



Agreement Type

Original

LOCAL PUBLIC AGENCY

Local Public Agency	County	Section Number	Job Number
County of McHenry	McHenry	28-00580-00-SP	
Project Number	Contact Name	Phone Number	Email
	Rebecca Brazas	815-482-1051	RJBrazas@mchenrycountyil.gov

SECTION PROVISIONS

Local Street/Road Name	Key Route	Length	Structure Number
Spring Grove Rd at Miller Rd, Coral Rd at Maple St, and Alden Rd at O'Brien Rd	0157, 0063, 0026, 0029, 0039, and 0536	0.5 per intersection	NA

Location Termini

Spring Grove Rd at Miller Rd, Coral Rd at Maple St, and Alden Rd at O'Brien Rd

Project Description

Phase I Preliminary Engineering and Environmental Studies to identify and address the purpose and needs for three (3) intersections: Spring Grove Road at Miller Road, Alden Road at O'Brien Road, and Coral Road at Maple Street. This includes the preparation of a Phase I Preliminary Engineering and Environmental (Phase I) Study for each intersection located in area of unincorporated McHenry County, Illinois, for the LPA and National Environmental Policy Act (NEPA) processes documentation.

Engineering/Right-of-Way Services Funding	<input checked="" type="checkbox"/> Local	RTA Sales Tax
Anticipated Construction Funding	<input type="checkbox"/> Federal <input type="checkbox"/> MFT/TBP <input type="checkbox"/> State <input type="checkbox"/> Other	

AGREEMENT FOR

☒ Phase I - Preliminary Eng ☐ Phase II - Design Eng ☐ Phase III - Construction Eng ☐ Right-of-Way Services

CONSULTANT

Prime Consultant (Firm) Name	Contact Name	Phone Number	Email
HDR Engineering, Inc.	Jeffrey Young	(773) 380-7943	Jeffrey.Young@hdrinc.com
Address	City	State	Zip Code
9450 W. Bryn Mawr, Suite 400	Rosemont	IL	60018

THIS AGREEMENT is made between the above Local Public Agency (LPA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above roadway section. Local funding allotted to the LPA will be used entirely to finance ENGINEERING SERVICES (as defined in Exhibit A) for the PROJECT (as defined in the above Project Description).

Since the services contemplated under THIS AGREEMENT are professional in nature, it is understood that the ENGINEER, acting as an individual, partnership, firm or legal entity, qualifies for professional status and will be governed by professional ethics in its relationship to the LPA. The LPA acknowledges the professional and ethical status of the ENGINEER by entering into THIS AGREEMENT on the basis of its qualifications and experience and determining its compensation by mutually satisfactory negotiations.

WHEREVER IN THIS AGREEMENT or attached exhibits the following terms are used, they shall be interpreted to mean:

Resident Construction Supervisor	Authorized representative of the LPA in immediate charge of the engineering details of the construction of the PROJECT.
In Responsible Charge Contractor	A full time LPA employee authorized to administer inherently governmental PROJECT activities, Company or Companies to which the construction contract was awarded.

AGREEMENT EXHIBITS

The following EXHIBITS are attached hereto and made a part of hereof THIS AGREEMENT:

- ☒ EXHIBIT A: Scope of Services
- ☒ EXHIBIT B: Project Schedule
- ☒ EXHIBIT C: Qualification Based Selection (QBS) Checklist
- ☒ EXHIBIT D: Cost Estimate of Consultant Services (CECS) Worksheets (BLR 05513 or BLR 05514)
- ☐ EXHIBIT E: Direct Costs Check Sheet (attach BDE 436 when using Lump Sum on Specific Rate Compensation)
- ☐ _____
- ☐ _____
- ☐ _____

I. THE ENGINEER AGREES,

1. To perform or be responsible for the performance of the Scope of Services presented in Exhibit A for the LPA in connection with the proposed improvements herein before described.
2. The Classifications of the employees used in the work shall be consistent with the employee classifications and estimated staff hours. If higher-salaried personnel of the firm, including the Principal Engineer, perform services to be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the payroll rate for the work performed.
3. That the ENGINEER shall be responsible for the accuracy of the work and shall promptly make necessary revisions or corrections required as a result of the ENGINEER'S error, omissions or negligent acts without additional compensation. Acceptance of work by the LPA will not relieve the ENGINEER of the responsibility to make subsequent correction of any such errors or omissions or the responsibility for clarifying ambiguities.
4. That the ENGINEER will comply with applicable Federal laws and regulations, State of Illinois Statutes, and the local laws or ordinances of the LPA.
5. To pay its subconsultants for satisfactory performance no later than 30 days from receipt of each payment from the LPA.
6. To invoice the LPA:
 - (a) For Preliminary and/or Design Engineering: The ENGINEER shall submit all invoices to the LPA within three months of the completion of the work called for in THIS AGREEMENT or any subsequent Amendment or Supplement.
 - (b) For Construction Engineering: The ENGINEER shall submit invoices, based on the ENGINEER's progress reports, to the LPA employee In Responsible Charge, no more than once a month for partial payment on account for the ENGINEER's work to date. Such invoices shall represent the value, to the LPA of the partially completed work, based on the sum of the actual costs incurred, plus a percentage (equal to the percentage of the construction engineering completed) of the fixed fee for the fully completed work.
7. The ENGINEER or subconsultant shall not discriminate on the basis of race, color, national origin or sex in the performance of THIS AGREEMENT. The ENGINEER shall carry out applicable requirements of 49 CFR part 26 in the administration of US Department of Transportation (US DOT) assisted contract. Failure by the ENGINEER to carry out these requirements is a material breach of THIS AGREEMENT, which may result in the termination of THIS AGREEMENT or such other remedy as the LPA deems appropriate.
8. That none of the services to be furnished by the ENGINEER shall be sublet, assigned or transferred to any other party or parties without written consent of the LPA. The consent to sublet, assign or otherwise transfer any portion of the services to be furnished by the ENGINEER shall not be construed to relieve the ENGINEER of any responsibility for the fulfillment of THIS AGREEMENT.
9. For Preliminary Engineering Contracts:
 - (a) To attend meetings and visit the site of the proposed improvement when requested to do so by representatives of the LPA, as defined in Exhibit A (Scope of Services).
 - (b) That all plans and other documents furnished by the ENGINEER pursuant to THIS AGREEMENT will be endorsed by the ENGINEER and affixed the ENGINEER's professional seal when such seal is required by law. Such endorsements must be made by a person, duly licensed or registered in the appropriate category by the Department of Professional Regulation of the State of Illinois. It will be the ENGINEER's responsibility to affix the proper seal as required by the Bureau of Local Roads and Streets manual published by the State Department of Transportation, hereinafter called the "DEPARTMENT".
 - (c) That the ENGINEER is qualified technically and is thoroughly conversant with the design standards and policies applicable for the PROJECT; and that the ENGINEER has sufficient properly trained, organized and experienced personnel to perform the services enumerated in Exhibit A (Scope of Services).
10. For Construction Engineering Contracts:
 - (a) For Quality Assurance services, provide personnel who have completed the appropriate DEPARTMENT's Bureau of Materials QC/QA trained technical classes.
 - (b) For all projects where testing is required, the ENGINEER shall obtain samples according to the DEPARTMENT's Bureau of Materials "Manual of Test Procedures for Materials," submit DEPARTMENT's Bureau of Materials inspection reports; and verify compliance with contract specifications.
11. That the engineering services shall include all equipment, instruments, supplies, transportation and personnel required to perform the duties of the ENGINEER in connection with THIS AGREEMENT (See DIRECT COSTS tab in BLR 05513 or BLR 05514).

II. THE LPA AGREES,

1. To certify by execution of THIS AGREEMENT that the selection of the ENGINEER was performed in accordance with the Professional Services Selection Act (50 ILCS 510) (Exhibit C).
2. To furnish the ENGINEER all presently available survey data, plans, specifications and project information.
3. For Construction Engineering Contracts:
 - (a) To furnish a full time LPA employee to be In Responsible Charge authorized to administer inherently governmental PROJECT activities.
 - (b) To prepare and approve forms BC 775 and BC 776 as necessary.
4. To pay the ENGINEER:
 - (a) For progressive payments - Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LPA, monthly payments for the work performed shall be due and payable to the ENGINEER, such payments to be equal to the value of the partially completed work minus all previous partial payments made to the ENGINEER.
 - (b) Final Payment - Upon approval of the work by the LPA but not later than 60 days after the work is completed and reports have been made and accepted by the LPA, a sum of money equal to the basic fee as determined in THIS AGREEMENT less the total of the amount of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.
 - (c) For Non-Federal County Projects - (605 ILCS 5/5-409)
 - (1) For progressive payments - Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LPA, monthly payments for the work performed shall be due and payable to the ENGINEER. Such payments to be equal to the value of the partially completed work in all previous partial payments made to the ENGINEER.
 - (2) Final payment - Upon approval of the work by the LPA but not later than 60 days after the work is completed and reports have been made and accepted by the LPA (and STATE as required), a sum of money equal to the basic fee as determined in THIS AGREEMENT less the total of the amount of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.
5. To pay the ENGINEER as compensation for all services rendered in accordance with THIS AGREEMENT on the basis of the following compensation method as discussed in 5-5.10 of the BLR Manual.

Method of Compensation

☐ Percent

☐ Lump Sum

☐ Specific Rate

☒ Cost plus Fixed Fee: Fixed

Total Compensation = DL + DC + OH + FF

Where:

DL is the total Direct Labor,

DC is the total Direct Cost,

OH is the firm's overhead rate applied to their DL and

FF is the Fixed Fee.

Where FF = (0.33 + R) DL + %SubDL, where R is the advertised Complexity Factor and %SubDL is 10% profit allowed on the direct labor of the subconsultants.

The Fixed Fee cannot exceed 15% of the DL + OH.

Field Office Overhead Rates: Field rates must be used for construction engineering projects expected to exceed one year in duration or if the construction engineering contract exceeds \$1,000,000 for any project duration.

6. The recipient shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any US DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of US DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by US DOT, is incorporated by reference in THIS AGREEMENT. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as violation of THIS AGREEMENT. Upon notification to the recipient of its failure to carry out its approved program, the LPA may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C 3801 et seq.).

III. IT IS MUTUALLY AGREED,

1. No work shall be commenced by the ENGINEER prior to issuance by the LPA of a written Notice to Proceed.
2. To maintain, for a minimum of 3 years after the completion of the contract, adequate books, records and supporting documents to verify the amount, recipients and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records and supporting documents related to the contract shall be available for review and audit by the LPA or its

authorized representative, and to provide full access to all relevant materials. Failure to maintain the books, records and supporting documents required by this section shall establish a presumption in favor of the LPA for the recovery of any funds paid by the LPA under the contract for which adequate books, records and supporting documentation are not available to support their purported disbursement.

3. That the ENGINEER shall be responsible for any and all damages to property or persons arising out of an error, omission and/or negligent act in the prosecution of the ENGINEER's work and shall indemnify and save harmless the LPA and their officers, agents and employees from all suits, claims, actions or damages liabilities, costs or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy. The LPA will notify the ENGINEER of any error or omission believed by the LPA to be caused by the negligence of the ENGINEER as soon as practicable after the discovery. The LPA reserves the right to take immediate action to remedy any error or omission if notification is not successful; if the ENGINEER fails to reply to a notification; or if the conditions created by the error or omission are in need of urgent correction to avoid accumulation of additional construction costs or damages to property and reasonable notice is not practicable.
4. THIS AGREEMENT may be terminated by the LPA 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 LPA all drawings, plats, surveys, reports, permits, agreements, soils and foundation analysis, provisions, specifications, partial and completed estimates and data, if any from soil survey and subsurface investigation with the understanding that all such materials become the property of the LPA. The LPA will be responsible for reimbursement of all eligible expenses incurred under the terms of THIS AGREEMENT up to the date of the written notice of termination.
5. The LPA may suspend work on the project. If THIS AGREEMENT is suspended by the LPA for more than thirty (30) calendar days, consecutive or in aggregate, over the term of THIS AGREEMENT, the ENGINEER shall be compensated for all services performed and reimbursable expenses incurred prior to receipt of notice of suspension. In addition, upon the resumption of services the LPA shall compensate the ENGINEER, for expenses incurred as a result of the suspension and resumption of its services, and the ENGINEER's schedule and fees for the remainder of the project shall be equitably adjusted.
6. THIS AGREEMENT shall continue as an open contract and the obligations created herein shall remain in full force and effect until the completion of construction of any phase of professional services performed by others based upon the service provided herein. All obligations of the ENGINEER accepted under THIS AGREEMENT shall cease if construction or subsequent professional services are not commenced within 5 years after final payment by the LPA.
7. The ENGINEER and LPA certify that their respective firm or agency:
 - (a) has not employed or retained for commission, percentage, brokerage, contingent fee or other considerations, any firm or person (other than a bona fide employee working solely for the LPA or the ENGINEER) to solicit or secure THIS AGREEMENT,
 - (b) has not agreed, as an express or implied condition for obtaining THIS AGREEMENT, to employ or retain the services of any firm or person in connection with carrying out THIS AGREEMENT or
 - (c) has not paid, or agreed to pay any firm, organization or person (other than a bona fide employee working solely for the LPA or the ENGINEER) any fee, contribution, donation or consideration of any kind for, or in connection with, procuring or carrying out THIS AGREEMENT.
 - (d) that neither the ENGINEER nor the LPA is/are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency,
 - (e) has not within a three-year period preceding THIS AGREEMENT been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property.
 - (f) are not presently indicated for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (e) and
 - (g) has not within a three-year period preceding THIS AGREEMENT had one or more public transaction (Federal, State, local) terminated for cause or default.
8. Where the ENGINEER or LPA is unable to certify to any of the above statements in this clarification, an explanation shall be attached to THIS AGREEMENT.
9. In the event of delays due to unforeseeable causes beyond the control of and without fault or negligence of the ENGINEER no claim for damages shall be made by either party. Termination of THIS AGREEMENT or adjustment of the fee for the remaining services may be requested by either party if the overall delay from the unforeseen causes prevents completion of the work within six months after the specified completion date. Examples of unforeseen causes included but are not limited to: acts of God or a public enemy; acts of the LPA, DEPARTMENT or other approving party not resulting from the ENGINEER's unacceptable services; fire; strikes; and floods.

