

Local Public Agency Engineering Services Agreement

Using Federal Funds? ☐ Yes No	MFT PE			Agreement Typ Original		
	LOCAL PUE	BLIC AGENCY				
Local Public Agency	County	/	Section	Number	Job	Number
Aurora	Kane		23-003	360-00-TL		
Project Number Contact Name	F	Phone Number	Email			
Timothy V. \	Neidner, P.E.	630) 256-3202	Weidn	erT@aurora	.il.us	
	SECTION	PROVISIONS	anul I			
Local Street/Road Name	Key Rout	e L	ength	Structure N	lumber	
Mitchell Road	FAU 25	11 8	70 ft			
Location Termini		- 11-				Add Location
at Sullivan Road (FAU 1502)						Remove Locatio
Project Description						
Engineering Funding Anticipated Construction Funding ☑ Fed ☑ Phase I - Preliminary Engineering ☐	eral 🛛 MFT/TBP 🗌 🤄	State Other Other State Other MENT FOR eering				nic vince
	CONS	SULTANT				
Prime Consultant (Firm) Name	Contact Name	Phone Numbe	r Er	nail		
Crawford, Murphy and Tilly, Inc.	Tice Cole	(630) 907-7		cole@cmteng	gr.com	
Address		City			State	Zip Code
550 N. Commons Drive, Suite 116		Aurora			IL	60504
THIS AGREEMENT IS MADE between the professional engineering services in connectate of Illinois under the general supervisused entirely or in part to finance ENGINE	ection with the improveme ion of the State Departme	nt of the above SE0 nt of Transportation	CTION. Po	roject funding a fter called the "l	llotted t	o the LPA by the

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

The following EXHIBITS are attached hereto and made a part of hereof this AGREEMENT:	
EXHIBIT B: Project Schedule	
EXHIBIT: Direct Costs Check Sheet (attach BDE 436 when using Lump Sum on Specific Rate Compensation)	

AGREEMENT EXHIBITS

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.
- 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.

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 $FF = (0.33 + P)DI + \%SUBDI when$

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

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

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

III. IT IS MUTUALLY AGREED,

Method of Compensation:

- 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.

- 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		
Crawford, Murphy and Tilly, Inc.	37-0844662	\$236,420.00		

Subconsultants	TIN/FEIN/SS Number	Agreement Amount
Chicago Testing Laboratory, Inc.	36-4199051	\$15,449.00
	Subconsultant Total	\$15,449.00
	Prime Consultant Total	\$236,420.00
	Total for all work	\$251,869.00

	ACDEEMEN	TOLONATURE
Executed by the LP.		T SIGNATURES
Excouled by life El		Public Agency
A44 4	The City of Auro	
Attest:		
By (Signature & Da		By (Signature & Date)
Local Public Agenc		Title
Aurora	Clerk	Director of Purchasing
(SEAL) Executed by the EN	JGINEER:	
	Prime Consultant (Firm) Name	
Attest:	Crawford, Murphy and Tilly, Ir	nc.
By (Signature & Da	Person + COO	By (Signature & Date) Kend Nels 2/9/3 Title Vice President + Regional Office Co-Mo
APPROVED:		
Regional Engineer	Department of Transportation (Signature & Dat	e)

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Aurora	Crawford, Murphy and Tilly, Inc.	Kane	23-00360-00-TL
	EXHIBIT A SCOPE OF SERVICES		
To perform or be responsible fo described and enumerated below	r the performance of the engineering services for the ow	e LPA, in connection	on with the PROJECT herein before

See attached.

Exhibit "A": SCOPE OF SERVICES

City of Aurora, Illinois Project Scope Description to Provide Phase I (Study) Engineering Services for Mitchell Road at Sullivan Road Intersection Improvements Section Number: 23-00360-00-TL

Contents

Introd	uction	1
Gener	ral Project Information	1
Delive	rables	2
Items	Not Included	2
Tasks		3
1.	Data Collection	3
2.	Field Investigations and Land Surveys	3
3.	Traffic Studies	4
4.	Environmental Studies	5
5.	Conceptual Roadway Design	6
6.	Abbreviated Location Drainage Study	6
7.	Geotechnical Investigations	8
8.	Intersection Design Studies	8
9.	Preliminary Design	9
10.	Land Acquisition	9
11.	Public Involvement	.10
12.	Cost Estimates	.10
13.	Draft PDR	.10
14.	Final PDR	.11
15.	Meetings and Coordination	.11
16.	Project Administration	.12

Introduction

Sullivan and Mitchell Roads are City of Aurora Streets and are designated major collectors. Sullivan Road is also designated a local Class II truck route at this location. The general scope of improvement to the Mitchell Road at Sullivan Road intersection includes changing the existing one-way stop control to a traffic signal, channelization improvements, expanding the intersection to accommodate trucks, and interconnecting the intersection to the intersection of Indian Trail at Mitchell Road approximately one-half mile to the south. Pedestrian sidewalk connections are anticipated. Bicycle accommodations will likely be required by IDOT. The Phase I study will be prepared to comply with federal STP-L funding through KKCOM and CMAP. The TIP ID is 09-22-0045.

General Project Information

Schedule

The project is currently in the KKCOM FFY 2023 - 2027 STP - L Active Program. Only the construction phase and phase III engineering is planned for federal funding. The project would target construction in FFY 2027, subject to future funding availability and/or future STP-L Call for Projects. The project schedule is attached and assumes NTP is provided March 6, 2023. Design Approval is planned for late April 2024. Plats and Legals are planned for approval in late September 2024. ROW Certification is planned for November 2026 and the letting is planned for January 2027.

Project Study Limits

- 1. Mitchell Road
 - a. Roadway Improvements
 - i. From 225' south of Bluebonnet Drive to 500' north of Sullivan Road
 - ii. Distance of approximately 1100 feet
 - b. Interconnect Improvements
 - i. From Indian Trail to Mitchell Road, approximately 2800 feet
 - ii. Net distance outside of roadway improvement limits = 2200 feet
- 2. Sullivan Road
 - i. From approximately 700 feet west of Mitchell Road to Mitchell Road
 - ii. Distance of approximately 700 feet

Total roadway improvement study limits of 1800 feet (0.34 miles). Total study limits including interconnect = 6200 feet (1.17 miles).

Environmental Processing

The project will be scoped as a federally-approved categorical exclusion (CE) and may be scaled back to a state-approved categorical exclusion (with report) pending the results of the study.

Deliverables

- 1. Data
 - a. Traffic Count Information
 - b. Microstation .dgn of topographic survey
 - c. .tin of completed topographic survey
- 2. Traffic Analysis Memorandum
 - a. Traffic Control Warrants
 - b. Capacity Analyses
 - c. Expected Crash Frequency Analysis
- 3. Environmental Studies
 - a. Environmental Survey Request (ESR)
 - b. Wetland Delineation Report and Wetland Impact Evaluation (WIE) (if applicable)
 - c. USACE JD Request (if applicable)
 - d. COSIM screening submittal
 - e. Special Waste Preliminary Environmental Site Assessment (PESA)
- 4. Intersection Design Study (assume Mitchell at Bluebonnet doesn't need a separate IDS)
- 5. Abbreviated Location Drainage Study
- 6. Roadway Geotechnical Report
- 7. Opinion of Probable Construction Cost
- 8. Plat of Highways and Legal Descriptions
- 9. Public Comment Responses
- 10. Exhibits
 - Color Exhibit of Conceptual Improvements and Critical Sections for Public Meeting
 - b. Color Exhibit of Final Proposed Improvements for City Use
- 11. Draft and Final PDR

Items Not Included

- 1. Subsurface Utility Engineering Quality Levels A and B deferred to Phase II at areas to be determined
- 2. Field Tile Investigations if necessary, can be performed in Phase II
- 3. Noise Analysis Anticipated scope of improvement does not meet IDOT policy requirements
- 4. Tree Survey deferred to Phase II pending the scope of the immediate improvement and that associated project footprint. Topo will still identify location and diameter of tree to determine magnitude of Phase I impact.
- 5. Section 4(f) studies
- 6. Roundabout IDS will still evaluate for feasibility as part of traffic analysis alternatives in case IDOT requests
- 7. CCDD deferred to Phase II
- 8. PSI deferred to Phase II, if necessary

Tasks

1. Data Collection

- a. Utilities
 - 1. JULIE Design Stage Ticket
 - 2. City GIS / Atlas Information
 - a. Sanitary
 - b. Water
 - 3. Electric (ComEd) Atlases
 - 4. Phone/Fiber (AT&T) Atlases
 - 5. Cable (Verizon or Comcast) Atlases
 - 6. Gas (Nicor) Atlases
 - 7. Other
- b. As-Built Plans from the City (if available)
 - 1. Mitchell Road
 - 2. Sullivan Road
 - 3. Subdivisions
 - i. Konen's Unit 11-A
 - ii. Marywood Meadow Estates
- c. GIS Mapping from the City
- d. Plats of Highways from the City
- e. Past traffic count data from the City
- f. Traffic projections from CMAP
- g. Crash Data from IDOT (GIS) and City
 - 1. Most recent 5 years at study start (purpose and need)
 - 2. Latest 5 years at study end (typical IDOT PDR comment)
- h. Aerial Photography
- i. Project Site Visit and Photolog
- j. Sign Inventory and Photolog
- k. Traffic Counts
 - 1. 24 hour turning movement counts at Mitchell/Sullivan with classification
 - 2. Peak hour turning movement counts Mitchell/Blue Bonnet with classification

2. Field Investigations and Land Surveys

- a. Topographic Survey
 - 1. Mitchell Road
 - a. From 225' south of Bluebonnet Drive to 500' north of Sullivan Road
 - b. Distance of approximately 1100 feet
 - c. General half-widths east and west = 50' from existing centerline
 - 2. Sullivan Road
 - a. From 700' west of Mitchell Road to Mitchell Road
 - b. Distance, excluding Mitchell Road, = 650'
 - c. General half-widths north and south = 45' from existing centerline
 - d. Corner Clips at intersection with Mitchell Road
- b. Interconnect Mapping

- a. CMT will use aerial imagery to approximate the existing roadway and features inside the existing ROW on Mitchell Road between the topographic survey limits and Indian Trail for use with interconnect design.
- b. CMT will use GIS mapping to approximate the existing ROW lines between the roadway improvements and Indian Trail.
- c. Geotechnical Layout and Pickup Survey
- d. Drainage/Utility Pickup Survey
- e. Miscellaneous Pickup Survey
- f. Survey Download, Cleanup, Preparation of Terrain Model
- g. Project Site visit and topo QA review
- h. 3D model of existing subsurface (pavement, topsoil)

