


Municipality	L O C A L A G E N C Y	 Illinois Department of Transportation	C O N S U L T A N T	Name Hampton, Lenzini & Renwick, Inc.
Township				Address 3085 Stevenson Drive, Suite 201
County Lake County – Division of Transportation		City Springfield		
Section 18-00999-54-RS		Preliminary Engineering Services Agreement For Non-Motor Fuel Tax Funds		State Illinois

THIS AGREEMENT is made and entered into this _____ day of _____, 2018 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 Grass Lake Road and Millburn Road Resurfacing

Route CH14/18 Length 5.20 Mi. 27450.00 FT (Structure No. _____)

Termini Deep Lake Road to Hunt Club Road

Description:

Produce plans and secure permits for 2019 letting of repair/replacement of 4 culverts, provide topographic survey for non-motorized travel improvements in 2020, perform CCDD testing, and provide a detail for the bridge deck overlay & restoration.

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 and** 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	(see note)
Under \$50,000	_____	%
	_____	%
	_____	%

~~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 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. ***See the CECS**

The Total Not-to-Exceed Contract Amount shall be \$169,330.00

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 ___ 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 ___ 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.

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 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 quintuplicate 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 _____
Lake County Clerk By _____
(Seal) Title Chairman of the County Board

RECOMMENDED FOR EXECUTION

Shane E. Schneider, P.E.
Director of Transportation/County Engineer
Lake County

Executed by the ENGINEER:

Engineering Firm
Street Address
City, State
ATTEST: _____
By _____ By _____
Title _____ Title _____

Note: Five (5) Original Executed Contracts – (2) LCDOT; (2) IDOT District 1, Local Roads; (1) Consultant



Hampton, Lenzini and Renwick, Inc.

Civil Engineers • Structural Engineers • Land Surveyors • Environmental Specialists
www.hlrengineering.com

August 10, 2018

Mr. Julian Rozwadowski, Senior Engineer
Lake County Division of Transportation
600 West Winchester Road
Libertyville, IL 60048

RE: Proposal for Engineering Services
Grass Lake Road / Millburn Road Improvements
(Deep Lake Road to Hunt Club Road & Millburn Bridge)

Dear Mr. Rozwadowski:

We are proposing the following Scope of Services for the subject improvements.

SCOPE OF SERVICES

- 1) **Grass Lake Road and Millburn Road culvert work and storm sewer repairs per LCDOT Plan Preparation Guidelines for a 2019 letting.**
 - Develop design, plans sheets, special provisions, cost estimates and utility coordination for:
 - Replacement of culverts #395 and #560 (24" replaced in kind),
 - Resetting a flared end section and installing joint ties (#397),
 - Repairing a 4' x 10' concrete box culvert with a polyurethane sprayed-in-place liner.
 - Develop storm sewer repairs, permitting and utility coordination along Old US Route 45 and Old Grass Lake Road.
 - Develop design, plans sheets, special provisions and cost estimates
 - Complete topographic survey along the north side of the road for the proposed Non-Motorized Traffic & pedestrian facilities and at the curb ramps, at the south edge of the pavement and fore/back slopes at the curve near STA 234+00 per the LCDOT Design Survey Procedures (2020).
 - Extending from CL pavement to 20 ft outside the ROW,
 - Develop CAD files, tin files, gpk files, etc. and provide to LCDOT for use.
 - Land acquisition services: Including title commitments, boundary, plat of highways, legals, monuments for 8 parcels along the NMT work. (complete for 2020 letting)
- 2) **Millburn Road bridge re-profile and aesthetic improvements per LCDOT Plan Preparation Guidelines for a 2019 letting.**
 - Develop and detail plan sheets and special provisions required for a proposed roadway approach and bridge profile for each edge line and the centerline to assist in construction; and proposed approach guardrail and terminal details
 - Design and recommend bridge deck overlay type and thickness, waterproofing measures, joint treatment and floor drain treatment; as well as coordinate color scheme to restore the red-brick appearance.

380 Shepard Drive
Elgin, Illinois 60123-7010
Tel. 847.697.6700
Fax 847.697.6753

6825 Hobson Valley Drive
Unit 302
Woodridge, Illinois 60517
Tel. 847.697.6700
Fax 847.697.6753

3085 Stevenson Drive
Suite 201
Springfield, Illinois 62703
Tel. 217.546.3400
Fax 217.546.8116

323 West 3rd Street
P.O. Box 160
Mt Carmel, Illinois 62863
Tel. 618.262.8651
Fax 618.263.3327

3) Clean Construction Demolition Debris (CCDD)

Phase 1- 2019 Letting - Storm sewer replacement on Old Grass Lake Road and Old US Route 45 and Culvert Repair for Culverts 395, 397, 558 and 560

CCDD will be completed in late 2018/early 2019, or as directed by LCDOT. We anticipate that a 663 will be required because more than 500 cubic yards of material will be generated. If less than 500 cubic yards is required, or if the regulations do not require it, a 662 will be completed.

