

**AGREEMENT FOR  
PROFESSIONAL CONSULTANT SERVICES  
BETWEEN  
CITY OF BROKEN ARROW  
AND  
GARVER, LLC  
FOR  
RECONNECTING BROKEN ARROW RAISE GRANT  
ST24140**

This AGREEMENT, including Attachment A through Attachment E, between the City of Broken Arrow (OWNER) and Garver, LLC, (CONSULTANT);

**W I T N E S S E T H:**

WHEREAS, OWNER intends to provide design plans for the multimodal improvements of the roadway corridors included in the Reconnecting Broken Arrow RAISE Grant application (PROJECT) for which, OWNER has requested that CONSULTANT provide certain professional services as required and,

WHEREAS, CONSULTANT is qualified and capable to provide the professional services required;

NOW, therefore, in consideration of the promises contained in this AGREEMENT, OWNER and CONSULTANT agree as follows:

**ARTICLE 1 - EFFECTIVE DATE**

This AGREEMENT shall be effective upon signature of both parties.

**ARTICLE 2 - GOVERNING LAW**

This AGREEMENT shall be governed by the laws of the State of Oklahoma and venue for any action concerning this Agreement shall be in the District Court of Tulsa County, Oklahoma.

**ARTICLE 3 - SERVICES TO BE PERFORMED BY CONSULTANT**

CONSULTANT shall perform the SERVICES described in Attachment A, Scope of Services. If construction phase services are included, the CONSULTANT shall be the OWNER'S agent and representative to observe, record and report with respect to all services that are required or authorized by the construction documents.

**ARTICLE 4 – ORGANIZATION OF SUBMITAL DOCUMENTS**

CONSULTANT shall prepare the documents as described in Attachment B as part of this Agreement.

**ARTICLE 5 - COMPENSATION**

OWNER shall pay CONSULTANT in accordance with Attachment C, Compensation and Additional Services.

**ARTICLE 6 - OWNER'S RESPONSIBILITIES**

OWNER shall be responsible for all matters described in Attachment D, OWNER'S Responsibilities and Special Conditions.

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## **ARTICLE 7 - STANDARD OF CARE**

CONSULTANT shall perform the SERVICES undertaken in a manner consistent with the prevailing accepted standard for similar services with respect to projects of comparable function and complexity, and with the applicable state laws enforced as of the effective date of the AGREEMENT, as well as the specific codes, regulations, design criteria and construction specifications adopted by the owner and other governing policies published and generally considered authoritative by CONSULTANT'S profession that are in effect at the time of performance of these SERVICES. Notwithstanding the foregoing, CONSULTANT is obligated to perform its professional services in accordance with the care and skill ordinarily used by members of CONSULTANT's profession practicing under similar circumstances in a similar locality with respect to the laws, codes, regulations, design criteria and construction specifications that are applicable pursuant to this AGREEMENT.

## **ARTICLE 8 - LIABILITY**

8.1 General. Having considered the potential liabilities that may exist during the performance of these SERVICES, the benefits of the PROJECT, and CONSULTANT'S fee for the SERVICES; and in consideration of the promises contained in this AGREEMENT, OWNER and CONSULTANT agree to allocate and limit such liabilities in accordance with Article 10.

8.2 Indemnification. CONSULTANT agrees to defend, indemnify, and hold harmless OWNER, and its agents and employees, from and against legal liability for all claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are caused by the negligent or intentional acts, errors, or omissions of CONSULTANT, its agents or employees. In the event claims, losses, damages, or expenses are caused by the joint or concurrent negligence of OWNER and CONSULTANT, or their agents or employees, then they shall be borne by each party in proportion to each entity's own negligence.

8.3 Consequential Damages. OWNER shall not be liable to CONSULTANT for any special, indirect, or consequential damages resulting in any way from the performance of the SERVICES such as, but not limited to, loss of use, loss of revenue, or loss of anticipated profits.

8.4 Survival. Upon completion of all SERVICES, obligations, and duties provided for in this AGREEMENT, or if this AGREEMENT is terminated for any reason, the terms and conditions of this Article 8 shall survive.

## **ARTICLE 9 - INSURANCE**

During the performance of the SERVICES under this AGREEMENT, CONSULTANT shall maintain the following insurance:

- (1) General Liability Insurance, with a combined single limit of \$1,000,000 for each occurrence and \$1,000,000 in the aggregate;
- (2) Automobile Liability Insurance, with a combined single limit of not less than \$1,000,000 for each person, not less than \$1,000,000 for each accident and not less than \$1,000,000 for property damage; and
- (3) Professional Liability Insurance, with a limit of \$1,000,000 annual aggregate.

CONSULTANT shall furnish OWNER certificates of insurance, which shall include a provision that such insurance shall not be canceled without at least thirty (30) days written notice to OWNER. All PROJECT sub-consultants shall be required to name OWNER and CONSULTANT as certificate holders on their certificate of insurance for the PROJECT, and shall be required to indemnify OWNER and CONSULTANT to the same extent. CONSULTANT shall be held responsible to submit certificates of insurance for sub-consultants to OWNER prior to the sub-consultant's release to commence work.

## **ARTICLE 10 - LIMITATIONS OF RESPONSIBILITY**

CONSULTANT shall not be responsible for: (1) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the construction of the PROJECT; or (2) procuring permits, certificates, and licenses required for any construction unless such responsibilities are specifically assigned to CONSULTANT in Attachment A, Scope of Services.

## **ARTICLE 11 - LIMITATIONS OF RESPONSIBILITIES FOR ACTS OF OTHERS**

CONSULTANT shall not at any time supervise, direct, control or have authority over any work performed by any employee, contractor or other agent of OWNER. CONSULTANT shall not be responsible for the acts or omissions of any employee, contractor or other agent associated with the PROJECT except for its own employees, subcontractors and other agents.

## **ARTICLE 12 - OPINIONS OF COST AND SCHEDULE**

Since CONSULTANT has no control over the cost of labor, materials, or equipment furnished by others, or over the resources provided by others to meet PROJECT schedules, CONSULTANT'S opinion of probable costs and of PROJECT schedules shall be made on the basis of experience and qualifications as a professional. CONSULTANT does not guarantee that proposals, bids, or actual PROJECT costs will conform to OWNER'S cost estimates or that actual schedules will conform to OWNER'S projected schedules.

## **ARTICLE 13 - REUSE OF DOCUMENTS**

All documents, including, but not limited to, drawings, specifications, and details, reports, etc. prepared by CONSULTANT pursuant to this AGREEMENT are instruments of service in respect to the PROJECT. They are not intended or represented to be suitable for reuse by OWNER or others on extensions of the PROJECT or on any other project. Any reuse or adaptation without prior written verification by the CONSULTANT for the specific purpose intended will be at OWNER'S sole risk and without liability or legal exposure to the CONSULTANT. OWNER shall defend, indemnify, and hold harmless the CONSULTANT against all claims, losses, damages, injuries, and expenses, including attorney's fees, arising out of or resulting from such reuse.

## **ARTICLE 14 - OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY**

Except as otherwise provided herein, engineering documents, drawings, and specifications prepared by CONSULTANT as part of the SERVICES shall become the property of OWNER. CONSULTANT shall retain its rights in its standard drawing details, specifications, data bases, computer software, and other proprietary property. Rights to intellectual property developed, utilized, or modified in the performance of the SERVICES shall remain the property of CONSULTANT, but shall be provided to the OWNER, at no additional expense to the OWNER, pursuant to a non-exclusive license to use the work product for project purposes only.

## **ARTICLE 15 - TERMINATION**

This AGREEMENT may be terminated by either party upon written notice in the event of substantial failure by the either party to perform in accordance with the terms of this AGREEMENT. The non-performing party shall have fifteen (15) calendar days from the date of the termination notice to cure or to submit a plan for cure acceptable to the other party.

OWNER may suspend performance of this AGREEMENT for OWNER'S convenience upon written notice to CONSULTANT. Upon restart, an equitable adjustment may be made to CONSULTANT'S compensation, if the period of suspension has created an economic hardship for the CONSULTANT.

## **ARTICLE 16 - DELAY IN PERFORMANCE**

Neither OWNER nor CONSULTANT shall be considered in default of this AGREEMENT for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this AGREEMENT, such circumstances include, but are not

limited to, abnormal weather conditions such as floods, earthquakes, fire; civil disturbances such as war, riots, or other civil epidemic; power outages, strikes, lockouts, work slowdowns, or other labor disturbances; sabotage; judicial restraint, and inability to procure permits, licenses, or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or services required to be provided by either OWNER or CONSULTANT under this AGREEMENT.

Should such circumstances occur, the non-performing party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this AGREEMENT.

Notwithstanding any provision to the contrary, CONSULTANT may be entitled to an equitable adjustment in the AGREEMENT price and project schedule for impacts to the SERVICES resulting from events beyond CONSULTANT's control.

#### **ARTICLE 17 - WAIVER**

A waiver by either OWNER or CONSULTANT of any breach of this AGREEMENT shall be in writing. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

#### **ARTICLE 18 - SEVERABILITY**

The invalidity, illegality, or unenforceability of any provision of this AGREEMENT or the occurrence of any event rendering any portion or provision of this AGREEMENT void shall in no way affect the validity or enforceability of any other portion or provision of this AGREEMENT. Any void provision shall be deemed severed from this AGREEMENT, and the balance of this AGREEMENT shall be construed and enforced as if this AGREEMENT did not contain the particular portion or provision held to be void. The parties further agree to amend this AGREEMENT to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this Article shall not prevent this entire AGREEMENT from being void should a provision which is of the essence of this AGREEMENT be determined void.

#### **ARTICLE 19 - INTEGRATION**

This AGREEMENT represents the entire and integrated AGREEMENT between OWNER and CONSULTANT. It supersedes all prior and contemporaneous communications, representations, and agreements, whether oral or written, relating to the subject matter of this AGREEMENT.

#### **ARTICLE 20 - SUCCESSORS AND ASSIGNS**

To the extent permitted by Article 22, OWNER and CONSULTANT each binds itself and its successors and assigns to the other party to this AGREEMENT.

#### **ARTICLE 21 - ASSIGNMENT**

Neither OWNER nor CONSULTANT shall assign its duties under this AGREEMENT without the prior written consent of the other party. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this AGREEMENT. Nothing contained in this Article shall prevent CONSULTANT from employing independent sub-consultants, associates, and sub-contractors to assist in the performance of the SERVICES. However, third party entities must comply with Article 9.

#### **ARTICLE 22 - THIRD PARTY RIGHTS**

Nothing in this AGREEMENT shall be construed to give any rights or benefits to anyone other than OWNER and CONSULTANT.

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## **ARTICLE 23 - COMPLETION**

CONSULTANT shall complete the services within the time frame outlined on Attachment E, Schedule, subject to conditions which are beyond the control of the CONSULTANT.

## **ARTICLE 24 - IMMIGRATION COMPLIANCE**

24.1 Consultant shall demonstrate that he:

24.1.1 Has complied, and shall at all times during the term of this Contract, comply in all respects with all immigration-related laws, statutes, ordinances and regulations including without limitation, the Immigration and Nationality Act, as amended, the Immigration Reform and Control Act of 1986, as amended, and the Oklahoma Taxpayer and Citizen Protection Act of 2007 (Oklahoma HB 1804) and any successor laws, ordinances or regulations (collectively, the Immigration Laws"); and

24.1.2 Has properly maintained, and shall at all times during the term of this Contract, maintain any and all employee records required by the U.S. Department of Homeland Security ("DHS"), including, without limitation, properly completed and maintained Form I-9s for each of the Consultants employees; and

24.1.3 Has verified the employment eligibility for all employees hired on or after July 1, 2008 through DHS's E-Verify system, and shall at all times continue to verify the employment eligibility of all employees hired during the term of this Contract; and

24.1.4 Has required, and will at all times during the term of this Contract, require any sub-contractor utilized, hired or sub-contracted for by Consultant for the completion or undertaking of any duties, tasks or responsibilities under this Contract, to comply the requirements and obligations imposed by the Immigration Laws and set forth in Paragraph (I), parts (a), (b) and (c), above, with regards to each of the sub-contractor's employees.

24.2 Consultant will indemnify, defend and hold harmless City against any loss, cost, liability, expense (including, without limitation, costs and expenses of litigation and reasonable attorney's fees) demands, claims, actions, causes of action, liabilities, suits, damages, including special and consequential damages that arise from or in connection with, directly or indirectly, Consultants failure, deliberate or negligent, to fulfill its obligations and representations regarding verifying the employment eligibility of its employees and the employees of any subcontractor utilized by Consultant as set forth more fully in Paragraph 24.1 above.

## **ARTICLE 25 - COMMUNICATIONS**

Any communication required by this AGREEMENT shall be made in writing to the address specified below:

OWNER:

City of Broken Arrow  
485 N. Poplar Street  
Broken Arrow, OK 74012  
Contact: Mr. Brent Stout, P.E.  
Transportation Project Engineer

CONSULTANT:

Garver, LLC  
6100 S Yale Ave, Suite 1300  
Tulsa, OK 74136  
(918) 250-5922  
Contact Name: Michael Winterscheidt  
Transportation Team Leader

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of OWNER and CONSULTANT.

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IN WITNESS WHEREOF, the City Manager of the City of Broken Arrow, Oklahoma has hereunto set his hand, for and on behalf of the City of Broken Arrow and the CONSULTANT has signed, or caused his name to be signed, and seal affixed by proper authority, the day and year first above written and these presents have been executed in triplicate counterparts.

**OWNER:**

City of Broken Arrow, a Municipal Corporation

By: \_\_\_\_\_

Michael L. Spurgeon, City Manager

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

**CONSULTANT:**

Garver, LLC

By: \_\_\_\_\_

Michael J. Winterscheidt, Project Manager

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

MAY 5, 2025

(CORPORATE SEAL, IF APPLICABLE)

Attest: \_\_\_\_\_

City Clerk [Seal]

Attest: \_\_\_\_\_

Damon D. Domer

Damon D. Domer, Project Manager

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

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

5/5/2025

Approved as to form:

D. Graham Parker

6/10/2025

Assistant City Attorney

**VERIFICATION**

State of Oklahoma)  
County of Tulsa) §

Before me, a Notary Public, on this 5th day of May, 2025, personally appeared Michael J. Winterscheidt, known to be to be the Project Manager of Garver, LLC, and to be the identical person who executed the within and foregoing instrument, and acknowledged to me that he/she executed the same as his/her free and voluntary act and deed for the uses and purposes therein set forth.

My Commission Expires:

August 05, 2028

[Signature]  
Notary Public

AMBER RAKESTRAW  
NOTARY PUBLIC  
TULSA COUNTY  
STATE OF OKLAHOMA  
COMMISSION NO. 20009443  
EXPIRES 08-05-2028

**RESOLUTION ADOPTED  
BY THE MANAGEMENT COMMITTEE OF  
GARVER, LLC.**

The Management Committee of Garver, LLC, hereby certify that, as duly elected and qualified officers of said firm, the following resolution was adopted at a specially called meeting held on the 25 th day of April 2025, and that said Resolution is now in full force and effect:

NOW, THEREFORE, IT IS RESOLVED, that:

Brock E. Hoskins, Chair, President, Chief Executive Officer  
Michael J. Graves, Executive Vice President, Chief Operating Officer  
Jerry D. Holder, Jr., Senior Vice President, Treasurer  
Frank O. McIlwain, Senior Vice President  
Brent S. Schniers, Senior Vice President  
Jeffrey L. Sober, Senior Vice President  
Wm. Earl Mott, Jr., Senior Vice President  
Kurtis L. John, Senior Vice President, Secretary, General Counsel  
Matthew J. Gross, Vice President, Chief Information Officer  
Kyle M. Lawson, Vice President, Chief Financial Officer  
John C. Shaw, Vice President, Chief Human Resource Officer  
Laura E. Nick, Vice President, Chief Communications Officer

Colin M. Bible, Vice President  
John F. Cantabery, Vice President  
Josh B. Crawford, Vice President  
John C. Cutright, Vice President  
Jason C. Langhammer, Vice President  
Mary E. Mach, Vice President  
R. Blake Martin, Vice President  
Mitchell R. McAnally, Vice President  
Shannon D. McGarrah, Vice President  
Randall G. McIntyre, Vice President  
Todd E. Mueller, Vice President  
Daniel N. Olson, Vice President  
Ronald S. Petrie, Vice President  
J. Andy Pruitt, Vice President  
Blake W. Roberson, Vice President  
John H. Ruddell, Vice President  
Brian S. Shannon, Vice President  
Aimee R. Schroller, Vice President  
Patrick R. Sisemore, Vice President  
S. Shane Smith, Vice President  
Wallace C. Smith, Vice President  
Nicci D. Tiner, Vice President  
Wendy G. Travis, Vice President  
John T. Watkins, III, Vice President  
Adam T. White, Vice President  
Dakota G. Zimmerman, Vice President

Nick J. Altobelli, Senior Project Manager  
Amanda J. Anderson, Senior Project Manager  
Gregory A. Archer, Director of Architecture  
T. Wayne Black, Senior Project Manager  
Christopher M. Bohm, Senior Project Manager  
Bradley S. Bradshaw, Senior Project Manager  
James B. Cabiness, Senior Project Manager  
R. Wesley Cardwell, Business Team Leader  
John W. Carrigan, Business Line Leader  
Brian S. Chong, Water Design Center Manager  
Robert J. Cook, Government Relations Director  
Ernesto A. Flores, Water Design Center Manager  
Christopher D. Gatling, Water Design Center Manager  
Lance P. Klement, Senior Project Manager  
Scott C. Leach, Senior Project Manager  
Craig G. Leone, Project Manager  
Zachary T. Moore, Project Manager  
Jerry T. Martin, Project Manager  
Ryan G. Patton, Senior Project Manager  
Nathaniel R. Polsgrove, Planning Director  
Justin A. Rackley, Senior Project Manager  
Jenny E. Sallee, Senior Project Manager  
Matthew J. Serynek, Business Line Leader  
Michael L. Spayd, Project Manager  
Gregory T. Swoboda, Senior Project Manager  
Keith D. Tencleve, Director of Innovation & Business Support  
R. Lawren Wilcox, Business Line Leader  
Michael J. Winterscheidt, Project Manager

are authorized and empowered to execute proposals and contracts on behalf of Garver, LLC.

In witness hereto, we have subscribed by name as officers of Garver, LLC, and have caused the seal of the Limited Liability Company to be affixed this 25th day of April 2025.



Brock Hoskins, Chair and President

Kurtis L. John, Sr. Vice President, Secretary  
and General Counsel



**ATTACHMENT A  
TO  
AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES  
BETWEEN  
CITY OF BROKEN ARROW  
AND  
GARVER, LLC  
FOR  
RECONNECTING BROKEN ARROW RAISE GRANT  
ST24140**

**SCOPE OF SERVICES**

The following scope of services shall be made a part of the AGREEMENT dated the \_\_\_\_ day of \_\_\_\_\_, 2025.

**1.0 PROJECT UNDERSTANDING**

CONSULTANT understands that the OWNER has retained their professional services in order to complete a multimodal transportation study; prepare a multimodal level of service report; prepare plans for roadway, sidewalk, sidepath, and multi-use trail; and NEPA and environmental permitting assistance for the study area included in the OWNER's 2023 RAISE Grant Application, Reconnecting Broken Arrow: Planning for Multimodal Improvements. These documents shall include, but not be limited to, the following: Multimodal Level of Service report, preliminary design plans detailing the intent of the project; environmental studies and NEPA document, standard details and standard drawings associated with the project specifics; construction specifications; general conditions, and special conditions.

In addition, the CONSULTANT understands that the OWNER has \$ 7,300,000.00 budgeted for this PROJECT that includes all professional consultant fees and right-of-way acquisition documents. The CONSULTANT is required to keep the OWNER apprised of the PROJECT costs and advise the OWNER of necessary cost reduction measures, if required, during the course of the PROJECT.

Furthermore, CONSULTANT understands: This project consists of study and design improvements to the following corridors in the study location:

- A new multiuse trail design between Nienhuis Park and Hillside Drive
- Roadway widening and rehabilitation
  - N Aspen Avenue from the intersection with W Omaha Street to E 46<sup>th</sup> Street
  - N Elm Place from W Kenosha Street to US-51
  - N Elm Place from US-51 to W Albany Street
  - N 9<sup>th</sup> Street from E Kenosha Street to E Albany Street

- N 9<sup>th</sup> Street and E Kenosha Street Intersection
- N 9<sup>th</sup> Street and E Hillside Drive Intersection
- Sidewalk and Sidepath design
  - Kenosha Street from N Aspen Avenue to N 9<sup>th</sup> Street
  - N Aspen Avenue from W Kenosha Street to W Omaha Street
  - E 46<sup>th</sup> Street from N Aspen Avenue to Rosa Parks Elementary School
  - E Hillside Drive from N 9<sup>th</sup> Street to Camino Villa Neighborhood
  - E Hillside Drive from E Albany Street to N 9<sup>th</sup> Street
  - E Kenosha Street through the Camino Villa Neighborhood to Timber Ridge Elementary School

## **2.0 PROJECT SCOPE**

CONSULTANT shall coordinate the subsurface exploration and design the subgrade and pavement section(s) as well as structure foundations; perform civil design including water and sewer lines, and grading; and perform hydraulics/hydrology necessary to properly design the drainage structures as well as bridge sizing/configuration as necessary. All necessary structural design required for the project including foundation design shall be performed by the CONSULTANT. CONSULTANT shall also coordinate gas, electric, telecommunication, and other utility relocation services with private utility companies.

CONSULTANT shall provide consulting services as follows:

- Geotechnical Services and Coordination
- Survey Services and Coordination
- Public and Stakeholder Outreach and Coordination
- Environmental Studies and NEPA Documentation
- Geometric, Site Grading, Drainage, Paving, and Miscellaneous Design
- Lighting Study and Design
- Landscape Architectural and Signage Design
- Public Utility Design and Relocations (as required)
- Private Utility Relocation Services and Coordination
- Right-of-Way Documents Preparation & Staking

## **3.0 SCOPE OF SERVICES**

### **PHASE 1 – CORRIDOR PLANNING AND PUBLIC/STAKEHOLDER ENGAGEMENT**

The first phase of this study consists of multimodal traffic analysis including data

collection, level of service analysis, crash data analysis, consideration of multimodal accessibility and safety countermeasures, simulation modeling and reporting. The proposed improvements will be presented to the public and key stakeholders through a detailed engagement process.

### **3.1 DATA COLLECTION**

CONSULTANT will collect traffic volumes including pedestrians and bicycles, travel speeds, inventory existing roadway and intersection geometry, including crosswalks, crossing facilities and trail paths, ADA compliant infrastructure, pedestrian push buttons, traffic signal timings, lane widths, presence of bike lanes or trails, crash data, intersections and driveways inventory, lighting inventory, school bus stops and bus routes, and micro-transit inventory. In addition, multimodal data from big data provider, Replica, will be utilized to better define pedestrian risk, speeding data, and mode share.

#### **3.1.1 Traffic Volume Data Collection**

Intersection turning movement counts (including bicycle and pedestrian movements) will be collected for 24-hours in 15-minute increments on all the approaches at the following locations for this project.

1. W Omaha Street and N Aspen Avenue
2. N Aspen Avenue and W Granger Street
3. W Albany Street and N Aspen Avenue
4. N Aspen Avenue and W Vancouver Street
5. N Aspen Avenue and W Tacoma Street
6. W Kenosha Street and N Aspen Avenue
7. W Kenosha Street and N Narcissus Avenue
8. W Kenosha Street and Rhema Bible Church Entrance
9. W Kenosha Street and N Elm Place
10. N Elm Place and W Norman Street
11. Kenosha Street and N Main Street
12. E Kenosha Street and N 4<sup>th</sup> Street
13. N 9<sup>th</sup> Street and E Tacoma Street
14. E Albany Street and N 9<sup>th</sup> Street
15. N 9<sup>th</sup> Street and E Juneau Street
16. E Kenosha Street and N 27<sup>th</sup> Street/Kilby Drive
17. E Kenosha Street and N 33<sup>rd</sup> Street
18. E Hillside Drive and N 23<sup>rd</sup> Street
19. E Hillside Drive and N 20<sup>th</sup> Street
20. E Albany Street and N 23<sup>rd</sup> Street
21. E Albany Street and N 12<sup>th</sup> Street/Creekwood Drive
22. E Albany Street and N 16<sup>th</sup> Street

In addition, traffic data from ODOT's adjacent study of the Broken Arrow Expressway (SH-51) will be utilized to provide consistency between the study.

The data collection plan for that project is detailed below.

1. N Aspen Avenue and WB Broken Arrow Expressway
2. Ramp Count with Classification – WB Broken Arrow Expressway
3. N Aspen Avenue and EB Broken Arrow Expressway
4. N Elm Place and W Queens Street
5. N Elm Place and W Queens Circle
6. N Elm Place and EB Broken Arrow Expressway
7. N Elm Place and WB Broken Arrow Expressway
8. N Elm Place and Stone Wood Drive
9. N Elm Place and E Albany Street
10. E Kenosha Street and N 9<sup>th</sup> Street
11. N 9<sup>th</sup> Street and E Lansing Street
12. N 9<sup>th</sup> Street and EB Broken Arrow Expressway
13. N 9<sup>th</sup> Street and WB Broken Arrow Expressway
14. N 9<sup>th</sup> Street and E Hillside Drive
15. E Kenosha Street and EB Broken Arrow Expressway
16. E Kenosha Street and WB Broken Arrow Expressway
17. E Kenosha Street and N 20<sup>th</sup> Street
18. E Kenosha Street and N 23<sup>rd</sup> Street
19. SH 51 and E Houston St
20. SH 51 Mainline Count with Classification and Speed (Two Locations)
21. Ramp Count with Classification – WB Broken Arrow Expressway
22. Ramp Count with Classification – EB Broken Arrow Expressway
23. Ramp Count with Classification – EB Muskogee Turnpike
24. Ramp Count with Classification – SB Creek Turnpike to WB Muskogee Turnpike
25. Ramp Count with Classification – EB Muskogee Turnpike
26. Ramp Count with Classification – WB Muskogee Turnpike to SB Creek Turnpike
27. Ramp Count with Classification – EB Muskogee Turnpike to SB Creek Turnpike
28. Ramp Count with Classification – NB Creek Turnpike to WB Muskogee Turnpike
29. Ramp Count with Classification – SB Creek Turnpike to EB Muskogee Turnpike
30. Ramp Count with Classification – EB Muskogee Turnpike to NB Creek Turnpike
31. Ramp Count with Classification – NB Creek Turnpike to EB Muskogee Turnpike

Traffic volumes collected will be checked for any errors and corrected/recounted if needed. Historical ADTs for the study corridor will be obtained from the OWNER and ODOT as available. Supplemental driveway same counts will be taken in the field as required to analyze alternatives.

#### 3.1.2. Speed Data

CONSULTANT will utilize field equipment with a GPS unit to collect operating speeds and will supplement this data with information from Replica, a big data provider. Speeds will be collected in all travelling directions on major facilities for AM and PM peak periods.

#### 3.1.3. Field Reconnaissance

CONSULTANT will collect existing roadway and intersection geometry, traffic signal information, queue lengths at intersections, lighting, and intersections and driveways inventory.

Existing congestion levels and local peaking characteristics will be documented during the peak hours. Traffic signal timing information (including pedestrian crossing intervals) will be obtained from the City of Broken Arrow.

#### 3.1.4. Crash Data

Crash data for the most recent five-year period will be obtained from the OWNER/ODOT.

#### 3.1.5. Traffic Signal Timing Data

Operating plans for every traffic signal in the study area will be tabulated to reflect time of day plans and pedestrian crossing information.

#### 3.1.6. Review Prior Plans/Studies

CONSULTANT will review prior traffic studies and planning documents related to the study area.

#### 3.1.7. Replica Data

CONSULTANT will assess “big data” from Replica to provide active transportation analysis, origins and destinations, and the safe streets planner module.

