


Municipality	<b>L O C A L  A G E N C Y</b>	 <b>Illinois Department of Transportation</b>	<b>C O N S U L T A N T</b>	Name DLZ Illinois
Township				Address 8619 W. Bryn Mawr Ave. ,Ste. 602
County Lake County – Division of Transportation		City Chicago		
Section		State Illinois		
		<b>Preliminary Engineering Services Agreement For Non-Motor Fuel Tax Funds</b>		

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2014 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Non-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 2014 PASSAGE Field Elements Design

Route Various Length \_\_\_\_\_ Mi. \_\_\_\_\_ FT (Structure No. \_\_\_\_\_ )

Termini \_\_\_\_\_

Description:

**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, **Lake County Stormwater Management Commission 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 **one (1) copy of each document in both hardcopy and electronic format**. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at the ENGINEER's actual cost for reproduction.
  - h.  Furnish the LA with survey and drafts in **duplicate** 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.
  - 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.  **Services as included and/or defined in the attached Scope of Services.**
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 LA** ~~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 the ENGINEER will perform such work without expense to the LA, even though final payment has been received by the ENGINEER. The ENGINEER 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 the ENGINEER and will show the ENGINEER's professional seal where such is required by law.

**The LA Agrees,**

1. To ~~pay the~~ ENGINEER as compensation for all services rendered in accordance with this AGREEMENT according to the following method 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~~

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 all services rendered in accordance with this AGREEMENT at the actual cost of performing such work plus 204.14 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 the ENGINEER's actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided in section 1 of the ENGINEER AGREES. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus an additional service charge of up to five (5) percent.

"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.

**The Total Not-to-Exceed Contract Amount shall be \$45,169.87**

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 section 1 of 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 sections 1 and 3 of the ENGINEER AGREES and prior to the completion of such services, the LA shall reimburse the ENGINEER for the ENGINEER's actual costs plus 204.14 percent 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.
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 204.14 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 the ENGINEER's responsibility to prepare a complete and adequate set of plans and specifications.

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#### **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 the ENGINEER's 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 the ENGINEER 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 the ENGINEER's 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 triplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

ATTEST: \_\_\_\_\_ County of Lake \_\_\_\_\_ of the  
 \_\_\_\_\_  
 (Municipality/Township/County)  
 State of Illinois, acting by and through its  
 County Board  
 By \_\_\_\_\_  
 \_\_\_\_\_ Clerk  
 Lake County  
 (Seal) Title Chairman of the County Board

RECOMMENDED FOR EXECUTION

\_\_\_\_\_  
 Paula J. Trigg, P.E.  
 Director of Transportation/County Engineer  
 Lake County

Executed by the ENGINEER:

ATTEST: \_\_\_\_\_ DLZ Illinois \_\_\_\_\_  
 \_\_\_\_\_  
 Engineering Firm  
 8619 W. Bryn Mawr Avenue, Suite 602  
 Street Address  
 Chicago, IL 60631  
 City, State  
 By \_\_\_\_\_  
 \_\_\_\_\_  
 Title \_\_\_\_\_



INNOVATIVE IDEAS  
EXCEPTIONAL DESIGN  
UNMATCHED CLIENT SERVICE

**2014 PASSAGE Field Element Design**  
**Scope of Services**  
**DLZ Illinois, Inc.**  
**January 10, 2014**

The Scope of services for this project includes work at the following locations. Tasks A through E are included for each of these locations.

