CITY		ENGINEER	
CITY OF JOPLIN 602 S. MAIN STREET JOPLIN, MO 64801		Name: Olsson Address: 702. S. Main Joplin, MO 64801	
Attention: David Hertzberg		Attention: Clayton Cristy Jack Schaller	
Department: Public Works Department		Phone: 417-781-0643	Fax: 417-781-4714
Phone: 417-624-0820	Fax:	Intersection of 4th and Murphy Boulevard	

WORK AUTHORIZATION NUMBER OLS-OC20-09
TO AGREEMENT FOR PROFESSIONAL ENGINEERING CONSULTING SERVICES

City and Engineer agree to amend their Agreement for Professional Engineering Consulting Services to include a scope of work and fees for engineering services, by adding the following terms to their Agreement.

1. **Services**. The City agrees to engage the services of the Engineer and the Engineer agrees to perform the services hereinafter set forth in connection with projects described in ***Exhibit A***.

2. **Addition to Services**. The City may add to the Engineer services or delete therefrom activities of a similar nature to those set forth in ***Exhibit A***, provided that the total cost of such work does not exceed the total cost allowance as specified in Paragraph 5 hereof. The Engineer shall undertake such changed activities only upon the direction of the City. All such directives and changes shall be in written form and prepared and approved by the City and shall be accepted and countersigned by the Engineer.

3. **Term**. The services of the Engineer shall commence as soon as practicable after the execution of this contract, unless otherwise directed in writing, and shall be undertaken and completed in such sequence as to assure their expeditious completion in the light of the purposes of the contract, but in any event, all of the services required hereunder shall be completed as set forth in the schedule for the project which is attached hereto as ***Exhibit A***.

4. **Costs not to Exceed**. The City of Joplin is limited by law with respect to the amount of money it can pay. Therefore, the City has established a fixed sum for this contract, which cannot be exceeded unless this contract is amended. The Engineer providing services hereunder shall be required to keep track of the amount of hours billable under this contract at all times; and any work in excess of the fixed sum shall not be eligible for payment. The Engineer shall notify the City if Engineer anticipates that the contract amount may be exceeded, in order to determine whether or not the City is prepared to increase the total compensation. The Engineer shall establish a billing system showing the amount of money remaining on the contract, which shall be shown in each monthly billing.

5. **Payment**.

a. **Conditioned upon acceptable performance**. The City agrees to pay the Engineer in accordance with the terms set forth in ***Exhibit A***, which shall constitute complete compensation for all services to be rendered under this contract; provided, that where payments are to be made periodically to Engineer for services rendered under this contract, the City expressly reserves the right to disapprove in whole or in part a request for payment where the services rendered during the period for which payment is claimed are not performed in a timely and satisfactory manner in accordance with the schedule and description of services set forth in ***Exhibit A***.

b. **Total compensation not to exceed**. It is expressly understood that in no event will the total compensation and reimbursement to be paid to the Engineer under the terms of this work Authorization Number OLS-OC20-09 exceed the sum of One Hundred and Eight Thousand, Six Hundred Dollars ($ 108,600.00).

6. **Insurance**. Without limiting any of the other obligations or liabilities of the Engineer, the Engineer shall secure and maintain at its own cost and expense, throughout the duration of this Contract and until the work is completed and accepted by the City of Joplin, insurance of such types and in such amounts as may be necessary to protect it and the interests of the City of Joplin against all hazards or risks of loss as hereunder specified or which may arise out of the performance of the Contract Documents. The form and

limits of such insurance, together with the underwriter thereof in each case, are subject to approval by the City of Joplin. Regardless of such approval, it shall be the responsibility of the Engineer to maintain adequate insurance coverage at all times during the term of the Contract. Failure of the Engineer to maintain coverage shall not relieve it of any contractual responsibility or obligation or liability under the Contract Documents.

The certificates of insurance, including evidence of the required endorsements hereunder or the policies, shall be filed with the City at the time that this contract is signed by the Engineer. All insurance policies shall provide thirty (30) days written notice to be given by the insurance company in question prior to modification or cancellation of such insurance. Such notices shall be mailed, certified mail, return receipt requested, to:

City of Joplin - Public Works, 602 S. Main, Joplin, MO 64801; and

Such policies shall name the City as an additional insured with limits of liability not less than the sovereign immunity limits for Missouri public entities calculated by the Missouri Department of Insurance as of January 1 each calendar year and published annually in the Missouri Register pursuant to Section 537.610, RSMo.
(See, http://insurance.mo.gov/industry/sovimmunity.php).

