

Municipality City of Peoria	<b>L O C A L  A G E N C Y</b>	<b>Preliminary Engineering Services Agreement For Motor Fuel Tax Funds  Work Order 16-02</b>	<b>C O N S U L T A N T</b>	Name Hanson Professional Services
Township Peoria				Address 7625 N. University St., Suite 200
County Peoria				City Peoria
Section 16-00358-02-PV				State IL

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2016 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 Sheridan Road

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Route FAU 6595 Length 0.26 Mi. 1,370 FT (Structure No. \_\_\_\_\_)

Termini Richmond Ave. to Eleanor Place

Description:  
Full-depth pavement removal/replacement; curb, sidewalk, and retaining wall reconstruction; roadway width changing from ex. 4-lanes to proposed 3-lanes for length of project. Two intersections to be reconstructed. (See TIP Sheet)

**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:
  - 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.
  - l.  See Exhibit A.
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 on a time and expense basis. The upper limit of compensation for these services shall not exceed \$375,000 without authorization from the LA. The attached Cost Estimate of Consultant Services (Exhibit B) provides an estimate of the work tasks and the fee calculation based on the attached Scope of Services (Exhibit A). This estimate of work and effort is the basis of the upper limit of compensation. ~~as stipulated in paragraphs 1a, 1g, 1i, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark:~~

- ~~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~~

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

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

~~2. To pay for services stipulated in paragraphs 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k of the ENGINEER AGREES at actual cost of performing such work plus \_\_\_\_\_ percent to cover profit, overhead and readiness to serve "actual cost" being defined~~

~~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 the paragraph 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k. 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.~~

2. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made **without retainage upon receipt of monthly invoices from the ENGINEER. Such invoices shall be for partially completed work less all previous partial payments paid to the ENGINEER. Payments shall be made as soon as practicable after receipt of each invoice.** ~~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.~~

3. 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 \_\_\_\_\_ percent~~ the time and expense incurred up to the time the ENGINEER is notified in writing of such abandonment. ~~"actual cost" being defined as in paragraph 2 of THE LA AGREES.~~

4. 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 a **time and expense basis as calculated in Exhibit B.** ~~the basis of actual cost plus \_\_\_\_\_ percent 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.~~
1. 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.~~
2. 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.
3. That this Work Order (WO 16-02) is subject to all terms and conditions of the Standard Agreement for Professional Services between the CITY and ENGINEER dated April 12, 2016.

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 \_\_\_\_\_

City Council

\_\_\_\_\_  
Clerk

By \_\_\_\_\_

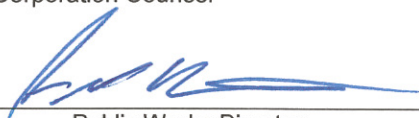
(Seal)

Title \_\_\_\_\_

Reviewed and Approved

REVIEWED AND APPROVED:

Corporation Counsel



Public Works Director

Executed by the ENGINEER:

Hanson Professional Services Inc.

7625 N. University St., Suite 200

Peoria, IL 61614

ATTEST:

By Matthew D

By Juanda A Loos

Title Associate

Title Vice President

Approved

\_\_\_\_\_  
Date

Department of Transportation

\_\_\_\_\_  
Regional Engineer

**WORK ORDER NO.: 16-02 Hanson**  
**EXHIBIT A: SCOPE OF SERVICES**  
**SHERIDAN ROAD: RICHMOND AVE. TO ELEANOR PLACE**  
**SECTION NO. 16-00358-02-PV**

Hanson Professional Services Inc. shall prepare project development studies and design plans, specifications and estimates for an improvement of Sheridan Road from Eleanor Pl. to Richmond Ave., in the City of Peoria for the City of Peoria (CITY). The proposed improvements include sidewalks, curbs, gutters, roadway profile and alignment adjustment, on-street bike lanes, on-street parking areas, and storm sewers.

The Project shall be designed in accordance with Motor Fuel Tax (MFT) standards and Specifications of the Illinois Department of Transportation, except as may be modified or approved by the City of Peoria Public Works Department.

Plans will be prepared in English units (feet) using Microstation software in accordance with CAD conventions of the Illinois Department of Transportation (IDOT) in IL State Plane Coordinates (East Zone).