### **3.2 TRAFFIC VOLUME DEVELOPMENT**

CONSULTANT will use the collected data and the information to produce balanced traffic volumes for the existing year conditions. If needed, the existing volumes will be adjusted to reflect any latent demand volume that wants to use the study area but is constrained due to downstream traffic congestion.

CONSULTANT will analyze historical and current traffic volumes along the corridor to calculate annual growth rates along various segments of the study area. With this information, information from INCOG, ODOT, and input from the OWNER staff, CONSULTANT will determine the 10-year and 20-year traffic projections for the study area. CONSULTANT will develop Existing, Future No-Build, and Future Build models for AM and PM peak periods with traffic data inclusive of pedestrians and bicycles.

### **3.3 TRAFFIC CAPACITY ANALYSIS AND MICRO-SIMULATION**

Existing and future year traffic capacity analysis will be conducted using Synchro for HCM analysis and Vissim for microsimulation. A simulation model will be developed for existing and each of the conceptual roadway alternatives in Vissim. These models will help to identify any capacity and queuing issues that might need to be addressed in the study corridor. Vissim is a software capable of modeling vehicles as well as pedestrians and cyclists, and relevant facilities.

### **3.4 MULTIMODAL LEVEL OF SERVICE (MMLOS) ANALYSIS OF EXISTING AND CONCEPTUAL ROADWAY ALTERNATIVES**

MMLOS methodology will take into consideration the roadway elements such as lanes, lane widths, turning islands, cross street widths, on-street parking, bike lanes, median type and width, clear sidewalk width, and presence of curb; traffic elements such as traffic control type, signal timing, traffic volumes, left turn lanes, and heavy vehicle percent; and transit elements such as number of bus stops, shelters/benches, exclusive transit lane, bus frequency, average dwell time, and near-side stops to analyze the roadway segment for multi-modal performance using HCM 7<sup>th</sup> Edition methodology. A LOS score will be calculated for each mode of travel on road segments.

Conceptual roadway alternatives will be evaluated with and without additional improvements such as rectangular rapid flashing beacons, mid-block crossings with median refuge, raised crosswalks, and access restrictions from the access/mobility task. In addition, CONSULTANT will assess the viability of Intelligent Transportation Systems installations, which may include smart signals that use advanced detection to adjust the timing and prioritize bike/ped traffic at intersections (e.g., by utilizing Leading Pedestrian Interval), thus reducing wait times and making active modes of transportation more appealing. This exercise will be helpful in determining the combinations of conceptual roadway improvements and additional improvements that meet the standards set forth in the INCOG Go Plan, City of Broken Arrow Next Comprehensive Plan, and Complete Streets Initiative.

CONSULTANT will consider several tools to conduct MMLOS analysis for existing and conceptual roadway alternatives, including: HCM MMLOS methodology, Level of Traffic Stress (LTS) analysis, ActiveTrans Priority tool by Federal Highway Administration, Cycling LOS tools (Bicycle Compatibility Index and Bicycle LOS), and Pedestrian LOS (PLOS) models. CONSULTANT will use HCM MMLOS methodology as the primary methodology, using other tools only to supplement when applicable. Several scenarios will be created from combining conceptual roadway alternatives with additional improvements described above.

### **3.5 CRASH ANALYSIS**

Historical crashes involving both motorist and non-motorist vehicles will be analyzed to identify trends in the data and potential hot-spot locations within the City. Crash diagrams will be developed, and the data will be categorically analyzed based on type and severity of collisions, location, lighting condition, and pedestrian/bike related crashes. Crash modification factors will be applied for

potential safety benefits from proposed countermeasures.

### **3.6 ACCESS/MOBILITY STUDY**

An Access/Mobility study will be conducted to identify access points/driveways which could be modified or eliminated to improve the traffic flow and safety of the study corridors. Detailed inventory of the driveways including the property served would be noted during the data collection through use of in-house tools. Access management strategies such as eliminating redundant driveways to the same property, relocating driveways near signalized intersections, improving the driveways by realigning or narrowing, prohibiting left turning movements, and implementing shared use driveways would be appropriately recommended to improve mobility and safety along the study corridor.

CONSULTANT will analyze the operating speeds across the entire study area and identify segments that have highly varying operating speeds from posted speeds. Factors that might be causing these higher speed fluctuations will be identified and countermeasures will be recommended. The countermeasures may include raised crosswalks, road diets, narrowed lane widths, landscaping and street trees, or roundabouts.

### **3.7 LIGHTING STUDY**

Lighting levels will be assessed in the study area and compared to the recommended roadway lighting levels set forth by the Illumination Engineering Society of North America (IES). IES Lighting Handbook, IES RP-8 for Roadway Lighting, and IES LM-50-99 for Photometric Measurements of Roadway Lighting Installations will be referenced.

Lighting levels will be taken on grid spacing at road level in order to provide data points used to analyze the existing lighting throughout the study area.

CONSULTANT will use LumiTracker, an in-house developed solution that can assess illumination in the study area and present the findings on a user-friendly dashboard. The values will include horizontal average illuminance, horizontal minimum illuminance, horizontal maximum illuminance, horizontal uniformity (max:min), and horizontal uniformity (avg:min).

Measurements will be divided and represented in zones separating compliant from deficient areas. A cost estimate to upgrade the roadway lighting to fully meet IES recommended values will be provided.

### **3.8 TRAFFIC SIGNAL TIMING REVIEW FOR MULTIMODAL IMPROVEMENT**

Existing traffic signal operating plans will be evaluated for progression as well as

multimodal improvements such as consideration of lower cycle lengths, leading pedestrian intervals, and updated crossing times. Timing plans will be evaluated for implementation with supporting documentation. New timing will be implemented for enhanced operation.

### **3.9 DEVELOPMENT OF MULTIMODAL STUDY ALTERNATIVES AND RECOMMENDATIONS**

Study alternatives will be developed based on roadway classification, right-of-way standards, and future traffic projections. CONSULTANT will collaborate with the OWNER staff to determine the OWNER'S concept for the corridors and develop study alternatives that meet the needs of all the users. The focus of the alternatives will be on a design that provides continuity along the corridors that traverse the city thus support people who choose to walk, ride a bicycle (including e-bikes, scooters) or take a bus. This will include recommendations for new or improved pedestrian crossings (traffic signals, HAWKs, or RRFBs), and improvements near school zones as necessary.

### **3.10 INTERSECTION STUDY – OMAHA AT ASPEN**

CONSULTANT will perform a traffic study of the intersection to determine the current traffic demand, crash experience, and operation. The consultant will assess historic growth trends, projection information from INCOG, and trip generation from known local developments. Future operating conditions will be assessed for a no build scenario and for the build configuration, which will be determined iteratively to optimize the turn lane lengths and signal phasing characteristics. A summary memo will document the study process.

### **3.11 DOCUMENTATION**

A draft final report documenting the entire study process along with technical summaries, findings, and conclusions will be prepared. The draft report will be shared electronically with the OWNER staff prior to meeting to discuss OWNER'S comments. Upon receiving the comments from the OWNER, CONSULTANT will revise the draft report accordingly and produce the final report.

### **3.12 PUBLIC & STAKEHOLDER ENGAGEMENT**

3.12.1 CONSULTANT will prepare a Public Involvement Plan (PIP) that will guide stakeholder and public involvement activities for the life of the project. The PIP will include a discussion of the OWNER'S regulatory responsibilities for public involvement, the objectives of public involvement for the project, the proposed tools and activities, and the general timeline. Specific attention will be given to identification and outreach to disadvantaged and underserved communities.

3.12.2 Phase 1 will include the formation of the Advisory Committee (AC) which will meet periodically throughout the project. It is anticipated that the AC will be comprised of the following entities; however, the final composition of the AC will be determined by the OWNER:

- City of Broken Arrow



- City Manager's Office
- Engineering and Construction
- Streets and Stormwater
- Parks and Recreation
- Development Services
- INCOG
- ODOT
- Elected Officials—City Councilor
- Broken Arrow Chamber of Commerce
- MetroLink Tulsa
- School Districts
  - Union Public Schools
  - Broken Arrow Public Schools
- Tulsa County Representative
- Wagoner County Representative
- City of Tulsa
- Neighborhood Associations
- Center for Individuals with Physical Challenges

CONSULTANT will coordinate the formation of the AC and will coordinate all meetings. It is anticipated that up to three (3) virtual AC meetings will occur during Phase 1. For each meeting, CONSULTANT will coordinate and hold a pre-meeting with the OWNER to discuss the meeting goals, agenda, and content. The first AC meeting will communicate the goals and objectives of the project to the AC and solicit input on specific needs and potential solutions. The second AC meeting will present the alternatives developed and obtain input to be used in selecting the final alternatives for design. A third meeting will be held if additional input is needed during the Phase 1 process. Tools such as Mentimeter will be used to gather targeted feedback from the AC as well as more open-ended comments.

3.12.3 CONSULTANT will develop and launch a project website in Phase 1 that will remain active for the duration of the project. The website will house general information about the project and serve to inform the public about progress and opportunities for public input. The website will include a comment page for the public to give input at any time during the project. Eventually the website will include maps and additional detail about the proposed improvements. The website will be advertised in conjunction with the first public meeting (see Section 3.12.4) and on the OWNER'S website. See Section 3.31 for Software Services Additional Language.

3.12.4 CONSULTANT will develop an on-line survey to include on the website. This survey will be used to gather targeted feedback from the public in addition to more open-ended comments. The content of the survey will be developed in coordination with the OWNER.

3.12.5 One in person public meeting will be held in Phase 1 to present alternatives and obtain public feedback. Prior to the public meeting, CONSULTANT will coordinate and hold a pre-meeting with the OWNER to discuss the meeting goals, format, and content. Notification of the public meeting will be done through a combination of letters, postcards, and information on the

OWNER'S website. CONSULTANT will prepare a presentation, display boards, handouts, and comment forms and will coordinate all meeting logistics. It is anticipated the meeting will take place in the evening at a location convenient to the project. All materials presented at the public meeting will also be available on the project website.

## **PHASE 2 – CONCEPTUAL DESIGN AND ENGINEERING**

### **3.13 ADMINISTRATIVE/MANAGERIAL DUTIES:**

CONSULTANT shall be responsible to perform the following tasks throughout the course of the PROJECT:

3.13.1 Document all meetings, conferences, coordination, phone conversations, etc. and send documentation to OWNER within three (3) calendar days.

3.13.2 Meet with the Owner in a Pre-Design Conference in order to determine design criteria, requirements and codes and other critical design features of the Project such as preferred alignment as well as project schedule and milestone dates. All designs shall meet current City of Broken Arrow codes, regulations and design criteria as found in the latest versions of the Engineering Design Criteria Manual, Land Subdivision Code, Zoning Code, Traffic Control Manual, Standard Construction Specifications, City Ordinances, Comprehensive Plan, AASHTO Green Book, MUTCD, and NACTO Urban Street Design Guide.

3.13.3 Provide Owner with a list of all proposed sub-consultants and tasks sub-consultants are responsible to perform.

3.13.4 Meet with the Owner to discuss review comments on each phase of the project, and incorporate appropriate comments into following phase.

### **3.14 LAND SURVEY:**

Upon receiving the written Notice to Proceed, the Consultant shall perform the following tasks in accordance with the schedule provided in Attachment E:

3.14.1 Establish horizontal and vertical control necessary for the design and construction of the project including the establishment of reference points and benchmarks at each end and at interim points of the project and setting PK nails, at distances no greater than 500 feet between PK nails and at offset locations sufficient as to not be disturbed during construction, throughout the project. Control shall be in accordance with the OWNER'S Engineering Design Criteria.

3.14.2 Conduct all field surveys, including topographical, boundary, and aerial surveys, as necessary, for design of the project.

3.14.3 Research and field-verify, to the fullest extents possible (typically S.U.E. level "C"), the horizontal and vertical locations of all public and private utilities within the project boundary, which may be in conflict with the project and include in base survey along with all pertinent utility

easements. It is incumbent upon CONSULTANT to determine if further investigation is necessary and advise OWNER of such need.

3.14.4 Determine existing right-of-way and easements.

3.14.5 Prepare and submit right-of-way documents for said project as defined in Section 3.16.

3.14.6 Submit one (1) drawing on electronic media (AutoCAD 2018 version preferred) and one (1) PDF file of the final survey.

### **3.15 GEOTECHNICAL SERVICES**

Geotechnical is anticipated for the completion of the project and is included in this scope of services. Any information provided by Owner to CONSULTANT is assumed as correct.

CONSULTANT will be responsible for contracting with a subconsultant to obtain geotechnical data necessary for the design of the roadway improvement Projects. The geotechnical subconsultant will provide 37 total borings at the locations described in Exhibit C. There will be 35 pavement borings and 2 shoulder borings, spaced at approximately 500 foot intervals. The thickness of the pavement cores will be recorded and photographed, to a depth of 3 feet or auger refusal. The geotechnical subconsultant will provide design recommendations for the roadway section based on their subsurface findings, including feasibility of mill/overlay of the existing pavement and pavement thickness recommendations for roadway reconstruction.

### **3.16 PLANNING AND CONCEPTUAL DESIGN PHASE:**

Upon receiving the written Notice to Proceed, the Consultant shall perform the following tasks in accordance with the schedule provided in Attachment E:

3.16.1 With OWNER input, establish project goals and alignments for streets, storm sewers, sanitary sewers and water lines as required.

3.16.2 Conduct all necessary geotechnical investigations and submit recommendations to the Owner for project sub-grade, pavement and foundation design.

3.16.3 Develop conceptual plan for street and stormwater improvements, including new pedestrian structures, modification to existing structures, needs for barrier protection, and soil retaining structures.

3.16.4 Develop conceptual plan for waterline relocations as needed to support street and stormwater improvements. Waterline relocations will be of same diameter and based on as needed limits for conflicts with proposed improvements.

3.16.5 Develop conceptual plan for sanitary sewer relocations as needed to support street and stormwater improvements. Sanitary sewer relocations will be of same diameter and based on as needed limits for conflicts with proposed

improvements.

3.16.6 Evaluate existing drainage system, capacity and conditions. Provide conceptual plan schematics and calculations for drainage design additions/improvements. Hydrology and hydraulic analysis will be performed for all locations that involve crossing or impacting a FEMA mapped floodplain or a stream delineated on the USGS Topographic Map. A Certified Letter of Map Revision (CLOMR) is expected to be required for the preliminary design of the Multimodal Trail. One (1) CLOMR preparation and submittal is included in this scope of services. Additional FEMA coordination, CLOMR, or LOMR tasks may be added by supplemental agreement.

3.16.7 Evaluate existing structures and provide a summary memo of findings. Structural evaluation will include:

- 3.16.7.1 Review of original construction plans, if available.
- 3.16.7.2 Review of previous bridge inspection reports, if available
- 3.16.7.3 Performing a site visit to verify geometry, member sizes, types and layout, and site conditions, assess general structural component and channel condition ratings (as applicable). General condition ratings will be provided as Good, Fair, or Poor, consistent with the National Bridge Inspection Standards (NBIS).
- 3.16.7.4 Performing a load rating analysis of bridge superstructures and culverts in accordance with the AASHTO specifications to verify structural adequacy of bridge-classed structures. A structure having an opening measured along the center of the roadway, trail or sidewalk of more than 20 feet between shall be considered a bridge-classed structure. Load rating analysis will be required if there is a change in loading conditions, signs of visible distress that has not been previously analyzed, or at the request of the OWNER. Load rating methods will include:
  - 3.16.7.4.1 Load and Resistance Factor Rating (LRFR) methodology in accordance with the Manual for Bridge Evaluation, 3rd edition with current interim revisions for bridges carrying both vehicular and pedestrian traffic.
  - 3.16.7.4.2 Load and Resistance Factor Rating (LRFR) methodology in accordance with the LRFD Guide Specifications for the Design of Pedestrian Bridges, 2nd Edition, with current interim revisions for structures carrying pedestrian traffic only.
  - 3.16.7.4.3 The summary memo will document site visit findings, load rating results, and recommendations for repair as needed to meet the needs of proposed alternatives. Details will be included in the Planning and Conceptual Design Phase submittal.

3.16.8 Provide a conceptual layout of proposed retaining wall structures, as needed. Conceptual layout of retaining wall structures will consider wall height, right-of-way and utility impacts, and constructability and maintenance considerations. Geotechnical investigations will not be performed for preliminary retaining wall design and subsurface conditions will be assumed

3.16.9 Coordinate with utility companies to provide adequate relocation corridors as necessary. Provide conceptual design plans to all utility companies electronically (i.e. pdf or CADD files as required) at submittal of conceptual design plans.

3.16.10 Identify “Ultimate” right-of-way required to accommodate construction of project and necessary utility relocation.

3.16.11 Submit three (3) bound sets of 1/2 size prints, one (1) set of drawings on electronic media (AutoCAD 2018 preferred, or earlier version), one (1) PDF file of the Planning & Conceptual design, and planning & conceptual cost estimate using 20% contingency.

3.16.12 The Planning and Conceptual Design Phase submittal shall include:

- Land Survey
- Title Sheet
- Typical Sections
- Miscellaneous Details
- Right-of-Way Map & Data (Existing Right-of-Way)
- Survey Data Sheet
- Plan and Profiles (Conceptual)
- General Plan and Elevation (as needed)
- Retaining Wall Layout (Conceptual)
- Identify any Public Utility Relocations on P&P
- Conceptual cross sections

3.16.13 Planning & Conceptual Design Review.

3.16.14 Attend a meeting with the OWNER to review the Conceptual Design Phase submittal and provide meeting minutes.

3.16.14.1. Prepare “Ultimate” right-of-way instruments which provide sufficient room to accommodate utility relocations and other construction activities. Instruments to be provided in Microsoft Word and PDF formats along with closure reports.

3.16.14.2. Prepare Right-of-Way map/plan sheet(s).

3.16.14.3. Submit, prior to completion of the preliminary design phase, three (3) bound sets of 1/2 size plan sheets and one (1) set of legal instruments, in both Microsoft Word and PDF formats, indicating “Ultimate” right-of-way documents for the project final taking/acquisitions requirements.

### **3.17 PRELIMINARY DESIGN PHASE:**

Following approval of the Planning and Concept Design, and upon receiving the written Notice to Proceed, the Consultant shall perform the following tasks in accordance with the schedule provided in Attachment E:

3.17.1 Perform preliminary drainage analysis and design in accordance with City of Broken Arrow Engineering Design Criteria Manual and Stormwater Management Ordinance Chapter 25.

3.17.2 Perform preliminary roadway geometric layout and design.

3.17.3 Provide preliminary design proposed structures, including span optimization, superstructure options including prestressed concrete beams, structural steel beams/girders, and prefabricated spans, and efficient substructure configuration.

3.17.4 Provide preliminary retaining wall design, including footing sizing and layouts.

3.17.5 Design and detail nonstandard miscellaneous details, as required by the study.

3.17.6 Perform an aesthetic study for corridor continuity, which will include aesthetic options such as form liners for retaining walls, parapet walls, and bridge columns, aesthetic features such as aesthetic columns and shields, lighting, fencing, decorative towers, Aesthetic study deliverables include:

3.17.6.1 Aesthetic design report summarizing recommended options.

3.17.6.2 Conceptual details of proposed aesthetic options.

3.17.6.3 Cost estimates for proposed aesthetic options.

3.17.7 Prepare preliminary construction plans and details, including public utility relocations, as necessary for proposed project.

3.17.8 Attend two (2) public meetings to present conceptual design plans and provide any figures, displays, or media required for use in the public meetings.

3.17.9 Participate in pre-final coordination with private and public utility companies.

3.17.9.1 Meet with utility companies and OWNER to conduct coordination for relocation of utility facilities and services in conflict with the project and request relocation plans/proposals from private utility companies.

3.17.9.2 Review relocation plans and proposals submitted by private utilities, and provide comments and recommendations prior to OWNER approval and execution of the relocation plans. Obtain releases for non-relocated facilities.

3.17.9.3 Provide preliminary design plans to all utility companies electronically (i.e. pdf or CADD files as required).

3.17.10 Prepare preliminary quantity estimate.

3.17.11 Prepare preliminary construction cost estimate using 15% contingency.

3.17.12 Submit six (6) bound sets of 1/2 size prints, one (1) set of drawings on

electronic media (AutoCAD 2018), one (1) PDF file, and one (1) set of full-size prints (if required) of the Preliminary plans.

3.17.13 The Preliminary Design Phase submittal shall include:

- Geotechnical Investigation Report
- Title Sheet
- Pay Quantities and Pay Item/General Notes
- Typical Sections
- Miscellaneous Details
- Right of Way Map and Data with proposed right of way
- Project Drainage Area Map
- Survey Data Sheet
- Plan and Profiles
- Retaining Wall Layout
- Lighting removal and installation plans, as indicated in the study
- Signal Improvement Plans, as necessary
- Waterline Relocation Sheets, as necessary
- Sanitary Sewer Relocation Sheets, as necessary
- Public Utility Relocation Sheets, as necessary
- Special Details Sheets, as necessary
- Cross Section Sheets
- General Plan & Elevation, as necessary
- Nonstandard Miscellaneous and Structural Details, as necessary

3.17.14 Preliminary Design Review.

3.17.15 Attend a meeting with the OWNER to review the Preliminary Design Phase submittal and provide meeting minutes.

### **3.18 ROADWAY PROJECTS**

3.18.1 N Aspen Ave.—Intersection at W Omaha St. to E 46<sup>th</sup> St.: The project scope is a widening of the road at the intersection of N Aspen Ave. and W Omaha St., roadway improvements between the intersection and E 46<sup>th</sup> St., signal improvements, sidewalk improvements, side path improvements, gateway monument sign, waterline and sanitary sewer relocations, drainage design, drainage analysis of the RCB approximately 1000' north of N Aspen Ave. and W Omaha St., and evaluate and design of RCB extensions or replacement.

3.18.2 N Elm Pl.—W Kenosha St. to US-51: The project scope is improvements to the N Elm Pl. and W Kenosha St. intersection, roadway improvements of N Elm Pl. between the intersections of W Kenosha St. and the interchange with eastbound US-51, signal improvements, sidewalk improvements, side path improvements, waterline and sanitary sewer relocations, drainage design, and approximately 1500 LF of retaining wall improvements. The bridge (NBI 24809) and interchanges to US-51 are excluded from the scope of this project, except for verification of existing bridge geometry. A proposed pedestrian bridge over US-51

will be considered based on the findings of Phase 1 of this study.

**3.18.3 N Elm Pl.—US-51 to W Albany St.:** The project scope is improvements to the N Elm Pl. and W Albany St. intersection, the N Elm Pl. and Queens Cir. Intersection, roadway improvements of Elm Pl. between the intersections of westbound US-51 and Albany St., signal improvements, sidewalk improvements, side path improvements, waterline and sanitary sewer relocations, drainage design, and approximately 500 LF of retaining wall improvements. The bridge (NBI 24809) and interchanges to US-51 are excluded from the scope of this project, except for verification of existing bridge geometry.

**3.18.4 N 9<sup>th</sup> St.—E Kenosha St. to E Albany St.:** The project scope is improvements to the N 9<sup>th</sup> St. and E Albany St. intersection, the N 9<sup>th</sup> St. and E Lansing St. intersection, the N 9<sup>th</sup> St. and E Hillside Dr. intersection, roadway improvements of N 9<sup>th</sup> St. between and including the intersections of E Kenosha St. and E Albany St., signal improvements, sidewalk improvements, sidepath improvements, waterline and sanitary sewer relocations, drainage design, drainage analysis of the RCB approximately 300' north of E Tacoma St., design of RCB extensions or replacement, and approximately 800 LF of retaining wall improvements. The bridge (NBI 24777) and interchanges to US-51 are excluded from the scope of this project, except for verification of existing bridge geometry. A proposed pedestrian bridge over US-51 will be considered based on the findings of Phase 1 of this study.

**3.18.4.1 N 9<sup>th</sup> St. and E Kenosha St. Intersection:** The project scope is improvements to the N 9<sup>th</sup> St. and E Kenosha St. intersection, signal improvements, sidewalk improvements, sidepath improvements, waterline relocations, drainage design, and drainage analysis.

**3.18.4.2 N 9<sup>th</sup> St. and E Hillside Dr. Intersection:** The project scope is improvements to the N 9<sup>th</sup> St. and E Kenosha St. intersection, signal improvements, sidewalk improvements, sidepath improvements, waterline and sanitary sewer relocations, drainage design, and drainage analysis.

### **3.19 MULTI-USE TRAIL**

**3.19.1 Nienhuis Park to Broken Arrow High School to E Hillside Dr.:** The project scope is the addition of a multi-use trail between Nienhuis Park and E Hillside Dr., connection to the Broken Arrow High School, pedestrian crossing improvements at E Albany St. and E Reno St., drainage design, drainage analysis, design of RCB extensions or replacement, and approximately 1000 LF of retaining wall improvements.

**3.19.1.1** Landscape architecture scope includes development of a corridor landscape plan with focus on restoring disturbed areas and placement of shade trees; development of 2 to 4 pause points along the length of the trail, to include bike and pedestrian-focused amenities, landscaping, and irrigation; planning and design of wayfinding signs for trail confirming with City of Broken Arrow standards.



### **3.20 SIDEPATHS/SIDEWALKS**

3.20.1 N Aspen Ave.—W Kenosha St. to W Omaha St.: The project scope is along N Aspen Ave. between W Kenosha St. and W Omaha St. and includes sidewalk improvements, sidepath improvements, waterline relocations, drainage design, drainage analysis of 5 crossings, design of RCB extensions or replacement of 5 crossings, including NBI 19675, and approximately 800 LF of retaining wall improvements. The bridge (NBI 27147) and interchanges to US-51 are excluded from the scope of this project, except for verification of existing bridge geometry.

3.20.2 E 46<sup>th</sup> St.—N Aspen Ave. to Rosa Parks Elementary: The project scope is along E 46<sup>th</sup> St. between N Aspen Ave. and the west end of Rosa Parks Elementary, and includes sidewalk improvements, sidepath improvements, drainage design, and approximately 400 LF of retaining wall improvements.

3.20.3 Kenosha St.—N Aspen Ave. to N 9<sup>th</sup> St.: The project scope is along Kenosha St. between N Aspen Ave. and N 9<sup>th</sup> St., and includes sidewalk improvements, sidepath improvements, waterline relocations, drainage design, drainage analysis of 2 crossings, design of RCB extensions or replacement of 2 crossings, and approximately 700 LF of retaining wall improvements. The railroad crossing east of N Aspen Ave. will be excluded from this project. The design is being completed as a part of another City of Broken Arrow project and the two projects will be coordinated.

3.20.4 E Hillside Dr.—N 9<sup>th</sup> St. to Camino Villa to Timber Ridge Elementary: The project scope is along E Hillside Dr., N 27<sup>th</sup> St., E Kenosha St., and N 33<sup>rd</sup> St. The project includes sidewalk improvements, sidepath improvements, waterline relocations, drainage analysis of 2 crossings, design of RCB extensions or replacement of 2 crossings, and approximately 3000 LF of retaining wall improvements

3.20.5 E Hillside Dr.—E Albany St. to N 9<sup>th</sup> St.: The project scope is along Hillside Dr., and includes sidewalk improvements, sidepath improvements, waterline relocations, and approximately 700 LF of retaining wall improvements

3.20.6 Wayfinding signs: planning and design of wayfinding signs for trail confirming with City of Broken Arrow standards.

### **3.21 TRAFFIC DESIGN**

3.21.1 W Omaha St at N Aspen Ave: A permanent traffic signal will be included in the plans. The design will include ADA pedestrian ramps with accessible pedestrian signals, flashing yellow arrow, and Iteris VantageNext detection. No communication or coordination is anticipated at the intersection.

