GEWALT HAMILTON ASSOCIATES, INC.

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www.gha-engineers.com

Mr. Dan Helgren Lake County Division of Transportation 600 W. Winchester Road Libertyville, Illinois 60048-1381

Re: Proposal for Civil Engineering Services
Phase II Design
Lake County Division of Transportation (LCDOT)
Section #10-00999-13-DR
GH Proposal #2011.081

Dear Mr. Helgren:

Thank you for allowing Gewalt Hamilton Associates, Inc. to submit this scope of services and man-hour calculation for the engineering design services with respect to the above captioned project. It is our understanding that the general scope of services will include the preparation of design plans, permitting and bidding documentation for the various culvert evaluation project. This project will be bid in two stages. Stage one will include the culverts that could be covered under a Lake County Stormwater Management Commission (LCSMC) Countywide Stormwater Permit #1 and will not require additional wetland permitting. The second stage includes the culverts that will require more extensive stormwater and wetland permitting. These culverts will be prepared and bid separately at a later date as the various permits are obtained.

The following are the list of the various LCDOT culverts (with ID numbers) from the Phase I - Culvert Evaluation Report and the anticipated bidding stage:

Stage 1 Bid

- Center Street (#92)
- Center Street (#93)
- Dilleys Road (#209)
- Fairfield Road (#240)
- Fairfield Road (#279)
- Gelden Road (#330)
- Miller Road (#569)
- Riverwoods Road (#737)
- Russell Road (#810)*(outside of LCDOT jurisdiction; Not Included in Phase Two)

Stage 2 Bid

- Cedar Lake Road (#86)
- Cuba Road (#107)
- Granada (#237)
- Fairfield Road (#248)
- Kenosha Road (#491)
- Kenosha Road (#493)
- Kilbourne Road (#505)**
- Kilbourne Road (#506)
- Kilbourne Road (#509)**
- Miller (#564)
- Wadsworth (#884)
- Deerfield Road (no ID#)
- Hoffman (no ID#)
- Jasmine Lane (no ID#)

^{**}As requested, we will include a phase one evaluation of the two culverts along Kilbourne Road (#505 and #509) and will also include the phase II design of these culverts during the stage two bidding preparation.

Our understanding of the work and scope of services are based on our experience, our discussions with you, and the Phase I Culvert Evaluation Report. We appreciate the opportunity to submit our proposal for this project.

SCOPE OF SERVICES

Gewalt Hamilton Associates, Inc. (GHA) will complete the following work:

A. Phase I Evaluation

GHA will complete a Phase I evaluation of two culverts along Kilbourne Road. These culverts are identified as LCDOT Culvert ID # 505 (located south of Sheryl Lynn Drive) and LCDOT Culvert ID #509 (north of Andover Road). Each culvert will be evaluated and included as an addendum to the original GHA 2011 Culvert Evaluation Report and we will follow the same scope of services identified in GHA Proposal #2010.218.

B. Project Administration, Meetings and Data Collection

- GHA will attend a kickoff meeting with the LCDOT for discussion of engineering plan and bid document preparation, schedule coordination and gathering further information.
- GHA will further coordinate the proposed improvements with utility companies to request field locates for those public utilities that were identified in the phase one report as potentially in conflict with the proposed improvements. GHA will coordinate with public utility companies to ensure any required relocations are reflected on the final plan documents.
- Meet with adjoining communities to discuss the project schedule, obtain any further information such as existing engineering plans, storm water calculations, right-of-way plats, etc. to aid in our final plan preparation of the various culvert locations and to review our final design for stage two culverts, up to a total of six meetings.
- Meet as needed with LCDOT to discuss the project, engineering plans and schedule.

C. Geotechnical Analysis

GHA will utilize the services of a geotechnical engineering firm to perform soil borings at any project locations for which the final design results in a replacement structure requiring a structural foundation. It is anticipated that this service may be necessary for up to three project locations.

D. Drainage Report

Stage 1

Upon completion and approval of the phase one culvert evaluation report, a drainage report will be prepared for those culverts included in the stage one bid. The report will document

existing and proposed flow rates and will include a determination of the downstream capacity at each location to demonstrate compliance with Countywide Permit #1.

