



Using Federal Funds? ☐ Yes ☒ No Agreement For
ST PE

Agreement Type
Original

LOCAL PUBLIC AGENCY

Local Public Agency	County	Section Number	Job Number
Lake County Division of Transportation	Lake	21-00110-15-BT	
Project Number	Contact Name	Phone Number	Email
	Matt Emde	(847) 377-7452	memde@lakecountyil.gov

SECTION PROVISIONS

Local Street/Road Name	Key Route	Length	Structure Number
Washington Street	049-91223	1.6 miles	n/a
Location Termini			Add Location
Sextant Drive to Almond Road			Remove Location

Project Description
Fill sidewalk gap from Sextant Drive to Mainsail Drive, provide multi-use path from Mainsail Drive to Almond Road. Provide pedestrian crossing signals and cross walks at the signalized intersection of Washington Street at US 45, address ADA needs at required crossings.

Engineering Funding ☐ MFT/TBP ☐ State ☒ Other Sales Tax
Anticipated Construction Funding ☐ Federal ☐ MFT/TBP ☐ State ☒ Other Sales Tax

AGREEMENT FOR

☒ Phase I - Preliminary Engineering ☐ Phase II - Design Engineering

CONSULTANT

Consultant (Firm) Name	Contact Name	Phone Number	Email
BLA, Inc	Jennifer Mitchell	(630) 438-6400	jmittchell@bla-inc.com
Address	City	State	Zip Code
333 Pierce Road, Suite 200	Itasca	IL	60143

THIS AGREEMENT IS MADE between the above Local Public Agency (LPA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Project funding allotted to the LPA ~~by the State of Illinois under the~~ in coordination with of the State Department of Transportation, hereinafter called the "DEPARTMENT," will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

Since the services contemplated under the AGREEMENT are professional in nature, it is understood that the ENGINEER, acting as an individual, partnership, firm or legal entity, qualifies for professional status and will be governed by professional ethics in its relationship to the LPA and the DEPARTMENT. The LPA acknowledges the professional and ethical status of the ENGINEER by entering into an AGREEMENT on the basis of its qualifications and experience and determining its compensation by mutually satisfactory negotiations.

WHEREVER IN THIS AGREEMENT or attached exhibits the following terms are used, they shall be interpreted to mean:

Regional Engineer	Deputy Director, Office of Highways Project Implementation, Regional Engineer, Department of Transportation
Resident Construction Supervisor	Authorized representative of the LPA in immediate charge of the engineering details of the construction PROJECT
In Responsible Charge Contractor	A full time LPA employee authorized to administer inherently governmental PROJECT activities Company or Companies to which the construction contract was awarded

AGREEMENT EXHIBITS

The following EXHIBITS are attached hereto and made a part of hereof this AGREEMENT:

- ☒ EXHIBIT A: Scope of Services
- ☒ EXHIBIT B: Project Schedule
- ☒ EXHIBIT C: Direct Costs Check Sheet
- ☒ EXHIBIT D: Qualification Based Selection (QBS) Checklist
- ☒ EXHIBIT E: Cost Estimate of Consultant Services Worksheet (BLR 05513 or BLR 05514)
- ☒ Exhibit F: Sub-consultant Services
- ☐ _____
- ☐ _____

I. THE ENGINEER AGREES,

1. To perform or be responsible for the performance of the Scope of Services presented in EXHIBIT A for the LPA in connection with the proposed improvements herein before described.
2. The Classifications of the employees used in the work shall be consistent with the employee classifications and estimated staff hours. If higher-salaried personnel of the firm, including the Principal Engineer, perform services that are to be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the payroll rate for the work performed.
3. That the ENGINEER shall be responsible for the accuracy of the work and shall promptly make necessary revisions or corrections required as a result of the ENGINEER'S error, omissions or negligent acts without additional compensation. Acceptance of work by the LPA or DEPARTMENT will not relieve the ENGINEER of the responsibility to make subsequent correction of any such errors or omissions or the responsibility for clarifying ambiguities.
4. That the ENGINEER will comply with applicable Federal laws and regulations, State of Illinois Statutes, and the local laws or ordinances of the LPA.
5. To pay its subconsultants for satisfactory performance no later than 30 days from receipt of each payment from the LPA.
6. To invoice the LPA, The ENGINEER shall submit all invoices to the LPA within three months of the completion of the work called for in the AGREEMENT or any subsequent Amendment or Supplement.
7. The ENGINEER or subconsultant shall not discriminate on the basis of race, color, national origin or sex in the performance of this AGREEMENT. The ENGINEER shall carry out applicable requirements of 49 CFR part 26 in the administration of US Department of Transportation (US DOT) assisted contract. Failure by the Engineer to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination of this AGREEMENT or such other remedy as the LPA deems appropriate.
8. That none of the services to be furnished by the ENGINEER shall be sublet, assigned or transferred to any other party or parties without written consent of the LPA. The consent to sublet, assign or otherwise transfer any portion of the services to be furnished by the ENGINEER shall be construed to relieve the ENGINEER of any responsibility for the fulfillment of this AGREEMENT.
9. For Preliminary Engineering Contracts:
 - (a) To attend meetings and visit the site of the proposed improvement when requested to do so by representatives of the LPA or the DEPARTMENT, as defined in Exhibit A (Scope of Services).
 - (b) That all plans and other documents furnished by the ENGINEER pursuant to the AGREEMENT will be endorsed by the ENGINEER and affixed the ENGINEER's professional seal when such seal is required by law. Such endorsements must be made by a person, duly licensed or registered in the appropriate category by the Department of Professional Regulation of the State of Illinois. It will be the ENGINEER's responsibility to affix the proper seal as required by the Bureau of Local Roads and Streets manual published by the DEPARTMENT.
 - (c) That the ENGINEER is qualified technically and is thoroughly conversant with the design standards and policies applicable for the PROJECT; and that the ENGINEER has sufficient properly trained, organized and experienced personnel to perform the services enumerated in Exhibit A (Scope of Services).
10. That the engineering services shall include all equipment, instruments, supplies, transportation and personnel required to perform the duties of the ENGINEER in connection with this AGREEMENT (See Exhibit C).

II. THE LPA AGREES,

1. To certify by execution of this AGREEMENT that the selection of the ENGINEER was performed in accordance with the Professional Services Selection Act (50 ILCS 510) (Exhibit D).
2. To furnish the ENGINEER all presently available survey data, plans, specifications, and project information.
3. To pay the ENGINEER:
 - (a) For progressive payments - Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LPA, monthly payments for the work performed shall be due and payable to the ENGINEER, such payments to be equal to the value of the partially completed work minus all previous partial payments made to the ENGINEER.
 - (b) Final payment - Upon approval of the work by the LPA but not later than 60 days after the work is completed and reports have been made and accepted by the LPA ~~and DEPARTMENT~~ a sum of money equal to the basic fee as determined in this AGREEMENT less the total of the amount of partial payments previously paid to the ENGINEER

shall be due and payable to the ENGINEER.

(c) For Non-Federal County Projects - (605 ILCS 5/5-409)

- (1) For progressive payments - Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LPA, monthly payments for the work performed shall be due and payable to the ENGINEER. Such payments to be equal to the value of the partially completed work in all previous partial payments made to the ENGINEER.
- (2) Final payment - Upon approval of the work by the LPA but not later than 60 days after the work is completed and reports have been made and accepted by the LPA and STATE, a sum of money equal to the basic fee as determined in the AGREEMENT less the total of the amount of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.

4. To pay the ENGINEER as compensation for all services rendered in accordance with the AGREEMENT on the basis of the following compensation method as discussed in 5-5.10 of the BLR Manual.

Method of Compensation:

☐ Percent

☐ Lump Sum

(Maximum Fee \$20,000) (For federal funds the lump sum shall be developed using Cost Plus Fixed Fee Formula).

☐ Specific Rate

☒ Cost plus Fixed Fee: Anniversary

Total Compensation = DL + DC + OH + FF

Where:

DL is the total Direct Labor,

DC is the total Direct Cost,

OH is the firm's overhead rate applied to their DL and

FF is the Fixed Fee.

Where $FF = (0.33 + R) DL + \%SubDL$, where R is the advertised Complexity Factor and %SubDL is 10% profit allowed on the direct labor of the subconsultants.

The Fixed Fee cannot exceed 15% of the DL + OH.

5. The recipient shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any US DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of US DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by US DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as violation of this AGREEMENT. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C 3801 et seq.).

III. IT IS MUTUALLY AGREED,

1. To maintain, for a minimum of 3 years after the completion of the contract, adequate books, records and supporting documents to verify the amount, recipients and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records and supporting documents related to the contract shall be available for review and audit by the Auditor General, and the DEPARTMENT; the Federal Highways Administration (FHWA) or any authorized representative of the federal government, and to provide full access to all relevant materials. Failure to maintain the books, records and supporting documents required by this section shall establish a presumption in favor of the DEPARTMENT for the recovery of any funds paid by the DEPARTMENT under the contract for which adequate books, records and supporting documentation are not available to support their purported disbursement.
2. That the ENGINEER shall be responsible for any all damages to property or persons out of an error, omission and/or negligent act in the prosecution of the ENGINEER's work and shall indemnify and save harmless the LPA, the DEPARTMENT, and their officers, agents and employees from all suits, claims, actions or damages liabilities, costs or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy.

The LPA will notify the ENGINEER of any error or omission believed by the LPA to be caused by the negligence of the ENGINEER as soon as practicable after the discovery. The LPA reserves the right to take immediate action to remedy any error or omission if notification is not successful; if the ENGINEER fails to reply to a notification; or if the conditions created by the error or omission are in need of urgent correction to avoid accumulation of additional construction costs or damages to property and reasonable notice is not practicable.
3. This AGREEMENT may be terminated by the LPA upon giving notice in writing to the ENGINEER at the ENGINEER's last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LPA all drawings, plats, surveys, reports, permits, agreements, soils and foundation analysis, provisions, specifications, partial and completed estimates and data, if any from soil survey and subsurface investigation with the understanding that all such materials becomes the property of the LPA. The LPA will be responsible for reimbursement of all eligible expenses incurred under the terms of this AGREEMENT up to the date of the written notice of termination.

4. ~~In the event that the DEPARTMENT stops payment to the LPA, the LPA may suspend work on the project. If this agreement is suspended by the LPA for more than thirty (30) calendar days, consecutive or in aggregate, over the term of this AGREEMENT, the ENGINEER shall be compensated for all services performed and reimbursable expenses incurred prior to receipt of notice of suspension. In addition, upon the resumption of services the LPA shall compensate the ENGINEER, for expenses incurred as a result of the suspension and resumption of its services, and the ENGINEER's schedule and fees for the remainder of the project shall be equitably adjusted.~~
5. This AGREEMENT shall continue as an open contract and the obligations created herein shall remain in full force and effect until the completion of construction of any phase of professional services performed by others based upon the service provided herein. All obligations of the ENGINEER accepted under this AGREEMENT shall cease if construction or subsequent professional services are not commenced within 5 years after final payment by the LPA.
6. That the ENGINEER shall be responsible for any and all damages to property or persons arising out of an error, omission and/or negligent act in the prosecution of the ENGINEER's work and shall indemnify and have harmless the LPA, the DEPARTMENT, and their officers, employees from all suits, claims, actions or damages liabilities, costs or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy.
7. The ENGINEER and LPA certify that their respective firm or agency:
- (a) has not employed or retained for commission, percentage, brokerage, contingent fee or other considerations, any firm or person (other than a bona fide employee working solely for the LPA or the ENGINEER) to solicit or secure this AGREEMENT,
 - (b) has not agreed, as an express or implied condition for obtaining this AGREEMENT, to employ or retain the services of any firm or person in connection with carrying out the AGREEMENT or
 - (c) has not paid, or agreed to pay any firm, organization or person (other than a bona fide employee working solely for the LPA or the ENGINEER) any fee, contribution, donation or consideration of any kind for, or in connection with, procuring or carrying out the AGREEMENT.
 - (d) that neither the ENGINEER nor the LPA is/are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency,
 - (e) has not within a three-year period preceding the AGREEMENT been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property.
 - (f) are not presently indicated for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph and
 - (g) has not within a three-year period preceding this AGREEMENT had one or more public transaction (Federal, State, local) terminated for cause or default.

Where the ENGINEER or LPA is unable to certify to any of the above statements in this clarification, an explanation shall be attached to this AGREEMENT.

8. In the event of delays due to unforeseeable causes beyond the control of and without fault or negligence of the ENGINEER no claim for damages shall be made by either party. Termination of the AGREEMENT or adjustment of the fee for the remaining services may be requested by either party if the overall delay from the unforeseen causes prevents completion of the work within six months after the specified completion date. Examples of unforeseen causes included but are not limited to: acts of God or a public enemy; acts of the LPA, DEPARTMENT, or other approving party not resulting from the ENGINEER's unacceptable services; fire; strikes; and floods.

If delays occur due to any cause preventing compliance with the PROJECT SCHEDULE, the ENGINEER shall apply in writing to the LPA for an extension of time. If approved, the PROJECT SCHEDULE shall be revised accordingly.

9. This certification is required by the Drug Free Workplace Act (30 ILCS 580). The Drug Free Workplace Act requires that no grantee or contractor shall receive a grant or be considered for the purpose of being awarded a contract for the procurement of any property or service from the DEPARTMENT unless that grantee or contractor will provide a drug free workplace. False certification or violation of the certification may result in sanctions including, but not limited to suspension of contract on grant payments, termination of a contract or grant and debarment of the contracting or grant opportunities with the DEPARTMENT for at least one (1) year but not more than (5) years.

For the purpose of this certification, "grantee" or "Contractor" means a corporation, partnership or an entity with twenty-five (25) or more employees at the time of issuing the grant or a department, division or other unit thereof, directly responsible for the specific performance under contract or grant of \$5,000 or more from the DEPARTMENT, as defined the Act.

The contractor/grantee certifies and agrees that it will provide a drug free workplace by:

- (a) Publishing a statement:
 - (1) Notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance, including cannabis, is prohibited in the grantee's or contractor's workplace.
 - (2) Specifying actions that will be taken against employees for violations of such prohibition.
 - (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
 - (a) abide by the terms of the statement; and
 - (b) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than (5) days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about:
 - (1) The dangers of drug abuse in the workplace;

- (2) The grantee's or contractor's policy to maintain a drug free workplace;
- (3) Any available drug counseling, rehabilitation and employee assistance program; and
- (4) The penalties that may be imposed upon an employee for drug violations.
- (c) Providing a copy of the statement required by subparagraph (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- (d) Notifying the contracting, or granting agency within ten (10) days after receiving notice under part (b) of paragraph (3) of subsection (a) above from an employee or otherwise, receiving actual notice of such conviction.
- (e) Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program.
- (f) Assisting employees in selecting a course of action in the event drug counseling, treatment and rehabilitation is required and indicating that a trained referral team is in place.

Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act, the ENGINEER, LPA and the Department agree to meet the PROJECT SCHEDULE outlined in EXHIBIT B. Time is of the essence on this project and the ENGINEER's ability to meet the PROJECT SCHEDULE will be a factor in the LPA selecting the ENGINEER for future projects. The ENGINEER will submit progress reports with each invoice showing work that was completed during the last reporting period and work they expect to accomplish during the following period.

- 10. Due to the physical location of the project, certain work classifications may be subject to the Prevailing Wage Act (820 ILCS 130/0.01 et seq.).
- 11. For Preliminary Engineering Contracts:
 - (a) That tracing, plans, specifications, estimates, maps and other documents prepared by the ENGINEER in accordance with this AGREEMENT shall be delivered to and become the property of the LPA and that basic survey notes, sketches, charts, CADD files, related electronic files, and other data prepared or obtained in accordance with this AGREEMENT shall be made available, upon request to the LPA or to the DEPARTMENT, without restriction or limitation as to their use. Any re-use of these documents without the ENGINEER involvement shall be at the LPA's sole risk and will not impose liability upon the ENGINEER.
 - (b) That all reports, plans, estimates and special provisions furnished by the ENGINEER shall conform to the current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Manual or any other applicable requirements of the DEPARTMENT, it being understood that all such furnished documents shall be approved by the LPA and the DEPARTMENT before final acceptance. During the performance of the engineering services herein provided for, the ENGINEER shall be responsible for any loss or damage to the documents herein enumerated while they are in the ENGINEER's possession and any such loss or damage shall be restored at the ENGINEER's expense.