3.21.2 E Kenosha at N 9<sup>th</sup> St: Traffic Signal Modifications including

- ADA ramps
- Pushbutton poles
- Accessible pedestrian signals
- Reflective back plates

3.21.3 E Lansing at N 9<sup>th</sup> St: Traffic Signal Modifications including

- ADA ramps
- Pushbutton poles
- Accessible pedestrian signals
- Reflective back plates

3.21.4 EB Broken Arrow Expwy at N 9<sup>th</sup> St: Traffic Signal Modifications including

- ADA ramps
- Pushbutton poles

3.21.5 WB Broken Arrow Expwy at N 9<sup>th</sup> St: no improvements anticipated.

3.21.6 E Hillside Dr at N 9<sup>th</sup> St: Traffic Signal Modifications including

- ADA ramps
- Pushbutton poles
- Accessible pedestrian signals
- Reflective back plates

3.21.7 E Albany St at N 9<sup>th</sup> St: Traffic Signal Modifications including

- ADA ramps
- Pushbutton poles
- Accessible pedestrian signals
- Reflective back plates

3.21.8 W Kenosha St at N Elm Pl.: Traffic Signal Modifications including

- ADA ramps
- Pushbutton poles
- Accessible pedestrian signals
- Reflective back plates

3.21.9 N Elm Pl at W Queens Cir.: Traffic Signal Modifications including

- ADA ramps
- Pushbutton poles
- Accessible pedestrian signals
- Reflective back plates

3.21.10 N Elm Pl at Broken Arrow Expwy.: No improvements anticipated.

3.21.11 N Elm Pl at W Stonewood Dr: Traffic Signal Modifications including

- ADA ramps
- Pushbutton poles
- Accessible pedestrian signals

- Reflective back plates
- Flashing yellow arrow

#### 3.21.12      N Elm Pl at W Albany St.: Traffic Signal Modifications including

- ADA ramps
- Pushbutton poles
- Accessible pedestrian signals
- Reflective back plates

#### 3.21.13      E Hillside Dr at N 23<sup>rd</sup> Ave: No improvements anticipated

### **3.22    PROPERTY ACQUISITION DOCUMENTS**

CONSULTANT will contract with a subconsultant to provide mapping as required for preparing Right of Way/Easement acquisition documents for the Owner's use in acquiring the property. Documentation will include a key map showing all affected properties and an individual tract map with description of temporary and permanent acquisition for each property. The Owner will provide a standard easement acquisition document or "go-by" example for use by CONSULTANT. The fee for providing property acquisition documentation is based on permanent right of way and temporary construction easements for no more than 100 parcels. Property acquisition document preparation will begin after receiving the Owner's comments from the Preliminary Design review.

### **3.23    PUBLIC & STAKEHOLDER ENGAGEMENT**

Public involvement in Phase 2 will consist of three (3) virtual AC meetings and two (2) in person public meeting. These meetings will present the preliminary designs of the proposed improvements and obtain feedback. Tools such as Mentimeter will be used to gather targeted feedback from the AC as well as more open-ended comments.

Prior to the public meeting, CONSULTANT will coordinate and hold a pre-meeting with the OWNER to discuss the meeting goals, format, and content. Notification of the public meeting will be done through a combination of letters, postcards, and information on the OWNER'S website. CONSULTANT will prepare a presentation, display boards, handouts, and comment forms and will coordinate all meeting logistics. It is anticipated the meeting will take place in the evening at a location convenient to the project. All materials presented at the public meeting will also be available on the project website.

CONSULTANT will update the project website as plans are developed and will monitor the feedback received. Renderings of trail and roadway typical sections and intersection improvements will be prepared and posted. Interactive maps will be developed showing the location of the proposed improvements and providing opportunity for the public to leave comments in specific locations. Monthly updates on public feedback received will be provided to the OWNER.

### **3.24    PRIVATE UTILITY RELOCATION COORDINATION**

A utility coordination meeting will be held after each of the conceptual and the

preliminary design plan submittals. The OWNER will schedule the coordination meetings, and CONSULTANT will participate in one utility coordination meeting after each submittal for each project. CONSULTANT will identify potential utility conflict points and pothole locations.

### **3.25 BENEFIT-COST ANALYSIS (BCA)**

3.25.1 Data Request and Collection—Develop a list of data, documentation, and information needed to conduct the BCA, and will work with the Project team to compile data and develop model inputs. Will collaborate with the Project team to develop assumptions or estimates for data that does not currently exist. These data collection and initial modeling processes may be iterative as the team works together to ensure that all project benefits are quantified to generate objective, evidence-supported results.

Receiving the requested items in a timely manner is critical to producing quality work that meets the U.S. Department of Transportation (U.S. DOT) standards. Additional data or documentation may need to be supplied based on preliminary BCA findings.

3.25.2 Data Analysis and Modeling Methodology—The BCA will be developed using WSP USA's Excel BCA template which incorporates the latest BCA input values recommended by U.S. DOT in its most recent Benefit-Cost Analysis Guidance for Discretionary Grant Programs from December 2023. The BCA may generate benefits associated with respect to the build scenario and the resilience of the system such as:

- Safety improvements such as reduce fatalities and/or serious injuries;
- Environmental Sustainability including reductions in emissions and reductions in vehicle miles traveled specifically through modal shift to transit, rail, or active transportation; and
- Mobility and Community Connectivity;

For the cost portion of the equation, capital costs will be included, encompassing design/engineering, right-of-way, and construction; operating and maintenance costs; and rehabilitation and repair costs. The sum of benefits to the sum of costs will be compared to derive the following economic measures: benefit-cost ration, net present value, return on investment, and payback period.

3.25.3 Development of Narrative Section and Technical Memorandum—Modeling results will be summarized for inclusion in the BUILD grant application narrative in a two-page summary memorandum and in a detailed BCA Report (i.e., BCA Narrative). The BCA Narrative will clearly document all assumptions used and how they were derived, methodology for estimating benefits, and BCA findings. Additionally, we will include qualitative description of benefits that could not be quantified or monetized due to lack of sufficient data or methodology from U.S. DOT to make the most compelling case for the Project's benefits. Preliminary and final BCA findings will be shared via Virtual (MS Teams) meetings.

3.25.4 Quality Assurance/Quality Control (QA/QC) of BCA—The BCA will be reviewed by a principal economist for QA / QC. The persons responsible for QA

/ QC will review the BCA Model, two-page summary memorandum, and BCA Narrative, ensuring that all inputs are sourced appropriately and that all calculations are operating correctly. The principal economist will also consider the fundamental logic of the model assumptions, identifying concerns that U.S. DOT reviewers could raise.

#### 3.25.5 Deliverables

- Memorandum summarizing BCA findings and methodology
- BCA Model
- Two-page preliminary and final summary of BCA results for inclusion in application narrative in Word format

### **3.26 FINAL DESIGN, BIDDING AND CONSTRUCTION SERVICES**

No final design or bidding and construction services will be included in this contract.

## **PHASE 3—ENVIRONMENTAL ANALYSIS AND APPROVALS**

### **3.27 ENVIRONMENTAL ANALYSIS**

CONSULTANT will coordinate with FHWA to determine the needed studies and level of NEPA document required for the project. This scope includes the anticipated studies needed, if additional studies are required this will be considered extra work. It is anticipated the project can be authorized with a Categorical Exclusion. One NEPA document is anticipated; should multiple documents be required this will be considered extra work.

#### 3.27.1 PROPERTY OWNER NOTIFICATION

CONSULTANT will identify the owner names and addresses of the properties within the study footprint from the Tulsa County Assessor. CONSULTANT will prepare a letter notifying the owners of the project and the intent to perform environmental investigations. The letter will be prepared for OWNER signature. Once signed, CONSULTANT will mail the letter to all private landowners within the study area. No field studies will be performed until at least two weeks after letters are mailed.

#### 3.27.2 TRIBAL CONSULTATION

CONSULTANT will prepare letters for FHWA signature initiating tribal consultation pursuant to Section 106 of the National Historic Preservation Act. Should any tribe desire additional consultation on the project this will be completed by FHWA.

#### 3.27.3 CULTURAL RESOURCES SURVEY

A cultural resources professional who meets or exceeds the Secretary of the Interior's Standards for archaeology as defined in 36 CFR 61 will perform a cultural resources survey of the project study area to determine if there is an effect on any property eligible for or listed in the National Register of Historic Places (NRHP). The Consultant will prepare and submit a report to the State Historic Preservation Office (SHPO) on behalf of FHWA. Should any mitigation to

historic properties be required this will be considered extra work.

#### 3.27.4. WETLAND DELINEATION

A professional trained in wetland delineations will review the project and determine if any wetlands and other waters of the U.S. will be impacted. If wetlands and/or other jurisdictional waters are identified, they will be delineated in the field with a sub-meter GPS unit, documented in a report, and shape files of the jurisdictional areas will be provided. The report will be submitted to the U.S. Army Corps of Engineers (USACE) with the Section 404 permit application.

#### 3.27.5. THREATENED & ENDANGERED SPECIES ASSESSMENT

CONSULTANT will conduct a review of the project's potential impacts on federally listed threatened and endangered species according to U.S. Fish and Wildlife Service (USFWS) procedures for federal projects. This review will include a field assessment for the presence of habitat for all federally-listed species within the project area and documentation of the presence of habitat and the potential effects in a report. The report will be submitted to the USFWS via the on-line review portal.

##### 3.27.5.1. Bald & Golden Eagle Assessment

The Consultant will review the proposed action and determine if the action is in compliance with the Bald and Golden Eagle Protection Act (BGEPA). Results will be documented in the T&E Report.

##### 3.27.5.2. Migratory Bird Assessment

The Consultant will review the proposed action and determine if the action is in compliance with the Migratory Bird Treaty Act (MBTA) and if the action has been planned in such a way to avoid the active nesting season of migratory birds. This is typically achieved through plan notes and scheduling. Results will be documented in the T&E report.

#### 3.27.6. HAZARDOUS MATERIALS STUDIES

CONSULTANT will conduct a database review and reconnaissance to identify any hazardous or potentially hazardous materials/waste-related conditions within and adjacent to the existing and proposed project footprint. A report will be prepared to include all pertinent information regarding listed hazardous materials/waste and potentially hazardous materials/waste sites in the vicinity of the project and any recommendations for avoidance or additional work. It is not anticipated that a full Initial Site Assessment (ISA) will be required.

#### 3.27.7 SECTION 4(f) EVALUATION

The proposed multi-modal trail within Neinhuis Park and Tiger Creek Nature Park will require coordination under Section 4(f). It is anticipated that impacts to Neinhuis Park and Tiger Creek Nature Park will be "de minimis" as defined in the regulation. CONSULTANT will coordinate two meetings with the OWNER Public Works and Parks Departments to discuss impacts and potential measures to minimize harm. CONSULTANT will prepare the de minimis coordination letter for OWNER signature. Notification of the 4f de minimis finding will be put on the OWNER and project websites and discussed at the Phase 3 public meeting.

### **3.28 ENVIRONMENTAL DOCUMENT**

CONSULTANT will prepare a single Categorical Exclusion (CE) document under

NEPA for FHWA review and signature. The CE will include all improvements proposed under the project. If multiple documents are required or if an Environmental Assessment is required this will be considered extra work.

### **3.29 CLEAN WATER ACT SECTION 404 PERMIT APPLICATION**

After the approval of the NEPA document and right-of-way plans, CONSULTANT will prepare one (1) Section 404 Permit pre-construction notification (PCN) for use of Nationwide Permit 14 for the project. The PCN will be submitted to the USACE for review and approval and CONSULTANT will prepare an Aquatic Resources Protection Plan. Should impacts exceed the threshold of the Nationwide Permit an Individual Permit would be required and would be considered extra work.

### **3.30 PUBLIC & STAKEHOLDER ENGAGEMENT**

Public involvement in Phase 3 will consist of one (1) virtual AC meeting and one (1) in person public meeting. These meetings will present the proposed improvements and the environmental impacts.

Prior to the public meeting, CONSULTANT will coordinate and hold a pre-meeting with the OWNER to discuss the meeting goals, format, and content. Notification of the public meeting will be done through a combination of letters, postcards, and information on the OWNER'S website. CONSULTANT will prepare a presentation, display boards, handouts, and comment forms and will coordinate all meeting logistics. It is anticipated the meeting will take place in the evening at a location convenient to the project. All materials presented at the public meeting will also be available on the project website.

CONSULTANT will assemble and summarize all comments received from all project phases and produce a public involvement summary document. The summary will describe the stakeholder and public activities conducted and will discuss the types of comments received. CONSULTANT will draft responses to public comments for OWNER review. Once approved, the public involvement summary will be posted on the project website.

### **3.31 SOFTWARE SERVICES ADDITIONAL LANGUAGE**

This Software Services Additional Language ("Additional Language"), shall accompany any language included in this Agreement for Professional Consultant Services between the City of Broken Arrow ("Owner") and Garver, LLC ("Consultant") for this project, referred to in the following paragraphs as the "Agreement."

#### **3.31.1 Definitions.**

3.31.1.1 "Services" means those services included in this Attachment A, Scope of Services of the Agreement.

3.31.1.2 "Software Services" means Services which include an Internet-based software component.

3.31.2 Software Services. This Additional Language governs the provision of the Software Services by Consultant and the access to, and usage of Software Services by Owner.

3.31.2.1 Use of Software Services.

3.31.2.1.1 Owner Owned Data. All electronic data and information authorized by Owner to be uploaded by the Software Services ("Owner Data") remains the property of Owner, as between Consultant and Owner. Owner grants Consultant the right to use the Owner Data solely for purposes of performing under this Agreement. Owner may export its Owner Data as allowed by functionality within the Software Services.

3.31.2.1.2 Owner Responsibilities. Owner (i) will keep its passwords secure and confidential and use industry-standard password management practices; (ii) is primarily responsible for Owner Data and all activity in its Software Services accounts; (iii) will use commercially reasonable efforts to prevent unauthorized access to its account and notify Consultant promptly of any such unauthorized access; and (iv) may use the Software Services only in accordance with the Software Services' technical documentation and applicable law.

3.31.2.1.3 DISCLAIMER. ALL SOFTWARE SERVICES ARE PROVIDED "AS IS" AND "AS AVAILABLE," AND CONSULTANT DISCLAIMS IN THEIR ENTIRETY ALL WARRANTIES, WHETHER STATUTORY, EXPRESS, OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. CONSULTANT DOES NOT WARRANT OR GUARANTEE THAT SOFTWARE SERVICES WILL BE UNINTERRUPTED, ERROR-FREE, OR INVULNERABLE. The Software Services may include gateways, links or other functionality that allows Owner to access third-party services, content, and material. Consultant does not supply and is not responsible for any third-party services, content, or material, which may be subject to their own license, end-user agreements, privacy and security policies and terms of use. ALL THIRD-PARTY SERVICES, CONTENT, AND MATERIALS ARE PROVIDED "AS IS" AND "AS AVAILABLE" WITHOUT WARRANTIES OF ANY KIND FROM CONSULTANT.

3.31.2.1.4 OWNER ACKNOWLEDGES AND AGREES THAT CONSULTANT DOES NOT OPERATE OR CONTROL THE INTERNET AND THAT (i) VIRUSES, WORMS, TROJAN HORSES, OR OTHER UNDESIREABLE DATA OR SOFTWARE; OR (ii) UNAUTHORIZED THIRD PARTIES (e.g. HACKERS) MAY ATTEMPT TO OBTAIN ACCESS TO AND DAMAGE OWNER'S DATA, WEBSITES, COMPUTERS OR



NETWORKS. CONSULTANT WILL NOT BE LIABLE FOR SUCH ACTIVITIES NOR WILL SUCH ACTIVITIES CONSTITUTE A BREACH BY CONSULTANT OF ITS OBLIGATIONS UNDER THE AGREEMENT.

3.31.2.1.5 Data Security. Consultant will (i) implement and maintain appropriate security measures, including, without limitation, technical, physical, administrative and organizational controls, designed to maintain the confidentiality and security of Owner Data maintained within Consultant's network; (ii) implement and maintain systems and procedures within Consultant's network for detecting, preventing, and responding to attacks, intrusions, and system failures, and regularly test and monitor the effectiveness of such systems and procedures; (iii) designate employees to coordinate implementation and maintenance of its security; and (iv) in accordance with the ordinary industry standard of care for A/E services, identify risks to the security and confidentiality of Owner Data maintained within Consultant's network that could result in the unauthorized disclosure, misuse, alteration or destruction of Owner Data and assess the sufficiency of Consultant's systems and procedures in place to control these risks (collectively, "Security Measures").

3.31.2.1.6 Data Breach. If Consultant becomes aware that Owner Data was accessed or disclosed in breach of this Additional Language, Consultant will so notify Owner without undue delay, and promptly act to mitigate the breach and preserve forensic evidence and provide information to Owner regarding the nature and scope of the breach.

### 3.31.3 Garver Property.

3.31.3.1 Reservation of Rights. Consultant and its licensors are and remain the sole owners of the Software Services and their underlying software, including all intellectual property rights therein. Owner may not remove or modify any proprietary marking or restrictive legend in the Software Services. Consultant reserves all rights not expressly granted in this Agreement.

3.31.3.2 Hosting. To the extent set forth in the Services, Consultant shall host the Software Services for the benefit of the Owner on servers owned, controlled, leased, or otherwise licensed by Consultant. In such event, Owner is solely responsible for connection of Owner's system to a telecommunication service that provides Internet access for purposes of Consultant's access and use of the Software Services.

3.31.3.3 Restrictions. Owner may not (i) sell, resell, rent, transfer, assign, or lease the Software Services or use them in a service provider capacity, (ii) use the Software Services in a manner that violates applicable law, rules, regulations and/or ordinances, (iii) to store

or transmit infringing, unsolicited marketing emails, libelous, unlawful or tortious material, or to store or transmit material in violation of third-party rights, (iv) interfere with or disrupt the integrity or performance of the Software Services, (v) attempt to gain unauthorized access to the Software Services or their related systems or networks, (vi) reverse engineer, disassemble, or decompile the Software Services except as otherwise required by law, (vii) allow others to use the Software Services for the benefit of any third party, or (viii) access the Software Services to build a competitive service or product, or copy any feature, function or graphic for competitive purposes. Consultant may suspend Software Services to Owner if Consultant believes in good faith that Owner's use of the Software Services poses an imminent threat to the security, availability, or legality of the Software Services; in such event, Consultant will work with Owner to address the issue and restore Software Services as quickly as possible.

3.31.3.4 Statistical Information. Consultant may compile statistical information related to the performance of the Software Services and may make such information publicly available so long as such information is aggregated and anonymized and provides no means to identify or re-identify Owner. Consultant retains all intellectual property rights in such information.

3.31.3.5 EXCEPTIONS. THE LIMITATIONS OF LIABILITY SET FORTH IN SECTION 3.31.4 DO NOT APPLY TO A CLAIM BY A PARTY BASED ON GROSS NEGLIGENCE, WILLFUL MISCONDUCT, OR FRAUD OF THE OTHER PARTY.

3.31.4 THIRD-PARTY CLAIMS FOR INFRINGEMENT. Should the Software Services become, or be likely to become in Consultant's reasonable opinion, the subject of any claim that infringes, violates, or constitutes a wrongful use of intellectual property rights, Consultant will, at its option: (i) procure for Owner the necessary rights to continue to use the infringing material, or (ii) replace or modify the potentially infringing material to make them non-infringing, but functionally equivalent. If Consultant determines that none of these options are reasonably available, then Consultant may terminate the Software Services and refund any prepaid and unused fees. **Exclusions.** Consultant has no obligation to the extent a claim arises from: Consultant's compliance with Owner's specifications; a combination of the Software Services with other technology or aspects where the infringement would not occur but for the combination; Owner Data; or technology or aspects not provided by Consultant. THIS SECTION CONTAINS OWNER'S EXCLUSIVE REMEDIES AND CONSULTANT'S SOLE LIABILITY FOR INTELLECTUAL PROPERTY INFRINGEMENT.

## **PHASE 4—FUTURE GRANT APPLICATION**

CONSULTANT will prepare a future BUILD construction grant application for the project. It is assumed that the grant will be prepared according to current (FY 2025) BUILD grant criteria. Should the criteria change substantially prior to preparation of the application, extra work may be required. CONSULTANT will prepare all required sections of the application, including Project Description and Location, Budget Narrative, Merit Criteria, and Project Readiness. Information from the BCA (see Section 3.25) will be used to supplement the narrative application. The schedule for this work will be determined when the Notice of Funding Opportunity (NOFO) for the appropriate grant program is published.

## **PROJECT DELIVERABLES**

The following will be submitted to the Owner, or others as indicated, by CONSULTANT:

- A. Three (3) physical copies and one (1) electronic copy of the Multimodal Study.
- B. One (1) electronic copy of the Geotechnical Report.
- C. Three (3) physical copies and electronic copies (pdf and Autocad formats) of each Conceptual Design with opinion of probable construction cost.
- D. Three (3) physical copies and electronic copies (pdf and Autocad formats) of each Preliminary Design with opinion of probable construction cost.
- E. One copy of the right-of-way and/or easement acquisition documents.
- F. One (1) electronic copy of NEPA studies and documents.
- G. One (1) draft and one (1) final copy of the future grant application.
- H. Additional electronic files as requested.

## **EXTRA WORK**

The following items are not included under this agreement but will be considered as extra work:

- A. Redesign for the Owner's convenience or due to changed conditions after previous alternate direction and/or approval.
- B. Submittals or deliverables in addition to those listed herein.
- C. Pavement Design beyond that furnished in the Geotechnical Report.
- D. Design of any utilities relocation other than water and sanitary sewer
- E. Retaining walls or other significant structural design beyond that required for roadway, sidewalk, and sidepath improvements described herein.
- F. Geotechnical borings at existing or proposed retaining wall locations
- G. Utility potholes
- H. Preparation of a Storm Water Pollution Prevention Plan (SWPPP). The construction contract documents will require the Contractor to prepare, maintain, and submit a SWPPP to DEQ.
- I. Construction materials testing.
- J. NEPA documents and Section 404 permit applications beyond what is described herein.
- K. Environmental Mitigation, including stream or wetland mitigation plans or other work related to environmentally or historically (culturally) significant items.
- L. Grant application under criteria other than FY 2025 BUILD grant program.

M. Services after construction, such as warranty follow-up, operations support, etc.

Extra Work will be as directed by the Owner in writing for an addition fee as agreed upon by the Owner and CONSULTANT.

**ATTACHMENT B  
TO  
AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES  
BETWEEN  
CITY OF BROKEN ARROW  
AND  
GARVER, LLC  
FOR  
RECONNECTING BROKEN ARROW RAISE GRANT  
ST24140**

**ORGANIZATION OF SUBMITTAL DOCUMENTS**

The following constitutes a list of project deliverables, as required, and shall be made a part of the AGREEMENT dated the \_\_\_\_ day of \_\_\_\_\_, 2025.

**1.0 MULTIMODAL STUDY:** The CONSULTANT shall submit in-full, in accordance with this AGREEMENT, the following documents:

- 1.1 Electronic draft final report
- 1.2 Electronic final report addressing OWNER comments

**2.0 PUBLIC AND STAKEHOLDER ENGAGEMENT:** The CONSULTANT shall submit in-full, in accordance with this AGREEMENT, the following items:

- 2.1 Public Involvement Plan (PIP)
- 2.2 Formation of the Advisory Committee (AC)
- 2.3 Project Website
  - 2.3.1 On-line survey
- 2.4 Public Meeting

**3.0 GEOTECHNICAL INVESTIGATION:** The CONSULTANT shall submit in-full, in accordance with this AGREEMENT, the following documents:

- 3.1 Geotechnical Engineering Reports

**4.0 PRELIMINARY CONSTRUCTION PLANS:** The CONSULTANT shall submit in-full, in accordance with this AGREEMENT, the following plan sheets:

- 4.1 Title Sheet;
- 4.2 Pay Quantities and Pay Item/General Notes;
- 4.3 Typical Sections;
- 4.4 Quantity & Miscellaneous Summaries;
- 4.5 Storm Water Management Plan (SWP3);
- 4.6 Project Drainage Area Map;
- 4.7 Right-of-Way Map & Data;
- 4.8 Survey Data Sheet;
- 4.9 Plan and Profiles (roadway & public utilities as necessary);
- 4.10 Miscellaneous Details;
- 4.11 General Plan and Elevation (as necessary);
- 4.12 Special & Structural/Bridge Details (as necessary);

- 4.13 Signing & Striping;
- 4.14 Construction Sequencing
- 4.15 Cross Sections; and
- 4.16 Standard Construction Drawings.

**5.0 BENEFIT-COST ANALYSIS (BCA):** The CONSULTANT shall submit in-full, in accordance with the AGREEMENT, the following documents:

- 5.1 Memorandum summarizing BCA findings and methodology
- 5.2 BCA Model
- 5.3 Preliminary and final summary of BCA results

**6.0 ENVIRONMENTAL ANALYSIS AND APPROVALS**

- 6.1 Categorical Exclusion (CE) document
- 6.2 Section 404 Permit Pre-Construction Notification (PCN)

**7.0 RIGHT-OF-WAY DOCUMENTS:** The CONSULTANT shall submit in-full, in accordance with this AGREEMENT, the following documents:

- 7.1 Right-of-Way Plans;
- 7.2 Individual Legal Description Documents for right-of-way, permanent easements, and temporary construction easements;
- 7.3 Individual Right-of-Way Detailed Drawing with Existing Easements Shown;
- 7.4 Closure Report;
- 7.5 Surveyor's Certification Document;
- 7.6 Provide right-of-way and temporary construction easement staking as required for acquisition purposes (assumed one staking per parcel required, **assumed 100 parcels**, at agreed upon unit price per parcel).

**8.0 DRAINAGE DESIGN DOCUMENTS:** The CONSULTANT shall submit in-full, in accordance with this AGREEMENT, the following documents:

- 8.1 Hydrology and Hydraulic Calculations;
- 8.2 Overall Project Drainage Map;
- 8.3 Drainage Summary Tables;
- 8.4 CLOMR preparation and submittal on Multi-Use Trail Project

**9.0 DESIGN CALCULATIONS:** The CONSULTANT shall submit in-full, in accordance with this AGREEMENT, the following documents:

- 9.1 Structural Design Calculations
  - 9.1.1 Bridge Designs;
  - 9.1.2 Retaining Earth; and
  - 9.1.3 Miscellaneous Structures
- 9.2 Water Analysis Calculations (Title 252: Chapter 626):
  - 9.2.1 Water Flow Projections and Analysis;
  - 9.2.2 Pressure and Velocity Analysis; and

### 9.3 Other Engineer Design Calculations

**10.0 BUILD GRANT APPLICATION:** The CONSULTANTS shall submit in-full, in accordance with this AGREEMENT, the following documents:

#### 10.1 BUILD Grant Application

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**ATTACHMENT C  
TO  
AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES  
BETWEEN  
CITY OF BROKEN ARROW  
AND  
GARVER, LLC  
FOR  
RECONNECTING BROKEN ARROW RAISE GRANT  
ST24140**

**COMPENSATION AND ADDITIONAL SERVICES**

The following compensation and hourly rates shall apply as described in Attachment C and shall be made a part of the AGREEMENT dated \_\_\_\_ day of \_\_\_\_, 2025.

**1.0 BASIC COMPENSATION**

The basic compensation for the Professional Consultant to perform all duties and responsibilities associated with the Scope of Services as described in Attachment A shall be in accordance with the following payment breakdown (see Exhibit A):

**1.1 Task 1. Traffic Analysis and Design Payment:**

1.1.1 The OWNER shall pay the CONSULTANT a lump sum amount of **\$775,000.00** for the completion of the Traffic Analysis and Design Phase, including the Multimodal Level of Service study of the project area. This amount includes all labor, material, overhead and profit associated with the Scope of Services.

**1.2 Task 2. Stakeholder and Public Involvement:**

1.2.1 The OWNER shall pay the CONSULTANT a lump sum of **\$393,940.00** for the organization and execution of stakeholder meetings and public involvement during the study and design process. This amount includes all labor, material, overhead and profit associated with the Scope of Services.

**1.3 Task 3. Project Management and Subconsultant Payment:**

1.3.1 The OWNER shall pay the CONSULTANT a lump sum of **\$1,004,750.00** for the management of the project and the subconsultant fees. The land survey and geotechnical investigation will both be completed in this phase. This amount includes all labor, material, and overhead and profit associated with the Scope of Services. At the OWNER's request, some survey fee was included in the individual projects for tracking purposes. The subconsultant fee will be included in those projects and will not be paid for under this task.

