



Illinois Department of Transportation

Office of Highways Project Implementation / Region 3 / District 4
401 Main Street / Peoria, Illinois 61602-1111

March 11, 2020

Ms. Beth Ball, City Clerk
City of Peoria
419 Fulton Street, Suite 401
Peoria, Illinois 61602

Funding—Motor Fuel Tax (MFT)
City of Peoria
Section No.: 19-00029-00-EG
Glen Avenue (Sheridan Rd to IL Rt 40/N Knoxville Ave)

Dear Ms. Ball:

The *Preliminary Engineering Services Agreement for Motor Fuel Tax Funds* dated February 1, 2021, between the City of Peoria and Crawford, Murphy & Tilly, Inc. to be performed in connection with the improvement of the above section is approved.

*NOTE: Approval of this agreement does not authorize expenditure of MFT funds. Proper documentation must be received by our office prior to paying any bills out of the MFT account.

If you have any questions, please contact Mr. Simon Alwan at (309) 671-3694.

Sincerely,

Kensil A. Garnett, P.E.
Region Three Engineer

SJA/jjs

s:\gen\winword\blrs\staff\alwan\transmittals&letters\agreements\agmnt_cop_glen ave_19-00029-00-eg_rev.docx

Attachments

cc: Mr. Bill Lewis, City Engineer
Mr. Eric Hansen, Crawford, Murphy & Tilly, Inc.
File

Municipality City of Peoria	L O C A L A G E N C Y	Preliminary Engineering Services Agreement For Motor Fuel Tax Funds	C O N S U L T A N T	Name Crawford, Murphy & Tilly, Inc.
Township Peoria				Address 203 Harrison Street
County Peoria				City Peoria
Section 19-00029-00-EG				State Illinois

THIS AGREEMENT is made and entered into this 1st day of February, 2021 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Motor Fuel Tax Funds, allotted to the LA by the State of Illinois under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

Section Description

Name Glen Avenue Reconstruction

Route FAU 6650 Length 0.52 Mi. 2,725 FT (Structure No. _____)

Termini Sheridan Road to Knoxville Avenue (IL Route 40)

Description:

Reconstruction of Glen Avenue from a 2-lane rural section to a 3-lane urban section including full-depth pavement removal and replacement, new curb and gutter, sidewalks, and storm drainage structures.

Agreement Provisions

The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described, and checked below:
 - a. Make such detailed surveys as are necessary for the preparation of detailed roadway plans
 - b. Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
 - c. Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
 - d. Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
 - e. Prepare Army Corps of Engineers Permit, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
 - f. Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
 - g. Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with five (5) copies of the plans; special provisions, proposals and estimates. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at his actual cost for reproduction.
 - h. Furnish the LA with survey and drafts in quadruplicate of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.

Note: Four copies to be submitted to the Regional Engineer



- i. Assist the LA in the tabulation and interpretation of the contractors' proposals
 - j. Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.
 - k. Prepare the Project Development Report when required by the DEPARTMENT.
- (2) That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies of the DEPARTMENT. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA and the DEPARTMENT.
- (3) To attend conferences at any reasonable time when requested to do so by representatives of the LA or the Department.
- (4) In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that he will perform such work without expense to the LA, even though final payment has been received by him. He shall give immediate attention to these changes so there will be a minimum delay to the Contractor.
- (5) That basic survey notes and sketches, charts, computations and other data prepared or obtained by the Engineer pursuant to this AGREEMENT will be made available, upon request, to the LA or the DEPARTMENT without cost and without restriction or limitations as to their use.
- (6) That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by him and will show his professional seal where such is required by law.

The LA Agrees,

1. To pay the ENGINEER as compensation for all services performed on a time and expense basis. The upper limit of compensation for these services shall not exceed **\$390,000** without authorization from the LA. The attached Cost Estimate of Consultant Services (Exhibit B) provides an estimate of the work tasks and the fee calculation based on the attached Scope of Services (Exhibit A). This estimate of work and effort is the basis of the upper limit of compensation. as stipulated in paragraphs 1a, 1g, 1i, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark:

- a. A sum of money equal to _____ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
- b. A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

Schedule for Percentages Based on Awarded Contract Cost

Awarded Cost	Percentage Fees
Under \$50,000	_____ (see note)
	_____ %
	_____ %
	_____ %
	_____ %
	_____ %

Note: Not necessarily a percentage. Could use per diem, cost-plus or lump sum.

