Illinois Department of Transportation

DRAFT

Local Public Agency Engineering Services Agreement

Using Federal Funds? ☒ Yes ☐ No

Agreement For: CMFT PE

Agreement Type: Original

LOCAL PUBLIC AGENCY

Local Public Agency	County	Section Number	Job Number
Lake	Lake	25-00113-21-WR	

Project Number	Contact Name	Phone Number	Email
	Angel Montero	(847) 377-7540	amontero2@lakecountyil.gov

SECTION PROVISIONS

Local Street/Road Name	Key Route	Length	Structure Number
Fairfield Road	CH 49	2.4	N/A

Location Termini: North of Gilmer Road to North of IL 60

Add Location | Remove Location

Project Description:

Work will include completing a Preliminary Engineering and Environmental Study (Phase I) for the first of three segments of Fairfield Road to develop and evaluate roadway and intersection alternatives for motorized and non-motorized travel within the project limits. The study will follow the Phase I process to identify a Preferred Alternative with consideration of stakeholder and public feedback.

Engineering Funding: ☐ MFT/TBP ☐ State ☒ Other — County Option

Anticipated Construction Funding: ☒ Federal ☐ MFT/TBP ☐ State ☐ Other

AGREEMENT FOR

☒ Phase I - Preliminary Engineering ☐ Phase II - Design Engineering

CONSULTANT

Prime Consultant (Firm) Name	Contact Name	Phone Number	Email
HDR Engineering, Inc.	Thomas M. Hein	(773) 867-7244	thomas.hein@hdrinc.com

Address	City	State	Zip Code
9450 West Bryn Mawr Avenue, 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 SECTION. Project funding allotted to the LPA by the State of Illinois under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT," will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

Since the services contemplated under the 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 and the DEPARTMENT. The LPA acknowledges the professional and ethical status of the ENGINEER by entering into an 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:

Regional Engineer	Deputy Director, Office of Highways Project Implementation, Regional Engineer, Department of Transportation

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 (CESCS) Worksheet (BLR 05513 or BLR 05514)

☐ _____

☐ _____

☐ _____

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 that are 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 or DEPARTMENT 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 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 the AGREEMENT or any subsequent Amendment or Supplement.
7. To submit a completed BLR 05613, Engineering Payment Report, to the DEPARTMENT within three months of the completion of the work called for in this AGREEMENT or any subsequent Amendment or Supplement. The form shall be submitted with the final invoice.
8. 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 United States 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.
9. 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 be construed to relieve the ENGINEER of any responsibility for the fulfillment of this AGREEMENT.
10. 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 or the DEPARTMENT, as defined in Exhibit A (Scope of Services).
    (b) That all plans and other documents furnished by the ENGINEER pursuant to the AGREEMENT will be endorsed by the ENGINEER and affix 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 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).
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 COST 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 following:
    (a) Professional Services Selection Act (50 ILCS 510), The Brooks Act (40 USC 11), and the Procurement, Management, and Administration of Engineering, and Design Related Services (23 CFR part 172). Exhibit C is required to be completed with this AGREEMENT.

2. To furnish the ENGINEER all presently available survey data, plans, specifications, and project information.

3. 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 and DEPARTMENT 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.

4. To pay the ENGINEER as compensation for all services rendered in accordance with the AGREEMENT on the basis of the following compensation method as discussed in 5-5.10 of the BLR Manual.

   Method of Compensation:

   ☐ Lump Sum

   ☐ Specific Rate

   ☒ Cost plus Fixed Fee:

   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.

5. The recipient shall not discriminate on the basis of race, color, national original 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 Department 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 IDOT 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 Auditor General, and the DEPARTMENT: the Federal Highways Administration (FHWA) or any authorized representative of the federal government, 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 DEPARTMENT for the recovery of any funds paid by the DEPARTMENT 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, the DEPARMTENT, and their officers, agents, and employees from all suits, claims, actions or damage 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 material becomes 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. In the event that the DEPARMENT stops payment to the LPA, 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 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. 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 have harmless the LPA, the DEPARTMENT, and their officers, 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.

8. 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 the 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 the 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 the 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 or local) terminated for cause or default.

   Where the ENGINEER or LPA is unable to certify to any of the above statements in this certification, 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 the 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 include but are not limited to: acts of God or a public enemy; act 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, the ENGINEER shall apply in writing to the LPA for an extension of time. If approved, the PROJECT SCHEDULE shall be revised accordingly.

10. By execution of this AGREEMENT the LPA and ENGINEER certify compliance with the Drug Free Workplace Act (30 ILCS 580). The Drug Free Workplace Act requires that 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 DEPARTMENT 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 on grant payments, termination of a contract or grant and debarment of the contracting or grant opportunities with the DEPARTMENT 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 an 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 DEPARTMENT, as defined the Act.

    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 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 statue conviction for a violation occurring int he workplace no later than (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 of 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) of 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 LPA agree to meet the PROJECT SCHEDULE outlined in EXHIBIT B. 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 project. 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 or to the DEPARTMENT, 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 current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Manual or any other applicable requirements of the DEPARTMENT, it being understood that all such furnished documents shall be approved by the LPA and the DEPARTMENT 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.

AGREEMENT SUMMARY

Prime Consultant (Firm) Name	TIN/FEIN/SS Number	Agreement Amount
HDR Engineering, Inc.	47-0680568	$1,548,061.00

Subconsultants	TIN/FEIN/SS Number	Agreement Amount
Accurate Group, Inc.	36-3966030	$99,909.00
Baxter & Woodman	36-2845242	$578,647.00
Interra, Inc.	36-4045796	$462,896.00
	Subconsultant Total	$1,141,452.00
	Prime Consultant Total	$1,548,061.00
	Total for all work	$2,689,513.00

AGREEMENT SIGNATURES

Executed by the LPA:

The Local Public Agency Type: County of Local Public Agency: Lake

Attest:

By (Signature & Date)

By (Signature & Date)

Name of Local Public Agency: Lake

Local Public Agency Type: County

Clerk

Title

(SEAL)

Executed by the ENGINEER:

Attest:

Prime Consultant (Firm) Name: HDR Engineering, Inc.

By (Signature & Date) 11/13/2025

Title: Project Manager, Stefanie Cassin

By (Signature & Date) 11/13/202

Title: Vice President, Thomas M. Hein

For information about IDOTs collection and use of confidential information review the department's Identity Protection Policy.

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Lake	HDR Engineering, Inc.	Lake	25-00113-21-WR

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

EXHIBIT A
SCOPE OF SERVICES

FOR FEDERAL PARTICIPATION PROJECTS

Introduction

This document presents the proposed work components for completing Phase I Engineering and Environmental Studies (Phase I) to address the purpose and needs along Fairfield Road between North of Gilmer Road and North of Illinois Route 60 (IL 60). This is the first of three segments of the Fairfield Road Corridor covered by the Planning and Environmental Linkages (PEL) Study. Draft Phase I scopes for engineering studies of the other segments will be completed at a later point.

This scope includes the preparation of a Phase I Preliminary Engineering and Environmental Study for the corridor located in unincorporated Lake County near Wauconda, Illinois, for the Lake County Division of Transportation (LCDOT) and National Environmental Policy Act (NEPA) processes documentation.

Fairfield Rd Phase I Study Limits

Road	Limits	Total Linear Feet	
Fairfield Road	N of Gilmer Road to N of IL 60	9,500	
Chardon Road	500 ft East and West (E&W)	1,000	
IL Route 60	1000 ft East and West (E&W)	2,000	
		12,500	ft
		2.4	mi

The Fairfield Road Phase I Study will follow the federal process using the NEPA-ready purpose and need developed in the PEL phase to identify alternatives through coordination with stakeholders, the public, and tribes, and development of a preferred alternative. The scope of services generally consists of the following:

- Startup tasks, data compilation and review of GIS development, survey and mapping efforts
- Updates to travel demand modeling and operational analysis
- Updates to the crash analysis
- Environmental studies
- Alternatives development, screening, and evaluation
- Phase I Project Development Report, including alternatives development efforts and environmental impacts
- Public involvement and agency coordination
- Project management and quality management, as defined in this document.

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

Procedures and Objectives

- Validate proposed study area, generally from north of the Gilmer Road overpass to north of IL 60 along the Fairfield Road alignment.
- Develop and implement a comprehensive Stakeholder Involvement Plan. Proactively elicit stakeholder involvement in development and evaluation of potential alternative solutions.

- Validate the NEPA-ready Purpose and Need throughout the Phase I process. FHWA consistency determination and stakeholder consensus for the Purpose and Need were established in the PEL phase. A Memo will be developed in consultation with IDOT to gain concurrence during Phase I.
- Develop an alternatives framework document that addresses the major design decisions, criteria and assumptions that will guide the development and evaluation of alternatives and their design treatments.
- Establish through working sessions with FHWA, LCDOT, IDOT/BLRS and resources agencies the appropriate level of engineering and environmental detail that will be applied to the process.
- Evaluate design year (2050) socio-economic/travel forecasts for the No-Build and Build Alternative(s) with agency and stakeholder input, in coordination with CMAP and other local agencies.
- Update GIS database developed in the PEL phase for use in alternatives development and evaluation. Published and available data pertaining to environmental resources and land was the primary source of information used to build the database. Some field reconnaissance and verification will be performed to supplement information for critical areas, and resources.
- Refine Alternatives to Be Carried Forward developed in the PEL phase with agency and stakeholder input. Build alternatives will be developed to greater engineering detail (preliminary design) to identify construction limits of each alternative. Additional detail for the environmental resource information is anticipated at this stage for further assessment of the impacts. The preliminary design will provide the necessary level of detail to evaluate the environmental acceptability, engineering viability, and planning level costs of the preferred alternative.
- Develop preliminary costs and schedule for implementation of the preferred alternative, and necessary documentation for cost sharing opportunities or commitments through the public involvement process.
- Develop a Phase I Project Development Report (PDR) which will identify the Preferred Alternative. It is anticipated and assumed in the work effort that the Preferred Alternative will establish the location and character (design treatment options, section widths, access management, and preliminary engineering details) of proposed improvements for which the required type of environmental documentation will be specified but recognized a no-action alternative may result from the efforts.
- The Phase I Study is anticipated to be processed as a Categorical Exclusion (CE).
- The project will utilize MicroStation Connect with Open Roads Designer (ORD) version 10.12.03.02, or latest ORD version at time of notice to proceed, with IDOT workspace, which includes the use of 3D modeling efforts. Plan sheet preparation will be developed to LCDOT CAD standards and will follow LCDOT's Plan Preparation Guidelines.

Project Schedule

The estimated completion duration for the Phase I Engineering and Environmental Studies work effort is anticipated to be **36 months** following authorization to proceed. 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.

Work Structure

As described in the preceding section, this document describes the proposed work structure for the development of a Phase I PDR for Fairfield Road from north of Gilmer Road to north of IL 60. A work breakdown structure will be developed with the scope of services description in the following section

identifying tasks to be contracted. For tasks to be contracted, estimated work hours and costs for services to be performed will be included in this proposal upon LCDOT review. The following section identifies assumptions, work responsibilities and task deliverables as appropriate for the completion of the Phase I Engineering Study.

100 SCOPE OF SERVICES

Task 1—Collection & Evaluation of Data

This task commences with the development of a list of preferred data requirements and sources, including engineering and environmental data, plans, report and documents.

1.1—Data Collection

Updates to available resource information relevant to the project will be obtained. This will include contacting relevant resource and regulatory agencies and accessing known resource databases through coordination with LCDOT and IDOT. The information will be obtained in a digital format, where possible, including but not limited to: local land use and zoning, emergency services travel routes, Pace bus routes, bicycle plans, public service boundaries and amenities (school districts, fire districts, park districts, etc.). Other updated data will be sought from the Village of Wauconda, and Lake County agencies pertinent to the corridor. Updated data will also be requested from CMAP, release of the 2050 forecast of population and employment in electronic format.

Under this task, the GIS database developed in the PEL phase will be updated as necessary for the project area. It is anticipated that new information will surface over the course of the project study process from a variety of sources. The database, tables and exhibits will be updated on regular intervals throughout the project.

Assumptions:

- Obtain Maps, Inventories, Plans, Reports, GIS Data, and Resource Inventories: IDOT, Lake County, CMAP, IDNR, USFWS, IEPA, Communities, FEMA, COE, SHPO, Utilities/Authorities, Forest Preserves, Pace, Metra.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Project Data Library (electronic) and GIS Database

1.2—Traffic Counts

The Consultant will update existing and historic data using multiple data sources including LCDOT's Passage/Automated Traffic Signal Performance Measures (ATSPM), or other web-based data tools that provide data for population areas including mobility, economic activity, travel information and land use.

The Consultant will utilize LCDOT's Automated Traffic Signal Performance Measures (ATSPM) portal which provides a wide range of data and metrics related to traffic volumes, signal timing parameters and performance measures at select signalized intersections. Within the project limits, data from the following intersection is available from the ATSPM portal:

- Fairfield Road at IL Route 60

For the cycling community, input has been received from the bicycle advocacy group. The Consultant will continue to consult with the public and cycling community groups. Strava is also an online data source to

reference cycling travel demand. This data will help identify the potential demand for cycling users in the study area.

1.3—Utility Identification and Coordination

The Consultant will coordinate a Subsurface Utility Engineering (SUE) evaluation, Levels A-D, including utility locating and coordination. The field survey in the PEL phase located above ground utilities, as well storm and sanitary sewer inverts and pipe sizes. The SUE evaluation will include horizontal location of all underground utilities including watermain, fiber optics, cable, electric, gas, etc. The information gathered will be incorporated into the project base CAD files. Each SUE Level will have a distinctive color/linestyle to differentiate.

1.3.1 Initial Coordination

The proposed improvements will require coordination with public and private utilities that have facilities within the project corridor. The Consultant will coordinate with any utility companies/agencies found to have facilities located within the vicinity of the project limits through the JULIE Design Stage/Planning Information Request conducted in the PEL phase. A request will be made for these utilities to provide any available updates to maps of existing facilities.

1.3.2 Utility Easement Research

A research update through the Lake County Recorder's office for utility easements as granted as separate documents and on recorded plats will be performed. Research will cover parcels of un-subdivided and subdivided property on both sides of Fairfield Road through the Village of Wauconda, unincorporated Lake County and within existing ROW. Additional document requests will be made to both IDOT and LCDOT for records.

1.3.3 Utility Locating

Descriptions of SUE quality levels are derived from the FHWA website on subsurface utility engineering. The website describes American Society of Civil Engineers (ASCE) Standard 38-22, Standard Guideline for Investigating and Documenting Existing Utilities. There are four recognized quality levels of underground utility information ranging from Quality Level QL-D (the lowest level) to Quality Level QL-A (the highest level). Level D information will be obtained from utility atlases, JULIE requests, and other reliable sources. Level C information will be taken from the Topographic Survey. Level B information is determined by using geophysical interpretations indicating a utility segment of utility feature with other pertinent information in hand to determine the best positional documentation for the utility segment. Five (5) Level A locates/potholes ranging from 0ft to over 13ft in depth are included in this proposal to determine the location and depth of underground utilities, by exposing the top of the utility. If additional test holes are needed, they will be covered in Phase II.