**1.4 Task 4. Conceptual and Preliminary Design Payment:**

1.4.1 The OWNER shall pay the CONSULTANT a lump sum amount of **\$3,767,628.00** for the completion of the Conceptual and Preliminary Phase. This amount includes all labor, material, overhead and profit associated with the Scope of Services.



1.5 Task 5. Environmental Services:

1.5.1 The OWNER shall pay the CONSULTANT a lump sum amount of **\$285,350.00** for the completion of all necessary environmental studies as required in the Conceptual and Preliminary Design Phase. This amount includes all labor, material, overhead and profit associated with the Scope of Services.

1.6 Task 6. BUILD Grant Application Payment:

1.6.1 The OWNER shall pay the CONSULTANT a lump sum amount of **\$48,250.00** for the completion of the grant application for Final and Construction Phase of the projects included in this contract. This amount includes all labor, material, overhead and profit associated with the Scope of Services.

## **2.0 ADDITIONAL SERVICES BASED ON TIME**

The hourly rates set forth below include all salaries, benefits, overhead and other indirect costs including federal, state, and local taxes, plus profit and effective as of May, 2025.

Professional Services

Senior Project Manager 2 (E-6)	\$316.00
Senior Project Manager (E-5)	\$257.00
Project Manager (E-4)	\$211.00
Senior Project Engineer (E-3)	\$180.00
Project Engineer (E-2)	\$157.00
Design Engineer (E-1)	\$135.00
Technician 2 (T-2)	\$119.00
Administrative 2 (AM-2)	\$100.00
Sr. Environmental Project Manager (ES-6)	\$331.00
Environmental Project Manager (ES-3)	\$174.00
Sr. Environmental Specialist (ES-2)	\$136.00
Environmental Specialist (ES-1)	\$108.00

## **3.0 REPRODUCTION**

All charges for reproduction shall be included in Basic Compensation Fee of the Professional Consultant. No separate payment will be made for these expenses.

## **4.0 MILEAGE**

All direct costs shall be included in the Basic Compensation of the Professional Consultant. No separate payment will be made for these expenses.

## **5.0 DIRECT COSTS**

All direct costs shall be included in the Basic Compensation of the Professional Consultant. No separate payment will be made for these expenses.

## **6.0 ADJUSTMENT CLAUSE**

The rates and costs described in this AGREEMENT shall not be revised annually, unless mutually agreed upon by both parties.

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## Exhibit A

### City of Broken Arrow Reconnecting Broken Arrow RAISE Grant ST24140 FEE SUMMARY

	Title I Service	Estimated Fees
Lump Sum	<b>TRAFFIC ANALYSIS AND DESIGN</b>	<b>\$ 775,000.00</b>
Lump Sum	<b>PROJECT MANAGEMENT AND SUBCONSULTANT</b>	<b>\$ 1,004,750.00</b>
Lump Sum	<b>LANDSCAPE ARCHITECTURE</b>	<b>\$ 111,900.00</b>
	<b>ASPEN AVENUE - OMAHA ST. TO 46TH ST.</b>	<b>\$ 308,550.00</b>
Lump Sum	Conceptual Design - Aspen Ave. & Omaha St. Civil	\$ 135,200.00
Lump Sum	Preliminary Design - Aspen Ave. & Omaha St. Civil	\$ 153,100.00
Lump Sum	Preliminary Design - Aspen Ave. & Omaha St. Traffic	\$ 20,250.00
	<b>ELM PLACE - ALBANY ST. TO KENOSHA ST.</b>	<b>\$ 746,950.00</b>
Lump Sum	Conceptual Design - Elm Pl. Civil, Kenosha St. To Us-51	\$ 209,500.00
Lump Sum	Conceptual Design - Elm Pl. Civil, Us-51 To Albany St.	\$ 132,200.00
Lump Sum	Preliminary Design - Elm Pl. Civil, Kenosha St. To Us-51	\$ 195,250.00
Lump Sum	Preliminary Design - Elm Pl. Civil, Us-51 To Albany St.	\$ 136,000.00
Lump Sum	Preliminary Design - Elm Pl. Traffic, Kenosha St. To Us-51	\$ 37,000.00
Lump Sum	Preliminary Design - Elm Pl. Traffic, Us-51 To Albany St.	\$ 37,000.00
	<b>9TH ST - ALBANY ST. TO KENOSHA ST.</b>	<b>\$ 966,000.00</b>
Lump Sum	Conceptual Design - 9Th St. Civil	\$ 239,000.00
Lump Sum	Conceptual Design - 9Th St. & Kenosha St. Civil	\$ 91,300.00
Lump Sum	Conceptual Design - 9Th St. & Hillside Dr. Civil	\$ 99,350.00
Lump Sum	Preliminary Design - 9Th St. Civil	\$ 216,500.00
Lump Sum	Preliminary Design - 9Th St. & Kenosha St. Civil	\$ 106,150.00
Lump Sum	Preliminary Design - 9Th St. & Hillside Dr. Civil	\$ 123,750.00
Lump Sum	Preliminary Design - 9Th St. Traffic	\$ 53,950.00
Lump Sum	Preliminary Design - 9Th St. & Kenosha Traffic	\$ 18,000.00
Lump Sum	Preliminary Design - 9Th St. & Hillside Dr. Traffic	\$ 18,000.00
	<b>MULTI-USE TRAIL</b>	<b>\$ 362,100.00</b>
Lump Sum	Conceptual Design - Multi-Use Trail	\$ 182,750.00
Lump Sum	Preliminary Design - Multi-Use Trail	\$ 179,350.00
	<b>ASPEN AVENUE SIDEWALK AND SIDEPATH</b>	<b>\$ 322,800.00</b>
Lump Sum	Conceptual Design - Aspen Sidewalk	\$ 170,800.00
Lump Sum	Preliminary Design - Aspen Sidewalk	\$ 152,000.00
	<b>46TH STREET SIDEWALK AND SIDEPATH</b>	<b>\$ 147,100.00</b>
Lump Sum	Conceptual Design - 46Th Sidewalk	\$ 65,500.00
Lump Sum	Preliminary Design - 46Th Sidewalk	\$ 81,600.00
	<b>KENOSHA STREET SIDEWALK AND SIDEPATH</b>	<b>\$ 201,650.00</b>
Lump Sum	Conceptual Design - Kenosha Sidewalk	\$ 81,900.00
Lump Sum	Preliminary Design - Kenosha Sidewalk	\$ 119,750.00
	<b>HILLSIDE DR-KENOSHA ST SIDEWALK AND SIDEPATH</b>	<b>\$ 320,250.00</b>
Lump Sum	Conceptual Design - Hillside/Kenosha Sidewalk	\$ 133,500.00
Lump Sum	Preliminary Design - Hillside/Kenosha Sidewalk	\$ 186,750.00
	<b>HILLSIDE DR-ALBANY TO 9TH SIDEWALK AND</b>	<b>\$ 280,328.00</b>
Lump Sum	Conceptual Design - Hillside, Albany To 9Th Sidewalk	\$ 135,046.00
Lump Sum	Preliminary Design - Hillside, Albany To 9Th Sidewalk	\$ 145,282.00
Lump Sum	<b>STAKEHOLDER AND PUBLIC INVOLVEMENT</b>	<b>\$ 393,940.00</b>
Lump Sum	<b>ENVIRONMENTAL SERVICES</b>	<b>\$ 285,350.00</b>
Lump Sum	<b>BUILD GRANT APPLICATION</b>	<b>\$ 48,250.00</b>
	<b>Subtotal for Title I Service</b>	<b>\$ 6,274,918.00</b>

## Exhibit A

### City of Broken Arrow Reconnecting Broken Arrow RAISE Grant ST24140 DETAILED FEE SUMMARY

	Title   Service	Estimated Fees
Lump Sum	<b>TRAFFIC ANALYSIS AND DESIGN</b>	<b>\$ 775,000.00</b>
Lump Sum	<b>PROJECT MANAGEMENT AND SUBCONSULTANT</b>	<b>\$ 1,004,750.00</b>
	<i>Project Management</i>	\$ 194,559.62
	<i>Bancroft Design (Survey)</i>	\$ 550,750.00
	<i>Bancroft Design (RW Exhibits and Staking, 100 @ \$1,740))</i>	\$ 174,000.00
	<i>Kleinfelder (Geotech)</i>	\$ 46,800.00
	<i>WSP (Benefit-Cost Analysis)</i>	\$ 38,640.38
	<b>LANDSCAPE ARCHITECTURE</b>	<b>\$ 111,900.00</b>
	<b>ASPEN AVENUE - OMAHA ST. TO 46TH ST.</b>	<b>\$ 308,550.00</b>
Lump Sum	<i>Conceptual Design - Aspen Ave. &amp; Omaha St. Civil</i>	\$ 135,200.00
	<i>Civil Engineering</i>	\$ 51,003.00
	<i>Lighting</i>	\$ 9,172.00
	<i>Landscape Architecture</i>	\$ 15,660.00
	<i>Hydrology and Hydraulics</i>	\$ 17,520.00
	<i>Structural Engineering</i>	\$ 4,031.00
	<i>Waterline &amp; Sanitary Sewer Engineering</i>	\$ 37,814.00
Lump Sum	<i>Preliminary Design - Aspen Ave. &amp; Omaha St. Civil</i>	\$ 153,100.00
	<i>Civil Engineering</i>	\$ 75,472.00
	<i>Lighting</i>	\$ 11,070.00
	<i>Landscape Architecture</i>	\$ 3,780.00
	<i>Structural Engineering</i>	\$ 6,192.00
	<i>Waterline &amp; Sanitary Sewer Engineering</i>	\$ 56,586.00
Lump Sum	<i>Preliminary Design - Aspen Ave. &amp; Omaha St. Traffic</i>	\$ 20,250.00
	<b>ELM PLACE - ALBANY ST. TO KENOSHA ST.</b>	<b>\$ 746,950.00</b>
Lump Sum	<i>Conceptual Design - Elm Pl. Civil, Kenosha St. To Us-51</i>	\$ 209,500.00
	<i>Civil Engineering</i>	\$ 45,016.00
	<i>Lighting</i>	\$ 9,712.00
	<i>Hydrology and Hydraulics</i>	\$ 5,970.00
	<i>Structural Engineering</i>	\$ 64,234.00
	<i>Waterline &amp; Sanitary Sewer Engineering</i>	\$ 37,608.00
	<i>Bancroft (Survey)</i>	\$ 46,960.00
Lump Sum	<i>Conceptual Design - Elm Pl. Civil, Us-51 To Albany St.</i>	\$ 132,200.00
	<i>Civil Engineering</i>	\$ 36,365.00
	<i>Lighting</i>	\$ 8,092.00
	<i>Hydrology and Hydraulics</i>	\$ 5,970.00
	<i>Structural Engineering</i>	\$ 5,709.00
	<i>Waterline &amp; Sanitary Sewer Engineering</i>	\$ 34,914.00
	<i>Bancroft (Survey)</i>	\$ 41,150.00
Lump Sum	<i>Preliminary Design - Elm Pl. Civil, Kenosha St. To Us-51</i>	\$ 195,250.00
	<i>Civil Engineering</i>	\$ 80,811.00
	<i>Lighting</i>	\$ 15,080.00
	<i>Structural Engineering</i>	\$ 42,579.00
	<i>Waterline &amp; Sanitary Sewer Engineering</i>	\$ 56,780.00
Lump Sum	<i>Preliminary Design - Elm Pl. Civil, Us-51 To Albany St.</i>	\$ 136,000.00
	<i>Civil Engineering</i>	\$ 69,269.00
	<i>Lighting</i>	\$ 10,054.00
	<i>Structural Engineering</i>	\$ 10,513.00
	<i>Waterline &amp; Sanitary Sewer Engineering</i>	\$ 46,164.00
Lump Sum	<i>Preliminary Design - Elm Pl. Traffic, Kenosha St. To Us-51</i>	\$ 37,000.00
Lump Sum	<i>Preliminary Design - Elm Pl. Traffic, Us-51 To Albany St.</i>	\$ 37,000.00

	<b>9TH ST - ALBANY ST. TO KENOSHA ST.</b>	<b>\$</b>	<b>966,000.00</b>
Lump Sum	Conceptual Design - 9Th St. Civil	\$	239,000.00
	Civil Engineering	\$	46,192.00
	Lighting	\$	9,172.00
	Hydrology and Hydraulics	\$	12,064.00
	Structural Engineering	\$	72,284.00
	Waterline & Sanitary Sewer Engineering	\$	35,488.00
	Bancroft (Survey)	\$	63,800.00
Lump Sum	Conceptual Design - 9Th St. & Kenosha St. Civil	\$	91,300.00
	Civil Engineering	\$	34,645.00
	Lighting	\$	9,172.00
	Hydrology and Hydraulics	\$	1,688.00
	Waterline Engineering	\$	14,405.00
	Bancroft (Survey)	\$	31,390.00
Lump Sum	Conceptual Design - 9Th St. & Hillside Dr. Civil	\$	99,350.00
	Civil Engineering	\$	30,846.00
	Lighting	\$	9,172.00
	Hydrology and Hydraulics	\$	1,688.00
	Waterline & Sanitary Sewer Engineering	\$	33,594.00
	Bancroft (Survey)	\$	24,050.00
Lump Sum	Preliminary Design - 9Th St. Civil	\$	216,500.00
	Civil Engineering	\$	101,053.00
	Lighting	\$	11,070.00
	Structural Engineering	\$	52,813.00
	Waterline & Sanitary Sewer Engineering	\$	51,564.00
Lump Sum	Preliminary Design - 9Th St. & Kenosha St. Civil	\$	106,150.00
	Civil Engineering	\$	68,473.00
	Lighting	\$	11,070.00
	Structural Engineering	\$	6,110.00
	Waterline Engineering	\$	20,497.00
Lump Sum	Preliminary Design - 9Th St. & Hillside Dr. Civil	\$	123,750.00
	Civil Engineering	\$	63,692.00
	Lighting	\$	11,070.00
	Structural Engineering	\$	6,110.00
	Waterline & Sanitary Sewer Engineering	\$	42,878.00
Lump Sum	Preliminary Design - 9Th St. Traffic	\$	53,950.00
Lump Sum	Preliminary Design - 9Th St. & Kenosha Traffic	\$	18,000.00
Lump Sum	Preliminary Design - 9Th St. & Hillside Dr. Traffic	\$	18,000.00
	<b>MULTI-USE TRAIL</b>	<b>\$</b>	<b>362,100.00</b>
Lump Sum	Conceptual Design - Multi-Use Trail	\$	182,750.00
	Civil Engineering	\$	66,262.00
	Lighting	\$	11,036.00
	Landscape Architecture	\$	33,390.00
	Structural Engineering	\$	14,428.00
	Hydrology and Hydraulics	\$	51,134.00
Lump Sum	Preliminary Design - Multi-Use Trail	\$	179,350.00
	Civil Engineering	\$	96,302.00
	Lighting	\$	16,178.00
	Landscape Architecture	\$	39,960.00
	Structural Engineering	\$	26,910.00
Lump Sum	<b>ASPEN AVENUE SIDEWALK AND SIDEPATH</b>	<b>\$</b>	<b>322,800.00</b>
Lump Sum	Conceptual Design - Aspen Sidewalk	\$	170,800.00
	Civil Engineering	\$	64,811.00
	Lighting	\$	11,518.00
	Hydrology and Hydraulics (Floral Haven Creek)	\$	10,366.00
	Structural Engineering	\$	4,642.00
	Waterline Engineering	\$	12,143.00
	Bancroft (Survey)	\$	67,320.00
Lump Sum	Preliminary Design - Aspen Sidewalk	\$	152,000.00
	Civil Engineering	\$	85,863.00
	Lighting	\$	15,652.00
	Structural Engineering	\$	27,752.00
	Waterline Engineering	\$	22,733.00

Lump Sum	<b>46TH STREET SIDEWALK AND SIDEPATH</b>	<b>\$ 147,100.00</b>
Lump Sum	<i>Conceptual Design - 46Th Sidewalk</i>	\$ 65,500.00
	<i>Civil Engineering</i>	\$ 49,480.00
	<i>Lighting</i>	\$ 7,594.00
	<i>Structural Engineering</i>	\$ 2,456.00
	<i>Hydrology and Hydraulics</i>	\$ 5,970.00
Lump Sum	<i>Preliminary Design - 46Th Sidewalk</i>	\$ 81,600.00
	<i>Civil Engineering</i>	\$ 63,644.00
	<i>Lighting</i>	\$ 11,340.00
	<i>Structural Engineering</i>	\$ 6,616.00
	<b>KENOSHA STREET SIDEWALK AND SIDEPATH</b>	<b>\$ 201,650.00</b>
Lump Sum	<i>Conceptual Design - Kenosha Sidewalk</i>	\$ 81,900.00
	<i>Civil Engineering</i>	\$ 53,988.00
	<i>Lighting</i>	\$ 8,539.00
	<i>Hydrology and Hydraulics</i>	\$ 1,688.00
	<i>Structural Engineering</i>	\$ 6,018.00
	<i>Waterline Engineering</i>	\$ 11,667.00
Lump Sum	<i>Preliminary Design - Kenosha Sidewalk</i>	\$ 119,750.00
	<i>Civil Engineering</i>	\$ 80,154.00
	<i>Lighting</i>	\$ 13,944.00
	<i>Structural Engineering</i>	\$ 4,867.00
	<i>Waterline Engineering</i>	\$ 20,785.00
	<b>HILLSIDE DR-KENOSHA ST SIDEWALK AND SIDEPATH</b>	<b>\$ 320,250.00</b>
Lump Sum	<i>Conceptual Design - Hillside/Kenosha Sidewalk</i>	\$ 133,500.00
	<i>Civil Engineering</i>	\$ 88,300.00
	<i>Lighting</i>	\$ 9,349.00
	<i>Hydrology and Hydraulics</i>	\$ 10,366.00
	<i>Structural Engineering</i>	\$ 11,394.00
	<i>Waterline Engineering</i>	\$ 14,091.00
Lump Sum	<i>Preliminary Design - Hillside/Kenosha Sidewalk</i>	\$ 186,750.00
	<i>Civil Engineering</i>	\$ 109,902.00
	<i>Lighting</i>	\$ 18,050.00
	<i>Structural Engineering</i>	\$ 32,689.00
	<i>Waterline Engineering</i>	\$ 26,109.00
	<b>HILLSIDE DR-ALBANY TO 9TH SIDEWALK AND</b>	<b>\$ 280,328.00</b>
Lump Sum	<i>Conceptual Design - Hillside, Albany To 9Th Sidewalk</i>	\$ 135,046.00
	<i>Civil Engineering</i>	\$ 57,447.00
	<i>Lighting</i>	\$ 9,349.00
	<i>Hydrology and Hydraulics</i>	\$ 1,688.00
	<i>Structural Engineering</i>	\$ 8,950.00
	<i>Waterline Engineering</i>	\$ 10,352.00
	<i>Bancroft Design (Survey)</i>	\$ 47,260.00
Lump Sum	<i>Preliminary Design - Hillside, Albany To 9Th Sidewalk</i>	\$ 145,282.00
	<i>Civil Engineering</i>	\$ 80,036.00
	<i>Lighting</i>	\$ 18,050.00
	<i>Structural Engineering</i>	\$ 28,137.00
	<i>Waterline Engineering</i>	\$ 19,059.00
Lump Sum	<b>STAKEHOLDER AND PUBLIC INVOLVEMENT</b>	<b>\$ 393,940.00</b>
Lump Sum	<b>ENVIRONMENTAL SERVICES</b>	<b>\$ 285,350.00</b>
Lump Sum	<b>BUILD GRANT APPLICATION</b>	<b>\$ 48,250.00</b>
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	<b>Subtotal for Title I Service</b>	<b>\$ 6,274,918.00</b>
<b>Fee Type</b>		

**Exhibit A****City of Broken Arrow  
Reconnecting Broken Arrow RAISE Grant  
ST24140  
TRAFFIC ANALYSIS AND DESIGN**

WORK TASK DESCRIPTION	E-7	E-6	E-5	E-4	E-3	E-2	E-1
	\$439.00	\$316.00	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Data Collection</b>							
Coordination with Subs		8					
Traffic Volume Data Collection (Driveway Sample Counts)		2		12			16
Speed Data Collection		2		12			16
Field Reconnaissance		2		24			32
Crash Data Collection		2		4			4
Traffic Signal Timing Data		6		12			16
Review Prior Data Sources/Plans/Adjacent Studies		4		18			18
Replica Data Review		6		24			40
<b>2. Traffic Volume Development</b>							
Traffic Data Compilation		4		20			48
2025 AM/PM Volume Development		4		16			24
Develop Projections of Future Traffic Volumes - Forecasting and Trip Generation		4		40			80
Pedestrian and Bicycle Future Projections		2		12			16
<b>3. Traffic Operational Analysis/Traffic Modeling</b>							
Existing Year Analysis and Vissim Modeling of Peaks - Vehicles/Peds/Bikes		10		40			80
Future Year (No Build) Analysis and Vissim Modeling - Vehicles/Peds/Bikes		10		30			80
Iterative Future Year (Build) Analysis and Vissim Modeling - Vehicles/Peds/Bikes		10		60			120
<b>4. MMLOS Analysis</b>							
Vehicular Level Of Service and Performance Metrics		8		20			28
Pedestrian Level Of Service and Performance Metrics		4		20			28
Bicycle Level Of Service and Performance Metrics		8		20			28
Transit/Micro-Transit Level of Service and Performance Metrics		2		20			28
Replica Data Analysis and Tool Usage		4		40			52
Pedestrian and Cycling Experience Index		12		20			16
Equity/Accessibility Evaluation and Refinements		2		16			24
<b>5. Crash Analysis</b>							
Crash Frequency and Severity Analysis		2		20			32
Crash Type Analysis (Categorization, Pattern Identification, Mode Specific Analysis)		2		20			32
Contributing Factors Analysis		2		12			24
Spatial and Temporal Analysis		2		12			24
Intersection Specific Analysis		2		12			24
Summary of High-Risk Locations		2		8			16
Recommendation of Countermeasures		4		20			28
<b>6. Access Management/Mobility Analysis</b>							
Access Point Analysis		2		24			24
Access Management Strategies		4		40			40
Develop Recommendations		4		24			24
Corridor speed studies		2		20			40
Countermeasure recommendations		8		20			24
<b>7. Lighting Analysis</b>							
Lighting Level Assessment							
Lumitracker Data Collection				12			12
Data Processing				16			
Portal / Report Development				16			
Coordination		8		8			8
Lighting Improvement Recommendations (~22 Sections)				22			88
Cost Estimate (~22 Estimates)				22			44
Reporting		2		20			20
<b>8. Traffic Signal Timing Updates</b>							
Updated cycle length, splits, sequence		20		100			120
Update Pedestrian Timings		4		16			20
Documentation		4		12			24
Implementation		12		36			32
<b>8. Development of Multimodal Study Alternatives</b>							
Pedestrian/Bicycle Priority Design Alternatives/ Complete Streets Recommendations		8		24			24
Comparative Analysis of Alternatives		4		20			20
Design Visualisation		4		28			28
Roadway and Vehicular Recommendations		10		20			28
Pedestrian Infrastructure and Safety Recommendations		6		20			24
Bicycle Infrastructure and Connectivity Recommendations		6		16			24

Access Improvements		6		16			24
Intersection Safety Enhancements		6		16			24
Policy Recommendations		6		12			20
Recommended Phasing and Prioritization (Short, Medium, Long Term Improvements)		6		40			10
<b>9. Omaha at Aspen - Intersection Study</b>							
Develop Design Traffic Data		2		16			12
Operational Analysis		16		36			48
Draft Report		2		8			16
Final Report		2		4			8
<b>10. Draft and Final Report</b>							
Quality Control		20					
Internal Meetings		32		32			36
Prepare Draft Report Sections		20		40			40
Update Analysis/Respond to Comments		12		24			24
Prepare and Submit Final Report		8		16			16

<b>Hours</b>	<b>0</b>	<b>378</b>	<b>0</b>	<b>1380</b>	<b>0</b>	<b>0</b>	<b>1920</b>
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<b>Salary Costs</b>	\$0.00	\$119,448.00	\$0.00	\$291,180.00	\$0.00	\$0.00	\$259,200.00
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<b>SUBTOTAL - SALARIES:</b>	<b>\$669,828.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$22.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Lumitracker	\$1,600.00
Replica Safe Streets Planner Coverage	\$30,000.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$12,000.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$43,622.00</b>
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<b>SUBTOTAL:</b>	<b>\$713,450.00</b>
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<b>SUBCONSULTANTS FEE: TRAFFIC ENGINEERING CONSULTANTS (DATA COLLECTION)</b>	<b>\$61,550.00</b>
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<b>TOTAL FEE:</b>	<b>\$775,000.00</b>
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**Exhibit A****City of Broken Arrow****Reconnecting Broken Arrow RAISE Grant****ST24140****PROJECT MANAGEMENT AND SUBCONSULTANT COORD.**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00
	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>						
Invoicing	36	36				
Labor projections	30	20				
Subconsultant Coordination		40			12	12
Client Update Meetings	72	72			72	
Multimodal Study Coordination	20	30				
Plan Design Coordination	30	30				12
Lighting Coordination	40	40			20	10
Environmental Services Coordination	30	30				
Landscape Coordination			44			
Right-of-Way Coordination	30	30				20
Railroad Coordination		40			20	20
Conceptual Design Public Meetings	20	20				
<b>Subtotal - Project Management</b>	<b>308</b>	<b>388</b>	<b>44</b>	<b>0</b>	<b>124</b>	<b>74</b>

<b>Hours</b>	<b>308</b>	<b>388</b>	<b>44</b>	<b>0</b>	<b>124</b>	<b>74</b>
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<b>Salary Costs</b>	<b>\$79,156.00</b>	<b>\$81,868.00</b>	<b>\$7,920.00</b>	<b>\$0.00</b>	<b>\$16,740.00</b>	<b>\$8,806.00</b>
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<b>SUBTOTAL - SALARIES:</b>	<b>\$194,490.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$69.62
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$69.62</b>
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<b>SUBTOTAL:</b>	<b>\$194,559.62</b>
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<b>Bancroft Design (Survey)</b>	<b>\$550,750.00</b>
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<b>Bancroft Design (RW Exhibits and Staking, 100 @ \$1,740))</b>	<b>\$174,000.00</b>
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<b>Kleinfelder (Geotech)</b>	<b>\$46,800.00</b>
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<b>WSP (Benefit-Cost Analysis)</b>	<b>\$38,640.38</b>
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SUBCONSULTANTS FEE:	\$810,190.38
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TOTAL FEE:	\$1,004,750.00
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**Exhibit A****City of Broken Arrow  
Reconnecting Broken Arrow RAISE Grant  
ST24140  
LANDSCAPE ARCHITECTURE**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. 3D Rendering (Roadway/Intersections)</b>							
Roadway Section 1 (TBD)			10		64		
Roadway Section 2 (TBD)			10		64		
Public Engagement Exhibit Prep			4		24		
3D Modeling of Additional Areas			12		130		
<b>Subtotal - 3D Rendering (Roadway/Intersections)</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>0</b>	<b>282</b>	<b>0</b>	<b>0</b>
<b>2. Wayfinding Signs (Sidewalks and Sidepaths)</b>							
Sign Design/Messaging			14		26		
Concept Sign Plan (30% Plans)			16		42		
Preliminary Sign Plans (60% Plans)			6		22		
Sign Details			6		22		
Fabrication Specifications			2		2		
<b>Sidepaths)</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>114</b>	<b>0</b>	<b>0</b>
<b>3. Corridor Aesthetic Study (Prelim Designs)</b>							
Background and Precedent Research			12		26		
Concept Studies of Project Elements			32		64		
Internal Team Coordination			8		14		
Preliminary Study Document Prep			22		34		
Meeting with Client(s)(Virtual Only)			4		4		
Revisions to Document/Final Prep			12		22		
Meetings (Internal)(Virtual Only)			18		18		
<b>Designs)</b>	<b>0</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>182</b>	<b>0</b>	<b>0</b>
<b>Subtotal - LANDSCAPE ARCHITECTURE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Hours</b>	<b>0</b>	<b>0</b>	<b>188</b>	<b>0</b>	<b>578</b>	<b>0</b>	<b>0</b>
<b>Salary Costs</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$33,840.00</b>	<b>\$0.00</b>	<b>\$78,030.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