**SERVICES:** The Scope of Services will be limited to the following:

- A. The corridor boundaries for data collection are along Sheridan Road from Eleanor Pl. to Richmond Ave. Data collection will extend 100 ft along each minor side road and 500 ft along each leg of Nebraska Ave.
- B. Study Surveying and Mapping (Quigg Engineering)
  - 1. Pickup survey for retaining wall and door locations.
  - 2. Right of way plats and legal description preparation for nine (9) parcels. Obtain title commitments for all right of way parcels. No plats will be provided for Temporary easements.
  - 3. Stake ROW corners and temporary easements for 9 properties. Stake temporary easements for an additional 35 properties.
- C. Additional Public Involvement
  - 1. Conduct public involvement activities to seek public input on the project. Public involvement activities will include:
    - i. One (1) additional meeting with property owners from Nebraska to Gale.
  - 2. Exhibits will be prepared for the meetings.
- D. Environmental Studies
  - 1. Update Preliminary Environmental Site Assessment (PESA).
  - 2. Conduct Preliminary Site Investigation (PSI) for properties identified in PESA as having RECs.
  - 3. Update biological Clearance.
- E. Traffic Studies
  - 1. Revise intersection design studies (IDS) for IDOT review at the Sheridan Road and Nebraska Avenue intersection to reflect the change to paver bike lanes the resulting shift of the curb lines in by 6 inches on either side.
  - 2. Meeting with City to discuss intersection design

3. Meeting with IDOT to discuss IDS comments
4. Prepare variance forms for each intersection for IDOT approval

#### F. Storm Water Drainage Design

1. Review known flooding history and any existing drainage deficiencies which are brought to the attention of the design engineer.
2. Storm water drainage will be designed in accordance with the current edition of the IDOT Drainage Manual. It is anticipated that the hydrology will be designed using the Rational Method & ISWS Bulletin 70. It is anticipated that the conveyance system will be storm sewers with the inlet spacing, capacity and hydraulic grade line designed per IDOT standards.
3. Existing conditions will be compared against proposed design to determine recommendations for upgrading the existing system. Recommendations will be based upon the incremental cost to upgrade the existing system to current design standards against the severity of known deficiencies.
4. Based upon the most recent FEMA mapping, the mapped floodplain for Big Hollow Creek within the vicinity is Zone A6. It is not anticipated that any modifications or adverse impacts to any regulatory floodplain will be necessary for the proposed improvements.
5. Research and investigate available green infrastructure options and determine which may offer a benefit to the project and to the CITIES CSO reduction goals. The proposed improvement will be analyzed to determine if green infrastructure options (i.e. stormwater infiltration) can be used to provide adequate stormwater detention. Where infiltration is not feasible, stormwater runoff may be detained and slowly released in accordance with standard detention methods. Develop details and requirements for the implementation of the selected options for the project.
6. Calculate storm water benefits of using permeable pavers for the bike lane.
7. Coordinate with supplier on layout for brick pavers.
8. Design calculations will be submitted to the CITY for review.

#### G. Erosion Control

1. Plans will be prepared in accordance with the requirements of the Illinois Environmental Protection Agency using the standards of the Illinois Department of Transportation.
2. Prepare Storm Water Pollution Prevention Plan (SWPPP) in accordance with the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

#### H. Roadway Geometric Design

1. Prepare additional pavement designs in accordance with IDOT's Local Roads Manual to evaluate following options as requested by the City:
  - i. Mill and Overlay
  - ii. Prepare HMA pavement design in accordance with IDOT's Local Roads Manual.
2. Develop typical sections. Revise typical sections to incorporate the paver bike lanes.
3. Revise intersection grading for change to paver bike lanes.
4. Prepare plan and profile sheets (@ 1"=20' H., 1"=5' V.) and cross sections every 25' for the project limits. Update plan and profile sheets based on bike lane changes.
5. Revise cross sections and corridor modeling for change to paver bike lanes.
6. Identify limits of right-of-way and temporary easement needs.
7. Design sidewalk ramps at each intersection in compliance with ADA/PROWAG guidelines including detailed layout and grading information.

8. Redesign sidewalk ramps at each side street intersection based on updated paver bike lane geometry.
9. Coordination with CityLink for bus stop locations and paved area for benches.
10. Coordination with utility companies.
11. Determine utility conflicts and make adjustments as necessary. Determine necessary utility relocations.
12. Revise sidewalk location to provide room for Ameren poles to remain.

I. Roadway Lighting

1. Hanson will provide engineering design and construction documents for roadway and pedestrian lighting.
2. Roadway lighting will be designed to match lighting installed on Forrest Hill Avenue.
3. Roadway lighting calculations will be submitted to CITY for review.
4. Interface with an existing lighting controller or provide a new electrical service and controller as required to provide power and control for the new lighting.
5. Lighting design plans showing fixture layout and circuit routing.
6. Lighting detail plans to show foundations, controllers, poles and fixtures.
7. Special provisions will be provided for all non-standard items.
8. A summary of quantities and an opinion of probable construction cost will be provided.
9. Coordination with the utilities and City questions/comments is included.

