

VILLAGE OF LOMBARD
REQUEST FOR BOARD OF TRUSTEES ACTION
For Inclusion on Board Agenda

 X Resolution or Ordinance (Blue) _____ Waiver of First Requested

Recommendations of Boards, Commissions & Committees (Green)
Other Business (Pink)

TO: PRESIDENT AND BOARD OF TRUSTEES

FROM: Scott Niehaus, Village Manager

DATE: November 24, 2015 (COW) (B of T) **Date:** December 3, 2015

TITLE: Hill Avenue Bridge
Resident Engineering Services

SUBMITTED BY: Dave Gorman, P.E., Assistant Director of Public Works *DGT*

BACKGROUND/POLICY IMPLICATIONS:

Provision of full time construction observation/inspection services for the Hill Avenue Bridge project.

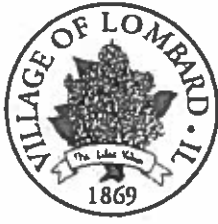
FISCAL IMPACT/FUNDING SOURCE:

Total Contract Amount: \$225,615
Total Lombard CIP Budget Amount: \$25,000.00 (10% of Total Budget Amount of \$250,000.00)
Total Federal Budget Amount: \$200,000.00 (80 % of Total Budget Amount of \$250,000.00)
Total Glen Ellyn Budget Amount: \$25,000.00 (10% of Total Budget Amount of \$250,000.00)
NWS Project Number: ST 15 07
Account: Water/Sewer Capital Reserve: 520.790.715.75420

Review (as necessary):

Village Attorney X _____ Date _____
Finance Director X _____ Date _____
Village Manager X _____ Date _____

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the Agenda Distribution.



To: Scott Niehaus, Village Manager

Through: Carl Goldsmith, Director of Public Works *CG*

From: Dave Gorman, P.E., Assistant Director Public Works *DG*

Date: November 24, 2015

Subject: Hill Avenue Bridge
Resident Engineering Services

Attached please find a resolution, contract and fee schedule regarding resident engineering services for the Hill Avenue Bridge project.

This selection was made from the FY 2014/2015 Resident Engineering Short List. The resident engineering short list is comprised of five firms.

Compiling all the scores from the four person evaluation committee yielded Civiltech Engineering Inc. of Itasca, as the overall top rated firm and thus was determined to be the "most qualified" firm to serve as resident engineer for this project.

Civiltech Engineering Inc. performed the Resident Engineering services for many past Village projects; Lombard Meadows Phase I and numerous Special Assessments in the Village. For Hill Avenue Bridge, Civiltech has proposed the same resident engineer, who worked on all of the above projects.

The scope and fee were negotiated with Civiltech Engineering Inc. and agreed to by both parties. The not-to-exceed fee for resident engineering services is \$225,615.00.

The Hill Avenue Bridge project is a federal aid project. The total funding (\$250,000.00) for the resident engineering services is shared by participations of Federal and local agencies, Village of Lombard and Village of Glen Ellyn. Village of Lombard participation is 10% (\$25,000.00); Village of Glen Ellyn participation is 10% (\$25,000.00), and Federal participation is 80% (\$200,000.00).

Please present this agreement and resolution to the President and Board of Trustees for their review at their regular meeting of December 3, 2015. If approved, please return one original signed copy to Public Works-Engineering for further processing.

RESOLUTION
R _____ 15

A RESOLUTION AUTHORIZING SIGNATURE OF
PRESIDENT AND CLERK ON AN AGREEMENT

WHEREAS, the Corporate Authorities of the Village of Lombard have received an Agreement between the Village of Lombard, and Civiltech Engineering, Inc. regarding the Hill Avenue Bridge project as attached hereto and marked Exhibit "A" and

WHEREAS, the Corporate Authorities deem it to be in the best interest of the Village of Lombard to approve such agreement.

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 the Village President be and hereby is authorized to sign on behalf of the Village of Lombard said agreement as attached hereto.

SECTION 2: That the Village Clerk be and hereby is authorized to attest said agreement as attached hereto.

Adopted this 3rd day of December, 2015.

