



Engineering & Public Works Department

SUBJECT: Neighborhood Storage Project – Phase 1

MEETING DATE: March 10, 2020

From: [Brigitte Ann Berger-Raish](#), P.E., Director of Engineering and Public Works
[Jeffrey Stein](#), Assistant Village Manager/Corporation Counsel
[Erik Hallgren](#), Assistant Village Manager

BUDGET IMPACT:	Phase 1 Updated Budget	\$24.0 million
	Phase 1 As Bid Project Cost	\$21.7 million
	Over/(Under) Budget Amount	\$2.3 million

Recommended Motion

The Village Board has the option to make an omnibus motion to approve all the agenda items listed below in a single motion, instead of five separate motions. To do so, the movant would need to make a single motion by stating “move to approve” and then list all the agenda items described below (with the exception of repeating the “move to approve” language).

- 6.41** Move to approve a contract in the amount not-to-exceed \$12,750,177 with Berger Excavating Contractors, Inc., Wauconda, IL for the Neighborhood Storage Project—Phase 1.
- 6.42** Move to approve a contract in the amount not-to-exceed \$1,212,045.13 with Christopher B. Burke Engineering Ltd. for construction oversight services associated with the Neighborhood Storage Project—Phase 1.
- 6.43** Move to approve Resolution 2020-R-14 approving an agreement for the grant of a permanent and temporary easement for construction, operation and maintenance of an underground stormwater reservoir and certain ancillary improvements.
- 6.44** Move to approve Resolution 2020-R-12 approving an Intergovernmental Agreement between the Board of Education of Wilmette Public Schools District 39 and the Village of Wilmette for the grant of a temporary easement for construction, operation and maintenance of an underground stormwater reservoir and certain ancillary improvements.

6.45 Move to approve Resolution 2020-R-11 approving an Intergovernmental Agreement between the Board of Education of Wilmette Public Schools District 39 and the Village of Wilmette for the grant of a non-exclusive permanent easement for construction, operation and maintenance of an underground stormwater reservoir and certain ancillary improvements.

6.46 Move to approve Resolution 2020-R-13 approving an Intergovernmental Agreement between Wilmette Park District and Village of Wilmette for the construction, operation and maintenance of a series of underground stormwater reservoirs and other ancillary improvements in portions of Community Playfields, Hibbard Park and Thornwood Park.

Background

Following widespread overland flooding in the Village due to a series of large rain events, the Village engaged the consulting firm of Christopher B. Burke Engineering Ltd. (CBBEL) to perform a study of the separate storm sewer and develop a plan for improving the storm sewer system. CBBEL presented a series of proposals to achieve the Village's goal of flood protection during a 10-year storm event. The results of the study and proposals to address the problem were reviewed by a second engineering firm, Stantec in 2017. On April 17, 2018, after a comprehensive review of alternatives and extensive public engagement, the majority of the Village Board voted to move forward with the Neighborhood Storage Project (NSP).

The primary NSP project consists of constructing three underground detention vaults and associated relief sewers to improve the effectiveness of the existing storm sewer system. Based on the hydraulic model of the sewer system, the original project was estimated to reduce structure flooding for 71% of the homes inundated by flooding in a ten-year storm event. Phase 1A, which consists of approximately 5,500 feet of new relief storm sewer in the right-of-way, is currently underway and scheduled to be completed in June 2020. The proposed vaults are located at Community Playfield (Phase 1, 2020), Hibbard Park (Phase 2, 2021) and Thornwood Park (Phase 3, 2022).