If delays occur due to any cause preventing compliance with the PROJECT SCHEDULE, as defined in Exhibit B, the ENGINEER shall apply in writing to the LPA for an extension of time. If approved, the PROJECT SCHEDULE shall be revised accordingly.

10. The LPA elects to enforce the certification and requirements of the Drug Free Workplace Act (30 ILCS 580) in THIS AGREEMENT, as modified herein. No grantee or contractor shall receive a grant or be considered for the purpose of being awarded a contract for the procurement of any property or service from the LPA unless that grantee or contractor will provide a drug free workplace.

False certification or violation of the certification may result in sanctions including, but not limited to suspension of contract or grant payments, termination of a contract or grant and debarment of the contracting or grant opportunities with the LPA for at least one (1) year but not more than (5) years.

For the purpose of this certification, "grantee" or "Contractor" means a corporation, partnership or those entity with twenty-five (25) or more employees at the time of issuing the grant or a department, division or other unit thereof, directly responsible for the specific performance under contract or grant of \$5,000 or more from the LPA.

The contractor/grantee certifies and agrees that it will provide a drug free workplace by:

- (a) Publishing a statement:
 - (1) Notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance, including cannabis, is prohibited in the grantee's or contractor's workplace.
 - (2) Specifying the actions that will be taken against employees for violations of such prohibition.
 - (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
 - (a) abide by the terms of the statement; and
 - (b) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about:
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's or contractor's policy to maintain a drug free workplace;
 - (3) Any available drug counseling, rehabilitation and employee assistance program; and
 - (4) The penalties that may be imposed upon an employee for drug violations.
- (c) Providing a copy of the statement required by subparagraph (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- (d) Notifying the contracting or granting agency within ten (10) days after receiving notice under part (b) paragraph (3) of subsection (a) above from an employee or otherwise receiving actual notice of such conviction.
- (e) Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program.
- (f) Assisting employees in selecting a course of action in the event drug counseling, treatment and rehabilitation is required and indicating that a trained referral team is in place.

Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act, the ENGINEER and the LPA agree to meet the PROJECT SCHEDULE. Time is of the essence on this project and the ENGINEER's ability to meet the PROJECT SCHEDULE will be a factor in the LPA selecting the ENGINEER for future projects. The ENGINEER will submit progress reports with each invoice showing work that was completed during the last reporting period and work they expect to accomplish during the following period.

11. Due to the physical location of the project, certain work classifications may be subject to the Prevailing Wage Act (820 ILCS 130/0.01 et seq.).
12. For Preliminary Engineering Contracts:
- (a) That tracing, plans, specifications, estimates, maps and other documents prepared by the ENGINEER in accordance with THIS AGREEMENT shall be delivered to and become the property of the LPA and that basic survey notes, sketches, charts, CADD files, related electronic files, and other data prepared or obtained in accordance with THIS AGREEMENT shall be made available upon request to the LPA without restriction or limitation as to their use. Any re-use of these documents without the ENGINEER involvement shall be at the LPA's sole risk and will not impose liability upon the ENGINEER.
 - (b) That all reports, plans, estimates and special provisions furnished by the ENGINEER shall conform to the DEPARTMENT's current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Manual or any other applicable requirements of the LPA, it being understood that all such furnished documents shall be approved by the LPA before final acceptance. During the performance of the engineering services herein provided for, the ENGINEER shall be responsible for any loss or damage to the documents herein enumerated while they are in the ENGINEER's possession and any such loss or damage shall be restored at the ENGINEER's expense.

For Construction Engineering Contracts:

- (a) That all services are to be furnished as required by construction progress and as determined by the LPA employee In Responsible Charge. The ENGINEER shall complete all services herein within a time considered reasonable to the LPA, after the CONTRACTOR has completed the construction contract.
- (b) That all field notes, test records and reports shall be turned over to and become the property of the LPA and that during the performance of the engineering services herein provide for, the ENGINEER shall be responsible for any loss or damage to the documents herein enumerated while they are in the ENGINEER's possession and any such loss or damage shall be restored at the ENGINEER's expense.

- (c) That any differences between the ENGINEER and the LPA concerning the 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 LPA, and a third member appointed by the two other members for disposition and that the committee's decision shall be final.
- (d) That in the event that engineering and inspection services to be furnished and performed by the ENGINEER (including personnel furnished by the ENGINEER's subconsultants) shall, in the opinion of the LPA be incompetent or inadequate, the LPA shall have the right to supplement the engineering and inspection force, or to replace the engineers or inspectors employed on such work, at the expense of the ENGINEER. This may be done through services of LPA staff or require the procurement of supplemental engineering services.
- (e) Inspection of all materials, when inspection is not provided by the LPA's selected material inspection consultant, shall have inspection reports submitted to the LPA in accordance with the DEPARTMENT's Central Bureau of Materials "Project Procedures Guide" and the policies of the STATE.

AGREEMENT SUMMARY

Prime Consultant (Firm) Name	TIN/FEIN/SS Number	Agreement Amount
HDR Engineering, Inc.	47-0680568	\$1,433,255.00

[illegible]

AGREEMENT SIGNATURES

Executed by the LPA:

Attest: The of

By (Signature & Date)

By (Signature & Date)

(SEAL)

Executed by the ENGINEER:

Prime Consultant (Firm) Name

Attest:

By (Signature & Date)

By (Signature & Date)

Title

Title

Local Public Agency

Prime Consultant (Firm) Name

County

Section Number

County of McHenry

HDR Engineering, Inc.

McHenry

24-00580-000-SP

**EXHIBIT A
SCOPE OF SERVICES**

To perform or be responsible for the performance of the engineering services for the LPA, in connection with the PROJECT herein before described and enumerated below:

See attached.

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
County of McHenry	HDR Engineering, Inc.	McHenry	24-00580-000-SP

**EXHIBIT B
PROJECT SCHEDULE**

See attached.

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
County of McHenry	HDR Engineering, Inc.	McHenry	24-00580-000-SP

EXHIBIT C
Qualification Based Selection (QBS) Checklist

The LPA must complete Exhibit D. If the value meets or will exceed the threshold in 50 ILCS 510, QBS requirements must be followed. Under the threshold, QBS requirements do not apply. The threshold is adjusted annually. If the value is under the threshold with federal funds being used, federal small purchase guidelines must be followed.

☐ Form Not Applicable (engineering services less than the threshold)

Items 1-13 are required when using federal funds and QBS process is applicable. Items 14-16 are required when using State funds and the QBS process is applicable.

		No	Yes
1	Do the written QBS policies and procedures discuss the initial administration (procurement, management and administration) concerning engineering and design related consultant services?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Do the written QBS policies and procedures follow the requirements as outlined in Section 5-5 and specifically Section 5-5.06 (e) of the BLRS Manual?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Was the scope of services for this project clearly defined?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Was public notice given for this project? Posted to County Purchasing Website from 11/02/2023-11/22/2023	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Do the written QBS policies and procedures cover conflicts of interest?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Do the written QBS policies and procedures use covered methods of verification for suspension and debarment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Do the written QBS policies and procedures discuss the methods of evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Project Criteria		Weighting	
+ - Technical Approach 20%, Firm Experience 10%, Specialized Expertise 15%, Staff Capabilities 30%, Work Load Capacity 15%, Past Performance 10%		100%	
8	Do the written QBS policies and procedures discuss the method of selection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Selection committee (titles) for this project

Design Engineer II, Design Engineer IV, Design Manager

Top three consultants ranked for this project in order			
1	HDR Engineering, Inc.		
2	Stanley Consultants, Inc.		
3	HR Green		
9	Was an estimated cost of engineering for this project developed in-house prior to contract negotiation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Were negotiations for this project performed in accordance with federal requirements.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Were acceptable costs for this project verified?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Do the written QBS policies and procedures cover review and approving for payment, before forwarding the request for reimbursement to IDOT for further review and approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Do the written QBS policies and procedures cover ongoing and finalizing administration of the project (monitoring, evaluation, closing-out a contract, records retention, responsibility, remedies to violations or breaches to a contract, and resolution of disputes)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	QBS according to State requirements used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15	Existing relationship used in lieu of QBS process?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16	LPA is a home rule community (Exempt from QBS).	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Route	Various
Local Agency	McHenry County Division of Transportation
Section Number	24-00580-00-SP
Type of Funding	RTA Sales Tax (Local)

PHASE I – PRELIMINARY ENGINEERING FOR THE 2024 INTERSECTION SAFETY PROJECT

MCHENRY COUNTY DIVISION OF TRANSPORTATION

EXHIBIT A – SCOPE OF SERVICES

The McHenry County Division of Transportation, hereafter referred to as Local Public Agency (**LPA**), has initiated a project requiring professional engineering services by HDR, Inc. (**ENGINEER**) for Phase I Preliminary Engineering of the subject project.

UNDERSTANDING OF THE PROJECT

This document presents the proposed work components for completing the necessary Phase I Preliminary Engineering and Environmental Studies to identify and address the purpose and needs for three (3) intersections: Spring Grove Road at Miller Road, Alden Road at O'Brien Road, and Coral Road at Maple Street. This includes the preparation of a Phase I Preliminary Engineering and Environmental (Phase I) Study for each intersection located in area of unincorporated McHenry County, Illinois, for the LPA and National Environmental Policy Act (NEPA) processes documentation. The following scope of services is for all three intersections combined; however, each intersection will be processed separately through the Illinois Department of Transportation (**DEPARTMENT**) and Federal Highway Administration (FHWA) for approval.

Each intersection Phase I Study will follow the federal process to develop a NEPA purpose and need, alternatives coordinated with stakeholders and the public, and development of a preferred alternative. The scope of services generally consists of the following:

- Startup tasks, data compilation and GIS development, survey, and mapping efforts
- Travel demand modeling and operational analysis, as well as crash analysis
- Analysis of environmental studies
- Alternatives development, screening, and evaluation
- Purpose & Need
- Public involvement and agency coordination
- NEPA Documentation
- Project management, and quality management, as defined in this document.

The scope is consistent with objectives and procedures for a Phase I Study and documentation as presented in the **DEPARTMENT** Bureau of Local Roads and Streets (BLRS) Manual and the FHWA policies and guidance documents. Specific procedures and objectives for the Phase I are as follows:

Project Schedule. The estimated completion duration for the Phase I Engineering and Environmental Studies work effort is anticipated to be **18 months** following authorization to proceed for each intersection. The basis of this overall schedule assumes timely coordination and delivery of required resource information to perform the necessary environmental evaluations, public involvement activities, and approvals following contract execution and authorization to proceed.

Existing Conditions. The following is a general description of the existing conditions at all three intersections. Following the general description, additional information for each intersection is provided. The study limits for each intersection are a half mile (2,640 feet) on each leg of the intersection.

Common Elements for All Intersections

Each intersection is a 4-legged, two-way stop-controlled intersection. All roads approaching the intersections are two-lanes (one travel lane in each direction) with paved/gravel shoulders and open ditch drainage. There are no turn lanes present at any of the intersections. All are located primarily in rural, unincorporated areas of McHenry County. The land adjacent to each intersection includes active farmland as well as rural residential properties / farmsteads. Each intersection has some type of overhead beacon lighting.

Each intersection in the last 5 years has experienced several injury vehicle crashes and one (1) fatal vehicle crash.

Spring Grove Road at Miller Road

Spring Grove Road is under the jurisdiction of the **LPA**. Miller Road is under the jurisdiction of the either McHenry Township or the Village of Johnsburg. Stade's Farm and Market (an agricultural tourism business) is located approximately one mile west of the intersection. ComEd / power supply lines for Scott Forge are also located near the project.

Alden Road at O'Brien Road

Alden Road is under the jurisdiction of the LPA. O'Brien Road is under the jurisdiction of Alden Township.

Coral Road at Maple Street.

Both roadways are under the jurisdiction of the **LPA**. Large culverts are located on the east and south legs of the intersection within 300 to 800 feet of the intersection.

Environmental Impact Classification. It is assumed that the project will be processed as a Federal Approved Categorical Exclusion according to Chapter 19 of the *BLRS Manual*.

Submittals. All project submittals shall be submitted to the **LPA** for review and comment prior to being submitted to the Illinois Department of Transportation (**DEPARTMENT**) and other agencies. An electronic copy of all deliverables shall be provided to the **LPA**. The **ENGINEER** shall copy the **LPA** on all submittals to the **DEPARTMENT** and other agencies. Each deliverable shall be uploaded to the **LPA**'s ProjectWise and is assumed to have three reviews by the **LPA** using Bluebeam. The schedule should assume the first two reviews are three weeks and the third is one week.

