

DRAFT

Lake County Division of Transportation
Old McHenry Road – Bonnie Lane to Fairfield Road (2.4 miles)

Phase II Design Engineering Services

Section No. 19-00999-65-ES

Lake County

August 13, 2024

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Prepared by:
TranSystems Corporation
1475 E. Woodfield Rd, Suite 600
Schaumburg, IL 60173



Local Public Agency Engineering Services Agreement

Agreement For PE Agreement Type Original Using Federal Funds? [] Yes [x] No

LOCAL PUBLIC AGENCY

Local Public Agency: Lake County Division of Transportation, County: Lake, Section Number: 19-00999-65-ES, Job Number: N/A, Project Number: N/A, Contact Name: Kevin Carrier, P.E., Phone Number: (847) 377-7448, Email: kcarrier@lakecountyil.gov

SECTION PROVISIONS

Local Street/Road Name: Old McHenry Road, Key Route: 1249 (CH 32), Length: 2.25 miles, Structure Number: 049-3084, Location Termini: Bonnie Lane to Fairfield Road

Project Description: Proposed improvements along Old McHenry Road include reconstruction and widening, intersection improvements, grade separation at the CN Railway (WCL), multi-use path and drainage improvements. The project will also reconstruct 0.65 miles of Midlothian Road (Route 3503) from March St to Kruger Rd and 0.40 miles of Fairfield Road (Route 0191, CH 49) from Old McHenry Rd to Kruger Rd

Engineering Funding: [] MFT/TBP [] State [] Other, Anticipated Construction Funding: [x] Federal [x] MFT/TBP [x] State [x] Other, ICC and Railroad

AGREEMENT FOR

[] Phase I - Preliminary Engineering [x] Phase II - Design Engineering

CONSULTANT

Prime Consultant (Firm) Name: TranSystems Corporation, Contact Name: Matt Smith, P.E., Phone Number: (847) 407-5300, Email: mjsmith@transystems.com, Address: 1475 East Woodfield Road, Suite 600, City: Schaumburg, State: IL, Zip Code: 60173

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

AGREEMENT EXHIBITS

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

- EXHIBIT A: Scope of Services
- ~~EXHIBIT B: Project Schedule~~
- ~~EXHIBIT C: Qualification Based Selection (QBS) Checklist~~
- ~~EXHIBIT D: Cost Estimate of Consultant Services (BLR 05510 or BLR 05514)~~
- ~~EXHIBIT : Direct Costs Check Sheet (attach BDE 400 when using Lump Sum or Specific Rate Compensation)~~
- _____
- _____
- _____

I. THE ENGINEER AGREES,

1. To perform or be responsible for the performance of the Scope of Services presented in EXHIBIT A for the LPA in connection with the proposed improvements herein before described.
2. The Classifications of the employees used in the work shall be consistent with the employee classifications and estimated staff hours. If higher-salaried personnel of the firm, including the Principal Engineer, perform services 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, 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. The ENGINEER or subconsultant shall not discriminate on the basis of race, color, national origin or sex in the performance of this AGREEMENT. The ENGINEER shall carry out applicable requirements of 49 CFR part 26 in the administration of US Department of Transportation (US DOT) assisted contract. Failure by the Engineer to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination of this AGREEMENT or such other remedy as the LPA deems appropriate.
8. That none of the services to be furnished by the ENGINEER shall be sublet, assigned or transferred to any other party or parties without written consent of the LPA. The consent to sublet, assign or otherwise transfer any portion of the services to be furnished by the ENGINEER shall be construed to relieve the ENGINEER of any responsibility for the fulfillment of this AGREEMENT.
9. For Preliminary Engineering Contracts:
 - (a) To attend meetings and visit the site of the proposed improvement when requested to do so by representatives of the LPA 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 affixed the ENGINEER's professional seal when such seal is required by law. Such endorsements must be made by a person, duly licensed or registered in the appropriate category by the Department of Professional Regulation of the State of Illinois. It will be the ENGINEER's responsibility to affix the proper seal as required by the Bureau of Local Roads and Streets manual published by the DEPARTMENT.
 - (c) That the ENGINEER is qualified technically and is thoroughly conversant with the design standards and policies applicable for the PROJECT; and that the ENGINEER has sufficient properly trained, organized and experienced personnel to perform the services enumerated in Exhibit A (Scope of Services).
10. 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 Professional Services Selection Act (50 ILCS 510) (Exhibit C).
2. To furnish the ENGINEER all presently available survey data, plans, specifications, and project information.
3. 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.

(c) For Non-Federal County Projects - (605 ILCS 5/5-409)

- (1) For progressive payments - Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LPA, monthly payments for the work performed shall be due and payable to the ENGINEER. Such payments to be equal to the value of the partially completed work in all previous partial payments made to the ENGINEER.
- (2) Final payment - Upon approval of the work by the LPA but not later than 60 days after the work is completed and reports have been made and accepted by the LPA ~~and STATE~~, a sum of money equal to the basic fee as determined in the 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:

- Percent
- Lump Sum
- Specific Rate
- Cost plus Fixed Fee: Fixed

Total Compensation = DL + DC + OH + FF

Where:

DL is the total Direct Labor,

DC is the total Direct Cost,

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

FF is the Fixed Fee.

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

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

5. The recipient shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any US DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of US DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by US DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as violation of this AGREEMENT. Upon notification to the recipient of its failure to carry out its approved program, the 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. 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.
2. That the ENGINEER shall be responsible for any all damages to property or persons 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 DEPARTMENT, and their officers, agents and employees from all suits, claims, actions or damages liabilities, costs or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy.

The LPA will notify the ENGINEER of any error or omission believed by the LPA to be caused by the negligence of the ENGINEER as soon as practicable after the discovery. The LPA reserves the right to take immediate action to remedy any error or omission if notification is not successful; if the ENGINEER fails to reply to a notification; or if the conditions created by the error or omission are in need of urgent correction to avoid accumulation of additional construction costs or damages to property and reasonable notice is not practicable.
3. This AGREEMENT may be terminated by the LPA upon giving notice in writing to the ENGINEER at the ENGINEER's last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LPA all drawings, plats, surveys, reports, permits, agreements, soils and foundation analysis, provisions, specifications, partial and completed estimates and data, if any from soil survey and subsurface investigation with the understanding that all such materials 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.

4. ~~In the event that the DEPARTMENT 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 prior to receipt of notice of suspension. In addition, upon the resumption of services the LPA shall compensate the ENGINEER, for expenses incurred as a result of the suspension and resumption of its services, and the ENGINEER's schedule and fees for the remainder of the project shall be equitably adjusted.~~
5. 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.
6. 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.
7. The ENGINEER and LPA certify that their respective firm or agency:
- (a) has not employed or retained for commission, percentage, brokerage, contingent fee or other considerations, any firm or person (other than a bona fide employee working solely for the LPA or the ENGINEER) to solicit or secure this AGREEMENT,
 - (b) has not agreed, as an express or implied condition for obtaining this AGREEMENT, to employ or retain the services of any firm or person in connection with carrying out 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 and
 - (g) has not within a three-year period preceding this AGREEMENT had one or more public transaction (Federal, State, local) terminated for cause or default.

Where the ENGINEER or LPA is unable to certify to any of the above statements in this clarification, an explanation shall be attached to this AGREEMENT.

8. 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 included but are not limited to: acts of God or a public enemy; acts of the LPA, DEPARTMENT, or other approving party not resulting from the ENGINEER's unacceptable services; fire; strikes; and floods.

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

9. This certification is required by 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 statute conviction for a violation occurring in the 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 to maintain a drug free workplace;
 - (3) Any available drug counseling, rehabilitation and employee assistance program; and
 - (4) The penalties that may be imposed upon an employee for drug violations.
- (c) Providing a copy of the statement required by subparagraph (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- (d) Notifying the contracting, or granting agency within ten (10) days after receiving notice under part (b) 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, LPA and the Department 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 projects. The ENGINEER will submit progress reports with each invoice showing work that was completed during the last reporting period and work they expect to accomplish during the following period.

10. 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.).
11. 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 |
|------------------------------|--------------------|------------------|
| TranSystems Corporation | 43-0839725 | \$3,604,224.00 |

| Subconsultants | TIN/FEIN/SS Number | Agreement Amount |
|---------------------------------------|--------------------|------------------|
| Christopher B. Burke Engineering, LTD | 36-3468939 | \$2,690,778.00 |
| Teska Associates, Inc. | 36-3051497 | \$121,029.00 |
| Wang Engineering Inc. | 36-3191909 | \$267,505.00 |
| HBK Engineering, LLC | 46-1255956 | \$48,841.00 |
| Huff & Huff, Inc. | 36-3044842 | \$122,971.00 |
| Mathewson Right of Way Company | 20-3870734 | \$1,156,600.00 |
| Subconsultant Total | | \$4,407,724.00 |
| Prime Consultant Total | | \$3,604,224.00 |
| Total for all work | | \$8,011,948.00 |

The Total Not-to-Exceed Contract Amount shall be \$8,011,948.00 as shown above and attached.

AGREEMENT SIGNATURES

Executed by the LPA:

Attest: The of

By (Signature & Date)

By (Signature & Date)

Local Public Agency Type
 Clerk

Local Public Agency Type
 Title

(SEAL)

Executed by the ENGINEER:

Attest:

By (Signature & Date)

Title

By (Signature & Date)

Title

~~APPROVED:
Regional Engineer, Department of Transportation (Signature & Date)~~

| Local Public Agency | Prime Consultant (Firm) Name | County | Section Number |
|-----------------------------------|------------------------------|--------|----------------|
| Lake County Division of Transport | TranSystems Corporation | Lake | 19-00999-65-ES |

**EXHIBIT A
SCOPE OF SERVICES**

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

See attached scope of services.

Old McHenry Road– Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering – Lake County Division of Transportation
Section No. 19-00999-65-ES
August 13, 2024

EXHIBIT A – SCOPE OF ENGINEERING SERVICES

The scope of services consists of full Phase II design engineering services for the proposed improvements along Old McHenry Road from Bonnie Lane to Fairfield Road including a new grade separation of Old McHenry Road at the CN Railway (WCL). The project includes improvements along Midlothian Road from March Street to Commons Circle and Fairfield Road from Old McHenry Road to Kruger Road, for a total project length of 3.7 miles in the Villages of Hawthorn Woods and Lake Zurich, Lake County. The improvements will include a new railroad bridge and retaining walls for a new grade separation of Old McHenry Road with WCL. Other project items include full removal and replacement of existing pavement, shoulders, medians, and subgrade within the limits of reconstruction. A multi-use path will be constructed along all three main routes as part of the project. The Lake County Division of Transportation (LCDOT) is the lead agency for the Project.

It is understood that LCDOT is actively seeking state and federal funding for this important project that will address capacity, safety, and mobility deficiencies along Old McHenry Road based on past and future growth and will provide for non-motorized accommodations and connections within the project area.

The following is a summary of the items that are included in the proposed scope of services:

1. Data Collection and Review

- A. Obtain the following information from the appropriate agencies if not available from Phase I: existing roadway plans, right-of-way data, permit and development plans, pavement flooding history, drainage atlases, FIRM and FIS maps, National Wetland Inventory Maps, emergency response routes, public and private utility atlases, benchmark, and other survey datum information.
- B. Conduct four site visits and take pictures of project features. Prepare log of photographs for use by project team during engineering phases.
- C. Obtain digital aerial photography for use in design studies, exhibit preparation, and public involvement presentations. Aerial photography will be obtained using NearMap and will include one update during the project to reflect development updates.

EXHIBIT A – SCOPE OF ENGINEERING SERVICES

Old McHenry Road (Bonnie Lane to Fairfield Road) – Phase II Engineering

2. Value Engineering Study Support

Another LCDOT consultant, Civiltech Engineering, will lead the Value Engineering Study and Report. The Value Engineering (VE) process provides an independent peer review of the Phase I Project Development Report (PDR) and all associated documentation and provides potential cost saving recommendations. It is conducted in a weeklong workshop-style format. TranSystems and CBBEL will provide independent subject matter experts (SME's). SME's will attend the final day of the workshop to participate in discussion and view VE study presentation. The project team will review the draft VE Report, address comments, and incorporate changes as feasible. LCDOT is also welcomed to provide any additional participants.

Section 1503(a)(3) of MAP-21 states that projects on the National Highway System (NHS) receiving Federal Assistance with an estimated total cost of \$50,000,000 or more require a Value Engineering (VE) study and report.

3. Supplemental Topographic Survey

TranSystems' subconsultant, CBBEL, will lead the supplemental topographic survey and drafting. All topographic survey from Phase I Engineering will be utilized and converted to OpenRoads Designer CE, 2022 Release 3 (10.12.02.004). The supplemental survey will include, but not limited to: areas not covered by the Phase I topographic survey, detention areas (based on final grading), restrictor structures/Outlet Control of existing storm water ponds on commercial lots, interface areas of the 30% parking lot design for St. Matthews Church performed in Task 5, identified stage construction areas, future development, maintenance of traffic stages that extend outside the original survey limits.

This task will include the will include the following tasks:

- A. Horizontal Control will be set utilizing state plane coordinates and recoverable primary control will be set utilizing our GPS equipment, tied to the control for the one-foot contour Lake County LiDAR mapping.
- B. Vertical control will be set with a level circuit within the above identified supplemental survey limits establishing benchmarks and assigning elevations to the horizontal control points. The elevations will be based on NAVD 88 and correlated with available FIRM benchmarks (if any) and tied to the control for the one-foot contour Lake County LiDAR mapping.
- C. Topographic Survey will include field locate pavements, driveways, curb and gutters, pavement markings, signs, manholes, utility vaults, drainage structures, utilities, driveway culverts, cross road culverts, trees (greater than 4-inch diameter), tree/brush line, wetland flagging, etc. within the project limits. Establish all rim and invert

EXHIBIT A – SCOPE OF ENGINEERING SERVICES

Old McHenry Road (Bonnie Lane to Fairfield Road) – Phase II Engineering

- elevations, utility sizes & type, depth subterranean structure, etc., at all points of access to below-grade utilities. Utility Survey: All existing storm and sanitary sewers will be surveyed to determine rim and invert elevations and pipe sizes. Above ground facilities for any additional underground utilities including water main, gas, electric, cable, etc. will also be located. Supplemental Level B SUE evaluation will be completed by HBK Engineering in parallel to the topographic survey as noted in Task 4 below.
- D. Cross sections will be surveyed at 50' intervals within the survey limits, at driveways, and at all other grade controlling features. The cross sections will extend to the existing right-of-line along Quentin Road and Old McHenry Road. The LiDAR data collected for the roadway pavement will be utilized to assist with development of the cross sections.
 - E. Right-of-way within the identified supplemental survey limits, based on monumentation found in the field, and based on available plats of highways, subdivision plats and any other available information.
 - F. Vegetative area survey will include boundary surveys for vegetative areas along the project limits. The Vegetative Area survey will extend 30 feet outside of the existing right-of-way where practical. This information will be used to quantify vegetative area impacts and establish the areas for individual tree surveys (as required) which will be completed as part of Task 5.

4. Utility Coordination

The proposed improvements will require coordination with public and private utilities located within the project corridor. Utility coordination will include the following tasks:

- A. Coordinate with JULIE to confirm listing of potential utility facilities within the project limits. Follow up coordination with each utility company to request atlases. Develop coordination log for correspondence. It is anticipated that coordination will be required for 14 utility owners as follows: Nicor, ComEd distribution, ComEd transmission, AT&T, Aqua Illinois, Lake County Public Works, Comcast, G4S, MCI/Verizon, Village of Hawthorn Woods, Village of Lake Zurich, CLCJAWA, IDOT (traffic signals) and CN Railway.
- B. Add new utility information to topographic survey information to confirm location from Phase I files.
- C. Identify potential utility conflicts and coordinate with utility companies for necessary adjustments and relocations for 14 utility owners.
- D. Review utility relocation permit submittals.
- E. Utility easement research and coordination.

EXHIBIT A – SCOPE OF ENGINEERING SERVICES

Old McHenry Road (Bonnie Lane to Fairfield Road) – Phase II Engineering

- F. Incorporate new utility corridor(s) into the proposed improvements for utility relocations along Old McHenry Road near the underpass including but not limited to the following utilities: Nicor, Aqua Illinois, ComEd, AT&T and Lake County Public Works.
- G. Coordination with the Village of Lake Zurich to incorporate their proposed JAWA main into the proposed improvements along Midlothian Road.
- H. Coordination with Lake County Public Works for inclusion of a new sanitary sewer along the north side of Old McHenry Road.
- I. Coordination with the Village of Hawthorn Woods for various items related to public utilities.
- J. TranSystems' sub-consultant, HBK Engineering, will provide limited Subsurface Utility Engineering (SUE) locating services to supplement the utility mapping data they provided in Phase I engineering. Supplemental SUE information will be provided for select utilities in strategic locations where a high degree of accuracy is required to evaluate for potential utility impacts with the proposed improvements. A total of six (6) Level A test holes of typical size and supplemental Level B designation of various utilities are included.

Potholing will be conducted near the St. Matthew Church underground water reservoir to evaluate for potential impact by the proposed retaining wall near the reservoir.

Refer to the scope document prepared by HBK in the supporting documentation for a detailed scope of work.

5. Design Studies and Reports

- A. ROW Verification: Verify proposed right-of-way needs as part of the development of the preliminary plans and prior to finalizing the plat of highways. Necessary adjustments to fee simple takes and temporary easements will be made as refinements in the design are made.
- B. Concept Parking Lot Site Plans: Develop 30% site plan design for the St. Matthew Church and Hawthorn Garden Center parking lot reconfigurations based on the sketch layout from Phase I. Site grading, parking lot design, driveway entrance details, retaining wall layouts and wall types, staging plan, drainage layout, storm water detention, lighting photometrics and layout, utilities relocations, signing and landscaping layout will be included. The 30% plans will be submitted to LCDOT, Village of Hawthorn Woods, St. Matthew Lutheran Church and Hawthorn Garden Center for review.

EXHIBIT A – SCOPE OF ENGINEERING SERVICES

Old McHenry Road (Bonnie Lane to Fairfield Road) – Phase II Engineering

- C. Wall Type Study: Evaluate the need for and type of retaining wall along Midlothian Road (east side to minimize property impacts adjacent to multi-use path) and for the retaining wall at the southeast corner of the St. Matthew Church parking lot.
- D. Drainage Studies: CBBEL will complete the drainage design studies outlined below:
 - i. The drainage design work will include:
 - a. Design of inlet spacing, storm sewers, inline detention pipes, and ditch conveyance systems. All systems will be designed per IDOT and Lake County SMC WDO standards.
 - b. Design of open detention basins.
 - c. Assist structural design team with drainage design for retaining walls, underpass and drop structures.
 - d. Design final detention systems. Including inline detention and open detention facilities.
 - ii. All drainage items to be included in the plan preparation, such as drainage plan and profile sheets showing proposed storm sewers, ditches, and structures, existing drainage removals, temporary drainage plan, and drainage details, are included within the drainage plan preparation task.
 - iii. Drainage special provisions will be prepared as part of this task.
- E. Concept Staging: Evaluate construction staging and sub-staging to maintain traffic and minimize disruption to the traveling public while maintaining a satisfactory work zone for the Contractor on Old McHenry Road, Midlothian Road and Fairfield Road. It is anticipated that a temporary roadway run-around will be constructed to facilitate construction of the bridge over Old McHenry Road. Confirm geometry of run-around design from Phase I engineering and develop exhibits to demonstrate sub-staging for LCDOT review. Once the traffic staging concept has been approved by LCDOT, it will serve as the basis for the development of the detailed Maintenance of Traffic plans.
- F. TMP: Preparation of Work Zone Traffic Management Plan for work along Midlothian Road to be submitted to IDOT for review and approval.
- G. Design analyses and calculations for LCDOT and IDOT approval:
 - i. Pavement design calculations using IDOT BDE 5401 template for mechanistic pavement design.
 - ii. Prepare roadway superelevation calculations.

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- iii. Update Design Deviations and Design Exceptions from Phase I as required.

6. Land Acquisition Services

TranSystems’ subconsultants, Mathewson Right of Way Company (MROWCO), will lead the land acquisition services for the project with CBBEL performing the plat and legal preparation. It is estimated that approximately 51 properties will be affected.

A. The MROWCO services will include appraisal, specialty reports, appraisal review, negotiation, relocation, closing, IDOT certification, project management and related direct expenses. It is anticipated that some changes to the plans will come out of the land negotiation process.

B. The CBBEL plat and legal services will include:

- i. Reconnaissance: CBBEL will field recon the project area in an attempt to discover sufficient right-of-way, property line and Section \ Quarter line evidence within the project limits. Research will be performed at the Lake County Recorder’s office to obtain record information to aid in the recovery of the above mentioned right-of-way, property lines and Section \ Quarter lines.
- ii. Parcel Surveys: CBBEL will field locate all property and section\ quarter line evidence discovered during Task B-i. CBBEL will also locate the existing buildings within the parcels affected by the proposed right-of-way takes and easements as required for Task B-iv.
- iii. Parcel Calculations: Utilizing the information and physical evidence found in Task B-i and B-ii, CBBEL will compute the location of the existing right-of-way, property lines and Section \ Quarter lines along with the proposed takes and easement lines for this project.
- iv. Drafting of the “Plat of Highway”: CBBEL will compile all the information gathered in Task B-i thru B-iii on the “Plat of Highway” in a format suitable for submittal to and approval by IDOT & LCDOT.
- v. Prepare Written Legal Description: CBBEL will prepare written legal descriptions of all permanent right-of-way takes and temporary easements suitable for submittal to and approval by IDOT & LCDOT.
- vi. Final Submittal and Revisions: CBBEL will submit hard and electronic copies of the Plat of Highway, Legal Descriptions and Title Reports for review and approval by IDOT & LCDOT and will make the necessary revisions to the Plat of Highway and Legal Descriptions after the review comments are received.

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- vii. Preliminary Staking of Proposed ROW & Easements: CBBEL will field stake the proposed ROW & easements during the appraisal and negotiations process with land owners on a as needed basis.
- C. CBBEL will prepare two plats of easement for the St. Matthew Church and Hawthorn Garden Center cross access agreement, and includes:
- i. Initial coordination with Client.
 - ii. Order and obtain current title commitment reports for the parcels.
 - iii. Research with the Lake County Clerk’s Office \ Recording Division.
 - iv. Field recon and survey to locate existing monumentation and boundary evidence.
 - v. Office calculations and plotting of field and record data.
 - vi. CAD drafting of the Plat of Easements for the proposed easement areas.
 - vii. Write a legal description for the proposed easement areas.
 - viii. Final review and submittal by an Illinois Professional Land Surveyor.
- D. A separate plat and legal and land acquisition services will be provided for six (6) parcels for intersection improvements at Quentin Road at Highland Drive that will be implemented as a standalone improvement. Refer to Task 11 for more detailed information for pertaining the scope of work.
- E. TranSystems and CBBEL will provide support during the land acquisition process including revisions to the construction documents and meetings with property owners as needed. Refer to the scope document prepared by MROWCO in the supporting documentation for a detailed scope of work for land acquisition.

7. Geotechnical Engineering

TranSystems’ subconsultant, Wang Engineering, will lead the geotechnical engineering and prepare a Structural Geotechnical Report (SGR) for structures not included in Phase I Engineering and a Roadway Geotechnical Report (RGR). Soil borings will be included for proposed traffic signal mast arm foundation locations and infiltration borings for each of the two planned detention basins to evaluate BMPs. The scope of work includes investigations, discussions, and recommendations to be incorporated into the reports. Wang will prepare soil boring log plan sheets and soil profile sheets for inclusion in the contract plans. Project specific geotechnical special provisions will also be prepared, if

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necessary. Wang will evaluate the soil borings for poor soil conditions and provide recommendations for anticipated ground improvements.

Refer to the scope document prepared by Wang Engineering in the supporting documentation for a detailed scope of work for the geotechnical engineering task.

8. Special Waste

TranSystems' subconsultant, Huff & Huff Inc. a Subsidiary of GZA, Inc., will prepare a Preliminary Site Investigation (PSI), LPC-663, and pre-demolition structure surveys. The pre-demolition surveys are intended to identify the presence of and sampling of various materials, including potential asbestos-containing materials (ACM), potential lead-based paint (LBP), and identification of potential universal wastes, including mercury containing light fixtures and switches. This task includes the following:

A. Preliminary Site Investigation (PSI) and LPC-663 Form CCDD Documentation

- i. Soil Boring and Soil Sampling
- ii. Analytics
- iii. PSI Report Preparation
- iv. CCDD (LPC-Form) Documentation and CCDD facility coordination

B. Pre-Demolition Survey and Reporting (4 Properties / 5 Structures)

The primary objective of the environmental sampling will be to identify, confirm through analytical testing, and quantify potential environmental hazards that require abatement and/or collection, removal, and proper disposal in advance of proposed demolition activity for each of the identified structures. Subsequently, H&H will assist Client in preparing the Special provisions language related to the environmental issues for inclusion in the bidding documents.

Pre-demolition and/or renovation surveys are required by the United States Environmental Protection Agency (USEPA national emission Standards for Hazardous Air Pollutants (NESHAP) provided in 40 CFR 61 and Illinois Administrative Code (IAC) Title 77, Chapter I, Subchapter p, Part 855. The United States Department of Labor, Occupational Safety and Health Administration (OSHA) also requires that asbestos containing materials (ACM) be identified prior to initiating demolition activities.

C. QA/QC

D. Project Administration

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Refer to the scope document prepared by Huff & Huff, Inc. in the supporting documentation for a detailed scope of work for the special waste task.

9. Environmental Studies & Permits

TranSystems' subconsultant, CBBEL, will prepare, submit, and coordinate obtaining permits and other approvals required from the following agencies: US Army Corps of Engineers (USACE), State Historic Preservation Office (SHPO), IDOT, Illinois Environmental Protection Agency (IEPA), and the Lake County Stormwater Management Commission (LSCMC).

The tasks listed below consist of the environmental and permitting scope of work. Utility permit applications will be prepared under Task 4. Before and during the permit review process, meetings will be held with the regulatory/review agencies and the client, as necessary. Responses to comments will be prepared as they are received during the review process. We anticipate two rounds of review and responses for each permit application. Coordination meetings and public outreach related to the permits are included under Task 15. This task includes the following:

- A. Wetland and Waters Field Delineation Update
- B. Boundary Confirmation and Jurisdictional Determination
- C. Threatened & Endangered Species Coordination
- D. Supplemental Tree Survey, Impact Evaluation, and Tree Mitigation Plan
- E. Lake County Watershed Development Ordinance Permit Application
- F. USACE Section 404 Clean Water Act Permit Application
- G. Soil Erosion & Sediment Control Plan Review/Coordination with LSCMC
- H. Best Management Practice Design
- I. Interagency Wetland Policy Act Coordination
- J. Section 401 CWA Individual Water Quality Certification
- K. Water Quality Pollutant Loading Analysis
- L. Prepare the Storm Water Pollution Prevention Plan and Notice of Intent
- M. Historic Preservation Coordination
- N. Preliminary Environmental Site Assessment (PESA) Update/Validation

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Refer to the scope document prepared by CBBEL in the supporting documentation for a detailed scope of work for the environmental studies and permitting task.

10. Landscape Design and Aesthetics

TranSystems' sub-consultant, Teska Associates (Teska), will lead the landscape architecture and aesthetic design for the project. This includes the aesthetics design and plan preparation for a custom form liner to be implemented on the retaining wall façades and bridge abutments along the roadway underpass. Teska will provide design plans for a custom decorative railing to be installed on top of the retaining walls and WCL bridge over Old McHenry Road. The design for the custom form liner and decorative railing will be coordinated with the Village of Hawthorn Woods. It is assumed that the additional cost for the custom aesthetic items near the bridge underpass will be borne by the Village.

Teska will develop landscape architecture design documentation for the proposed site improvements within the St. Matthew Church property.

Refer to the scope document prepared by Teska in the supporting documentation for a detailed scope of work for the landscaping and aesthetics task.

11. Traffic Signal Alternative Evaluation and Contract Documents (Quentin Rd at Highland Dr)

Based on the Phase I study, the unsignalized intersection of Quentin Road at Highland Drive meets the 8-hour, 4-hour and peak hour signal warrants in the base year (2020) existing condition. Due to the anticipated implementation of the Old McHenry Crossings project, the Quentin Road corridor is to be constructed sometime after the initial phases of Old McHenry Road. Therefore, LCDOT intends to install a new traffic signal at this location in advance of the Quentin Road corridor widening and reconstruction contract. This task consists of the following sub-tasks:

- A. Evaluation of alternatives for traffic signal installation at this location which will include comparison of a temporary or permanent signal installation, both with consideration for land acquisition, pedestrian accommodations, utility impacts, traffic operations, future MOT staging considerations, life cycle analysis and cost estimates. The alternatives evaluation will be summarized in a technical memorandum which will include a discussion of the considerations above, layout diagrams, and a recommended alternative.
- B. Preparation of contract plans, specifications and estimates (PS&E) for three plan submittals – preliminary, pre-final and final to LCDOT. It is assumed the contract will be locally let by LCDOT. This scope covers the contract preparation for either the temporary or permanent traffic signal, whichever alternative is selected by LCDOT.

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| Traffic Signal Plans (Quentin Rd at Highland Dr) | |
|---|---|
| 1 | Cover Sheet |
| 2 | Highway Standards, General Notes and Commitments |
| 3 | Summary of Quantities |
| 4 | Alignment, Ties, and Benchmarks |
| 5 | Maintenance of Traffic Plans |
| 6 | Existing Conditions Plans |
| 7 | Roadway Plan and Profile |
| 8 | Erosion Control Plans |
| 9 | Plat of Highways (for information only) <i>(By CBBEL)</i> |
| 10 | ADA Details |
| 11 | Pavement Marking and Signing Plans |
| 12 | Landscaping Plans |
| 13 | Traffic Signal Plans |

- C. Land acquisition and plat and legal services will be provided by subconsultants Mathewson Right of Way Company (MROWCO) and CBBEL respectively for six (6) parcels. Refer to Task 6D for the Land Acquisitions scope of services.
- D. LCDOT coordination and plan review meetings (2 meetings) and ongoing coordination to assist in selecting preferred traffic signal alternative.

12. Building Demolition Advanced Contract Documents

This task will consist of the preparation of building demolition contract documents for the removal of buildings and other structures, driveways, utility service lines, septic tanks, trees, and other vegetation on four residential properties along Old McHenry Road. It is assumed that this contract package will be locally let. No IDOT/FHWA coordination is anticipated.

- A. It will include the preparation of contract plans, specifications, and estimates (PS&E) for three plan submittals – preliminary, pre-final and final. The results of the Pre-Demolition Structure Surveys performed by Huff & Huff (Task 8B) will be incorporated into the contract plans and specifications for potential environmental hazards that require abatement and/or collection, removal, and proper disposal in advance of proposed demolition activity for each of the identified structures.

| Demolition Plans | |
|-------------------------|--|
| 1 | Cover Sheet |
| 2 | Highway Standards, General Notes and Commitments |
| 3 | Summary of Quantities |
| 4 | Schedule of Quantities |
| 5 | Key Plan |

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| | |
|----|---|
| 6 | Existing Conditions Plans |
| 7 | Building Demolition Plans |
| 8 | Erosion and Sediment Control Plans |
| 9 | Plat of Highways (for information only) <i>(By CBBEL)</i> |
| 10 | Details |

- B. Prepare special provisions, supplemental specifications, and check sheets of recurring special provisions.
- C. Prepare summary of quantities and estimate of construction cost based on current unit prices.
- D. Acquire demolition permits required by the Village of Hawthorn Woods and Lake County Planning, Building and Development.
- E. Locate utilities on each residential property and coordinate with each utility company to disconnect services (by TranSystems).

13. Preliminary Plans and Documents (60%)

- A. Based on the approved Phase I Preferred Improvement Plans, the TranSystems team will prepare preliminary plans to approximately 60% completion. It is anticipated that the following sheets would be included in the final contract plans as well as draft special provisions and construction cost estimate. The preliminary PS&E will be submitted to LCDOT, IDOT BLRS, and WCL for review. Plans will be prepared in English units in accordance with the IDOT CADD Manual following IDOT’s drafting guidelines using MicroStation DGN format using OpenRoads Designer CE, 2022 Release 3 (10.12.02.004).

| Plans – Volume 1 | |
|-------------------------|---|
| 1 | Cover Sheet |
| 2 | Index of Sheets and List of Standards |
| 3 | General Notes |
| 4 | Summary of Quantities |
| 5 | Typical Sections (Existing and Proposed) |
| 6 | Schedules of Quantities (submitted at Pre-Final) |
| 7 | Alignment, Ties, and Benchmarks (1”=200’) <i>(By CBBEL)</i> |
| 8 | Removal Plans (1”=20’) |
| 9 | Roadway Plan and Profile Sheets (1”=20’ H, 1”=5’ V) |
| 10 | Suggested Stages of Construction and Traffic Control (1”=50’) |
| 11 | Erosion and Sediment Control Plans (1”=50’) |

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| | |
|----|---|
| 12 | Drainage and Utility Plans (<i>By CBBEL</i>) Temporary Drainage Plans (1"=20'), Drainage Removal Plans (1"=20'), Drainage Plan and Profiles (1"=20'), Drainage Schedules, Drainage Details, Detention Pond Grading Plans (1"=50'), LCPW Sanitary Sewer Plan and Profiles (1"=50') |
| 13 | Plat of Highways (1"=50') (<i>By CBBEL</i>) |
| 14 | Intersection Details (1"=20') |
| 15 | Curb Ramp Details (1"=5') |
| 16 | Pavement Marking and Signing Plans (1"=50') |
| 17 | Landscaping Plans and Details (1"=50') |
| 18 | St. Matthew Church and Hawthorn Gardens Site Plans (1"=20') (<i>By CBBEL</i>) |
| 19 | Temporary Signal and Cable Plans (1"=20') Old McHenry Road at Quentin Road, Combined Driveway Entrance, Midlothian Road and Fairfield Road, Midlothian Road at Landover Pkwy |
| 20 | Traffic Signal Plans (1"=20') Old McHenry Road at Quentin Road, Combined Driveway Entrance, Midlothian Road and Fairfield Road, Midlothian Road at Landover Pkwy |
| 21 | Temporary Signal Interconnect Plans (1"=50') and Interconnect Schematics |
| 22 | Traffic Signal Interconnect Plans (1"=50') and Interconnect Schematics |
| 23 | WCL Bridge over Old McHenry Road (S.N. 049-3084) |
| 24 | Retaining Wall Plans |
| 25 | Aesthetic Features (<i>By Teska</i>) and other Construction Details (project specific) |
| | Plans – Volume 2 |
| 26 | Cover Sheet |
| 27 | Index of Sheets and List of Standards |
| 28 | LCDOT Details |
| 29 | IDOT District 1 Details |
| 30 | Cross Sections at 50' spacing, side streets, and driveways (1"=10' H, 1"=5' V) |
| 31 | Track General Plans |
| 32 | Track Staging Plans and Typical Sections |
| 33 | Track Demolition Plans (1"=50') – Temporary and Final |
| 34 | Track Erosion Control and Grading Plans (1"=50') – Temporary and Final |
| 35 | Track Plan and Profile (1"=50 H, 1"=5" V) – Temporary and Final |
| 36 | Track Temporary Retaining Walls |
| 37 | Track Temporary Grade Crossing Details and other Construction Details (project specific) |
| 38 | CN Standard Details |
| 39 | Track Cross Sections (1"=10' H, 1"=10' V) – Temporary and Final |

- B. Prepare special provisions, supplemental specifications, and check sheets of recurring special provisions and guide bridge special provisions.

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- C. Prepare summary of quantities and estimate of construction cost based on current unit prices. Cost estimates will include third party costs such as railroad force account work.
- D. Conduct a constructability review.
- E. Submit preliminary plan, specifications (including SWPPP) and estimates for review by LCDOT, IDOT and WCL.

14. Pre-Final Plans and Documents (95%)

Prepare pre-final plans to approximately 95% completion to be submitted to LCDOT, IDOT BLRS, and WCL. The submittal will include plans, special provisions, check sheets, and LCDOT or IDOT prepared specifications, cost estimate, estimate of time, and other documents as required by IDOT BLRS.

- A. Incorporate and/or address all comments made during the preliminary plan review. Prepare disposition of comments.
- B. Conduct a plan-in-hand field review and constructability review.
- C. Determine the cost participation arrangements (e.g. federal, State, and local shares) to be shown on the Summary of Quantities sheets.
- D. Prepare special provisions, supplemental specifications, and check sheets of recurring special provisions and guide bridge special provisions.
- E. Prepare summary of quantities and estimate of construction cost based on current unit prices. Cost estimates will include third party costs such as railroad force account work.
- F. Submit pre-final plan, specifications (including SWPPP) and estimates for review by LCDOT, IDOT and WCL.
- G. Send pre-final plans to utility companies along with transmittal on LCDOT letterhead.

15. Final Plans and Documents (100%)

Prepare final plans to approximately 100% completion to be submitted to LCDOT, IDOT BLRS, and WCL. The submittal will include plans, special provisions, check sheets, and LCDOT or IDOT prepared specifications, cost estimate, estimate of time, and other documents as required by IDOT BLRS.

- A. Incorporate and/or address all comments made during the pre-final plan review. Prepare disposition of comments.

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- B. Prepare final special provisions, supplemental specifications, and check sheets of recurring special provisions and guide bridge special provisions.
- C. Prepare final summary of quantities and estimate of construction cost based on current unit prices. Cost estimates will include third party costs such as railroad force account work.
- D. Verify all quality assurance documentation is in place for the final submission.
- E. Submit final plan, specifications (including SWPPP) and estimates for review by LCDOT, IDOT and WCL.
- F. Send final plans to utility companies along with transmittal on LCDOT letterhead.

16. Bid Set

Final for bid PS&E documents submitted to IDOT BLRS for bidding. The bid sets will include plans, special provisions, check sheets, any IDOT or LCDOT prepared specifications, cost estimate and estimate of time.

- A. Review final PS&E comments from LCDOT and IDOT and prepare dispositions to comments. Any conflicting comments between reviewers will be discussed and a final decision will be determined. The plans will be modified based on the outcome and the dispositions will be completed and transmitted to agencies with the final submittal.
- B. Prepare final for bid PS&E.
- C. Adjust the estimate of construction cost based on comments and current contract unit prices. Cost estimates will include third party costs such as railroad force account work.
- D. Prepare final technical special provisions (including SWPPP), supplemental specifications, and check sheets of recurring special provisions. Include contractor requirements for working on WCL right-of-way, as specified in railroad agreements.
- E. Prepare final grading surface model to provide as information only to the Contractor. Assume one model for the temporary condition for the run-around roadway and one for the final condition.

17. Agency Coordination and Meetings

This task includes pre-meeting preparation, attendance, and preparation of meeting minutes. Minutes (draft and final) along with meeting materials will be distributed to

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participants via email. Coordination with agencies includes email correspondence, phone conversations, providing project updates, data gathering and information sharing.

- A. LCDOT Kick-off, status, and review meetings (48 meetings), ongoing coordination to facilitate project and obtain plan approval.
- B. IDOT Kick-off, status, and review meetings (12 meetings), ongoing coordination to obtain plan approval.
- C. WCL Kick-off, status, and review meetings (12 meetings), ongoing coordination to obtain plan acceptance, and assist LCDOT in development of railroad agreements.
- D. ICC meetings and hearings (4 meetings). Project manager or engineer will attend final evidentiary hearing to provide expert witness testimony.
- E. FHWA presentations (2 meetings).
- F. Local Municipality meetings (12 meetings) and ongoing coordination.
- G. Project Team Bi-Weekly Meetings (104 meetings).

