 | \$ | 4,250.00 | \$ | 925.00 | \$ | 9,250.00 |
| 46 |  | FR \& LIDS T1 OL | EACH | 6 | \$425.00 | \$ | 2,550.00 | \$ | 400.00 | \$ | 2,400.00 | \$ | 800.00 | \$ | 4,800.00 |
| 47 |  | FR \& LIDS T1 CL | EACH | 14 | \$425.00 | \$ | 5,950.00 | \$ | 400.00 | \$ | 5,600.00 | \$ | 800.00 | \$ | 11,200.00 |
| 48 |  | COMB CC\&G TM2.12 | FOOT | 164 | \$27.00 | \$ | 4,428.00 | \$ | 35.00 | \$ | 5,740.00 | \$ | 35.00 | \$ | 5,740.00 |

VILLAGE OF WILMETTE
2020 ROAD PROGRAM (\#20023)
SECTION 20-00207-00-PV
BID TABULATION - BASE BID
DATE: APRIL 2, 2020

| BASE BID |  |  |  |  | ENGINEER'S EST | IM | ATE OF COST |  | A. JOHNSO | P | aving co. |  | ETER BAKE | R \& | SON CO. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NO. | ITEM NO. | ITEMS | UNIT | QUANTITY | UNIT COST |  | OTAL COST |  | NIT COST |  | OTAL COST |  | IIT COST |  | OTAL COST |
| 49 |  | COMB CC\&G TM MOD | FOOT | 185 | \$29.00 | \$ | 5,365.00 | \$ | 37.00 | \$ | 6,845.00 | \$ | 35.00 | \$ | 6,475.00 |
| 50 | 66900200 | NON SPL WASTE DISPOSL | CU YD | 337 | \$100.00 | \$ | 33,700.00 | \$ | 10.00 | \$ | 3,370.00 | \$ | 55.00 | \$ | 18,535.00 |
| 51 |  | MOBILIZATION | L SUM | 1 | \$100,000.00 | \$ | 100,000.00 | \$ | 125,000.00 | \$ | 125,000.00 | \$ | 153,600.00 | \$ | 153,600.00 |
| 52 | 70102620 | TRAF CONT \& PROT 701501 | L SUM | 1 | \$50,000.00 | \$ | 50,000.00 | \$ | 89,923.00 | \$ | 89,923.00 | \$ | 19,050.00 | \$ | 19,050.00 |
| 53 | 70102635 | TRAF CONT \& PROT 701701 | L SUM | 1 | \$150.00 | \$ | 150.00 | \$ | 1.00 | \$ | 1.00 | \$ | 500.00 | \$ | 500.00 |
| 54 | 70102640 | TRAF CONT \& PROT 701801 | L SUM | 1 | \$2,500.00 | \$ | 2,500.00 | \$ | 1.00 | \$ | 1.00 | \$ | 500.00 | \$ | 500.00 |
| 55 | 78000100 | THPL PVT MK LTR \& SYM | SQ FT | 165 | \$7.50 | \$ | 1,237.50 | \$ | 4.25 | \$ | 701.25 | \$ | 6.00 | \$ | 990.00 |
| 56 | 78000200 | THPL PVT MK LINE 4 | FOOT | 590 | \$1.25 | \$ | 737.50 | \$ | 0.90 | \$ | 531.00 | \$ | 1.10 | \$ | 649.00 |
| 57 | 78000400 | THPL PVT MK LINE 6 | FOOT | 2,557 | \$1.50 | \$ | 3,835.50 | \$ | 1.21 | \$ | 3,093.97 | \$ | 1.50 | \$ | 3,835.50 |
| 58 | 78000600 | THPL PVT MK LINE 12 | FOOT | 994 | \$2.50 | \$ | 2,485.00 | \$ | 2.41 | \$ | 2,395.54 | \$ | 3.00 | \$ | 2,982.00 |
| 59 | 78000650 | THPL PVT MK LINE 24 | FOOT | 671 | \$5.00 | \$ | 3,355.00 | \$ | 4.25 | \$ | 2,851.75 | \$ | 6.00 | \$ | 4,026.00 |
| 60 |  | CONSTRUCTION LAYOUT | L SUM | 1 | \$8,000.00 | \$ | 8,000.00 | \$ | 7,500.00 | \$ | 7,500.00 | \$ | 14,000.00 | \$ | 14,000.00 |
| 61 |  | DRAINAGE STR RECONST | EACH | 3 | \$1,500.00 | \$ | 4,500.00 | \$ | 1,200.00 | \$ | 3,600.00 | \$ | 2,800.00 | \$ | 8,400.00 |
| 62 |  | DRAINAGE STR REMOVED | EACH | 10 | \$300.00 | \$ | 3,000.00 | \$ | 200.00 | \$ | 2,000.00 | \$ | 1,500.00 | \$ | 15,000.00 |
