

**AGREEMENT**  
**For**  
**PROFESSIONAL ENGINEERING SERVICES**  
**Between**  
**THE CITY OF COLUMBIA, MISSOURI**  
**And**  
**GEORGE L. CRAWFORD & ASSOCIATES, INC., DBA CBB**

THIS AGREEMENT made by and between the City of Columbia, Missouri (hereinafter called “City”), and **George L. Crawford & Associates, Inc., dba CBB** (hereinafter called “Engineer”), is entered into on the date of the last signatory noted below (the “Effective Date”).

WITNESSETH, that whereas City intends to make improvements as described below, hereinafter called the Project, consisting of the following:

**Street and Intersection Pedestrian Safety Study, working towards Vision Zero objectives with a focus on prioritizing equity and the safety of the most vulnerable road users.**

*(Description of Project)*

NOW, THEREFORE, in consideration of the mutual covenants set out herein the parties agree as follows:

Engineer shall serve as City’s professional engineering contractor in those assignments to which this Agreement applies, and shall give consultation and advice to City during the performance of the services. All services shall be performed under the direction of a professional engineer registered in the State of Missouri and qualified in the particular field.

**SECTION 1 - AUTHORIZATION OF SERVICES**

1.1 Engineer shall not undertake to begin any of the services contemplated by this agreement until directed in writing to do so by City. City may elect to authorize the Project as a whole or in parts.

1.2 Authorized work may include services described hereafter as Basic Services or as Additional Services of Engineer.

**SECTION 2 - BASIC SERVICES OF ENGINEER**

2.1 General

2.1.1 Perform professional engineering services as set forth in Exhibit A - "Scope of Basic Services," dated **February 11, 2025** (hereinafter referred to as "Scope of Basic Services").

2.1.2 Engineer will designate the following listed individuals as its project team with responsibilities as assigned. Engineer shall dedicate whatever additional resources are necessary to accomplish the Project within the specified time frame but will not remove these individuals from the assigned tasks for any reason within the control of Engineer without the written approval of City.

<u>Name and Title</u>	<u>Assignment</u>
<b>Shawn Leight, PE, PTOE, PTP (CBB)</b>	<b>Project Manager</b>

All of the services required hereunder will be performed by Engineer or under its supervision and all personnel engaged in the work shall be fully qualified and authorized or permitted under state and local law to perform such services.

None of the work or services covered by this Agreement shall be subcontracted without the prior written approval of City and any work or services so subcontracted shall be subject to the provisions of this Agreement.

2.2 Engineer shall furnish such periodic reports as City may request pertaining to the work or services undertaken pursuant to this Agreement, the costs and obligations incurred or to be incurred, and any other matters covered by this Agreement.

2.3 Engineer shall maintain accounts and records, including personnel, property and financial records, adequate to identify and account for all costs pertaining to the Agreement and any other records as deemed necessary by City to assure proper accounting for all project funds. These records must be available to City or its authorized representatives, for audit purposes, and must be retained for three (3) years after expiration or completion of this Agreement.

### SECTION 3 - ADDITIONAL SERVICES OF ENGINEER

#### 3.1 General

If authorized in writing by City, and agreed to in writing by Engineer, Engineer shall furnish or obtain from others Additional Services of the following types which are not considered normal or customary Basic Services. The scope of Additional Services may include:

##### 3.1.1 Financial Consultation

Consult with City's fiscal agents and bond attorneys and provide such engineering data as required for any bond prospectus or other financing requirements.

- 3.1.2           Property Procurement Assistance  
Provide consultation and assistance on property procurement as related to professional engineering services being performed.
- 3.1.3           Obtaining Services of Others  
Provide through subcontract the services or data set forth in Scope of Basic Services. Engineer is prohibited from holding a retainage on any payment to a subcontractor that provides any services or work on this Project.
- 3.1.4           Preliminary or final engineering design of capital facilities except as specifically identified herein.
- 3.1.5           Preparation of reports, data, application, etc., in connection with modifications to FEMA floodplain definition and/or mapping.
- 3.1.6           Extra Services  
Services not specifically defined heretofore that may be authorized in writing by City.

