

Memo

TO:

Mayor Manier and City Council

FROM:

Ed Andrews, Public Works Director

SUBJECT:

Cruger Road Phase 2 Multi-Use Path – TAP Grant

Supplement for PESA (Preliminary Environmental Site Assessment)

DATE:

December 1st, 2017

EXECUTIVE SUMMARY:

On September 12, 2016, the City Council awarded an engineering contract to Terra Engineering for the construction of an 8' wide recreational trail along the north side of Cruger Road from Nofsinger Road to Main Street, and a portion of Main Street to connect to Easy Street. This contract was prepared using IDOT's standard agreement for Consultant services under a cost plus fixed fee (CPFF) of the estimated project cost for a time and materials, not to exceed fee of \$57,007.99.

Due to the results of a special waste screening, a Preliminary Environmental Site Assessment (PESA) was required by IDOT & FHWA due to proximity of an industrial battery business. This effort was conducted by Terra's subconsultant, SCI and resulted in an upper end adjustment of **\$61,955.74**. Since this amount was below \$5,000, work was allowed to proceed but since it is a modification to an existing contract, it is being presented for Council approval as well.

This matter has been placed on the City Council consent agenda of Monday, December 4th, 2017 for post-ratification review and approval.

CC:

File

	_							
Local Agency				Consultant				
City of Washington	L	(Illinois Department		TERRA Engineering, Ltd.				
, and the second	0	of Transportation	С	,				
County	- 1		_	Address				
Tazewell	C		0					
Section	A		N	401 Main Street, Suite 1130				
TOTAL CONTRACTOR OF THE CONTRA	L		S	City				
16-00119-00-BT (Bike Trail)			U	Peoria				
Project No.	A	Preliminary Engineering	ī	State				
		Services Agreement	-	IL				
Job No.	G	For	T	Zip Code				
	E	Federal Participation	Α	61602				
Contact Name/Phone/E-mail Address	N	rederal Participation	N	Contact Name/Phone/E-mail Address				
Ed Andrews	C		Т	George Ghareeb, P.E.				
309-444-1136	307 777-0123							
eandrews@ci.washington.il.us gghareeb@terraengineering.com								
ggnat eebwtei i aengineering.com								
THIS AGREEMENT is made and entered into this day of , 2017 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the PROJECT. Federal-aid funds allotted to the LA 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 Cruger Road Recreational Trail Ext	ensid	on Route Cruger Rd Lengt	h	1.2 mi. Structure No.				
Termini From the east side of Nofsinger Ro	oad t	o the west side of Main Street						
-								
Description This project will construct an app Nofsinger Road and Main Street and on the w	roxin est s	nately 1.2 mile extension of a recreation side of Main Street between Cruger Ro	nal t ad a	trail on the noth side of Cruger Road between and Easy Street.				
		Agreement Provisions						

I. THE ENGINEER AGREES,

- To perform or be responsible for the performance, in accordance with STATE approved design standards and policies, of engineering services for the LA for the proposed improvement herein described.
- To attend any and all meetings and visit the site of the proposed improvement at any reasonable time when requested by representatives of the LA or STATE.
- 3. To complete the services herein described within 365 calendar days from the date of the Notice to Proceed from the LA, 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 manhours 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.
- 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 LA.

- 9. The undersigned certifies neither the ENGINEER nor I have:
 - 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 LA.
- 11. To submit all invoices to the LA 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 - SCOPE OF SERVICES

\boxtimes	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, Environmental Class of Action Determination 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 LA 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 LA 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 LA AGREES,

- 1. To furnish the ENGINEER all presently available survey data and information
- To pay the ENGINEER as compensation for all services rendered in accordance with this AGREEMENT, on the basis of the following compensation formulas:

	Cost Plus Fixed Fee	☐ CPFF	f = 14.5%[DL + R(DL) + OH(DL) + IHDC], or f = 14.5%[DL + R(DL) + 1.4(DL) + IHDC], or f = 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 p	per element)
	Lump Sum		
3.	To pay the ENGINEER L	using one of t	he 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 LA, 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 LA, 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 LA but not later than 60 days after the work is completed and reports have been made and accepted by the LA 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.
- a) For progressive payments Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LA, 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 LA but not later than 60 days after the work is completed and reports have been made and accepted by the LA and STATE, a sum o 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 (31U.S.C. 3801 et seq.).