Ayes: _____

Nays: _____

Absent: _____

Approved this 3rd day of December, 2015.

Keith Giagnorio
Village President

ATTEST:

Sharon Kuderna
Village Clerk



VILLAGE OF LOMBARD CONTRACT

CONTRACT DOCUMENT NUMBER ST 15 07

This agreement is made this 3rd day of December 2015, between and shall be binding upon the VILLAGE of Lombard, an Illinois municipal Corporation hereinafter referred to as the "VILLAGE" and Civiltech Engineering Inc. hereinafter referred to as the "ENGINEER" and its successors.

Witnessed, that in consideration of the mutual promises of the parties delineated in the contract documents, the ENGINEER agrees to perform the services and the VILLAGE agrees to pay for the following services as set forth in the contract documents:

Resident Engineering services for Hill Avenue Bridge

1. This contract shall embrace and include all applicable contract documents listed below as if attached hereto or repeated herein:
 - a. Request for Qualifications and Request for Proposal (December 13, 2013) consisting of the following:
 - i) Cover Sheet
 - ii) Table of Contents
 - iii) General Provisions
 - iv) Special Provisions
 - v) Request for Qualifications and Proposals for Resident Engineering Short-List
 - vi) Instructions Regarding the Consultant Evaluation Form
 - vii) Instructions Regarding the Statement of Qualifications Form
 - viii) Consultant Evaluation Form
 - ix) Statement of Qualifications Form
 - b. Request for Proposal dated October 19, 2015
 - c. ENGINEER'S Proposal Dated October 30, 2015
 - d. ENGINEER'S Proposal Dated November, 2015 and attached Cost Estimate of Construction Services Dated November 12, 2014
 - e. Required Certificates and Signatures and Certificate of Insurance
2. The VILLAGE agrees to pay, and the ENGINEER agrees to accept as full payment for the services, which are the subject matter of this contract in accordance with the General Provisions.
3. This Contract represents the entire agreement between the parties and may not be modified without the written approval of both parties.

IN WITNESS WHEREOF, the Village of Lombard, Illinois by Keith Giagnorio, Village President, and the ENGINEER have hereunto set their hands this 3rd day of December 2015.

If an individual or partnership, all individual names of each partner shall be signed or if a corporation, an officer duly authorized shall sign here:

Civiltech Engineering Inc.

Accepted this _____ day of _____, 2015.

Individual or Partnership _____ Corporation _____

By

Position/Title

By

Position/Title

THE VILLAGE OF LOMBARD, ILLINOIS

Accepted this 3rd day of December, 2015.

Keith Giagnorio, Village President

Attest:

Sharon Kuderna, Village Clerk

**VILLAGE OF LOMBARD
ENGINEER'S CERTIFICATION**

_____, having been first duly sworn depose and states as follows:
(Officer or Owner of Company)

_____, having submitted a proposal for:
(Name of Company)

Hill Avenue Bridge to the Village of Lombard, hereby certifies that said ENGINEER:

1. has a written sexual harassment policy in place in full compliance with 775 ILCS 5/2-105(A) (4).
2. is not delinquent in the payment of any tax administered by the Illinois Department of Revenue, or if it is:
 - a. it is contesting its liability for the tax or the amount of tax in accordance with procedures established by the approve Revenue Act; or
 - b. it has entered into an agreement with the Department of Revenue for payment of all taxes due and is currently in compliance with that agreement.
3. is in full compliance with the Federal Highway Administration Rules on Controlled Substances and Alcohol Use and Testing, 49 CFR Parts 40 and 382 and that

(Name of employee/driver or "all employee drivers")
is/are currently participating in a drug and alcohol testing program pursuant to the
aforementioned rules.

By: _____
Officer or Owner of Company named above

Subscribed and sworn to
before me this _____
day of _____, 2015.

Notary Public

Proposal to Furnish Resident Engineering Services

Hill Avenue over East Branch DuPage River Bridge Replacement

Civiltech's contact person responsible for and knowledgeable of this proposal is Mr. James D. Ewers, P.E. who is our Director of Construction Engineering Services. He can be reached by phone at 630.735.3383, by fax at 630.773.3975, and via email at jewers@civiltechinc.com. Although our Construction Services Department is now under the direction of Mr. Ewers, Mr. John Breitsameter, P.E. will still be available to address Village needs.