**SUBTOTAL - SALARIES: \$111,870.00****DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$30.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$30.00****SUBTOTAL: \$111,900.00****SUBCONSULTANTS FEE: \$0.00**

TOTAL FEE:

\$111,900.00

## Exhibit A

### City of Broken Arrow Reconnecting Broken Arrow RAISE Grant ST24140 CONCEPTUAL DESIGN - ASPEN AVE. & OMAHA ST. CIVIL

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Investigation		4			4		
Horizontal Geometry		2			4	2	
Driveway Layouts		2			4	2	
Sidewalk/ADA Evaluation		2			4	2	
Title Sheet					2	4	
Typical Sections		2			4	4	
Right-of-Way Map		2			4	4	
Plan & Profile Sheets	2	4			20	100	
Drainage Improvements		6			16	4	
Quantity Calculations		4			8	2	
Utility Companies Coordination	4	4			4	4	
Lighting							
Photometric Modeling		4			8		
Demo / Removal Plans		4			8		
Installation Plans		4			16		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Landscape Architecture							
3D Rendering			6		44		
Gateway Signs			12		48		
Meetings/Coordination with City	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>12</b>	<b>58</b>	<b>18</b>	<b>0</b>	<b>214</b>	<b>128</b>	<b>0</b>
<b>3. Hydrology and Hydraulics</b>							
Data Collection		2		8			
Hydrology		8		24			
Hydraulics		8		24			
Documentation		12		12			
QAQC	2						
<b>Subtotal - Hydrology and Hydraulics</b>	<b>2</b>	<b>30</b>	<b>0</b>	<b>68</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Structural Engineering</b>							
Site Evaluation of Existing Structure & Memo	1		4		3		
RCB Extension Details (Conceptual)	1		8			8	
<b>Subtotal - Structural Engineering</b>	<b>2</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>3</b>	<b>8</b>	<b>0</b>
<b>5. Waterline &amp; Sanitary Sewer Engineering</b>							
Conceptual Water Plans							
Site Visit and Field Data Collection		2		2			
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Review of Existing Pump Station Connections		2		2			
Waterline Design - Horizontal Alignment		8		4			
Waterline Design - Layout Appurtenances		2		2			

Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		12		12		24	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Waterline Review	2	2		2		2	
Conceptual Sanitary Sewer Plans							
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Sanitary Sewer Design - Horizontal Alignment		8		8			
Sanitary Sewer Design - Vertical Profile		12		12			
Sanitary Sewer Key Map		1				2	
Sanitary Sewer Plan and Profile Sheets		8		12		12	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Sanitary Sewer Review	2	2		2		2	
<b>Subtotal - Waterline &amp; Sanitary Sewer Engineering</b>	<b>4</b>	<b>90</b>	<b>0</b>	<b>80</b>	<b>0</b>	<b>44</b>	<b>0</b>

<b>Hours</b>	<b>44</b>	<b>206</b>	<b>30</b>	<b>148</b>	<b>221</b>	<b>184</b>	<b>0</b>
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<b>Salary Costs</b>	\$11,308.00	\$43,466.00	\$5,400.00	\$23,236.00	\$29,835.00	\$21,896.00	\$0.00
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**SUBTOTAL - SALARIES: \$135,141.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$59.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$59.00**

**SUBTOTAL: \$135,200.00**

**SUBCONSULTANTS FEE: \$0.00**

**TOTAL FEE: \$135,200.00**

**Exhibit A****City of Broken Arrow  
Reconnecting Broken Arrow RAISE Grant  
ST24140  
PRELIMINARY DESIGN - ASPEN AVE. & OMAHA ST. CIVIL**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Geometry		2			2	2	
Vertical Geometry		2			20	2	
Roadway Modelling		2			20		
Driveway Design		2			4	2	
Title Sheet		2			2	2	
Pay Quantities and Notes		2			8	2	
Summary Sheets		2			16	2	
Typical Sections		2			2	2	
Right-of-Way Map		2			2	4	
Drainage Design/Drainage Area Map		2			40	4	
Geometric Layout		2			2	2	
SWMP		2			8	4	
Erosion Control Plans		2			8	4	
Plan & Profile Sheets		8			20	60	
Striping & Signing Plans		2			8	4	
Removal Sheets		2			4	4	
Drainage Profiles		2			8	4	
Construction Sequence		2			16	4	
Cross Sections		2			20	20	
Quantity Calculations		4			8	4	
ROW Document Review		4					
Coordination with Utility Companies		4			4	4	
Lighting							
Demo / Removal Plans		2			4	4	
Installation Plans		2			16	16	
Details / One-Line		2			8		
Voltage Drop Calculations					2		
Electric Power Distribution Design					2		
Structural Coordination	2				2		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Landscape Architecture							
Gateway Signs			6		20		
Coordination and Meetings with Owner	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>8</b>	<b>76</b>	<b>6</b>	<b>0</b>	<b>292</b>	<b>156</b>	<b>0</b>
<b>3. Structural Engineering</b>							
RCB Extension Details (Prelim)	1		4		2	16	
Structural Quantity Cost Estimate	1		1		1		
Miscellaneous Structural Details	1		4		4	8	
<b>Subtotal - Structural Engineering</b>	<b>3</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>7</b>	<b>24</b>	<b>0</b>

<b>4. Waterline &amp; Sanitary Sewer Engineering</b>							
Preliminary Waterline Plans							
Waterline Design - Horizontal Alignment		8		8		2	
Waterline Design - Vertical Profile		8		8		4	
Waterline Design - Layout Appurtenances		4		4			
Waterline Design - Pump Station Connections		4		4			
Waterline Design - Misc. Details		8		8		4	
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		20		32		40	
Waterline Pay Items, Quantities, and Notes		4		4			
Water Service Connections		4		4			
Opinion of Probable Construction Cost		4		2			
QA/QC Waterline Review	4	4		4		4	
Preliminary Sanitary Sewer Plans							
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Sanitary Sewer Design - Horizontal Alignment		8		8			
Sanitary Sewer Design - Vertical Profile		12		12		8	
Sanitary Sewer Key Map		1				2	
Sanitary Sewer Plan and Profile Sheets		12		16		16	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Sanitary Sewer Review	2	2		2		2	
<b>Subtotal - Waterline &amp; Sanitary Sewer Engineering</b>	<b>6</b>	<b>119</b>	<b>0</b>	<b>127</b>	<b>0</b>	<b>84</b>	<b>0</b>
<b>Hours</b>	<b>41</b>	<b>223</b>	<b>15</b>	<b>127</b>	<b>303</b>	<b>268</b>	<b>0</b>
<b>Salary Costs</b>	<b>\$10,537.00</b>	<b>\$47,053.00</b>	<b>\$2,700.00</b>	<b>\$19,939.00</b>	<b>\$40,905.00</b>	<b>\$31,892.00</b>	<b>\$0.00</b>

**SUBTOTAL - SALARIES: \$153,026.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$74.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$74.00**

**SUBTOTAL: \$153,100.00**

**SUBCONSULTANTS FEE: \$0.00**

**TOTAL FEE: \$153,100.00**



## Exhibit A

### City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant

ST24140

### PRELIMINARY DESIGN - ASPEN AVE. & OMAHA ST. TRAFFIC

WORK TASK DESCRIPTION	E-6	E-4	E-3	E-1	- Select Category -	- Select Category -
	\$316.00	\$211.00	\$180.00	\$135.00	\$0.00	\$0.00
	hr	hr	hr	hr	hr	hr
<b>1. Traffic Design</b>						
Preliminary Plans (1 Intersection)						
Pay Quantities and Notes		2	8	12		
Signal plan sheets		4	12	40		
Phasing and sequencing sheets		2	8	16		
Wiring diagram sheets		2	8	16		
QA/QC	1					
<b>Subtotal - Traffic Design</b>	<b>1</b>	<b>10</b>	<b>36</b>	<b>84</b>	<b>0</b>	<b>0</b>
<b>Hours</b>	<b>1</b>	<b>10</b>	<b>36</b>	<b>84</b>	<b>0</b>	<b>0</b>
<b>Salary Costs</b>	\$316.00	\$2,110.00	\$6,480.00	\$11,340.00	\$0.00	\$0.00

**SUBTOTAL - SALARIES: \$20,246.00**

#### **DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$4.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$4.00**

**SUBTOTAL: \$20,250.00**

**SUBCONSULTANTS FEE: \$0.00**

**TOTAL FEE: \$20,250.00**

**Exhibit A****City of Broken Arrow****Reconnecting Broken Arrow RAISE Grant****ST24140****CONCEPTUAL DESIGN - ELM PL. CIVIL, KENOSHA ST. TO US-51**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	6	6					
Quality Control Review	6	6					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>12</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Investigation		4			4		
Horizontal Geometry		2			4	2	
Driveway Layouts		2			4	2	
Sidewalk/ADA Evaluation		2			4	2	
Title Sheet					2	4	
Typical Sections		2			4	4	
Right-of-Way Map		2			4	4	
Plan & Profile Sheets	4	4			16	80	
Drainage Improvements		4			12	4	
Quantity Calculations		4			8		
Utility Companies Coordination	4	4			4	4	
Lighting							
Photometric Modeling		4			12		
Demo / Removal Plans		4			8		
Installation Plans		4			16		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Meetings/Coordination with City	8	8			8		
Opinion of Probable Construction Cost		8			8		
<b>Subtotal - Civil Engineering</b>	<b>18</b>	<b>64</b>	<b>0</b>	<b>0</b>	<b>122</b>	<b>106</b>	<b>0</b>
<b>3. Hydrology and Hydraulics</b>							
Data Collection		2		8			
Hydrology		2		4			
Hydraulics		2		8			
Documentation		2		4			
QAQC	2						
<b>Subtotal - Hydrology and Hydraulics</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Structural Engineering</b>							
Site Evaluation of Existing Structure & Memo	1		4		2		
Retaining Wall Design (Conceptual)	2		16		4	16	
Proposed Bridge Details (Conceptual)							
Geometry Prelim Calculations	1		6		8		
Span Configuration Study	1		40		40		
Preliminary Superstructure Design (3 Designs)	1		32		48		
Preliminary Substructure Design (2 Designs)	1		24		20		
Detail General Plan and Elevation (3)	1		12		12	72	
Detail Typical Section (3)	1		12		12	18	
Structural Quantity Cost Estimate (Conceptual)	1		8		12		
<b>Subtotal - Structural Engineering</b>	<b>10</b>	<b>0</b>	<b>154</b>	<b>0</b>	<b>158</b>	<b>106</b>	<b>0</b>
<b>5. Waterline &amp; Sanitary Sewer Engineering</b>							
Site Visit and Field Data Collection		2		2			
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			

Review of Existing Right of Way and Easements		1		1			
Waterline Design - Horizontal Alignment		8		4			
Waterline Design - Layout Appurtenances		4		4			
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		12		8		24	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		4		2			
QA/QC Waterline Review	2	2		2		2	
Conceptual Sanitary Sewer Plans							
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Sanitary Sewer Design - Horizontal Alignment		8		8			
Sanitary Sewer Design - Vertical Profile		12		12			
Sanitary Sewer Key Map		1				2	
Sanitary Sewer Plan and Profile Sheets		8		12		12	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Sanitary Sewer Review	2	2		2		2	
<b>Subtotal - Waterline &amp; Sanitary Sewer Engineering</b>	<b>4</b>	<b>92</b>	<b>0</b>	<b>76</b>	<b>0</b>	<b>44</b>	<b>0</b>

<b>Hours</b>	<b>46</b>	<b>180</b>	<b>154</b>	<b>100</b>	<b>284</b>	<b>260</b>	<b>0</b>
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<b>Salary Costs</b>	\$11,822.00	\$37,980.00	\$27,720.00	\$15,700.00	\$38,340.00	\$30,940.00	\$0.00
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**SUBTOTAL - SALARIES: \$162,502.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$38.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$38.00**

**SUBTOTAL: \$162,540.00**

**Bancroft (Survey) \$46,960.00**

**SUBCONSULTANTS FEE: \$46,960.00**

**TOTAL FEE: \$209,500.00**

**Exhibit A****City of Broken Arrow  
Reconnecting Broken Arrow RAISE Grant  
ST24140  
CONCEPTUAL DESIGN - ELM PL. CIVIL, US-51 TO ALBANY ST.**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	6	6					
Quality Control Review	6	6					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>12</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Investigation		4			4		
Horizontal Geometry		2			4	2	
Driveway Layouts		2			4	2	
Sidewalk/ADA Evaluation		2			4	2	
Title Sheet					2	4	
Typical Sections		2			4	4	
Right-of-Way Map		2			4	8	
Plan & Profile Sheets	2	4			12	60	
Drainage Improvements		4			8	4	
Utility Companies Coordination	4	4			4	4	
Lighting							
Photometric Modeling		4			8		
Demo / Removal Plans		4			8		
Installation Plans		4			8		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Meetings/Coordination with City	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>12</b>	<b>52</b>	<b>0</b>	<b>0</b>	<b>90</b>	<b>90</b>	<b>0</b>
<b>3. Hydrology and Hydraulics</b>							
Data Collection		2		8			
Hydrology		2		4			
Hydraulics		2		8			
Documentation		2		4			
QAQC	2						
<b>Subtotal - Hydrology and Hydraulics</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Structural Engineering</b>							
Site Evaluation of Existing Structure & Memo	1		3		2		
Retaining Wall Design (Conceptual)	2		12		4	12	
<b>Subtotal - Structural Engineering</b>	<b>3</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>6</b>	<b>12</b>	<b>0</b>
<b>5. Waterline &amp; Sanitary Sewer Engineering</b>							
Site Visit and Field Data Collection		2		2			
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Waterline Design - Horizontal Alignment		8		4			
Waterline Design - Layout Appurtenances		2		4			
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		8		8		12	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		4		2			
QA/QC Waterline Review	2	2		2		2	

Conceptual Sanitary Sewer Plans							
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Sanitary Sewer Design - Horizontal Alignment		8		8			
Sanitary Sewer Design - Vertical Profile		12		12			
Sanitary Sewer Key Map		1				2	
Sanitary Sewer Plan and Profile Sheets		8		12		12	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Sanitary Sewer Review	2	2		2		2	
<b>Subtotal - Waterline &amp; Sanitary Sewer Engineering</b>	<b>4</b>	<b>86</b>	<b>0</b>	<b>76</b>	<b>0</b>	<b>32</b>	<b>0</b>

<b>Hours</b>	<b>33</b>	<b>162</b>	<b>15</b>	<b>100</b>	<b>100</b>	<b>138</b>	<b>0</b>
<b>Salary Costs</b>	<b>\$8,481.00</b>	<b>\$34,182.00</b>	<b>\$2,700.00</b>	<b>\$15,700.00</b>	<b>\$13,500.00</b>	<b>\$16,422.00</b>	<b>\$0.00</b>

**SUBTOTAL - SALARIES: \$90,985.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$65.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$65.00**

**SUBTOTAL: \$91,050.00**

**Bancroft (Survey) \$41,150.00**

**SUBCONSULTANTS FEE: \$41,150.00**

**TOTAL FEE: \$132,200.00**

## Exhibit A

### City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant

### ST24140

### PRELIMINARY DESIGN - ELM PL. CIVIL, KENOSHA ST. TO US-51

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	8	8					
Quality Control Review	8	8					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>16</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Geometry		2			2	2	
Vertical Geometry		2			20	2	
Roadway Modelling		2			20		
Driveway Design		2			4	2	
Sideroad Design		4			20	4	
Title Sheet					2	2	
Pay Quantities and Notes		2			8	4	
Summary Sheets		2			16	2	
Typical Sections		2			2	2	
General Plan and Elevation	1	4			8	8	
Right-of-Way Map		2			4	4	
Drainage Design/Drainage Area Map		2			24	16	
Geometric Layout		2			2	2	
SWMP		2			8	4	
Erosion Control Plans		2			8	4	
Plan & Profile Sheets		4			20	60	
Striping & Signing Plans		4			16	16	
Removal Sheets		2			4	4	
Drainage Profiles		4			20	4	
Construction Sequence		2			16	4	
Cross Sections		4			20	8	
Quantity Calculations		4			4	4	
ROW Document Review		4					
Coordination with Utility Companies		4			4	4	
Lighting							
Demo / Removal Plans		2			8	8	
Installation Plans		2			24	24	
Details / One-Line		2			12		
Voltage Drop Calculations					2		
Electric Power Distribution Design					2		
Structural Coordination	2				2		
QC Review	2	6					
Quantities / Opinion of Probable Construction Cost		2			4		
Coordination and Meetings with Owner	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>9</b>	<b>86</b>	<b>0</b>	<b>0</b>	<b>318</b>	<b>194</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Prelim)	1		4		8	16	
Pedestrian Bridge (Conceptual)							
Update General Plan and Elevation	1		8		8	8	
Update Typical Section			1		1	2	
Aesthetic Details	1		24		16	32	
Miscellaneous Structural Details	2		40		40	80	

Structural Quantity Cost Estimate (Prelim)	1		2		4		
<b>Subtotal - Structural Engineering</b>	<b>6</b>	<b>0</b>	<b>79</b>	<b>0</b>	<b>77</b>	<b>138</b>	<b>0</b>
<b>4. Waterline &amp; Sanitary Sewer Engineering</b>							
Preliminary Waterline Plans							
Waterline Design - Horizontal Alignment		12		8		2	
Waterline Design - Vertical Profile		12		8		4	
Waterline Design - Layout Appurtenances		8		8		2	
Waterline Design - Misc. Details		8		8		4	
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		20		24		36	
Waterline Pay Items, Quantities, and Notes		4		4			
Water Service Connections		4		4			
Opinion of Probable Construction Cost		4		2			
QA/QC Waterline Review	4	4		4		4	
Preliminary Sanitary Sewer Plans							
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Sanitary Sewer Design - Horizontal Alignment		8		8			
Sanitary Sewer Design - Vertical Profile		12		12		8	
Sanitary Sewer Key Map		1				2	
Sanitary Sewer Plan and Profile Sheets		12		16		16	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Sanitary Sewer Review	2	2		2		2	
<b>Subtotal - Waterline &amp; Sanitary Sewer Engineering</b>	<b>6</b>	<b>127</b>	<b>0</b>	<b>119</b>	<b>0</b>	<b>82</b>	<b>0</b>
<b>Hours</b>	<b>37</b>	<b>233</b>	<b>79</b>	<b>119</b>	<b>399</b>	<b>418</b>	<b>0</b>
<b>Salary Costs</b>	<b>\$9,509.00</b>	<b>\$49,163.00</b>	<b>\$14,220.00</b>	<b>\$18,683.00</b>	<b>\$53,865.00</b>	<b>\$49,742.00</b>	<b>\$0.00</b>

**SUBTOTAL - SALARIES: \$195,182.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$68.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$68.00**

**SUBTOTAL: \$195,250.00**

**SUBCONSULTANTS FEE: \$0.00**

**TOTAL FEE: \$195,250.00**

## Exhibit A

### City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant

ST24140

### PRELIMINARY DESIGN - ELM PL. CIVIL, US-51 TO ALBANY ST.

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	6	6					
Quality Control Review	6	6					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>12</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Geometry		2			2	2	
Vertical Geometry		2			16	2	
Roadway Modelling		2			20		
Driveway Design		2			4	2	
Sideroad Design		4			8	4	
Title Sheet					2	2	
Pay Quantities and Notes		2			16	4	
Summary Sheets		2			16	2	
Typical Sections		2			2	2	
Right-of-Way Map		2			4	4	
Drainage Design/Drainage Area Map		2			24	4	
Geometric Layout		2			2	2	
SWMP					2	2	
Erosion Control Plans		2			4	2	
Plan & Profile Sheets		8			20	60	
Striping & Signing Plans		4			12	12	
Removal Sheets		2			4	4	
Drainage Profiles		4			8	4	
Construction Sequence		2			16	4	
Cross Sections		4			20	8	
Quantity Calculations		4			4	4	
ROW Document Review		4					
Coordination with Utility Companies		4			4	4	
Lighting							
Demo / Removal Plans		2			4	4	
Installation Plans		2			12	12	
Details / One-Line		2			8		
Voltage Drop Calculations					2		
Electric Power Distribution Design					2		
Structural Coordination	2				2		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Coordination and Meetings with Owner	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>8</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>256</b>	<b>150</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Prelim)	1		2		2		
Miscellaneous Structural Details	2		12		12	40	
Structural Quantity Cost Estimate	1		1		1		
<b>Subtotal - Structural Engineering</b>	<b>4</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>15</b>	<b>40</b>	<b>0</b>
<b>4. Waterline &amp; Sanitary Sewer Engineering</b>							
Preliminary Waterline Plans							



Waterline Design - Horizontal Alignment		8		8		2	
Waterline Design - Vertical Profile		8		8		2	
Waterline Design - Layout Appurtenances		8		4		2	
Waterline Design - Misc. Details		8		8		4	
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		12		12		8	
Waterline Pay Items, Quantities, and Notes		4		4			
Water Service Connections		2		2			
Opinion of Probable Construction Cost		2		2			
QA/QC Waterline Review	4	4		4		4	
Preliminary Sanitary Sewer Plans							
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Sanitary Sewer Design - Horizontal Alignment		8		8			
Sanitary Sewer Design - Vertical Profile		12		12		8	
Sanitary Sewer Key Map		1				2	
Sanitary Sewer Plan and Profile Sheets		12		16		16	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Sanitary Sewer Review	2	2		2		2	
<b>Subtotal - Waterline &amp; Sanitary Sewer Engineering</b>	<b>6</b>	<b>107</b>	<b>0</b>	<b>101</b>	<b>0</b>	<b>52</b>	<b>0</b>
<b>Hours</b>	<b>30</b>	<b>205</b>	<b>15</b>	<b>101</b>	<b>275</b>	<b>246</b>	<b>0</b>
<b>Salary Costs</b>	<b>\$7,710.00</b>	<b>\$43,255.00</b>	<b>\$2,700.00</b>	<b>\$15,857.00</b>	<b>\$37,125.00</b>	<b>\$29,274.00</b>	<b>\$0.00</b>

**SUBTOTAL - SALARIES: \$135,921.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$79.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$79.00**

**SUBTOTAL: \$136,000.00**

**SUBCONSULTANTS FEE: \$0.00**

**TOTAL FEE: \$136,000.00**

**Exhibit A****City of Broken Arrow****Reconnecting Broken Arrow RAISE Grant****ST24140****PRELIMINARY DESIGN - ELM PL. TRAFFIC, KENOSHA ST. TO US-51**

WORK TASK DESCRIPTION	E-6	E-4	- Select Category -	E-3	E-1	- Select Category -	- Select Category -
	\$316.00	\$211.00	\$0.00	\$180.00	\$135.00	\$0.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Traffic Design</b>							
Preliminary Plans (2 Intersections)							
Pay Quantities and Notes		2		8	16		
Signal plan sheets		8		32	48		
phasing and sequencing sheets		8		16	32		
wiring diagram sheets		8		16	32		
QA/QC	4						
<b>Subtotal - Traffic Design</b>	<b>4</b>	<b>26</b>	<b>0</b>	<b>72</b>	<b>128</b>	<b>0</b>	<b>0</b>

<b>Hours</b>	<b>4</b>	<b>26</b>	<b>0</b>	<b>72</b>	<b>128</b>	<b>0</b>	<b>0</b>
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<b>Salary Costs</b>	\$1,264.00	\$5,486.00	\$0.00	\$12,960.00	\$17,280.00	\$0.00	\$0.00
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<b>SUBTOTAL - SALARIES:</b>	<b>\$36,990.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$10.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$10.00</b>
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<b>SUBTOTAL:</b>	<b>\$37,000.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
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<b>TOTAL FEE:</b>	<b>\$37,000.00</b>
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**Exhibit A****City of Broken Arrow****Reconnecting Broken Arrow RAISE Grant  
ST24140****PRELIMINARY DESIGN - ELM PL. TRAFFIC, US-51 TO ALBANY ST.**

WORK TASK DESCRIPTION	E-6	E-4	- Select Category -	E-3	E-1	- Select Category -	- Select Category -
	\$316.00	\$211.00	\$0.00	\$180.00	\$135.00	\$0.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Traffic Design</b>							
Preliminary Plans (2 Intersections)							
Pay Quantities and Notes		2		8	16		
Signal plan sheets		8		32	48		
phasing and sequencing sheets		8		16	32		
wiring diagram sheets		8		16	32		
QA/QC	4						
<b>Subtotal - Traffic Design</b>	<b>4</b>	<b>26</b>	<b>0</b>	<b>72</b>	<b>128</b>	<b>0</b>	<b>0</b>

<b>Hours</b>	<b>4</b>	<b>26</b>	<b>0</b>	<b>72</b>	<b>128</b>	<b>0</b>	<b>0</b>
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<b>Salary Costs</b>	\$1,264.00	\$5,486.00	\$0.00	\$12,960.00	\$17,280.00	\$0.00	\$0.00
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<b>SUBTOTAL - SALARIES:</b>	<b>\$36,990.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$10.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$10.00</b>
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<b>SUBTOTAL:</b>	<b>\$37,000.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
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<b>TOTAL FEE:</b>	<b>\$37,000.00</b>
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**Exhibit A****City of Broken Arrow  
Reconnecting Broken Arrow RAISE Grant  
ST24140  
CONCEPTUAL DESIGN - 9TH ST. CIVIL**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Investigation		4			4		
Horizontal Geometry		2			4	2	
Driveway Layouts		2			12	2	
Sidewalk/ADA Evaluation		2			8	2	
Title Sheet					2	4	
Typical Sections		2			8	4	
Right-of-Way Map		2			4	4	
Plan & Profile Sheets	2	4			20	60	
Drainage Improvements		4			12	12	
Utility Companies Coordination	4	4			4	4	
Lighting							
Photometric Modeling		4			8		
Demo / Removal Plans		4			8		
Installation Plans		4			16		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Meetings/Coordination with City	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>12</b>	<b>52</b>	<b>0</b>	<b>0</b>	<b>126</b>	<b>94</b>	<b>0</b>
<b>3. Hydrology and Hydraulics</b>							
Data Collection		2		8			
Hydrology		8		12			
Hydraulics		8		12			
Documentation		4		12			
QAQC	2						
<b>Subtotal - Hydrology and Hydraulics</b>	<b>2</b>	<b>22</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Structural Engineering</b>							
Site Evaluation of Existing Structure & Memo	2		12		12		
Load Rating of Existing Structure	1		4		6		
Retaining Wall Design (Conceptual)	2		12		12	40	
Proposed Bridge Details (Conceptual)							
Geometry Prelim Calculations	1		6		8		
Span Configuration Study	1		40		40		
Preliminary Superstructure Design (3 Designs)	1		32		48		
Preliminary Substructure Design (2 Designs)	1		24		20		
Detail General Plan and Elevation (3)	1		12		12	72	
Detail Typical Section (3)	1		12		12	18	
Structural Quantity Cost Estimate (Conceptual)	1		8		12		
<b>Subtotal - Structural Engineering</b>	<b>12</b>	<b>0</b>	<b>162</b>	<b>0</b>	<b>182</b>	<b>130</b>	<b>0</b>
<b>4. Waterline &amp; Sanitary Sewer Engineering</b>							
Conceptual Waterline Plans							
Site Visit and Field Data Collection		2		2			

Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Waterline Design - Horizontal Alignment		8		4			
Waterline Design - Layout Appurtenances		4		4			
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		12		12		8	
Pay Items, Quantities, and Notes		4		4			
Opinion of Probable Construction Cost		4		2			
QA/QC Waterline Review	2	2		2		2	
Conceptual Sanitary Sewer Plans							
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Sanitary Sewer Design - Horizontal Alignment		8		8			
Sanitary Sewer Design - Vertical Profile		12		12			
Sanitary Sewer Key Map		1				2	
Sanitary Sewer Plan and Profile Sheets		8		12		12	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Sanitary Sewer Review	2	2		2		2	
<b>Subtotal - Waterline &amp; Sanitary Sewer Engineering</b>	<b>4</b>	<b>88</b>	<b>0</b>	<b>80</b>	<b>0</b>	<b>28</b>	<b>0</b>