Correspondence. The **ENGINEER** shall maintain for a minimum of three (3) years after acceptance of Affidavit of Completion and the last action on the contract all project correspondence to the **LPA** and other outside agencies.

Stakeholders. Coordination is anticipated with the following stakeholders, agencies, and utilities:

- Federal Highway Administration (FHWA)
- Illinois Department of Transportation (IDOT)
- Illinois Department of Natural Resources (IDNR)
- Village of Johnsbury and City of Marengo
- Alden, McHenry, Richmond, and Riley Townships
- McHenry County Planning & Development
- McHenry-Lake County Soil & Water Conservation District
- US Fish and Wildlife Service (if applicable)
- Federal Emergency Management Agency (FEMA) (if applicable)
- US Postal Service
- McHenry County Farm Bureau
- Fire Districts
- School Districts
- Property owners
- Utility Companies

Subconsultants. The following subconsultants are anticipated to be used for the following services:

- MSA Professional Services
 - Roundabout Design Support
- Gewalt Hamilton Associates (GHA)
 - Survey and Traffic Counts
- AMES Engineering
 - Roadway Lighting
- Rubino Engineering
 - Geotechnical
- Huddleston and McBride
 - Field Tile survey

Summary. The Scope of Services for the Phase I engineering involves a comprehensive preliminary engineering and environmental study that results in design approval from the

DEPARTMENT. Included in this scope are the following tasks:

1. Data Collection and Review
2. Roadway Surveys
3. Utility Identification and Coordination
4. Environmental Studies
5. Traffic and Safety Analysis Report
6. Intersection Alternatives Analysis
7. Preferred Alternative Analysis
8. Intersection Design Studies
9. Location Drainage Technical Memorandum
10. Geotechnical Subsurface Investigation
11. Lighting Assessment
12. Traffic Management Analysis
13. Public Involvement
14. Project Development Activities and Report
15. Meetings
16. Project Administration and Management
17. Quality Control / Quality Assurance

TASK 1 – DATA COLLECTION AND REVIEW

Coordinate with local agencies and verify project pertinent data for each intersection.

Review Existing Data. Available information from **LPA** will be obtained and reviewed including existing right-of-way and property limit data, title commitments, existing County roadway plans, County-based GIS digital topographic survey data and aerial photography, crash data, traffic projections from the Chicago Metropolitan Agency for Planning (CMAP), and existing maintenance and flooding records, existing traffic counts, bike routes, bus routes, existing / proposed developer plans, public agency districts (fire, school, etc.), waterway information tables, and other publicly available GIS data. Existing traffic counts to be provided by **LPA**. One additional intersection traffic count is included in the scope at a location and time to be determined, if needed.

Prepare Photo Log. Photograph the features of the project site and prepare a photo log.

Site Visit. Staff will visit the sites to familiarize themselves with the existing topography, above ground utilities and underground markers, and assessment of existing site issues. These conditions will be documented for consideration when developing intersection alternatives.

Tile Investigation. An existing drain tile investigation, including staking, mapping, and trenching to verify the existence of drain tile will be performed in accordance with McHenry County Stormwater Ordinance Standards. An aerial markup of the investigation limits will be provided to the **LPA** for approval.

This investigation will be limited to the mapping of agricultural drainage systems, mainline and sub-main collectors, and will include local lateral / feeder drain tiles only when encountered at hand probe transect locations. It shall be our intent to complete this investigation process by the implementation of hand probe transects in efforts to minimize right of way and private property damage and restoration. This investigation will include the intersection area and 2,500 ft in each of 4 directions. All agricultural drain tile systems located and staked within the existing intersection improvements right of way and will extend 20 ft into private lands.

Field Tile Investigation Procedures. Field reconnaissance and record research work will be completed in efforts to identify all areas which are typical to installation of existing drain tile. Existing features such as soils, water table, topographical elevations, surface channels, depressions, wetlands and natural drainage ingress and egress locations are considered.

Following field review, investigation areas will be staked and hand probed to verify existence of drain tile. All existing drain tiles encountered during the investigation procedure will be recorded on field mapping and repaired if damaged to their original state according to U.S.D.A. Natural Resource Conservation Service construction repair practices. Following specific point locations, drain tile routes will be located by surface probing or electronic detection and field staked at 20' intervals including cut stakes for invert elevations where requested. Any existing drain tile not encountered during surface probe transect procedures will remain unknown.

Field Tile Record and Mapping Report. Record mapping shall be performed according to typical civil engineering mapping standards. It will be the responsibility of the developer to furnish one ACAD (version 2018 or 2021 .dwg) computer data file of the investigation area including mapped topography, easements, right-of-ways, wetland delineation areas and property boundary limits.

All existing drain tile routes will be located in the field by GPS location systems (<1m., Illinois State Plane East NAD 83) and recorded on final plans. Our field staking process will include pipe invert cut stakes at right of way locations, strategic interior locations and 20' interval pin flagging along tile routes for electronic survey location by the **ENGINEER** if deemed necessary. It will be the responsibility of the surveyor to survey drain tile location/elevation staking pertinent to final improvement design.

Final drain tile mapping will be computer drafted on a base map including recent color digital aerial photography, topography and project limits. Mapped information will include the location of septic systems, existing drain tile routes and applicable drainage findings encountered during the field investigation process. A field report shall be attached to the plan containing evaluation information including size, flow, system effectiveness, restrictive siltation, pipe invert to ground surface depth, pipe type / quality, system classification and specific field notes.

This project shall be completed in accordance with typical drain tile investigation standards as required by McHenry County Stormwater ordinances.

Mosaics. Ortho-digital photographic mosaics will be obtained for use in performing the study efforts verifying the mapping files are compatible in terms of scaling, format, and perform adjustments to images as appropriate. Develop initial base maps from the ortho-digital aerial mapping collected, onto which project information, data and alternatives will be overlaid. Mosaics will be used for public involvement materials as well.

Unmanned Aerial Vehicle (UAV). The **ENGINEER** will utilize a UAV to record general traffic flow during peak traffic periods at each intersection. The video collected will be used for project understanding as well as public involvement tools to communicate with the public aspects about each intersection.

TASK 2 – ROADWAY SURVEYS

Preliminary design surveys will be required and performed at each project location to document existing field conditions that will serve as the basis for the preliminary engineering and design. An aerial markup of the topographic survey limits will be provided to the **LPA** for approval.

Existing Conditions Topographic Survey | Roadway Improvements

The survey will meet or exceed the Minimum Standards of Practice as set forth by Illinois Administrative Code for a Topographic Survey. Accordingly, we will provide the following services:

1. Obtain benchmark information (NAVD88) from NGS, McHenry County Geodetic Monuments, or the Trimble VRS Now Network.
2. Horizontal coordinates shall be referenced to the State Plane Coordinate System, Illinois East Zone, NAD83 adjustment. Vertical elevations shall be referenced to the North American Vertical Datum of 1988 (NAVD88). All units shall be U.S. Survey feet and decimal parts thereof.
3. Establish five (5) permanent site benchmark(s) (i.e., crosses or boxes cut on concrete, flange bolts on fire hydrants, etc.) on each site.

4. Contours will be provided at 1'-0" intervals, with an error not to exceed one-half the contour interval.
5. Elevations will be taken at 50-foot cross sections across the right-of-way width along the limits of survey (1,320 linear feet in each direction of the centerline) including spot grades at high points, low points, and grade changes. Points required are located at the right-of-way line, edge of pavements, centerline, driveways, etc. The topography will extend approximately 15 feet beyond the existing and proposed ROW.
6. The survey will show the location of the visible ground features, physical improvements with the project limits including location and elevation of light poles/utility poles, driveways, fences, guard rails, signage, striping, overhead wires, etc.
7. The location of underground utilities, both observed and from record information such as Municipal utility atlases or Design Stage J.U.L.I.E maps will be provided and will include location and size of water mains, fire hydrants and valves. The survey will show depth, size, and direction of flow for all sanitary, storm drains, and culverts, etc. The location of all manholes, catch basins and all pipe inverts that are accessible from the surface will be depicted. Marking from the J.U.L.I.E. Locates will be surveyed. Field tile locations will be surveyed as located in Task 1 – Field Tile Investigation.
8. Location of "dry" utilities such as telephone, electric, gas and cable T.V. lines, etc. will be depicted based on visual surface evidence and available utility atlas information from the respective utility companies. The cost for marking of private or public utilities is not included in this scope, but information provided by Huddleston for Field Tile survey will be surveyed.

Scope of Services – Right-of-Way Survey – Level Three Boundary

Obtain documentation and complete a survey of the right-of-way (ROW) within project limits for the purposes of establishing the ROW. Title commitments will not be obtained during Phase I for this task thereby relying on publicly available information whether provide by the **LPA** or deeds of the parcels that will dedicate right-of-way or grant easements.

1. Necessary Courthouse Research to obtain available plats, deeds, property records, and Right of Way Documents.
2. Locate and survey the existing property monumentation in the project area and establish the position of the ROW lines within the project limits.
3. Locate and survey monuments on side lot property lines along the ROW that will be within the project limits.

Tree Inventory. For projects where right-of-way or easements are expected to have adverse impact or require removal of the trees of three (3) inches or greater as measured at Diameter at Breast Height (DBH), a tree survey will be conducted in accordance with current **DEPARTMENT** policies and D&E-18.

- Trees will be tagged, surveyed, identified, and evaluated for condition and form (tagging identification, evaluation by a state certified arborist).
- The trees will be shown on the plans.
- The data will be in table format and the headings include tree species, size (DBH), station, offset, health, structure, impact status, and suitability for preservation.

TASK 3 – UTILITY IDENTIFICATION AND COORDINATION

Utility Investigation. Pertinent utility information will be collected for the project area to locate utilities that may affect design or construction of the project for each intersection.

- A Joint Utility Locating Information for Excavators (JULIE) Design Stage Request for buried facilities will be submitted.
- Prepare and send utility notification letters per **LPA** template to identify utility companies.
- Information provided by utility companies will be reviewed and incorporated into the base mapping. Compare facilities in relation to the proposed improvement for potential conflicts. Compile and summarize available utility information in a spreadsheet per the formatting requirements for Phase II utility documentation.
- Identify and locate utility easements from Task 2 in the base utility mapping.
- Identify the type and conditions of any utility easements within the project limits.
- Follow up letters per **LPA** template with preliminary plan sheets showing potential conflicts will be sent to utility companies.
- Electronic copies of all information received or provided to the utility companies will be sent to the **LPA** for their records.

TASK 4 – ENVIRONMENTAL STUDIES

Environmental Survey Screening. The Environmental Survey Screening and attachments will be prepared and submitted electronically in accordance with BDE Manual Section 27-1.05 (b) for each intersection. In addition to BDE Form 2715, and all required documents which includes but not limited to:

- A complete and detailed project description of all the proposed scope of work;
- Project location map;
- Project area map;
- Aerial photography; and
- Building photo log.

The following exhibits are recommended in support of the Environmental Survey Screening and will be developed and submitted:

- Spatially located GIS shape files (submitted in either .dbf; .prj; .shp; or .shx format)
- Project plan review sheets;
- Ground level photos;
- NWI and McHenry County Advanced Identification of Wetlands maps;
- HARGIS maps;
- A bridge bat assessment is required for any tree removal or work on existing bridges or culverts with a vertical clearance of 48” or higher. Both pages of the bat assessment form must be completed.
- Spatially located Google Earth KML or KMZ files are requested when there are multiple locations to be evaluated. Each location will be submitted independently.

An Environmental Screening Survey package, consisting of BDE Form 2715 and the required and recommended exhibits, will be prepared for each intersection, and provided to the **LPA** for approval prior to submittal to the **DEPARTMENT**.

Environmental Survey Request. The Environmental Survey Request (ESR) and attachments will be prepared and submitted electronically in accordance with *BLRS Manual Section 20-2* for each intersection. In addition to the ESR, the supporting exhibits developed for the Environmental Survey Screening are required to be resubmitted. The following supporting documents are recommended and will be developed and submitted:

- Project Plan View Sheet(s)
- Ground-level Photos.

The ESR package for each intersection will be provided to the **LPA** for approval prior to submittal to the **DEPARTMENT**.

Wetland Delineation and Report. Wetland and/or waters are anticipated to be present in the study areas. The following tasks will be performed for each intersection:

- Obtain preliminary information including aerial photos, wetland maps, United States Geological Survey (USGS), soils mapping, FEMA map, and other data necessary for the wetland delineation.
- Conduct wetland and water delineations based on methodology approved by United States Army Corps of Engineers (USACE), including farmed wetland determinations as required. Wetland and waters will be differentiated to determine impacts to each.
- Field stake perimeter of wetlands and survey their locations.
- Prepare wetland delineation report, including resource evaluation, support data, and graphics.

Wetland Impact Evaluation. Based on the wetland delineation reports and proposed improvements, Wetland Impact Evaluations (WIEs) will be prepared as follows:

- Prepare wetland impact exhibit and evaluate wetland impacts for each intersection.
- Prepare and submit the **DEPARTMENT** Wetland Impact Evaluations (WIE) forms electronically.

The Wetland Reports and WIE forms for each intersection will be provided to the **LPA** for approval prior to submittal to the **DEPARTMENT**.