18. Public Outreach and Stakeholder Coordination

- A. Maintaining the Commitment File as required in BLRS Manual Section 22-2.09 including list of commitments made in Phase I and new commitments made through coordination with stakeholders and public agencies. Commitments may include funding arrangements which may include construction costs, signal maintenance, lighting agreements, etc. The file may also include notification requirements prior to construction, commitments to property owners, environmental commitments, drainage agreements, special construction requests or any other special agreements made between the County and property owners during right-of-way negotiations.
- B. Maintain Project Website and provide project status updates, schedule updates, and provide any new/updated exhibits as needed.
- C. Property owner meetings (30 Meetings) and coordination. This also includes design requests and design evaluations during the land acquisition process.
- D. One public information meeting will be held for the project near the end of Phase II leading into Phase III to present the final design, drainage design, tree impacts, maintenance of traffic plan, and anticipated schedule. Specific work tasks for both the Public Meeting include the following:
 - i. Compile Mailing List (including Stakeholders and all adjacent property owners).

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- ii. Preparation of Public Information Meeting Brochures/Handouts.
- iii. Preparation of Public Information Meeting Display Exhibits (Aerial Displays with final design, maintenance of traffic plan, bridge staging visualizations, and other displays as appropriate).
- iv. Attendance at two Public Information Meeting “Dry Run”.
- v. Secure location for Public Information Meeting site.
- vi. Preparation of Public Information Meeting Display Ads content for release by LCDOT.
- vii. Attendance at Public Information Meeting (4 TSC Staff & 6 CBBEL Staff).
- viii. Preparation of record summaries of the Public Information Meeting which will include at a minimum copies of all notices, meeting materials, attendance lists, comments, and responses.
- ix. Prepare a project FAQ to address most comments and individual response letters as needed.

19. Financial Plan and Funding Assistance

- A. A FHWA Financial Plan is required pursuant to 23 U.S.C 106(i) “Project approval and oversight,” based on the classification of the project being an “Other than Major Project,” which has a total estimated cost of between \$100 million and \$500 million. This task includes preparation of an Initial Financial Plan (IFP) plus six annual plan updates (2025, 2026, 2027, 2028, 2029, 2030). It is anticipated that any additional Financial Plan Updates needed will be part of a future Contract for the remainder of the life of the Old McHenry Crossings project, including all sections from the approved Phase I Report.

The Financial Plan will follow the FHWA Financial Plans Guidance (December 18, 2014) and BDE Manual Chapter 20-4. FHWA will not approve the Initial Financial Plan, but it will be subject to FHWA review to ensure compliance with Title 23 requirements for content and timeliness.

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The scope of the Financial Plan will include:

1. Project Description
2. Schedule
3. Project Cost
4. Project Funds
5. Financing Issues
6. Cash Flow
7. Risk and Response Strategies
8. Annual Update Cycle

As part of the FHWA guidance on preparing the IFP, a Cost Estimate Review (CER) workshop with the project team, LCDOT, IDOT and FHWA is required to complete a risk-based and probability-based review of the project cost and schedule to be included in the IFP. The CER workshop may be held in person or virtually, which will be determined through IDOT and FHWA coordination. The CER workshop is anticipated to occur via multiple meetings that include 1) project introduction, 2) discussion of project risks, costs/probability, and schedule, and 3) a final CER presentation and discussion for concurrence.

Per the FHWA guidance, yearly updates are required to be made to the plan for the entire construction life of the project. Current construction scheduling estimates construction to be completed in 2034. However, this contract included updates for 4 years from 2024 to 2028. The updates will need to be coordinated with IDOT BLRS D1 with regards to state and federal funding availability. The Financial Plan updates involve the following steps:

1. Update contract cost information for each of the 3 anticipated contracts. This includes cost information for any design engineering updates project letting bid costs and construction change order costs. Bid cost analysis will be completed to compare bridge, retaining wall, roadway, utility, drainage, and other cost breakdown information.
2. Update contract schedule information for each of the 3 upcoming contracts. This includes current letting dates, projected future letting dates and adjusting any contracts that are on-going or being re-packaged.
3. Coordination with the Bureau of Construction to obtain all Phase III Engineering costs and construction cost updates for all contracts under construction.
4. Coordination with LCDOT staff for updating the letting schedule and confirming the plan remains consistent with the County's Multi-Year Program and update accordingly.
5. Coordination with the Bureau of Programming for funding updates as project costs are reevaluated as bid costs are obtained and design development continues. The Financial Plan update will need to be coordinated with any funding revisions for Design Engineering, Construction Engineering and Construction.
6. Analysis of market conditions and analyze their effect on the bid costs.

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7. Update Financial Plan Document including report and corresponding tables and figures.
 8. Address comments from the District and FHWA, update and resubmit.
- B. Assist application process for funding through the STP Shared Fund Program
- C. Strategize and write federal grant applications. There are several approaches that can be used for the pursuit of funding for engineering and construction. A baseline competitive grant application can be prepared to compete for these funding opportunities. Once a baseline is created, TranSystems can adjust the application and prepare a benefit cost analysis to meet the specific grant program requirements and selection criteria. As it stands, the Project would be eligible for the following discretionary grant opportunities: BUILD, INFRA and CRISI.
- D. Conduct two meetings with LCDOT staff, elected officials and other project advocates to strategize ways to promote the project to be successful with competitive grant funding programs.

20. Project Management and Administration

- A. Prepare and submit monthly progress reports and invoices.
- B. Project management including contract administration, schedule monitoring, budget control, and internal project team meetings. Prepare and monitor the project schedule using Microsoft Project or other scheduling software, as well as perform scope of work reviews, resource planning, internal team coordination, contract administration, and invoicing.

21. QA/QC and Constructability Reviews

This task includes establishment and adherence to an approved Quality Management Plan (QMP).

QA/QC reviews will be performed in accordance with TranSystems' Quality Process prior to all major submittals.

Constructability Reviews

Perform an independent review of the plans by the construction resident engineering staff to identify potential areas that could cause a delay during construction or require extra contract work. This work is not intended to be a full QA/QC of all project documents. The scope of work for plan constructability will include:

- A. Review of the plans for missing pay items

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- B. Perform a rough check of major plan quantities to ensure magnitude of the quantity is correct
- C. Review construction staging for practicality
 - i. Utility staging
 - ii. Sufficient temporary pavement
 - iii. Identify potential staging variations to allow work to proceed pending resolution of known ROW or utility conflicts
 - iv. Check staging grade differentials at driveways and cross streets
- D. Constructability of retaining wall work and review of easements
- E. Review needs for temporary sheeting or similar
- F. Review traffic control signing
- G. Review estimated probable cost for major contract items

22. Bid Phase Support

This task includes providing LCDOT and IDOT with support during the bid process. The TranSystems team will address questions from bidders and, if necessary, will compile up to three addenda to be issued to bidders. A bid review will be performed to validate the bid prices.

Assumptions

- A. Cross sections will only be prepared for the improvements in their final configuration and will not be broken out by stage. Earthwork quantities will be reflective of the project as a whole and will not be broken out by stage. Any 3D model that is generated for the use of design or cross section creation is not intended to be a deliverable. TranSystems will produce proposed surface models intended for information only to the Contractor.
- B. WCL is responsible for the design and installation of all temporary railroad signals, crossing gates and grade crossing panels.
- C. It is assumed that ComEd transmission poles will not be impacted by the project.
- D. The following tasks or items were not included in the scope of services:

EXHIBIT A – SCOPE OF ENGINEERING SERVICES

Old McHenry Road (Bonnie Lane to Fairfield Road) – Phase II Engineering

- i. Phase III Design Support Services (attendance to preconstruction meeting, RFI's, shop drawing reviews).
- ii. Roadway lighting is not anticipated for the project along the corridors nor at intersections.
- iii. Design of private and public utility relocation plans.
- iv. Permit fees.
- v. Components of the St. Matthew Church concept plan that were presented to the Church as above and beyond what the County is responsible for (i.e. tree plantings greater than replacements or building walkway/entrance improvements).

Workhour Summary Forms

Old McHenry Road - Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering – Lake County Division of Transportation
Section No. 19-00999-65-ES
EXHIBIT B - Workhour Estimate

| Task and Description | Total Workhours | TS | CBBEL | Teska | Wang | HBK | H&H | MROWCO |
|---|------------------------|--------------|--------------|--------------|-------------|------------|----------------|---------------|
| Task 1 - Data Collection and Review | | | | | | | | |
| A. Collect Data from Agencies | 160 | 88 | 72 | - | - | - | - | - |
| B. Site Visits | 120 | 60 | 60 | - | - | - | - | - |
| C. Obtain digital aerial photography | 40 | 40 | - | - | - | - | - | - |
| Task 1 Subtotal: | 320 | 188 | 132 | - | - | - | - | - |
| Task 2 - Value Engineering Study Support | | | | | | | | |
| A. Pre-Workshop Preparation | 22 | 12 | 10 | - | - | - | - | - |
| B. VE Workshop (8 hour duration x 8 SME's) | 52 | 32 | 20 | - | - | - | - | - |
| C. Post Workshop (Review VE Report, Address Comments) | 128 | 64 | 64 | - | - | - | - | - |
| Task 2 Subtotal: | 202 | 108 | 94 | - | - | - | - | - |
| Task 3 - Supplemental Topographic Survey | | | | | | | | |
| A. Survey Coordination | 72 | 32 | 40 | - | - | - | - | - |
| B. Supplemental Topographic Survey | 320 | - | 320 | - | - | - | - | - |
| Task 3 Subtotal: | 392 | 32 | 360 | - | - | - | - | - |
| Task 4 - Utility Coordination | | | | | | | | |
| A. JULIE design locate and Utility Coordination (14 utility owners) | 700 | 700 | - | - | - | - | - | - |
| B. Update utility base map with new information since Phase I | 256 | 256 | - | - | - | - | - | - |
| C. Identify conflicts and coordinate with utilities for adjustments/relocations | 336 | 168 | 168 | - | - | - | - | - |
| D. Review permit submittals (14 utils, 3 submittals ea) | 252 | 252 | - | - | - | - | - | - |
| E. Easement coordination | 160 | - | 160 | - | - | - | - | - |
| F. Proposed utility corridors for relocations | 80 | 80 | - | - | - | - | - | - |
| G. Coordination with Lake Zurich for proposed JAWA | 104 | 24 | 80 | - | - | - | - | - |
| H. Coordination with Lake County Public Works for sanitary sewer | 72 | 24 | 48 | - | - | - | - | - |
| I. Coordination with Village of Hawthorn Woods for various utilities | 48 | 12 | 36 | - | - | - | - | - |
| J. Supplemental utility locates (by HBK) | 318 | 16 | 8 | - | - | 294 | - | - |
| Task 4 Subtotal: | 2,326 | 1,532 | 500 | - | - | 294 | - | - |
| Task 5 - Design Studies and Reports | | | | | | | | |
| A. ROW Verification | 400 | 260 | 140 | - | - | - | - | - |
| B. St. Matthew 30% Design Development & Associated Engineering Studies | 1,068 | 100 | 968 | - | - | - | - | - |
| C. Wall Type Study | 168 | 168 | - | - | - | - | - | - |
| D. Drainage Studies | 912 | - | 912 | - | - | - | - | - |
| E. Concept Staging | 536 | 400 | 136 | - | - | - | - | - |
| F. Traffic Management Plan | 80 | - | 80 | - | - | - | - | - |
| G. Design analyses and calculations | 416 | 256 | 160 | - | - | - | - | - |
| Task 5 Subtotal: | 3,580 | 1,184 | 2,396 | - | - | - | - | - |

Old McHenry Road - Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering – Lake County Division of Transportation
Section No. 19-00999-65-ES
EXHIBIT B - Workhour Estimate

| Task and Description | Total Workhours | TS | CBBEL | Teska | Wang | HBK | H&H | MROWCO |
|---|------------------------|------------|--------------|--------------|-------------|------------|----------------|---------------|
| Task 6 - Land Acquisition Services | | | | | | | | |
| A. Appraisals, Specialty Reports, Appraisal Review, Negotiation, Relocation, Closing, IDOT Certification, Project Management, & Direct Expenses - by Mathewson (refer to scope & fee proposal by Mathewson) | 390 | - | - | - | - | - | - | 390 |
| B. Plat & Legals | 1,688 | - | 1,688 | - | - | - | - | - |
| C. St. Matthew/Garden Center Cross Access Plat of Easement | - | - | 104 | - | - | - | - | - |
| D. Quentin/Highland Intersection Plat and Land Acquisition Services | - | - | 286 | - | - | - | - | - |
| E. Land Acquisition Coordination with LCDOT and Mathewson and Property Owners | 588 | 180 | 408 | - | - | - | - | - |
| Task 6 Subtotal: | 3,056 | 180 | 2,486 | - | - | - | - | 390 |
| Task 7 - Geotechnical Engineering | | | | | | | | |
| A. Geotechnical Engineering services - by Wang Engineering (refer to scope & fee proposal by Wang) | 700 | - | - | - | 700 | - | - | - |
| B. Geotechnical Coordination with Wang (SGR & RGR reviews) | 88 | 72 | 16 | - | - | - | - | - |
| Task 7 Subtotal: | 788 | 72 | 16 | - | 700 | - | - | - |
| Task 8 - Special Waste | | | | | | | | |
| A. PSI & LPC-663 | 319 | 112 | 32 | - | - | - | 175 | - |
| B. Pre-Demolition Survey and Reporting | 245 | 72 | - | - | - | - | 173 | - |
| C. QA/QC (Huff & Huff only) | 20 | - | - | - | - | - | 20 | - |
| D. Project Management (Huff & Huff only) | 20 | - | - | - | - | - | 20 | - |
| Task 8 Subtotal: | 604 | 184 | 32 | - | - | - | 388 | - |
| Task 9 - Environmental Studies & Permits | | | | | | | | |
| A. Wetland and Waters Field Delineation Update | 94 | - | 94 | - | - | - | - | - |
| B. Boundary Confirmation and Jurisdictional Determination | 20 | - | 20 | - | - | - | - | - |
| C. Threatened & Endangered Species Coordination | 50 | - | 50 | - | - | - | - | - |
| D. Supplemental Tree Survey, Impact Evaluation, and Tree Mitigation Plan | 136 | - | 136 | - | - | - | - | - |
| E. Lake County Watershed Development Ordinance Permit Application | 124 | - | 124 | - | - | - | - | - |
| F. USACE Section 404 Clean Water Act Permit Application | 228 | - | 228 | - | - | - | - | - |
| G. Soil Erosion & Sediment Control Plan Review/Coordination with LSCMC | 32 | - | 32 | - | - | - | - | - |
| H. Best Management Practice Design | 212 | - | 212 | - | - | - | - | - |
| I. Interagency Wetland Policy Act Coordination | 88 | - | 88 | - | - | - | - | - |
| J. Section 401 CWA Individual Water Quality Certification | 120 | - | 120 | - | - | - | - | - |
| K. Water Quality Pollutant Loading Analysis | 168 | - | 168 | - | - | - | - | - |
| L. Prepare the Storm Water Pollution Prevention Plan and Notice of Intent | 72 | - | 72 | - | - | - | - | - |
| M. Historic Preservation Coordination | 38 | - | 38 | - | - | - | - | - |
| N. Preliminary Environmental Site Assessment (PESA) Update/Validation | 88 | - | 88 | - | - | - | - | - |
| O. Permits Coordination & Support | 350 | 350 | - | - | - | - | - | - |
| Task 9 Subtotal: | 1,820 | 350 | 1,470 | - | - | - | - | - |

Old McHenry Road - Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering – Lake County Division of Transportation
Section No. 19-00999-65-ES
EXHIBIT B - Workhour Estimate

| Task and Description | Total Workhours | TS | CBBEL | Teska | Wang | HBK | H&H | MROWCO |
|---|------------------------|--------------|--------------|--------------|-------------|------------|----------------|---------------|
| Task 10 - Landscape Design and Aesthetics | | | | | | | | |
| A. Old McHenry Road Aesthetic Design Documentation - refer to Tasks 11 through 14 and Exhibit B1 for Teska hours (TS Coordination) | 32 | 32 | - | - | - | - | - | - |
| B. St. Matthew Church - Landscape Architectural Design Documentation - refer to Tasks 11 through 14 and Exhibit B1 for Teska hours (CBBEL Coordination) | 32 | - | 32 | - | - | - | - | - |
| Task 10 Subtotal: | 64 | 32 | 32 | - | - | - | - | - |
| Task 11 - Traffic Signal Alternative Evaluation and Contract Documents (Quentin Rd at Highland Dr) | | | | | | | | |
| A. Alternatives Evaluation | 100 | 60 | 40 | - | - | - | - | - |
| B. Plans, Specs & Estimates - refer to Exhibit B1 for detail | 635 | 635 | - | - | - | - | - | - |
| C. Plat & Legals (Included in Task 6B) | - | - | - | - | - | - | - | - |
| D. LCDOT Coordination and Meetings (2 meetings) | 24 | 24 | - | - | - | - | - | - |
| Task 11 Subtotal: | 759 | 719 | 40 | - | - | - | - | - |
| Task 12 - Building Demolition Advanced Contract Documents | | | | | | | | |
| A. Plans, Specs & Estimates - refer to Exhibit B2 for detail | 410 | 360 | 50 | - | - | - | - | - |
| B. Demolition Permits (Hawthorn Woods & LC Planning, Building & Development) | 80 | 80 | - | - | - | - | - | - |
| C. Locate utilities and coordinate disconnection of services | 40 | 40 | - | - | - | - | - | - |
| Task 12 Subtotal: | 530 | 480 | 50 | - | - | - | - | - |
| Task 13 - Preliminary Plans and Documents (60%) | | | | | | | | |
| A. Plans, Specs & Estimates - refer to Exhibit B3 for detail | 8,594 | 5,717 | 2,653 | 224 | - | - | - | - |
| Task 13 Subtotal: | 8,594 | 5,717 | 2,653 | 224 | - | - | - | - |
| Task 14 - Pre-Final Plans and Documents (95%) | | | | | | | | |
| A. Plans, Specs & Estimates - refer to Exhibit B3 for detail | 8,616 | 5,735 | 2,629 | 252 | - | - | - | - |
| Task 14 Subtotal: | 8,616 | 5,735 | 2,629 | 252 | - | - | - | - |
| Task 15 - Final Plans and Documents (100%) | | | | | | | | |
| A. Plans, Specs & Estimates - refer to Exhibit B3 for detail | 2,344 | 1,578 | 710 | 56 | - | - | - | - |
| Task 15 Subtotal: | 2,344 | 1,578 | 710 | 56 | - | - | - | - |
| Task 16 - Bid Set | | | | | | | | |
| A. Plans, Specs & Estimates - refer to Exhibit B3 for detail | 1,141 | 772 | 341 | 28 | - | - | - | - |
| Task 16 Subtotal: | 1,141 | 772 | 341 | 28 | - | - | - | - |
| Task 17 - Agency Coordination and Meetings | | | | | | | | |
| A. LCDOT coordination and meetings (48 meetings) | 456 | 240 | 192 | 24 | - | - | - | - |
| B. IDOT coordination and meetings (12 meetings) | 108 | 60 | 48 | - | - | - | - | - |
| C. WCL coordination and meetings (8 meetings) | 40 | 40 | - | - | - | - | - | - |
| D. ICC coordination and meetings (4 meetings) | 20 | 20 | - | - | - | - | - | - |
| E. FHWA presentations (2 meetings) | 16 | 4 | 12 | - | - | - | - | - |
| F. Local municipality coordination and meetings (12 meetings) | 108 | 60 | 48 | - | - | - | - | - |
| G. Permit Agency Coordination Meetings (20 meetings) & General Coordination | 200 | 40 | 160 | - | - | - | - | - |
| H. Project Team bi-weekly meetings (96 meetings) | 1,354 | 768 | 480 | 106 | - | - | - | - |
| Task 17 Subtotal: | 2,302 | 1,232 | 940 | 130 | - | - | - | - |

Old McHenry Road - Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering – Lake County Division of Transportation
Section No. 19-00999-65-ES
EXHIBIT B - Workhour Estimate

| Task and Description | Total Workhours | TS | CBBEL | Teska | Wang | HBK | H&H | MROWCO |
|---|------------------------|---------------|---------------|--------------|-------------|------------|----------------|---------------|
| Task 18 - Public Outreach and Stakeholder Coordination | | | | | | | | |
| A. Maintenance of Project Commitment File | 168 | 84 | 84 | - | - | - | - | - |
| B. Website Maintenance & Public Outreach Deliverables | 110 | - | 40 | 70 | - | - | - | - |
| C. Property owner meetings & coordination | | 105 | 105 | - | - | - | - | - |
| D. Public Information Meeting | 528 | 168 | 360 | - | - | - | - | - |
| Task 18 Subtotal: | 1,016 | 357 | 589 | 70 | - | - | - | - |
| Task 19 - Financial Plan and Funding Assistance | | | | | | | | |
| A. Project Financial Plan | | | | | | | | |
| 1. Initial Development for entire Old McHenry Crossings Project (4 sections) | 180 | 140 | 40 | - | - | - | - | - |
| 2. Annual Updates (assume 6 annual updates) | 504 | 480 | 24 | - | - | - | - | - |
| 3. Cost Estimate Review Workshop | 224 | 112 | 112 | - | - | - | - | - |
| B. Assist application process for STP and STP Shared Fund programs | 40 | 40 | - | - | - | - | - | - |
| C. Strategize and write federal grant applications (BUILD, INFRA, CRISI) | 40 | 40 | - | - | - | - | - | - |
| D. Conduct two meetings with LCDOT staff, elected officials and others to strategize project promotion to be successful with competitive grant funding programs | 48 | 32 | 16 | - | - | - | - | - |
| Task 19 Subtotal: | 1,036 | 844 | 192 | - | - | - | - | - |
| Task 20 - Project Management and Administration | | | | | | | | |
| A. Administration and Management (3%) | 1,140 | 636 | 488 | 16 | - | - | - | - |
| Task 20 Subtotal: | 1,140 | 636 | 488 | 16 | - | - | - | - |
| Task 21 - QA/QC and Constructability Reviews | | | | | | | | |
| A. 60% Preliminary Plans (5% of PS&E hours for TS and CBBEL) | 344 | 229 | 107 | 8 | - | - | - | - |
| B. 95% Prefinal Plans (5% of PS&E hours for TS and CBBEL) | 340 | 230 | 106 | 4 | - | - | - | - |
| C. 100% Final Plans (5% of PS&E hours for TS and CBBEL) | 95 | 64 | 29 | 2 | - | - | - | - |
| D. Constructability Reviews (at 60% and 95%) | 120 | 120 | - | - | - | - | - | - |
| Task 21 Subtotal: | 899 | 643 | 242 | 14 | - | - | - | - |
| Task 22 - Bid Phase Support | | | | | | | | |
| A. Respond to bidder questions | 140 | 60 | 60 | 20 | - | - | - | - |
| B. Contract Addenda (up to 3) | 720 | 360 | 360 | - | - | - | - | - |
| C. Bid review | 32 | 16 | 16 | - | - | - | - | - |
| Task 22 Subtotal: | 892 | 436 | 436 | 20 | - | - | - | - |
| Total | 42,422 | 23,011 | 16,829 | 810 | 700 | 294 | 388 | 390 |

**Old McHenry Road - Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering - Lake County Division of Transportation
Section No. 19-00999-65-ES
EXHIBIT B1 - Traffic Signal (Quentin Rd at Highland Dr) Contract Workhours Estimate**

| Sheet Description | Sheet Totals | | | | | | | | Task 11 - Preliminary Plans (60%) | | | | | Task 12 - Pre-Final (95%) | | | | | Task 13 - Final (100%) | | | | | Task 14 - Bid Set | | | | |
|---|--------------|----------|----------|----------|-------------|----------|----------|------------|-----------------------------------|--------------------|----------|----------|-----------|---------------------------|--------------------|----------|----------|-----------|------------------------|--------------------|----------|----------|-----------|-------------------|-------------------|----------|-----------|---|
| | Hrs/Sht | Sheets | | | Total Hours | | | | Hrs/Sht | 40% of Total Hours | | | | Hrs/Sht | 45% of Total Hours | | | | Hrs/Sht | 10% of Total Hours | | | | Hrs/Sht | 5% of Total Hours | | | |
| | TSC | CBBEL | Teska | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | |
| A. General Sheets | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cover Sheets | 8 | 1 | - | - | 8 | - | - | 8 | 3.2 | 3 | - | - | 3 | 3.6 | 4 | - | - | 4 | 0.8 | 1 | - | - | 1 | 0.4 | 0 | - | - | 0 |
| Hwy Stds, General Notes & Commitments | 12 | 1 | - | - | 12 | - | - | 12 | 4.8 | 5 | - | - | 5 | 5.4 | 5 | - | - | 5 | 1.2 | 1 | - | - | 1 | 0.6 | 1 | - | - | 1 |
| Summary of Quantities | 14 | 2 | - | - | 28 | - | - | 28 | 5.6 | 11 | - | - | 11 | 6.3 | 13 | - | - | 13 | 1.4 | 3 | - | - | 3 | 0.7 | 1 | - | - | 1 |
| Alignment, Ties and Benchmarks (200'=1") | 14 | 1 | - | - | 14 | - | - | 14 | 5.6 | 6 | - | - | 6 | 6.3 | 6 | - | - | 6 | 1.4 | 1 | - | - | 1 | 0.7 | 1 | - | - | 1 |
| Subtotal: | 5 | - | - | - | 62 | - | - | 62 | 25 | - | - | - | 25 | 28 | - | - | - | 28 | 6 | - | - | - | 6 | 3 | - | - | 3 | |
| B. Maintenance of Traffic Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction Staging Notes | 10 | 1 | - | - | 10 | - | - | 10 | 4.0 | 4 | - | - | 4 | 4.5 | 5 | - | - | 5 | 1.0 | 1 | - | - | 1 | 0.5 | 1 | - | - | 1 |
| Typical Sections - Prestage | 8 | 1 | - | - | 8 | - | - | 8 | 3.2 | 3 | - | - | 3 | 3.6 | 4 | - | - | 4 | 0.8 | 1 | - | - | 1 | 0.4 | 0 | - | - | 0 |
| Typical Sections - Stage 1 and 2 | 8 | 1 | - | - | 8 | - | - | 8 | 3.2 | 3 | - | - | 3 | 3.6 | 4 | - | - | 4 | 0.8 | 1 | - | - | 1 | 0.4 | 0 | - | - | 0 |
| Temporary Informational Signing Details | 16 | 1 | - | - | 16 | - | - | 16 | 6.4 | 6 | - | - | 6 | 7.2 | 7 | - | - | 7 | 1.6 | 2 | - | - | 2 | 0.8 | 1 | - | - | 1 |
| MOT Plans - Pre-Stage | 12 | 1 | - | - | 12 | - | - | 12 | 4.8 | 5 | - | - | 5 | 5.4 | 5 | - | - | 5 | 1.2 | 1 | - | - | 1 | 0.6 | 1 | - | - | 1 |
| MOT Plans - Stage 1 (50'=1") | 12 | 1 | - | - | 12 | - | - | 12 | 4.8 | 5 | - | - | 5 | 5.4 | 5 | - | - | 5 | 1.2 | 1 | - | - | 1 | 0.6 | 1 | - | - | 1 |
| MOT Plans - Stage 2 (50'=1") | 12 | 1 | - | - | 12 | - | - | 12 | 4.8 | 5 | - | - | 5 | 5.4 | 5 | - | - | 5 | 1.2 | 1 | - | - | 1 | 0.6 | 1 | - | - | 1 |
| Subtotal: | 7 | - | - | - | 78 | - | - | 78 | 31 | - | - | - | 31 | 35 | - | - | - | 35 | 8 | - | - | - | 8 | 4 | - | - | 4 | |
| C. Civil Roadway Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Removal & Existing Conditions (1"=20') | 6 | 1 | - | - | 6 | - | - | 6 | 2.4 | 2 | - | - | 2 | 2.7 | 3 | - | - | 3 | 0.6 | 1 | - | - | 1 | 0.3 | 0 | - | - | 0 |
| Roadway Plan & Profile (1"=20') | 6 | 1 | - | - | 6 | - | - | 6 | 2.4 | 2 | - | - | 2 | 2.7 | 3 | - | - | 3 | 0.6 | 1 | - | - | 1 | 0.3 | 0 | - | - | 0 |
| Erosion & Sediment Control - Sequence of Operations & Notes | 8 | 1 | - | - | 8 | - | - | 8 | 3.2 | 3 | - | - | 3 | 3.6 | 4 | - | - | 4 | 0.8 | 1 | - | - | 1 | 0.4 | 0 | - | - | 0 |
| Erosion & Sediment Control - Details | 8 | 2 | - | - | 16 | - | - | 16 | 3.2 | 6 | - | - | 6 | 3.6 | 7 | - | - | 7 | 0.8 | 2 | - | - | 2 | 0.4 | 1 | - | - | 1 |
| Plat of Highways (1"=50') Hours included in Task 6B | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADA Ramp Details (1"=5') (4 ramps @ 4 per sheets) | 54 | 1 | - | - | 54 | - | - | 54 | 21.6 | 22 | - | - | 22 | 24.3 | 24 | - | - | 24 | 5.4 | 5 | - | - | 5 | 2.7 | 3 | - | - | 3 |
| Pavement Marking Plans (1"=50') | 6 | 1 | - | - | 6 | - | - | 6 | 2.4 | 2 | - | - | 2 | 2.7 | 3 | - | - | 3 | 0.6 | 1 | - | - | 1 | 0.3 | 0 | - | - | 0 |
| Existing Signing Plans (1"=50') | 3 | 1 | - | - | 3 | - | - | 3 | 1.2 | 1 | - | - | 1 | 1.4 | 1 | - | - | 1 | 0.3 | 0 | - | - | 0 | 0.2 | 0 | - | - | 0 |
| Proposed Signing Plans (1"=50') | 6 | 1 | - | - | 6 | - | - | 6 | 2.4 | 2 | - | - | 2 | 2.7 | 3 | - | - | 3 | 0.6 | 1 | - | - | 1 | 0.3 | 0 | - | - | 0 |
| Signing Details | 8 | 1 | - | - | 8 | - | - | 8 | 3.2 | 3 | - | - | 3 | 3.6 | 4 | - | - | 4 | 0.8 | 1 | - | - | 1 | 0.4 | 0 | - | - | 0 |
| Existing Signing Schedules | 8 | 1 | - | - | 8 | - | - | 8 | 3.2 | 3 | - | - | 3 | 3.6 | 4 | - | - | 4 | 0.8 | 1 | - | - | 1 | 0.4 | 0 | - | - | 0 |
| Proposed Signing Schedules | 8 | 1 | - | - | 8 | - | - | 8 | 3.2 | 3 | - | - | 3 | 3.6 | 4 | - | - | 4 | 0.8 | 1 | - | - | 1 | 0.4 | 0 | - | - | 0 |
| Landscaping Plans (1"=50') | 8 | 1 | - | - | 8 | - | - | 8 | 3.2 | 3 | - | - | 3 | 3.6 | 4 | - | - | 4 | 0.8 | 1 | - | - | 1 | 0.4 | 0 | - | - | 0 |
| Landscaping Details | 16 | 1 | - | - | 16 | - | - | 16 | 6.4 | 6 | - | - | 6 | 7.2 | 7 | - | - | 7 | 1.6 | 2 | - | - | 2 | 0.8 | 1 | - | - | 1 |
| Subtotal: | 14 | - | - | - | 153 | - | - | 153 | 61 | - | - | - | 61 | 69 | - | - | - | 69 | 15 | - | - | - | 15 | 8 | - | - | 8 | |
| D. Traffic Signal & Lighting Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <u>Traffic Signal Plans</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Sheets | varies | 6 | - | - | 26 | - | - | 26 | varies | 10 | - | - | 10 | varies | 12 | - | - | 12 | varies | 3 | - | - | 3 | varies | 1 | - | - | 1 |
| Quentin Road at Highland Dr Traffic Signal Plans | varies | 3 | - | - | 78 | - | - | 78 | varies | 31 | - | - | 31 | varies | 35 | - | - | 35 | varies | 8 | - | - | 8 | varies | 4 | - | - | 4 |
| Traffic Signal Interconnect Plans (50'=1") | varies | 3 | - | - | 48 | - | - | 48 | varies | 19 | - | - | 19 | varies | 22 | - | - | 22 | varies | 5 | - | - | 5 | varies | 2 | - | - | 2 |
| Subtotal: | 12 | - | - | - | 152 | - | - | 152 | 61 | - | - | - | 61 | 68 | - | - | - | 68 | 15 | - | - | - | 15 | 8 | - | - | 8 | |
| E. Contract Documents | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Plotting and Packaging PDF Documents | | | | | | | | | 4 | - | - | - | 4 | 4 | - | - | - | 4 | 4 | - | - | - | 4 | 4 | - | - | - | 4 |
| Specifications | | | | | | | | | 40 | - | - | - | 40 | 30 | - | - | - | 30 | 4 | - | - | - | 4 | 4 | - | - | - | 4 |
| Construction Cost and Time Estimates | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Civil Quantity Calculations | | | | | | | | | 16 | - | - | - | 16 | 12 | - | - | - | 12 | 4 | - | - | - | 4 | 4 | - | - | - | 4 |
| Traffic Signals Quantity Calculations | | | | | | | | | 20 | - | - | - | 20 | 16 | - | - | - | 16 | 4 | - | - | - | 4 | 4 | - | - | - | 4 |
| Unit Price Evaluation | | | | | | | | | 8 | - | - | - | 8 | 4 | - | - | - | 4 | 2 | - | - | - | 2 | 2 | - | - | - | 2 |
| Subtotal: | | | | | | | | | 88 | - | - | - | 88 | 66 | - | - | - | 66 | 18 | - | - | - | 18 | 18 | - | - | 18 | |

| | MH.Total | Sheets | Sheets | Sheets | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal |
|---|------------|-----------|----------|----------|------------|----------|----------|------------|------------|----------|----------|------------|------------|----------|----------|------------|-----------|----------|----------|-----------|-----------|----------|----------|-----------|
| A. General Sheets | 62 | 5 | - | - | 62 | - | - | 62 | 25 | - | - | 25 | 28 | - | - | 28 | 6 | - | - | 6 | 3 | - | - | 3 |
| B. Maintenance of Traffic Plans | 78 | 7 | - | - | 78 | - | - | 78 | 31 | - | - | 31 | 35 | - | - | 35 | 8 | - | - | 8 | 4 | - | - | 4 |
| C. Civil Roadway Plans | 153 | 14 | - | - | 153 | - | - | 153 | 61 | - | - | 61 | 69 | - | - | 69 | 15 | - | - | 15 | 8 | - | - | 8 |
| D. Traffic Signal & Lighting Plans | 152 | 12 | - | - | 152 | - | - | 152 | 61 | - | - | 61 | 68 | - | - | 68 | 15 | - | - | 15 | 8 | - | - | 8 |
| E. Contract Documents | 190 | - | - | - | - | - | - | 190 | 88 | - | - | 88 | 66 | - | - | 66 | 18 | - | - | 18 | 18 | - | - | 18 |
| TOTALS | 635 | 38 | - | - | 445 | - | - | 445 | 266 | - | - | 266 | 266 | - | - | 266 | 63 | - | - | 63 | 40 | - | - | 40 |

Old McHenry Road - Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering – Lake County Division of Transportation
Section No. 19-00999-65-ES
EXHIBIT B2 - Building Demolition Contract PS&E Workhours Estimate

| Sheet Description | Sheet Totals | | | | | | | Task 11 - Preliminary Plans (60%) | | | | Task 12 - Pre-Final (95%) | | | | Task 13 - Final (100%) | | | | Task 14 - Bid Set | | | | | | | | |
|---|--------------|-----------|----------|----------|-------------|-----------|----------|-----------------------------------|--------------------|-----------|----------|---------------------------|--------------------|------------|-----------|------------------------|--------------------|------------|-----------|-------------------|-------------------|----------|-----------|-----------|----------|----------|----------|-----------|
| | Hrs/Sht | Sheets | | | Total Hours | | | Hrs/Sht | 40% of Total Hours | | | Hrs/Sht | 45% of Total Hours | | | Hrs/Sht | 10% of Total Hours | | | Hrs/Sht | 5% of Total Hours | | | | | | | |
| | TSC | CBBEL | Teska | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | | | | | |
| A. General Sheets | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cover Sheets | 8 | 1 | - | - | 8 | - | - | 8 | 3.2 | 3 | - | - | 3 | 3.6 | 4 | - | - | 4 | 0.8 | 1 | - | - | 1 | 0.4 | 0 | - | - | 0 |
| Hwy Stds, General Notes & Commitments | 24 | 1 | - | - | 24 | - | - | 24 | 9.6 | 10 | - | - | 10 | 10.8 | 11 | - | - | 11 | 2.4 | 2 | - | - | 2 | 1.2 | 1 | - | - | 1 |
| Summary of Quantities | 16 | 2 | - | - | 32 | - | - | 32 | 6.4 | 13 | - | - | 13 | 7.2 | 14 | - | - | 14 | 1.6 | 3 | - | - | 3 | 0.8 | 2 | - | - | 2 |
| Schedule of Quantities | 16 | 3 | - | - | 48 | - | - | 48 | 6.4 | 19 | - | - | 19 | 7.2 | 22 | - | - | 22 | 1.6 | 5 | - | - | 5 | 0.8 | 2 | - | - | 2 |
| Subtotal: | 7 | - | - | - | 112 | - | - | 112 | 45 | - | - | - | 45 | 50 | - | - | - | 50 | 11 | - | - | - | 11 | 6 | - | - | 6 | |
| B. Demo & Civil Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Key Plan | 16 | 1 | - | - | 16 | - | - | 16 | 6.4 | 6 | - | - | 6 | 7.2 | 7 | - | - | 7 | 1.6 | 2 | - | - | 2 | 0.8 | 1 | - | - | 1 |
| Existing Conditions Plans | 8 | 4 | - | - | 32 | - | - | 32 | 3.2 | 13 | - | - | 13 | 3.6 | 14 | - | - | 14 | 0.8 | 3 | - | - | 3 | 0.4 | 2 | - | - | 2 |
| Building Demolition Plans | 24 | 4 | - | - | 96 | - | - | 96 | 9.6 | 38 | - | - | 38 | 10.8 | 43 | - | - | 43 | 2.4 | 10 | - | - | 10 | 1.2 | 5 | - | - | 5 |
| Erosion and Sediment Control Plans | 16 | 4 | - | - | 64 | - | - | 64 | 6.4 | 26 | - | - | 26 | 7.2 | 29 | - | - | 29 | 1.6 | 6 | - | - | 6 | 0.8 | 3 | - | - | 3 |
| Plat of Highways (for information only) | 10 | - | 5 | - | - | 50 | - | 50 | 4.0 | - | 20 | - | 20 | 4.5 | - | 23 | - | 23 | 1.0 | - | 5 | - | 5 | 0.5 | - | 3 | - | 3 |
| Details | 10 | 4 | - | - | 40 | - | - | 40 | 4.0 | 16 | - | - | 16 | 4.5 | 18 | - | - | 18 | 1.0 | 4 | - | - | 4 | 0.5 | 2 | - | - | 2 |
| Subtotal: | 17 | 5 | - | - | 248 | 50 | - | 298 | 99 | 20 | - | - | 119 | 112 | 23 | - | - | 134 | 25 | 5 | - | - | 30 | 12 | 3 | - | - | 15 |
| C. Contract Documents | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Plotting and Packaging PDF Documents | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Specifications | - | - | - | - | - | - | - | - | - | 40 | - | - | 40 | - | 30 | - | - | 30 | - | 4 | - | - | 4 | - | 4 | - | - | 4 |
| Construction Cost and Time Estimates | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Civil Quantity Calculations | - | - | - | - | - | - | - | - | - | 40 | - | - | 40 | - | 30 | - | - | 30 | - | 4 | - | - | 4 | - | 4 | - | - | 4 |
| Unit Price Evaluation | - | - | - | - | - | - | - | - | - | 20 | - | - | 20 | - | 16 | - | - | 16 | - | 2 | - | - | 2 | - | 2 | - | - | 2 |
| Subtotal: | - | - | - | - | - | - | - | - | 104 | - | - | - | 104 | 80 | - | - | - | 80 | 14 | - | - | - | 14 | 14 | - | - | - | 14 |
| GRAND TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A. General Sheets | 112 | 7 | - | - | 112 | - | - | 112 | 45 | - | - | - | 45 | 50 | - | - | - | 50 | 11 | - | - | - | 11 | 6 | - | - | - | 6 |
| B. Demo & Civil Plans | 298 | 17 | 5 | - | 248 | 50 | - | 298 | 99 | 20 | - | - | 119 | 112 | 23 | - | - | 134 | 25 | 5 | - | - | 30 | 12 | 3 | - | - | 15 |
| C. Contract Documents | 212 | - | - | - | - | - | - | - | 104 | - | - | - | 104 | 80 | - | - | - | 80 | 14 | - | - | - | 14 | 14 | - | - | - | 14 |
| TOTALS | 622 | 24 | 5 | - | 360 | 50 | - | 410 | 248 | 20 | - | - | 268 | 242 | 23 | - | - | 265 | 50 | 5 | - | - | 55 | 32 | 3 | - | - | 35 |

