Legistar: 140126

DISTRICT - 6

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: March 25, 2014 (COW) (B of T) **Date:** April 3, 2014

TITLE: Lombard Meadows - Phase II
Design Engineering

SUBMITTED BY: David A. Dratnol, P.E., Village Engineer

BACKGROUND/POLICY IMPLICATIONS:

CIP reconstruction project including watermain replacement, storm and sanitary sewer improvements, and street lighting upgrade to LED lighting.

FISCAL IMPACT/FUNDING SOURCE:

Total Contract Amount: $199,535
Project Number: ST 14 03 Design Eng.
Account: Capital Project Fund: 410.710.725.75410 ($152,600)
Water/Sewer Capital Reserve: 520.790.715.75420 ($87,900)

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.

AGENDA.DOC

Legistar: 140126

To:	Scott Niehaus, Village Manager
Through:	Carl S. Goldsmith, Director of Public Works
From:	David A. Dratnol, P.E., Village Engineer
Date:	March 25, 2014
Subject:	Lombard Meadows – Phase II Design Engineering Contract

The current Capital Improvement Plan (CIP) has the first phase of Lombard Meadows Phase II programmed for Fiscal Years (FY) 14 and 15. The project comprises the reconstruction of Lilac Way from Lombard Circle to its terminus at Madison Meadows Park and Lodge Lane from Lilac Way to its terminus at Madison Meadows Park. 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 included in the Village's Design Engineering short list of firms request for qualifications and proposal. Civiltech Engineering, Inc. (Civiltech) was chosen as the most qualified firm. Civiltech was the design engineer for the Olde Towne East project, Finley Road Whitetopping project and 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 $199,535. The engineering costs will be paid through the Capital Project Fund and the Sewer and Water Capital Reserve Fund. The current CIP budgets $240,500 in FY 2014 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 3, 2014. If approved, please return two original signed copies of the agreement to Public Works-Engineering for further processing.

DAD/pfk

RESOLUTION
R_____14

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 – Phase II (Lilac Way and Lodge Lane) 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 April, 2014.

Ayes;_____

Nays:_____

Absent:_____

Approved this 3rd day of April, 2014.

_____
Keith Giagnorio
Village President

ATTEST:

_____
Janet Downer
Deputy Village Clerk

VILLAGE OF LOMBARD
CONTRACT

CONTRACT DOCUMENT NUMBER ST-14-03

This agreement is made this 3rd day of April, 2014, 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:

Design Engineering Services for the Lombard Meadows – Phase II 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 December 13, 2013

   b. ENGINEER'S Statement of Qualifications and Proposal Dated January 24, 2014

   c. ENGINEER'S Revised Scope and Work Effort and Fee submittal Dated March 17, 2014

   d. 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 ENGINEER have hereunto set their hands this 3rd day of April, 2014.

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_____, 2014.

Individual or Partnership _____ Corporation _____

_____

By Position/Title

_____

By Position/Title

THE VILLAGE OF LOMBARD, ILLINOIS

Accepted this 3rd day of April, 2014.

_____

Keith Giagnorio
Village President

Attest:_____

Janet Downer
DeputyVillage Clerk

VILLAGE OF LOMBARD
ENGINEER'S CERTIFICATION

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

Civiltech Engineering Inc., having submitted a proposal for: Lombard Meadows – Phase II 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 _____, 2014.

_____
Notary Public

Proposal to Furnish
Design Engineering Services
Lombard Meadows Phase II

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.

1. 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, information conveyed at the Question and Answer session held at the Village of Lombard Public Works Department, **and the phone conversation between Mr. David Dratnol and Mr. Jon Vana on March 7, 2014.** Our team is also the best choice to complete this project for the Village because of our experience completing Phase I of the Lombard Meadows Reconstruction. Our project team will bring continuity of design knowledge and experience to most efficiently complete the design of this Phase of the Lombard Meadows project.

