



Illinois Department of Transportation

Office of Highways Project Implementation / Region 3 / District 4
401 Main Street / Peoria, Illinois 61602-1111

September 26, 2017

Mr. Scott Reeise, Director of Public Works
City of Peoria
3505 North Dries Lane
Peoria, Illinois 61604

Motor Fuel Tax (MFT) Funds
City of Peoria
Section: 16-00368-00-EG
Western Avenue (Adams Street to W. Howett Street)
Preliminary Engineering Services Agreement

Dear Mr. Reeise:

The *Preliminary Engineering Services Agreement For Motor Fuel Tax Funds* agreement dated December 9, 2015 between the City of Peoria and Terra Engineering Ltd. for engineering services to be performed in connection with this section is approved.

The costs for engineering services are permitted for MFT funds and will be authorized based on your *Agreement of Understanding*. An authorization to expend \$164,268.79 of Motor Fuel Tax (MFT) funds should appear on the city's next MFT transaction detail. A balance of \$1,215,731.21 remains from the total appropriation for this section.

Sincerely,

A handwritten signature in black ink that reads "Kensil A. Garnett".

Kensil A. Garnett, P.E.
Region Three Engineer

SJA/bkf

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cc: Ms. Beth Ball, City Clerk
Eric Therkildsen, Terra Engineering Ltd.
Central Bureau of Local Roads and Streets (letter only)
District Four Compliance Review Officer
File

Municipality City of Peoria	L O C A L A G E N C Y	Preliminary Engineering Services Agreement For Motor Fuel Tax Funds	C O N S U L T A N T	Name TERRA Engineering
Township				Address 401 Main Street
County Peoria County				City Peoria
Section 16-00368-00-EG				State IL

THIS AGREEMENT is made and entered into this 9th day of December, 2015 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Motor Fuel Tax Funds, allotted to the LA by the State of Illinois under the general supervision 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.

Section Description

Name Western Avenue

Route _____ Length 0.91 Mi. 4800.00 FT (Structure No. N/A)

Termini The intersection Lincoln Ave on the north end to the intersection of Adams Street on the south end

Description:

Reconstruction of Western Avenue from 4-lanes to 3-lanes, bike accomodations and improved pedestrian accommodations with the existing 66-foot wide right-of-way.

Agreement Provisions

The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described, and checked below: **SEE ATTACHMENT A – SCOPE OF SERVICES**
 - a. Make such detailed surveys as are necessary for the preparation of detailed roadway plans
 - b. Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
 - c. Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
 - d. 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.
 - e. Prepare Army Corps of Engineers Permit, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
 - f. Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
 - g. Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with five (5) copies of the plans, special provisions, proposals and estimates. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at his actual cost for reproduction.
 - h. Furnish the LA with survey and drafts in quadruplicate of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.

Note: Four copies to be submitted to the Regional Engineer

- i. Assist the LA in the tabulation and interpretation of the contractors' proposals
 - j. Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.
 - k. Prepare the Project Development Report when required by the DEPARTMENT.
- (2) That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies of the DEPARTMENT. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA and the DEPARTMENT.
- (3) To attend conferences at any reasonable time when requested to do so by representatives of the LA or the Department.
- (4) In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that he will perform such work without expense to the LA, even though final payment has been received by him. He shall give immediate attention to these changes so there will be a minimum delay to the Contractor.
- (5) That basic survey notes and sketches, charts, computations and other data prepared or obtained by the Engineer pursuant to this AGREEMENT will be made available, upon request, to the LA or the DEPARTMENT without cost and without restriction or limitations as to their use.
- (6) That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by him and will show his professional seal where such is required by law.

The LA Agrees,

1. To pay the ENGINEER as compensation for all services performed as stipulated in **Attachment A – Scope of Services** in accordance with **ATTACHMENT B – ESTIMATED FEES NOT TO EXCEED.**
- a. A sum of money equal to _____ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
 - b. A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

Schedule for Percentages Based on Awarded Contract Cost

Awarded Cost	Percentage Fees	
Under \$50,000	_____	(see note)
	_____	%
	_____	%
	_____	%
	_____	%
	_____	%

Note: Not necessarily a percentage. Could use per diem, cost-plus or lump sum.