AGREEMENT SUMMARY

Prime Consultant	TIN/FEIN/SS Number	Agreement Amount
BLA Inc.	36-4263432	\$221,843.00

Subconsultants	TIN/FEIN/SS Number	Agreement Amount
- Huff and Huff, Inc	36-3044842	\$5,479.00
- HBK Engineering	46-1255956	\$15,912.00
- Jorgensen & Associates	36-3668574	\$145,419.00
- Soil & Material Consultants, Inc	36-3094075	\$19,277.00
Subconsultant Total		\$186,087.00
Prime Consultant Total		\$221,843.00
Total for all work		\$407,930.00

Add Subconsultant

AGREEMENT SIGNATURES

Executed by the LPA:

Local Public Agency Type		Name of Local Public Agency	
Attest:	The <input type="text" value="County"/>	of	<input type="text" value="Lake"/>
By	<input type="text"/>	Date	<input type="text"/>
By	<input type="text"/>	Date	<input type="text"/>
Name of Local Public Agency	Local Public Agency Type	Title	
<input type="text" value="Lake"/>	<input type="text" value="County"/>	<input type="text"/>	
		Clerk	

(SEAL)

Executed by the ENGINEER:

Consultant (Firm) Name

Attest:

BLA, Inc

By

Date



8/25/21

By

Date

Title

President/CEO

Title

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00110-15-BT

**EXHIBIT A
SCOPE OF SERVICES**

To perform or be responsible for the performance of the engineering services for the LPA, in connection with the PROJECT herein before described and enumerated below

See attached



PROJECT SCOPE DESCRIPTION

BLA, Inc.
August 11, 2021

Washington Street Multi-Use Path Scope of Work

Lake County Division of Transportation (LCDOT) desires to provide a non-motorized off-street facility along Washington Street from the existing facilities at Sextant Drive to existing facilities at Almond Road in the Village of Gurnee, Unincorporated Third Lake, and Warren Township. The corridor includes signalized intersections at Mainsail Drive, US 45, and Almond Road and a mid-block pedestrian crossing at Old Walnut Circle. The following scope of work details the activities to be completed to address the obstacles and identify a preferred alternative for the non-motorized facility.

Task 1 - Data Collection/Review

BLA will obtain from LCDOT GIS data that includes known parcel, right of way, pavement centerline, environmental resources (wetlands and historical properties), and public utilities. BLA will also request as-built plans and historical survey data for permitted improvements within the Washington Street right of way from Sextant Drive to Almond Road.

Other data that will be obtained includes local agency comprehensive plans, multi-modal plans, traffic data, traffic signal plans and timings, functional classification, utilities such as septic and well, zoning, school and park district boundaries and plans, environmental resources, and crash data. A site visit is included in this task.

The proposed improvement will occur primarily in parkway where utilities are located; therefore, a Level B SUE study is included in this task in order to obtain a more accurate location of utilities. *Refer to the attached scope of work from HBK.*

A key feature of data collection for this project will be defining property lines, determining ownership, identifying easements, and maintenance responsibilities of existing facilities. It is known that there are a few properties with inconsistent rights of way and these properties will be contacted via letter to initiate a kick-off meeting. The following property owners are anticipated to be contacted for information.

- | | |
|------------------------------------------|-----------------------------|
| • IL Department of Transportation (IDOT) | • 7698 W Washington St |
| • Warren Township | • 18463 Washington St |
| • Woodland CCSD 50 | • 34367 N US Highway 45 |
| • Double W Stables | • Timberwoods HOA |
| • Alexander Druse Cemetery Association | • Kingsport Woods HOA |
| • CVS | • Ravinia Woods HOA |
| • Marathon Gas | • Stoneridge HOA |
| • Thorntons Gas | • Oakwood Hills Condominium |
| • 18490 W Washington St | Association |



PROJECT SCOPE DESCRIPTION

BLA, Inc.
August 11, 2021

Task 2 - Topographic Survey / Plat and Legal

A full topographic survey of the entire roadway corridor is not anticipated. A topographic survey will be conducted uniformly either side of Washington Street to a distance 90 feet beyond the centerline. Data collected includes the centerline, edge of pavement, back of curb and all features beyond the back of curb.

Included in the topographic survey task is two (2) site visits which will be utilized to perform survey and conflict verifications. Survey work will be performed in accordance with the LCDOT survey requirements including start up coordination with the LCDOT surveyor. Baseline plan stationing shall follow existing LCDOT stationing, as provided by LCDOT. *Refer to the attached scope of work from Jorgensen and Associates.*

It is understood that easements and/or right of way will be needed for the construction of this project. The Phase I includes the preparation of plat and legal description for an estimated 20 parcels. The scope includes legal document research, survey of full parcel, preparation of plat and legal descriptions, coordination of draft and final plat and legal documents. *Refer to the attached scope of work from Jorgensen and Associates.*

Task 3 - Geotechnical Investigation

Soil borings will be obtained every 600 feet in the parkway either side of Washington Street. The soil borings will assist in retaining wall design, if needed, and assist in structural needs of the proposed non-motorized facility. Pavement cores are not included in the scope of work. The proposed boring locations will be coordinated with LCDOT and a pre-bore meeting will be scheduled prior to performing the work. The geotechnical reports will be transmitted electronically to LCDOT for their files. *Refer to the attached scope of work from SMC.*

Task 4 - Environmental

Wetlands

BLA will perform a wetland delineation of the project site, utilizing a Certified Wetland Specialist per LCSMC requirements, using methodology outlined in the Regional Supplement of 2010 Corps of Engineers Wetland Delineation Manual. The delineation will be completed based on conditions found during the field visit, soil maps, Lake County Wetland Map, National Wetlands Inventory, and the U.S. Army Corps of Engineers (USACE) Routine On-Site Data Forms. During the site visit, the wetlands' generalized quality ratings according to Swink and Wilhelm (1994) will be defined and the limits of the wetland will be flagged. Finally, during the site visit, wildlife and plant community qualities will be assessed.

The results of the field investigation will be summarized in a letter report. The wetlands floristic inventory, index values and quality rating will be included along with exhibits depicting wetland boundaries, project boundary, all resources utilized in the defining and quantifying of the wetlands, site photographs, and the USACE Routine On-Site Data Forms. This information will be compiled in a format which can be used as part of a USACE Joint Application package.



PROJECT SCOPE DESCRIPTION

BLA, Inc.
August 11, 2021

Based on the preferred alternative analysis will be performed to determine if any wetlands will be disturbed. Avoidance will be the first action followed by mitigation. Upon determining wetland involvement, the delineation report, preferred geometry exhibit defining the impacts, and proposed mitigation will be coordinated electronically with USACE and LCSMC as appropriate. The wetland documents and coordination will be transmitted electronically to LCDOT for their files.

Special Waste – Local

A Special Waste Assessment (SWA) will be performed for the local agency right of way to determine potential for involvement with special waste and other regulated substances. The SWA will determine whether or not further action is necessary. Should further action be necessary a PSI will be performed in Phase II. The SWA assessment will be transmitted electronically to LCDOT for their files. The findings and future actions will be included in the Project Report. *Refer to the attached scope of work from Huff & Huff.*

ESR Form with Attachments

An Environmental Survey Request (ESR) form will be submitted with the appropriate exhibits to obtain corridor-wide clearance for Cultural, Biological, and Special Waste for state owned right of way. The ESR will be prepared for the entire project limits of Washington Street from Sextant Drive to Almond Street and along US 45. The ESR form and attachments will be transmitted electronically to LCDOT for their files. The results will be included in the Project Report.

Tree Survey

BLA will identify, locate and tag all trees greater than or equal to 6" diameter at breast height (DBH) of **native species only**, in accordance with the Lake County requirements, that will be potentially impacted by the preferred alternative. A complete tree inventory listing tag number, station, offset, size, common name, scientific name, health, and comments regarding the quality of the identified trees will be provided. Nomenclature used for common and scientific names follows Swink and Wilhem (1994) Plants of the Chicago Region and U.S. Fish and Wildlife Service (1996) National List of Vascular Plant Species that Occur in Wetlands. The process performed, policies followed, summary of data, and exhibits prepared will be summarized in a Tree Inventory Technical Memorandum. The Tree Inventory Technical Memorandum will be transmitted electronically to LCDOT and Lake County Planning, Building and Development (LCPBD), as appropriate, for their files. The findings, impacts, and mitigation measures, if needed, will be summarized in the Project Report.

Section 4(f)

The Alexander Druce Family cemetery is located adjacent to the Washington Street project corridor. In the case that an easement is needed to construct sidewalk adjacent to the cemetery and it is determined that the cemetery is eligible for National Register, a Section 4(f) *de minimis* will be prepared for IDOT review and approval. The Section 4(f) will document the need for right of way, the lack of impact on the functionality of the cemetery, and the owner's concurrence with the findings.



PROJECT SCOPE DESCRIPTION

BLA, Inc.
August 11, 2021

Task 5 - Crash Study

BLA will collect 5 years' worth of recent crash data from LCDOTs crash database. A general summary of the types of crashes that occur will be provided. Only crashes that involve pedestrians or bicyclists will be investigated further. If a vehicular crash trend occurs at any one location that would impair safety for pedestrians or bicyclists, it will be so noted and recommendations to improve conditions provided. The Crash Study will be transmitted electronically to LCDOT for their files. The data, analyses, and recommendations will be summarized in the Project Report.

Task 6 - Alternatives Analysis

BLA will prepare alternatives to evaluate where the non-motorized facility shall be located within the parkway of Washington Street. A decision matrix will be utilized to summarize the project, the impacts, pros and cons, and mitigation measures. The following process will be utilized to identify a preferred alignment.

Step One – Prepare Base Geometry

An alignment will be defined on each side of Washington Street following basic design criteria and feedback obtained during data collection from the adjacent property owners. Challenge areas of the base geometry will be identified. Challenge areas include private right of way, steep grade, loss of natural screening, structural modifications/additions, existing roadway geometric modifications, or anywhere the minimum design criteria cannot be provided.

Step Two – Identify Challenge Areas

Wherever there is a challenge area mitigation will be defined. Mitigation may include retaining walls (structural or landscape brick), guardrail/railing, refuge islands, chicanes, storm sewer modifications, local street routing, traffic controls, pavement markings, and use of both sides of the street. Each mitigation measure will include pros/cons of the measure and an estimated cost to implement the measure.

Step Three – LCDOT Coordination.

See Task 12 – Agency Coordination and Meetings

Step Four – Refine Alternatives

Based on discussion with LCDOT regarding the base geometry and mitigation measures the alignment will be refined to prepare alternatives with preferred mitigation measures. The refined alternatives will be shared electronically with LCDOT for review and comment. Based upon the extent of comment, further refinement may occur.

Step Five –Public Coordination

See Task 10 - Public Involvement.

Step Six – Prepare Preferred Alternative



PROJECT SCOPE DESCRIPTION

BLA, Inc.

August 11, 2021

See Task 7 - Preferred Alternative.

Step Seven – LCDOT Coordination

See Task 12 – Agency Coordination and Meetings

Step Eight –Public Coordination

See Task 10 - Public Involvement.

Task 7 - Preferred Alternative

From the feedback obtained via public coordination a preferred alternative will be prepared that includes plan, profile, cross sections, guardrail/railing warrant, ADA accommodations, structural work, proposed drainage, proposed right of way, and environmental resource impacts and permit needs.

Such that the proposed improvement will pass through the US 45 intersection, which is under IDOT jurisdiction, this task includes the preparation and coordination of an intersection design study (IDS) with IDOT Geometric Studies Unit. The IDS will include signal timing modifications to accommodate pedestrian signals and may include geometric modifications for refuge islands and/or ADA ramps. This task also includes coordination with IDOT in regard to future improvements in the vicinity of the subject intersection and connectivity of the projects. Documents will be transmitted electronically to IDOT.

Task 8 - Drainage Analysis

Data Collection & Review

BLA will collect and catalog available historic project information from LCDOT, the Village of Gurnee, the Village of Third Lake, Lake County, and the Illinois Department of Transportation (IDOT). Historic project information may include record drawings for the roadway system and surrounding developments, previously completed engineering studies, utility atlases, effective floodplain and floodway mapping, wetland mapping, GIS topographic contour data, known drainage issues and concerns and design stage utility records obtained from the JULIE/811 one call system.

Floodplain / Floodway Encroachment Analysis

A determination will be made as to whether any Flood Prone Areas, as defined in the Lake County Watershed Development Ordinance (WDO), exist. Preliminary review of available data indicates that there are no floodplain / floodway environments within the project limits.

Delineate Existing and Proposed Drainage Areas

BLA will use field collected topographic information supplemented with Lake County GIS topography to delineate the existing and proposed watershed divides and drainage areas. Watershed divides will be delineated, and sub drainage areas will be numbered for correlation to the drainage calculations.



PROJECT SCOPE DESCRIPTION

BLA, Inc.
August 11, 2021

Calculate Hydrologic and Hydraulic Variables

Hydrologic and hydraulic variables including soil types, runoff curve numbers, weighted runoff curve numbers, and time of concentration will be calculated for the identified drainage areas. Hydrologic and hydraulic variables will be summarized in tables for existing and proposed conditions.

Hydrologic Modeling

A HEC-HMS hydrologic model will be created to perform a critical duration analysis of the existing and proposed conditions to evaluate the project impacts on the identified outlets and conveyance systems. HEC-HMS models will be developed using the current Bulletin 75 rainfall data and Huff distributions. Results will be summarized for each drainage area and outlet.

Stormwater Detention Evaluation

The proposed improvements will be evaluated for stormwater detention requirements based on the increased impervious area created by the proposed improvements. The requirements of the Lake County WDO will be referenced in the stormwater detention analysis. Exhibits will be provided indicating the existing and proposed impervious areas and the total areas will be summarized in tabular format. Water Quality / BMP requirements will be evaluated based on the increase in impervious area and will be implemented pursuant to the Lake County WDO. A right-of-way analysis will be performed to determine the need for additional right-of-way and easements for drainage purposes.

Evaluate Existing and Proposed Conveyance Systems

The existing conveyance system is comprised of both curb and gutter with a closed storm sewer drainage system and open drainage systems with shoulders and roadside swales. BLA will develop roadside drainage calculations to confirm conveyance of swales and area drains adjacent to the existing roadway drainage system. Driveway and roadway cross culverts will be identified, cataloged, and analyzed for conveyance.

Drainage Report

BLA will prepare and assemble a drainage report to evaluate the proposed improvements and demonstrate compliance with local, state, and federal regulations. The drainage report will summarize the existing drainage conditions, impact of the proposed improvements on the existing conveyance system, describe the proposed drainage system and any alternatives evaluated. The Existing Drainage Plan and Proposed Drainage Plan will be attached as exhibits. Correspondence, meeting minutes and calculations relating to the proposed improvements will be included in the appendices. The following tasks will be performed in order to prepare the drainage report:

- BLA will prepare a narrative that provides a project overview and introduction; describes in general the existing conditions, including any drainage problems, identifies major drainage features and outlets; and describes the proposed conditions including detention. Analyses, design methodologies and design criteria utilized will be briefly discussed. It is understood that the format of the narrative will not follow the IDOT Location Drainage Study outline.



PROJECT SCOPE DESCRIPTION

BLA, Inc.

August 11, 2021

- A project General Location Drainage Map will be developed. The map will utilize the USGS Hydrologic Atlas as a base map, display the drainage basin boundaries, and identify the major drainage features within the project limits.
- The Existing Drainage Plan will use GIS topographic contours provided by the County to supplement the field surveyed topographic data; FEMA Floodplains will be shown as well as any Flood Prone Areas; offsite and onsite drainage areas will be delineated; drainage features such as storm sewer sizes, crossroad culverts, and outlets will be shown. Delineated wetlands will be identified and numbered and will include the wetland areas. Wetland buffers will be identified for each delineated wetland based on the Lake County WDO and the determined wetland quality per the delineation report.
- A Proposed Drainage Plan (PDP) will be prepared to fully describe the proposed drainage concept and reflect drainage calculations for the drainage system size, type, and location. Potential utility conflicts will be identified during development of the PDP.
- Permit requirements for the proposed drainage plan will be identified and discussed in the narrative. No permit applications will be prepared as part of this Phase I study.

The Drainage Report will be transmitted electronically to LCDOT for their files. IDOT will obtain paper copies of the Drainage Report.

Task 9 - Retaining Wall Analysis

BLA understands that retaining walls may be required on either side of Washington Street depending on the path alignment. BLA will perform a site visit and brief assessment of the existing terrain and conditions to determine potential solutions and/or types of retaining wall options viable for these locations. A path located on the south side of Washington street will require a retaining wall in the existing Warren Township detention pond. A path located on the north side will require a retaining wall along the curve as the existing embankment drops off quickly. An assessment of the potential for having a wall over 7 feet of exposed face will also be made as this will trigger the need for a Type Size & Location (TS&L) plan. Preliminary construction cost estimates will be prepared. A Technical Memorandum will be prepared which summarizes our findings including types of potential retaining walls investigated and costs along with a recommended alternative, and the completion of a TS&L. The Technical Memorandum will be transmitted electronically to LCDOT for their files. This scope also includes submittal of the TS&L to the IDOT Central Bureau of Structures and Bridges and disposition of any comments received.

Task 10 - Public Involvement

For each meeting that will be held, BLA will coordinate the advertisement, meeting location, exhibits, handouts, and comment/response forms. All documents utilized for meetings will be presented to LCDOT for review and approval prior to the subject meeting. These meetings are anticipated to occur in person. Should a meeting need to be virtual, BLA and LCDOT will review the level of effort and determine if additional efforts are needed or not.