Stage 2

Upon completion and approval of the phase one culvert evaluation report, a separate drainage report will be prepared for those project locations included in the stage two bid package. The projects included in the stage two bid require a separate watershed development permit due to such factors as the size of the upstream tributary area and/or proposed wetland impacts. Typically the report for these locations will included a more detailed analysis of existing storage capacity and outlet conditions upstream of the culvert locations. The drainage report will identify existing and proposed release rates at each location and include an examination of the downstream capacity where needed.

The draft phase one culvert evaluation report notes existing flooding conditions upstream of the Cuba Road project location that if addressed would require additional capacity at the Cuba Road culvert. The stage two drainage report will include coordination with the Village of Deer Park to determine what additional capacity would be needed based on potential improvements upstream of the culvert.

E. Easement Plat and Agreement Preparation

GHA will prepare easement agreements and plats for work taking place beyond the limits of the existing right-of-way. Based on the draft phase one culvert evaluation report the Cedar Lake Road culvert replacement would require a temporary construction easement as the existing culvert extends beyond the limits of the right-of-way. In addition, it is anticipated that grading work beyond the right-of-way would be needed at the Cuba Road location as well due to steep existing front and back slopes adjacent to the culvert.

Depending on the final engineering design, additional temporary and/or permanent easements may be necessary at the Wadsworth Road (#884) culvert and at the Deerfield Road/Hoffman Lane/Jasmine Lane project location. The man-hour calculations attached included an allowance for preparation of the easement agreements and plats at these locations as well. No other easements are anticipated.

F. Permitting

- Lake County Stormwater Management Permitting and Coordination
 - The culverts included in the Stage 1 bid are those anticipated to meet the requirements of Countywide Stormwater Permit #1. The final engineering plan set and drainage report will be submitted to Lake County SMC for concurrence that each project location meets the permit requirements.
 - The final phase one report outlines ten project locations that would not be covered under countywide permit #1. A watershed development permit application will be submitted for these project locations as well as the two additional culverts on Kilbourne Road.

Prior to applying for the permit GHA will schedule a pre-application meeting with Lake County SMC staff and the Army Corps (if possible) to review the permit requirements.

Wetland Permitting and Agency Coordination

As part of the final design stage for the culverts that will impact jurisdictional wetlands, the required data and project information will be compiled and assembled into a permit application submittal package and submitted to the jurisdictional agency for review. Based on the phase one report there are twelve locations that require wetland permitting. This task will include coordination with, at a minimum, the respective communities in which the various culverts are located, Lake County Stormwater Management Commission, U.S. Army Corps of Engineers, Lake County Soil & Water Conservation District, U.S. Fish & Wildlife Service and Illinois Department of Natural Resources. During the permit review process, follow-up meetings with the regulatory agencies and LCDOT are anticipated to finalize the required information, documentation, and submittals.

Railroad Coordination

Our analysis for the phase one culvert evaluations revealed that two culverts were located either partially or wholly within the right-of-way of an adjacent railroad. The south end of the Cuba Road culvert (#107) was located within the Canadian National Railroad right-of-way and the preliminary design calls for it to be relocated out of the right-of-way. The Wadsworth Road culvert (#884) is located entirely within the Union Pacific right-of-way and the preliminary design maintains that location. GHA will coordinate submittal of the final engineering plans to the respective agencies to secure authorization to complete the work and incorporate any general conditions or traffic control requirements the railroads may have for work within their right-of-way.

G. Engineering Plans, Contract Documents, & Bidding Phase

The draft phase one culvert evaluation report noted that additional topographic information would be required to complete the final design at three project locations: Cedar Lake Road (#86), Cuba Road (#107), and Wadsworth Road (#884). GHA will conduct a topographic survey at these locations to supplement the existing conditions survey completed during phase one as required to complete the design.

For both the Stage 1 and Stage 2 bid packages, GHA will perform the following tasks:

- GHA will prepare final engineering plans for all project locations included in each work package.
- Two sets of final engineering plans will be prepared, one for the Stage 1 project locations and the second to include the Stage 2 project locations as well as the additional Kilbourne Road culvert locations. The engineering plans will include a title sheet, general notes & summary of quantities, typical cross section sheets, erosion control sheets, traffic control/detour plans, plan and profile sheets, cross section sheets, and details for construction. The plans will be prepared in accordance with Lake County DOT plan preparation guidelines.