As of January 1, 2020, the minimum coverage for the insurance referred to herein shall be as set out below:

a. Workers' Compensation….Statutory coverage per RSMo 287.010 et seq.
Employer's Liability……. $1,000,000.00

b. Commercial General Liability Insurance, including coverage for Contractual Liability and Independent Contractors Liability. Such coverage shall apply to bodily injury and property damage on an "Occurrence Form Basis" with limits of Two Million Nine Hundred Five Thousand Six Hundred Sixty-four and no/100 Dollars ($2,905,664.00 for all claims arising out of a single accident or occurrence and at least Four Hundred Thirty-five Thousand Eight Hundred Forty-Nine and no/100 Dollars ($435,849.00) with respect to injuries and/or death of any one person in a single occurrence and an amount not less than at least $1,000,000 for all claims to property arising out of a single occurrence and at least $100,000 to any one owner with respect to damages to property. Engineer agrees that the proceeds of such insurance policy shall first be used to pay any award, damages, costs, and/or attorneys' fees incurred by or assessed against City, its employees, officers and agents, before payment of any award, damages, costs or attorneys fees of Engineer, its employees, officers or agents. Engineer agrees to cause its insurer to name City as an additional insured on such insurance policy, including the City as an additional insured for coverage under its products-completed operations hazard, and said policy shall be primary and noncontributory.

c. Automobile Liability Insurance covering bodily injury and property damage for owned, non-owned and hired vehicles, with limits of at least Two Million Nine Hundred Five Thousand Six Hundred Sixty-four and no/100 Dollars ($2,905,664.00 for all claims arising out of a single accident or occurrence and at least Four Hundred Thirty-five Thousand Eight Hundred Forty-Nine and no/100 Dollars ($435,849.00) with respect to injuries and/or death of any one person in a single accident or occurrence.

d. Errors and Omissions Insurance. The Engineer shall maintain a professional liability insurance policy in the amount of $1,000,000.00. This policy shall remain in full force and effect for a period of one year after completion and acceptance by the City of the construction of the project.

e. Subcontracts. In case any or all of this work is sublet, the Engineer shall require the subcontractor to procure and maintain all insurance required in subparagraphs (A), (B) and (C) hereof and in like amounts. Engineer shall require any and all subcontractors with whom it enters into a contract to perform work on this project to protect the City of Joplin through insurance against applicable hazards or risks and shall, upon request of the City, provide evidence of such insurance.

f. Notice. The Engineer and/or subcontractor shall furnish the City prior to beginning the work satisfactory proof of carriage of all the insurance required by this contract, with the provision that policies shall not be canceled, modified or non-renewed without thirty (30) days written notice to the City of Joplin.

g. Legislative or Judicial Changes. In the event the scope or extent of the City's tort liability as a governmental entity as described in Section 537.600 through 537.650 RSMo is broadened or increased during the term of this agreement by legislative or judicial action, the City may require Engineer, upon 10 days written notice, to execute a contract addendum whereby the Engineer agrees to provide, at a price not exceeding Engineer's actual increased premium cost, additional liability insurance coverage as the City may require to protect the City from increased tort liability exposure as the result of such legislative or judicial action. Any such

additional insurance coverage shall be evidenced by an appropriate certificate of insurance and shall take effect within the time set forth in the addendum.

7. All other terms and conditions of the original Agreement shall remain in effect.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals on the day and year herein stated.

REVIEWED FOR APPROVAL

_____
Name & Title of Staff Project Manager

CERTIFICATE OF DIRECTOR OF FINANCE

I certify that the expenditure contemplated by this document is within the purpose of the appropriation to which it is to be charged and that there is an unencumbered balance of appropriated and available funds to pay therefore.

_____
Leslie Haase, Director of Finance

APPROVED AS TO FORM

_____
Peter Edwards, City Attorney

Engineer: Olsson

By: _____

Printed Name: Jack Schaller

Title: Vice President

Date: 09/08/2020

By: _____

Printed Name: Clayton Cristy

Title: Vice President

Date: 09/08/2020

CITY OF JOPLIN, MISSOURI

By: _____
David Hertzberg, P.E.
Public Works Director

Date: _____

EXHIBIT A to WORK AUTHORIZATION
SCOPE OF SERVICES

This exhibit is hereby attached to and made a part of the Work Authorization for Professional Services dated September 8, 2020 between the City of Joplin, Missouri ("Client") and Olsson, Inc. ("Olsson") providing for professional services. Olsson's Scope of Services for the Agreement is indicated below.