Alternatives Meeting

Alternatives to be considered further will be presented to the public at an open house meeting. The meeting will define the alternatives evaluated, their challenge areas, and the mitigation measures.



PROJECT SCOPE DESCRIPTION

BLA, Inc.
August 11, 2021

Feedback will be requested from the attendees in regard to preferred mitigation measures, alignments, combination of alignments, and overall acceptance of the alternatives studied.

Preferred Alternative Meeting

Upon concurrence of preferred alternative geometry and the associated mitigation measures from LCDOT, the preferred alternative will be presented to the public at an open house meeting. The final alignment, impacts, and mitigations measures will be presented. Feedback will be requested of the attendees in relation to acceptance of the alternative as the preferred alternative and that public input has been considered.

Task 11 - Project Report

A project report will be prepared that defines the:

1. Existing conditions,
2. Design criteria,
3. Crash, structural, and drainage analyses,
4. Proposed design,
5. Environmental resource evaluation, and
6. Public engagement activities

A draft report, prefinal report, and final report will be prepared for LCDOT and submitted electronically for review, comment, and approval.

Task 12 – Agency Coordination and Meetings

In addition to the public meetings identified in Task 10, other one-on-one coordination meetings are recommended or had been identified in Tasks 2 through 11 and are as summarized below. For all meetings, BLA will prepare an agenda, exhibits, and meeting minutes. Two staff from BLA will attend each meeting.

Lake County Meetings

- An in-person project kick-off meeting will be held with LCDOT. The meeting will set the communication parameters, review the schedule and set milestones, share/request data, discuss areas needing special attention/avoidance, and initiate stakeholder coordination.
- A virtual coordination meeting (2 total) will be held for each of the start-ups related to topographic survey (Task 2) and geotechnical collection (Task 3).
- After electronic submittal of the initial alternatives to LCDOT (Task 6, Step 3), an in-person meeting will be held to present to LCDOT the base geometry and mitigation measures. The intent of the meeting is to inform LCDOT, identify feasible and reasonable mitigation measures, and define alternatives for further analysis.
- After electronic submittal of the preferred alternative to LCDOT (Task 6, Step 7), an in-person meeting will be held to present to LCDOT the preferred alternative. Details in relation to plan, profile, agency coordination and concurrence, environmental impacts, drainage needs, landscaping, mitigation measures, and right of way will be summarized. The intent of the meeting is to inform LCDOT and obtain concurrence with the preferred alternative.
- Three (3) virtual general coordination meetings. These meetings will be held to discuss design specific issues needing coordination with various staff of LCDOT.



PROJECT SCOPE DESCRIPTION

BLA, Inc.

August 11, 2021

- An in-person joint meeting with LCSMC and LCPBD is planned to present the wetland impacts and drainage analysis (Tasks 4 & 8) as a result of the preferred alternative. This meeting will obtain preliminary feedback on the proposed improvement and to discuss anticipated permitting and approvals required for the proposed improvement.

IDOT Meetings

Two (2) virtual meetings are proposed with IDOT Permits coordination. One meeting will be a kick-off meeting to present the project, gather data, and obtain direction in regard to documents needed for IDOT approval. A second meeting is to review the preferred improvement at US 45 and compatibility with adjoining improvements.

Stakeholders

Of the private properties that have irregular right of way, it is expected to have further discussions regarding usage of land, right of way needs, and maintenance of facilities. It is assumed that four (4) in-person meetings will occur. Two staff from BLA will attend.

Task 13 - Administration & Management

This item includes project setup, invoicing, in-house coordination, and Quality Control and Quality Assurance of the project. Invoices and progress reports will be transmitted electronically for LCDOT processing.

Schedule

NPT – 9/15/21

Data Collection - 9/15/21 to 10/15/21

Topographic Survey – 9/15/21 to 12/15/21

Geotechnical Survey – 9/15/21 to 12/15/21

Environmental – 9/15/21 to 9/15/22

Crash Study – 9/15/21 to 10/15/21

Alternatives Analysis – 10/15/21 to 3/15/22

Preferred Alternative – 4/15/22 to 7/15/2022

Drainage Analysis – 10/15/2022 to 6/15/2022

Retaining Wall Analysis – 11/15/2021 to 6/15/2022

Public Involvement – 4/1/2022 & 8/1/2022

Project Report – 6/15/2022 to 10/15/2022

Design approval – 11/2022

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00110-15-BT

**EXHIBIT B
PROJECT SCHEDULE**

NPT – 9/15/21
 Data Collection - 9/15/21 to 10/15/21
 Topographic Survey – 9/15/21 to 12/15/21
 Geotechnical Survey – 9/15/21 to 12/15/21
 Environmental – 9/15/21 to 9/15/22
 Crash Study – 9/15/21 to 10/15/21
 Alternatives Analysis – 10/15/21 to 3/15/22
 Preferred Alternative – 4/15/22 to 7/15/2022
 Drainage Analysis – 10/15/2022 to 6/15/2022
 Retaining Wall Analysis – 11/15/2021 to 6/15/2022
 Public Involvement – 4/1/2022 & 8/1/2022
 Project Report – 6/15/2022 to 10/15/2022
 Design approval – 11/2022

Local Public Agency

County

Section Number

Lake County Division of Transportation

Lake

21-00110-15-BT

Exhibit C
Direct Costs Check Sheet

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.

Item	Allowable	Quantity	Contract Rate	Total
<input type="checkbox"/> Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual cost (Up to state rate maximum)			
<input type="checkbox"/> Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			
<input type="checkbox"/> Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			
<input type="checkbox"/> Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum			
<input checked="" type="checkbox"/> Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day	12	\$65.00	\$780.00
<input type="checkbox"/> Vehicle Rental	Actual cost (Up to \$55/day)			
<input type="checkbox"/> Tolls	Actual cost			
<input type="checkbox"/> Parking	Actual cost			
<input type="checkbox"/> Overtime	Premium portion (Submit supporting documentation)			
<input type="checkbox"/> Shift Differential	Actual cost (Based on firm's policy)			
<input type="checkbox"/> Overnight Delivery/Postage/Courier Service	Actual cost (Submit supporting documentation)			
<input checked="" type="checkbox"/> Copies of Deliverables/Mylars (In-house)	Actual cost (Submit supporting documentation)	8030	\$0.05	\$401.50
<input type="checkbox"/> Copies of Deliverables/Mylars (Outside)	Actual cost (Submit supporting documentation)			
<input type="checkbox"/> Project Specific Insurance	Actual Cost			
<input type="checkbox"/> Monuments (Permanent)	Actual Cost			
<input type="checkbox"/> Photo Processing	Actual Cost			
<input type="checkbox"/> 2-Way Radio (Survey or Phase III Only)	Actual Cost			
<input type="checkbox"/> Telephone Usage (Traffic System Monitoring Only)	Actual Cost			
<input type="checkbox"/> CADD	Actual cost (Max \$15/hour)			
<input type="checkbox"/> Web Site	Actual cost (Submit supporting documentation)			
<input checked="" type="checkbox"/> Advertisements	Actual cost (Submit supporting documentation)	4	\$200.00	\$800.00
<input type="checkbox"/> Public Meeting Facility Rental	Actual cost (Submit supporting documentation)			
<input type="checkbox"/> Public Meeting Exhibits/Renderings & Equipment	Actual cost (Submit supporting documentation)			
<input type="checkbox"/> Recording Fees	Actual Cost			
<input type="checkbox"/> Transcriptions (specific to project)	Actual Cost			
<input type="checkbox"/> Courthouse Fees	Actual Cost			
<input type="checkbox"/> Storm Sewer Cleaning and Televising	Actual cost (Requires 2-3 quotes with IDOT approval)			
<input type="checkbox"/> Traffic Control and Protection	Actual cost (Requires 2-3 quotes with IDOT approval)			
<input type="checkbox"/> Aerial Photography and Mapping	Actual cost (Requires 2-3 quotes with IDOT approval)			
<input type="checkbox"/> Utility Exploratory Trenching	Actual cost (Requires 2-3 quotes with IDOT approval)			
<input type="checkbox"/> Testing of Soil Samples	Actual Cost			
<input type="checkbox"/> Lab Services	Actual Cost (Provide breakdown of each cost)			
<input type="checkbox"/> Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
Total Direct Costs				\$1,981.50

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00110-15-BT

Exhibit D
Qualification Based Selection (QBS) Checklist

The LPA must complete Exhibit D. If the value meets or will exceed the threshold in 50 ILCS 510, QBS requirements must be followed. Under the threshold, QBS requirements do not apply. The threshold is adjusted annually. If the value is under the threshold with federal funds being used, federal small purchase guidelines must be followed.

☐ Form Not Applicable (engineering services less than the threshold)

Items 1-13 are required when using federal funds and QBS process is applicable. Items 14-16 are required when using State funds and the QBS process is applicable.

		No	Yes
1	Do the written QBS policies and procedures discuss the initial administration (procurement, management and administration) concerning engineering and design related consultant services?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Do the written QBS policies and procedures follow the requirements as outlined in Section 5-5 and specifically Section 5-5.06 (e) of the BLRS Manual?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Was the scope of services for this project clearly defined?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Was public notice given for this project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If yes Due date of submittal 05/21/21

Method(s) used for advertisement and dates of advertisement

Newspaper publication on 5/6/21 & 5/13/21. Also was emailed to LCDOT's list of consultants on file to receive project selection notices.

5	Do the written QBS policies and procedures cover conflicts of interest?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Do the written QBS policies and procedures use covered methods of verification for suspension and debarment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Do the written QBS policies and procedures discuss the methods of evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Project Criteria	Weighting
- Technical Approach	25%
- Firm Experience	15%
- Specialized Expertise	15%
- Team Capabilities	20%
- Workload	10%
- Past Performance	10%
- Local Presence	5%
Add	

8	Do the written QBS policies and procedures discuss the method of selection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Selection committee (titles) for this project

County Engineer, Asst. County Engineer, Engineer of Traffic, Director of Planning, Engineer of Design, Project Manager, Design Engineer

Top three consultants ranked for this project in order	
1	BLA, Inc.
2	V3
3	HLR

9	Was an estimated cost of engineering for this project developed in-house prior to contract negotiation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Were negotiations for this project performed in accordance with federal requirements.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Were acceptable costs for this project verified?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Do the written QBS policies and procedures cover review and approving for payment, before forwarding the request for reimbursement to IDOT for further review and approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Local Public Agency		County		Section Number	
Lake County Division of Transportation		Lake		21-00110-15-BT	
13	Do the written QBS policies and procedures cover ongoing and finalizing administration of the project (monitoring, evaluation, closing-out a contract, records retention, responsibility, remedies to violations or breaches to a contract, and resolution of disputes)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
14	QBS according to State requirements used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
15	Existing relationship used in lieu of QBS process?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
16	LPA is a home rule community (Exempt from QBS).	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

PAYROLL ESCALATION TABLE ANNIVERSARY RAISES

FIRM NAME
PRIME/SUPPLEMENT
Prepared By

BLA, Inc.
Washington St MUP
BLA, Inc.

DATE 08/11/21
PTB-ITEM # 0

CONTRACT TERM 24 MONTHS
START DATE 9/15/2021
RAISE DATE ANNIVERSARY

OVERHEAD RATE 101.89%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%

ESCALATION PER YEAR

DETERMINE THE MID POINT OF THE AGREEMENT

12

CACULATE THE ESCALATION FACTOR TO THE MIDPOINT OF THE CONTRACT

3.00%

The total escalation for this project would be: 3.00%

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PTB-ITEM #

BLA, Inc.
Washington St MUP
0

DATE _____

08/11/21

ESCALATION FACTOR

3.00%

Note: Rates should be capped on the AVG 1 tab as necessary

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Principal	\$70.00	\$72.10
Dir of Prelim. Design Svs	\$70.00	\$72.10
Dir of Structural Eng	\$70.00	\$72.10
Dir of Environmental Svs	\$70.00	\$72.10
Senior Project Manager	\$64.23	\$66.16
Project Manager	\$53.52	\$55.13
Project Engineer	\$38.55	\$39.71
Structural Engineer	\$31.41	\$32.35
Design Engineer	\$30.27	\$31.18
Sr Marketing Coordinator	\$34.41	\$35.44
Billing & Payroll	\$33.00	\$33.99

Bureau of Design and Environment
Prepared By: Consultant
DATE **08/11/21**

BLA, Inc.

0

Washington St MUP

101.89%

0

185,808

DBE 0.00%

AVERAGE HOURLY PROJECT RATES

FIRM BLA, Inc.
PTB-ITEM# 0
PRIME/SUPPLEMENT Washington St MUP

DATE 08/11/21

SHEET 1 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			1 - Data Collection			2 - Survey/Plat & Legal			3 - Geotechnical			4 - Environmental			5 - Crash Study		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00	46.0	2.27%	1.59															
Dir of Prelim. Design Svs	70.00	307.0	15.14%	10.60	19	20.43%	14.30	16	21.05%	14.74	4	10.00%	7.00	36	11.11%	7.78	4	16.67%	11.67
Dir of Structural Eng	70.00	24.0	1.18%	0.83															
Dir of Environmental Svs	70.00	180.0	8.88%	6.21										180	55.56%	38.89			
Senior Project Manager	66.16	40.0	1.97%	1.30															
Project Manager	55.13	0.0																	
Project Engineer	39.71	623.0	30.72%	12.20	48	51.61%	20.49	32	42.11%	16.72	14	35.00%	13.90	24	7.41%	2.94	8	33.33%	13.24
Structural Engineer	32.35	66.0	3.25%	1.05							14	35.00%	11.32						
Design Engineer	31.18	636.0	31.36%	9.78	26	27.96%	8.72	28	36.84%	11.49	8	20.00%	6.24	84	25.93%	8.08	12	50.00%	15.59
Sr Marketing Coordinator	35.44	64.0	3.16%	1.12															
Billing & Payroll	33.99	42.0	2.07%	0.70															
		0.0																	
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TOTALS		2028.0	100%	\$45.38	93.0	100.00%	\$43.51	76.0	100%	\$42.94	40.0	100%	\$38.46	324.0	100%	\$57.69	24.0	100%	\$40.49

AVERAGE HOURLY PROJECT RATES

FIRM BLA, Inc.
PTB-ITEM # 0
PRIME/SUPPLEMENT Washington St MUP

DATE 08/11/21

SHEET 2 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	6 - Alternative Analysis			7 - Preferred Alternative			8 - Drainage			9 - Retaining Wall			10 - Public Involvement			11 - Project Report		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00													8	4.44%	3.11			
Dir of Prelim. Design Svs	70.00	44	15.17%	10.62	30	7.81%	5.47	8	5.00%	3.50	4	3.85%	2.69	32	17.78%	12.44	28	21.54%	15.08
Dir of Structural Eng	70.00										24	23.08%	16.15						
Dir of Environmental Svs	70.00																		
Senior Project Manager	66.16							40	25.00%	16.54									
Project Manager	55.13																		
Project Engineer	39.71	100	34.48%	13.69	170	44.27%	17.58	52	32.50%	12.90	8	7.69%	3.05	24	13.33%	5.29	82	63.08%	25.05
Structural Engineer	32.35										52	50.00%	16.18						
Design Engineer	31.18	146	50.34%	15.70	184	47.92%	14.94	60	37.50%	11.69	16	15.38%	4.80	52	28.89%	9.01	20	15.38%	4.80
Sr Marketing Coordinator	35.44													64	35.56%	12.60			
Billing & Payroll	33.99																		
TOTALS		290.0	100%	\$40.01	384.0	100%	\$37.99	160.0	100%	\$44.64	104.0	100%	\$42.87	180.0	100%	\$42.46	130.0	100%	\$44.92

AVERAGE HOURLY PROJECT RATES

FIRM BLA, Inc.
PTB-ITEM# 0
PRIME/SUPPLEMENT Washington St MUP

DATE 08/11/21

SHEET 3 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	12 - Agency Coordination			13 - Administration														
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00	14	12.96%	9.07	24	20.87%	14.61												
Dir of Prelim. Design Svs	70.00	47	43.52%	30.46	35	30.43%	21.30												
Dir of Structural Eng	70.00																		
Dir of Environmental Svs	70.00																		
Senior Project Manager	66.16																		
Project Manager	55.13																		
Project Engineer	39.71	47	43.52%	17.28	14	12.17%	4.83												
Structural Engineer	32.35																		
Design Engineer	31.18																		
Sr Marketing Coordinator	35.44																		
Billing & Payroll	33.99				42	36.52%	12.41												
TOTALS		108.0	100%	\$56.82	115.0	100%	\$53.16	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00