<b>Hours</b>	<b>54</b>	<b>190</b>	<b>162</b>	<b>124</b>	<b>312</b>	<b>256</b>	<b>0</b>
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<b>Salary Costs</b>	\$13,878.00	\$40,090.00	\$29,160.00	\$19,468.00	\$42,120.00	\$30,464.00	\$0.00
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**SUBTOTAL - SALARIES:** **\$175,180.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$20.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES:** **\$20.00**

**SUBTOTAL:** **\$175,200.00**

**Bancroft (Survey)** **\$63,800.00**

**SUBCONSULTANTS FEE:** **\$63,800.00**

**TOTAL FEE:** **\$239,000.00**

## Exhibit A

### City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant

ST24140

### CONCEPTUAL DESIGN - 9TH ST. & KENOSHA ST. CIVIL

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	4	4					
Quality Control Review	4	4					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>8</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Investigation		4			4		
Horizontal Geometry		2			4	2	
Driveway Layouts		2			4	2	
Sidewalk/ADA Evaluation		2			4	2	
Intersection Layout		2			8	2	
Title Sheet					2	4	
Typical Sections		2			4	4	
Right-of-Way Map		2			4	4	
Plan & Profile Sheets	2	8			12	40	
Drainage Improvements		4			8	8	
Utility Companies Coordination	4	4			4	4	
Lighting							
Photometric Modeling		4			8		
Demo / Removal Plans		4			8		
Installation Plans		4			16		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Meetings/Coordination with City	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>12</b>	<b>58</b>	<b>0</b>	<b>0</b>	<b>106</b>	<b>72</b>	<b>0</b>
<b>3. Hydrology and Hydraulics</b>							
Coordination with Roadway		8					
<b>Subtotal - Hydrology and Hydraulics</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Waterline Engineering</b>							
Site Visit and Field Data Collection		2		2			
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		1		1			
Review of Existing Right of Way and Easements		1		1			
Waterline Design - Horizontal Alignment		4		4			
Waterline Design - Layout Appurtenances		2		2			
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		12		12		12	
Pay Items, Quantities, and Notes		4		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Waterline Review	2	2		2		2	
<b>Subtotal - Waterline Engineering</b>	<b>2</b>	<b>33</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>16</b>	<b>0</b>
<b>Hours</b>	<b>22</b>	<b>111</b>	<b>0</b>	<b>32</b>	<b>110</b>	<b>92</b>	<b>0</b>
<b>Salary Costs</b>	<b>\$5,654.00</b>	<b>\$23,421.00</b>	<b>\$0.00</b>	<b>\$5,024.00</b>	<b>\$14,850.00</b>	<b>\$10,948.00</b>	<b>\$0.00</b>

<b>SUBTOTAL - SALARIES:</b>	<b>\$59,897.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$13.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

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<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$13.00</b>
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<b>SUBTOTAL:</b>	<b>\$59,910.00</b>
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<b>Bancroft (Survey)</b>	<b>\$31,390.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$31,390.00</b>
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<b>TOTAL FEE:</b>	<b>\$91,300.00</b>
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**Exhibit A****City of Broken Arrow  
Reconnecting Broken Arrow RAISE Grant  
ST24140  
CONCEPTUAL DESIGN - 9TH ST. & HILLSIDE DR. CIVIL**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	4	4					
Quality Control Review	4	4					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>8</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Investigation		4			4		
Horizontal Geometry		2			4	2	
Driveway Layouts		2			4	2	
Sidewalk/ADA Evaluation		2			4	2	
Intersection Layout		2			8	2	
Title Sheet					2	4	
Typical Sections		2			4	4	
Right-of-Way Map		2			4	4	
Plan & Profile Sheets	2	8			12	40	
Drainage Improvements		2			8	4	
Utility Companies Coordination	4	4			4	4	
Lighting							
Photometric Modeling		4			8		
Demo / Removal Plans		4			8		
Installation Plans		4			16		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Opinion of Probable Construction Cost		4			4		
<b>Subtotal - Civil Engineering</b>	<b>8</b>	<b>52</b>	<b>0</b>	<b>0</b>	<b>98</b>	<b>68</b>	<b>0</b>
<b>3. Hydrology and Hydraulics</b>							
Coordination with Roadway		8					
<b>Subtotal - Hydrology and Hydraulics</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Waterline &amp; Sanitary Sewer Engineering</b>							
Site Visit and Field Data Collection		2		2			
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		1		1			
Review of Existing Right of Way and Easements		1		1			
Waterline Design - Horizontal Alignment		4		4			
Waterline Design - Layout Appurtenances		2		2			
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		12		12		12	
Pay Items, Quantities, and Notes		4		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Waterline Review	2	2		2		2	
Conceptual Sanitary Sewer Plans							
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Sanitary Sewer Design - Horizontal Alignment		8		8			
Sanitary Sewer Design - Vertical Profile		12		12			
Sanitary Sewer Key Map		1				2	
Sanitary Sewer Plan and Profile Sheets		8		12		12	



Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Sanitary Sewer Review	2	2		2		2	
<b>Subtotal - Waterline &amp; Sanitary Sewer Engineering</b>	<b>4</b>	<b>79</b>	<b>0</b>	<b>77</b>	<b>0</b>	<b>32</b>	<b>0</b>

<b>Hours</b>	<b>20</b>	<b>151</b>	<b>0</b>	<b>77</b>	<b>102</b>	<b>104</b>	<b>0</b>
<b>Salary Costs</b>	\$5,140.00	\$31,861.00	\$0.00	\$12,089.00	\$13,770.00	\$12,376.00	\$0.00

**SUBTOTAL - SALARIES: \$75,236.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$64.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$64.00**

**SUBTOTAL: \$75,300.00**

**Bancroft (Survey) \$24,050.00**

**SUBCONSULTANTS FEE: \$24,050.00**

**TOTAL FEE: \$99,350.00**

## Exhibit A

### City of Broken Arrow Reconnecting Broken Arrow RAISE Grant ST24140 PRELIMINARY DESIGN - 9TH ST. CIVIL

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Geometry		2			4	2	
Vertical Geometry		2			20	4	
Roadway Modelling		2			20		
Driveway Design		2			20	4	
Sideroad Design		2			20	4	
Title Sheet					2	2	
Pay Quantities and Notes		2			8	2	
Summary Sheets		2			16	2	
Typical Sections		2			8	2	
Right-of-Way Map		2			4	4	
Drainage Design/Drainage Area Map		4			16	4	
Geometric Layout		2			2	2	
SWMP					2	2	
Erosion Control Plans		2			4	2	
Plan & Profile Sheets		8			40	80	
Striping Plans		2			16	16	
Removal Sheets		2			8	8	
Drainage Profiles		4			40	20	
Construction Sequence		2			20	4	
Cross Sections		4			60	40	
Quantity Calculations		4			4	4	
ROW Document Review		4					
Coordination with Utility Companies		4			4	4	
Lighting							
Demo / Removal Plans		2			4	4	
Installation Plans		2			16	16	
Details / One-Line		2			8		
Voltage Drop Calculations					2		
Electric Power Distribution Design					2		
Structural Coordination	2				2		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Coordination and Meetings with Owner	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>8</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>388</b>	<b>232</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Prelim)	1		4		8	16	
Pedestrian Bridge (Conceptual)							
Update General Plan and Elevation	1		8		8	8	
Update Typical Section	1		1		1	2	
Superstructure Preliminary Design	1		24		40		
Aesthetic Details	1		24		16	32	
Miscellaneous Structural Details	2		40		40	80	

Structural Quantity Cost Estimate	1		2		4		
<b>Subtotal - Structural Engineering</b>	<b>8</b>	<b>0</b>	<b>103</b>	<b>0</b>	<b>117</b>	<b>138</b>	<b>0</b>
<b>4. Waterline &amp; Sanitary Sewer Engineering</b>							
Preliminary Waterline Plans							
Waterline Design - Horizontal Alignment		8		8		2	
Waterline Design - Vertical Profile		8		8		4	
Waterline Design - Layout Appurtenances		8		8		2	
Waterline Design - Misc. Details		8		8		4	
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		16		16		24	
Waterline Pay Items, Quantities, and Notes		4		4			
Water Service Connections		4		4			
Opinion of Probable Construction Cost		4		2			
QA/QC Waterline Review	4	4		4		4	
Preliminary Sanitary Sewer Plans							
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Sanitary Sewer Design - Horizontal Alignment		8		8			
Sanitary Sewer Design - Vertical Profile		12		12		8	
Sanitary Sewer Key Map		1				2	
Sanitary Sewer Plan and Profile Sheets		12		16		16	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Sanitary Sewer Review	2	2		2		2	
<b>Subtotal - Waterline &amp; Sanitary Sewer Engineering</b>	<b>6</b>	<b>115</b>	<b>0</b>	<b>111</b>	<b>0</b>	<b>70</b>	<b>0</b>

<b>Hours</b>	<b>46</b>	<b>223</b>	<b>103</b>	<b>111</b>	<b>509</b>	<b>444</b>	<b>0</b>
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<b>Salary Costs</b>	\$11,822.00	\$47,053.00	\$18,540.00	\$17,427.00	\$68,715.00	\$52,836.00	\$0.00
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**SUBTOTAL - SALARIES: \$216,393.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$107.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$107.00**

**SUBTOTAL: \$216,500.00**

**SUBCONSULTANTS FEE: \$0.00**

**TOTAL FEE: \$216,500.00**

**Exhibit A****City of Broken Arrow  
Reconnecting Broken Arrow RAISE Grant  
ST24140  
PRELIMINARY DESIGN - 9TH ST. & KENOSHA ST. CIVIL**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	4	4					
Quality Control Review	4	4					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>8</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Geometry		2			4	2	
Vertical Geometry		2			12	2	
Roadway Modelling		2			20		
Driveway Design		2			8	2	
Intersection Layout		2			16	4	
Title Sheet					2	2	
Pay Quantities and Notes		2			8	4	
Summary Sheets		2			16	2	
Typical Sections		2			2	2	
Right-of-Way Map		2			4	4	
Drainage Design/Drainage Area Map		2			24	4	
Geometric Layout		2			2	2	
SWMP					2	2	
Erosion Control Plans		2			4	2	
Plan & Profile Sheets		4			20	40	
Striping Plans		4			12	8	
Removal Sheets		2			8	8	
Drainage Profiles		4			12	20	
Construction Sequence		2			16	4	
Cross Sections		4			20	20	
Quantity Calculations		4			4	4	
ROW Document Review		4					
Coordination with Utility Companies		4			4	4	
Lighting							
Demo / Removal Plans		2			4	4	
Installation Plans		2			16	16	
Details / One-Line		2			8		
Voltage Drop Calculations					2		
Electric Power Distribution Design					2		
Structural Coordination	2				2		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Coordination and Meetings with Owner	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>8</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>270</b>	<b>162</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design	2			8		4	
Bridge	4			12		8	
<b>Subtotal - Structural Engineering</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>12</b>	<b>0</b>
<b>4. Waterline Engineering</b>							
Preliminary Waterline Plans							
Waterline Design - Horizontal Alignment		8		4		2	
Waterline Design - Vertical Profile		4		4		4	
Waterline Design - Layout Appurtenances		4		4		2	
Waterline Design - Misc. Details		2		2		2	

Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		16		16		24	
Waterline Pay Items, Quantities, and Notes		4		2			
Water Service Connections		2		2			
Opinion of Probable Construction Cost		2		2			
QA/QC Waterline Review	2	2		2		2	
<b>Subtotal - Waterline Engineering</b>	<b>2</b>	<b>45</b>	<b>0</b>	<b>38</b>	<b>0</b>	<b>38</b>	<b>0</b>

<b>Hours</b>	<b>24</b>	<b>133</b>	<b>0</b>	<b>58</b>	<b>274</b>	<b>216</b>	<b>0</b>
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<b>Salary Costs</b>	\$6,168.00	\$28,063.00	\$0.00	\$9,106.00	\$36,990.00	\$25,704.00	\$0.00
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<b>SUBTOTAL - SALARIES:</b>	<b>\$106,031.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$119.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$119.00</b>
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<b>SUBTOTAL:</b>	<b>\$106,150.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
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<b>TOTAL FEE:</b>	<b>\$106,150.00</b>
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**Exhibit A****City of Broken Arrow  
Reconnecting Broken Arrow RAISE Grant  
ST24140  
PRELIMINARY DESIGN - 9TH ST. & HILLSIDE DR. CIVIL**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	4	4					
Quality Control Review	4	4					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>8</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Geometry		2			4	2	
Vertical Geometry		2			12	2	
Roadway Modelling		2			20		
Driveway Design		2			16	2	
Intersection Layout		2			16	4	
Title Sheet					2	2	
Pay Quantities and Notes		2			8	4	
Summary Sheets		2			16	2	
Typical Sections		2			2	2	
Right-of-Way Map		2			4	4	
Drainage Design/Drainage Area Map		4			16	4	
Geometric Layout		2			2	2	
SWMP					2	2	
Erosion Control Plans		2			4	2	
Plan & Profile Sheets		8			12	40	
Striping Plans		4			8	4	
Drainage Profiles		4			12	8	
Construction Sequence		2			16	4	
Cross Sections		4			20	20	
Quantity Calculations		4			4	4	
ROW Document Review		4					
Coordination with Utility Companies		4			4	4	
Lighting							
Demo / Removal Plans		2			4	4	
Installation Plans		2			16	16	
Details / One-Line		2			8		
Voltage Drop Calculations					2		
Electric Power Distribution Design					2		
Structural Coordination	2				2		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Coordination and Meetings with Owner	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>8</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>250</b>	<b>138</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design	2			8		4	
Bridge	4			12		8	
<b>Subtotal - Structural Engineering</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>12</b>	<b>0</b>
<b>4. Waterline &amp; Sanitary Sewer Engineering</b>							
Preliminary Waterline Plans							
Waterline Design - Horizontal Alignment		8		4		2	
Waterline Design - Vertical Profile		8		4		2	

Waterline Design - Layout Appurtenances		4		2		2	
Waterline Design - Misc. Details		2		2		2	
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		16		16		24	
Waterline Pay Items, Quantities, and Notes		4		2			
Water Service Connections		2		2			
Opinion of Probable Construction Cost		2		2			
QA/QC Waterline Review	2	2		2		2	
Preliminary Sanitary Sewer Plans							
Review of Topo Survey, Atlas, and Record Drawings		2		2			
Coordination with Utility Companies		2		2			
Review of Existing Right of Way and Easements		1		1			
Sanitary Sewer Design - Horizontal Alignment		8		8			
Sanitary Sewer Design - Vertical Profile		12		12		8	
Sanitary Sewer Key Map		1				2	
Sanitary Sewer Plan and Profile Sheets		12		16		16	
Pay Items, Quantities, and Notes		8		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Sanitary Sewer Review	2	2		2		2	
<b>Subtotal - Waterline &amp; Sanitary Sewer Engineering</b>	<b>4</b>	<b>99</b>	<b>0</b>	<b>85</b>	<b>0</b>	<b>64</b>	<b>0</b>

<b>Hours</b>	<b>26</b>	<b>191</b>	<b>0</b>	<b>105</b>	<b>254</b>	<b>218</b>	<b>0</b>
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<b>Salary Costs</b>	<b>\$6,682.00</b>	<b>\$40,301.00</b>	<b>\$0.00</b>	<b>\$16,485.00</b>	<b>\$34,290.00</b>	<b>\$25,942.00</b>	<b>\$0.00</b>
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**SUBTOTAL - SALARIES: \$123,700.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$50.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$50.00**

**SUBTOTAL: \$123,750.00**

**SUBCONSULTANTS FEE: \$0.00**

**TOTAL FEE: \$123,750.00**

**Exhibit A****City of Broken Arrow****Reconnecting Broken Arrow RAISE Grant****ST24140****PRELIMINARY DESIGN - 9TH ST. TRAFFIC**

WORK TASK DESCRIPTION	E-6	E-4	- Select Category -	E-3	E-1	- Select Category -	- Select Category -
	\$316.00	\$211.00	\$0.00	\$180.00	\$135.00	\$0.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Traffic Design</b>							
Preliminary Plans (3 Intersections)							
Pay Quantities and Notes		2		4	8		
Signal plan sheets		12		48	72		
phasing and sequencing sheets		9		32	55		
wiring diagram sheets		9		32	55		
QA/QC	2						
<b>Subtotal - Traffic Design</b>	<b>2</b>	<b>32</b>	<b>0</b>	<b>116</b>	<b>190</b>	<b>0</b>	<b>0</b>

<b>Hours</b>	<b>2</b>	<b>32</b>	<b>0</b>	<b>116</b>	<b>190</b>	<b>0</b>	<b>0</b>
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<b>Salary Costs</b>	\$632.00	\$6,752.00	\$0.00	\$20,880.00	\$25,650.00	\$0.00	\$0.00
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<b>SUBTOTAL - SALARIES:</b>	<b>\$53,914.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$36.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$36.00</b>
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<b>SUBTOTAL:</b>	<b>\$53,950.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
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<b>TOTAL FEE:</b>	<b>\$53,950.00</b>
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**Exhibit A****City of Broken Arrow****Reconnecting Broken Arrow RAISE Grant  
ST24140****PRELIMINARY DESIGN - 9TH ST. & KENOSHA TRAFFIC**

WORK TASK DESCRIPTION	E-6	E-4	- Select Category -	E-3	E-1	- Select Category -	- Select Category -
	\$316.00	\$211.00	\$0.00	\$180.00	\$135.00	\$0.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Traffic Design</b>							
Preliminary Plans (1 Intersections)							
Pay Quantities and Notes		1		2	4		
Signal plan sheets		4		16	27		
phasing and sequencing sheets		4		8	16		
wiring diagram sheets		4		8	16		
QA/QC	2						
<b>Subtotal - Traffic Design</b>	<b>2</b>	<b>13</b>	<b>0</b>	<b>34</b>	<b>63</b>	<b>0</b>	<b>0</b>

<b>Hours</b>	<b>2</b>	<b>13</b>	<b>0</b>	<b>34</b>	<b>63</b>	<b>0</b>	<b>0</b>
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<b>Salary Costs</b>	\$632.00	\$2,743.00	\$0.00	\$6,120.00	\$8,505.00	\$0.00	\$0.00
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<b>SUBTOTAL - SALARIES:</b>	<b>\$18,000.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$0.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$0.00</b>
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<b>SUBTOTAL:</b>	<b>\$18,000.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
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<b>TOTAL FEE:</b>	<b>\$18,000.00</b>
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**Exhibit A****City of Broken Arrow****Reconnecting Broken Arrow RAISE Grant****ST24140****PRELIMINARY DESIGN - 9TH ST. & HILLSIDE DR. TRAFFIC**

WORK TASK DESCRIPTION	E-6	E-4	- Select Category -	E-3	E-1	- Select Category -	- Select Category -
	\$316.00	\$211.00	\$0.00	\$180.00	\$135.00	\$0.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Traffic Design</b>							
Preliminary Plans (1 Intersections)							
Pay Quantities and Notes		1		2	4		
Signal plan sheets		4		16	27		
phasing and sequencing sheets		4		8	16		
wiring diagram sheets		4		8	16		
QA/QC	2						
<b>Subtotal - Traffic Design</b>	<b>2</b>	<b>13</b>	<b>0</b>	<b>34</b>	<b>63</b>	<b>0</b>	<b>0</b>

<b>Hours</b>	<b>2</b>	<b>13</b>	<b>0</b>	<b>34</b>	<b>63</b>	<b>0</b>	<b>0</b>
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<b>Salary Costs</b>	\$632.00	\$2,743.00	\$0.00	\$6,120.00	\$8,505.00	\$0.00	\$0.00
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<b>SUBTOTAL - SALARIES:</b>	<b>\$18,000.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$0.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$0.00</b>
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<b>SUBTOTAL:</b>	<b>\$18,000.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
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<b>TOTAL FEE:</b>	<b>\$18,000.00</b>
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## Exhibit A

### City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant ST24140

### CONCEPTUAL DESIGN - MULTI-USE TRAIL

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Investigation		8			8		
Horizontal Geometry		2			20	8	
Crossing Layouts		2			12	4	
Title Sheet					2	4	
Typical Sections		2			8	8	
Right-of-Way Map		2			24	24	
Plan & Profile Sheets	4	16			60	100	
Drainage Profiles		4			16	8	
Utility Companies Coordination		4			4	4	
Lighting							
Photometric Modeling		4			16		
Installation Plans		4			24		
QC Review	4	8					
Quantities / Opinion of Probable Construction Cost		2			6		
Landscape Architecture							
Pause Points - Concept Design			22		44		
Pause Points Renderings (Corridor plan view)			4		18		
Pause Points Plans - Schematic Design			32		66		
Meetings (Internal and External)(Virtual Only)			18		18		
Meetings/Coordination with City	4	4			4		
Opinion of Probable Construction Cost		4			4		
<b>Subtotal - Civil Engineering</b>	<b>12</b>	<b>66</b>	<b>76</b>	<b>0</b>	<b>354</b>	<b>160</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Conceptual)	4		24		32	40	
<b>Subtotal - Structural Engineering</b>	<b>4</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>32</b>	<b>40</b>	<b>0</b>
<b>4. Hydrology and Hydraulics</b>							
Data Collection		2		8			
Hydrology		8		40			
Hydraulics		8		40			
Documentation		12		24			
CLOMR		60		60			
QAQC	20						
<b>Subtotal - Hydrology and Hydraulics</b>	<b>20</b>	<b>90</b>	<b>0</b>	<b>172</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Hours</b>	<b>60</b>	<b>184</b>	<b>100</b>	<b>172</b>	<b>390</b>	<b>204</b>	<b>0</b>
<b>Salary Costs</b>	<b>\$15,420.00</b>	<b>\$38,824.00</b>	<b>\$18,000.00</b>	<b>\$27,004.00</b>	<b>\$52,650.00</b>	<b>\$24,276.00</b>	<b>\$0.00</b>

**SUBTOTAL - SALARIES:**

**\$176,174.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$76.00
CLOMR Submittal Fees	\$6,500.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

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<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$6,576.00</b>
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<b>SUBTOTAL:</b>	<b>\$182,750.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
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<b>TOTAL FEE:</b>	<b>\$182,750.00</b>
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**Exhibit A****City of Broken Arrow  
Reconnecting Broken Arrow RAISE Grant  
ST24140  
PRELIMINARY DESIGN - MULTI-USE TRAIL**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Geometry		2			20	4	
Vertical Geometry		2			40	8	
Sidewalk Modeling		2			20		
Title Sheet					2	2	
Pay Quantities and Notes		2			8	4	
Summary Sheets		2			8	2	
Typical Sections		2			4	2	
Geometric Layouts		2			12	8	
Right-of-Way Map		2			12	12	
Drainage Design/Drainage Area Map		2			16	4	
SWMP					2	2	
Erosion Control		2			8	4	
Plan & Profile Sheets		8			60	120	
Striping & Signing Plans		2			8	8	
Drainage Profiles		4			12	4	
Cross Sections		4			40	60	
ROW Document Review		8					
Quantity Calculations		2			8		
Coordination with Utility Companies		4			4	4	
Lighting							
Installation Plans		4			24	24	
Details / One-Line		4			12		
Voltage Drop Calculations					6		
Electric Power Distribution Design		2			6		
Structural Coordination	2				4		
QC Review	4	8					
Quantities / Opinion of Probable Construction Cost		2			4		
Landscape Architecture							
Pause Points Plans - Design Development			22		44		
Corridor Landscape Plans			8		28		
Irrigation Plans (@ Pause points only)			12		44		
Trail Signage Plan			14		28		
OPCC			10		8		
Specifications			6		6		
Meetings (Internal and External)(Virtual Only)			18		18		
Coordination and Meetings with Owner	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>10</b>	<b>80</b>	<b>90</b>	<b>0</b>	<b>528</b>	<b>272</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Prelim)	1		4		8	16	
Miscellaneous Structural Details	2		40		40	80	
Structural Quantity Cost Estimate			1		1		
<b>Subtotal - Structural Engineering</b>	<b>3</b>	<b>0</b>	<b>45</b>	<b>0</b>	<b>49</b>	<b>96</b>	<b>0</b>

Hours	37	108	135	0	581	372	0
<b>Salary Costs</b>	\$9,509.00	\$22,788.00	\$24,300.00	\$0.00	\$78,435.00	\$44,268.00	\$0.00
<b>SUBTOTAL - SALARIES:</b>		<b>\$179,300.00</b>					
<b><u>DIRECT NON-LABOR EXPENSES</u></b>							
Document Printing/Reproduction/Assembly	\$50.00						
Postage/Freight/Courier	\$0.00						
Office Supplies/Equipment	\$0.00						
Communications	\$0.00						
Survey Supplies	\$0.00						
Aerial Photography	\$0.00						
GPS Equipment	\$0.00						
Computer Modeling/Software Use	\$0.00						
Traffic Counting Equipment	\$0.00						
Locator/Tracer/Thermal Imager Equipment	\$0.00						
Travel Costs	\$0.00						
<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>		<b>\$50.00</b>					
<b>SUBTOTAL:</b>		<b>\$179,350.00</b>					
<b>SUBCONSULTANTS FEE:</b>		<b>\$0.00</b>					
<b>TOTAL FEE:</b>		<b>\$179,350.00</b>					

**Exhibit A****City of Broken Arrow  
Reconnecting Broken Arrow RAISE Grant  
ST24140  
CONCEPTUAL DESIGN - ASPEN SIDEWALK**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Visit		8			8		
Horizontal Alignment		2			8	2	
Sidewalk/ADA Evaluation		8			8		
Driveway Design		2			8		
Typical Sections		2			8	8	
Title Sheet					2	4	
Typical Sections		2			8	8	
Right-of-Way Map		2			12	8	
Plan & Profile Sheets	4	4			40	100	
Drainage Improvements		4			20	20	
Quantity Calculations		4			8		
Utility Companies Coordination	4	4			4	4	
Lighting							
Photometric Modeling		6			12		
Demo / Removal Plans		4			8		
Installation Plans		6			20		
QC Review	2	6					
Quantities / Opinion of Probable Construction Cost		2			4		
Meetings/Coordination with City	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>14</b>	<b>74</b>	<b>0</b>	<b>0</b>	<b>190</b>	<b>154</b>	<b>0</b>
<b>3. Hydrology and Hydraulics (Floral Haven Creek)</b>							
Data Collection		2		8			
Hydrology		2		20			
Hydraulics		2		20			
Documentation		2		4			
QAQC	2						
<b>Subtotal - Hydrology and Hydraulics (Floral Haven Creek)</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>52</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Conceptual)	2		12		4	12	
<b>Subtotal - Structural Engineering</b>	<b>2</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>4</b>	<b>12</b>	<b>0</b>
<b>4. Waterline Engineering</b>							
Site Visit and Field Data Collection		1		1			
Review of Topo Survey, Atlas, and Record Drawings		1		1			
Coordination with Utility Companies		1		1			
Review of Existing Right of Way and Easements		1					
Waterline Design - Horizontal Alignment		4		4			
Waterline Design - Layout Appurtenances		2		2			
Waterline Key Map		1		1		2	
Waterline Plan and Profile Sheets		8		8		8	
Pay Items, Quantities, and Notes		4		4			
Opinion of Probable Construction Cost		4		2			
QA/QC Waterline Review	2	2		2		2	