- GHA will prepare project notes and contract specific directions for the culvert replacements, including working conditions, material specifications, coordination with public inspection agencies, and other construction information.
- GHA will coordinate with the County regarding the final scope of the planned improvements.
- GHA will prepare detailed quantity calculations.
- GHA will prepare separate construction bidding documents and specifications for each stage utilizing the LCDOT standard specifications document format for a locally let/non-federal project.
- GHA will prepare a detailed engineer's opinion of probable cost based upon the completed final engineering plans.
- GHA will submit to the Lake County Division of Transportation for review and comment. Revisions are included as a part of our work.
- GHA will attend the bid opening, review bid proposals, create a bid summary, and will make a recommendation for award.

H. Services Not Included

Services not included in our scope:

- Permit fees or review fees.
- Meetings or hearings outside of the scope of services described above.
- Preparation of an ALTA/ACSM Land Title Survey.
- Preparation of SWPPP and NPDES Permit Application
- Obtaining additional topographic information beyond the scope noted above.
- Hydrologic or hydraulic modeling beyond those services noted above;
- Structural Design.
- Right-of-way/Easement Negotiation
- Geotechnical Testing for CCDD requirements.
- Construction staking or construction observation.
- Surveys required for locating underground utilities marked by third parties. Gas, electric, telephone or other public utility services design. For informational purposes, the location of such utilities shall be depicted on our drawings based on information provided to us by the public utility or the Village. Performing additional surveying and topographic work beyond that noted in the scope of work, including investigation of underground utilities, and physical location of them.

I. Schedule/Personnel

GHA will proceed with the project upon the County's authorization to proceed. It is our understanding that you wish to proceed with the bid for the Stage 1 locations in the summer of 2011, with the stage 2 locations bid at a later date. Coordination, survey, and wetland delineation work will begin immediately

upon your authorization. We will make every effort to complete the final plans and specifications within the specified time period.

Todd P. Gordon P.E., Senior Engineer, will be Project Manager. Dan Strahan, P.E., CFM will serve as Project Engineer. George Saam, P.L.S. Land Surveyor Manager, will be responsible for the coordination of all surveys. Marcy Knysz, AICP, LEED AP will be responsible for the wetland and environmental aspects of the project. Karl Jensen, P.E. CFM will be coordinating the drainage component of this project. They will be assisted, as needed, by other GHA engineers, technicians, and support staff.

J. Compensation

Included with this proposal is the estimated man-hour calculations. Reimbursable expenses such as mileage, printing, courier service etc. are also included as an attachment and are noted on man-hour calculation chart. These reimbursable expenses will be billed directly to the client without markup.

Note that invoices of GHA charges made against the project are submitted to clients every four weeks. This allows the client to review the status of the work in progress and the charges made. Additional hours considered to be outside the scope of services will be identified. If it is determined that the manhour estimate or services beyond the original scope is to be exceeded, a written modification to the proposal will be submitted to the County.

No permit fees or review fees are included in this proposal.

K. General Conditions of this Agreement

The delineated services provided by Gewalt Hamilton Associates, Inc., (GHA) under this Agreement will be performed as reasonably required in accordance with the generally accepted standards for civil engineering and surveying services as reflected in the contract for this project at the time when and the place where the services are performed.

Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Client or GHA. GHA's services under this Agreement are being performed solely for the Client's benefit, and no other party or entity shall have any claim against GHA because of this Agreement or the performance or nonperformance of services hereunder. In no event shall GHA be liable for any loss of profit or any consequential damages.

GHA shall not have control of and shall not be responsible for construction means, methods, techniques, sequences or procedures, or for job site safety measures. Such control is the sole responsibility of the Client's contractor.

The Client, and not GHA, is responsible for ensuring that the contractor implements the Storm Water Pollution Prevention Plan (SWPPP), including maintenance and/or repair of soil erosion and sediment control measures for compliance with the General NPDES Permit for Storm Water Discharges from Construction Site Activities. GHA assumes no liability for any actions by the Illinois Environmental

Protection Agency (IEPA) resulting from the contractor's failure to comply with SWPPP or the requirements of the General Permit.

The Client and GHA agree that all disputes between them arising out of or relating to this Agreement or the Project shall be submitted to nonbinding mediation in Chicago, Illinois unless the parties mutually agree otherwise.

This Agreement, including all subparts and *Attachment A*, which is attached hereto and incorporated herein as the General Provisions of this Agreement, constitute the entire integrated agreement between the parties which may not be modified without all parties consenting thereto in writing.