BLA, INC**WASHINGTON STREET MUP****PRELIMINARY DESIGN MANHOURS**

<u>Task and Description</u>	<u>Total Manhours</u>
Task 1 - Data Collection and Review	
<i>Obtain and Review existing GIS Data, Records, Maps, Ex. Reports</i>	32
<i>Level B Sue Study - subconsultant coordination</i>	24
<i>Property Owner Letters</i>	17
<i>Observation, Photo Log collection, and Site Visit: 2 people x 8 hours x 1 visit</i>	16
<i>Prepare Photograph Log</i>	4
Subtotal:	93
Task 2 - Topographic Survey	
<i>Survey - subconsultant coordination</i>	24
<i>Two site visits: 2 people x 8 hours x 2</i>	32
<i>Plat and Legal - subconsultant coordination</i>	20
<i>(See attached sub-consultants hours for Survey - Jorgensen Associates)</i>	
Subtotal:	76
Task 3 - Geotechnical Investigation	
<i>Geotechnical - subconsultant coordination</i>	24
<i>Report Review (SGR and RGR)</i>	16
<i>(See attached sub-consultants hours for Geotechnical - SMC)</i>	
Subtotal:	40
Task 4 - Environmental	
<i>Wetlands</i>	160
<i>Special Waste - Local</i>	16
<i>(See attached sub-consultants hours for Special Waste Local - Huff & Huff)</i>	
<i>ESR Form (Biological/Cultural/Special Waste - State)</i>	24
<i>Tree Survey</i>	100
<i>Section 4(f) De minimis - Druce Cemetery</i>	24
Subtotal:	324
Task 5 - Crash Study	
<i>Crash Study Analysis, Documentation, Exhibits, Review</i>	24
Subtotal:	24
Task 6 - Alternative Analysis	
<i>Base Geometry (Both North and South alignment options)</i>	170
<i>Challenge Areas</i>	80
<i>Refine Alternatives</i>	40
Subtotal:	290
Task 7 - Preferred Alternative	
<i>Preferred Alternative</i>	160
<i>IDS (US 45 at Washington Street), ADA Ramps</i>	96
<i>Corridor ADA (12 intersections/DW x 2 corners x 4 hours)</i>	96
<i>Decision Matrix</i>	32
Subtotal:	384
Task 8 - Drainage Analysis	
<i>Data collection</i>	32
<i>Delineate Existing / Proposed Drainage Areas</i>	16
<i>Hyrdologic Modeling</i>	24
<i>Stormwater Dentention Evaluation</i>	16
<i>Evaluate Existing / Proposed Conveyance System</i>	24
<i>Drainage Report</i>	48
Subtotal:	160

Task 9 - Retaining Wall Analysis	
<i>Feasibility alternatives</i>	32
<i>TS&L for Preferred Alternative</i>	72
Subtotal:	104
Task 10 - Public Involvement	
<i>Present Alternatives (Meeting, Exhibits, Coordination)</i>	90
<i>Present Preferred Alternative (Meeting, Exhibits, Coordination)</i>	90
Subtotal:	180
Task 11 - Project Report	
<i>Prepare Report Exhibits (Typical Sections, MOT, Location Map, Etc)</i>	30
<i>Estimate of Cost</i>	40
<i>IDOT BLR 22110</i>	40
<i>PDR Revisions</i>	20
Subtotal:	130
Task 12 - Agency Involvement & Meetings	
<i>LCDOT Kick-off In-Person 1 mtg x 2 staff x 6 hours</i>	12
<i>Survey / GeoTech Start-up Virtual: 2 mtgs x 2 staff x 1 hours</i>	4
<i>LCDOT Initial Alternatives In-Person 1 mtg x 2 staff x 6 hours</i>	12
<i>LCDOT Preferred Alternative In-Person 1 mtg x 2 staff x 6 hours</i>	12
<i>LCDOT General Coord Virtual 2 mtgs x 2 staff x 2 hours</i>	8
<i>LCSMC / LCPDB Coord In-Person 1 mtg x 2 staff x 4 hours</i>	8
<i>IDOT Permits Virtual 2 mtgs x 2 staff x 3 hrs</i>	12
<i>Stakeholder Meetings on-site 4 ea x 2 people x 5 hrs</i>	40
Subtotal:	108
Task 13 - Administration & Management	
<i>QA/QC, Invoicing, Coordination, etc (6% of total MH)</i>	115
Subtotal:	115
Total	2028

BLA, INC**WASHINGTON STREET MUP****DIRECT COST**

<u>Task and Description</u>	<u>Sheets</u>	<u>Sets</u>	<u>Rate</u>	<u>Extended Cost</u>
Task 1 - Data Collection and Review				
<i>Letters (8.5x11 B&W) (letter, location map, property map)</i>	3	17	\$0.05	\$2.55
<i>Exhibits (11x17 Color) (site visit)</i>	30	2	\$0.12	\$7.20
<i>Exhibits (22x34 Color)</i>			\$13.00	\$0.00
<i>Document Acquisition</i>			\$200.00	\$0.00
<i>Photograph Log (8.5x11 Color)</i>			\$0.12	\$0.00
<i>Vehicle Days (site visit)</i>		1	\$65.00	\$65.00
			Subtotal:	\$74.75
Task 2 - Topographic Survey / Plat and Legal				
<i>(No Direct Cost - Included in Subconsultant's Cost)</i>	---	---	---	\$0.00
			Subtotal:	\$0.00
Task 3 - Geotechnical Investigation				
<i>(No Direct Cost - Included in Subconsultant's Cost)</i>	---	---	---	\$0.00
			Subtotal:	\$0.00
Task 4 - Environmental				
<i>ESR Form and Attachments (8.5x11 Color)</i>	25	1	\$0.12	\$3.00
<i>Vehicle Days (Wetlands / Tree Survey)</i>		5	\$65.00	\$325.00
			Subtotal:	\$328.00
Task 5 - Crash Study				
<i>(No Direct Cost)</i>	---	---	---	\$0.00
			Subtotal:	\$0.00
Task 6 - Alternative Analysis				
<i>Forms and Calculations (8.5x11 BW)</i>			\$0.05	\$0.00
<i>Exhibits (22x34 Color)</i>			\$13.00	\$0.00
<i>Working Drawings (11x17 Color)</i>	15	4	\$0.12	\$7.20
<i>Exhibits (8.5x11 Color)</i>	5	4	\$0.12	\$2.40
			Subtotal:	\$9.60
Task 7 - Preferred Alternative				
<i>Forms and Calculations (8.5x11 BW)</i>			\$0.05	\$0.00
<i>Exhibits (22x34 Color)</i>			\$13.00	\$0.00
<i>Working Drawings (11x17 Color)</i>	15	4	\$0.12	\$7.20
<i>Exhibits (8.5x11 Color)</i>	5	4	\$0.12	\$2.40
			Subtotal:	\$9.60
Task 8 - Drainage Study, Calculations, & Design				
<i>Forms and Calculations (8.5x11 BW)</i>	50	3	\$0.05	\$7.50
<i>Drainage (LDS) Report (8.5x11 Color)</i>	100	3	\$0.12	\$36.00
			Subtotal:	\$43.50
Task 9 - Retaining Wall Analysis				
<i>Forms and Calculations (8.5x11 BW)</i>			\$0.05	\$0.00
<i>Working Drawings (11x17 Color)</i>	5	4	\$0.12	\$2.40
			Subtotal:	\$2.40
Task 10 - Public Involvement				
<i>Advertisement</i>	2	2	\$200.00	\$800.00
<i>Exhibits (8.5x11 Color)</i>			\$0.12	\$0.00
<i>Exhibits (11x17 Color)</i>	2	100	\$0.12	\$24.00
<i>Exhibits (22x34 Color)</i>	12	2	\$13.00	\$312.00
<i>Vehicle Days</i>	1	2	\$65.00	\$130.00
			Subtotal:	\$1,136.00

Task 11 - Project Development Report (PDR)				
<i>Forms and Calculations (8.5x11 BW)</i>	100	3	\$0.05	\$15.00
<i>Exhibits (11x17 Color)</i>	20	3	\$0.12	\$7.20
<i>Exhibits (8.5x11 Color)</i>	20	3	\$0.12	\$7.20
<i>Misc. Materials & Bindings</i>		3	\$4.75	\$14.25
			Subtotal:	\$43.65
Task 12 - Agency Involvement & Meetings				
<i>Agendas, Handouts, Minutes, etc. (8.5x11 Color)</i>	10	4	\$0.05	\$2.00
<i>Exhibits (11x17 Color)</i>	150	4	\$0.12	\$72.00
<i>Exhibits (22x34 Color)</i>			\$13.00	\$0.00
<i>Vehicle Days</i>	0.5	4	\$65.00	\$130.00
			Subtotal:	\$204.00
Task 13 - Administration & Management				
<i>Invoice and Progress Report (8.5x11 BW)</i>	10	24	\$0.05	\$130.00
			Subtotal:	\$130.00
Total				\$1,981.50



A Subsidiary of GZA

GEOTECHNICAL

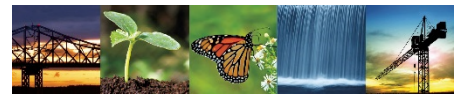
ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION
MANAGEMENT

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August 11, 2021

via email: jmitchell@bla-inc.com

Exhibit F1

Jennifer Mitchell, P.E., PTOE
Director of Preliminary Design Services
BLA, Inc.
333 Pierce Road, Suite 200
Itasca, IL 60143

Re: Phase I Environmental Services – PESA
LCDOT – Washington Street Multi-Use Path and Sidewalk Project
Sec. No. 21-00110-15-BT
Proposal No.: 81.P013044.22

Dear Ms. Mitchell:

Huff & Huff, Inc., a subsidiary of GZA, Inc. (GZA) is pleased to submit this proposal to BLA, Inc. (Client) to provide Phase I environmental services in conjunction with the proposed improvement project, located along Washington Street between Mainsail Drive and Almond Road and with new sidewalk between Mainsail Drive and Sextant Drive, in the Village of Gurnee and Unincorporated Third Lake, Lake County, Illinois. Client has requested completion of a Preliminary Environmental Site Assessment (PESA) in support of the project.

This proposal presents our project understanding based on information provided by Client including our proposed the scope of services and associated fee.

1. PROJECT UNDERSTANDING

Lake County Division of Transportation (LCDOT) is seeking preparation of Phase I preliminary engineering study, and an option to perform Phase II design engineering, in accordance with the Illinois Department of Transportation's Bureau of Local Roads & Streets Policies & Procedures for County approval, for a new multi-use path along Washington Street between Mainsail Drive and Almond Road in the Village of Gurnee and Unincorporated Third Lake, Illinois. The project also includes a new sidewalk between Mainsail Drive and Sextant Drive on the north side of Washington Street. The work will include preparation and approval of a Project Development Report for County approval; field survey; plats and legal descriptions for right-of-way and easement acquisitions; identification of detention requirements; flood plain determination; wetland delineation; soils investigation; alternatives analysis, public involvement and an environmental assessment (PESA and PSI). Coordination with IDOT (ESR and Route 45), utility companies, permitting agencies and local communities will be part of the work. It is anticipated that local funds will be used for engineering and construction.



2. SCOPE OF SERVICES

Task 1 – Preliminary Environmental Site Assessment (PESA)

The process will follow general protocols contained within:

- A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation (IDOT) Highway Projects (Erdmann et al., 2012)
- ASTM International (ASTM) standard 1527-13
- The IDOTs Bureau of Design and Environment (BDE) Procedure Memorandum Number 10-07, *Special Waste Procedures*. This memo was incorporated into Chapter 27-3 of the IDOT BDE Manual in June 2012.
- IDOT Bureau of Local Roads and Streets (BLRS) Manual, Chapter 20-12, Special Waste, July 2013.
- Public Act 96-1416
- Clean Construction or Demolition Debris Fill Operations (CCDD) and Uncontaminated Soil Fill Operations: Amendments to 35 Illinois Administrative Code 1100. Effective on August 27, 2012.

A. Historical Research

The site's historical land use/ownership record will be developed from standard historical sources. Historic aerial photographs will be reviewed to identify land use over time and potential areas of environmental concern, such as areas of surface disturbance and outside storage.

B. Site Evaluation

Current environmental features and conditions of sites adjacent to the right-of-way/project area will be evaluated. A site walkover of potential right-of-way/project areas designated for excavation and/or acquisition will be conducted for first-hand evaluation of current environmental conditions within the project limits. All of the features and conditions listed above will be investigated and, as appropriate, documented in photographs. The land-use and housekeeping practices of adjacent properties also will be evaluated in accordance with ASTM protocols.

C. Records Review

A records review will be conducted to determine potential environmental concerns within the study area. It will include a search of standard state and federal environmental record databases in accordance with the specifications of ASTM standards. This search is based on the outline of the study area. Specifically, GZA will search each database to identify any potential sources requiring further investigation. As appropriate, Freedom of Information Act (FOIA) requests will be filed with the IEPA to obtain additional data pertaining to identified sites.

D. Report Preparation

One report summarizing the results of the evaluation will be prepared and will include the following information:

- a) The project location and description
- b) Historical uses of corridor.
- c) The area geology and hydrology.
- d) The environmental status of sites adjacent to the corridor regarding chemical use and storage, underground and aboveground storage tanks, solid waste, special waste, and hazardous waste, and PCBs.



- e) An analysis of the site inspection.
- f) A summary of the findings regarding environmental concerns. This will include IDOT's BDE Manual Chapter 27-3, Special Waste Procedures, and identification of Potentially Impacted Properties (PIPs) per Subpart F, Section 1100, 35 IAC, related to Clean Construction or Demolition Debris management.

Task 2 – QA/QC

Time under this task includes QA/QC time for the project deliverables as described above.

Task 3 – Project Management

Time under this task includes project administration and management activities that include cost and schedule tracking, coordination with Client on authorized activities, document production and other in-house management activities.

3. PROJECT COSTS

Costs have been included on the attached Bureau of Local Roads CECS spreadsheets in cost plus fixed fee (CPFF) format.

4. LEVEL OF EFFORT AND SCHEDULE

PESA Task work will commence within five business days of project approval, with a target completion date of five weeks from the date of approval. The PSI is anticipated to commence following the PESA upon approval by Client to ensure project timing needs are met. This schedule can be adjusted to accommodate the schedule of the project owner to ensure milestones are met.

5. TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

CONDITIONS OF ENGAGEMENT

The conditions of engagement are described in the attached Terms and Conditions for Professional Services. GZA's report will be prepared on behalf of and for the exclusive use of Client. Client acknowledges and agrees that the report and the findings in the report shall not, in whole or in part, be disseminated or conveyed to any other party, or used or relied upon by any other party, in whole or in part, except for the specific purpose and to the specific parties alluded to above, without the written consent of GZA. GZA would be pleased to discuss the conditions associated with any additional dissemination, use, or reliance by other parties.

ACCEPTANCE

This agreement may be accepted by signing in the appropriate space below and returning one complete copy to GZA. Issuance of a Purchase Order implicitly acknowledges acceptance of this proposal. This proposal is valid for a period of 30 days from the date of issue.



We appreciate the opportunity to submit this proposal. Please feel free to contact the undersigned at (630) 684-9100 with any questions.

Very truly yours,

Huff & Huff, Inc., a subsidiary of GZA, inc.

Jeremy J. Reynolds, P.G.
Associate Principal

Attachments: Terms and Conditions

This Proposal for Services, Schedule of Fees and Terms and Conditions for Professional Services are hereby accepted and executed by a duly authorized signatory, who by execution hereof, warrants that he/she has full authority to act for, in the name, and on behalf of _____.

By: _____ Title: _____

Printed/Typed Name: _____ Date: _____

The Proposal for Services, Schedule of Fees and Terms and Conditions for Professional Services may be executed in two or more counterparts, each of which together shall be deemed an original, but all of which together shall constitute one and the same instrument. In the event that any signature is delivered by facsimile transmission or by an e-mail delivery of a document in “.pdf” format, each such signature shall create a valid and binding obligation of the party executing the document, or on whose behalf each document is executed, with the same force and effect as if each such facsimile or “.pdf” signature were an original thereof.

TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

Including Site Investigation, Remediation, Geotechnical, Construction, And Testing

© 2021 by GZA GeoEnvironmental, Inc.

These Terms and Conditions, together with GZA’s Proposal, make up the Agreement between GZA and you, Client, named in the attached proposal.

BEFORE SIGNING THE PROPOSAL, BE SURE YOU READ AND UNDERSTAND THE PARAGRAPHS ENTITLED "INDEMNIFICATION" AND "LIMITATION OF REMEDIES" WHICH DEAL WITH THE ALLOCATION OF RISK BETWEEN YOU AND GZA.

