


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 380 Shepard Drive
County Lake County – Division of Transportation				City Elgin
Section 20-00999-74-DR				State Illinois

THIS AGREEMENT is made and entered into this _____ day of _____, 2020 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 Culvert Replacement 2021

Route Various Length n/a Mi. n/a FT (Structure No. n/a)

Termini Culverts at Monaville Road (#584), Kelsey Road (#481) and Old McHenry Road (#641)

Description:

Develop stabiliation measures for #584; Develop, permits and contract plans for culvert replacements on Monaville Road, Kelsey Road and Old McHenry Roads.

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, Appraisal and Negotiation services for three parcels at Monaville Road
 - 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 Under \$50,000	Percentage Fees	(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 ****** 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. ****100**

The Total Not-to-Exceed Contract Amount shall be \$214840.00

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.

****100**

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:

County of Lake of the
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By _____

County Board

Lake County Clerk

By _____

(Seal)

Title Chair, Lake County Board

RECOMMENDED FOR EXECUTION

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

Executed by the ENGINEER:

Hampton, Lenzini & Renwick, Inc.

Engineering Firm
380 Shepard Drive

Street Address
Elgin, IL 60123

City, State

ATTEST:

By _____

By *Steven W. Megginson*

Title _____

Title Vice President

Note: Three (3) Original Executed Contracts – (2) LCDOT; (1) Consultant



Hampton, Lenzini and Renwick, Inc.

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

August 18, 2020

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

RE: Proposal for Engineering Services
20-00999-74-DR
Culvert Replacement 2021
Monaville, Kelsey, Old McHenry Culvert Replacements

Dear Mr. Zemaitis:

We are proposing the following Project Understanding and Scope of Services for the subject improvements in Lake County.

Lake County Division of Transportation (hereinafter the "Client") has requested professional engineering services for the Culvert Replacement 2021 project (hereinafter the "Project"). The following outlines the proposed Project scope of services.

Project UNDERSTANDING

Hampton, Lenzini and Renwick, Inc. (HLR) has prepared this Scope of Work for engineering services based on our knowledge of the Project from the following items:

- Projects' consultant's scope prepared by the Client
- Site review
- Wetland and floodplain maps
- Inspection Reports
- Construction documents (Culvert plans, resurfacing plans)

The following is a list of basic project understandings:

- Provide stabilization measures for the Monville Road culvert # 584 in 2020.
- The following culverts are to be replaced: Monaville Road, Kelsey Road and Old McHenry Road.
- This is a maintenance project to replace culverts that have reached the end of their design life but are, from a hydraulics standpoint, performing adequately. Hydrologic and hydraulic analyses are anticipated.
- Preferably, the projects will be let at the same time as one plan set, but the County would like the flexibility to separate various culverts into separate projects if necessary.

Project Schedule – Based on our project understanding, the following are project milestones desired by Client.

Notice To Proceed:	October 1, 2020
Stabilization measures, PS&E	November 1, 2020
Preliminary replacement designs and Permit submittals	November 1, 2020
Pre-Final Plans and Bid Documents	February, 2021
Final Plans and Bid Documents	March 2021
Project Letting	April 2021

SCOPE OF SERVICES

1. Topographic Survey

HLR will provide a topographic survey for a culvert located at Kelsey Road over Tower Lake Creek (#481), culvert located at Monaville Road over Eagle Creek (#584) and for a culvert located at Old McHenry Road over North Branch Flint Creek (#641).

For culvert numbers 481 and 584 HLR will provide stream profiles 1000 feet upstream and downstream at 100 foot intervals. X-sections at 1000', 500' 250' right-of-way and culvert face both upstream and downstream. Topographic survey of road 100 feet both sides of the culvert from right-of-way to right-of-way. Locate lowest entry and lowest adjacent grades for homes identified by engineer. For culvert number 641 HLR will locate stream profile upstream and downstream for 100 feet. Provide 2 x-sections at 25 foot intervals upstream and downstream. Topographic survey of road 100 feet both sides of the culvert from right-of-way to right-of-way.