Anticipated lengths of utilities to designate are as follows:

Fairfield Rd, (9,500ft)	**IL RT60 (2,000ft)**	**Chardon Rd (1,000ft)**
Gas - 10,000ft	Gas - 2,500ft	Gas - 1,500ft
Tele - 12,000ft	Tele - 3,000ft	Tele - 3,000ft
Elec - 5,000ft	Elec - 5,500ft	Elec - 1,000ft
Fiber - 12,000ft	Fiber - 2,500ft	Fiber - 2,500ft
Water - 5,500ft	Water - 2,000ft	Water - 1,000ft
UNK - 3,000ft	UNK - 2,000ft	UNK - 1,000ft
Total - 47,500ft	Total - 17,500ft	Total - 10,000ft
		All Total - 75,000ft

1.3.4 Utility Data Base Mapping

The Consultant will prepare base CAD files for the results of the Level A locates for transmittal to the surveyor. The utility base CAD files will utilize MicroStation Connect with Open Roads Designer (ORD) which includes the use of 3D modeling files. To show the utilities in 3D, the utilities will be drawn at approximate depths determined from designating the utilities (QL-B) and at the test hole locations (QL-A) will be modified to the depth recorded in the test hole. SUE plan sheets will be compiled for LCDOT review and sent to utility companies for review and verification. The Consultant will coordinate with the roadway designer to ensure the utilities are depicted accurately in the survey data and utility base maps. This shall include time allotted for utility base map QA/QC. The CONSULTANT shall prepare 2D and 3D deliverables for QL-B and QL-A once data is received. This shall include preparing the sheets, adding callouts for utilities, adding test hole data, creating a test hole matrix, and a .KMZ file.

1.3.5 Preliminary Design Review and Coordination

The Consultant will coordinate with utility companies/agencies during Phase I Engineering. The Consultant will send preliminary plans to utility companies to verify the locations of their facilities and review preliminary design to determine if there are any significant conflicts that need to be reviewed. The Consultant will also coordinate with the roadway design team to develop an understanding of the presence of utilities, their type, and possible issues with protecting and/or relocating those utilities. In addition, the Consultant will coordinate with the Village of Wauconda, IDOT and utility owners regarding the potential for a utility corridor due to potential development along the corridor. Coordination between Accurate Group, Inc. and Baxter and Woodman (surveyor) will be completed to pick up all SUE flags.

A meeting to discuss data gaps or areas of concern will be held once the SUE is assembled. An SUE plan-in-hand field meeting will be held with senior staff to identify items in the field that may indicate the presence of an unlocated facility.

Assumptions:

- Meetings (2) – one virtual, 1 in field

Work Responsibilities:

- HDR: Level D updates, Utility Easement Research update, Level C plan sheets, coordination with utility companies, Level B design markout coordination
- Accurate Group, Inc. (AGI): Designation of QL-B (approximately 75,000 ft of utility flags), Level A test holes, and completion of QL- A test holes (5)
- Baxter and Woodman (B&W): Survey SUE flags and test hole locations, Sanitary and Storm Manhole Details

Deliverables:

- Coordination Matrix
- Utility Meeting Minutes
- Utility Base Map and SUE plan sheets

Task 2—Surveys

The Consultant will maximize the use of the previous survey completed under the PEL phase. This will include verifying the accuracy of the previously completed survey, obtaining supplemental survey to update features and updating the topographic survey where needed.

2.1—Supplemental Topographic & DTM Surveys

Work under this task includes additional survey work needed as identified by the design consultant for design surveys at various intersections including Gilmer Road (at the connector), Chardon Road and IL Route 60. Additionally, the supplemental survey will be utilized for structural locations including retaining wall locations. A request will be made to LCDOT to perform the additional survey with an estimated effort for each location. Survey will not be performed without LCDOT approval.

2.2—Supplemental Tree Surveys

The Consultant will perform supplemental tree surveys in locations along the Fairfield Road corridor affected by the proposed right-of-way of the preferred alternative. Work will consist of the location and measurement of trees 3" in diameter or larger at breast height, as well as of other specially designated trees. Work under this task assumes the locating of supplemental trees will utilize GPS-based survey.

2.3—Survey Management and Quality Control

Work effort includes work planning and monitoring the integration of survey data and deliverables into a Base Map/CADD product in accordance with LCDOT design survey procedures. Work under this task includes the Surveying Consultant's quality control and management efforts to perform the necessary survey work.

Work Responsibilities:

- B&W: Survey Lead

Assumptions:

- Initial utility surveys were completed in the PEL phase and will be updated where needed.
- Hydraulic surveys were completed in the PEL phase and will be updated where needed.
- Survey of underground storage tanks is not anticipated.

Deliverables:

- Plan Drawing/Plotting of Existing Topography, Digital Terrain Model

TASK 3 - DRAINAGE ANALYSIS

The Consultant will lead the preparation of the Locations Drainage Technical Memorandums (LDTM) for the Fairfield Road at IL Route 60, Chardon Road and Gilmer Road Connector intersection improvements. In addition, the Consultant will lead the preparation of the Location Drainage Study (LDS). Work under this task includes further 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. Sensitive outfalls will be identified, and the drainage report will be in accordance with the 2024 ACEC/IDOT Drainage Seminar requirements and the IDOT Drainage Manual with consideration of the Lake County Watershed Development Ordinance.

Assumptions:

- Field Evaluation: Perform a field evaluation of drainage conditions and structures within the project limits.
- Data Collection: Review of Hydraulic Atlases, Identified Base Floodplains, Streamstats, Wetland Inventory Maps, Lake County GIS.
- Topographic survey: Included in the PEL phase.
- Stream Survey: Included in PEL phase.
- Drain Tile Survey: A drain tile survey will be performed by Huddleston McBride
- Temporary Drainage Design is not included. It will be designed in later Phase II Design.
- Rainfall Data: Bulletin 75 will be utilized for analysis.

3.1—Existing Drainage System

Work assumed and deliverables under this task include the following:

- *General Location Drainage Map* - This task involves the preparation of a General Location Drainage Map to show the project limits with respect to the overall drainage features.
- *Existing Drainage Plans (EDP)* - This task describes the requirements of a detailed Existing Drainage Plan (EDP). Section 2-202 of the IDOT Drainage Manual provides additional details on requirements for the EDP.
- *Identified Drainage Problems* - This task involves documentation of identified drainage problems throughout the project limits.
- *Identification and documentation of Base Floodplains* - This task involves the documentation of existing floodplains and floodways within the project limits. An exhibit will be prepared to show the project with respect to the existing floodplains and floodways.
- *Identify and documentation of Depressional Storage Areas* - This task involves the documentation of existing depressional storage areas within the project limits. An exhibit will be prepared to show the project with respect to the depressional areas.
- *Major Drainage Features (Major Culvert Crossings)* - This task involves the compilation of data to enable the Hydrologic and Hydraulic Analysis to be developed for the existing and proposed conditions for Major Culvert Crossings.

Assumed Hydraulic Reports Requiring HEC-RAS

Culvert Location	Size	Reason
Lake Helen Drain	72”	Zone AE Floodway
North of Gilmer Road (ID 297)	24”	Zone A
	Total	2 Hydraulic Reports

Assumed Culverts Requiring HY-8 Analysis

24” South of IL Route 60 (ID 302)
Unknown South of IL Route 60 (ID 24)
24” North of IL Route 60 (ID 269)
24” North of IL Route 60 (ID 270)
24” North of Chardon Road (ID 299)
Unknown North of Chardon Road (ID 300)
24” South of Chardon Road (ID 298)
Unknown North of Gilmer Road (ID 296)

Total: 8 HY-8 Analyses

3.2—Proposed Drainage System

Work assumed and deliverables under this task includes the following:

- *Documentation of Design Criteria* - This task involves documentation that the highway system meets certain design criteria as specified in Section 2-01 of the LDS/LDTMs and provides justification for those cases in which it does not. Lake County Watershed Development Ordinance will also be considered.
- *Evaluation of existing outlets* - This task involves the evaluation of existing outlets to determine their suitability for continued use and sensitivity to increases in rate and volume of runoff. The outlets to be evaluated are identified in Existing Drainage System, Section 1-00 of the LDS/LDTMs
- *Stormwater Detention Analysis* - This task involves the evaluation of detention requirements in accordance with Section 1-304.03 of the Drainage Manual Storm Water Storage and the Lake County Watershed Development Ordinance. Justification should be included to support the findings of either providing detention or omitting it. Task will include identifying locations to provide proposed detention including appropriate exhibits.
- *Right of Way Analysis* - This task involves a determination of the drainage right of way and easement requirements. The proposed drainage improvements will be evaluated to see if additional right of way or drainage easements are needed.
- *Drainage Alternatives* - This task involves the qualitative analysis of an open drainage system vs. closed drainage system.
- *Local and other Agency Coordination* - The purpose of this task is to encourage involvement by the local and other agencies such as LCSMC and the Village of Wauconda to document comments, drainage concerns, and concurrence with the EDP and PDP.
- *Proposed Drainage Plans (PDP)* - This task involves the preparation of a Proposed Drainage Plan (PDP), with drainage symbols and notes on exhibit(s), and appropriate wording in the LDS/LDTMs text, which fully describes the proposed drainage concept. Both aerial imagery and contour mapping will be used as the PDP base map, along with existing CADD topography and proposed geometric plan superimposed. Proposed trunk storm sewer design is included. Design of lateral storm sewers, driveway culverts and inlet spacing is not included in this task. The PDP will be prepared in a digital format.

- *Water Quality Best Management Practices (BMPs) Permanent Measures* - This task involves documentation that the designer has considered options for water quality Best Management Practices (BMPs) and incorporated these practices into the Proposed Drainage Plans as specified in Section 2-08 of the LDS/LDTMs. The section also provides opportunities to provide justification for those cases in which the incorporation of BMPs is limited. Detailed design for water quality features is not included.
- *Floodplain Encroachment Evaluation* - This task involves the evaluation of encroachments on Regulatory Floodways and unstudied Zone A floodplains. Regulatory Floodplains are those 100-year frequency floodplains which are mapped by the Illinois Department of Natural Resources – Office of Water Resources (IDNR-OWR) and/or the Federal Emergency Management Agency (FEMA).
- *Depressional Storage Impact Evaluation* – This task involves the evaluation of impacted depressional storage areas for compensation consideration.

3.3—Drainage Study Assembly

This task involves the organization, preparation and assembly of the completed LDS/LDTMs. This task follows completion of previous tasks.

Assumptions:

- LDS/LDTMs revisions should be anticipated, and the time required to implement those revisions are included in the individual tasks.
- Only the organizational time for those revisions is included in this task.

Work Responsibilities:

- HDR: Drainage Lead LDTMs
- B&W: Drainage Lead LDS; LDTM Memo for Gilmer Road at Gilmer Connector

Deliverables:

- Fairfield Road LDS (Final)

TASK 4—ENVIRONMENTAL DATA COORDINATION, INVENTORY AND ANALYSIS

The Consultant, in coordination with LCDOT, will develop environmental studies required to support the alternatives analysis and will comply with Federal Aid guidelines, as federal funding is anticipated. With support from IDOT, the Consultant will assist in determining the presence or absence of resources within the study area.

It is assumed work under this task includes an update to early resource impact assessments during the PEL phase and potential impacts to the resources based on the Preferred Alternative. The design of the Preferred Alternative will be developed to avoid and minimize impacts. If avoidance is not feasible, potential mitigation measures will be identified. In evaluating the environmental impacts, the Consultant will coordinate with jurisdictional agencies, IDOT and/or organizations directly affected by the Preferred Alternative through FHWA.

4.1—IDOT Environmental Forms

The Consultant will prepare Screening Forms and an Environmental Survey Request Form (ESR) and related attachments as required by IDOT to initiate the environmental resource field studies for the Preferred Alternative.

4.1.1—Natural Resources Screening

The Natural Resources Screening submittal will include completion of BDE form 2715; Bat Bridge Survey Form for the Gilmer Road overpass and culverts over 48"; GIS shapefiles; and the following exhibits: Location Map on USGS Topographic Map, Project right of way, State right of way and environmental survey limits dimensioned on Aerial Photograph, National Wetland Inventory (NWI) map. It is anticipated that the project will "fail" the natural resources screening and require a full Environmental Survey Request (ESR). See task 4.3.3.

4.1.2—Cultural Resources Screening

The Cultural Resources Screening submittal will include completion of BDE form 2705, HARGIS map and a historic structure (40+ years old) photolog and key. It is anticipated that the project will require a full cultural resources study to be performed by IDOT.

4.1.3—Environmental Survey Request (ESR)

The Consultant will complete the electronic ESR form for biological, cultural and State ROW special waste. The attachments prepared under tasks 4.1.1 and 4.1.2 and the results from the PEL ESR will be used. These forms will formally request IDOT review and clearance on wetlands, biological and cultural resources. Additionally, this form formally requests IDOT to prepare a Preliminary Environmental Site Assessment (PESA) for the portion of the project along IL Route 60.

4.1.4—Addendum ESR

The scope includes one Addendum ESR (AESR) package to be submitted to IDOT for the project limits of this Phase I.

Assumptions:

- Limits of ESR are Fairfield Road from north of Gilmer Road to north of IL 60, assumed 50-ft outside existing right-of-way, and up to 1000-ft along various cross-streets and drives.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- 1 Natural Resources Screening Package
- 1 Cultural Resources Screening Package
- 1 ESRF Package
- 1 AESR Package

4.2—Environmental Inventory Map

The Consultant will prepare an environmental inventory map (critical issues map) that includes environmental resources within the study area. This map will be developed using existing, publicly available GIS databases, and will be updated periodically and upon receipt of environmental survey data from fieldwork and from IDOT. The Area of Potential Effect (APE) will also be included after it is approved by FHWA and SHPO.

Assumptions:

- Publicly available GIS database information to be obtained under Task 1.
- FHWA and SHPO approval of APE

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- EIM (Critical Issues Map)

4.3—Environmental Studies

The Consultant will lead the development of environmental studies required to support IDOT Phase I environmental procedures and the alternatives development and evaluation process. A technical report or memorandum will be prepared for each of the following resources with appropriate appendix material, as described in the following tasks.

4.3.1—Air Quality Analysis

The Consultant will assess and document air quality conformity and Mobile Source Air Toxics (MSAT). The information will be summarized in the PDR document and detailed information, as applicable, will be provided as a technical memorandum in the appendix.