PROJECT UNDERSTANDING

The proposed improvement is officially known as the Hill Avenue (FAU Route 1431) over the East Branch DuPage River Bridge Replacement, Contract Document Number ST-15-07. The work will consist of:

- Full road closure on Hill Avenue with a posted detour
- Complete removal of existing, deteriorated structure
- In stream work with associated erosion control
- Two new abutments and two new piers on driven piles
- Cofferdams to construct piers
- Precast, pre-stressed box beams
- Poured in place bridge deck
- Parapet wall separating pedestrian path
- Guardrail and bridge rail
- New approach slabs
- Furnished excavation to raise the grade of roadway and bridge
- HMA resurfacing of adjacent pavement
- Landscaping and restoration

This improvement is scheduled for the April, 2016 IDOT Letting. Using the 60 days that IDOT allows for award and execution, the project could potentially begin in late June, 2016. The contractor will certainly submit box beam shop drawings and pile hammer data as soon as they can, but actual work on the site will most likely not start until after the 4th of July Holiday. That is when Hill Avenue will be closed to traffic with the detour in place. Using an estimated 3 to 4 month project duration, this will put the actual project completion sometime in October of 2016. This should be enough time for the contractor to complete this improvement following typical production rates. The October completion will also get the HMA surface and thermoplastic striping finished before cold weather sets in or the IDOT specified end dates for those items. As always Civiltech will review the contractor's proposed schedule and go through their progress at the weekly meetings to ensure the project is heading in the right direction on time.

This project poses challenges that Civiltech's earned experience has equipped us to overcome. Those challenges are:

- Constructing a new structure over and within the East Branch of the DuPage River
- Utility protection and relocation
- Public outreach (as explained more in depth below)

Hill Avenue over East Branch DuPage River Bridge Replacement

The project site was checked by our Team. One of the most notable aspect of this improvement's area was the adjacent business and nearby homes which will be affected by the work. This is a convenient route for people to move east and west. Fortunately the proposed traffic control for this project is a full closure with a posted detour. This will mean a slight inconvenience for motorists when traveling around, however the closed road will allow for this project to finish more quickly than a drawn out staged construction. With enough room to work within the fully closed site, Civiltech will help the contractor layout a properly sized limit of work zone to minimize disturbance to the natural surroundings.

Coffer dams will be needed to perform the abutment and pier foundation work. The means and methods of the coffer dam are left up to the contractor. Our Chief Structural Engineer, who regularly inspects this bridge, will work closely with the contractor during the submittal process to determine the best solution to keep the water out. The in-stream work for the piers will pose a challenge for limiting dirty water. We will work with the contractor and representatives of the Kane - DuPage Soil and Water Conservation District (KDSWCD) to put in place the most effective erosion measures. While floating silt curtains work well, the ultimate goal is to limit the in-stream work as much as possible. Timber mats for equipment platforms have proven to be superior over clean stone fill.

Weight limits must be followed as they apply to the contractor's equipment during the demolition of the old bridge. We will review the contractor's demo and erection plans thoroughly to make certain the capability of the existing structure is recognized. Our Resident Engineer has ample experience with what is needed to cleanly demolish and then reconstruct a structure within a river. The best way to accomplish little impact is to carefully plan equipment entry whether on the preferred timber mats or clean stone fill, complete the work quickly, finish to a final condition when in the river, and then get out of the water without the need to return. Of course the use of floating silt curtains and other measures must be placed to catch what soil does get churned up. However, our proposed RE had the most success on his last culvert over a creek project by ensuring that the contractor completed all that was needed including final placement of rip rap the first and only time they entered the creek. Performing the work during low flow conditions in DuPage River would also help and would be encouraged, however the work still must get done despite the weather.