3. Traffic Studies

- a. Existing Traffic Volumes
 - 1. Assemble existing traffic counts
 - 2. Establish ADTs from 24-hour counts
 - 3. Establish ADTTs from 24-hour counts
 - 4. Create ADT and ADTT exhibit
 - 5. Identify Peak Hours and establish DHVs
- b. Projected Traffic Volumes
 - 1. Assume Build 2050 and No-Build 2050 are the same traffic
 - 2. Develop projected turning movements and DHVs (at major intersection) from CMAP provided 2050 ADT projections
 - 3. Create Projected ADT and ADTT exhibit
- c. Capacity Analysis (Existing, No-Build 2050, Build 2050)
 - 1. Assumptions:
 - a. All in HCS
 - b. Existing, No-Build 2050, and Build 2050 traffic scenarios
 - c. AM, PM and School Peaks
 - d. Different Lane Configurations as necessary for optimization at intersections
 - 2. One-Way Stop Capacity Analysis
 - 3. All-Way Stop Capacity Analysis (may be preferred control during construction)
 - 4. Traffic Signal Capacity Analysis
 - 5. Roundabout Capacity Analysis (per typical IDOT request)
- d. Crash Analysis
 - 1. Organize Crash Data Location
 - 2. Perform Statistical Analysis
 - 3. Prepare Crash Diagrams
 - 4. Prepare Crash Map
 - 5. Identify Trends, Possible Causes, and Potential Countermeasures
 - 6. Perform Interactive Highway Safety Design Model (IHSDM) Analysis for Existing, 2050 No-Build and 2050 Build
 - 7. Identify locations with safety issues
 - 8. Prepare Summary Narrative
- e. Warrant Analysis

- 1. All-Way Stop Warrant Analysis
- 2. Traffic Signal Warrant Analysis
- f. Summarize Traffic Analysis in Technical Memorandum

4. Environmental Studies

a. Environmental Survey Request (ESR)

CMT will prepare and submit the ESR to IDOT.

CMT will show the Mitchell Road corridor within the ESR to accommodate the excavation and work associated with the interconnect. However, outside the roadway improvement limits, the ESR limits will be within the existing ROW. IDOT is expected to complete the biological and cultural review for the project. CMT will complete the remaining items described below.

b. Wetland Delineation

CMT will complete a wetland delineation meeting the requirements of the U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual and the Midwest Regional Supplement within the project Environmental Survey Request (ESR) limits. The following will be required:

- 1. Secondary resource review
- 2. On-site investigation
- 3. Report preparation
- c. Jurisdictional Determination

If wetlands or streams are located within the project limits, permitting may be required. A jurisdictional determination request will be submitted to the USACE.

d. Wetland Impact Evaluation (WIE)

If wetlands are located within the project limits, a wetland impact evaluation will be prepared.

e. Prime Farmland

Not Applicable

f. Tree Survey, Impacts, and Replacement

Project development will follow *IDOT D&E-18: Preservation and Replacement of Trees* policy. Detail tree survey (including species and condition) will be deferred until Phase II once the area of impact is known. Tree locations and sizes will still be part of topographic survey given the limited amount of trees within the survey limits.

g. Section 4(f) Recreational Evaluation

Properties located within the ESR limits will be evaluated to determine if they qualify as a Section 4(f) resource. Currently, there do not appear to be any Section 4(f) resources within the project area that would require formal Section 4(f) coordination.

h. Air Quality

A COSIM screening sheet will be prepared for IDOT that includes the total ADT and the highest DHV at each project intersection. The results of the screening will be documented in the PDR.

i. Environmental Justice

No displacements and relocations are anticipated. Per IDOT Interim Guidance, the project should not need documentation other than clearly documenting no displacements and relocations in the project report.

j. Noise Analysis

The project is expected to add channelization as part of the intersection

improvements. We have examined the project area and believe the project is a Type III project with respect to IDOT's and FHWA's noise regulations for the following reasons:

- There will be no roadway on new alignment and no added through-traffic lanes of any kind
- The existing roadway will not be moved close enough to any noise-sensitive use in the project area to halve the distance between the existing roadway and the noise-sensitive use
- The roadway profile will not experience substantial vertical alteration and no acoustic shielding will be removed between the roadway and noise-sensitive uses
- The only auxiliary lane to be added will be a turn lane with a length less than 2,500 feet

As a Type III project, the project will not require noise analysis.

k. Preliminary Environmental Site Assessment (PESA)

CMT will complete a local PESA for the project within the ESR limits. The PESA will follow general protocols contained within *A Manual for Conducting Preliminary Site Assessments for IDOT Highway Projects*, ASTM International Standard 1527-13, IDOT's Bureau of Design and Environment Procedure Memorandum Number 10-07-Special Waste Procedures, IDOT Bureau of Local Roads and Streets Manual-Chapter 20-12, Public Act 96-1416, and Clean Construction or Demolition Debris Fill Operations (CCDD) and Uncontaminated Soil Fill Operations: Amendments to 35 Illinois Administrative Code 1100. The following will be required:

- i. Historical research
- ii. Records review
- iii. Site evaluation
- iv. Report preparation

5. Conceptual Roadway Design

- a. Establish project limits
- b. Establish project design criteria and standards
- c. Review the geometrics of the existing alignment and identify deficiencies.
- d. Determine geometric and location requirements/need for bike path/pedestrian facilities
- e. Prepare existing and proposed alternative typical cross-sections for review by the City.
- f. Prepare conceptual intersection configuration
- g. Establish and provide the preliminary horizontal geometrics on the topographic survey drawing
- h. Develop conceptual Maintenance of Traffic/Construction Staging Plan
- i. Deliverables
 - Color exhibit of proposed improvements for use in public involvement
 - Critical typical sections

6. Abbreviated Location Drainage Study

- a. Existing Drainage System
 - i. Identify Drainage Problems

- 1. Research, obtain, and document the location and description of any identified drainage problems.
- 2. Define factors leading to non-maintenance drainage problems, if any, and determine responsibility for corrective measures.

ii. Identify Base Floodplains

- 1. The floodplain boundaries of the closest tributary, the Fox River, will be determined based on FEMA mapping. No floodplain impacts are anticipated.
- iii. Identify Major Drainage Features
 - 1. Major culvert crossings
 - 2. Existing detention facilities and ponds
 - a. Obtain and review any available hydraulic information pertaining to existing detention facilities within the project vicinity.
 - b. Evaluate alternatives to avoid or minimize impacts to existing facilities.
 - c. Determine any impacts to nearby properties.
 - 3. Identify existing drainage outlets and outlet treatments.
 - 4. Identify wetland areas.

b. Proposed Drainage System

- i. Design Criteria
 - 1. Provide written documentation for non-compliance where Kane County and/or City of Aurora design criteria are not met.
 - 2. Develop concept drainage plan (trunk line pipe sizes, layout, and outlet locations).
- ii. Outlet Evaluation
 - 1. Qualitatively evaluate whether each existing outlet is suitable for continued use.
 - 2. Perform quantitative evaluation outlet suitability.
 - a. Analyze existing drainage system with proposed flow to determine potential impacts.
 - 3. Develop feasible, cost effective recommendations in accordance with Kane County and City of Aurora policies, practices, and procedures.
- iii. Stormwater Detention Analysis
 - 1. Determine if detention is required for project.
 - a. It is anticipated that detention will not be required for the project.
 - 2. Determine required detention volume if necessary.
 - 3. Develop a plan for providing detention or watershed benefit measure in lieu of detention.
- iv. Stormwater BMP Analysis
 - 1. Determine BMP requirements for project.
 - a. It is anticipated that stormwater BMPs will not be required for the project.
 - 2. Develop plan for providing stormwater BMPs or watershed benefit measure in lieu of BMP.
- v. Right-of-Way Analysis
 - 1. Review ROW and easement needs for drainage features.
- vi. Summarize Drainage Alternatives
 - 1. Determine alignment to minimize impacts.

- vii. Develop Proposed Drainage Plans
 - 1. Identify locations of ditch regrading.
 - 2. Identify locations where sheet flow is proposed.
 - 3. Identify existing storm sewer to be maintained or removed.
 - 4. Design proposed storm sewers.
 - 5. Provide plan and profile of proposed trunk line storm sewers.
- c. Preparation of Drainage Study Report
 - i. Report Text
 - ii. Source Data
 - iii. Exhibits
 - 1. Location Drainage Map
 - 2. Existing Drainage Plan
 - 3. Flood insurance Rate Map (FIRM)
 - 4. Proposed Concept Drainage Plan
 - 5. Existing Typical Sections
 - 6. Proposed Typical Sections
 - iv. Correspondence
 - v. Supporting Documents and Computations
 - 1. Storm sewer capacity calculations
 - 2. Plot hydraulic grade line
- d. Identify Permit Requirements
 - i. Kane County/Aurora Stormwater Management Permit
 - ii. NPDES Permit
 - iii. Kane-DuPage Soil and Water Conservation District Permit

7. Geotechnical Investigations

Geotechnical Investigations will be performed by Chicago Testing Laboratories (CTL). Their scope is included as attachment A. The scope will generally include soil borings in areas of pavement widening and reconstruction as well as proposed traffic signal mast arm posts. Pavement cores in areas of proposed improvements. CMT hours include coordination time.

8. Intersection Design Studies

- a. Mitchell Road at Sullivan Road
 - 1. Complete Traffic Data Table
 - 2. Complete Phasing Diagram
 - 3. Complete Capacity Table
 - 4. Elements Controlling Design
 - 5. General Notes
 - 6. Location Map
 - 7. Existing and Proposed Views and Labeling
 - 8. 2nd Page for Approach Matchlines (if necessary)
 - 9. Red Time Queue Analysis
 - 10. Turning Templates and Sheet
 - 11. ADA details and Sheet(s)
 - 12. Address IDOT Comments
 - 13. Prepare Disposition of Comments

9. Preliminary Design

- a. Design and refine horizontal and vertical geometry.
- b. Intersection Sight Distance.
- c. Perform preliminary pavement design.
- d. Evaluate existing pavement for remediation and/or reconstruction.
- e. Determine geometric and location requirements of pedestrian facilities.
- f. Determine roadway lighting warrants and evaluate existing and proposed roadway lighting.
- g. Existing and proposed typical sections.
- h. Finalize intersection geometrics.
- i. Determine preliminary site grading plan utilizing 3d software.
- j. Perform barrier warrant analysis.
- k. Create plan and profile plans (20 scale).
- I. Develop preliminary cross sections for earthwork calculations.
- m. Develop concept sequence of construction plan.
- n. Identify potential utility conflicts.
- o. Determine / justify design exceptions.