Optimization

In February 2019, the Village Board reviewed an option to optimize the NSP to improve the protection of vulnerable structures in a ten-year storm from 71% to 98%. The optimization requires larger reservoirs at Community Playfield and Thornwood Park and additional storm sewers. At that time, the Village Board made two decisions:

- “Future-proof” the NSP by optimizing the size of the reservoirs at Community Playfield and Thornwood Park as part of the base project
- Bid the additional storm sewers as alternatives in Phase 1 (Community Playfield- 2020) and Phase 3 (Thornwood Park- 2022) and determine at that time whether to pursue installation of the additional sewers based on bid prices and other economic factors

Discussion

6.41 Move to approve a contract in the amount not-to-exceed \$12,750,177 with Berger Excavating Contractors, Inc., Wauconda, IL for the Neighborhood Storage Project—Phase 1

The bid opening for Phase 1 (Community Playfield) was February 13 and the Village received five bids. The bids included pricing on the following components:

- **Base Bid** – Includes 20.2-acre-foot stormwater facility; 5,665 feet of storm sewer ranging in sizes; manholes, catch basins, and inlets; pavement rehabilitation and sidewalk removal and replacement
- **Alternative 1** – Optimized sewer installation from the east side of the vault through the north side of the Highcrest parking lot
- **Alternative 2** – Optimized sewer installations on Hunter and Washington
 - *Alternative 2A – Construction completed in 2020*
 - *Alternative 2B – Construction completed in 2021*

The complete bid tabulation is attached and a summary of bids is as follows:

Contractor	Base Bid	Alt 1	Alt 2A	Alt 2B
Berger Excavating	9,185,892.33	1,472,600.85	1,455,703.96	1,455,703.96
Joel Kennedy Construction	8,998,677.00	1,457,410.50	1,585,415.25	1,689,915.75
DiMeo Brothers	9,472,621.00	1,687,767.00	1,566,099.00	1,520,513.00
Martam Construction	14,263,434.00	1,670,087.81	1,643,414.28	1,643,414.25
V3	10,120,000.00	1,745,000.00	1,482,000.00	1,499,000.00
<i>Engineer's Estimate*</i>	<i>13,338,751.21</i>	<i>1,414,776.68</i>	<i>1,443,037.31</i>	<i>1,443,037.31</i>

**Engineer's estimate includes construction and construction management costs*

Below is a cost summary of the base bid plus the alternative sewer optimization choices. If the optimization alternatives are chosen, there is a different low bid option for each alternative highlighted in blue.

Contractor	Base + Alternative 1 and 2A (\$)	Base + Alternative 1 and 2B (\$)
Berger Excavating	12,114,197.14	12,114,197.14
Joel Kennedy Construction	12,041,502.75	12,146,003.25
DiMeo Brothers	12,726,487.00	12,680,901.00
Martam Construction	17,576,936.09	17,576,936.06
V3	13,347,000.00	13,364,000.00
<i>Engineer's Estimate*</i>	<i>16,196,565.20</i>	<i>16,196,565.20</i>

**Engineer's estimate includes construction and construction management costs*

After reviewing the bid prices and interviewing the two lowest bidders, Berger Excavating Contractors (Berger) and Joel Kennedy Construction, staff recommends awarding the base bid plus alternatives 1 and 2B to Berger Excavating Contractors.

Staff believes awarding the optimization sewers (Alternatives 1 and 2) with the base bid is in the Village's best interest because the contract is under the Village's budget, the optimization program will provide enhanced and timely flood relief to the Birchwood / Schiller / Washington neighborhood and postponing the optimization work would likely yield higher bid prices due to construction inflation.

In reviewing the bids, staff also recommends awarding Alternative 2B over 2A. While there is a modest cost increase (0.6%) to build Alternative 2B next construction season, staff believes this is the better choice because it eliminates the possibility of constructing the Hunter Road and Washington Avenue storm sewers while school is in session.

Based on their competitive bid, favorable reviews, interview, and direct experience, staff recommends awarding the Phase 1 construction contract (including Alternative 1 and 2B) to Berger. Berger is one of the top contractors in the Chicagoland area for installing StormTrap systems. They will be performing all of the StormTrap installation as well as the mainline storm sewers, which is preferred compared to subcontracting these key components to other companies.