#### SECTION 4 - RESPONSIBILITIES OF CITY

- 4.1           Provide full information as to City's requirements for the Project.
- 4.2           Assist Engineer by placing at Engineer's disposal available information pertinent to the assignment including previous reports and other data relative thereto, including the items outlined in Scope of Basic Services.
- 4.3           Guarantee access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform Engineer's services under this Agreement.
- 4.4           Examine all studies, reports, sketches, estimates, Bid Documents, Drawings, proposals and other documents presented by Engineer and render in writing decisions pertaining thereto.
- 4.5           Provide such professional legal, accounting, financial and insurance counseling services as may be required for the Project.
- 4.6           Designate **Shane Creech, P. E.**, as City's representative with respect to the services to be performed under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to materials, equipment, elements and systems to be used in the Project, and other matters pertinent to the services covered by this Agreement. The City's designated representative may be changed during the duration of this Agreement by written notice from the City Manager, or City Manager's designee, to Engineer.

4.7 Give prompt written notice to Engineer whenever City observes or otherwise becomes aware of any defect in the Project.

4.8 Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project.

4.9 Furnish Engineer data such as probings and subsurface explorations, with appropriate professional interpretations; property, boundary, easement, right-of-way, topographic and utility surveys; zoning and deed restriction; and other special data or consultations, all of which Engineer may rely upon in performing his services under this Agreement.

#### SECTION 5 - PERIOD OF SERVICE

5.1 This Agreement will become effective upon the first written notice by City authorizing services hereunder.

5.2 This Agreement shall be applicable to all work assignments authorized by City subsequent to the date of its execution and shall be effective as to all assignments authorized.

5.3 Services shall be started within 10 calendar days of Notice to Proceed and completed within **180** calendar days from the issuance of the Notice to Proceed. City shall have the right to establish performance times for individual phases or elements of the Project by delivering a written schedule setting out the performance times to the Engineer.

#### SECTION 6 - PAYMENTS TO ENGINEER

6.1 Amount of Payment

6.1.1 For services performed, City agrees to pay Engineer the sum of **\$96,540.00**, which shall constitute complete compensation for all services and payment of expenses to be rendered under this Agreement.

6.1.2 It is expressly understood that in no event will the total amount paid to Engineer under the terms of this Agreement, or any amendment thereto, exceed the sum set forth in paragraph 6.1.1 unless otherwise agreed to in writing between the parties in advance of the provision of such services.

6.2 Payments

6.2.1 Engineer shall submit an invoice to City for the percentage of services rendered to date under this Agreement not more than once every month. Upon receipt

of the invoice and progress report, City will, as soon as practical, pay Engineer for the services rendered, provided City does not contest the invoice.

## SECTION 7 - GENERAL CONSIDERATIONS

### 7.1 Insurance

7.1.1 **ENGINEER'S INSURANCE:** Engineer agrees to maintain, on a primary basis and at its sole expense, at all times during the life of this contract the following insurance coverages, limits, including endorsements described herein. The requirements contained herein, as well as City's review or acceptance of insurance maintained by Engineer is not intended and shall not in any manner limit or qualify the liabilities or obligations assumed by Engineer under this contract.

**Commercial General Liability** Engineer agrees to maintain Commercial General Liability at a limit of liability not less than **\$2,000,000** per occurrence and \$3,000,000 aggregate covering both bodily injury and property damage, including accidental death. Coverage shall not contain any endorsement(s) excluding nor limiting Contractual Liability or Cross Liability. If the contract involves any underground/digging operations, the general liability certificate shall include X, C and U (Explosion, Collapse and Underground) coverage.

**Professional Liability** Engineer agrees to maintain Professional (Errors & Omissions) Liability at a limit of liability not less than **\$2,000,000** per occurrence and **\$3,000,000** aggregate. For policies written on a "Claims-Made" basis, Engineer agrees to maintain a Retroactive Date prior to or equal to the Effective Date of this contract. In the event the policy is canceled, non-renewed, switched to an Occurrence Form, retroactive date advanced; or any other event triggering the right to purchase a Supplemental Extended Reporting Period (SERP) during the life of this contract, Engineer agrees to purchase a SERP with a minimum reporting period not less than two **(2)** years. The requirement to purchase a SERP shall not relieve Engineer of the obligation to provide replacement coverage.

