

**CITY OF BROKEN ARROW  
PROFESSIONAL SERVICES AGREEMENT  
2D HEC-RAS MODELING TRAINING  
PROJECT NUMBER: 2552190**

**1. PROFESSIONAL SERVICE PROVIDER:**

- a. Name: Freese and Nichols, Inc.
- b. Telephone No.: 539.444.8677
- c. Address: 5100 E. Skelly Dr., Suite 602 Tulsa, OK 74135

**2. PROJECT TITLE AND LOCATION: 2D RAIN ON MESH HEC-RAS TRAINING.**

**3. Contract for:** Providing professional survey services associated with public works projects for the City of Broken Arrow. Professional services to include providing 2D HEC-RAS modeling training. The Professional Service Provider shall perform all duties, responsibilities and requirements set out in Attachment A hereto. The Professional Service Provider agrees that this professional service shall be treated as an important service to the City and also agrees to commit the time necessary to perform the professional services in a professional manner.

**4. Compensation:** Professional Service Provider shall be compensated at the hourly rate in accordance with attached hourly rate schedule and the total compensation under this contract is Not to Exceed Seven Thousand Five Hundred and No/100 (\$7,500.00) for the entire Scope of the Professional Services rendered. The parties agree that the Professional Service Provider's position is not a traditional City employee position; therefore, the foregoing constitutes all the benefits and other forms of compensation due the Professional Service Provider, acting in the role of an independent contractor, and therefore ineligible for all other benefits paid to regular full-time City employees. The Professional Service Provider shall be responsible for his own vehicle expenses and any other indirect costs incurred in fulfilling the stated contract requirements. The Professional Service Provider agrees to abide by and comply with all of the City's Administrative Policies.

**5. Invoicing and Payment:** The Professional Service Provider shall submit invoices requesting payment for services rendered to the City monthly in accordance with actual progress of the work on each work item. The invoices shall be in a format satisfactory to the City. Payment will be made within 30 days following the first eligible City Council meeting occurring after the date on the invoice.

**6. Time for Performance:** These duties, responsibilities and requirements shall begin upon the execution of this Contract and training shall be conducted May 28-29, 2025 at the City's Operation Building located at 485 N. Poplar Ave.

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**7. Insurance:** The Professional Service Provider shall acquire all insurance policies required for professional liability insurance, general liability, auto insurance, workers' compensation and/or health insurance. The Professional Service Provider shall provide proof of general liability and professional liability insurance coverage to the City on or before the effective date of this Agreement.

During the performance of the services under this Professional Services Contract, the Professional Service Provider shall maintain the insurance coverage required below and the City shall be named as an Additional Insured on each required policy:

- (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.

**8. Indemnification:** The Professional Services Provider agrees to defend, indemnify, and hold harmless the City, 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 The Professional Services Provider, its agents or employees.

**9. Immigration Compliance:** The Professional Service Provider shall 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”).

**10. Governing Documents:** The parties agree to perform this contract in strict accordance with the clauses, provisions, and the documents identified as follows, all of which are made part of this contract. In the event of conflict, these documents shall be interpreted in the following order:

- a. This Contract
- b. Attachment A to this Contract
- c. Duly Authorized Amendments arising out of this Contract

**11. Electronic Signatures:**

The Parties agree this transaction may be completed by electronic means and an electronic signature on this Contract will be given the same legal effect as a handwritten signature and cannot be denied enforceability solely because is it in electronic form. If the Professional Services Provider signs this Contract electronically and/or submits documents electronically, the Professional Services Provider agrees to comply with the City's requirements for submission of

electronically signed and/or submitted documents.

**12. 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.

**13. Entirety of Agreement:** The foregoing Professional Services Contract supersedes all previous negotiations and may not be modified except by a written order executed by the parties hereto.

**14. Effective Date:** This Contract is effective shall be effective upon signature of both parties.

REMAINDER OF PAGE INTENTIONALLY BLANK

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed by their duly authorized officers or representatives on the dates set forth below.

City of Broken Arrow, a municipal corporation:

By: Michael Spurgeon  
Michael Spurgeon, City Manager

Date: 5/14/25

Attest: Curtis Green  
City Clerk [Seal]

Date: 5/20/2025



Professional Service Provider:  
Freese and Nichols, Inc.

By: Scott Hubley  
Scott Hubley, P.E.

Title: Principal & Vice President

Date: 5/13/25

Attest: Austin Dugger  
By: Austin Dugger, P.E.