Assumptions:

- Conformity: Consultant will document the Project's inclusion in the conformed, fiscally constrained portion of the regional transportation plan, as well as the region's Transportation Improvement Program (TIP). LCDOT will ensure that the project is included in the appropriate TIP.
- Mobile Source Air Toxics (MSAT): This project is assumed to be a project with "low potential MSAT Effects." The Consultant will prepare a qualitative assessment in accordance with the FHWA report, *"A Methodology for Evaluating Mobile Source Air Toxic Emissions among Transportation Project Alternatives*." Language from the IDOT BDE Manual (April 2020) will be used, as applicable.
- The scope assumes that a Microscale Analysis is not required.
- This scope assumes that a Hot-Spot Analysis is not required.
- The Consultant will include BLRS and BDE language regarding construction particulate matter mitigation.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Air Quality Analysis Technical Memorandum

4.3.2—Agricultural

Prime or unique farmland as well as farmland of State or local importance will be identified. The amount converted to non-agricultural use due to the proposed improvements will be calculated.

Assumptions:

- This scope assumes that coordination with the NRCS is not required, and that the Consultant will prepare a general Farmland Conversion Impact Rating Form. The Consultant will coordinate with the IDOA for compliance, as applicable.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Farmland Conversion Impact Rating Form (Agriculture impacts)

4.3.3—Biological Resources

The Consultant will support the biological resources evaluation.

- *Migratory Birds*: the Consultant will document the results of IDOT's biological review of the ESR for the presence of migratory birds and coordination efforts with the USFWS and IDNR, including species, habitat, regional abundance, likely mechanisms of take, and mitigation measures (as appropriate).
- *Bats*: The Consultant will determine if bats are present, or potentially present, on existing bridges and culverts and prepare the Bat Habitat Assessment form, in accordance with IDOT and USFWS procedures. This will be prepared early in the project and submitted with the ESR package. It is assumed that no bats, or evidence of bats, are present.
- *Wildlife*: the Consultant will summarize the results of IDOT's biological review for the presence of wildlife, including threatened and endangered species and their habitats, and coordination with the IDNR and USFWS. The Consultant will summarize IDOT's findings contained in the Biological Resource Review (BRR) memo. The PDR will discuss the project's impact on wildlife, threatened and endangered species, and habitat, as well as minimization and mitigation measures.
- *Invasive Species & Noxious Weeds*: the Consultant will summarize the results of the information provided by IDOT in one of the aforementioned biological reports or the wetland report. Measures to avoid introducing or spreading the species and to minimize their potential for causing harm, especially in sensitive environmental areas, will be discussed in the PDR.
- *Aquatic Habitat*: the Consultant will summarize the results of the information provided by IDOT regarding the aquatic habitat of water resources, if applicable.
- *Threatened or Endangered (T/E) Species*: the Consultant will discuss the presence of the federal and state T/E species and critical habitat as described by IDOT in the BRR and describe avoidance, minimization, and mitigation measures.
- *Trees/Vegetation:* The Consultant will review results from field surveys and tabulate trees by location, size and type. Trees of 6" diameter or greater will be evaluated with respect to species, condition and form. Each evaluated tree will be assigned a number rating from 1 to 5 based on general observations at the time of the inventory. A rating of 1 (excellent) has the highest value in terms of protection or preservation. A rating of 5 (poor) has the lowest value and represents lower quality individuals. An impact evaluation will be performed which consists of tree impact plans and a summary table of impacted trees by species and quality, for the Preferred Alternative. The tree inventory and impact evaluation will be included in the Project Development Report. It will also include identification of trees located on LCFPD property utilizing LCFPD tree survey requirements.

Assumptions:

- It is assumed that IDOT will conduct screening and field surveys for biological resources, except for trees and bats.
- IDOT will provide the results of the Consultant's tree survey to the IDNR.
- This scope assumes that formal consultation with USFWS and/or IDNR for T/E species is not required. If so, this will be completed by IDOT.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Biological Resources Technical Memorandum
- Tree Survey and Impact Evaluation

4.3.4—Cultural Resources

In support of National Historic Preservation Act (NHPA) Section 106 compliance, the Consultant proposes IDOT's Cultural Resource Unit (CRU) conduct archaeological and architectural resources investigations, preparing reports, and making the initial Assessment of Effects to historic properties. There is no work associated with this task.

4.3.5—Floodplains

Current FEMA maps identify various floodplains and floodways within the study limits. The Consultant will summarize the results of the Location Drainage Study (LDS) and Locations Drainage Technical Memorandums (LDTM) in the PDR to identify floodplain/floodway impacts.

Assumptions:

- An LDS and LDTMs will be completed for this project under separate task.

4.3.6—Special Waste/Regulated Substances

The Consultant will prepare a Preliminary Environment Site Assessment (PESA) for special waste for County and local routes. IDOT will prepare the PESA for IL Route 60. The PESA will determine whether or not further studies will be necessary. Should further action be necessary, a PSI will be performed in Phase II. The findings and recommended future actions will be included in the PDR. The Consultant's scope includes:

- Preparing PESA for Fairfield Road including County and local crossroads only.
- Reviewing and summarizing the findings of the State-prepared PESA report for state routes and consultant-prepared PESA in a technical memorandum, identifying the Recognized Environmental Conditions (REC) in text and on a GIS-based map.
- Including summary in the PDR.
- Evaluating the potential for the Preferred Alternative to disturb REC's; determining and documenting if avoidance is possible, not possible, or has a de minimis effect (in consultation with IDOT).
- Include the PESA Report(s) as an Appendix to the PDR.

Assumptions:

- IDOT will perform the PESA and provide the report and GIS data file to the Consultant for State Routes. Consultant will prepare PESA for County and local routes.

Work Responsibilities:

- B&W: Task Lead

Deliverables:

- Special Waste/Regulated Substances Technical Memorandum for State PESA
- PESA for County and Local Routes

4.3.7—Section 4(f) and 6(f) Evaluation

The Consultant will identify Section 4(f) resources (publicly owned lands that are managed as parks and recreational areas, wildlife or waterfowl refuges, and eligible historic sites) within the study area. Trails are also considered Section 4(f) resources. The following 4(f) resources have been identified within the study limits:

- Ray Lake Forest Preserve (Lake County FPD) North of Gilmer Road on the East Side

- One historic property as identified in Task 4.3.4. SHPO is considered the Official with Jurisdiction (OHJ) for all historic properties, but local historic agencies may also be involved.

Specific work tasks will include:

- Two coordination meetings with the OHJ, including Lake County Forest Preserve District (LCFPD) concerning potential use of property.
- Develop exhibits for use with OHJs.
- Evaluate alternatives and measures to minimize harm.
- Prepare the Section 4(f) de minimis documentation. This task also includes submitting draft documents to IDOT and FHWA for review/approval.
- Prepare de minimis correspondence to the OHJ's after the Public Information Meeting (assumes 4(f) is part of overall project public meeting).
- Include correspondence in PDR, as appropriate.

Consultant will contact IDNR and/or OHJ's to determine whether any of the parklands or forest preserves have been funded through the Land and Water Conservation (LAWCON) Fund or by the Open Space and Lands Acquisition and Development (OSLAD), either of which trigger Section 6(f). Specific Section 6(f) work tasks will include:

- Coordination with IDOT, IDNR and the OHJ to retrieve records and determine if any properties in the study area were funded through LAWCON or OSLAD. Identify as 6(f) in GIS database.
- If impacts to a Section 6(f) cannot be avoided, coordinate with FHWA, IDOT and IDNR to secure agency comments and determine Section 6(f) documentation requirements. This scope assumes that one of the impacted parkland properties is Section 6(f) but that IDNR will determine that no conversion of use will occur.
- Design refinements if required by IDNR.
- Include required commitments and correspondence in the PDR, as applicable.

Impacts to Section 4(f) and Section 6(f) resources will be avoided if possible. If avoidance is not possible, ways to minimize impacts to a de minimis status will be identified. If this is not possible, the Consultant will help determine if a programmatic evaluation is applicable, assist LCDOT in coordination with OHJs, and prepare the requisite documentation. If a de minimis finding or programmatic evaluation is not possible, additional scope and fee will be required to prepare an Individual Section 4(f) Evaluation.

Assumptions:

- This scope assumes that no Section 6(f) conversion will occur. Additional scope and fee will be required if this is not possible.
- Additional scope and fee will be required if a Section 4(f) de minimis finding or programmatic evaluation is not possible.
- It is anticipated that three submittals of the Section 4(f) de minimis document or Programmatic Evaluation will be required:
    - Draft submittal to IDOT Local Roads (prior to Public Meeting)
    - Draft submittal to FHWA (prior to Public Meeting)
    - Final Submittal to IDOT and FHWA (following Public Meeting)

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Section 4(f) de minimus or Programmatic Evaluation Technical Memoranda

4.3.8—Noise Analysis

The Consultant will conduct a traffic noise analysis along the Fairfield Road corridor following the process outlined in the BDE Manual and the IDOT Highway Traffic Noise Assessment Manual based on the proposed scope of work which includes additional travel lanes or travel lanes that are closer to noise receptors. A Traffic Noise Analysis report will be included as an appendix in the PDR, which presents the analysis, results, and recommendations. The consultant will summarize the results in the PDR.

Specific work tasks include:

- Identify places with similar noise and land use by developing Common Noise Environments (CNEs). This scope assumes up to 6 CNEs.
- Assign one representative receptor per CNE (up to 6)
- Field measure existing noise levels
- Model existing, future No-Build, and the Preferred Alternative noise levels for up to 6 representative receptors using the latest TNM model approved by IDOT. The proposed model will be based on 2050 peak hour traffic projection data and the proposed horizontal and vertical roadway alignment information.
- Analyze noise impacts for up to 6 receptors
- Predict noise levels for the future Build with noise abatement scenario for up to 6 receptors
- Determine the reasonableness and feasibility of abatement measures
- Describe measures to minimize construction noise impacts, per BDE Manual
- Prepare draft and final technical memorandum

Assumptions:

- Noise analysis corridor limits are Fairfield Road between Gilmer Road and IL 60, and identified cross-road limits
- The noise analysis will be performed for one preferred build alternative. If the preferred build alternative changes during Phase I, additional noise analysis may need to be performed.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Noise Analysis Technical Memorandum – Draft & Final

4.3.9—Wetlands and Water Resources

The Consultant will lead efforts in the wetland and water resource identification and impact analysis. The PEL environmental scan indicates that several are present within the project limits.

A wetland delineation will be completed based on the methodology established by US. Army Corps of Engineers (USACE) and will include Floristic Quality Assessment as determined using Chicago Region Floristic Quality Assessment Calculator (USACE, Chicago District, most recent version). A preliminary jurisdictional determination and wetland boundary confirmation site visit will be held with Lake County Stormwater Commission (LCSMC).

The results of the Waters of the U.S./Wetlands field survey will be summarized in a Wetland and Waters Delineation Report that will include the USACE Routine On-Site Data Forms for the identified Waters of the U.S./Wetlands, exhibits depicting the delineated Waters of the U.S./Wetland boundaries, National Wetland Inventory, Lake County Advanced Identification (ADID) wetlands, Soil Survey information, floodplains, USGS topography, and supporting site photographs. The report will also summarize the assessment of wildlife and plant community qualities.

The scope under this task includes:

- Delineating wetlands and Waters of the U.S.
- Preparing draft and final report.
- Coordination with LCSMC.
- Calculating impacts to wetlands, by jurisdiction (USACE or LCSMC).
- Completing Wetland Impact Evaluation (WIE) forms and exhibits for submittal to IDOT.

Assumptions:

- Up to 15 individual wetlands and/or Waters of the U.S. are assumed for WIE forms.
- IDOT will agree that Consultant can perform wetland delineations/reporting along state routes

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Wetland and Waters Delineation Report
- WIE Forms and Exhibits

TASK 5— CRASH ANALYSIS

5.1—Crash Analysis

Updates to crash data provided by LCDOT and IDOT through 2024 data will be obtained and compiled with crash data from the previous 5 years.

5.2— Crash Analysis Document

Update the Crash Analysis Technical Memorandum. Crash reports for 2022 to present will be obtained from the IDOT portal. Accidents with Severe injuries or Fatal will be requested from the Sheriff's Office for additional information.

Assumptions:

- It is assumed the crash analysis document will be updated once during the term of the project to incorporate two (2) additional years of new data since the PEL phase.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Update to the Crash Analysis Technical Memorandum developed in the PEL.

TASK 6 – TRAFFIC OPERATIONAL ANALYSIS

Updates to the Traffic Operational Technical Analysis Memorandum will be performed for the Build alternatives. Simulation models will be conducted and used to assist in the coordination of signals, as well as presentation to agencies and public stakeholders. Work under this task also includes the preparation of Intersection Design Studies (IDS) for intersections where improvements are proposed for the recommended Preferred alternative, as described below.

6.1—Traffic Estimating

For Major Commercial Access, Minor Commercial Access and Other commercial access, the weekday AM peak hour and the Weekend Mid-day peak hour will be estimated using the ITE Trip Generation Manual and calibrated utilizing other available traffic counts.

6.2— Traffic Balancing

Utilize existing traffic counts from the various intersections taken on various weekdays and weekend days to re-balance the traffic as needed throughout the project limits. Prepare a memorandum discussing methodology and findings.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Addendum to the Traffic Methodology Technical Memorandum

6.3— Traffic Forecasting

Update projected 2050 traffic volumes for proposed intersection alternatives in accordance with FHWA guidelines. This task includes intersection capacity analyses and simulations. Coordinate with IDOT and the Chicago Metropolitan Agency for Planning (CMAP) for updates to 2050 traffic projections. The Consultant will prepare correspondence letters with CMAP.

Deliverables:

- Updates to the Traffic Methodology Technical Memorandum

6.4— Capacity Analysis

Work under this task includes updates to the capacity analysis at existing intersections and assumes the evaluation of roundabout and signalized alternatives at the following intersections:

Intersections to be Analyzed
Fairfield Road at IL Route 60
Fairfield Road at Chardon Road
Fairfield Road at Gilmer Connector

Assumptions:

- 3 intersection capacity analyses updates using Highway Capacity Software (HCS) for the following traffic years, assuming a no-build analysis and two proposed alternatives for each intersection (See Table above):
  - Existing traffic and traffic signals
  - 2050 traffic and traffic signals

- 3 intersection capacity analyses updates using Sidra Software for 2 proposed roundabout alternatives at each intersection for 2050 traffic.
- Sensitivity testing has been included to determine the need for interim improvement alternatives.