**Business Automobile Liability** Engineer agrees to maintain Business Automobile Liability at a limit of liability not less than **\$2,000,000** per occurrence and **\$3,000,000** aggregate, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the Engineer's own automobiles, and trucks; hired automobiles, and trucks; and automobiles both on and off the site of work. Coverage shall include liability for Owned, Non-Owned & Hired automobiles. In the event Engineer does not own automobiles, Engineer agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

**Workers' Compensation Insurance & Employers' Liability** Engineer agrees to take out and maintain during the life of this contract, Employers' Liability and Workers' Compensation Insurance for all of their employees employed at the site of the work, and

in case any work is sublet, the Engineer shall require the subcontractor similarly to provide Workers' Compensation Insurance for all the latter's employees unless such employees are covered by the protection afforded by the Engineer. Workers' Compensation coverages shall meet Missouri statutory limits. Employers' Liability minimum limits shall be \$500,000 each employee, \$500,000 each accident and \$500,000 policy limit. In case any class of employees engaged in hazardous work under this contract is not protected under the Workers' Compensation Statute, the Engineer shall provide and shall cause each subcontractor to provide Employers' Liability Insurance for the protection of their employees not otherwise protected.

**Excess/Umbrella Liability** The above liability limits may be satisfied by any combination of primary and excess/umbrella liability policies.

**Additional Insured** Engineer agrees to endorse City as an Additional Insured with a CG 2026 Additional Insured – Designated Person or Organization endorsement, or similar endorsement, to the Commercial General Liability. The Additional Insured shall read "City of Columbia."

**Waiver of Subrogation** Engineer agrees by entering into this contract to a Waiver of Subrogation for each required policy herein except professional liability. When required by the insurer, or should a policy condition not permit Engineer to enter into a pre-loss agreement to waive subrogation without an endorsement, then Engineer agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition specifically prohibiting such an endorsement, or voids coverage should Engineer enter into such an agreement on a pre-loss basis.

**Certificate(s) of Insurance** Engineer agrees to provide City with Certificate(s) of Insurance evidencing that all coverages, limits and endorsements required herein are maintained and in full force and effect. Said Certificate(s) of Insurance shall include a minimum thirty (30) day endeavor to notify due to cancellation or non-renewal of coverage. The Certificate(s) of Insurance shall name the City as additional insured in an amount as required in this contract and contain a description of the project or work to be performed.

**Right to Revise or Reject** City reserves the right, but not the obligation, to review and revise any insurance requirement, not limited to limits, coverages and endorsements based on insurance market conditions affecting the availability or affordability of coverage; or changes in the scope of work / specifications affecting the applicability of coverage. Additionally, City reserves the right, but not the obligation, to review and reject any insurance policies failing to meet the criteria stated herein or any insurer providing coverage due of its poor financial condition or failure to operating legally.

7.1.2 HOLD HARMLESS AGREEMENT: To the fullest extent not prohibited by law, Engineer shall indemnify and hold harmless the City of Columbia, its directors, officers, agents and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any negligent act or failure to act, or willful misconduct, of Engineer, of any subcontractor (meaning

anyone, including but not limited to consultants having a contract with Engineer or a subcontractor for part of the services), of anyone directly or indirectly employed by Engineer or by any subcontractor, or of anyone for whose acts Engineer or its subcontractor may be liable, in connection with providing these services except as provided in this Agreement. This provision does not, however, require Engineer to indemnify, hold harmless or defend the City of Columbia from its own negligence, except as set out herein.

## 7.2 Professional Responsibility

### 7.2.1 Missouri Licensure & Certificate of Authority

Engineer certifies that it is currently in compliance, and agrees to maintain compliance for the duration of this Agreement, with all licensure requirements of the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors and Professional Landscape Architects (hereinafter "APEPLSPLA") to practice in Missouri as a professional engineer as provided under chapter 327 of the Missouri Revised Statutes. To the extent required by Section 327.401 of the Missouri Revised Statutes, Engineer understands and agrees that the person personally in charge and supervising the professional engineering services of Engineer under this Agreement shall be licensed and authorized to practice engineering in Missouri, and that Engineer will keep and maintain a valid certificate of authority from APEPLSPLA.