Thank you for your consideration. We look forward to the opportunity to working with you and providing our services to the County.

Sincerely,

GEWALT HAMILTON ASSOCIATES, INC.

Todd P. Gordon P.E. Senior Engineer

Encl:

Attachment A

Exhibit A - Man-hour Calculation Exhibit B- Direct Cost Estimate

ATTACHMENT A TO GEWALT HAMILTON ASSOCIATES, INC. PROFESSIONAL SERVICES AGREEMENT

The delineated services provided by Gewalt Hamilton Associates, Inc., (GHA) under this Agreement will be performed as reasonably required in accordance with the generally accepted standards for civil engineering and surveying services as reflected in the contract for this project at the time when and the place where the services are performed.

The terms of this Agreement are subject to renegotiation if not accepted within 60 days of the date indicated on the contract. Requests for extension beyond 60 days should be made in writing prior to the expiration date. The fees and terms of the Agreement shall remain in full force and effect for one year from the date of acceptance of the Agreement, and shall be subject to revision at that time, or any time thereafter, if GHA gives written notice to the other party at least 60 days prior to the requested date of revision. In the event that the parties fail to agree on the new rates or other revisions, either party may terminate this Agreement by giving the other party 10 days written notice.

Payments are due within (30) days after a statement is rendered. Fees not paid within 60 days of the end of the calendar month in which the statement is rendered will bear interest at the rate of one percent (1.0%) per month until paid. The provision for the payment of interest shall not be construed as authorization to make payments late. Failure of the Client to make payments when due shall, at the option of GHA, be cause for suspension of services. Upon notification by GHA of suspension of services, Client shall make payment of all outstanding invoices within seven days. Client's failure to make such payment to GHA shall constitute a material breach of the Agreement and shall be cause for termination by GHA. GHA shall be entitled to reimbursement of all costs actually incurred by GHA in collecting overdue accounts under this Agreement, including, without limitations, legal fees and costs.

The Client's obligation to pay for the professional services provided is in no way dependent upon the Client's ability to obtain financing, rezoning, payment from a third party, approval of governmental or regulatory agencies or the Client's successful completion of the project.

The Client and GHA agree that any documents prepared by either party shall conform to the specifications listed in the Engineering Agreement. Any electronic files submitted by GHA to the Client are submitted for an acceptance period of 10 days. Any defects the Client discovers during this period will be reported to GHA and will be corrected as part of GHA's Basic Scope of Services. Corrections of defects detected and reported after the acceptance period will be compensated for as Additional Services.

The Client acknowledges GHA's plans and specifications, including field data, notes, calculations, and all documents or data on electronic media, as instruments of professional service. The plans and specifications prepared under this Agreement shall become the property of the Client upon completion of the services and payment in full of all monies due to GHA. However, GHA shall retain ownership rights over all electronic data and documents.

The Client shall not reuse or make or permit to be made any modification to the plans, specifications, or electronic data without the prior written authorization of GHA. The Client agrees to waive any claim against GHA arising from any unauthorized reuse or modification of the plans and specifications or electronic data. The Client agrees, to the fullest extent permitted by law, to defend and indemnify and hold GHA harmless from any damage, liability or cost, including attorneys' fees and costs, arising from any reuse or modification of the plans, specifications, or electronic data by the Client or any person or entity which acquires or obtains the plans, specifications, or electronic data from or through the Client.

The client is aware that differences may exist between the electronic files delivered and the printed plans and specifications. In the event of a conflict between the signed and/or sealed printed plans and specifications prepared by GHA and electronic files, the signed and/or sealed printed plans and specifications shall govern.

The Americans with Disabilities Act (ADA) provides that it is a violation of the ADA to design and construct a facility for first occupancy later than January 26, 1993, that does not meet the accessibility and usability requirements of the ADA except where an entity can demonstrate that it is structurally impractical to meet such requirements. The Client acknowledges that the requirements of the ADA will be subject to various, and possibly contradictory interpretations. GHA,

therefore, will use reasonable professional efforts to interpret applicable ADA requirements and other federal, state and local laws, rules, codes, ordinances, and regulations as they apply to the project. GHA, however cannot and does not warrant or guarantee that the Client's project will comply with interpretations of ADA requirements and/or requirements of other federal, state and local laws, rules, codes, ordinances, and regulations as they apply to the project.