The first phase of improvements includes culvert repair/replacement and storm sewer replacement to be let in 2019. The second phase includes resurfacing of the entire project limits to be let in 2020. The Illinois Environmental Protection Agency (IEPA) has the opportunity to modify the regulations for disposal of Clean Construction Demolition Debris (CCDD) in 2019. Draft regulations have not yet been released, but some of the options in discussion would have dramatic impacts on costs for CCDD disposal. In order to ensure that the budgets will provide for these more extensive regulations, we have estimated costs based on the most restrictive regulations under discussion. The amount of soil allowed for a 662 form would be 500 cubic yards. Sites on or adjacent to a potentially impacted property (PIP), and sites that have more than 500 cubic yards of material generated would require a 663 form and soil analysis for every 500 cubic yards of soil generated. This proposal calculates costs based on the most restrictive guidance, but the actual costs billed will be limited to only what is required by law at the time the CCDD coordination is being conducted. These estimates are worst case scenarios. We do not anticipate that the regulations will be this strict, but we want to make sure we have enough in the budget for the worst case scenario. We have provided estimates of work to be completed under the current regulations for reference.

Task 1: Environmental Background Research and 662 Application

The initial step will include an environmental database search for all records pertaining to contamination within project limits. The information generated in the database search will be utilized to provide LCDOT with a map delineating potentially impacted properties (PIPs). The areas not adjacent to PIPs should be eligible for processing with a 662 application. The spoils generated from these sites will only require pH testing, which will be provided by HLR with a mobile testing device. HLR will coordinate with local CCDD facilities for 662 pre-approval. In the unlikely event that any PIPs are found on or adjacent to the site, LCDOT staff would be notified of the options available for material disposal prior to commencing Task 2. If any areas are adjacent to PIPs, the site will require Task 2 for additional testing and analysis, for processing with a 663 application.

Task 2: Sampling and 663 Application

Task 2 includes taking up to seven soil samples for soil characterization. That would include one sample for each culvert and three samples for the storm sewer repair area. Drilling may be necessary depending on the storm sewer and culvert design. We have included one day of drilling to be used if needed. These samples will be used to establish pre-existing conditions and also for potential CCDD coordination. The soil samples will be submitted to a NELAC approved laboratory for analysis. We may analyze each soil sample for metals, volatiles, semivolatiles, polynuclear aromatic hydrocarbons and PCBs. The results of the analysis would be compared to the limits outlined in the Maximum Allowable Concentrations (MAC) of Chemical Constituents In Uncontaminated Soil Used as Fill Material At Regulated Fill Operations (35 Ill. Adm. Code 1100.Subpart F). A 663 will be prepared if levels meet MAC table limits.

If the soils come back with any elevated levels, additional TCLP or SPLP analysis on those specific constituents may be required to determine if they are within the MAC table limits. This testing would be used to create a waste profile if it is necessary to take it to a landfill.

Phase 2- 2020 Letting – Resurfacing for Grass Lake Road from Deep Lake Road to the Millburn Bypass limits (283+70) and on Millburn Road from the Millburn Bypass limits (0+00) to Hunt Club Road

CCDD will be completed in late 2019/early 2020, or as directed by LCDOT. We anticipate that a 663 will be required because more than 500 cubic yards of material will be generated. If less than 500 cubic yards is required, or if the regulations do not require it, a 662 will be completed.

Task 1: Environmental Background Research and 662 Application

The initial step will include an environmental database search for all records pertaining to contamination within project limits. The information generated in the database search will be utilized to provide LCDOT with a map delineating potentially impacted properties (PIPs). The areas not adjacent to PIPs should be eligible for processing with a 662 application. The spoils generated from these sites will only require pH testing, which will be provided by HLR with a mobile testing device. HLR will coordinate with local CCDD facilities for 662 pre-approval. In the unlikely event that any PIPs are found on or adjacent to the site, LCDOT staff would be notified of the options available for material disposal prior to commencing Task 2. If any areas are adjacent to PIPs ***or the total cubic yards of material to be disposed exceeds 500 cubic yards***, the site will require additional testing and analysis, for processing with a 663 application.

All costs listed include Environmental Database Review cost.

4) Complete Permitting and Wetland Delineation report for proposed improvements.

HLR proposes to provide the following environmental services for the Grass Lake Road and Millburn Road Project in Lake County, Illinois. Permitting costs include 2 separate permits for the 2019 construction. The 2020 construction permits will be completed by LCDOT. The two projects can use the same wetland delineation report, and jurisdictional determination, which reduces costs. We do not anticipate that the culvert replacements will exceed 1 acre of disturbance. If they do, an NPDES permit will be required. Environmental services scope and costs are as follows:

Task 1: Wetland Delineation and Report

HLR will conduct a map review of the project. The following maps and documents will be reviewed prior to conducting the field investigation:

- U.S. Geological Survey Topographic Maps
- National Wetlands Inventory Maps
- Lake County Advanced Identification (ADID) Maps
- USDA Soil Survey
- Hydric Soils of the United States Regulatory Flood Map

HLR will conduct a field visit to verify site conditions and conduct a wetland delineation within the project limits. It appears from a cursory map review that approximately 15 wetlands (6 associated with the culvert work, 4 associated with the NMT work and 5 associated with the storm sewer work in the area of US Route 45 and Old Grass Lake Road) are located within the project limits.