10. Land Acquisition

- a. Magnitude of effort
 - 1. There are 8 parcels adjacent to the project study area (non-interconnect)
 - 2. 2 subdivisions entail 4 of the parcels
 - 3. There are 3 parcels with likely permanent impacts, 3 parcels with possible impacts, and 2 parcels with no impacts likely
 - 4. Existing ROW conditions will be established for all 8 adjacent parcels to ensure the project does not encroach on private property
- b. Obtain Courthouse Data and Owner of Record Reports
- c. Review Existing ROW and Property Line Information
- d. Property Surveys (assume 8 parcels)
 - 1. Contact Property Owners for Survey access
 - 2. Field research for Boundary and Section Corners
 - 3. Land Surveys
 - 4. Process Survey Data
 - 5. Evaluate and Draft Boundaries (Land and Property Lines)
- e. Title Commitments Any Updates for Appraisals will be performed in Phase II
- f. Conceptual ROW and Costs
 - 1. Prepare initial conceptual ROW and cost estimates for concept design
 - 2. Prepare preliminary ROW and cost estimates for 3d modeled design (Draft PDR)
 - 3. Update ROW from refinements/comments on Draft PDR
- g. Plats and Legals (assume 6 parcels max)
 - Prepare Preliminary Plat of Highways, Legal Descriptions, and Checklist for IDOT
 - 2. Update Preliminary Plat of Highways and Legal Descriptions and prepare disposition of comments
 - 3. Make any revisions to the plats and legals as a result of changes in the land acquisition type or area as a result of negotiations with the property owners. (assume 2 rounds of revisions) and shall only apply to the near term Phase II/III

- improvement. If other areas/acquisitions are deferred to a future Phase II/III project, then any updates would be part of that Phase II contract.
- 4. Draft Monument records and re-establish lost section corners (assume 1 lost corner)

11. Public Involvement

- a. Draft a public involvement plan to outline communication strategies, tasks and engagement schedule.
- b. Summarize public involvement findings and comments in memorandum form
- c. Individual Stakeholder Meetings assume 1, to be used upon stakeholder request
 - 1. Develop exhibits and handouts for discussion
 - 2. Attend with City staff
 - 3. Address questions or comments
- d. Public Involvement assume 1 meeting
 - 1. Develop exhibits and strip maps for public display
 - 2. Advertisements, mailings and notices
 - 3. Attend public involvement meeting, assume 3 CMT staff members
 - 4. Address/Respond to questions or comments

12. Cost Estimates

- a. Initial planning level estimate of project cost for public meeting
- b. Preliminary estimate of project cost (for draft PDR).
- c. Final phase I level estimate of project cost (with final PDR).

13. Draft PDR

- 1. Location and Existing Conditions
 - a. Location
 - b. Description of Existing Facility
 - c. Traffic Data
 - d. Structures
 - e. Railroads
 - f. Contiguous Sections
- 2. Proposed Improvements
 - a. Purpose and Need
 - b. Design Guidelines
 - c. Scope
 - i. Road
 - ii. Alignment
 - iii. Drainage
 - iv. Traffic Control
 - v. Railroad
 - vi. Utility Adjustments
 - vii. Intersections
 - viii. Sideslopes and Clearzone
 - ix. Items Affecting Improvements
 - x. Design Variances
 - xi. Cost
 - xii. Bike/Ped

xiii. Adjacent Segments

- 3. Crash Analysis
- 4. ROW
- 5. Prime Farmland
- 6. Floodplain Encroachment
- 7. NPDES
- 8. 404 Permit
- 9. Special Waste
- 10. Environmental Survey
- 11. Section 4f
- 12. Air Quality
- 13. Noise
- 14. Work Zone Traffic Management Plan
- 15. Complete Streets
- 16. Maintenance of Traffic
- 17. Public Involvement
- 18. Coordination
- 19. Other Coordination
- 20. Commitments
- 21. Assemble report pdf and hard copies
- 22. Attachments
 - a. Location Map
 - b. Functional Classification Map with Project Limits
 - c. Existing and Proposed Typical Sections
 - d. Plan and Profile Sheets
 - e. Intersection Design Studies
 - f. Spot Map and/or Collision Diagram
 - g. Environmental Clearances and Correspondence
 - h. Public Involvement Correspondence
 - i. Newspaper Advertisement
 - j. Coordination Meeting Minutes
 - k. BLR 22120 Approval of Design Variance
 - I. Cost Estimate
- 23. Address City Comments before submittal to IDOT

14. Final PDR

- a. Address comments from IDOT and make any applicable updates since the Draft PDR
- b. Incorporate comments from Public Involvement
- c. Disposition of Comments
- d. Update the Crash Data with the latest available information and update the crash statistics
- e. Assemble report pdf

15. Meetings and Coordination

Meetings and Coordination with the following:

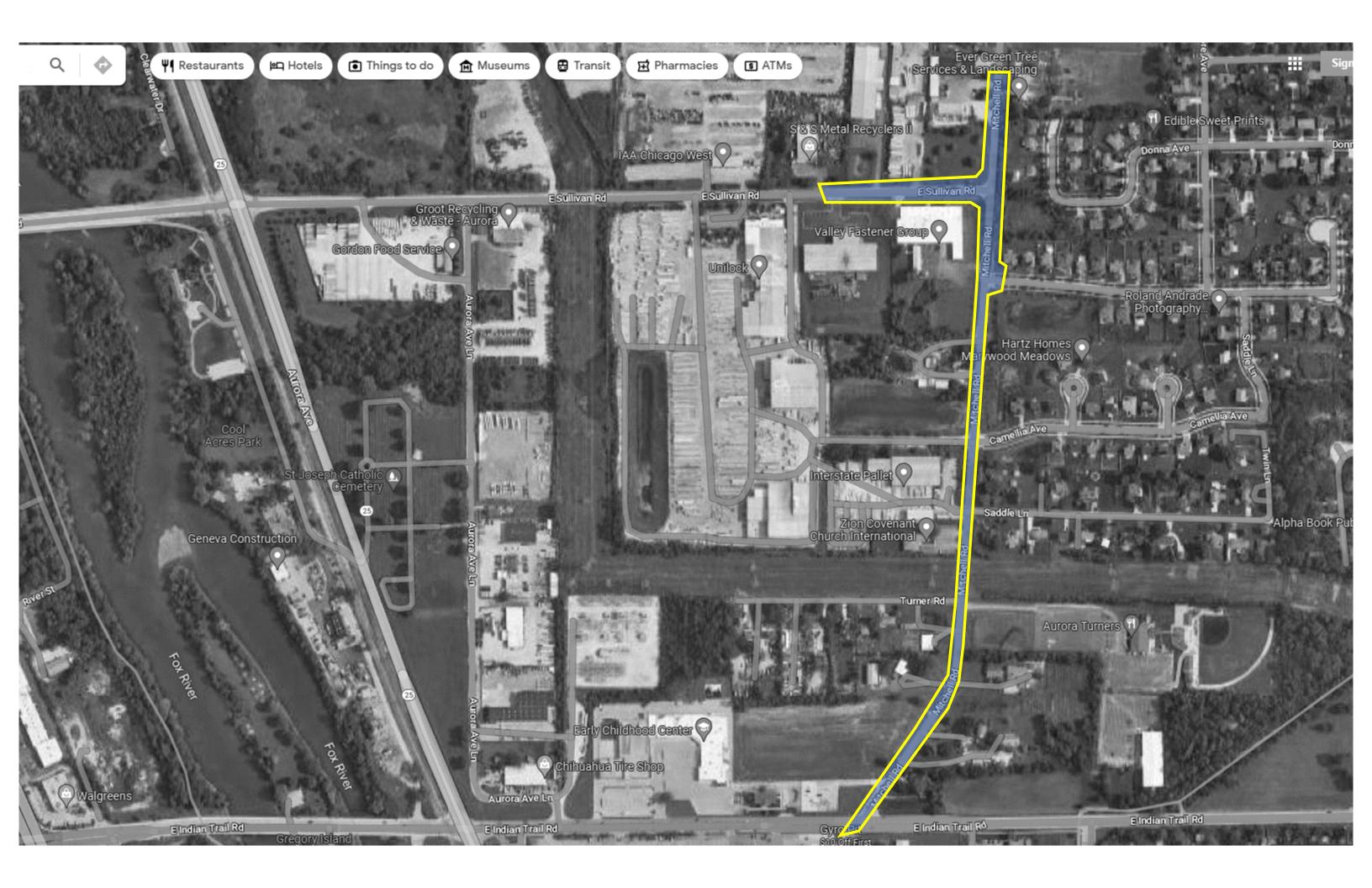
a. City of Aurora including City Utilities

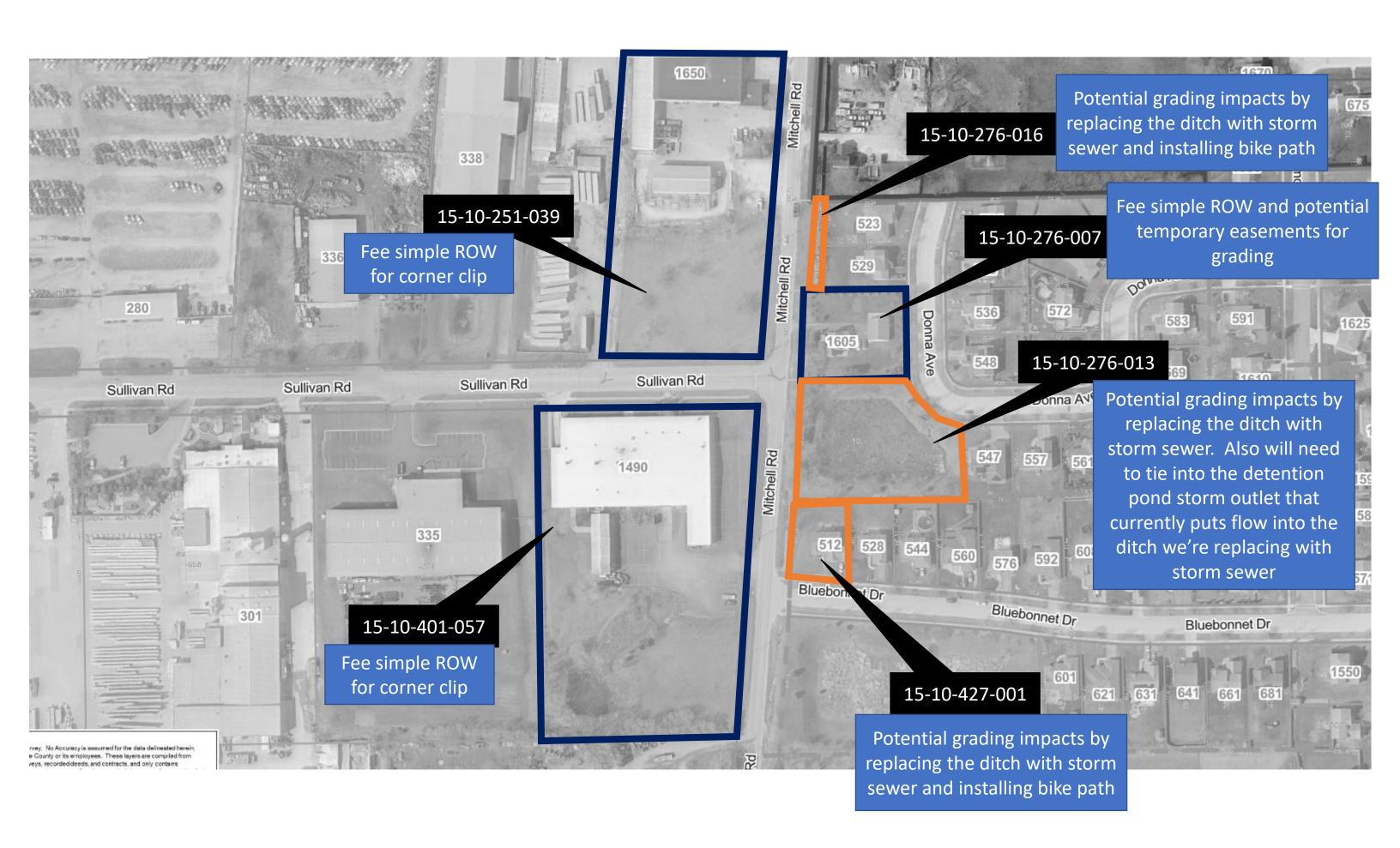
- b. Aurora Township for unincorporated portions of roadway and interconnect improvements
- c. IDOT BLRS D1 and Kickoff Meeting
- d. FHWA / IDOT CBLRS and Initial Coordination Meeting
- e. IDOT D1 Bureau of Land Acquisition and Kickoff Meeting
- f. No Pace Coordination is anticipated because there are no routes within the study limits.