If required by the contracted scope of services, GHA, shall prepare an opinion of probable construction costs, which shall be submitted to the Client for review. Since GHA has no control over the cost of labor, materials, or equipment, or over the contractor's methods of determining prices, or over competitive bidding or market conditions, opinions of probable costs, if called for by this Agreement as part of GHA's scope, shall be made on the basis of experience and qualifications applied to the program contemplated by the Agreement and information provided by Owner, and represent a reasonable judgment as a design professional familiar with the construction industry. However, GHA cannot and does not guarantee or warrant that proposals, bids, or the actual construction costs will not vary from opinions of probable cost prepared for the Client. If the Client wishes greater assurance as to the construction cost, Client agrees it will employ an independent cost estimator.

If required by the Scope of Services, GHA shall visit the project at defined intervals during construction to become generally familiar with the progress and quality of the contractors' work to determine if the work is proceeding in general conformance with the Contract Documents.

Client agrees that GHA does not have control of and is not responsible for construction means, methods, techniques, sequences or procedures, or for safety measures and programs including enforcement of Federal, State and County safety requirements, in connection with construction work performed by the Client's construction contractors. GHA is not responsible for the supervision of Client's construction contractors, subcontractors, materialmen, suppliers, or any of their employees, agents and representatives of such contractors; or responsible for any machinery, construction equipment, and tools used and employed by contractors and subcontractors in the project. GHA, Inc. has no authority or right to stop the work. In no event shall GHA be liable for the acts or omissions of Client's construction contractors, subcontractors, materialmen or suppliers, or any persons or entities performing any of the construction work, or for failure of any of them to carry out their work as called for by the Construction Documents.

Neither the professional activities of GHA, nor the presence of GHA or its employees and subconsultants (if any) at a construction site, shall relieve the Contractor or any other entity of their obligations, duties and responsibilities including but not limited to, construction means, methods, sequence, techniques, or procedures necessary for performing, superintending or coordinating all portions of the Work in accordance with the Contract Documents and any health or safety precautions required by any regulatory agencies or industry practice. GHA personnel have no authority or right to exercise any control or direction over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions. The Client agrees that the Contractor is solely responsible for jobsite safety, and warrants that this intent shall be included in the Client's agreement with the Contractor. The Client also agrees that the Client, GHA, and GHA's personnel and consultants shall be defended/indemnified by the Contractor for all claims asserted against GHA which arise out of the Contractor's or its subcontractors' negligence, errors or omissions in their performance of their work, and shall also be named as an additional insured under the Contractor(s)'s general liability insurance policy.

It is acknowledged by both parties that GHA's scope of services does not include any services related to asbestos, mold, fungus or any other hazardous or toxic materials, contaminants or pollutants. In the event that GHA, or any other party encounters asbestos mold, fungus or any other hazardous or toxic materials, contaminants or pollutants at the job site, or it should become known in any way that such materials may be present at the jobsite or any adjacent areas that may affect the performance of GHA, GHA may, at its option and without liability for consequential or any other damages, suspend performance of its services on the project until the Client retains appropriate specialist consultants or contractors to identify, abate and/or remove the asbestos, mold, fungus or any other hazardous or toxic materials, contaminants or pollutants and further warrant that the jobsite is in full compliance with applicable laws and regulations.

If required by the scope of services, records drawings (or revised specifications) will be prepared, in part, on the basis of information compiled and furnished by others, the accuracy of which GHA may reasonably rely upon, GHA will not be responsible for any errors or omissions, which have been incorporated into this document due to information furnished by others.

When preparing civil engineering or surveying plans and drawings, information on existing underground utilities or soil conditions is provided from the best information available. This information may be obtained from visible surface evidence, utility company records or soil borings, and is not represented to be the exact location of these utilities or soils in the fields. Client agrees that GHA may reasonably rely on the accuracy of information furnished by third parties. Contractor is solely responsible for exact utility locations. Client shall not hold GHA responsible for Contractor's error/omission in the utility locations. Client agrees GHA is not responsible for additional costs, which result from utility conflicts or unforeseen conditions. If the Client wishes to obtain the services of a contractor to provide test holes and exact utility locations, GHA, may incorporate that information into the design and reasonably rely upon same. If not included in the scope of services, such work will be compensated as additional services.