Hawley Interconnect (7300')

- Gilmer Rd to Chevy Chase Rd

IL 120 @ Hunt Club Rd

IL 176 @ Bradley Rd

IL 137 @ Amstutz Expy

IL 176 Corridor

IL 176 @ US 12 (East Ramp)

IL 176 @ US 12 (West Ramp)

IL 176 @ Wauconda Crossing

IL 176 @ Larkdale Row

US 12 @ Old McHenry Rd

IL 173 Corridor

IL 173 @ Deep Lake Rd

IL 173 @ Walmart

US14/Kelsey Corridor

US 14 @ Kelsey Rd

US 14 @ Pepper Rd

Kelsey Interconnect (4000')

- US 14 to IL 22

IL 22 @ Kelsey Rd

Arlington Hts Interconnect (4800')

- IL 83 to Checker Rd

It has been assumed that there will be three project submittals: 1) preliminary submittal after field reviews are completed and recommendations on required equipment modification have been developed, 2) pre-final plans and 3) final plans. Submittals of the pre-final and final plans will also be made to IDOT. As part of the project it has also been assumed that two review meetings will be held with the County – after the preliminary submittal and after the pre-final plan submittal. The hours for all submittals and meetings have been included with the following work items.

- A. Field Visits – Conduct field inspection of existing traffic signal installations and field verification of existing signal plans. Inventory and photograph existing controller cabinet and traffic signal equipment. For proposed interconnect segments, field verification of Google Earth aeriels and any available existing plans will be completed. This will include wheel survey as necessary to located additional topographic features that would be critical to the design and construction of the proposed interconnect.

- B. Prepare traffic signal and cable plans to show the proposed modifications to the installation. These plans will be done using the existing signal and cable plans as a base and superimposing the proposed equipment over the existing plan. For intersections where the existing plan is poor quality, a new base sheet will be prepared by redrawing the existing plan.
  - C. For locations where new interconnect is proposed, base sheets will be prepared using aerial photography provided by the County and existing roadway and right-of-way plans where available. The proposed interconnect equipment will be added to these base sheets. This work will also include preparation of new or modified interconnect schematics to show the new fiber network.
  - D. Quantities will be calculated for each location and specifications will be prepared as necessary.
  - E. Bid documents and plan sets will be prepared. The plan sets will include a cover sheet, location map, summary of quantities, signal and cable modification plans, and interconnect plans and schematics, and standard details. The bid documents will be prepared to allow for alternate bids for the project. This item will also include coordination with existing utility companies including providing plan sets for identifying potential utility conflicts.
  - F. DLZ will coordinate the proposed scope of work with Delcan in order to obtain the Cabinet Detail and Fiber Splicing Diagram sheets. These sheets will be incorporated into the plan set.
  - G. DLZ will complete a QA/QC review for all signal and interconnect plans and quantities.
  - H. Project management will include internal project scheduling, project invoicing and internal project team meetings.
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# PAYROLL RATES

FIRM NAME  
PRIME/SUPPLEMENT  
PSB NO.

DLZ Illinois                      DATE  
Prime  
2014 PASSAGE Field Elements Design

02/12/14

ESCALATION FACTOR                      0.00%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Principal	\$70.00	\$70.00
Senior Engineer	\$51.92	\$51.92
Engineer	\$31.01	\$31.01
CAD Designer	\$27.20	\$27.20
Administrative	\$26.58	\$26.58
		\$0.00
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# COST PLUS FIXED FEE COST ESTIMATE OF CONSULTANT SERVICES

**FIRM** DLZ Illinois **DATE** 02/12/14  
**PSB** 2014 PASSAGE Field Elements Design  
**PRIME/SUPPLEMENT** Prime **OVERHEAD RATE** 1.6597  
**COMPLEXITY FACTOR** 0