7.2.2 Engineer will exercise reasonable skill, care, and diligence in the performance of its services and will carry out its responsibilities in accordance with customarily accepted good professional engineering practices. If Engineer fails to meet the foregoing standard, Engineer will perform at its own cost, and without reimbursement from City, the professional engineering services necessary to correct errors and omissions which are caused by Engineer's failure to comply with above standard, and which are reported to Engineer within one year from the completion of Engineer's services for the Project.

7.2.3 In addition, Engineer will be responsible to City for damages caused by its negligent conduct during its activities at the Project site or in the field.

### 7.2.4 Professional Oversight Indemnification

Engineer understands and agrees that City has contracted with Engineer based upon Engineer's representations that Engineer is a skilled professional and fully able to provide the services set out in this Agreement. In addition to any other indemnification set out in this Agreement, Engineer agrees to defend, indemnify and hold and save harmless City from any and all claims, settlements and judgments whatsoever arising out of City's alleged negligence in hiring or failing to properly supervise Engineer. Engineer agrees to provide City with Certificate(s) of Insurance evidencing that all coverages, limits and endorsements are maintained and in full force and effect.

### 7.3 Estimates and Projections

Estimates and projections prepared by Engineer relating to construction costs and schedules, operation and maintenance costs, equipment characteristics and performance, and operating results are based on Engineer's experience, qualifications and judgment as a design professional. Since Engineer has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction contractor's procedures and methods, unavoidable delays, construction contractor's methods of determining prices, economic conditions, competitive bidding or market conditions and other factors affecting such estimates or projections, Engineer does not guarantee that actual rates, costs, performance, schedules, etc., will not vary from estimates and projections prepared by Engineer.

### 7.4 On-Site Services

Project site visits by Engineer during construction shall not make Engineer responsible for construction means, methods, techniques, sequences or procedures; for construction safety precautions or programs; or for any construction contractor(s)' failure to perform its work in accordance with the plans and specifications.

### 7.5 Changes

City shall have the right to make changes within the general scope of Engineer's services, with an appropriate change in compensation and/or schedule, upon execution of a mutually acceptable amendment or change order signed by an authorized representative of City and the President or any Vice President of Engineer.

### 7.6 Suspension of Services

Should City fail to fulfill its responsibilities as provided under Section 4 to the extent that Engineer is unduly hindered in Engineer's services or if City fails to make any payment to Engineer on account of its services and expenses within ninety (90) days after receipt of Engineer's bill therefor, Engineer may, after giving seven (7) days' written notice to City, suspend services under this Agreement until City has satisfied his obligations under this Agreement.

### 7.7 Termination

Services may be terminated by the City at any time and for any reason, and by Engineer in the event of substantial failure to perform in accordance with the terms hereof by City through no fault of Engineer, by ten (10) days' notice. If so terminated, City shall pay Engineer all uncontested amounts due Engineer for all services properly rendered and expenses incurred to the date of receipt of notice of termination.

7.7.1 In the event of City's termination of this Agreement pursuant to the above section, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs and reports prepared under this Agreement, shall at the option of City become its property.

Further, Engineer shall not be relieved of any liability to City for any damages sustained by City by virtue of any breach of this Agreement by Engineer and City may withhold any

payments due Engineer for the purpose of set-off until such time as the exact amount of damages to City, if any, is determined.

#### 7.8 Publications

Recognizing the importance of professional development on the part of Engineer's employees and the importance of Engineer's public relations, Engineer may prepare publications, such as technical papers, articles for periodicals, and press releases, pertaining to Engineer's services for the Project. Such publications will be provided to City in draft form for City's advance review. City will review such drafts promptly and will provide comments to Engineer. City may require deletion of proprietary data or confidential information from such publications but otherwise will not unreasonably withhold its approval. The cost of Engineer's activities pertaining to any such publication shall be paid entirely by Engineer.