J. Preparation of necessary plans and specifications, which include the following minimum items:

1. Title Sheet (w/ Sheet Index)
2. General Notes, Standard List, Legend/Abbrev.
3. Summary of Quantities Sheets
4. Schedule of Quantities
5. Existing/Proposed Typical Sections
6. H/V Control Schematic including control points and any required curve data
7. Control ties, TBM Locations
8. Right-of-way Plans
9. Stage Construction / Maintenance of Traffic Plans
10. Removals/Relocations Plan
11. Plan / Profile Sheets (1" = 20' H & 1" = 5' V)
12. Storm Water Pollution Prevention Plan (SWPPP)
13. Storm Sewer Plans and Details
14. Intersection Details
15. Sidewalk Ramp Details
16. Pavement Marking / Signing and Details
17. Miscellaneous Details
18. Lighting Plans and Details
19. Traffic Signal Plans and Details
20. Cross Section Sheets (with cross-sections every 50' (min.) and at all driveways)
21. Details (CITY Standards, special details, misc., etc.)
22. Retaining Wall Plans and Details
23. State Standard Drawings (compile)

K. Preparation of Opinion of Probable Construction Cost and Estimate of Time



- L. Special Provisions – Copy and revise for second plan set
  - 1. Provide special provisions covering construction work.
  - 2. Prepare special provision for every pay item not being constructed per the standard.
  - 3. Provide in digital format (Microsoft Word).
  - 4. Prepare Bidding Documents on CITY forms
  
- M. Quality Assurance
 

Provide proper quality assurance prior to sending any construction plans and specifications for review. The following items as a minimum will be reviewed prior to submitting any construction plans or specifications for review:

  - 1. Every item shown in the construction plans either has a pay item or is specifically discussed in a pay item special provision.
  - 2. Items to be constructed have been reviewed for constructability and directly correspond to a standard pay item or a special provision.
  - 3. Existing utilities have been checked against proposed facilities for horizontal and vertical conflict (based on information received from the utility companies) during construction.
  - 4. Address CITY comments and concerns.
  
- N. Project Deliverables:
  - 1. 90% Pre-final Documents                      3 Sets and Special Provisions and one pdf set
  - 2. Final Construction Documents              5 Sets and Special Provisions and one pdf set
  
- O. Project Progress Reviews: Project progress review meetings will be held at the following milestones:
  - 1. Preliminary Geometric Design
  - 2. 90% Pre-final Construction Documents
  
- P. Project Management
  - 1. Coordination with CITY
  - 2. Coordination with IDOT
  - 3. Meetings to discuss project
  - 4. Staffing and Management Plan
  - 5. Financial and schedule controls
  
- Q. Construction Questions
  - 1. Provide 80 hours to answer construction questions
  
- R. The following items are not included in the scope of work but could be provided as an addendum to the contract:
  - 1. Construction observation activities
  - 2. Attendance at pre-bid or pre-construction meetings
  - 3. Shop drawing review
  - 4. Sewer televising
  - 5. Section 106 statement or mitigation for cultural resource impacts
  - 6. Section 4(f) evaluation
  - 7. NEPA documentation, i.e., EA, EIS
  - 8. Mitigation planning and design for impacts to threatened and endangered species, wetlands/waters, or historic/archaeological resources.
  - 9. Preparation of and coordination for a Section 404 permit and Section 401 Water Quality Certification.

10. Utility relocation plans
11. Landscaping plans other than turf restoration will not be included in the plans. Any tree replacements necessary will be not be included in the plans, but will be coordinated by the City of Peoria.
12. Water Main Plans
13. Sanitary sewer plans and details.
14. Necessary permitting and/or mitigation for floodplain impacts.
15. Preparation of any NEPA documentation including Environmental Assessment (EA) or Environmental Impact Statement (EIS), or a Project Development Report (PDR).
16. Implementation of traffic signal timings after construction.

**WORK ORDER NO.: 16-02 Hanson**  
**EXHIBIT B**  
**COST ESTIMATE OF CONSULTANT SERVICES**  
**SHERIDAN ROAD: RICHMOND AVE. TO ELEANOR PLACE**  
**SECTION NO. 16-00358-02-PV**

Charges for additional professional services performed by our firm for all services listed in the Scope of Services will be made on a time and materials basis according to the hourly rate schedules in the master agreement. The compensation for these services shall not exceed \$375,000 without authorization from the LA. Billings will be issued at least monthly, and will be based upon total services completed and expenses incurred at the time of billing.

<b>Task</b>	<b>Fee</b>
Phase 2 Design & Plan Prep.	\$263,000
Public Involvement	\$15,000
Environmental Updates	\$25,000
Construction Services	\$12,000
ROW Services	\$60,000
<b>Total Fee</b>	<b>\$375,000</b>