During their interview, it became apparent that Berger has the appropriate resources (equipment and manpower) to build the project and talented and experienced staff to manage the project. There were many details about their approach to building the project that impressed the interview team, but one of the most impressive is their state-of-the-art GPS guided earth moving equipment that will ensure precision and accuracy when setting the vault pieces. During the interview, Berger clearly articulated a well-thought out plan to build the project in the timeframe allowed per the Village's IGA with the School District.

Berger has an excellent reputation in the construction industry as demonstrated by their quality references. This has also been the experience of Wilmette staff having worked with Berger on the Skokie/Hibbard and the Isabella Relief Sewer projects where they served as the general contractor. For all of these reasons, staff recommends awarding the first phase of the Neighborhood Storage Project to Berger Excavating Contractors.

Since the bid opening, there have been changes to the contract value of the project. These include an early completion bonus which was included in the base bid to try and minimize neighbor impact (this was inadvertently left out of the contract award amount in the February 25 materials), a drainage contingency to address concerns from the Park District, and an overall project contingency of 2.5% that would cover potential project changes to meet the concerns of the neighboring properties.

Construction Contract	
Original Award Recommendation	\$12,114,197
Early completion bonus	\$75,000
Drainage contingency	\$250,000
2.5% construction contract contingency	\$310,980
Updated Contract Value	\$12,750,177

Documents Attached:

1. Recommendation letter prepared by Christopher B. Burke Engineering Ltd. and bid tabulation

6.42 Contract in the amount not-to-exceed \$1,212,045.13 with Christopher B. Burke Engineering Ltd. for construction oversight services associated with the Neighborhood Storage Project—Phase 1

Construction management and contractor oversight are critical components of the project; therefore, Village staff has put together a qualified team to provide the day-to-day oversight of the project. The team consists of individuals from Baxter and Woodman (lead design engineer on Phase 1), Christopher B. Burke Engineering Ltd (lead consultant on the NSP), and RHMG (owner's representative on the West Park Storage Facility Project). This team will supplement Village staff during the execution of the construction. They will also assist with ensuring the primary stakeholders (Park District, School District, and neighbor residents) are kept informed of the project's progress. The scope of work includes a robust communication plan that will be essential in delivering a successful project.

The complete proposal is included as Attachment 2. Some of the key points include:

- Includes construction oversight for base bid and Alternate 1 sewers. Engineering services for Alternate 2B sewers will be awarded in 2021;
- Over 5,700 labor hours to manage all facets of the project;
- Oversight staff will be present on the job at all times when the contractor is working;
- During peak construction time, oversight staff is estimated to work as many as 60 hours per week, which includes weekends;
- Proposal is 7.6% of the construction cost (including the StormTrap pieces), which is the low end of the industry standard for construction engineering (typically 10%-12% of the construction value);
- RHMG will serve as owner's representative and assist with enforcing the requirements in the IGA's as well as serving as primary Village liaison to the School and Park Districts;
- Material testing for asphalt, concrete, soil quality and trench backfill density (quality assurance) is included in the proposal (\$14,600).

Village staff has direct experience working with each member of the construction oversight team and is confident they will enforce the contract specifications, provide accurate and regular updates to the Wilmette community and overall deliver a successful project.

Since the last Village Board meeting, additional scope of work has been added to the contract in the value of \$24,858. This included additional public engagement efforts from CBBEL and Baxter & Woodman, attending meetings and preparing materials for the contract and IGA approvals.

Documents Attached:

2. Proposal for Construction Engineering Services prepared by Christopher B. Burke Engineering Ltd.

6.43 Move to approve Resolution 2020-R-14 approving an agreement for the grant of a permanent and temporary easement for construction, operation and maintenance of an underground stormwater reservoir and certain ancillary improvements.