III. IT IS MUTALLY AGREED,

- 1. That no work shall be commenced by the ENGINEER prior to issuance by the LA of a written Notice to Proceed.
- 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 LA 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 LA 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 LA 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 LA. 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 LA 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 LA, 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 LA 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 LA 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 LA. The LA 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 LA deems appropriate.

		Agreement Summa	ry	
	onsultant:		TIN Number	Agreement Amount
TERRA Engineering, Ltd.			36-3853964	\$61,965.74
Sub-Cor	nsultants:		TIN Number	Agreement Amount
			Sub-Consultant Total:	
			Prime Consultant Total:	\$61,965.74
			Total for all Work:	
Executed by the LA:		City of Was	hington	
•			(Municipality/Township/Cou	nty)
ATTEST:				
Ву:		Ву:		
	Clerk	Title:		
(SEAL)				
Executed by the ENGINEER:				
ATTEST:				
		7.		
Ву:		Ву:		
Title: Associate Vice President		Title: Se	nior Project Manager	



Phase I - Prelminary Engineering, Update Environmental Clearances, Update PDR

The City of Washington has Funds from IDOT to extend a multiuse path along the north side of Cruger Road, from Nofsinger Road to Main Street. Engineering services will be performed in accordance with Bureau of Local Roads and Streets Standards. It is assumed that the project will be approved based on a Group I Categorical Exclusion or an update of a previously approved PDR.

The following tasks will be required for Phase I Preliminary Engineering:

- Field Investigations and Data gathering
 - o Collect available data from City of Washington, IDOT, utility companies.
 - Perform pick-up topographic survey along Cruger Road along the route of the proposed multi use path to verify as built conditions.
- Environmental Survey Request, only as needed
 - Based on the proposed alignment 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)
 - Address any environmental concerns through the preliminary engineering phase
- Existing Conditions:
 - o Prepare Location Map(s) and provide narrative
 - Determine Existing Conditions
 (width of travel, turn lanes, alignment, traffic control devices, utilities, jurisdiction, maintenance responsibility, drainage, terrain and current land use)
 - Prepare existing typical sections (roadway widths, ROW widths, guardrail, curb and gutter, surface types)
 - Report current traffic data including percentage of trucks; estimate design traffic data
- Proposed Improvements:
 - Describe purpose and need for project
 - o Define Logical Termini
 - o Determine IDOT design guidelines
 - Meet current accessibility requirements (i.e. longitudinal, cross slope and intersection ramps and crossings).
 - Describe proposed improvements
 (width of proposed travel, bicycle and turning lanes, sidewalks, shared-use paths, traffic control devices, drainage items, alignment changes, utility adjustments, intersection improvements, side slopes and clear zones, super-elevation data for horizontal curves)
 - Prepare typical sections
 - Prepare plan and profile sheets
 - Identify items affecting improvement
 (parking and truck restrictions, traffic signals, stage construction, lighting)
 - Identify required design variances; prepare justification and submit IDOT



- Prepare opinion of probable cost
- Discuss any proposed improvements being considered in conjunction with this project.
- Crash Analysis (Update existing crash data or complete analysis)
 - Summarize crash data for the past five years
 - Prepare a spot map or a location map showing crash locations
 - Detail the types of crashes
 - collision diagrams
 - define data source
 - Analyze crash data
 - high crash locations
 - critical wet weather sites
 - other crash patterns
 - Define how the proposed project will address any crash issues
- Right-of-Way
 - Determine Right-of-way needs including temporary easements.
- Special Waste, if Right of Way is needed
 - o Perform a special waste screening based on previously collected database results.
- Maintenance of Traffic
 - Define how vehicle traffic and pedestrians will be accommodated during construction
- Public Involvement
 - No formal public meetings are anticipated.
 - TERRA may need to prepare exhibits and reports for routine city meeting.
- Prepare or amend a Local Project Development Report for IDOT's approval.
- Prepare a Preliminary Environmental Site Assessment for the project area and include relevant documentation in the Project Development Report.