Old McHenry Road - Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering - Lake County Division of Transportation
Section No. 19-00999-65-ES
EXHIBIT B3 - Contract PS&E Workhours Estimate

| Sheet Description | Sheet Totals | | | | | | | | Task 11 - Preliminary Plans (60%) | | | | | Task 12 - Pre-Final (95%) | | | | | Task 13 - Final (100%) | | | | | Task 14 - Bid Set | | | | | |
|---|--------------|-----------|----------|----------|--------------|------------|----------|--------------|-----------------------------------|------------|----------|------------|------------|---------------------------|----------|------------|------------|-----------|------------------------|------------|-----------|-----------|----------|-------------------|-----------|----------|----------|-----------|--|
| | Hrs/Sht | TSC | CBBEL | Teska | TSC | CBBEL | Teska | Subtotal | Hrs/Sht | TSC | CBBEL | Teska | Subtotal | Hrs/Sht | TSC | CBBEL | Teska | Subtotal | Hrs/Sht | TSC | CBBEL | Teska | Subtotal | Hrs/Sht | TSC | CBBEL | Teska | Subtotal | |
| A. General Sheets | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cover Sheets | 8 | 2 | - | - | 16 | - | - | 16 | 3.2 | 6 | - | - | 6 | 3.6 | 7 | - | - | 7 | 0.8 | 2 | - | - | 2 | 0.4 | 1 | - | - | 1 | |
| Index of Sheets | 12 | 1 | - | - | 12 | - | - | 12 | 4.8 | 5 | - | - | 5 | 5.4 | 5 | - | - | 5 | 1.2 | 1 | - | - | 1 | 0.6 | 1 | - | - | 1 | |
| General Notes | 14 | 2 | - | - | 28 | - | - | 28 | 5.6 | 11 | - | - | 11 | 6.3 | 13 | - | - | 13 | 1.4 | 3 | - | - | 3 | 0.7 | 1 | - | - | 1 | |
| Summary of Quantities | 8 | 20 | - | - | 160 | - | - | 160 | 3.2 | 64 | - | - | 64 | 3.6 | 72 | - | - | 72 | 0.8 | 16 | - | - | 16 | 0.4 | 8 | - | - | 8 | |
| Existing Typical Sections - Old McHenry Road | 12 | 2 | - | - | 24 | - | - | 24 | 4.8 | 10 | - | - | 10 | 5.4 | 11 | - | - | 11 | 1.2 | 2 | - | - | 2 | 0.6 | 1 | - | - | 1 | |
| Existing Typical Sections - Cross Roads | 12 | 2 | 2 | - | 24 | 24 | - | 48 | 4.8 | 10 | 10 | - | 19 | 5.4 | 11 | 11 | - | 22 | 1.2 | 2 | 2 | - | 5 | 0.6 | 1 | 1 | - | 2 | |
| Proposed Typical Sections - Old McHenry Road | 14 | 4 | - | - | 56 | - | - | 56 | 5.6 | 22 | - | - | 22 | 6.3 | 25 | - | - | 25 | 1.4 | 6 | - | - | 6 | 0.7 | 3 | - | - | 3 | |
| Proposed Typical Sections - Cross Streets | 14 | 3 | 3 | - | 42 | 42 | - | 84 | 5.6 | 17 | 17 | - | 34 | 6.3 | 19 | 19 | - | 38 | 1.4 | 4 | 4 | - | 8 | 0.7 | 2 | 2 | - | 4 | |
| Proposed Typical Sections - Details | 16 | 1 | - | - | 16 | - | - | 16 | 6.4 | 6 | - | - | 6 | 7.2 | 7 | - | - | 7 | 1.6 | 2 | - | - | 2 | 0.8 | 1 | - | - | 1 | |
| Schedule of Quantities | 6 | 10 | - | - | 60 | - | - | 60 | 2.4 | 24 | - | - | 24 | 2.7 | 27 | - | - | 27 | 0.6 | 6 | - | - | 6 | 0.3 | 3 | - | - | 3 | |
| Alignment, Ties and Benchmarks (200'=1") | 14 | - | 2 | - | - | 28 | - | 28 | 5.6 | - | 11 | - | 11 | 6.3 | - | 13 | - | 13 | 1.4 | - | 3 | - | 3 | 0.7 | - | 1 | - | 1 | |
| Subtotal: | 47 | 7 | - | - | 438 | 94 | - | 532 | 175 | 38 | - | 213 | 197 | 42 | - | 239 | 44 | 9 | - | 53 | 22 | 5 | - | 27 | 5 | - | 1 | 27 | |
| B. Maintenance of Traffic Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Notes | 10 | 1 | - | - | 10 | - | - | 10 | 4.0 | 4 | - | - | 4 | 4.5 | 5 | - | - | 5 | 1.0 | 1 | - | - | 1 | 0.5 | 1 | - | - | 1 | |
| Construction Staging Notes | 10 | 2 | - | - | 20 | - | - | 20 | 4.0 | 8 | - | - | 8 | 4.5 | 9 | - | - | 9 | 1.0 | 2 | - | - | 2 | 0.5 | 1 | - | - | 1 | |
| Typical Sections - Prestage | 8 | 4 | 1 | - | 32 | 8 | - | 40 | 3.2 | 13 | 3 | - | 16 | 3.6 | 14 | 4 | - | 18 | 0.8 | 3 | 1 | - | 4 | 0.4 | 2 | 0 | - | 2 | |
| Typical Sections - Stage 1 | 8 | 4 | 1 | - | 32 | 8 | - | 40 | 3.2 | 13 | 3 | - | 16 | 3.6 | 14 | 4 | - | 18 | 0.8 | 3 | 1 | - | 4 | 0.4 | 2 | 0 | - | 2 | |
| Typical Sections - Stage 2 | 8 | 4 | 1 | - | 32 | 8 | - | 40 | 3.2 | 13 | 3 | - | 16 | 3.6 | 14 | 4 | - | 18 | 0.8 | 3 | 1 | - | 4 | 0.4 | 2 | 0 | - | 2 | |
| Typical Sections - Stage 3 | 8 | 4 | 1 | - | 32 | 8 | - | 40 | 3.2 | 13 | 3 | - | 16 | 3.6 | 14 | 4 | - | 18 | 0.8 | 3 | 1 | - | 4 | 0.4 | 2 | 0 | - | 2 | |
| Typical Sections - Stage 4 | 8 | 4 | 1 | - | 32 | 8 | - | 40 | 3.2 | 13 | 3 | - | 16 | 3.6 | 14 | 4 | - | 18 | 0.8 | 3 | 1 | - | 4 | 0.4 | 2 | 0 | - | 2 | |
| Typical Sections - Stage 5 | 8 | 4 | 1 | - | 32 | 8 | - | 40 | 3.2 | 13 | 3 | - | 16 | 3.6 | 14 | 4 | - | 18 | 0.8 | 3 | 1 | - | 4 | 0.4 | 2 | 0 | - | 2 | |
| Temporary Pavement Details | 20 | 2 | - | - | 40 | - | - | 40 | 8.0 | 16 | - | - | 16 | 9.0 | 18 | - | - | 18 | 2.0 | 4 | - | - | 4 | 1.0 | 2 | - | - | 2 | |
| Temporary Runaround Plan | 20 | 3 | - | - | 60 | - | - | 60 | 8.0 | 24 | - | - | 24 | 9.0 | 27 | - | - | 27 | 2.0 | 6 | - | - | 6 | 1.0 | 3 | - | - | 3 | |
| Temporary Informational Signing Details | 28 | - | - | - | - | - | - | - | 11.2 | - | - | - | - | 12.6 | - | - | - | - | 2.8 | - | - | - | - | 1.4 | - | - | - | - | |
| MOT Plans - Pre-Stage | 12 | 12 | 4 | - | 144 | 48 | - | 192 | 4.8 | 58 | 19 | - | 77 | 5.4 | 65 | 22 | - | 86 | 1.2 | 14 | 5 | - | 19 | 0.6 | 7 | 2 | - | 10 | |
| MOT Plans - Stage 1 (50'=1") | 12 | 12 | 4 | - | 144 | 48 | - | 192 | 4.8 | 58 | 19 | - | 77 | 5.4 | 65 | 22 | - | 86 | 1.2 | 14 | 5 | - | 19 | 0.6 | 7 | 2 | - | 10 | |
| MOT Plans - Stage 2 (50'=1") | 12 | 12 | 4 | - | 144 | 48 | - | 192 | 4.8 | 58 | 19 | - | 77 | 5.4 | 65 | 22 | - | 86 | 1.2 | 14 | 5 | - | 19 | 0.6 | 7 | 2 | - | 10 | |
| MOT Plans - Stage 3 (50'=1") | 12 | 12 | 4 | - | 144 | 48 | - | 192 | 4.8 | 58 | 19 | - | 77 | 5.4 | 65 | 22 | - | 86 | 1.2 | 14 | 5 | - | 19 | 0.6 | 7 | 2 | - | 10 | |
| MOT Plans - Stage 4 (50'=1") | 12 | 12 | 4 | - | 144 | 48 | - | 192 | 4.8 | 58 | 19 | - | 77 | 5.4 | 65 | 22 | - | 86 | 1.2 | 14 | 5 | - | 19 | 0.6 | 7 | 2 | - | 10 | |
| MOT Plans - Stage 5 (50'=1") | 12 | 12 | 4 | - | 144 | 48 | - | 192 | 4.8 | 58 | 19 | - | 77 | 5.4 | 65 | 22 | - | 86 | 1.2 | 14 | 5 | - | 19 | 0.6 | 7 | 2 | - | 10 | |
| MOT Plans - Detours | 36 | 1 | - | - | 36 | - | - | 36 | 14.4 | 14 | - | - | 14 | 16.2 | 16 | - | - | 16 | 3.6 | 4 | - | - | 4 | 1.8 | 2 | - | - | 2 | |
| Winter Shutdown Plans | 14 | 12 | 4 | - | 168 | 56 | - | 224 | 5.6 | 67 | 22 | - | 90 | 6.3 | 76 | 25 | - | 101 | 1.4 | 17 | 6 | - | 22 | 0.7 | 8 | 3 | - | 11 | |
| Intersection Construction Staging Notes | 8 | 4 | - | - | 32 | - | - | 32 | 3.2 | 13 | - | - | 13 | 3.6 | 14 | - | - | 14 | 0.8 | 3 | - | - | 3 | 0.4 | 2 | - | - | 2 | |
| Intersection Construction Detail Sheets | 22 | 4 | - | - | 88 | - | - | 88 | 8.8 | 35 | - | - | 35 | 9.9 | 40 | - | - | 40 | 2.2 | 9 | - | - | 9 | 1.1 | 4 | - | - | 4 | |
| Traffic Control Details | 16 | 2 | 2 | - | 32 | 32 | - | 64 | 6.4 | 13 | 13 | - | 26 | 7.2 | 14 | 14 | - | 29 | 1.6 | 3 | 3 | - | 6 | 0.8 | 2 | 2 | - | 3 | |
| Subtotal: | 127 | 36 | - | - | 1,542 | 424 | - | 1,966 | 617 | 170 | - | 786 | 694 | 191 | - | 885 | 154 | 42 | - | 197 | 77 | 21 | - | 98 | 21 | - | 3 | 98 | |
| C. Civil Roadway Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Removal & Existing Conditions (1"=20') | 8 | 14 | 5 | - | 112 | 40 | - | 152 | 3.2 | 45 | 16 | - | 61 | 3.6 | 50 | 18 | - | 68 | 0.8 | 11 | 4 | - | 15 | 0.4 | 6 | 2 | - | 8 | |
| Roadway Plan & Profile (1"=20') | 12 | 21 | 10 | - | 252 | 120 | - | 372 | 4.8 | 101 | 48 | - | 149 | 5.4 | 113 | 54 | - | 167 | 1.2 | 25 | 12 | - | 37 | 0.6 | 13 | 6 | - | 19 | |
| Construction Details | 20 | 2 | 1 | - | 40 | 20 | - | 60 | 8.0 | 16 | 8 | - | 24 | 9.0 | 18 | 9 | - | 27 | 2.0 | 4 | 2 | - | 6 | 1.0 | 2 | 1 | - | 3 | |
| Erosion & Sediment Control - Sequence of Operations & Notes | 14 | - | 1 | - | - | 14 | - | 14 | 5.6 | - | 6 | - | 6 | 6.3 | - | 6 | - | 6 | 1.4 | - | 1 | - | 1 | 0.7 | - | 1 | - | 1 | |
| Erosion & Sediment Control - Stage 1 (1"=50') | 14 | - | 12 | - | - | 168 | - | 168 | 5.6 | - | 67 | - | 67 | 6.3 | - | 76 | - | 76 | 1.4 | - | 17 | - | 17 | 0.7 | - | 8 | - | 8 | |
| Erosion & Sediment Control - Stage 2 (1"=50') | 14 | - | 12 | - | - | 168 | - | 168 | 5.6 | - | 67 | - | 67 | 6.3 | - | 76 | - | 76 | 1.4 | - | 17 | - | 17 | 0.7 | - | 8 | - | 8 | |
| Erosion & Sediment Control - Stage 3 (1"=50') | 14 | - | 12 | - | - | 168 | - | 168 | 5.6 | - | 67 | - | 67 | 6.3 | - | 76 | - | 76 | 1.4 | - | 17 | - | 17 | 0.7 | - | 8 | - | 8 | |
| Erosion & Sediment Control - Details | 14 | - | 2 | - | - | 28 | - | 28 | 5.6 | - | 11 | - | 11 | 6.3 | - | 13 | - | 13 | 1.4 | - | 3 | - | 3 | 0.7 | - | 1 | - | 1 | |
| Drainage Removal (1"=20') | 8 | - | 19 | - | - | 152 | - | 152 | 3.2 | - | 61 | - | 61 | 3.6 | - | 68 | - | 68 | 0.8 | - | 15 | - | 15 | 0.4 | - | 8 | - | 8 | |
| Drainage Plan & Profile (1"=20') | 36 | - | 31 | - | - | 1,116 | - | 1,116 | 14.4 | - | 446 | - | 446 | 16.2 | - | 502 | - | 502 | 3.6 | - | 112 | - | 112 | 1.8 | - | 56 | - | 56 | |
| Proposed Pond Grading (1"=50') | 36 | - | 2 | - | - | 72 | - | 72 | 14.4 | - | 29 | - | 29 | 16.2 | - | 32 | - | 32 | 3.6 | - | 7 | - | 7 | 1.8 | - | 4 | - | 4 | |
| Drainage Schedules | 20 | - | 4 | - | - | 80 | - | 80 | 8.0 | - | 32 | - | 32 | 9.0 | - | 36 | - | 36 | 2.0 | - | 8 | - | 8 | 1.0 | - | 4 | - | 4 | |
| Drainage Details | 36 | - | 2 | - | - | 72 | - | 72 | 14.4 | - | 29 | - | 29 | 16.2 | - | 32 | - | 32 | 3.6 | - | 7 | - | 7 | 1.8 | - | 4 | - | 4 | |
| Temporary Drainage Plans (1"=20') | 6 | - | 50 | - | - | 300 | - | 300 | 2.4 | - | 120 | - | 120 | 2.7 | - | 135 | - | 135 | 0.6 | - | 30 | - | 30 | 0.3 | - | 15 | - | 15 | |
| Temporary Drainage Schedules | 20 | - | 1 | - | - | 20 | - | 20 | 8.0 | - | 8 | - | 8 | 9.0 | - | 9 | - | 9 | 2.0 | - | 2 | - | 2 | 1.0 | - | 1 | - | 1 | |
| LCPW Sanitary Sewer Plans (1"=50') | 28 | - | 8 | - | - | 224 | - | 224 | 11.2 | - | 90 | - | 90 | 12.6 | - | 101 | - | 101 | 2.8 | - | 22 | - | 22 | 1.4 | - | 11 | - | 11 | |
| Plat of Highways (1"=50') Hours included in Task 6B | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Intersection Details (1"=20') | 36 | 4 | - | - | 144 | - | - | 144 | 14.4 | 58 | - | - | 58 | 16.2 | 65 | - | - | 65 | 3.6 | 14 | - | - | 14 | 1.8 | 7 | - | - | 7 | |
| ADA Ramp Details (1"=5') (16 ramps @ 4 per sheets) | 54 | 4 | 2 | - | 216 | 108 | - | 324 | 21.6 | 86 | 43 | - | 130 | 24.3 | 97 | 49 | - | 146 | 5.4 | 22 | 11 | - | 32 | 2.7 | 11 | 5</ | | | |

Old McHenry Road - Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering - Lake County Division of Transportation
Section No. 19-00999-65-ES
EXHIBIT B3 - Contract PS&E Workhours Estimate

| Sheet Description | Sheet Totals | | | | Task 11 - Preliminary Plans (60%) | | | | | Task 12 - Pre-Final (95%) | | | | | Task 13 - Final (100%) | | | | | Task 14 - Bid Set | | | | | | | | |
|--|--------------|------------|----------|----------|-----------------------------------|--------------|------------|--------------|------------|---------------------------|-----------|------------|--------------|------------|------------------------|------------|------------|--------------|------------|-------------------|-----------|-----------|------------|-----------|------------|----------|----------|------------|
| | Hrs/Sht | TSC | CBBEL | Teska | TSC | CBBEL | Teska | Subtotal | Hrs/Sht | TSC | CBBEL | Teska | Subtotal | Hrs/Sht | TSC | CBBEL | Teska | Subtotal | Hrs/Sht | TSC | CBBEL | Teska | Subtotal | | | | | |
| Proposed Signing Plans (1"=50') | 6 | 9 | 3 | - | 54 | 18 | - | 72 | 2.4 | 22 | 7 | - | 29 | 2.7 | 24 | 8 | - | 32 | 0.6 | 5 | 2 | - | 7 | 0.3 | 3 | 1 | - | 4 |
| Signing Details | 10 | 5 | 1 | - | 50 | 10 | - | 60 | 4.0 | 20 | 4 | - | 24 | 4.5 | 23 | 5 | - | 27 | 1.0 | 5 | 1 | - | 6 | 0.5 | 3 | 1 | - | 3 |
| Existing Signing Schedules | 20 | 1 | 1 | - | 20 | 20 | - | 40 | 8.0 | 8 | 8 | - | 16 | 9.0 | 9 | 9 | - | 18 | 2.0 | 2 | 2 | - | 4 | 1.0 | 1 | 1 | - | 2 |
| Proposed Signing Schedules | 20 | 1 | 1 | - | 20 | 20 | - | 40 | 8.0 | 8 | 8 | - | 16 | 9.0 | 9 | 9 | - | 18 | 2.0 | 2 | 2 | - | 4 | 1.0 | 1 | 1 | - | 2 |
| Landscaping Plans (1"=50') | 6 | 9 | 3 | - | 54 | 18 | - | 72 | 2.4 | 22 | 7 | - | 29 | 2.7 | 24 | 8 | - | 32 | 0.6 | 5 | 2 | - | 7 | 0.3 | 3 | 1 | - | 4 |
| Landscaping Details | 20 | 1 | 1 | - | 20 | 20 | - | 40 | 8.0 | 8 | 8 | - | 16 | 9.0 | 9 | 9 | - | 18 | 2.0 | 2 | 2 | - | 4 | 1.0 | 1 | 1 | - | 2 |
| Roadway Soil Boring Plans & Logs | 4 | 2 | - | - | 8 | - | - | 8 | 1.6 | 3 | - | - | 3 | 1.8 | 4 | - | - | 4 | 0.4 | 1 | - | - | 1 | 0.2 | 0 | - | - | 0 |
| Subtotal: | 91 | 191 | - | - | 1,071 | 3,009 | - | 4,080 | 428 | 1,204 | - | - | 1,632 | 482 | 1,354 | - | - | 1,836 | 107 | 301 | - | - | 408 | 54 | 150 | - | - | 204 |
| D. Civil Site Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parking Lot Site Plan (1"=20') | 30 | - | 8 | - | - | 240 | - | 240 | 12.0 | - | 96 | - | 96 | 13.5 | - | 108 | - | 108 | 3.0 | - | 24 | - | 24 | 1.5 | - | 12 | - | 12 |
| Parking Lot Grading Plan (1"=20') | 22 | - | 8 | - | - | 176 | - | 176 | 8.8 | - | 70 | - | 70 | 9.9 | - | 79 | - | 79 | 2.2 | - | 18 | - | 18 | 1.1 | - | 9 | - | 9 |
| Parking Lot Drainage and Utility Plan (1"=50') | 54 | - | 4 | - | - | 216 | - | 216 | 21.6 | - | 86 | - | 86 | 24.3 | - | 97 | - | 97 | 5.4 | - | 22 | - | 22 | 2.7 | - | 11 | - | 11 |
| Parking Lot Electrical Plan (1"=50') | 54 | - | 3 | - | - | 162 | - | 162 | 21.6 | - | 65 | - | 65 | 24.3 | - | 73 | - | 73 | 5.4 | - | 16 | - | 16 | 2.7 | - | 8 | - | 8 |
| Parking Lot Landscaping Plan (1"=50') | 16 | - | 3 | 8 | - | 48 | 220 | 268 | 6.4 | - | 19 | 88 | 107 | 7.2 | - | 22 | 99 | 121 | 1.6 | - | 5 | 22 | 27 | 0.8 | - | 2 | 11 | 13 |
| Parking Lot Details | 12 | - | 4 | - | - | 48 | - | 48 | 4.8 | - | 19 | - | 19 | 5.4 | - | 22 | - | 22 | 1.2 | - | 5 | - | 5 | 0.6 | - | 2 | - | 2 |
| Subtotal: | - | 30 | 8 | - | - | 890 | 220 | 1,110 | - | 356 | 88 | 444 | - | 401 | 99 | 500 | - | 89 | 22 | 111 | - | 45 | 11 | - | 56 | | | |
| E. Traffic Signal & Lighting Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Traffic Signal Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Sheets | varies | 6 | - | - | 26 | - | - | 26 | varies | 10 | - | - | 10 | varies | 12 | - | - | 12 | varies | 3 | - | - | 3 | varies | 1 | - | - | 1 |
| OMR and Quentin Rd - Temp & Prop | varies | 8 | - | - | 156 | - | - | 156 | varies | 62 | - | - | 62 | varies | 70 | - | - | 70 | varies | 16 | - | - | 16 | varies | 8 | - | - | 8 |
| OMR and Combined Entrance - Temp & Prop | varies | 8 | - | - | 156 | - | - | 156 | varies | 62 | - | - | 62 | varies | 70 | - | - | 70 | varies | 16 | - | - | 16 | varies | 8 | - | - | 8 |
| OMR and Midlothian Rd - Temp & Prop | varies | 8 | - | - | 156 | - | - | 156 | varies | 62 | - | - | 62 | varies | 70 | - | - | 70 | varies | 16 | - | - | 16 | varies | 8 | - | - | 8 |
| OMR and Fairfield Rd - Temp & Prop | varies | 8 | - | - | 156 | - | - | 156 | varies | 62 | - | - | 62 | varies | 70 | - | - | 70 | varies | 16 | - | - | 16 | varies | 8 | - | - | 8 |
| Midlothian and Landover Pkwy - Temp & Prop | varies | 8 | - | - | 156 | - | - | 156 | varies | 62 | - | - | 62 | varies | 70 | - | - | 70 | varies | 16 | - | - | 16 | varies | 8 | - | - | 8 |
| Traffic Signal Interconnect Plans (50"=1") | 28 | 7 | - | - | 196 | - | - | 196 | 11.2 | 78 | - | - | 78 | 12.6 | 88 | - | - | 88 | 2.8 | 20 | - | - | 20 | 1.4 | 10 | - | - | 10 |
| Subtotal: | 53 | - | - | - | 1,002 | - | - | 1,002 | 401 | - | - | 401 | 451 | - | - | 451 | 100 | - | - | 100 | 50 | - | - | - | 50 | | | |
| F. Structural Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Underpass Retaining Wall Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Plan and Elevation | 36 | 6 | - | - | 216 | - | - | 216 | 14.4 | 86 | - | - | 86 | 16.2 | 97 | - | - | 97 | 3.6 | 22 | - | - | 22 | 1.8 | 11 | - | - | 11 |
| General Notes and Bill of Materials | 28 | 4 | - | - | 112 | - | - | 112 | 11.2 | 45 | - | - | 45 | 12.6 | 50 | - | - | 50 | 2.8 | 11 | - | - | 11 | 1.4 | 6 | - | - | 6 |
| Plan and Elevation | 28 | 14 | - | - | 392 | - | - | 392 | 11.2 | 157 | - | - | 157 | 12.6 | 176 | - | - | 176 | 2.8 | 39 | - | - | 39 | 1.4 | 20 | - | - | 20 |
| Sections and Details | 36 | 6 | - | - | 216 | - | - | 216 | 14.4 | 86 | - | - | 86 | 16.2 | 97 | - | - | 97 | 3.6 | 22 | - | - | 22 | 1.8 | 11 | - | - | 11 |
| Railing Details | 42 | 2 | - | - | 84 | - | - | 84 | 16.8 | 34 | - | - | 34 | 18.9 | 38 | - | - | 38 | 4.2 | 8 | - | - | 8 | 2.1 | 4 | - | - | 4 |
| Fence Details | 28 | 1 | - | - | 28 | - | - | 28 | 11.2 | 11 | - | - | 11 | 12.6 | 13 | - | - | 13 | 2.8 | 3 | - | - | 3 | 1.4 | 1 | - | - | 1 |
| Boring Logs | 5 | 12 | - | - | 60 | - | - | 60 | 2.0 | 24 | - | - | 24 | 2.3 | 27 | - | - | 27 | 0.5 | 6 | - | - | 6 | 0.3 | 3 | - | - | 3 |
| Fairfield Rd Retaining Wall Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Plan and Elevation | 36 | 1 | - | - | 36 | - | - | 36 | 14.4 | 14 | - | - | 14 | 16.2 | 16 | - | - | 16 | 3.6 | 4 | - | - | 4 | 1.8 | 2 | - | - | 2 |
| General Notes and Bill of Materials | 28 | 1 | - | - | 28 | - | - | 28 | 11.2 | 11 | - | - | 11 | 12.6 | 13 | - | - | 13 | 2.8 | 3 | - | - | 3 | 1.4 | 1 | - | - | 1 |
| Plan and Elevation | 28 | 6 | - | - | 168 | - | - | 168 | 11.2 | 67 | - | - | 67 | 12.6 | 76 | - | - | 76 | 2.8 | 17 | - | - | 17 | 1.4 | 8 | - | - | 8 |
| Sections and Details | 28 | 2 | - | - | 56 | - | - | 56 | 11.2 | 22 | - | - | 22 | 12.6 | 25 | - | - | 25 | 2.8 | 6 | - | - | 6 | 1.4 | 3 | - | - | 3 |
| Railing Details | 28 | 1 | - | - | 28 | - | - | 28 | 11.2 | 11 | - | - | 11 | 12.6 | 13 | - | - | 13 | 2.8 | 3 | - | - | 3 | 1.4 | 1 | - | - | 1 |
| Boring Logs | 5 | 4 | - | - | 20 | - | - | 20 | 2.0 | 8 | - | - | 8 | 2.3 | 9 | - | - | 9 | 0.5 | 2 | - | - | 2 | 0.3 | 1 | - | - | 1 |
| Midlothian Rd Retaining Wall Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Plan and Elevation | 36 | 1 | - | - | 36 | - | - | 36 | 14.4 | 14 | - | - | 14 | 16.2 | 16 | - | - | 16 | 3.6 | 4 | - | - | 4 | 1.8 | 2 | - | - | 2 |
| General Notes and Bill of Materials | 28 | 1 | - | - | 28 | - | - | 28 | 11.2 | 11 | - | - | 11 | 12.6 | 13 | - | - | 13 | 2.8 | 3 | - | - | 3 | 1.4 | 1 | - | - | 1 |
| Plan and Elevation | 28 | 4 | - | - | 112 | - | - | 112 | 11.2 | 45 | - | - | 45 | 12.6 | 50 | - | - | 50 | 2.8 | 11 | - | - | 11 | 1.4 | 6 | - | - | 6 |
| Sections and Details | 28 | 2 | - | - | 56 | - | - | 56 | 11.2 | 22 | - | - | 22 | 12.6 | 25 | - | - | 25 | 2.8 | 6 | - | - | 6 | 1.4 | 3 | - | - | 3 |
| Railing Details | 28 | 1 | - | - | 28 | - | - | 28 | 11.2 | 11 | - | - | 11 | 12.6 | 13 | - | - | 13 | 2.8 | 3 | - | - | 3 | 1.4 | 1 | - | - | 1 |
| Boring Logs | 5 | 3 | - | - | 15 | - | - | 15 | 2.0 | 6 | - | - | 6 | 2.3 | 7 | - | - | 7 | 0.5 | 2 | - | - | 2 | 0.3 | 1 | - | - | 1 |
| Church Parking Lot Retaining Wall Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Plan and Elevation | 36 | 1 | - | - | 36 | - | - | 36 | 14.4 | 14 | - | - | 14 | 16.2 | 16 | - | - | 16 | 3.6 | 4 | - | - | 4 | 1.8 | 2 | - | - | 2 |
| Sections and Details | 28 | 1 | - | - | 28 | - | - | 28 | 11.2 | 11 | - | - | 11 | 12.6 | 13 | - | - | 13 | 2.8 | 3 | - | - | 3 | 1.4 | 1 | - | - | 1 |
| Railing Details | 28 | 1 | - | - | 28 | - | - | 28 | 11.2 | 11 | - | - | 11 | 12.6 | 13 | - | - | 13 | 2.8 | 3 | - | - | 3 | 1.4 | 1 | - | - | 1 |
| Boring Logs | 5 | 2 | - | - | 10 | - | - | 10 | 2.0 | 4 | - | - | 4 | 2.3 | 5 | - | - | 5 | 0.5 | 1 | - | - | 1 | 0.3 | 1 | - | - | 1 |
| WCI Temporary Retaining Wall Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Plan and Elevation | 42 | 2 | - | - | 84 | - | - | 84 | 16.8 | 34 | - | - | 34 | 18.9 | 38 | - | - | 38 | 4.2 | 8 | - | - | 8 | 2.1 | 4 | - | - | 4 |
| General Notes and Bill of Materials | 42 | 1 | - | - | 42 | - | - | 42 | 16.8 | 17 | - | - | 17 | 18.9 | 19 | - | - | 19 | 4.2 | 4 | - | - | 4 | 2.1 | 2 | - | - | 2 |
| Plan and Elevation | 42 | 5 | - | - | 210 | - | - | 210 | 16.8 | 84 | - | - | 84 | 18.9 | 95 | - | - | 95 | 4.2 | 21 | - | - | 21 | 2.1 | 11 | - | - | 11 |
| Sections and Details | 20 | 3 | - | - | 60 | - | - | 60 | 8.0 | 24 | - | - | 24 | 9.0 | 27 | - | - | 27 | 2.0 | 6 | - | - | 6 | 1.0 | 3 | - | - | 3 |
| Boring Logs | 5 | 6 | - | - | 30 | - | - | 30 | 2.0 | 12 | - | - | 12 | 2.3 | 14 | - | - | 14 | 0.5 | 3 | - | - | 3 | 0.3 | 2 | - | - | 2 |
| Bridge Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Plan and Elevation | 54 | 1 | - | - | 54 | - | | | | | | | | | | | | | | | | | | | | | | |

Old McHenry Road - Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering - Lake County Division of Transportation
Section No. 19-00999-65-ES
EXHIBIT B3 - Contract PS&E Workhours Estimate

| Sheet Description | Sheet Totals | | | | Task 11 - Preliminary Plans (60%) | | | | | Task 12 - Pre-Final (95%) | | | | | Task 13 - Final (100%) | | | | | Task 14 - Bid Set | | | | | | | | |
|--|--------------|-----------|----------|--------------|-----------------------------------|------------|--------------|--------------|------------|---------------------------|--------------|--------------|------------|------------|------------------------|------------|----------|------------|------------|-------------------|----------|-----------|------------|--------|----|----|----|----|
| | Hrs/Sht | TSC | CBBEL | Teska | TSC | CBBEL | Teska | Subtotal | Hrs/Sht | TSC | CBBEL | Teska | Subtotal | Hrs/Sht | TSC | CBBEL | Teska | Subtotal | Hrs/Sht | TSC | CBBEL | Teska | Subtotal | | | | | |
| Structural Steel Details | 72 | 3 | - | - | 216 | - | - | 216 | 28.8 | 86 | - | - | 86 | 32.4 | 97 | - | - | 97 | 7.2 | 22 | - | - | 22 | 3.6 | 11 | - | - | 11 |
| Deck Plate Plan | 42 | 1 | - | - | 42 | - | - | 42 | 16.8 | 17 | - | - | 17 | 18.9 | 19 | - | - | 19 | 4.2 | 4 | - | - | 4 | 2.1 | 2 | - | - | 2 |
| Deck Plate Details | 42 | 1 | - | - | 42 | - | - | 42 | 16.8 | 17 | - | - | 17 | 18.9 | 19 | - | - | 19 | 4.2 | 4 | - | - | 4 | 2.1 | 2 | - | - | 2 |
| Bearing Details | 64 | 2 | - | - | 128 | - | - | 128 | 25.6 | 51 | - | - | 51 | 28.8 | 58 | - | - | 58 | 6.4 | 13 | - | - | 13 | 3.2 | 6 | - | - | 6 |
| Waterproofing Details | 42 | 1 | - | - | 42 | - | - | 42 | 16.8 | 17 | - | - | 17 | 18.9 | 19 | - | - | 19 | 4.2 | 4 | - | - | 4 | 2.1 | 2 | - | - | 2 |
| Drainage Details | 42 | 1 | - | - | 42 | - | - | 42 | 16.8 | 17 | - | - | 17 | 18.9 | 19 | - | - | 19 | 4.2 | 4 | - | - | 4 | 2.1 | 2 | - | - | 2 |
| Drainage Plan | 42 | 1 | - | - | 42 | - | - | 42 | 16.8 | 17 | - | - | 17 | 18.9 | 19 | - | - | 19 | 4.2 | 4 | - | - | 4 | 2.1 | 2 | - | - | 2 |
| Walkway Details | 42 | 1 | - | - | 42 | - | - | 42 | 16.8 | 17 | - | - | 17 | 18.9 | 19 | - | - | 19 | 4.2 | 4 | - | - | 4 | 2.1 | 2 | - | - | 2 |
| Railing Details | 42 | 1 | - | - | 42 | - | - | 42 | 16.8 | 17 | - | - | 17 | 18.9 | 19 | - | - | 19 | 4.2 | 4 | - | - | 4 | 2.1 | 2 | - | - | 2 |
| Protection Beam Details | 42 | 1 | - | - | 42 | - | - | 42 | 16.8 | 17 | - | - | 17 | 18.9 | 19 | - | - | 19 | 4.2 | 4 | - | - | 4 | 2.1 | 2 | - | - | 2 |
| North Abutment | 72 | 1 | - | - | 72 | - | - | 72 | 28.8 | 29 | - | - | 29 | 32.4 | 32 | - | - | 32 | 7.2 | 7 | - | - | 7 | 3.6 | 4 | - | - | 4 |
| North Abutment Details | 72 | 2 | - | - | 144 | - | - | 144 | 28.8 | 58 | - | - | 58 | 32.4 | 65 | - | - | 65 | 7.2 | 14 | - | - | 14 | 3.6 | 7 | - | - | 7 |
| South Abutment | 72 | 1 | - | - | 72 | - | - | 72 | 28.8 | 29 | - | - | 29 | 32.4 | 32 | - | - | 32 | 7.2 | 7 | - | - | 7 | 3.6 | 4 | - | - | 4 |
| South Abutment Details | 72 | 2 | - | - | 144 | - | - | 144 | 28.8 | 58 | - | - | 58 | 32.4 | 65 | - | - | 65 | 7.2 | 14 | - | - | 14 | 3.6 | 7 | - | - | 7 |
| Pier | 72 | 1 | - | - | 72 | - | - | 72 | 28.8 | 29 | - | - | 29 | 32.4 | 32 | - | - | 32 | 7.2 | 7 | - | - | 7 | 3.6 | 4 | - | - | 4 |
| Pier Details | 72 | 1 | - | - | 72 | - | - | 72 | 28.8 | 29 | - | - | 29 | 32.4 | 32 | - | - | 32 | 7.2 | 7 | - | - | 7 | 3.6 | 4 | - | - | 4 |
| Boring Logs | 5 | 6 | - | - | 30 | - | - | 30 | 2.0 | 12 | - | - | 12 | 2.3 | 14 | - | - | 14 | 0.5 | 3 | - | - | 3 | 0.3 | 2 | - | - | 2 |
| Bridge & Wall Aesthetic Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Custom Formliner & Railing Details | varies | - | - | 6 | - | - | 340 | 340 | varies | - | - | 136 | 136 | varies | - | - | 153 | 153 | varies | - | - | 34 | 34 | varies | - | - | 17 | 17 |
| Subtotal: | 132 | - | 6 | 4,067 | - | 340 | 4,407 | 1,627 | - | 136 | 1,763 | 1,830 | - | 153 | 1,983 | 407 | - | 34 | 441 | 203 | - | 17 | 220 | | | | | |
| G. Cross Sections (10H:5V) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mainline at 50 ft intervals & Driveway or Critical section every 250' at 2.5 xs/sheet | 14 | 52 | - | - | 728 | - | - | 728 | 5.6 | 291 | - | - | 291 | 6.3 | 328 | - | - | 328 | 1.4 | 73 | - | - | 73 | 0.7 | 36 | - | - | 36 |
| Major Cross Roads at 50 ft intervals & Driveway or Critical section every 250' at 2.5 xs/sheet | 14 | 22 | 36 | - | 308 | 504 | - | 812 | 5.6 | 123 | 202 | - | 325 | 6.3 | 139 | 227 | - | 365 | 1.4 | 31 | 50 | - | 81 | 0.7 | 15 | 25 | - | 41 |
| Minor Cross Roads at 50 ft intervals & Driveway or Critical section every 250' at 2.5 xs/sheet | 8 | 13 | 9 | - | 104 | 72 | - | 176 | 3.2 | 42 | 29 | - | 70 | 3.6 | 47 | 32 | - | 79 | 0.8 | 10 | 7 | - | 18 | 0.4 | 5 | 4 | - | 9 |
| Subtotal: | 87 | 45 | - | 1,140 | 576 | - | 1,716 | 456 | 230 | - | 686 | 513 | 259 | 772 | 114 | 58 | - | 172 | 57 | 29 | - | 86 | | | | | | |
| H. Track Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Plans | 10 | 10 | - | - | 100 | - | - | 100 | 4.0 | 40 | - | - | 40 | 4.5 | 45 | - | - | 45 | 1.0 | 10 | - | - | 10 | 0.5 | 5 | - | - | 5 |
| Staging Plans and Typical Sections | 20 | 10 | - | - | 200 | - | - | 200 | 8.0 | 80 | - | - | 80 | 9.0 | 90 | - | - | 90 | 2.0 | 20 | - | - | 20 | 1.0 | 10 | - | - | 10 |
| Demolition Plans (Temp and Final) | 20 | 10 | - | - | 200 | - | - | 200 | 8.0 | 80 | - | - | 80 | 9.0 | 90 | - | - | 90 | 2.0 | 20 | - | - | 20 | 1.0 | 10 | - | - | 10 |
| Erosion Control & Grading (Temp and Final) | 20 | 10 | - | - | 200 | - | - | 200 | 8.0 | 80 | - | - | 80 | 9.0 | 90 | - | - | 90 | 2.0 | 20 | - | - | 20 | 1.0 | 10 | - | - | 10 |
| Plan and Profile (Temp and Final) | 42 | 10 | - | - | 420 | - | - | 420 | 16.8 | 168 | - | - | 168 | 18.9 | 189 | - | - | 189 | 4.2 | 42 | - | - | 42 | 2.1 | 21 | - | - | 21 |
| Track Details | 20 | 5 | - | - | 100 | - | - | 100 | 8.0 | 40 | - | - | 40 | 9.0 | 45 | - | - | 45 | 2.0 | 10 | - | - | 10 | 1.0 | 5 | - | - | 5 |
| Temporary Grade Crossing Details | 20 | 2 | - | - | 40 | - | - | 40 | 8.0 | 16 | - | - | 16 | 9.0 | 18 | - | - | 18 | 2.0 | 4 | - | - | 4 | 1.0 | 2 | - | - | 2 |
| CN Standard Details | 14 | 2 | - | - | 28 | - | - | 28 | 5.6 | 11 | - | - | 11 | 6.3 | 13 | - | - | 13 | 1.4 | 3 | - | - | 3 | 0.7 | 1 | - | - | 1 |
| Cross Sections (10H:5V) | 20 | 20 | - | - | 400 | - | - | 400 | 8.0 | 160 | - | - | 160 | 9.0 | 180 | - | - | 180 | 2.0 | 40 | - | - | 40 | 1.0 | 20 | - | - | 20 |
| Subtotal: | 79 | - | - | 1,688 | - | - | 1,688 | 675 | - | - | 675 | 760 | - | - | 760 | 169 | - | 169 | 84 | - | - | 84 | | | | | | |