Work Responsibilities:

- HDR: Task Lead
- B&W: Roundabout Analysis

Deliverables:

- Addendum to the Traffic Analysis Technical Memorandum

6.5— Traffic Simulations

Work under this task includes the use of Synchro and Vissim simulations to be performed within the Fairfield Road project limits. A high-level review will be performed to compare the Preferred Alternative with the remainder of the corridor to the north in the PEL Study. Simulations will be coordinated appropriately with LCDOT to limit the number of alternatives analyzed.

Assumptions:

- Traffic simulations (AM and PM peak hours) will be developed from north of Gilmer Road to north of IL 60 utilizing Synchro software for the following alternatives:
  - No-build alternative
  - 2 proposed Build Alternatives
- Traffic signal timings will be transferred from Synchro Models to develop the corridor in Vissim, to analyze non-motorized travel from north of Gilmer Road to north of IL 60, and to be utilized for visualization purposes.
  - 2 proposed alternative models are included.

6.6— Traffic Analysis Technical Memorandum

Prepare updates to the Traffic Analysis Technical Memorandum for LCDOT to review traffic signal warrants, traffic counts, and intersection capacity analyses. A summary of all intersections will be provided along with recommendations. Tables will be provided for ease of comparison of the different alternatives. Level of Service deficiencies will be identified. The report will include a summary of existing traffic volume adjustments that may be made due to existing environmental conditions. A discussion will be included on how this relates to the 2050 traffic projections for the intersections.

Work Responsibilities:

- HDR: Task Lead
- B&W: Gilmer Connector

Deliverables:

- Addendum to the Traffic Operational Analysis Technical Memorandum

6.7— Intersection Design Studies

Work under this task assumes the preparation of Intersection Design Studies (IDS) for the following locations:

IDS Locations
1. Fairfield Road at Gilmer Road (Connector)
2. Fairfield Road at Chardon Road
3. Fairfield Road at IL 60

Assumptions:

- IDS sheet setup, queue length calculations (red time formula for signalized intersections), fastest path analysis (for roundabout intersections), Autoturn analyses and exhibits, ADA ramp design, cross sections for ROW analysis at driveways, and other sheet requirements per IDOT.
- Work under this task assumes preparation of detailed IDSs are for the recommended Preferred Alternative and will require 1 round of review coordination efforts and revisions with LCDOT for approval.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- IDS Plans Package
- B&W: Roundabout IDS

TASK 7—ALTERNATE GEOMETRIC STUDIES

The Consultant will lead the development and evaluation of geometric alternatives. Under this task the development of the Build alternatives and screening for the recommendation of a Preferred Alternative will occur.

7.1—Initial Alternatives Development and Evaluation

The Consultant will develop a set of Initial Alternatives to a functional layout level of detail to allow an initial assessment of engineering viability, potential environmental issues, and relative planning level costs. The functional layout will consist of the development of potential changes in alignment locations, conceptual sections and intersection types. Initial corridor alternatives will include:

- Three lanes including up to four intersection sub-alternatives.
- Five Lanes including up to four intersection sub-alternatives

Work Responsibilities:

- HDR: Task Lead
- B&W: Roundabout Support

Deliverables:

- Planning Framework Document
- Initial Alternatives Exhibits and Conceptual Sections Package
- Initial Alternatives Evaluation Technical Memorandum

7.2—Preliminary Engineering – Build and Preferred Alternatives

The Consultant will further develop the alternatives carried forward from Task 7.1. For budgeting purposes, it is assumed that up to **2** Build Alternatives with 4 sub-alternatives will be developed. Build Alternatives will be presented as preliminary design drawings on an updated aerial photo with topographical base map for further in-depth analysis of their economic, environmental, and engineering factors.

The work under this task will provide horizontal and vertical geometries, proposed roadways, proposed non-motorized facilities, cross-sectional design impacts, earthwork, access management and proposed retaining wall locations. Preliminary design construction footprints, right-of-way needs, and utility conflicts will be shown on the plan drawings as well as other pertinent information collected in accordance with the IDOT BDE manual.

Plan and profile sheets will be developed for a total project length, requiring plan sheets to be developed for each alternative along 9,500 ft of Fairfield Road with an assumed plan scale of 1" = 50'. Plan sheets for cross streets will be developed assuming 1 plan sheet per cross street with additional sheets needed at IL Route 60, Chardon Road and the Gilmer Road Connector.

Existing cross sections will be developed during the development of the 2 Build Alternatives at critical areas including driveways, cross streets, and locations with potential need for a retaining wall. Cross sections of the Preferred Alternative will be developed at 100-foot stations along Fairfield Road in addition to at driveways, cross streets and retaining wall locations. Cross sections will be developed along major cross streets.

Assumptions:

- 2 Build Alternatives with 4 sub-alternatives will be developed and evaluated (plan, profile, typical sections, cross sections).
- Design full scale 1" = 50', plan and profile development. (assume 13 mainline sheets + 3 cross street sheets per alternative)
- Typical section development is assumed for each alternative along Fairfield Road, and for the major cross streets (Gilmer Road connector ramp, Chardon Road and IL 60).
- Quantitative evaluation factors will be considered for the engineering and environmental analysis, utilizing updated data from collection efforts.
- It is expected through this work, identification of the recommended Preferred Alternative will be communicated, and minor refinements will be necessary following coordination efforts for selection.
- Coordination efforts for the NEPA process for the Preferred Alternative is under separate task.

Deliverables:

- Preliminary Design Plans
- Selected Preferred Alternative Design Plans
- Build Alternatives Evaluation Technical Memorandum

7.3—Complete Streets Evaluation of Preferred Alternative

The Consultant will evaluate the needs of non-motorized travel as part of the preferred alternative selection. Alternatives will include a combination of multi-use paths and/or sidewalks on one or both sides of Fairfield Road as well as connections to sidestrees. Individual curb ramp details will be prepared for all stop sign, yield sign, roundabout and/or signalized non-motorized travel crossings at intersections. ADA Curb Ramp Details will be provided at the following locations listed below where new ramps will be constructed. Locations that do not warrant detectable warnings are not considered ADA curb ramps and details will not

be provided for those locations. Additional details for all crossings/driveways will be developed during Phase II.

Assumed ADA Curb Ramp Locations

Intersections	Number of Corners	Ramps
Fairfield Road at IL Route 60	4	8
Fairfield Road at Chardon Road	4	8
Fairfield Road at Gilmer Road (Connector Ramp)	2	2
Miscellaneous (i.e. Roundabout, Ped Crossing, etc.)	4	8
Total:	14	26

Assumptions:

- Design full scale 1" = 5', detail development.

Deliverables:

- White Paper on ADA Compliance of Preferred Alternative
- Individual Curb Ramp Details

7.4— Preliminary Right-of-Way

Work under this task is separate from Task 7.2, where it is assumed final refinements to the proposed right-of-way and easements of the recommended Preferred Alternative will be necessary following coordination and review efforts of other disciplines, and final review from regulatory/ resource agencies.

Additional work under this task for the Preferred Alternative includes exhibits to be prepared for each PIN. An additional exhibit at 100 scale will be prepared for the entire project defining the same information as the individual PIN exhibits identifying the parcel boundaries, PIN, owner (if available), addresses (if applicable), the station/offset for each right-of-way breakpoint, and the amount of acquisition proposed for each type of acquisition for each PIN. A database will also be produced detailing the owner, PIN, type of right of way (TE, PE, or FS), and the amount of right of way. A spreadsheet (IDOT Form) will be provided listing each PIN, area of acquisition, and type of acquisition.

Deliverables:

- Preliminary Right-of-Way Plans and Easements Exhibit
- ROW Needs/Property Database
- Narrative summary with table identifying ROW needs by land use type (residential, commercial, other) and displacements for inclusion in PDR

7.4.1 Plat of Highways

The Consultant will perform legal surveys and develop plats, legal descriptions and title commitments according to LCDOT's Plat Guidelines (02/17/20) as well as IDOT guidelines for the adjacent parcels of land to be acquired for R.O.W., permanent easements or temporary construction easements at the Fairfield Road at IL 60, Chardon Road and Gilmer connector intersection improvements and along Fairfield Road within the project limits. The Consultant will prepare all required documentation, forms and related exhibits including R.O.W Impacts Table.

The Consultant will assist with identifying well and septic locations on private property within right-of-way to be acquired. Lake County Health Department records will be researched for available information.

Assumptions:

- There may be some locations where an adjoining property owner owns the underlying property to the centerline. Previously dedicated land will be acquired via Quitclaim Deed.
- New ROW and ROW interests included in the property deed will be acquired by Warranty Deed.

Work Responsibilities:

- B&W: Task Lead

Deliverables:

- Plats of Highway

7.5—Alternatives Cost Analysis

The Consultant will develop construction cost estimates at the various stages in the alternatives development process as described below.

7.5.1—Initial Alternatives Cost Estimate

The Consultant will develop an order of magnitude planning-level cost estimate for the Initial Alternatives. Cost estimates will include construction, right-of-way, and engineering costs. At this stage, cost estimates will be based on major construction elements with other elements estimated on a percentage basis for obtaining relative comparisons.

7.5.2—Build and Preferred Alternatives Cost Estimate

The Consultant will develop preliminary cost estimates for the Build and Preferred Alternatives, commensurate for inclusion in the final PDR. Cost estimates for the Build Alternatives will be based on high-level planning estimates in coordination with LCDOT for final assessments in the comparison of alternatives and then refined to a greater level of detail for the Preferred Alternative for the proper assessment of construction and programming options.

7.6—Team Coordination and Meetings

This task includes effort for internal project team coordination (Consultant and LCDOT) related to the Alternatives Evaluations efforts.

2 coordination meetings with LCDOT and 2 miscellaneous meetings are assumed for budgeting purposes. They are anticipated to occur after the development of the Build Alternatives, and before development of the Preferred Alternative, at a minimum.

Assumptions:

- 2 internal coordination meetings and 2 miscellaneous meetings are assumed for evaluation concurrences, and preparation of discussion materials.

Work Responsibilities:

- HDR: Task Lead

TASK 8— TRANSPORTATION MANAGEMENT PLAN

8.1—TMP Analysis

A maintenance of traffic implementation plan will be developed for the recommended preferred alternative that will include an efficient strategy for construction of the project while minimizing overall impacts operationally to businesses and active transportation facilities.

Assumptions:

- It is assumed a phased implementation plan will not be required for the project and available funding will be obtained for the proposed project improvements should a build alternative be selected.
- Exhibits will be prepared of typical MOT sections for 2 road segments (up to 4 stages each) and for major intersections (up to 4 stages), with associated schematic plans.
- It is assumed that a TMP Team and associated coordination efforts will not be required for the potential implementation of the project.
- Assume phased construction only.

Work Responsibilities:

- HDR: Task Lead
- B&W: Roundabout Support

Deliverables:

- TMP Concept Exhibits (Schematic Roll Plot) and Sections
- Queue Analysis Output

8.2— TMP Document

Prepare a technical memorandum to summarize traffic staging in order to accommodate the construction of the recommended Preferred Alternative in accordance with FHWA Work Safety and Mobility Policy and IDOT District 1 Circular Memorandums regarding traffic control and staging. The technical memorandum will incorporate as appendix Task 8.1 deliverables and require approval signature from the Bureau of Traffic.

Assumptions:

- It is assumed detours may be needed for various intersection or staged improvements.

Work Responsibilities:

- HDR: Task Lead
- B&W: Roundabout Support

Deliverables:

- TMP Technical Memorandum

TASK 9- CONCEPT AND PRELIMINARY STRUCTURAL DESIGN

The Consultant will lead the development and evaluation of the alternatives related to the following:

- Various retaining walls along Fairfield Road
- A culvert structure at Lake Helen Drain

9.1—Structures

Various locations along the corridor have been identified as locations potentially requiring retaining walls greater than 7 ft in height based on the proposed alternatives. In accordance with IDOT requirements (BLRS Manual 32.05), the Consultant will perform the following tasks for each structure:

- Prepare a Wall Type Study
- Develop a Type, Size and Location Plan (TS&L)

Assumptions:

- Potential locations for retaining walls with > 7' proposed height:

Locations	Height > 7' Length (ft)
Gilmer Connector (Roundabout Alt. Only)	900
Chardon (Roundabout Alt. Only)	600
West side north of Chardon	300
East side south of IL 60	800
Miscellaneous	500
Total	3100

- Potential location of culvert structure:
  Lake Helen Drain - Prepare a Preliminary Bridge Design and Hydraulic Report (PBDHR - BLR Form 10210)

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Wall Type Study(s) – for retaining walls >7ft
- TS&L(s) – for retaining walls >7ft
- PBDHR Form(s) – for culvert structure

TASK 10—GEOTECHNICAL INVESTIGATION

The Consultant will perform a preliminary geotechnical investigation of the Fairfield Road project limits which includes the following:

- Drilling Subgrade Borings
- Drilling Structure Borings
- Preparation of Roadway Geotechnical Report (RGR)
- Preparation of Structure Geotechnical Reports (SGR).

Roadway subgrade borings will be drilled in the shoulders or easements, will be spaced approximately 300 feet apart, and staggered along the Phase I Study Limits:

Road	Limits	Total Linear Feet
Fairfield Road	N of Gilmer Road to N of IL 60	9,500
Chardon Road	500 ft East and West (E&W)	1,000
IL Route 60	1000 ft East and West (E&W)	2,000

The majority of the roadway borings will be drilled to a depth of 10 feet. According to historical information, peat layers are expected between the depths of 10 and 20 feet in portions of the project site. To identify these peat layers, every 3rd roadway subgrade boring on Fairfield Road, Chardon Road and IL

60, will be extended to a depth of 25 feet from the surface. Borings on remaining side streets will be drilled to a depth of 10 feet each.

Structure borings for retaining walls will be spaced in accordance with IDOT Geotechnical manual guidelines. In general, borings will be drilled for all retaining walls with an expected exposed height greater than 7 feet for TS&L preparation. See table in task 9.1 for assumed locations of retaining walls Actual locations of borings will be based on the Preferred Alternative. Borings for walls between 3ft and 7ft will be deferred to a future phase of work. Retaining wall borings will be drilled to depths recommended in the IDOT Geotechnical manual and are expected to vary between 10 feet and 50 feet. The average depth is assumed to be 30 feet each for this preliminary scope.

10.1—Field Work

Borings will be located in the field by the HDR's survey subconsultant, accompanied by an inspector/geologist to verify accessibility. The location of the borings will be adjusted after review by LCDOT, and will be based on field conditions, accessibility and utility conflicts. Traffic control signage, shoulder or lane closures and flaggers will be utilized during drilling, as needed in accordance with IDOT regulations to ensure safety of the crew and traffic. Surface elevation, northing and easting of the boreholes will be surveyed by HDR's survey subconsultant.