2. To pay for services stipulated in paragraphs 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k of the ENGINEER AGREES at actual cost of performing such work plus _____ percent to cover profit, overhead and readiness to serve "actual cost" being defined

~~as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at his actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided under the paragraph 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus a five (5) percent service charge.~~

~~"Cost to Engineer" to be verified by furnishing the LA and the DEPARTMENT copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed.~~

2. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made **without retainage upon receipt of monthly invoices from the ENGINEER. Such invoices shall be for partially completed work less all previous partial payments paid to the ENGINEER. Payments shall be made as soon as practicable after receipt of each invoice.** ~~the services have been performed in accordance with the following schedule:~~

~~a. Upon completion of detailed plans, special provisions, proposals and estimate of cost being the work required by paragraphs 1a through 1g under THE ENGINEER AGREES to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on the approved estimate of cost.~~

~~b. Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.~~

~~By Mutual agreement, partial payments, not to exceed 90 percent of the amount earned, may be made from time to time as the work progresses.~~

3. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in paragraphs 1a, through 1h and prior to the completion of such services, the LA shall reimburse the ENGINEER for his actual costs plus _____ percent **the time and expense** incurred up to the time he is notified in Abandonment. ~~"actual cost" being defined as in paragraph 2 of THE LA AGREES.~~

4. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of THE ENGINEER AGREES, after they have been approved by the DEPARTMENT, the LA will pay the ENGINEER for such changes on a **time and expense basis as calculated in Exhibit B.**

~~the basis of actual cost plus _____ percent to cover profit, overhead and readiness to serve "actual cost" being defined as in paragraph 2 of THE LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of his responsibility to prepare a complete and adequate set of plans and specifications.~~

It is Mutually Agreed,

- ~~1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.~~
2. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at his last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with Section 4 of THE LA AGREES.
- ~~3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA and their approval by the DEPARTMENT, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA and the DEPARTMENT.~~
4. That the ENGINEER warrants that he/she has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For Breach or violation of this warranty the LA shall have the right to annul this contract without liability.

IN WITNESS WHEREOF, the parties have caused the AGREEMENT to be executed in quadruplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

City of Peoria of the
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By Beth S. Ball
Clerk

Patricia

By Patrick Ulrich

Title City Manager

Executed by the ENGINEER:

Crawford, Murphy + Tilly, Inc.

ATTEST:

Eric J. Hansen

By [Signature]

By Eric J. Hansen

Title SENIOR ENGINEER

Title Vice President

Approved
031121
Date
Department of Transportation
[Signature]
Regional Engineer

Project: Glen Avenue
Work Order Number: 20-03

EXHIBIT A

ESTIMATING DATA AND SCOPE OF SERVICES

Engineering and Surveying Services for

Reconstruction of Glen Avenue
from Sheridan Road to Knoxville Avenue

Section 18-00029-00-PV (Construction)
Section 19-00029-00-EG (Engineering & ROW)

Programmed for construction in Year 2022

City of Peoria

December 11, 2020

The City of Peoria (City) and Crawford, Murphy & Tilly, Inc. (CMT) have developed the following scope of work for Work Order Number 03.

PROJECT DESCRIPTION

Improvements to Glen Avenue from Sheridan Road to Knoxville Avenue (IL Route 40) are expected to include:

- New Concrete pavement constructed on a suitable pavement base. Alternative pavement sections will not be included in the bidding documents.
- New curb and gutter constructed along both sides of the street.
- New sidewalk and/or multiuse path constructed along both sides of the street. A turf buffer not less than 3 feet wide shall be provided behind the curb. A continuous obstruction free path for pedestrians shall be provided along both sides of the street throughout the project limits.
- The City's Bicycle Master Plan recommends a standard bike lane via pavement markings on Glen Avenue from Sheridan Road to Prospect Avenue.
- Design studies will establish a new vertical profile that is anticipated to be lower than the current pavement surface. Considerations will be adverse impacts to private property and impacts to existing buried utilities.
- A new storm sewer system will be constructed throughout the improvement length. Existing drainage structures and pipes in poor condition shall be replaced. Improvements to promote infiltration and reduce runoff volumes will be reviewed and implemented where possible.
- Bus stop facilities shall be allowed in coordination with City Link and in compliance with City of Peoria policies.
- Driveways to private property shall be reconstructed to comply with current ADA policies.
- Reconstruction of the intersection with Sheridan Road will be evaluated during design studies. An Intersection Design Study will be prepared to determine the improvement limits.
- An Intersection Design Study will be prepared for the intersection with Knoxville Avenue. Anticipated improvements on Glen Avenue include modifications to curb & gutter radii and lane configuration on the west leg of the intersection. Full Depth pavement reconstruction will end west of the Knoxville Avenue right of way line. Modifications to pavement, traffic signals, corner islands, and lane configurations on Knoxville Ave. are not anticipated and are not included as part of this project.
- Temporary construction easements throughout the project may be required and in some isolated locations, additional right of way might be necessary.
- Tree removal will be necessary to construct the improvements. IDOT's tree replacement policies will be followed.
- Project may include street lighting and/or other street amenities.

Project: Glen Avenue
Work Order Number: 20-03

PROJECT SCHEDULE

The project will be advertised for bidding no later than on the March 2022 State Letting with anticipated start of construction May 1, 2022.

The following is a tentative list of project tasks/milestones and dates.

Task/Milestone	<i>IDOT Schedule</i>	Project Schedule
Consultant Notice to Proceed	-	January 2021
Environmental Survey Request	<i>April 16, 2021</i>	April 16, 2021
Intersection Design Study (if needed)	<i>June 2, 2021</i>	June 2, 2021
Draft PDR	<i>July 30, 2021</i>	July 30, 2021
Final PDR	<i>September 15, 2021</i>	September 15, 2021
Pre-Final PS&E	<i>October 15, 2021</i>	October 15, 2021
Final PS&E to IDOT District 4	<i>December 3, 2021</i>	December 3, 2021
ROW to be Certified	<i>January 19, 2022</i>	January 19, 2022
Letting Date	<i>March 4, 2022</i>	March 4, 2022
Anticipated Start of Construction	-	May 1, 2022

FUNDING OF IMPROVEMENTS

Improvements shall be paid with a combination of Federal, state and local funds. The following funding sources and approximate funding levels are identified IDOT's LPA Multi-Year Program Project Request:

FHWA STU Funds	\$1,274,000	26.3%
Peoria County MFT	\$1,788,000	36.9%
City of Peoria State MFT	\$1,638,000	33.8%
City of Peoria Local MFT	\$150,000	3.3%
Totals	\$4,850,000	100%

JURISDICTION APPROVAL

The City and CMT understand that approvals from IDOT are required before the project can be constructed. IDOT's approval process will be more extensive if construction activities will impact state or federal routes. The review time and approval process of IDOT is a factor that is beyond the control of the City and CMT. Glen Avenue is currently under Peoria's County's jurisdiction. Once construction is completed, a transfer of jurisdiction to the City will occur.

PROPERTY IMPACTS

This work order does include effort to acquire new right of way or easements for construction of the proposed improvements. Property appraisals and negotiations are included in this contract.

PROJECT FEATURES

The functional classification of Glen Avenue is a Minor Arterial. The street is also identified as Federal Aid Urban (FAU) Route 6650 by the Illinois Department of Transportation.

- Average Daily Traffic in Year 2017: 9,750 vpd
- Posted Speed: 40 mph
- Existing typical cross section: 30 feet from edge of shoulder to edge of shoulder
 - One EB lane & one WB lane, 12 feet each (24 ft)
 - Center median & left turn lane at Sheridan & Knoxville intersections
 - Rural with open channel ditches and urban with existing curb and gutter near Sheridan and Knoxville Intersections
 - Existing sidewalk near Sheridan Road and Knoxville Avenue intersections
- Typical ROW width: 80 feet (100 feet at Sheridan Road intersection)
- Project length: 2,725 feet
- Number of Public Street Intersections: 8
- Number of Alleys: 0
- Number of private driveways: 47
- Number of residential properties: 44 parcels
- Number of commercial properties: 11 parcels
- One church and several shopping centers and stores
- Estimated Construction Cost: \$4,000,000

POLICIES AND PROCEDURES

IDOT's Bureau of Local Roads Manual provides policies and procedures for projects utilizing Federal-Aid funds allocated to local public agencies.