PROJECT DESCRIPTION AND LOCATION

Project will be located at: Intersection of 4th Street and Murphy Boulevard

Project Description: Signalized Intersection Improvements
4th Street and Murphy Boulevard

SCOPE OF SERVICES

Olsson shall provide the following services (Scope of Services) to Client for the Project:

DESIGN SERVICES

Phase 100 – Surveying Services

Task 101 - Topographic Survey Data

Olsson will collect Topographic Survey data for the portions of 4th Street and Murphy Blvd, as outlined in red, on the attached Exhibit B. The Topographic Survey data shall depict contours at a 1' vertical interval, all physical improvements including buildings, driveways, fencing, vegetation, existing storm sewer systems, and visible utilities, as well as underground utilities as located by Missouri One-Call system. Survey shall be tied vertically to the NAVD 1988 Vertical Datum and horizontally to the Missouri State Plane Coordinate System NAD 83–West Zone-US Survey foot. Olsson's fee does not include preparation of a deliverable survey in paper format. Survey provided will be in AutoCad format only.

- Utility location and mapping is for horizontal location of above ground and underground utilities only. Utility depths will not be obtained or indicated on the topographic survey. Survey of utilities will be based on tracing and marking by One Call and / or a private utility locater. By signing this contract, the client understands and acknowledges that utility mapping is not exact, and it is possible that not all utility lines will be located. Olsson is not responsible for miss-marked or unmarked utilities.

Task 102 - Boundary Survey Data

Olsson will collect boundary information and determine right of way lines for the portions of 4th Street and Murphy Blvd, as outlined in red, on the attached exhibit. The survey shall be tied vertically to the NAVD 1988 Vertical Datum and horizontally to the Missouri State Plane Coordinate System NAD 83–West Zone-US Survey foot. Olsson's fee does not include preparation of a deliverable survey in paper format. Survey provided will be in AutoCad format only.

The City shall provide title search information for project parcels.

Total Fee (Tasks 101 & 102) = $11,500

Phase 200 – Intersection Analysis

Task 201 – Traffic Counts

Olsson will collect 12-hour vehicular, trucks, and pedestrian traffic volume counts for a typical weekday for the study intersection of 4th Street and Murphy Boulevard.

Travel patterns have been impacted due to the current COVID-19 pandemic. To determine the reduction in traffic volumes due to closures and stay-at-home orders, data collected by MoDOT within the vicinity of the project area will be reviewed to determine if traffic volumes are reduced due to varying travel patterns. Upon review, a percent decrease in current traffic volumes will be determined and intersection turning movement counts will be adjusted to obtain a base traffic count, if appropriate.

Task 202 – Safety Analysis

A safety analysis will be completed to review crash history at the intersection of 4th Street and Murphy Boulevard including the railroad crossing west of the intersection. It is assumed that relevant crash data for a three-year period will be provided by City staff. Olsson will determine detailed information possibly including: Type, Time-of-Day, Weather Condition, Lighting Condition, and Severity. The crash data will be summarized on a figure and/or table as appropriate. Detailed crash diagrams will not be provided with this task.

Task 203 – Capacity Analysis

Olsson will conduct capacity and queuing analysis of the proposed scenarios as shown below for the typical weekday AM and PM peak hour for the following three scenarios:

- Existing
- Existing as 3-Lane Segment on 4th Street
- Future 2040

Olsson will develop Future 2040 traffic volumes based on available data from the City including the City's model for the study intersection.

Task 204 – Intersection Traffic Control Evaluation (Railroad Crossing)

The existing signal will be reviewed for the study intersection to determine if an advance pre-signal is warranted for the railroad crossing and or preemption. **If it is determined that the intersection requires a pre-signal or preemption an amendment will be required for these services.**

Task 205 – Intersection Analysis Memorandum

A brief memorandum will be prepared to summarize analysis and provide recommendation of intersection traffic control type, potential geometric improvements, and pedestrian accommodations. Recommendations will be based on City and MoDOT standards and engineering judgement.

Total Fee (Tasks 201, 202, 203, 204, & 205) = $16,100

Phase 300 – Traffic Signal Design

Task 301 – Traffic Signal Design

Olsson will use the findings of Phase 200. Traffic Signal layout will be based on City standards and findings of Phase 200 Analysis report. Features will include equipment such as Detection, Interconnect, and remote monitoring capabilities (CCFV).