Phase II of the Lombard Meadows reconstruction project involves the reconstruction of Lodge Lane and Lilac Way, including the cul-de-sac on the south side of Lilac Way. These roadways connect to Bradley Lane, which is under the jurisdiction of the Lombard Park District and serves as primary access to Madison Meadows Park. **As discussed on the phone, Bradley Lane will also be resurfaced as part of this project.** The park is home to several recreational activities and Village events that need to be taken into account when designing construction staging and schedules. Civiltech successfully coordinated with the Lombard Park District as part Phase I of the Lombard Meadows project, and also 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.

Lodge Lane and Lilac Way are hot mix asphalt roadways that have reached the end of their useful life, and are 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. Watermain replacement and sanitary sewer replacement and/or rehabilitation will are also anticipated to be included. This is the second phase of five total phases within the Lombard Meadows area as outlined in the Village's FY 13 to FY 22 Capital Improvement Plan, with funding coming from the Capital Project and Water/Sewer capital Reserve funds. The construction cost is estimated at $2,624,700 in the C.I.P.

Civiltech will commit to maintain continuity of staff with the design team if selected by the Village to complete this project. That team includes Dave Kreeger, Kristin Kalitowski and Shirley Choi. Jeff Tomasek also served as a Design Engineer on Phase I of Lombard Meadows, and he will continue to assist the design team. We will apply our local project area knowledge and expertise that was gained on Chase Lane and Chase Court during the design of Phase II of Lombard Meadows. This will benefit various elements of the design process including roadway and utilities, potential unsuitable sub-grade soil conditions, street lighting and will ensure public involvement consistencies. 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. Our local knowledge not

only helps us efficiently complete design work, it also maintains consistencies and relationships with the Public Involvement efforts. This 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.

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
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 (Consider impacts to previous/future stages)
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. Overall 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. A key element that Civiltech will discuss with the Village during the project scoping stage will be the need for an overall master utility plan for the Lombard Meadows area. Although not always necessary, benefits may be realized considering that this is the first of four more improvement phases in the Lombard Meadows area. Where the benefit is realized are at project interfaces between phases. This allows decisions about interim and/or permit utility connections and paving strategies at Phase limits to be made with the utmost knowledge and confidence that minimizes unnecessary re-work. Establishing alignments and sizes of all utilities on a sound preliminary basis ensures that conflicts will not arise as the improvements are constructed through the project area in future years. **As discussed on the phone, an overall utility plan will NOT be included in the scope of this project.**

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. This Phase of Lombard Meadows also includes the main drainage connection to the pond in Madison Meadows Park, and is a critical link in the overall Lombard Meadows drainage system. 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 except in a few isolated locations, 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. Parkway and driveway grades, especially along Lilac Way, are very flat, and any increase in profile elevation would result in undesirable back-pitched areas. Stormwater detention is not anticipated to be required based on the scope of the project.

The condition of the existing 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.

Watermain improvements will include the replacement of the existing system, including interim connections at limits of future phases. These interim connection conditions can be challenging design evaluations and strategies, and our team's expertise having completed numerous Village milti-phased residential projects will ensure that the best decisions are made at the interface of future phases. Phase II will also interface with Phase I at the intersection of Lilac Way and Chase Lane, and Civiltech possesses the most knowledge of the conditions that will be coordinated at this location.

Fifty-two 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 design stage and pre-construction pubic meetings and various other coordination activities with the local government agencies consistent with efforts expended with Lombard Meadows Phase I.

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. Consideration will be given to unsuitable sub-grade findings from Phase I of Lombard Meadows when scoping the geotechnical investigation effort with the Village.