Title: Project Manager

Date: 5/13/2025

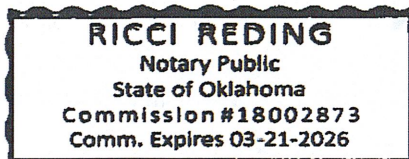
Approved as to form:

D. Graham Parker  
Assistant City Attorney

### VERIFICATIONS

State of Oklahoma )  
County of Tulsa ) §

Before me, a Notary Public, on this 13 day of May 2025, personally appeared Scott Hubley, known to me to be the (President, Vice-President, Corporate Officer, Member, Partner or Other: \_\_\_\_\_ (Please circle or specify) of Freese and Nichols, Inc. to be the identical person who executed the within and foregoing instrument, and acknowledged to me that s/he executed the same as his/her free and voluntary act and deed for the uses and purposes therein set forth.



Ricci Reding  
Notary Public



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**ATTACHMENT A**

**SP - 1.0 SCOPE OF THE PROJECT:**

1.1. Providing Professional Training Services associated with HEC-RAS Rain on Mesh 2D Modeling. Refer to Attachment B for entire scope of work. Work performed under the contract shall be performed on a not to exceed contract as requested by the City.

**SP- 2.0 SERVICES OF THE CITY: THE CITY WILL:**

2.1. Furnish to Professional Service Provider all data in its possession, and needed engineering guidance as necessary for the service provider to complete the contract requirements.

2.2. Designate in writing a person to act as its representative in respect to the work to be performed under this agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define the City's policies and decisions with respect to materials, equipment, elements and systems pertinent to the services covered by this agreement.

**SP - 3.0 SCOPE OF SERVICES: THE PROFESSIONAL SERVICE PROVIDER SHALL:**

3.1 The Professional Service Provider shall provide 2D HEC-RAS Rain on Mesh Modeling Training.

3.2 Work will be a not to exceed contract all costs associated with the performance of the work, including any support and supervision cost required from the Professional Service Provider

[END OF ATTACHMENT A]



5100 E. Skelly Drive, Suite 602 • Tulsa, Oklahoma 74135 • 539-444-8677

[www.freese.com](http://www.freese.com)

May 9, 2025

Sarah Walters and Kenneth Schwab  
City of Broken Arrow  
485 N. Poplar Avenue  
Broken Arrow, OK 74012

Re: HEC-RAS 2D Version 6.6 Training

Ms. Walters and Mr. Schwab,

Freese and Nichols, Inc. (FNI) is pleased to submit this training services proposal to the City of Broken Arrow (City) for Professional Services related to HEC-RAS 2D version 6.6 training two-day workshop costs.

### SCOPE OF SERVICES

FNI will provide professional services for the following scope of work:

- FNI will facilitate an in-person, project-based 2D Rain-on Mesh HEC-RAS modeling session using a detention pond near St. John Hospital as the case study. The purpose of this effort is to both build a pre-developed model (reflecting conditions prior to the development of St. John Hospital, using 2009 topographic data) and proposed conditions model to train City staff on the step-by-step process of model development and analysis. FNI staff will travel to the City and work on-site for up to two (2) days, collaboratively building the model with City staff and explaining each modeling step in detail. The case study will focus on Packages B and C of the provided plans and will include modeling updates based on the CAD grading plans and any additional data (e.g., 2009 topo) supplied by the City. This effort will include: (1) Reviewing and processing available site data (CAD grading, topography, design plans), (2) Constructing a pre-developed hydrologic and hydraulic model, (3) Identifying any additional modeling needs and outlining next steps, and (4) Live instruction on model setup, calibration, and review techniques.
- Learning Objectives: (1) Open, explore, and modify 2D HEC-RAS models, (2) Understand and use the new features of HEC-RAS, and (3) Build a 2D rain-on-grid HEC-RAS model from scratch. Topics Covered: (1) Overview of HEC-RAS 2D, (2) Importing Terrains and Land Cover with RASMapper, (3) Generating 2D Flow Areas and Running a 2D Model, (4) Reviewing and processing results with RASMapper, (5) Model Review and Troubleshooting, and (6) Discuss alternative modeling for detention facilities and other stormwater design.
- Workshop Outline: 20% Lecture, 70% Hands-On Modeling Exercises, 10% Q&A.
- Assumptions: One (1) instructors for in person only. The City will provide room accommodations. The City will provide all local area data to use as a project example.

### COMPENSATION

FNI proposes to furnish Professional Services for a Lump Sum fee of Seven Thousand Five Hundred Dollars (\$7,500) for the two-day workshop.

If additional information or clarification is desired, please do not hesitate to contact me at (405) 267-1281, [Austin.Dugger@freese.com](mailto:Austin.Dugger@freese.com).

Sincerely,

Austin Dugger, P.E.  
Freese and Nichols, Inc.