16. Project Administration

- a. Project Startup File System and Accounting
- b. Project Scheduling and Staff Allocation
- c. Internal Project Team Meetings
- d. Budget Control and Monitoring
- e. Quality Assurance Plan (QAP)
 - 1. Prepare QAP
 - 2. QA Reviews
 - 3. Constructability Review
 - 4. Monitor QAP Compliance
 - 5. Disposition of Internal Review Comments
- f. Progress Reports Assume BDE 430
- g. Assistance with STP-L Quarterly Status Updates
- h. Project Closeout









Chicago Testing Laboratory, Inc.

30W114 Butterfield Road, Warrenville, IL 60555 p 630.393.2851 f 630.393.2857 w chicagotestinglab.com e info@chicagotestinglab.com

Testing • Inspection • Training • Consulting • Research • Geotechnical

January 30, 2023

Mr. Tice 'Charles' Cole, P.E. Project Manager Crawford, Murphy & Tilly 550 N Commons Drive, Suite 116 Aurora, IL 60504

Re: Geotechnical Engineering Services – Scope of Work Sullivan and Mitchell Intersection Improvements Aurora, IL

CTL Proposal No. CTL23025

Dear Mr. Cole,

Chicago Testing Laboratory, Inc. (CTL) is pleased to present this cost estimate for completing a geotechnical subsurface investigation for the Sullivan and Mitchell Intersection Improvements in Aurora, IL. Based on preliminary information provided by CMT, the proposed improvements will include partial widening and reconstruction of the to accommodate a turn lane as well as constructing new traffic signals.

Scope of Work

Chicago Testing Laboratory will provide the following Professional Services:

- 1. Layout boring locations and coordinate utility clearance with the State of Illinois One call system (aka JULIE).
- 2. Coordinate the drilling program using a subcontractor drilling firm and coordinate traffic control using a subcontracting firm. Flaggers will be required in order to perform the work.
- 3. Perform a total of six (6) soil borings, four (4) to a depth of 10 feet each below ground surface (bgs) for the roadway widening and two (2) to a depth of 20 feet each bgs for the new traffic signals for a total linear footage of 80 feet. Also perform two (2) hang augers to a depth of 3 feet each to determine the near surface soils in the existing ditch east of Mitchell Road. Soil sampling will be completed at 2.5-foot intervals to the boring termination depths in accordance with the most recent addition of the ASTM standards including D1586, D1587 and D2113. After completion, the borings will be backfilled with soil cuttings and surface patched with non-shrink grout, where applicable.
- **4.** Prepare field logs with the results of field testing and visual descriptions of the pavement and soils encountered and retain representative soil samples of the subsurface materials from each boring for geotechnical analysis. CTL will perform pocket penetrometer and IDOT Rimac testing to determine the compressive strength of all cohesive soils. Soil



samples will be placed in airtight jars and delivered to CTL's laboratory for additional testing.

- 5. Perform a laboratory investigation to determine the physical characteristics of the soils encountered. Scope of laboratory testing is dependent on the soils encountered during the investigation. Laboratory testing will include, but not limited to, moisture contents, Atterberg limits, gradations, organic contents, and dry unit weights.
- **6.** Prepare a Roadway Geotechnical Report (RGR) for the roadway and traffic signal improvements based on the results of the field investigation, laboratory testing and engineering analysis. The report will include a synopsis of the conditions encountered, geotechnical design parameters, recommendations for the proposed roadway and traffic signal improvements, and other geotechnical and construction recommendations pertinent to the project.

Closure

We appreciate the opportunity to work with you as your Geotechnical Engineering consultant. Please contact me if you require any additional information.

Respectively Submitted,

CHICAGO TESTING LABORATORY

Jeffrey A. Rothamer, P.E.

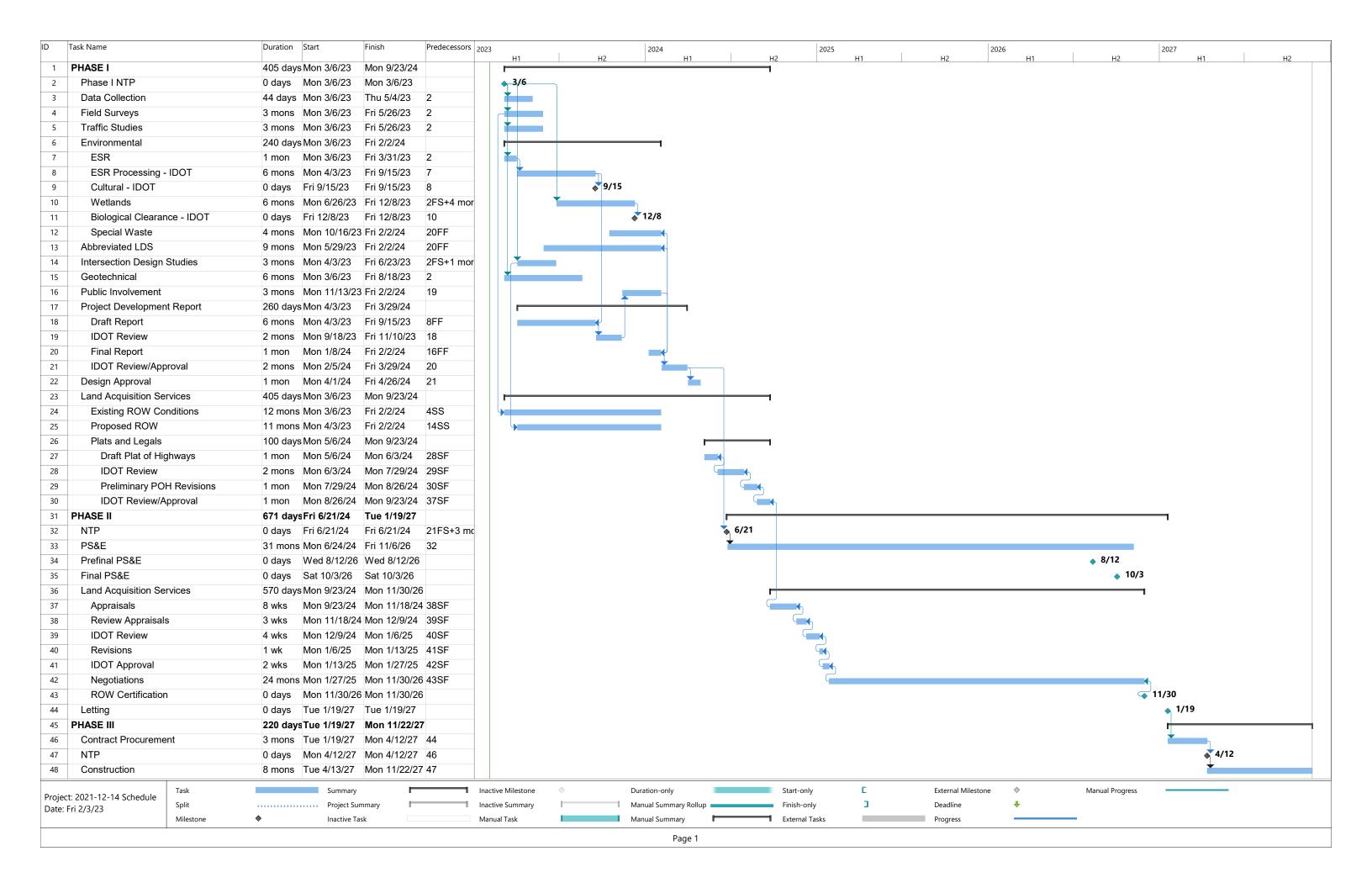
Jeffrey A Rotter

Director of Technical Services

Riyad Wahab, PhD, P.E.