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
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 (Consider impacts to previous/future stages)
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. Overall 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 pre-final 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') (6 sheets)
Resurfacing Plan (1"=20') (Dual View) (1 sheet)
Drainage and Utility Plan and Profile (1"=20') (6 sheets)
Intersection Grading Details (1"=10') (3 sheets)
Erosion Control and Landscaping (1"=50') (1 sheet)
Cross Sections (1"=10'H : 1"=5'V) (10 Sheets)
Street Lighting General Notes (1 sheet)
Street Lighting Plans (1"=20') (6 sheets)
Existing Wiring Diagram (1 sheet)
Proposed Wiring Diagram (1 sheet)
Lighting Details (3 sheets)
Construction Details (3 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 QA/QC Review - Prior to submission of the pre-final plans for review, we will perform an internal Quality Assurance / Quality Control review of the work completed in accordance with Civiltech's internal Design Engineering Quality Assurance / Quality Control Plan. The review will be performed by a professional engineer independent of the design team. The review will consider 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 5 - 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 6 – 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 7 - Final QA/QC Review - Prior to the final submittal a second QA/QC review of the plans and special provisions will be performed, in accordance with Civiltech's internal Design Engineering Quality Assurance / Quality Control Plan.

Item 8 - 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	April 7, 2014
Draft PDR Submittal	August 1, 2014
Final PDR Submittal	September 8, 2014
Preliminary (65%) Plan Submittal	September 8, 2014
Pre-Final (95%) P, S & E Submittal	November 7, 2014
QC/QA Submittal	December 12, 2014
Final (100%) P, S & E Submittal	January 7, 2015
Bid Opening	February 24, 2015

Cost Estimate of Consultant Services

	Personnel & Hours									
	Director of Design Services	Project Manager	Project Engineer	Design Engineer	Lighting Engineer	Design Technician	QC/QA Engineer	Total Hours	% of Hours	Labor Cost
	$70.00	$50.50	$40.00	$33.50	$36.00	$27.00	$70.00			
1 Preliminary Engineering Phase										
	14	74	178	185	14	32	2	499	30.9%	$19,542.50
2 Design Engineering Phase										
	39	129	311	340	98	183	16	1116	69.1%	$42,663.50
Total Labor Cost										$62,206.00
Multiplier = 2.75										$171,067
Direct Costs and Sub Consultant Expense (See attached calculation)										$28,468
							Total Engineering Cost:	**1615**	**100.0%**	**$199,535**

Manhours (page 1 of 2)

Task No.	Task	Personnel & Hours							Total Hours	% of Hours
		Director of Design Services	Project Manager	Project Engineer	Design Engineer	Lighting Engineer	Design Technician	QC QA Engineer		
A.	**Preliminary Engineering Phase**									
1	Initial Meeting with Village		2	3					5	1.0%
2	Early Coordination and Data Collection		2	4		2			8	1.6%
3	Field Survey, Preparation of Base Sheets, and Structure Survey									
	Base Sheet Preparation		1	4	8		16		29	5.8%
	Field Verification of Survey Data and Project Walk-thru		6	6	6				18	3.6%
	Utility Structure Inspections			8	16				24	4.8%
	Project Photolog			2					2	0.4%
4	Coordination with Geotechnical / Environmental Consultant		2	4					6	1.2%
5	Design Criteria and Preliminary Design Studies									
	Pavement Analysis and Design		1	1					2	0.4%
	Preliminary Geometric Design	2	8	24	16		8		58	11.6%
	Sidewalk/Pedestrian Facilities and ADA/PROWAG Compliance		4	8	12				24	4.8%
	Geotechnical Study, Pavement Cores and CCDD Compliance		2	2					4	0.8%
	Condition and Capacity of Existing Storm and Sanitary Sewers		2	12	16				30	6.0%
	Watermain Replacement Strategies	2	6	6					14	2.8%
	Utility Structure Inventory			2	2				4	0.8%
	Identification and Evaluation of Problematic Drainage Locations	2	4	16	24				46	9.2%
	Inlet Spacing and Storm Sewer Design	2	6	24	40				72	14.4%
	Sanitary Sewer Improvements Alternative Analysis	1	2	4	4				11	2.2%
	Tree Condition and Impact Analysis		1	2	3				6	1.2%
	Construction Staging and Maintenance of Traffic		2	4	2				8	1.6%
	Private Utility Investigation and Conflict Assessment		1	2	6				9	1.8%
	Project Right-of-Way Confirmation and Easement Requirements		2	4					6	1.2%
	Conceptual Street Lighting Design		2			12	4		18	3.6%
	DuPage County Countywide Stormwater and Flood Plain Ordinance Compliance		2	2	2				6	1.2%
	Overall Lombard Meadows Phasing Compatibility Analysis	2	4	6	4				16	3.2%
	Public Involvement Plan	1	2						3	0.6%
	Preliminary Quantity Calculations and Estimates of Cost and Time		2	16	16				34	6.8%
6	Finalize Project Development Report	2	8	12	8		4	2	36	7.2%
	Sub-total Item A	**14**	**74**	**178**	**186**	**14**	**32**	**2**	**499**	**100.0%**

