Legistar: 130178

### **DISTRICT - 6**

AGENDA DOC

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

<u> </u>	Resolution or Ordinance (B Recommendations of Board Other Business (Pink)	lue)Waive ls, Commissions & Con	r of First Requested imittees (Green)				
то:	PRESIDENT AND BOARI	O OF TRUSTEES					
FROM:	David Hulseberg, Village M	<b>fanager</b>					
DATE:	April 10, 2013 (COW) (B of T) Date: April 18, 2013						
TITLE:	Lombard Meadows Reconstruction - Phase I Design Engineering						
SUBMITTED BY:	David A. Dratnol, P.E., Vil	lage Engineer MAR					
BACKGROUND/PO	OLICY IMPLICATIONS:						
Improvement Plan fo lighting upgrade to L design engineering se	or reconstruction including wa ED lighting. A request for p	ntermain replacement, s roposals was made to th g, Inc. has been determi	urt is programmed in the Capital ewer improvements, and street ne short list of engineering firms for ined to be the most qualified firm to e not to exceed amount of				
FISCAL IMPACT/	FUNDING SOURCE:						
Total Contract Amou Project Number: ST Account: 410.710.72		ojects (\$100,094.00), W	7/SCapRsv (\$57,620.00)				
Review (as necessary	y):						
Village Attorney X_			Date				
Finance Director X_			Date				
Village Manager X_			Date				
NOTE:	All materials must be subm Manager's Office by 12:00 Distribution.						





To: David Hulseberg, Village Manager

Through: Carl S. Goldsmith, Director of Public Works

From: David A. Dratnol, P.E., Village Engineer

Date: April 10, 2013

Subject: Lombard Meadows Reconstruction – Phase I

**Design Engineering Contract** 

The current Capital Improvement Plan (CIP) has the first phase of Lombard Meadows Reconstruction programmed for Fiscal Years (FY) 13 and 14. The project comprises the reconstruction of Chase Lane from Lilac Way to its terminus at Madison Meadows Park and Chase Court. Items of work include full curb and gutter replacement, watermain upgrade from 6 inch to 8 inch diameter, drainage improvements, sanitary sewer rehabilitation, sidewalk rehabilitation, and upgrading the street lighting to Village standard LED lighting.

A Request For Proposal (RFP) was sent to the Village's Design Engineering short list of firms consisting of five companies. Four companies submitted proposals. Civiltech Engineering, Inc. (Civiltech) was chosen as the most qualified firm. Civiltech was the design engineer for the Olde Towne East project and various other Village projects. The project scope and fee was directly negotiated with Civiltech and agreed to by both parties.

The scope of work includes both preliminary and final engineering. Included in the preliminary engineering phase is; a complete topographic survey, evaluation of existing drainage, assessment of underground utility structures, evaluation of sidewalks, designing new watermain, evaluation of sanitary sewer, and preparing a Project Development Report. Final engineering includes preparation of bid documents (plans, specifications and engineer's estimate of cost), utility permitting, and participation in a project public information meeting.

This work will be performed for a total not to exceed engineering fee of \$157,714.00. The engineering costs will be paid through the Capital Project Fund and the Sewer and Water Capital Reserve Fund. The current CIP allots \$149,600.00 in FY 2013 for Design Engineering.

Please present this agreement and resolution for Design Engineering services to the President and Board of Trustees for their review at their regular meeting of April 18, 2013. If approved, please return one original signed copy of the agreement to Public Works-Engineering for further processing.

DAD/pfk

Legistar: 130178

### RESOLUTION R 13

## 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 Lombard Meadows Reconstruction – Phase I (Chase Lane and Chase Court ) 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 18<sup>th</sup> day of April, 2013.

# VILLAGE OF LOMBARD CONTRACT

### CONTRACT DOCUMENT NUMBER ST-13-07

This agreement is made this 18<sup>st</sup> day of April, 2013, 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:

Preliminary and Design Engineering Services for the Lombard Meadows Reconstruction – Phase I Project

- 1. This contract shall embrace and include all of the applicable contract documents listed below as if attached hereto or repeated herein:
  - a. VILLAGE'S Request for Qualifications for Short-List for Engineering Services Dated January 13, 2012
  - b. ENGINEER'S Statement of Qualifications Dated February 3, 2012
  - c. ENGINEER'S Proposal Dated March 22, 2013
  - d. ENGINEER'S Work Effort and Fee submittal Dated April 9, 2013
  - 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 the	Village	President,	and
the	ENGINEE	R have hereu	nto set their	r hands this 1	8th day o	f April	, 2013.		

corporation, an officer duly authorized		-
Civiltech Engineering Inc.		
Accepted this day of		, 2013.
Individual or Partnership Corp	oration	
Ву		Position/Title
Ву		Position/Title
THE VILLAGE OF LOMBARD, ILL	INOIS	
Accepted this 18 <sup>th</sup> day of April, 2013.		
		Village President
	Attest:	Village Clerk