As you well know, coordination has already begun with the large number of utilities that are present within the Right-of-Way adjacent to the Hill Avenue Bridge. Conduit attached to the structure, Com Ed high tension nearby overhead, 8" gas main to be relocated, and 36" gas main that must be protected. It will be imperative to continue coordination with the multiple utility companies, and begin whatever relocations are needed as soon as possible. If the right people from the utility companies are found and involved early on, then great things can happen with their relocation efforts. Once a good field representative contact has been established, then we must immediately start the utility company's internal procedures for work orders. Consistently (almost daily) reminding the utilities that their work must keep moving forward is our best found approach at getting the relocation work completed.

As the piers and abutments come up from the foundations, the formwork will be inspected to ensure the approved shop drawings are followed. Civiltech's long time Structural Engineer will be available to review, comment, and approve those shop drawings. The forms cannot be faulty and risk leaking into the river. Rebar clearances, spacing, and epoxy coatings will be thoroughly checked. We verify all the critical dimensions with either our RE or our surveyor on bridge projects. We have ample experience with deck pours and their sequencing. We will make certain during the pre-pour meeting and the actual deck pour that all the latest placement / curing procedures and recommendations to ensure a long lasting deck life are followed.

Hill Avenue over East Branch DuPage River Bridge Replacement

One of the greatest challenges of this improvement will be coordinating all of the work on Hill Avenue with the many IDOT Bureaus as well as following all of the documentation requirements as set forth by IDOT. As mentioned, Civiltech and our proposed RE Marty Ebert excel at IDOT coordination. We know the people in each Bureau who need to be contacted. We will work closely with the Bureau of Construction and their Local Agency Engineer for the area Jeff Mysliwicz. All documentation, schedules, a litany of forms, pay estimates, and any needed contract changes will go through Jeff with our recommendations. The Bureau of Materials will be called upon to approve the contractor's Quality Control Plans for both HMA and PCC. Our proposed material testing company who are well known to the IDOT folks will be in constant contact with IDOT Material's representatives to ensure all the paperwork is accurate and complete with each item properly inspected.

Our unique understanding of this project as described above and further explained below will produce multiple benefits for the Village of Lombard as we approach the project in a way that only Civiltech can provide.

PROJECT APPROACH (PROJECT SCOPE AND EXPERIENCE)

Civiltech agrees with the Resident Engineering General Scope of Services listed in the Request for Proposals as described by the Village of Lombard, and these requirements will be followed by our staff in the performance of our duties. We would like to further explain how Civiltech approaches a project from beginning to end in order to provide the quality service our clients have come to expect. This expanded scope clearly demonstrates how our team consistently approaches each project to produce exceptional results.

We will provide a:

- Resident Engineer
- Project Manager
- Inspectors when needed
- Surveyor when needed

who are fully experienced in the administration of the contract work listed above. Our Resident Engineer will act as a liaison between the Village of Lombard and the contractor, residents, schools, and any other concerned party. When the amount of work necessitates, summer interns could be available as well. A Project Manager will also ensure the quality of our services and facilitate the multiple levels of coordination that are required for complex projects with IDOT involvement. Our Surveyor will be available for initial layout of control points and construction staking verification, and our Resident Engineer is qualified to perform this layout verification as well. Civiltech is capable of providing all of these services with our own forces. The only sub-consultant we propose is needed to perform the Material Quality Assurance testing. We will use Midland Standard Engineering & Testing who we have worked with on nearly all of our Federally funded projects. Their qualifications are further detailed later in this proposal.

We have established relationships and coordination experience with IDOT, DuPage County, and many other agencies whose input may be needed to successfully complete this project. Our inspection abilities with regard to:

- bridge demolition over a waterway
- new structure construction
- utility coordination
- HMA resurfacing
- coordination with residents and businesses

have been proven over the years on multiple similar projects. Our true strength and experience shows best when we are solving unknown problems which arise on all projects.

COORDINATION

Our project team excels as liaisons between our clients and the multiple stakeholders of a project. We will coordinate all project issues with the involved parties and relate them back to the Village for your information or approval. We understand that close communication with the Village, residents, schools, and other involved agencies is of the utmost importance. Our goal will be to preempt any calls to the Village regarding the project, since we would have already been in contact with the inquiring party. We will update the Village on the status of any issues and forward recommendations when needed. Our status updates to the Village will include any major project issues and their effect on the progress schedule.

