



CITY OF WASHINGTON, ILLINOIS

Public Works Committee Agenda Communication

Meeting Date: January 6, 2020

Prepared By: Jon R. Oliphant, AICP, Planning & Development Director

Agenda Item: Safe Routes to School Engineering Services Agreement Contract Authorization

Explanation: The City of Washington received infrastructure grant funding for two Safe Routes to School applications in April. The District 51 project would construct a 5' wide sidewalk on the north side of Bobolink Drive, 5' wide sidewalk on Elgin Avenue adjacent to the circular drive area at Central Intermediate School (CIS), and the construction of a new concrete pad to accommodate 20 inverted-U bicycle racks to be placed near the entrance to CIS. The District 52 project would construct an 8' wide shared use path on N. Main Street between W. Cruger Road and Washington Middle School (WMS) and a 5' wide sidewalk on the north side of North Street between N. Main and West Street. Each project received the maximum \$200,000 for the construction.

Staff recently released a Request for Qualifications to complete Phase I and II engineering for both projects. Phase I has previously been completed for the N. Main shared use path but engineering has not been initiated for any of the other project components. After reviewing the submittals, staff recommends entering into a contract with Terra Engineering to complete this work. Terra completed all of the engineering associated with the Transportation Alternatives Program project that constructed the Phase II construction of the W. Cruger shared use path as well as the Phase I engineering for the gap on N. Main.

The goal will be to proceed with this project as soon as IDOT approves the contract. It is feasible that a spring letting could be met for N. Main to allow for construction to occur this summer while WMS is on its break. The same goal will be in place for the District 51 construction, though the engineering will likely take longer because it is not as advanced at this point and because a few right-of-way easements may be needed on Bobolink. The engineering and eventual construction of North Street will likely take the longest because of some challenging terrain, ADA improvements, and utility relocations that are apparent.

Fiscal Impact: The FY 19-20 budget includes \$90,000 for the completion of Phase I and II engineering for both projects. This contract would be for a not-to-exceed amount of \$82,602.

Recommendation/

Committee Discussion Summary: Staff recommends approval of the contract.

Action Requested: Recommendation of the attached contract for approval at the January 6 Council meeting.

Local Public Agency City of Washington	LOCAL A G E N C Y	 Illinois Department of Transportation Preliminary Engineering Services Agreement For Federal Participation	CONSULTANT	Consultant TERRA Engineering, LTD
County Tazewell				Address 401 Main St Ste 1560
Section 18-00123-00-SW 19-00125-00-SW				City Peoria
Project No.				State Illinois
Job No.				Zip Code 61615
Contact Name/Phone/E-mail Address Jon Oliphant 309-444-1135 joliphant@ci.washington.il.us				Contact Name/Phone/E-mail Address Eric Therkildsen 309-999-0123 etherkildsen@terraengineering.com

THIS AGREEMENT is made and entered into this _____ day _____, 2020 between the above Local Public Agency (LPA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the PROJECT. Federal-aid funds allotted to the LPA by the state of Illinois under the general supervision of the Illinois Department of Transportation (STATE) will be used entirely or in part to finance engineering services as described under AGREEMENT PROVISIONS.

Project Description

Name	SRTS Projects within School Districts 51 and 52	Route	Bobolink Dr, Eagle Ave, North St, Main St	Length	2,550	Structure No.	
Termini	N. Main Street between W. Cruger Road and Washington Middle School, North Street from N. Main Street to just west of West Street, Bobolink Drive and 500 LF on Eagle Avenue at Central Intermediate School						

Description Plan preparation for a shared use path on N. Main Street, Phase I and II Engineering for safe route to school sidewalks on North St and Bobolink and construction inspection for the same.

Agreement Provisions

I. THE ENGINEER AGREES,

1. To perform or be responsible for the performance, in accordance with STATE approved design standards and policies, of engineering services for the LPA for the proposed improvement herein described.
2. To attend any and all meetings and visit the site of the proposed improvement at any reasonable time when requested by representatives of the LPA or STATE.
3. To complete the services herein described within 365 calendar days from the date of the Notice to Proceed from the LPA, excluding from consideration periods of delay caused by circumstances beyond the control of the ENGINEER.