The project includes building a new storm sewer connection from Wilmette Avenue through Meadow Drive to the new vault under Community Playfield. This agenda item will approve the easement agreement that will provide the contractor access through private property so the sewer connection can be made. The easement was previously discussed by the Village Board in executive session and negotiated by staff within the parameters established by the Board. Some key points in the agreement include:

- 20-foot permanent easement through the driveway at 2432 Meadow
- Connects the Wilmette Avenue trunk sewer to the vault under Community Playfield
- Compensation amount of \$180,000 for the permanent easement paid in three separate installments as follows:
 - \$60,000.00 to be paid before April 1, 2020;
 - \$100,000.00 to be paid upon substantial completion of the construction of the Access;
 - \$20,000.00 plus any accrued interest remaining in the escrow account to be paid within a year after substantial completion and upon receipt of an executed release of any claims or liability from the owner to the Village.
- Easement access to install the sewer between April 1 and May 31, 2020
- All work must be completed in 45 days

There have been no changes to the business terms of the private property easement since the last Board discussion on February 11, 2020.

Documents Attached:

3. Resolution 2020-R-14 – including agreements

6.44 Move to approve Resolution 2020-R-12 approving an Intergovernmental Agreement between the Board of Education of Wilmette Public Schools District 39 and the Village of Wilmette for the grant of a temporary easement for construction, operation and maintenance of an underground stormwater reservoir and certain ancillary improvements.

The Village is requesting a temporary easement from the School Board in order to access Community Playfield through the Highcrest School parking lot for the construction of the reservoir and storm sewer. This route is the least impactful to the residents of Wilmette. Additionally, the School District staff is a key project stakeholder and will be included in weekly meetings so they can be kept informed of the contractor's progress.

Over the past several months, Village and School District staff have held several meetings to discuss the parameters of the temporary easement. A summary of the temporary easement agreement terms includes the following:

- The School District will provide the Village and its contractors access for the construction and installation of stormwater facilities at Community Playfield and construction of the optimized storm sewers.
- The School District will provide the Village and its contractors access through the school property in three phases to minimize disruption; each stage has specific requirements that define how the Village and contractors may access and utilize the site.

- Early Access – April 6th through last day of school, June 12th to 18th
- Full Access – June 12th to 18th through August 16th
- Late Access – August 17th through November 28th
- The Village will operate the construction site in a safe and efficient manner. The Village will install temporary fencing and use dust control measures. This provision also includes items requested by the School District to enhance the safety of the site. These provisions include background checks for flaggers who will be crossing school children and cameras and lighting around the construction zone.
- The Village will fully restore the easement area including landscaping and the parking lot. The Village is committed to restoring the Highcrest School parking lot to “safe and usable” binder level of asphalt by August 15 in time for teachers to report back to school.
- The Village will compensate the School District for any unforeseen expenses assumed by the District due to work that is related to the construction access. These expenses can include reimbursement for any direct expenses or loss of operations.

The list of business terms with a financial impact have been updated with the base bid pricing. Two of the items, air conditioning and wireless communication are direct contributions from the Village to District 39 and were not part of the bid pricing.

School District Request	Estimate	Bid
Resurfacing parking lot	\$175,000	\$152,400
Temporary air conditioning during construction	\$85,000	\$85,000
Point to point wireless internet connection	\$20,000	\$20,000
Replacement entry sign	\$40,000	\$63,000
Vibration testing	\$10,000	\$26,000
Site security cameras	\$10,000	\$14,000
Temporary Lighting	\$10,000	\$29,000
Total	\$350,000	\$389,400

There have been several amendments to the temporary easement IGA with the School District since the original introduction at the February 25 Village Board meeting. The substantive amendments include:

- Clarification that the Village shall still be able to access the School District’s property for the sole purpose of repairing or restoring the School District’s landscaping. The Village will have until May 1, 2021 to finalize any landscaping repairs.
- Amendment to the Costs and Mediation provision added by the School District to allow the School District to expend costs necessary to ensure the uninterrupted operation of Highcrest School if the Village’s work creates a “situation” that significantly interrupts the operations. The original language was if the Village creates an “emergency” as opposed to a “situation.”