#### 7.9 Nondiscrimination

During the performance of this Agreement, Engineer agrees to the following:

7.9.1 Engineer shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation, gender identity or expression, or any other protected category designated by local, state, or federal law. Engineer shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation, gender identity or expression, or any other protected category designated by local, state, or federal law. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. Engineer agrees to post notices in conspicuous places, available to employees and applicants for employment.

7.9.2 Engineer shall, in all solicitation or advertisements for employees placed by or on behalf of Engineer, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation, gender identity or expression, or any other protected category designated by local, state, or federal law.

7.9.3 Engineer shall comply with all provisions of State and Federal Laws governing the regulation of Equal Employment Opportunity including Title VI of the Civil Rights Act of 1964.

#### 7.10 Successor and Assigns

City and Engineer each binds himself and his successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of such other party, in respect to all covenants of

this Agreement; except as above, neither City nor Engineer shall assign, sublet or transfer his interest in the Agreement without the written consent of the other.

7.11 Rights and Benefits

Engineer's services will be performed solely for the benefit of the City and not for the benefit of any other persons or entities.

7.12 Compliance with Local Laws

Engineer shall comply with all applicable laws, ordinances and codes of the state and city.

7.13 Law; Submission to Jurisdiction Governing

This Agreement shall be governed by, interpreted and enforced in accordance with the laws of the State of Missouri and/or the laws of the United States, as applicable. The venue for all litigation arising out of, or relating to this Agreement, shall be Boone County, Missouri or the United States Western District of Missouri. The parties hereto irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of Missouri and waive any defense of forum non conveniens.

7.14 Employment of Unauthorized Aliens Prohibited

7.14.1 Engineer agrees to comply with Missouri State Statute section 285.530 in that they shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.

7.14.2 As a condition for the award of this Agreement, Engineer shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Engineer shall also sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services.

7.14.3 Engineer shall require each subcontractor to affirmatively state in its contract with Engineer that the subcontractor shall not knowingly employ, hire for employment or continue to employ an unauthorized alien to perform work within the state of Missouri. Engineer shall also require each subcontractor to provide Engineer with a sworn affidavit under the penalty of perjury attesting to the fact that the subcontractor's employees are lawfully present in the United States.

7.15 Missouri Anti-Discrimination Against Israel Act: To the extent required by Missouri Revised Statute Section 34.600, Engineer certifies it is not currently engaged in and shall not, for the duration of this Agreement, engage in a boycott of goods or services from the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or persons or entities doing business in the State of Israel. If any provision of this paragraph, or the application of such provision to any person or circumstance, shall be held invalid, the remainder of this Agreement, or the application of such provision to persons or circumstances other than

those as to which it is held invalid, shall not be affected thereby. This paragraph shall not apply to contracts with a total potential value of less than one hundred thousand dollars (\$100,000.00) or to contractors with fewer than ten (10) employees.

7.16 No Waiver of Immunities

In no event shall the language of this Agreement constitute or be construed as a waiver or limitation for either party's rights or defenses with regard to each party's applicable sovereign, governmental, or official immunities and protections as provided by federal and state constitutions or laws.

7.17 Counterparts and Electronic Signatures

This Agreement may be signed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same document. Faxed signatures, or scanned and electronically transmitted signatures, on this Agreement or any notice delivered pursuant to this Agreement, shall be deemed to have the same legal effect as original signatures on this Agreement.

7.18 Agreement Documents

This Agreement includes the following exhibits, which are incorporated herein by reference:

<u>Exhibit</u>	<u>Description</u>
A	Scope of Work
B	Work Authorization Affidavit

In the event of a conflict between the terms and conditions of this Agreement and any exhibit hereto, the terms contained in this Agreement shall prevail and the terms contained in any exhibit shall subsequently prevail in the order attached hereto.

7.19 Entire Agreement

This Agreement represents the entire and integrated Agreement between Engineer and City relative to the Scope of Basic Services herein. All previous or contemporaneous agreements, representations, promises and conditions relating to Engineer's services described herein are superseded.