2. To pay for services stipulated in **Attachment A – Scope of Services** of the ENGINEER AGREES at actual cost of performing such work plus a 2.8 multiplier to cover profit, overhead and readiness to serve - "actual cost" being as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at his actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided under **Attachment A – Scope of Services**. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus a five (5) percent service charge.

"Cost to Engineer" to be verified by furnishing the LA and the DEPARTMENT copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed.

3. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made as soon as practicable after the services have been performed in accordance with the following schedule:
 - a. Upon completion of detailed plans, special provisions, proposals and estimate of cost - being the work required by paragraphs 1a through 1g under THE ENGINEER AGREES - to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on the approved estimate of cost.
 - b. Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.

By Mutual agreement, partial payments, not to exceed 90 percent of the amount earned, may be made from time to time as the work progresses.

4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in paragraphs 1a, through 1h and prior to the completion of such services, the LA shall reimburse the ENGINEER for his actual costs plus a 2.8 multiplier percent incurred up to the time he is notified in writing of such abandonment - "actual cost" being defined as in paragraph 2 of THE LA AGREES.
5. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of THE ENGINEER AGREES, after they have been approved by the DEPARTMENT, the LA will pay the ENGINEER for such changes on the basis of actual cost plus a 2.8 multiplier to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 2 of THE LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of his responsibility to prepare a complete and adequate set of plans and specifications.

It is Mutually Agreed,

1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.
2. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at his last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with Section 4 of THE LA AGREES.
3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA and their approval by the DEPARTMENT, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA and the DEPARTMENT.
4. That the ENGINEER warrants that he/she has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For Breach or violation of this warranty the LA shall have the right to annul this contract without liability.

IN WITNESS WHEREOF, the parties have caused the AGREEMENT to be executed in quadruplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

City of Peoria _____ of the
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By Beth Ball

By [Signature]

City Clerk

Title City Manager (Acky 8/1/17)

(Seal)

REVIEWED AND APPROVED:

BY: [Signature]

CORPORATION COUNSEL

Executed by the ENGINEER:

TERRA Engineering, Ltd.

401 Main Street, Suite 1130

ATTEST:

Peoria, IL 61602

By [Signature]

By [Signature]

Title Senior Vice President

Title Associate Vice President

Approved

092617

Date

Department of Transportation

[Signature]

Regional Engineer

WO #13**Attachment A – Scope of Services****Western Avenue, from Adams Street to W. Lincoln Avenue****Project Description**

The City of Peoria desires to reconstruct Western Avenue, from Adams Street to W. Lincoln Avenue. Local and/or state funds will be used for design and construction, and the target letting date is November 2016 to February 2017, for 2017 construction.

The proposed improvements will include converting an existing four-lane roadway section to a three-lane section, with on-street parking and/or bike lanes, and improved pedestrian accommodations within the existing 66-foot wide right-of-way. Work will include:

- New curb and gutter constructed along both sides of the street
- New ADA compliant sidewalk on both sides of the street and ADA compliant ramps at all intersections
- ADA compliant residential and commercial entrances
- New Hot Mix Asphalt (HMA) pavement overlay constructed on a suitable pavement base
- Ornamental lighting
- Storm drainage improvements
 - Frames, grates and lids of storm drainage inlets and manholes shall be replaced with new items.
 - New drainage structures and connecting storm sewer pipes shall be included where localized flooding problems have been identified and/or where existing drainage items are in poor condition.
 - Green Infrastructure Best Management Practices (BMPs) within the ROW to reduce storm water runoff volumes entering the city's combined sewer system. Consideration will be given to utilizing porous pavement and porous sub-base in the parking lanes to promote infiltration, infiltration trenches behind the curb line, or other green BMPs.
- Intersection improvements at the following signalized intersections:
 - Western, SW Adams and Starr Streets
 - Western and SW Jefferson Street
 - Western and W Starr Street
 - Western and W Garden Street
 - Western and W Lincoln Avenue