Tree Inventory. It is anticipated that right-of-way or easements are expected to have adverse impact or require removal of the trees of three (3) inches or greater as measured at Diameter at Breast Height (DBH). HDR will conduct a tree survey for each intersection in accordance with current **DEPARTMENT** policies and D&E-18.

- Trees will be tagged, surveyed, identified, and evaluated for condition and form.
- The trees will be shown on the plans.
- The data should be in table format and the table headings should include tree species, size (DBH), station, offset, health, structure, impact status, and suitability for preservation.

Special Waste Assessment. A Special Waste Assessment (SWA) for each project area will be prepared to screen for potential contamination and to determine whether a Preliminary Environmental Site Assessment (PESA) is required. An SWA will be prepared for each intersection area following the guidelines in Section 20-12.03 of the *BLRS Manual*.

- Obtain a Radius Report from a company that provides search results of public and proprietary databases to identify any nearby CERCLIS, LUST, UST, RCRA, and other sites that may pose a risk of contamination.
- A Memorandum will be prepared for each intersection area that summarizes the findings of the SWA for inclusion in the Project Development Reports (PDRs).

Preliminary Environmental Site Assessment (PESA). A PESA will be performed for each of the intersection's study areas not within **DEPARTMENT** jurisdiction in accordance with the following policies and standards:

- A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Infrastructure Projects (Erdmann et al., 2012)
- ASTM International (ASTM) standard 1527-21
- *BLRS Manual*, Chapter 20-12, Special Waste Procedures

Tasks include but not limited to:

- **Historical Research.** Historical land use/ownership records will be developed from standard historical sources for each intersection area. Sanborn Fire Insurance Maps and historic aerials will be requested from the records review provider. Available Sanborn Fire Insurance Maps and historic aerials will be reviewed to identify land use over time and potential areas of environmental concern, such as areas of surface disturbance and outside storage.
- **Site Evaluation.** Current environmental features and conditions of sites adjacent to the right-of-way/project areas will be evaluated. A site reconnaissance of potential right-of-way/project areas designated for excavation and/or acquisition will be conducted for in-person evaluation of current environmental conditions within the project limits. All of the features and conditions listed above will be investigated and, as appropriate, documented in photographs. The land-use and housekeeping practices of adjacent properties also will be recorded and evaluated in accordance with ASTM protocols.
- **Records Review.** Records reviews will be conducted to determine potential environmental concerns within each intersection's study area. They will include a search of standard state and federal environmental record databases in accordance with the specifications of ASTM standards. This search is based on the outline of each study area. Specifically, each database will be searched to identify any potential sources requiring further investigation. As appropriate, Freedom of Information Act (FOIA) requests will be filed with the IEPA to obtain additional data pertaining to identified sites.
- **Report Preparation.** One report for each intersection summarizing the results of the evaluation will be prepared. The following information will be included in this report:
 - The project location and description
 - Historical uses of corridor
 - The area geology and hydrology

- The environmental status of sites adjacent to the corridor regarding chemical use and storage, underground and above ground storage tanks, solid waste, special waste, and hazardous waste, and PCBs
- An analysis of the site review
- A summary of the findings regarding any environmental concerns.
- List of locations for recommended Preliminary Site Investigation (PSI) to be performed in Phase II.

PESA Validation. PESAs need to be validated if six months or more elapse after the date of the PESA completion. This scope assumes one validation of the PESA for design approval, which includes a site visit, records review, and memorandum of validation preparation for each intersection area.

PESA Response. HDR will identify sites to be avoided and, after evaluation, complete **DEPARTMENT** form BDE 2735 and required attachments for each intersection area.

TASK 5 – TRAFFIC AND SAFETY ANALYSIS REPORT

A safety analysis will be completed for each intersection location with the following tasks completed:

Crash Analysis. Review crash reports and make any necessary coding adjustments based upon the written description of the crash. The revised data will be used to develop intersection collision diagram exhibits. Crash trends and patterns will be identified, and any crashes specifically related to roadside design and features will be noted. The most recent 5 years of crash data (2019 to 2023) from the IDOT data portal will be used. **LPA** may provide more recent crash data not available on IDOT's portal. One (1) update to the crash analysis will be provided for each intersection should it be necessary obtaining up to date crash data. Past **LPA** Safety Studies will also be considered as provided by **LPA**.

Traffic Analysis. Traffic operational analyses will be performed for the existing, 2050 no-build, and 2050 build alternatives at each intersection. CMAP projections, obtained by **LPA**, will be used to determine 2050 Average Daily Traffic (ADT) and 2050 Design Hourly Volumes (DHV).

Intersection capacity analyses will be performed for each Level 1 alternative developed for each intersection using Highway Capacity Software (HCS) and/or Sidra software. Analyses at each intersection include weekday AM and PM Peak Hours for existing, 2050 no build, and up to four (4) 2050 build alternatives. Two (2) additional analyses for AM and PM for each intersection will be included for updates during the Level 2 alternatives development. One weekend peak hour will be analyzed for all scenarios for the Spring Grove Road at Miller Road intersection.

Signal and All-way stop warrant analyses will be performed in accordance with IL MUTCD.

Human Factors Assessment. Review the ease with which the driver can traverse the intersections given the existing physical and engineering characteristics. Included in this will be a review of winter operation safety issues. A summary of the findings will be included in the Safety Analysis Report.

Existing Sign Analysis. Evaluate and verify existing sign inventory. Identify additional sign locations and/or relocations of existing signs to improve safety at each location. Sign evaluation will include ball-bank test on horizontal curves and roadway profile analysis for vertical curves to determine the existing available sight distance. New and/or relocated signs will be provided in tabular format and GIS format.

Existing Pavement Markings Analysis. Evaluate and verify existing pavement markings. Identify any additional pavement marking alternatives to improve safety at each intersection.

Intersection Risk Factors. Develop a list of risk factors such as curve radius, shoulder width, traffic volumes, highway signs, presence of local hazards, above average crash frequency and rates, and driveway sight distance. The list of risk factors will be included in the Traffic and Safety Analysis Report and utilized during data collection.

Safety Performance Analysis. Crash Modification Factor (CMF), as outlined in the Highway Safety Manual (HSM), will be used to estimate the potential reduction in crashes for proposed improvements. This can be used as a tool to screen alternatives at each intersection. For alternatives that are more thoroughly vetted (See Task 6 for Level 2 Alternatives), the use of the HSM predictive method provides a better prediction for crashes, providing predictions of the crash types and severities. The history of crashes can also be used in the predictive methodology utilizing Empirical Bayes (EB). The Interactive Highway Safety Design Model (IHSDM) will be used to apply the HSM predictive method and will provide cost/benefit ratios for each alternative.

Traffic and Safety Analysis Report. A Traffic and Safety Analysis Report will be prepared for each intersection location to document the findings of the traffic and safety analyses. Graphics, technical appendices, tables, and exhibits will be provided, as applicable, in the report summarizing the analyses performed.

TASK 6 – INTERSECTION ALTERNATIVES ANALYSIS

The **ENGINEER** will develop a range of alternatives (Level 1) that have the potential to satisfy the operations, safety requirements, and needs of the project for each intersection. Prior to the development of Level 1 Alternatives, a meeting for each intersection will be held with the **LPA** with up to 4 staff from the **ENGINEER**. When feasible, the meetings for individual intersections will be combined.

Level 1 Alternatives will be developed to a functional layout of detail to allow an initial assessment of engineering viability, potential environmental issues, and other relative impacts. The functional layout will consist of the development of potential changes in alignment locations and intersection types including roundabouts. The functional design exhibits will be prepared to represent the horizontal layout of the alternatives. Vertical alignment will be evaluated during the Level 1 process to identify any potential changes to a roadway's profile. Separate profile exhibits will not be provided. Up to four (4) Level 1 Alternatives will be developed for each intersection with up to four (4) sub-alternatives for each intersection. Multi-modal concepts will be considered but not fully developed. The Level 1 Alternatives will be presented to **LPA** in exhibit format on an aerial base

map, not sheeted. A meeting will be held to discuss the comments and direction from the **LPA**. When feasible, the meetings for individual intersections will be combined.

Upon MCDOT's review and direction, in-depth Level 2 Alternatives will be developed that meet the Purpose and Need for each intersection that are feasible. The Level 2 alternatives, originating from the Level 1 Alternatives, will be refined and modified based on **LPA** comments and direction. The Level 2 Alternatives will be presented in exhibit format, not sheeted. Vertical profiles and cross sections will be developed to determine construction limits, environmental impacts, and right-of-way needs. **LPA** will provide guidance as to how multi-modal concepts should be further developed (on-road vs. off-road). A planning-level cost estimate will be provided for each Level 2 Alternative for comparative purposes. Up to three (3) Level 2 Alternatives will be developed for each intersection.

For the Level 2 alternatives, a report for each intersection will be developed that discusses the following items comparing alternatives: methodology, existing conditions, brief summary of the Level 1 alternatives, description of each Level 2 alternative, associated impacts for each alternative with respect to right-of-way and environmental features, summary of the traffic and safety analysis, public involvement summary, evaluation matrix table, location map, and an exhibit of each alternative.

TASK 7 – PREFERRED ALTERNATIVE ANALYSIS

A meeting with the **LPA** will be held with up to 4 staff from the **ENGINEER** to discuss and develop the preferred alternative prior to it being developed. When feasible, the meetings for individual intersections will be combined.

Preliminary Design. A preferred alternative design will be developed in accordance with criteria prescribed in the *BLRS Manual* for each intersection. Plan and profile sheets (1" = 50' at 11"x17") and roadway typical sections will be developed based on the proposed roadway profile. The roadway geometry and plans will be prepared in accordance with the applicable requirements of *BLRS Manual Section IV – Project Design*. Preliminary cross sections will be prepared to the extent necessary so that right-of-way and easement needs, wetland impacts, floodplain and floodway impacts, and compensatory stormwater requirements can be identified and evaluated. Other elements to be designed / accommodated / identified include access management, utility conflicts, and right-of-way and easement needs. One (1) Preferred Alternative will be developed for each intersection.

Design Exceptions. Elements to be constructed at less than the design guidelines will be identified, and a clear description of required exceptions and appropriate justification will be provided (*BLRS Manual Section 27-7*). **DEPARTMENT** form BLR 22120 will be completed. These items will be discussed at an FHWA meeting. For budgeting purposes, it is assumed that up to a total of three (3) Design Exceptions may be needed, one (1) for each intersection.

Barrier Warrant Analysis. A barrier warrant analysis will be performed and presented for review in a memorandum that includes a narrative, plan, calculations, and documentation. For budgeting purposes, it is assumed that a barrier warrant analysis will be needed for two approaches at each intersection.

Sight Distance Analysis. A sight distance analysis will be performed and presented for review in a memorandum that includes a narrative, plan, calculations, and documentation.

Cost Analysis. A construction cost estimate will be prepared commensurate for inclusion in the final PDR for each intersection.

TASK 8 – INTERSECTION DESIGN STUDIES

Prepare the Intersection Design Studies (IDS) for each of the three intersections. The task is scoped for the most conservative intersection alternative. The IDS submittal will include:

- Intersection Design Study
- Alignment sheets
- Profiles
- Signing and marking
- AutoTurn sheets
- Vision angles
- Intersection capacity and vehicle queue values, as applicable
- Signal warrant information, as applicable
- ADA ramp details up to 16 ramps at each intersection

TASK 9 – LOCATION DRAINAGE TECHNICAL MEMORANDUM

An analysis will be performed to determine existing drainage patterns and the impact of the roadway improvements at each intersection location. Work under this task includes an analysis of the existing drainage system, an analysis of existing outlets, an evaluation of the need for storm water detention and compensatory storage, and design of proposed drainage improvements. The **ENGINEER** will identify sensitive outfalls and provide the drainage report in accordance with the 2014 ACEC/IDOT Drainage Seminar requirements and the IDOT Drainage Manual with consideration of the McHenry County Stormwater Management Ordinance. Prepare a recommended design for the crossings and develop the transitions to the existing waterway.

Assumptions

- A field evaluation of drainage conditions and structures within the project limits will be performed under Task 1.
- A data review including review of Hydraulic Atlases, Identified Base Floodplains, Streamstats, Wetland Inventory Maps, and McHenry County GIS will be completed under Task 1.
- A topographic survey including all identified drainage structures will be completed under Task 2.
- A drain tile survey will be performed by Huddleston McBride.
- Bulletin 75 rainfall data will be used for analysis.

Existing Drainage System

- Evaluate the existing drainage and determine deficiencies in accordance with the **DEPARTMENT Drainage Manual**, as well as coordinated efforts with the McHenry County Stormwater Management Ordinance.
- Prepare an Existing Drainage Plan (EDP) according to section 2-202 of the IDOT Drainage Manual. (assumed to be 3 major sheets, 2 minor sheets, and 3 overall sheets)
- There are assumed to be two (2) culverts requiring HY-8 analysis for the Spring Grove at Miller intersection and two (2) culverts for the Coral Road at Maple Street intersection.
- Evaluate existing outlets to determine their suitability for continued use and sensitivity to increases in rate and volume runoff. Identify drainage problems and document the identified drainage problems throughout the project limits.
- Floodplain evaluation – there are no mapped FEMA floodplain within the project limits at any of the locations, so floodplain evaluation is excluded from the scope.