# VILLAGE OF LOMBARD ENGINEER'S CERTIFICATION

	, having b	een first duly sworn depose and states as follows:
(Off	ficer or Owner of Company)	· -
Re		nitted a proposal for: Lombard Meadows of Lombard, hereby certifies that said
1.	has a written sexual harassment poli 105(A) (4).	cy in place in full compliance with 775 ILCS 5/2-
2.	is not delinquent in the payment of a Revenue, or if it is:	any tax administered by the Illinois Department of
	a. it is contesting its liabilit	y for the tax or the amount of tax in accordance
		ned by the approve Revenue Act; or eement with the Department of Revenue for
		and is currently in compliance with that
3.	Substances and Alcohol Use and Te	al Highway Administration Rules on Controlled sting, 49 CFR Parts 40 and 382 and that
	(Name of employee/driver or "all employee driv is/are currently participating in a dru aforementioned rules.	ers")  lig and alcohol testing program pursuant to the
		By:
		Officer or Owner of Company named above
Su	bscribed and sworn to	
be	fore me this	
da	y of, 2013.	
No	otary Public	



### **Proposal to Furnish Design Engineering Services**

Lombard Meadows Reconstruction Village of Lombard | April 9, 2013

All work identified herein will be performed by Civiltech Engineering, Inc. located at 450 E. Devon Ave., Ste. 300, Itasca, Illinois 60143. Mr. Jonathan R. Vana, P.E. shall serve as the contact person responsible for and knowledgeable of this proposal (630) 735-3382, jvana@civiltechinc.com.

### LOMBARD MEADOWS RECONSTRUCTION PROJECT UNDERSTANDING AND APPROACH:

Our understanding of the project is based on a review of the Village's Request for Proposal document, an initial site visit, and information conveyed at the Question and Answer session held at the Village of Lombard Public Works Department.

Phase I of the Lombard Meadows reconstruction project involves the reconstruction Chase Lane from the intersection of Lilac Way to the northern terminus just north of Bradley Lane. Bradley Lane serves as the primary access to Madison Meadow Park, which is home to several recreational activities. Civiltech successfully coordinated with the Lombard Park District with respect to impacts to the Sunset Knoll Recreation Center as part of the Finley Road rehabilitation project. We will continue that same successful history of proactive coordination as part of this project. Improvements will also extend onto Chase Court extending northeast of Chase Lane.

Chase Lane is a hot mix asphalt roadway that has reached the end of its useful life, and is composed of approximately 3 inches of HMA pavement over a stone base. A grind and overlay was completed approximately 20 years ago. This project will reconstruct the pavement and include municipal utility, pedestrian facility and street lighting improvements in accordance with the current Village standard guidelines for this type of project. Chase Lane is the first phase of five planned phases within the Lombard Meadows area as outlined in the Village's FY 12 to FY 21 Capital Improvement Plan, with funding coming from the Capital Project and Water/Sewer capital Reserve funds,

Civiltech's proposed design team has extensive experience completing multi phase improvements in residential neighborhoods including the Lombard Hill East projects and the Old Towne East projects. Our experience enables our designers to recognize and plan for work in adjacent future phases, and identify critical design elements as well as cost saving opportunities. The same core group of designers that completed the multiple phases of the aforementioned projects is targeted to serve the Village as part of Phase I of the Lombard Meadows project. We understand the importance and benefits of providing continuity of staff when it comes to knowledge and efficiency in completing the Village's projects, and will commit to maintain the level of responsive service that Lombard has come to expect from Civiltech's designers.

Civiltech has a successful history of identifying critical design elements up front during the Preliminary design stage in order to produce accurate scope of work and budget information that carries through the pre-final and final design stages of the project. Our experience having completed these types of projects for the Village gives our designers an edge over our competitors. The Preliminary PDR stage of the design will involve the identification and review of all critical design and project task elements to define the ultimate scope of work and cost:

- 1. Pavement Analysis and Design
- 2. Preliminary Geometric Design
- 3. Sidewalk/Pedestrian Facilities and ADA/PROWAG Compliance



- 4. Geotechnical Study, Pavement Cores and CCDD Compliance (work with Village's Consultant)
- 5. Condition and Capacity of Existing Storm and Sanitary Sewers
- 6. Watermain Replacement Strategies (incl. re-routing of existing 6 inch through ped. corridor)
- 7. Utility Structure Inventory
- 8. Identification and Evaluation of Problematic Drainage Locations
- 9. Inlet Spacing and Storm Sewer Design
- 10. Sanitary Sewer Improvements Alternative Analysis
- 11. Tree Condition and Impact Assessment
- 12. Construction Staging and Maintenance of Traffic
- 13. Private Utility Investigation and Conflict Assessment
- 14. Project Right-of-way Confirmation and Easement Requirements
- 15. Conceptual Street Lighting Design
- 16. DuPage County Countywide Stormwater and Flood Plain Ordinance Compliance
- 17. Future Lombard Meadows Phasing Compatibility Analysis
- 18. Public Involvement Plan
- 19. Preliminary Quantity Calculations and Estimates of Cost and Time

The above items are the critical tasks that our designers will focus on during the Preliminary Engineering stage of the project to establish the basis for proceeding with the contract plans, special provisions and estimates.

Utility improvements are anticipated to involve watermain, storm and sanitary sewers as well as the associated services within the Village right-of-way. Our experience with these types of projects dictates that an evaluation of the existing sewers will be required, and the Village will provide sewer videos for use in scoping the utility improvements as part of the Preliminary design stage. As is typical with most projects of this nature, additional inlet capacity will be provided as part of the improvements, and sewer extensions will be required to accomplish this goal. There is also a storm inlet connection to the sanitary sewer on Chase Court that will be connected to the storm sewer as part of the project. We will also review the right-of-way corridor to identify localized drainage problems, and will seek resident input during the design phase to resolve private property drainage concerns as appropriate. Parkway drainage does not generally appear to be a problem in the existing condition, and we will ensure that positive parkway drainage and acceptable driveway profiles are maintained when establishing the new roadway profile during the design of the improvements. One of the only sets of inlets on Chase Lane is located at the sag in the profile, which currently falls in the middle of driveways existing on each side of the roadway. One of our design goals will be to shift this low point so that it does not place inlets within the limits of the driveways. Stormwater detention is not anticipated to be required based on the scope of the project.

