



Agenda Item Executive Summary

Engineering Services Agreement with
Engineering Enterprises, Inc. for Basin N-1 & E-1 Committee
Item Name Flow Monitoring Study or Board Board

BUDGET IMPACT

Amount: \$47,449 Budgeted \$50,000

List what
fund Sewer Fund

EXECUTIVE SUMMARY

We have completed the majority of the public sanitary sewer maintenance improvements in the area north of the railroad tracks and east of Oak Ave. and we are ready to move to a new area. This contract is for flow monitoring of two areas of our sewer system that we have been experiencing high flows during rain events. The area covers the majority of homes south of Devon Ave. and north of the Com Ed ROW. We have been working with Engineering Enterprises, Inc. (EEI) on our sanitary sewer system rehabilitation and would like them to help us with this new area.

ATTACHMENTS (PLEASE LIST)

Memo, Resolution, Agreement w/Attachments

ACTION REQUESTED

- For Discussion Only
- Resolution
- Ordinance
- Motion:

MOTION: I move the Village Board approve Resolution 2019 - _____, a Resolution Approving of the Agreement for Professional Engineering Services Between the Village of Bartlett and Engineering Enterprises, Inc.

Staff: Dan Dinges, Director of Public Works Date: 4/29/19

Memo

DATE: April 29, 2019

TO: Paula Schumacher
Village Administrator

FROM: Dan Dinges, PE
Director of Public Works

SUBJECT: Engineering Enterprises Inc. Engineering Service Agreement

We have completed the majority of the public sanitary sewer maintenance improvements in the area north of the railroad tracks and east of Oak Ave. and we are ready to move to a new area. This contract is for flow monitoring of two areas of our sewer system that we have been experiencing high flows during rain events. The area covers the majority of homes south of Devon Ave. and north of the Com Ed ROW. We have been working with Engineering Enterprises, Inc. (EEI) on our sanitary sewer system rehabilitation and would like them to help us with this new area.

We recommend that the Village Board approve the agreement with EEI.

MOTION: I move the Village Board approve Resolution 2019 - _____, a Resolution Approving of the Agreement for Professional Engineering Services Between the Village of Bartlett and Engineering Enterprises, Inc.

RESOLUTION 2019 - _____

**A RESOLUTION APPROVING OF THE AGREEMENT FOR PROFESSIONAL
ENGINEERING SERVICES BETWEEN THE VILLAGE OF BARTLETT AND
ENGINEERING ENTERPRISES, INC.**

BE IT RESOLVED by the President and Board of Trustees of the Village of Bartlett, Cook, DuPage and Kane Counties, Illinois, as follows:

SECTION ONE: The Agreement for Professional Engineering Services between the Village of Bartlett and Engineering Enterprises, Inc. dated _____, 2019, (the "Agreement"), a copy of which is appended hereto and expressly incorporated herein by this reference, is hereby approved.

SECTION TWO: That the Village President and the Village Clerk are hereby authorized and directed to sign and attest, respectively, the Agreement on behalf of the Village of Bartlett.

SECTION THREE: SEVERABILITY. The various provisions of this Resolution are to be considered as severable, and of any part or portion of this Resolution shall be held invalid by any Court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions of this Resolution.

SECTION FOUR: REPEAL OF PRIOR RESOLUTIONS. All prior Ordinances and Resolutions in conflict or inconsistent herewith are hereby expressly repealed only to the extent of such conflict or inconsistency.

SECTION FIVE: EFFECTIVE DATE. This Resolution shall be in full force and effect upon passage and approval.

ROLL CALL VOTE:

AYES:

NAYS:

ABSENT:

PASSED:

APPROVED:

Kevin Wallace, Village President

ATTEST:

Lorna Giles, Village Clerk

CERTIFICATION

I, the undersigned, do hereby certify that I am the Village Clerk of the Village of Bartlett, Cook, DuPage and Kane Counties, Illinois, and that the foregoing is a true, complete and exact copy of Resolution 2019 - _____ enacted on May 7, 2019, and approved on May 7, 2019, as the same appears from the official records of the Village of Bartlett.

Lorna Giles, Village Clerk



Engineering Enterprises, Inc.