HLR will follow topographic survey standards as outlined in the Lake County Division of Transportation Design Survey Standards. HLR will use Illinois State Plane East Coordinate system 1983 datum for the horizontal control on this project and vertical datum will be NAVD 1988 datum. A minimum of two control points will be established at each culvert location. The final deliverable will be a Microstation dgn. HLR will follow LCDOT CAD Standards. This survey scope does not include determining road right-of-way, property boundaries and easements.

- 1.1 Complete Plats and legal descriptions for 3 parcels at culvert #584 for land acquisition. Appraisal and Negotiation services will also be completed for these parcels.

2. Permitting

2.1 Task 1: Wetland Delineation Report

The delineation for Monaville Road Culvert 584 was completed by Lake County Stormwater Management Commission so we will use this report for permitting purposes. There is no wetland delineation report for Kelsey Road (Culvert 481) or Old McHenry Road (Culvert 641) so HLR proposes to complete these delineations. HLR will conduct a map review of the two culvert locations. 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 review of aerial photographs and maps that wetlands may be associated with the southwest side of Culvert 641 and on both sides of Culvert 481.

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.

One wetland delineation report including both culvert locations 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.

This task will include and ECOCAT review to determine the presence of any potential threatened or endangered species in the area. This scope of work does not include any threatened and endangered species surveys. HLR can conduct these surveys and can provide a separate scope of work for this task, if needed.

2.2 **Task 2: Jurisdictional Determination and SMC Wetland Boundary Verification (if needed)**

If necessary, HLR will prepare and submit a jurisdictional determination (JD) request to the USACE – Chicago District. The turnaround time for the USACE to perform a JD may be a few months or longer.

Since LCDOT will require a quicker turnaround, we propose to submit a Preliminary Jurisdictional Determination (PJD) to the Lake County Stormwater Commission (SMC) in lieu of submitting the JD performed to the USACE. Since this is a LCDOT project, LCSMC will handle watershed development review and permitting. SMC PJD fees are \$720.00 for the first wetland and \$180.00 each additional. SMC wetland boundary verifications are \$480.00 for the first wetland + \$180.00 each additional wetland. These fees will be handled between LCDOT and LCSMC and are not included in our fees. In some instances, the SMC requests that the wetland consultant meet at the site for boundary verification. A separate cost is included if a site meeting is required.

2.3 **Task 3: Wetland Permitting – USACE Permit (if needed)**

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 Regional permit can be obtained for the project and that mitigation will not be required. We assume preparation of 1 permit for all three culvert projects. If an Individual Permit is required, additional scope will be required.

2.4 **Task 4: Stormwater Permitting (Lake County)**

Since this is a LCDOT project, the permit and attachments will be submitted to LCSMC for review and approval.

The stormwater management permit to be submitted will include permit application, narrative, location exhibits, necessary calculations, and the plan set.

2.5 **Task 5: National Pollutant Discharge Elimination System (NPDES) Permitting (if needed)**

Any project disturbing over 1 acre of land will require an NPDES permit. **In the event that this project will have over 1 acre of disturbance,** HLR will prepare the Notice of Intent (NOI) form, Stormwater

Pollution Prevention Plan (SWPPP), and Notice of Termination (NOT) as required by this permit LCDOT will make the submittal of all documents. ***Permit fees are not included in the costs outlined in this proposal.***

3. **Clean Construction Demolition Debris (CCDD), Sampling and 663 Application**

This service includes taking one sample at culverts #584 and #481, and two samples at #641 for soil characterization. It is anticipated that ditch clearing at #641 will result in additional soil removal which will exceed the 400 cubic yard limit per sample. These samples will be used to establish pre-existing conditions and also for 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. A pre-approval from Thelen (or another nearby site) will be obtained.

4. **Drainage Engineering Services**

The items under this task include hydraulic modeling and preparation of two hydraulic reports for Culverts 481 and 584. HLR will locate the effective models for Tower Lake Creek and Eagle Creek from FEMA or the Lake County Stormwater Management Commission. We will also request available data from the county and countywide GIS (contours, latest aerial photography, construction plans or utility atlases). The effective hydraulic model will be updated to the current HEC-RAS model. The model cross sections will be updated with stream survey cross sections to improve accuracy. The design of the site will be reviewed for floodway impacts. Compensatory storage calculations will be made, and volumes provided if necessary.