One of the project objectives will be to replace and abandon the current watermain connection that extends along the pedestrian corridor between 6 and 7 Chase Court and east to Ahrens Avenue. Alternatives will likely involve new main construction along Bradley Lane or through Park District property either north to Madison Street or north and then east back out to Ahrens Avenue. We will coordinate with the Village and Park District and provide the necessary information to secure any permanent easements required to construct alternative watermain connections. Jorgensen and Associates will prepare any easement documents required as part of the watermain realignment. Civiltech's designers are very experienced with watermain design for the Village based on past residential project experience as well as the Village's Roosevelt Road watermain project. We will not preclude the feasibility of lining the existing watermain as should conditions arise that makes a new connection along a new



alignment problematic for unforeseen reasons, or too expensive. The remaining 6 inch watermain in the project area will be upgraded to the Village's minimum standard of 8 inch with new services within the right-of-way.

The condition of the existing 8 inch sanitary sewer system including structures will be evaluated as part of the Preliminary design phase by reviewing video tapes and field inspections. The scope of sanitary sewer improvements will be determined based on our findings in conjunction with Village Underground Division input. Recommendations for rehabilitation or replacement will be made during the PDR stage of the project, and will include a review of service connections.

Thirty-seven properties will be directly affected by these improvements, with other stakeholders being neighborhood residents, Madison Meadow Park users, the Lombard Park District, school districts, churches, and local service providers such as garbage and mail. Civiltech will work with the Village to determine the necessary level of public outreach and involvement to obtain design input and prepare all stakeholders for the construction phase. We anticipate this to involve two design stage public meetings and various other coordination activities with the local government agencies.

One of the goals of this project will be to provide ADA/PROWAG compliant conditions. All components of the project will need to meet the requirements of the Americans with Disabilities Act, under the guidance of the Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way.

- A) Provide ADA compliant curb ramps Based on our field visit, the existing curb ramps do not have the current, standard detectable warnings (truncated domes) and do not meet ADA requirements. In addition, the curb ramps will need to be removed in order to construct the new curb and gutter.
  - Although IDOT has recently updated their Highway Standards to include several options for providing curb ramps, we believe it is in the best interest of the project to include detailed grading plans at each of the curb ramps. This will ensure that the grades proposed are less than the maximum allowed, and has the added benefit of making the layout of the sidewalk more straight-forward during construction, leading to fewer opportunities for the curb ramp to be constructed out of compliance.
- B) Provide ADA compliant driveway crossings The maximum allowable slope of the driveways within the area of the sidewalk crossing is 2%. We will review each driveway location, and if the slope is greater than 2%, a flatter area will be provided at the crossing location. If this flatter area cannot be achieved without the slope of the driveway exceeding the maximum allowed by the Village, a temporary easement will need to be provided to reduce the slope.
- C) Additional PROWAG requirements There are two other requirements that will affect the scope of sidewalk construction trip hazards (maximum of ¼" elevation difference between panels) and maximum cross slope (2%). We will field walk the sidewalk to determine what areas need to be replaced.



### 2. SCOPE OF SERVICES

### A. Preliminary Engineering Phase

The primary objective of the Preliminary Engineering Phase is to develop a conceptual improvement plan which fulfills all of the requirements for processing and funding of this project. The Preliminary Engineering services will meet the pertinent requirements of the Village of Lombard and IDOT standards and specifications, as applicable.

The following major work items will likely be required to complete the Preliminary Engineering phase of the project:

Item 1 - Initial Meeting with Village - This work item will include an initial meeting with the Village to determine what available data and record information exists that will be useful in the design process, and to discuss the project requirements in detail. We anticipate that the initial meeting will include members from the Village of Lombard Public Works, Engineering, and Underground Utilities divisions. The initial meeting with the Village will be the basis for development of an Itemized Scope and Task List.

Item 2 - Early Coordination and Data Collection - We will obtain and review available Village data including, but not limited to, subdivision plans and plats, record plans, previously completed geotechnical and pavement reports, right-of-way data, aerial photography and contour mapping, municipal utility atlases, and private utility atlases. In addition, the data collection for this project will include a complete photolog in order to document existing conditions for use during design.

Item 3 – Field Survey, Preparation of Base Sheets, and Structure Survey - The design survey for this project will be completed by Jorgensen and Associates as a sub-consultant to Civiltech. A full topographic survey within the right-of-way limits will be required. The survey will extend outside the right-of-way at driveway locations in the cases where easements are required. It will also extend approximately 10 feet outside of the right-of-way at intersection quadrants in case transition grading is required to meet ADA/PROWAG grading standards for sidewalk ramps.

We will prepare a structure inventory report which will include the type and condition for each manhole, drainage structure and valve vault within the project limits. This information will be used to assess the need for adjustment, reconstruction or replacement of these structures as part of the design phase. Pipe material, size and invert information will be collected for use in plotting utilities in the profile view, which will be required as part of obtaining the IEPA permits.