Old McHenry Road - Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering - Lake County Division of Transportation
Section No. 19-00999-65-ES
EXHIBIT B3 - Contract PS&E Workhours Estimate

| Sheet Description | Sheet Totals | | | | | | | | Task 11 - Preliminary Plans (60%) | | | | Task 12 - Pre-Final (95%) | | | | Task 13 - Final (100%) | | | | Task 14 - Bid Set | | | | | | | |
|--|--------------|-----|--------|--|-------------|---|---|----------|-----------------------------------|--------------|--------------------|----------|---------------------------|------------------|------------|--------------------|------------------------|--------------|------------------|------------|--------------------|----------|------------|------------------|------------|-------------------|----------|------------|
| | Hrs/Sht | TSC | Sheets | | Total Hours | | | Subtotal | Hrs/Sht | TSC | 40% of Total Hours | | Subtotal | Hrs/Sht | TSC | 45% of Total Hours | | Subtotal | Hrs/Sht | TSC | 10% of Total Hours | | Subtotal | Hrs/Sht | TSC | 5% of Total Hours | | Subtotal |
| I. Contract Documents | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Plotting and Packaging PDF Documents | | | | | - | - | - | - | 28 | 14 | - | 42 | | 21 | 11 | - | 32 | | 15 | 7 | - | 22 | | 15 | 7 | - | 22 | |
| Specifications | | | | | - | - | - | - | 240 | 120 | - | 360 | | 160 | 80 | - | 240 | | 80 | 36 | - | 116 | | 40 | 20 | - | 60 | |
| Construction Cost and Time Estimates | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Civil Quantity Calculations | | | | | - | - | - | - | 480 | 320 | - | 800 | | 240 | 160 | - | 400 | | 120 | 80 | - | 200 | | 60 | 40 | - | 100 | |
| Traffic Signals Quantity Calculations | | | | | - | - | - | - | 36 | - | - | 36 | | 22 | - | - | 22 | | 18 | - | - | 18 | | 10 | - | - | 10 | |
| Structural Quantity Calculations | | | | | - | - | - | - | 200 | - | - | 200 | | 150 | - | - | 150 | | 90 | - | - | 90 | | 40 | - | - | 40 | |
| Rail Quantity Calculations | | | | | - | - | - | - | 36 | - | - | 36 | | 22 | - | - | 22 | | 18 | - | - | 18 | | 10 | - | - | 10 | |
| Unit Price Evaluation | | | | | - | - | - | - | 120 | 60 | - | 180 | | 40 | 20 | - | 60 | | 36 | 18 | - | 54 | | 18 | 8 | - | 26 | |
| Cost Participation Breakdown | | | | | - | - | - | - | 30 | 30 | - | 60 | | 15 | 15 | - | 30 | | 8 | 8 | - | 16 | | 8 | 8 | - | 16 | |
| Construction Estimate of Time | | | | | - | - | - | - | 60 | 30 | - | 90 | | 30 | 15 | - | 45 | | 8 | 8 | - | 16 | | 8 | 8 | - | 16 | |
| Surface Grading Model for Contractor's Use | | | | | - | - | - | - | - | - | - | - | | - | - | - | - | | 36 | - | - | 36 | | 16 | - | - | 16 | |
| Project Schedules | | | | | - | - | - | - | - | - | - | - | | - | - | - | - | | - | - | - | - | | - | - | - | - | |
| Construction Scheduling (Gantt Chart) | | | | | - | - | - | - | 72 | 54 | - | 126 | | 72 | 54 | - | 126 | | 36 | 36 | - | 72 | | - | - | - | - | |
| Design Scheduling (Gantt Chart) | | | | | - | - | - | - | 36 | 28 | - | 64 | | 36 | 28 | - | 64 | | 18 | 18 | - | 36 | | - | - | - | - | |
| Subtotal: | | | | | - | - | - | - | Subtotal: | 1,338 | 656 | - | 1,994 | Subtotal: | 808 | 383 | - | 1,191 | Subtotal: | 483 | 211 | - | 694 | Subtotal: | 225 | 91 | - | 316 |

| GRAND TOTALS | MH Total | Sheets | | | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal | TSC | CBBEL | Teska | Subtotal |
|------------------------------------|---------------|------------|------------|-----------|---------------|--------------|------------|---------------|--------------|--------------|------------|--------------|--------------|--------------|------------|--------------|--------------|------------|-----------|--------------|------------|------------|-----------|--------------|
| | | 47 | 7 | - | | | | | | | | | | | | | | | | | | | | |
| A. General Sheets | 532 | 47 | 7 | - | 438 | 94 | - | 532 | 175 | 38 | - | 213 | 197 | 42 | - | 239 | 44 | 9 | - | 53 | 22 | 5 | - | 27 |
| B. Maintenance of Traffic Plans | 1,966 | 127 | 36 | - | 1,542 | 424 | - | 1,966 | 617 | 170 | - | 786 | 694 | 191 | - | 885 | 154 | 42 | - | 197 | 77 | 21 | - | 98 |
| C. Civil Roadway Plans | 4,080 | 91 | 191 | - | 1,071 | 3,009 | - | 4,080 | 428 | 1,204 | - | 1,632 | 482 | 1,354 | - | 1,836 | 107 | 301 | - | 408 | 54 | 150 | - | 204 |
| D. Civil Site Plans (St. Matthews) | 1,110 | - | 30 | 8 | - | 890 | 220 | 1,110 | - | 356 | 88 | 444 | - | 401 | 99 | 500 | - | 89 | 22 | 111 | - | 45 | 11 | 56 |
| E. Traffic Signal & Lighting Plans | 1,002 | 53 | - | - | 1,002 | - | - | 1,002 | 401 | - | - | 401 | 451 | - | - | 451 | 100 | - | - | 100 | 50 | - | - | 50 |
| F. Structural Plans | 4,407 | 132 | - | 6 | 4,067 | - | 340 | 4,407 | 1,627 | - | 136 | 1,763 | 1,830 | - | 153 | 1,983 | 407 | - | 34 | 441 | 203 | - | 17 | 220 |
| G. Cross Sections | 1,716 | 87 | 45 | - | 1,140 | 576 | - | 1,716 | 456 | 230 | - | 686 | 513 | 259 | - | 772 | 114 | 58 | - | 172 | 57 | 29 | - | 86 |
| H. Track Plans | 1,688 | 79 | - | - | 1,688 | - | - | 1,688 | 675 | - | - | 675 | 760 | - | - | 760 | 169 | - | - | 169 | 84 | - | - | 84 |
| I. Contract Documents | 4,195 | - | - | - | - | - | - | - | 1,338 | 656 | - | 1,994 | 808 | 383 | - | 1,191 | 483 | 211 | - | 694 | 225 | 91 | - | 316 |
| TOTALS | 20,696 | 616 | 309 | 14 | 10,948 | 4,993 | 560 | 16,501 | 5,717 | 2,653 | 224 | 8,594 | 5,735 | 2,629 | 252 | 8,616 | 1,578 | 710 | 56 | 2,344 | 772 | 341 | 28 | 1,141 |



| | | |
|--|--------------------------------------|---|
| Local Public Agency Lake County Division of Transportation | County Lake | Section Number 19-00999-65-ES |
| Prime Consultant (Firm) Name TranSystems | Prepared By Ben Vander Wal | Date 8/13/2024 |
| Consultant / Subconsultant Name TranSystems | 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

Old McHenry Road (Bonnie Ln to Fairfield Rd)

PAYROLL ESCALATION TABLE

| | | | | |
|----------------------|-----------|--------|--------------------------|---------|
| CONTRACT TERM | 48 | MONTHS | OVERHEAD RATE | 134.78% |
| START DATE | 10/1/2024 | | COMPLEXITY FACTOR | 0 |
| RAISE DATE | 4/6/2025 | | % OF RAISE | 2.00% |
| END DATE | 9/30/2028 | | | |

ESCALATION PER YEAR

| Year | First Date | Last Date | Months | % of Contract |
|------|------------|-----------|--------|---------------|
| 0 | 10/1/2024 | 4/6/2025 | 6 | 12.50% |
| 1 | 4/7/2025 | 4/6/2026 | 12 | 25.50% |
| 2 | 4/7/2026 | 4/6/2027 | 12 | 26.01% |
| 3 | 4/7/2027 | 4/6/2028 | 12 | 26.53% |
| 4 | 4/7/2028 | 10/6/2028 | 6 | 13.53% |

The total escalation = 4.07%

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

19-00999-65-ES

Consultant / Subconsultant Name

TranSystems

Job Number

DIRECT COSTS WORKSHEET

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

| ITEM | ALLOWABLE | QUANTITY | CONTRACT RATE | TOTAL |
|---|---|----------|---------------|-------------|
| Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD) | Actual Cost (Up to state rate maximum) | | | \$0.00 |
| Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD) | Actual Cost | | | \$0.00 |
| Air Fare | Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval | | | \$0.00 |
| Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD) | Up to state rate maximum | 5280 | \$0.66 | \$3,458.40 |
| Vehicle Owned or Leased | \$32.50/half day (4 hours or less) or \$65/full day | | | \$0.00 |
| Vehicle Rental | Actual Cost (Up to \$55/day) | | | \$0.00 |
| Tolls | Actual Cost | | | \$0.00 |
| Parking | Actual Cost | | | \$0.00 |
| Overtime | Premium portion (Submit supporting documentation) | 250 | \$20.00 | \$5,000.00 |
| Shift Differential | Actual Cost (Based on firm's policy) | | | \$0.00 |
| Overnight Delivery/Postage/Courier Service | Actual Cost (Submit supporting documentation) | 20 | \$40.00 | \$800.00 |
| 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 |
| Utility Exploratory Trenching | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| Testing of Soil Samples | Actual Cost | | | \$0.00 |
| Lab Services | Actual Cost (Provide breakdown of each cost) | | | \$0.00 |
| Equipment and/or Specialized Equipment Rental | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| Copies B/W 11x17 | Actual Cost | 40500 | \$0.50 | \$20,250.00 |
| Copies Color 8.5x11 | Actual Cost | 22500 | \$0.10 | \$2,250.00 |
| Traffic Counts/Geofencing | Actual Cost (See separate calculations) | | | \$0.00 |
| | | | | \$0.00 |

TOTAL DIRECT COSTS: \$31,758.40

Local Public Agency

Lake County Division of Transportation

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Section Number

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Consultant / Subconsultant Name

TranSystems

Job Number

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE 134.78%

COMPLEXITY FACTOR 0

| TASK | DIRECT COSTS (not included in row totals) | STAFF HOURS | PAYROLL | OVERHEAD & FRINGE BENEFITS | FIXED FEE | SERVICES BY OTHERS | TOTAL | % OF GRAND TOTAL |
|--|---|-------------|-----------|-------------------------------|-----------|-----------------------|-------------|---------------------|
| Data Collection and Review | | 188 | 10,583 | 14,264 | 3,492 | | 28,339 | 0.35% |
| Value Engineering Study Support | | 108 | 8,467 | 11,412 | 2,794 | | 22,673 | 0.28% |
| Supplemental Topographic Survey | | 32 | 1,971 | 2,656 | 650 | | 5,277 | 0.07% |
| Utility Coordination | | 1532 | 86,956 | 117,199 | 28,695 | | 232,850 | 2.91% |
| Design Studies and Reports | | 1184 | 67,339 | 90,759 | 22,222 | | 180,320 | 2.25% |
| Land Acquisition Services | | 180 | 11,137 | 15,011 | 3,675 | | 29,823 | 0.37% |
| Geotechnical Engineering | | 72 | 4,896 | 6,599 | 1,616 | | 13,111 | 0.16% |
| Special Waste | | 184 | 11,305 | 15,237 | 3,731 | | 30,273 | 0.38% |
| Environmental Permits | | 350 | 21,112 | 28,455 | 6,967 | | 56,534 | 0.71% |
| Landscape Design and Aesthetics | | 32 | 1,821 | 2,454 | 601 | | 4,876 | 0.06% |
| Traffic Signal (Quentin Rd at Highland Dr) | | 719 | 40,840 | 55,044 | 13,477 | | 109,361 | 1.36% |
| Building Demo Advanced Contract Docs | | 480 | 27,257 | 36,737 | 8,995 | | 72,989 | 0.91% |
| Preliminary PS&E (60%) | 11,320 | 5717 | 324,460 | 437,307 | 107,072 | | 868,839 | 10.84% |
| Pre-Final PS&E (95%) | 12,735 | 5735 | 325,650 | 438,912 | 107,465 | | 872,027 | 10.88% |
| Final PS&E (100%) | 2,830 | 1578 | 89,526 | 120,663 | 29,543 | | 239,732 | 2.99% |
| Bid Set | 1,415 | 772 | 43,818 | 59,058 | 14,460 | | 117,336 | 1.46% |
| Agency Coordination and Meetings | 3,458 | 1232 | 73,695 | 99,326 | 24,319 | | 197,340 | 2.46% |
| Public Outreach and Stakeholder Coordination | | 357 | 21,514 | 28,997 | 7,100 | | 57,611 | 0.72% |
| Financial Plan and Funding Assistance | | 844 | 49,481 | 66,690 | 16,329 | | 132,500 | 1.65% |
| PM and Administration | | 636 | 38,136 | 51,400 | 12,585 | | 102,121 | 1.27% |
| QA/QC and Constructability Reviews | | 643 | 37,631 | 50,719 | 12,418 | | 100,768 | 1.26% |
| Bid Phase Support | | 436 | 25,555 | 34,443 | 8,433 | | 68,431 | 0.85% |
| | | | - | - | - | | - | |
| CBBEL | | | - | - | - | 2,690,778 | 2,690,778 | 33.58% |
| Teska | | | - | - | - | 121,029 | 121,029 | 1.51% |
| Wang | | | - | - | - | 267,505 | 267,505 | 3.34% |
| HBK | | | - | - | - | 48,841 | 48,841 | 0.61% |
| Huff&Huff | | | - | - | - | 122,971 | 122,971 | 1.53% |
| Mathewson | | | - | - | - | 1,156,600 | 1,156,600 | 14.44% |
| Subconsultant DL | | | | | | | \$29,334.51 | 0.37% |
| Direct Costs Total ==> | \$31,758.40 | | | | | | \$31,758.40 | 0.40% |
| TOTALS | | 23011 | 1,323,150 | 1,783,342 | 436,639 | 4,407,724 | 8,011,948 | 100.00% |

3,106,492

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

19-00999-65-ES

Consultant / Subconsultant Name

TranSystems

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 1 OF 4

| PAYROLL CLASSIFICATION | AVG HOURLY RATES | TOTAL PROJ. RATES | | | Data Collection and Review | | | Value Engineering Study Support | | | Supplemental Topographic Survey | | | Utility Coordination | | | Design Studies and 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 |
| Engineer 5 (E5) | 86.00 | 1,179.0 | 5.12% | 4.41 | 8 | 4.26% | 3.66 | 18 | 16.67% | 14.33 | | | | 76 | 4.96% | 4.27 | 60 | 5.07% | 4.36 |
| Engineer 4 (E4) | 86.00 | 1,116.0 | 4.85% | 4.17 | 8 | 4.26% | 3.66 | 20 | 18.52% | 15.93 | | | | 76 | 4.96% | 4.27 | 60 | 5.07% | 4.36 |
| Engineer 3 (E3) | 78.08 | 3,836.0 | 16.67% | 13.02 | 10 | 5.32% | 4.15 | 22 | 20.37% | 15.91 | 4 | 12.50% | 9.76 | 230 | 15.01% | 11.72 | 178 | 15.03% | 11.74 |
| Engineer 2 (E2) | 65.94 | 4,719.0 | 20.51% | 13.52 | 58 | 30.85% | 20.34 | 18 | 16.67% | 10.99 | 16 | 50.00% | 32.97 | 306 | 19.97% | 13.17 | 236 | 19.93% | 13.14 |
| Engineer 1 (E1) | 50.27 | 8,148.0 | 35.41% | 17.80 | 82 | 43.62% | 21.92 | 8 | 7.41% | 3.72 | 12 | 37.50% | 18.85 | 584 | 38.12% | 19.16 | 450 | 38.01% | 19.10 |
| Construction Services 5 (C) | 86.00 | 46.0 | 0.20% | 0.17 | | | | 22 | 20.37% | 17.52 | | | | 0 | | | 0 | | |
| Technician 3 (T3) | 45.81 | 430.0 | 1.87% | 0.86 | | | | | | | | | | 30 | 1.96% | 0.90 | 24 | 2.03% | 0.93 |
| Technician 1 (T1) | 21.81 | 3,239.0 | 14.08% | 3.07 | 22 | 11.70% | 2.55 | | | | | | | 230 | 15.01% | 3.27 | 176 | 14.86% | 3.24 |
| Administrative 3 (A3) | 57.05 | 38.0 | 0.17% | 0.09 | | | | | | | | | | | | | | | |
| Administrative 2 (A2) | 34.76 | 260.0 | 1.13% | 0.39 | | | | | | | | | | | | | | | |
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| | | 0.0 | | | | | | | | | | | | | | | | | |
| TOTALS | | 23011.0 | 100% | \$57.50 | 188.0 | 100.00% | \$56.29 | 108.0 | 100% | \$78.40 | 32.0 | 100% | \$61.58 | 1532.0 | 100% | \$56.76 | 1184.0 | 100% | \$56.87 |

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

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Consultant / Subconsultant Name

TranSystems

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 2 OF 4

| PAYROLL CLASSIFICATION | AVG HOURLY RATES | Land Acquisition Services | | | Geotechnical Engineering | | | Special Waste | | | Environmental Permits | | | Landscape Design and Aesthetics | | | Traffic Signal (Quentin Rd at Highland Dr) | | |
|-------------------------------|------------------|---------------------------|---------|----------|--------------------------|---------|----------|---------------|---------|----------|-----------------------|---------|----------|---------------------------------|---------|----------|--|---------|----------|
| | | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg |
| Engineer 5 (E5) | 86.00 | 10 | 5.56% | 4.78 | 3 | 4.17% | 3.58 | 8 | 4.35% | 3.74 | 16 | 4.57% | 3.93 | | | | 36 | 5.01% | 4.31 |
| Engineer 4 (E4) | 86.00 | 10 | 5.56% | 4.78 | 4 | 5.56% | 4.78 | 8 | 4.35% | 3.74 | 16 | 4.57% | 3.93 | | | | 36 | 5.01% | 4.31 |
| Engineer 3 (E3) | 78.08 | 46 | 25.56% | 19.95 | 37 | 51.39% | 40.13 | 52 | 28.26% | 22.07 | 50 | 14.29% | 11.15 | 2 | 6.25% | 4.88 | 108 | 15.02% | 11.73 |
| Engineer 2 (E2) | 65.94 | 46 | 25.56% | 16.85 | 18 | 25.00% | 16.48 | 46 | 25.00% | 16.48 | 90 | 25.71% | 16.96 | 10 | 31.25% | 20.61 | 144 | 20.03% | 13.21 |
| Engineer 1 (E1) | 50.27 | 46 | 25.56% | 12.85 | | | | 46 | 25.00% | 12.57 | 154 | 44.00% | 22.12 | 20 | 62.50% | 31.42 | 273 | 37.97% | 19.09 |
| Construction Services 5 (CS5) | 86.00 | | | | | | | | | | 4 | 1.14% | 0.98 | | | | | | |
| Technician 3 (T3) | 45.81 | | | | | | | | | | | | | | | | 14 | 1.95% | 0.89 |
| Technician 1 (T1) | 21.81 | 22 | 12.22% | 2.67 | 10 | 13.89% | 3.03 | 24 | 13.04% | 2.85 | 20 | 5.71% | 1.25 | | | | 108 | 15.02% | 3.28 |
| Administrative 3 (A3) | 57.05 | | | | | | | | | | | | | | | | | | |
| Administrative 2 (A2) | 34.76 | | | | | | | | | | | | | | | | | | |
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| TOTALS | | 180.0 | 100% | \$61.87 | 72.0 | 100% | \$68.00 | 184.0 | 100% | \$61.44 | 350.0 | 100% | \$60.32 | 32.0 | 100% | \$56.90 | 719.0 | 100% | \$56.80 |

Local Public Agency

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Lake

Section Number

19-00999-65-ES

Consultant / Subconsultant Name

TranSystems

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 3 OF 4

| PAYROLL CLASSIFICATION | AVG HOURLY RATES | Building Demo Advanced Contract Docs | | | Preliminary PS&E (60%) | | | Pre-Final PS&E (95%) | | | Final PS&E (100%) | | | Bid Set | | | Agency Coordination and Meetings | | |
|-------------------------------|------------------|--------------------------------------|---------|----------|------------------------|---------|----------|----------------------|---------|----------|-------------------|---------|----------|---------|---------|----------|----------------------------------|---------|----------|
| | | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg |
| Engineer 5 (E5) | 86.00 | 24 | 5.00% | 4.30 | 286 | 5.00% | 4.30 | 286 | 4.99% | 4.29 | 78 | 4.94% | 4.25 | 38 | 4.92% | 4.23 | 52 | 4.22% | 3.63 |
| Engineer 4 (E4) | 86.00 | 24 | 5.00% | 4.30 | 286 | 5.00% | 4.30 | 286 | 4.99% | 4.29 | 78 | 4.94% | 4.25 | 38 | 4.92% | 4.23 | 34 | 2.76% | 2.37 |
| Engineer 3 (E3) | 78.08 | 72 | 15.00% | 11.71 | 855 | 14.96% | 11.68 | 860 | 15.00% | 11.71 | 236 | 14.96% | 11.68 | 116 | 15.03% | 11.73 | 308 | 25.00% | 19.52 |
| Engineer 2 (E2) | 65.94 | 96 | 20.00% | 13.19 | 1142 | 19.98% | 13.17 | 1148 | 20.02% | 13.20 | 315 | 19.96% | 13.16 | 154 | 19.95% | 13.15 | 302 | 24.51% | 16.16 |
| Engineer 1 (E1) | 50.27 | 182 | 37.92% | 19.06 | 2172 | 37.99% | 19.10 | 2180 | 38.01% | 19.11 | 600 | 38.02% | 19.11 | 295 | 38.21% | 19.21 | 302 | 24.51% | 12.32 |
| Construction Services 5 (CS5) | 86.00 | | | | | | | | | | | | | | | | 14 | 1.14% | 0.98 |
| Technician 3 (T3) | 45.81 | 10 | 2.08% | 0.95 | 114 | 1.99% | 0.91 | 115 | 2.01% | 0.92 | 35 | 2.22% | 1.02 | 16 | 2.07% | 0.95 | 48 | 3.90% | 1.78 |
| Technician 1 (T1) | 21.81 | 72 | 15.00% | 3.27 | 862 | 15.08% | 3.29 | 860 | 15.00% | 3.27 | 236 | 14.96% | 3.26 | 115 | 14.90% | 3.25 | 172 | 13.96% | 3.05 |
| Administrative 3 (A3) | 57.05 | | | | | | | | | | | | | | | | | | |
| Administrative 2 (A2) | 34.76 | | | | | | | | | | | | | | | | | | |
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| TOTALS | | 480.0 | 100% | \$56.79 | 5717.0 | 100% | \$56.75 | 5735.0 | 100% | \$56.78 | 1578.0 | 100% | \$56.73 | 772.0 | 100% | \$56.76 | 1232.0 | 100% | \$59.82 |

Local Public Agency

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Consultant / Subconsultant Name

TranSystems

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 4 OF 4

| PAYROLL CLASSIFICATION | AVG HOURLY RATES | Public Outreach and Stakeholder Coordination | | | Financial Plan and Funding Assistance | | | PM and Administration | | | QA/QC and Constructability Reviews | | | Bid Phase Support | | | Hours | % Part. | Wgtd Avg |
|------------------------------|------------------|--|---------|----------|---------------------------------------|---------|----------|-----------------------|---------|----------|------------------------------------|---------|----------|-------------------|---------|----------|-------|---------|----------|
| | | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | | | |
| Engineer 5 (E5) | 86.00 | 18 | 5.04% | 4.34 | 38 | 4.50% | 3.87 | 68 | 10.69% | 9.19 | 32 | 4.98% | 4.28 | 24 | 5.50% | 4.73 | | | |
| Engineer 4 (E4) | 86.00 | 38 | 10.64% | 9.15 | 38 | 4.50% | 3.87 | | | | 32 | 4.98% | 4.28 | 24 | 5.50% | 4.73 | | | |
| Engineer 3 (E3) | 78.08 | 75 | 21.01% | 16.40 | 145 | 17.18% | 13.41 | 270 | 42.45% | 33.15 | 96 | 14.93% | 11.66 | 64 | 14.68% | 11.46 | | | |
| Engineer 2 (E2) | 65.94 | 94 | 26.33% | 17.36 | 212 | 25.12% | 16.56 | | | | 158 | 24.57% | 16.20 | 110 | 25.23% | 16.64 | | | |
| Engineer 1 (E1) | 50.27 | 62 | 17.37% | 8.73 | 305 | 36.14% | 18.16 | | | | 225 | 34.99% | 17.59 | 150 | 34.40% | 17.29 | | | |
| Construction Services 5 (CS) | 86.00 | | | | | | | | | | 6 | 0.93% | 0.80 | | | | | | |
| Technician 3 (T3) | 45.81 | | | | | | | | | | 14 | 2.18% | 1.00 | 10 | 2.29% | 1.05 | | | |
| Technician 1 (T1) | 21.81 | 70 | 19.61% | 4.28 | 106 | 12.56% | 2.74 | | | | 80 | 12.44% | 2.71 | 54 | 12.39% | 2.70 | | | |
| Administrative 3 (A3) | 57.05 | | | | | | | 38 | 5.97% | 3.41 | | | | | | | | | |
| Administrative 2 (A2) | 34.76 | | | | | | | 260 | 40.88% | 14.21 | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | |
| TOTALS | | 357.0 | 100% | \$60.26 | 844.0 | 100% | \$58.63 | 636.0 | 100% | \$59.96 | 643.0 | 100% | \$58.52 | 436.0 | 100% | \$58.61 | 0.0 | 0% | \$0.00 |

TranSystems Design Direct Costs

**Old McHenry Road - Bonnie Lane to Fairfield Road (2.4 miles)
Phase II Engineering – Lake County Division of Transportation
Section No. 19-00999-65-ES
8/13/2024**

Direct Cost Summary

General

| | | | | | <u>In house</u> | <u>Outside</u> |
|--|---------------------------|---------------|----------------|----------------------|-----------------|----------------|
| | | | | | Direct Cost | Direct Cost |
| 1 Printing | | | | | | |
| Preliminary Submittal | | | | | | |
| | <u>Sheets</u> | <u>Copies</u> | <u>\$/copy</u> | <u>No. of Copies</u> | | |
| 1 | 500 | 15 | \$0.10 | 7500 | | \$ 750.00 |
| 2 | 900 | 15 | \$0.50 | 13500 | | \$ 6,750.00 |
| Pre-Final Submittal | | | | | | |
| | <u>Sheets</u> | <u>Copies</u> | <u>\$/copy</u> | | | |
| 1 | 500 | 15 | \$0.10 | 7500 | | \$ 750.00 |
| 2 | 900 | 15 | \$0.50 | 13500 | | \$ 6,750.00 |
| Final Submittal | | | | | | |
| 1 | 500 | 15 | \$0.10 | 7500 | | \$ 750.00 |
| 2 | 900 | 15 | \$0.50 | 13500 | | \$ 6,750.00 |
| 2 Overnight Delivery/Postage/Courier Service | | | | | | |
| | No. Deliveries | | Cost/Delivery | | | |
| | Plan Submittal Deliveries | 20 | \$ 40.00 | | | \$ 800.00 |
| 3 Overtime Premium | | | | | | |
| | 250 hours x | \$ | 20.00 | /hour | | \$ 5,000.00 |

General Total

\$ 5,000.00 \$ 23,300.00

\$ 28,300.00

Meetings

| | | | | | | | <u>In house</u> | <u>Outside</u> |
|--|----------------------|-----------------|-----------------|----------------|----------------|----------------|-----------------|----------------|
| | | | | | | | Direct Cost | Direct Cost |
| | <u>No. Meetings</u> | | <u>No.</u> | <u>Average</u> | | | | |
| | <u>/Field Checks</u> | <u>No. Days</u> | <u>Attendee</u> | <u>Miles/</u> | <u>\$/mile</u> | <u>Total</u> | | |
| | | | <u>s</u> | <u>Meeting</u> | | <u>Mileage</u> | | |
| 1 Vehicle Expense (meetings, field checks) | | | | | | | | |
| | 24 | | 2 | 50 | \$ 0.655 | 2,400 | \$ 1,572.00 | |
| | 2 | | 2 | 10 | \$ 0.655 | 40 | \$ 26.20 | |
| | 3 | | 2 | 90 | \$ 0.655 | 540 | \$ 353.70 | |
| | 10 | | 2 | 40 | \$ 0.655 | 800 | \$ 524.00 | |
| | 15 | | 1 | 40 | \$ 0.655 | 600 | \$ 393.00 | |
| | 5 | | 2 | 40 | \$ 0.655 | 400 | \$ 262.00 | |
| | 5 | | 1 | 100 | \$ 0.655 | 500 | \$ 327.50 | |
| | | | | | | 5,280 | \$ 3,458.40 | \$ - |

Meetings Total

\$ 3,458.40

TOTAL DIRECT COSTS

\$ 31,758.40

Christopher B. Burke Engineering, Ltd. (CBBEL)

Contract Scope and CECS

CHRISTOPHER B. BURKE ENGINEERING, LTD.
SCOPE OF SERVICES

Old McHenry Crossings
(Forest Drive to Fairfield Road)

Lake County Division of Transportation
Lake County, Illinois

August 13, 2024

PHASE II – DESIGN ENGINEERING SERVICES

CBBEL will be providing services as stated within the main TranSystems scope of work (scope) and Exhibit B Manhour Estimate for Old McHenry Crossings from Forest Drive to Fairfield Road. Generally, CBBEL will be assisting roadway design (Midlothian Road), St. Matthew parking lot reconfiguration, drainage design, environmental studies and permitting, supplemental survey, and plat of highway.

The following scope of work provides an additional level of detail for Task 9, Environmental Studies & Permitting that Christopher B. Burke Engineering, Ltd. will be performing. The task numbers below align with the tasks in the main TranSystems scope of work and are referenced accordingly.

Task 9 – Permits

This task will prepare, submit, and coordinate obtaining permits and other approvals needed for project construction.

CBBEL will prepare, submit, and coordinate obtaining permits and other approvals needed for project construction from the following agencies: U.S. Army Corps of Engineers (USACE), State Historic Preservation Office (SHPO), IDOT, Illinois Environmental Protection Agency (IEPA), and the Lake County Stormwater Management Commission (LCSMC).

Before and during the permit review process, we expect to have meetings with the regulatory/review agencies and the client, as necessary. We also expect to prepare responses to comments received during the review process. We have included budget to cover the cost of submittal of two responses to comments. Time for meetings is covered under Task 17 – Agency Coordination and Meetings. Utility permit applications will be prepared under Task 4.

Task 9A – Wetland and Waters Field Delineation Update:

A wetland/other surface water delineation of the entire OMX project corridor was completed by CBBEL in August 2021 as part of the Phase I study. A supplemental wetland delineation of the OMX addendum study area was completed in May 2023. Approved delineations are typically valid for up to five (5) years. Refer to Task 9B for additional information. Phase II completion is anticipated in 2026 depending on land acquisition and obtaining requisite permits.

Given the project timing and the length of time since the last field visit, a supplemental investigation of the OMX project corridor will be completed to update the limits of the previously identified wetlands/other surface waters to identify any new wetlands/other surface waters that are now present within the study area. Also, during the site visit, wildlife and plant community qualities will be assessed. The limits of wetlands will be field staked and located using a sub-meter accuracy handheld GPS unit.

The results of the field reconnaissance will be summarized in an updated letter report. The wetlands' generalized quality ratings, according to the Swink and Wilhelm Methodology (1994), will be included along with exhibits depicting the approximate wetland and project boundaries, National Wetland Inventory, Lake County Wetland Inventory, Soil Survey, floodplain, Hydrologic Atlas, USGS topography, site photographs, and the USACE Routine On-Site Data Forms. The wetland delineation will be depicted on an aerial photograph along with all data point locations clearly identified.

Task 9B – Boundary Confirmation and Jurisdictional Determination:

During the Phase I study, preliminary wetland coordination was completed with the USACE and LCSMC for the OMX project corridor, including:

- The USACE completed a Jurisdictional Determination (JD), dated 09/13/2022. USACE JDs are typically valid for five (5) years. However, please note that this JD may no longer be valid due to changes in waters of the US definitions that took place in 2023.
- The LCSMC completed a Preliminary JD (PJD) in the presence of the USACE for the OMX addendum study areas, dated 10/31/2023. The PJD is valid for three (3) years unless new information warrants a revision before the expiration date.
- LCSMC prepared an Isolated Waters of Lake County (IWLC) Exclusion Determination letter, dated 06/14/2023. The findings of the IWLC Exclusion Determination are valid for three (3) years unless new information warrants a revision before the expiration date.

This task includes updating the JD/PJD and IWLC Exclusion Determination, as necessary, for project permitting.

A wetland boundary confirmation for the OMX project corridor was not completed as part of Phase I. The USACE, LCSMC, and applicable certified community (or deferment to LCSMC) will be requested to visit the site to confirm the delineated wetland boundaries. To accomplish this task, the wetland boundary flags will be refreshed as part of Task 9A.

Task 9C – Threatened & Endangered Species Coordination:

Threatened & Endangered (T&E) species review/coordination was completed by the IDOT Natural Resources Unit during Phase I. However, T&E species clearances are only valid for two (2) years, and will need to be renewed during the permit process and prior to the start of construction. This task assumes that the T&E species clearance will be updated by IDOT during Phase II, and that the IDOT T&E species clearance will be sufficient for permitting. This task will be completed for the project corridor.

This task also includes updating the previously completed Bridge/Structure Bat Assessments (BBA) completed during Phase I. BBAs were required for the Phase I Natural Resource Review and are only valid for two (2) years. IDOT will not allow a project to proceed to letting or be awarded without a current/valid BBA.

There are no bridges located within the project corridor. However, the BBAs will be completed at applicable culverts (e.g., culverts with a vertical opening ≥ 48 -inches) within the project limits. Based on Phase I data collection, this task includes completion of a BBA at up to two (2) existing culverts. This task includes coordination, fieldwork, photo log, location map, and BBA forms. Two CBBEL staff will complete the BBA fieldwork. This task assumes that the project will have one (1) letting.

This task does not include a bat survey (e.g., mist-netting), acoustic monitoring, or other detailed search for T&E species. A supplemental task will be required if additional T&E documentation or submittals are required/requested by an agency during permitting (e.g., Incidental Take Authorization, Biological Assessment).

Task 9D – Supplemental Tree Survey, Impact Evaluation, and Tree Mitigation Plan:

Trees were surveyed during the Phase I study. Supplemental tree survey may be required. If necessary, additional trees will be located using a sub-meter accuracy handheld GPS unit. In accordance with the latest Northern Long-Eared Bat (NLEB) guidance from IDOT, trees greater than or equal to 3-inches diameter at breast height (dbh) along the project corridor will be located. CBBEL will also locate landscape trees (regardless of size). All identified trees will be tabulated and evaluated with respect to species, condition, and form. This task will be completed for the project corridor where (through additional coordination) it is determined that additional tree data is necessary.

Additional tree impact evaluation will be completed as necessary to avoid/minimize impacts with respect to detailed engineering design, and tree mitigation will be discussed in greater detail with the Village of Hawthorn Woods and others as necessary. This task also includes assistance with the Tree Preservation Plan, if necessary, based on coordination with the Village of Hawthorn Woods.

A Tree Mitigation Plan will be prepared for tree impacts, as necessary. This task involves coordination and preparation of a Tree Mitigation Plan based on Village of Hawthorn Woods requirements as practical and feasible. Selection of replacement tree species will consider the Village of Hawthorn Woods Tree Preservation and Landscaping requirements. This task will complement the Landscape Design task(s) completed by others.

Task 9E – Lake County Watershed Development Ordinance Permit Application:

A Lake County Watershed Development Ordinance (WDO) permit application will be submitted to LCSMC (and Village of Hawthorn Woods), as appropriate. At this time, it is anticipated that two (2) separate permit applications will be prepared for (i.e., one for the proposed roadway improvements and one for the proposed improvements at St Matthew Lutheran Church Campus. CBBEL will prepare and compile the required application forms, schedules, plans, and calculations related to stormwater management, floodplain, wetlands-buffer areas, outfalls, qualified sewer construction, and erosion/sediment control for submittal. CBBEL will schedule a pre-application meeting with LCSMC prior to the permit submittal, if necessary.

No Illinois Department of Natural Resources-Office of Water Resources (IDNR-OWR) floodway construction permit is required because there is no regulatory floodplain or floodway within the project limit.