4. The classifications of the employees used in the work should be consistent with the employee classifications and estimated man-hours shown in EXHIBIT A. If higher-salaried personnel of the firm, including the Principal Engineer, perform services that are indicated in Exhibit A 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.
5. That the ENGINEER is qualified technically and is entirely 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 herein.
6. That the ENGINEER shall be responsible for the accuracy of the work and shall promptly make necessary revisions or corrections resulting from the ENGINEER's errors, omissions or negligent acts without additional compensation. Acceptance of work by the STATE will not relieve the ENGINEER of the responsibility to make subsequent correction of any such errors or omissions or for clarification of any ambiguities.
7. That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by the ENGINEER and will affix the ENGINEER's professional seal when such seal is required by law. Plans for structures to be built as a part of the improvement will be prepared under the supervision of a registered structural engineer and will affix structural engineer seal when such seal is required by law. 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 STATE.
8. That the ENGINEER will comply with applicable federal statutes, state of Illinois statutes, and local laws or ordinances of the LPA.
9. The undersigned certifies neither the ENGINEER nor I have:
 - a. 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 me or the above ENGINEER) to solicit or secure this AGREEMENT,
 - b. 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. paid, or agreed to pay any firm, organization or person (other than a bona fide employee working solely for me or the above ENGINEER) any fee, contribution, donation or consideration of any kind for, or in connection with, procuring or carrying out the AGREEMENT.
 - d. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency,
 - e. have 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 indicted 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 (e) and
 - g. have not within a three-year period preceding this AGREEMENT had one or more public transactions (Federal, State or local) terminated for cause or default.
10. To pay its subconsultants for satisfactory performance no later than 30 days from receipt of each payment from the LPA.
11. To submit all invoices to the LPA within one year of the completion of the work called for in this AGREEMENT or any subsequent Amendment or Supplement.
12. To submit BLR 05613, Engineering Payment Report, to the STATE upon completion of the project (Exhibit B).
13. Scope of Services to be provided by the ENGINEER: SEE ATTACHMENT A
 - ☐ Make such detailed surveys as are necessary for the planning and design of the PROJECT.
 - ☐ Make stream and flood plain hydraulic surveys and gather both existing bridge upstream and downstream high water data and flood flow histories.
 - ☐ Prepare applications for U.S. Army Corps of Engineers Permit, Illinois Department of Natural Resources Office of Water Resources Permit and Illinois Environmental Protection Agency Section 404 Water Quality Certification.
 - ☐ Design and/or approve cofferdams and superstructure shop drawings.
 - ☐ Prepare Bridge Condition Report and Preliminary Bridge Design and Hydraulic Report, (including economic analysis of bridge or culvert types and high water effects on roadway overflows and bridge approaches).
 - ☐ Prepare the necessary environmental and planning documents including the Project Development Report or Environmental Assessment, State Clearinghouse, Substate Clearinghouse and all necessary environmental clearances.
 - ☐ Make such soil surveys or subsurface investigations including borings and soil profiles as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations to be made in accordance with the current Standard Specifications

for Road and Bridge Construction, Bureau of Local Roads and Streets Administrative Policies, Federal-Aid Procedures for Local Highway Improvements or any other applicable requirements of the STATE.

- ☐ Analyze and evaluate the soil surveys and structure borings to determine the roadway structural design and bridge foundation.
- ☐ Prepare preliminary roadway and drainage structure plans and meet with representatives of the LPA and STATE at the site of the improvement for review of plans prior to the establishment of final vertical and horizontal alignment, location and size of drainage structures, and compliance with applicable design requirements and policies.
- ☐ Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
- ☐ Complete the general and detailed plans, special provisions and estimate of cost. Contract plans shall be prepared in accordance with the guidelines contained in the Bureau of Local Roads and Streets manual. The special provisions and detailed estimate of cost shall be furnished in quadruplicate.
- ☐ Furnish the LPA with survey and drafts in quadruplicate all necessary right-of-way dedications, construction easements and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.