Culvert designs will be evaluated to determine if they are permissible under the IDNR-OWR Part 3708 floodway regulations and the permits will be obtained. IDNR-OWR will likely delegate review of the hydraulic reports to Lake County SMC, which HLR will coordinate.

At Culvert 641, a hydrologic analysis of the upstream tributary area will be made to determine the peak flow rates to the culvert. The appropriately sized culvert will be designed using HY-8 culvert hydraulic analysis program. Improvements to adjacent drainage channels will be checked using Hydraulic Toolbox to confirm the drainage system has adequate capacity for the expected peak flows.

5. **Structural Engineering – Monaville #584 Stabilization Plan**

Complete structural design and contract plans to provide stabilization measures for this deteriorated culvert. This will include planning, coordination with potential contractors, design and installation procedures to fill voids in the backfill around this pipe culvert. HLR will provide plans sheets, special provisions, and cost estimates.

6. **Design Engineering**

6.1 **Data Collection**

HLR will review various resources and collect project pertinent data. This work will include detailed review of publicly available and Client provided information to fully understand the project requirements, complete field reconnaissance, and coordinate with other sub-consultants, as necessary.

- Document Review** – HLR will review the following publicly available and/or Client provided

information:

- "As-Built" Plans
- Construction Plans
- Existing Utility Atlases
- Publicly available GIS data
- GIS data to be provided by Client
- Technical Reports provided by the Client
- Site Specific data provided by the Client

- **Field Review** – HLR will scheduled a field review of the project to determine site-specific constraints and document existing conditions. A photographic log will not be prepared of the project.

6.2 **Utility Coordination**

HLR will coordinate with utilities with determining their facility location, potential conflict determination, and resolution of those conflicts. The major work items under this task will include:

- A J.U.L.I.E. Design Level Locate request will be submitted.
- Project status letters will be prepared to the individual utility companies along with location map.
- HLR will verify the utilities identified on the atlas maps provided by the utilities.
- HLR will identify potential utility conflicts with the proposed improvements. These locations will be identified and sent to the utility for evaluation and verification.
- Pre-final plans will be sent to the utility companies. This submittal will include location of conflicts identified by the utilities.

6.3 **Structural Design**

Complete structural design using precast-flared-end sections when appropriate or a cast-in-place concrete headwall and wingwall configuration required to fit any unique site requirements and right-of-way. Develop design, plans sheets, special provisions, and cost estimates. Includes up to two unique headwall and wingwall design configurations for these replacements. Two 30 ft soil borings will be provide at culvert #584 – Monaville Road.

6.4 **Proposed Plans**

Contract Plans - The plans will be prepared and submitted to the Client at the following intervals:

- **Pre-Final (90%)** – Plans and concepts are nearly complete and minor modifications are expected.
- **Final (100%)** – Plans are fully developed and are ready for distribution to contractors.

The plans are working drawings that show the location, configuration, and dimensions of the proposed construction activities. The plans will be prepared under the supervision of a Professional Engineer. The plan set will consist of the following drawings and the estimated number of sheets:

Title Sheet	1 Sheet
General Notes	1 Sheet
Summary of Quantities	1 Sheet

Schedule of Quantities	2 Sheets
Ties and Benchmarks	1 Sheet
Maintenance of Traffic Plan & Details	3 Sheets
Existing Conditions and Removals	3 Sheets
Culvert Plan & Profile	3 Sheets
Grading Plan	3 Sheets
Soil Erosion and Sediment Control Plans and Details	3 Sheets
Structural Details	8 Sheets
Special Details	1 Sheet
Standard Details	3 Sheets
Cross Sections (Grading)	12 Sections

Increases to the actual number of plans sheets as compared to the estimated sheets above may constitute additional work. HLR will notify the Client if additional work is anticipated.

HLR will distribute electronic version of plans, bid documents, and estimate of probable costs to Client's Project Manager for distribution to reviewers. Comments provided will be reviewed and necessary updates will be made. Disposition to comments will be provided at the next submittal. The disposition to comments will be provided based on how HLR received them:

- Client provides a list of comments – HLR will provide a formal disposition to comments in letter format.
- Client provides comment on plan and/or bid document sheets – HLR will provide written disposition to comments next to the comments provided by the Client.