The field investigation will be conducted by our environmental personnel who are experienced in Federal methods for conducting wetland delineations. Our staff will classify and define hydric soils, hydrophytic vegetation, and evidence of hydrology to determine what areas wetland and define the wetland boundaries. The wetland perimeter (s) will be staked and surveyed. Wetland boundary stake locations will be surveyed using a hand-held Trimble R1 GNSS receiver.

A wetland delineation report will be prepared summarizing the findings of the fieldwork. Included in the report will be the required wetland delineation data sheets that summarize the findings of the field investigation as well as figures that detail the maps reviewed and current wetland boundaries of the site.

Task 2: Jurisdictional Determination

If necessary, HLR will prepare and submit a jurisdictional determination (JD) request to the Lake County Stormwater Management Commission (SMC). There will be a fee associated with this which includes \$720 for the first wetland and \$180 for each subsequent wetland. This fee has not been incorporated into our fee since we do not know how many total wetlands are present until we complete the delineation.

Task 3A: Wetland Permitting - USACE Permit (Culvert Project 395, 397, 558, and 560)

Any impacts to Waters of the US or jurisdictional wetlands will require Section 404 permits from the US Army Corps of Engineers (USACE). HLR will prepare and obtain any necessary permits from the USACE.

The following is a summary of permitting requirements. HLR will complete and submit the Joint Application form and other necessary information to obtain a permit from the Chicago District Corps of Engineers. The Joint Application will be simultaneously submitted to the following agencies:

- US Army Corps of Engineers
- US Fish & Wildlife Service
- Illinois Department of Natural Resources (IDNR)
- Illinois Environmental Protection Agency (IEPA)
- Illinois Historic Preservation Agency (IHPA)

The Regional Permits issued by the USACE contain a conditional Section 401 Water Quality Certification built into the permit. If this project qualifies under the Regional Permit program, no separate Section 401 review will be required. For the purposes of this proposal, we will assume Nationwide/Regional permit can be obtained for the project. If an Individual Permit is required, additional scope will be required.

Task 4A: Stormwater Permitting (Lake County) (Culvert Project 395, 397, 558, and 560)

HLR will prepare the Lake County Stormwater permit application and necessary attachments. Since the project is located within several jurisdictions including unincorporated Lake County, Lake Villa, Lindenhurst, and Old Mill Creek; typically, the permit and attachments would be submitted to Lake County Stormwater Management Commission for review and approval.

The stormwater management permit to be submitted will include permit application, narrative, location exhibits, necessary calculations, and the plan set. ***The Lake County permit application will require a review fee and pre-construction and construction deposits, these fees are not included in the costs outline in this proposal.***

Plan Development Tasks and Associated Costs

Tasks	Cost
1. Culvert designs and plan sheets	\$18,100.00
2. Storm Sewer designs and plan sheets	\$14,500.00
3. Develop Cad sheets for NMT / ped facilities, etc on GL Road	\$8,700.00
4. Bridge deck and approach overlay plans & specifications	\$17,500.00
5. Administration and Coordination	\$2,800.00
TOTAL	\$61,600.00

Surveying and Land Acquisition Tasks and Associated Costs

Tasks	Cost
1. Grass Lake Road NMT & ADA intersection surveys	\$26,500.00
2. Grass Lake / Millburn Road culvert replacements	\$3,500.00
3. Millburn Road bridge profiling/ resurfacing	\$3,400.00
4A. Plat of Highways/ Plats (Control, Boundary, Plats, Legals, Monument Corners): 8 Parcels	\$29,200.00
4B. Title Commitments (8 at \$500 each + Recorders Office \$25)	\$4,200.00
TOTAL	\$66,800.00

Clean Construction Demolition Debris (CCDD) Tasks and Associated Costs

Tasks	Cost
1. Phase 1 – 2019 letting – Storm Sewer & Culvert Replacements	
1A. Environmental Background Research and 662	\$3,500.00
1B. Soil sampling, laboratory coordination and 663 (if needed)	\$2,600.00
1C. Laboratory analysis- \$700 / sample, up to 7 samples (as needed)	\$4,900.00
1D. Drilling- One day if needed	\$2,400.00
2. Phase 2 – 2020 letting – Non-Motorized Traffic Improvements	
2A. Environmental Background Research and 662	\$3,500.00
TOTAL	\$16,900.00

Environmental Tasks and Associated Costs

Tasks	Cost
1. Wetland Delineations and Letter Report (Based on delineating 15 wetlands)	\$13,580.00
2. Jurisdictional Determination*	\$650.00
3A. USACE Permit (Culvert Project 395, 397, 558, and 560)	\$4,500.00
4A. Lake County Watershed Permit (Culvert Project 395, 397, 558, and 560)	\$5,300.00
TOTAL	\$24,030.00

*Does not includes fees to Lake County SMC (\$720 for the first wetland and \$180 for each subsequent wetland)

Project Total Fee \$169,330