We will plot the existing topographic survey information and develop plan base sheets at a scale of 1" = 20' and 1" = 50' for use in the development of contract plans. Cross sections will be prepared at 50-foot intervals and will include full sections at intersections and high and low points along the roadway profile. Half width cross sections will be prepared at driveways and street intersections. Existing utility information that has been obtained during the data collection phase will also be plotted on the base sheets.

Once base sheets have been prepared, we will perform a "plan in hand" field check during which we will:

- Verify the completeness and accuracy of the design survey while familiarizing ourselves with the project area and any special conditions in the field.
- Review the project area for any problematic drainage conditions that can be remedied as part of this project.
- Prepare a detailed inventory of existing signage and any other topographic features which may impact
  or be impacted by the proposed design.



- Establish as accurately as possible, the locations of existing private utilities in the field using atlases
  obtained during the Data Collection and Early Coordination Phase.
- Photo document the project area for use during design.

Item 4 – Coordination with Geotechnical / Environmental Consultant – Civiltech will coordinate with the Village's Consultant to discuss the scope of their field work and ensure that the required information is obtained for design and preparation of contract plans and specifications.

Item 5 - Design Criteria and Preliminary Design Studies - Based on information obtained under items one through three above, we will develop relevant design criteria and standards for use in proceeding with the Preliminary Engineering stage of the Project. The Preliminary Engineering work will address the following:

- 1. Pavement Analysis and Design
- 2. Preliminary Geometric Design
- 3. Sidewalk/Pedestrian Facilities and ADA/PROWAG Compliance
- 4. Geotechnical Study, Pavement Cores and CCDD Compliance (work with Village's Consultant)
- 5. Condition and Capacity of Existing Storm and Sanitary Sewers
- 6. Watermain Replacement Strategies (includes re-routing of existing 6 inch through pedestrian corridor)
- 7. Utility Structure Inventory
- 8. Identification and Evaluation of Problematic Drainage Locations
- 9. Inlet Spacing and Storm Sewer Design
- 10. Sanitary Sewer Improvements Alternative Analysis
- 11. Tree Condition and Impact Assessment
- 12. Construction Staging and Maintenance of Traffic
- 13. Private Utility Investigation and Conflict Assessment
- 14. Project Right-of-way Confirmation and Easement Requirements
- 15. Conceptual Street Lighting Design
- 16. DuPage County Countywide Stormwater and Flood Plain Ordinance Compliance
- 17. Future Lombard Meadows Phasing Compatibility Analysis
- 18. Public Involvement Plan
- 19. Preliminary Quantity Calculations and Estimates of Cost and Time

Based on the established design criteria and standards, we will prepare a Project Development Report (PDR) that will consist of a technical memorandum addressing the above listed design—components of the Project. Furthermore, we anticipate the development of various design—exhibits for inclusion in the PDR. The prefinal report will be submitted to the Village for review—and comment. We anticipate meeting with the Village to discuss any review comments and—design issues prior to finalizing the report.

Item 6 - Finalize Project Development Report - Based on the Village's review, we will finalize the PDR, which will serve as the basis for the Design Engineering Phase of the Project. The final report will be submitted to the Village Public Works and Engineering Staff, and if required, presented to the Board of Trustees.



### B. Design Engineering Phase

Once the design report has been approved, we will proceed with the Design Phase. This phase of the project will consist of the preparation of contract plans and specifications for the construction of the improvements. The following major work items are anticipated to complete the Design Engineering Phase of this project:

Item 1 - Preliminary and Pre-Final Contract Plans - Based on the findings of the Preliminary Engineering Phase described above, we will prepare preliminary (65%), pre-final (95%), and QA/QC contract plans -. We anticipate that the plans will likely contain the following drawings:

Title Sheet and Index of Sheets (1 sheet)

Summary of Quantities (2 sheets)

Schedule of Quantities (4 sheets)

General Notes and State/Village Standards (1 sheet)

Existing and Proposed Typical Sections (1 sheet)

Alignment, Ties and Benchmarks (1"=50') (1 sheet)

Construction Staging Plan (1"=50') (2 sheets)

Roadway Plan and Profile (1" = 20') (4 sheets)

Drainage and Utility Plan and Profile (1"=20') (5 sheets)

Intersection Grading Details (1"=10') (3 sheets)

Erosion Control and Landscaping (1"=50") (1 sheet)

Cross Sections (1"=10'H: 1"=5'V) (8 Sheets)

Construction Details (3 sheets)

Lighting Plans (1"=20) (2 sheets)

Lighting Circuit Diagram (1 sheet)

Lighting Details (2 sheets)

Detailed quantity calculations will be performed at all milestone stages of the project in order to develop an accurate Engineer's Estimate of Cost. An Estimate of Construction Time will also be prepared.

Detailed special provisions supplementing the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2012 by the Illinois Department of Transportation, will be prepared. All work will be in accordance with Village Standards and Specifications and the 2009 Standard Specifications for Water and Sewer Construction in Illinois. A bid booklet will be developed using Village standard forms for the bidding documents, including notice to bidders, bid bond, contract and contract bond, schedule of prices, signature sheets, and the project special provisions.

We will also submit the contract plans to the various utility companies. The Preliminary submittal will sufficiently define the conflicts so that the utility companies can, at a minimum, perform the necessary engineering for any required utility relocations. This allows relocations to be performed in advance of the actual construction. Civiltech will perform the necessary coordination with the utility companies and follow up as needed on each of our submittals to ensure that no utility company is ignoring the project.