Proposed Drainage System

- Perform an evaluation of the need for storm water detention, ditch capacity calculations, and design the proposed drainage improvements including best management practices.
- Document design criteria and ensure that the design meets the criteria as specified in Section 2-01 of the **DEPARTMENT Drainage Manual** and providing justification for those cases which it does not. The McHenry County Stormwater Management Ordinance will also be considered.
- Evaluate existing outlets to determine their suitability for continued use and sensitivity to increases in rate and volume runoff.
- Evaluate the stormwater detention requirements for the site in accordance with the McHenry County Stormwater Management Ordinance. Justification should be included to support the findings of either providing detention or omitting it. Task will include identifying locations to provide the proposed detention and include appropriate exhibits.
- Assess the options for water quality Best Management Practices (BMPs) for the site and incorporate these practices into the proposed drainage plan as specified in Section 2-08 of the **DEPARTMENT Drainage Manual**. The section also provides opportunity to give justification for the cases in which the incorporation of BMPs is limited. Detailed design for water quality features is not included.
- Perform a right-of-way analysis to determine if drainage easements are needed for the proposed drainage plan.
- Culvert design for potential proposed culverts. This task includes two (2) culvert designs at Coral and Maple, and two (2) potential additional culverts at each of the other two intersections, for a total of six (6) proposed culvert designs.
- Prepare a Proposed Drainage Plan (PDP) according to the IDOT drainage manual requirements.

Narrative

- Prepare a Location Drainage Technical Memorandum (LDTM). Contents are anticipated to include a narrative, general location drainage map, existing drainage plan, proposed drainage plan and profile, ditch profiles, major culvert analysis, and correspondence.

TASK 10 – GEOTECHNICAL SUBSURFACE INVESTIGATION

Structure borings, soil borings, pavement cores, and design recommendations will be performed and/or provided. Geotechnical services and report will conform to the requirements of the **DEPARTMENT Geotechnical Manual (IDOT Geotechnical Manual Revised December 4, 2020)**. An aerial markup of the boring and core locations will be provided to the **LPA** for approval. An **LPA** Facility Installation Permit is required prior to performing this work.

Roadway (Subgrade) Borings. Four (4) roadway borings per intersection for a total of twelve (12) roadway borings drilled to a depth of 10 feet are to be performed to determine topsoil and unsuitable soil depths, groundwater, and soil conditions for the reconstruction of the existing roadway. The **LPA** will provide the geotechnical subconsultant permission to access private property for subsurface exploration, if required.

Pavement Cores. Four (4) pavement cores per intersection for a total of twelve (12) pavement cores will be taken to identify the existing pavement materials and thickness and to determine the properties of the underlying aggregate and soil.

Laboratory Testing. The scope will include per AASHTO/ASTM guidelines testing for soil index, particle size distribution, Atterberg limits, soil settlement and collapse potential, shear strength of soil and soil classification.

Potentially Impacted Property (PIP) Evaluation. Soil testing (including pH) will be performed to determine if there are areas for special waste disposal and satisfy the Clean Construction or Demolition Debris (CCDD) requirements. This includes the preparation of the LPC 662 or LPC 663 form as required.

Traffic Control. The geotechnical subconsultant's scope of service will include all necessary traffic control and flagman required to complete subsurface drilling and testing operations. Any required permits will be obtained from the **LPA** or Township.

Geotechnical Report. A Geotechnical Report will be prepared for each intersection location to document findings and recommendations.

Structural borings for any infrastructure proposed will not be performed during Phase I to be deferred to Phase II Engineering.

TASK 11 – LIGHTING ASSESSMENT

Complete a lighting assessment for each of the three (3) intersection locations. The lighting assessment will include a review of existing lighting equipment and its condition and recommendation for proposed lighting. The guidelines to be used for this evaluation include IES RP-8-22, AASHTO and **DEPARTMENT** District I guidelines. It is anticipated that temporary lighting will not be required during construction. The following is a description of the tasks to complete the lighting assessment:

Data Collection. This task will include obtaining necessary data and understanding of the existing lighting that is mounted on utility poles. A field visit is included in this task. The field visit will be conducted by a design engineer and an electrical engineer to inventory existing lighting, evaluate conditions, and conduct a visual review of lighting levels.

Evaluation of Existing Conditions. An evaluation of the existing lighting will be done to document the following:

- IES roadway classification
- Ownership and maintenance
- Existing lighting layout
- Lighting type and equipment details
- Existing equipment condition
- Controller location and type
- Compliance with **DEPARTMENT** District I Lighting Guidelines

A warrant analysis will be completed to determine the need for lighting using AASHTO and **DEPARTMENT** District 1 criteria. A photo log will be prepared to document the existing lighting. Develop conceptual lighting requirements for the proposed lighting. Evaluate impacts to surrounding property owners. The possibility of using existing lighting for proposed condition will be conducted under this task. A preliminary layout for the segments and the intersection will be developed by conducting a brief lighting analysis to ensure that the required lighting levels can be met with at least one standard luminaire type. The IES-RP-8 and **DEPARTMENT** District 1 guidelines will be used for this evaluation.

Cost Estimates. Cost estimates for lighting will be prepared based on the preliminary evaluation conducted in the previous to be used in the construction cost estimates developed in other tasks. The cost estimate will determine the cost participation for the local agencies.

Lighting Assessment Memorandum. The lighting assessment memorandum will summarize the findings, conclusions, and recommendations.

TASK 12 – TRAFFIC MANAGEMENT ANALYSIS

The project improvements will be designed with staged construction anticipating a full or partial roadway closure. Analyze aspects of traffic management including traffic capacity, detour concepts, roadway, or route limitations, motoring public impacts, stakeholder coordination, and documentation.

Develop qualitative concepts for the Level 2 alternatives. Develop the MOT concept for the Preferred Alternative.

- Detour analysis exhibits and stakeholder coordination for full and/or partial roadway closure. Upon analysis, submit finding and recommendation to the **LPA** for concurrence.
- For detours anticipated using **DEPARTMENT** routes, a presentation at a **DEPARTMENT/District1** Detour Committee meeting and processing of the **DEPARTMENT** Transportation Management Plan form (D1 OP0042) will be required. An impact analysis will be required if the **DEPARTMENT** route is significant per the **DEPARTMENT** Work

Zone Safety and Mobility Policy. It is anticipated that up to three (3) detour meetings with the **DEPARTMENT** will be held for all three (3) intersections, one for each intersection.

The **ENGINEER** will coordinate with the **DEPARTMENT** for their concurrence.

TASK 13 - PUBLIC INVOLVEMENT

Public Involvement Plan. The **ENGINEER** will develop a Public Involvement Plan (PIP) with input from **LPA**. The **ENGINEER** will develop up to one (1) draft version and one (1) final version of the PIP. Each version will include a stakeholder list specific to each intersection. Stakeholder lists will include, but are not limited to, adjacent property owners, businesses, applicable merchant organizations, area civic organizations, schools, neighborhood associations, churches, and special interest groups. The PIP will also include identification of outreach techniques, schedule and milestone for outreach events, notifications methods, management of comments and comment response protocols, and a media/social media plan.

Initial Agency Process Coordination. The **ENGINEER** will participate in early discussions with **LPA** to initiate approach for engaging project stakeholders to help guide the development of the PIP, including:

- Identify potential stakeholders, including agencies, local governments, community groups, and the public.
- Discuss methods for communicating with stakeholders.
- Identify potential project planning groups, if appropriate.
- Address the public involvement requirements of the **DEPARTMENT** and NEPA process.

For budgeting purposes, initial **LPA** process coordination is assumed to require up to two (2) in-person meetings with up to three (3) **ENGINEER** staff for each intersection.

Stakeholder Meetings. The **ENGINEER** will conduct one-on-one or small group meetings with local elected officials, local agency staff, businesses, community organizations such as the Farm Bureau, schools, neighborhood associations, religious institutions, and advocacy groups. For budgeting purposes, it is assumed that up to five (5) virtual stakeholder meetings combined for all three (3) intersections and will be held and will include up to two (2) **ENGINEER** staff. The **ENGINEER** will be responsible for meeting preparations and meeting summaries.

Project Website Support. **LPA** will develop and maintain the project website. The **ENGINEER** will contribute exhibits and respond to public comments. For budgeting purposes, it is assumed the **ENGINEER** will develop up to twenty-four (24) exhibits for each intersection.

Public Meetings. The **ENGINEER** will prepare for and lead up to two (2) in-person open house format public meetings for each intersection. The following subtasks are included in the public meeting task:

- Workback schedule
- Project brochure
- Display exhibits
- Newspaper public notice

- Postcard mailer
- Targeted digital display advertising using strategic communication engagement (geofencing)
- Mailing list
- Meeting dry run
- Meeting summary with comment responses
- Comment management and responses for up to 120 comments total for all public meetings combined. This includes comments received from the Online Public Engagement Opportunities.

It is assumed that up to three (3) **ENGINEER** staff will attend each dry run and each public meeting.

Online Public Engagement Opportunity. The **ENGINEER** will develop and maintain an online, self-paced, virtual public engagement opportunity that will enable stakeholders and the public to review public meeting displays and offer public comments through the project engagement website. The **LPA** will link the project website to the engagement website. It is assumed that the online public engagement opportunity will be updated one (1) time for each intersection. A total of 6 engagements are provided.

Video. **ENGINEER** will develop up to two (2) videos for each intersection to be used at public meetings and on the project website. Video #1 will feature existing conditions including project information such as purpose and need. Video #2 will feature the preferred alternative. The UAV video obtained during data collection will be used as the background for the videos produced.

Project Materials. The **ENGINEER** will develop and design key project materials for use throughout the project including:

- Up to one (1) Style guide
- Up to three (3) Templates (Word, PPT, Email)
- Schedule/process graphic
- Up to three (3) Fact sheets with up to three (3) updates for each fact sheet
- Up to three (3) Maps
- Talking points with up to three (3) updates for each intersection
- Up to twenty-four (24) Display boards for each intersection

Impacted Property Coordination. Per *BLRS Manual Section 21-3.01*, projects with minimal right-of-way (ROW) acquisition shall contact affected property owners via certified mail. Letters and exhibits depicting proposed ROW or easements will be prepared and provided to the **LPA** to mail.

TASK 14 – PROJECT DEVELOPMENT ACTIVITIES AND REPORT

Prepare a Project Development Report (PDR) for each intersection location using **DEPARTMENT** form BLR forms including exhibits and documentation to obtain design approval for the project. The PDR will follow the guidelines outlined in the *BLRS Manual Section 22-2.11*.

Existing Condition Analysis. Evaluate existing conditions and design criteria, then determine deficiencies. Develop project purpose and need. (*BLRS Manual Section 22-2.11(b)(2-5)*).

Draft Project Development Report. The draft PDR with exhibits and documentation will be assembled and submitted to the **LPA** for review and comment. The **LPA** comments will be addressed before submitting the draft report to **DEPARTMENT**. A disposition of comments will be prepared.

Final Project Development Report. The final PDR will be revised based on review comments from **DEPARTMENT** and resubmitted to **DEPARTMENT** for design approval. A disposition of comments will be prepared.

TASK 15 – MEETINGS

Meetings will serve to discuss and resolve issues in the preliminary design process. Meeting materials will be prepared and provided to the **LPA** in advance for review. The **ENGINEER** will lead meetings. Minutes of all meetings will be prepared and distributed within five working days of the meeting. A list of action items will be maintained and updated at each meeting. The following meetings are anticipated where “project” refers to all 3 intersections combined:

- One (1) project initiation meeting with the **LPA**
- One (1) project initiation meeting at the **DEPARTMENT District 1 BLRS**
- One (1) project site meeting with the **LPA**
- Nine (9) FHWA/**DEPARTMENT** meetings
- Three (3) meetings with **DEPARTMENT** District 1 Detour Committee
- One (1) pre-application meetings with the McHenry County P&D for all 3 intersections combined
- One (1) pre-application meeting with the McHenry Lake Soil and Water Conservation District
- Three (3) Level 1 review meetings
- Three (3) Level 2 review meetings
- Three (3) Drainage concept meetings
- Five (5) stakeholder meetings one of which may include the McHenry County Farm Bureau

TASK 16 – PROJECT ADMINISTRATION AND MANAGEMENT

The successful management of a Phase I project requires scheduling and reporting of the progress of the project. Services will include the following tasks:

- Project setup including contract administration, budget control and internal project team meetings.
- Prepare and submit monthly invoices and progress reports during months when engineering activities occur, and invoices are due. Progress reports are due by the first of the month.
- Provide phone and email updates and general project coordination with the **LPA** as necessary to advance the progress of the project. A one-hour virtual progress meeting is

assumed per month for the duration of the project which is assumed to be 18 months for budgeting purposes.

- Prepare and monitor a project schedule and update quarterly as tasks or project scheduling change, as well as perform scope of services reviews, resource planning, internal team coordination and contract administration and invoicing.

TASK 17 – QUALITY CONTROL / QUALITY ASSURANCE

Establish, submit to the LPA, and adhere to an approved project QA/QC plan. Submit certification of QA/QC for each submittal attesting the QA/QC plan has been implemented on the Phase I reports.