Civiltech will hold progress meetings every week or as often as needed, depending on the amount of project activity. All concern parties will be invited. The contractors will be required to provide and discuss a two week look-ahead schedule. The first portion of the meeting will be devoted to the coordination of project work and schedule between:

- all of the concerned participants
- the contractor
- the IDOT Local Agency Engineer
- Village Departments including the Police and Fire Departments
- and especially all the Village Public Works sections

This is an invaluable tool to keep all informed, preempt initial calls to the Village, and keep on track towards a successful completion of the projects.

When concerns of the individual parties have been satisfied, they may leave, and we will continue with more in depth project monitoring with the contractor regarding pay items, contract changes, staging, status of submittals, overall schedule, etc. We will work with the contractor to resolve all issues and keep the project moving forward. The actual progress of the project will be closely tracked as it compares with the overall project schedule. If a contractor falls behind, we will investigate and recommend possibilities to get back on schedule. Meeting minutes will be prepared, distributed to the appropriate parties, and filed in the project records. Civiltech's experience with bringing projects to a successful completion through our detailed construction inspection and administration services, as well as thorough coordination, has been proven on many of our past projects.

COMMUNICATION / PUBLIC NOTIFICATION

Public notification and communication will be critical for this improvement. Civiltech is committed to keeping all the involved parties fully informed so they know what is upcoming within the project work zone. Proper notification will be accomplished with multiple forms of communication from changeable message signs along the project to informational flyers to what we consider the best communication which is face to face with the residents. It is this personal contact that brought success to our former projects and will solve the coordination and information challenges of this improvement as well. When people understand what needs to happen in front of their homes and how long each activity will last, they can better accommodate the work and still get their business done. We have received many compliments and “thank you’s” from satisfied residents who were truly part of the process. The inconvenience of a reconstruction is greatly reduced when the stakeholder is working with us to determine the best solution.



Website

Civiltech has developed and supported dynamic websites for previous projects, and only if requested can create one for this project. Of course the most important aspect of the webpage are to announce:

- construction alerts
- detour route
- other news concerning the project
- be able to accept and answer questions regarding the improvement



We would keep the site updated with pertinent information and photos. It is an excellent and efficient tool for spreading project status and keeping the public fully informed. We will have a person dedicated to maintaining the website with daily and sometimes more frequent updates regarding the construction status. Visitors to the website will be able to contact our website administrator either over the internet or the provided phone number. We are committed to having a person answer the phone or call back within a very short time. A friendly voice on the end of the line is one of the most calming features of good communications. If the question cannot be answered immediately, our administrator will have the Resident Engineer contact the resident. The phone number of the RE will be given out regardless of whether the question is answered immediately or not. The Hill Avenue Bridge website if desired will be attractive and informative. Most visitors will be satisfied and have their questions answered on the spot through the ample amounts of project information that will be listed.

Individual Contact and Communication

We will have one point of contact for the individual stakeholders along the project. That point of contact will be our Resident Engineer. This has proven to be very successful on past projects as the best way to keep

everyone fully informed and a working partner on the improvement. Initial contact may come from the website, but once the representative from each residence or school is known, our RE will communicate all information regarding their portion of the project directly with them. Items such as:

- what work will occur in front of their places
- when to expect the work
- how long it will last

The schedule of the work is always a difficult item to nail down with contractors, so we will enforce that they provide realistic time frames for driveway access which if not met will be corrected with an assessed fine. Working with individual residents to determine the best access and schedule for construction has been proven on our past projects to be the best method to make certain that their concerns are met and their operations run as smooth as they can.

CONSTRUCTION ENGINEERING SERVICES

Civiltech's team will accomplish the goal of providing the excellent Resident Engineering Services we are known for by using our typical project approach, which has brought us success on our past projects. Our project approach will be to divide the work into three phases:

- Pre-construction
- Construction
- Completion and Final

Pre-construction

Plan Review

Civiltech will perform a detailed constructability review of the plans and special provisions to determine if there are any potential conflicts that could be addressed and resolved before construction, and those changes incorporated into the final engineering documents. Plan quantities and the viability of the Maintenance of Traffic plans are areas we thoroughly investigate to ensure a workable project.