| 63 |  | RR PROT LIABILITY INS (CTA) | L SUM | 1 | \$3,500.00 | \$ | 3,500.00 | \$ | 3,000.00 | \$ | 3,000.00 | \$ | 5,000.00 | \$ | 5,000.00 |
| 64 |  | RR PROT LIABILITY INS (UP) | L SUM | 1 | \$3,500.00 | \$ | 3,500.00 | \$ | 9,000.00 | \$ | 9,000.00 | \$ | 5,000.00 | \$ | 5,000.00 |
| 65 |  | CLEARING \& GRUBBING | SQ YD | 60 | \$60.00 | \$ | 3,600.00 | \$ | 20.00 | \$ | 1,200.00 | \$ | 20.00 | \$ | 1,200.00 |
| 66 |  | SEWER SERVICE R\&R | EACH | 8 | \$1,900.00 | \$ | 15,200.00 | \$ | 2,500.00 | \$ | 20,000.00 | \$ | 1,500.00 | \$ | 12,000.00 |
| 67 |  | STRUCTURE ADJ | EACH | 71 | \$350.00 | \$ | 24,850.00 | \$ | 375.00 | \$ | 26,625.00 | \$ | 460.00 | \$ | 32,660.00 |
| 68 |  | STRUCTURE ADJ SPL | EACH | 95 | \$500.00 | \$ | 47,500.00 | \$ | 650.00 | \$ | 61,750.00 | \$ | 885.00 | \$ | 84,075.00 |
| 69 |  | BYPASS PUMPING SPL | L SUM | 1 | \$3,000.00 | \$ | 3,000.00 | \$ | 5,650.00 | \$ | 5,650.00 | \$ | 5,500.00 | \$ | 5,500.00 |
| 70 |  | BRICK PAVER REM \& REP | SQ FT | 1,375 | \$14.00 | \$ | 19,250.00 | \$ | 13.00 | \$ | 17,875.00 | \$ | 15.00 | \$ | 20,625.00 |
| 71 |  | WOOD FENCE REMOVAL | FT | 180 | \$10.00 | \$ | 1,800.00 | \$ | 15.00 | \$ | 2,700.00 | \$ | 15.00 | \$ | 2,700.00 |
| 72 |  | HMA SURF REM VAR DP | SQ YD | 936 | \$7.00 | \$ | 6,552.00 | \$ | 2.00 | \$ | 1,872.00 | \$ | 7.00 | \$ | 6,552.00 |
| 73 |  | BRICK DRWY REM \& REPL | SQ FT | 1,200 | \$30.00 | \$ | 36,000.00 | \$ | 13.00 | \$ | 15,600.00 | \$ | 15.00 | \$ | 18,000.00 |
| 74 |  | PCC DRIVE REM \& REPL 6" | SQ YD | 570 | \$65.00 | \$ | 37,050.00 | \$ | 68.00 | \$ | 38,760.00 | \$ | 68.00 | \$ | 38,760.00 |
| 75 |  | PCC DRIVE REM \& REPL 8" | SQ YD | 94 | \$80.00 | \$ | 7,520.00 | \$ | 72.00 | \$ | 6,768.00 | \$ | 72.00 | \$ | 6,768.00 |
| 76 |  | HMA DRIVE REM \& REP 3" | SQ YD | 516 | \$45.00 | \$ | 23,220.00 | \$ | 45.00 | \$ | 23,220.00 | \$ | 65.00 | \$ | 33,540.00 |
| 77 |  | CONCRETE RIBBON | FOOT | 192 | \$40.00 | \$ | 7,680.00 | \$ | 65.00 | \$ | 12,480.00 | \$ | 35.00 | \$ | 6,720.00 |
| 78 |  | COMB SEW REM \& REP 12 | FOOT | 40 | \$525.00 | \$ | 21,000.00 | \$ | 750.00 | \$ | 30,000.00 | \$ | 995.00 | \$ | 39,800.00 |
| 79 |  | SPRINKLER SYSTEM HEAD | EACH | 72 | \$62.00 | \$ | 4,464.00 | \$ | 1.00 | \$ | 72.00 | \$ | 100.00 | \$ | 7,200.00 |
| 80 |  | SPRINKLET SYSTEM LINE | FOOT | 720 | \$12.00 | \$ | 8,640.00 | \$ | 1.00 | \$ | 720.00 | \$ | 25.00 | \$ | 18,000.00 |
| 81 |  | BRICK PAVT PATCH | SQ FT | 384 | \$25.00 | \$ | 9,600.00 | \$ | 20.00 | \$ | 7,680.00 | \$ | 16.50 | \$ | 6,336.00 |
| DIFFERENCE BETWEEN ENGINEER'S E.O.C. |  |  |  |  |  | \$ | 2,390,334.25 | * |  | \$ | 2,177,103.76 |  |  | \$ | 2,400,774.90 |
|  |  |  |  |  |  |  | 0.00\% |  |  | -8.92\% |  |  |  |  | 0.44\% |