II. THE LPA AGREES,

1. To furnish the ENGINEER all presently available survey data and information
2. To pay the ENGINEER as compensation for all services rendered in accordance with this AGREEMENT, on the basis of the following compensation formulas: SEE CECS Form BDE 3608 and Direct Cost Form BDE 436

Cost Plus Fixed Fee

- ☐ CPFF = $14.5\%[DL + R(DL) + OH(DL) + IHDC]$, or
- ☐ CPFF = $14.5\%[DL + R(DL) + 1.4(DL) + IHDC]$, or
- ☐ CPFF = $14.5\%[(2.3 + R)DL + IHDC]$

Where: DL = Direct Labor
IHDC = In House Direct Costs
OH = Consultant Firm's Actual Overhead Factor
R = Complexity Factor

Specific Rate

- ☐ (Pay per element)

Lump Sum

☐

3. To pay the ENGINEER using one of the following methods as required by 49 CFR part 26 and 605 ILCS 5/5-409:

☐ With Retainage

- a) **For the first 50% of completed work**, and 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 90% of the value of the partially completed work minus all previous partial payments made to the ENGINEER.
- b) **After 50% of the work is completed**, and upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LPA, monthly payments covering work performed shall be due and payable to the ENGINEER, such payments to be equal to 95% of the value of the partially completed work minus all previous partial payments made to the ENGINEER.
- c) **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 the STATE, a sum of money equal to the basic fee as determined in this AGREEMENT less the total of the amounts of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.

☒ Without Retainage

- 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 the STATE, a sum of money equal to the basic fee as determined in this AGREEMENT less the total of the amounts of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.

4. The recipient shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any 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 DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by 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.).
5. To certify by execution of this AGREEMENT that the selection of the ENGINEER was performed in accordance with the Local Government Professional Services Selection Act 50 ILCS 510, the Brooks Act 40 USC 11, and Procurement, Management, and Administration of Engineering and Design related Services (23 CFR part 172). Exhibit C is required to be completed with this agreement.

III. IT IS MUTALLY AGREED,

1. That no work shall be commenced by the ENGINEER prior to issuance by the LPA of a written Notice to Proceed.
2. That tracings, 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 and other data prepared or obtained in accordance with this AGREEMENT shall be made available, upon request, to the LPA or to the STATE, without restriction or limitation as to their use.
3. That all reports, plans, estimates and special provisions furnished by the ENGINEER shall be in accordance with the current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Administrative Policies, Federal-Aid Procedures for Local Highway Improvements or any other applicable requirements of the STATE, it being understood that all such furnished documents shall be approved by the LPA and the STATE 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.
4. 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 not be construed to relieve the ENGINEER of any responsibility for the fulfillment of this agreement.
5. To maintain, for a minimum of 3 years after the completion of the contract, adequate books, records and supporting documents to verify the amounts, 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 STATE; 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 STATE for the recovery of any funds paid by the STATE under the contract for which adequate books, records and supporting documentation are not available to support their purported disbursement.
6. The payment by the LPA in accordance with numbered paragraph 3 of Section II will be considered payment in full for all services rendered in accordance with this AGREEMENT whether or not they be actually enumerated in this AGREEMENT.
7. 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 save harmless the LPA, the STATE, and their officers, agents and employees from all suits, claims, actions or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy.
8. 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 material becomes the property of the LPA. The LPA will be responsible for reimbursement of all eligible expenses to date of the written notice of termination.

9. This certification is required by the Drug Free Workplace Act (30ILCS 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 State 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 or grant payments, termination of a contract or grant and debarment of the contracting or grant opportunities with the State for at least one (1) year but no more than five (5) years.