DBE DROP BOX	ITEM	MANHOURS  (A)	PAYROLL  (B)	OVERHEAD & FRINGE BENF  (C)	IN-HOUSE DIRECT COSTS  (D)	FIXED FEE  (E)	Outside Direct Costs  (F)	SERVICES BY OTHERS  4	DBE TOTAL  (H)	TOTAL  (B-G)	% OF GRAND TOTAL
	1. Hawley Interconnect	59	2,470.09	4,099.61	18.66	952.61				7,540.96	16.69%
	2. IL 120 & Hunt Club	14	498.73	827.74	18.66	192.34				1,537.47	3.40%
	3. IL 176 & Bradley	14	498.73	827.74	18.66	192.34				1,537.47	3.40%
	4. IL 137 & Amstutz Expy	14	498.73	827.74	18.66	192.34				1,537.47	3.40%
	5. IL 176 Corridor	56	1,994.92	3,310.97	18.66	769.35				6,093.90	13.49%
	6. US 12 & Old McHenry	14	498.73	827.74	18.66	192.34				1,537.47	3.40%
	7. IL 173 Corridor	28	997.46	1,655.48	18.66	384.68				3,056.28	6.77%
	8. US14/Kelsey Corridor	85	3,272.45	5,431.29	18.66	1,262.04				9,984.44	22.10%
	9. Arlington Hts Interconn	6	244.98	406.59	18.72	94.48				764.77	1.69%
	10. Bid Documents	52	2,211.20	3,669.93		818.14	200.00			6,899.27	15.27%
	11. QA/QC	16	804.15	1,334.65		297.54				2,436.33	5.39%
	12. Project Management	16	720.87	1,196.43		266.72	60.00			2,244.02	4.97%
	Subconsultant DL					0.00				0.00	0.00%
	<b>TOTALS</b>	<b>374</b>	<b>14,711.04</b>	<b>24,415.91</b>	<b>168.00</b>	<b>5,614.91</b>	<b>260.00</b>	<b>0.00</b>	<b>0.00</b>	<b>45,169.87</b>	<b>100.00%</b>

DBE 0.00%



# AVERAGE HOURLY PROJECT RATES

**FIRM** DLZ Illinois  
**PSB** 2014 PASSAGE Field Elements Design  
**PRIME/SUPPLEMENT** Prime

**DATE** 02/12/14  
**SHEET** 1 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			1. Hawley Interconnect			2. IL 120 & Hunt Club			3. IL 176 & Bradley			4. IL 137 & Amstutz Expy			5. IL 176 Corridor		
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
Principal	70.00	5	1.34%	0.94															
Senior Engineer	51.92	159	42.51%	22.07	33	55.93%	29.04	4	28.57%	14.83	4	28.57%	14.83	4	28.57%	14.83	16	28.57%	14.83
Engineer	31.01	104	27.81%	8.62	13	22.03%	6.83	5	35.71%	11.08	5	35.71%	11.08	5	35.71%	11.08	20	35.71%	11.08
CAD Designer	27.20	102	27.27%	7.42	13	22.03%	5.99	5	35.71%	9.71	5	35.71%	9.71	5	35.71%	9.71	20	35.71%	9.71
Administrative	26.58	4	1.07%	0.28															
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<b>TOTALS</b>		374	100%	\$39.33	59	100.00%	\$41.87	14	100%	\$35.62	14	100%	\$35.62	14	100%	\$35.62	56	100%	\$35.62

# AVERAGE HOURLY PROJECT RATES

FIRM DLZ Illinois  
 PSB 2014 PASSAGE Field Elements Design  
 PRIME/SUPPLEMENT Prime

DATE 02/12/14  
 SHEET 2 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	6. US 12 & Old McHenry			7. IL 173 Corridor			8. US14/Kelsey Corridor			9. Arlington Hts Interconnect			10. Bid Documents			11. QA/QC		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00																2	12.50%	8.75
Senior Engineer	51.92	4	28.57%	14.83	8	28.57%	14.83	35	41.18%	21.38	3	50.00%	25.96	31	59.62%	30.95	11	68.75%	35.70
Engineer	31.01	5	35.71%	11.08	10	35.71%	11.08	25	29.41%	9.12	2	33.33%	10.34	8	15.38%	4.77	3	18.75%	5.81
CAD Designer	27.20	5	35.71%	9.71	10	35.71%	9.71	25	29.41%	8.00	1	16.67%	4.53	13	25.00%	6.80			
Administrative	26.58																		
<b>TOTALS</b>		14	100%	\$35.62	28	100%	\$35.62	85	100%	\$38.50	6	100%	\$40.83	52	100%	\$42.52	16	100%	\$50.26