Manhours (page 2 of 2)

Task No.	Task	Personnel & Hours: Director of Design Services	Project Manager	Project Engineer	Design Engineer	Lighting Engineer	Design Technician	QC QA Engineer	Total Hours	% of Hours
B	**Design Engineering Phase**									
1	Preliminary and Pre-Final Contract Plans									
	Title Sheet and Index of Sheets (1 sheet)		1		1		2		4	0.4%
	Summary of Quantities (2 sheets)			1	2		2		5	0.4%
	Schedule of Quantities (4 sheets)		1	2	4		2		9	0.8%
	General Notes and State/Village Standards (2 sheets)		1		1		1		3	0.3%
	Existing and Proposed Typical Sections (1 sheet)	1	2	4	4		4		15	1.3%
	Alignment, Ties and Benchmarks (1"=50') (1 sheet)		1	2	4		4		11	1.0%
	Construction Staging Plan (1"=50') (2 sheets)	1	4	8	8		12		33	3.0%
	Roadway Plan and Profile (1"=20') (6 sheets)	4	12	48	64		24		152	13.6%
	Resurfacing Plan (1"=20') (Dual View) (1 sheet)		2	4	8		4		18	1.6%
	Drainage and Utility Plan and Profile (1"=20') (6 sheets)	4	16	48	64		32		164	14.7%
	Intersection Grading Details (1"=10') (3 sheets)	2	4	16	8		8		38	3.4%
	Erosion Control and Landscaping (1"=50') (1 sheet)		2	4	8		4		18	1.6%
	Cross Sections (1"=10'H : 1"=5'V) (10 sheets)	2	16	32	60		32		142	12.7%
	Street Lighting General Notes (1 sheet)					3			3	0.3%
	Street Lighting Plans (1"=20') (6 sheets)		2			36	12		50	4.5%
	Existing Wiring Diagram (1 sheet)		1			8	4		13	1.2%
	Proposed Wiring Diagram (1 sheet)		1			12	4		17	1.5%
	Lighting Details (3 sheets)		1			4	4		9	0.8%
	Construction Details (3 sheets)		2	2	4		4		12	1.1%
	Special Provisions and Bid Book		8	16		6			30	2.7%
	Quantity Calculations	2	2	40	40	8			92	8.2%
	Estimate of Construction Cost and Time		2			1			3	0.3%
2	IEPA Project Permitting		2	4					6	0.5%
3	Pre-final QA/QC Review	8						8	16	1.4%
4	Submittals and Coordination		8	8	8	4			28	2.5%
5	Utility Company Coordination		4	16	4	4			28	2.5%
6	Public Meeting and Coordination	4	8	8	4				24	2.2%
7	Final QA/QC Review	8						8	16	1.4%
8	Final (100%) Plans, Special Provisions/Bid Booklet and Estimates									
	Final Plans	2	16	32	32	8	24		114	10.2%
	Final Special Provisions and Bid Book	1	8	4		2			15	1.3%
	Final Quantity Calculations			12	12	2			26	2.3%
	Final Estimate of Construction Cost and Time		2						2	0.2%
	Sub-total Item B	**39**	**129**	**311**	**340**	**98**	**183**	**16**	**1116**	**100.0%**
	Total Hours:	**63**	**203**	**489**	**525**	**112**	**215**	**18**	**1615**	
	% of Hours:	**3.3%**	**12.6%**	**30.3%**	**32.6%**	**6.9%**	**13.3%**	**1.1%**	**100.0%**	