The Client agrees to limit GHA's professional liability to the Client and to all construction contractors, or subcontractors on the project arising from GHA, Inc.'s alleged negligent acts, errors, or omissions, such that the total aggregate liability of GHA, Inc. to all those named shall not exceed \$50,000 or GHA's total fee for the services rendered on this project, whichever is greater. GHA, Inc. makes no warranties, either expressed or implied, including any warranty of habitability, merchantability or fitness for any particular purpose. In no event shall GHA be liable for any loss of profit or any consequential damages.

All claims, disputes, controversies or matters in question arising out of or relating to this Agreement or any breach thereof, including but not limited to disputes arising out of alleged design defects, breaches of contract, errors, omissions, or acts of professional negligence (collectively "disputes") shall be submitted to mediation before and as a condition precedent to any other remedy. Upon written request by either party to this Agreement for mediation of any dispute, the Client and GHA shall select by mutual agreement a neutral mediator. Such selection shall be made within ten (10) calendar days of the date of receipt by the other party of the written request for mediation. In the event of failure to reach such agreement or in any instance when the selected mediator is unable or unwilling to serve and a replacement mediator cannot be agreed upon by Client or GHA within ten (10) calendar days, a mediator shall be chosen as specified in the Construction Industry Mediation Rules of the American Arbitration Association then in effect. Mediation shall take place in Chicago, Illinois unless the Client and GHA agree otherwise. The fees of the mediator(s) and costs incurred by the mediator(s) shall be apportioned equally between the parties.

Either the Client or GHA may terminate this Agreement without penalty at any time with or without cause upon giving the other party ten (10) calendar days prior written notice. The Client shall, within thirty (30) calendar days of termination pay GHA for all services rendered and all costs incurred up to the date of termination, in accordance with compensation provisions to this Agreement. The Client shall also reimburse GHA termination expenses, including, but not limited to, those associated with demobilization, reassignment of personnel and space and equipment costs. Client shall not assign this Agreement without GHA's written consent.

Exhibit A

Man-Hour Calculations
Phase Two Design Engineering Services
Lake County Division of Transportation
Various Culvert Replacement
Lake County, Illinois

Route: Local Agency:

Section: Project: Job No.:

(Municipality/Township/County) Various Locations LCDOT

10-00999-13-DR Various Culvert - Phase II

165.00 % 14.5 % 0 0.035 0.07 *Firm's approved rates on file with IDOT'S Bureau of Accounting and Audiling: 120 Days Overhead Rate Profit Rate Complexity Factor Project Duration