Notes

* = CORRECTION: The total "Based Bid" value on the bid sheet submitted by J.A. Johnson, $\$ 2,097,700.00$, is incorrect. The actual summation is $\$ 2,177,103.76$

VILLAGE OF WILMETTE
2020 ROAD PROGRAM (\#20023)
SECTION 20-00207-00-PV
BID TABULATION - ALTERNATE 1
DATE: APRIL 2, 2020


VILLAGE OF WILMETTE
2020 ROAD PROGRAM (\#20023)
SECTION 20-00207-00-PV
BID TABULATION - ALTERNATE 2
DATE: APRIL 2, 2020


## Request for Board Action

## Engineering \& Public Works Department

Subject: 2020 Alley and Brick Street Reconstruction Program
Meeting Date: April 28, 2020
From: Brigitte Ann Berger-Raish, P.E. Director of Engineering and Public Works Dan Manis, P.E., Village Engineer Jorge Cruz, P.E., Assistant Village Engineer Ryan Kearney, P.E., Project Manager

Budget Impact: Contract Cost: \$845,072

| Budget: | $\$ 939,000$ |
| :--- | :--- |
| Over/(Under) Budget | $(\$ 93,928)$ |

This item is of an immediate and critical nature to prevent further degradation of the Village's infrastructure; the construction must be performed during warm weather months and approval will provide for the project to begin in May and completed by August 2020.

## Recommended Motion

Move to approve a contract in an amount not-to-exceed \$845,072 with Schroeder \& Schroeder, Inc., Skokie, IL, for the 2020 Alley and Brick Street Reconstruction Program.

## Background

Alley Reconstruction Program
The purpose of the Alley Reconstruction Program is to rehabilitate alleys that are in very poor condition. The typical scope of work consists of removing the existing pavement and base and replacement with a new gravel base and 8 -inch concrete pavement. The work also includes sewer repairs/installation as needed, driveway apron replacements, intermittent curb and sidewalk repairs, pavement patching and parkway restoration.

The chart below shows the number of alleys constructed per year since 2015.

| Number of Alleys Constructed per Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $2015^{*}$ | 2016 | 2017 | 2018 | 2019 |
| 5 | 4.5 | 4 | 4 | 5 |

* MWRD grant for 4 green alleys

The Alley Reconstruction Program is designed and managed by Engineering staff. The Village utilizes field inspections to prioritize alley rehabilitation needs. The program goal is to reconstruct four alleys per year. Wilmette has 225 alleys so four alleys represents nearly $2 \%$ of the alley system. In 2019, the Village Board determined that an optimized budget for the 2020 Road Program was necessary to help improve the overall pavement condition of Villageowned streets. In order to increase Road Program funding, only three alleys were included in Base Bid Option 1.

The following alleys were selected for the 2020 program:

| Alley ID Number | Entrances | Between |
| :--- | :--- | :--- |
| 212 | 7th St/Gth St | Central Ave/Washington Ave |
| 232 | $9 t h$ St/8th St | Greenleaf Ave/Linden Ave |
| 613 | 1th St/16th St | Walnut Avee/Forest Ave |
| $620^{1}$ (half alley) | Alley/17th St | Forest Ave/Lake Ave |

${ }^{1}$ This alley was only included in Base Bid Option 2; the other half the alley was reconstructed in 2016.

## Brick Street Reconstruction Program

The purpose of the Brick Street Reconstruction Program is to rehabilitate an existing brick street block that was previously overlaid with asphalt and is rated in very poor condition. The typical scope of work consists of removing the asphalt surface, replacing the stone base, relaying the existing bricks, replacing the concrete curb, intermittent sidewalk repairs, minor sewer repairs, and parkway restoration. The 700 block of Forest Avenue is scheduled for reconstruction in 2020.