6.5 **Bid Documents, Estimates of Probable Costs and Estimate of Time**

Estimate of Probable Cost and Time - HLR will prepare engineering opinions of probable construction costs and estimate of time for each submittal. Costs will be determined using available guides and bid tabulations from similar projects. In addition, the pay item reports with awarded prices from IDOT's website will be used to approximate current unit costs.

Bid Documents – Bid Documents will be prepared for the solicitation of contractors to provide construction services. Bid Documents format will be based on the following criteria:

- **Client Provided Bid Document** – Client will prepare the majority of the bid document. HLR will provide Special Provisions and an Estimate of Probable Cost in Excel format.

HLR will prepare special provisions for Pre-Final and Final Plan submittals. The latest version of the IDOT "Standard Specifications for Road and Bridge Construction" and "Supplemental Specifications and Recurring Special Provisions" will be used as the basis of the construction special provisions.

Where a project work item contains work, material, unique sequence of operations or any other requirements that are not included in the Standard Specifications, Supplemental Specifications, Recurring Special Provisions, BDE Special Provisions or Guide Bridge Special Provisions, a project specific Special Provision will be written by HLR.

6.6 **Consultation and Coordination**

- **Kickoff Meeting** - Kickoff Meeting with Client (assume 1 meeting).
- **Coordination Meeting** - Coordination and design meeting with the Client (assume 2

meetings).

- **Consultation and Coordination** – HLR will coordinate with all regulatory agencies regarding the permitting and design phase of the project.
- **Request for Information** – HLR will correspond with the engineering team during construction for any questions that may arise.
- **Phase III Coordination** – HLR will coordinate with the Client to answer project related questions during construction.

Meeting minutes will be provided for each meeting.

7. Design QCQA

The HLR Project Manager will complete QCQA of each stage of the project to ensure compliance with the goals of the project, LCDOT and IDOT standards.

8. Engineering Cost Details

Section 1 (Survey)

Tasks	Cost
1. Topographic Survey and plotting	\$32,780.00
2. Right-of-Way / Easement Plats (3 parcels at #584-Monaville Road)	\$18,945.00
3. Appraisal / Negotiation (3 parcels at #584-Monaville Road)	\$18,000.00
TOTAL	\$69,725.00

Section 2 (Permitting, Environmental Tasks and Associated Costs

Tasks	Cost
1. Wetland Delineation and Letter Report	\$5,000.00
2. Jurisdictional Determination (if needed)	\$1,400.00
3. USACE Permit (if needed)	\$5,400.00
4. Lake County Watershed Permit	\$6,435.00
5. NPDES Permitting (if needed)	\$1,240.00
TOTAL	\$19,475.00

Section 3 (CCDD Permitting)

Tasks	Cost
1. 663 Permit (Culverts Replacement 2021)	\$10,540.00
TOTAL	\$10,540.00

Section 4 (Drainage Engineering Services)

Tasks	Cost
1. Hydraulic Report – Culvert 481	\$19,100.00
2. Hydraulic Report – Culvert 584	\$19,100.00
3. Hydraulics and Hydrology – Culvert 641	\$5,300.00

4. IDNR-OWR Coordination	\$1,600.00
	\$45,100.00

Section 5 (Stabilizing Culvert # 584 Monaville)

Tasks	Cost
1. Structural Design and Plan Sheet	\$5,300.00
2. Traffic Management Plans	\$6,500.00
3. Coordination, Special Provisions and Estimate of Probable Costs	\$7,100.00
4. Soil Borings – 2 @ 30ft depth at culvert #584 - Monaville Road	\$9,000.00
	\$27,900.00

Section 6 (Design Engineering)

Tasks	Cost
1. Data Collection	\$3,300.00
2. Utility Coordination	\$2,700.00
3. Proposed Plans and Special Provisions	\$16,700.00
4. Headwall and Wingwall Structural Engineering Design	\$5,300.00
5. Special Provisions and Estimate of Probable Costs	\$4,400.00
TOTAL	\$32,400.00

Section 7 (Quality Assurance and Project Administration)

Tasks	Cost
1. QA/QC and Project Admin.	\$9,700.00
TOTAL	\$9,700.00

Project Total Fee: \$214,840