	Cost E	stimate of Co	onsultant's 9	Cost Estimate of Consultant's Services in Dollars					
Element of Work	Employee Classification	Man-Hours	Payroll Rate	Payroll Costs	Overhead*	Services by Others	In House Direct Costs	Profit	Total
Phase I Evaluation - Kilbourne Culverts (#505 and #509)	SENIOR ENG PROF LAND SR ENG TECH ENG TECH 1 ENG TECH 11 STAFF ENG PROFESSIONAL	4 8 8 8 1 1 1 2 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	\$48.91 \$46.25 \$28.05 \$13.31 \$19.79 \$25.65 \$32.64	\$ 195.64 \$ 370.00 \$ 224.40 \$ 159.72 \$ 316.64 \$ 513.00	\$ 322.81 \$ 610.50 \$ 370.26 \$ 263.54 \$ 522.46 \$ 1,292.54		8 00.00 8 00.00 8 00.00 8 00.00 8 00.00 8 00.00 8 00.00 8 00.00	75.17 142.17 86.23 61.37 121.67 197.12 301.01	\$ 593.62 \$ 1,122.67 \$ 680.89 \$ 484.63 \$ 960.76 \$ 1,556.57 \$ 2,376.91
Project Administration, Meetings and Data Collection	SENIOR ENG PROFESSIONAL STAFF ENG	24 12	\$48.91 \$32.64 \$25.65	\$ 1,173.84 \$ 783.36 \$ 307.80	\$ 1,936.84 \$ 1,292.54 \$ 507.87		\$0.00 \$0.00 \$0.00	451.05 301.01 118.27	\$ 3,561,72 \$ 2,376,91 \$ 933.94
Drainage Report Drainage Report - Stage 1	PROFESSIONAL STAFF ENG ENG TECH II	24 24	\$32.64 \$25.65 \$19.79	\$ 783,36 \$ 1,026.00 \$ 474.96	\$ 1,292.54 \$ 1,692.90 \$ 783.68		\$ 00.08 \$ 00.08 \$ 00.08	301.01 394.24 182.50	\$ 2,376.91 \$ 3,113.14 \$ 1,441.15
Drainage Report - Stage 2	SENIOR ENG PROFESSIONAL STAFF ENG ENG TECH 1 ENG TECH 1 CLERICAL	40 32 32 20 20 8	\$48.91 \$32.64 \$25.65 \$13.31 \$19.79 \$21.30	\$ 391.28 \$ 1,305.60 \$ 820.80 \$ 425.92 \$ 395.80 \$ 170.40	\$ 645.61 \$ 2,154.24 \$ 1,354.32 \$ 702.77 \$ 653.07 \$ 281.16		\$0.00 \$0.00 \$0.00 \$1.00 \$1.00 \$2.00	150.35 501.68 315.39 163.66 152.23 65.48	\$ 1,187.24 \$ 3,961.52 \$ 2,490.51 \$ 1,292.35 \$ 1,202.10 \$ 517.04
Easement Plat and Agreement Preparation	SENIOR ENG PROF LAND PROFESSIONAL ENG TECH II	31 30 16 16	\$48.91 \$46.25 \$32.64 \$19.79	\$ 782.56 \$ 1,387.50 \$ 522.24 \$ 316.64	\$ 1,291,22 \$ 2,289,38 \$ 861,70 \$ 522,46		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	300.70 533.15 200.67 121.67	\$ 2,374.48 \$ 4,210.02 \$ 1,584.61 \$ 960.76
Permitting Permitting - Stage 1	SENIOR ENG PROFESSIONAL ENG TECH 1	8 32 16 16	\$48.91 \$32.64 \$13.31 \$19.79	\$ 391.28 \$ 1,044.48 \$ 212.96 \$ 316.64	\$ 645.61 \$ 1,723.39 \$ 351.38 \$ 522.46		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	150.35 401.34 81.83 121.67	\$ 1,187.24 \$ 3,169.21 \$ 646.17 \$ 960.76
Permitting - Stage 2	SENIOR ENG PROFESSIONAL ENG TECH 1	12 80 60 40	\$48.91 \$32.64 \$13.31 \$19.79	\$ 586.92 \$ 2,611.20 \$ 798.60 \$ 791.60	\$ 968.42 \$ 4,308.48 \$ 1,317.69 \$ 1,306.14		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	225.52 1,003.35 306.86 304.17	\$ 1,780.86 \$ 7,923.03 \$ 2,423.15 \$ 2,401.91
Engineering Plans, Contract Documents & Bidding Phase Eng Plans, Contract Doc & Bidding Phase - Stage 1	SENIOR ENG PROFESSIONAL STAFF ENG SR ENG TECH CLERICAL	32 80 24 16	\$48.91 \$32.64 \$25.65 \$28.05 \$21.30	\$ 1,565.12 \$ 2,611.20 \$ 615.60 \$ 448.80	\$ 2,582.45 \$ 4,308.48 \$ 1,015.74 \$ 740.52 \$ 281.16		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	601.40 1,003.35 236.54 172.45 65.48	\$ 4,748.97 \$ 7,923.03 \$ 1,867.86 \$ 1,361.77 \$ 517.04
Eng Plans, Confract Doc & Bidding Phase - Stage 2	SENIOR ENG PROFESSIONAL STAFF ENG PROF LAND SR ENG TECH CLERICAL	000 322 400 400 400	\$48.91 \$32.64 \$25.65 \$46.25 \$28.05 \$21.30	\$ 1,956.40 \$ 3,264.00 \$ 820.80 \$ 740.00 \$ 1,122.00 \$ 340.80	\$ 3,228.06 \$ 5,385.60 \$ 1,354.32 \$ 1,221.00 \$ 1,651.30 \$ 5,62.32		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	751.75 1,254.19 315.39 284.35 431.13	\$ 5,936.21 \$ 9,903.79 \$ 2,490.51 \$ 2,245.35 \$ 3,404.43 \$ 1,034.07
Geotechnical Analysis - (Geotechnical Consultant)			П		1	\$ 5,000.00			\$ 5,000.00
In House Direct Costs (See Attached Estimate)							\$6,330.00		\$ 6,330.00

\$6,331.00 \$ 13,079.87 \$ 114,615.86

56,165.37 \$ 5,000.00

34,039.62 \$

1126

Totals

Exhibit B

Design Engineering Services Lake County Division of Transportation Various Culvert Replacement- Phase Two Design Services Lake County, Illinois

Direct Cost Estimate

Printing	Expenses:
11111111112	TYDEHRED.