**[SIGNATURES ON FOLLOWING PAGE]**

IN WITNESS WHEREOF, the PARTIES have hereunto set their hands and seals the day and year written below.

**CITY OF COLUMBIA, MISSOURI**

By: \_\_\_\_\_  
City Manager

*SSU*

Date: \_\_\_\_\_

ATTESTED BY:

\_\_\_\_\_  
Sheela Amin, City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
Nancy Thompson, City Counselor

CERTIFICATION: I hereby certify that the above expenditure is within the purpose of the appropriation to which it is charged, Account No. 44008830-604023 40159, and that there is an unencumbered balance to the credit of such appropriation sufficient to pay therefor.

By \_\_\_\_\_  
Director of Finance

**GEORGE L. CRAWFORD & ASSOCIATES,  
INC., DBA CBB**

By: *[Signature]*  
Date: FEB 19, 2025

ATTEST:

By: *Brian Rensing*  
Name: Brian Rensing

January 31, 2025

# Exhibit A

Mr. Shane Creech  
Public Works Director  
City of Columbia - Missouri  
(573) 874-2489

Scope of Services for Street and Intersection Pedestrian Safety Study  
City of Columbia, MO

Dear Mr. Creech:

Per your request, we have developed a scope of services and fee estimate for traffic engineering services to support a Street and Intersection Pedestrian Safety Study for the City of Columbia, Missouri. The objective of this project is to support the City's efforts to work towards Vision Zero objectives with a focus on prioritizing equity and the safety of the most vulnerable road users. Toward that end, the CBB team will complete the following tasks.

**Task 1) Project Management:** CBB will manage the project schedule, budget, and organize meetings.

**1.1) Project Administration:** CBB will administer contracts with the City and prepare invoicing and payment requests. The invoices will include financial reports, and expenditures.

**1.2) Meetings and Coordination:** CBB will coordinate with the City throughout the project through conference calls, virtual, and/or in-person meetings. Approximately 3, 2-hour meetings are anticipated. The following key phases are anticipated:

- Kick-off/ Data collection (1 meeting)
- Draft recommendations (1 meeting)
- Project wrap-up (1 meeting)

**Task 2) Developing Recommended Criteria**

**2.1) Research applicable resources and standards** for industry best practices and other criteria for evaluating the safety of pedestrians in center median/islands. These references include, but not limited to:

- a. US Department of Transportation (USDOT);
- b. National Highway Traffic Safety Administration (NHTSA);
- c. Federal Highway Administration (FHWA);
  - i. Office of Safety;
  - ii. Manual on Uniform Traffic Control Devices (MUTCD);
- d. American Association of State Highway and Transportation Officials (AASHTO);
  - i. Roadside Design Guide;
  - ii. A Policy on Geometric Design of Highways and Streets;



- e. Occupational Safety and Health Administration (OSHA);
- f. Institute of Transportation Engineers (ITE);
- g. Highway Safety Manual;
- h. CMFClearinghouse.org;
- i. Data provided by the City;
- j. Missouri's Strategic Highway Safety Plan (Show Me Zero);
- k. National Association of City Transportation Officials (NACTO);
- l. Bikepedinfo.org;
- m. Missouri Coalition for Roadway Safety;
- n. International Municipal Signal Association (IMSA); and
- o. Other Similar Studies and/or ordinances both locally and across the nation regarding safety in medians.

**2.2) Evaluate the crash, speed, and volume data** provided by the City of Columbia. Note that this scope and fee does not include any traffic data collection tasks to be performed by CBB. The City of Columbia will provide historic volume, crash, and speed data. The City of Columbia will provide the additional volume data collection on City & MoDOT routes necessary to complete the final report.