Phase II - Plans, Specifications and Estimated

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

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



- o Pavement Markings & Signage Plans
- o Landscaping Plans
- o 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
- o Recurring Special Provisions
- BDE Special Provisions
- o Contract Special Provisions
- Project Specific Special Provisions
- o Highway Standards

Prepare Quantities and Estimates which will include the following:

- Quantities
- o Estimate of Time
- Estimate of Cost

Utility Coordination

- o 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 - Cruger Road

- It is assumed that one Right-of-way from up to two 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.
 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.

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- 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.
- o It is assumed that professional land acquisition services for appraisals and negotiations will not be needed.

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FIXED RAISES COST PLUS FIXED FEE

176.05% 0 3.00%				
DATE 09/28/17 PTB NOOVERHEAD RATE COMPLEXITY FACTOR % OF RAISE				1.50%
12 MONTHS 9/1/2016 9/1/2017	ESCALATION PER YEAR	3/2/2017 - 9/1/2017	12	51.50% project would be:
TERRA Engineering, Ltd. CONTRACT TERM START DATE RAISE DATE		9/1/2016 - 3/1/2017	12	= 50.00% = 1.0150 The total escalation for this project
FIRM NAME PRIME/SUPPLEMENT				

PAYROLL RATES

FIRM NAME PRIME/SUPPLEMENT PSB NO.

TERRA	Engineering,	Ltd	DA	TΕ

09/28/17

ESCALATION FACTOR

1.50%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Project Principal	\$70.00	\$71.05
Sr Project manager	\$70.00	\$71.05
Sr Engineer	\$51.57	\$52.34
Project Engineer	\$26.74	\$27.14
Senior Technician	\$32.00	\$32.48
Survey Manager	\$54.32	\$55.13
Surveyor	\$30.83	\$31.29
Adm. Assoc.	\$20.02	\$20.32
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
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		\$0.00 \$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00

Subconsultants

PRIME/SUPPLEMENT PSB NO.	TERRA Engineeri	ng, Ltd.	DATE	09/28/17
NAME	Direct Labor Total	Contribution to Prime Consultant		
		0.00	d.	
		0.00		
		0.00		
		0.00		
		0.00		
		0.00		
		0.00		
		0.00		
Total	0.00	0.00		

COST ESTIMATE OF CONSULTANT SERVICES

09/28/17 DATE 1.7605 OVERHEAD RATE COMPLEXITY FACTOR TERRA Engineering, Ltd. FIRM PSB PRIME/SUPPLEMENT

			OVERHEAD	IN-HOUSE		Outside	SERVICES			% OF
DKOP	MANHOURS	PAYROLL	ත්	DIRECT	FIXED	Direct	BY	DBE	TOTAL	GRAND
Δ.	€	(9)	FRINGE BENF (C)	COSTS (D)	2 0	Costs (F)	OTHERS (G)	TOTAL	9	TOTAL
Survey, Data Gathering	45	1,913.46			784.25				6.192.85	9.99
Phase I Engineering	83.5	4,087.34		00.099	1,731.75	4,350.00			18,024.85	29.09%
Phase II Engineering	280	10,958.91	19,293.17		4,401.05				34,753.14	56.08%
Right-of-way Plats	22	947.52			379.27				2,994.90	4.83%
Subconsultant DL					0.00				00.00	0.00%
TOTALS	430 5	17 007 23	34 K2K KD	000	7 206 20	4 250 00	300	000	100000	