Chapters 18 through 24 of IDOT's BLR manual provide directions for Federal-Aid funded construction projects. The scope of services for this improvement shall comply with the procedures prescribed in Chapters 22 Project Development and Chapter 23 Plan Development of IDOT's BLR manual.

DOCUMENTS TO BE DELIVERED

- Phase I – Project Development
 - Categorical Exclusion Project Development Report (CE PDR) (BLR 22210)
 - Approval of Design Variance (BLR 22120) – if needed

Project: Glen Avenue
 Work Order Number: 20-03

- Phase II – Plan Development
 - Construction Plans
 - Project Special Provisions
 - Estimate of Cost
 - Estimate of Time
 - Land Acquisition Documentation

TASK ITEM SUMMARY

MANAGEMENT, DATA COLLECTION AND PROPERTY RECORDS

1. Project Management
 - a. Monthly invoices
 - b. Utility company coordination
 - i. Identify existing utilities
 - ii. Identify conflicts and relocations
 - c. Coordination with City & IDOT
 - d. Quality Assurance Plan
 - i. Prepare a project specific quality assurance plan
 - ii. Review project deliverables for compliance
2. Route Surveys
 - a. Horizontal and Vertical Control
 - b. Topographic Features along Roadway – 10 feet beyond ROW on each side
 - c. Existing property pins along the street
 - d. Supplemental Drone Survey
 - e. Mapping of property lines and topography
3. Utility & Property Data Collection
 - a. Review of utility as-builts and records
 - b. Title commitments and document search for adjacent properties

PROJECT DEVELOPMENT (PHASE I)

4. Environmental Review
 - a. Environmental Survey Request
 - i. Cultural surveys
 - ii. Biological & Wetland Survey
 - iii. Special Waste – IDOT ROW
 - b. Preliminary Environmental Site Assessment (PESA) – LPA ROW
5. Project Studies
 - a. Alignment Studies
 - i. Cross Section
 - ii. Vertical Profile
 - b. Sheridan Road Intersection Design Study
 - i. Existing and proposed traffic volumes
 - ii. Traffic capacity analysis
 - iii. Intersection geometrics
 - c. Knoxville Avenue Intersection Design Study
 - i. Existing and proposed traffic volumes
 - ii. Traffic capacity analysis
 - iii. Intersection geometrics
 - d. Drainage Studies & Design
 - e. Subsurface soil testing & Pavement Design
 - f. Design Exceptions

- g. Commitments
- h. Project Development Report (PDR)

- 6. Public Involvement
 - a. Public meeting
 - b. Property owner meetings

PLAN DEVELOPMENT (PHASE II)

- 7. Construction Plans
 - a. Cover Sheet & General Notes
 - b. Summary of Quantities & Schedules
 - c. Typical Sections
 - d. Alignment Control
 - e. Removal Plans
 - f. Plan & Profile Sheets
 - g. Traffic Control Plan
 - h. Storm Water Pollution Prevention Plan
 - i. Intersection Grading Plans
 - j. Pavement Marking & Signing Plans
 - k. Traffic Signal Plans (if needed)
 - l. Lighting Plans (if needed)
 - m. Miscellaneous Details
 - n. Cross Sections
- 8. Special Provisions & Estimate of Cost and Time
- 9. Land Acquisition Services (20 parcels estimated)
 - a. Waiver Valuations complete by LPA
 - b. Negotiations
 - c. Certification Documents in accordance with IDOT procedures

Project: Glen Avenue
Work Order Number: 20-03

EXHIBIT B

COST ESTIMATE OF CONSULTING SERVICES

Engineering and Surveying Services for

Reconstruction of Glen Avenue
from Sheridan Road to Knoxville Avenue

Section 18-00029-00-PV (Construction)
Section 19-00029-00-EG (Engineering & ROW)