Although this rehabilitation will be completed by this contract, the work is funded from the Road Program - Street Resurfacing account [11202035-425250]. Of the $\$ 2.75$ million Road Program for $2020, \$ 350,000$ is committed to brick overlay. Please see the road program information which can be found in Agenda Item 6.41

## Brick Street Maintenance Program

The Brick Street Maintenance Program consists of removing and re-laying areas of settled brick pavers at various locations throughout the Village. The purpose of this program is to improve street rideability and safety. The program addresses severe depressions in the brick streets on a "worst-first" basis. The recommended award value includes the full bid amount of nearly 4,400 square feet of brick pavement.

## Utility Patching Program

The purpose of the Utility Patching Program is to repair areas that have been temporarily patched by the Engineering and Public Works Department crews after repairing sewer lines or water main breaks. Patching work for brick streets will be conducted by this project.

## Discussion

The bid document for the 2020 Alley \& Brick Street Reconstruction Program was advertised and published on the Village website on March 12, 2020. Bids were opened April 2, 2020. The project had six (6) qualified bidders. The bid results are summarized below:

| Contractor | Base Bid Option 1 | Base Bid Option 2 |
| :--- | ---: | ---: |
| Schroeder \& Schroeder, Inc. | $\$ 791,444.00$ | $\$ 845,071.50$ |
| A Lamp Concrete Contractors | $\$ 892,794.00$ | $\$ 977,067.00$ |
| Triggi Construction, Inc. | $\$ 951,518.00$ | $\$ 1,013,277.50$ |
| Landmark Contractors, Inc. | $\$ 993,277.85$ | $\$ 1,061,355.20$ |
| Alliance Contractors, Inc. | $\$ 1,046,067.00$ | $\$ 1,121,014.00$ |
| M \& J Asphalt Paving Co., Inc. | $\$ 1,419,487.97$ | $\$ 1,534,412.56$ |
| Engineers Estimate | $\$ 934,683.00$ | $\$ 990,905.00$ |

* As corrected

Schroeder \& Schroeder, Inc. submitted the lowest qualified bid of $\$ 845,071.50$ (Base Bid Option 2). Schroeder \& Schroeder has previous construction experience in Wilmette, serving as general contractor for the Curb and Sidewalk Programs since 2015 and the alley program in 2014, 2016, and 2018. These projects were completed to the satisfaction of Engineering staff. Based on their competitive bid and previous work experience, the Engineering and Public Works Department recommends awarding the 2020 Alley \& Brick Street Reconstruction Program Base Bid Option 2, which includes an additional half alley, to Schroeder \& Schroeder, Inc.

## Schedule

The 2020 Alley and Brick Street Reconstruction Program is scheduled to begin in early-May and be completed by end-August 2020.

## Budget Impact

The 2020 Alley and Brick Street Reconstruction Program is allocated to various accounts within the general, water, sewer and motor fuel tax funds. A component of the general fund dollars has dedicated revenues allocated towards brick street resurfacing associated with the annual road program. Work associated with this contract are a component of the below accounts and are within the FY 2020 budget.

| Description | 2020 <br> Budget | Contract <br> Amount | Account Number |
| :--- | :---: | :---: | :---: |
| Alley Maintenance Program | $\$ 450,000$ | $\$ 409,700$ | $11202035-425200$ |
| Street Resurfacing (Dedicated Revenue) | $\$ 350,000$ | $\$ 339,272$ | $11202035-425250$ |
| Brick Street Maintenance | $\$ 110,000$ | $\$ 67,100$ | $11202035-425230$ |
| Utility Street Patching - Sewer | $\$ 11,000$ | $\$ 11,000$ | $40807090-421000$ |
| Utility Street Patching - Water | $\$ 18,000$ | $\$ 18,000$ | $41838090-421000$ |
| Total | $\$ 939,000$ | $\$ 845,072$ |  |

Note: An additional \$20,000 expense will be incurred later this year for the purchase of bricks.
COVID-19 Consideration: The contract award recommendation is for the entire bid amount; however, the Village reserves the right to reduce the amount of work in the awarded contract until early June. At that time, staff will prepare options for up to $\$ 172,000$ in contract value reductions for Village Board consideration. Options will include deferral of Alley 212 (full alley) at $\$ 118,000$ and/or Alley 620 (half alley) at \$54,000.