- 1. Services.** GZA will perform the services set forth in its Proposal and any amendments or change orders authorized by you. Any request or direction from you that would require extra work or additional time for performance or would result in an increase in GZA's costs will be the subject of a negotiated amendment or change order.
- 2. Standard of Care; Warranties.**



- a. GZA will perform the services with the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time under similar conditions in the same or similar locality.
- b. GZA warrants that its construction services will be of good quality, free of faults and defects and in conformance with the Proposal.
- c. **EXCEPT AS SET FORTH IN SUBSECTIONS 2a AND 2b, ABOVE, NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MARKETABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS MADE OR INTENDED BY GZA'S PROPOSAL OR BY ANY OF GZA'S ORAL OR WRITTEN REPORTS.**
- d. GZA assigns to you any manufacturers' warranties of equipment or materials purchased from others, to the extent they are assignable, and your sole recourse will be against the manufacturer. Full risk of loss of materials and equipment will pass to you upon delivery to the Site, and you will be responsible for insuring and otherwise protecting them against theft and damage.

3. Payment.

- a. Except as otherwise stated in the Proposal, you will compensate GZA for the services at the rates set forth in the applicable Proposal, amendment or change order; reimburse its expenses, which will include a communication fee calculated as a percentage of labor invoiced; and pay any sales or similar taxes thereon.
- b. Any retainer specified in GZA's Proposal shall be due prior to the start of services and will be applied to the final invoice for services.
- c. GZA will submit invoices periodically, and payment will be due within 20 days from invoice date. Overdue payments will bear interest at 1½ percent per month or, if lower, the maximum lawful rate. GZA may terminate its services upon 10 days' written notice anytime your payment is overdue on this or any other project and you will pay for all services through termination, plus termination costs. You will reimburse GZA's costs of collecting overdue invoices, including reasonable attorneys' fees.

4. Your Responsibilities.

- a. Except as otherwise agreed, you will secure the approvals, permits, licenses and consents necessary for performance of the services. If you are the owner or operator of the Site, you will provide GZA with all documents, plans, information concerning underground structures (including but not limited to utilities, conduits, pipes, and tanks), information related to hazardous materials or other environmental or geotechnical conditions at the Site and other information that may be pertinent to the services or, if you are not the owner or operator of the Site, you agree to make reasonable efforts to obtain these same documents and provide them to GZA. Unless otherwise indicated in writing, GZA will be entitled to rely on documents and information you provide.
- b. If you use the services of a construction manager at the Site, you agree to use best and reasonable efforts to include in your agreement(s) with the construction contractor provisions obligating the latter:
 - (i) to indemnify and hold harmless, to the fullest extent permitted by law, you and GZA, its officers, employees and principals, for or on account of any claims, liabilities, costs and expenses, including attorneys' fees, arising out of or relating to the design or implementation of construction means, methods, procedures, techniques, and sequences of construction, including safety precautions or programs, of the contractor, or any of its subcontractors or any engineer engaged by it;
 - (ii) to name you and GZA as additional insureds under general liability and builder's risk insurance coverages maintained by the contractor, or any of its subcontractors; and
 - (iii) to require that all of its subcontractors agree and be bound to the obligations set forth in (i) and (ii) above.
- c. In the event that you are unable to secure such provisions in the agreement(s) with the construction contractor, you shall promptly notify GZA and GZA shall have the opportunity to negotiate with you reasonable substitute risk allocation and insurance indemnities and protections.

- 5. Right of Entry; Site Restoration.** You grant GZA and its subcontractor(s) permission to enter the Site to perform the services. If you do not own the Site, you represent and warrant that the owner has granted permission for GZA to enter the Site and perform the services; you will provide reasonable verification on request; and you will indemnify GZA for any claims by the Site owner related to alleged trespass by GZA or



its subcontractors. GZA will exercise reasonable care to limit damage to landscaping, paving, systems and structures at the Site that may occur and you agree to compensate GZA for any restoration it is asked to perform, unless otherwise indicated in the Proposal.

6. Underground Facilities. GZA's only responsibility under this Section will be to provide proper notification to the applicable state utility "Call-Before-You-Dig" program. You further agree to assume responsibility for and to defend, indemnify and hold harmless GZA with respect to personal injury and property damages due to GZA's interference with subterranean structures including but not limited to utilities, conduits, pipes, and tanks:

- (i) that are not correctly shown on any plans and information you or governmental authorities provide to GZA; or
- (ii) that are not correctly marked by the appropriate utility.

7. Reliance. The services, information, and other data furnished by you shall be at your expense, and GZA may rely upon all information and data that you furnish, including the accuracy and completeness thereof. You acknowledge that the quality of the services provided by GZA is directly related to the accuracy and completeness of the information and data that you furnish to GZA. **GZA'S REPORTS ARE PREPARED FOR AND MADE AVAILABLE FOR YOUR SOLE USE. YOU ACKNOWLEDGE AND AGREE THAT USE OF OR RELIANCE UPON THE REPORT OR THE FINDINGS IN THE REPORT BY ANY OTHER PARTY, OR FOR ANY OTHER PROJECT OR PURPOSE, SHALL BE AT YOUR OR SUCH OTHER PARTY'S SOLE RISK AND WITHOUT ANY LIABILITY TO GZA.**

8. Lab Tests and Samples. GZA is entitled to rely on the results of laboratory tests using generally accepted methodologies. GZA may dispose of samples in accordance with applicable laws 30 days after submitting test results to you unless you request in writing for them to be returned to you or to be held longer, in which case you will compensate GZA for storage and/or shipping beyond 30 days.

9. GZA Professionals. GZA employees or consultants may act as licensed, certified or registered professionals (including but not limited to Professional Engineers, Licensed Site or Environmental Professionals, or Certified Industrial Hygienists collectively referred to in this section as "GZA Professionals") whose duties may include the rendering of independent professional opinions. You acknowledge that a federal, state or local agency or other third party may audit the services of GZA or other contractor/consultant(s), which audit may require additional services, even though GZA and such GZA Professionals have each performed such services in accordance with the standard of care set forth herein. You agree to compensate GZA for all services performed in response to such an audit, or to meet additional requirements resulting from such an audit, at the rates set forth in the applicable Proposal, amendment or change order.

10. Hazardous Materials; GZA "Not a Generator". Before any hazardous or contaminated materials are removed from the Site, you will sign manifests naming you as the generator of the waste (or, if you are not the generator, you will arrange for the generator to sign). You will select the treatment or disposal facility to which any waste is taken. GZA will not be the generator or owner of, nor will it possess, take title to, or assume legal liability for any hazardous or contaminated materials at or removed from the Site. GZA will not have responsibility for or control of the Site or of operations or activities at the Site other than its own. GZA will not undertake, arrange for or control the handling, treatment, storage, removal, shipment, transportation or disposal of any hazardous or contaminated materials at or removed from the Site, other than any laboratory samples it collects or tests. You agree to defend, indemnify and hold GZA harmless for any costs or liability incurred by GZA in defense of or in payment for any legal actions in which it is alleged that GZA is the owner, generator, treater, storer or disposer of hazardous waste.

11. Limits on GZA's Responsibility. GZA will not be responsible for the acts or omissions of contractors or others at the Site, except for its own subcontractors and employees. GZA will not supervise, direct or assume control over or the authority to stop any contractor's work, nor shall GZA's professional activities nor the presence of GZA or its employees and subcontractors be construed to imply that GZA has authority over or responsibility for the means, methods, techniques, sequences or procedures of construction, for work site health or safety precautions or programs, or for any failure of contractors to comply with contracts, plans, specifications or laws. Any opinions by GZA of probable costs of labor, materials, equipment or services to be furnished by others are strictly estimates and are not a guarantee that actual costs will be consistent with the estimates.

12. Changed Conditions.

a. You recognize the uncertainties related to environmental and geotechnical services, which often require a phased or exploratory approach, with the need for additional services becoming apparent during the initial services. You also recognize that actual conditions



encountered may vary significantly from those anticipated, that laws and regulations are subject to change, and that the requirements of regulatory authorities are often unpredictable.

- b. If changed or unanticipated conditions or delays make additional services necessary or result in additional costs or time for performance, GZA will notify you and the parties will negotiate appropriate changes to the scope of services, compensation and schedule.
- c. If no agreement can be reached, GZA will be entitled to terminate its services and to be equitably compensated for the services already performed. GZA will not be responsible for delays or failures to perform due to weather, labor disputes, intervention by or inability to get approvals from public authorities, acts or omissions on your part, or any other causes beyond GZA's reasonable control, and you will compensate GZA for any resulting increase in its costs.

13. Documents and Information. All documents, data, calculations and work papers prepared or furnished by GZA are instruments of service and will remain GZA's property. Designs, reports, data and other work product delivered to you are for your use only, for the limited purposes disclosed to GZA. Any delayed use, use at another site, use on another project, or use by a third party will be at the user's sole risk, and without any liability to GZA. Any technology, methodology or technical information learned or developed by GZA will remain its property. Provided GZA is not in default under this Agreement, GZA's designs will not be used to complete this project by others, except by written agreement relating to use, liability and compensation.

14. Electronic Media. In accepting and utilizing any drawings, reports and data on any form of electronic media generated by GZA, you covenant and agree that all such electronic files are instruments of service of GZA, who shall be deemed the author and shall retain all common law, statutory law and other rights, including copyrights. In the event of a conflict between the signed documents prepared by GZA and electronic files, the signed documents shall govern. You agree not to reuse these electronic files, in whole or in part, for any purpose or project other than the project that is the subject of this Agreement. Any transfer of these electronic files to others or reuse or modifications to such files by you without the prior written consent of GZA will be at the user's sole risk and without any liability to GZA.

15. Confidentiality; Subpoenas. Information about this Agreement and GZA's services and information you provide to GZA regarding your business and the Site, other than information available to the public and information acquired from third parties, will be maintained in confidence and will not be disclosed to others without your consent, except as GZA reasonably believes is necessary: (a) to perform its services; (b) to comply with professional standards to protect public health, safety and the environment; and (c) to comply with laws and court orders. GZA will make reasonable efforts to give you prior notice of any disclosure under (b) or (c) above. Information available to the public and information acquired from third parties will not be considered confidential. You will reimburse GZA for responding to any subpoena or governmental inquiry or audit related to the services, at the rates set forth in the applicable Proposal, amendment or change order.

16. Insurance. During performance of the services, GZA will maintain workers compensation, commercial general liability, automobile liability, and professional liability/contractor's pollution liability insurance. GZA will furnish you certificates of such insurance on request.

17. Indemnification. You agree to hold harmless, indemnify, and defend GZA and its affiliates and subcontractors and their employees, officers, directors and agents (collectively referred to in this paragraph as "GZA") against all claims, suits, fines and penalties, including mandated cleanup costs and attorneys' fees and other costs of settlement and defense, which claims, suits, fines, penalties or costs arise out of or are related to this Agreement or the services, except to the extent they are caused by GZA's negligence or willful misconduct.

18. Limitation of Remedies.

- a. To the fullest extent permitted by law and notwithstanding anything else in this Agreement to the contrary, the aggregate liability of GZA and its affiliates and subcontractors and their employees, officers, directors and agents (collectively referred to in this paragraph as "GZA") for all claims arising out of this Agreement or the services is limited to \$50,000 or, if greater, 10% of the compensation received by GZA under this Agreement.
- b. You may elect to increase the limit of liability by paying an additional fee, such fee to be negotiated prior to the execution of this Agreement.
- c. Any claim will be deemed waived unless received by GZA within one year of substantial completion of the services.



- d. GZA will not be liable for lost profits, loss of use of property, delays, or other special, indirect, incidental, consequential, punitive, exemplary, or multiple damages.
- e. GZA will not be liable to you or the Site owner for injuries or deaths suffered by GZA's or its subcontractors' employees.
- f. You will look solely to GZA for your remedy for any claim arising out of or relating to this Agreement, including any claim arising out of or relating to alleged negligence or errors or omissions of any GZA principal, officer, employee or agent.

19. Disputes.

- a. All disputes between you and GZA shall be subject to non-binding mediation.
- b. Either party may demand mediation by serving a written notice stating the essential nature of the dispute, the amount of time or money claimed, and requiring that the matter be mediated within forty-five (45) days of service of notice.
- c. The mediation shall be administered by the American Arbitration Association in accordance with its most recent Construction Mediation Rules, or by such other person or organization as the parties may agree upon.
- d. No action or suit may be commenced unless mediation has occurred but did not resolve the dispute, or unless a statute of limitation period would expire if suit were not filed prior to such forty-five (45) days after service of notice.

20. Miscellaneous.

- a. Illinois law shall govern this Agreement.
- b. The above terms and conditions regarding Limitation of Remedies and Indemnification shall survive the completion of the services under this Agreement and the termination of the contract for any cause.
- c. Any amendment to these Terms and Conditions must be in writing and signed by both parties.
- d. Having received these Terms and Conditions, your oral authorization to commence services, your actions, or your use of the Report or Work Product constitutes your acceptance of them.
- e. This Agreement supersedes any contract terms, purchase orders or other documents issued by you.
- f. Neither party may assign or transfer this Agreement or any rights or duties hereunder without the written consent of the other party.
- g. Your failure or the failure of your successors or assigns to receive payment or reimbursement from any other party for any reason whatsoever shall not absolve you, your successors or assigns of any obligation to pay any sum to GZA under this agreement.
- h. These Terms and Conditions shall govern over any inconsistent terms in GZA's Proposal.
- i. The provisions of this Agreement are severable; if any provision is unenforceable it shall be appropriately limited and given effect to the extent it is enforceable.
- j. The covenants and agreements contained in this Agreement shall apply to, inure to the benefit of and be binding upon the parties hereto and upon their respective successors and assigns.

**Local Public Agency**

Lake County Division of Transportation

County

Lake

Section Number

21-00110-15-BT

Consultant (Firm) Name

Huff & Huff, Inc., a Subsidiary of GZA

Prepared By

JJR

Date

8/11/2021

PAYROLL ESCALATION TABLE

CONTRACT TERM **6** MONTHS
START DATE **8/15/2021**
RAISE DATE **3/1/2022**
END DATE **2/14/2022**

OVERHEAD RATE **182.42%**
COMPLEXITY FACTOR **0**
% OF RAISE **2.00%**

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	8/15/2021	2/14/2022	6	100.00%

The total escalation = 0.00%

Local Public Agency	County	Section Number
Lake County Division of Transp	Lake	21-00110-15-BT

MAXIMUM PAYROLL RATE	78.00
ESCALATION FACTOR	0.00%

PAYROLL RATES

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Associate Principal II	\$69.10	\$69.10
Associate Principal I	\$62.14	\$62.14
Senior Consultant	\$69.25	\$69.25
Senior Project Manager III	\$61.88	\$61.88
Senior Project Manager II	\$50.21	\$50.21
Senior Project Manager I	\$43.74	\$43.74
Senior Landscape Architect	\$55.01	\$55.01
Senior Planning PM	\$51.85	\$51.85
Senior Geologist PM	\$51.62	\$51.62
Senior Technical Specialist II	\$62.60	\$62.60
Senior Technical Specialist I	\$50.43	\$50.43
Senior Scientist PM II	\$51.49	\$51.49
Senior Technical Scientist	\$48.82	\$48.82
Scientist PM II	\$46.53	\$46.53
Assistant PM Scientist	\$36.03	\$36.03
Environmental Engineer PM I	\$41.52	\$41.52
Geotechnical Engineer PM I	\$39.19	\$39.19
Architect PM	\$45.19	\$45.19
Assistant PM Engineer I	\$38.89	\$38.89
Engineer I	\$29.90	\$29.90
Scientist E1	\$29.71	\$29.71
Scientist E2	\$25.64	\$25.64
Technical Graphics Technician	\$24.60	\$24.60
Administrative Managers	\$44.42	\$44.42
Senior Administrative Assistant	\$31.22	\$31.22
Word Processing Operator	\$38.77	\$38.77
Intern	\$22.00	\$22.00

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

21-00110-15-BT

COST ESTIMATE WORKSHEET

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

OVERHEAD RATE 182.42%**COMPLEXITY FACTOR** 0

TASK	STAFF HOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	DIRECT COSTS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
Task 1: PESA	41.5	1,225	2,235	474	404	0	4,338	79.18%
Task 2: QAQC	4	224	409	0	74	0	707	12.90%
Task 3: Project Management	2.5	138	251	0	45	0	434	7.92%
		-	-		-		-	
Subconsultant DL					0		-	
TOTALS	48	1,587	2,895	474	523	-	5,479	100.00%

4,482

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

21-00110-15-BT

AVERAGE HOURLY PROJECT RATES

Exhibit E Cost Estimate of Consultants Services Worksheet Fixed Raise

SHEET 1 OF 1

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Task 1: PESA			Task 2: QAQC			Task 3: Project Management								
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Associate Principal II	69.10	2.0	4.17%	2.88	0.5	1.20%	0.83	1	25.00%	17.28	0.5	20.00%	13.82						
Associate Principal I	62.14	0.0																	
Senior Consultant	69.25	0.0																	
Senior Project Manager III	61.88	0.0																	
Senior Project Manager II	50.21	0.0																	
Senior Project Manager I	43.74	0.0																	
Senior Landscape Architect	55.01	0.0																	
Senior Planning PM	51.85	0.0																	
Senior Geologist PM	51.62	5.0	10.42%	5.38				3	75.00%	38.72	2	80.00%	41.30						
Senior Technical Specialist II	62.60	0.0																	
Senior Technical Specialist I	50.43	1.0	2.08%	1.05	1	2.41%	1.22												
Senior Scientist PM II	51.49	0.0																	
Senior Technical Scientist	48.82	0.0																	
Scientist PM II	46.53	0.0																	
Assistant PM Scientist	36.03	5.0	10.42%	3.75	5	12.05%	4.34												
Environmental Engineer PM I	41.52	0.0																	
Geotechnical Engineer PM I	39.19	0.0																	
Architect PM	45.19	0.0																	
Assistant PM Engineer I	38.89	0.0																	
Engineer I	29.90	0.0																	
Scientist E1	29.71	15.0	31.25%	9.28	15	36.14%	10.74												
Scientist E2	25.64	15.0	31.25%	8.01	15	36.14%	9.27												
Technical Graphics Technician	24.60	4.0	8.33%	2.05	4	9.64%	2.37												
Administrative Managers	44.42	0.0																	
Senior Administrative Assistant	31.22	1.0	2.08%	0.65	1	2.41%	0.75												
Word Processing Operator	38.77	0.0																	
Intern	22.00	0.0																	
TOTALS		48.0	100%	\$33.06	41.5	100.00%	\$29.52	4.0	100%	\$55.99	2.5	100%	\$55.12	0.0	0%	\$0.00	0.0	0%	\$0.00

HUFF & HUFF, INC.