Item 2 – IEPA Project Permitting – We will submit the plans and special provisions to the IEPA upon resolution of Preliminary plan comments received from the Village and IDOT in order to initiate the IEPA permit review process, and ultimately obtain a permit for each phase of the project.



Item 3 Pre-final QC/QA Review - Prior to submission of the pre-final plans for review, we will perform an internal Quality Control / Quality Assurance review of the work completed in accordance with Civiltech's internal Design Engineering Quality Control / Quality Assurance Plan. The review will be performed by a professional engineer independent of the design team. The review willconsider constructability issues as well as identification of missing pay items, quantities of work, and special provisions required. The design team will also perform a "plan-in-hand" field check to confirm the existing conditions and design.

Item 4 - Submittals and Coordination - This item includes all reviews and meetings with the Village to obtain final plan and permit approval. An initial submittal of the 65% contract plans will be made to the Village to ensure the goals and requirements of the approved PDR are being followed. Once the contract plans and supporting documents have been completed to a pre-final (95% complete) stage, plans, specifications, and estimates will be submitted to the Village. We will also issue a QA/QC set of contract documents to the Village prior to the Final P, S & E stage.

Civiltech will also assist the Village with Park District coordination and communication, and prepare exhibits as required to address any impacts to Madison Meadow Park. With direction from the Village, we will also submit the plans to the Park District in efforts to communicate details about the project.

Item 6 - Utility Company Coordination - As noted above, we will analyze the project for potential impacts to existing utilities. We will provide the utility companies with a list of areas of potential conflict so that additional information, such as horizontal locates or depth borings, can be obtained where necessary to further define the extent of conflicts. We will first attempt to address utility conflicts through design modifications while considering the impact those changes will have on the overall improvement.

Should any utility relocation work be necessary, we will work with the utilities as they develop relocations plans, provide them with electronic files when requested and review those plans when they are submitted. We will meet with the utility companies when required to assist in the conflict resolution.

Item 5 – Public Meetings and Coordination – Civiltech will work closely with the Village to develop a Public Involvement plan that successfully gathers and disseminates the necessary information to the project stakeholders. Civiltech will work with the Village to identify the stakeholders, define the objectives of the public involvement phase of the work, and develop the necessary communication strategies and tools. Civiltech will attend, assist with organizing and lead all public meetings. We will make the necessary presentations and prepare any required exhibits.

It is anticipated that meetings may be held during the Preliminary stage of the design to collect information and input from residents, and then once again during the final design stage to prepare the stakeholders and residents for what to expect during construction.

Item 6 - Final QC/QA Review - Prior to the final submittal a second QC/QA review of the plans and special provisions will be performed, in accordance with Civiltech's internal Design Engineering Quality Control / Quality Assurance Plan.

Item 7 - Final (100%) Plans, Special Provisions/Bid Booklet and Estimates - After completion of the Village's review and resolution of other concerns the contract plans, special provisions, bid booklet and Engineer's Estimate of Cost and Time will be finalized. We will furnish the Village the appropriate number of copies of the plans and special provisions along with the electronic drawing and .pdf files.



### 3. PROJECT SCHEDULE

Notice to Proceed May 7, 2013 Draft PDR Submittal August 5, 2013 Final PDR Submittal September 16, 2013 Preliminary (65%) Plan Submittal October 14, 2013 Pre-Final (95%) P, S & E Submittal December 2, 2013 QC/QA Submittal January 13, 2014 Final (100%) P, S & E Submittal January 27, 2014 **Bid Opening** February 21, 2014



# **Cost Estimate of Consultant Services**

Director of Project Design Manager Services Services 565.00 S47.00	Project Engineer \$37.75	Design Engineer \$29.75	Lighting Engineer \$34.00	Design Technician \$25.50	QC/QA Engineer \$65.00	Total	% of	
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								6400 000
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### **Direct Costs**

DIRECT COSTS		
iTEM 1 - Printing		
Pre-Final PDR		
Village 7 books X \$20/book		\$140.00
Final PDR		
Village 7 books X \$20/book		\$140.00
Preliminary Plans		
Village 7 sets X 41 sheets/set X \$0.60/sheet		\$172.20
Utility Co. 8 sets X 41 sheets/set X \$0.60/sheet		\$196.80
Pre-Final Plans		
Village 7 sets X 41 sheets/set X \$0.60/sheet		\$172.20
Utility Co. 8 sets X 41 sheets/set X \$0.60/sheet		\$196.80
Pre-Final Specification Books		
Village 7 books X \$20/book		\$140.00
QC/QA Plans		
Village 7 sets X 41 sheets/set X \$0.60/sheet		\$172.20
Utility Co. 8 sets X 41 sheets/set X \$0.60/sheet		\$196.80
QC/QA Specification Books		
Village 7 books X \$20/book		\$140.00
Finai Plans		
Village 7 sets X 41 sheets/set X \$0.60/sheet		\$172.20
Utility Co. 8 sets X 41 sheets/set X \$0.60/sheet		\$196.80
Final Specification Books		
Village 7 books X \$20/book		\$140.00
	Total Item 1	\$2,176.00
ITEM 2 - Shipping		
25 overnight shipping items X \$25/each		\$625.00
	Total Item 2	\$625.00
ITEM 3 - Vehicle Expense	Company Control Acres	THE TAX PROPERTY OF THE
Mileage		
10 trips x 30 miles per trip x \$0.565/mile		\$169.50
	Total Item 3	\$169.50
ITEM 4 - Supplemental Topographic Survey		
(to be completed by Jorgensen and Associates, Inc.)		
	Total Item 4	\$18,271.05
ITEM 5 - Topographic Survey and Easement Documents for		
(to be completed by Jorgensen and Associates, Inc.)		
	Total Item 5	\$7,084.45
TOTAL DIR	ECT EXPENSES:	\$28,326.00



April 3, 2013

Mr. David J. Kreeger, P.E. Civiltech Engineering, Inc. 450 East Devon Avenue Suite 300 Itasca, Illinois 60143

Re: Village of Lombard - Lombard Meadows Phase 1 Survey Proposal

Dear Mr. Kreeger:

Enclosed, please find our proposal to prepare a topographic survey for the referenced project.