For the purpose of this certification, "grantee" or "contractor" means a corporation, partnership or other 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 a contract or grant of \$5,000 or more from the State, as defined in 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 the 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 five (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 of maintaining 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 by,
- 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.
- g. Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.
10. 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 DOT assisted contracts. 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.
11. When the ENGINEER is requested to complete work outside the scope of the original AGREEMENT, a supplemental AGREEMENT will be required. Supplements will also be required for the addition or removal of subconsultants, direct costs, the use of previously unspecified staff, and other material changes to the original AGREEMENT.

Agreement Summary

Prime Consultant:	TIN Number	Agreement Amount
TERRA Engineering, LTD	36-3853964	\$82,602.00
Sub-Consultants:	TIN Number	Agreement Amount
Sub-Consultant Total:		0.00
Prime Consultant Total:		82,602.00
Total for all Work:		82,602.00

Executed by the LPA:

City of Washington

(Municipality/Township/County)

ATTEST:

By: _____

Clerk

By: _____

Title: _____

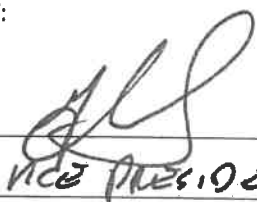
(SEAL)

Executed by the ENGINEER:

ATTEST:

By: _____

Title: _____


VICE PRESIDENT

TERRA Engineering, LTD
401 Main Street Ste 1560
Peoria, IL 61602

By: _____

Title: _____

Associate Vice President

Exhibit A - Preliminary Engineering

Route: _____
 Local Agency: _____
 (Municipality/Township/County)
 Section: _____
 Project: _____
 Job No.: _____

*Firm's approved rates on file with IDOT'S
 Bureau of Accounting and Auditing:

Overhead Rate (OH) _____ %
 Complexity Factor (R) _____
 Calendar Days _____

Method of Compensation:

- Cost Plus Fixed Fee 1 ☐ 14.5%[DL + R(DL) + OH(DL) + IHDC]
 Cost Plus Fixed Fee 2 ☐ 14.5%[DL + R(DL) + 1.4(DL) + IHDC]
 Cost Plus Fixed Fee 3 ☐ 14.5%[(2.3 + R)DL + IHDC]
 Specific Rate ☐
 Lump Sum ☐

Cost Estimate of Consultant's Services in Dollars

Element of Work	Employee Classification	Man-Hours	Payroll Rate	Payroll Costs (DL)	Overhead*	Services by Others	In-House Direct Costs (IHDC)	Profit	Total
									\$ 390.00
Totals		0.00		\$ 390.00					\$ 390.00

Engineering Payment Report (Submit with Final Invoice)

Name	TERRA Engineering, LTD
Address	401 Main St Ste 1560 Peoria
Telephone	309-999-0123
TIN Number	

Local Agency	City of Washington
Section Number	18-00123-00-SW; 19-00125-00-SW
Project Number	
Job Number	

Sub-Consultant Name	TIN Number	Actual Payment from Prime
N/A		
Sub-Consultant Total:		
Prime Consultant Total:		
Total for all Work Completed:		

Date _____

For information about IDOTs collection and use of confidential information review the department's [Identity Protection Policy](#).

Exhibit C **Federal Qualification Based Selection (QBS) Checklist**

Local Public Agency City of Washington
 Section Number 18-00123-00-SW; 19-00125-00-SW
 Project Number _____
 Job Number _____

The LPA must complete Exhibit C, if federal funds are used for this engineering agreement and the value will exceed \$40,000. The LPA must follow federal small purchase procedures, if federal funds are used and the engineering agreement has a value less than \$40,000.