SUMMARY OF DIRECT COSTS

Project: BLA - LCDOT Washington St. MUP

DIRECT

Task 1 - PESA

Trips	55 miles	x	2	x	\$	0.56	=	\$	61.60
Tolls			8	x	\$	1.50	=	\$	12.00
Database Package (~2-mi)			1	x	\$	400.00	=	\$	400.00
						Task Total		\$	473.60

Task 2 - QAQC

	0	x	\$	-	=	\$	-
			Task Total			\$	-

Task 3 - Project Management

0	x	\$ -	=	\$ -
		Task Total		\$ -

GRAND TOTAL \$ 473.60

HUFF & HUFF, INC.
SUMMARY OF SERVICES BY OTHERS
Project: BLA - LCDOT Washington St. MUP

			<u>OUTSIDE</u>
<i>Task 1 - PESA</i>			
_____	0 x	\$ -	= \$ -
		Task Total	\$ -
<i>Task 2 - QAQC</i>			
_____	0 x	\$ -	= \$ -
		Task Total	\$ -
<i>Task 3 - Project Management</i>			
_____	0 x	\$ -	= \$ -
		Task Total	\$ -
<hr/>			
	GRAND TOTAL	\$	-

August 11, 2021

Jennifer Mitchell, PE, PTOE, EVN SP
Director Preliminary Design Services
BLA, Inc.
333 Pierce Road, Ste. 200
Itasca, IL 60143

Re: Scope and Fee for Washington Street Bike Path Improvements – SUE QLB Locating
Third Lake, IL

Dear Jennifer,

HBK Engineering, LLC, (HBK) is pleased to present this revised proposal to BLA, Inc. (BLA) for the Washington Street Bike Path Improvements project that consists of installation of a new bike path on Washington Street from Sextant Drive to Almond Road in Third Lake, IL. This project will require Sub-surface Utility Engineering (SUE) QLB utility locating, surveying and utility base mapping CAD drawing work, which HBK will provide.

HBK's work scope and fees are attached. Fees are, as follows:

1. SUE Utility Locating including Quality Level D collection of utility atlases, performance of Quality Level B Utility Locating (utility marks), survey and utility base mapping/CAD services with a base scope fee of \$15,912.00.
2. Quality Level A Utility verification (potholing/excavation), CAD, and survey services are omitted from this work and can be provided upon request with additional funding for such operations.

HBK appreciates the opportunity to assist BLA on this project. Please contact me if there are questions and/or a need for additional information.

Upon acceptance of this proposal, HBK will require execution of a new task authorization with BLA, Inc., based on our existing MSA, for this work.

Sincerely,



Robert Kolar
Senior Project Manager

Attachments:

- BLA_WashingtonStBikePath-SUEQLB-FeeEst_HBK_08112021 R1 (PDF)
- BLA_WashingtonStBikePath-SUEQLB-SOW_HBK_08112021 (PDF)
- WashingtonStBikePathLocationExhibitA_HBK_08092021 (PDF)

cc: Bethany Turk, P.E. – HBK
HBK Project File

(BLA_WashingtonStBikePath-SUEQLB_HBK_CoverLtr_08112021 R1.DOC)

BLA, Inc.

Washington Street Bike Path Improvements - SUE QLB Locating

HBK

Work Scope	Classification	Task	Hours	Rate	Sub-total
<i>Utility Verification</i>	Senior Project Manager	Project Oversight	5	\$ 145.00	\$ 725.00
	Permit Coordinator	JULIE Design Locate Request/Atlases	12	\$ 117.00	\$ 1,404.00
	Locator 3 (Associate 1)	Level B Locating	80	\$ 112.00	\$ 8,960.00
	Designer 2	Utility Base Mapping (CAD)	10	\$ 112.00	\$ 1,120.00
<i>Surveying</i>	Senior Project Manager	Project Oversight	3	\$ 145.00	\$ 435.00
	Field Lead	Survey	24	\$ 112.00	\$ 2,688.00
	Professional Land Surveyor	Survey QAQC	4	\$ 145.00	\$ 580.00
	Total Cost		138		\$ 15,912.00

Notes:

1) Hourly rate includes field vehicle with gas for vehicle. Vehicle will have company logos, strobe lights, backup alarms, safety cones and an arrow flash bar.
2) Hourly rate includes locating equipment and associated standard mark-out materials (paint/flags).
3) Utilities to be located include, gas, electric, telecomm, water, street lights, and traffic signals.

Subsurface Utility Engineering (SUE)

The following information is derived from the FHWA website on subsurface utility engineering. It describes American Society of Civil Engineers (ASCE) Standard *C-I 38-02, Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data*.

There are four recognized quality levels of underground utility information ranging from Quality Level QL-D (the lowest level) to Quality Level QL-A (the highest level).

The highest level of accuracy and comprehensiveness is generally not needed at every point along a utility's path, only where conflicts with highway design features are most likely to occur. Hence, lesser levels of information may be appropriate at points where fewer or no conflicts are expected.

Each of the four Quality Levels is described as follows:

- **Quality Level D.** QL-D is the most basic level of information for utility locations. It comes solely from existing utility records or verbal recollections, both typically unreliable sources. It may provide an overall "feel" for the congestion of utilities but is often highly limited in terms of comprehensiveness and accuracy. QL-D is useful primarily for project planning and route selection activities.
- **Quality Level C.** QL-C is probably the most commonly used level of information. It involves surveying visible utility facilities (e.g., manholes, valve boxes, etc.) and correlating this information with existing utility records (QL-D information). When using this information, it is not unusual to find that many underground utilities have been either omitted or erroneously plotted. Its usefulness, therefore, is primarily on rural projects where utilities are not prevalent or are not too expensive to repair or relocate.
- **Quality Level B.** QL-B involves the application of appropriate surface geophysical methods to determine the existence and horizontal position of virtually all utilities within the project limits. This activity is called "designating". The information obtained in this manner is surveyed to project control. It addresses problems caused by inaccurate utility records, abandoned or unrecorded facilities, and lost references. The proper selection and application of surface geophysical techniques for achieving QL-B data is critical. Information provided by QL-B can enable the accomplishment of preliminary engineering goals. Decisions regarding location of storm drainage systems, footers, foundations and other design features can be made to successfully avoid conflicts with existing utilities. Slight adjustments in design can produce substantial cost savings by eliminating utility relocations.
- **Quality Level A.** QL-A, also known as "locating", is the highest level of accuracy presently available and involves the full use of the subsurface utility engineering services. It provides information for the precise plan and profile mapping of underground utilities through the nondestructive exposure of underground utilities, and it also provides the type, size, condition, material and other characteristics of underground features.

The following information represents HBK's typical scope of work for SUE for a utility improvement project.

Utility Verification:

Utility locating (Subsurface Utility Engineering, or SUE) for this project will be completed by **HBK Engineering, Inc. (HBK)**, as a subconsultant to BLA, Inc. (BLA).

Initial Coordination/Data Collection:

The proposed improvements will require coordination with public and private utilities that have facilities within the project corridor. The client will coordinate with any utility companies/agencies found to have facilities located within the vicinity of the project limits. HBK will submit for a JULIE Design Stage/Planning Information Request for these utilities to provide any available maps of existing facilities within the project limits. All utility atlases collected will be provided to BLA for its use/evaluation of proposed bike path and related improvements over the utilities deemed to be in conflict with the proposed improvements.

Utility Locating

HBK will perform SUE Level D, C and B locating of any utility facilities located within the project limits. Level D information will be obtained from utility atlases, JULIE requests, and other reliable sources. Qualified HBK staff will document Level B locates of underground utilities within the project limits.

Utility Data Base Mapping

HBK will coordinate with BLA so that utilities can be depicted accurately in the survey data and utility base maps. This shall include time allotted for utility base map QA/QC.

Surveying:

Surveying of the located utilities will be completed by HBK Engineering, LLC (HBK), as a subconsultant.

Utility Surveying

After Level B locating work is completed, HBK survey crews will survey the corresponding utility marks/flag locations within the project limits to bring the located utility locations and information into a base utility CAD MicroStation DGN file.

All work proposed is within existing roadway right-of-way and should not require private property/parcel access.

On this basis, HBK will perform the following survey tasks in accordance with applicable IDOT Survey Procedures:

GPS Field Location:

Utilizing state plane coordinates, HBK will locate all marked utilities and existing utility structures utilizing GPS equipment. It is assumed that the coordinates or field information will be on Illinois State Plane East, NAD83 (2011).

Vertical Control:

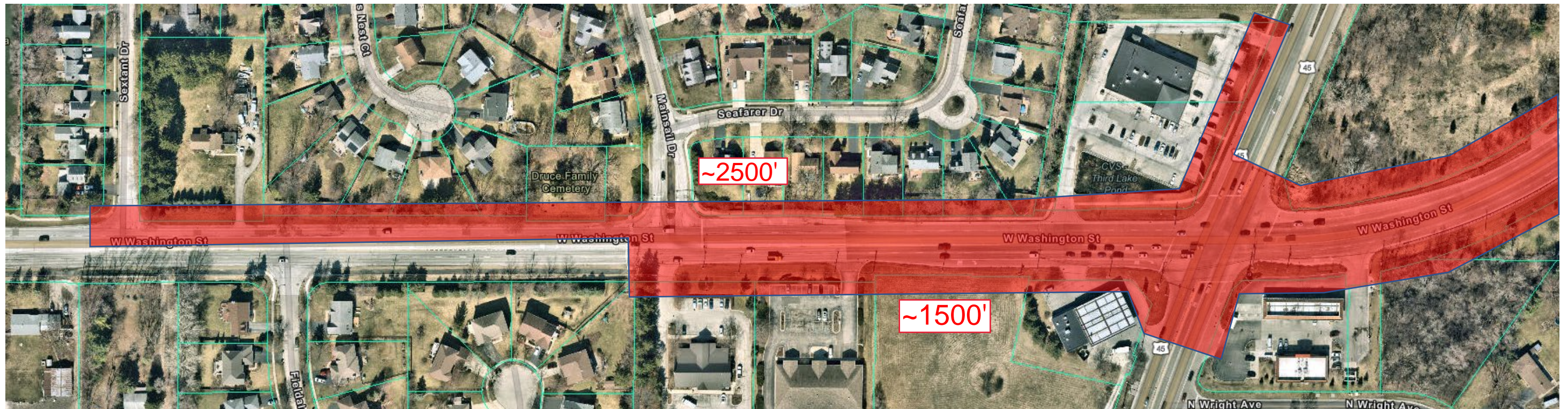
It is assumed that either BLA and/or Lake County DOT has benchmarks available in the vicinity of the project or that HBK will be allowed to establish vertical control (NAVD88) utilizing GPS and the nearest NGS vertical monuments. BLA will provide the benchmark(s) and control data for HBK's use in its data collection.

Survey will include existing utilities, including telecommunication, gas, electric, watermain, streetlights and traffic signal equipment found within the project limits. HBK will survey all utility locate marks as performed by HBK locating staff (as indicated in previous 'Utility Locating' work scope).

Omissions:

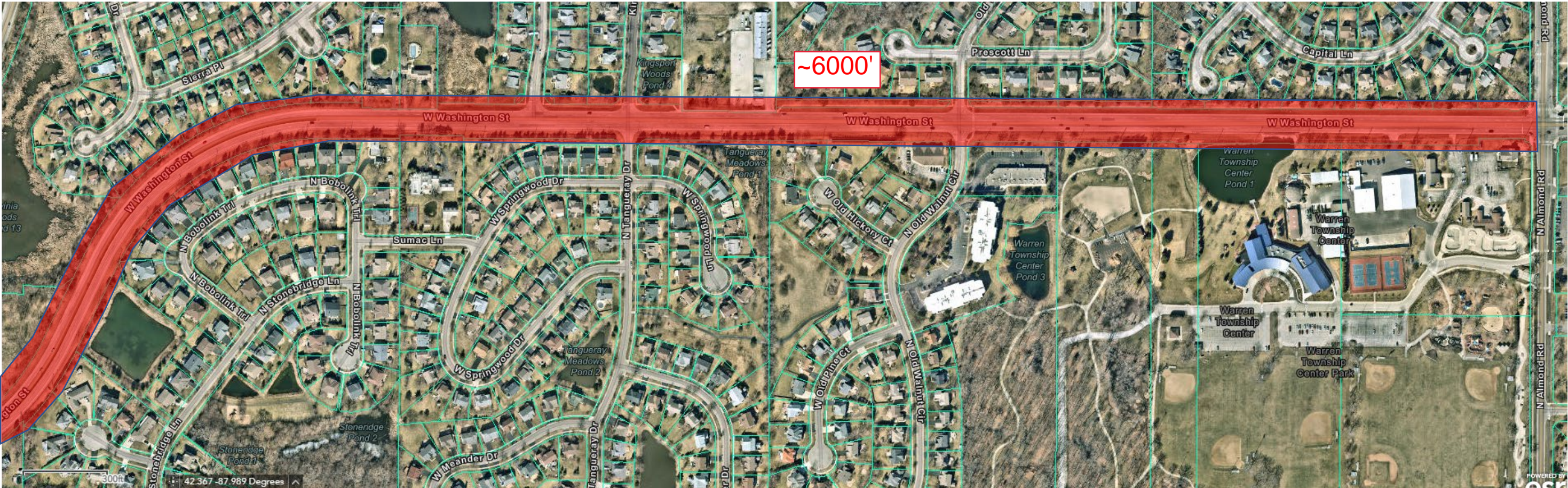
- SUE Quality Level A locating (potholing or otherwise exposing buried utilities) is not included in this work scope and can be performed for additional cost as requested by BLA.
- Locating/Surveying services does not include storm and/or sanitary facilities (lines/structures).
- Coordination with LCDOT for survey right-of-entry letter, if required, will be handled by BLA.

Washington Street SUE Level B Limits



- Sextant Drive to Mainsail Drive, north side only
- Mainsail Drive to Almond Road
- Intersection of US 45 including the ROW adjacent to the CVS along the northwest quadrant of US 45 and Washington Street
- Survey should extend to 90' beyond the existing centerline of Washington Street

Washington Street SUE Level B Limits



- Mainsail Drive to Almond Road
- Survey should extend to 90' beyond the existing centerline of Washington Street

SCOPE OF SERVICES

Topographic Survey

General: The topographic survey to include: structures, ground shots, roadway and shoulders, guardrail, utilities, locate trees 5" and larger, soil borings and inverts within the project corridor.

The project corridor being 90 feet beyond the center line of Washington Street from Mainsail Drive to Almond Road. The survey will extend 30 feet beyond the existing R.O.W. at entrances and 150 feet beyond the existing R.O.W. at U.S. Route 45. The survey will include the establishment of the existing R.O.W. lines within the project limits.

Establish bench marks and horizontal control points based on NGS geodetic survey monuments with G.P.S. survey methods. Locate and describe bench marks. The project will be based on NAD '83(2011) and NGVD '88 datums.

Prepare "MicroStation" base file of the topographic survey and provide "GEOPAK" T.I.N.

All work will be completed according to the current Lake County Design Survey Procedures.

Land Acquisition Survey

General: Prepare a Plat of Highways and legal descriptions for 20 fee simple parcels.

The project involves land surveying to reference the highways center lines to public land lines, location of property boundaries, preparation of a statutory plat of highways and legal descriptions, monumentation of the proposed right of way and highways center lines. The preparation and recording of "Monument Record" documents for all U.S. public land survey monuments referenced in the plat of highways.

Search for and locate boundary monumentation and locate appraisal topography on all affected parcels.