# AVERAGE HOURLY PROJECT RATES

FIRM DLZ Illinois  
 PSB 2014 PASSAGE Field Elements Design  
 PRIME/SUPPLEMENT Prime

DATE 02/12/14  
 SHEET 3 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	12. Project Management																	
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg			
Principal	70.00	3	18.75%	13.13															
Senior Engineer	51.92	6	37.50%	19.47															
Engineer	31.01	3	18.75%	5.81															
CAD Designer	27.20																		
Administrative	26.58	4	25.00%	6.65															
<b>TOTALS</b>		16	100%	\$45.05	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00



Direct Costs Check Sheet

Firm Name: DLZ Illinois PTB/Item No: \_\_\_\_\_

REQUIRED – DIRECT COSTS WILL ONLY BE ACCEPTED FOR INCLUSION IN CONTRACT WHEN DOCUMENTED ON THIS FORM.  
 (Indicate only rate and quantities for this specific project.)

Item	Allowable	Contract (1) Rate	Quantity (n/a for work orders)	Total
Per Diem	Up to State Rate Maximum			\$0.00
Lodging (Overnight)	Up to State Rate Maximum			\$0.00
Lodging (Extended)	Actual Cost (based on IDOT's and firm's policy)			\$0.00
Air Fare Coach Rate (with two weeks' notice)	As Approved			\$0.00
Vehicles:		\$0.560	300.00	
Mileage	Up to State Rate Maximum			\$168.00
Daily Rate (owned or leased)	\$45/day			\$0.00
Overtime	(Premium Portion)			\$0.00
Tolls	Actual Cost			\$0.00
Digital Photo Processing	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
Cell Phones – (traffic systems, survey, phase III only)	\$70/month/phone (maximum) – Phase III (max. of three without IDOT approval)			\$0.00
Telephone Usage (traffic system monitoring)	Actual Cost			\$0.00
2-Way Radio (survey or phase III only)	Actual Cost			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost	\$30.00	2.00	\$60.00
Copies of Deliverables/Mylars (in-house)	Actual Cost			\$0.00
Copies of Deliverables/Mylars (outside)	Actual Cost			\$0.00
Specific Insurance (required for project)	Actual Cost			\$0.00
CADD	Actual Cost (max. \$15.00/hour)			\$0.00
Monuments (permanent)	Actual Cost			\$0.00
Advertisements	Actual Cost			\$0.00
Web Site	Actual Cost			\$0.00
Facility Rental for Public Meetings & Exhibits/Renderings & AV	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Recording Fees	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (requires 2-3 quotes)			\$0.00
Traffic Control and Protection	Actual Cost (requires 2-3 quotes)			\$0.00
Aerial Photography and Mapping	Actual Cost (requires 2-3 quotes)			\$0.00
Utility Exploratory Trenching	Actual Cost (requires 2-3 quotes)			\$0.00
Shift Differential	Actual Cost (based on firm's policy)			\$0.00
PROJECT Site Travel	Actual Cost (based on IDOT's and firm's policy)			\$0.00
	Actual Cost (requires 2-3 quotes)			\$0.00
	Actual Cost (requires 2-3 quotes)			\$0.00
	Include 2-3 vendor quotes and explanation for necessity.			\$0.00
Printing/Copying 11x17 (black & white)	Actual Cost	\$0.10	2,000.00	\$200.00
Printing/Copying 22"x34"	Actual Cost	\$3.00	0.00	\$0.00
<b>TOTAL</b>				<b>\$428.00</b>

1) Used to determine upper limit of compensation for direct cost. Unless maximum is specified under allowable, bill at actual cost.