April 25, 2019

Mr. Daniel Dinges, P.E.
Director of Public Works
Village of Bartlett
228 South Main Street
Bartlett, IL 60103

**Re: Basin N-1 & E-1 Flow Monitoring (Phase 1)
Village of Bartlett, Cook, DuPage, & Kane Cos., IL**

Dear Dan:

In accordance with your request, enclosed for your review and consideration are two copies of our proposed agreement for the Basin N-1 & E-1 Flow Monitoring within the Village's sanitary sewer network. Flow monitoring of the N-1 & E-1 Basins is part of the Village's overall Inflow and Infiltration Reduction Program. Inflow & Infiltration (I/I) investigations are meant to delineate problematic areas of the system that are prime candidates for further sewer system evaluation work and appropriate rehabilitation.

The attached agreement includes a detailed scope of services, estimate of level of effort and associated cost, and schedule for the project. We are proposing to provide our professional engineering services on a time and materials basis for a not-to-exceed cost of \$47,449. Our proposed schedule is to conduct flow monitoring from beginning of May through early July. We will complete the data analysis through the end of summer and complete the report in the fall.

We look forward to continuing our outstanding partnership with the Village and look forward to working with you and members of your staff on this project. If you have any questions or require any additional information, please do not hesitate to contact me.

Respectfully submitted,

ENGINEERING ENTERPRISES, INC.

Stephen T. Dennison, P.E.
Senior Project Manager

STD/anu

Enclosures

pc: JWF, CRW, ANU, DMT – EEI (Via E-mail)

**AGREEMENT FOR CONSULTING ENGINEERING SERVICES FOR
BASIN N-1 & E-1 FLOW MONITORING STUDY – 2019**

This Agreement, made this _____ day of _____, 2019 by and between the Village of Bartlett, Cook, DuPage, and Kane Counties, Illinois, a municipal corporation of the State of Illinois (hereinafter referred to as the “VILLAGE”) and Engineering Enterprises, Inc. of 52 Wheeler Road, Sugar Grove, Illinois, 60554 (hereinafter referred to as the “ENGINEER”).

In consideration of the mutual covenants and agreements contained in this Agreement, the VILLAGE and the ENGINEER agree, covenant and bind themselves as follows:

1. Services: ENGINEER agrees to perform for the VILLAGE the Services defined within Attachment A.
2. Direction: The Director of Public Works, or his written designee, shall act as the VILLAGE’S representative with respect to the Services to be provided by the ENGINEER under this Agreement and shall transmit instructions and receive information with respect to the Consulting Engineering Services.
3. Compensation: The work items, estimated staff time, and projected fees for each work item are summarized within Attachment B. Based on this computation, the VILLAGE agrees to pay the ENGINEER for providing the Services set forth herein a fixed fee amount of \$47,449.
4. Term: The term of this Agreement shall be active through September 30, 2019 unless otherwise extended through written confirmation by both parties. The work items and phases shall be completed in accordance with the schedule defined within Attachment C.
5. Payment: Engineer shall invoice the VILLAGE on a monthly basis for Services performed and any costs and expenses incurred during the previous thirty (30) day period. The VILLAGE shall pay the ENGINEER within thirty (30) days of receipt of said invoice.
6. Termination: This Agreement may be terminated upon fourteen (14) days written notice of either party. In the event of termination, the ENGINEER shall prepare a final invoice and be due compensation calculated as described in paragraph 3 for all costs incurred through the date of termination.
7. Documents: All related writings, notes, documents, information, files, etc., created, compiled, prepared and/or obtained by the ENGINEER on behalf of the VILLAGE for the Services provided herein shall be used solely for the intended project.
8. Notices: All notices given pursuant to this Agreement shall be sent Certified Mail, postage prepaid, to the parties at the following addresses:

The VILLAGE:

Village of Bartlett
228 South Main Street
Bartlett, IL 60103
Attn: Daniel Dinges, P.E.
Director of Public Works

The ENGINEER:

Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, IL 60554
Attn: Jeffrey W. Freeman, P.E. CFM, LEED AP
Vice President

9. Waiver: The failure of either party hereto, at any time, to insist upon performance or observation of any term, covenant, agreement or condition contained herein shall not in any manner be constructed as a waiver of any right to enforce any term, covenant, agreement or condition hereto contained.
10. Amendment: No purported oral amendment, change or alteration hereto shall be allowed. Any amendment hereto shall be in writing by the governing body of the VILLAGE and signed by the ENGINEER.
11. Succession: This Agreement shall ensure to the benefit of the parties hereto, their heirs, successors and assigns.