Task 9F – USACE Section 404 Clean Water Act Permit Application:

Based on the Phase I study, approximately 1 acre of USACE jurisdictional wetlands/waters of the US may be impacted by the proposed improvements. Consequently, this project will be processed by the USACE as a Section 404 Clean Water Act (CWA) Individual Permit (IP). A single IP application will be prepared for the project. Due to the anticipated time gaps between the OMX contracts and independent utility, this scope assumes that Contracts 2 and 3 will be permitted separately. However, please note that the USACE JD that was completed for the overall OMX project during Phase I may no longer be valid due to changes in waters of the US definitions that took place in 2023. A request for an updated JD/PJD will be completed under a separate task, as necessary. A pre-application meeting will be scheduled with the USACE, as necessary, as an early step in the permitting process to discuss the OMX permitting strategy,

Best Management Practices (BMPs), proposed wetland mitigation, and project corridor characteristics (e.g., Forest Lake, cultural resources).

The required exhibits, specifications, data, and project information for the proposed improvements will be compiled and assembled in an IP application package to the USACE and other regulatory/resource agencies, as necessary. The following information will be required as part of the application:

- Narrative description of proposed BMPs
- Post-construction management and monitoring plan for BMPs (activities to be completed as part of routine site maintenance)
- Plan and profile drawings for road crossings
- Planting plan for wet bottom detention basins
- Alternative Sites Analysis to consider alternative site designs which may be constructed and that may have less impact on aquatic resources
- Proposed compensatory wetland mitigation strategy

For the overall OMX project, compensatory wetland mitigation will likely be provided at an offsite USACE approved mitigation bank within the same watershed as the impacted resource: (a) Buffalo Creek Wetland Bank - Des Plaines River basin, and (b) Big Sag Wetland Bank - Fox River basin.

The project team will coordinate development of the permitting documents with the USACE and other resource agencies, as necessary. This task will likely require meeting(s) with regulatory/resource agencies to coordinate permitting activities. Agency meetings will be completed under a separate task.

The IP is contingent upon receipt of Section 401 CWA Individual Water Quality Certification (WQC) from the Illinois Environmental Protection Agency (IEPA). This work effort will be completed under a separate task. The IP application also requires historic preservation and T&E species compliance. Historic preservation and T&E species compliance will also be completed under separate tasks.

The IP process requires a public notice and coordination with other resource agencies. Because Forest Lake is considered a valuable resource to the Forest Lake community, we expect the Forest Lake Community Association and potentially other Conservation Groups and agencies to comment on the project with respect to potential downstream impacts. This task includes preparation of responses to public notice comments.

It is not unusual for the IP process to take a year (or more) to complete. Below is the typical chronology of IP application processing. Please note that actual review times may vary and often are based on the level of detail necessary to respond to public notice comments.

- Submit Application
- 45 days – receive letter from USACE acknowledging application

- 45 days – USACE issues public notice
- Public notice posted for 30 days
- 30 days to receive comments back from USACE after notice is closed
- 30 days to respond to comments received.

After the process listed above has been completed, the clock stops for the USACE, and there is typically 2-6 months (or more) of negotiation with the USACE. How long it will take to negotiate an acceptable permit is an unknown factor. Once the special conditions of the IP are agreed to, expect 1-2 months for the USACE to prepare the decision document and issue the IP.

The project team will offer to prepare the first draft of the decision document for the USACE to help move the process along. This offer has been accepted in the past for other projects by the USACE.

Task 9G – Soil Erosion & Sediment Control Plan Review/Coordination with LCSMC:

This task includes preparation of a submittal to LCSMC to obtain approval of the Soil Erosion & Sediment Control Plan for the proposed improvements. This coordination is typically required by the USACE as part of the Section 404 CWA permitting process. Preparation of the Soil Erosion & Sediment Control Plan is included under a separate task. This task also includes response to LCSMC comments.

Task 9H – Best Management Practice Design

As noted above, Forest Lake is considered a valuable resource to the Forest Lake community. Under existing and proposed conditions, Forest Lake receives storm water runoff from the surrounding area, including the OMX project area. The USACE requires, under the Section 404 CWA review, that to the extent practicable proposed activities be designed so that surface water runoff does not directly discharge into wetlands/waters of the US but should pass through BMPs prior to discharge. Therefore, BMP opportunity areas must be identified and evaluated for viability to protect downstream environments.

Potential BMP opportunity area locations were identified as part of the Phase I study. These locations, and potentially others will be evaluated in greater detail in Phase II. Viable areas will be incorporated into the final design. The viability determination will include coordination with the regulatory and resource agencies. The viability of each BMP opportunity area and type of BMP to be installed will depend on several factors, including but not limited to, site constraints, geology, groundwater, soil conditions, slope, drainage, final engineering design, target pollutants, location, and agency coordination.

The viability evaluation will include collection of data including geology, drainage area, soils, and topography. This task will require that soil samples be collected by others approximately every 50 to 100 feet within the potential BMP opportunity areas. At the proposed detention basin locations determined during Phase I, up to three (3) equally spaced soil borings will be completed at each basin location. Existing topography will be surveyed (as part of a separate task) within the BMP opportunity areas and 30 feet beyond their Phase I limits.

Based on the results of the BMP opportunity area feasibility evaluation, identified BMP options will be submitted to the USACE for review during the IP process. This task also includes the preparation of short and long-term BMP maintenance and monitoring plans that will be submitted to the USACE for consideration during their review process.

Task 9I – Interagency Wetland Policy Act Coordination:

Wetland Clearance to address Interagency Wetland Policy Act (IWPA) requirements was coordinated through IDOT during the Phase I study. The IDOT review for compliance under IWPA – Part 1090 clears the project for letting with respect to wetlands.

The IWPA regulates all vegetated wetland areas but does not regulate the unvegetated portions of waters of the US or other surface waters. Based on preliminary engineering and coordination during Phase I for the overall OMX project corridor, approximately 3 acres of wetland may be impacted by the proposed improvements, and many of the wetlands that may be impacted by the project are USACE jurisdictional. During CWA permitting, the project team will look for opportunities to avoid/minimize wetland impacts.

This task will be completed once final wetland impact totals have been determined. This task includes IWPA-related agency coordination, preparation of an updated Wetland Impact Evaluation (WIE) form and exhibits. The updated WIE documents will be submitted for IDOT review/approval and to refine the IWPA required wetland mitigation acreage total based on Phase II engineering design.

Task 9J – Section 401 CWA Individual Water Quality Certification:

The USACE IP is contingent upon receipt of an IEPA Section 401 CWA Individual Water Quality Certification (WQC). This task includes preparation and submittal of the required documentation to the IEPA for an Individual WQC application that will cover the project corridor. Individual WQC will also require an anti-degradation review, which is subject to public review. This task includes response to comments.

A pollutant loading analysis will be completed as part of the Individual CWA permitting under a separate task. The pollutant loading analysis will be used to evaluate the potential effect of the proposed improvements on water quality. The analysis will estimate pollutant load concentrations for typical highway storm water runoff constituents and other pollutants of concern.

This task assumes that fish, aquatic macroinvertebrate, mussel, and/or water quality sampling data will be available and acceptable to IEPA, if requested as part of the Section 401 WQC review (e.g., for Forest Lake and unnamed tributaries along the project corridor). A supplemental proposal will be required if additional field data/sampling is necessary.

Individual WQC can take approximately 1-6 months longer than the IP process to complete.

Task 9K – Water Quality Pollutant Loading Analysis:

The overall OMX project corridor is located within two watersheds: the Des Plaines River and the Upper Fox River Watersheds. The drainage divide is located near Fairfield Road. Areas east of Fairfield Road near the OMX project corridor generally drain east/southeast with Forest Lake as the primary outlet for Old McHenry Road drainage. Areas west of Fairfield Road near the OMX project corridor generally drain south and west. The majority of the improvements are located east of Fairfield Road.

As part of the Phase I study, a water quality pollutant loading analysis was prepared for the overall OMX project corridor using the Stochastic Empirical Loading and Dilution Model (SELDM) to determine the potential effect of stormwater runoff on Forest Lake. SELDM was developed by the US Geological Survey (USGS) in cooperation with the Federal Highway Administration (FHWA) as a stormwater runoff quality modeling tool. It is typically used for

transportation projects in Illinois that require a pollutant loading analysis. The Phase I SELDM analysis evaluated three scenarios: existing condition, post-construction condition without BMPs, and post-construction condition with BMPs. Typical roadway pollutants (e.g., heavy metals) and other pollutants of concern (i.e., total suspended solids and total phosphorus) were evaluated during the Phase I study. The Phase I SELDM analysis will be refined for the proposed improvements as part of the Section 404 CWA Individual Permit process. This task assumes one (1) iteration and that IEPA will accept the SELDM analysis results and Phase I methodology – as typically used for roadway projects. The proposed methodology will be confirmed with IEPA as part of the Section 401 CWA Individual WQC process.

Task 9L – Prepare the Storm Water Pollution Prevention Plan and Notice of Intent:

This task includes preparation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with Part IV of the General National Pollutant Discharge Elimination System (NPDES) Permit #ILR10. This task assumes that the IDOT BDE 2342 form will be used for the SWPPP, and that one (1) SWPPP will be prepared to supplement the special provisions. Completion of this task will require narrative, coordination with other project team members, Soil Erosion & Sediment Control Plans (to be completed under a separate task), and signed certification statements from all contractors, subcontractors, and the operator as identified in the SWPPP.

The SWPPP is part of the Notice of Intent (NOI) submitted to the IEPA to obtain coverage under the General NPDES ILR10 Permit. A NOI will be prepared for the proposed improvements. The NOI requires documentation of historic preservation and T&E species compliance. Historic preservation and T&E species coordination/compliance will be completed under separate tasks.

Task 9M – Historic Preservation Coordination:

Based on the Phase I study, there are six (6) resources along the overall OMX project corridor that warrant National Register of Historic Places (NRHP) consideration. An Assessment of Effects (AOE) Report was prepared for the overall OMX project corridor. Based on the AOE, in the opinion of the OMX project team architectural historian, the proposed improvements will have “No Adverse Effect” on the identified NRHP eligible resources. The AOE is currently under review by the IDOT Cultural Resources Unit.

Two (2) of the identified NRHP eligible resources are located adjacent to the project limits. This task assumes that Cultural Resources Clearance for the OMX project may require that the State Historic Preservation Office (SHPO) be given the opportunity to review and approve the Phase II plans and specifications prior to initiation of construction activities, and that the Cultural Resources coordination for this project will not be complete until the SHPO has reviewed and approved the final plans and specifications.

We presume that the IDOT Cultural Resources Unit will coordinate the review with the SHPO as soon as final plans and specifications are available. This task involves coordination with the IDOT Cultural Resources Unit, including submittal of the Phase II plans and specifications and response to comments.

Task 9N – Preliminary Environmental Site Assessment (PESA) Update/Validation:

A Preliminary Environmental Site Assessment (PESA) was completed as part of the Phase I studies for the overall OMX project corridor. The results of the PESA identify areas of Recognized Environmental Conditions (RECs) for avoidance or which may require more detailed analysis during subsequent Phase II engineering. IDOT previously completed the PESA for the State right-of-way portions of the overall OMX project corridor. CBEL completed the PESA for the non-State right-of-way portions of the overall OMX project corridor. The results

of the PESA are typically valid for up to three (3) years. IDOT requires that the PESA be valid at the time of letting.

Phase II completion is anticipated in 2026 depending on land acquisition and obtaining requisite permits. This task includes coordination with IDOT to update/validate the PESA for the State right-of-way portion of the project limits (i.e., Midlothian Road). This task also includes updating/validating the PESA for the non-State right-of-way portion of the project area, as necessary. This task includes a field visit, database review, and updated PESA report.

The PESA Response, Preliminary Site Investigation (PSI), and any necessary asbestos surveys required will be completed under separate tasks.



| | | |
|--|------------------------------------|---|
| Local Public Agency Lake County Division of Transportation | County Lake | Section Number 19-00099-65-ES |
| Prime Consultant (Firm) Name Christopher B. Burke Engineering, Ltd. | Prepared By Matt Huffman | Date 8/13/2024 |
| Consultant / Subconsultant Name Christopher B. Burke Engineering, Ltd. | 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
 Subconsultant to TranSystems for Design Engineering and Plat of Highway for Old McHenry Road from Forest Drive to Fairfield Road.

PAYROLL ESCALATION TABLE

| | | | | |
|---------------|-----------|--------|-------------------|---------|
| CONTRACT TERM | 48 | MONTHS | OVERHEAD RATE | 132.88% |
| START DATE | 10/1/2024 | | COMPLEXITY FACTOR | |
| RAISE DATE | 1/1/2025 | | % OF RAISE | 2.00% |
| END DATE | 9/30/2028 | | | |

ESCALATION PER YEAR

| Year | First Date | Last Date | Months | % of Contract |
|------|------------|-----------|--------|---------------|
| 0 | 10/1/2024 | 1/1/2025 | 3 | 6.25% |
| 1 | 1/2/2025 | 1/1/2026 | 12 | 25.50% |
| 2 | 1/2/2026 | 1/1/2027 | 12 | 26.01% |
| 3 | 1/2/2027 | 1/1/2028 | 12 | 26.53% |
| 4 | 1/2/2028 | 10/1/2028 | 9 | 20.30% |

The total escalation = 4.59%

Local Public Agency

County

Section Number

Lake County Division of Transportation

Lake

19-00099-65-ES

Consultant / Subconsultant Name

Job Number

Christopher B. Burke Engineering, Ltd.

PAYROLL RATES

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

| | |
|-----------------------------|--------------|
| MAXIMUM PAYROLL RATE | 86.00 |
| ESCALATION FACTOR | 4.59% |

| CLASSIFICATION | IDOT PAYROLL RATES ON FILE | CALCULATED RATE |
|--|---|------------------------|
| Engineer VI | \$82.63 | \$86.00 |
| Engineer V | \$72.59 | \$75.92 |
| Engineer IV | \$59.41 | \$62.13 |
| Engineer III | \$46.80 | \$48.95 |
| Engineer I/II | \$36.22 | \$37.88 |
| Survey V | \$85.04 | \$86.00 |
| Survey IV | \$76.25 | \$79.75 |
| Survey III | \$66.63 | \$69.69 |
| Survey II | \$54.50 | \$57.00 |
| Survey I | \$38.75 | \$40.53 |
| Engineering Technician V | \$68.90 | \$72.06 |
| Engineering Technician IV | \$64.03 | \$66.97 |
| Engineering Technician III | \$42.86 | \$44.83 |
| Engineering Technician I/II | \$30.00 | \$31.38 |
| CAD Manager | \$70.83 | \$74.08 |
| CAD Technician II | \$53.29 | \$55.73 |
| GIS Specialist III | \$58.00 | \$60.66 |
| Landscape Architect | \$65.00 | \$67.98 |
| Landscape Designer III | \$40.50 | \$42.36 |
| Environmental Resource Specialist V | \$76.01 | \$79.50 |
| Environmental Resource Specialist IV | \$60.78 | \$63.57 |
| Environmental Resource Specialist III | \$52.75 | \$55.17 |
| Environmental Resource Specialist I/II | \$30.92 | \$32.34 |
| Environmental Resource Technician | \$45.30 | \$47.38 |
| Engineering Intern | \$18.88 | \$19.75 |
| Business Operations Department | \$57.69 | \$60.34 |
| | | |

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

19-00099-65-ES

Consultant / Subconsultant Name

Christopher B. Burke Engineering, Ltd.

Job Number

DIRECT COSTS WORKSHEET

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

| ITEM | ALLOWABLE | QUANTITY | CONTRACT RATE | TOTAL |
|---|---|----------|---------------|-------------|
| Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD) | Actual Cost (Up to state rate maximum) | | | \$0.00 |
| Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD) | Actual Cost | | | \$0.00 |
| Air Fare | Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval | | | \$0.00 |
| Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD) | Up to state rate maximum | 5000 | \$0.69 | \$3,425.00 |
| Vehicle Owned or Leased | \$32.50/half day (4 hours or less) or \$65/full day | 15 | \$65.00 | \$975.00 |
| Vehicle Rental | Actual Cost (Up to \$55/day) | | | \$0.00 |
| Tolls | Actual Cost | 200 | \$0.50 | \$100.00 |
| 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) | 48 | \$35.00 | \$1,680.00 |
| 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 | 1 | \$14,000.00 | \$14,000.00 |
| Monuments (Permanent) | Actual Cost | 2 | \$250.00 | \$500.00 |
| 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) | 30 | \$100.00 | \$3,000.00 |
| Recording Fees | Actual Cost | | | \$0.00 |
| Transcriptions (specific to project) | Actual Cost | | | \$0.00 |
| Courthouse Fees | Actual Cost | | | \$0.00 |
| Storm Sewer Cleaning and Televising | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| Traffic Control and Protection | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| Aerial Photography and Mapping | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| Utility Exploratory Trenching | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| Testing of Soil Samples | Actual Cost | | | \$0.00 |
| Lab Services | Actual Cost (Provide breakdown of each cost) | | | \$0.00 |
| Equipment and/or Specialized Equipment Rental | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| Permitting Fees | Actual Cost | 1 | \$28,500.00 | \$28,500.00 |
| Plotting Sheets/Exhibits | Actual Costs | 1 | \$2,800.00 | \$2,800.00 |
| Title Reports | Actual Costs | 1 | \$41,100.00 | \$41,100.00 |
| RR Flagger & Fees | Actual Costs | 15 | \$1,600.00 | \$24,000.00 |

TOTAL DIRECT COSTS: \$120,080.00

Local Public Agency

Lake County Division of Transportation

Consultant / Subconsultant Name

Christopher B. Burke Engineering, Ltd.

County

Lake

Section Number

19-00099-65-ES

Job Number

AVERAGE HOURLY PROJECT RATES
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 1 OF 4

| PAYROLL CLASSIFICATION | AVG HOURLY RATES | TOTAL PROJ. RATES | | | 1. Data Collection and Review | | | 2. Value Engineering Support | | | 3. Supplemental Topographic Survey | | | 4. Utility Coordination | | | 5. Design Studies and 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 |
| Engineer VI | 86.00 | 498.0 | 2.96% | 2.55 | 4 | 3.03% | 2.61 | 12 | 12.77% | 10.98 | | | | 14 | 2.80% | 2.41 | 56 | 2.34% | 2.01 |
| Engineer V | 75.92 | 1,156.0 | 6.87% | 5.22 | 8 | 6.06% | 4.60 | 12 | 12.77% | 9.69 | 10 | 2.78% | 2.11 | 30 | 6.00% | 4.56 | 136 | 5.68% | 4.31 |
| Engineer IV | 62.13 | 2,894.0 | 17.20% | 10.69 | 16 | 12.12% | 7.53 | 16 | 17.02% | 10.58 | | | | 58 | 11.60% | 7.21 | 544 | 22.70% | 14.11 |
| Engineer III | 48.95 | 3,284.0 | 19.52% | 9.55 | 40 | 30.30% | 14.83 | 24 | 25.53% | 12.50 | | | | 64 | 12.80% | 6.27 | 682 | 28.46% | 13.93 |
| Engineer I/II | 37.88 | 2,559.0 | 15.21% | 5.76 | | | | 24 | 25.53% | 9.67 | | | | 108 | 21.60% | 8.18 | 510 | 21.29% | 8.06 |
| Survey V | 86.00 | 64.0 | 0.38% | 0.33 | | | | | | | 6 | 1.67% | 1.43 | 14 | 2.80% | 2.41 | | | |
| Survey IV | 79.75 | 448.0 | 2.66% | 2.12 | | | | | | | 16 | 4.44% | 3.54 | 58 | 11.60% | 9.25 | 24 | 1.00% | 0.80 |
| Survey III | 69.69 | 100.0 | 0.59% | 0.41 | | | | | | | 16 | 4.44% | 3.10 | 22 | 4.40% | 3.07 | | | |
| Survey II | 57.00 | 618.0 | 3.67% | 2.09 | | | | | | | 104 | 28.89% | 16.47 | 14 | 2.80% | 1.60 | | | |
| Survey I | 40.53 | 618.0 | 3.67% | 1.49 | | | | | | | 104 | 28.89% | 11.71 | 14 | 2.80% | 1.13 | | | |
| Engineering Technician V | 72.06 | 0.0 | | | | | | | | | | | | | | | | | |
| Engineering Technician IV | 66.97 | 0.0 | | | | | | | | | | | | | | | | | |
| Engineering Technician III | 44.83 | 0.0 | | | | | | | | | | | | | | | | | |
| Engineering Technician I/II | 31.38 | 0.0 | | | | | | | | | | | | | | | | | |
| CAD Manager | 74.08 | 1,305.0 | 7.75% | 5.74 | | | | | | | 80 | 22.22% | 16.46 | 58 | 11.60% | 8.59 | 170 | 7.10% | 5.26 |
| CAD Technician II | 55.73 | 712.0 | 4.23% | 2.36 | | | | | | | 24 | 6.67% | 3.72 | | | | 170 | 7.10% | 3.95 |
| GIS Specialist III | 60.66 | 329.0 | 1.96% | 1.19 | 40 | 30.30% | 18.38 | | | | | | | 22 | 4.40% | 2.67 | 34 | 1.42% | 0.86 |
| Landscape Architect | 67.98 | 141.0 | 0.84% | 0.57 | 8 | 6.06% | 4.12 | | | | | | | | | | 16 | 0.67% | 0.45 |
| Landscape Designer III | 42.36 | 145.0 | 0.86% | 0.36 | | | | | | | | | | | | | | | |
| Environmental Resource S | 79.50 | 678.0 | 4.03% | 3.20 | | | | 4 | 4.26% | 3.38 | | | | 14 | 2.80% | 2.23 | 34 | 1.42% | 1.13 |
| Environmental Resource S | 63.57 | 414.0 | 2.46% | 1.56 | 8 | 6.06% | 3.85 | 2 | 2.13% | 1.35 | | | | 6 | 1.20% | 0.76 | | | |
| Environmental Resource S | 55.17 | 414.0 | 2.46% | 1.36 | 8 | 6.06% | 3.34 | | | | | | | 4 | 0.80% | 0.44 | 20 | 0.83% | 0.46 |
| Environmental Resource T | 32.34 | 409.0 | 2.43% | 0.79 | | | | | | | | | | | | | | | |
| Environmental Resource T | 47.38 | 42.0 | 0.25% | 0.12 | | | | | | | | | | | | | | | |
| Engineering Intern | 19.75 | 0.0 | | | | | | | | | | | | | | | | | |
| Business Operations Depa | 60.34 | 0.0 | | | | | | | | | | | | | | | | | |
| | | 0.0 | | | | | | | | | | | | | | | | | |
| TOTALS | | 16828.0 | 100% | \$57.46 | 132.0 | 100.00% | \$59.27 | 94.0 | 100% | \$58.15 | 360.0 | 100% | \$58.54 | 500.0 | 100% | \$60.77 | 2396.0 | 100% | \$55.33 |

Local Public Agency

Lake County Division of Transportation

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Section Number

19-00099-65-ES

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AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 2 OF 4

| PAYROLL CLASSIFICATION | AVG HOURLY RATES | 6. Land Acquisition Services | | | 7. Geotechnical Engineering | | | 8. Special Waste | | | 9. Environemtnal Studies & Permits | | | 10. Landscape Design and Aesthetics | | | 11. Traffic Signal Design Quentin/Highland | | |
|--|------------------------|---------------------------------|------------|-------------|--------------------------------|------------|-------------|------------------|------------|-------------|---------------------------------------|------------|-------------|--|------------|-------------|---|------------|-------------|
| | | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg |
| Engineer VI | 86.00 | | | | 2 | 12.50% | 10.75 | | | | 24 | 1.63% | 1.40 | | | | | | |
| Engineer V | 75.92 | 60 | 2.41% | 1.83 | 6 | 37.50% | 28.47 | 6 | 18.75% | 14.23 | 34 | 2.31% | 1.76 | 2 | 6.25% | 4.74 | 8 | 20.00% | 15.18 |
| Engineer IV | 62.13 | 60 | 2.41% | 1.50 | 8 | 50.00% | 31.07 | 8 | 25.00% | 15.53 | 150 | 10.20% | 6.34 | 4 | 12.50% | 7.77 | 8 | 20.00% | 12.43 |
| Engineer III | 48.95 | 224 | 9.01% | 4.41 | | | | 6 | 18.75% | 9.18 | | | | | | | 12 | 30.00% | 14.68 |
| Engineer I/II | 37.88 | 108 | 4.34% | 1.65 | | | | 6 | 18.75% | 7.10 | | | | | | | 12 | 30.00% | 11.36 |
| Survey V | 86.00 | 44 | 1.77% | 1.52 | | | | | | | | | | | | | | | |
| Survey IV | 79.75 | 344 | 13.84% | 11.03 | | | | | | | | | | | | | | | |
| Survey III | 69.69 | 62 | 2.49% | 1.74 | | | | | | | | | | | | | | | |
| Survey II | 57.00 | 500 | 20.11% | 11.46 | | | | | | | | | | | | | | | |
| Survey I | 40.53 | 500 | 20.11% | 8.15 | | | | | | | | | | | | | | | |
| Engineering Technician V | 72.06 | | | | | | | | | | | | | | | | | | |
| Engineering Technician IV | 66.97 | | | | | | | | | | | | | | | | | | |
| Engineering Technician III | 44.83 | | | | | | | | | | | | | | | | | | |
| Engineering Technician I/II | 31.38 | | | | | | | | | | | | | | | | | | |
| CAD Manager | 74.08 | 584 | 23.49% | 17.40 | | | | | | | | | | | | | | | |
| CAD Technician II | 55.73 | | | | | | | | | | | | | | | | | | |
| GIS Specialist III | 60.66 | | | | | | | | | | 90 | 6.12% | 3.71 | | | | | | |
| Landscape Architect | 67.98 | | | | | | | | | | | | | 10 | 31.25% | 21.24 | | | |
| Landscape Designer III | 42.36 | | | | | | | | | | | | | 16 | 50.00% | 21.18 | | | |
| Environmental Resource Specialist V | 79.50 | | | | | | | 6 | 18.75% | 14.91 | 220 | 14.97% | 11.90 | | | | | | |
| Environmental Resource Specialist IV | 63.57 | | | | | | | | | | 300 | 20.41% | 12.97 | | | | | | |
| Environmental Resource Specialist III | 55.17 | | | | | | | | | | 340 | 23.13% | 12.76 | | | | | | |
| Environmental Resource Specialist I/II | 32.34 | | | | | | | | | | 270 | 18.37% | 5.94 | | | | | | |
| Environmental Resource Technician | 47.38 | | | | | | | | | | 42 | 2.86% | 1.35 | | | | | | |
| Engineering Intern | 19.75 | | | | | | | | | | | | | | | | | | |
| Business Operations Department | 60.34 | | | | | | | | | | | | | | | | | | |
| TOTALS | | 2486.0 | 100% | \$60.70 | 16.0 | 100% | \$70.29 | 32.0 | 100% | \$60.95 | 1470.0 | 100% | \$58.14 | 32.0 | 100% | \$54.93 | 40.0 | 100% | \$53.66 |

Local Public Agency

Lake County Division of Transportation

Consultant / Subconsultant Name

Christopher B. Burke Engineering, Ltd.

County

Lake

Section Number

19-00099-65-ES

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AVERAGE HOURLY PROJECT RATES
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 3 OF 4

| PAYROLL CLASSIFICATION | AVG HOURLY RATES | 12. Building Demolition Contract Docs | | | 13. Preliminary Plans & Documents (60%) | | | 14. Pre-Final Plans & Documents (95%) | | | 15. Final Plans & Documents (100%) | | | 16. Bid Set | | | 17. Agency Coordinaiton and Meetings | | |
|-----------------------------|------------------|---------------------------------------|---------|----------|---|---------|----------|---------------------------------------|---------|----------|------------------------------------|---------|----------|-------------|---------|----------|--------------------------------------|---------|----------|
| | | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg |
| Engineer VI | 86.00 | | | | 70 | 2.64% | 2.27 | 68 | 2.59% | 2.22 | 20 | 2.82% | 2.42 | 8 | 2.35% | 2.02 | 40 | 4.26% | 3.66 |
| Engineer V | 75.92 | 14 | 28.00% | 21.26 | 138 | 5.20% | 3.95 | 138 | 5.25% | 3.99 | 36 | 5.07% | 3.85 | 18 | 5.28% | 4.01 | 124 | 13.19% | 10.01 |
| Engineer IV | 62.13 | 12 | 24.00% | 14.91 | 620 | 23.37% | 14.52 | 616 | 23.43% | 14.56 | 168 | 23.66% | 14.70 | 78 | 22.87% | 14.21 | 156 | 16.60% | 10.31 |
| Engineer III | 48.95 | 12 | 24.00% | 11.75 | 690 | 26.01% | 12.73 | 684 | 26.02% | 12.73 | 184 | 25.92% | 12.68 | 90 | 26.39% | 12.92 | 220 | 23.40% | 11.46 |
| Engineer I/II | 37.88 | 12 | 24.00% | 9.09 | 572 | 21.56% | 8.17 | 565 | 21.49% | 8.14 | 150 | 21.13% | 8.00 | 74 | 21.70% | 8.22 | 124 | 13.19% | 5.00 |
| Survey V | 86.00 | | | | | | | | | | | | | | | | | | |
| Survey IV | 79.75 | | | | | | | | | | | | | | | | | | |
| Survey III | 69.69 | | | | | | | | | | | | | | | | | | |
| Survey II | 57.00 | | | | | | | | | | | | | | | | | | |
| Survey I | 40.53 | | | | | | | | | | | | | | | | | | |
| Engineering Technician V | 72.06 | | | | | | | | | | | | | | | | | | |
| Engineering Technician IV | 66.97 | | | | | | | | | | | | | | | | | | |
| Engineering Technician III | 44.83 | | | | | | | | | | | | | | | | | | |
| Engineering Technician I/II | 31.38 | | | | | | | | | | | | | | | | | | |
| CAD Manager | 74.08 | | | | 172 | 6.48% | 4.80 | 171 | 6.50% | 4.82 | 48 | 6.76% | 5.01 | 22 | 6.45% | 4.78 | | | |
| CAD Technician II | 55.73 | | | | 218 | 8.22% | 4.58 | 216 | 8.22% | 4.58 | 58 | 8.17% | 4.55 | 26 | 7.62% | 4.25 | | | |
| GIS Specialist III | 60.66 | | | | | | | | | | | | | | | | 70 | 7.45% | 4.52 |
| Landscape Architect | 67.98 | | | | 28 | 1.06% | 0.72 | 27 | 1.03% | 0.70 | 8 | 1.13% | 0.77 | 4 | 1.17% | 0.80 | 18 | 1.91% | 1.30 |
| Landscape Designer III | 42.36 | | | | 54 | 2.04% | 0.86 | 55 | 2.09% | 0.89 | 14 | 1.97% | 0.84 | 6 | 1.76% | 0.75 | | | |
| Environmental Resource Spe | 79.50 | | | | 34 | 1.28% | 1.02 | 34 | 1.29% | 1.03 | 8 | 1.13% | 0.90 | 4 | 1.17% | 0.93 | 118 | 12.55% | 9.98 |
| Environmental Resource Spe | 63.57 | | | | | | | | | | | | | | | | 44 | 4.68% | 2.98 |
| Environmental Resource Spe | 55.17 | | | | | | | | | | | | | | | | 26 | 2.77% | 1.53 |
| Environmental Resource Spe | 32.34 | | | | 57 | 2.15% | 0.69 | 55 | 2.09% | 0.68 | 16 | 2.25% | 0.73 | 11 | 3.23% | 1.04 | | | |
| Environmental Resource Tec | 47.38 | | | | | | | | | | | | | | | | | | |
| Engineering Intern | 19.75 | | | | | | | | | | | | | | | | | | |
| Business Operations Departm | 60.34 | | | | | | | | | | | | | | | | | | |
| TOTALS | | 50.0 | 100% | \$57.01 | 2653.0 | 100% | \$54.31 | 2629.0 | 100% | \$54.33 | 710.0 | 100% | \$54.45 | 341.0 | 100% | \$53.92 | 940.0 | 100% | \$60.74 |

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

19-00099-65-ES

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Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 4 OF 4

| PAYROLL CLASSIFICATION | AVG HOURLY RATES | 18. Public Outreach and Stakeholder Coordination | | | 19. Financial Plan & Project Funding Assistance | | | 20. Project Management and Administration | | | 21. QA/QC and Constructability Reviews | | | 22. Bid Support | | | Hours | % Part. | Wgtd Avg |
|-----------------------------|------------------|--|---------|----------|---|---------|----------|---|---------|----------|--|---------|----------|-----------------|---------|----------|-------|---------|----------|
| | | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | | | |
| Engineer VI | 86.00 | 20 | 3.40% | 2.92 | 32 | 16.67% | 14.33 | 72 | 14.75% | 12.69 | 32 | 13.22% | 11.37 | 24 | 5.50% | 4.73 | | | |
| Engineer V | 75.92 | 72 | 12.22% | 9.28 | 32 | 16.67% | 12.65 | 142 | 29.10% | 22.09 | 82 | 33.88% | 25.72 | 48 | 11.01% | 8.36 | | | |
| Engineer IV | 62.13 | 80 | 13.58% | 8.44 | 48 | 25.00% | 15.53 | 106 | 21.72% | 13.50 | 82 | 33.88% | 21.05 | 56 | 12.84% | 7.98 | | | |
| Engineer III | 48.95 | 126 | 21.39% | 10.47 | 24 | 12.50% | 6.12 | 106 | 21.72% | 10.63 | | | | 96 | 22.02% | 10.78 | | | |
| Engineer I/II | 37.88 | 156 | 26.49% | 10.03 | 24 | 12.50% | 4.74 | 14 | 2.87% | 1.09 | | | | 100 | 22.94% | 8.69 | | | |
| Survey V | 86.00 | | | | | | | | | | | | | | | | | | |
| Survey IV | 79.75 | 6 | 1.02% | 0.81 | | | | | | | | | | | | | | | |
| Survey III | 69.69 | | | | | | | | | | | | | | | | | | |
| Survey II | 57.00 | | | | | | | | | | | | | | | | | | |
| Survey I | 40.53 | | | | | | | | | | | | | | | | | | |
| Engineering Technician V | 72.06 | | | | | | | | | | | | | | | | | | |
| Engineering Technician IV | 66.97 | | | | | | | | | | | | | | | | | | |
| Engineering Technician III | 44.83 | | | | | | | | | | | | | | | | | | |
| Engineering Technician I/II | 31.38 | | | | | | | | | | | | | | | | | | |
| CAD Manager | 74.08 | | | | | | | | | | | | | | | | | | |
| CAD Technician II | 55.73 | | | | | | | | | | | | | | | | | | |
| GIS Specialist III | 60.66 | 57 | 9.68% | 5.87 | 16 | 8.33% | 5.05 | | | | | | | | | | | | |
| Landscape Architect | 67.98 | 14 | 2.38% | 1.62 | | | | | | | | | | 8 | 1.83% | 1.25 | | | |
| Landscape Designer III | 42.36 | | | | | | | | | | | | | | | | | | |
| Environmental Resource Sp | 79.50 | 36 | 6.11% | 4.86 | 8 | 4.17% | 3.31 | 48 | 9.84% | 7.82 | 46 | 19.01% | 15.11 | 64 | 14.68% | 11.67 | | | |
| Environmental Resource Sp | 63.57 | 22 | 3.74% | 2.37 | 8 | 4.17% | 2.65 | | | | | | | 24 | 5.50% | 3.50 | | | |
| Environmental Resource Sp | 55.17 | | | | | | | | | | | | | 16 | 3.67% | 2.02 | | | |
| Environmental Resource Sp | 32.34 | | | | | | | | | | | | | | | | | | |
| Environmental Resource Te | 47.38 | | | | | | | | | | | | | | | | | | |
| Engineering Intern | 19.75 | | | | | | | | | | | | | | | | | | |
| Business Operations Depar | 60.34 | | | | | | | | | | | | | | | | | | |
| TOTALS | | 589.0 | 100% | \$56.68 | 192.0 | 100% | \$64.39 | 488.0 | 100% | \$67.81 | 242.0 | 100% | \$73.26 | 436.0 | 100% | \$58.98 | 0.0 | 0% | \$0.00 |

Teska Associates, Inc. (Teska)

Contract Scope and CECS



February 14, 2024

To: Matt Smith, TranSystems, mjsmith@transystems.com
Ben Vander Wal, Transystems, brvanderwal@transystems.com

From: Jodi Mariano, Teska Associates, jmariano@teskaassociates.com

Re: Old McHenry Road Phase 2, Fairfield Rd to Bonnie Ln – Outreach + Aesthetic Design Scope

Please find the proposed scope of services for the above-mentioned project.

OLD MCHENRY ROAD PHASE 2, FAIRFIELD RD TO BONNIE LN - OUTREACH + AESTHETIC DESIGN SCOPE

1. Meetings

- A. *Project kickoff.* Attend an initial project kickoff meeting to confirm the project scope, schedule, overall public involvement approach and project milestones. During this meeting we will also confirm the design approaches for the aesthetic and landscape design elements of the project.
- B. *Monthly meetings.* Attend monthly meetings with LCDOT for a duration of two years.
- C. *Team coordination.* Coordinate with the Team via email, telephone, teleconference meetings as required throughout the duration of this assignment.

2. Public Outreach

Teska will provide public outreach support throughout this assignment. The project logo and branding will be carried over from the previous Phase 1 assignment to Phase 2. Teska will work with the team and LCDOT to provide information for LCDOT's use in developing the Phase 2 website, hosted by LCDOT. Outreach tasks will include the following:

- A. *Project website.* Close the Teska-hosted Phase 1 website: www.omxproject.com. Provide graphics, narratives, and documents to LCDOT for inclusion in the LCDOT hosted Phase 2 website. Provide graphics, narratives, and documents to LCDOT for website updates throughout the duration of the project.
- B. *Public Meetings.* Five presentations to the Village of Hawthorn Woods / Village of Lake Zurich Boards and Commissions are included. The purpose of the meetings would be to present design progress, discuss design options, confirm decisions for design features and receive community

feedback. Meetings would include formal presentations, followed by discussions. Teska will provide full size color exhibits of the Teska produced materials for each meeting.

3. Old McHenry Road - Aesthetic Design Documentation

Based on the conceptual design materials produced during the Phase 1 Engineering, including community feedback and LCDOT direction, Teska will develop design documentation for the project area located along the Old McHenry Road right of way, between Fairfield Road (west) and Bonnie Lane (east) (approximately 4,315 lf). The aesthetic features to be designed and documented include the proposed bridge, retaining walls and railings associated with the proposed underpass at the Old McHenry Road and Canadian National (CN) Railway crossing.

- A. Prepare base plans. Teska will obtain proposed civil, geometric, and structural drawings from TranSystems. These materials will form the basis upon which Teska's design materials will be prepared. All design work will be produced in AutoCAD format.
- B. Prepare construction documents. Based on confirmation from LCDOT and municipalities on the Phase 1 concept design, Teska will produce construction documents at the 60%, 95% and 100% levels. Construction documents will include plans (AutoCAD format), specifications (Word format), and cost estimates (Excel format). The construction documents will be coordinated with the design team. Teska will participate in review meetings with LCDOT to review and confirm the design selections. Revisions will be made as required. Teska's design materials will address aesthetic improvements to the bridge, retaining walls and railings as applicable to the proposed underpass improvements. Teska's scope will address all aesthetic and surface treatments. All civil and structural engineering shall be by others.
- C. Prepare bid documents. Based on approval of the 100% Construction Documents, The Bid Documents will include any refinements needed to the plans (AutoCAD format), specifications (Word format), and quantities (Excel format). Bid Documents will be forwarded to the project team for inclusion in the overall document set and for LCDOT's use in issuing for public bidding. All front-end bid documents and bid administration shall be by others.
- D. Design Visualizations. Illustrations will be developed to assist LCDOT and municipal partners understand proposed design features. Based on 3D modeling prepared by others, Teska will create two illustrative perspective drawings to convey proposed bridge, retaining wall and railing improvements.
- E. Review landscape architectural design. Teska will review landscape architectural design prepared by TranSystems. Teska will review TranSystems' landscape design progress at the 60%, 95% and 100% levels and provide redlines and recommendations to TranSystems for landscape design, including plant species, sizes, and arrangements.