Senior Geotechnical Engineer

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number			
Aurora	Crawford, Murphy and Tilly, Inc.	Kane	23-00360-00-TL			
	EXHIBIT B					
	PROJECT SCHEDULE					



Loc	al Public Agency	Prime Consultant (Firm) Name	County		Sect	ion N	umber
Au	Aurora Crawford, Murphy and Tilly, Inc. Kane			23-00360-00-TL			
		Exhibit C Qualification Based Selection (QBS)					
Und fund	ler the threshold, QBS requirements d ds being used, federal small purchase Form Not Applicable (engineering sei	vices less than the threshold) eral funds and QBS process is applicab	ually. If the	value is under th	e thre	esholo	be followed. I with federal
1		edures discuss the initial administration (pre eering and design related consultant service		management	No	Yes	
2	Do the written OBS policies and procedures follow the requirements as outlined in Section 5.5 and						
3	Was the scope of services for this pro	ject clearly defined?					
4	Was public notice given for this project	ot?			盲		
			email/tex	rt sign up			
5	Do the written QBS policies and proc	edures cover conflicts of interest?					
Do the written QBS policies and procedures use covered methods of verification for suspension and debarment?							
7	7 Do the written QBS policies and procedures discuss the methods of evaluation?						
Project Criteria Weighting							
	Consultant Experience			3	30%		
	Staff Capabilities			2	20%		
	Technical Approach			3	30%		
	Schedule			2	20%		
8	Do the written QBS policies and proc	edures discuss the method of selection?		<u>, </u>			
Sel	lection committee (titles) for this project	st .					
En	igineering Coordinator, Capital	Projects Manager, Civil Engineer I					
	Top three	consultants ranked for this project in order	ſ		Ī		
	1 Crawford, Murphy, & Tilly, I	nc. (CMT)					
	2 V3 Companies, Ltd.						
	3 Baxter & Woodman, Inc.	g for this project developed in being private			 		Î
-	 Was an estimated cost of engineering for this project developed in-house prior to contract negotiation? Were negotiations for this project performed in accordance with federal requirements. 			riegotiation?	뷰		
11					쓔		
12		edures cover review and approving for pay	ment, befo	re forwarding			
13		redures cover ongoing and finalizing admin a contract, records retention, responsibility, n of disputes)?				\boxtimes	
14	QBS according to State requirements	s used?					
_	Existing relationship used in lieu of C						
16 LPA is a home rule community (Exempt from QBS).							



COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

Local Public Agency

City of Aurora

County Kane Section Number 23-00360-00-TL

Prime Consultant (Firm) Name

Crawford, Murphy & Tilly, Inc.

Prepared By

Job Number

Charles "Tice" Cole

Date

2/3/2023

Consultant / Subconsultant Name

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

Remarks

Mitchell Road at Sullivan Road Improvements - Phase I Study

PAYROLL ESCALATION TABLE

CONTRACT TERM 18.5 MONTHS
START DATE 3/6/2023
RAISE DATE 1/1/2025

OVERHEAD RATE 166.83%
COMPLEXITY FACTOR 0.035
% OF RAISE 2.00%

END DATE 9/5/2024

ESCALATION PER YEAR

	% of				
First Date	Last Date	Months	Contract		
3/6/2023	9/5/2024	18	97.30%		
9/6/2024	9/5/2024	0.5	2.76%		
	3/6/2023	3/6/2023 9/5/2024	3/6/2023 9/5/2024 18		

Local Public Agency	County	Section Number
City of Aurora	Kane	23-00360-00-TL
Consultant / Subconsultant Name		Job Number

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE 166.83% COMPLEXITY FACTOR 0.035

TASK	DIRECT COSTS (not included in row totals)	STAFF HOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
1. Data Collection	0	50	2,020	3,370	737	0	6,127	2.43%
2. Field Investigations & Land Surveys	73	155	4,978	8,306	1,817	0	15,101	6.00%
3. Traffic Studies	1,150	93	3,341	5,574	1,220	0	10,135	4.02%
Environmental Studies	398	180	6,713	11,199	2,450	0	20,362	8.08%
5. Conceptual Roadway Design	0	96	3,789	6,320	1,383	0	11,492	4.56%
6. Abbrev. Location Drainage Study	0	135	5,135	8,566	1,874	0	15,575	6.18%
7. Geotechnical Investigations	0	4	201	335	73	15,449	16,058	6.38%
8. Intersection Design Studies	0	120	4,194	6,997	1,531	0	12,722	5.05%
9. Preliminary Design	0	227	8,631	14,400	3,150	0	26,181	10.39%
10. Land Acquisition	3,018	274	11,361	18,954	4,147	0	34,462	13.68%
11. Public Involvement	2,315	100	4,619	7,705	1,686	0	14,010	5.56%
12. Cost Estimates	0	63	2,335	3,895	852	0	7,082	2.81%
13. Draft PDR	0	144	5,940	9,910	2,168	0	18,018	7.15%
14. Final PDR	0	86	3,462	5,775	1,264	0	10,501	4.17%
15. Meetings and Coordination	0	77	3,848	6,420	1,405	0	11,673	4.63%
16. Project Administration	0	92	4,846	8,085	1,769	0	14,700	5.84%
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Subconsultant DL							\$714.62	0.28%
Direct Costs Total ===>	\$6,955.01						\$6,955.01	2.76%
TOTALS		1896	75,413	125,811	27,526	15,449	251,869	97.24%

201,224

Local Public Agency	County	Section Number
City of Aurora	Kane	23-00360-00-TL
Consultant / Subconsult	ant Name	Job Number

PAYROLL RATES

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

MAXIMUM PAYROLL RATE	78.00
ESCALATION FACTOR	0.05%

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Principal	\$89.91	\$78.00
Project Engineer II	\$72.91	\$72.95
Project Manager II	\$69.46	\$69.49
Project Environmental Specialist II	\$69.25	\$69.29
Project Engineer I	\$57.69	\$57.72
Project Manager I	\$56.76	\$56.79
Project Environmental Specialist I	\$56.71	\$56.74
Sr. Engineer I	\$42.66	\$42.68
Technical Manager II	\$50.99	\$51.01
Sr. Planner I	\$41.64	\$41.66
GIS Specialist	\$41.39	\$41.41
Environmental Specialist III	\$44.90	\$44.92
Engineer I	\$32.69	\$32.70
Environmental Scientist II	\$37.94	\$37.96
Planner I	\$32.80	\$32.82
Environmental Scientist I	\$29.69	\$29.70
Technical Manager I	\$30.38	\$30.39
Land Surveyor	\$43.10	\$43.12
Sr. Technician I	\$40.40	\$40.42
Sr. Technician II	\$51.09	\$51.12
Technician II	\$35.18	\$35.19
Technician I	\$28.87	\$28.89
Project Administrative Assistant	\$27.53	\$27.54
Administrative/Accounting Assistant	\$20.77	\$20.78

BLR 05514 (Rev. 11/04/22)

Local Public Agency	County	Section Number
City of Aurora	Kane	23-00360-00-TL
Consultant / Subconsultant Name		Job Number

SUBCONSULTANTS

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

NAME	Direct Labor Total	Contribution to Prime Consultant
Chicago Testing Laboratory, Inc.	7,146.15	714.62

Total 7,146.15 714.62

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

BLR 05514 (Rev. 11/04/22)

Local Public Agency	County	Section Number
City of Aurora	Kane	23-00360-00-TL
Consultant / Subconsultant Name		Job Number
	i	

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 1 OF 3

PAYROLL	AVG	TOTAL PRO	J. RATES		1. 0	ata Collect	ion		I Investiga and Surve		3.	Traffic Stu	dies	4. Env	ironmental	Studies	5. Cor	nceptual R Design	oadway
	HOURLY	Hours	%	Wgtd	Hours	%	Wgtd	Hours	%	Wgtd	Hours	%	Wgtd	Hours	%	Wgtd	Hours	%	Wgtd
CLASSIFICATION	RATES		Part.	Avg		Part.	Avg		Part.	Avg		Part.	Avg		Part.	Avg		Part.	Avg
Principal	78.00	0.0																	
Project Engineer II	72.95	0.0																	
Project Manager II	69.49	0.0																	
Project Environmental Spec	69.29	0.0																	
Project Engineer I	57.72	193.0	10.18%	5.88	9	18.00%	10.39	5	3.23%	1.86	4	4.30%	2.48	1	0.56%	0.32	6	6.25%	3.61
Project Manager I	56.79	34.0	1.79%	1.02															
Project Environmental Spec	56.74	0.0																	
Sr. Engineer I	42.68	493.0	26.00%	11.10	16	32.00%	13.66	14	9.03%	3.85	20	21.51%	9.18	3	1.67%	0.71	50	52.08%	22.23
Technical Manager II	51.01	4.0	0.21%	0.11															
Sr. Planner I	41.66	0.0																	
GIS Specialist	41.41	0.0																	
Environmental Specialist III	44.92	0.0																	
Engineer I	32.70	598.0	31.54%	10.32	25	50.00%	16.35	28	18.06%	5.91	69	74.19%	24.26	4	2.22%	0.73	40	41.67%	13.63
Environmental Scientist II	37.96	184.0	9.70%	3.68										156	86.67%	32.89			
Planner I	32.82	0.0																	
Environmental Scientist I	29.70	16.0	0.84%	0.25										16	8.89%	2.64			
Technical Manager I	30.39	0.0																	
Land Surveyor	43.12	146.0	7.70%	3.32				4	2.58%	1.11									
Sr. Technician I	40.42	104.0	5.49%	2.22															
Sr. Technician II	51.12	0.0																	
Technician II	35.19	0.0																	
Technician I	28.89	124.0	6.54%	1.89				104	67.10%	19.38									
Project Administrative Assis	27.54	0.0																	
Administrative/Accounting A	20.78	0.0																	
		0.0																	
		0.0																	
		0.0																	
TOTALS		1896.0	100%	\$39.77	50.0	100.00%	\$40.40	155.0	100%	\$32.12	93.0	100%	\$35.93	180.0	100%	\$37.29	96.0	100%	\$39.46

BLR 05514 (Rev. 11/04/22) AVG 1 Printed 2/9/2023 12:03 PM

Page 1 of 1

City of Aurora Consultant / Subconsultant Name [23-00360-00-TL] Job Number	Local Public Agency	County	Section Number
Consultant / Subconsultant Name Job Number	City of Aurora	Kane	23-00360-00-TL
	Consultant / Subconsultant Name		Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 2 OF 3

PAYROLL	AVG		bbrev. Loc rainage Stu			Geotechni nvestigatio		8. Int	ersection [Studies	Design	9. Pr	eliminary D)esign	10. L	_and Acqui	isition	11. P	ublic Invol	vement
	HOURLY	Hours	%	Wgtd	Hours	%	Wgtd	Hours	%	Wgtd	Hours	%	Wgtd	Hours	%	Wgtd	Hours	%	Wgtd
CLASSIFICATION	RATES		Part.	Avg		Part.	Avg		Part.	Avg		Part.	Avg		Part.	Avg		Part.	Avg
Principal	78.00																		
Project Engineer II	72.95																		
Project Manager II	69.49																		
Project Environmental Specia	69.29																		
Project Engineer I	57.72	18	13.33%	7.70	2	50.00%	28.86	2	1.67%	0.96	6	2.64%	1.53	2	0.73%	0.42	27	27.00%	15.58
Project Manager I	56.79													4	1.46%	0.83	18	18.00%	10.22
Project Environmental Specia	56.74																		
Sr. Engineer I	42.68	27	20.00%	8.54	2	50.00%	21.34	22	18.33%	7.82	106	46.70%	19.93	8	2.92%	1.25	24	24.00%	10.24
Technical Manager II	51.01													4	1.46%	0.74			
Sr. Planner I	41.66																		
GIS Specialist	41.41																		
Environmental Specialist III	44.92																		
Engineer I	32.70	90	66.67%	21.80				96	80.00%	26.16	115	50.66%	16.57				31	31.00%	10.14
Environmental Scientist II	37.96																		
Planner I	32.82																		
Environmental Scientist I	29.70																		
Technical Manager I	30.39																		
Land Surveyor	43.12													132	48.18%	20.77			
Sr. Technician I	40.42													104	37.96%	15.34			
Sr. Technician II	51.12																		
Technician II	35.19																		
Technician I	28.89													20	7.30%	2.11			
Project Administrative Assista	27.54																		
Administrative/Accounting As:	20.78																		
TOTALS		135.0	100%	\$38.03	4.0	100%	\$50.20	120.0	100%	\$34.95	227.0	100%	\$38.02	274.0	100%	\$41.47	100.0	100%	\$46.19