DBE 0.00%

AVERAGE HOURLY PROJECT RATES

DATE 09/28/17 TERRA Engineering, Ltd. PRIME/SUPPLEMENT FIRM PSB

Wgtd Avg Part. % rO Hours R Wgtd 10.02 6.46 9.52 17.07 -Avg Right-of-way Plats 9.09% 18.18% 54.55% % Hours SHEET 5 5.08 8.72 0.79 0.15 0.51 Phase II Engineering 7.14% 32.14% 0.71% 0.71% 32,14% 1.43% Hours 20 72 06 90 28.74% 20.42 32.93% 17.24 1.70 0.49 33.53% 9.10 Phase | Engineering 2.40% 2.40% Part Hours 24 28 Wgtd 09.0 Survey, Data Gathering 9.31 4.33 4.90 Avg 9.47 13.33% 17.78% 2.22% 13.33% 8.89% Part % Hours 20 8.58 13.56 7.50 7.24 1.54 0.19 12.08% 25.90% 27.64% 22.30% 2.79% 7.43% 0.93% 0.93% TOTAL PROJECT RATES 4 37 38 00 0 0 0 0 0 HOURLY RATES 71.05 71.05 52.34 27.14 32.48 32.48 55.13 20.32 CLASSIFICATION Project Principal Sr Project manager Senior Technician Project Engineer Survey Manager PAYROLL Sr Engineer Adm. Assoc. Surveyor

\$0.00

%0

0

\$43.07

100%

22

100% \$39.14

280

100% \$48.95

100.00% \$42.52 83.5

45

\$41.60

100%

430.5

TOTALS



COMPANY NAME: TERRA Engineering, Ltd.

PTB NUMBER:

TODAY'S DATE: 9/28/2017

ITEM	ALLOWABLE	W.O. ONLY	QUANTITY J.S. ONLY	CONTRACT RATE	TOTAL
Per Diem (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum			\$0.00	\$0.00
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD) Lodging Taxes and Fees	Actual cost (Up to state rate maximum)			\$0.00	\$0.00
(per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual cost			\$0.00	\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00	\$0,00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum		220	\$0.575	\$126.50
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day			\$0.00	\$0.00
Vehicle Rental	Actual cost (Up to \$55/day)			\$0.00	\$0.00
Tolls	Actual cost			\$0.00	\$0.00
Parking	Actual cost			\$0.00	\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00	\$0,00
Shift Differential	Actual cost (Based on firm's policy)			\$0,00	\$0.00
Overnight Delivery/Postage/Courier Service	Actual cost (Submit supporting documentation)		2	\$30,00	\$60.00
Copies of Deliverables/Mylars (In-house)	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Copies of Deliverables/Mylars (Outside)	Actual cost (Submit supporting documentation)		1	\$100.00	\$100.00
Project Specific Insurance	Actual cost			\$0.00	\$0.00
Monuments (Permanent)	Actual cost			\$0.00	\$0.00
Photo Processing	Actual cost			\$0.00	
2-Way Radio (Survey or Phase III Only)	Actual cost			\$0.00	\$0.00 \$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual cost			\$0.00	\$0.00
CADD	Actual cost (Max \$15/hour)			\$0.00	\$0.00
Web Site	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Advertisements	Actual cost (Submit supporting documentation)				\$0.00
Public Meeting Facility Rental	Actual cost (Submit supporting documentation)		1	\$500.00	\$500.00
Public Meeting Exhibits/Renderings & Equipment	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Recording Fees	Actual cost			\$0.00	\$0.00
Transcriptions (specific to project)	Actual cost		198	\$0.00	\$0.00
Courthouse Fees and Title Commitments	Actual cost			\$0.00	\$0.00
			1	\$100.00	\$100.00
Storm Sewer Cleaning and Televising	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Traffic Control and Protection	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Aerial Photography and Mapping	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Utility Exploratory Trenching	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0,00	\$0.00
Testing of Soil Samples*	Actual cost			\$0,00	\$0.00
Lab Services*	Actual cost (Provide breakdown of each cost)			\$0.00	\$0.00
Equipment and/or Specialized Equipment Rental*	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Environmental Reports: PESA	Actual cost		1	\$4,350.00	\$4,350.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0,00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0,00	\$0.00
				\$0.00	\$0.00
TOTAL DIRECT COST					\$5,236.50

^{*}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