The School District is anticipated to vote on approval of the IGA at their March 9 board meeting.

Documents Attached:

- 4. Resolution 2020-R-12 – including agreements

6.45 Move to approve Resolution 2020-R-11 approving an Intergovernmental Agreement between the Board of Education of Wilmette Public Schools District 39 and the Village of Wilmette for the grant of a non-exclusive permanent easement for construction, operation and maintenance of an underground stormwater reservoir and certain ancillary improvements.

The Village is requesting a permanent non-exclusive easement from the School District in order to build a new 36-inch diameter storm sewer connecting the vault under Community Playfield to the Birchwood / Schiller / Washington neighborhood. The pipe is proposed under the north portion of the Highcrest School property, just south of the existing bike path. The School Board previously approved a similar permanent easement with the Village for the installation of a 36-inch diameter water transmission main in the same vicinity. This easement is necessary for installation of the optimized storm sewers as part of alternative 1. A summary of the permanent easement agreement terms includes the following:

- The Village will have unfettered access to the easement to inspect, maintain or repair the storm sewer;
- The Village will provide the School District 48 hours' notice of planned work within the easement, unless in the event of an emergency;
- The School District agrees to keep the easement free from permanent encroachments (accessory structures with a foundation);
- If the Village damages any of the school's property in the course of performing work in the easement, the Village will make the necessary repairs.

There have been several amendments to the permanent easement IGA with the School District since the original introduction at the February 25 Village Board meeting. The substantive amendments include:

- Clarification that the current driveway, parking lot, landscaping, bike paths can be placed in the easement area and not to be considered encroachments.
- Amendment to the Costs and Mediation provision added by the School District to allow the School District to expend costs necessary to ensure the uninterrupted operation of Highcrest School if the Village's work creates a "situation" that significantly interrupts the operations. The original language was if the Village creates an "emergency" as opposed to a "situation."

The School District is anticipated to vote on approval of the IGA at their March 9 board meeting.

Documents Attached:

5. Resolution 2020-R-11 – including agreements

6.46 Move to approve Resolution 2020-R-13 approving an Intergovernmental Agreement between Wilmette Park District and Village of Wilmette for the construction, operation and maintenance of a series of underground stormwater reservoirs and other ancillary improvements in portions of Community Playfields, Hibbard Park and Thornwood Park.

An IGA is necessary with the Park District so the Village can build the underground reservoirs beneath Community Playfield, Hibbard Park, and Thornwood Park. The general conditions of

the IGA have been tentatively agreed upon, however engineers from both the Village and Park District are continuing to refine the location of at-grade drainage structures in the park as well as the cost estimates for the park enhancements listed below. Since approval of the IGA serves as project design approval for Community Playfield, the Park District has requested additional review time. A summary of the permanent and temporary easement agreement terms includes the following:

- The Park District will provide the Village and its contractors a temporary easement for access for the construction and installation of stormwater facilities at the three identified park facilities. The temporary easement at each of the facilities will expire on the following dates:
 - Community Playfields – December 31, 2021
 - Hibbard Park – December 31, 2022
 - Thornwood Park – December 31, 2023
- The Park District will provide the Village and its contractors a permanent easement for access for the operation and maintenance of stormwater facilities at the three identified park facilities
- The Village will fully restore the easement areas to their original condition at the Village’s sole costs and expense
- The Park District acknowledges that per the approval of this IGA, the project plans submitted for Community Playfield shall be considered final.
- The Park District has the right to review and approve plans for Hibbard Park and Thornwood Park as submitted by the Village. The Park District shall have 30 days to review and provide comments at which point the Village may re-submit revised plans for review and approval by the Park District.