Local Public Agency	County	Section Number
City of Aurora	Kane	23-00360-00-TL
Consultant / Subconsultant Name		Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 3 OF 3

PAYROLL	AVG	12. Cost Estimates			13. Draft PDR			14. Final PDR			15. Meetings and Coordination			16. Project Administration					
CLASSIFICATION	HOURLY RATES	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	78.00																		
Project Engineer II	72.95																		
Project Manager II	69.49																		
Project Environmental Specia	69.29																		
Project Engineer I	57.72	3	4.76%	2.75	10	6.94%	4.01	4	4.65%	2.68	29	37.66%	21.74	65	70.65%	40.78			
Project Manager I	56.79										12	15.58%	8.85						
Project Environmental Specia	56.74																		
Sr. Engineer I	42.68	20	31.75%	13.55	92	63.89%	27.27	54	62.79%	26.80	18	23.38%	9.98	17	18.48%	7.89			
Technical Manager II	51.01																		
Sr. Planner I	41.66																		
GIS Specialist	41.41																		
Environmental Specialist III	44.92																		
Engineer I	32.70	40	63.49%	20.76	30	20.83%	6.81	26	30.23%	9.89				4	4.35%	1.42			
Environmental Scientist II	37.96				12	8.33%	3.16	2	2.33%	0.88	10	12.99%	4.93	4	4.35%	1.65			
Planner I	32.82																		
Environmental Scientist I	29.70																		
Technical Manager I	30.39																		
Land Surveyor	43.12										8	10.39%	4.48	2	2.17%	0.94			
Sr. Technician I	40.42																		
Sr. Technician II	51.12																		
Technician II	35.19																		
Technician I	28.89																		
Project Administrative Assista	27.54																		
Administrative/Accounting Ass	20.78																		
																			_
TOTALS		63.0	100%	\$37.06	144.0	100%	\$41.25	86.0	100%	\$40.25	77.0	100%	\$49.97	92.0	100%	\$52.67	0.0	0%	\$0.00

BLR 05514 (Rev. 11/04/22)

City of Aurora Sullivan Road - Edgelawn to Golden Oaks Phase I

CMT Estimate of Hours

Sullivan Road Phase I Engineering		Crawford, Murphy & Tilly, Inc. Tasks, Hours and Fee Summary											
Task No.	Task Description	Project Engineer I	Project Manager I	Sr. Engineer I	Technical Manager II	Engineer I	Environmental Scientist II	Environmental Scientist I	Land Surveyor	Sr. Technician I	Technician I	Total Hours	
1	Data Collection	9	-	16	-	25	-	-	-	-	-	50	
	a. Utilities	1		4		8						13	
	b. As-Built Plans from the City	1		1		1						3	
	c. GIS Mapping from the City	1		1		1						3	
	d. Plats of Highways from the City	1		1		1						3	
	e. Past traffic count data from the City	1		1		1						3	
	f. Traffic projections from CMAP	1		2		1						4	
	g. Crash Data from IDOT (GIS) and City	1		2		4						7	
	h. Aerial Photography			1		1						2	
	i. Project Site Visit and Photolog	2		2		2						6	
	j. Sign Inventory and Photolog					4						4	
	k. Traffic Counts			1		1						2	
		<u> </u>									121	 	
<u> </u>	Field Investigation and Land Survey	5	-	14	-	28	-	-	4	-	104	155	
	a. Topographic Survey (see attached exhibit 2)								4	-	64	68	
	b. Interconnect Mapping	1		2		8				1		11	
	c. Geotechnical Layout and Pickup Survey										8	8	
	d. Drainage/Utility Pickup Survey										16	16	
	e. Miscellaneous Pickup Survey			1	-	40				1	16	16 20	
	f. Survey Download, Cleanup, Preparation of Terrain Model	+ -	<u> </u>	4	-	16							
	g. Project Site visit and topo QA review	4		4		4						12	
	h. 3D model of existing subsurface (pavement, top soil)			4	-					1		4	
-	Traffic Studies	4	 	20	 	69	 	<u> </u>	 	+ -	<u> </u>	93	
├	a. Existing Traffic Volumes	<u> </u>										0	
	Assemble existing traffic counts					1						1	
	2. Establish ADTs from 24 hour counts					2						2	
	3. Establish ADTTs from 24 hour counts					2						2	
	4. Create ADT and ADTT exhibit					2						2	
	5. Identify Peak Hours and establish DHVs			2		4						6	
	b. Projected Traffic Volumes											0	
	Assume Build 2050 and No-Build 2050 are the same traffic											0	
	2. Develop projected turning movements and DHVs (at two major intersections) from CMAP provided 2050 ADT projections			1		1						2	
	3. Create Projected ADT and ADTT exhibit			1	1	2						3	
	c. Capacity Analysis (Existing, No-Build 2050, Build 2050)											0	
	1. Assumptions											0	
	2. One-Way Stop Control Capacity Analysis (2 scenarios)			1		1						2	
	3. All-Way Stop Capacity Analysis (2 scenarios)			1		1						2	
	4. Traffic Signal Capacity Analysis (4 scenarios)			2		8						10	

	Sullivan Road Phase I Engineering	Crawfo	ord, Mu	rphy &	Tilly, In	c. Task			ee Sun	ımary		
Task No.	Task Description	Project Engineer I	Project Manager I	Sr. Engineer I	Technical Manager II	Engineer I	Environmental Scientist II	Environmental Scientist I	Land Surveyor	Sr. Technician I	Technician I	Total Hours
	5. Roundabout Capacity Analysis (4 scenarios)			2		8						10
	d. Crash Analysis											0
	Organize Crash Data by Segments and Intersections					2						2
	2. Perform Statistical Analysis					2						2
	3. Prepare Crash Diagrams					2						2
	4. Prepare Crash Map					2						2
	5. Identify Trends, Possible Causes, and Potential Countermeasures	1		1		4						6
	6. Perform IHSDM Analysis for Existing, 2050 No-Build and 2050 Build			1		4						5
	7. Identify locations with safety issues	1		1		1						3
	8. Prepare Summary Narrative	1		1		4						6
	e. Warrant Analysis											0
	1. All-Way Stop Warrant Analysis			1		4						5
	2. Traffic Signal Warrant Analysis			1		4						5
	h. Summarize Traffic Analysis in Technical Memorandum	1		4		8					<u> </u>	13
	Environmental Studies	1	-	3	-	4	156	16	-	-	 -	180
	a. Environmental Survey Request (ESR)	1		1			40					42
	b. Wetland Delineation and Report						36	16				52
	c. Jurisdictional Determination						4					4
	d. Wetland Impact Evaluation (WIE) - assume a 2nd submittal			1		4	8					13
	e. Prime Farmland						0					0
	f. Tree Survey, Impacts, and Replacement						0					0
	g. Section 4(f) Recreational Evaluation						0					0
	h. Air Quality			1			4					5
	i. Noise Analysis						0					0
	j. Preliminary Environmental Site Assessment (PESA)						64					64
	Conceptual Roadway Design	6	-	50	-	40	-	-	-	_	 -	96
	a. Establish project limits			4								4
	b. Establish project design criteria and standards			4								4
	c. Review the geometrics of the existing alignment and identify deficiencies.			8								8
	d. Determine geometric and location requirements/need for bike path/pedestrian facilities	1		8								9
	e. Prepare existing and proposed alternative typical cross-sections for review by the City.	1		4		8						13
	f. Prepare conceptual intersection configuration			8								8
	g. Establish and provide the preliminary horizontal geometrics on the topographic survey drawing	1		4		8						13
	h. Develop conceptual Maintenance of Traffic/Construction Staging memo	1		8	1	8		 	 		 	17
	i. Deliverables											0

	Sullivan Road Phase I Engineering	Crawfo			Tilly, In	c. Task	s, Hour	s and F	ee Sun	nmary		
Task No.	Task Description	Project Engineer I	Project Manager I	Sr. Engineer I	Technical Manager II	Engineer I	Environmental Scientist II	Environmental Scientist I	Land Surveyor	Sr. Technician I	Technician I	Total Hours
	· Color exhibit of proposed improvements for use in public involvement	1		1		8						10
	Critical typical sections	1		1		8						10
	Abbreviated Location Drainage Study	18	-	27	-	90	-	-	-	-	-	135
	a. Existing Drainage System	4										4
	i. Identify Drainage Problems			1		4						5
	ii. Identify Base Floodplains			0		0						0
	iii. Identify Major Drainage Features											0
	Major culvert crossings			0		0						0
	Existing detention facilities and ponds					1						1
	Identify existing drainage outlets and outlet treatments.			4		1						5
	Identify wetland areas.			1		1						2
	b. Proposed Drainage System	4										4
	i. Design Criteria											0
	Provide written documentation for non-compliance where Kane			l o		Ιo						0
	County and/or City of Aurora design criteria are not met.					ı						Ů
	Develop concept drainage plan (trunk line pipe sizes, layout, and			4		16						20
	outlet locations).					10						20
	ii. Outlet Evaluation											0
	 Qualitatively evaluate whether each existing outlet is suitable for 			1 1		2						3
	continued use.											
	Perform quantitative evaluation outlet suitability.			1		4						5
	Develop feasible, cost effective recommendations in accordance with Kane County and City of Aurora policies, practices, and procedures.					4						4
	iii. Stormwater Detention Analysis											0
	Determine if detention is required for project.	1				1						2
	Determine required detention volume if necessary.			0		0						0
	Develop a plan for providing detention or watershed benefit measure											
	in lieu of detention.			0		0						0
	iv. Stormwater BMP Analysis											0
	Determine BMP requirements for project.					1						1
	Develop plan for providing stormwater BMPs or watershed benefit	2				8						40
	measure in lieu of BMP.	2				*						10
	v. Right-of-Way Analysis											0
	Review ROW and easement needs for drainage features.	1		4		4						9
	vi. Summarize Drainage Alternatives											0
	Determine alignment to minimize impacts.			1		1						2
	vii. Develop Proposed Drainage Plans											0
	Identify locations of ditch regrading.			4		4						8