☐ Form Not Applicable (engineering services less than \$40,000)

1.	Do the written QBS policies and procedures discuss the initial administration (procurement, management, and administration) concerning engineering and design related consultant services? ☐ Yes ☐ No																				
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 <i>BLRS Manual</i> ? ☐ Yes ☐ No If no, IDOT's approval date: _____																				
3.	Was the scope of services for this project clearly defined? ☐ Yes ☐ No																				
4.	Was public notice given for this project? ☒ Yes ☐ No Due date of submittal: _____ Method(s) used for advertisement and dates of advertisement: _____																				
5.	Do the written QBS policies and procedures cover conflicts of interest? ☐ Yes ☐ No																				
6.	Do the written QBS policies and procedures use covered methods of verification for suspension and debarment? ☐ Yes ☐ No																				
7.	Do the written QBS policies and procedures discuss the method of evaluation? ☐ Yes ☐ No <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Criteria for this project</td> <td style="width: 10%;">Weighting</td> <td style="width: 33%;">Criteria for this project</td> <td style="width: 10%;">Weighting</td> </tr> <tr> <td>_____</td> <td>_____ %</td> <td>_____</td> <td>_____ %</td> </tr> <tr> <td>_____</td> <td>_____ %</td> <td>_____</td> <td>_____ %</td> </tr> <tr> <td>_____</td> <td>_____ %</td> <td>_____</td> <td>_____ %</td> </tr> <tr> <td>_____</td> <td>_____ %</td> <td>_____</td> <td>_____ %</td> </tr> </table>	Criteria for this project	Weighting	Criteria for this project	Weighting	_____	_____ %	_____	_____ %	_____	_____ %	_____	_____ %	_____	_____ %	_____	_____ %	_____	_____ %	_____	_____ %
Criteria for this project	Weighting	Criteria for this project	Weighting																		
_____	_____ %	_____	_____ %																		
_____	_____ %	_____	_____ %																		
_____	_____ %	_____	_____ %																		
_____	_____ %	_____	_____ %																		
8.	Do the written QBS policies and procedures discuss the method of selection? ☐ Yes ☐ No Selection committee (titles) for this project: _____ _____ Top three consultants selected for this project in order: 1) _____ 2) _____ 3) _____ If less than 3 responses were received, IDOT's approval date: _____																				
9.	Was an estimated cost of engineering for this project developed in-house prior to contract negotiation? ☐ Yes ☐ No																				
10.	Were negotiations for this project performed in accordance with federal requirements? ☐ Yes ☐ No																				
11.	Were acceptable costs for this project verified? ☐ Yes ☐ No ☐ LPA will rely on IDOT review and approval of costs.																				
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? ☐ Yes ☐ No																				
13.	Do the written QBS policies and procedures cover ongoing and finalizing administration of the project (monitoring, evaluation, closing-out a contract, record retention, responsibility, remedies to violations or breaches to a contract, and resolution of disputes)? ☐ Yes ☐ No																				

Phase I – Preliminary Engineering

The City of Washington requires professional Phase I and Phase II engineering services for two grant-funded projects: 1) An eight-foot wide shared use path on North Main Street between West Cruger Road and Washington Middle School. Additionally, a five-foot wide sidewalk would be constructed on North Street between North Main Street and West Street; and 2) A five-foot wide sidewalk on Bobolink Drive between Elgin Avenue and Eagle Avenue and a five-foot wide sidewalk on Eagle Avenue adjacent to the circular drive area at Central Intermediate School. This project also includes the construction of a new concrete pad to accommodate 20 inverted-U bicycle racks to be placed near the entrance to Central Intermediate School. Grants were obtained through the Safe Routes to School (SRTS) program to provide federal funding for the construction portion of this project.

Engineering services will be performed in accordance with Bureau of Local Roads and Streets Standards. It is assumed that Bobolink Drive and North Street will each qualify as a State Approved CE using form BLR 19100 with the Main St section covered under a previous PDR. The following tasks will be required for Phase I Preliminary Engineering for District 51: Bobolink Drive and District 52: North Street and Main Street:

- Field Investigations and Data gathering
 - Collect available data from City of Washington and utility companies.
 - Perform topographic survey along North Street between North Main Street and West Street, along Bobolink Drive between Elgin Avenue and Eagle Avenue and along Eagle Avenue to establish existing conditions.
- Environmental Survey Request
 - Based on the proposed alignments and the use of existing right-of-way, submit an ESR to the State for environmental clearances (wetlands, Archaeological and Historical Preservation, Threatened or Endangered Species) *Bobolink Drive and North Street*
 - Submit an update request for previously approved ESR. *Main Street*
 - Address any environmental concerns through the preliminary engineering phase
- Existing Conditions: *Bobolink Drive and North Street*
 - Prepare Location Map(s) and provide narrative: *Bobolink Drive and North Street*
 - Determine Existing Conditions (width of travel, alignment, traffic control devices, utilities, jurisdiction, maintenance responsibility, drainage, terrain, access and current land use).
 - Prepare existing typical sections (roadway widths, ROW widths, guardrail, curb and gutter, surface types).
- Proposed Improvements: *Bobolink Drive and North Street*
 - Define Logical Termini
 - Determine IDOT design guidelines
 - Meet current accessibility requirements (i.e. longitudinal, cross slope and intersection ramps and crossings).
 - Describe proposed improvements (sidewalks, shared-use paths, traffic control devices, drainage items, utility adjustments, intersection improvements, driveway slopes,)
 - Prepare typical sections
 - Prepare plan sheets
 - Identify items affecting improvement (driveways, utilities, culverts, trees, stairs)

- Identify required design variances; prepare justification and submit IDOT
 - Prepare opinion of probable cost
- Culvert Extension Design *North Street*
- Right-of-Way *Bobolink Drive and North Street*
 - Determine Right-of-way needs including temporary easements.
 - Prepare up to five Right-of-way plat and legal descriptions
- Special Waste, if Right of Way is needed *Bobolink Drive and North Street, Update Main St*
 - Perform a special waste screening based on previously collected database results.
- Maintenance of Traffic *Bobolink Drive and North Street*
 - Define how vehicle traffic and pedestrians will be accommodated during construction
- Public Involvement *Bobolink Drive and North Street*
 - Property owner contact letters
 - No formal public meetings are anticipated.
 - TERRA may need to prepare exhibits and reports for routine city meeting.
- Submit Form BLR 19100 to District for approval.

Phase II – Plans, Specifications and Estimate: *Bobolink Drive and North Street & Main Street*

Prepare the following Plan Sheets in accordance with Bureau of Design and Environment Manual:

- Cover Sheet
- General Notes
- Summary of Quantities
- Typical Sections
- Schedule of Quantities
- Alignment, Ties & Benchmarks
- Removal Plans
- Plan & Profile Sheets
- Traffic Control Plans (Maintenance of Traffic)
- Erosion and Sediment Control Plans
- Miscellaneous Details – Culvert Extension
- Details of intersection ramps to meet ADA requirements
- Pavement Markings & Signage Plans
- Landscaping Plans
- Cross Sections

Prepare and determine the pavement structure in accordance with the Bureau of Local Roads Manual.

Prepare Project Specifications in accordance with IDOT specifications and include the following:

- Supplemental Specifications
- Recurring Special Provisions
- BDE Special Provisions
- Contract Special Provisions
- Project Specific Special Provisions
- Highway Standards

Prepare Quantities and Estimates which will include the following:

- Quantities
- Estimate of Time
- Estimate of Cost

ATTACHMENT A - Scope of Services Safe Routes to School

Utility Coordination

- Analyze potential conflicts between the proposed improvements and the existing utilities.
- Coordinate utility relocations as necessary to facilitate construction of the proposed improvements.

Right of Way – North Street and Bobolink Drive

- It is assumed that five Right-of-way Easements from up to five parcels will be needed for this project.
- Right-of-way plat and legal descriptions will be prepared.

Assumptions

The following assumptions were made in the development of the above scope and man-hour estimate:

- It is assumed that this project will not impact a jurisdictional floodplain or jurisdictional wetlands.
- It is assumed that no hydraulic analysis of culverts or storm sewers will be required.
- It is assumed that this project will not be taken to an additional Bi-Monthly meeting.
- Should impacts to wetlands be identified during Phase I, additional services will be discussed and negotiated with the City of Washington.
- It is assumed that special waste screening will show that neither a PESA or PSI will be required for this project.
- It is assumed that the project will not impact any historic, archeological or cultural resources.
- Should the results of the ESR indicate otherwise, additional services will be discussed and negotiated with the City of Washington.
- It is assumed that a formal public hearing will not be required for this project. Should additional services be required, they will be discussed and negotiated with the City of Washington.
- It is assumed that professional land acquisition services for appraisals and negotiations will not be needed.

PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME
PRIME/SUPPLEMENT
Prepared By

TERRA Engineering, LTD
Prime
Eric Therkildsen

DATE 12/31/19
PTB-ITEM# 0

CONTRACT TERM 12 MONTHS
START DATE 1/10/2020
RAISE DATE 12/31/2020
END DATE 1/9/2021

OVERHEAD RATE 160.60%
COMPLEXITY FACTOR 0
% OF RAISE 3%

ESCALATION PER YEAR

year	First date	Last date	Months	% of Contract
0	1/10/2020	12/31/2020	12	100.00%

The total escalation = 0.00%

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PTB-ITEM #

TERRA Engineering, LTD
Prime
0

12/31/19

ESCALATION FACTOR

0.00%

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

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Principal	\$78.00	\$78.00
Sr Project Manager	\$78.00	\$78.00
Senior Structural Engineer	\$61.54	\$61.54
Sr Project Engineer	\$47.14	\$47.14
Project Engineer	\$35.75	\$35.75
Technician	\$23.00	\$23.00
Surveyor	\$40.38	\$40.38
Administrative Assistant	\$23.00	\$23.00

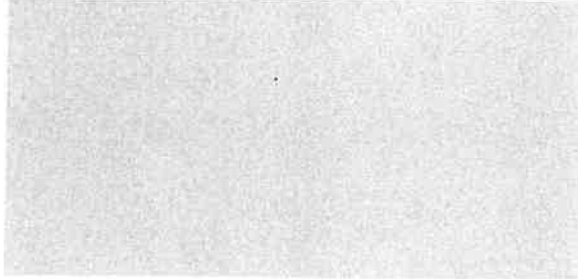
Subconsultants

FIRM NAME
PRIME/SUPPLEMENT
PTB-ITEM #

TERRA Engineering, LTD
Prime
0

DATE

NAME	Direct Labor Total	Contribution to Prime Consultant
------	--------------------	----------------------------------



Total

0.00

0.00

Bureau of Design and Environment
Prepared By: Consultant
12/31/19

OVERHEAD RATE	160.60%
COMPLEXITY FACTOR	<u>0</u>

Prepared
12/31/19

71,650

DBE 0.00%

AVERAGE HOURLY PROJECT RATES

SHEET 1 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Data/Survey			Phase I			Phase II								
		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	78.00	2.0	0.30%	0.23							2	0.43%	0.33						
Sr Project Manager	78.00	40.0	6.01%	4.68	2	3.45%	2.69	20	14.29%	11.14	18	3.85%	3.00						
Senior Structural Engineer	61.54	30.0	4.50%	2.77							30	6.41%	3.94						
Sr Project Engineer	47.14	260.0	39.04%	18.40	4	6.90%	3.25	72	51.43%	24.24	184	39.32%	18.53						
Project Engineer	35.75	120.0	18.02%	6.44				8	5.71%	2.04	112	23.93%	8.56						
Technician	23.00	144.0	21.62%	4.97				24	17.14%	3.94	120	25.64%	5.90						
Surveyor	40.38	52.0	7.81%	3.15	52	89.56%	36.20												
Administrative Assistant	23.00	18.0	2.70%	0.62				16	11.43%	2.63	2	0.43%	0.10						
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
TOTALS		566.0	100%	\$41.28	58.0	100.00%	\$42.14	140.0	100%	\$44.00	468.0	100%	\$40.36	0.0	0%	\$0.00	0.0	0%	\$0.00



COMPANY NAME: TERRA Engineering, LTD

PTB NUMBER:

TODAY'S DATE: 12/21/2020

[illegible]

*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