In addition to the above terms, there are park enhancements requested by the Park District as part of the IGA which include:

Park District Request	Community Playfield	Hibbard Park	Thornwood Park
Comprehensive Landscaping	\$312,500	\$57,000	\$57,000
Drainage Improvements (outside of work zone)	\$160,000	\$80,000	\$80,000
Public Restrooms	\$550,000		\$362,500
Lawn Irrigation	\$500,000		\$250,000
Recreational Path with Lighting	\$940,000		
<i>Subtotal per Park</i>	<i>\$2,462,500</i>	<i>\$137,000</i>	<i>\$749,500</i>
Subtotal	\$3,349,000		
Drainage improvements at CPF in work zone		\$950,000*	
Total Park District Benefit	\$4,299,000		

* included in the base project bid

There have been several amendments to the temporary and permanent easement IGA’s with the Park District since the original introduction at the February 25 Village Board meeting. The substantive amendments include:

- Insertion of an Exhibit created by in partnership by the Park District’s engineers and Village engineering team to show the locations of the storm sewer structure placement at Community Playfield.

- Amendment to provide the Park District the option (to be determined at a future date) to include Park amenities, including bathrooms, walking path, lighting and landscaping, instead of having the mandatory language of “shall.”

The Park Board is expected to approve the IGA at their March 9 meeting.

Documents Attached:

6. Resolution 2020-R-11 – including agreements

Budget Impact

The original budget developed for Phase 1 for the Community Playfield project was estimated at \$20.3 million during the 2019 conceptual phase. That amount was updated to \$24.0 million in 2020 based upon more refined engineering drawings and included easement and IGA expenses. Based upon the bid prices the project is estimated to be \$2.3 million less than the 2020 updated budget projections.

Community Playfield Budget				
	2019 Conceptual	2020 Updated Budget	February 25 VB Meeting	March 10 Approval Update
Construction/Management	\$ 12,700,000	\$ 13,338,751	\$ 10,373,079	\$ 11,033,917
Optimization	\$ 2,600,000	\$ 2,857,814	\$ 2,928,305	\$ 2,928,305
StormTrap Materials	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000
Easement	\$ -	\$ 180,000	\$ 180,000	\$ 180,000
Park District IGA*	\$ -	\$ 2,462,500	\$ 2,462,500	\$ 2,462,500
School District IGA*	\$ -	\$ 105,000	\$ 105,000	\$ 105,000
TOTALS	\$ 20,300,000	\$ 23,944,065	\$ 21,048,884	\$ 21,709,722

**Includes items not included as part of the base bid*

From an overall project budget perspective, the as-bid pricing puts the overall budget at \$2.3 million less than the 2019 concept estimates.

Neighborhood Storage Project (NSP) Update				
Year	Phase	Location	2019 Concept Estimate	2020 Updated Estimate/ As-Bid
2019	Phase 1A	Various	\$6.4M	\$4.5M
2020	Phase 1	Community Playfield	\$20.3M	\$21.7M
2021	Phase 2	Hibbard Park	\$14.2M	\$13.2M
2022	Phase 3	Thornwood Park	\$27.3M	\$26.5M
Totals			\$68.2M	\$65.9M

Documents Attached:

1. Recommendation letter for Berger Excavating Contractors, Inc., prepared by Christopher B. Burke Engineering Ltd. and bid tabulation
2. Proposal for Construction Engineering Services prepared by Christopher B. Burke Engineering Ltd.
3. Easement Agreement Resolution 2020-R-14 – including agreements
4. School District Temporary Easement Resolution 2020-R-12 – including agreements
5. School District Permanent Easement Resolution 2020-R-11 – including agreements
6. Park District Intergovernmental Agreement and Resolution 2020-R-13
7. E-mailed comments and Village responses
8. Memo and attachments from Gewalt Hamilton and Associates to Steve Wilson, Executive Director of Wilmette Park District