I would like to thank you for considering Jorgensen & Associates for this project. We look forward to continuing our working relationship with your firm. Should you have any questions, comments or require any further information concerning our proposal, please feel free to call me at (847)356-3371.

Respectfully submitted, Jorgensen & Associates, Inc.

Christian H. Jorgensen, P.L.S.

President

CHJ/pt

**Enclosures** 

E:\Civiltech\Lombard\Chase Lane\LTR

Chase Lane

Section:

Lombard Meadows Phase 1

County:

DuPage

Job No.:

### Exhibit "A"

### Hourly Rate Range - Consultant's Regular Staff

Classification	<u>From</u>	<u>To</u>
Principal, Manager, P.L.S.	40.00	42.00
Supervisor, Project Surveyor	38.00	40.00
Cadd Supervisor, Survey Party Chief, S.I.T., Survey Party Chief	21.50	28.50
Instrument Operator, Cadd Operator, assignable Clerical and Secretarial Labor	14.00	20.00

Chase Lane

Section:

Lombard Meadows Phase 1

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### Exhibit "B"

### Payroll Burden & Fringe Costs

	% of Direct Productive Payroll
Federal Insurance Contributions Act	11.71%
State Unemployment Compensation	1.81%
Federal Unemployment Compensation	0.16%
Workmen's Compensation Insurance	1.88%
Paid Holidays, Vacation, Sick Leave, Personal Leave	12.20%
Bonus	5.05%
Pension	0.87%
Group Insurance	<u>36.25%</u>
Total Payroll Burden & Fringe Costs	69.93%

Chase Lane

Section:

Lombard Meadows Phase 1

County:

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Job No.:

### Exhibit "C"

### Overhead and Indirect Costs

	% of Direct Productive <u>Payroll</u>
Business Insurance	4.70%
Depreciation	14.08%
Indirect wages and salaries	42.12%
Reproductive and printing costs	0.19%
Office Supplies	3.93%
Computer Costs	1.27%
Professional Fees	1.64%
Telephone	2.06%
Fees, license & dues	
Repairs and maintenance	0.50%
Business space rent	
Facilities - capital	
Travel - Meals	
Survey Supplies	
Automobile/travel expense	5.39%
Equipment Rental	
Miscellaneous Expense	
State Income Tax	
Postage	0.24%
Educational & Professional Registrations	0.96%
Total Overhead	89.78%

Chase Lane

Section:

Lombard Meadows Phase 1

County:

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Job No.:

### Exhibit "D"

### Classification Types & Rates

### Sheet 1 of 2

- A. Principal/Officer
- B. Supervisor, P.L.S.
- C. Survey Party Chief, S.I.T.
- D. Instrument Operator
- E. Cadd Supervisor

### Classification Rates used for Calculation of Fee

A.	Principal/Officer	\$ <b>42.0</b> 0
B.	Supervisor, P.L.S.	\$ 40.00
C.	Survey Party Chief, S.I.T.	\$ 22.00
D.	Instrument Operator	\$ 18.25
E.	Cadd Supervisor	\$ 27.50

Chase Lane

Section:

Lombard Meadows Phase 1

County:

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Job No.:

### Exhibit "D"

### **Average Hourly Rate Calculation**

### Sheet 2 of 2

Principal/Officer	2 hours	@ \$42.00/hour	=	\$	84.00
Supervisor, P.L.S.	26 hours	@ \$40.00/hour	=	\$	1,040.00
Survey Party Chief, S.I.T.	81 hours	@ \$22.00/hour	=	\$	1,782.00
Instrument Operator	81 hours	@ \$18.25/hour	=	\$	1,478.25
Cadd Supervisor	58 hours	@ \$27.50/hour	=	<u>\$</u>	1,595.00
	248 hours			\$	5,979.25

Average Hourly Rate =  $\frac{$5,979.25}{248}$  = \$24.11/hour

Chase Lane Lombard Meadows Phase 1

DuPage Route: Section: Project: County: Job No.:

# COST ESTIMATE OF CONSULTANT'S SERVICES

Consultant: Jorgensen & Associates, Inc.
Date: April 3, 2013
Description: Topographic Survey
Cost Plus Fixed Fee = 14.5%[(2.3 + R) DL + IHDC]