The Consultant will conduct QA/QC reviews of key deliverables in conformance with the established Quality Plan. Assumptions, calculations, memorandums, reports, and plans will be thoroughly reviewed for accuracy and consistency before submittals and coordination efforts and accompanying QC review documentation. The following deliverables will have a QA/QC review performed for each intersection:

- Environmental Cultural Reports
- Traffic and Safety Technical Memorandum
- Transportation Management Plan
- Location Drainage Technical Memorandum
- Level 2 Alternatives Analysis Report
- Preferred Alternative Plan, Profile, Cross Sections, and Costs
- Intersection Design Study
- Project Development Report

EXCLUSIONS TO THE SCOPE OF SERVICES

The following tasks or items were deemed unnecessary and would be considered as additional services if required:

- Public hearing
- Traffic noise analysis
- COSIM modeling
- Wetland bank fee
- Title commitments
- Plat of Highways and legal descriptions
- Land acquisition services (appraisals, negotiations, closings, and certification) Conditional Letter of Map Revision (CLOMR)/Letter of Map Revision (LOMR)
- Section 4(f) coordination
- Section 6(f) coordination
- Submission for permits with McHenry County Planning and Development and the McHenry Lake County Soil and Water Conservation District

Route	Various
Local Agency	McHenry County Division of Transportation
Section Number	24-00580-00-SP
Type of Funding	RTA Sales Tax (Local)

PHASE I – PRELIMINARY ENGINEERING FOR THE 2024 INTERSECTION SAFETY PROJECT

McHENRY COUNTY DIVISION OF TRANSPORTATION

EXHIBIT B – PROJECT SCHEDULE

March 2024 - Notice to Proceed

April through July 2024 - Data Collection

May 2024 - IDOT Kickoff Meeting

July through December 2024 - Develop Alternatives

January 2025 - Public Meeting #1

February 2025 through May 2025 - Develop Preferred Alternative

June 2025 - Public Meeting #2

August 2025 - Submit final Project Development Report

Phase I – Preliminary Engineering for the 2024 Intersection Safety Proejct							16-Feb-24
		Level of Effort - Hrs by Firm					
		HDR	GHA	MSA	AMES	Rubino	Total by Task
Task 1	Data Collection and Review	286	0	0	0	0	286
1.1	Collect and reivew existing data	13					13
1.2	Site visit / Photo Log	154					154
1.4	Field Tile Investigation	26					
1.5	Mosaics and UAV	93					
Task 2	Roadway Surveys	60	429	0	0	0	489
2.1	TOPO Survey & Coordination	33					33
2.2	ROW Investigation	18					18
2.3	Tree Inventory	9					9
2.4	Research		12				
2.5	Control		6				
2.6	Recon & Locate Property Corners		24				
2.7	Locate Improvements in field		189				
2.8	Additional Pickup survey		102				
2.9	Draft Existing Conditions		72				
2.1	Analyze Boundary		24				
Task 3	Utility Identificaiton and Coordination	77	0	0	0	0	77
3.1	Collect existing utilty data / JULIE Design Locates	56					56
3.2	Coordinate Utility Easements	21					21
Task 4	Environmental Studies	463	0	0	0	0	463
4.1	Environmental Survey Screening	118					118
4.2	ESR	30					30
4.3	Wetland Delineation and Report	67					67
4.4	Wetland Impact Evaluation	30					30
4.5	Tree Inventory	9					9
4.6	Special Waste Assessment	55					55
4.7	PESA	125					125
4.8	PESA Validation	29					29
Task 5	Traffic and Safety Analysis Report	779	0	36	0	0	815
5.1	Crash Analysis	127					127
5.2	Traffic Analysis - 3 Int - AM/PM - Exist, NB, Bld (4 Lvl-1 + 3 Lvl-2)	147					147
5.3	Signal / All way Stop Warrants - 3 intersections	78					78
5.4	Human Factor Assessment	52					52
5.5	Existing Sign Analysis	40					40
5.6	Existing Pavement Marking Analysis	40					40
5.7	Intersection Risk Factors	40					40
5.8	Safety Performance Analysis	40					40
5.9	Traffic and Safety Report	215		36			251
Task 6	Intersection Alternatives Analysis	1,741	0	96	0	0	1,837
6.1	Level 1 - 4 alts + 4 sub-alts for ea. Int = 24 Level 1 alts	374		70			444
6.2	Vertical evaluation	77					77
6.3	Multi modal assessment	17					17
6.4	Exhibits	137					137
6.5	Level 2 - 3 alts for ea. Int. = 9 Level 2 alts	165		26			191
6.6	Vertical design	190					190
6.7	Multi modal - design	46					46
6.8	Cross Sections	250					250
6.9	Preliminary ROW	48					48
6.10	Cost Estimates - Initial Alts (3) + Preferred (1) = 4	54					54
6.11	Exhibits	78					78
6.12	Report	305					305

Phase I – Preliminary Engineering for the 2024 Intersection Safety Proejct							16-Feb-24
		Level of Effort - Hrs by Firm					
		HDR	GHA	MSA	AMES	Rubino	Total by Task
Task 7	Preferred Alternative Analysis	1,327	0	48	0	0	1,375
7.1	Preferred Alternative	13		48			61
7.2	Plan and Profile - assume 4 sheets ea. Int.	171					171
7.3	Typical Cross Sections (2 ex/pr typ sec) 2 sheets per int x 3 int. = 6 sheets	59					59
7.4	Proposed Cross Sections	546					546
7.5	Pavement Design	70					70
7.6	ADA Ramp Design	237					237
7.7	ROW	36					36
7.8	Cost estiamte	71					71
7.9	Desgin Exceptions - assume up to 1 for ea. Intersection	39					39
7.10	Barrier Warrant analysis - 2 per intersection = 6	43					43
7.11	Sight Distrance Analysis	42					42
Task 8	Intersection Design Study	303	0	0	0	0	303
8.1	IDS - 3 intersections - autoturns	303					303
Task 9	Location Drainage Technical Memorandum	1,506	0	0	0	0	1,506
9.1	<i>Existing Drainage System</i>						
	Watershed Review	28					28
	Existing Drainage Exhibits	84					84
	General Location Drainage Map	16					16
	Existing Drainage Plan	270					270
	Identified Drainage Problems	42					42
	Identified Base Field Tile Conditions	8					8
	Major Drainage Features	44					44
	HY-8	50					50
9.2	<i>Proposed Drainage System</i>						
	Design Criteria	12					12
	Outlet Evaluation	78					78
	Stormwater Detention Analysis	148					148
	Right-of-Way Analysis	40					40
	Drainage Alternatives (Open vs Closed System Analysis)	124					124
	Local & Other Agency Coordination	28					28
	Watershed Concept Exhibits	64					64
	Proposed Drainage Plan (including storm sewer modeling)	250					250
	Floodplain Encroachment Evaluation	22					22
	Water Quality (BMP)	47					47
9.3	Study Assembly	151					151
Task 10	Geotechnical Subsurface Investigation	32	0	0	0	157	189
10.1	Coordinate and Setup Geotechnical Work	5					5
10.2	Steup/Drilling/Reporting					157	157
10.3	Review Geotechnical Report	27					
Task 11	Lighting Assessment	37	0	0	124	0	161
11.1	Coordinate and Setup Lighting Work	9					9
11.2	Lighting Assessment				124		124
11.3	Review Lighting Assessment	28					28
Task 12	Traffic Management Analysis	280	0	16	0	0	296
12.1	Develop concepts for Level 2 - Qaulitative Assessment	42		16			58
12.2	Exhibits	121					121
12.3	Report	111					111
12.4	IDOT Detour Meetings - Meetings are in TASK 17	6					6

Phase I – Preliminary Engineering for the 2024 Intersection Safety Proejct							16-Feb-24
		Level of Effort - Hrs by Firm					
		HDR	GHA	MSA	AMES	Rubino	Total by Task
Task 13	Public Involvement	929	0	44	0	0	973
13.1	Public Involvement Plan	88					88
13.2	Project Website/Online Public Engagement Opportunity	195					195
13.3	Initial Agency Process Coordination	12					12
13.4	Public Meetings (2 for ea. Intersection - 6 total)	420		44			464
13.5	Comment Management	68					68
13.6	Video	128					128
13.7	Strategic Project Engagement	18					18
Task 14	Project Development Activities and Report	525	0	0	0	0	525
14.1	Draft PDR and submittal to MCDOT	319					319
14.2	Address Comments	65					65
14.3	Final PDR submittal to IDOT	96					96
14.4	Address Comments	45					45
Task 15	Meetings	427	0	0	0	0	427
15.1	MCDOT Kickoff Meeting - 1 meeting	25					25
15.2	IDOT Kickoff Meeting - 1 for all 3 intersections combined	25					25
15.3	Site meeting w/ MCDOT - 2 days	32					32
15.4	IDOT / FHWA Meeting - 3 for each intersection - 9 total	174					174
15.5	IDOT Detour Meeting - 1 for each intersection - 3 total	30					30
15.6	County P&D - 1 for each intersection - 3 total	6					6
15.7	Soil and Water - 1 for each intersection - 3 total	6					6
15.8	Level 1 - 1 for each intersection - 3 total	41					41
15.9	Level 2 - 1 for each intersection - 3 total	11					11
15.10	Drainage concept - 1 for each intersection - 3 total	50					50
15.11	5 Stakeholder Meetings for all 3 intersections combined	27					27
Task 16	Project Administration and Management	319	0	18	5	0	342
16.1	Project Management, invoicing, reporting for 18 months	198		18	5		221
16.2	Monthly meetings with MCDOT	105					105
16.3	Admin Coordination with subs	16					16
Task 17	Quality Control / Quality Assurance	295	24	0	5	0	324
17.1	QA/QC Plan	24					24
17.2	QC Reviews	271	24		5		300
	Total	9,386	453	258	134	157	10,388



Local Public Agency	County	Section Number
McHenry County	McHenry County	24-00580-00-SP
Prime Consultant (Firm) Name	Prepared By	Date
HDR Engineering, Inc.	D Creighton	1/30/2024
Consultant / Subconsultant Name	Job Number	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

PAYROLL ESCALATION TABLE

CONTRACT TERM	18	MONTHS	OVERHEAD RATE	157.57%
START DATE	4/4/2024		COMPLEXITY FACTOR	0
RAISE DATE	1/1/2025		% OF RAISE	2.00%
END DATE	10/3/2025			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	4/4/2024	1/1/2025	9	50.00%
1	1/2/2025	10/1/2025	9	51.00%

The total escalation = 1.00%

Local Public Agency	County	Section Number
McHenry County	McHenry County	24-00580-00-SP
Consultant / Subconsultant Name		Job Number

PAYROLL RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

MAXIMUM PAYROLL RATE	86.00
ESCALATION FACTOR	1.00%

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Principal	\$86.00	\$86.00
Project Manager III	\$82.61	\$83.44
Senior Transportation Planner	\$86.00	\$86.00
Senior Civil Engineer III	\$81.05	\$81.86
Senior Civil Engineer I	\$65.30	\$65.95
Transportation Planner IV	\$72.38	\$73.10
Transportation Planner I	\$43.88	\$44.32
Civil Engineer III	\$54.27	\$54.81
Civil Engineer II	\$45.99	\$46.45
Civil Engineer I	\$36.48	\$36.84
Senior Communications Coordinator	\$61.01	\$61.62
Communications Coordinator II	\$46.19	\$46.65
Senior Graphics Designer	\$41.84	\$42.26
Senior Environmental Scientist	\$63.36	\$63.99
Environmental Scientist II	\$36.70	\$37.07
Environmental Scientist I	\$30.78	\$31.09
Clerical IV	\$46.57	\$47.04
Clerical III	\$36.45	\$36.81

Local Public Agency	County	Section Number
McHenry County	McHenry County	24-00580-00-SP
Consultant / Subconsultant Name		Job Number

SUBCONSULTANTS

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

[illegible]

NOTE: Only subconsultants who fill out a cost estimate that splits out direct labor may be listed on this sheet.