Subtotal - Waterline Engineering	2	29	0	26	0	12	0
Hours	44	139	12	78	198	182	0
Salary Costs	\$11,308.00	\$29,329.00	\$2,160.00	\$12,246.00	\$26,730.00	\$21,658.00	\$0.00
<b>SUBTOTAL - SALARIES:</b>		<b>\$103,431.00</b>					
<b>DIRECT NON-LABOR EXPENSES</b>							
Document Printing/Reproduction/Assembly	\$49.00						
Postage/Freight/Courier	\$0.00						
Office Supplies/Equipment	\$0.00						
Communications	\$0.00						
Survey Supplies	\$0.00						
Aerial Photography	\$0.00						
GPS Equipment	\$0.00						
Computer Modeling/Software Use	\$0.00						
Traffic Counting Equipment	\$0.00						
Locator/Tracer/Thermal Imager Equipment	\$0.00						
Travel Costs	\$0.00						
<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>		<b>\$49.00</b>					
<b>SUBTOTAL:</b>		<b>\$103,480.00</b>					
<b>Bancroft (Survey)</b>		<b>\$67,320.00</b>					
<b>SUBCONSULTANTS FEE:</b>		<b>\$67,320.00</b>					
<b>TOTAL FEE:</b>		<b>\$170,800.00</b>					



## Exhibit A

### City of Broken Arrow Reconnecting Broken Arrow RAISE Grant ST24140 PRELIMINARY DESIGN - ASPEN SIDEWALK

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Alignments		2			8	2	
Vertical Alignments		2			20	2	
Sidewalk Modelling		2			20		
Driveway Design		2			16		
Title Sheet					2	2	
Pay Quantities and Notes		2			16	4	
Summary Sheets		2			8	2	
Typical Sections		2			2	2	
Geometric Layout		2			4	4	
Right-of-Way Map		2			4	4	
Drainage Design/Drainage Area Map		2			24	4	
SWMP		2			2	2	
Erosion Control Plan		2			8	2	
Plan & Profile Sheets		8			40	80	
Striping Plans		4			16	16	
Drainage Profiles		4			20	12	
Cross Sections		4			40	20	
ROW Document Review		4					
Quantity Calculations		4			8		
Coordination with Utility Companies		4			4	4	
Lighting							
Demo / Removal Plans		2			6	6	
Installation Plans		2			24	24	
Details / One-Line		2			12		
Voltage Drop Calculations					4		
Electric Power Distribution Design					6		
Structural Coordination	2				4		
QC Review	2	6					
Quantities / Opinion of Probable Construction Cost		2			4		
Coordination and Meetings with Owner	4	4			4		
Opinion of Probable Construction Cost		8			16		
<b>Subtotal - Civil Engineering</b>	<b>8</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>342</b>	<b>192</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Prelim)	1		4		8	16	
Miscellaneous Structural Details	2		40		40	80	
Structural Quantity Cost Estimate	1		2		4		
<b>Subtotal - Structural Engineering</b>	<b>4</b>	<b>0</b>	<b>46</b>	<b>0</b>	<b>52</b>	<b>96</b>	<b>0</b>
<b>4. Waterline Engineering</b>							
Preliminary Waterline Plans							
Waterline Design - Horizontal Alignment		8		8		2	
Waterline Design - Vertical Profile		8		8		4	
Waterline Design - Layout Appurtenances		4		4		2	

Waterline Design - Misc. Details		4		4		4	
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		12		12		8	
Waterline Pay Items, Quantities, and Notes		4		4			
Water Service Connections		2		2			
Opinion of Probable Construction Cost		4		4			
QA/QC Waterline Review	4	4		4		4	
<b>Subtotal - Waterline Engineering</b>	<b>4</b>	<b>51</b>	<b>0</b>	<b>50</b>	<b>0</b>	<b>26</b>	<b>0</b>

<b>Hours</b>	<b>40</b>	<b>161</b>	<b>46</b>	<b>50</b>	<b>398</b>	<b>318</b>	<b>0</b>
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<b>Salary Costs</b>	\$10,280.00	\$33,971.00	\$8,280.00	\$7,850.00	\$53,730.00	\$37,842.00	\$0.00
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**SUBTOTAL - SALARIES: \$151,953.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$47.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$47.00**

**SUBTOTAL: \$152,000.00**

**SUBCONSULTANTS FEE: \$0.00**

**TOTAL FEE: \$152,000.00**

## Exhibit A

### City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant ST24140

### CONCEPTUAL DESIGN - 46TH SIDEWALK

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	4	4					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>16</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Visit		4			4		
Horizontal Alignment		2			8	2	
Sidewalk/ADA Evaluation		8			8		
Driveway Design		2			8		
Title Sheet					2	4	
Typical Sections		2			8	8	
Right-of-Way Map		2			4	8	
Plan & Profile Sheets	4	8			20	60	
Drainage Improvements		4			12	12	
Quantity Calculations		2			8		
Utility Companies Coordination	4	4			4	4	
Lighting							
Photometric Modeling		4			6		
Demo / Removal Plans		2			6		
Installation Plans		4			14		
QC Review	2	3					
Cost		2			3		
Meetings/Coordination with City	8	8			8		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>18</b>	<b>65</b>	<b>0</b>	<b>0</b>	<b>131</b>	<b>98</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Conceptual)	2		4		2	8	
<b>Subtotal - Structural Engineering</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>0</b>
<b>4. Hydrology and Hydraulics</b>							
Data Collection		2		8			
Hydrology		2		4			
Hydraulics		2		8			
Documentation		2		4			
QAQC	2						
<b>Subtotal - Hydrology and Hydraulics</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Hours</b>	<b>38</b>	<b>93</b>	<b>4</b>	<b>24</b>	<b>137</b>	<b>110</b>	<b>0</b>
<b>Salary Costs</b>	<b>\$9,766.00</b>	<b>\$19,623.00</b>	<b>\$720.00</b>	<b>\$3,768.00</b>	<b>\$18,495.00</b>	<b>\$13,090.00</b>	<b>\$0.00</b>

**SUBTOTAL - SALARIES: \$65,462.00**

#### DIRECT NON-LABOR EXPENSES

Document Printing/Reproduction/Assembly \$38.00  
Postage/Freight/Courier \$0.00

Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00
<hr/>	
<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$38.00</b>
<hr/>	
<b>SUBTOTAL:</b>	<b>\$65,500.00</b>
<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
<hr/>	
<b>TOTAL FEE:</b>	<b>\$65,500.00</b>

## Exhibit A

### City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant ST24140

### PRELIMINARY DESIGN - 46TH SIDEWALK

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Alignment		2			8	2	
Vertical Alignment		2			8	2	
Sidewalk Modelling		2			12		
Driveway Design		2			8	2	
Title Sheet					2	2	
Pay Quantities and Notes		2			8	2	
Summary Sheets		2			8	2	
Typical Sections		2			2	2	
Geometric Layout		2			2	4	
Right-of-Way Map		2			4	4	
Drainage Design/Drainage Area Map		4			30	8	
SWMP		2			2	2	
Erosion Control Plan		2			8	2	
Plan & Profile Sheets		4			20	20	
Striping Plans		4			8	4	
Drainage Profiles		2			8	8	
Cross Sections		2			20	20	
ROW Document Review		4					
Quantity Calculations		2			8		
Coordination with Utility Companies		4			4	4	
Lighting							
Demo / Removal Plans		2			4	4	
Installation Plans		2			16	16	
Details / One-Line		2			8		
Voltage Drop Calculations					2		
Electric Power Distribution Design					4		
Structural Coordination	2				2		
QC Review	2	4					
Cost		2			4		
Coordination and Meetings with Owner	8	8			8		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>12</b>	<b>72</b>	<b>0</b>	<b>0</b>	<b>226</b>	<b>110</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Prelim)	1		2		2	8	
Miscellaneous Structural Details	1		8		8	12	
Structural Quantity Cost Estimate	1		1		1		
<b>Subtotal - Structural Engineering</b>	<b>3</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>20</b>	<b>0</b>

Hours	39	100	11	0	241	134	0
Salary Costs	\$10,023.00	\$21,100.00	\$1,980.00	\$0.00	\$32,535.00	\$15,946.00	\$0.00
<hr/>							
SUBTOTAL - SALARIES:	\$81,584.00						
<hr/>							
<b><u>DIRECT NON-LABOR EXPENSES</u></b>							
Document Printing/Reproduction/Assembly	\$16.00						
Postage/Freight/Courier	\$0.00						
Office Supplies/Equipment	\$0.00						
Communications	\$0.00						
Survey Supplies	\$0.00						
Aerial Photography	\$0.00						
GPS Equipment	\$0.00						
Computer Modeling/Software Use	\$0.00						
Traffic Counting Equipment	\$0.00						
Locator/Tracer/Thermal Imager Equipment	\$0.00						
Travel Costs	\$0.00						
<hr/>							
SUBTOTAL - DIRECT NON-LABOR EXPENSES:	\$16.00						
<hr/>							
SUBTOTAL:	\$81,600.00						
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SUBCONSULTANTS FEE:	\$0.00						
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TOTAL FEE:	\$81,600.00						

## Exhibit A

### City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant

ST24140

### CONCEPTUAL DESIGN - KENOSHA SIDEWALK

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Visit		8			8		
Horizontal Alignment		2			16	2	
Sidewalk/ADA Evaluation		4			8		
Driveway Design		2			16		
Title Sheet					2	4	
Typical Sections		2			8	8	
Right-of-Way Map		2			4	8	
Plan & Profile Sheets	4	4			32	60	
Drainage Improvements		2			16	8	
Quantity Calculations		2			8		
Utility Companies Coordination	4	4			4	4	
Lighting							
Photometric Modeling		4			8		
Demo / Removal Plans		2			8		
Installation Plans		4			16		
QC Review	2	3					
Cost		2			4		
Meetings/Coordination with City	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>14</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>170</b>	<b>94</b>	<b>0</b>
<b>3. Hydrology and Hydraulics</b>							
Coordination with Roadway		8					
<b>Subtotal - Hydrology and Hydraulics</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Structural Engineering</b>							
Retaining Wall Design (Conceptual)	2		8		16	16	
<b>Subtotal - Structural Engineering</b>	<b>2</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>16</b>	<b>16</b>	<b>0</b>
<b>5. Waterline Engineering</b>							
Site Visit and Field Data Collection		1		1			
Review of Topo Survey, Atlas, and Record Drawings		1		1			
Coordination with Utility Companies		1		1			
Review of Existing Right of Way and Easements		1					
Waterline Design - Horizontal Alignment		4		4			
Waterline Design - Layout Appurtenances		2		2			
Waterline Key Map		1		1		2	
Waterline Plan and Profile Sheets		8		8		4	
Pay Items, Quantities, and Notes		4		4			
Opinion of Probable Construction Cost		4		2			
QA/QC Waterline Review	2	2		2		2	

<b>Subtotal - Waterline Engineering</b>	<b>2</b>	<b>29</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>8</b>	<b>0</b>

<b>Hours</b>	<b>42</b>	<b>120</b>	<b>8</b>	<b>26</b>	<b>190</b>	<b>122</b>	<b>0</b>
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<b>Salary Costs</b>	\$10,794.00	\$25,320.00	\$1,440.00	\$4,082.00	\$25,650.00	\$14,518.00	\$0.00
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<b>SUBTOTAL - SALARIES:</b>	<b>\$81,804.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$96.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$96.00</b>
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<b>SUBTOTAL:</b>	<b>\$81,900.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
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<b>TOTAL FEE:</b>	<b>\$81,900.00</b>
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## Exhibit A

### City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant ST24140

### PRELIMINARY DESIGN - KENOSHA SIDEWALK

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Alignment		2			12	2	
Vertical Alignment		2			12	2	
Sidewalk Modelling		2			20		
Driveway Design		2			16		
Title Sheet					2	2	
Pay Quantities and Notes		2			8	4	
Summary Sheets		2			8	2	
Typical Sections		2			2	2	
Geometric Layout		2			4	4	
Right-of-Way Map		2			4	4	
Drainage Design/Drainage Area Map		4			24	8	
SWMP		2			2	2	
Erosion Control		2			8	4	
Plan & Profile Sheets		8			40	80	
Striping & Signing Plans		2			8	8	
Drainage Profiles		4			16	12	
Cross Sections		4			40	20	
ROW Document Review		4					
Quantity Calculations		2			8		
Coordination with Utility Companies		4			4	4	
Lighting							
Demo / Removal Plans		2			6	6	
Installation Plans		2			20	20	
Details / One-Line		2			10		
Voltage Drop Calculations					6		
Electric Power Distribution Design					6		
Structural Coordination	2				2		
QC Review	2	4					
Quantities / Opinion of Probable Construction Cost		2			4		
Coordination and Meetings with Owner	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>8</b>	<b>74</b>	<b>0</b>	<b>0</b>	<b>304</b>	<b>186</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Prelim)	2		4		2	8	
Miscellaneous Structural Details	1		2		2	8	
Structural Quantity Cost Estimate	1		1		1		
<b>Subtotal - Structural Engineering</b>	<b>4</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>5</b>	<b>16</b>	<b>0</b>

<b>4. Waterline Engineering</b>							
Preliminary Waterline Plans							
Waterline Design - Horizontal Alignment		8		8		2	
Waterline Design - Vertical Profile		8		8		4	
Waterline Design - Layout Appurtenances		4		4		2	
Waterline Design - Misc. Details		4		4		4	
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		8		8		4	
Waterline Pay Items, Quantities, and Notes		4		4			
Water Service Connections		2		2			
Opinion of Probable Construction Cost		4		4			
QA/QC Waterline Review	4	4		4		4	
<b>Subtotal - Waterline Engineering</b>	<b>4</b>	<b>47</b>	<b>0</b>	<b>46</b>	<b>0</b>	<b>22</b>	<b>0</b>

<b>Hours</b>	<b>40</b>	<b>149</b>	<b>7</b>	<b>46</b>	<b>313</b>	<b>228</b>	<b>0</b>
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<b>Salary Costs</b>	\$10,280.00	\$31,439.00	\$1,260.00	\$7,222.00	\$42,255.00	\$27,132.00	\$0.00
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**SUBTOTAL - SALARIES: \$119,588.00**

**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$162.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$162.00**

**SUBTOTAL: \$119,750.00**

**SUBCONSULTANTS FEE: \$0.00**

**TOTAL FEE: \$119,750.00**

## Exhibit A

### City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant ST24140

### CONCEPTUAL DESIGN - HILLSIDE/KENOSHA SIDEWALK

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Visit		8			8		
Horizontal Alignment		4			40	8	
Sidewalk/ADA Evaluation		8			8		
Driveway Design		2			24		
Title Sheet					2	4	
Typical Sections		2			12	8	
Right-of-Way Map		4			24	12	
Plan & Profile Sheets	4	12			80	160	
Drainage Improvements		4			20	20	
Quantity Calculations		4			16		
Utility Companies Coordination	4	4			4	4	
Lighting							
Photometric Modeling		4			10		
Demo / Removal Plans		2			8		
Installation Plans		4			20		
QC Review	2	3					
Cost		2			4		
Meetings/Coordination with City	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>14</b>	<b>75</b>	<b>0</b>	<b>0</b>	<b>292</b>	<b>216</b>	<b>0</b>
<b>3. Hydrology and Hydraulics</b>							
Data Collection		2		8			
Hydrology		2		20			
Hydraulics		2		20			
Documentation		2		4			
QAQC	2						
<b>Subtotal - Hydrology and Hydraulics</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>52</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Structural Engineering</b>							
Retaining Wall Design (Conceptual)	2		16		24	40	
<b>Subtotal - Structural Engineering</b>	<b>2</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>24</b>	<b>40</b>	<b>0</b>
<b>5. Waterline Engineering</b>							
Site Visit and Field Data Collection		2		2			
Review of Topo Survey, Atlas, and Record Drawings		1		1			
Coordination with Utility Companies		1		1			
Review of Existing Right of Way and Easements		1					
Waterline Design - Horizontal Alignment		4		4			
Waterline Design - Layout Appurtenances		4		4			
Waterline Key Map		1		1		2	
Waterline Plan and Profile Sheets		12		8		8	

Pay Items, Quantities, and Notes		4		4			
Opinion of Probable Construction Cost		4		2			
QA/QC Waterline Review	2	2		2		2	
<b>Subtotal - Waterline Engineering</b>	<b>2</b>	<b>36</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>12</b>	<b>0</b>

<b>Hours</b>	<b>44</b>	<b>147</b>	<b>16</b>	<b>81</b>	<b>320</b>	<b>272</b>	<b>0</b>
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<b>Salary Costs</b>	\$11,308.00	\$31,017.00	\$2,880.00	\$12,717.00	\$43,200.00	\$32,368.00	\$0.00
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<b>SUBTOTAL - SALARIES:</b>	<b>\$133,490.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$10.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$10.00</b>
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<b>SUBTOTAL:</b>	<b>\$133,500.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
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<b>TOTAL FEE:</b>	<b>\$133,500.00</b>
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**Exhibit A****City of Broken Arrow****Reconnecting Broken Arrow RAISE Grant****ST24140****PRELIMINARY DESIGN - HILLSIDE/KENOSHA SIDEWALK**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Alignment		2			16	2	
Vertical Alignment		2			24	2	
Sidewalk Modelling		2			40		
Driveway Design		2			24	4	
Title Sheet					2	2	
Pay Quantities and Notes		4			12	4	
Summary Sheets		2			8	2	
Typical Sections		2			4	2	
Geometric Layout		2			4	4	
Right-of-Way Map		2			24	12	
SWMP		2			2	2	
Erosion Control Plan		2			16	4	
Drainage Design/Drainage Area Map		4			40	16	
Plan & Profile Sheets		8			60	120	
Striping & Signing Plans		4			8	8	
Drainage Profiles		2			32	16	
Cross Sections		4			40	20	
ROW Document Review		8					
Quantity Calculations		8			24		
Coordination with Utility Companies		4			4	4	
Lighting							
Demo / Removal Plans		2			8	8	
Installation Plans		2			24	24	
Details / One-Line		2			16		
Voltage Drop Calculations					10		
Electric Power Distribution Design					10		
Structural Coordination	2				4		
QC Review	2	6					
Cost		2			4		
Coordination and Meetings with Owner	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>8</b>	<b>88</b>	<b>0</b>	<b>0</b>	<b>472</b>	<b>256</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Prelim)	2		8		16	16	
Miscellaneous Structural Details	2		40		40	80	
Structural Quantity Cost Estimate	1		12		12		
<b>Subtotal - Structural Engineering</b>	<b>5</b>	<b>0</b>	<b>60</b>	<b>0</b>	<b>68</b>	<b>96</b>	<b>0</b>
<b>4. Waterline Engineering</b>							

Preliminary Waterline Plans							
Waterline Design - Horizontal Alignment		8		8		2	
Waterline Design - Vertical Profile		8		8		4	
Waterline Design - Layout Appurtenances		4		4		2	
Waterline Design - Misc. Details		4		4		4	
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		16		16		24	
Waterline Pay Items, Quantities, and Notes		4		4			
Water Service Connections		2		2			
Opinion of Probable Construction Cost		4		4			
QA/QC Waterline Review	4	4		4		4	
<b>Subtotal - Waterline Engineering</b>	<b>4</b>	<b>55</b>	<b>0</b>	<b>54</b>	<b>0</b>	<b>42</b>	<b>0</b>

<b>Hours</b>	<b>41</b>	<b>171</b>	<b>60</b>	<b>54</b>	<b>544</b>	<b>398</b>	<b>0</b>
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<b>Salary Costs</b>	\$10,537.00	\$36,081.00	\$10,800.00	\$8,478.00	\$73,440.00	\$47,362.00	\$0.00
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<b>SUBTOTAL - SALARIES:</b>	<b>\$186,698.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$52.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$52.00</b>
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<b>SUBTOTAL:</b>	<b>\$186,750.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
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<b>TOTAL FEE:</b>	<b>\$186,750.00</b>
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## Exhibit A

### City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant

ST24140

### CONCEPTUAL DESIGN - HILLSIDE, ALBANY TO 9TH SIDEWALK

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Site Visit		4			4		
Horizontal Alignment		4			24	2	
Sidewalk/ADA Evaluation		8			8		
Driveway Design		2			8		
Title Sheet					2	4	
Typical Sections		2			12	8	
Right-of-Way Map		4			20	8	
Plan & Profile Sheets	2	4			32	48	
Drainage Improvements		4			20	20	
Quantity Calculations		2			8		
Utility Companies Coordination	4	4			4	4	
Lighting							
Photometric Modeling		4			10		
Demo / Removal Plans		2			8		
Installation Plans		4			20		
QC Review	2	3					
Quantities / Opinion of Probable Construction Cost		2			4		
Meetings/Coordination with City	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>12</b>	<b>61</b>	<b>0</b>	<b>0</b>	<b>196</b>	<b>94</b>	<b>0</b>
<b>3. Hydrology and Hydraulics</b>							
Coordination with Roadway		8					
<b>Subtotal - Hydrology and Hydraulics</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Structural Engineering</b>							
Retaining Wall Design (Conceptual)	2		16		20	24	
<b>Subtotal - Structural Engineering</b>	<b>2</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>20</b>	<b>24</b>	<b>0</b>
<b>5. Waterline Engineering</b>							
Site Visit and Field Data Collection		1		1			
Review of Topo Survey, Atlas, and Record Drawings		1		1			
Coordination with Utility Companies		1		1			
Review of Existing Right of Way and Easements		1					
Waterline Design - Horizontal Alignment		2		2			
Waterline Design - Layout Appurtenances		2		2			
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		8		8		4	
Pay Items, Quantities, and Notes		4		4			
Opinion of Probable Construction Cost		2		2			
QA/QC Waterline Review	2	2		2		2	
<b>Subtotal - Waterline Engineering</b>	<b>2</b>	<b>25</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>8</b>	<b>0</b>
<b>Hours</b>	<b>40</b>	<b>122</b>	<b>16</b>	<b>23</b>	<b>220</b>	<b>130</b>	<b>0</b>

<b>Salary Costs</b>	\$10,280.00	\$25,742.00	\$2,880.00	\$3,611.00	\$29,700.00	\$15,470.00	\$0.00
<hr/>							
<b>SUBTOTAL - SALARIES:</b>		<b>\$87,683.00</b>					
<hr/>							
<b><u>DIRECT NON-LABOR EXPENSES</u></b>							
Document Printing/Reproduction/Assembly	\$103.00						
Postage/Freight/Courier	\$0.00						
Office Supplies/Equipment	\$0.00						
Communications	\$0.00						
Survey Supplies	\$0.00						
Aerial Photography	\$0.00						
GPS Equipment	\$0.00						
Computer Modeling/Software Use	\$0.00						
Traffic Counting Equipment	\$0.00						
Locator/Tracer/Thermal Imager Equipment	\$0.00						
Travel Costs	\$0.00						
<hr/>							
<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>		<b>\$103.00</b>					
<hr/>							
<b>SUBTOTAL:</b>		<b>\$87,786.00</b>					
<b>Bancroft Design (Survey)</b>		<b>\$40,300.00</b>					
<b>Bancroft Design (RW Exhibits and Staking, 4 @ \$1,740))</b>		<b>\$6,960.00</b>					
<b>SUBCONSULTANTS FEE:</b>		<b>\$47,260.00</b>					
<hr/>							
<b>TOTAL FEE:</b>		<b>\$135,046.00</b>					



**Exhibit A****City of Broken Arrow****Reconnecting Broken Arrow RAISE Grant  
ST24140****PRELIMINARY DESIGN - HILLSIDE, ALBANY TO 9TH SIDEWALK**

WORK TASK DESCRIPTION	E-5	E-4	E-3	E-2	E-1	T-2	- Select Category -
	\$257.00	\$211.00	\$180.00	\$157.00	\$135.00	\$119.00	\$0.00
	hr	hr	hr	hr	hr	hr	hr
<b>1. Project Management</b>							
Administration and Coordination	12	12					
Quality Control Review	12	12					
Submittals to Client		4			4	4	
<b>Subtotal - Project Management</b>	<b>24</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>
<b>2. Civil Engineering</b>							
Preliminary Plans							
Horizontal Alignment		2			12	2	
Vertical Alignment		4			24	2	
Sidewalk Modelling		2			32		
Driveway Design		2			8	2	
Title Sheet					2	2	
Pay Quantities and Notes		4			8	4	
Summary Sheets		2			8	2	
Typical Sections		2			4	2	
Geometric Layout		2			8	4	
Right-of-Way Map		2			12	4	
SWMP		2			2	2	
Erosion Control Plan		2			8	4	
Drainage Design/Drainage Area Map		4			16	4	
Plan & Profile Sheets		8			48	40	
Striping & Signing Plans		4			8	8	
Drainage Profiles		2			20	8	
Cross Sections		4			40	20	
ROW Document Review		4					
Quantity Calculations		2			8		
Coordination with Utility Companies		4			4	4	
Lighting							
Demo / Removal Plans		2			8	8	
Installation Plans		2			24	24	
Details / One-Line		2			16		
Voltage Drop Calculations					10		
Electric Power Distribution Design					10		
Structural Coordination	2				4		
QC Review	2	6					
Cost		2			4		
Coordination and Meetings with Owner	4	4			4		
Opinion of Probable Construction Cost		4			8		
<b>Subtotal - Civil Engineering</b>	<b>8</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>360</b>	<b>146</b>	<b>0</b>
<b>3. Structural Engineering</b>							
Retaining Wall Design (Prelim)	2		8		8	8	
Miscellaneous Structural Details	2		40		40	80	
Structural Quantity Cost Estimate	1		4		4		
<b>Subtotal - Structural Engineering</b>	<b>5</b>	<b>0</b>	<b>52</b>	<b>0</b>	<b>52</b>	<b>88</b>	<b>0</b>
<b>4. Waterline Engineering</b>							

Preliminary Waterline Plans							
Waterline Design - Horizontal Alignment		8		8		2	
Waterline Design - Vertical Profile		8		8		2	
Waterline Design - Layout Appurtenances		4		4		2	
Waterline Design - Misc. Details		4		4		2	
Waterline Key Map		1				2	
Waterline Plan and Profile Sheets		8		8		4	
Waterline Pay Items, Quantities, and Notes		4		4			
Water Service Connections		2		2			
Opinion of Probable Construction Cost		2		2			
QA/QC Waterline Review	2	4		4		4	
<b>Subtotal - Waterline Engineering</b>	<b>2</b>	<b>45</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>18</b>	<b>0</b>

<b>Hours</b>	<b>39</b>	<b>153</b>	<b>52</b>	<b>44</b>	<b>416</b>	<b>256</b>	<b>0</b>
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<b>Salary Costs</b>	\$10,023.00	\$32,283.00	\$9,360.00	\$6,908.00	\$56,160.00	\$30,464.00	\$0.00
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<b>SUBTOTAL - SALARIES:</b>	<b>\$145,198.00</b>
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**DIRECT NON-LABOR EXPENSES**

Document Printing/Reproduction/Assembly	\$84.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

<b>SUBTOTAL - DIRECT NON-LABOR EXPENSES:</b>	<b>\$84.00</b>
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<b>SUBTOTAL:</b>	<b>\$145,282.00</b>
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<b>SUBCONSULTANTS FEE:</b>	<b>\$0.00</b>
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<b>TOTAL FEE:</b>	<b>\$145,282.00</b>
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# Exhibit A