	Sullivan Road Phase I Engineering	Crawfo	ord, Mu	rphy &	Tilly, In	c. Task			ee Sun	nmary		
Task No.	Task Description	Project Engineer I	Project Manager I	Sr. Engineer I	Technical Manager II	Engineer I	Environmental Scientist II	Environmental Scientist I	Land Surveyor	Sr. Technician I	Technician I	Total Hours
	Identify locations where sheet flow is proposed.					2						2
	Identify existing storm sewer to be maintained or removed.			2		2						4
	Design proposed storm sewers.					8						8
	Provide plan and profile of proposed trunk line storm sewers.			4		8						12
	c. Preparation of Drainage Study Report	4				16						20
	d. Identify Permit Requirements	2				2						4
	Geotechnical Investigations	2	-	2	-	-	<u> </u>	-	-	-	-	4
	coordination time with subconsultant	2		2								4
	see subconsultant proposal											0
	Intersection Design Studies	2	<u> </u>	22	<u> </u>	96	 -	<u> </u>	_	-	<u> </u>	120
	a. Mitchell Road at Sullivan Road	2				30	_	_		_	-	2
	Complete Traffic Data Table			1		1						2
	Complete Phasing Diagram including evaluation of flashing yellow arrows			4		8						12
	Complete Capacity Table			1	<u> </u>	4						5
	Elements Controlling Design			1		1						2
	5. General Notes			1		1						2
	6. Location Map					1						1
	7. Existing and Proposed Views and Labeling			1		16						17
	2nd Page for Approach Matchlines (if necessary)			1		4						5
	9. Red Time Queue Analysis			1		4						5
	10. Turning Templates and Sheet			1		8						9
	11. ADA details and Sheet(s)			2		16						18
	12. Address IDOT Comments			4		16						20
	13. Prepare Disposition of Comments			4		16						20
(Preliminary Design	6	-	106	-	115	<u> </u>	-	-	-	 -	227
	a. Design and refine horizontal and vertical geometry			8	ļ	8					<u> </u>	16
	b. Intersection sight distance			1		2						3
	c. Perform preliminary pavement design			1		8					1	9
	d. Evaluate existing pavement for remediation and/or reconstruction	1		8		8					1	17
	e. Determine geometric and location requirements of pedestrian facilities			2	1	8					1	10
	f. Determine roadway lighting warrants and evaluate existing and proposed roadway lighting	1		2		8						11
	g.Existing and proposed typical sections	1		8		8						17
	h. Finalize geometrics	1		2		8						11
	i. Determine preliminary site grading plan utilizing 3D software			40								40
	j. Perform barrier warrant analysis			1		1						2

	Sullivan Road Phase I Engineering	Crawfo	ord, Mu	rphy &	Tilly, Inc	c. Task			ee Sum	mary		
Task No.	Task Description	Project Engineer I	Project Manager I	Sr. Engineer I	Technical Manager II	Engineer I	Environmental Scientist II	Environmental Scientist I	Land Surveyor	Sr. Technician I	Technician I	Total Hours
	k. Create plan and profile plans (20 scale)			4		32						36
	Develop preliminary cross sections for concept earthwork calculations			1		4						5
	m. Develop concept sequence of construction plan	1		16		4						21
	n. Identify potential utility conflicts	1		4		8						13
	o. Determine / justify design exceptions			8		8						16
4	Land Acquisition	2	4	8	4	-	_		132	104	20	274
- 10	b. Obtain Courthouse Data and Owner of Record Reports	-	4	•	4	-	-	<u> </u>	8		20	8
	c. Review Existing ROW and Property Line Information & Compilation of Legal Docs								12			12
	d. Property Surveys (assume 6 parcels)								20		20	40
	Process Survey Data									8		8
	Evaluate and Draft Boundaries (Land and Property Lines)								12			12
	e. Title Commitments – Any Updates for Appraisals will be performed in Phase II								12			12
	f. Conceptual ROW and Costs	2	4	8	4							18
	g. Plats and Legals											
	Prepare Preliminary Plat of Highways, Legal Descriptions, and Checklist for IDOT								24	40		64
	Update Preliminary Plat of Highways and Legal Descriptions and prepare disposition of comments								12	24		36
	3. Make any revisions to the plats and legals as a result of changes in the land acquisition type or area as a result of negotiations with the property owners. (assume 2 rounds of revisions) and shall only apply to the near term Phase II/III improvement. If other areas/acquisitions are deferred to a future Phase II/III project, then any updates would be part of that Phase II contract.								12	24		36
	Draft Monument records and re-establish lost section corners (assume 1 lost corner)								20	8		28
1	1 Public Involvement	27	18	24	-	31	-	-	-	-	-	100
	a. Draft a public involvement plan to outline communication strategies, tasks and engagement schedule.	4										4
	b. Summarize public involvement findings and comments in memorandum form	2				8						10
	c. Individual Stakeholder Meetings – assume 1	3	8			3						14
	d. Public Involvement – assume 1											0
	Develop exhibits and strip maps for public display	8		8		8						24
	2. Advertisements, mailings and notices	2		8		8						18
	3. Attend public involvement meeting, assume 3 CMT staff members	4	8	4		4						20
	4. Address/Respond to questions or comments	4	2	4								10

	Sullivan Road Phase I Engineering	Crawfo	ord, Mu	rphy &	Tilly, In	c. Task		s and F	ee Sun	ımary		
Task No.	Task Description	Project Engineer I	Project Manager I	Sr. Engineer I	Technical Manager II	Engineer I	Environmental Scientist II	Environmental Scientist I	Land Surveyor	Sr. Technician I	Technician I	Total Hours
1	Cost Estimates	3	-	20	-	40	-	-	-	-	-	63
а	Initial planning level estimate (for public involvement)	1		8		16						25
b	Preliminary estimate of project cost (for draft PDR)	1		8		16						25
С	Final phase I level estimate of project cost (for final PDR)	1		4		8						13
									<u> </u>			
_1	B Draft PDR	10	-	92	-	30	12	-	-	-	-	144
╙	Location and Existing Conditions	1									<u> </u>	1
	a. Location			1							<u> </u>	1
	b. Description of Existing Facility			1							<u> </u>	1
	c. Traffic Data			1								1
	d. Structures			-							<u> </u>	0
	e. Railroads			-							ļ	0
	f. Contiguous Sections			1							<u> </u>	1
	2. Proposed Improvements	2										2
	a. Purpose and Need			24							<u> </u>	24
	b. Design Guidelines			1								1
	c. Scope											0
	i. Road			2								2
	ii. Alignment			1								1
	iii. Drainage			2								2
	iv. Traffic Control			2								2
	v. Railroad			-								0
	vi. Utility Adjustments			1								1
	vii. Intersections			2								2
	viii. Sideslopes and Clearzone			2								2
	ix. Items Affecting Improvements			-								0
	x. Design Variances			2								2
	xi. Cost			1								1
	xii. Bike/Ped			2								2
	xiii. Adjacent Segments			3								3
	3. Crash Analysis	1		4								5
	4. ROW	1		4								5
	5. Prime Farmland						1					1
	6. Floodplain Encroachment											0
	7. NPDES			1								1
	8. 404 Permit											0
	9. Special Waste						4					4
	10. Environmental Survey					İ	4					4
	11. Section 4f						-					0
	12. Air Quality				<u> </u>		1			 		1

	Sullivan Road Phase I Engineering	Crawfo	ord, Mu	rphy &	Tilly, In	c. Task			ee Sun	nmary		
Task No.	Task Description	Project Engineer I	Project Manager I	Sr. Engineer I	Technical Manager II	Engineer I	Environmental Scientist II	Environmental Scientist I	Land Surveyor	Sr. Technician I	Technician I	Total Hours
	13. Noise						1					1
	14. Work Zone Traffic Management Plan	1		1								2
	15. Complete Streets			1								1
	16. Maintenance of Traffic			1								1
	17. Public Involvement	1		2								3
	18. Coordination			2								2
	19. Other Coordination			2								2
	20. Commitments			1								1
	21. Assemble report pdf and hard copies			8		8						16
	22. Attachments	1										1
	a. Location Map					4						4
	b. Functional Classification Map with Project Limits					1						1
	c. Existing and Proposed Typical Sections					1						1
	d. Plan and Profile Sheets					1						1
	e. Intersection Design Studies					1						1
	f. Spot Map and/or Collision Diagram					1						1
	g. Environmental Clearances and Correspondence					-	1					1
	h. Public Involvement Correspondence					1						1
	i. Newspaper Advertisement					1						1
	j. Coordination Meeting Minutes					1						1
	k. BLR 22120 Approval of Design Variance					1						1
	I. Cost Estimate					1						1
	23. Address City Comments before submittal to IDOT	2		16		8						26
	•											
14	Final PDR	4	-	54	-	26	2	-	-	-	T -	86
	Address comments from IDOT and make any applicable updates since the Draft PDR	2		40		16	2					60
	b. Incorporate comments from Public Involvement	1		2		2						5
	c. Disposition of Comments	1		8								9
	d. Update the Crash Data with the latest available information and update the crash statistics			2		8						10
	e. Assemble report pdf			2								2
15	Meetings and Coordination	29	12	18	-	-	10	-	8	-	-	77
	a. City of Aurora	16	4	8			4					32
	b. Aurora Township	4		4							T	8
	c. IDOT BLRS D1 and Kickoff Meeting	3		3			3					9
	d. FHWA / IDOT CBLRS and Initial Coordination Meeting	3		3			3					9
	e. IDOT D1 Bureau of Land Acquisition and Kickoff Meeting	3	8						8			19

	Sullivan Road Phase I Engineering Crawford, Murphy & Tilly, Inc. Tasks, Hours and Fee Summary											
Task No.	Task Description	Project Engineer I	Project Manager I	Sr. Engineer I	Technical Manager II	Engineer I	Environmental Scientist II	Environmental Scientist I	Land Surveyor	Sr. Technician I	Technician I	Total Hours
16	Project Administration	65	-	17	-	4	4	-	2	-	-	92
	a. Project Startup – File System and Accounting	4										4
	b. Project Scheduling and Staff Allocatoin	8										8
	c. Internal Project Team Meetings	8		4		4	4		2			22
	d. Budget Control and Monitoring	9										9
	e. Quality Assurance Plan (QAP)											0
	1. Prepare QAP	4										4
	2. QA Reviews			8								8
	Constructability Review			4								4
	4. Monitor QAP Compliance	2										2
	Disposition of Internal Review Comments			1								1
	f. Progress Reports – Assume BDE 430	18										18
	g. Assistance with STP-L Status Updates	8										8
	h. Project Closeout	4										4
	Total CMT Hours	193	34	493	4	598	184	16	146	104	124	1896