Research at County Recorder for any pertinent boundary documentation. Provide and review title commitments, calculate parcel boundaries, proposed center line alignments and proposed right of way lines.

Prepare preliminary plat of highways and legal descriptions.

Monument center line alignments, proposed right of way, section corners and quarter corners.

Prepare final plat of highways and legal descriptions, submit to client for recording.

DESIGN SURVEY PROCEDURES



DESIGN SURVEY PROCEDURES (Revised 2/22/21)

HORIZONTAL ALIGNMENT

Unless otherwise specified in the services contract, the CONSULTANT is to provide the horizontal alignment. The CONSULTANT will conduct all surveying, stationing, and preparation of required plans using English units of measure and the U.S. Survey Foot. The CONSULTANT'S SURVEYOR will try to re-establish the original horizontal alignment as shown on the recorded R.O.W. plats. The CONSULTANT shall contact LCDOT's Land Surveyor to obtain R.O.W. plats and field notes before establishing the horizontal alignment and stationing. The CONSULTANT shall notify LCDOT's Surveyor immediately if the alignment cannot be reproduced or if in the CONSULTANT'S opinion the existing alignment information is in error.

The CONSULTANT'S SURVEYOR, prior to construction, shall stake the PCs, PIs, PTs, and POTs so that the alignment location can be verified before construction staking is initiated. The CONSULTANT'S SURVEYOR will provide four reference ties to all U.S. Public Land Survey Monuments that are located within the construction limits. The reference points should be located outside of the anticipated construction limits if practical, so that they can be used after construction to replace the monuments. The CONSULTANT shall record Monument Records for all Section and Quarter Section corners set or found within the construction limits.

The CONSULTANT will mark the baseline for relocated alignments when off pavement at the PCs, PTs, and POTs with iron rods. The rods shall be set one foot below the surface in farmed land. The CONSULTANT will advise the County of any pavement alignment variations. In cases where the proposed centerline of construction or survey baseline is different from the existing centerline of R.O.W., both shall be shown and the relationship between them shall be indicated on an Alignment & Tie sheet.

ALIGNMENT & TIE SHEET

An Alignment & Tie Sheet shall be provided as part of the final plans. The plans are to be prepared using English units of measure and the U.S. Survey Foot. The station, offset, and coordinates of the alignment points (PCs, PTs, PIs, and POTs) and survey control (traverse) points shall be shown. Coordinates for all projects shall be on the Illinois State Plane Coordinate System, - East zone, NAD83 (Adjustment). The grid (combination) factor for the project shall be shown. A list of traverse points with station, offset, and coordinates shall be provided.

VERTICAL ALIGNMENT

The North American Vertical Datum of 1988 (NAVD 88) shall be used for vertical control. Lake County Mapping Benchmarks are available on-line (<http://gis.lakeco.org/maps/>). NAVD88 benchmarks are available on-line from the National Geodetic Survey. LCDOT's Land Surveyor may also be contacted for benchmarks that may be in the area. The primary benchmarks and site benchmarks shall be listed and described on the Alignment & Tie Sheet. The location of the site benchmarks shall also be shown on the plan sheets with a symbol. Site benchmarks are to be located at less than 1000-foot intervals with a minimum of two (2) on each project.

All benchmarks shall be located on stable objects. LCDOT prefers these objects to be outside the construction limits. Some acceptable benchmark examples are, spikes in poles, bolts on fire hydrant rings, and concrete foundations.

TOPOGRAPHY

The CONSULTANT shall cut cross-sections on station at 50-foot intervals (i.e. XX+00.00 and XX+50.00) and at all points needing clarification. For areas of superelevation or requiring greater detail, cross-sections shall be cut on station at 25-foot intervals. The cross section interval should be defined in the engineering services contract.

Full cross-section profiles will be taken at all cross streets, alleys, cross road culverts, and entrances (commercial, private, and field). Half cross-sections will not be accepted because they skew the computer terrain model.

The CONSULTANT will locate and identify all trees (6 inches in diameter or greater) within the area either side of the centerline, defined by the proposed ROW or construction limits (whichever is greater) plus an additional 10 feet. The trees shall be identified by species and size. The trees shall be located by station/offset and have a ground elevation.

Streams, tributaries, or major drainage ditches located within a lateral distance of 250 feet from centerline (upstream and downstream) shall be surveyed. Alignment, profiles, and cross-sections shall be taken. The stream width shall be shown as the distance measured between the tops of the stream banks. Profile elevations along the bottom of the watercourse shall be taken at a minimum of 50-foot intervals.

The survey shall extend a minimum of 200 feet beyond the roadway construction limits. Cross-sections shall be taken a minimum of 10 feet beyond the proposed R.O.W. or construction limits (whichever is greater). Cross-sections will extend 30 feet beyond the proposed R.O.W. at entrances and 150 feet at minor side roads.

All survey data shall be collected in Illinois State Plane Coordinates – East Zone. The collected survey data for the existing topography shall have a minimum of 3rd Order Accuracy horizontally with readings to the nearest 0.1 feet for vertical on gravel or ground and readings to the nearest 0.01 feet for vertical on all other surfaces.

For ADA ramps: The Consultant shall not use GPS devices to collect vertical data or elevations for hard surfaces e.g. curb and gutter, sidewalk, bike paths etc.

RAILROAD INSURANCE

The CONSULTANT will comply with the railroad's requirements when conducting a survey on the railroad's R.O.W. Usually, this includes obtaining a permit, paying a fee, obtaining Railroad Protective Liability Insurance, notification of a flagman to be present near the rails during the survey operations, and any other requirements of the railroad. The CONSULTANT is responsible for all of the foregoing requirements.

DELIVERABLES

- I. Copies from the CONSULTANT'S field books, showing benchmarks, level circuits, & structure details, such as size and inverts etc.
- II. The Base Drawing at 1:1 scale. All the topographic information shall be plotted electronically. The data shall be in Illinois State Plane Coordinates – East Zone and be recorded in a MICROSTATION (dgn) format. All CAD work shall be according to LCDOT CAD Standards. ASCII files, gpk files, and/or InRoads files containing all point information as described below shall be included. A filename “ID” acronym explanation sheet shall be provided. Backup CDs shall be provided.
- III. Point Information:
 - (1) Point number
 - (2) Northing and Easting coordinate values
 - (3) "Z" elevations
 - (4) Point identification by code
 - (5) Notes

**PAYROLL ESCALATION TABLE
ANNIVERSARY RAISES**FIRM NAME
PRIME/SUPPLEMENT
Prepared ByJorgensen & Associates, Inc.
PRIMEDATE 08/06/21
PTB-ITEM # 0CONTRACT TERM 12 MONTHS
START DATE 8/6/2021
RAISE DATE ANNIVERSARYOVERHEAD RATE 150.97%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%**ESCALATION PER YEAR****DETERMINE THE MID POINT OF THE AGREEMENT****6****CACULATE THE ESCALATION FACTOR TO THE MIDPOINT OF THE CONTRACT****1.50%****The total escalation for this project would be: 1.50%**

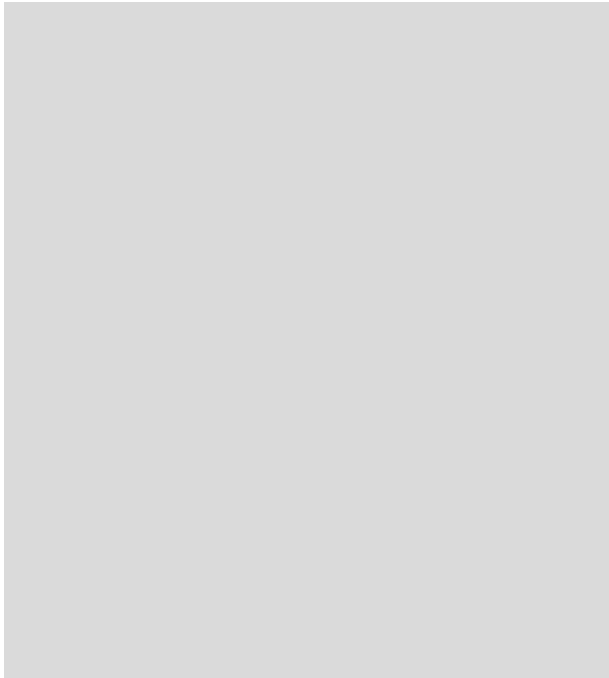
PAYROLL RATES

FIRM NAME Jorgensen & Associates DATE 08/06/21
PRIME/SUPPLEMENT PRIME
PTB-ITEM # 0

ESCALATION FACTOR 1.50%

Note: Rates should be capped on the AVG 1 tab as necessary

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Supervisor, P.L.S.	\$44.00	\$44.66
Survey Party Chief, P.L.S.	\$30.50	\$30.96
Instrument Operator	\$23.75	\$24.11
Cadd Supervisor	\$33.75	\$34.26



DATE 08/06/21

OVERHEAD RATE 150.97%

COMPLEXITY FACTOR	0
-------------------	---

[illegible]

DBE 0.00%

FIRM	Jorgensen & Associates, Inc.
PTB-ITEM#	0
PRIME/SUPPLEMENT	PRIME

SHEET 1 OF 1

BDE 3604 Template (Rev. 10/19/17)

Route: Washington Street
 Section: Sextant Dr. to Almond Rd.
 County: Lake
 Job No.:

Manhour Breakdown
Topographic Survey Estimate

Washington Street	$\pm 7,680' = \pm 1.454$ miles
U.S. Route 45	$\pm \underline{300'} = \pm \underline{0.057}$ mile
 Total Length	 $\pm 7,980' = \pm 1.511$ miles

1. Field – Topographic Survey

a. Measure traverse, level circuit & G.P.S. survey 25 hours x 2 men =	50 MH
b. Search & locate existing R.O.W. & section lines 60 hours x 2 men =	120 MH
c. Locate existing topography & inverts 183 hours x 2 men =	366 MH
d. Locate utility markings 40 hours x 2 men =	80 MH
e. Monument existing center line alignment 5 hours x 2 men =	10 MH
f. Monument/tie section & quarter corners 4 hours x 2 men =	<u>8 MH</u>
Sub-total Item #1	634 MH

2. Office - Compile Field Data

a. Compute traverse, level circuit & G.P.S. survey 12 hours x 1 man =	12 MH
b. Edit & compile topographic survey 28 hours x 1 man =	28 MH
c. Research records 2 hours x 1 man =	2 MH
d. Compute existing R.O.W. lines 44 hours x 1 man =	<u>44 MH</u>

Sub-total Item #2 86 MH

3. Office - Create Existing Topography Base File

a. Layout and drafting 80 hours x 1 man =	80 MH
----------------------------------------------	-------

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

a. Compute contours 9 hours x 1 man =	9 MH
------------------------------------------	------

5. QC/QA

a. Check topographic survey 18 hours x 1 man =	18 MH
b. Check contours 2 hours x 1 man =	<u>2 MH</u>

Total All Items 829 MH

Route: Washington Street
 Section: Sextant Dr. to Almond Rd.
 County: Lake
 Job No.:

**Breakdown of
In House Direct Costs**

Item

1. Field - Topographic Survey

a. Trips to project site - 40 each
 $\pm 20 \text{ miles/trip} \times 40 \text{ trips} = \pm 800 \text{ miles}$
 $\pm 800 \text{ miles @ } \$0.56/\text{mile} =$ \$ 448.00

2. Office – Compile Field Data

a. Trips to County Recorder - 1 each
 $\pm 30 \text{ miles/trip} \times 1 \text{ trip} = \pm 30 \text{ miles}$
 $\pm 30 \text{ miles @ } \$0.56/\text{mile} =$ \$ 16.80

b. Miscellaneous Records = \$ 325.00

Total All Items \$ 789.80

PTB NUMBER:

TODAY'S DATE: 8/6/2021

**If other allowable costs are needed and not listed, please add in the above spaces provided.*

LEGEND

W.O. = Work Order

J.S. = Job Specific

**PAYROLL ESCALATION TABLE
ANNIVERSARY RAISES**FIRM NAME
PRIME/SUPPLEMENT
Prepared ByJorgensen & Associates, Inc.
PRIMEDATE 08/06/21
PTB-ITEM # 0CONTRACT TERM 12 MONTHS
START DATE 8/6/2021
RAISE DATE ANNIVERSARYOVERHEAD RATE 150.97%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%**ESCALATION PER YEAR****DETERMINE THE MID POINT OF THE AGREEMENT****6****CACULATE THE ESCALATION FACTOR TO THE MIDPOINT OF THE CONTRACT****1.50%****The total escalation for this project would be: 1.50%**

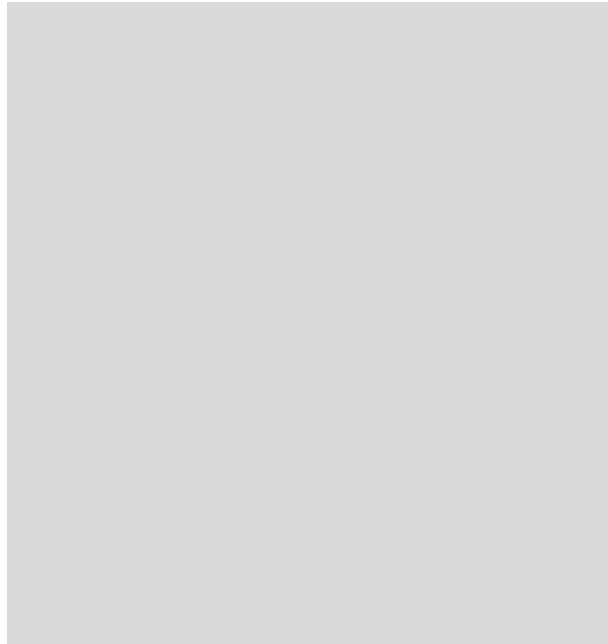
PAYROLL RATES

FIRM NAME Jorgensen & Associates DATE 08/06/21
 PRIME/SUPPLEMENT PRIME
 PTB-ITEM # 0

ESCALATION FACTOR 1.50%

Note: Rates should be capped on the AVG 1 tab as necessary

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Supervisor, P.L.S.	\$44.00	\$44.66
Survey Party Chief, P.L.S.	\$30.50	\$30.96
Instrument Operator	\$23.75	\$24.11
Cadd Supervisor	\$33.75	\$34.26
Administrative Assistant	\$24.00	\$24.36



FIRM

Jorgensen & Associates, Inc.

DATE 08/06/21

PTB-ITEM#

0

OVERHEAD RATE 150.97%

PRIME/SUPPLEMENT

PRIME

COMPLEXITY FACTOR	0
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DBE DROP BOX	ITEM	MANHOURS	PAYROLL	OVERHEAD & FRINGE BENF (C)	DIRECT COSTS (D)	FIXED FEE (E)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
		(A)	(B)							
	(1) Pre-Survey Phase	7	220	332	67	81	9,500	-	10,200	13.94%
	(2) Survey Reconnaissance	24	661	998	22	244		-	1,925	2.63%
	(3) Project Survey Plan	4	137	207		51		-	395	0.54%
	(4) First Submittal Plat of Highways & Descriptions	127	4,663	7,039	55	1,725		-	13,482	18.43%
	(5) Survey (Field)	314	8,645	13,051	224	3,199		-	25,119	34.34%
	(6) Survey (Office)	119	5,034	7,599		1,862		-	14,495	19.81%
	(7) Final Submittal Plat of Highways & Descriptions	16	560	845	209	207		-	1,821	2.49%
	(8) QC/QA	47	1,985	2,996		734		-	5,715	7.81%
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	Subconsultant DL					0			-	
	TOTALS	658	21,905	33,067	577	8,103	9,500	-	73,152	100.00%

54,972

DBE 0.00%

AVERAGE HOURLY PROJECT RATES

FIRM Jorgensen & Associates, Inc.
 PTB-ITEM# 0
 PRIME/SUPPLEMENT PRIME

DATE 08/06/21SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			(1) Pre-Survey Phase			(2) Survey Reconnaissance			(3) Project Survey Plan			(4) First Submittal Plat of Highways & Descriptions			(5) Survey (Field)		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Supervisor, P.L.S.	44.66	162.0	24.62%	11.00										30	23.62%	10.55			
Survey Party Chief, P.L.S.	30.96	169.0	25.68%	7.95				12	50.00%	15.48							157	50.00%	15.48
Instrument Operator	24.11	169.0	25.68%	6.19				12	50.00%	12.05							157	50.00%	12.05
Cadd Supervisor	34.26	153.0	23.25%	7.97	5	71.43%	24.47				4	100.00%	34.26	97	76.38%	26.16			
Administrative Assistant	24.36	5.0	0.76%	0.19	2	28.57%	6.96												
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TOTALS		658.0	100%	\$33.29	7.0	100.00%	\$31.43	24.0	100%	\$27.53	4.0	100%	\$34.26	127.0	100%	\$36.71	314.0	100%	\$27.53