Item	Number of Man Hours (A)	Payroll (B)	Overhead & Fringe Benefits (C)	In-House Direct Costs (D)	Sub-Total	Profit (F)	Services By Others	Total	Percent of Grand Total
1) Field - Topographic Survey	162	\$3,260.25	\$5,206.95	\$550.00	\$9,017.20	\$1,167.04	N/A	\$10,184.24	55.74%
2) Office - Compile Field Data	34	\$1,160.00	\$1,852.64	\$65.00	\$3,077.64	\$396.29	N/A	\$3,473.92	10.61
3) Office - Create Topography Base Sheets	4 2	\$1,230.00	\$1,964,43	\$0.00	\$3,194.43	\$410.21	N/A	\$3,604.64	19.73\$
4) Office - Create T.I.N. & Contours	60	\$245.00	\$391.29	\$0.00	\$636.29	\$81.71	N/A	\$718.00	3.93%
5) Coordination Meetings	2	\$84.00	\$134.16	\$38.50	\$256.66	\$33.60	N/A	\$290.25	1.59
	248	\$5,979.25	\$9,549.46	\$653.50	\$653.50 \$16,182.21	\$2,088.84	\$0.00	\$0.00 \$18,271.05	100.00\$

Chase Lane

Section:

Lombard Meadows Phase 1

County:

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Job No.:

### Manhour Breakdown **Topographic Survey Estimate**

Chase Lane

 $\pm 1,200' = \pm 0.227$  mile

Chase Court & Easement  $\pm$  580' =  $\pm$  0.110 mile

Bradley Lane

 $\pm$  400' =  $\pm$  0.076 mile

Total Length

 $\pm 2,180' = \pm 0.413$  mile

### 1. Field – Topographic Survey

a. Measure traverse & level circuit

17 hours x 2 men = 1

34 MH

b. Locate existing R.O.W. & property line occupation

20 hours x 2 men =

40 MH

c. Locate existing topography

44 hours x 2 men =

88 MH

Sub-total Item #1 162 MH

### 2. Office - Compile Field Data

a. Compute traverse & level circuit

 $3 \text{ hours } \times 1 \text{ man} =$ 

3 MH

b. Research records

4 hours x 1 man =

4 MH

c. Compute existing R.O.W. lines

18 hours x 1 man =

18 MH

d. Edit & compile topographic survey

9 hours x 1 man =

9 MH

Sub-total Item #2

34 MH

3	Office -	Create	Topography	<b>Base Sheets</b>
┛.	Office .	Cicate	Topograpity	Dasc Directs

a. Layout and drafting existing topography 36 hours x 1 man =

36 MH

b. Check topographic survey 6 hours x 1 man =

6 MH

Sub-total Item #3

42 MH

### 4. Office - Create T.I.N. & Contours

a. Compute contours 6 hours x 1 man =

6 MH

b. Check contours 2 hours x 1 man =

2 MH

Sub-total Item #4

8 MH

5. Coordination Meetings 1 meeting @ 2 hours =

2 MH

Total All Items

248 MH

Chase Lane

Section:

Lombard Meadows Phase 1

County:

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Job No.:

### Manhour Breakdown By Item

<u>Ite</u>	<u>m</u>	Classification	<u>Manhours</u>
1.	Field – Topography	Survey Party Chief, S.I.T.	81
	Survey	Instrument Operator	81
2.	Office - Compile	Supervisor, P.L.S.	18
	Field Data	Cadd Supervisor	16
3.	Office – Create Topography	Supervisor, P.L.S.	6
	Base Sheets	Cadd Supervisor	36
4.	Office - Create T.I.N. and Contours	Supervisor, P.L.S. Cadd Supervisor	2 6
5.	Coordination Meetings	Principal/Officer	2

Chase Lane

Section:

Lombard Meadows Phase 1

County:

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Job No.:

### Breakdown of In House Direct Costs

### Item

### 1. Field - Topographic Survey

a. Trips to project site - 10 ea.
 ± 100 miles/trip x 10 trips = ± 1,000 miles
 ± 1,000 miles @ \$0.55/mile =

\$ 550.00

### 2. Office - Compile Field Data

a. Trips to County Recorder - 1 ea.
 ± 100 miles/trip x 1 trip = ± 100 miles

 $\pm$  100 miles @ \$0.55/mile =

\$ 55.00

b. Miscellaneous Subdivisions =

\$ 10.00

\$ 65.00

5. Coordination Meetings

a. Meetings at Civiltech's office - 1 ea.

 $\pm$  70 miles/trip x 1 trip =  $\pm$  70 miles

 $\pm$  70 miles @ \$0.55/mile =

\$ 38.50

Total All Items

Sub-total Item #2

\$ 653.50

Madison Meadows Park

Section:

Lombard Meadows Phase 1

County:

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Job No.:

### Exhibit "D"

### Classification Types & Rates

### Sheet 1 of 2

- A. Principal/Officer
- B. Supervisor, P.L.S.
- C. Survey Party Chief, S.I.T.
- D. Instrument Operator
- E. Cadd Supervisor

### Classification Rates used for Calculation of Fee

A.	Principal/Officer \$	42.00
B.	Supervisor, P.L.S \$	40.00
C.	Survey Party Chief, S.I.T \$	22.00
D.	Instrument Operator \$	18.25
	Cadd Supervisor\$	

Madison Meadows Park

Section:

Lombard Meadows Phase 1

County: Job No.:

DuPage

### Exhibit "D"

### **Average Hourly Rate Calculation**

### Sheet 2 of 2

Principal/Officer	2 hours	@ \$42.00/hour	=	\$	84.00
Supervisor, P.L.S.	13 hours	@ \$40.00/hour	=	\$	520.00
Survey Party Chief, S.I.T.	24 hours	@ \$22.00/hour	=	\$	528.00
Instrument Operator	24 hours	@ \$18.25/hour	=	\$	438.00
Cadd Supervisor	_27 hours	@ \$27.50/hour	=	<u>\$</u>	742.50
	90 hours			\$	2,312.50

