Legistar #: 230061

DISTRICT 1

VILLAGE OF LOMBARD REQUEST FOR BOARD OF TRUSTEES ACTION

For Inclusion on Board Agenda

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то:	PRESIDENT AND B	OARD OF TRUSTEES					
FROM:	Scott Niehaus, Village Manager						
DATE:	February 6, 2023	(COW) (<u>B of T</u>)	Date: February 16, 2023				
TITLE:	Charles Lane Basin Improvements Design Engineering - Amendment No. 1						
SUBMITTED BY:	David Gorman, P.E., Assistant Director of Public Works						
BACKGROUND/PO	OLICY IMPLICATIO	ONS:					
Please see the attache	ed memo.						
FISCAL IMPACT/	FUNDING SOURCE:						
Account Number: 52 Total Contract Amou	unt: \$93,142.00 (\$67,94 18 01 Charles Lane Bas						
Review (as necessary	y):						
Village Attorney X_			Date				
Finance Director X_ Village Manager X_			Date Date				
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NOTE:		submitted to and approved 2:00 noon. Wednesday, pri					

Distribution.

AGENDA.DOC

Legistar: 230061

Interoffice Memo



To: Scott Niehaus, Village Manager

From: David Gorman, P.E, Assistant Director of Public Works

Through: Carl Goldsmith, Public Works Director \$\mathcal{Y}\$

Date: February 6, 2023

Subject: Charles Lane Basin Improvements

Design Engineering Amendment #1

Attached please find an amendment for \$25,200.00 to the design engineering contract for the Charles Lane Basin Improvements project. The amendment is for engineering services outside of the original scope of the contract.

The goal of the project is to significantly reduce the effects of significant rain events on the Finley Road corridor, specifically between Charles Lane and Hickory Street. To achieve this objective, some form of compensatory storage of floodwaters is necessary. Typically, this is accomplished by expanding or creating new depressional storage. However, the areas adjacent to the Charles Lane Basin are wetlands that have environmental constraints and regulations related to fill and excavation.

Given the restrictions related to the wetlands and the right-of-way, a retaining wall designed by a structural engineer licensed in the state of Illinois is being proposed. The reason for the wall will be to restrain floodwaters from the East Branch of the DuPage River. The employment of a geotechnical engineer will also be required as part of the design process. Soil borings, soil analysis, and paperwork required by the State of Illinois related to CCDD (Clean Construction and Demolition Debris) will need to be included for the design of the retaining wall.

To obtain a permit for the improvement project, the compensatory storage inside the Charles Lane Basin must be accounted for. This will be accomplished by hydrologic and hydraulic computations performed by the consultant. Those calculations along with the plans and specifications shall be submitted to DuPage County illustrating compliance with the stormwater ordinance.

Please present this contract amendment to the President and Board of Trustees for their review and approval at their regular meeting on February 16, 2023. If approved, please return a digitally signed copy to Public-Works-Engineering for further processing.

DG/RGS

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RESOLUTION R

A RESOLUTION AUTHORIZING AN AMENDMENT TO A PROFESSIONAL SERVICES CONTRACT INVOLVING AN INCREASE/DECREASE IN THE DOLLAR AMOUNT OF THE CONTRACT OF \$10,000 OR MORE AND/OR EXTENDING/SHORTENING THE TIME IN WHICH THE CONTRACT IS TO BE COMPLETED BY THIRTY (30) DAYS OR MORE

WHEREAS, pursuant to Illinois Compiled Statutes, Chapter 720, Section 5/33E-9, units of local government are required to make specific findings prior to authorizing any amendment relative to a contract which would increase or decrease the dollar amount of the contract by \$10,000 or more, or would extend or shorten the time in which the contract is to be completed by thirty (30) days or more; and

WHEREAS, staff has presented and recommended the proposed amendment to the contract between the Village of Lombard and Engineering Resource Associates regarding the Charles lane Basin Improvements project, as attached hereto as Exhibit "A" and made part hereof, (the "Amendment") to the Corporate Authorities of the Village of Lombard; and

WHEREAS, said Amendment attached hereto as Exhibit "A" would increase the dollar amount of the contract by \$25,200.00, bringing the total dollar amount of the contract to \$93,142.00,

WHEREAS, said Amendment attached hereto as Exhibit "A" would extend the time period in which the contract is to be completed by 167 days;

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS, as follows:

SECTION 1: That after reviewing the explanation of staff as to the necessity of and reasons for the Amendment attached hereto as Exhibit "A", the President and Board of Trustees find as follows:

- A That the circumstances which necessitated said Amendment were not reasonably foreseeable at the time the contract was entered into.
- B. That the basis of the Amendment was not within the contemplation of the contract when the contract was signed.
- C. That it is in the best interests of the Village of Lombard to approve the Amendment in its proposed form.
- D. That to the extent that it may have been necessary to go to bid relative to the work contemplated by said Amendment, bidding is hereby specifically waived as to the Amendment work.

and Board of Trustees hereby approv	nade the findings set forth in Section 1 above, the President ve the Amendment attached hereto as Exhibit "A", and direct and Village Clerk to execute said Amendment on behalf of
Adopted this 16th day of February 20	023, pursuant to a roll call vote as follows:
Ayes:	
Nays:	
Absent:	
Approved by me this 16th day of Feb	bruary, 2023.
	Keith Giagnorio Village President
ATTEST:	
Liz Brezinski Village Clerk	

Legistar: 230061
Resolution _____
Page 2



3s701 West Ave, Suite 150 Warrenville, IL 60555 Phone: 630-393-3060 Fax: 630-393-2152

www.eraconsultants.com

Additional Work Authorization

Sent via email to Ray Schwab | schwabr@villageoflombard.org

Date: 1/30/2023 Client: Village of Lombard, Illinois

Project Name: Charles Lane Basin Improvements ERA Project No.: W22049.00

The work described in this Additional Work Authorization (AWA) is outside of the original scope of work anticipated for the professional service contract between Engineering Resource Associates, Inc. (ERA) and the Village of Lombard (Village). ERA will proceed as expeditiously as possible to complete the described services upon written authorization.