The borings will be drilled with a truck-mounted drill rig or an ATV-mounted drill rig. Drilling, sampling and field testing of the soil samples will be performed in general accordance with the IDOT Geotechnical Manual (2020), All Geotechnical Manual Users (AGMU) memoranda and AASHTO guidelines. Soil sampling will be performed as per AASHTO T-206, "Penetration Test and Split Barrel Sampling of Soils". Unconfined compressive strength testing will be performed in the field using a RIMAC tester. Observation for groundwater will be made during and immediately after the completion of the drilling. 24-hour water levels will be collected from selected structure borings when feasible. After the completion of the drilling, the boreholes will be backfilled with the soil auger cuttings from the same borehole. Where required, the surface will be patched with asphalt or cement grout to match surrounding elevations.

10.2—Laboratory Work

Laboratory testing includes moisture content tests on all soil samples. Laboratory unconfined compressive strength, Atterberg Limits and Grain Size Analysis tests will be performed on selected soil samples from structure borings. Standard Proctor tests and Illinois Bearing Ratio (IBR) tests will be performed on bulk samples recovered from the proposed roadway areas. Organic content tests may be performed on selected soil samples.

Work Responsibilities:

- HDR: Task Coordination
- Interra: Task Lead
- B&W: Survey of borings

Assumptions:

- Soil Borings for traffic signal improvements and retaining walls between 3ft and 7ft will be performed during Phase II Engineering and are not included in the Phase I Engineering Scope
- A Pre-Drilling Meeting and Post-Drilling Meeting will be coordinated.

Deliverables:

- RGR with all proposed roadway improvements
- Separate SGRs for all retaining walls that need a TS&L

TASK 11— PUBLIC INVOLVEMENT

11.1—Stakeholder Involvement

The Consultant will develop a Public Involvement Plan (PIP) largely based on the PIP developed in the PEL phase for the project. The PIP will be developed with concurrence from LCDOT. The Stakeholder Involvement Group (SIG) will be reconvened at the beginning of Phase I and will meet during the project development process. The SIG will provide critical guidance in the overall project development process, including implementation of the PIP. The SIG member list developed in the PEL phase will be updated as needed and will include representatives from the Village of Wauconda Fire and Police Districts, Forest Preserve District, area civic organizations, schools, neighborhood associations, churches, special interest groups and adjacent businesses and property owners. The Consultant will be responsible for meeting preparations and meeting summaries.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Updated SIG member list
- Addendum to the Public Involvement Plan

11.2—Project Website Support

The Consultant will maintain the project website developed during the PEL. The Phase I website content will include:

- Background project information including schedule
- List of Frequently Asked Questions (FAQs) and responses
- SIG and Public Information Meeting notifications
- Project Team contact information
- Posting of project documents and videos for information and/or review
- Subscribers are invited to receive project updates.

Assumptions:

- Website content will be developed and maintained throughout the Phase I development process.
- All website content will be reviewed and approved by LCDOT before posting.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Website updates

11.3 – Community Engagement - Public Information Meetings

The Consultant will provide logistical planning and execution for two (2) public information meetings. It is assumed the public information meetings will occur in person. Activities for each public meeting include:

- Development and management of workback schedules and meeting plans
- Attendance at a dry run meeting
- Design and production of informational materials and collateral
- Advertisement of the meetings, including:

  - Display ad in The Daily Herald
  - Draft press releases to be provided to LCDOT for distribution
  - Postcard mailing to civic organizations, elected officials, and major area employers
  - Variable message signs to be set up on Fairfield Road (will be handled by LCDOT)
- Attendance at the in-person meetings
- Preparation of a meeting summary to include public comments, questions, concerns raised by the public

Videos and Visualizations: Consultant will complete a UAV drone flight of the project area. The Consultant will utilize the UAV to record traffic flow and movements during peak hour traffic at the following intersections. The recordings will be utilized to view current traffic movements and to understand potential safety concerns at the following intersections:

- Fairfield Road at Gilmer Road connector
- Fairfield Road at Chardon Road
- Fairfield Road at IL Route 60

The UAV will also be used to develop a video to be used at the public information meetings.

The Consultant will prepare visualizations of the Preferred Alternative to be included in the public information meeting video.

Deliverables:

- Up to sixteen (16) standard display boards per meeting
- Video Production:
  - One alternatives development video with immersive technology
  - One preferred alternative video with immersive technology
    - Full 3D immersive animations at focused locations
    - Post-Production (audio, animation, graphics, titles, lower-thirds)
- 2.5D Visualizations of preferred alternative

Work Responsibilities:

- HDR: Task Lead
- B&W: Drone flight, Video development and production lead, visualizations, and materials support

TASK 12—PREPARE PROJECT DEVELOPMENT REPORT (PDR)

The Consultant will lead the preparation of the Project Development Report (PDR) in accordance with the IDOT BLRS/BDE Manual. Work under this task includes the development, internal proof reading and editorial edits necessary for the document submittal. Following initial submittal and comment period, work under this task includes the revisions and re-submittal of the "final" Preliminary PDR document.

Assumptions:

- One PDR will be prepared for the project limits and will be submitted electronically.
- Following LCDOT comment/revisions, electronic submittal of the Prefinal document will be provided to IDOT and revised per comment as Final.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Draft PDR to LCDOT
- Prefinal/Final PDR to IDOT

TASK 13— AGENCY COORDINATION

13.1—Regulatory/Resource Agency Coordination

The Consultant will prepare materials for and lead coordination meetings with resource and regulatory agencies that will expand upon the NEPA-404 Merger process that occurred during the PEL phase. Expected points of coordination will include 1 preferred alternative concurrence meeting. A Memo will be developed in coordination with IDOT/FHWA to gain concurrence on the Purpose and Need and Alternatives to Be Carried Forward from the PEL phase during Phase I. These meetings are anticipated to be Virtual.

Work under this task also includes an expansion of the Timeframes Agreement established during the PEL Phase. Timeframes Agreement will identify the key milestones for the NEPA aspects of the project. The Consultant will manage and update the Timeframes Agreement through the duration of the project. The Consultant will be responsible for meeting preparations, agendas and meeting summaries.

Work Responsibilities:

- HDR: Task Lead

Deliverables:

- Concurrence Memo
- Meeting materials (agenda, handouts, PowerPoint presentation, meeting minutes)

13.2—Lead Agencies Coordination and Reviews

The Consultant will prepare for and attend meetings and associated ongoing coordination activities with LCDOT, FHWA and IDOT. It is envisioned that meetings will occur in the early stages of Phase I, and as needed as the project progresses. The coordination efforts will assess and reassess direction established early on and determine if the level of detail is satisfactory. Included under this task are design coordination meetings as the study progresses into the development of the Build and Preferred alternatives solutions for specific engineering efforts.

Assumptions:

- Monthly check-in meetings will be held with LCDOT Project Manager for the project duration (36 months) – virtual (2 hrs/month x 1.5 ppl)
- One Phase I Kickoff meeting with IDOT BLRS (virtual)
- One Phase I Kickoff meeting with FHWA (virtual)
- One IDOT Geometrics review meeting (virtual)
- The Consultant will be responsible for the preparation of coordination meeting materials and meeting summaries.

Work Responsibilities:

- HDR: Task Lead

13.3—External Agencies Coordination

The Consultant will organize, prepare for and attend meetings and associated ongoing coordination activities with involved local agencies, Lake County, transportation agencies and other interested public agencies. The Consultant will assist LCDOT in coordination of meeting logistics, material preparation, and minutes of the meetings.

Work under this task assumes support preparation of external agency correspondence throughout the course of the study. These could include project information or data collection coordination letters, and responses to agency comments received during the study.

TASK 14— PROJECT MANAGEMENT/ADMINISTRATION

14.1—Project Kickoff

The Consultant Team will conduct one (1) Project Kickoff Meeting with LCDOT staff and appropriate project team members. The purpose of this meeting will be to discuss project team organization, roles/responsibilities for project staff, decision making procedures, change management procedures, and communication/coordination protocols.

The Consultant will prepare Project Instructions and an Initial Work Plan, which will document established roles, responsibilities and procedures for executing the project work effort.

Assumptions:

Work Responsibilities:

- HDR: Task Lead
- B&W: Meeting Support

Deliverables:

- Project Instructions and Initial Work Plan

14.2—Project Management

The Consultant will lead, assist and monitor Project Management activities related to the Fairfield Road Phase I contained in this scope of services. Work under this task includes project management by subconsultants as well as related internal coordination meetings with subconsultants. The anticipated period of performance for this task is 36 months and includes:

- *Work Planning and Scheduling* – The Prime Consultant will manage the overall Work Planning and Scheduling for the technical services, agency coordination, and public involvement activities contained in the scope of services.
- *Project Management and Coordination* – The Prime Consultant will provide project management and coordination support services including meeting scheduling and preparations, general administrative support, and related project coordination support. A scope creep log of additions and subtractions of unneeded tasks will be maintained as a basis for any change orders that may be required during the life of the project.

Assumptions:

- Monthly monitoring of schedule and scope log and oversight of subconsultant scope and schedule (11.5 hrs/month)

Work Responsibilities:

- HDR: Task Lead

- Subconsultants: Project Management and Coordination

14.3—Project Administration

Project administration including payroll, billing, and filing will be performed monthly. Work under this task includes oversight of project administration by subconsultants.

The Prime Consultant will prepare and monitor the overall schedule and budget performance of services contained under this scope of services, including preparation of associated progress reports, invoices and Monthly Status Reports in compliance with LCDOT requirements. Involved subconsultants will provide related progress reporting/invoicing and scope creep log for their respective services.

Task 15—QA/QC

15.1—Quality Plan Development

The Consultant will prepare a Quality Management Plan for the Phase I Engineering efforts.

Assumptions:

- Initial Quality Plan development as well as development of an updated Quality Plan is included in this task - up to 2 assumed updates for the duration of the project.

Work Responsibilities:

- HDR: Task Lead
- Subconsultants: Quality Planning

Deliverables:

- QA/QC Plan (Initial, Updates)

15.2—Senior Review Meetings

The Consultant will conduct up to 3 senior review meetings through the duration of the Phase I Engineering and accompanying QA review documentation.

Assumptions:

- Up to 3 Senior Review Meetings will be conducted during the contract.

Work Responsibilities:

- HDR: Task Lead

15.3—Quality Reviews

The Consultant will conduct QA/QC reviews of Environmental, Engineering, and Public Involvement procedures, methodologies and 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.

Work Responsibilities:

- HDR: QA/QC Reviews
- B&W: QA/QC Reviews
- AGI: QA/QC Reviews
- Interra: QA/QC Reviews

Fairfield Road Phase I - North of Gilmer Road to North of IL 60						3-Nov-25	
		Level of Effort - Hours					Assumptions
		HDR	B&W	AGI	Interra	Total by Task	
Task 1	**Collection & Evaluation of Data**	**134**	**374**	**594**	**0**	**1,102**	
1.1	Data Collection and Review of Historical Studies	24	6			30	
1.2	Traffic Counts	2				40	
	ATSPM Review	20					
	Strava	20					
1.3	Utility Identification and Coordination					1,030	
1.3.1	Initial Coordination	16					
1.3.2	Utility Easement Research		40				2.4 miles with cross streets
1.3.3	Utility Locating			384			SUE Crew = 3 people x 15 days (75,000'/5,000'/day) =**360**hrs + SUE Field Manager 1 day/week (3 weeks) = **24**hrs
1.3.4	Utility Data Base Mapping			202			2D CAD=**128**hrs (10 sheets @12 hrs/sheet+1 Cover @ 8 hrs) + *3D CAD= **64** hrs (model utilities including S&S manholes)*+ test hole matrix=**8**hrs + .kmz=**2**hrs
	Survey 5 QLA potholes and 75,000 ft of QLB utility flags		320				
1.3.5	Preliminary Design Review and Coordination	52	8	8		68	Includes 2 meetings - 1 virtual and 1 in-field
Task 2	**Surveys**	**48**	**200**	**0**	**0**	**248**	
2.1	Supplemental Topographic & DTM Surveys		200			200	
2.2	Supplemental Tree Surveys	32				32	
2.3	Survey Management and Quality Control	16				16	
Task 3	**Drainage Analysis**	**1,498**	**304**	**0**	**0**	**1,802**	
3.1	Existing Drainage System					378	
	General Location Drainage Map		24				
	Existing Drainage Plan (EDP) including modeling (updates)		80				10 sheets double panel @ 8 hrs/sheet
	Identified Drainage Problems	24					
	Identified Base Floodplain	4					
	Major Drainage Features						
	HEC-RAS	70					Lake Helen Drain and North of Glimer Road ID 297 at 35 hrs/each
	HY-8	96					8 culverts at 12 hrs/each
	Hydraulic Reports	80					2 reports at 40 hrs/report
3.2	Proposed Drainage System					1,024	
	Outlet Evaluation	64					Assume 8 outlets @ 8hrs/each
	Stormwater Detentention Analysis	192					2.4 miles at 80/hrs per mile
	Right-of-Way Analysis	24					
	Proposed Drainage Plan (including modeling)	512					16 Plan and Profile Sheets at 32 hrs/sht
	FloodPlain Encroachment Evaluation	96					2.4 miles at 40 hrs/mile
	IDNR-OWR Permit Preparation	80					
	LCSMC WDO Permit Review	24					
	Water Quality BMP White Paper	32					
3.3	Drainage Study Assembly					400	
	LDS/LDTM	200	200				includes LDTM Memo for Gilmer Connector (w/ exhibits)
Task 4	**Environmental Data Coordination, Inventory and Analysis**	**722**	**132**	**0**	**0**	**854**	
4.1	IDOT Environmental Forms					78	
4.1.1	Natural Resources Screening	44					Includes BDE form (2 hrs), bat field survey-2ppl (12hrs), bat form (2hrs), GIS shapefiles (4hrs) & 3 aerial exhibits to be updated with Phase I limits (8hrs ea)
4.1.2	Cultural Resources Screening	6					Includes BDE form (2 hrs), historic structure survey & photolog update (2hrs) & HARGIS map update (2hrs)
4.1.3	Environmental Survey Request (ESR)	16					
4.1.4	Addendum ESR	12					assumes 1 AESR
4.2	Environmental Inventory Map	12				12	
4.3	Environmental Studies					764	
4.3.1	Air Quality Analysis	4					
4.3.2	Agricultural	8					
4.3.3	Biological Resources	40					includes tree survey & table
4.3.4	Cultural Resources	0					IDOT to perform
4.3.5	Floodplains	4					Summarize LDS for floodway/floodplain impacts, mitigation
4.3.6	Special Waste/Regulated Substances		132				
4.3.7	Section 4(f) and 6(f) Evaluation	40					Assumes 1 de minimis impact to Ray Lake FP and potentially one other historic property with 2 coordination meetings
4.3.8	Noise Analysis	420					Up to 6 CNEs (70 hrs/CNE)
4.3.9	Wetlands and Water Resources	116					2 staff x 2 field days + Report
Task 5	**Crash Analysis**	**100**	**0**	**0**	**0**	**100**	
5.1	Crash Analysis	40				40	
5.2	Crash Analysis Document	60				60	
Task 6	**Traffic Operational Analysis**	**994**	**310**	**0**	**0**	**1,304**	
6.1	Traffic Estimating	32				32	
6.2	Traffic Balancing	32				32	
6.3	Traffic Forcasting	32				32	
6.4	Capacity Analysis					402	
	Highway Capacity Software	240					4 intersections x 3 peak periods x 5 scenarios x 4 hrs
	Sidra		96				Sidra analysis at 2 intersections (Gilmer & Chardon) for 2 alts for AM and PM at 12/each
	Sensitivity Testing	18					1 hr at 2 scenarios at 3 intersections at 3 peak periods
	Gilmer Connector at Gilmer Rd Sidra		48				
6.5	Traffic Simulations					336	
	Synchro Software/Sim Traffic	72					3 intersections x 3 peak periods x 2 scenarios x 4 hrs
	Custom Signal Timing	24					
	Vissim	200					Only for the Preferred Alternative for visualizations. Synchro is sufficient for capacities.
	Northern Section of Fairfield reviewed against Preferred Alt	40					A high level review (not analysis) to be performed to compare the Preferred Alt to the remainder of the corridor further north. (moved from under IDS)
6.6	Traffic Analysis Technical Memorandum					140	
	Update	80	8				
	Gilmer Connector at Gilmer Rd Memo	4	48				
6.7	Intersection Design Studies					330	
	IDS	180	90				3 intersections at 90 hrs/int (queue length calcs, Autoturn analysis, cross street profiles, cross sections, ADA ramp design, driveway analysis.)
	Revisions	40	20				3 intersections at 20 hrs/each
	Gilmer Connector at Gilmer Rd		0				Will be completed outside of this Phase I.
Task 7	**Alternate Geometric Studies**	**1,636**	**888**	**0**	**0**	**2,524**	
7.1	Initial Alternatives Development and Evaluation					728	
	Three Lane - 4 intersection sub alternatives - open vs closed drainage	640	88				10 sheets (50 scale; split plan view when feasible) x 4 int alts x 2 section alts at 8 hrs/each; B&W for Roundabout support
7.2	Preliminary Engineering - Build and Preferred Alternatives	768				768	16 sheets (50 scale; P&P) x 4 alts x 1 section x 12 hrs/each
	Gilmer Connector at Gilmer Rd		48				2 sheets (50 scale; P&P) x 2 alts x 1 section x 12 hrs/each
7.3	Complete Streets Evaluation of Preferred Alternative					180	
	white paper		24				
	ADA Curb Ramp Details		104				26 ramps x 4 hrs
	Revisions		52				26 ramps x 2 hrs
7.4	Preliminary Right-of-Way					160	