Phase Two- Stage One Bid	
 Preliminary Documents/Plans 	
Assume 40 sheets x 5 sets x 6 sf x \$0.25/SF	\$300.00
 Permit Submittals (2 Submittals) 	
Assume 40 sheets x 4 sets x 6 sf/shts x \$0.25/sf x 2 submittals	\$480.00
Bid Set Engineering Plans	
Assume 40 sheets x 15 sets x 6 sf x \$0.25/sf	\$900.00
 Specification Book 	
Assume 160 sheets x 15 sets x \$0.15/sheet	\$360.00
 Hydrologic & Hydraulic Analysis Report (2 Submittals) 	
Assume 120 sheets x 5 sets x \$0.15/sheet x 2 submittals	\$180.00
Phase Two- Stage Two Bid Preliminary Documents/Plans	
Assume 30 sheets x 5 sets x 6 sf x \$0.25/SF	\$450.00
	φ-30.00
 Permit & Coordinating Agency Submittals (6 Submittals) Assume 30 sheets x 4 sets x 6 sf/shts x \$0.25/sf x 6 submittals 	\$1,080.00
	\$1,000.00
 Bid Set Engineering Plans Assume 30 sheets x 15 sets x 6 sf x \$0.25/sf 	₽ <i>ርሚፍ</i> 00
	\$675.00
• Wetland Delineation Booklet	#125 OO
Assume 150 sheets x 6 sets x \$0.15/sheet	\$135.00
 Hydrologic & Hydraulic Analysis Report (2 Submittals) Assume 240 sheets x 5 sets x \$0.15/sheet x 2 submittals 	#2 <i>C</i> 0.00
	\$360.00
Specification Book	***
Assume 160 sheets x 15 sets x \$0.15/sheet	\$360.00
Shipping Expense: 20 submittals x \$15.00/submittal	\$300.00
Vehicle Expense: 1,500 miles x \$0.50/mile	<u>\$750.00</u>

Anticipated Direct Cost Estimate:

\$6,330.00

Municipality	LOC	of Transportation ON Address 850 Fore		Name Gewalt Hamilton Associates, Inc.
Township	C A L			Address 850 Forest Edge Drive
County Lake County – Division of Transportation	A G H Z	Preliminary Engineering Services Agreement For	LTAN	City Vernon Hills
Section #10-00999-13-DR	C	Non-Motor Fuel Tax Funds	Т	State Illinois
THIS AGREEMENT is made and entered into this day of, 2011 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 Various Culverts Maintenance				
Route N/A Length 0.	00	Mi. <u>0.00</u> FT		(Structure No. N/A)
Termini Various Locations				
Description: Phase II design of maintenance of the various culvert improvements.				
		Agreement Provisions	I kenang	
The Engineer Agrees,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. X 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	on a	nd interpretation of the contractors' propo	sals	i

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.
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.
To attend conferences at any reasonable time when requested to do so by representatives of the LA or the Department .
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.
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.
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.
e LA Agrees,
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.
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 subject all or part

2. GINEER 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 \$114,615.86

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- 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'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.

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IN WITNESS WHEREOF, the parties have caused the AGRE shall be considered as an original by their duly authorized office.	EMENT to be executed in triplicate counterparts, each of which cers.
Executed by the LA:	
	County of Lake of the (Municipality/Township/County)
ATTEST:	State of Illinois, acting by and through its
Ву	County Board
Lake County Clerk	Ву
(Seal)	Title Chairman of the County Board
	RECOMMENDED FOR EXECUTION
	Martin G. Buehler, P.E. Director of Transportation/County Engineer Lake County
Executed by the ENGINEER:	Gewalt Hamilton Associates, Inc.
	Engineering Firm 850 Forest Edge Drive
ATTEST:	Street Address Vernon Hills, Illinois
	City, State
Ву	Ву
Title	Title