Direct Costs

ITEM 1 - Printing		
Pre-Final PDR		
Village 5 books X $20/book		$100.00
Final PDR		
Village 5 books X $20/book		$100.00
Preliminary Plans		
Village 5 sets X 55 sheets/set X $0.60/sheet		$165.00
Utility Co. 8 sets X 55 sheets/set X $0.60/sheet		$264.00
Pre-Final Plans		
Village 5 sets X 55 sheets/set X $0.60/sheet		$165.00
Utility Co. 8 sets X 55 sheets/set X $0.60/sheet		$264.00
Pre-Final Specification Books		
Village 5 books X $20/book		$100.00
QC/QA Plans		
Village 5 sets X 55 sheets/set X $0.60/sheet		$165.00
Utility Co. 8 sets X 55 sheets/set X $0.60/sheet		$264.00
QC/QA Specification Books		
Village 5 books X $20/book		$100.00
Final Plans		
Village 10 sets X 55 sheets/set X $0.60/sheet		$330.00
Utility Co. 8 sets X 55 sheets/set X $0.60/sheet		$264.00
Final Specification Books		
Village 10 books X $20/book		$200.00
	Total Item 1	**$2,481.00**
ITEM 2 - Shipping		
25 overnight shipping items X $25/each		$625.00
	Total Item 2	**$625.00**
ITEM 3 - Vehicle Expense		
Mileage		
10 trips x 30 miles per trip x $0.56/mile		$168.00
	Total Item 3	**$168.00**
ITEM 4 - Supplemental Topographic Survey		
(to be completed by Jorgensen and Associates, Inc.)		
	Total Item 4	**$22,543.07**
ITEM 5 - Plat of Dedication		
(to be completed by Jorgensen and Associates, Inc.)		
	Total Item 5	**$2,651.38**
	TOTAL DIRECT EXPENSES:	$28,468.45

JORGENSEN & ASSOCIATES, INC.
CONSTRUCTION and LAND SURVEYORS
Est. 1990

March 14, 2014

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

Re: Village of Lombard - Lombard Meadows 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\Lombard Meadows\LTR

Route: Lilac Way
Section: Lombard Meadows
County: DuPage
Job No.:

Exhibit "A"

Hourly Rate Range - Consultant's Regular Staff

Classification	From	To
Principal, Manager, P.L.S.	41.00	43.00
Supervisor, Project Surveyor	39.00	41.00
Cadd Supervisor, Survey Party Chief, S.I.T., Survey Party Chief	21.50	29.50
Instrument Operator, Cadd Operator, assignable Clerical and Secretarial Labor	14.00	20.00

Route: Lilac Way
Section: Lombard Meadows
County: DuPage
Job No.:

Exhibit "B"

Payroll Burden & Fringe Costs

	% of Direct Productive Payroll
Federal Insurance Contributions Act	11.84%
State Unemployment Compensation	3.59%
Federal Unemployment Compensation	0.12%
Workmen's Compensation Insurance	0.94%
Paid Holidays, Vacation, Sick Leave, Personal Leave	8.78%
Bonus	4.59%
Pension	0.83%
Group Insurance	36.56%
Total Payroll Burden & Fringe Costs	67.25%

Route: Lilac Way
Section: Lombard Meadows
County: DuPage
Job No.:

Exhibit "C"