Reason(s) for Services:

The development of 65% Plans resulting from Site Visits, Design Meetings, Coordination with the permitting agency and Right-of-Way restrictions is requiring a retaining wall that is greater than 3-ft in height to meet the project's design goals. This retaining wall is proposed to be approximately 112-ft in length along Finley Road. It will need to be designed to hold back the floodwaters from the East Branch during large storm events. The retaining wall will be Cast-in-Place (CIP) wall or a CIP Soldier Pile wall. Plans will be designed under the direct supervision of a registered license structural engineer in the state of Illinois. Structural plans will also be signed and sealed.

The project requires compensatory storage for the volume of water below the 100-year base flood elevation that is no longer accessible with the proposed improvements for Finley Road. Typically, this would involve excavating in the floodplain. However, the areas around Charles Lane Basin that are adjacent to the proposed fill have environmental constraints (wetlands). To provide the compensatory storage inside the Charles Lane basin, ERA will need to perform hydrologic and hydraulic computations to show compliance with the Floodplain ordinance based on multiple pre-application meetings with DuPage County.

SCOPE OF WORK

Task 1 – Additional Design/Progress and Permitting Meetings

The expansion of the scope of work requires additional design and progress meetings with the Village of Lombard (virtual and in-person) and additional meetings with DuPage County permitting department.

Task 2 - Hydrologic and Hydraulic Modeling, Results Analysis and Documentation

ERA will create hydrologic and hydraulic models of Charles Lane Basin. They will be used to demonstrate that sufficient water enters the basin and can be occupied during storm events up to the 100-year. This would provide floodplain storage that can compensate for the removal of floodplain storage from the Finley Road protection improvements. This model will be used to set the overflow elevation and assist with determining the gravity outlet. The model will be simplified and not include the upstream storm sewer network. It will focus on the storage volume of Charles Lane basin using the simplified pumping operations and any proposed outlet improvements. The hydraulic models will guide the design. The results, calculations and documentation will be included in the permit application to DuPage County.

Task 3 - Geotechnical Borings and Report

For the design of the structural retaining wall, soil borings and analysis will be provided by Rubino Engineering. Their scope of work and contract is attached.

Task 4 - Geotechnical Coordination and Review

ERA will coordinate with the geotechnical firm to perform the soil borings. Coordination may include meetings, email, phone calls. ERA will provide the firm with the preliminary engineering plans and survey information for their use.

Task 5 – Retaining Wall Design - Plans, Specifications, and Estimate (PS&E)

ERA will prepare construction documents consisting of plans, specifications, and cost estimates for the new retaining wall. The following plans are anticipated:

- General Plan & Elevation (1 sheet)
- General Data (1 sheet)
- Wall Plans Sheets (2 sheets)
- Wall Details (1 sheet)
- Soil Boring Logs (1 sheet)

Task 6 -Quality Control/ Quality Assurance (QA/QC)

Quality Assurance is the overall process of developing procedures to ensure a quality product has been developed. These procedures constitute the Quality Control portion of the system. These procedures assure design elements, calculations, plans, specifications, etc. are free of errors, are clear and understandable, and can be built properly. This task is to provide the QC on the Hydrologic and Hydraulic models and the structural retaining wall design calculations. QC of the proposed improvements in the Plans, Specifications and Estimates are already included in the original scope of work.

BUDGET

TASK No.	WORK DESCRIPTION	HOURS	WEIGHTED HOURLY RATE	FEE	% OF GRAND TOTAL
1	Additional Design/Progress and Permitting Meetings	8	\$196	\$1,600.00	6.3%
2	Hydrologic and Hydraulic Modeling, Results Analysis and Documentation	36	\$157	\$5,700.00	22.6%
3	Geotechnical Borings and Report	By Others - Rubino Engineering, Inc.		\$6,200.00	24.6%
4	Geotechnical Coordination and Review	6	\$160	\$1,000.00	4.0%
5	Structural Design PS&E	60	\$143	\$8,600.00	34.1%
6	QA/QC	10	\$207	\$2,100.00	8.3%
	TOTALS	120	\$173	\$25,200.00	100%

TOTALS	120	\$173	\$25,200.00	100%
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Principal	fed 1	fet fell 1/30/20:		3
Title	Signature		Date	
ument number SS : f Trustees. I acknow	18 01) accepted on March 3,	2022 by the Vill	age of Lombard	
, Illinois		Client		
Title	Signature		Date	
	Principal Title the services is here ument number SS of Trustees. I acknow bove.	Title Signature the services is hereby granted under the terms a ument number SS 18 01) accepted on March 3, f Trustees. I acknowledge the above and authorize bove.	Title Signature the services is hereby granted under the terms and conditions soment number SS 18 01) accepted on March 3, 2022 by the Ville for Trustees. I acknowledge the above and authorize ERA to proceed bove. I, Illinois	Principal 1/30/2023 Title Signature Date the services is hereby granted under the terms and conditions set forth in the ument number SS 18 01) accepted on March 3, 2022 by the Village of Lombard f Trustees. I acknowledge the above and authorize ERA to proceed with the chabove. I, Illinois Client