Fee (Task 301) = $18,500

Phase 400 – Public Roadway Design

Task 401 – Roadway & Geometric Design

Olsson shall prepare a design analysis and geometric layout for an improved signalized intersection. The geometric improvements will be based on the Intersection Analysis Memorandum. The geometric improvements are anticipated to include the following:

- Dedicated North Bound Right Turn Lane
- Improved Southbound Right Turn Slip Lane

Olsson will prepare design plans for the intersection project based on City of Joplin standards. Plans will be prepared and submitted for the 30%, 60%, 90%, and Final PS&E stage with plan development progressing at each submittal. The final plans will include the following sheets:

- Cover Sheet
- Survey control and alignment sheet
- Demolition Plan
- Develop typical sections
- Plan & Profile Sheets
- Detail Grading Plans (as necessary)
- Storm System Profiles (if necessary)
- Special Details
- Grading and Erosion Control Plan
- Cross Sections (as necessary).
- Signal Design Plans
- Traffic Control Plan
- Utility Coordination Plan

Drainage design will be performed to include Drainage Area Map, Pavement Spread Calculations, Inlet & Structure capacity design, and hydraulic grade calculations.

Olsson will estimate the construction quantities and provide an Engineer's Opinion of Probable Cost for each respective plan phase submittal.

Fee (Task 401) = $25,000

Task 402 – Pavement Marking and Signing Plans

Olsson will design pavement marking and signing complying with the MUTCD and the City of Joplin Standards.

Fee (Task 402) = $3,000

Task 403 – Traffic Control & Construction Sequencing

Olsson will design traffic control for the roadway design and signal improvement construction. Construction sequencing sheets and narrative will be developed based on the assumption that limited traffic will be maintained, in limited directions, through the intersection during construction. Olsson will work to maximize amount of traffic allowed through construction, but it is unlikely that all turning movements will be accommodated.

Fee (Task 403) = $3,000

Task 404 – Land Disturbance Permit & Stormwater Pollution Prevention Plan (SWPPP)

Olsson will complete the Missouri Division of Natural Resources Land Disturbance Permit, as necessary. Olsson will prepare a SWPPP that incorporates standard practices and the developed erosion control plan to be maintained by the Contractor during construction.

Fee (Task 404) = $3,500

Task 405 – Meetings and Project Management
Olsson will attend review and progress meetings with the City at various stages of design. It is anticipated that 5 meetings will be required throughout the various design stage submittals.

Olsson will perform project management to include coordination with City staff; monitoring scope, schedule, and budget; and performing QA/QC reviews at each design submittal stage.

Fee (Task 405) = $6,000

Task 406 – Public Street Lighting Plans (Excluded)
It is assumed that lighting on the signal poles will be adequate for the intersection improvements. Any additional lighting plans would be additional services.

Total Fee (Tasks 401, 402, 403, 404 & 405) = $40,500

Phase 500 – Utility Coordination

Task 501 – Utility Coordination
Olsson shall prepare a utility coordination plan for the intersection improvements. This effort will include coordinating and gathering the proposed relocation plans for all utility companies involved with the project and graphically inputting the information into one plan to assist in determining potential conflicts. Electronic base files will be made available to utility companies to assist with their respective designs.

Fee (Task 501) = $5,000

BIDDING & CONSTRUCTION ADMINISTRATION SERVICES

Phase 600 – Bid Phase Services

Task 601 - Prepare Notice to Bidders and Issue Documents
Olsson will coordinate the issuance of notices to bidders and the production and distribution of bidding documents. Notices will be placed in the official publications directed by the Client, and in bidding services known to provide data to contractors in the area. In addition, invitations will be mailed directly to contractors whom Olsson and/or the Client know will be interested in the project. Documents will be available for inspection at the local Olsson office.

Olsson will coordinate answering questions raised by bidders. Addenda will be prepared, if needed, to provide clarification to questions. The Client will be informed on a regular basis of project changes resulting from bidders' questions.

Task 602 - Review and Evaluate Bids
Olsson will attend the bid opening. Bids properly received will be reviewed. Inconsistencies or irregularities found in the bids will be reported to the Client. Olsson will prepare a bid tabulation of bids received and will make the bid tabulation available to bidders. Olsson will evaluate the bids and make a written recommendation to the Client concerning contract award.

Task 603 - Conform Documents

Conformed copies of the contract documents, including insurance and bond forms, will be prepared by Olsson. Olsson will review the documents to confirm that procedures have been properly followed. Copies of the conformed documents will be provided to the Client for review. Executed copies will be distributed to the Client, the contractor, and Olsson. These documents form the official contract between the Client and the contractor, as well as the basis for decisions concerning the work.