Local Public Agency	
City of Aurora	
Consultant / Subconsultant Name	е

County	
Kane	

Section Number 23-00360-00-TL 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	542	\$0.66	\$355.01
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day			\$0.00
Vehicle Rental	Actual Cost (Up to \$55/day)			\$0.00
Tolls	Actual Cost			\$0.00
Parking	Actual Cost			\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00
Shift Differential	Actual Cost (Based on firm's policy)			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			\$0.00
Project Specific Insurance	Actual Cost			\$0.00
Monuments (Permanent)	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			\$0.00
CADD	Actual Cost (Max \$15/hour)			\$0.00
Web Site	Actual Cost (Submit supporting documentation)			\$0.00
Advertisements	Actual Cost (Submit supporting documentation)	2	\$500.00	\$1,000.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)	12	\$85.00	\$1,020.00
Recording Fees	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Utliity Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			\$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Counts	Actual Cost	1	\$1,150.00	\$1,150.00
PESA Environmental Database	Actual Cost	1	\$380.00	\$380.00
Title Commitments	Actual Cost	6	\$500.00	\$3,000.00
Postcard Mailing	Actual Cost	50	\$1.00	\$50.00
		TOTAL DIRE	CT COSTS:	\$6,955.01

Direct Cost Detail by Task

1. Data Collection

2. Field Investigations & Land Surv	eys							
Travel	Trips	8	Miles/Trip 14	Miles	112	\$/mi \$ 0.655	\$ \$	73.36
3. Traffic Studies								
Traffic Counts	Counts	1	\$/Count \$ 1,150.00				\$ \$	1,150.00
4. Environmental Studies						.	_	
Travel	Trips	2	Miles/Trip 14	Miles	28	\$/mi \$ 0.655	\$ \$	18.34
PESA Env. Database Report							\$	380.00
Subtota	I						\$	398.34
5. Conceptual Roadway Design 6. Abbrev. Location Drainage Study 7. Geotechnical Investigations 8. Intersection Design Studies 9. Preliminary Design 10. Land Acquisition	y							
Travel	Trips	2	Miles/Trip 14	Miles	28	\$/mi \$ 0.655	\$ \$	18.34
Title Commitments	Parcels	6	\$/Parcel 500				\$ \$	3,000.00
Subtotal							\$	3,018.34
11. Public Involvement Travel - PIM Land Acq (city hall) Travel - PIM Engineers (city hall) Travel - Stakeholder Mtg (near site)	Trips	1 1 1	Miles/Trip 348 12 14		348 12 14	\$/mi \$ 0.655 \$ 0.655 \$ 0.655	\$ \$ \$	227.94 7.86 9.17
postcard mailing	postcard	ds 50					\$ \$	50.00
newspaper advertisements	runs	2	\$/run \$ 500.00				\$ \$	1,000.00
boards	boards	12	\$/board \$ 85.00				\$ \$	1,020.00
Subtotal							\$	2,314.97
12. Cost Estimates13. Draft PDR14. Final PDR15. Meetings and Coordination16. Project Administration								
				Total M	lileag 542	e	\$	355.01

PAYROLL ESCALATION TABLE ANNIVERSARY RAISES COST PLUS FIXED FEE

FIRM NAME PRIME/SUPPLEMENT

Chicago Testing Laboratory, Inc. Crawford, Murphy & Tilly

DATE PTB NO. 01/30/23 204

MONTHS

OVERHEAD RATE COMPLEXITY FACTOR 159.52%

CONTRACT TERM START DATE RAISE DATE

3/1/2023 **ANNIVERSER**Y

% OF RAISE

3.00%

ESCALATION PER YEAR

DETERMINE THE MID POINT OF THE AGREEMENT

6

CALCULATE THE ESCALATION FACTOR TO THE MIDPOINT OF THE CONTRACT

1.50%

The total escalation for this project would be: 1.50%

PAYROLL RATES

FIRM NAME PRIME/SUPPLEMENT PTB NO. Chicago Testing Laborate DATE
Crawford, Murphy & Tilly
204

01/30/23

ESCALATION FACTOR

1.50%

CL ACCITICATION	0.1202.12	
CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Project Manager	\$48.92	\$49.65
Senior Geotechnical Engineer	\$65.00	\$65.98
Principal	\$73.95	\$75.06
Material Technician	\$32.50	\$32.99
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
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		\$0.00

BDE 3604 Template (Rev. 10/31/16)

COST PLUS FIXED FEE COST ESTIMATE OF CONSULTANT SERVICES

FIRM Chicago Testing Laboratory, Inc.

PTB 204 OVERHEAD RATE 1.5952

PRIME/SUPPLEMENT Crawford, Murphy & Tilly COMPLEXITY FACTOR 0

DBE				OVERHEAD	IN-HOUSE		Outside	SERVICES			% OF
DROP	ITEM	MANHOURS	PAYROLL	&	DIRECT	FIXED	Direct	BY	DBE	TOTAL	GRAND
BOX				FRINGE BENF	COSTS	FEE	Costs	OTHERS	TOTAL		TOTAL
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(B-G)	
	Site Layout	8		527.32	65.00	122.31				1,045.19	6.77%
	Field Exploration	10		579.39	65.00	134.39	5,600.00			6,741.98	43.64%
	Laboratory Testing	2		158.42	1,554.00	36.74				1,848.47	11.96%
	Analysis and Report	36				697.62				5,590.78	36.19%
	Administration	1	75.06	119.73		27.77				222.57	1.44%
	Subconsultant DL					0.00				0.00	0.00%
	TOTALS	57	2,753.60	4,392.55	1,684.00	1,018.83	5,600.00	0.00	0.00	15,448.99	100.00%

DBE 0.00%

DBE

AVERAGE HOURLY PROJECT RATES

FIRM Chicago Testing Laboratory, Inc.

PTB 204

DATE 01/30/23

PRIME/SUPPLEMENT Crawford, Murphy & Tilly

SHEET __1 OF __5

PAYROLL	AVG TOTAL PROJECT RATES Si		PROJECT R	ATES	Site Layout			Field Exploration		Laboratory Testing			Analysis and Report			Administration			
		Hours			Hours	%	Wgtd	Hours	%		Hours		Wgtd	Hours			Hours	%	Wgtd
CLASSIFICATION	RATES		Part.	Avg		Part.	Avg		Part.	Avg		Part.	Avg		Part.	Avg		Part.	Avg
Project Manager	49.65	38	66.67%	33.10	4	50.00%	24.83	2	20.00%	9.93	2	100.00%	49.65	30	83.33%	41.38			
Senior Geotechnical		6	10.53%	6.94										6	16.67%	11.00			
Principal	75.06	1	1.75%	1.32													1	100.00%	75.06
Material Technician	32.99	12	21.05%	6.94	4	50.00%	16.49	8	80.00%	26.39									
		0																	
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TOTALS		57	100%	\$48.31	8	100%	\$41.32	10	100%	\$36.32	2	100%	\$49.65	36	100%	\$52.37	1	100%	\$75.06

BDE 3604 Template (Rev. 10/31/16)



COMPANY NAME: Chicago Testing Laboratory, Inc.

PTB NUMBER: Sullivan and Mitchell Improvements

TODAY'S DATE: 1/30/2023

ITEM	ALLOWABLE	UTILIZE W.O. ONLY	QUANTITY J.S. ONLY	CONTRACT RATE	TOTAL
Per Diem (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum			\$0.00	\$0.00
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual cost (Up to state rate maximum)			\$0.00	\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual cost			\$0.00	\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00	\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum			\$0.000	\$0.00
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day	Х	2.0	\$65.00	\$130.00
Vehicle Rental	Actual cost (Up to \$55/day)			\$0.00	\$0.00
Tolls	Actual cost			\$0.00	\$0.00
Parking	Actual cost			\$0.00	\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00	\$0.00
Shift Differential	Actual cost (Based on firm's policy)			\$0.00	\$0.00
Overnight Delivery/Postage/Courier Service	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Copies of Deliverables/Mylars (In-house)	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Copies of Deliverables/Mylars (Outside)	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Project Specific Insurance	Actual cost			\$0.00	\$0.00
Monuments (Permanent)	Actual cost			\$0.00	\$0.00
Photo Processing	Actual cost			\$0.00	\$0.00
2-Way Radio (Survey or Phase III Only)	Actual cost			\$0.00	\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual cost			\$0.00	\$0.00
CADD	Actual cost (Max \$15/hour)			\$0.00	\$0.00
Web Site	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Advertisements	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Public Meeting Facility Rental	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Recording Fees	Actual cost			\$0.00	\$0.00
Transcriptions (specific to project)	Actual cost			\$0.00	\$0.00
Courthouse Fees	Actual cost			\$0.00	\$0.00
Storm Sewer Cleaning and Televising	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Traffic Control and Protection	Actual cost (Requires 2-3 quotes with IDOT approval)	Х	1	\$1,760.00	\$1,760.00
Aerial Photography and Mapping	Actual cost (Requires 2-3 quotes with IDOT approval)	Λ		\$0.00	\$0.00
Utility Exploratory Trenching	Actual cost (Requires 2-3 quotes with IDOT approval) Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Testing of Soil Samples*	Actual cost			\$0.00	\$0.00
Lab Services*	Actual cost (Provide breakdown of each cost)	Х	1	\$1,554.00	
Equipment and/or Specialized Equipment Rental*	Actual cost (Requires 2-3 quotes with IDOT approval)	^	ı	\$0.00	\$1,554.00
	Actual cost (Requires 2-3 quotes with IDO1 approval)	V	1		\$0.00
Drilling Services		X	ı	\$3,840.00	\$3,840.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
TOTAL DIRECT COS					\$7,284.00

*If other allowable costs are needed and not listed, please add in the above spaces provided.

LEGEND

W.O. = Work Order

J.S. = Job Specific

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Chicago Testing Laboratory, Inc.

30W114 Butterfield Road, Warrenville, IL 60555 p 630.393.2851 f 630.393.2857 w chicagotestinglab.com e info@chicagotestinglab.com

Testing • Inspection • Training • Consulting • Research • Geotechnical

Sullivan and Mitchell Improvements Laboratory Testing Services CTL Proposal No. CTL23025

Laboratory Services	Quantity	Unit Rate	Cost
Moisture Content - AASHTO T265	40	\$10.00	\$400.00
Atterberg Limits - AASHTO T89/T90	3	\$110.00	\$330.00
Grain Size Analysis - AASHTO T27	2	\$150.00	\$300.00
Hydrometer - AASHTO T88	2	\$185.00	\$370.00
Organic Content - AASHTO T267	2	\$77.00	\$154.00
		Total	\$1,554.00