Programmed for construction in Year 2022

City of Peoria

December 11, 2020



COST ESTIMATE OF CONSULTANT SERVICES WORKSHEET
ANNIVERSARY RAISE

Local Public Agency City of Peoria	County Peoria	Section Number 19-00029-00-EG
Consultant (Firm) Name Crawford, Murphy & Tilly	Prepared By E. Munday	Date 2/17/2021

PAYROLL ESCALATION TABLE

CONTRACT TERM 9 MONTHS	OVERHEAD RATE 168.85%
START DATE 3/1/2021	COMPLEXITY FACTOR 0.035
RAISE DATE ANNIVERSARY	% OF RAISE 2.00%

ESCALATION PER YEAR

DETERMINE THE MID POINT OF THE AGREEMENT

4.5

CALCULATE THE ESCALATION FACTOR TO THE MIDPOINT OF THE CONTRACT

0.75%

The total escalation for this project would be:

0.75%

AVERAGE HOURLY PROJECT RATES
 Exhibit E Cost Estimate of Consultant Services Worksheet Anniversary Raise

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			1. Project Management			2. Route Surveys			3. Utility & Property Data Collection			4. Environmental Review			5. Project Studies			
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	
10. Principal	70.00	0.0																		
20. Project Engineer II	67.45	110.0	3.62%	2.44	30	21.13%	14.25	8	2.82%	1.90										
30. Project Engineer I	52.40	314.0	10.34%	5.42	48	33.80%	17.71													
40. Senior Engineer I	38.91	640.0	21.07%	8.20	40	28.17%	10.96	40	14.08%	5.48	28	36.84%	19.31	32	100.00%	52.40	40	5.10%	3.44	
42. Technical Manager II	47.82	0.0																		
43. Sr. Planner I	41.14	623.0	20.51%	8.44																
46. Sr. Structural Engineer II	51.25	0.0																		
50. Engineer I	30.80	740.0	24.37%	7.50	24	16.90%	5.21	60	21.13%	6.51	24	31.58%	9.73				184	23.47%	7.23	
70. Land Surveyor	43.20	0.0																		
80. Sr. Technician I	37.47	194.0	6.39%	2.39														44	5.61%	2.10
81. Sr. Technician II	47.84	28.0	0.92%	0.44																
90. Technician II	31.36	132.0	4.35%	1.36				88	30.99%	9.72								44	5.61%	1.76
100. Technician I	26.47	256.0	8.43%	2.23				88	30.99%	8.20										
110. Administrative Assistant	20.55	0.0																		
		0.0																		
		0.0																		
		0.0																		
		0.0																		
		0.0																		
		0.0																		
TOTALS		3037.0	100%	\$38.43	142.0	100.00%	\$48.13	284.0	100%	\$31.81	76.0	100%	\$41.32	32.0	100%	\$52.40	784.0	100%	\$38.85	

Local Public Agency

City of Peoria

County

Peoria

Section Number

19-00029-00-EG

AVERAGE HOURLY PROJECT RATES
 Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

SHEET

2 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	6. Public Involvement			7. Construction Plans			8. Special Provisions & Estimates			9. Land Acquisition Services					
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
10. Principal	70.00															
20. Project Engineer II	67.45	8	16.67%	11.24	20	2.21%	1.49	4	5.00%	3.37						
30. Project Engineer I	52.40	20	41.67%	21.93	40	4.42%	2.31	60	75.00%	39.30	34	4.96%	2.60			
40. Senior Engineer I	38.91				116	12.80%	4.98									
42. Technical Manager II	47.82															
43. Sr. Planner I	41.14															
46. Sr. Structural Engineer II	51.25															
50. Engineer I	30.80	20	41.67%	12.93	412	45.47%	14.01	16	20.00%	6.16						
70. Land Surveyor	43.20				150	16.56%	6.20									
80. Sr. Technician I	37.47															
81. Sr. Technician II	47.84															
90. Technician II	31.36															
100. Technician I	26.47				168	18.54%	4.91									
110. Administrative Assistant	20.55															
TOTALS		48.0	100%	\$45.91	906.0	100%	\$33.90	80.0	100%	\$48.83	685.0	100%	\$41.97	0.0	0%	\$0.00