## Documents Attached

1. Alley Map
2. CIP Sheet - Alley Program
3. CIP Sheet-Road Program
4. Bid Tabulation

## 2020 ALLEY AND BRICK STREET RECONSTRUCTION PROGRAM



NOTE: BRICK MAINTENANCE PATCHING AND UTILITY
PATCHING AT VARIOUS LOCATIONS IN THE VILLAGE
AND WILL BE MARKED OUT IN THE FIELD BY
ENGINEERING STAFF DURING CONSTRUCTION

DESIGN: DPS
DATE: 4-21-2020
PAGE 1 OF 1
SCALE: NOT TO SCALE

| Alley Reconstruction Program | 2020 | $\$ 550,000$ | Operating |
| :--- | :--- | :--- | :--- |
| Streets, Sidewalks and Alleys | 2021 | $\$ 567,000$ |  |
|  | 2022 | $\$ 584,000$ |  |
|  | 2023 | $\$ 602,000$ |  |
|  | 2024 | $\$ 620,000$ |  |
|  |  |  |  |
|  | Critical |  |  |
|  | Recommended |  |  |

## Original Purchase Date \& Cost

Unknown

## Funding History

| Year | Amount | Source |
| :--- | :--- | :--- |
| 2019 | $\$ 552,100^{1}$ | Operating |
| 2018 | $\$ 529,763$ | Operating |
| 2017 | $\$ 587,670^{2}$ | Operating |
| 2016 | $\$ 515,000$ | Operating |
| 2015 | $\$ 836,500^{3}$ | Operating |
| 2014 | $\$ 273,000$ | Operating |
| 2013 | $\$ 900,000$ | Bond |
| 2012 | $\$ 355,000$ | Operating |
| ${ }^{1}$ Storm sewer was installed in 2 of the 5 |  |  |
| alleys. |  |  |


${ }^{2}$ Storm sewer was installed in 3 of the 4 alleys.
${ }^{3}$ Includes $\$ 130,000$ from MWRD for green infrastructure improvements.
With the passage of the increased Home Rule Sales Tax in 2014, a portion of the proceeds was dedicated for street, sidewalk, and alley programs. As a result of the increased revenue, the Board allocated approximately $\$ 515,000$ annually with the goal of repairing all failed and poor alleys by 2022.

## Project Description \& Justification

The purpose of this program is to reconstruct alleys owned and maintained by the Village. The Village currently maintains 226 alleys, made up of the following surface types:

| Surface Type | Total Alleys |
| :--- | :---: |
| Asphalt Cement (AC) | 110 |
| Concrete (PCC) | 111 |
| Green Alleys | 4 |
| Brick Alleys | 1 |

The scope of work for this program consists of designing new alley pavement sections to extend the service life of the alley, minimize the impact to adjacent properties, and improve the drainage in the public Right-of-Way. All alleys are preferred to drain by overland flow. In cases where overland flow cannot not be achieved, however, the drainage designs will utilize storm sewers. The impact of adding storm sewer is significant in terms of cost, so this feature is used as a last resort.

## Pavement Rehabilitation Strategy

This program rehabilitates alleys on a "worst-first" basis. Similar to the road program, each alley is inspected by the Engineering Division periodically and is assigned a pavement condition index (PCI) rating. These ratings corresponds to the following surface conditions:

| Surface Condition | PCI Rating |
| :--- | :---: |
| Excellent | $100-86$ |
| Good | $85-71$ |
| Fair | $70-56$ |
| Poor | $55-41$ |
| Very Poor | $40-26$ |
| Serious | $25-0$ |

The Department will conduct full alley inventory inspections every three years, in addition to more frequent inspections of alleys slated for rehabilitation within the next three to five years. This process will ensure that the alleys with the worst pavement conditions are rehabilitated first. Engineering will select three to four alleys per year for the reconstruction program. The scope of work for this program will include alternate bid options for area patching and additional alleys in order to maximize the program budget.