Stakeholder Coordination

We will initiate or continue coordination with all stakeholders in the project including schools, residents, utilities, other agencies such as IDOT (where we have close ties to their representatives), and Village Departments. Pre-project field meetings will be held with any of the above mentioned entities necessary to resolve potential issues and keep them fully informed. All concerned parties would be encouraged to attend the Pre-construction Meeting.

Contractors and Contacts

A list of names, addresses, and telephone numbers (especially 24 hour emergency contact numbers) will be compiled and maintained for all contractors, subcontractors, material suppliers, and any others pertinent to the project. We will make recommendations to the Village regarding the suitability of the proposed subcontractors.

Traffic Staging Review

The staging and maintenance of traffic drawings will be reviewed as they relate to field conditions. We will forward our comments to the contractor highlighting concerns that may limit traffic moving safely while the contractor has enough room to work.

Field Review

We will thoroughly investigate the field conditions of the project exposing conflicts so that the proposed improvements can be constructed without them. The geometric control points will be set at this time as well. The erosion and sediment control plan will be reviewed to make certain that the proposed measures will be effective in the field, and we will confirm that the Notice of Intent has been completed and submitted to the Illinois Environmental Protection Agency.

Initial Documentation

Field books, quantity book, diary, and all other forms of proper project documentation will be set up per IDOT Documentation Standards. Existing conditions photos will be taken. Important submittals will be requested from the contractor and they will be required to show those submittals on their proposed schedule. Our experienced team of designers knows the Village requirements and can review / comment / approve shop drawings in a short amount of time to keep project progress moving forward.

Progress Schedule Review

We will review the contractor's proposed schedule for constructability, to verify that all controlling as well as major items are shown within the context of the staging, and whether it is reasonable as compared to our experience with production rates.

Construction

On Site Inspection

Civiltech will perform all on site inspection of the contractors' work and operations enforcing compliance with the plans and specifications. Any variations found will either be corrected or a sound solution will be formulated and forwarded to the Village for approval. We will be present on the job site when any contractor work is performed. Our staff will abide by the Village's Personal Protective Equipment policy to ensure safety.

Individual Item Inspection

Our project team has substantial experience with HMA resurfacing which will be used to guide the contractor. We will conduct a pre-pave meeting to establish the best practices with the contractor, reviewing the proper equipment needed, size of crew, and rolling patterns to get required density. The underground work will be closely coordinated with the contractor and utilities. Our abilities in this type of work will be evident as unknown conflicts that arise are quickly resolved.

Construction Layout Verification

Our resident engineer or surveyor will provide construction staking verification. All survey control and benchmarks will be established prior to construction to aid in contractor layout. Before any material is removed or placed, a final review will be made checking that the proposed lines and grades have been met, make sense, and all transitions are smooth.

Material Testing and Quality Assurance

It is understood that the contractor will be performing Quality Control for the materials incorporated into these projects. We will provide Quality Assurance for material inspection at PCC and bituminous plants with our sub-consultant Midland Standard Engineering & Testing, Inc. Reports will be completed daily. Our IDOT Level II trained Resident Engineer or our sub-consultant will perform the on-site QA material testing. We have the knowledge and capability to respond quickly to any material problems that may arise. We will keep in constant communication, so recommendations for changes if needed can be submitted and approved without delaying the project. As always, any items lacking proper inspection from the contractor will be measured, but not paid. We will deliver updated holdback reports to the contractors, so they know what is deficient and can re-familiarize themselves with what we have already instructed them is required for payment.

Project Documentation

Civiltech will document all project activities daily in the diary, field books, and inspectors' daily reports (IDR's) with the Illinois Construction Records System (ICORS) since IDOT has trained and approved us to use it. Weekly reports of the project's progress will be forwarded to the Village and the contractor. These weekly reports will be one of the tools used to review the progress of the work with the contractor and what should be done to stay on schedule. Measurements of work completed will be documented daily, posted to the quantity book, and when possible, agreed to with the contractor.