Local Public Agency

McHenry County

Consultant / Subconsultant Name

County

McHenry County

Section Number

24-00580-00-SP

Job Number

DIRECT COSTS WORKSHEET

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	2160	\$0.67	\$1,447.20
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day			\$0.00
Vehicle Rental	Actual Cost (Up to \$55/day)			\$0.00
Tolls	Actual Cost	155	\$1.50	\$232.50
Parking	Actual Cost			\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00
Shift Differential	Actual Cost (Based on firm's policy)			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)	6	\$1,000.00	\$6,000.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)	380	\$0.90	\$342.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			\$0.00
Project Specific Insurance	Actual Cost			\$0.00
Monuments (Permanent)	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			\$0.00
CADD	Actual Cost (Max \$15/hour)			\$0.00
Web Site	Actual Cost (Submit supporting documentation)	6	\$15.00	\$90.00
Advertisements	Actual Cost (Submit supporting documentation)	6	\$2,907.00	\$17,442.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)	6	\$750.00	\$4,500.00
Recording Fees	Actual Cost	1	\$250.00	\$250.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)	3	\$300.00	\$900.00
Utlility Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			\$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
GPS/UAV		4	\$200.00	\$800.00
Field Tile Survey - Huddleston		1	\$21,900.00	\$21,900.00
EDR Database		3	\$350.00	\$1,050.00
Comment Mgmnt Zoho CRM		2	\$276.00	\$552.00
TOTAL DIRECT COSTS:				\$55,505.70

Local Public Agency

McHenry County

County

McHenry County

Section Number

24-00580-00-SP

Consultant / Subconsultant Name

Job Number

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE 157.57%

COMPLEXITY FACTOR 0

TASK	DIRECT COSTS (not included in row totals)	STAFF HOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
Data Collection		286	14,950	23,557	4,934		43,441	2.72%
Surveys		60	2,792	4,399	921		8,112	0.51%
Utility Identification and Coordination		77	3,835	6,043	1,265		11,143	0.70%
Environmental Studies		463	21,302	33,565	7,030		61,897	3.87%
Traffic and Safety		779	37,859	59,655	12,494		110,008	6.88%
Intersection Alt Analysis		1741	78,438	123,595	25,885		227,918	14.25%
Preferred Alternatives Analysis		1327	57,663	90,859	19,029		167,551	10.48%
Intersection Design Study		303	14,352	22,615	4,736		41,703	2.61%
Location Drainage Tech Memo		1506	73,972	116,558	24,411		214,941	13.44%
Geotechnical		32	1,608	2,534	531		4,673	0.29%
Lighting Assessment		37	2,018	3,180	666		5,864	0.37%
Traffic Management Analysis		280	13,996	22,053	4,619		40,668	2.54%
Public Involvement		929	52,045	82,007	17,175		151,227	9.46%
Project Develop. Activities & Rpt		525	27,420	43,205	9,048		79,673	4.98%
Meetings		427	25,611	40,354	8,451		74,416	4.65%
Project Admin		319	21,575	33,995	7,120		62,690	3.92%
QC		295	22,965	36,187	7,579		66,731	4.17%
			-	-	-		-	
			-	-	-		-	
			-	-	-		-	
			-	-	-		-	
			-	-	-		-	
			-	-	-		-	
AMES Engineering			-	-	-	19,236	19,236	1.20%
Gewalt-Hamilton			-	-	-	62,608	62,608	3.92%
MSA Professional Services			-	-	-	52,160	52,160	3.26%
Rubino Engineering			-	-	-	31,878	31,878	1.99%
			-	-	-		-	
			-	-	-		-	
Subconsultant DL							\$5,092.60	0.32%
Direct Costs Total ==>	\$0.00						\$55,505.70	3.47%
TOTALS		9386	472,401	744,361	155,894	165,882	1,599,137	100.00%

1,216,762

BLR 05514 (Rev. 02/09/23)

COST EST

McHenry County

McHenry County

24-00580-00-SP

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EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 1 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Data Collection			Surveys			Utility Identification and Coordination			Environmental Studies			Traffic and Safety		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	86.00	52.0	0.55%	0.48	1	0.35%	0.30							2	0.43%	0.37	2	0.26%	0.22
Project Manager III	83.44	507.0	5.40%	4.51	9	3.15%	2.63	1	1.67%	1.39	1	1.30%	1.08	6	1.30%	1.08	10	1.28%	1.07
Senior Transportation Planner I	86.00	28.0	0.30%	0.26										6	1.30%	1.11			
Senior Civil Engineer III	81.86	421.0	4.49%	3.67	23	8.04%	6.58	4	6.67%	5.46	8	10.39%	8.50	29	6.26%	5.13	12	1.54%	1.26
Senior Civil Engineer I	65.95	919.0	9.79%	6.46	25	8.74%	5.77	2	3.33%	2.20	4	5.19%	3.43				50	6.42%	4.23
Transportation Planner IV	73.10	39.0	0.42%	0.30															
Transportation Planner I	44.32	0.0																	
Civil Engineer III	54.81	1,854.0	19.75%	10.83	100	34.97%	19.17	9	15.00%	8.22	20	25.97%	14.24	10	2.16%	1.18	287	36.84%	20.19
Civil Engineer II	46.45	871.0	9.28%	4.31	40	13.99%	6.50	14	23.33%	10.84	12	15.58%	7.24	5	1.08%	0.50	150	19.26%	8.94
Civil Engineer I	36.84	3,536.0	37.67%	13.88	88	30.77%	11.34	30	50.00%	18.42	32	41.56%	15.31	10	2.16%	0.80	268	34.40%	12.68
Senior Communications Coordinator	61.62	196.0	2.09%	1.29															
Communications Coordinator	46.65	40.0	0.43%	0.20															
Senior Graphics Designer	42.26	408.0	4.35%	1.84															
Senior Environmental Scientist I	63.99	131.0	1.40%	0.89										131	28.29%	18.11			
Environmental Scientist II	37.07	0.0																	
Environmental Scientist I	31.09	264.0	2.81%	0.87										264	57.02%	17.73			
Clerical IV	47.04	72.0	0.77%	0.36															
Clerical III	36.81	48.0	0.51%	0.19															
		0.0																	
		0.0																	
		0.0																	
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TOTALS		9386.0	100%	\$50.33	286.0	100.00%	\$52.27	60.0	100%	\$46.53	77.0	100%	\$49.80	463.0	100%	\$46.01	779.0	100%	\$48.60

McHenry County

McHenry County

24-00580-00-SP

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 2 OF 3

BLR 05514 (Rev. 02/09/23)
AVG 2

McHenry County

McHenry County

24-00580-00-SP

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AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 3 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Traffic Management Analysis			Public Involvement			Project Develop. Activities & Rpt			Meetings			Project Admin			QC		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	86.00	1	0.36%	0.31				2	0.38%	0.33	4	0.94%	0.81	18	5.64%	4.85	12	4.07%	3.50
Project Manager III	83.44	3	1.07%	0.89	118	12.70%	10.60	11	2.10%	1.75	68	15.93%	13.29	106	33.23%	27.72	154	52.20%	43.56
Senior Transportation Planner	86.00																22	7.46%	6.41
Senior Civil Engineer III	81.86	14	5.00%	4.09				26	4.95%	4.05	63	14.75%	12.08	42	13.17%	10.78	17	5.76%	4.72
Senior Civil Engineer I	65.95	48	17.14%	11.31	167	17.98%	11.86	66	12.57%	8.29	72	16.86%	11.12	36	11.29%	7.44	48	16.27%	10.73
Transportation Planner IV	73.10													9	2.82%	2.06	30	10.17%	7.43
Transportation Planner I	44.32																		
Civil Engineer III	54.81	75	26.79%	14.68				206	39.24%	21.51	88	20.61%	11.30						
Civil Engineer II	46.45	12	4.29%	1.99				70	13.33%	6.19									
Civil Engineer I	36.84	127	45.36%	16.71				144	27.43%	10.11	132	30.91%	11.39						
Senior Communications Coordinator	61.62				196	21.10%	13.00												
Communications Coordinator	46.65				40	4.31%	2.01												
Senior Graphics Designer	42.26				408	43.92%	18.56												
Senior Environmental Scientist	63.99																		
Environmental Scientist II	37.07																		
Environmental Scientist I	31.09																		
Clerical IV	47.04													72	22.57%	10.62			
Clerical III	36.81													36	11.29%	4.15	12	4.07%	1.50
TOTALS		280.0	100%	\$49.98	929.0	100%	\$56.02	525.0	100%	\$52.23	427.0	100%	\$59.98	319.0	100%	\$67.63	295.0	100%	\$77.85



• 9504 East Fowler Rd., Rochelle, IL., 61068
Phone 815-562-6007 Fax 815-562-6557
T. Huddleston mobile 815-757-6007
Email: huddmac@aol.com

PROPOSAL

Jeff Young, PE, PTOE
HDR
9450 W. Bryn Mawr Ave Suite 400
Rosemont, IL 60018

Date : January 19, 2024
Prop : 24111r1
Terms: Net 30 Days

>> **RE: LAND DRAINAGE INVESTIGATION SERVICES PROPOSAL**

Project Locations:

McHenry DOT Intersection Improvements, 15,840 total ft.

Project 101, Spring Grove and Miller Rd., S-36 Richmond & S-1 McHenry twp., McHenry Co., IL.

Project 102, O'Brien and Alden Rd., S-22, 23, 26, & 28, Alden Twp., McHenry Co., IL.

Project 101, Coral and Maple, S-12 & 13, Riley Twp., McHenry Co., IL.

Thank you for the opportunity to submit the attached Mainline Drain Tile Investigation Letter of Agreement for your consideration.

Following is a brief summary outlining investigation services which shall be completed in accordance with McHenry County typical standards and procedures for the subject property located at as indicated in Location Section

This investigation will be limited to the mapping of agricultural drainage systems, mainline and sub-main collectors, and will include local lateral / feeder drain tiles only when encountered at hand probe transect locations. It shall be our intent to complete this investigation process by the implementation of hand probe transects in efforts to minimize right of way and private property damage and restoration. This investigation will include the intersection area and 2500 ft in each of 4 directions, All agricultural drain tile systems located and staked within the existing McHenry DOT Intersection Improvements right of way and will extend 20 ft into private lands.

I. SCOPE OF WORK

FIELD INVESTIGATION PROCEDURES:

Field reconnaissance and record research¹ work will be completed in efforts to identify all areas which are typical to installation of existing drain tile. Existing features such as soils, watertable, topographical elevations, surface channels, depressions, wetlands and natural drainage ingress and egress locations are considered.

Following field review, investigation areas are staked and hand probed to verify existence of drain tile. All existing drain tiles encountered during the investigation procedure are recorded on field mapping and repaired if damaged to their original state according to U.S.D.A. Natural Resource Conservation Service construction repair practices. Following specific point locations, drain tile routes are located by surface probing or electronic detection and field staked at 20' intervals including cut stakes for invert elevations where requested. Any existing drain tile not encountered during s probe transect procedures will remain unknown.

¹Huddleston McBride Land Drainage Co., owns, maintains and will access an extensive electronic record system of McHenry County Existing Agricultural Drain Tile Historic Mapping Records. This mapping system has been based upon geographic parcel location including record information from Huddleston-McBride Land Drainage Co.(1975) , Coopriders Farm Drainage Co. (1930), Elbridge F. Ball & Sons, (drainage engr.) Survey notes (1940), Countryside Drainage (2009). These record files include historic farm parcel notes, active / inactive drainage district maps and documents, conservation resource mapping, agricultural drain tile contractor records, aerial photo delineation, S.C.S./ N.R.C.S design notes and soil maps, typical drain tile investigation reports, record construction drawings, and land owner sketch drawings.

RECORD MAPPING AND REPORT:

Record mapping shall be performed according to typical civil engineering mapping standards. It will be the responsibility of the developer to furnish one ACAD (version 2018 or 2021 .dwg) computer data file of the investigation area including mapped topography, easements, right-of-ways, wetland delineation areas and property boundary limits.

All existing drain tile routes will be located in the field by GPS location systems (<1m., Illinois State Plane East NAD 83) and recorded on final plans. Our field staking process will include pipe invert cut stakes at right of way locations, strategic interior locations and 20' interval pin flagging along tile routes for electronic survey location by the project engineer if deemed necessary. It will be the responsibility of the project engineer to survey drain tile location/elevation staking pertinent to final improvement design.

Final drain tile mapping will be computer drafted on a base map including recent color digital aerial photography, topography and project limits. Mapped information will include the location of septic systems, existing drain tile routes and applicable drainage findings encountered during the field investigation process. A field report shall be attached to the plan containing evaluation information including size, flow, system effectiveness, restrictive siltation, pipe invert to ground surface depth, pipe type / quality, system classification and specific field notes.

This project shall be completed in accordance with typical drain tile investigation standards as required by McHenry County Stormwater ordinances.

II. Proposed Service Description:			
The intent of this proposal is to provide existing drain tile location, consulting and GPS survey mapping services in regard with typical existing drain tile investigation standards and in accordance with McHenry County Stormwater Ordinance Standards (McHenry DOT Intersection Improvements as indicated in Location Section above			
III. Proposed Services Cost:	Qty.	Cost	Amount
¹ Drainage Investigation and Repair Crew (4.5 days) (Field survey services including all excavation equipment and labor)	1 ea.	17,520.00	17,520.00
⁴ Project Consulting Services Hour Basis (GPS field survey, staking, and record plans)	16 hrs	200.00	3,200.00
⁵ Crew Transport Hour basis, (190 round trip miles) (Including DOT permits, electronic logs, licenses and fees)	4 ea.	295.00	1,180.00
Proposed Materials Cost:			
<i>All materials incidental to labor cost</i>			0.00
¹ Investigation & Reconnaissance Crew Hour Basis; is calculated on an hourly basis including a full 4 man investigation crew and will additionally consist of (6) man ground laborers, electronic and manual investigation equipment, hand probe transects, surface evaluation, pipeline video equipment, field staking materials, field supervision, consulting services and miscellaneous support equipment. Daily hours are computed by home port to home port. ⁴ Project Consulting Services Hour Basis ; (T.L. Huddleston) is calculated on an hourly basis of \$160.00 including initial project assessment, client consultation, site meetings, Utility locations, GPS land surveying , existing conditions research, project planning, record mapping w/ plots and project supervision. ⁵ Heavy Equipment Transport Hour basis; - is calculated on an hourly basis of \$ 295.00 including heavy equipment loading transport including all IDOT and Local transportation permits, licenses and fees, and electronics log system requirements. Travel cost for crew lodging, long haul mobilization, overnight materials trips and expenses will be at \$780.00 (based on 6-man crew)			
TOTAL LUMP SUM CHARGES INCLUDING ALL MATERIALS AND SERVICES			\$21,900.00

An invoice will be presented following the completion of the work and will be due and payable thirty (30) days after the invoice date. Any late payments made will be subject to the interest rate of 1 ½% per month on the entire principal amount of the money owed for the period from the date it becomes due and payable through the period of time in which it is paid.

IV. LIMITS OF LIABILITY

Any breach on the part of either party shall be limited to liability in an amount not to exceed the contract price of services associated with this drain tile investigation proposal.

Should the terms of this letter of agreement meet with your approval, please execute below and return one original.