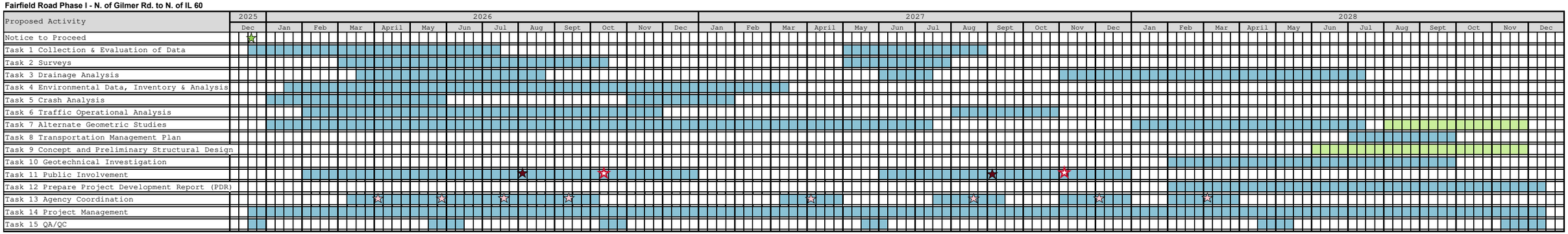
Fairfield Road Phase I - North of Gilmer Road to North of IL 60 3-Nov-25

		Level of Effort - Hours					Assumptions
		HDR	B&W	AGI	Interra	Total by Task	
	Preliminary Right-of-Way Plans		60				1" = 200' - 5 sheets @12hrs/each
	ROW Needs/Property Database	60					
	Narrative Summary With Table	40					
7.4.1	Plat of Highways		480				80 parcels @ 6 hrs
7.5	Alternatives Cost Analysis					96	
7.5.1	Initial Alternatives Cost Estimate	40	8				
7.5.2	Build and Preferred Alternatives Cost Estimate	40	8				
7.6	Team Coordination and Meetings	48	16			64	4 coordination meetings (3 HDR/ 1 B&W staff) @ 4 hrs ea
Task 8	**Transportation Management Plan**	**336**	**184**	**0**	**0**	**520**	
8.1	TMP Analysis					448	
	TMP Concept Exhibits and Sections	188	120				14 sheets (50 scale) at 10 hrs/each + 8 TS at 6 hrs/each; B&W roundabout staging = 12 sheets at 10 hrs/each
	Temporary Easement Evaluation	24	24				
	Queue Analysis Output	40	12				
	Detour Committee Meeting with IDOT	24	16				2 staff/1 meeting with exhibits
8.2	TMP Document	60	12			72	
Task 9	**Concept and Preliminary Structural Design**	**884**	**152**	**0**	**0**	**1,036**	
9.1	Structures					880	
	Retaining Walls						
	Gilmer Connector (Roundabout)	192					Includes Type Study TSL: 2 plan sheets, 1 detail sheet
	Chardon (Roundabout)	192					Includes Type Study TSL: 2 plan sheets, 1 detail sheet
	West Side North of Chardon	152					Includes Type Study TSL: 2 plan sheets, 1 detail sheet
	East Side South of IL 60	192					Includes Type Study TSL: 2 plan sheets, 1 detail sheet
	Miscellaneous Wall (location TBD)		152				Includes Type Study TSL: 2 plan sheets, 1 detail sheet
	Culvert						
	Lake Helen Drain TSL and BLR Form 10210 (Existing Structure 257)	156				156	*Culvert includes structure development, TS&L sheets, & BLR Form 10210*
Task 10	**Geotechnical Investigation**	**16**	**72**	**0**	**980**	**1,068**	
10.1	Field Work	8			380	460	95 borings: boring logs, boring location plan and profile sheets, utility clearances, RGR (1) & SGRs for retaining walls that need a TS&L (up to 5)
	Survey of boring locations		72				3 ppl x 3 days
10.2	Laboratory Work	8			600	608	
Task 11	**Public Involvement**	**1,192**	**424**	**0**	**0**	**1,616**	
11.1	Stakeholder Involvement					306	
	Stakeholder Involvement Plan	70					
	Timeframe Agreement	56					
	SIG Meeting Preparation	120	12				2 Meetings at 40 hrs each for prep
	SIG Meetings (2)	36	12				2 meetings - 3 HDR staff; 1 B&W at 6 hrs
11.2	Project Website Support	180	12			192	8 updates @ 24hours/update
11.3	Community Engagement - Public Information Meetings					1,118	
	Meeting Preparation and Documentation	240	48				2 meetings x 120hrs/meeting (HDR); 2 meetings x 24hrs (B&W)
	Dry Run Meetings (2)	24	8				2 meetings x 3 HDR staff x 4 hrs; 1 B&W staff x 4 hrs
	Meetings (2)	64	8				2 meetings x 4 HDR staff; 1 B&W staff x 4 hrs (PM, PE, Traffic, ROW or Drainage, Principal)
	Drone Flight		24				
	Videos and Visualization (UAV)	40	260				2 videos (100 for alt; 160 for prefered alt video)
	Online, Virtual Public Information Meeting (2)	120	16				
	Update Project Branding	8					
	Display Boards (16)	194	24				
	Project Fact Sheet	40					
Task 12	**Prepare Project Development Report (PDR)**	**240**	**24**	**0**	**0**	**264**	
	Draft PDR	160	16			176	
	Prefinal/Final PDR (to IDOT)	80	8			88	
Task 13	**Agency Coordination**	**138**	**60**	**0**	**0**	**198**	
13.1	Regulatory/Resource Agency Coordination					18	
	LCSMC	12					2 meetings 3 HDR staff @ 2 hrs each - virtual
	USACE	6					1 meeting 3 HDR staff @ 2 hrs each - virtual
13.2	Lead Agencies Coordination and Reviews					144	
	LCDOT	60	24				LCDOT - 2/year @ 3 HDR/meeting (assumed virtual) @ 4/hrs each
	IDOT BLRS	12					2 meeting @ 3 HDR/meeting @ 2 hrs each (assumed virtual)
	IDOT Geometrics	12					2 meeting @ 3 HDR/meeting @2 hrs each (assumed virtual)
	FHWA	12	24				2 meeting @ 3 HDR/meeting @2 hrs each (assumed virtual)
13.3	External Agencies Coordination					36	
	Miscelleneous	24	12				2 meeting w/ 2 HDR staff @ 6 hrs/meeting; 1 B&W staff (Village/Township)
Task 14	**Project Management/Administration**	**480**	**202**	**48**	**45**	**775**	
14.1	Project Kickoff	12	4			16	1 LCDOT meeting (3 HDR) x 4 hrs; (1 B&W) x 4 hrs (in person)
14.2	Project Management	414	144	24	21	603	11.5 hrs/mo x 36 months (HDR); 4 hrs/month for 36 months for B&W; 3 hrs/month for 8 months AGI; 3 hrs/month for 7 months Interra
14.3	Administration	54	54	24	24	156	1.5 hrs/month for 36 months for HDR and B&W; 3 hrs/month for 8 months AGI & Interra (includes project setup & closeout)
Task 15	**QA/QC**	**269**	**79**	**82**	**24**	**453**	
15.1	Quality Plan Development	16	4	16	4	40	
15.2	Senior Review Meetings	24				24	6 Review meetings (one a quarter) x 2 staff x 2 hours (virtual)
15.3	Quality Reviews	229	75	66	20	389	3% of (Tasks 3-12) for HDR & B&W; AGI = 66; Interra = 20
	Total	**8,687**	**3,405**	**724**	**1,049**	**13,864**	

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Lake	HDR Engineering, Inc.	Lake	25-00113-21-WR

EXHIBIT B
PROJECT SCHEDULE

Fairfield Road Phase I - N. of Gilmer Rd. to N. of IL 60



External Agency Meeting
SIG Meeting
Public Information Meeting

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Lake	HDR Engineering, Inc.	Lake	25-00113-21-WR

Exhibit C
Qualification Based Selection (QBS) Checklist

The LPA must complete Exhibit C. If the value meets or will exceed the small dollar threshold in 50 ILCS 510, QBS requirements must be followed.Under the threshold, QBS requirements do not apply. The small dollar threshold is adjusted annually and can be found in IDOT Circular Letters.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?	☐	☒
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?	☐	☒
3	Was the scope of services for this project clearly defined?	☐	☒
4	Was public notice given for this project?	☐	☒

If yes, Due date of submittal: 02/21/22

Method(s) used for advertisement and dates of advertisement

Ad in NewSun published on 3/11/22 & 3/18/22
Email blast to LCDOT's consultant and contractor list on 3/11/22

5	Do the written QBS policies and procedures cover conflicts of interest?	☐	☒
6	Do the written QBS policies and procedures use covered methods of verification for suspension and debarment?	☐	☒
7	Do the written QBS policies and procedures discuss the methods of evaluation?	☐	☒

Project Criteria	Weighting
Technical Approach	25%
Firm Experience	15%
Specialized Experience	15%
Staff Capability	20%
Workload Capacity	10%
Past Performance	15%

8	Do the written QBS policies and procedures discuss the method of selection?	☐	☒

Selection committee (titles) for this project

County Engineer, Asst. County Engineer, Engineer of Traffic, Engineer of Design, Director of Planning, Project Manager, Design Engineer

Top three consultants ranked for this project in order	
1	HDR
2	CBBEL
3	Civiltech

9	Was an estimated cost of engineering for this project developed in-house prior to contract negotiation?	☐	☒
10	Were negotiations for this project performed in accordance with federal requirements.	☐	☒
11	Were acceptable costs for this project verified?	☐	☒
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?	☐	☒
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)?	☐	☒

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Lake	HDR Engineering, Inc.	Lake	25-00113-21-WR

14	QBS according to State requirements used?	☐	☒
15	Existing relationship used in lieu of QBS process?	☒	☐
16	LPA is a home rule community (Exempt from QBS).	☒	☐

Illinois Department of Transportation

EXHIBIT D

COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

FIXED RAISE

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	25-00113-21-WR
Prime Consultant (Firm) Name	**Prepared By**	**Date**
HDR Engineering, Inc.	Aniko Shuey	11/4/2025
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	**36**	**MONTHS**	**OVERHEAD RATE**	**161.77%**
START DATE	**12/22/2025**		**COMPLEXITY FACTOR**	
RAISE DATE	**12/28/2025**		**% OF RAISE**	**3.00%**
END DATE	12/21/2028			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	12/22/2025	12/28/2025	0	0.00%
1	12/29/2025	12/28/2026	12	34.33%
2	12/29/2026	12/28/2027	12	35.36%
3	12/29/2027	12/28/2028	12	36.42%

The total escalation = 6.12%

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	25-00113-21-WR

Consultant / Subconsultant Name	Job Number

PAYROLL RATES

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

MAXIMUM PAYROLL RATE	**90.00**
ESCALATION FACTOR	**6.12%**

JOB SPECIFIC - Classifications and Average Payrates need to match current payrolls submitted to the Department.