Estimate of Effort by Task

FIRM NAME: CRAWFORD, MURPHY AND TILLY
 ROUTE: Glen Avenue
 WORK ORDER: 20-03 DATE: 09/27/17

Task	CMT Hours
Management, Data Collection and Property Records	
1. Project Management	
a. Monthly invoices	24
b. Coordination with City & IDOT	64
c. Quality Assurance Plan	54
Sub-total	142
2. Route Surveys	
a. Horizontal and Vertical Control	16
b. Topographic Features along Roadway – 10 feet beyond ROW	160
c. Existing property pins along the street	32
d. Supplemental Drone Survey	16
e. Mapping of ROW and Topography	60
Sub-total	284
3. Utility & Property Data Collection	
a. Review of utility as-builts and records	24
b. Title commitments and document search	16
c. Utility company coordination (9 companies @ 4hrs each)	36
Sub-total	76
Project Development (Phase I)	
4. Environmental Review	
a. Environmental Survey Request	32
b. Preliminary Environmental Site Assessment (PESA) – LPA	ANDREWS
Sub-total	32
5. Project Studies	
a. Alignment Studies	80
b. Sheridan Rd Intersection Design Studies	132
c. Knoxville Ave. Intersection Design Studies	132
d. Drainage Studies	160
e. Geotechnical Report/Pavement Design	16
f. Design Exceptions	16
g. Commitments	8
h. Project Development Report (PDR)	240
Sub-total	784
6. Public Involvement	48
Sub-total	48
Plan Development (Phase II)	
7. Construction Plans	
	# of Shts Hrs/Sht
a. Cover Sheet & General Notes	2 4 8
b. Summary of Quantities & Schedules	5 8 40
c. Typical Sections	2 16 32
d. Alignment Control	3 8 24
e. Removal Plans	3 20 60
f. Plan & Profile Sheets (5 Street and 5 Storm Sewer)	10 20 200
g. Traffic Control Plan	6 20 120
h. Storm Water Pollution Prevention Plan	3 10 30
i. Intersection Grading Plans	8 16 128
j. Pavement Marking & Signing Plans	3 4 12
k. Traffic Signal Plans (if needed)	2 50 100

Estimate of Effort by Task

FIRM NAME: CRAWFORD, MURPHY AND TILLY,
 ROUTE: Glen Avenue
 WORK ORDER: 20-03 DATE: 09/27/17

Task	CMT Hours		
l. Lighting Plans (if needed)	0	12	0
m. Miscellaneous Details	4	8	32
n. Cross Sections	20	6	120
	Sub-total		906
 8. Special Provisions & Estimate of Cost and Time			 80
	Sub-total		80
 9. Land Acquisition Services (20 parcels estimated)			
a. Waiver Valuations complete by LPA			80
b. Negotiations & Certification Documents			605
	Sub-total		685

FIRM NAME: CRAWFORD, MURPHY AND TILLY, INC.
 ROUTE: Glen Avenue
 SECTION: 20-03
 COUNTY: 0

DATE: 02/27/20

In House Direct Costs

Task	Description of Expense		
Travel Expense			
2	Lodging	9 days, 2 rm, \$80/rm	\$ 1,440.00
2	Meals	\$28 x 9 days X 2	\$ 504.00
2	Travel (Spfld/Peoria)	75 miles, 3 trips, \$0.56	\$ 126.00
9	Travel (Spfld/Peoria)	75 miles, 3 trips, \$0.56	\$ 126.00
	Contingency/Misc		
			<u>\$ 2,196.00</u>
1	Travel (Local)	10 miles, 10 trips, \$0.56	\$ 56.00
			<u>\$ 56.00</u>
2	Drone Flight & Mapping		\$ 2,500.00

Outside Direct Costs

Task	Description of Expense	Provided By	Calculation	Amount
Property Records				
3	Title Commitments - Initial Search	Chicago Title	55 parcels @ \$250/each	<u>\$13,750.00</u>
			Total	\$13,750.00
Construction Plans				
	Pre-final Plan Set (84 shts)	CBT	B-size, 2 sets @ \$0.15/Sq ft	
	Final Plan Set (84 shts)	CBT	B-size, 2 sets @ \$0.15/Sq ft	
			Total	<u>\$0.00</u>