Thank you for considering our proposal, we look forward to an opportunity to assist you with the development of this project.

Respectfully submitted,

HUDDLESTON McBRIDE LAND DRAINAGE CO.

Thomas L. Huddleston III

T. L. Huddleston III, Partner

ABOVE LETTER OF AGREEMENT ACCEPTED THIS _____ DAY _____ 2024.

BY: _____
PRINTED NAME / TITLE

SIGNATURE



Local Public Agency	County	Section Number
McHenry County	McHenry County	24-00580-00-SP
Prime Consultant (Firm) Name	Prepared By	Date
HDR, Inc.	Joan Somer	1/23/2024
Consultant / Subconsultant Name	Job Number	
AMES Engineering, Inc.		

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

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PAYROLL ESCALATION TABLE

CONTRACT TERM	18	MONTHS	OVERHEAD RATE	96.79%
START DATE	4/4/2024		COMPLEXITY FACTOR	0
RAISE DATE	1/1/2025		% OF RAISE	2.00%
END DATE	10/3/2025			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	4/4/2024	1/1/2025	9	50.00%
1	1/2/2025	10/1/2025	9	51.00%

McHenry County

McHenry County

24-00580-00-SP

AMES Engineering, Inc.

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EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

86.00

1.00%

[illegible]

Local Public Agency	County	Section Number
McHenry County	McHenry County	24-00580-00-SP
Consultant / Subconsultant Name		Job Number
AMES Engineering, Inc.		

SUBCONSULTANTS

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

[illegible]

NOTE: Only subconsultants who fill out a cost estimate that splits out direct labor may be listed on this sheet.

Local Public Agency

McHenry County

County

McHenry County

Section Number

24-00580-00-SP

Consultant / Subconsultant Name

AMES Engineering, Inc.

Job Number

DIRECT COSTS WORKSHEET

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	180	\$0.67	\$120.60
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day			\$0.00
Vehicle Rental	Actual Cost (Up to \$55/day)			\$0.00
Tolls	Actual Cost			\$0.00
Parking	Actual Cost			\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00
Shift Differential	Actual Cost (Based on firm's policy)			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			\$0.00
Project Specific Insurance	Actual Cost			\$0.00
Monuments (Permanent)	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			\$0.00
CADD	Actual Cost (Max \$15/hour)	8	\$10.00	\$80.00
Web Site	Actual Cost (Submit supporting documentation)			\$0.00
Advertisements	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			\$0.00
Recording Fees	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Utility Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			\$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
TOTAL DIRECT COSTS:				\$200.60

McHenry County

McHenry County

24-00580-00-SP

AMES Engineering, Inc.

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

COMPLEXITY FACTOR 0

16,552

COST EST

McHenry County

McHenry County

24-00580-00-SP

AMES Engineering, Inc.

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 1 **OF** 1

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Lighting Assessment			QC/QA			Project Mgt/Admin								
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Sr Electrical Engineer	66.96	60.0	44.78%	29.98	50	40.32%	27.00	5	100.00%	66.96	5	100.00%	66.96						
Project Engineer	62.05	64.0	47.76%	29.64	64	51.61%	32.03												
CADD Technician	42.17	10.0	7.46%	3.15	10	8.06%	3.40												
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TOTALS		134.0	100%	\$62.77	124.0	100.00%	\$62.43	5.0	100%	\$66.96	5.0	100%	\$66.96	0.0	0%	\$0.00	0.0	0%	\$0.00



EXHIBIT D
COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET
FIXED RAISE

Local Public Agency	County	Section Number
McHenry County	McHenry	N/A
Prime Consultant (Firm) Name	Prepared By	Date
HDR, Inc.	Lauren Cherepski	1/24/2024
Consultant / Subconsultant Name	Job Number	
Gewalt Hamilton Associates, Inc.	N/A	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

MCDOT - HDR PH I Roundabout Surveys

PAYROLL ESCALATION TABLE

CONTRACT TERM	18	MONTHS	OVERHEAD RATE	165.81%
START DATE	4/4/2024		COMPLEXITY FACTOR	
RAISE DATE	6/1/2024		% OF RAISE	2.00%
END DATE	10/3/2025			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	4/4/2024	6/1/2024	2	11.11%
1	6/2/2024	6/1/2025	12	68.00%
2	6/2/2025	10/1/2025	4	23.12%

Local Public Agency	County	Section Number
McHenry County	McHenry	N/A
Consultant / Subconsultant Name		Job Number
Gewalt Hamilton Associates, Inc.		N/A

PAYROLL RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

MAXIMUM PAYROLL RATE	86.00
ESCALATION FACTOR	2.23%

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Principal	\$78.21	\$79.95
CE VI	\$75.00	\$76.67
CE VI	\$70.25	\$71.82
CE IV	\$57.50	\$58.78
CE III	\$44.00	\$44.98
CE III	\$39.79	\$40.68
CE I	\$33.21	\$33.95
LS IV	\$52.88	\$54.06
LS III	\$43.81	\$44.79
LS I	\$23.50	\$24.02
GISP III	\$61.00	\$62.36
ET V	\$63.25	\$64.66
ET IV	\$40.21	\$41.11
ET III	\$33.83	\$34.58
ET II	\$31.50	\$32.20
ET I	\$24.50	\$25.05
AD I	\$25.96	\$26.54
Environmental Consultant I	\$31.00	\$31.69

Local Public Agency	County	Section Number
McHenry County	McHenry	N/A
Consultant / Subconsultant Name		Job Number
Gewalt Hamilton Associates, Inc.		N/A

SUBCONSULTANTS

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

[illegible]

NOTE: Only subconsultants who fill out a cost estimate that splits out direct labor may be listed on this sheet.

Local Public Agency

McHenry County

County

McHenry

Section Number

N/A

Consultant / Subconsultant Name

Gewalt Hamilton Associates, Inc.

Job Number

N/A

DIRECT COSTS WORKSHEET

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum			\$0.00
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day	27	\$65.00	\$1,755.00
Vehicle Rental	Actual Cost (Up to \$55/day)			\$0.00
Tolls	Actual Cost			\$0.00
Parking	Actual Cost			\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00
Shift Differential	Actual Cost (Based on firm's policy)			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			\$0.00
Project Specific Insurance	Actual Cost			\$0.00
Monuments (Permanent)	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			\$0.00
CADD	Actual Cost (Max \$15/hour)			\$0.00
Web Site	Actual Cost (Submit supporting documentation)			\$0.00
Advertisements	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			\$0.00
Recording Fees	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Utlility Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			\$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Documents (Plats, deeds, etc.)	Actual Cost	1	\$500.00	\$500.00
1 Intersection	Actual Cost	1	\$2,238.00	\$2,238.00
				\$0.00
				\$0.00
TOTAL DIRECT COSTS:				\$4,493.00

McHenry County

McHenry

N/A

Gewalt Hamilton Associates, Inc.

N/A

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

COMPLEXITY FACTOR 0

TASK	DIRECT COSTS (not included in row totals)	STAFF HOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
Research		12	649	1,076	214		1,939	3.10%
Control		6	269	446	89		804	1.28%
Recon & Locate Property Corners		24	1,075	1,782	355		3,212	5.13%
Locate Improvements in the Field		189	8,465	14,036	2,793		25,294	40.40%
Additional Pickup Survey		102	4,079	6,763	1,346		12,188	19.47%
Draft Existing Conditions		72	2,490	4,129	822		7,441	11.89%
Analyze Boundary		24	1,297	2,151	428		3,876	6.19%
QA/QC		24	1,125	1,865	371		3,361	5.37%
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Subconsultant DL							\$0.00	
Direct Costs Total ==>	\$0.00						\$4,493.00	7.18%
TOTALS		453	19,449	32,248	6,418	-	62,608	100.00%

McHenry County

Gewalt Hamilton Associates, Inc.

McHenry

N/A

N/A

SHEET 1 **OF** 2

McHenry County

McHenry

N/A

Gewalt Hamilton Associates, Inc.

N/A

SHEET 2 OF 2

Local Public Agency McHenry County Division of Transportation	County McHenry	Section Number 24-00580-00-SP
Prime Consultant (Firm) Name HDR Inc.	Prepared By Ben Wilkinson	Date 1/24/2024
Consultant / Subconsultant Name MSA Professional Services, Inc.	Job Number R18326009.00	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

PAYROLL ESCALATION TABLE

CONTRACT TERM	18	MONTHS	OVERHEAD RATE	184.47%
START DATE	4/4/2024		COMPLEXITY FACTOR	0
RAISE DATE	1/1/2025		% OF RAISE	2.00%
END DATE	10/3/2025			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	4/4/2024	1/1/2025	9	50.00%
1	1/2/2025	10/1/2025	9	51.00%

The total escalation = 1.00%

McHenry County Division of Transportation

McHenry

24-00580-00-SP

MSA Professional Services, Inc.

R18326009.00

DIRECT COSTS WORKSHEET

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	1140	\$0.67	\$763.80
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day			\$0.00
Vehicle Rental	Actual Cost (Up to \$55/day)			\$0.00
Tolls	Actual Cost			\$0.00
Parking	Actual Cost			\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00
Shift Differential	Actual Cost (Based on firm's policy)			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			\$0.00
Project Specific Insurance	Actual Cost			\$0.00
Monuments (Permanent)	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			\$0.00
CADD	Actual Cost (Max \$15/hour)			\$0.00
Web Site	Actual Cost (Submit supporting documentation)			\$0.00
Advertisements	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			\$0.00
Recording Fees	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Utlility Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			\$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
				\$0.00
				\$0.00
				\$0.00
TOTAL DIRECT COSTS:				\$763.80

McHenry County Division of Transportation

MSA Professional Services, Inc.

McHenry

24-00580-00-SP

R18326009.00

McHenry County Division of Transportation

MSA Professional Services, Inc.

McHenry

24-00580-00-SP

R18326009.00

SHEET 1 **OF** 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Task 5 - Traffic and Safety Analysis Report			Task 6 - Intersection Alternatives Analysis			Task 9 - Preferred Alternative Analysis			Task 13 - Traffic Management Analysis			Task 14 - Public Engagement		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Senior Project Manager	75.75	106.0	41.09%	31.12	4	11.11%	8.42	16	16.67%	12.63	8	16.67%	12.63	16	100.00%	75.75	44	100.00%	75.75
Senior Project Engineer	54.39	144.0	55.81%	30.36	24	66.67%	36.26	80	83.33%	45.32	40	83.33%	45.32						
Project Engineer	40.91	8.0	3.10%	1.27	8	22.22%	9.09												
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TOTALS		258.0	100%	\$62.75	36.0	100.00%	\$53.77	96.0	100%	\$57.95	48.0	100%	\$57.95	16.0	100%	\$75.75	44.0	100%	\$75.75



Local Public Agency	County	Section Number
McHenry County	McHenry	
Prime Consultant (Firm) Name	Prepared By	Date
HDR	Anthony Tomaras	1/30/2024
Consultant / Subconsultant Name	Job Number	
Rubino Engineering, Inc.	Q24.020g	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

Geotechnical and CCDD work to support intersection improvements at three intersections. Rubino to complete 4 soil borings and 4 pavement cores at each intersection and produce RGR and LPC 662 certificates at each intersection.

PAYROLL ESCALATION TABLE

CONTRACT TERM	18	MONTHS	OVERHEAD RATE	169.03%
START DATE	4/4/2024		COMPLEXITY FACTOR	
RAISE DATE	3/1/2025		% OF RAISE	2.00%
END DATE	10/3/2025			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	4/4/2024	3/1/2025	11	61.11%
1	3/2/2025	10/1/2025	7	39.67%

McHenry County

McHenry

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Rubino Engineering, Inc.

Q24.020g

Local Public Agency	County	Section Number
McHenry County	McHenry	
Consultant / Subconsultant Name		Job Number
Rubino Engineering, Inc.		Q24.020g

SUBCONSULTANTS

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

[illegible]

NOTE: Only subconsultants who fill out a cost estimate that splits out direct labor may be listed on this sheet.

Local Public Agency

McHenry County

County

McHenry

Section Number

Consultant / Subconsultant Name

Rubino Engineering, Inc.

Job Number

Q24.020g

DIRECT COSTS WORKSHEET

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum			\$0.00
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day	8	\$65.00	\$520.00
Vehicle Rental	Actual Cost (Up to \$55/day)			\$0.00
Tolls	Actual Cost			\$0.00
Parking	Actual Cost			\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00
Shift Differential	Actual Cost (Based on firm's policy)			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			\$0.00
Project Specific Insurance	Actual Cost			\$0.00
Monuments (Permanent)	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			\$0.00
CADD	Actual Cost (Max \$15/hour)			\$0.00
Web Site	Actual Cost (Submit supporting documentation)			\$0.00
Advertisements	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			\$0.00
Recording Fees	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)	3	\$2,200.00	\$6,600.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Utility Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)	1	\$1,940.20	\$1,940.20
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Drill Rig Mobilization	In House Direct Cost	2	\$650.00	\$1,300.00
Pavement Cores	In House Direct Cost			\$0.00
ERIS Report	Outside Direct Cost	3	\$250.00	\$750.00
				\$0.00
TOTAL DIRECT COSTS:				\$11,110.20

McHenry County

McHenry

Rubino Engineering, Inc.

Q24.020g

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

COMPLEXITY FACTOR 0

BLR 05514 (Rev. 02/09/23)

McHenry County

McHenry

Rubino Engineering, Inc.

Q24.020g