IN WITNESS WHEREOF, we have hereunto signed our names the day and year first above written.

VILLAGE OF BARTLETT

ENGINEERING ENTERPRISES, INC.:

Title: _____

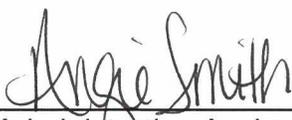


Senior Project Manager

ATTEST:

ATTEST:

Title: _____



Administrative Assistant

ATTACHMENT A – SCOPE OF SERVICES
BASIN N-1 & E-1 FLOW MONITORING STUDY – 2019
Village of Bartlett, Cook, DuPage & Kane Co., IL

The Sanitary Sewer Basins N-1 & E-1 Flow Monitoring Study will help delineate inflow and infiltration severity throughout each subbasin. Basins N-1 and E-1 are located south of E Devon Ave, in DuPage County with approximately three-fourths of the basins East of S Bartlett Road. The location of Basins N-1 and E-1 is depicted on the attached Exhibit A-1. The flow monitoring phase will help delineate inflow and infiltration (I/I) severity throughout the Basins N-1 and E-1. The I/I Investigation of Basins N-1 and E-1 is part of a multiphase plan to reduce I/I within the Village of Bartlett sanitary sewer system. The scope and cost of the N-1 & E-1 Basin flow monitoring phase only covers the first portion/phase of the I/I investigation and does not include Phase 2 (Sanitary Sewer Evaluation Survey) or Phase 3 (Rehabilitation).

As part of the flow monitoring phase (this contract), the N-1 & E-1 Basins will be divided into two (2) Subbasins each, such that the sanitary sewer flows and the correlating I/I can be further defined within the Basins. The proposal includes flow monitoring at four (4) locations (two (2) flow monitors per Basin) for eight (8) weeks. The attached Exhibit A-1 shows the four (4) proposed flow monitoring locations and provides additional details for all locations. All cost and schedule decisions were based on EEI's best knowledge of the N-1 & E-1 Basins to date. The proposed flow monitoring locations will be reviewed with Village Staff to ensure accessibility to all flow monitor manholes, as well as the appropriate placement of each flow monitor.

The base proposal also includes the installation of one (1) recording rain gauge in a secure location to measure rainfall during the monitoring period. The quality of the flow monitoring results will be increased with an increased number of precipitation events. A minimum of two 1.0-inch or greater rain events, each over a 24-hour period, is needed to make reasonable conclusions. The Village will have the opportunity to increase the flow monitoring period at the end of the eight-week period, should a sufficient rain event not occur or if they would wish to obtain additional data. Once sufficient flow monitoring data is obtained, the data will be analyzed and the analysis details and conclusions will be provided to the Village for review. The flow monitoring process, analysis and conclusions will be summarized in a report.

The proposed work items for this project are as follows:

PHASE 1 – FLOW MONITORING

- 1.1 Project Administration
- 1.2 Kick-Off & Progress Review Meeting (2 Meetings Total)
- 1.3 Divide N-1 & E-1 Basins into Subbasins
- 1.4 Coordinate Flow Monitoring (Assumes Four (4) Locations – Two (2) Within Each Basin) For 8 Weeks
- 1.5 Coordinate Rainfall Monitoring (Assumes One (1) Location) For 8 Weeks
- 1.6 Analyze Flows & Determine I&I Severity by Subbasin
- 1.7 Prepare Flow Monitoring Report

The above scope summarizes the work items that will be completed for this contract. Additional work items, including additional meetings beyond the project initiation meeting defined in the above scope, shall be considered outside the scope of the base contract and will be billed in accordance with the Standard Schedule of Charges.