Contract Changes

No substantial changes in contract work or quantities will be done without the prior approval of the Village of Lombard. We will investigate the reason for any change and forward our recommendations to the Village for approval. As the Village's representative and as part of our construction engineering services, our resident engineer will make decisions and interpretations regarding the improvement that do not substantially increase the cost or negatively affect its overall quality. We will keep the Village informed of these decisions and, as mentioned above, seek their opinion on items that will impact the overall project. Actual authorizations for change orders will include all necessary items and detailed reasons. We will maintain a record of the dollar total for all changes and provide direction toward keeping the costs within the budget.

Pay Estimates

Pay estimates will be compiled regularly as a reasonable amount of work is completed, typically on a monthly basis. Only items that have been measured and thoroughly checked in the quantity book and IDR's will be placed on the estimates. The contractor will have an opportunity to review them as well before processing, but as stated before, no item will be paid without the proper material inspection.

Erosion Control Inspection

Correct installation for all erosion and sediment control measures per the approved plan will be verified. The measures will be inspected weekly or after rain events. Incidents of non-compliance will be documented and forwarded to the contractor for immediate repair.

Submittal Review

Important submittals will be required from the contractor early on in the project and repeatedly requested if they are not received in a timely fashion. We will review them, return them to the contractor for any revisions, and forward them to the Village with our recommendations for approval. A status file of submittals

will be maintained for tracking purposes, and we will verify that what is shown in the approved submittal is incorporated into the project. Any contractor requests for information or changes will also be reviewed and recommendations given to the Village.

Traffic Control Inspection

Civiltech will review the traffic control for correct installation. We will look for and enforce not only compliance with the traffic control standards, but keep an eye toward how it appears to the everyday motorists. It should be clear where to safely travel. The traffic control will be inspected at least twice a day and in actuality whenever we travel through the project. Night inspections for verifying equipment reflectivity, steady-burn light outages, striping, and after hours traffic safety will be performed weekly and reported on the Village form. We will keep the Village and the contractor informed of the traffic control status daily, document any deficiencies, and forward them onto the contractor for immediate action. Should the contractor fail to correct the deficiencies in a timely manner, they will be charged damages per the contract. We will closely monitor staging switches and remind the contractor to protect the public from old travel habits. It should be clear where to travel through a project that is safely controlled.

Completion and Final

Final Phase

Civiltech will monitor the project throughout the punchlist period and forward to the contractor for correction any safety concerns that may arise such as traffic control. We will ready our forces and continue coordination much like it was described in the pre-construction portion of this proposal.

Contractor's Punch-list

We will enlist items from all those involved with the project. Then, after our detailed inspection and the Village's full input, we will produce a final punch-list for the contractor to finish before the project will be considered complete. Constant communication and follow up with the contractor will be performed to ensure that all items and stakeholders are satisfied with the completed work. Only when all punch-list items are completed will we make recommendations to the Village concerning final acceptance.

Final Inspection

The final inspection for the project will be held when all items of the punch-list have been completed. We will conduct the final inspection with all interested parties present, most importantly the Village's representatives. Separate final inspections will be held when required by other agencies such as IDOT. The project's Notice of Termination will be completed.

Final Documentation

All pay items will be final measured, calculated, and checked. They will be marked and posted as final on the IDR's and in the quantity book. We will provide all backup documentation as well as the necessary cross referencing so the final quantities are clear and can be easily verified.

Record Drawings

The contractor's record drawings will be reviewed for accuracy and all dimensions shown will be verified. We will also provide a detailed set of "As Built" drawings for the Village's permanent records. All changes will be noted and the drawings will be reproducible.

Material Certification

We will work closely with the contractor to resolve all the material deficiencies that may still be present on the holdback reports. Any material inspection required for quality assurance will be reviewed for accuracy and completeness. We are committed to resolving all material deficiencies. However, if after we do all we possibly can to help and the contractor still cannot provide what is needed, those deficient items will not be paid.