Intersection improvements will include improved geometrics and ADA compliant cross walks and ramps. Signal improvements will include new mast arms and signal heads, pedestrian signals and push buttons for ADA compliance, and new loop detectors. Signal upgrades may not be required at Lincoln. Other improvements may include, at the City's request, new controller cabinets & signal controllers, uninterruptable power supplies, and interconnection between all signals within the project limits.

WO #13

Attachment A – Scope of Services

Western Avenue, from Adams Street to W. Lincoln Avenue

Design Standards

TERRA will follow IDOT policy and procedures, as described in Part II of the Bureau of Local Roads and Streets (BLRS) Manual for Motor Fuel Tax (MFT) and State-Funded projects. Design will be in accordance with Part IV of the BLRS Manual, Project Design.

Deliverables

- Phase I – Project Development
 - MFT Certification / Project Status (BLR 10100)
 - Approval of Design Variances (BLR 22120)
 - Traffic Impact Study
 - Intersection Design Studies *as required by BLRS Manual* ~~for all signalized intersections listed above~~
- Phase II – Plan Development
 - Construction Plans
 - Project Special Provisions
 - Opinion of Construction Cost

**** NOTE – Project Scope does not include Land Acquisition Services, which will be provided under a separate contract or Work Order.***

Work Order #13

Phase I - Project Development

The following tasks will be required for Phase I Engineering:

- **Corridor Concepts and Public Involvement**
 - Evaluate Cross-section concepts to convert the existing four-lane roadway section to a three-lane section, with on-street parking and/or bike lanes, and improved pedestrian accommodations within the existing 66-foot wide right-of-way.
 - Review options with the City of Peoria and present option(s) at a Public Meeting.
 - Provide high quality renderings of proposed improvements
 - Attend one public meeting
 - Attend a meeting with elected officials and advocate groups
 - Track all comments received
 - Refine proposed corridor concepts and cross section(s) based on public input and City direction.

WO #13

**Attachment A – Scope of Services
Western Avenue, from Adams Street to W. Lincoln Avenue**

- **Survey, Field Investigations and Data Gathering**
 - Utilities
 - Gather utility data from providers
 - Incorporate information into base topographic
 - Route Surveys
 - Establish Horizontal and Vertical Control
 - Survey Topographic Features along Roadway – 10 feet beyond ROW on each side
 - Perform property document search at the County Courthouse
 - Set existing property pins along the street
- **Environmental Review**
 - Obtain cultural clearance ~~from IHPA~~
 - Obtain ~~an EcoCAT for~~ Biological & Wetland clearances
 - Perform a Special Waste screening
- **Project Studies**
 - Traffic Impact Study
 - Count existing traffic at identified locations
 - Project traffic for design year
 - Prepare one Traffic Impact Study for the project corridor
 - Intersection Design Studies – one for each intersection as required by BLRS Manual
 - Develop horizontal alignment for the intersection
 - Analyze signal warrants
 - Develop proposed geometrics
 - Complete IDS's for City/IDOT review and approval
- **Project Management**
 - Coordination with City
 - Coordination with IDOT
 - Coordination with utility companies
 - Prepare a Quality Assurance Plan
 - Review project deliverables for compliance
 - Prepare monthly invoices

WO #13

Attachment A – Scope of Services

Western Avenue, from Adams Street to W. Lincoln Avenue

Additional Phase I Engineering Services required, under a future Work Order:

- **Survey, Field Investigations and Data Gathering**
 - Obtain pavement cores, one every 500 feet alternating lanes
 - Obtain percolation tests

- **Environmental Review**
 - Prepare a PESA (Preliminary Environmental Survey Assessment)
 - Prepare an MFT Certification / Project Status (BLR 10100)