4. St Matthew Church – Landscape Architectural Design Documentation

Based on the conceptual design materials produced during the Phase 1 Engineering, including St Matthew Church feedback and LCDOT direction, Teska will develop landscape architectural design documentation for the proposed site improvements within the St. Matthew Church property.

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|--|----------------------------------|---------------------------|
| Local Public Agency Lake County Department of Transportation | County Lake | Section Number |
| Prime Consultant (Firm) Name TranSystems | Prepared By J. Mariano | Date 5/29/2024 |
| Consultant / Subconsultant Name Teska Associates | 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 | 48 | MONTHS | OVERHEAD RATE | 110.24% |
| START DATE | 10/1/2024 | | COMPLEXITY FACTOR | 0 |
| RAISE DATE | 1/1/2025 | | % OF RAISE | 2.00% |
| END DATE | 9/30/2028 | | | |

ESCALATION PER YEAR

| Year | First Date | Last Date | Months | % of Contract |
|------|------------|-----------|--------|---------------|
| 0 | 10/1/2024 | 1/1/2025 | 3 | 6.25% |
| 1 | 1/2/2025 | 1/1/2026 | 12 | 25.50% |
| 2 | 1/2/2026 | 1/1/2027 | 12 | 26.01% |
| 3 | 1/2/2027 | 1/1/2028 | 12 | 26.53% |
| 4 | 1/2/2028 | 10/1/2028 | 9 | 20.30% |

The total escalation = 4.59%

Local Public Agency

Lake County Department of Transportation

County

Lake

Section Number

Consultant / Subconsultant Name

Teska Associates

Job Number

DIRECT COSTS WORKSHEET

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

| ITEM | ALLOWABLE | QUANTITY | CONTRACT RATE | TOTAL |
|---|---|----------|---------------|-------------------|
| Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD) | Actual Cost (Up to state rate maximum) | | | \$0.00 |
| Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD) | Actual Cost | | | \$0.00 |
| Air Fare | Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval | | | \$0.00 |
| Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD) | Up to state rate maximum | 7 | \$75.00 | \$525.00 |
| Vehicle Owned or Leased | \$32.50/half day (4 hours or less) or \$65/full day | | | \$0.00 |
| Vehicle Rental | Actual Cost (Up to \$55/day) | | | \$0.00 |
| Tolls | Actual Cost | | | \$0.00 |
| Parking | Actual Cost | | | \$0.00 |
| Overtime | Premium portion (Submit supporting documentation) | | | \$0.00 |
| Shift Differential | Actual Cost (Based on firm's policy) | | | \$0.00 |
| Overnight Delivery/Postage/Courier Service | Actual Cost (Submit supporting documentation) | | | \$0.00 |
| Copies of Deliverables/Mylars (In-house) | Actual Cost (Submit supporting documentation) | | | \$0.00 |
| Copies of Deliverables/Mylars (Outside) | Actual Cost (Submit supporting documentation) | 7 | \$150.00 | \$1,050.00 |
| 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 |
| Utility Exploratory Trenching | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| Testing of Soil Samples | Actual Cost | | | \$0.00 |
| Lab Services | Actual Cost (Provide breakdown of each cost) | | | \$0.00 |
| Equipment and/or Specialized Equipment Rental | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| | | | | \$0.00 |
| | | | | \$0.00 |
| | | | | \$0.00 |
| TOTAL DIRECT COSTS: | | | | \$1,575.00 |

Local Public Agency

Lake County Department of Transportation

County

Lake

Section Number

Consultant / Subconsultant Name

Teska Associates

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 1 OF 2

| PAYROLL CLASSIFICATION | AVG HOURLY RATES | TOTAL PROJ. RATES | | | Meetings | | | Public Outreach | | | Old McHenry Rd - Aesthetic Design Documentation | | | St Matthew Church - Landscape Architectural Design Documentation | | | Project Management and 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 |
| Principal | 76.87 | 220.0 | 27.16% | 20.88 | 60 | 46.15% | 35.48 | 20 | 28.57% | 21.96 | 60 | 17.65% | 13.57 | 40 | 18.18% | 13.98 | 30 | 100.00% | 76.87 |
| Senior Associate | 61.06 | 200.0 | 24.69% | 15.08 | 40 | 30.77% | 18.79 | 10 | 14.29% | 8.72 | 80 | 23.53% | 14.37 | 60 | 27.27% | 16.65 | 0 | | |
| Associate | 52.01 | 390.0 | 48.15% | 25.04 | 30 | 23.08% | 12.00 | 40 | 57.14% | 29.72 | 200 | 58.82% | 30.59 | 120 | 54.55% | 28.37 | 0 | | |
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| TOTALS | | 810.0 | 100% | \$61.00 | 130.0 | 100.00% | \$66.27 | 70.0 | 100% | \$60.41 | 340.0 | 100% | \$58.53 | 220.0 | 100% | \$59.00 | 30.0 | 100% | \$76.87 |

Local Public Agency

Lake County Department of Transportation

County

Lake

Section Number

Consultant / Subconsultant Name

Teska Associates

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 2 OF 2

| PAYROLL CLASSIFICATION | AVG HOURLY RATES | Bid Support | | | | | | | | | | | | | | | | | |
|---------------------------|------------------------|-------------|------------|-------------|-------|------------|-------------|-------|------------|-------------|-------|------------|-------------|-------|------------|-------------|-----|----|--------|
| | | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | | | |
| Principal | 76.87 | 10 | 50.00% | 38.44 | | | | | | | | | | | | | | | |
| Senior Associate | 61.06 | 10 | 50.00% | 30.53 | | | | | | | | | | | | | | | |
| Associate | 52.01 | 0 | | | | | | | | | | | | | | | | | |
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| TOTALS | | 20.0 | 100% | \$68.96 | 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 |

Wang Engineering, Inc. (Wang)

Contract Scope and CECS

February 15, 2024

Joe R. Mickow, PE, SE
Project Manager
TranSystems
1475 East Woodfield Road, Suite 600
Schaumburg, IL 60173-5440

Re: Proposal for Geotechnical Engineering Services
Old McHenry Road and Quentin Road
Phase II Design Services, Contract 1
Hawthorn Woods and Lake Zurich
Lake County, Illinois
Wang PKE245048

Dear Mr. Mickow:

Wang Engineering Inc. (Wang) is pleased to present this proposal for geotechnical engineering services to support the Phase 2 Contract 1 project for the improvement of Old McHenry Road (OMR) east of Fairfield Road including Fairfield Road. in the Villages of Hawthorn Woods and Lake Zurich, Lake County. The following describes the proposed scope of services and cost estimate. Our project understanding is based on email received from TranSystems on February 8, 2024. The geotechnical investigation will be performed in accordance with the IDOT Geotechnical Manual.

The objectives of the geotechnical engineering services will be to define general subsurface soil and groundwater conditions, develop parameters for foundation and subgrade soil stability and deformation analyses, and provide geotechnical recommendations for roadway and foundation design and construction.

SCOPE OF WORK

Based on our understanding of the proposed improvements and TranSystems scope of work, Wang proposes the following field exploration program.

Proposed boring program:

1. **Four** Additional structure borings for the temporary wall along the shoofly track alignment, south of previously performed Boring SF-RW-01. The anticipated maximum wall height is 10 feet. These borings will be drilled to the requested depth of 50 feet.
2. **Four** 20-foot-deep borings along Midlothian Road south of Old McHenry Road between Sta. 94+50 and Sta. 98+00. The anticipated maximum wall height is 5 feet.

February 15, 2024

3. **Four** 20-foot-deep borings within St. Matthews church property for a new wall near the southeast corner of a proposed parking area. The anticipated maximum wall height is 5 feet. The parking lot will be raised in this area.
4. **Four** 10-foot-deep roadway borings located along the temporary roadway alignment, north of OMR. Access to this area will not be allowed until the property has been acquired by the County, so these borings will be performed at a later date.
5. **Thirty-six** 10-foot-deep additional roadway borings located along each project roadway alignment to meet the IDOT recommended 300 feet spacing. Structure borings performed for Phase 1 walls will be utilized for the RGR too.
6. **Four** 15-foot-deep detention pond borings will be performed in two potential detention areas. At each pond location, one boring will be converted to a piezometer for groundwater monitoring. Bulk samples will also be obtained for embankment suitability testing.
7. **Two** 20-foot-deep borings will be drilled for proposed railroad gate foundations. And,
8. **Sixteen** 30-foot-deep traffic signal borings will be drilled at the corridor intersections.

| Improvement | Borings | Depth (ft) | Footage (ft) |
|----------------------------------|----------------|-------------------|---------------------|
| Temporary Shoofly Retaining Wall | 4 | 50 | 200 |
| Midlothian Road Retaining Wall | 4 | 20 | 80 |
| St. Matthews Retaining Wall | 4 | 20 | 80 |
| Temporary Road (north of OMC) | 4 | 10 | 40 |
| Roadway Improvements | 36 | 10 | 360 |
| Detention Pond | 4 | 15 | 60 |
| Railroad Gates | 2 | 20 | 40 |
| Traffic Signals | 16 | 30 | 480 |
| Totals | 74 | | 1,340 |

To accomplish the above geotechnical investigation program, Wang proposes the following tasks:

Desk Study and Site Visit: Wang will study and analyze existing roadway and foundation drawings, boring logs, and subsurface geological information to check for factors that might impact the proposed engineering works. Ground surface features, potential construction limitations and impacts on nearby structures, evidence of distress or deformation in the existing

February 15, 2024

pavements and foundations, and signs of approach settlement will be examined during a site visit and boring layout.

Geotechnical Drilling and Sampling: Wang will provide equipment, labor, and associated materials to drill and sample roadway and structure borings. For Phase 2, we will drill and sample an estimated 1,340 feet of soil in 74 boreholes. The borings will be drilled using both truck- and ATV-mounted rigs. We assume that traffic control will be allowed only between the hours of 9:00 AM and 3:00 PM.

Full-depth pavement cores will not be collected. The borings will be advanced with hollow stem augers. Soil samples will be collected with split barrel samplers according to AASHTO T206, "Penetration Test and Split-Barrel Sampling of Soils."

Soil samples will be collected at 2.5-foot intervals in the structure borings. Roadway borings will be sampled continuously.

Structure boreholes will be grouted after completion. The roadway boreholes will be backfilled with soil cuttings. The remaining drilling spoils will be discarded off pavement areas and evenly spread out. Where necessary, the pavement will be patched, and the surface will be restored as close as possible to the original condition. We will make reasonable efforts to avoid making ruts in landscape areas during drilling activities, but landscape restoration services are not included in out scope of work.

Field Supervision: Prior to the start of the investigation, Wang will obtain right-of entry permits with CN Railroad and will coordinate access to the private church property. Wang will coordinate the location of utilities with respect to the proposed boring locations. Utilities within the Matthews Church property will require the use of a private utility locator. A Wang field engineer will monitor drilling activities, maintain field notes, log samples, measure groundwater elevations, and prepare soil samples for transport to our laboratory. The field engineer will also perform penetrometer and Rimac unconfined compressive strength tests on cohesive soil samples and observe and record the SPT values on 6 inches of penetration. The as-drilled boring/coring northing and easting locations will be measured using a mapping-grade GPS. As drilled boring elevations will be surveyed by others or interpolated by TranSystems from the TIN model.

Laboratory Testing: Soil samples will be transported to our AASHTO-certified laboratory. Soil testing will include moisture content, organic content, compaction testing, Atterberg limits, and particle size analysis tests.

February 15, 2024

Engineering Analyses, Recommendations, and Reporting:

Wang will prepare Structure Geotechnical Reports (SGRs) for every structure that will require a TSL Plan. A geotechnical letter report will be prepared for structures that will not require TSL plans (e.g., traffic signals, railroad gate foundations). Roadway Geotechnical Reports (RGRs) will be prepared for the roadway alignments. One draft version of each report will be submitted for review by TranSystems and the County; final signed reports will address issues raised by reviewers.

The geotechnical reports will include site location maps, description of the subsurface investigation methods, soil boring location plans, boring logs, laboratory test results, and assessments of the site soil and groundwater conditions. Analyses for foundation type, pile capacity and settlement evaluations, recommendations for foundation design and construction, seismic site classification, global stability analyses, as well as criteria and procedures for temporary excavation, dewatering, backfilling, and compaction will be provided. The reports will be prepared as per the current IDOT requirements.

We will submit the following geotechnical reports.

1. One Roadway Geotechnical Report (RGR)
2. One SGR for the Midlothian Road retaining wall
3. One SGR for the St. Matthews Church retaining wall
4. One revised SGR for the extended shoofly retaining wall
5. One revised RGR for the temporary roadway alignment north of Old McHenry Road
6. One geotechnical letter report for traffic signals, detention ponds, and railroad gate structures

SCHEDULING

Wang will start the project expediently upon prior written authorization to proceed. We estimate the site visit and boring layout will require three working days. The proposed Phase 2 subsurface investigation program will be completed in about 20 working days using just one drilling rig. If necessary, Wang may mobilize more than one rig at any given time to meet the project schedule demands. The laboratory testing program will be completed within four weeks after the subsurface investigation. Draft reports will be submitted for review within three weeks after receiving preliminary TSL plans and roadway plan and profile drawings. Final reports will be issued two weeks after receiving comments on the draft reports.

ESTIMATED COST AND ASSUMPTIONS

Wang proposes to provide the above tasks on time and expense basis according to the attached cost estimate. Wang would not exceed the estimated upper limit without the Client approval. In preparing the cost estimate we have assumed the following conditions:

February 15, 2024

- Railroad permitting and railroad flaggers will be required,
- A right of entry agreement and private utility clearance will be required on Matthews Church property,
- Working times for items with traffic impacts will be restricted to 9AM to 3PM, and
- Truck-and-driver traffic control will be necessary for the signal borings

Wang Engineering, Inc. appreciates the opportunity to present this proposal. If you have questions, or if you require additional information, please contact us at (630) 953-9928.

Sincerely,

WANG ENGINEERING, INC.



Mohammed Kothawala, P.E., D. GE
Sr. Project manager/ Sr. Geotechnical Engineer

Eric Datz
Project Manager/ Engineering Geologist

Liviu Iordache, PG
Principal / Geotechnical Department Manager III



| | | |
|--|------------------------------------|---|
| Local Public Agency Lake County Department of Transportation | County Lake | Section Number 19-00999-65-ES |
| Consultant (Firm) Name Wang Engineering, Inc. | Prepared By M. Kothawala | Date 5/28/2024 |

PAYROLL ESCALATION TABLE

| | | | | |
|---------------|-----------|--------|-------------------|---------|
| CONTRACT TERM | 48 | MONTHS | OVERHEAD RATE | 200.57% |
| START DATE | 10/1/2024 | | COMPLEXITY FACTOR | 0 |
| RAISE DATE | 4/1/2025 | | % OF RAISE | 2.00% |
| END DATE | 9/30/2028 | | | |

ESCALATION PER YEAR

| Year | First Date | Last Date | Months | % of Contract |
|------|------------|-----------|--------|---------------|
| 0 | 10/1/2024 | 4/1/2025 | 6 | 12.50% |
| 1 | 4/2/2025 | 4/1/2026 | 12 | 25.50% |
| 2 | 4/2/2026 | 4/1/2027 | 12 | 26.01% |
| 3 | 4/2/2027 | 4/1/2028 | 12 | 26.53% |
| 4 | 4/2/2028 | 10/1/2028 | 6 | 13.53% |

The total escalation = 4.07%

Local Public Agency

Lake County Department of Transportation

County

Lake

Section Number

19-00999-65-ES

AVERAGE HOURLY PROJECT RATES

Exhibit E Cost Estimate of Consultants Services Worksheet Fixed Raise

SHEET 1 OF 2

| PAYROLL CLASSIFICATION | AVG HOURLY RATES | TOTAL PROJ. RATES | | | Desk Study, Permitting & Boring Layout | | | Field Work, Logging, GW Monitoring | | | Laboratory Testing | | | Data Analyses & Engineering | | | Report Preparation | | |
|----------------------------|------------------|-------------------|---------|----------|--|---------|----------|------------------------------------|---------|----------|--------------------|---------|----------|-----------------------------|---------|----------|--------------------|---------|----------|
| | | 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 in Charge | 78.00 | 15.0 | 2.14% | 1.67 | | | | | | | | | | | | | | | |
| Project Manager | 72.12 | 30.0 | 4.29% | 3.09 | | | | | | | | | | | | | | | |
| Senior Engineer | 72.12 | 85.0 | 12.14% | 8.76 | 5 | 14.29% | 10.30 | | | | | | 30 | 15.79% | 11.39 | 50 | 28.57% | 20.61 | |
| Project Engineer/Project G | 44.50 | 280.0 | 40.00% | 17.80 | 30 | 85.71% | 38.14 | 10 | 4.44% | 1.98 | | | 145 | 76.32% | 33.96 | 95 | 54.29% | 24.16 | |
| Assistant Engineer/Assista | 34.88 | 235.0 | 33.57% | 11.71 | | | | 215 | 95.56% | 33.33 | | | 15 | 7.89% | 2.75 | 5 | 2.86% | 1.00 | |
| Laboratory Technician | 37.74 | 5.0 | 0.71% | 0.27 | | | | | | | 5 | 100.00% | 37.74 | | | | | | |
| Administrative Assistant | 37.27 | 25.0 | 3.57% | 1.33 | | | | | | | | | | | | | | | |
| QC/QA Reviewer | 78.00 | 25.0 | 3.57% | 2.79 | | | | | | | | | | | | 25 | 14.29% | 11.14 | |
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| TOTALS | | 700.0 | 100% | \$47.42 | 35.0 | 100.00% | \$48.45 | 225.0 | 100% | \$35.31 | 5.0 | 100% | \$37.74 | 190.0 | 100% | \$48.10 | 175.0 | 100% | \$56.90 |

HBK Engineering, LLC. (HBK)

Contract Scope and CECS

February 14, 2024

Matthew J. Smith, P.E.
Senior Vice President
Transystems
1475 East Woodfield Road, Suite 600
Schaumburg, IL 60173

Re: Scope and Fee for Subsurface Utility Engineering & Utility Coordination along Old McHenry Rd –
Lake County, Illinois
HBK Engineering, LLC – P23-5007

Dear Mr. Smith,

HBK Engineering, LLC, is pleased to present this proposal to Transystems. This Phase II Engineering Study centering around corridor improvements along Old McHenry Road in Lake County, Illinois. This project will require field investigation, utility relocation plan reviews, and design team meetings.

The total proposal cost estimate is \$48,841.00. HBK's scope and fees for the project are broken into four (4) components, as follows:

Additional Field Investigations

Pricing Total: \$9,081.00

Utility Relocation Plan Reviews

Pricing Total: \$12,931.00

SUE Quality Level A Locating

Pricing Total: \$19,046.00

Design Progress Meetings

Pricing Total: \$7,783.00

HBK appreciates the opportunity to assist Transystems on this project. Please contact me if there are questions or if you need additional information. Upon acceptance of this proposal, HBK Engineering will provide a Professional Services Agreement for execution with Transystems.

Sincerely,



Anthony R. D'Angelo
Project Manager

Attachments:

- HBK SUE-Utility Coordination SOW - Old McHenry Road PH02 Sect01-2024.02.14.doc
- BLR 05514_LCDOT - Transystems_Old McHenry Road PH02 Sect01_HBK_2024.02.14.xls
- HBK SUE- QLA Fee Estimate - Old McHenry Road PH02 Sect01 - 2024.02.14.xls

cc: Dan Zeman, PE CAPM

(HBK SUE-Utility Coordination Cover Letter - Old McHenry Road PH02 Sect01-2024.02.14)

Old McHenry Rd from Forest Ave to Fairfield Ave PH 02 – Lake County, IL

At the request of Transystems (Consultant), **HBK Engineering, LLC (HBK)** has prepared a scope of services for field investigations, Quality Level A test holes, and utility relocation design review for Old McHenry Road improvements in Lake County, IL. A manhour and fee estimate for this project is also attached.

Project Limits

The project limits and all work will occur in and regarding the project area along Old McHenry Road as described below (see attached exhibit):

Project Area

- Along Old McHenry Road from East ROW line of Forest Ave to ~700 feet West of the West ROW line of Fairfield Road including:
 - o Along CNRR ROW for 1000' North and South of the ROW lines of Old McHenry Road
 - o Along Midlothian Rd for 1500' North and South of the ROW lines of Old McHenry Road
 - o Along Fairfield Rd for 2000' North of the North ROW line of Old McHenry Road
 - o Along all other intersecting public streets to 100' from the ROW of Old McHenry Road

All work for this project will be completed by HBK, as a subconsultant to Transystems.

Project Tasks

Based on the expectation that utility conflicts are likely to be a substantial challenge with respect to design and construction of the proposed improvements, a separate Subsurface Utility Engineering (SUE) investigation and a review of utility relocation plans, will be completed for the project by HBK. The information gathered by HBK will be incorporated into the project plans as appropriate. All work will be performed within the following tasks.

Additional Field Investigation

HBK will be available to perform site walkdowns and/or additional field investigations as requested by the Consultant or as recommended by HBK and concurred by the Consultant, up to the available contract fee.

Descriptions of SUE quality levels are derived from the 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).

HBK will perform additional SUE Quality Level B designation of any utility facilities located within the project limits as recommended and concurred by the Consultant. Quality Level D information will be obtained from the local agencies, utility company atlases, JULIE requests, and other reliable sources. Qualified HBK staff will perform Level B designation of underground utilities within the project limits.

HBK will survey the located utilities utilizing state plane coordinates. HBK will survey all designated and, if applicable, potholed utilities utilizing GPS equipment. It is assumed that the coordinates or field information will be on Illinois State Plane East, NAD83 (2011).

It is assumed that Consultant has benchmarks available in the vicinity of the project or that HBK will be allowed to establish vertical control (NAVD88) utilizing GPS and the nearest NGS vertical

monuments. Consultant will provide the benchmark(s) and control data for HBK's use in its data collection.

Survey will include existing visible utility structures, including telecommunication, gas, electric, watermain, and other utilities as relevant to the approved additional investigation.

Utility Relocation Plan Review

HBK will review relocation plans provided by the utility owners as they are provided by the project design team. Plans will be reviewed for constructability and conflict resolution. Recommendations will be passed to the design team to help ensure efficient use of the available right of way.

Utility Locate and Survey

HBK will oversee the excavation and collection of data for as many as six (6) Level A test holes of a typical size (see attached fee exhibit). HBK will have qualified staff on hand to observe a sub-contracted excavation crew and collect field measurements and other data. The data will be added to the utility base map. This data will be used to refine the project team's understanding of existing subsurface utilities and required potential need for relocations. All test holes are to be requested by the design team or recommended by HBK with the concurrence of the design team previous to performing the work.

Design Team Progress Meetings

HBK will have at least one (1) representative attend progress meetings, assumed to be monthly and led by the Consultant.

Exclusions

- Permitting fees are NOT included in this proposal and, if assessed, shall be considered a pass-through cost
- Additional utility relocation cost estimates can be performed, as requested by the Consultant, at additional cost and at the discretion of HBK
- SUE Level B designation and utility base mapping DOES NOT include sanitary or storm sewers
- All fees within this proposal are based on the provided project timeline

End of Document



| | | |
|--|--|---|
| Local Public Agency Lake County Division of Transportation | County Lake | Section Number 19-00999-65-ES |
| Prime Consultant (Firm) Name Transystems | Prepared By Anthony D'Angelo | Date 5/30/2024 |
| Consultant / Subconsultant Name HBK Engineering, LLC | 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 | 48 | MONTHS | OVERHEAD RATE | 117.52% |
| START DATE | 10/1/2024 | | COMPLEXITY FACTOR | 0 |
| RAISE DATE | 1/1/2025 | | % OF RAISE | 2.00% |
| END DATE | 9/30/2028 | | | |

ESCALATION PER YEAR

| Year | First Date | Last Date | Months | % of Contract |
|------|------------|-----------|--------|---------------|
| 0 | 10/1/2024 | 1/1/2025 | 3 | 6.25% |
| 1 | 1/2/2025 | 1/1/2026 | 12 | 25.50% |
| 2 | 1/2/2026 | 1/1/2027 | 12 | 26.01% |
| 3 | 1/2/2027 | 1/1/2028 | 12 | 26.53% |
| 4 | 1/2/2028 | 10/1/2028 | 9 | 20.30% |

The total escalation = 4.59%

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

19-00999-65-ES

Consultant / Subconsultant Name

HBK Engineering, LLC

Job Number

DIRECT COSTS WORKSHEET

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

| ITEM | ALLOWABLE | QUANTITY | CONTRACT RATE | TOTAL |
|---|---|----------|---------------|--------------------|
| Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD) | Actual Cost (Up to state rate maximum) | | | \$0.00 |
| Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD) | Actual Cost | | | \$0.00 |
| Air Fare | Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval | | | \$0.00 |
| Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD) | Up to state rate maximum | | | \$0.00 |
| Vehicle Owned or Leased | \$32.50/half day (4 hours or less) or \$65/full day | 10 | \$65.00 | \$650.00 |
| 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 |
| Utility Exploratory Trenching | Actual Cost (Requires 2-3 quotes with IDOT approval) | 2 | \$6,629.41 | \$13,258.82 |
| Testing of Soil Samples | Actual Cost | | | \$0.00 |
| Lab Services | Actual Cost (Provide breakdown of each cost) | | | \$0.00 |
| Equipment and/or Specialized Equipment Rental | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| | | | | \$0.00 |
| | | | | \$0.00 |
| | | | | \$0.00 |
| | | | | \$0.00 |
| TOTAL DIRECT COSTS: | | | | \$13,908.82 |

FLR 05514 (Rev. 02/09/23)

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

19-00999-65-ES

Consultant / Subconsultant Name

HBK Engineering, LLC

Job Number

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 | | | Additional Field Investigations | | | Relocation Plan Review | | | SUE QL-A Test Holes | | | Design Team Meetings | | | | | |
|----------------------------|------------------|-------------------|---------|----------|---------------------------------|---------|----------|------------------------|---------|----------|---------------------|---------|----------|----------------------|---------|----------|-------|---------|----------|
| | | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg |
| Program Manager | 79.61 | 6.0 | 2.04% | 1.62 | 2 | 2.56% | 2.04 | 2 | 1.89% | 1.50 | 2 | 4.00% | 3.18 | | | | | | |
| Senior Project Manager | 61.55 | 28.0 | 9.52% | 5.86 | 4 | 5.13% | 3.16 | 8 | 7.55% | 4.65 | 4 | 8.00% | 4.92 | 12 | 20.00% | 12.31 | | | |
| Senior Engineer | 53.85 | 24.0 | 8.16% | 4.40 | | | | 24 | 22.64% | 12.19 | | | | | | | | | |
| Project Manager | 49.44 | 76.0 | 25.85% | 12.78 | 8 | 10.26% | 5.07 | 16 | 15.09% | 7.46 | 4 | 8.00% | 3.95 | 48 | 80.00% | 39.55 | | | |
| Engineer | 43.47 | 88.0 | 29.93% | 13.01 | 16 | 20.51% | 8.92 | 56 | 52.83% | 22.97 | 16 | 32.00% | 13.91 | | | | | | |
| Associate 1 | 34.18 | 0.0 | | | | | | | | | | | | | | | | | |
| Associate 2 | 40.12 | 72.0 | 24.49% | 9.82 | 48 | 61.54% | 24.69 | | | | 24 | 48.00% | 19.26 | | | | | | |
| Permit Coordinator | 31.08 | 0.0 | | | | | | | | | | | | | | | | | |
| Analyst 1 | 29.68 | 0.0 | | | | | | | | | | | | | | | | | |
| Analyst 2 | 44.61 | 0.0 | | | | | | | | | | | | | | | | | |
| Licensed Professional Surv | 56.74 | 0.0 | | | | | | | | | | | | | | | | | |
| Field Lead | 40.43 | 0.0 | | | | | | | | | | | | | | | | | |
| Field Technician | 26.86 | 0.0 | | | | | | | | | | | | | | | | | |
| Locator 1 | 23.54 | 0.0 | | | | | | | | | | | | | | | | | |
| Locator 2 | 24.36 | 0.0 | | | | | | | | | | | | | | | | | |
| Locator 3 | 28.47 | 0.0 | | | | | | | | | | | | | | | | | |
| Designer 1 | 31.67 | 0.0 | | | | | | | | | | | | | | | | | |
| Designer 2 | 32.83 | 0.0 | | | | | | | | | | | | | | | | | |
| Designer 3 | 43.14 | 0.0 | | | | | | | | | | | | | | | | | |
| | | 0.0 | | | | | | | | | | | | | | | | | |
| | | 0.0 | | | | | | | | | | | | | | | | | |
| | | 0.0 | | | | | | | | | | | | | | | | | |
| | | 0.0 | | | | | | | | | | | | | | | | | |
| | | 0.0 | | | | | | | | | | | | | | | | | |
| | | 0.0 | | | | | | | | | | | | | | | | | |
| | | 0.0 | | | | | | | | | | | | | | | | | |
| TOTALS | | 294.0 | 100% | \$47.50 | 78.0 | 100.00% | \$43.87 | 106.0 | 100% | \$48.77 | 50.0 | 100% | \$45.23 | 60.0 | 100% | \$51.86 | 0.0 | 0% | \$0.00 |

Excavation Contractor Example

2024 Rates

| Item | Rate | Qty | Sub-total |
|----------------------|-----------|---------------|---------------------|
| 1-man (ST hourly) | \$ 260.00 | 16 | \$ 4,160.00 |
| 1-man (OT hourly) | \$ 310.00 | 4 | \$ 1,240.00 |
| 2-man (ST hourly) | \$ 115.00 | 16 | \$ 1,840.00 |
| 2-man (OT hourly) | \$ 140.00 | 4 | \$ 560.00 |
| Support truck (day) | \$ 160.00 | 2 | \$ 320.00 |
| Coring Truck (day) | \$ 205.00 | 1 | \$ 205.00 |
| Core Epoxy (bag) | \$ 85.00 | 3 | \$ 255.00 |
| TBF (pallet sand) | \$ 400.00 | 6 | \$ 2,400.00 |
| Disposal Charge | \$ 350.00 | 2 | \$ 700.00 |
| Water (per load) | \$ 85.00 | 2 | \$ 170.00 |
| Remote Hose (per ft) | \$ 3.20 | 100 | \$ 320.00 |
| Consumables | \$ 42.00 | 2 | \$ 84.00 |
| | | Sub-Total= | \$ 12,254.00 |
| Fuel Fee (8.2%) | \$ 0.082 | 1 | \$ 1,004.82 |
| | | Total= | \$ 13,258.82 |

Other Misc. Charges (not included in pricing)

| Item | Rate | Qty | Sub-total |
|--------------------------|----------|-----|-----------|
| Stand pipe (10' section) | \$ 45.10 | 0 | \$ - |
| Pipe couplers (each) | \$ 11.67 | 0 | \$ - |

| | | | |
|---------------------------|--|----------|---------------------|
| 6 potholes (3/day) | | 1 | \$ 13,258.82 |
|---------------------------|--|----------|---------------------|

Huff & Huff, Inc. (H&H)

Contract Scope and CECS



A Subsidiary of GZA

GEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION
MANAGEMENT

915 Harger Road
Suite 330
Oak Brook, IL 60523
T: 630.684.9100
F: 630.684.9120
www.huffnhuff.com
www.gza.com



February 16, 2024

via email: mhuffman@cbbel.com

Mr. Matt Huffman, PE
Assistant Department Head, Phase I Engineering
Christopher B. Burke Engineering, Ltd.
9575 W. Higgins Road – Suite 600
Rosemont, IL 60018

**Re: Phase II Environmental Services – PSI/CCDD and Asbestos Survey
Old McHenry Road Crossings (Contract 1) – Lake County, IL.
Proposal No.: 81.P013151.24**

Dear Mr. Huffman:

Huff & Huff, Inc., a subsidiary of GZA, Inc. (H&H) is pleased to submit this revised proposal to Christopher B. Burke Engineering, Ltd. (Client) to provide Phase II environmental services in conjunction with the proposed improvements associated with the Old McHenry Road Crossings project, located in Lake County, Illinois. Specifically, Client has requested completion of a Preliminary Site Investigation (PSI), including LPC-663 documentation for consideration of acceptance of project spoils at a Clean Construction and Demolition Debris (CCDD) or uncontaminated soil fill operation (USFO) facility for the local roads portion of Contract 1.

In addition, as related to parcel acquisition and demolition of some structures, Client has also requested a pre-demolition survey of the structures at four properties. This scope is intended to identify the presence of and sampling of various materials, including potential asbestos-containing material (ACM), potential lead-based paint (LBP), and identification of potential universal wastes, including mercury containing light fixtures and switches. This proposal presents our project understanding based on information provided by Client including our proposed the scope of services and associated fee.

1. PROJECT UNDERSTANDING

We understand there are four (4) Sections associated with the proposed improvements, including:

- Section 1: Old McHenry Road Underpass (Forest Drive to Midlothian Road);
- Section 1b: St. Matthew Church Property;
- Section 2: Old McHenry Road (Midlothian Road to Fairfield Road);
- Section 3: Old McHenry Road (Fairfield Road to Hubbard Lane; and
- Section 4: Quentin Road (IL 22 to Highland Terrace).

We understand Client is seeking scope and fee associated with two (2) Contracts:

- Contract #1: Includes Sections 1, 1b, and 2, identified above (this scope/fee); and
- Contract #2: Includes Section 3, identified above (submitted under separate cover).

Client has provided the following documentation which shall serve as our basis of understanding of the project to develop[e the scope and fee herein:



- Proposed Project sections exhibit (1-Sheet);
- PESA Identified Properties Map (4-Sheets);
- Project Development Report (PDR) Preferred Alternative Exhibit (2-Sheets); and
- ISGS/IDOT Preliminary Environmental Site Assessment (PESA) files (ISGS #4201), including:
 - 4201 PESA Executive summary (15-Pages);
 - 4201 PESA Letting Cover Note (1-Page);
 - 4201A Summary Report (9-Pages);
 - 4201A – Sequence 24174A Letting cover Note (1-Page); and
 - BDE 2735 PESA Response form – 24174A (3-Pages).

We understand Client will provide a copy of the Local Roads PESA when it is completed.

2. SCOPE OF SERVICES

A series of soil borings are proposed to cover Contract 1 (Section 1, 1b, and 2). Specifically, the following soil borings are proposed to cover areas of construction including addressing the PESA sites identified as RECs and also coverage of other work areas for full corridor coverage. This is to address the industry trends for acceptance of spoils at CCDD or USFO facilities and in general conformance with IDOT District 1 protocol, though the soil boring frequency presented below is less frequent than IDOT protocol.

Task 1 – Preliminary Site Investigation (PSI) and LPC-663 Form CCDD Documentation (Contract 1)

A. Soil Borings and Soil Sampling

An initial site visit will be conducted to pre-mark the locations and to convey location information to the drilling subcontractor to place the utility locate call to the state one-call system (JULIE). It is anticipated that up to four (4) days of field effort will be required with up to forty-three (43) soil borings completed with the aid both drilling and traffic control subcontractors, including the following breakdown by Section:

- Thirty (30) soil borings for Section 1;
- Three (3) soil borings for section 1b; and
- Ten (10) soil borings for section 2.

The borings will be advanced and soil samples collected for laboratory analysis to address sites identified as RECs/PIPs and for full project coverage of non-REC/PIP for soil disposal considerations, specifically at locations identified for proposed excavation. The depths of the soil borings will be dependent upon design details to account for depths of proposed disturbance. Consultant will finalize depths of planned borings prior to mobilization consistent with project plans as provided by Client, in conjunction with PESA findings. Without having a PESA Response form to identify maximum depth of work at each site, for scoping and budgetary purposes, it is estimated that borings will be advanced to depths up to approximately eight (8) to ten (10) feet below ground surface. Samples will be collected in 2 to 5-foot intervals for field screening and select samples prepared for laboratory analysis as discussed below.



B. Analytical

A total of forty-three (43) soil boring locations are proposed and we anticipate collecting one (1) sample for laboratory analysis from each boring. The soil samples will be analyzed for the contaminants of concern (COCs) per IDOT protocol, which include:

- 22 Total metals (Target Analyte List (TAL) minus Aluminum)
- SPLP/TCLP Metals (8 RCRA and Be, Co, Cu, Fe, Mn, Ni, and Zn)
- Volatile organic compounds (VOCs)
- Semi-volatile organic compounds (SVOCs)
- Soil pH

C. PSI Report Preparation

A report summarizing the results of the soil and sediment sample collection activities and analytical results will be prepared. This document will present information pertinent for the bidding documents regarding conditions of soils assessed, handling and final disposition considerations, specifically including soil classifications per IDOT Article 669.05 for use in identifying quantities and pay items in the bidding specifications. Time has also been included to assist Client in preparing the pay items and standard and/or special provisions/specifications related to soil management.

D. CCDD (LPC-Form) Documentation and CCDD Facility Coordination

The soil sample results will be compared to the Maximum Allowable Concentrations (MACs) associated with CCDD facility acceptance, including the soil pH range of 6.25 to 9.0. If results achieve the MAC values, H&H will prepare the LPC-663 document that will be signed/stamped by the H&H. Any locations that do not achieve the MACs (including soil pH range) will be identified as exclusion zones, not acceptable for CCDD facility disposal. Any locations that do not achieve the MACs (including soil pH range) will be identified as exclusion zones, not acceptable for CCDD facility disposal, utilizing soil classifications per IDOT 669.05. We also anticipate coordinating with at least three (3) CCDD facilities to provide the completed LPC-663 documentation for their review, and if acceptable, to provide letters of pre-authorized acceptance for including in the bid document. Please note, these pre-authorization letters are not an indication that all spoils will be accepted since CCDD facilities adhere to a process of screening each incoming load and this screening process takes precedence to previously submitted analytical results and pre-authorization letters.

Task 2 – Pre-Demolition Survey and Reporting

The primary objective of the environmental sampling will be to identify, confirm through analytical testing, and quantify potential environmental hazards that require abatement and/or collection, removal, and proper disposal in advance of proposed demolition activity for each of the identified structures. Subsequently, H&H will assist Client in preparing the Special provisions language related to the environmental issues for inclusion in the bidding documents.

Pre-demolition and/or renovation surveys are required by the United States Environmental Protection Agency (USEPA) national emission Standards for Hazardous Air Pollutants (NESHAP) provided in 40 CFR 61 and Illinois Administrative Code (IAC) Title 77, Chapter I, Subchapter p, Part 855. The United States Department of Labor, Occupational Safety and Health Administration (OSHA) also requires that asbestos containing materials (ACM) be identified prior to initiating demolition activities.

OSHA 29 CFR 1926.62-Lead applies to all construction work where an employee may be occupationally exposed to lead, including demolition and renovation. The employer shall communicate information concerning lead hazards and



appropriate protective measures to employees. As specified in Illinois Administrative Code 845.205(b), a *lead bearing substance* is any existing house paint or other surface coating material containing greater than or equal to 0.5% lead or greater than or equal to 1.0 mg/cm² lead. Materials containing 1.0 mg/cm² or more of lead must be identified prior to initiating demolition activities. The results can be used to assess compliance with OSHA Lead in Construction regulations for demolition and to identify if any LBP chips are required to be disposed of as a hazardous waste.