Final Pay Estimate

Only after all final measurements have been verified and material inspection assured will we create the final pay estimate and forward it to the Village for approval.

Project Records

Civiltech will compile all the project records in an orderly fashion. They will be labeled, arranged, and a table of contents provided for easy review. The completed set of records will be promptly submitted to the Village of Lombard.

GIS Capabilities

Civiltech has the personnel, ability, and equipment to provide the information needed for Lombard's GIS records. We will collect and provide the location information for the required items to be recorded in the desired format for this project. Civiltech provides full GIS service. We can read, analyze, model and publish to all common data formats used in the Engineering and GIS community.

**Exhibit A - Construction Engineering
COST ESTIMATE OF CONSTRUCTION SERVICES
PHASE III ENGINEERING SERVICES
FAU Route 1431 Hill Avenue over East Branch DuPage River Bridge Replacement
Village of Lombard**

Route: FAU Route 1431 Hill Avenue over East Branch DuPage River Bridge Replacement
 Local Agency: Village of Lombard
 Section No.: 10-00154-00-BR
 Project No.: BRM-9003(897)
 Job No.: C-91-752-10
 County: DuPage

*Includes annual increase for work in 2015
 **Firm's approved Over Head rate on file with IDOT's Bureau of Accounting and Auditing is 133.51%
 ***Labor x 0.145 x 2.3351 = Fixed Fee
 Complexity factor (R=0.00)

Consultant: Civiltch Engineering, Inc.

Prepared: 11/12/2015

ITEM	Employee Classification	Estimated Manhours by Task				Total Number of Manhours	Percent of Total	DOLLARS (\$)				
		Meetings	Layout & Verification	Inspection	Documentation			Payroll Ratio*	Payroll Costs	Payroll, Burden & Fringe Costs; Overhead & Expenses** (Labor x 1.3351)	Fixed Fee*** (Labor x 0.3396)	TOTAL
Construction Engineering:	Res. Engr.	20	24	718	336	1,098	69.23%	50.82	55,800	74,499	18,894	149,193
	Asst. RE		16	264	80	360	22.70%	33.39	12,020	16,048	4,070	32,138
	Engr. (Inspector)					0	0.00%	33.39	-	-	-	-
	Tech (Intern)					0	0.00%	18.00	-	-	-	-
	Surveyor		76		12	88	5.55%	42.74	3,761	5,021	1,273	10,055
	Sr. Structural Engr.				16	16	1.01%	50.47	808	1,079	274	2,161
	Proj. Mngr.	12				24	1.51%	70.00	1,660	2,243	569	4,492
TOTALS		32	116	982	444	1,566	100.00%		\$ 74,069	\$ 98,890	\$ 25,080	\$ 225,615
Direct Expenses:												
1.) Vehicle Expense												
2.) Material Testing												
3.) Printing Expense												
4.) Photography												
SUBTOTAL												
		\$ 198,039										
		\$ 7,875										
		\$ 19,291										
		\$ 210										
		\$ 200										

- 1.) 175 Days @ \$45.00/Day
- 2.) Material Testing (Midland Standard Engineering & Testing, Inc.)
- 3.) Estimated printing expense for Record Drawings
- 4.) Estimated photography expense

**FAU Route 1431 Hill Avenue over East Branch DuPage River Bridge
Summary of Direct Costs**

Route: FAU Route 1431 Hill Avenue over East Branch DuPage River Bridge Replacement
Local Agency: Village of Lombard
Section: 10-00154-00-BR
Proj. No.: BRM-9003(697)
Job No.: C-91-752-10
County: DuPage
Contract No.:

Direct Costs:

Printing Expense

Assume 2 large sets for working drawings & 1 set for final "As-Builts"
Bond Prints: 3 sets X 81 sheets/set X \$0.86 per sheet = \$209.98

Total = \$209.98

Say: \$210.00

Photography Expense

Assume 20 sets of developed digital pictures @ \$10.00 ea. = \$200.00

Total: \$200.00

Vehicle Expense

175 vehicle days required @ \$45.00 per day = \$7,875.00

Total: \$7,875.00