Overhead and Indirect Costs

	% of Direct Productive Payroll
Business Insurance	3.23%
Depreciation	10.17%
Indirect wages and salaries	46.70%
Reproductive and printing costs	0.05%
Office Supplies	3.04%
Computer Costs	0.66%
Professional Fees	1.60%
Telephone	2.11%
Fees, license & dues	1.09%
Repairs and maintenance	0.52%
Business space rent	5.18%
Facilities - capital	0.44%
Travel - Meals	0.03%
Survey Supplies	2.09%
Automobile/travel expense	4.79%
Equipment Rental	0.97%
Miscellaneous Expense	0.81%
State Income Tax	0.62%
Postage	0.26%
Educational & Professional Registrations	0.10%
Total Overhead	84.46%

Route: Lilac Way
Section: Lombard Meadows
County: DuPage
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 ..... $ 43.00
B. Supervisor, P.L.S. ..... $ 41.00
C. Survey Party Chief, S.I.T. ..... $ 23.50
D. Instrument Operator ..... $ 19.00
E. Cadd Supervisor ..... $ 28.50

Route: Lilac Way
Section: Lombard Meadows
County: DuPage
Job No.:

Exhibit "D"

Average Hourly Rate Calculation

Sheet 2 of 2

Principal/Officer	2 hours	@ $43.00/hour	=	$ 86.00
Supervisor, P.L.S.	32 hours	@ $41.00/hour	=	$ 1,312.00
Survey Party Chief, S.I.T.	101 hours	@ $23.50/hour	=	$ 2,373.50
Instrument Operator	101 hours	@ $19.00/hour	=	$ 1,919.00
Cadd Supervisor	68 hours	@ $28.50/hour	=	$ 1,938.00
	304 hours			$ 7,628.50

Average Hourly Rate = $\frac{\$7,628.50}{304}$ = $25.09/hour

Route: Lilac Way
Section: Lombard Meadows
Project:
County: DuPage
Job No.:

COST ESTIMATE OF CONSULTANT'S SERVICES

Consultant: Jorgensen & Associates, Inc.
Date: March 14, 2014
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 (E)	Profit (F)	Services By Others	Total	Percent of Grand Total
1) Field - Topographic Survey	202	$4,292.50	$6,512.15	$657.80	$11,462.45	$1,526.93	N/A	$12,989.38	57.62%
2) Office - Compile Field Data	38	$1,358.00	$2,060.22	$0.00	$3,418.22	$452.89	N/A	$3,871.11	17.17%
3) Office - Create Topography Base Sheets	53	$1,610.50	$2,443.29	$0.00	$4,053.79	$537.10	N/A	$4,590.89	20.36%
4) Office - Create T.I.N. & Contours	9	$281.50	$427.06	$0.00	$708.56	$93.88	N/A	$802.44	3.56%
5) Coordination Meetings	2	$86.00	$130.47	$38.50	$254.97	$34.26	N/A	$289.23	1.28%
TOTALS	304	$7,628.50	$11,573.20	$696.30	$19,898.00	$2,645.07	$0.00	$22,543.07	100.00%

Route: Lilac Way
Section: Lombard Meadows
County: DuPage
Job No.:

Manhour Breakdown
Topographic Survey Estimate

Lilac Way	± 1,560' =	± 0.295 mile
Lodge Lane	± 800' =	± 0.152 mile
Bradley Lane	± 360' =	± 0.068 mile
Total Length	± 2,720' =	± 0.515 mile

1. Field – Topographic Survey

   a. Measure traverse & level circuit
      21 hours x 2 men = 42 MH

   b. Locate existing R.O.W. & property line occupation
      25 hours x 2 men = 50 MH

   c. Locate existing topography
      55 hours x 2 men = 110 MH

   Sub-total Item #1 202 MH

2. Office - Compile Field Data

   a. Compute traverse & level circuit
      4 hours x 1 man = 4 MH

   b. Compute existing R.O.W. lines
      22 hours x 1 man = 22 MH

   c. Edit & compile topographic survey
      12 hours x 1 man = 12 MH

   Sub-total Item #2 38 MH

3. Office - Create Topography Base Sheets

   a. Layout and drafting existing topography
      45 hours x 1 man = 45 MH

   b. Check topographic survey
      8 hours x 1 man = 8 MH

   Sub-total Item #3 53 MH

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

   a. Compute contours
      7 hours x 1 man = 7 MH

   b. Check contours
      2 hours x 1 man = 2 MH

   Sub-total Item #4 9 MH

5. Coordination Meetings
   1 meeting @ 2 hours = 2 MH

   Total All Items 304 MH

Route: Lilac Way
Section: Lombard Meadows
County: DuPage
Job No.:

Manhour Breakdown By Item

Item	Classification	Manhours
1. Field – Topography Survey	Survey Party Chief, S.I.T.	101
	Instrument Operator	101
2. Office - Compile Field Data	Supervisor, P.L.S.	22
	Cadd Supervisor	16
3. Office – Create Topography Base Sheets	Supervisor, P.L.S.	8
	Cadd Supervisor	45
4. Office - Create T.I.N. and Contours	Supervisor, P.L.S.	2
	Cadd Supervisor	7
5. Coordination Meetings	Principal/Officer	2

Route: Lilac Way
Section: Lombard Meadows
County: DuPage
Job No.:

Breakdown of
In House Direct Costs

Item		
1. Field - Topographic Survey		
a. Trips to project site - 13 ea. ± 92 miles/trip x 13 trips = ± 1,196 miles ± 1,196 miles @ $0.55/mile =		$ 657.80
5. Coordination Meetings		
a. Meetings at Civiltech's office - 1 ea. ± 70 miles/trip x 1 trip = ± 70 miles ± 70 miles @ $0.55/mile =		$ 38.50
	Total All Items	$ 696.30

JORGENSEN & ASSOCIATES, INC.
CONSTRUCTION and LAND SURVEYORS
Est. 1990

March 24, 2014

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

Re: Village of Lombard - Lombard Meadows Survey Proposal

Dear Mr. Kreeger:

Enclosed, please find our proposal to prepare a plat of dedication for Bradley Lane 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

Christian H. Jorgensen, P.L.S.
President

CHJ/pt

Enclosures

E:\Civiltech\Lombard\Lombard Meadows\Bradley Ln\LTR

Route: Bradley Lane
Section: Lombard Meadows
County: DuPage
Job No.:

Exhibit "A"

Hourly Rate Range - Consultant's Regular Staff

Classification	From	To
Principal, Manager, P.L.S.	41.00	43.00
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Route: Bradley Lane
Section: Lombard Meadows
County: DuPage
Job No.:

Exhibit "B"

Payroll Burden & Fringe Costs

	% of Direct Productive Payroll
Federal Insurance Contributions Act	11.84%
State Unemployment Compensation	3.59%
Federal Unemployment Compensation	0.12%
Workmen's Compensation Insurance	0.94%
Paid Holidays, Vacation, Sick Leave, Personal Leave	8.78%
Bonus	4.59%
Pension	0.83%
Group Insurance	36.56%
Total Payroll Burden & Fringe Costs	67.25%

Route: Bradley Lane
Section: Lombard Meadows
County: DuPage
Job No.:

Exhibit "C"

Overhead and Indirect Costs

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Business Insurance	3.23%
Depreciation	10.17%
Indirect wages and salaries	46.70%
Reproductive and printing costs	0.05%
Office Supplies	3.04%
Computer Costs	0.66%
Professional Fees	1.60%
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Facilities - capital	0.44%
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Survey Supplies	2.09%
Automobile/travel expense	4.79%
Equipment Rental	0.97%
Miscellaneous Expense	0.81%
State Income Tax	0.62%
Postage	0.26%
Educational & Professional Registrations	0.10%
Total Overhead	84.46%

Route: Bradley Lane
Section: Lombard Meadows
County: DuPage
Job No.:

Exhibit "D"

Classification Types & Rates

Sheet I 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

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E. Cadd Supervisor ..... $ 28.50