NO.	DATE	REVISIONS

DATE:	APRIL 2019
PROJECT NO.:	BL1901
PATH:	H:\GIS\PUBLIC\BARTLETT\2019\BL1901
FILE:	BL1901_EXHIBIT A-1_FLOW MONITORS.MXD

**VILLAGE OF BARTLETT
 INFILTRATION AND INFLOW
 INVESTIGATION - 2019**

**EXHIBIT A-1
 BASIN N1 & E1
 FLOW MONITORING PLAN**



Outstanding Service ~ Every Client ~ Every Day

**ATTACHMENT B:
ESTIMATE OF LEVEL OF EFFORT AND ASSOCIATED COST
PROFESSIONAL ENGINEERING SERVICES
Basins N-1 & E-1 Infiltration and Inflow Investigation - 2019**
Village of Bartlett, Cook, DuPage, & Kane Counties, IL

DATE: 4/25/2019
ENTERED BY: AM/CRW/JWF

WORK ITEM NO.	WORK ITEM	ENTITY:		EEI			LAND SURVEYING		WORK ITEM HOUR SUMM.	COST PER ITEM
		PROJECT ROLE:	HOURLY RATE:	PRINCIPAL IN CHARGE \$203	QA/QC SENIOR PM \$203	SENIOR PROJECT MANAGER \$197	SENIOR PROJECT ENGINEER \$153	PROJECT ENGINEER \$141		
PHASE 1 - FLOW MONITORING										
1.1	Project Administration			2		8			10	\$ 1,982
1.2	Kick-Off & Progress Review Meeting (2 Meetings Total)			8		12			28	\$ 5,212
1.3	Divide Basins N-1 & E-1 Into Subbasins					1		10	18	\$ 2,486
1.4	Coordinate Flow Monitoring (Assumes 4 Locations) Within Basin For 8 Weeks					1			6	\$ 914
1.5	Coordinate Rainfall Monitoring (Assumes 1 Location) For 8 Weeks			1		1			4	\$ 632
1.6	Analyze Flows & Determine I&I Severity By Subbasin			1		4		12	41	\$ 6,067
1.7	Prepare Flow Monitoring Report			2		4		12	56	\$ 8,102
Phase 1 - Flow Monitoring Subtotal:				13		31		34	163	\$ 25,395
PROJECT TOTAL:				13		31		34	163	\$ 25,395

LABOR EXPENSES	
Engineering Expenses =	\$ 20,869
Drafting & GIS Technician Expenses =	\$ 4,386
Land Surveying Expenses =	\$ -
Administrative Expenses =	\$ 140
TOTAL LABOR EXPENSES =	\$ 25,395

DIRECT EXPENSES	
Printing =	\$ 300
Supplies & Mileage =	\$ 150
Flow & Rainfall Monitoring Sub-Consultant (ADS) - 8 weeks =	\$ 21,604
DIRECT EXPENSES =	\$ 22,054

TOTAL COSTS = \$ 47,449



Standard Schedule of Charges

January 1, 2019

EMPLOYEE DESIGNATION	CLASSIFICATION	HOURLY RATE
Senior Principal	E-4	\$208.00
Principal	E-3	\$203.00
Senior Project Manager	E-2	\$197.00
Project Manager	E-1	\$178.00
Senior Project Engineer/Planner/Surveyor II	P-6	\$165.00
Senior Project Engineer/Planner/Surveyor I	P-5	\$153.00
Project Engineer/Planner/Surveyor	P-4	\$141.00
Senior Engineer/Planner/Surveyor	P-3	\$129.00
Engineer/Planner/Surveyor	P-2	\$117.00
Associate Engineer/Planner/Surveyor	P-1	\$106.00
Senior Project Technician II	T-6	\$153.00
Senior Project Technician I	T-5	\$141.00
Project Technician	T-4	\$129.00
Senior Technician	T-3	\$117.00
Technician	T-2	\$106.00
Associate Technician	T-1	\$ 93.00
Engineering/Land Surveying Intern	I-1	\$ 84.00
GIS Technician	G-1	\$ 75.00
Administrative Assistant	A-3	\$ 70.00

CREW RATES, VEHICLES AND REPROGRAPHICS

1 Man Field Crew with Standard Survey Equipment		\$168.00
2 Man Field Crew with Standard Survey Equipment		\$262.00
1 Man Field Crew with RTS or GPS *		\$208.00
2 Man Field Crew with RTS or GPS *		\$302.00
Vehicle for Construction Observation		\$15.00
In-House Scanning and Reproduction	\$0.25/Sq. Ft. (Black & White) \$1.00/Sq. Ft. (Color)	
Reimbursable Direct Costs & Services by Others	Cost + 10%	

*RTS = Robotic Total Station / GPS = Global Positioning System