- a. CRASH DATA - Crash analysis shall include vehicle, pedestrian, and bicyclist crashes over the past 5 years (2019-2023).
- b. VOLUME DATA - Volume considerations shall be given to the functional classification of the street as it relates to the geometry of the intersection, and the consultant shall provide recommendations on thresholds that increase the probability of a crash based upon the volume present at each location.
- c. SPEED DATA - Posted speed limit data will be provided by the City of Columbia. The consultants shall provide a recommendation based upon engineering expertise and existing technical studies that determine at what speed there is an increased likelihood of severe injury or death if a pedestrian is struck by a vehicle.
- d. Analyze data provided by the City and suggest any additional considerations that should be included in the final report. This work will include an evaluation of the correlations between vehicle speed, vehicle volume, and pedestrian injuries and/or fatalities.

**2.3) Develop Recommendations:** Based on the research of national engineering standards, guidelines, case studies, and best practices, as well as the data provided by the City of Columbia; develop recommendations for restricting pedestrians from medians and islands for reasons other than for temporary refuge when crossing a street.

**2.4) Documentation:** Prepare a draft written report documenting our findings and conclusions along with references and graphics (Task 3), as needed, to illustrate the recommendations. Finalize the draft based on City comments.

### **Task 3) Identify Locations that have Medan/Island Safety Concerns**

**3.1) Determine Median Locations:** Evaluate the crash history, traffic volumes, speed information, medians and physical geometrics, and other characteristics of up to 200 intersections and/or roadway segments to determine location(s) where pedestrians standing



in medians and islands are at highest risk. This evaluation would be initially completed by viewing aerial imagery.

**3.2) Field check** the locations that have median/island safety concerns to verify field conditions are accurate with aerial imagery.

**3.3) Provide a tabular list of locations** that have median/island safety concerns.

**3.4) Generate a map** to display locations of intersection, segment, median, and island safety concerns.

**3.5)** Incorporate the recommended median/island list and map to the project report.

**Task 4) Present Findings at City Council Meeting:** Present the findings at a City Council or other meeting determined by the City. The presentation will include a Power Point presentation accompanied by an executive summary of the final report.

#### **Final Deliverables and Digital Products**

At the project's conclusion, the CBB team will deliver all final products and data to the City, ensuring they are in a format compatible with the City's existing systems and ready for use.

- Collection and analysis of available data to include existing median infrastructure,
- Review of available crash data with a focus on pedestrian crashes,
- Comprehensive Street and Intersection Pedestrian Safety Study report,
- Provide all graphics, and
- Provide all collected data sets, and GIS layers.

#### **Fees**

We propose to perform the above scope of services on a time and materials basis based on the schedule of attached billing rates for a fee not to exceed \$96,540.00, as is detailed in the attachment.

#### **Period of Service**

CBB is ready to begin work upon City Council approval, with a project timeline of approximately three to four months. We will ensure all deliverables are completed within this time frame, allowing for any necessary adjustments.

We look forward to working with you on this project. Should there be any questions regarding this proposal, please contact me at (314) 922-3099 or [Sleight@cbbtraffic.com](mailto:Sleight@cbbtraffic.com).

Sincerely,

Shawn Leight, P.E., PTOE, PTP  
Vice President

CBB Fee  
Columbia Pedestrian Safety Study  
City of Columbia, MO  
January 31, 2025

	CBB							Total CBB Hours	Total CBB Labor
	Principal	Sr Eng III	Sr Plnr II	Project Engr III	Staff Eng III	Jr. Engr	CADD Tech III		
	\$ 230.00	\$ 215.00	\$ 190.00	\$ 175.00	\$ 145.00	\$ 115.00	\$ 110.00		
<b>Task 1: Project Management</b>								<b>36</b>	<b>\$ 6,870.00</b>
Task 1.1: Project Administration/Invoicing	4	2						6	\$ 1,350.00
Task 1.2: Meetings/Coordination	6	6	6	6			6	30	\$ 5,520.00
<b>Task 2: Developing Recommended Criteria</b>								<b>196</b>	<b>\$ 35,940.00</b>
standards	4	8	16	30		8		66	\$ 11,850.00
Task 2.2: Evaluate the crash, speed, and volume data	2	16		30		8		56	\$ 10,070.00
Task 2.3: Develop Recommendations	6	8	4	8				26	\$ 5,260.00
Task 2.4: Documentation	8	8	8	16			8	48	\$ 8,760.00
<b>Task 3: Identify Locations</b>								<b>292</b>	<b>\$ 46,150.00</b>
Task 3.1: Determine Median Locations	8	8	4	60			60	140	\$ 21,420.00
Task 3.2: Field Check	12	12		40			40	104	\$ 16,740.00
Task 3.3: Generate Map	2	2	2	6			6	18	\$ 2,980.00
Task 3.4: Generate List	2	2	2	6			6	18	\$ 2,980.00
Task 3.5: Add Locations to Document	2	2		4			4	12	\$ 2,030.00
<b>Task 4: Present Findings</b>								<b>26</b>	<b>\$ 5,360.00</b>
Create PowerPoint and Present Findings at City Council Meeting	10	8	4		4			26	\$ 5,360.00
<b>Total</b>	<b>66</b>	<b>82</b>	<b>46</b>	<b>206</b>	<b>4</b>	<b>16</b>	<b>130</b>	<b>550</b>	<b>\$ 94,320.00</b>
<b>Direct Costs: Travel Expenses to Columbia</b>									<b>\$ 2,220.00</b>