The LBP survey will include a general paint conditions assessment of readily accessible painted surfaces on the interior and exterior of the buildings. This will include assessment of surfaces with flaking paint, as necessary. According to the USEPA, lead-based paint waste removed from a home by a contractor may be: (1) demolition/construction debris (general refuse in a Subtitle D permitted landfill), (2) non-hazardous special waste, or (3) hazardous waste. The generator may dispose of lead-based paint waste as demolition/construction debris if the paint is not removed from the painted surface prior to disposal. Lead-based paint waste that is removed from a surface prior to disposal (LBP chips and scrapings, for example) must be disposed of as a special waste and may be a hazardous waste. Paint waste is hazardous if it has a concentration of lead equal to 5.0 mg/l or greater as indicated by the Toxicity Characteristic Leaching Procedure.

This assessment will also include a restricted universal hazardous waste (U-waste) assessment to document site conditions and estimated quantities of materials that may be present that require proper removal and disposal prior to completing the proposed demolition work for each structure. According to the USEPA, U-waste items include batteries, pesticides, mercury-containing equipment, lamps, and aerosol cans. Universal waste must be disposed of at a facility designated under RCRA to treat, dispose of, or recycle a particular category of universal waste (40 CFR 273.9).

The following sub-tasks are included for Task 2 for the surveys associated with the following four (4) properties, including five (5) structures:

- 24508 Old McHenry Road (1-residential structure);
- 24515 Old McHenry Road (2-structures including residence with attached garage and additional garage);
- 24570 Old McHenry Road (1-residential structure); and
- 24578 Fairfield Road (2-residential structures).

SUB-TASK A: ASBESTOS CONTAINING MATERIAL SURVEY

1. Pre-Mobilization Activity

This task includes coordination with Client to obtain site plans/documents identifying floor plans within the structures and coordination with any necessary subcontractors and Village officials. In addition, this task includes the development of a site-specific Health & Safety Plan (HASP) for use during the proposed ACM survey, prior to conducting the on-site surveys.

2. ACM sampling and Laboratory Analysis

The H&H surveys for each structure will include an assessment of both friable (easily reduced to powder by hand pressure) and non-friable materials such as thermal system insulation (TSI) on pipes, boilers, hot water tanks and related items; surface coatings such as fireproofing materials applied to floor decking, sheetrock, beams and ceilings, or acoustic and decorative coatings; and miscellaneous materials that may contain asbestos, including interior surfaces, transite panels, chalkboards, vinyl floor tiles and mastics; roofing materials that are accessible in a safe manner; and limited assessment of electrical systems (if safe to access and certified as non-energized), heating, ventilation, air conditioning and other mechanical systems noted during past walk-thru (i.e.: drying and refrigerated systems).



An asbestos inspector accredited by the USEPA and Illinois Department of Public Health (IDPH) will conduct the inspections of the buildings. Suspect ACM identified by H&H will be documented on a floor plan, sampled, and submitted for laboratory analysis. The actual number of samples to be collected and analyzed will depend on the number of different types of suspect ACM observed.

The number of asbestos bulk samples collected depended on the type of the identified suspect material. According to USEPA AHERA regulation, materials may be classified as surfacing (i.e., applied to a surface), thermal (i.e., providing thermal insulation), or miscellaneous (i.e., window glaze, floor tiles, roofing shingles, etc.).

The number of samples collected for analysis during an asbestos assessment increases as the potential for either a non-uniform mixture or inconsistent asbestos distribution in the material increases. The following table summarizes the sampling protocol utilized by H&H for this assessment:

Typical Minimum Bulk Sampling Criteria

| Type of Suspect Material | Minimum Sampling Criteria |
|--------------------------|---|
| Surfacing | Statistically random criteria (minimum of three samples, maximum of seven samples per each homogeneous material). |
| Thermal | Minimum of three samples per homogeneous area of suspect material. |
| Miscellaneous | Minimum of two samples per homogeneous area of suspect material, as potential for non-uniform mixture is relatively slight. |

H&H will conduct a site walkthrough identifying potential ACM and will collect samples of suspect ACM. Up to seventy-five (75) ACM samples will be collected and analyzed for each structure for a total of up to 375 samples. Samples will be sent to an accredited laboratory and analyzed using USEPA polarized light microscopy (PLM) methodology. Quantities of the suspected ACM will be estimated. Some samples have multiple layers of material for testing and therefore single samples may require multiple analyses, hence the proposed number for budgetary considerations. We have also included up to 5 samples per structure (25 samples) for PLM (400) Point count analysis if additional confirmation of ACM content is necessary.

Please note that H&H anticipates performing destructive sampling on the interior and exterior of the structures, inclusive of roof materials that are readily accessible in a safe manner. We do not anticipate being required to repair damage sustained during inspection.

SUB-TASK B: LEAD PIPE/LEAD PAINT SAMPLING

1. Pre-Mobilization Activity

This task includes coordination with Client to obtain site plans/documents identifying floor plans within each structure and coordination with any necessary subcontractors and Village officials. In addition, this task includes the development of a site-specific Health & Safety Plan (HASP) for use during the proposed lead survey, prior to conducting the on-site survey.



2. Lead sampling and Laboratory Analysis

The H&H survey will include a surface-by-surface assessment of painting/coating materials that were used in each structure for lead by use of a hand-held X-ray fluorescence device (XRF). XRF is a non-destructive analytical technique used to identify the elemental composition of materials. The process involves emitting high-energy radiation in the form of X-ray to excite atoms and measuring the fluorescence energy emitted, which is unique to each element. The XRF device will be used to measure lead concentrations in surface painting/coatings at or above the IDPH Standard of 1.0 mg/cm². The XRF will also be used to assess the presence of lead in exposed pipes and radiators throughout the structure.

If pipes cannot be accessed or if deemed necessary, H&H will attempt to collect up to three (3) flushed-water samples to assess whether there is lead residue in the piping system and/or service lines. The water samples will be analyzed by a National Environmental Laboratory Accreditation Program (NELAP) certified laboratory.

The LBP survey will also include a general paint conditions assessment of readily accessible painted surfaces on the interior and exterior of the building. If lead concentrations are present at or above 1.0 mg/cm² in paints that are removed from the original substrate it was originally adhered to (for example, flaking or chipping), a paint chip sample will be collected and analyzed to assess whether it is considered a non-hazardous solid waste or as a hazardous waste due to its characteristics. LBP waste meets the definition of hazardous if it has a concentration of lead equal to or greater than 5.0 milligrams per liter (mg/l), as indicated by the Toxicity Characteristic Leaching Procedure (TCLP). In support of the screening via XRF, we have included confirmation analysis of up to seven (7) samples via total analysis method and up to three (3) samples via TCLP analysis method for each structure, for a total of thirty-five (35) total and fifteen (15) TCLP samples.

A lead inspector accredited by the USEPA and Illinois Department of Public Health (IDPH) will conduct the inspections and potential water and paint-chip sampling of the buildings. Lead-bearing substances identified by H&H will be photographed and documented on the floor plans.

SUB-TASK C: RESTRICTED UNIVERSAL WASTE SURVEY

1. Pre-Mobilization Activity

This task includes coordination with Client to obtain site plans/documents identifying floor plans within the structures and coordination with any necessary subcontractors and Village officials. In addition, this task includes the development of a site-specific Health & Safety Plan (HASP) for use during the proposed U-waste surveys, prior to conducting the on-site surveys.

- H&H will visually evaluate the Properties for the presence of hazardous or potentially hazardous materials, including restricted U-wastes including polychlorinated biphenyl (PCB)-containing ballasts, mercury containing switches, fluorescent lamps, and refrigerants. We will inventory any abandoned containerized materials observed, which may include chemical products (i.e.: acids, caustics, miscellaneous chemicals, etcetera), petroleum products (i.e.: fuel, hydraulic/motor oils, paints, and thinners), and gasses (i.e.: carbon dioxide, propane, halons, and chlorofluorocarbons). In addition, H&H will make observations as to whether building materials may be impacted by hazardous waste or petroleum hydrocarbons that may require cleaning, special handling, and/or disposal prior to or during demolition. We have included costs for up to five (5) PCB samples for each structure, for a total of twenty-five (25) samples.



SUB-TASK D: PRE-DEMOLITION SURVEY REPORT PREPARATION

A letter report will be prepared summarizing the findings of the asbestos-containing material, lead, and restricted universal waste survey and the associated sample analyses for each property, four (4) total. The reports will also include a summary of the sampling protocols, description of sampled material, location of materials on the interior and exterior of each structure, approximate quantities of ACM and U-waste materials, and the lead concentration for each surface identified during the surveys. The letter report will contain a summary of the findings and a figure showing the sampling locations.

Task 3 – QA/QC

Time under this task includes QA/QC time for the PSI and Pre-Demo Survey project deliverables as described above.

Task 5 – Project Administration

Time under this task includes project administration and management activities that include cost and schedule tracking, coordination with Client on authorized activities, document production and other in-house management activities.

3. PROJECT COSTS

Costs have been included on the attached CECS spreadsheets.

4. LEVEL OF EFFORT AND SCHEDULE

The PSI is anticipated to commence upon approval by Client and will require approximately sixteen (16) weeks to complete. We do not recommend commencing with the PSI too early in the Phase 2 design stage since it is inclusive of CCDD documentation. Due to industry trends with some facilities seeking to approve projects only if analytical data is less than 1-year old, we recommend timing the completion of the PSI as close to the final design needs as possible to ensure the data is considered contemporary by CCDD receiving facilities. The ACM, LBP, and U-Waste Survey work will commence within five (5) days of the notice to proceed (NTP), dependent upon availability of rental equipment (XRF) and will require approximately ten (10) weeks to complete. This schedule can be adjusted to accommodate the schedule of the project owner to ensure milestones are met.

5. TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

CONDITIONS OF ENGAGEMENT

The conditions of engagement are described in the attached Terms and Conditions for Professional Services. H&H’s report will be prepared on behalf of and for the exclusive use of Client. Client acknowledges and agrees that the report and the findings in the report shall not, in whole or in part, be disseminated or conveyed to any other party, or used or relied upon by any other party, in whole or in part, except for the specific purpose and to the specific parties alluded to above, without the written consent of H&H. H&H would be pleased to discuss the conditions associated with any additional dissemination, use, or reliance by other parties.



ACCEPTANCE

This agreement may be accepted by signing in the appropriate space below and returning one complete copy to H&H. Issuance of a Purchase Order implicitly acknowledges acceptance of this proposal. This proposal is valid for a period of 30 days from the date of issue.

We appreciate the opportunity to submit this proposal. Please feel free to contact the undersigned at (630) 684-9100 with any questions.

Very truly yours,

Huff & Huff, Inc., a subsidiary of GZA, inc.

Jeremy J. Reynolds, P.G.
Associate Principal

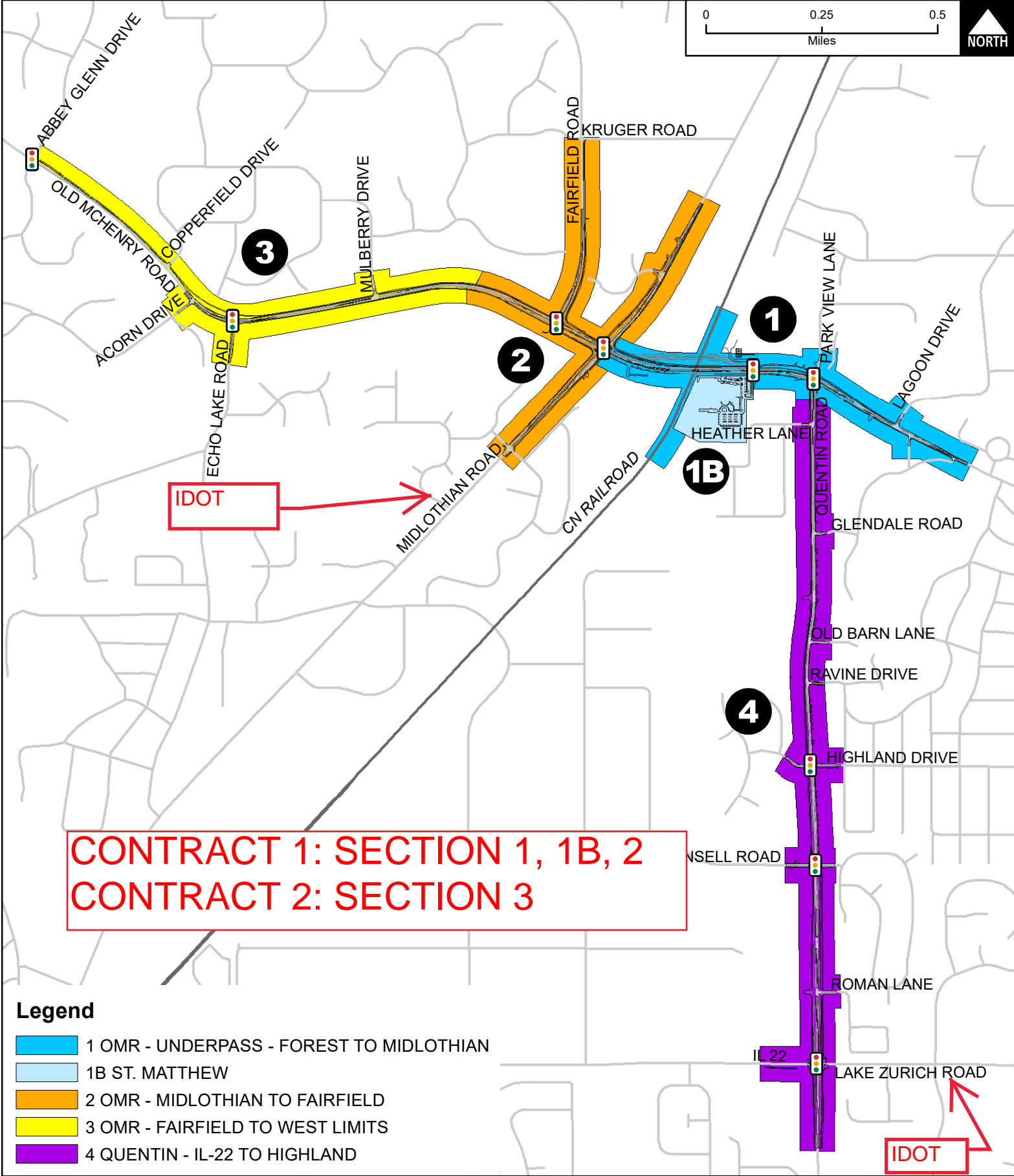
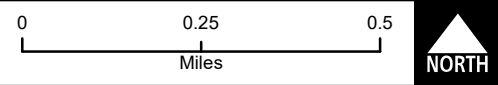
Attachments: Terms and Conditions
IDOT BLR 05514 Cost Sheets

This Proposal for Services, Schedule of Fees and Terms and Conditions for Professional Services are hereby accepted and executed by a duly authorized signatory, who by execution hereof, warrants that he/she has full authority to act for, in the name, and on behalf of _____.

By: _____ Title: _____

Printed/Typed Name: _____ Date: _____

The Proposal for Services, Schedule of Fees and Terms and Conditions for Professional Services may be executed in two or more counterparts, each of which together shall be deemed an original, but all of which together shall constitute one and the same instrument. In the event that any signature is delivered by facsimile transmission or by an e-mail delivery of a document in “.pdf” format, each such signature shall create a valid and binding obligation of the party executing the document, or on whose behalf each document is executed, with the same force and effect as if each such facsimile or “.pdf” signature were an original thereof.



CONTRACT 1: SECTION 1, 1B, 2
CONTRACT 2: SECTION 3

Legend

- 1 OMR - UNDERPASS - FOREST TO MIDLOTHIAN
- 1B ST. MATTHEW
- 2 OMR - MIDLOTHIAN TO FAIRFIELD
- 3 OMR - FAIRFIELD TO WEST LIMITS
- 4 QUENTIN - IL-22 TO HIGHLAND

CLIENT:



TITLE:
PROPOSED PROJECT SECTIONS

PROJ. NO. 210174
 DATE: 2/2/2024
 SHEET 1 OF 1
 ATTACHMENT NO.

| | | | |
|-------|------------------------------|------------|----------|
| DSGN. | | SCALE: | 1:17,000 |
| DWN. | DRW | AUTHOR: | |
| CHKD. | | PLOT DATE: | 2/2/2024 |
| FILE: | Construction Phase Breakdown | | |

1



February 16, 2024
81.P013151.24 – CBBEL
Old McHenry Road Crossings, Lake County, IL – Phase II – PSI and Pre-Demo Survey – Contract 1
ATTACHMENTS

ATTACHMENT A
TERMS AND CONDITIONS



TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

© 2023 by Huff & Huff, Inc., a Subsidiary of GZA GeoEnvironmental, Inc.

Client ("You"): Christopher B. Burke engineering, Ltd.

Proposal No: 81.P013151.24

Site: LCDOT Old McHenry Crossings Contract 1

These Terms and Conditions, together with Huff & Huff, Inc.'s (H&H's) Proposal, make up the Agreement between H&H and you, Client, named above.

BEFORE SIGNING THE PROPOSAL, BE SURE YOU READ AND UNDERSTAND THE PARAGRAPHS ENTITLED "INDEMNIFICATION" AND "LIMITATION OF REMEDIES" WHICH DEAL WITH THE ALLOCATION OF RISK BETWEEN YOU AND H&H.

1. **Services.** H&H will perform the services set forth in its Proposal and any amendments or change orders authorized by you (the "Services"). Any request or direction from you that would require extra work or additional time for performance or would result in an increase in H&H's costs will be the subject of a negotiated amendment or change order.
2. **Standard of Care; Warranties.**
 - a. H&H will perform professional Services with the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time under similar conditions in the same or similar locality.
 - c. **EXCEPT AS SET FORTH IN SUBSECTIONS 2a ABOVE, NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MARKETABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS MADE OR INTENDED BY H&H'S PROPOSAL OR BY ANY OF H&H'S ORAL OR WRITTEN REPORTS.**
 - d. H&H assigns to you any manufacturers' warranties of equipment or materials purchased from others, to the extent they are assignable, and your sole recourse will be against the manufacturer. Full risk of loss of materials and equipment will pass to you upon delivery to the Site, and you will be responsible for insuring and otherwise protecting them against theft and damage.
3. **Payment.**
 - a. Except as otherwise stated in the Proposal, you will compensate H&H for the Services at the rates set forth in the applicable Proposal, amendment or change order; reimburse its expenses, which will include a communication fee calculated as a percentage of labor invoiced; and pay any sales or similar taxes thereon.
 - b. Any retainer specified in H&H's Proposal shall be due prior to the start of Services and will be applied to the final invoice for Services.
 - c. H&H will submit invoices periodically, and payment will be due within 20 days from invoice date. Overdue payments will bear interest at 1½ percent per month or, if lower, the maximum lawful rate. H&H may terminate the Services upon 10 days' written notice anytime your payment is overdue on this or any other project and you will pay for all Services through termination, plus termination costs. You will reimburse H&H's costs of collecting overdue invoices, including reasonable attorneys' fees (including costs for time expended by in-house counsel, which will be charged to you at the prevailing market rate for attorneys of similar experience practicing in the jurisdiction).
4. **Your Responsibilities.**
 - a. Except as otherwise agreed in writing, you will secure the access agreements, approvals, permits, licenses and consents necessary for performance of the Services. If you are the owner or operator of the Site, you will provide H&H with all documents, plans, information concerning underground structures (including but not limited to utilities, conduits, pipes, and tanks), information related to hazardous materials or other environmental or geotechnical conditions at the Site (including, if applicable, asbestos containing materials ["ACM"]) and other information that may be pertinent to the Services or, if you are not the owner or operator of the Site, you agree to make reasonable efforts to obtain these same documents and provide them to H&H. Unless otherwise indicated in writing, H&H will be entitled to rely on documents and information you provide.
 - b. If you use the services of a contractor or construction manager at the Site, you agree to use best and reasonable efforts to include in your agreement(s) with the construction contractor provisions obligating the latter:
 - (i) to defend, indemnify and hold harmless, to the fullest extent permitted by law, you and H&H and its officers, directors, members, partners, agents, employees, and subconsultants (the "H&H Indemnitees"), for or on account of any claims, liabilities, costs and expenses, including attorneys' fees, arising out of or relating to the design or implementation of construction means, methods, procedures, techniques, and sequences of construction, including safety precautions or programs, of the contractor, or any of its subcontractors or any engineer engaged by it;
 - (ii) to name you and H&H as additional insureds under general liability and builder's risk insurance coverages maintained by the contractor, or any of its subcontractors, and to ensure that such policies are primary and noncontributory with regard to the above indemnity obligations; and
 - (iii) to require that all of its subcontractors agree and be bound to the obligations set forth in (i) and (ii) above.
 - c. In the event that you are unable to secure such provisions in the agreement(s) with the construction contractor, you shall promptly (but in any event prior to the commencement of the Services) notify H&H and H&H shall have the opportunity to negotiate with you reasonable substitute risk allocation and insurance indemnities and protections.
5. **Right of Entry; Site Restoration.** You grant H&H and its subcontractor(s) permission to enter the Site to perform the Services. If you do not own the Site, you represent and warrant that the owner has granted permission for H&H to enter the Site and perform the Services; you will provide reasonable verification on request; and you will indemnify the H&H Indemnitees for any claims by the Site owner related to alleged trespass by H&H or its subcontractors. Although H&H will exercise reasonable care to limit damage to landscaping, paving, systems and structures at the Site, you acknowledge that some damage may occur even with the exercise of due care and you agree to compensate H&H for any restoration it is asked to perform, unless otherwise indicated in the Proposal.
6. **Underground Facilities.** H&H's only responsibility under this Agreement will be to provide proper notification to the applicable state utility "Call-Before-You-Dig" program. You further agree to assume responsibility for and to defend, indemnify and hold harmless H&H with respect to personal injury and property damages due to H&H's interference with subterranean structures including but not limited to utilities, conduits, pipes, and tanks:
 - (i) that are not correctly shown on any plans and information you or governmental authorities provide to H&H; or
 - (ii) that are not correctly marked by the appropriate utility.



- 7. Reliance.** The services, information, and other data furnished by you shall be at your expense, and H&H may rely upon all information and data that you furnish, including the accuracy and completeness thereof. You acknowledge that the quality of the Services provided by H&H is directly related to the accuracy and completeness of the information and data that you furnish to H&H. **H&H'S REPORTS ARE PREPARED FOR AND MADE AVAILABLE FOR YOUR SOLE USE. YOU ACKNOWLEDGE AND AGREE THAT USE OF OR RELIANCE UPON THE REPORT OR THE FINDINGS IN THE REPORT BY ANY OTHER PARTY, OR FOR ANY OTHER PROJECT OR PURPOSE, SHALL BE AT YOUR OR SUCH OTHER PARTY'S SOLE RISK AND WITHOUT ANY LIABILITY TO H&H. YOU SHALL INDEMNIFY AND HOLD HARMLESS THE H&H INDEMNITEES FROM ALL CLAIMS, DAMAGES, LOSSES, AND EXPENSES, INCLUDING ATTORNEYS' FEES, ARISING OUT OF OR RESULTING FROM ANY USE, REUSE, OR MODIFICATION OF THE DOCUMENTS WITHOUT WRITTEN VERIFICATION, COMPLETION, OR ADAPTATION BY H&H AND SUCH LIMITED LICENSE TO YOU SHALL NOT CREATE ANY RIGHTS IN THIRD PARTIES.**
- 8. Lab Tests and Samples.** H&H is entitled to rely on the results of laboratory tests using generally accepted methodologies. H&H may dispose of samples in accordance with applicable laws 30 days after submitting test results to you unless you request in writing for them to be returned to you or to be held longer, in which case you will compensate H&H for storage and/or shipping beyond 30 days.
- 9. H&H Professionals.** H&H employees or consultants may act as licensed, certified or registered professionals (including but not limited to Professional Engineers, Licensed Site or Environmental Professionals, Certified Hazardous Materials Managers,, or Certified Industrial Hygienists collectively referred to in this section as "H&H Professionals") whose duties may include the rendering of independent professional opinions. You acknowledge that a federal, state or local agency or other third party may audit the Services of H&H or other contractor/consultant(s), which audit may require additional Services, even though H&H and such H&H Professionals have each performed such Services in accordance with the standard of care set forth herein. You agree to compensate H&H for all Services performed in response to such an audit, or to meet additional requirements resulting from such an audit, at the rates set forth in the applicable Proposal, amendment or change order.
- 10. Hazardous Materials; H&H "Not a Generator".** Before any hazardous or contaminated materials, including, if applicable, ACMs (the "Wastes") are removed from the Site, you will sign manifests naming you as the generator of the Wastes (or, if you are not the generator, you will arrange for the generator to sign). You will select the treatment or disposal facility to which any Wastes are taken. H&H will not be the generator or owner of, nor will it possess, take title to, or assume legal liability for any Wastes at or removed from the Site. H&H will not have responsibility for or control of the Site or of operations or activities at the Site other than its own. H&H will not undertake, arrange for or control the handling, treatment, storage, removal, shipment, transportation or disposal of any Wastes at or removed from the Site, other than any laboratory samples it collects or tests. You agree to defend, indemnify and hold the H&H Indemnitees harmless for any costs or liability incurred by H&H in defense of or in payment for any legal actions in which it is alleged that H&H is the owner, generator, treater, storer or disposer of any Wastes.
- 11. Limits on H&H's Responsibility.** H&H will not be responsible for the acts or omissions of contractors or others at the Site, except for its own subcontractors and employees. H&H will not supervise, direct or assume control over or the authority to stop any contractor's work, nor shall H&H's professional activities nor the presence of H&H or its employees and subcontractors be construed to imply that H&H has authority over or responsibility for the means, methods, techniques, sequences or procedures of construction, for work site health or safety precautions or programs, or for any failure of contractors to comply with contracts, plans, specifications or laws. Any opinions by H&H of probable costs of labor, materials, equipment or services to be furnished by others are strictly estimates and are not a guarantee that actual costs will be consistent with the estimates.
- 12. Changed Conditions.**
- You recognize the uncertainties related to the Services (including, without limitation, environmental and geotechnical Services), which often require a phased or exploratory approach, with the need for additional Services becoming apparent during the initial Services. You also recognize that actual conditions encountered may vary significantly from those anticipated, that laws and regulations are subject to change, and that the requirements of regulatory authorities are often unpredictable.
 - If changed or unanticipated conditions or delays make additional Services necessary or result in additional costs or time for performance, H&H will notify you and the parties will negotiate appropriate changes to the scope of Services, compensation and schedule.
 - If no agreement can be reached, H&H will be entitled to terminate the Services and to be equitably compensated for the Services already performed. H&H will not be responsible for delays or failures to perform due to weather, labor disputes, intervention by or inability to get approvals from public authorities, acts or omissions on your part, or any other causes beyond H&H's reasonable control, and you will compensate H&H for any resulting increase in its costs.
- 13. Documents and Information.** All documents, data, calculations and work papers prepared or furnished by H&H are instruments of service and will remain H&H's property. Designs, reports, data and other work product delivered to you are for your use only, for the limited purposes disclosed to H&H. Any delayed use, use at another site, use on another project, or use by a third party will be at the user's sole risk, and without any liability to H&H. Any technology, methodology or technical information learned or developed by H&H will remain its property. Provided H&H is not in default under this Agreement, H&H's designs will not be used to complete this project by others, except by written agreement relating to use, liability and compensation.
- 14. Electronic Media.** In accepting and utilizing any drawings, reports and data on any form of electronic media generated by H&H, you covenant and agree that all such electronic files are instruments of service of H&H, who shall be deemed the author and shall retain all common law, statutory law and other rights, including copyrights. In the event of a conflict between the signed documents prepared by H&H and electronic files, the signed documents shall govern. You agree not to reuse these electronic files, in whole or in part, for any purpose or project other than the project that is the subject of this Agreement. Any transfer of these electronic files to others or reuse or modifications to such files by you without the prior written consent of H&H will be at the user's sole risk and without any liability to H&H.
- 15. Confidentiality; Subpoenas.** Information about this Agreement and H&H's Services and information you provide to H&H regarding your business and the Site, other than information available to the public and information acquired from third parties, will be maintained in confidence and will not be disclosed to others without your consent, except as H&H reasonably believes is necessary: (a) to perform the Services; (b) to comply with professional standards to protect public health, safety and the environment; and (c) to comply with laws, regulations, court orders and professional obligations. H&H will make reasonable efforts to give you prior notice of any disclosure under (b) or (c) above. Information available to the public and information acquired from third parties will not be considered confidential. You will reimburse H&H for responding to any subpoena or governmental inquiry or audit related to the Services, at the rates set forth in the applicable Proposal, amendment or change order.



- 16. Insurance.** During performance of the Services, H&H will maintain workers' compensation, commercial general liability, automobile liability, and professional liability/contractor's pollution liability insurance. H&H will furnish you certificates of such insurance on request.
- 17. Indemnification.** You agree to hold harmless, indemnify, and defend the H&H Indemnitees against all claims, suits, fines and penalties, including mandated cleanup costs and attorneys' fees and other costs of settlement and defense, which claims, suits, fines, penalties or costs arise out of or are related to this Agreement or the Services, except to the extent they are caused by H&H's negligence or willful misconduct.
- 18. Limitation of Remedies.**
- To the fullest extent permitted by law and notwithstanding anything else in this Agreement to the contrary, the aggregate liability of H&H and its affiliates and subcontractors and their employees, officers, directors and agents (collectively referred to in this paragraph as "H&H") for all claims arising out of this Agreement or the Services is limited to \$50,000 or, if greater, 10% of the compensation received by H&H under this Agreement.
 - You may elect to increase the limit of liability by paying an additional fee, such fee to be negotiated prior to the execution of this Agreement.
 - Any claim will be deemed waived unless written notice of such claim is received by H&H within one year of substantial completion of the Services.
 - H&H will not be liable for lost profits, loss of use of property, delays, or other special, indirect, incidental, consequential, punitive, exemplary, or multiple damages.
 - H&H will not be liable to you or the Site owner for injuries or deaths suffered by H&H's or its subcontractors' employees.
 - You will look solely to H&H for your remedy for any claim arising out of or relating to this Agreement, including any claim arising out of or relating to alleged negligence or errors or omissions of any H&H principal, officer, employee or agent. To the extent damages are covered by property insurance or any other insurance, both you and H&H waive all rights against each other and against the contractors, consultants, agents, and employees of the other, for damages, except such rights as they may have to the proceeds of such insurance as set forth in this Agreement. The you or H&H, as appropriate, shall require of the contractors, consultants, agents, and employees of any of them, similar waivers in favor of the other parties enumerated herein.
- 19. Disputes.**
- All disputes between you and H&H shall be subject to non-binding mediation.
 - Either party may demand mediation by serving a written notice stating the essential nature of the dispute, the amount of time or money claimed, and requiring that the matter be mediated within forty-five (45) days of service of notice.
 - The mediation shall be administered by the American Arbitration Association in accordance with its most recent Construction Mediation Rules, or by such other person or organization as the parties may agree upon.
 - No action or suit may be commenced unless mediation has occurred but did not resolve the dispute, or unless a statute of limitation period would expire if suit were not filed prior to such forty-five (45) days after service of notice. However, where non-payment of an invoice has occurred and H&H sends you a final demand letter for payment, your failure to respond within ten (10) days of receipt (or, for certified mail, the date of the first attempt to deliver the letter to your address of record if you ultimately do not accept receipt of the letter) of such letter will be deemed to be a waiver of your right to enforce this mediation clause and H&H may immediately file suit to enforce the terms of this Agreement.
- 20. Miscellaneous.**
- This Agreement and all claims relating thereto shall be governed by the substantive and procedural laws of the State of Illinois, as they presently exist or may hereafter be amended, without regard to principles of conflict of laws.
 - The above terms and conditions regarding Limitation of Remedies and Indemnification shall survive the completion of the Services under this Agreement and the termination of the contract for any cause.
 - Any amendment to these Terms and Conditions must be in writing and signed by both parties. No modification of these Terms and Conditions will be binding against H&H unless specifically approved in writing by a Principal of H&H.
 - Having received these Terms and Conditions, your oral authorization to commence Services, your acceptance of performance of the Services, your actions, or your use of the Report or Work Product constitutes your acceptance of them.
 - This Agreement supersedes any contract terms, purchase orders or other documents issued by you, even if signed by an authorized representative of H&H.
 - Neither party may assign or transfer this Agreement or any rights or duties hereunder without the written consent of the other party.
 - Your failure or the failure of your successors or assigns to receive payment, reimbursement, insurance proceeds or grant funds from any other party for any reason whatsoever shall not absolve you, your successors or assigns of any obligation to pay any sum to H&H under this agreement.
 - These Terms and Conditions shall govern over any inconsistent terms in H&H's Proposal.
 - The provisions of this Agreement are severable; if any provision is unenforceable it shall be appropriately limited and given effect to the extent it is enforceable.
 - The covenants and agreements contained in this Agreement shall apply to, inure to the benefit of and be binding upon the parties hereto and upon their respective successors and assigns.
 - Any reports generated by H&H will be subject to H&H's standard report limitations for that particular type of report.
- 21. Asbestos Abatement Services (If Applicable).** If the Services include asbestos abatement services, then the following terms and conditions will apply and will supersede any conflicting terms contained elsewhere in this Agreement.
- You acknowledge that conditions can vary from those encountered at the times and locations of explorations and data collection, and that the limitation on available data may result in some level of uncertainty with respect to the interpretation of those conditions, despite due professional care. H&H therefore cannot guaranty specific results such as the identification or removal of all asbestos or other contamination.



- 22. Microbial Services (If Applicable).** If the Services include microbial services, then the following terms and conditions will apply and will supersede any conflicting terms contained elsewhere in this Agreement.
- a. You recognize that meeting the standard of care does not establish an assurance that corrective procedures will be permanent. Because Microbial infestations are created by near-omnipresent living microscopic spores, grows very quickly and are influenced by nanoclimatological conditions that are very difficult to detect and sources of water intrusion, elevated moisture or relative humidity over which H&H has neither control or responsibility, H&H cannot and does not claim that its Services will eliminate the risk of a Microbial infestation recurring.
 - b. You acknowledge that the Services entail risk of personal injury and property damage (including cross-contamination) that cannot be avoided, even with the exercise of due care. You also acknowledge that environmental conditions can vary from those encountered at the times and locations of explorations and data collection, and that the limitation on available data may result in some level of uncertainty with respect to the interpretation of these conditions, despite due care. H&H therefore cannot guaranty specific results such as the identification of all contamination or other environmental conditions or problems nor their resolution.
 - c. You acknowledge that Microbial infestations may be hidden from view and concealed in locations that are difficult to discover. Accordingly, you agree that despite H&H's efforts, some Microbial locations may remain undetected. In such situations, you agree that you will have no claim against H&H provided H&H followed all applicable laws and regulations pertaining to the Work.
 - d. For purposes of this Agreement, Microbial is defined as any and all fungal and/or bacterial growth including but not limited to mold, mildew, yeast, fungus, fungi, bacteria, spores, odors, particulates, vapors, gas, or other emissions produced by or arising out of or toxins emanating therefrom.
 - e. You further agree that where H&H shall performs Services intended to minimize the risk of Microbial infestations, H&H shall not be liable for damages resulting from Microbial contamination including but not limited to fungal or bacterial infestations and water damage or dry or wet rot and you agree to waive any Microbial infestation claim(s) against H&H, and you agree to indemnify, defend and hold the H&H Indemnitees harmless from any claim alleging that H&H's Services caused or aggravated a Microbial infestation or did not prevent a Microbial infestation from re-occurring.



February 16, 2024
81.P013151.24 – CBBEL
Old McHenry Road Crossings, Lake County, IL – Phase II – PSI and Pre-Demo Survey – Contract 1
ATTACHMENTS

ATTACHMENT B

IDOT BLR 5514 COST SHEETS



| | | |
|--|---------------------------|------------------------------|
| Local Public Agency Lake County Division of Transportation | County Lake | Section Number TBD |
| Prime Consultant (Firm) Name Christopher B. Burke Engineering, Ltd. | Prepared By JJR | Date 5/28/2024 |
| Consultant / Subconsultant Name Huff & Huff, Inc., a subsidiary of GZA, Inc. | 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

Phase 2 Environmental Services - OMR Crossings Contract 1 - PSI/CCDD, and Pre-demo Survey (4 Properties)

PAYROLL ESCALATION TABLE

| | | | | |
|----------------------|-----------|--------|--------------------------|---------|
| CONTRACT TERM | 24 | MONTHS | OVERHEAD RATE | 190.00% |
| START DATE | 6/1/2024 | | COMPLEXITY FACTOR | 0 |
| RAISE DATE | 3/1/2025 | | % OF RAISE | 2.00% |
| END DATE | 5/31/2026 | | | |

ESCALATION PER YEAR

| Year | First Date | Last Date | Months | % of Contract |
|------|------------|-----------|--------|---------------|
| 0 | 6/1/2024 | 3/1/2025 | 9 | 37.50% |
| 1 | 3/2/2025 | 3/1/2026 | 12 | 51.00% |
| 2 | 3/2/2026 | 6/1/2026 | 3 | 13.01% |

The total escalation = 1.51%

| | | |
|--|---------------|-----------------------|
| Local Public Agency | County | Section Number |
| Lake County Division of Transportation | Lake | TBD |
| Consultant / Subconsultant Name | | Job Number |
| Huff & Huff, Inc., a subsidiary of GZA, Inc. | | |

PAYROLL RATES

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

| | |
|-----------------------------|--------------|
| MAXIMUM PAYROLL RATE | 86.00 |
| ESCALATION FACTOR | 1.51% |

| CLASSIFICATION | IDOT PAYROLL RATES ON FILE | CALCULATED RATE |
|---------------------------------|---|------------------------|
| Principal | \$85.96 | \$86.00 |
| Associate Principal III | \$83.37 | \$84.62 |
| Associate Principal II | \$76.01 | \$77.15 |
| Associate Principal I | \$71.92 | \$73.00 |
| Senior Project Manager III | \$73.19 | \$74.29 |
| Senior Project Manager I | \$56.56 | \$57.41 |
| Senior Landscape Architect | \$61.47 | \$62.40 |
| Senior Planning PM | \$59.03 | \$59.92 |
| Senior Technical Specialist II | \$62.64 | \$63.58 |
| Senior Technical Specialist I | \$55.79 | \$56.63 |
| Senior Scientist PM II | \$61.17 | \$62.09 |
| Senior Technical Scientist | \$57.15 | \$58.01 |
| Scientist PM II | \$53.34 | \$54.14 |
| Scientist PM I | \$46.97 | \$47.68 |
| Assistant PM Scientist | \$39.32 | \$39.91 |
| Environmental Engineer PM II | \$49.99 | \$50.74 |
| Environmental Engineer PM I | \$47.00 | \$47.71 |
| Assistant PM Engineer I | \$41.15 | \$41.77 |
| Engineer II | \$31.75 | \$32.23 |
| Engineer I | \$35.69 | \$36.23 |
| Scientist SI | \$34.50 | \$35.02 |
| Scientist SII | \$30.16 | \$30.61 |
| Technical Graphics Technician | \$27.73 | \$28.15 |
| Administrative Executive | \$52.42 | \$53.21 |
| Senior Administrative Assistant | \$36.31 | \$36.86 |
| Billing Administrator | \$25.00 | \$25.38 |

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

TBD

Consultant / Subconsultant Name

Huff & Huff, Inc., a subsidiary of GZA, Inc.