- **Project Studies**
 - Drainage Studies
 - Identify existing drainage patterns and storm sewer system
 - Assess need to repair, reconstruct portions of, or supplement existing drainage system
 - Identify opportunities for providing green infrastructure BMPs
 - Existing Conditions:
 - Prepare topographic and property boundary mapping
 - Prepare existing typical sections
 - Proposed Improvements:
 - Prepare typical sections
 - Develop vertical profile
 - Prepare plan and profile sheets
 - Identify utility conflicts and required relocations
 - Identify required design variances; prepare justification and submit IDOT
 - Develop street lighting options for residential and commercial areas
 - Determine ROW needs including temporary construction easements

Phase II – Plans, Specifications and Estimate

- **Right of Way Plats**
(temporary construction easements for about 60 parcels including 33 residential driveways and 27 commercial driveways)
 - Obtain Title Commitments (60)

WO #13

Attachment A – Scope of Services

Western Avenue, from Adams Street to W. Lincoln Avenue

- Property surveys
- Prepare Plats (60)
- Prepare ROW Deeds (60)
- Prepare Permanent Easement Deeds (number to be determined)
- Place Iron Pins at new ROW corners
- **Design**
 - Roadway Geometrics
 - Pavement Design
 - PROWAG / ADA Details
 - Drainage / Sewer Design
 - Traffic Signals
 - Lighting
 - MOT
- **Construction Plans**

Prepare the following Plan Sheets in accordance with Bureau of Design and Environment Manual. Provide Quality Control and Assurance. Submit to IDOT and City of Peoria for review, and revise to address review comments.

 - Cover Sheet
 - General Notes / Index / Legend
 - Summary of Quantities
 - Typical Sections
 - Schedule of Quantities
 - Alignment, Ties & Benchmarks
 - Removal Plans
 - Plan & Profile Sheets
 - Drainage Plans & Utilities
 - Signage and Pavement Markings
 - Traffic Control Plans (Maintenance of Traffic)
 - Erosion and Sediment Control Plans
 - Landscaping Plans
 - Lighting Plans
 - Intersection Details
 - Traffic Signal Plans
 - Miscellaneous Details
 - Cross Sections

WO #13

Attachment A – Scope of Services

Western Avenue, from Adams Street to W. Lincoln Avenue

- **Project Specifications, Estimates and Permits**
 - Prepare Project Specifications in accordance with IDOT specifications and include the following:
 - Supplemental Specifications
 - Recurring Special Provisions
 - BDE and BLRS Special Provisions
 - Contract Special Provisions
 - Project Specific Special Provisions
 - Highway Standards
 - Prepare Quantities and Estimates which will include the following:
 - Quantities
 - Estimate of Cost
 - Prepare and submit the SWPPP to the IEPA



Payroll Escalation Table
Fixed Raises
New Formula

FIRM NAME TERRA
 PRIME/SUPPLEMENT Prime

DATE 09/20/17
 PTB NO. _____

CONTRACT TERM 18 MONTHS
 START DATE 10/1/2015
 RAISE DATE 1/1/2016

OVERHEAD RATE 149.99%
 COMPLEXITY FACTOR 0
 % OF RAISE 3.00%

ESCALATION PER YEAR

10/1/2015 - 3/31/2017				
18				
18				

= 100.00%
 = 1.0000

The total escalation for this project would be: 0.00%



WO #17-05 - Direct Costs

Western Avenue - Adams to Howett

Direct Costs				
Item	Rate	Unit	Quantity	Total Cost
TERRA				
CADD computer - hr	\$ 15.00	hour		\$ -
Plots - Bond Prints (B&W)	\$ 0.35	Sq Ft		\$ -
Plots - Bond Prints (color)	\$ 1.35	Sq Ft	150	\$ 202.50
Outside Direct Costs				
Display Boards / Mounting	At Cost	LS	1	\$ 300.00
Total Direct Cost				\$ 502.50