## City of Broken Arrow

### Reconnecting Broken Arrow RAISE Grant

ST24140

### STAKEHOLDER AND PUBLIC INVOLVEMENT

	KJM	MEP	JAZ	JDH	MTP	CEH	LBS	JMS	MJW	DDD/DJ	MLS
WORK TASK DESCRIPTION	ES-6	ES-4	P-1	ES-3	ES-2	ES-1	E-2	E-3	E-5	E-4	E-6
	\$331.00	\$205.00	\$163.00	\$174.00	\$136.00	\$108.00	\$157.00	\$180.00	\$257.00	\$211.00	\$316.00
	hr	hr	hr	hr	hr	hr	hr	hr	hr	hr	hr
<b>1. Phase 1 Stakeholder and Public Involvement</b>											
Public Involvement Plan	4		24		4						
Advisory Committee Formation	4		10	2		6					
Advisory Committee Meetings (3)											
Pre-Meetings (3)	12		12					6	12	12	6
Mentimeter	6		24	18							
Presentation	24		60			12		12	12	12	12
Meetings	6		6					6	6	6	6
Summary	6		18								
Website	4		8	20					2	2	2
Surveys	2		8	6					2		2
Public Meeting											
Notifications	2		6	6	4						
Presentation	4		12					4	8	4	8
Handouts	2		6	8		4					
Pre-Meeting	4		4					2	4	4	2
Attend Meeting	6		6						6	6	12
<b>Phase 1 Summary</b>	<b>86</b>	<b>0</b>	<b>204</b>	<b>60</b>	<b>8</b>	<b>22</b>	<b>0</b>	<b>30</b>	<b>52</b>	<b>46</b>	<b>50</b>
<b>2. Phase 2 Stakeholder and Public Involvement</b>											
Advisory Committee Meetings (3)											
Pre-Meetings (3)	12		12					6	12	12	6
Mentimeter	6		24	18							
Presentation	24		60			12		36	36	36	36
Meetings	6		6					6	6	6	6
Summary	6		18								
Website Updates	4		24	24				12	12	12	12
Renderings/Graphics/Maps	4		10			60	60				
Public Meetings (2)											
Notifications	4		12	12	8						
Presentation	8		24					4	8	4	8
Handouts	4		12	16		8					
Pre-Meeting (2)	8		8					4	8	8	4
Attend Meeting	12		12						12	12	24
<b>Phase 2 Summary</b>	<b>98</b>	<b>0</b>	<b>222</b>	<b>70</b>	<b>8</b>	<b>80</b>	<b>60</b>	<b>68</b>	<b>94</b>	<b>90</b>	<b>96</b>
<b>3. Phase 3 Stakeholder and Public Involvement</b>											
Advisory Committee Meetings (1)											
Pre-Meeting (1)	4		4					2	4	4	2
Mentimeter	2		12	6							
Presentation	8		20			12		4	8	4	8
Meeting	2		2					2	2	2	2
Summary	2		6								
Website Updates	4		8	8							
Public Meeting											
Notifications	2		6	6	4						
Presentation	4		12					2	4	2	4
Handouts	2		6	8		4					
Pre-Meeting	4		4					2	4	4	2
Attend Meeting	6		6						6	6	12
Public Involvement Summary	6		24	4		4			2		2
<b>Phase 3 Summary</b>	<b>46</b>	<b>0</b>	<b>110</b>	<b>32</b>	<b>4</b>	<b>20</b>	<b>0</b>	<b>12</b>	<b>30</b>	<b>22</b>	<b>32</b>

Hours 230 0 536 162 20 122 60 110 176 158 178

Salary Costs \$76,130.00 \$0.00 \$87,368.00 \$28,188.00 \$2,720.00 \$13,176.00 \$9,420.00 \$19,800.00 \$45,232.00 \$33,338.00 \$56,248.00

SUBTOTAL - SALARIES: \$384,940.00

#### DIRECT NON-LABOR EXPENSES

Document Printing/Reproduction/Assembly \$6,000.00 handouts, displays  
Postage/Freight/Courier \$800.00 postage  
Office Supplies/Equipment \$0.00  
Communications \$0.00  
Survey Supplies \$0.00  
Aerial Photography \$0.00  
GPS Equipment \$0.00  
Computer Modeling/Software Use \$100.00 Mentimeter  
Traffic Counting Equipment \$0.00  
Locator/Tracer/Thermal Imager Equipment \$0.00  
Travel Costs \$2,100.00 mileage, PI travel for MLS

SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$9,000.00

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SUBTOTAL: \$393,940.00

SUBCONSULTANTS FEE: \$0.00

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TOTAL FEE: \$393,940.00

## Exhibit A

### City of Broken Arrow Reconnecting Broken Arrow RAISE Grant ST24140 ENVIRONMENTAL SERVICES

	KJM	MEP	JAZ	CDM/SWM	MTP	JPA/RLD	LBS			
WORK TASK DESCRIPTION	ES-6	ES-4	P-1	ES-3	ES-2	ES-1	E-2	E-3	E-5	E-4
	\$331.00	\$205.00	\$163.00	\$174.00	\$136.00	\$108.00	\$157.00	\$180.00	\$257.00	\$211.00
	hr	hr	hr	hr	hr	hr	hr	hr	hr	hr
<b>1. Environmental Studies</b>										
Property Owner Notifications	1	2			8		8			
Tribal Consultation Letters	2	2								
Cultural Resources Survey	2	2								
Stream & Wetland Delineation	2	8		208	168	208	48			
T&E Habitat Assessment	2	8		44	40	44	24			
Hazmat Assessment	2	4			4	10	4			
Section 4(f) de minimis	16	16			6		2			
QA/QC	4	32					16			
<b>Subtotal - Environmental Studies</b>	<b>31</b>	<b>74</b>	<b>0</b>	<b>252</b>	<b>226</b>	<b>262</b>	<b>102</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1. NEPA Document &amp; Permitting</b>										
Draft CE	2			8						
Final CE	2			4						
Section 404 permit	4			16			32			
Aquatic Resources Protection Plan	2	8					24			
QA/QC	2	10								
<b>Subtotal - NEPA Document &amp; Permitting</b>	<b>12</b>	<b>18</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Hours</b>	<b>43</b>	<b>92</b>	<b>0</b>	<b>280</b>	<b>226</b>	<b>262</b>	<b>158</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Hours Check</b>	<b>43</b>	<b>92</b>	<b>0</b>	<b>280</b>	<b>226</b>	<b>262</b>	<b>158</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Salary Costs</b>	<b>\$14,233.00</b>	<b>\$18,860.00</b>	<b>\$0.00</b>	<b>\$48,720.00</b>	<b>\$30,736.00</b>	<b>\$28,296.00</b>	<b>\$24,806.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

**SUBTOTAL - SALARIES: \$165,651.00**

#### DIRECT NON-LABOR EXPENSES

Document Printing/Reproduction/Assembly	\$53.00	
Postage/Freight/Courier	\$120.00	postage
Office Supplies/Equipment	\$0.00	
Communications	\$0.00	
Survey Supplies	\$500.00	environmental database search
Aerial Photography	\$0.00	
GPS Equipment	\$0.00	
Computer Modeling/Software Use	\$0.00	
Traffic Counting Equipment	\$0.00	
Locator/Tracer/Thermal Imager Equipment	\$0.00	
Travel Costs	\$150.00	mileage

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$823.00**

**SUBTOTAL: \$166,474.00**

**SUBCONSULTANTS FEE: \$118,876.00**

**TOTAL FEE: \$285,350.00**

## Exhibit A

### City of Broken Arrow Reconnecting Broken Arrow RAISE Grant ST24140 BUILD GRANT APPLICATION

	KJM	MEP	JAZ	CDM/SWM	MTP	JPA/RLD	LBS			
WORK TASK DESCRIPTION	ES-6	ES-4	P-1	ES-3	ES-2	ES-1	E-2	E-3	E-5	E-4
	\$331.00	\$205.00	\$163.00	\$174.00	\$136.00	\$108.00	\$157.00	\$180.00	\$257.00	\$211.00
	hr	hr	hr	hr	hr	hr	hr	hr	hr	hr
<b>1. Grant Application</b>										
Strategic Guidance	4		8						8	
Project Description & Location	2		8		4		4			
Budget Narrative	2		8							
Merit Criteria	24		40	8	4		4		16	
Project Readiness	2		24							
<b>Subtotal - Grant Application</b>	<b>34</b>	<b>0</b>	<b>88</b>	<b>8</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>24</b>	<b>0</b>
<b>2. Project Management and Meetings</b>										
Meetings	16		16							
QA/QC	8								8	
<b>Meetings</b>	<b>24</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>

Hours	58	0	104	8	8	0	8	0	32	0
Hours Check	58	0	104	8	8	0	8	0	32	0

<b>Salary Costs</b>	\$19,198.00	\$0.00	\$16,952.00	\$1,392.00	\$1,088.00	\$0.00	\$1,256.00	\$0.00	\$8,224.00	\$0.00
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**SUBTOTAL - SALARIES: \$48,110.00**

#### DIRECT NON-LABOR EXPENSES

Document Printing/Reproduction/Assembly	\$140.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$0.00

**SUBTOTAL - DIRECT NON-LABOR EXPENSES: \$140.00**

**SUBTOTAL: \$48,250.00**

**SUBCONSULTANTS FEE: \$0.00**

**TOTAL FEE: \$48,250.00**

**ATTACHMENT D  
TO  
AGREEMENT FOR CONSULTING SERVICES  
BETWEEN  
CITY OF BROKEN ARROW  
AND  
GARVER, LLC  
RECONNECTING BROKEN ARROW RAISE GRANT  
ST24140**

**OWNER'S RESPONSIBILITIES AND SPECIAL CONDITIONS**

The following list of special OWNER'S responsibilities and contract special conditions shall be made a part of this AGREEMENT dated the \_\_\_\_ day of \_\_\_\_\_, 2025.

**1.0 OWNER'S RESPONSIBILITIES**

- 1.1 OWNER shall furnish to CONSULTANT all available information pertinent to the PROJECT including previous reports and any other data relative to design and construction of the PROJECT;
- 1.2 OWNER shall furnish to CONSULTANT all public utility information available relative to the design and construction of the PROJECT. Consultant topographical survey shall locate all utilities above and below ground for exact location;
- 1.3 OWNER shall furnish to CONSULTANT list of codes adopted by the municipality as well as subdivision regulations, design criteria and construction standards and specifications that may be pertinent to the design and construction of the PROJECT;
- 1.4 OWNER shall be responsible for all permit fees, including USACOE, DEQ and FEMA fees, and for all reproduction costs associated with the bidding of the final approved construction documents required for the construction of this PROJECT;
- 1.5 OWNER shall be responsible for all land/easement acquisition costs and filing of the required legal documents, if necessary; and
- 1.6 OWNER shall examine all studies, reports, sketches, estimates, specifications, plan drawings, proposals, and other documents presented by the CONSULTANT and render in writing decisions pertaining thereto within a reasonable time so as not to delay the SERVICES of the CONSULTANT.

**2.0 SPECIAL CONDITIONS**

- 2.1 None

**ATTACHMENT E  
TO  
AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES  
BETWEEN  
CITY OF BROKEN ARROW  
AND  
GARVER, LLC  
FOR  
RECONNECTING BROKEN ARROW RAISE GRANT  
ST24140**

**PROJECT SCHEDULE**

The following schedule shall be made a part of the AGREEMENT dated the \_\_ day of \_\_, 2025. On issuance of notice proceed by the OWNER, the CONSULTANT shall provide the OWNER a Gantt chart schedule (EXHIBIT B), utilizing the phases and durations provided below.

**1.0 MULTIMODAL STUDY AND REPORT: 300 Days**

- 1.1 Notice to Proceed:
- 1.2 Traffic Data Collection:
- 1.3 Multimodal Analysis:
- 1.4 Multimodal Level of Service Report

**2.0 PUBLIC AND STAKEHOLDER ENGAGEMENT: 725 Days**

- 2.1 Notice to Proceed:
- 2.2 Prepare Public Involvement Plan:
- 2.3 Formation of Advisory Committee:
- 2.4 Public Meeting:

**3.0 CONCEPTUAL AND PRELIMINARY DESIGN PHASE: 753 Days**

- 2.1 Notice to Proceed:
- 2.2 Land Surveys:
- 2.3 Conceptual Plans:
- 2.4 Owner Review:
- 2.5 Prepare & Submit "Ultimate" Right-of-Way Documents including: right-of-way map/plans, instruments, closure reports, and certified property reports.
- 2.6 Preliminary Plans:
- 2.7 Owner Review:
- 2.8 Multimodal Revisions (as necessary):

**4.0 ENVIRONMENTAL ANALYSIS AND APPROVALS: 690 Days**

- 4.1 Notice to Proceed (concurrent with Conceptual and Preliminary Design



- Phase):
- 4.2 Begin Environmental Study:
  - 4.3 Finalize Environmental Study and 404 Nationwide Permit application

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ID	Task Name	Duration	Start	Finish	<div> <div>2026</div> <div> <div>Qtr 2</div> <div>Qtr 3</div> <div>Qtr 4</div> </div> <div>2027</div> <div> <div>Qtr 1</div> <div>Qtr 2</div> <div>Qtr 3</div> <div>Qtr 4</div> </div> </div>							
1	<b>Multimodal Study and Report</b>	300 days	Tue 9/2/25	Sun 6/28/26								
2	<b>Public and Stakeholder Engagement</b>	725 days	Sun 6/1/25	Wed 5/26/27								
3	<b>Multi-Use Trail</b>	252 days	Sun 6/1/25	Sat 2/7/26								
4	Survey	117 days	Sun 6/1/25	Thu 9/25/25								
5	Conceptual Design	60 days	Fri 9/26/25	Mon 11/24/25								
6	Broken Arrow Review	15 days	Tue 11/25/25	Tue 12/9/25								
7	Preliminary Design	45 days	Wed 12/10/25	Fri 1/23/26								
8	Broken Arrow Review	15 days	Sat 1/24/26	Sat 2/7/26								
9	<b>Kenosha St. Sidewalks &amp; Sidepaths</b>	529 days	Sun 6/1/25	Wed 11/11/26								
10	Survey	117 days	Sun 6/1/25	Thu 9/25/25								
11	Conceptual Design	75 days	Mon 6/15/26	Fri 8/28/26								
12	Broken Arrow Review	15 days	Sat 8/29/26	Sat 9/12/26								
13	Preliminary Design	45 days	Sun 9/13/26	Tue 10/27/26								
14	Broken Arrow Review	15 days	Wed 10/28/26	Wed 11/11/26								
15	<b>Aspen Ave. Sidewalk &amp; Sidepaths</b>	550 days	Sun 6/1/25	Wed 12/2/26								
16	Survey	145 days	Sun 6/1/25	Thu 10/23/25								
17	Conceptual Design	75 days	Mon 7/6/26	Fri 9/18/26								
18	Broken Arrow Review	15 days	Sat 9/19/26	Sat 10/3/26								
19	Preliminary Design	45 days	Sun 10/4/26	Tue 11/17/26								
20	Broken Arrow Review	15 days	Wed 11/18/26	Wed 12/2/26								
21	<b>Hillside Dr., Albany to 9th St. Sidewalk &amp; Sidepaths</b>	534 days	Tue 7/8/25	Wed 12/23/26								
22	Survey	123 days	Tue 7/8/25	Fri 11/7/25								
23	Conceptual Design	75 days	Mon 7/27/26	Fri 10/9/26								

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Progress

Manual Progress

ID	Task Name	Duration	Start	Finish	<div>2026</div> <div>Qtr 2   Qtr 3   Qtr 4</div> <div>2027</div> <div>Qtr 1   Qtr 2   Qtr 3   Qtr 4</div>							
24	Broken Arrow Review	15 days	Sat 10/10/26	Sat 10/24/26								
25	Preliminary Design	45 days	Sun 10/25/26	Tue 12/8/26								
26	Broken Arrow Review	15 days	Wed 12/9/26	Wed 12/23/26								
27	<b>46th St. Sidewalk &amp; Sidepaths</b>	<b>506 days</b>	<b>Tue 8/26/25</b>	<b>Wed 1/13/27</b>								
28	Survey	89 days	Tue 8/26/25	Sat 11/22/25								
29	Conceptual Design	75 days	Mon 8/17/26	Fri 10/30/26								
30	Broken Arrow Review	15 days	Sat 10/31/26	Sat 11/14/26								
31	Preliminary Design	45 days	Sun 11/15/26	Tue 12/29/26								
32	Broken Arrow Review	15 days	Wed 12/30/26	Wed 1/13/27								
33	<b>Hillside Dr. &amp; Kenosha St. Sidewalk &amp; Sidepaths</b>	<b>470 days</b>	<b>Tue 10/7/25</b>	<b>Tue 1/19/27</b>								
34	Survey	117 days	Tue 10/7/25	Sat 1/31/26								
35	Conceptual Design	60 days	Mon 9/7/26	Thu 11/5/26								
36	Broken Arrow Review	15 days	Fri 11/6/26	Fri 11/20/26								
37	Preliminary Design	45 days	Sat 11/21/26	Mon 1/4/27								
38	Broken Arrow Review	15 days	Tue 1/5/27	Tue 1/19/27								
39	<b>Aspen Ave.--Omaha St. Intersection to 46th St.</b>	<b>536 days</b>	<b>Tue 10/7/25</b>	<b>Fri 3/26/27</b>								
40	Survey	117 days	Tue 10/7/25	Sat 1/31/26								
41	Conceptual Design	60 days	Mon 9/28/26	Thu 11/26/26								
42	Broken Arrow Review	15 days	Fri 11/27/26	Fri 12/11/26								
43	Preliminary Design	90 days	Sat 12/12/26	Thu 3/11/27								
44	Broken Arrow Review	15 days	Fri 3/12/27	Fri 3/26/27								

EXHIBIT B-Fall Traffic Counts Project: BA Multimodal Schedu Date: Tue 5/6/25	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
	Inactive Milestone		Finish-only			

ID	Task Name	Duration	Start	Finish	2026 Qtr 1Qtr 2Qtr 3Qtr 4Qtr 1Qtr 2Qtr 3Qtr 4											
45	9th St.--Kenosha Intersection to Albany Intersection	614 days	Tue 10/7/25	Sat 6/12/27												
46	Kenosha St. Intersection	542 days	Tue 10/7/25	Thu 4/1/27												
47	Survey	117 days	Tue 10/7/25	Sat 1/31/26												
48	Conceptual Design	60 days	Mon 10/19/26	Thu 12/17/26												
49	Broken Arrow Review	15 days	Fri 12/18/26	Fri 1/1/27												
50	Preliminary Design	75 days	Sat 1/2/27	Wed 3/17/27												
51	Broken Arrow Review	15 days	Thu 3/18/27	Thu 4/1/27												
52	Hillside Dr. Intersection	593 days	Tue 10/7/25	Sat 5/22/27												
53	Survey	117 days	Tue 10/7/25	Sat 1/31/26												
54	Conceptual Design	90 days	Mon 11/9/26	Sat 2/6/27												
55	Broken Arrow Review	15 days	Sun 2/7/27	Sun 2/21/27												
56	Preliminary Design	75 days	Mon 2/22/27	Fri 5/7/27												
57	Broken Arrow Review	15 days	Sat 5/8/27	Sat 5/22/27												
58	9th St. Roadway	614 days	Tue 10/7/25	Sat 6/12/27												
59	Survey	117 days	Tue 10/7/25	Sat 1/31/26												
60	Conceptual Design	90 days	Mon 11/30/26	Sat 2/27/27												
61	Broken Arrow Review	15 days	Sun 2/28/27	Sun 3/14/27												
62	Preliminary Design	75 days	Mon 3/15/27	Fri 5/28/27												
63	Broken Arrow Review	15 days	Sat 5/29/27	Sat 6/12/27												
64	Elm Pl.--Kenosha St. Intersection to US-51	544 days	Tue 1/6/26	Sat 7/3/27												
65	Survey	85 days	Tue 1/6/26	Tue 3/31/26												
66	Conceptual Design	90 days	Mon 12/21/26	Sat 3/20/27												
EXHIBIT B-Fall Traffic Counts Project: BA Multimodal Schedu Date: Tue 5/6/25					<div><div>Task</div><div><div></div>Task</div><div><div></div>Split</div><div><div></div>Milestone</div><div><div></div>Summary</div><div><div></div>Project Summary</div><div><div></div>Inactive Task</div><div><div></div>Inactive Milestone</div></div> <div><div>External Tasks</div><div><div></div>External Task</div><div><div></div>External Milestone</div><div><div></div>Deadline</div><div><div></div>Progress</div><div><div></div>Manual Progress</div></div> <div><div>Inactive Summary</div><div><div></div>Inactive Summary</div><div><div></div>Manual Task</div><div><div></div>Duration-only</div><div><div></div>Manual Summary Rollup</div><div><div></div>Manual Summary</div><div><div></div>Start-only</div><div><div></div>Finish-only</div></div>											

ID	Task Name	Duration	Start	Finish	<div> <div>2026</div> <div> <div>Qtr 2</div> <div>Qtr 3</div> <div>Qtr 4</div> <div>Qtr 1</div> <div>Qtr 2</div> <div>Qtr 3</div> <div>Qtr 4</div> </div> <div>2027</div> <div> <div>Qtr 1</div> <div>Qtr 2</div> <div>Qtr 3</div> <div>Qtr 4</div> </div> </div>							
67	Broken Arrow Review	15 days	Sun 3/21/27	Sun 4/4/27								
68	Preliminary Design	75 days	Mon 4/5/27	Fri 6/18/27								
69	Broken Arrow Review	15 days	Sat 6/19/27	Sat 7/3/27								
70	<b>Elm Pl.--US-51 to Albany Intersection</b>	<b>570 days</b>	<b>Tue 12/2/25</b>	<b>Thu 6/24/27</b>								
71	Survey	117 days	Tue 12/2/25	Sat 3/28/26								
72	Conceptual Design	60 days	Mon 1/11/27	Thu 3/11/27								
73	Broken Arrow Review	15 days	Fri 3/12/27	Fri 3/26/27								
74	Preliminary Design	75 days	Sat 3/27/27	Wed 6/9/27								
75	Broken Arrow Review	15 days	Thu 6/10/27	Thu 6/24/27								
76	<b>Environmental Analysis and Approvals</b>	<b>690 days</b>	<b>Tue 2/10/26</b>	<b>Fri 12/31/27</b>								

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Progress

Manual Progress

EXHIBIT B-Fall Traffic Counts

Project: BA Multimodal Schedu

Date: Tue 5/6/25



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

5/5/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS **WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Stephens Insurance, LLC 111 Center Street, Suite 100 Little Rock, AR 72201  www.stephensinsurance.com	<b>CONTACT</b> NAME: Kathy Jones PHONE (A/C, No. Ext): 501-377-8502 E-MAIL ADDRESS: kathy.jones@stephens.com FAX (A/C, No):  <b>INSURER(S) AFFORDING COVERAGE</b> INSURER A: Phoenix Insurance Company (A++XV) NAIC # 25623 INSURER B: Charter Oak Fire Insurance Company (A++XV) 25615 INSURER C: Standard Fire Insurance Company (A++XV) 19070 INSURER D: Travelers Property Casualty Co of Amer (A++ XV) 25674 INSURER E: Starr Surplus Lines Insurance Company (A XV) 13604 INSURER F: Tokio Marine Specialty Insurance Company (A++XV) 23850
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**COVERAGES****CERTIFICATE NUMBER:** 85144377**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input checked="" type="checkbox"/> OTHER: -0- Deductible		P-630-1G052988-PHX-24	7/1/2024	7/1/2025	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$500,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$4,000,000 PRODUCTS - COMP/OP AGG \$4,000,000 \$
B	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY		810-1N886537-24-43-G	7/1/2024	7/1/2025	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
D	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b> <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$10,000		CUP-6J09853A-24-43	7/1/2024	7/1/2025	EACH OCCURRENCE \$10,000,000 AGGREGATE \$10,000,000 \$
C	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input checked="" type="checkbox"/> N/A		UB-7K425966-24-43-G	7/1/2024	7/1/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
E	Professional Liability- Claims Made		1000634123241	7/1/2024	7/1/2025	Each Claim & Aggregate \$2,000,000
F	Contractor's Pollution Liability		PPK2691456	7/1/2024	7/1/2025	Occurrence & Aggregate \$2,000,000
	Maritime Employer's Liability *		PSR083863	7/1/2024	7/1/2025	Combined Single Limit \$1,000,000
	Underwriter at Lloyds NAIC AA-1122000					

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES** (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

See Attached  
RE: Garver Project: 2301988 BA Multimodal Improvements

Full Prior Acts applies under the Starr Professional Liability policy shown above.

**CERTIFICATE HOLDER**

Garver Project: 2301988 BA Multimodal Improvements

City of Broken Arrow  
485 N. Popular Ave  
Broken Arrow OK 74012

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Ted Grace

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ACORD 25 (2016/03)

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**ADDITIONAL REMARKS SCHEDULE**

<b>AGENCY</b> Stephens Insurance, LLC		<b>NAMED INSURED</b> Garver LLC 6100 Yale Avenue, Suite 1300 Tulsa OK 74136	
<b>POLICY NUMBER</b> P-630-1G052988-PHX-24			
<b>CARRIER</b> Phoenix Insurance Company (A++XV)	<b>NAIC CODE</b> 25623	<b>EFFECTIVE DATE:</b> 7/1/2024	

**ADDITIONAL REMARKS****THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,****FORM NUMBER:** 25 **FORM TITLE:** Certificate of Liability Insurance (03/16)**HOLDER:** City of Broken Arrow**ADDRESS:** 485 N. Popular Ave Broken Arrow OK 74012

The following policy endorsements apply to the Certificate Holder and other named person or organization if you have agreed in written contract:

Certificate Holder is an Additional Insured on the General Liability if required by written contract per Blanket Endorsement CGD414 & CGD246 on a Primary & Non-contributory basis and includes Completed Operations.

Certificate Holder is an Additional Insured on a Primary & Non-contributory basis per Blanket Auto Endorsement CAT474.

Certificate Holder is an Additional Insured under the Umbrella policy on a Primary & Non-contributory basis per the follow form wording.

Waiver of Subrogation applies in favor of the Certificate Holder under the General Liability by Blanket Endorsement CGD379.

Waiver of Subrogation applies in favor of the Certificate Holder under the Automobile by Blanket Endorsement CAT353.

Waiver of Subrogation applies under the Umbrella per follow form wording if required by written contract.

Waiver of Subrogation applies in favor of the Certificate Holder under the Worker's Compensation by Blanket Endorsement WC000313. Form WC420304 Texas. Form WC9903J9 Kansas. WC430305 Utah.

Waiver of Subrogation applies in favor of the Certificate Holder under the Professional Liability. This is provided within the Starr Professional Liability policy form.

30 day notice will be provided to the Certificate Holder in the event of Cancellation, Non-renewal, Material Change per Blanket Endorsement ILT804-General Liability & ILT354 (03/98) on the Automobile & ILT400 (05/19) on the Umbrella.

Notice of Cancel, Non-renewal, Material Change will be sent per WC Blanket Endorsement WC9906R5.

Notice of Cancel, Non-renewal and Reduction of Limits will be provided by the Professional Liability Carrier per Blanket Endorsement.

Notice of Cancel for non-payment of premium is provided if Certificate Holder is specifically endorsed to the Professional Liability policy (Endt to be attached with this certificate if applicable).

\*\*\* (Notice of Cancel for non-payment of premium will not be provided to the Certificate Holder by Travelers Ins. Co. (applies to the General Liability, Automobile Liability and Umbrella policies).

Valuable Papers is provided under policy P-630-1G052988-PHX-24 shown above with a limit of \$500,000.

General Liability policy form CGT001 includes Severability (Separation) of Interest (Insured's) Clause.

General Liability Includes Work Within Railroad by endorsement CG D3 79 and Auto includes Work within Railroad endorsement CA 2070 .

AGENCY CUSTOMER ID: \_\_\_\_\_

LOC #: \_\_\_\_\_

**ADDITIONAL REMARKS SCHEDULE**

Page \_\_\_\_ of \_\_\_\_

<b>AGENCY</b> Stephens Insurance, LLC		<b>NAMED INSURED</b> Garver LLC 6100 Yale Avenue, Suite 1300 Tulsa OK 74136
<b>POLICY NUMBER</b> P-630-1G052988-PHX-24		
<b>CARRIER</b> Phoenix Insurance Company (A++XV)	<b>NAIC CODE</b> 25623	<b>EFFECTIVE DATE:</b> 7/1/2024

**ADDITIONAL REMARKS****THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,****FORM NUMBER:** 25      **FORM TITLE:** Certificate of Liability Insurance (03/16)**HOLDER:** City of Broken Arrow**ADDRESS:** 485 N. Popular Ave Broken Arrow OK 74012

Worker's Compensation Policy includes coverage for USL&H exposures without endorsement to the policy per endorsement WC000106.

Cyber Policy PRV30063164200 with Endurance Assurance Corporation, eff. 7/1/24-7/1/25  
Limits \$10,000,000 Data & Network Liability.

Employee Dishonesty Coverage - Policy #105807050 eff. 7/1/24-7/1/25 Limit \$1,000,000