Job Number

DIRECT COSTS WORKSHEET

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

| ITEM | ALLOWABLE | QUANTITY | CONTRACT RATE | TOTAL |
|--|---|----------|---------------|--------------------|
| Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD) | Actual Cost (Up to state rate maximum) | | | \$0.00 |
| Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD) | Actual Cost | | | \$0.00 |
| Air Fare | Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval | | | \$0.00 |
| Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD) | Up to state rate maximum | 450 | \$0.67 | \$301.50 |
| Vehicle Owned or Leased | \$32.50/half day (4 hours or less) or \$65/full day | | | \$0.00 |
| Vehicle Rental | Actual Cost (Up to \$55/day) | | | \$0.00 |
| Tolls | Actual Cost | 9 | \$7.60 | \$68.40 |
| 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) | 4 | \$2,750.00 | \$11,000.00 |
| Aerial Photography and Mapping | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| Utility Exploratory Trenching | Actual Cost (Requires 2-3 quotes with IDOT approval) | | | \$0.00 |
| Testing of Soil Samples | Actual Cost | 43 | \$740.00 | \$31,820.00 |
| Lab Services | Actual Cost (Provide breakdown of each cost) | 1 | \$9,262.50 | \$9,262.50 |
| Equipment and/or Specialized Equipment Rental | Actual Cost (Requires 2-3 quotes with IDOT approval) | 4 | \$750.00 | \$3,000.00 |
| Driller (day) | Actual Cost | 4 | \$2,750.00 | \$11,000.00 |
| Expendible Materials | Daily Rate | 8 | \$30.00 | \$240.00 |
| PID | Daily Rate | 4 | \$100.00 | \$400.00 |
| GPS | Daily Rate | 4 | \$100.00 | \$400.00 |
| TOTAL DIRECT COSTS: | | | | \$67,492.40 |

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

TBD

Consultant / Subconsultant Name

Huff & Huff, Inc., a subsidiary of GZA, Inc.

Job Number**COST ESTIMATE WORKSHEET**

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE **190.00%**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 |
|----------------------------------|---|-------------|---------------|-------------------------------|--------------|-----------------------|--------------------|---------------------|
| PSI/CCDD | 54,949 | 175 | 6,728 | 12,783 | 2,220 | 0 | 21,731 | 17.67% |
| Pre-Demo Survey (4 Properties) | 12,544 | 173 | 7,741 | 14,708 | 2,555 | 0 | 25,004 | 20.33% |
| QAQC | 0 | 20 | 1,493 | 2,837 | 493 | 0 | 4,823 | 3.92% |
| Project Administration | 0 | 20 | 1,214 | 2,306 | 401 | 0 | 3,921 | 3.19% |
| Subconsultant DL | | | | | | | \$0.00 | |
| Direct Costs Total ==> | \$67,492.40 | | | | | | \$67,492.40 | 54.88% |
| TOTALS | | 388 | 17,176 | 32,634 | 5,669 | - | 122,971 | 100.00% |

49,810

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

TBD

Consultant / Subconsultant Name

Huff & Huff, Inc., a subsidiary of GZA, Inc.

Job Number

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 | | | PSI/CCDD | | | Pre-Demo Survey (4 Properties) | | | QAQC | | | Project Administration | | | Hours | % Part. | Wgtd Avg |
|---------------------------------|------------------------|-------------------|------------|-------------|----------|------------|-------------|-----------------------------------|------------|-------------|-------|------------|-------------|------------------------|------------|-------------|-------|------------|-------------|
| | | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | Hours | % Part. | Wgtd Avg | | | |
| Principal | 86.00 | 0.0 | | | | | | | | | | | | | | | | | |
| Associate Principal III | 84.62 | 0.0 | | | | | | | | | | | | | | | | | |
| Associate Principal II | 77.15 | 16.0 | 4.12% | 3.18 | 3 | 1.71% | 1.32 | 1 | 0.58% | 0.45 | 8 | 40.00% | 30.86 | 4 | 20.00% | 15.43 | | | |
| Associate Principal I | 73.00 | 20.0 | 5.15% | 3.76 | 3 | 1.71% | 1.25 | 1 | 0.58% | 0.42 | 12 | 60.00% | 43.80 | 4 | 20.00% | 14.60 | | | |
| Senior Project Manager III | 74.29 | 0.0 | | | | | | | | | | | | | | | | | |
| Senior Project Manager II | 61.35 | 0.0 | | | | | | | | | | | | | | | | | |
| Senior Project Manager I | 57.41 | 4.0 | 1.03% | 0.59 | | | | | | | | | | 4 | 20.00% | 11.48 | | | |
| Senior Landscape Architect | 62.40 | 0.0 | | | | | | | | | | | | | | | | | |
| Senior Planning PM | 59.92 | 0.0 | | | | | | | | | | | | | | | | | |
| Senior Technical Specialist II | 63.58 | 0.0 | | | | | | | | | | | | | | | | | |
| Senior Technical Specialist I | 56.63 | 81.0 | 20.88% | 11.82 | 6 | 3.43% | 1.94 | 75 | 43.35% | 24.55 | | | | | | | | | |
| Senior Scientist PM II | 62.09 | 0.0 | | | | | | | | | | | | | | | | | |
| Senior Technical Scientist | 58.01 | 0.0 | | | | | | | | | | | | | | | | | |
| Scientist PM II | 54.14 | 4.0 | 1.03% | 0.56 | | | | | | | | | | 4 | 20.00% | 10.83 | | | |
| Scientist PM I | 47.68 | 0.0 | | | | | | | | | | | | | | | | | |
| Assistant PM Scientist | 39.91 | 30.0 | 7.73% | 3.09 | 20 | 11.43% | 4.56 | 10 | 5.78% | 2.31 | | | | | | | | | |
| Environmental Engineer PM II | 50.74 | 0.0 | | | | | | | | | | | | | | | | | |
| Environmental Engineer PM I | 47.71 | 0.0 | | | | | | | | | | | | | | | | | |
| Assistant PM Engineer I | 41.77 | 29.0 | 7.47% | 3.12 | 25 | 14.29% | 5.97 | | | | | | | 4 | 20.00% | 8.35 | | | |
| Engineer II | 32.23 | 0.0 | | | | | | | | | | | | | | | | | |
| Engineer I | 36.23 | 50.0 | 12.89% | 4.67 | 50 | 28.57% | 10.35 | | | | | | | | | | | | |
| Scientist SI | 35.02 | 125.0 | 32.22% | 11.28 | 50 | 28.57% | 10.01 | 75 | 43.35% | 15.18 | | | | | | | | | |
| Scientist SII | 30.61 | 0.0 | | | | | | | | | | | | | | | | | |
| Technical Graphics Technician | 28.15 | 25.0 | 6.44% | 1.81 | 15 | 8.57% | 2.41 | 10 | 5.78% | 1.63 | | | | | | | | | |
| Administrative Executive | 53.21 | 0.0 | | | | | | | | | | | | | | | | | |
| Senior Administrative Assistant | 36.86 | 4.0 | 1.03% | 0.38 | 3 | 1.71% | 0.63 | 1 | 0.58% | 0.21 | | | | | | | | | |
| Billing Administrator | 25.38 | 0.0 | | | | | | | | | | | | | | | | | |
| TOTALS | | 388.0 | 100% | \$44.27 | 175.0 | 100.00% | \$38.44 | 173.0 | 100% | \$44.75 | 20.0 | 100% | \$74.66 | 20.0 | 100% | \$60.70 | 0.0 | 0% | \$0.00 |

HUFF & HUFF, INC.
SUMMARY OF DIRECT COSTS

Project: CBBEL-LCDOT OMR Crossings Contract 1

| | | | | | | | <u>DIRECT</u> |
|------------------------------------|----------|---|-------|-------------|---|-----------|----------------------|
| Task 1 - PSI/CCDD | | | | | | | |
| Trips | 50 miles | x | 5 x | \$ 0.670 | = | \$ | 167.50 |
| Tolls | | | 5 x | \$ 7.60 | = | \$ | 38.00 |
| Expendible Materials | 1 day | x | 4 x | \$ 30.00 | = | \$ | 120.00 |
| Driller | 1 day | x | 4 x | \$ 2,750.00 | = | \$ | 11,000.00 |
| Traffic Control | 1 day | x | 4 x | \$ 2,750.00 | = | \$ | 11,000.00 |
| PID | 1 day | x | 4 x | \$ 100.00 | = | \$ | 400.00 |
| GPS | 1 day | x | 4 x | \$ 100.00 | = | \$ | 400.00 |
| IDOT Protocol Analytical | | | | | | | |
| VOCs | 1 ea | x | 43 x | \$ 115.00 | = | \$ | 4,945.00 |
| SVOCs | 1 ea | x | 43 x | \$ 210.00 | = | \$ | 9,030.00 |
| TAL total Metals | 1 ea | x | 43 x | \$ 155.00 | = | \$ | 6,665.00 |
| SPLP Metals | 1 ea | x | 43 x | \$ 125.00 | = | \$ | 5,375.00 |
| TCLP Metals | 1 ea | x | 43 x | \$ 125.00 | = | \$ | 5,375.00 |
| pH | 1 ea | x | 43 x | \$ 10.00 | = | \$ | 430.00 |
| <u>Cost/IDOT Sample</u> | | | | \$ 740.00 | | | |
| Task Total | | | | | | \$ | 54,945.50 |
| Task 2 -Pre-Demo Survey | | | | | | | |
| Trips | 50 miles | x | 4 x | \$ 0.670 | = | \$ | 134.00 |
| Tolls | | | 4 x | \$ 7.60 | = | \$ | 30.40 |
| ACM Bulk | 1 ea | x | 375 x | \$ 8.50 | = | \$ | 3,187.50 |
| ACM PLM 400 ct | 1 ea | x | 25 x | \$ 50.00 | = | \$ | 1,250.00 |
| Total Pb | 1 ea | x | 35 x | \$ 25.00 | = | \$ | 875.00 |
| TCLP Lead | 1 ea | x | 15 x | \$ 105.00 | = | \$ | 1,575.00 |
| PCBs | 1 ea | x | 25 x | \$ 95.00 | = | \$ | 2,375.00 |
| XRF Rental | 1 ea | x | 4 x | \$ 750.00 | = | \$ | 3,000.00 |
| Expendible Materials | 1 day | x | 4 x | \$ 30.00 | = | \$ | 120.00 |
| | | | 0 x | \$ - | = | \$ | - |
| Task Total | | | | | | \$ | 12,546.90 |
| Task 3 - QAQC | | | | | | | |
| | | | 0 x | \$ - | = | \$ | - |
| Task Total | | | | | | \$ | - |
| Task 4 - PM | | | | | | | |
| | | | 0 x | \$ - | = | \$ | - |
| Task Total | | | | | | \$ | - |
| GRAND TOTAL | | | | | | \$ | 67,492.40 |

HUFF & HUFF, INC.
SUMMARY OF SERVICES BY OTHERS
 Project: CBBEL-LCDOT OMR Crossings Contract 1

OUTSIDE

Task 1 - PSI/CCDD

| | | | | | | |
|--|-----|----|-------------------|---|----|-------------|
| | 0 x | \$ | - | = | \$ | - |
| | | | <u>Task Total</u> | | | <u>\$ -</u> |

Task 2 -Pre-Demo Survey

| | | | | | | |
|--|-----|----|-------------------|---|----|-------------|
| | 0 x | \$ | - | = | \$ | - |
| | | | <u>Task Total</u> | | | <u>\$ -</u> |

Task 3 - QAQC

| | | | | | | |
|--|-----|----|-------------------|---|----|-------------|
| | 0 x | \$ | - | = | \$ | - |
| | | | <u>Task Total</u> | | | <u>\$ -</u> |

GRAND TOTAL **\$ -**

Mathewson Right of Way Company (MROWCO)

Contract Scope and Cost Estimate

**AGREEMENT FOR
LAND ACQUISITION CONSULTING SERVICES**

**TranSystems Corporation
Old McHenry Crossings (Contract 1: Sections 1, 1B, and 2)**

AGREEMENT between Mathewson Right of Way Company (MROWCO) whose address is 2024 Hickory Road, Suite 205, Homewood, Illinois 60430 and TranSystems Corporation (TRANSYSTEMS), whose address is 1475 E. Woodfield Road, Suite 600, Schaumburg, Illinois 60173.

MROWCO shall provide to TRANSYSTEMS, on behalf of the Lake County Division of Transportation (LCDOT), consulting services for the acquisition of right of way for the Old McHenry Crossings Project (PROJECT).

The PROJECT shall consist of the acquisition of approximately 57 parcels.

MROWCO shall perform the following services:

1. Appraisal
2. Specialty Report
3. Appraisal Review
4. Negotiation
5. Relocation
6. Closing
7. IDOT Certification
8. Project Management
9. Direct Expenses

All of the above are described as specified in Exhibit A: Scope of Services attached hereto.

TRANSYSTEMS shall compensate MROWCO for the services provided under this AGREEMENT as provided in Exhibit B: Compensation attached hereto. The total amount of compensation authorized by this agreement is not to exceed \$1,156,600.00.

Exhibit C: Terms and Conditions is attached hereto and made a part hereof.

Submitted this 22nd day of July, 2024.

Accepted this ___ day of _____, 2024.

Mathewson Right of Way Company

TranSystems Corporation

By: _____

Mark D. Mathewson
President

By: _____

EXHIBIT A: SCOPE OF SERVICES

MROWCO agrees to perform, at the direction of TRANSYSTEMS, the following services:

1. Appraisal
2. Specialty Report
3. Appraisal Review
4. Negotiation
5. Relocation
6. Closing
7. IDOT Certification
8. Project Management
9. Direct Expenses

All services called for in this AGREEMENT will be conducted by an individual or individuals whose qualifications have been approved by the Illinois Department of Transportation, when applicable. All service providers shall be subject to Lake County approval.

All services within the scope of this AGREEMENT shall be performed, where applicable, in accordance with the IDOT Land Acquisition Policies and Procedures Manual, hereinafter referred to as the LAPPM.

APPRAISALS

Determinations of fair market value performed by the Appraiser shall be in accordance with the LAPPM.

The Appraiser shall make a detailed inspection of the properties and make such investigations and studies as are necessary to derive sound conclusions for the preparation of appraisal reports.

Valuations shall be prepared as outlined in the LAPPM. The format to be used shall be one of the following types as described in the LAPPM:

- Non-Complex Appraisal Report
- Complex Appraisal Report

The Appraiser is to determine which type of appraisal format should be used for each parcel and obtain the LCDOT's concurrence. MROWCO shall provide a copy of an appraisal of each parcel together with Improvement Disposition Values form to be submitted to the LCDOT for approval.

For all fee simple acquisitions and any Permanent or Temporary Easement involving compensation greater than \$10,000.00, the Appraisal Report shall include the appraiser's opinion as to the value of the Total Holding.

Property needed shall be acquired by fee simple, dedication, permanent easement, temporary use permit, or temporary easement as determined and shown on the right of way plan furnished by TRANSYSTEMS.

It may be necessary for a completed appraisal to be updated for condemnation purposes or revised due to a change in the ROW plat or due to new information provided by the LCDOT or TRANSYSTEMS. These updates or revisions will be assigned to the Appraiser in a separate work order as the need arises. An Appraiser's revision of the appraisal due to the Review Appraiser's comments or corrections does not constitute an update or revision that would necessitate a separate work order.

On parcels that require the acquisition of a residence, it may be necessary for the Appraiser to perform an additional analysis to determine an allocated value for the residence and home site as separate from the whole parcel to be acquired. This would be needed for relocation purposes and is not to be included in the appraisal report. The cost for the additional appraisal analysis will be established in the work order for that appraisal.

The Appraiser shall prepare a comparable sales brochure in accordance with the LAPPM for each project and as directed by the LCDOT.

The Appraiser shall prepare grids that compare comparable sales to the subject parcel, where appropriate.

The Appraiser shall include land and improvement allocations in the comparable sales data section of all appraisals.

The Non-Complex Appraisal Report and Complex Appraisal Report, and an updated or revised appraisal report, shall be deemed complete when an acceptable appraisal report is submitted by MROWCO and approved by the LCDOT.

Appearances in court and/or pretrial conferences, which include depositions and preparation time for depositions and court, may be required for the appraisal services requested herein. The time spent at such appearance or appearances shall be made upon request of the LCDOT or its trial counsel and shall be paid for as specified in Exhibit B.

Appraiser may be asked to perform a Cost Analysis for appropriation purposes, said Cost Analysis shall be compensated as provided under Project Management.

Appraiser may be asked to provide a Comparable Sales Book as an on-going assignment independent of individual appraisals.

MROWCO staff may assist in the preparation of appraisal work.

SPECIALTY REPORTS

Specialty Reports performed by MROWCO must be in accordance with the LAPPM. It is MROWCO's responsibility to ensure that all items affecting the value of the property have been considered in the Specialty Report.

MROWCO shall make sufficient inspection of the properties and make such investigations and studies as are necessary to derive sound conclusions to support the specialty report.

Work is to be performed by a licensed Engineer, Architect, or appropriately licensed person in that specific field or MROWCO must certify that a bona fide employee working solely for MROWCO assisted in preparations of the report. If MROWCO is not qualified to perform assigned tasks, MROWCO may then employ the services of a qualified SUBCONTRACTOR.

The Specialty Report, and an updated or revised specialty report, shall be deemed complete when an acceptable Specialty Report is submitted by MROWCO and approved by the LCDOT.

Each Specialty Report shall be paid for as specified in Exhibit B.

It may be necessary for a completed specialty report to be updated or revised due to a change in the ROW Plat. Each updated or revised specialty report shall be paid for as specified in Exhibit B.

Appearances in court and/or pretrial conferences, which include depositions, may be required for the specialty report services requested herein. The time spent at such appearance or appearances shall be made upon request of the LCDOT or its trial counsel and shall be paid for as specified in Exhibit B.

REVIEW APPRAISALS

All appraisals must be reviewed and certified by a Review Appraiser. Appraisal reviews performed by the Review Appraiser must be in accordance with the LAPPM. It is the Review Appraiser's responsibility to ensure that all items affecting the value of the property have been considered in the appraisal. A study of the comparable sales brochure is considered as part of the appraisal review.

The Review Appraiser must complete an Appraisal Review Certification for all appraisal reviews.

It may be necessary for a completed appraisal review to be updated due to a change in the ROW plat or due to new information provided by the LCDOT. These updates or revisions will be assigned to MROWCO in a separate work order as the need arises. A Review Appraiser's second or other subsequent review of an appraisal, rewritten by the appraiser due to the Review Appraiser's comments or corrections, does not constitute an update or revision to the appraisal review that would necessitate a separate work order.

The Appraisal Review for the Non-Complex Appraisal Report and Complex Appraisal Report, and an updated or revised appraisal review, shall be deemed complete when an acceptable Appraisal Review is submitted by MROWCO and approved by the LCDOT.

Appearances in court and/or pretrial conferences, which include depositions, may be required for the review appraisal services requested herein. The time spent at such appearance or appearances shall be made upon request of the LCDOT or its trial counsel and shall be paid for as specified in Exhibit B.

The Review Appraiser may be asked to review a Comparable Sales Book as an on-going assignment independent of individual appraisals.

MROWCO staff may assist in the preparation of review appraisal work.

NEGOTIATIONS

The Negotiator is responsible for all land acquisition negotiations conducted under this AGREEMENT. Negotiations shall be in accordance with the LAPPM. The negotiator shall:

- Be the LCDOT's representative to the property owner.
- Work with the Project Manager to receive and understand the scope of work for each work order and the associated deadlines/time frames involved.
- Establish schedules for each activity and report the progress to the Project Manager to assure a quality product.
- Assure that the deadlines assigned are met.
- Maintain channels of communication.
- Provide a quality product.

Before the initiation of negotiations for each parcel, the LCDOT must approve the amount of just compensation. The Negotiator shall fully document on an ongoing basis all efforts made to acquire the parcel in the Negotiator's Report. Said report shall be available to the LCDOT as reasonably requested.

The Negotiator may recommend administrative settlements as outlined in the LAPPM. Administrative settlements will be determined by the LCDOT on an individual parcel basis.

In the event MROWCO, after having made every reasonable effort to negotiate with the owner of a parcel, is unable to obtain a settlement on the approved appraisal amount, MROWCO shall prepare and submit a written report summarizing the progress of negotiations to date together with a copy of MROWCO's Negotiator's Report completed to date with the names and addresses of all interested parties. MROWCO's written report shall also include its recommendation for further procedure towards acquiring the parcel. The LCDOT may elect to prepare and forward a Final Offer letter (with copy to MROWCO) to the owner of the parcel and thereafter refer the matter to the State's Attorney's Office to proceed with preparation of a condemnation petition. In any case, the LCDOT reserves the right to require MROWCO to make additional negotiation contacts with the parcel owner up until the actual date of filing a petition to condemn the parcel.

The negotiation for a parcel will be deemed complete when all required documents necessary to obtain title approval are submitted and approved by the LCDOT. If a negotiated settlement cannot

be reached, the negotiation for a parcel will be deemed complete when the documentation for eminent domain action is submitted and approved by the LCDOT, and the complaint is filed.

If requested to do so, MROWCO shall provide title review and an attorney's approval letter provided by Mathewson & Mathewson, P.C. for no additional cost.

Each Updated Negotiation or Revised Negotiation shall be paid for at the per parcel fee as specified in Exhibit B. An updated negotiation or revised negotiation is defined as additional negotiation work requested by the LCDOT due to new parcel information supplied by the LCDOT to MROWCO after first contact with the property owner. New parcel information could include, but is not limited to, significant changes in the area of the acquisition; updated (and modified) appraisal amounts that require revised negotiation documents; updated (and modified) title information that requires negotiations with additional property owner(s). Any additional work required to obtain title approval does not constitute an update or revision that would necessitate a separate work order.

Where the acquisition of a parcel involves the displacement of an owner or tenant occupant from a residence or any personal property thereof, MROWCO shall coordinate the offering of relocation assistance any payments to each displaced owner-occupant simultaneously with initiation of negotiations and to each displaced tenant-occupant within seven (7) days following initiation of negotiations for the parcel.

Appearances in court and/or pretrial conferences, which include depositions, may be required for the negotiation services requested herein. The time spent at such appearance or appearances shall be made upon request of the LCDOT or its trial counsel and shall be paid for as specified in Exhibit B.

RELOCATION

Relocation work performed by the Relocation Agent must be in accordance with the LAPPM.

The Relocation Agent shall prepare a relocation plan for the full scope of each project in accordance with the LAPPM. All identified relocation units on the project, including advanced acquisitions, must be addressed in the relocation plan. This relocation plan shall be submitted to the LCDOT for review and approval prior to initiation of negotiations.

It may be necessary for a completed relocation plan to be supplemented due to a change in the LCDOT's project. These supplements, or relocation plan addenda, will be assigned to the Relocation Agent in a separate work order as the need arises. All relocation plan addenda shall be submitted to the LCDOT for review and approval prior to initiation of negotiations.

The Relocation Agent shall be required to provide relocation assistance, advisory services, and determine the amount of payments to be provided to a displaced person. The Relocation Agent shall submit all computations for replacement housing payments and requests for housing of last resort payment to the LCDOT for review and approval prior to initiation of negotiations.

The Relocation Agent shall be required to personally contact the property owner or occupant at the onset of the relocation process, present the appropriate informational letter, and provide information about the relocation advisory assistance and payments that will be made available to them. The Relocation Agent is required to remain in continual personal contact with the displaced person throughout the relocation process to assist in their relocation. A log of each contact will be maintained on an ongoing basis as part of the Relocation Assistance Unit Record.

All relocation claims, along with their necessary supporting documentation, shall be submitted to the LCDOT for review and final approval.

The Relocation Agent shall maintain an accurate and up-to-date file for each relocation unit, including moving expense records, replacement housing payment records, all relevant correspondence and the Relocation Assistance Unit Record. This file will be provided to the LCDOT upon completion of the relocation for that unit.

The Relocation Agent shall forward all written requests for review of disputed relocation claims to the LCDOT.

The Relocation Plan and Relocation Plan Addendum shall be deemed complete when an acceptable Relocation Plan or Relocation Plan Addendum is submitted and approved.

The Residential and Non-Residential Relocation activities shall be deemed complete when the subject property is vacated and able to be utilized for construction of the project, and the displaced person has received all payments.

Each Unit relocated by MROWCO shall be paid for as specified in Exhibit B.

Each Relocation Plan and Addendum prepared by MROWCO shall be paid for as specified in Exhibit B.

CLOSINGS

MROWCO shall attend or otherwise supervise the actual closing of each acquired parcel. It is anticipated that most closings will not require an escrow transaction but it is understood that certain acquisitions are best facilitated through an escrow closing.

IDOT CERTIFICATION

MROWCO shall complete the IDOT D1 Bureau of Land Acquisition Right of Way Certification process on behalf of the LCDOT.

PROJECT MANAGEMENT

MROWCO shall establish a Project Manager who will be knowledgeable and responsible for all services performed under this AGREEMENT. The main duties of the Project Manager may include:

- Be the liaison between the LCDOT, TRANSYSTEMS and MROWCO and coordinate all daily project activities of MROWCO.
- Understand the scope of work for each work order and the associated deadlines/timeframes the LCDOT needs to meet.
- Assist LCDOT and TRANSYSTEMS in value engineering by anticipating right of way acquisition costs and issues.
- Assign work to appropriate staff.
- Coordinate all deliverables, keep project on schedule and maintain the channels of communication between the LCDOT, TRANSYSTEMS and MROWCO.
- Provide the appropriate staff and SUBCONSULTANTS that have knowledge of and will follow Illinois Department of Transportation's LAPP.
- Submit accurate invoices that have documentation to support the invoiced amount.
- Ensure SUBCONTRACTORS' prompt and efficient performance.
- Provide QA/QC oversight.
- Provide coordination with the LCDOT, TRANSYSTEMS and IDOT to obtain project right of way, herein referred to as ROW, certification when necessary.

As noted above, the Project Manager shall task the appraiser with preparing a Project Cost Analysis for appropriation and management purposes.

EXHIBIT B: COMPENSATION

The services to be provided by MROWCO under this agreement shall be assigned and compensated as provided in the attached EXHIBIT B-1.

The sum total of all services provided for in this AGREEMENT shall not exceed **\$1,156,600.00**.

Direct Expenses shall include later date title charges, document copy fees, partial release fees, trustee fees, Title Insurance, Escrow closing fees, recording and other closing costs imposed by the title company.

It is understood that appearances in court and pretrial conferences may be required in relation to the negotiation services called for herein and it is agreed that such appearance or appearances shall be made upon request of the LCDOT or its trial counsel.

In event of such services being requested, they will be provided as follows:

- (a) Rate each half day or fraction thereof for time spent in pretrial conference \$1,000.00.
- (b) Rate each half day or fraction thereof for time spent in court \$1,000.00.

The fees for services shall include all transportation, food, lodging, telephone, or any other operating expenses incurred by MROWCO in the performance thereof.

EXHIBIT C: TERMS AND CONDITIONS

1. Parcels

TRANSYSTEMS shall provide MROWCO with relevant plats of highways, legal descriptions and construction plans for each parcel to be acquired. Each parcel shall consist of one or more basic parcels of land required as right of way for highway purposes to be acquired in fee simple title, and such other easements (temporary or permanent) for uses incidental to construction of the highway but which are not considered as part of the highway right of way, all of which are under the same ownership involving a complete contiguous parcel.

2. Termination

TRANSYSTEMS may terminate this AGREEMENT at any time and for any cause by a notice in writing to MROWCO. In the event of such termination, payment will be made to MROWCO for any completed services. Services in the process of completion shall be compensated for on an equitable basis and all incomplete parcel data collected in connection with them shall be turned over and become the property of the LCDOT; provided, however, this AGREEMENT be terminated solely because the progress or quality of work is unsatisfactory as determined by the LCDOT or TRANSYSTEMS accepting this AGREEMENT, then no payment will be made or demanded by MROWCO for any services which have not been completed and delivered to TRANSYSTEMS and the LCDOT prior to the date of said termination.

3. Project Materials

- a. It is understood and agreed that the LCDOT shall be considered the sole owner of all plats, legal descriptions, ownership and occupancy records, forms of deeds and easements, title reports, and any and all other material furnished, prepared or obtained by MROWCO during the course of providing its services for the parcel and shall be maintained in a separate parcel file for the parcel assigned. MROWCO will provide a copy of the original file of the parcel during the course of the project to the LCDOT. MROWCO will provide a timely update of all documents that pertain to the parcel during the course of the project. Upon completion of the project the original file will be delivered to the LCDOT. Upon termination of this AGREEMENT for any cause or upon completion of the acquisition of the parcel or upon request of the LCDOT when acquisition is determined to be by Eminent Domain proceedings, MROWCO's parcel file shall be delivered to the LCDOT. MROWCO's parcel files shall be available for inspection or review of its contents by the LCDOT, Illinois Department of Transportation or Federal Highway Administration personnel at any time.
- b. Electronic copies shall be provided unless the LCDOT requests to the contrary.

4. Records Preservation

MROWCO shall maintain, for a minimum of five years after the completion of the AGREEMENT, adequate books, records, and supporting documents to verify the amount, recipients, and uses of all disbursements of funds passing in conjunction with the AGREEMENT; the AGREEMENT and all books, records, and supporting documents related to the AGREEMENT shall be available for review and audit by the LCDOT Auditor; and the MROWCO agrees to cooperate fully with any audit conducted by the Auditor 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 LCDOT for the recovery of any funds paid by the LCDOT under the AGREEMENT for which adequate books, records, and supporting documentation are not available to support their purported disbursement.

5. Consultant Certifications and Representations

- a. MROWCO certifies that MROWCO has read the certifications and assurances described in this AGREEMENT and in the Standard Provisions, and certifies that Mark D. Mathewson's signature on the AGREEMENT constitutes an endorsement and execution of each certification and assurance as though each were individually signed, and made on behalf of the contracting entity and its officers and each individual authorized to do work for the LCDOT under this AGREEMENT.
- b. MROWCO under penalties of perjury, certifies that 20-3870734 is its correct Federal Taxpayer Identification number. It is doing business as a Corporation.
- c. MROWCO certifies that it is not in default on an educational loan.
- d. MROWCO certifies that it is not barred from bidding on State of Illinois AGREEMENTs because of violations of State law regarding bid rigging or rotating. 720 ILCS 5/33E-3, 33E-4.
- e. MROWCO certifies that it will not engage in the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance in the performance of this AGREEMENT, or if a corporation, partnership, or other entity with 25 or more employees, have completed and signed a "DRUG-FREE WORKPLACE CERTIFICATION."
- f. MROWCO, under penalty of perjury under the laws of the United States, certifies that the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of federal funds:
 - i. is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;

- ii. has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three years;
 - iii. does not have a proposed debarment pending; and
 - iv. has not been indicted, convicted, or the subject of a civil judgment by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.
- g. MROWCO certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois nor has MROWCO made admission of guilt of such conduct which is a matter of record, nor has any official, officer, agent, or employee of this company been so convicted nor made such an admission.
- h. MROWCO is hereby notified that the LCDOT, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and Title 49, Code of Federal Regulations, Part 21, issued pursuant to such Act, will affirmatively insure that any AGREEMENT entered into pursuant to this AGREEMENT will be awarded without discrimination on the grounds of race, color, or national origin.
- i. MROWCO warrants and represents that it is fully qualified to provide the services hereunder provided for in this Agreement.

6. Disclosures

- a. MROWCO hereby certifies that if any conflict of interest arises, in any of the parcels subsequently assigned to it, it will immediately, within 5 business days of receipt, inform the LCDOT accepting this AGREEMENT and return all material furnished to him for reassignment to others.
- b. It is understood and agreed that Appendices A and B shall be a part of this AGREEMENT and MROWCO agrees to be bound by the terms and provisions contained herein.
- c. MROWCO warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for it, to solicit or secure this AGREEMENT, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for it, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of the AGREEMENT. For breach or violation of this warranty, the LCDOT shall have the right to annul this AGREEMENT without liability.

7. Indemnity

MROWCO will indemnify and hold harmless the LCDOT from all claims and liability due to activities of himself, its agents, and its employees and will comply with all Federal, State, and local laws and ordinances.

8. Insurance

MROWCO shall obtain Commercial General Liability in a broad form, to include but not be limited to, coverage for the following where exposure exists: Bodily Injury and Property Damage, Premises/Operations, Independent contractors, Products/Completed Operations, Personal Injury, Professional Liability and contractual Liability; limits of liability not less than: \$1,000,000.00 per occurrence and \$2,000,000.00 in the aggregate.

Business Auto Liability to include, but not be limited to, coverage for the following where exposure exists: Owned Vehicles, Hired and Non-Owned Vehicles and Employee Non-Ownership; limits of liability not less than: \$1,000,000.00 per occurrence, combined single limit for Bodily Injury and Property Damage Liability. Workers' Compensation Insurance will cover all employees that meet statutory limit in compliance with applicable state and federal laws. The coverage must also include employer's liability with minimum limits of \$100,000.00 for each incident.

The LCDOT shall be provided with Certificates of Insurance evidencing the above required insurance prior to the commencement of services and thereafter with the certificates evidencing renewals or changes to said policies of insurance at least fifteen (15) days prior to the expiration or cancellation of any such policies. The LCDOT shall be named as additional insured on all liability policies, and MROWCO acknowledges that any insurance maintained by the LCDOT shall apply in excess of, and not contribute to, insurance provided by MROWCO. The contractual liability arising out of the AGREEMENT shall be acknowledged on the Certificate of Insurance by the insurance company.

The LCDOT shall be provided with thirty (30) day prior notice, in writing, of Notice of Cancellation or material change and said notification requirements shall be stated on the Certificate of Insurance.

9. Breach

Nothing herein shall be construed as prohibiting the parties to the AGREEMENT from pursuing any other remedies available to the parties for such breach or threatened breach, including recovery of damages from the parties. This provision shall survive any termination of this AGREEMENT.

10. Governing Law

Terms of this AGREEMENT will be governed by Illinois law.

11. Transferability

MROWCO agrees that this AGREEMENT or any part thereof will not be sublet or transferred without the written consent of the LCDOT accepting this AGREEMENT.

12. Execution of AGREEMENT

In the event this AGREEMENT is executed, it shall constitute a contract as of the date it is approved by the LCDOT or its authorized representative and shall be binding on MROWCO, its executors, administrators, successors or assigns, as may be applicable.

STATE OF ILLINOIS DRUG FREE WORKPLACE CERTIFICATION

This certification is required by the Drug Free Workplace Act (III. Rev. Stat., ch. 127, par. 152.311). The Drug Free Workplace Act, effective January 1, 1992, requires that no grantee or contractor shall receive a grant or be considered for the purposes of being awarded a contract for the procurement of any property or services from the State unless that grantee or contractor has certified to the State that the grantee or contractor will provide a drug free workplace. False certification or violation of the certification may result in sanctions including, but not limited to, suspension of contract or grant payments, termination of the contract or grant and debarment of contracting or grant opportunities with the State for at least one (1) year but not more than five (5) years.

For the purpose of this certification, "grantee" or "contractor" means a corporation, partnership, or other 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 a contract or grant of \$5,000 or more from the State.

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

- (a) Publishing a statement:
 - (1) Notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance, including cannabis, is prohibited in the grantee's or contractor's workplace.
 - (2) Specifying the actions that will be taken against employees for violations of such prohibition.
 - (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
 - (A) abide by the terms of the statement; and
 - (B) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about:
 - (1) the dangers of drug abuse in the workplace;
 - (2) the grantee's or contractor's policy of maintaining 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 by an employee who is so convicted, as required by section 5 of the Drug Free Workplace Act.
- (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.
- (g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

THE UNDERSIGNED AFFIRMS, UNDER PENALTIES OF PERJURY, THAT HE OR SHE IS AUTHORIZED TO EXECUTE THIS CERTIFICATION ON BEHALF OF THE DESIGNATED ORGANIZATION.

Mathewson Right of Way Company
Printed Name of Organization


Signature of Authorized Representative

Requisition/Contract/Grant
ID Number

Mark D. Mathewson, President
Printed Name and Title

July 22, 2024
Date

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

1. **Compliance with Regulations:** The contractor shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as Regulations), which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The contractor, with regard to the work performed by it during the contract, shall not discriminate on the ground of race, color or national origin in the selection and retention of subcontractors including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
3. **Solicitations for Subcontracts, Including Procurement of Materials and Equipment:**
In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the ground of race, color or national origin.
4. **Information and Reports:** The contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the State or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the State or the Federal Highway Administration is appropriate and shall set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the State shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - withholding of payments to the contractor under the contract until the contractor complies, and/or
 - cancellation, termination or suspension of the contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor shall include the provisions of Paragraph (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the State or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the State to enter into such litigation to protect the interests of the State, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

APPENDIX B

EQUAL EMPLOYMENT OPPORTUNITY CLAUSE required by the Illinois Fair Employment Practices Commission as a material term of all public contracts:

EQUAL EMPLOYMENT OPPORTUNITY. In the event of the contractor's noncompliance with any provision of this Equal Employment Opportunity Clause, the Illinois Fair Employment Practices Act or the Fair Employment Practices Commission's Rules and Regulations for Public Contracts, the contractor may be declared nonresponsible and therefore ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or avoided in whole or in part, and such other sanctions or penalties may be imposed and remedies invoked as provided by Statute or regulation.

During the performance of this contract (Agreement), the contractor (Consultant) agrees as follows:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or ancestry, physical or mental handicap unrelated to ability, or an unfavorable discharge from the military service, and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
2. That, if it hires additional employees in order to perform this contract, or any portion hereof, it will determine the availability (in accordance with the Commission's Rules and Regulations for Public Contracts) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
3. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, national origin or ancestry, physical or mental handicap unrelated to ability, or an unfavorable discharge from the military service.
4. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice such labor organization or representative of the contractor's obligations under the Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts. If any such labor organization or representative fails or refuses to cooperate with the contractor in its efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Illinois Fair Employment Practices Commission and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
5. That it will submit reports as required by the Illinois Fair Employment Practices Commission's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the Commission or the contracting agency, and in all respects comply with the Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts.
6. That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Illinois Fair Employment Practices Commission for purposes of investigation to ascertain compliance with the Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts.

7. That it will include verbatim or by reference the provisions of Paragraphs 1 through 7 of this clause in every performance subcontract as defined in Section 2.1 O(b) of the Commission's Rules and Regulations for Public Contracts so that such provisions will be binding upon every such subcontractor; and that it will also so include the provisions of paragraphs 1, 5, 6 and 7 in every supply subcontract as defined in Section 2.1 O(a) of the Commission's Rules and Regulations for Public Contracts so that such provisions will be binding upon every such subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by all its subcontractors; and further it will promptly notify the contracting agency and the Illinois Fair Employment Practices Commission in the event any subcontractor fails or refuses to comply therewith. In addition, no contractor will utilize any subcontractor declared by the Commission to be nonresponsible and therefore ineligible for contracts or subcontracts with the state of Illinois or any of its political subdivisions or municipal corporations.

With respect to the two types of subcontracts referred to under paragraph 7 of the Equal Employment Opportunity Clause above, following is an excerpt of Section 2 of the FEPC's Rules and Regulations for Public Contracts:

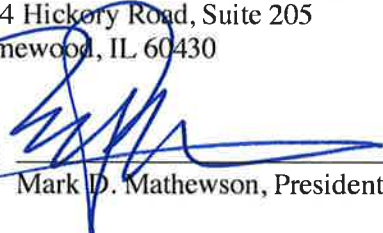
Section 2.10. The term "Subcontract" means any agreement, arrangement or understanding, written or otherwise, between a contractor and any person (in which the parties do not stand in the relationship of an employer and an employee):

- for the furnishing of supplies or services or for the use of real or personal property, including lease arrangements, which, in whole or in part, is utilized in the performance of any one or more contracts; or
- under which any portion of the contractor's obligation under any one or more contracts is performed, undertaken or assumed.

By signing this Proposal, the **CONSULTANT** agrees to the provisions as written. Upon acceptance by the **LPA**, this Contract shall be governed by Illinois law.

For the **CONSULTANT**:

Mathewson Right of Way Company
2024 Hickory Road, Suite 205
Homewood, IL 60430

By: 
Mark D. Mathewson, President

July 22, 2024

FEIN: 20-3870734

Telephone: (312) 676-2900

For the **LPA**:

Lake County Division of Transportation /
TranSystems Corporation

By: _____
LPA Representative

Date: _____