Total Fee (Tasks 601, 602, & 603) = $6,500

Phase 700 – Construction Administration Services

Task 701 - Construction Administration

Olsson shall perform the following construction administration services:

- Conduct a pre-construction meeting. Olsson will prepare and distribute minutes of the meeting.
- Receive, log and review contractor submittals (i.e. shop drawings, cut sheets).
- Review Contractor pay applications.
- Prepare necessary Change Orders and Revision Sheets (3 Change Orders Estimated)
- Answer contractors' questions and interpret construction documents. Questions and interpretations will be answered with a written Request for Information (RFI) or similar process.
- Conduct Periodic site visits during construction (Assumed 4).

Task 702 – Project Close Out

Olsson will conduct a final walkthrough of the project. A "punch list" of deficiencies will be prepared and distributed.

Total Fee (Tasks 701 & 702) = $10,500

Assumptions:

- Title Searches for adjacent right-of-way will be provided by City staff.
- Crash reports will be provided by City staff.
- Detailed crash diagrams will not be provided.
- Development of Railroad System Requirements and coordination with Railroad Consultant to determine this is excluded with this scope of services, however, can be included at an additional fee to be established in an amendment.
- No right of way is anticipated for this project.

Meetings: Listed meeting are included in the basic scope. Additional meetings shall be considered additional services.

Should Client request work in addition to the Scope of Services, Olsson shall invoice Client for such additional services (Optional Additional Services) at the standard hourly billing labor rate charged for those employees actually performing the work, plus reimbursable expenses if any. Olsson shall not commence work on Optional Additional Services without Client's prior written approval.

Olsson agrees to provide all of its services in a timely, competent and professional manner, in accordance with applicable standards of care, for projects of similar geographic location, quality and scope.

SCHEDULE FOR OLSSON'S SERVICES

Unless otherwise agreed, Olsson expects to perform its services under the Agreement as follows:

Signalized Intersection Improvements Design Services will be completed in an 8-month period following notice to proceed.

SUMMARY OF FEES

Phase 100 – Surveying Services	$11,500
Phase 200 – Intersection Analysis	$16,100
Phase 300 – Traffic Signal Design	$18,500
Phase 400 – Public Roadway Design & PM	$40,500
Phase 500 – Utility Coordination	$5,000
Phase 600 – Bidding	$6,500
Phase 700 – Construction Administration	$10,500
GRAND TOTAL FEE	**$108,600**

Assumption included that fees can be shifted between phases and tasks as work progresses, to cover actual work completed.


Survey Exhibit B
Topographic and R/W Determination area
Legend
Becton Ave
S Cox Ave
E 3rd
SE Murphy Blvd
Water Ave
Becton Rd
Grand Ave
E 5th St
Google Earth
© 2020 Google
N
500 ft

Olsson Billing Rate Schedule
2020 Labor Rates

Description	Range		
Principal	118.00	-	381.00
Project Manager	114.00	-	195.00
Project Professional	110.00	-	174.00
Assistant Professional	64.00	-	143.00
Designer	80.00	-	216.00
CAD Operator	43.00	-	118.00
Survey	46.00	-	187.00
Construction Services	43.00	-	193.00
Administrative/Clerical	29.00	-	130.00

Note:

1. Special Services not included in above categories will be provided on a Special Labor Rate Schedule
2. Rates subject to change based upon updates to Billing Rates for upcoming year.

Please contact the Project Manager for special services not included above (Survey; Field Operations including Special Inspections, Construction Administration/Observation, and Geotechnical; Non-Destructive Testing, and Drilling) and they will provide their Special Services Labor Rate Schedule to include with your Agreement

REIMBURSABLE EXPENSE SCHEDULE

The expenses incurred by Olsson or Olsson's independent professional associates or consultants directly or indirectly in connection with the Project shall be included in periodic billing as follows:

Classification	**Cost**
Automobiles (Personal Vehicle)	$0.575/mile*
Suburban's and Pick-Ups	$0.75/mile*
Automobiles (Olsson Vehicle)	$85.00/day
Other Travel or Lodging Cost	Actual Cost
Meals	Actual Cost
Printing and Duplication including Mylars and Linens	
In-House	Actual Cost
Outside	Actual Cost+10%
Postage & Shipping Charges for Project Related Materials including Express Mail and Special Delivery	Actual Cost
Film and Photo Developing	Actual Cost+10%
Telephone and Fax Transmissions	Actual Cost+10%
Miscellaneous Materials & Supplies Applicable to this Project	Actual Cost+10%
Copies of Deeds, Easements or other Project Related Documents	Actual Cost+10%
Fees for Applications or Permits	Actual Cost+10%
Sub-Consultants	Actual Cost+10%
Taxes Levied on Services and Reimbursable Expenses	Actual Cost

*Rates consistent with the IRS Mileage Rate Reimbursement Guidelines (Subject to Change).