Grand Total \$ 96,540.00



**2025 FEE SCHEDULE\***  
For Contracted Services

<u>Classification</u>		<u>Hourly Rate</u>
Principal		\$230.00
Senior Engineer	Level VI	\$220.00
Senior Engineer	Level V	\$215.00
Senior Engineer	Level IV	\$210.00
Senior Engineer	Level III	\$200.00
Senior Engineer	Level II	\$195.00
Senior Engineer	Level I	\$190.00
Senior Planner	Level III	\$200.00
Senior Planner	Level II	\$190.00
Senior Planner	Level I	\$185.00
Project Engineer	Level V	\$185.00
Project Engineer	Level IV	\$180.00
Project Engineer	Level III	\$175.00
Project Engineer	Level II	\$170.00
Project Engineer	Level I	\$165.00
Staff Engineer	Level III	\$150.00
Staff Engineer	Level II	\$145.00
Staff Engineer	Level I	\$140.00
Staff Planner	Level II	\$140.00
Staff Planner	Level I	\$135.00
Jr. Engineer		\$115.00
Senior CADD Designer		\$115.00
CADD Tech	Level III	\$105.00
CADD Tech	Level II	\$100.00
CADD Tech	Level I	\$95.00
Construction Inspector		\$110.00
Field Tech	Level II	\$95.00
Field Tech	Level I	\$90.00
Senior Admin.		\$100.00
Marketing Spec.		\$90.00

Other Direct Costs (ODC)

Mileage	IRS Standard Rate/Mile
Special Prints or Plan Sheets	Actual Cost
Overnight Mail/Express	Actual Cost
Miscellaneous	Actual Cost

\* Note: Effective January 1, 2025  
 Rates subject to change January 1 of each calendar year.

CITY OF COLUMBIA, MISSOURI  
WORK AUTHORIZATION AFFIDAVIT  
PURSUANT TO 285.530 RSMo  
(FOR ALL CONTRACTS IN EXCESS OF \$5,000.00)

County of ST. LOUIS )  
State of MISSOURI ) ss.  
 )

My name is SRINIVASA R. YANAMAMANA. I am an authorized agent of George L. Crawford  
4 Assoc. Inc dba CBB (Bidder). This business is enrolled and participates in a federal  
work authorization program for all employees working in connection with services  
provided to the City of Columbia. This business does not knowingly employ any person  
who is an unauthorized alien in connection with the services being provided.

**Documentation of participation in a federal work authorization program is  
attached to this affidavit.**

Furthermore, all subcontractors working on this contract shall affirmatively state  
in writing in their contracts that they are not in violation of Section 285.530.1 RSMo and  
shall not thereafter be in violation. Alternatively, a subcontractor may submit a sworn  
affidavit under penalty of perjury that all employees are lawfully present in the United  
States.

*S R Yanamana*  
Affiant

SRINIVASA R. YANAMAMANA  
Printed Name

Subscribed and sworn to before me this 19<sup>th</sup> day of December, 2024

*Diane M. Miromonti*  
Notary Public