CLASSIFICATION	IDOT AVG PAYROLL RATES ON FILE	CALCULATED RATE
Principal	$90.00	$90.00
Project Manager IV	$85.26	$90.00
Senior Civil Engineer III	$84.22	$89.38
Senior Civil Engineer II	$72.06	$76.47
Senior Civil Engineer I	$64.49	$68.44
Civil Engineer II	$45.83	$48.64
Civil Engineer I	$37.78	$40.09
Transportation Planner II	$57.84	$61.38
Senior Environmental Scientist	$66.01	$70.05
Environmental Scientist I	$30.18	$32.03
Senior Structural Engineer IV	$90.00	$90.00
Structural Engineer III	$62.53	$66.36
Structural Engineer II	$49.77	$52.82
Structural Technician II	$45.10	$47.86
Senior Communications Coordinator	$64.68	$68.64
Communications Coordinator II	$49.37	$52.39
Communications Coordinator I	$35.80	$37.99
Senior Graphic Designer	$44.61	$47.34
Project Support IV	$51.21	$54.34
Project Support II	$37.22	$39.50

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	25-00113-21-WR
Consultant / Subconsultant Name		**Job Number**

SUBCONSULTANTS

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

NAME	Direct Labor Total (Payroll Only)	Contribution to Prime Consultant
Accurate Group, Inc.	32,854.00	3,285.40
Baxter & Woodman, Inc.	193,636.00	19,363.60
Interra, Inc.	51,166.00	5,116.60

Total **277,656.00** **27,765.60**

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

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	25-00113-21-WR

Consultant / Subconsultant Name	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
Per Diem (per Federal GSA)	Up to federal maximum	4	$25.00	$100.00
Lodging (per Federal GSA)	Actual Cost (Up to Federal rate maximum)			$0.00
Lodging Taxes and Fees (per Federal GSA)	Actual Cost			$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			$0.00
Vehicle Mileage (per Federal GSA)	Up to Federal rate maximum	3600	$0.70	$2,520.00
Vehicle Owned or Leased (no mileage charge allowed)	$32.50/half day (4 hours or less) or $65/full day	3	$65.00	$195.00
Vehicle Rental	Actual Cost (Up to $55/day)	2	$55.00	$110.00
Tolls	Actual Cost	142	$1.50	$213.00
Parking	Actual Cost	2	$35.00	$70.00
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)	4	$25.00	$100.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)	2850	$0.18	$513.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)	32	$315.00	$10,080.00
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)	1	$250.00	$250.00
Advertisements	Actual Cost (Submit supporting documentation)	4	$400.00	$1,600.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)	4	$1,125.00	$4,500.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)	6	$250.00	$1,500.00
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
Utliity 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)	6	$150.00	$900.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)	1	$600.00	$600.00
Newspaper Notice	Actual Cost	2	$750.00	$1,500.00
Field Supplies	Actual Cost	2	$50.00	$100.00
Property Titles	Actual Cost	80	$800.00	$64,000.00
			TOTAL DIRECT COSTS:	**$88,851.00**

Local Public Agency: Lake County Division of Transportation

County: Lake

Section Number: 25-00113-21-WR

Consultant / Subconsultant Name:

Job Number:

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE 161.77%

COMPLEXITY FACTOR 0

TASK	DIRECT COSTS (not included in row totals)	MANHOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
1.0 Collection & Evaluation of Data		134	7,069	11,436	2,333		20,838	0.77%
2.0 Surveys		48	3,311	5,356	1,093		9,760	0.36%
3.0 Drainage Analysis		1498	81,849	132,407	27,010		241,266	8.97%
4.0 Environ Data Coord Inventory Analysis		722	39,491	63,885	13,032		116,408	4.33%
5.0 Crash Analysis		100	5,001	8,090	1,650		14,741	0.55%
6.0 Traffic Operational Analysis		994	50,693	82,006	16,729		149,428	5.56%
7.0 Alternate Geometric Studies		1636	86,300	139,608	28,479		254,387	9.46%
8.0 Trans Management Plan		336	17,246	27,899	5,691		50,836	1.89%
9.0 Concept Prelim Structural Design		884	48,655	78,709	16,056		143,420	5.33%
10.0 Geotechnical Investigation		16	1,165	1,884	384		3,433	0.13%
11.0 Public Involvement		1192	60,841	98,422	20,077		179,340	6.67%
12.0 Prepare Project Develop Report		240	11,101	17,958	3,663		32,722	1.22%
13.0 Agency Coordination		138	9,132	14,773	3,014		26,919	1.00%
14.0 Project Management/Admin	88,851	480	41,188	66,630	13,592		210,261	7.82%
15.0 QA/QC		269	22,572	36,515	7,449		66,536	2.47%
Accurate Group, Inc.			-	-	-	99,909	99,909	3.71%
Baxter & Woodman, Inc.			-	-	-	578,647	578,647	21.51%
Interra, Inc.			-	-	-	462,896	462,896	17.21%
			-	-	-		-	
			-	-	-		-	
Subconsultant DL					27,766.00		$27,766.00	1.03%
TOTALS	88,851	8687	485,614	785,578	188,018	1,141,452	2,689,513	100.00%

Local Public Agency
Lake County Division of Transportation

County
Lake

Section Number
25-00113-21-WR

Consultant / Subconsultant Name

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			1.0 Collection & Evaluation of Data			2.0 Surveys			3.0 Drainage Analysis			4.0 Environ Data Coord Inventory Analysis			5.0 Crash Analysis		
		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	90.00	247.0	2.84%	2.56															
Project Manager IV	90.00	415.0	4.78%	4.30	34	25.37%	22.84										10	10.00%	9.00
Senior Civil Engineer III	89.38	266.0	3.06%	2.74													10	10.00%	8.94
Senior Civil Engineer II	76.47	656.0	7.55%	5.77							599	39.99%	30.58	4	0.55%	0.42			
Senior Civil Engineer I	68.44	846.0	9.74%	6.66				32	66.67%	45.62				4	0.55%	0.38			
Civil Engineer II	48.64	882.0	10.15%	4.94										210	29.09%	14.15			
Civil Engineer I	40.09	2,719.0	31.30%	12.55	100	74.63%	29.92				899	60.01%	24.06	10	1.39%	0.56	80	80.00%	32.07
Transportation Planner II	61.38	210.0	2.42%	1.48										210	29.09%	17.85			
Senior Environmental Scier	70.05	182.0	2.10%	1.47				16	33.33%	23.35				166	22.99%	16.11			
Environmental Scientist I	32.03	118.0	1.36%	0.44										118	16.34%	5.23			
Senior Structural Engineer	90.00	24.0	0.28%	0.25															
Structural Engineer III	66.36	208.0	2.39%	1.59															
Structural Engineer II	52.82	330.0	3.80%	2.01															
Structural Technician II	47.86	330.0	3.80%	1.82															
Senior Communications Co	68.64	184.0	2.12%	1.45															
Communications Coordinat	52.39	400.0	4.60%	2.41															
Communications Coordinat	37.99	200.0	2.30%	0.87															
Senior Graphic Designer	47.34	400.0	4.60%	2.18															
Project Support IV	54.34	54.0	0.62%	0.34															
Project Support II	39.50	16.0	0.18%	0.07															
		0.0																	
TOTALS		8687.0	100%	$55.90	134.0	100.00%	$52.76	48.0	100%	$68.98	1498.0	100%	$54.64	722.0	100%	$54.70	100.0	100%	$50.01

Local Public Agency
Lake County Division of Transportation

County
Lake

Section Number
25-00113-21-WR

Consultant / Subconsultant Name

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	6.0 Traffic Operational Analysis			7.0 Alternate Geometric Studies			8.0 Trans Management Plan			9.0 Concept Prelim Structural Design			10.0 Geotechnical Investigation			11.0 Public Involvement		
		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	90.00				16	0.98%	0.88										4	0.34%	0.30
Project Manager IV	90.00	34	3.42%	3.08	40	2.44%	2.20	12	3.57%	3.21				4	25.00%	22.50	4	0.34%	0.30
Senior Civil Engineer III	89.38	76	7.65%	6.83															
Senior Civil Engineer II	76.47																		
Senior Civil Engineer I	68.44				632	38.63%	26.44	100	29.76%	20.37				4	25.00%	17.11			
Civil Engineer II	48.64	632	63.58%	30.92				40	11.90%	5.79									
Civil Engineer I	40.09	252	25.35%	10.16	948	57.95%	23.23	184	54.76%	21.96									
Transportation Planner II	61.38																		
Senior Environmental Scientis	70.05																		
Environmental Scientist I	32.03																		
Senior Structural Engineer IV	90.00										24	2.71%	2.44						
Structural Engineer III	66.36										200	22.62%	15.01	8	50.00%	33.18			
Structural Engineer II	52.82										330	37.33%	19.72						
Structural Technician II	47.86										330	37.33%	17.87						
Senior Communications Coor	68.64																184	15.44%	10.60
Communications Coordinator	52.39																400	33.56%	17.58
Communications Coordinator	37.99																200	16.78%	6.37
Senior Graphic Designer	47.34																400	33.56%	15.89
Project Support IV	54.34																		
Project Support II	39.50																		
TOTALS		994.0	100%	$51.00	1636.0	100%	$52.75	336.0	100%	$51.33	884.0	100%	$55.04	16.0	100%	$72.79	1192.0	100%	$51.04

Local Public Agency
Lake County Division of Transportation

County
Lake

Section Number
25-00113-21-WR

Consultant / Subconsultant Name

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 3 **OF** 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	12.0 Prepare Project Develop Report			13.0 Agency Coordination			14.0 Project Management/Admin			15.0 QA/QC			Accurate Group, Inc.			Baxter & Woodman, Inc.		
		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	90.00				6	4.35%	3.91	211	43.96%	39.56	10	3.72%	3.35						
Project Manager IV	90.00	16	6.67%	6.00	40	28.99%	26.09	211	43.96%	39.56	10	3.72%	3.35						
Senior Civil Engineer III	89.38										180	66.91%	59.80						
Senior Civil Engineer II	76.47										53	19.70%	15.07						
Senior Civil Engineer I	68.44	24	10.00%	6.84	46	33.33%	22.81	4	0.83%	0.57									
Civil Engineer II	48.64																		
Civil Engineer I	40.09	200	83.33%	33.41	46	33.33%	13.36												
Transportation Planner II	61.38																		
Senior Environmental Scientis	70.05																		
Environmental Scientist I	32.03																		
Senior Structural Engineer IV	90.00																		
Structural Engineer III	66.36																		
Structural Engineer II	52.82																		
Structural Technician II	47.86																		
Senior Communications Coor	68.64																		
Communications Coordinator	52.39																		
Communications Coordinator	37.99																		
Senior Graphic Designer	47.34																		
Project Support IV	54.34							54	11.25%	6.11									
Project Support II	39.50							0			16	5.95%	2.35						
TOTALS		240.0	100%	$46.25	138.0	100%	$66.18	480.0	100%	$85.81	269.0	100%	$83.91	0.0	0%	$0.00	0.0	0%	$0.00

Illinois Department of Transportation

EXHIBIT D

COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

FIXED RAISE

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	25-00113-21-WR

Prime Consultant (Firm) Name	Prepared By	Date
HDR Engineering, Inc.	Jay Coleman	10/22/2025

Consultant / Subconsultant Name	Job Number
Baxter & Woodman, Inc.	

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	**36**	**MONTHS**	**OVERHEAD RATE**	**163.36%**
START DATE	**12/22/2025**		**COMPLEXITY FACTOR**	**0**
RAISE DATE	**12/28/2025**		**% OF RAISE**	**3.00%**
END DATE	12/21/2028			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	12/22/2025	12/28/2025	0	0.00%
1	12/29/2025	12/28/2026	12	34.33%
2	12/29/2026	12/28/2027	12	35.36%
3	12/29/2027	12/28/2028	12	36.42%

The total escalation = 6.12%

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	25-00113-21-WR

Consultant / Subconsultant Name	Job Number
Baxter & Woodman, Inc.	

PAYROLL RATES

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

MAXIMUM PAYROLL RATE	**90.00**
ESCALATION FACTOR	**6.12%**

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Executive Vice President	$90.00	$90.00
Vice President	$85.42	$90.00
Engineer VII	$73.38	$77.87
Engineer VI	$71.42	$75.79
Engineer V	$60.15	$63.83
Engineer IV	$53.75	$57.04
Engineer III	$47.08	$49.96
Engineer II	$40.63	$43.12
Engineer I	$36.35	$38.57
Electrical Automation Engineer IV	$53.75	$57.04
Environ. Scientist V	$58.58	$62.17
Environ. Scientist IV	$43.00	$45.63
Engineer Tech V	$56.32	$59.77
Engineer Tech IV	$47.93	$50.86
Engineer Tech III	$41.63	$44.18
Engineer Tech II	$34.33	$36.43
Engineer Tech I	$30.00	$31.84
Spatial Tech. Prof. IV	$52.00	$55.18
Spatial Tech. Prof. II	$35.00	$37.14
Survey Manager	$55.00	$58.37
Surveyor, Project	$42.83	$45.45
Survey Tech. I	$27.63	$29.32
CADD Technician III	$46.45	$49.29
Marketing Prof. IV	$45.00	$47.75
Marketing Prof. III	$43.25	$45.90
Admin. Support IV	$40.33	$42.80

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	25-00113-21-WR
Consultant / Subconsultant Name		**Job Number**
Baxter & Woodman, Inc.		

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	936	$0.70	$655.20
Vehicle Owned or Leased	$32.50/half day (4 hours or less) or $65/full day	52	$65.00	$3,380.00
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
Utliity 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
Drone	$250/day	3	$250.00	$750.00
				$0.00
				$0.00
				$0.00
			TOTAL DIRECT COSTS:	**$4,785.20**

Local Public Agency
Lake County Division of Transportation

County
Lake

Section Number
25-00113-21-WR

Consultant / Subconsultant Name
Baxter & Woodman, Inc.

Job Number

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE 163.36%

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
Task 1 Data Collection	206	374	18,085	29,544	5,968		53,597	9.26%
Task 2 Surveys	3,418	200	9,219	15,061	3,042		27,322	4.72%
Task 3 Drainage Analysis	51	304	15,029	24,551	4,960		44,540	7.70%
Task 4 Environmental	103	132	7,015	11,460	2,315		20,790	3.59%
Task 6 Traffic Operational Analysis		310	18,453	30,145	6,089		54,687	9.45%
Task 7 Alternate Geometric Studies		888	52,045	85,021	17,175		154,241	26.66%
Task 8 Transportation Mgt Plan		184	11,477	18,748	3,787		34,012	5.88%
Task 9 Concept & Prelim Str Design		152	9,000	14,703	2,970		26,673	4.61%
Task 10 Geotechnical Investigation	1,007	72	3,652	5,966	1,205		10,823	1.87%
Task 11 Public Involvement		424	23,888	39,024	7,883		70,795	12.23%
Task 12 Prepare PDR		24	1,444	2,359	477		4,280	0.74%
Task 13 Agency Coordination		60	3,728	6,090	1,230		11,048	1.91%
Task 14 Project Management		202	14,572	23,805	4,809		43,186	7.46%
Task 15 QA/QC		79	6,029	9,849	1,990		17,868	3.09%
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Subconsultant DL							$0.00	
Direct Costs Total ===>	$4,785.20						**$4,785.20**	0.83%
TOTALS		3405	193,636	316,326	63,900	-	578,647	100.00%

509,962

Local Public Agency
Lake County Division of Transportation

County
Lake

Section Number
25-00113-21-WR

Consultant / Subconsultant Name
Baxter & Woodman, Inc.