Average Hourly Rate = 
$$\frac{$2,312.50}{90}$$
 = \$25.69/hour

Route: Section: Project: County: Job No.:

Madison Meadows Park Lombard Meadows Phase 1

DuPage

# COST ESTIMATE OF CONSULTANT'S SERVICES

Consultant: J Date: Description: 7

Jorgensen & Associates, Inc.
April 3, 2013
Topographic Survey & Plat of Easement
Cost Plus Fixed Fee = 14.5%[(2.3 + R)DL + IHDC)

Item	Number of Man Hours (A)	Payroll (B)	Overhead & Fringe Benefits (C)	In-House Direct Costs (D)	Sub-Total (E)	Profit (F)	Services By Others	Total	Percent of Grand Total
1) Field - Topographic Survey	48	\$966.00	\$1,542.80	\$165.00	\$2,673.80	\$346.09	N/A	\$3,019.88	42.63\$
2) Office - Compile Field Data	15	\$487.50	\$778.59	\$65.00	\$1,331.09	\$172.01	N/A	\$1,503.09	21.22\$
3) Office - Create Topography Base Sheets & Plat of Easement	22 it	\$680.00	\$1,086.03	\$0.00	\$1,766.03	\$226.78	N/A	\$1,992.81	28,13%
4) Office - Create T.I.N. & Contours	E.	\$95.00	\$151.72	\$0.00	\$246.72	\$31.68	N/A	\$278.41	3.93%
5) Coordination Meetings	2	\$84.00	\$134.16	\$38.50	\$256.66	\$33.60	N/A	\$290.25	4.10\$
TOTALS	06	\$2,312.50	\$3,693.29	\$268.50	\$268.50 \$6,274.29	\$810.15	\$0.00	\$0.00 \$7,084.45	100.00\$

Madison Meadows Park

Section:

Lombard Meadows Phase 1

County:

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Job No.:

## Manhour Breakdown Topographic Survey Estimate

Madison Meadows Park

 $\pm 700' = \pm 0.133 \text{ mile}$ 

Total Length

 $\pm 700' = \pm 0.133$  mile

### 1. Field - Topographic Survey

a. Measure traverse & level circuit

4 hours x 2 men =

8 MH

b. Locate existing R.O.W. & property line occupation

8 hours x 2 men =

16 MH

c. Locate existing topography

12 hours x 2 men =

24 MH

Sub-total Item #1

48 MH

### 2. Office - Compile Field Data

a. Compute traverse & level circuit

2 hours x 1 man =

2 MH

b. Research records

4 hours x 1 man =

4 MH

c. Compute existing R.O.W. & property lines

6 hours x 1 man =

6 MH

d. Edit & compile topographic survey

3 hours x 1 man =

3 MH

Sub-total Item #2

15 MH

3.	Office -	Create	Topography	Base	Sheets	&	Plat	of	Easement
----	----------	--------	------------	------	--------	---	------	----	----------

	<ul><li>a. Layout and drafting existing topography</li><li>10 hours x 1 man =</li></ul>		10 MH
	<ul><li>b. Check topographic survey</li><li>2 hours x 1 man =</li></ul>		2 MH
	<ul><li>c. Layout and drafting plat of easement</li><li>6 hours x 1 man =</li></ul>		6 MH
	d. Check plat of easement 2 hours x 1 man =		2 MH
	e. Write & check legal description proposed easement 2 hours x 1 man =		2 <u>MH</u>
		Sub-total Item #3	22 MH
4.	Office - Create T.I.N. & Contours		
	a. Compute contours 2 hours x 1 man =		2 MH
	b. Check contours 1 hour x 1 man =		1 <u>MH</u>
		Sub-total Item #4	3 MH
5.	Coordination Meetings 1 meeting @ 2 hours =		2 MH
		Total All Items	90 MH

Madison Meadows Park

Section:

Lombard Meadows Phase 1

County: Job No.:

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### Manhour Breakdown By Item

<u>Ite</u>	<u>m</u>	Classification	<u>Manhours</u>
1.	Field – Topography Survey	Survey Party Chief, S.I.T. Instrument Operator	24 24
2.	Office - Compile Field Data	Supervisor, P.L.S. Cadd Supervisor	6 9
3.	Office – Create Topography Base Sheets & Plat of Easement	Supervisor, P.L.S. Cadd Supervisor	6 16
4.	Office - Create T.I.N. and Contours	Supervisor, P.L.S. Cadd Supervisor	1 2
5.	Coordination Meetings	Principal/Officer	2

Madison Meadows Park

Section:

Lombard Meadows Phase 1

County:

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Job No.:

### Breakdown of In House Direct Costs

### Item

### 1. Field - Topographic Survey

a. Trips to project site - 3 ea.
 ± 100 miles/trip x 3 trips = ± 300 miles

± 300 miles @ \$0.55/mile =

\$ 165.00

### 2. Office - Compile Field Data

a. Trips to County Recorder - 1 ea.

 $\pm$  100 miles/trip x 1 trip =  $\pm$  100 miles

± 100 miles @ \$0.55/mile =

\$ 55.00

b. Miscellaneous Subdivisions =

10.00

Sub-total Item #2

\$ 65.00

### 5. Coordination Meetings

a. Meetings at Civiltech's office - 1 ea.

 $\pm$  70 miles/trip x 1 trip =  $\pm$  70 miles

± 70 miles @ \$0.55/mile =

\$ 38.50

Total All Items

\$ 268.50