AVERAGE HOURLY PROJECT RATES

FIRM	<u>Jorgensen & Associates, Inc.</u>
PTB-ITEM #	<u>0</u>
PRIME/SUPPLEMENT	<u>PRIME</u>

DATE 08/06/21

SHEET 2 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	(6) Survey (Office)			(7) Final Submittal Plat of Highways & Descriptions			(8) QC/QA											
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Supervisor, P.L.S.	44.66	92	77.31%	34.53	4	25.00%	11.17	36	76.60%	34.21									
Survey Party Chief, P.L.S.	30.96																		
Instrument Operator	24.11																		
Cadd Supervisor	34.26	27	22.69%	7.77	9	56.25%	19.27	11	23.40%	8.02									
Administrative Assistant	24.36				3	18.75%	4.57												

Route: Washington Street
Section: Sextant Dr. to Almond Rd.
County: Lake
Job No.:

**Manhour Breakdown
Land Acquisition Estimate**

Length of Project

Washington Street $\pm \underline{3,000'} = \pm \underline{0.568 \text{ mile}}$

Total Length $\pm \text{ 3,000'} = \pm 0.568 \text{ mile}$

20 Parcels: 20 Fee Simple

1.	Pre-Survey Phase		
	Research available records		
a.	Title Co.)	
)	
b.	Recorder's Office)	5 MH
)	
c.	I.D.O.T.)	
)	
d.	Utilities)	
)	
e.	Private Surveyors)	
)	
f.	Land Owners)	<u>2 MH</u>
		Sub-total Item # 1	7 MH
2.	Reconnaissance Survey	2 Men	24 MH

3.	Project Survey Plan	$\pm 2,640'$ /sheet - 4 sheets	
a.	Alignment info)	
)	
b.	Existing R.O.W. info)	
)	
c.	Land line data)	
)	
d.	Subdivision data)	4 sheets
			<u>4 MH</u>
		Sub-total Item #3	4 MH
4.	First Submittal Plat of Highways & Descriptions		
a.	Ownership info)	
)	
b.	Total holding boundaries)	
)	
c.	Total holding area listing)	10 MH
)	
d.	Private survey info)	
)	
e.	Deed calculated closures)	
f.	Layout and drafting	$\pm 600'$ /sht. ± 6 sheets	
	84 hours x 1 man =		84 MH
	Cover Sheet	1 sheet	
	1 hour x 1 man =		1 MH
	Index Sheet	1 sheet	
	3 hours x 1 man =		3 MH
	Alignment sheets	2 sheets	
	6 hours x 1 man =		6 MH
	Total Holding sheets	1 sheet	
	3 hours x 1 man =		3 MH
g.	Legal descriptions	20 descriptions	<u>20 MH</u>
		Sub-total Item #4	127 MH

5. Survey (Field)

a.	Measure existing property lines 82 hours x 2 men =	164 MH
b.	Appraisal topography 44 hours x 2 men =	88 MH
c.	Monument & reference section & quarter corners 3 hours x 2 men =	6 MH
d.	Monument proposed R.O.W. lines 28 hours x 2 men =	<u>56 MH</u>

Sub-total Item #5 314 MH

6. Survey (Office)

a.	Compute traverse 11 hours x 1 man =	11 MH
b.	Compute existing property lines 76 hours x 1 man =	76 MH
c.	Compile appraisal topography 16 hours x 1 man =	16 MH
d.	Compute center line alignment 4 hours x 1 man =	4 MH
e.	Compute proposed R.O.W. 12 hours x 1 man =	<u>12 MH</u>

Sub-total Item #6 119 MH

7. Final Submittal Plat of Highways & Descriptions

a.	Final drafting \pm 11 sheets 5 hours x 1 man =	5 MH
b.	Final descriptions 20 descriptions	2 MH
b.	Prepare & record Monument Records 3 Monument Records	6 MH
d.	Assembly of final papers	<u>3 MH</u>
	Sub-total Item #7	16 MH

8. QC/QA

a.	Check preliminary plats 11 sheets	32 MH
b.	Check preliminary legal descriptions 20 legal descriptions	9 MH
c.	Check final plats 11 sheets	4 MH
d.	Check final legal descriptions 20 legal descriptions	<u>2 MH</u>
	Total All Items	658 MH

Route: Washington Street
 Section: Sextant Dr. to Almond Rd.
 County: Lake
 Job No.:

**Breakdown of
In House Direct Costs**

Item

1. Pre-Survey Phase

a. Trip to County Recorder – 1 each
 $\pm 30 \text{ miles/trip} \times 1 \text{ trip} = \pm 30 \text{ miles}$
 $\pm 30 \text{ miles @ } \$0.56/\text{mile} =$ \$ 16.80

b. Deeds & Monument Records = \$ 50.00

Sub-total Item #1 \$ 66.80

2. Reconnaissance Survey

a. Trips to project site - 2 each
 $\pm 20 \text{ miles/trip} \times 2 \text{ trips} = \pm 40 \text{ miles}$
 $\pm 40 \text{ miles @ } \$0.56/\text{mile} =$ \$ 22.40

4. First Submittal Plat of Highways & Descriptions

a. Plat of Highways Mylars
 11 sheets @ \$5.00/sheet = \$ 55.00

5. Survey (Field)

a. Trips to project site - 20 each
 $\pm 20 \text{ miles/trip} \times 20 \text{ trips} = \pm 400 \text{ miles}$
 $\pm 400 \text{ miles @ } \$0.56/\text{mile} =$ \$ 224.00

7. Final Submittal Plat of Highways & Descriptions

a. Trip to County Recorder	
± 30 miles/trip x 1 trip = ± 30 miles	
± 30 miles @ \$0.56/mile =	\$ 16.80
b. Record Monument Records	
3 Monument Records @ \$60 =	\$ 180.00
c. Deliver Final Papers to Lake County office	
± 22 miles/trip x 1 trip = ± 22 miles	
± 22 miles @ \$0.56/mile =	<u>\$ 12.32</u>
Total All Items	\$ 577.32

PTB NUMBER:

TODAY'S DATE: **8/6/2021**

**If other allowable costs are needed and not listed, please add in the above spaces provided.*

W.O. = Work Order
J.S. = Job Specific

Route: Washington Street
Section: Sextant Dr. to Almond Rd.
County: Lake
Job No.:

**Breakdown of
Services by Others**

Item

1. Pre-Survey Phase

- | | |
|------------------------------------|-------------|
| a. Commitments for Title Insurance | |
| 20 Commitments @ \$475.00 each = | \$ 9,500.00 |



Office: 847-870-0544

Fax: 847-870-0661

us@soilandmaterialconsultants.com

www.soilandmaterialconsultants.com

July 6, 2021

Proposal No. 19,365

Revised

Mr. Jacob Thede, P.E.
 BLA, Inc.
 333 Pierce Road, Suite 200
 Itasca, IL 60143

Re: Geotechnical Investigation
 Washington Street Bike Path
 and Sidewalk – Phase I
 Grayslake & Gurnee, Illinois

Dear Mr. Thede:

Submitted for your consideration is our proposal to provide the requested subsurface soil investigation, engineering evaluation and geotechnical report on the above referenced site.

Field Investigation

We propose the layout of 24 borings at the requested locations and in areas accessible to our track mounted drilling equipment. We will take reasonable precautions to minimize surface and subsurface damage due to our operations. We cannot be responsible for the cost of site restoration resulting from accessing and performing the investigation. We will contact JULIE for location of public utilities. The location of private services or other below grade improvements is the responsibility of the property owner.

It is assumed traffic control and permits will not be required for this work therefore, costs for traffic control and permits are not included within this proposal.

The borings will be power auger drilled and soils sampled using a split barrel sampler at intervals of 2.5 feet to depths of 10.0 feet. Additional boring depth and sampling may be provided if weak or unsuitable soil conditions are encountered. Borings may be terminated at shallower depths if refusal is encountered.

Laboratory Testing

Soil samples will be returned to our laboratory for review and tested to determine moisture content. Competent samples of cohesive soils will be tested further to determine dry unit weight and unconfined compressive strength. Additionally, grain-size analysis and Atterberg Limits testing will be provided on selected soil samples to provide an estimated IBR value.

Scope of the CCDD Soil Assessment

The CCDD Soil Assessment will be conducted by True North Consultants, Inc. and will include a Historical and Regulatory Review along with soil sampling and analysis. The field investigation will include having an environmental engineer in the field during Soil and Material Consultants, Inc. geotechnical drilling for PID screening and sampling of soils. True North has assumed collecting up to eleven (11) soil samples from the geotechnical borings. Seven (7) of the samples will be have discrete soil analytical testing performed as shown under the Schedule of Fees in this proposal.

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORINGS • SITE INVESTIGATIONS • PAVEMENT INVESTIGATIONS • GEOTECHNICAL ENGINEERING
 TESTING OF • SOIL • ASPHALT • CONCRETE • MORTAR • STEEL

Four (4) samples will be submitted on hold and analyzed only if necessary. Laboratory analysis costs reflect a standard turn-around time of 7 to 10 days. The analysis can be expedited for a surcharge. Some facilities may require additional testing beyond which is proposed. Upon receipt of analytical results, True North will issue a LPC #663 for the soils if they do not exceed the Maximum Allowable Concentrations (MACs) published in 35 IAC Part 1100. If any of the RCRA metal results exceed the MAC table values, then a SPLP will be run to determine if the value meets uncontaminated requirements (excluding arsenic). If the soil analytical results do not support this, then the soils will require landfill waste analysis for landfill disposal. Waste soil characterization and delineating non-CCDD soils are not included in this proposal.

Engineering Evaluation, Report

The field investigation and laboratory testing will be completed under the direction of a Registered Professional Engineer. Preliminary information will be available upon request. Upon completion of the investigation an engineering evaluation will be completed and a report prepared. The report will present our findings, evaluate the findings and present appropriate recommendations.

Charges

Our unit charges and the estimated total cost for the investigation are indicated on the attached Schedule of Fees. Final billing will be based on this schedule. If additional services are requested that are beyond the scope of the proposed investigation, they will be provided at our established unit prices.

Your consideration of this proposal is appreciated. The attached General Conditions are understood to be part of this proposal. If acceptable, please execute and return one copy to our office. We anticipate submittal of the final report approximately 20 to 25 working days after receipt of the signed proposal.

Should you have any questions concerning the scope of the investigation, please let us know.

Very truly yours,

SOIL AND MATERIAL CONSULTANTS, INC.



Thomas P. Johnson, P.E.
President

Proposal Accepted By:

Client _____

Street _____

Town _____ State _____ Zip Code _____

Phone () _____ E-Mail Address _____

Signature _____ Position _____

SCHEDULE OF FEES -- SUBSURFACE SOIL INVESTIGATION

Field

Boring Layout	8	hr.	\$	96.00	/hr.	\$	768.00
Utility Location	4	hr.	\$	96.00	/hr.	\$	384.00
Mobilization	1		\$	Lump	Sum	\$	1,800.00
Drilling (24 @ 10')	240	ft.	\$	14.00	/ft.	\$	3,360.00
Split Barrel Sampling	96	ea.	\$	10.00	ea.	\$	960.00

Laboratory

Moisture Content							
Unit Weight	1		\$	Lump	Sum	\$	1,750.00
Unconfined Compressive Strength							

Report

Senior Engineer (P.E.)	12	hr.	\$	140.00	/hr.	\$	1,680.00
Meeting Time - if necessary	5	hr.	\$	140.00	/hr.	\$	700.00

Estimated Total Cost: \$ 11,402.00

SCHEDULE OF FEES – CCDD TESTING

Field

Environmental Technician	24	hr.	\$	110.00	/hr.	\$	2,640.00
Field Supplies	3	day	\$	330.00	/day	\$	990.00

Laboratory

Discrete pH	7	ea.	\$	20.00	ea.	\$	140.00
Discrete VOCs	1	ea.	\$	180.00	ea.	\$	180.00
Discrete BETX	4	ea.	\$	85.00	ea.	\$	340.00
Discrete PNAs	7	ea.	\$	150.00	ea.	\$	1,050.00
Discrete RCRA Metals	7	ea.	\$	105.00	ea.	\$	735.00

Report

PIP Evaluation	1	ea.	\$	Lump	Sum	\$	600.00
LPC 663 Consulting	1	ea.	\$	Lump	Sum	\$	1,200.00

Estimated Total Cost: \$ 7,875.00

SPLP testing of the RCRA Metals over the MAC Table limits can be run at an additional cost of \$110.00 each.

TERMS AND CONDITIONS

Soil and Material Consultants, Inc. (SMC) scope of work defined in the proposal was based on information provided by the client. If incomplete, inaccurate or if unexpected site conditions are discovered, the scope of work may change.

GEOTECHNICAL INVESTIGATIONS

Client will furnish SMC with right-of-access to the site. SMC will take reasonable precautions to minimize site damage due to its operations, but has not included in the fee the cost of restoration of any resulting damage. SMC shall not be liable for damage or injury due to encountering subsurface structures (pipes, tanks, utilities or others) not called to SMC's attention in writing or are not correctly shown on the drawings furnished by client or client's representative. If the client desires, SMC will restore any damage to the site and add the cost of restoration to the fee.

Field work, laboratory testing and engineering analysis will be performed in accordance with generally accepted soil and foundation engineering practices. Samples are retained in our laboratory for 30 days from date of report and then destroyed unless other disposition is requested. The data reported applies only to the soils sampled and the conditions encountered at each boring location. This does not imply or guarantee that soils between borings will be identical in character. Isolated inclusions of better or poorer soils can be found on any site. SMC will not be liable for extra work or other consequences due to changed conditions encountered between borings.

Any exploration, testing and analysis associated with the investigation will be performed by SMC for the client's sole use to fulfill the purpose of this Agreement. SMC is not responsible for use or interpretation of the information by others. The client recognizes that subsurface conditions may vary from those encountered in borings or explorations. Information and recommendations developed by SMC are based solely on available information and for the currently proposed improvement.

Documents including but not limited to technical reports, original boring logs, field data, field notes, laboratory test data, calculations, reports of inspection and testing, geotechnical reports, technical reports, submittals and estimates furnished to the client or its agents pursuant to this agreement are not intended or represented to be suitable for reuse by the client or others on extensions of this project or on any other project. Any reuse without SMC's written consent will be at user's sole risk and without liability or legal exposure to SMC. User shall indemnify and hold harmless SMC from all claims, damages, losses and expenses including attorney's fees arising out of or resulting therefrom. To the maximum extent permitted by law, the Client agrees to limit SMC liability for clients' damages to \$100,000 or the fee, whichever is lesser. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

Soil and Material Consultants, Inc. is a Professional Engineering Corporation. Engineering services are often completed by extension through technical staff. The unit rates presented in this proposal do not reflect charges associated with organized labor. Future agreements, if any, with organized labor will invalidate some of the unit rates presented. Required rate adjustments will be presented to the client for acceptance prior to providing services at the adjusted rates.

Services are invoiced monthly for the preceding period. Client agrees to pay each invoice within thirty (30) days of receipt and further agrees to pay interest on all amounts not paid at the rate of 2.0% per month, an annual rate of 24%, from the due date. Client agrees to pay all reasonable costs of collection including staff time, court costs, Attorneys' fees and related expenses, if this account becomes delinquent. Client agrees that reports furnished to the client but not paid for in full remain the sole property of SMC and will not be used for design, construction, permits, licensing, sales or other gain.

TESTING SERVICES

Client shall furnish SMC with at least one working day's notice on any part-time (less than 8 hours/day) job when field personnel are requested. SMC shall make reasonable effort to provide field personnel in a timely manner but reserves the right to schedule field personnel as deemed appropriate. Minimum charges will be billed when work cancellations are received after field personnel have left for the project site.

SMC personnel will provide a professional service based on observations and testing of the work of a contractor, subcontractor, or other service/material provider, as specifically requested. SMC field personnel will look for general conformance with project specifications, plans and/or soil report but does not accept the responsibility to control or direct the work of others. Discrepancies noted by SMC office or field personnel will be referred to client or client's representative.

Testing Services furnished by SMC are defined as the taking of soil and/or material tests at various locations and the making of visual observations relating to earthwork, foundations, and/or materials as specifically requested by the client and agreed to by SMC, and will be limited to those specifically agreed services. Such services will be performed by SMC using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable members of the profession practicing in this or similar localities.

Observations and testing of soils and/or materials by SMC in no way implies a guarantee or warranty of the work of the contractor, subcontractor, or other service/material provider. SMC's work or failure to perform same shall in no way excuse such contractor, subcontractor or other service/material provider from liability in the event of subsequently discovered defects, omissions, errors, deficiencies or failure to perform in accordance with the project plans and specifications. SMC field personnel shall not be responsible for superintendence of the construction process nor direction of the work of the contractor, subcontractor, or other service/material provider. SMC's work shall not include determining or implementing the means, methods, techniques, sequences or procedures of construction. SMC shall not be responsible for evaluating, reporting or affecting job conditions concerning health, safety or welfare.