In 2018, the Engineering Division inspected the pavement surfaces of the entire alley inventory. The overall PCI rating was 74, indicating that the average pavement conditions are "good". This assessment would indicate that the program is adequately managing the Village's alley assets. At the current funding levels, all "serious" and "very poor" alleys will be completed by 2020. Below is the estimated funding to complete four alleys per year, depending on alley sizes.

| Year | Construction $^{1}$ | Engineering $^{2}$ | Total |
| :--- | :--- | :--- | :--- |
| 2020 | $\$ 524,000$ | $\$ 26,000$ | $\$ 550,000$ |
| 2021 | $\$ 540,000$ | $\$ 27,000$ | $\$ 567,000$ |
| 2022 | $\$ 556,000$ | $\$ 28,000$ | $\$ 584,000$ |
| 2023 | $\$ 573,000$ | $\$ 29,000$ | $\$ 602,000$ |
| 2024 | $\$ 590,000$ | $\$ 30,000$ | $\$ 620,000$ |

${ }^{1}$ Construction funding increases $3 \%$ annually to account for inflation.
${ }^{2}$ Engineering (land survey, environmental, geotechnical, and construction material testing services) is estimated at 5\% (alleys require more construction material testing than roads)

## Green Alleys

In 2015 the Village of Wilmette received a grant from the Metropolitan Water Reclamation District of Greater Chicago (MWRD) to build four green alleys. Upon review of the project details, cost estimate, and storm water storage benefits, MWRD determined that the project would reduce flooding and the
burden on the combined sewer system during rain events. A grant was awarded in the amount of $\$ 130,000$ to partially fund the installation of green alleys in Wilmette. The grant contribution of $\$ 130,000$ reflected the cost differential to incorporate green infrastructure improvements compared to the conventional concrete alley design.

The Municipal Services Committee (MSC) discussed the success of the 2015 program which has performed very well during rain events. Residents have reported the green alleys have significantly better drainage than the original asphalt or concrete alleys. The MSC recommended staff seek additional green infrastructure grant funds from MWRD, however staff is still evaluating the operational costs associated with properly maintaining green alleys to ensure they continue to perform optimally.

## Project Update

The Engineering Division revised the CIP content and updated funding amounts for 2020-2024.

## Project Alternative

The alternative is to temporarily patch the alleys with cold-mix asphalt, however this material needs to be replaced on a bi-annual or more frequent basis. A hot-mix asphalt or concrete patching program would provide another intermediate option to repair and extend the service life of the alley pavement. The asphalt patching should last about five to ten years on a stable base, whereas the concrete patching lifespan can be decades.

## Operating Budget Impact

Is this purchase routine $X$ $\qquad$ non-routine?

| ROUTINE |  |
| :--- | :--- |
| Department Budget | Engineering |
| Account Number Description | Alley Replacement Program |
| Account Number | $11202035-425200$ |


|  |  |  |  |
| :--- | :--- | :--- | :--- |
| Brick Street Repairs | 2020 | $\$ 110,000$ | Operating |
| Streets, Sidewalks and Alleys | 2021 | $\$ 113,000$ |  |
|  |  | 2022 | $\$ 116,000$ |
|  | 2023 | $\$ 119,000$ |  |
|  | 2024 | $\$ 123,000$ |  |
| X $\quad$ Critical |  |  |  |
|  | Recommended |  |  |



## Original Purchase Date \& Cost

Unknown


Funding History
2019 \$140,000 Operating
2018 \$136,000 Operating
2017 \$136,000 Operating
2016 \$136,000 Operating
2015 \$50,000 Dedicated revenues
2014 \$40,000 Dedicated revenues
2013 \$40,000 Dedicated revenues
2012 \$132,000 Dedicated revenues

## Project Description \& Justification

This is an annual maintenance program to repair and relay brick pavers that have settled in various locations throughout the Village. In addition, the areas where the edge of pavement has fallen below the gutter line will be repaired. This settlement creates trip hazards, drainage problems, and vehicle damage.

In 2020, Village staff will be conducting a condition evaluation of the entire brick street inventory to update patching and complete renovation schedules.

## Project Update

The funding request for 2020 has been decreased from $\$ 140,000$ to $\$ 110,000$ and, $\$ 123,000$ has been added to 2024. Costs have been updated to reflect an annual 3\% price index.

## Project Alternative

The alternative is to defer maintenance that can lead to increased liability resulting from car damage caused by settled pavers.

## Operating Budget Impact

Is this purchase routine $X$ or____non-routine?

| ROUTINE |  |
| :--- | :--- |
| Department Budget | Engineering |
| Account Number Description | Brick Street Repair |
| Account Number | $11202035-425230$ |

2020 Vilage of Wilmette Bid No. 20030
Tion Bid Tab Base Bid 1 and 2



[^0]:    1 *The Skokie Valley Trail project is predominantly grant funded and the net cost to the Village in 2020 was to be $\$ 20,000$; the project has been deferred to 2021