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Task 1 Data Collection			Task 2 Surveys			Task 3 Drainage Analysis			Task 4 Environmental			Task 6 Traffic Operational Analysis		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Executive Vice President	90.00	0.0																	
Vice President	90.00	0.0																	
Engineer VII	77.87	116.0	3.41%	2.65													16	5.16%	4.02
Engineer VI	75.79	369.0	10.84%	8.21	8	2.14%	1.62												
Engineer V	63.83	517.0	15.18%	9.69	20	5.35%	3.41				36	11.84%	7.56				110	35.48%	22.65
Engineer IV	57.04	1,003.0	29.46%	16.80	20	5.35%	3.05				42	13.82%	7.88				144	46.45%	26.50
Engineer III	49.96	104.0	3.05%	1.53							84	27.63%	13.81						
Engineer II	43.12	136.0	3.99%	1.72	6	1.60%	0.69				70	23.03%	9.93						
Engineer I	38.57	40.0	1.17%	0.45							40	13.16%	5.08						
Electrical Automation Engir	57.04	0.0																	
Environ. Scientist V	62.17	60.0	1.76%	1.10										60	45.45%	28.26			
Environ. Scientist IV	45.63	72.0	2.11%	0.96										72	54.55%	24.89			
Engineer Tech V	59.77	0.0																	
Engineer Tech IV	50.86	0.0																	
Engineer Tech III	44.18	0.0																	
Engineer Tech II	36.43	0.0																	
Engineer Tech I	31.84	0.0																	
Spatial Tech. Prof. IV	55.18	24.0	0.70%	0.39															
Spatial Tech. Prof. II	37.14	0.0																	
Survey Manager	58.37	50.0	1.47%	0.86	20	5.35%	3.12	10	5.00%	2.92									
Surveyor, Project	45.45	538.0	15.80%	7.18	300	80.21%	36.46	190	95.00%	43.18									
Survey Tech. I	29.32	0.0																	
CADD Technician III	49.29	206.0	6.05%	2.98							32	10.53%	5.19				40	12.90%	6.36
Marketing Prof. IV	47.75	100.0	2.94%	1.40															
Marketing Prof. III	45.90	60.0	1.76%	0.81															
Admin. Support IV	42.80	10.0	0.29%	0.13															
		0.0																	
TOTALS		3405.0	100%	$56.87	374.0	100.00%	$48.36	200.0	100%	$46.10	304.0	100%	$49.44	132.0	100%	$53.15	310.0	100%	$59.53

Local Public Agency
Lake County Division of Transportation

County
Lake

Section Number
25-00113-21-WR

Consultant / Subconsultant Name
Baxter & Woodman, Inc.

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Task 7 Alternate Geometric Studies			Task 8 Transportation Mgt Plan			Task 9 Concept & Prelim Str Design			Task 10 Geotechnical Investigation			Task 11 Public Involvement			Task 12 Prepare PDR		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Executive Vice President	90.00																		
Vice President	90.00																		
Engineer VII	77.87																		
Engineer VI	75.79	100	11.26%	8.54	40	21.74%	16.48	40	26.32%	19.95	4	5.56%	4.21	50	11.79%	8.94	4	16.67%	12.63
Engineer V	63.83	148	16.67%	10.64	50	27.17%	17.35							60	14.15%	9.03			
Engineer IV	57.04	480	54.05%	30.83	80	43.48%	24.80	72	47.37%	27.02				130	30.66%	17.49	20	83.33%	47.53
Engineer III	49.96							20	13.16%	6.57									
Engineer II	43.12	40	4.50%	1.94				20	13.16%	5.67									
Engineer I	38.57																		
Electrical Automation Enginee	57.04																		
Environ. Scientist V	62.17																		
Environ. Scientist IV	45.63																		
Engineer Tech V	59.77																		
Engineer Tech IV	50.86																		
Engineer Tech III	44.18																		
Engineer Tech II	36.43																		
Engineer Tech I	31.84																		
Spatial Tech. Prof. IV	55.18													24	5.66%	3.12			
Spatial Tech. Prof. II	37.14																		
Survey Manager	58.37										20	27.78%	16.21						
Surveyor, Project	45.45										48	66.67%	30.30						
Survey Tech. I	29.32																		
CADD Technician III	49.29	120	13.51%	6.66	14	7.61%	3.75												
Marketing Prof. IV	47.75													100	23.58%	11.26			
Marketing Prof. III	45.90													60	14.15%	6.49			
Admin. Support IV	42.80																		
TOTALS		888.0	100%	$58.61	184.0	100%	$62.37	152.0	100%	$59.21	72.0	100%	$50.72	424.0	100%	$56.34	24.0	100%	$60.17

Local Public Agency
Lake County Division of Transportation

County
Lake

Section Number
25-00113-21-WR

Consultant / Subconsultant Name
Baxter & Woodman, Inc.

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Task 13 Agency Coordination			Task 14 Project Management			Task 15 QA/QC												
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Executive Vice President	90.00																		
Vice President	90.00																		
Engineer VII	77.87				80	39.60%	30.84	20	25.32%	19.71									
Engineer VI	75.79				64	31.68%	24.01	59	74.68%	56.60									
Engineer V	63.83	45	75.00%	47.87	48	23.76%	15.17												
Engineer IV	57.04	15	25.00%	14.26															
Engineer III	49.96																		
Engineer II	43.12																		
Engineer I	38.57																		
Electrical Automation Enginee	57.04																		
Environ. Scientist V	62.17																		
Environ. Scientist IV	45.63																		
Engineer Tech V	59.77																		
Engineer Tech IV	50.86																		
Engineer Tech III	44.18																		
Engineer Tech II	36.43																		
Engineer Tech I	31.84																		
Spatial Tech. Prof. IV	55.18																		
Spatial Tech. Prof. II	37.14																		
Survey Manager	58.37																		
Surveyor, Project	45.45																		
Survey Tech. I	29.32																		
CADD Technician III	49.29																		
Marketing Prof. IV	47.75																		
Marketing Prof. III	45.90																		
Admin. Support IV	42.80				10	4.95%	2.12												
TOTALS		60.0	100%	$62.13	202.0	100%	$72.14	79.0	100%	$76.32	0.0	0%	$0.00	0.0	0%	$0.00	0.0	0%	$0.00

Illinois Department of Transportation

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	25-00113-21-WR
Prime Consultant (Firm) Name	**Prepared By**	**Date**
HDR Engineering, Inc.	Jennifer Tobergte	10/24/2025
Consultant / Subconsultant Name	**Job Number**	
Accurate Group, Inc.		

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	36	MONTHS	OVERHEAD RATE	135.00%
START DATE	12/22/2025		COMPLEXITY FACTOR	0
RAISE DATE	2/1/2026		% OF RAISE	3.00%
END DATE	12/21/2028			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	12/22/2025	2/1/2026	1	2.78%
1	2/2/2026	2/1/2027	12	34.33%
2	2/2/2027	2/1/2028	12	35.36%
3	2/2/2028	1/1/2029	11	33.39%

The total escalation = 5.86%

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	25-00113-21-WR

Consultant / Subconsultant Name	Job Number
Accurate Group, Inc.	

PAYROLL RATES

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

MAXIMUM PAYROLL RATE	**90.00**
ESCALATION FACTOR	**5.86%**

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Project Manager, PE	$90.00	$90.00
Engineer V	$80.00	$84.69
Engineer IV	$65.45	$69.29
Engineer I	$36.25	$38.38
CADD Technician II	$36.50	$38.64
SUE Field Operations Manager	$67.75	$71.72
SUE Tech III	$36.50	$38.64
SUE Tech II	$26.50	$28.05

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	25-00113-21-WR

Consultant / Subconsultant Name	Job Number
Accurate Group, Inc.	

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	51	$65.00	$3,315.00
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
Utliity 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
Utility Locating Test Holes 0 - 3.28 ft	$1,052.47/each	1	$1,052.47	$1,052.47
Utility Locating Test Holes 3.29 - 6.56 ft	$1,278.33/each	2	$1,278.33	$2,556.66
Utility Locating Test Holes 6.57 - 13.12 ft	$1,783.53/each	2	$1,783.53	$3,567.06
QA/QC of Locates	$273.70/each	5	$273.70	$1,368.50
			TOTAL DIRECT COSTS:	**$11,859.69**

Local Public Agency
Lake County Division of Transportation

County
Lake

Section Number
25-00113-21-WR

Consultant / Subconsultant Name
Accurate Group, Inc.

Job Number

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE 135.00%   **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
Task 1.3.3 - Utility Locating	11,860	384	14,361	19,388	4,739		38,488	38.52%
Task 1.3.4 - Utility Base Mapping		202	7,773	10,494	2,565		20,832	20.85%
Task 1.3.5 - Preliminary Design Review and Coordination		8	564	761	186		1,511	1.51%
Task 14.3 - Project Administration		48	4,320	5,832	1,426		11,578	11.59%
Task 15.1 - Quality Plan Development		16	1,109	1,497	366		2,972	2.97%
Task 15.3 - Quality Reviews		66	4,727	6,381	1,560		12,668	12.68%
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Subconsultant DL							$0.00	
Direct Costs Total ===>	$11,859.69						$11,859.69	11.87%
TOTALS		724	32,854	44,353	10,842	-	99,909	100.00%
			77,207					

Local Public Agency
Lake County Division of Transportation

County
Lake

Section Number
25-00113-21-WR

Consultant / Subconsultant Name
Accurate Group, Inc.

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Task 1.3.3 - Utility Locating			Task 1.3.4 - Utility Base Mapping			Task 1.3.5 - Preliminary Design Review and Coordination			Task 14.3 - Project Administration			Task 15.1 - Quality Plan Development		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Project Manager, PE	90.00	48.0	6.63%	5.97										48	100.00%	90.00			
Engineer V	84.69	10.0	1.38%	1.17															
Engineer IV	69.29	76.0	10.50%	7.27							4	50.00%	34.64				16	100.00%	69.29
Engineer I	38.38	122.0	16.85%	6.47				122	60.40%	23.18									
CADD Technician II	38.64	80.0	11.05%	4.27				80	39.60%	15.30									
SUE Field Operations Mana	71.72	28.0	3.87%	2.77	24	6.25%	4.48				4	50.00%	35.86						
SUE Tech III	38.64	240.0	33.15%	12.81	240	62.50%	24.15												
SUE Tech II	28.05	120.0	16.57%	4.65	120	31.25%	8.77												
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TOTALS		724.0	100%	$45.38	384.0	100.00%	$37.40	202.0	100%	$38.48	8.0	100%	$70.50	48.0	100%	$90.00	16.0	100%	$69.29

Local Public Agency
Lake County Division of Transportation

County
Lake

Section Number
25-00113-21-WR

Consultant / Subconsultant Name
Accurate Group, Inc.

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Task 15.3 - Quality Reviews																	
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Project Manager, PE	90.00																		
Engineer V	84.69	10	15.15%	12.83															
Engineer IV	69.29	56	84.85%	58.79															
Engineer I	38.38																		
CADD Technician II	38.64																		
SUE Field Operations Manag	71.72																		
SUE Tech III	38.64																		
SUE Tech II	28.05																		
TOTALS		66.0	100%	$71.62	0.0	0%	$0.00	0.0	0%	$0.00	0.0	0%	$0.00	0.0	0%	$0.00	0.0	0%	$0.00

Illinois Department of Transportation

EXHIBIT D

COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

FIXED RAISE

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	25-00113-21-WR

Prime Consultant (Firm) Name	Prepared By	Date
HDR Engineering, Inc.	Ashok Guntaka	10/28/2025

Consultant / Subconsultant Name	Job Number
INTERRA, Inc.	Fairfield Road

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

Remarks

Geotechnical investigation for lane additions and retaining walls for Fairfield Road Phase I Preliminary Engineering – North of Gilmer Road to North of IL 60.

PAYROLL ESCALATION TABLE

CONTRACT TERM	**36**	**MONTHS**	**OVERHEAD RATE**	**128.30%**
START DATE	**12/22/2025**		**COMPLEXITY FACTOR**	**0**
RAISE DATE	**1/1/2026**		**% OF RAISE**	**3.00%**
END DATE	12/21/2028			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	12/22/2025	1/1/2026	0	0.00%
1	1/2/2026	1/1/2027	12	34.33%
2	1/2/2027	1/1/2028	12	35.36%
3	1/2/2028	1/1/2029	12	36.42%

The total escalation = 6.12%

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	

Consultant / Subconsultant Name	Job Number
INTERRA, Inc.	Fairfield Road

PAYROLL RATES

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

MAXIMUM PAYROLL RATE	**90.00**
ESCALATION FACTOR	**6.12%**

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Sr. Administrative Assistant	$34.00	$36.08
Staff Engineer	$34.00	$36.08
Geologist	$39.00	$41.39
Project Engineer	$46.00	$48.82
Senior Project Manager	$80.00	$84.90
Principal Engineer	$90.00	$90.00

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	

Consultant / Subconsultant Name	Job Number
INTERRA, Inc.	Fairfield Road

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	40	$65.00	$2,600.00
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)	28	$3,050.00	$85,400.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Utliity Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Testing of Soil Samples	Actual Cost	1	$47,610.00	$47,610.00
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
Drilling for Geotechnical & Environmental incl. traffic ct	Actual Cost (see attached)	1	$193,590.00	$193,590.00
				$0.00
				$0.00
				$0.00
			TOTAL DIRECT COSTS:	**$329,200.00**

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

Consultant / Subconsultant Name

INTERRA, Inc.

Job Number

Fairfield Road

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE 128.30%

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
Administration		44	2,564	3,289	846		6,699	1.45%
QA/QC		24	2,119	2,719	699		5,537	1.20%
Field Services		380	16,075	20,624	5,305		42,004	9.07%
Geotechnical Reports		600	30,408	39,013	10,035		79,456	17.16%
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Subconsultant DL							$0.00	
Direct Costs Total ===>	$0.00						**$329,200.00**	71.12%
TOTALS		1048	51,166	65,645	16,885	-	462,896	100.00%

116,811

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

Consultant / Subconsultant Name

INTERRA, Inc.

Job Number

Fairfield Road

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 1 OF 1

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Administration			QA/QC			Field Services			Geotechnical Reports					
		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. Administrative Assistant	36.08	24.0	2.29%	0.83	24	54.55%	19.68												
Staff Engineer	36.08	188.0	17.94%	6.47										188	31.33%	11.31			
Geologist	41.39	372.0	35.50%	14.69							372	97.89%	40.52						
Project Engineer	48.82	322.0	30.73%	15.00										322	53.67%	26.20			
Senior Project Manager	84.90	74.0	7.06%	5.99	20	45.45%	38.59	8	33.33%	28.30	8	2.11%	1.79	38	6.33%	5.38			
Principal Engineer	90.00	68.0	6.49%	5.84				16	66.67%	60.00				52	8.67%	7.80			
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TOTALS		1048.0	100%	$48.82	44.0	100.00%	$58.27	24.0	100%	$88.30	380.0	100%	$42.30	600.0	100%	$50.68	0.0	0%	$0.00