

City of Fayetteville Staff Review Form

2019-0588

Legistar File ID

10/1/2019

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Tim Nyander

9/12/2019

WATER SEWER (720)

Submitted By

Submitted Date

Division / Department

Action Recommendation:

Staff recommends approval an Engineering Services Agreement with FTN Associates, Ltd., pursuant to RFQ #19-01, in the amount of \$63,466.00 for Assessment of the Lake Fayetteville Spillway Capacity and Recommended Improvements as Required by the Arkansas Natural Resources Commission.

Budget Impact:

5400.720.1840-5314.00	Water and Sewer																								
Account Number	Fund																								
02064.1	Water & Sewer Rate/Operations Study																								
Project Number	Project Title																								
<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">Budgeted Item?</td> <td style="width: 10%; text-align: center;">Yes</td> <td style="width: 30%; border-bottom: 1px solid black;">Current Budget</td> <td style="width: 30%; text-align: right;">\$ 375,116.00</td> </tr> <tr> <td></td> <td style="text-align: center;">_____</td> <td style="border-bottom: 1px solid black;">Funds Obligated</td> <td style="text-align: right;">\$ -</td> </tr> <tr> <td></td> <td></td> <td style="border-bottom: 1px solid black;">Current Balance</td> <td style="text-align: right; border: 1px solid black;">\$ 375,116.00</td> </tr> </table>	Budgeted Item?	Yes	Current Budget	\$ 375,116.00		_____	Funds Obligated	\$ -			Current Balance	\$ 375,116.00	<table border="0" style="width: 100%;"> <tr> <td style="width: 30%; border-bottom: 1px solid black;">Does item have a cost?</td> <td style="width: 10%; text-align: center;">Yes</td> <td style="width: 30%; border-bottom: 1px solid black;">Item Cost</td> <td style="width: 30%; text-align: right;">\$ 63,466.00</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Budget Adjustment Attached?</td> <td style="text-align: center;">No</td> <td style="border-bottom: 1px solid black;">Budget Adjustment</td> <td style="text-align: right;">\$ -</td> </tr> <tr> <td></td> <td></td> <td style="border-bottom: 1px solid black;">Remaining Budget</td> <td style="text-align: right; border: 1px solid black;">\$ 311,650.00</td> </tr> </table>	Does item have a cost?	Yes	Item Cost	\$ 63,466.00	Budget Adjustment Attached?	No	Budget Adjustment	\$ -			Remaining Budget	\$ 311,650.00
Budgeted Item?	Yes	Current Budget	\$ 375,116.00																						
	_____	Funds Obligated	\$ -																						
		Current Balance	\$ 375,116.00																						
Does item have a cost?	Yes	Item Cost	\$ 63,466.00																						
Budget Adjustment Attached?	No	Budget Adjustment	\$ -																						
		Remaining Budget	\$ 311,650.00																						

V20180321

Purchase Order Number: _____

Previous Ordinance or Resolution # _____

Change Order Number: _____

Approval Date: _____

Original Contract Number: _____

Comments: RFQ 19-01, Selection #8



MEETING OF OCTOBER 1, 2019

TO: Mayor and City Council

THRU: Don Marr, Chief of Staff
Tim Nyander, Utilities Director

FROM: Corey Granderson, Utilities Engineer

DATE: September 12, 2019

SUBJECT: RFQ 19-01, Selection #8 – Engineering Services Agreement with FTN Associates, Ltd. for Assessment of the Lake Fayetteville Spillway Capacity and Recommended Improvements as Required by the Arkansas Natural Resources Commission

RECOMMENDATION:

Staff recommends approval an Engineering Services Agreement with FTN Associates, Ltd., pursuant to RFQ #19-01, in the amount of \$63,466.00 for Assessment of the Lake Fayetteville Spillway Capacity and Recommended Improvements as Required by the Arkansas Natural Resources Commission.

BACKGROUND:

The Lake Fayetteville Dam is regulated by the Arkansas Natural Resources Commission (ANRC) and is classified as an ‘intermediate-size, high-hazard’ dam based on storage volume and downstream conditions, respectively. The City of Fayetteville Water and Sewer Division is responsible for Dam maintenance, inspection, and upkeep. The ANRC completed a comprehensive inspection of the dam and available reports/plans most recently in Fall 2018. One of the key findings by ANRC was that the spillway is reported to have a capacity to pass 50% of the Probable Maximum Flood (PMF), however, for an intermediate/high-hazard classification the spillway must be capable of passing 100% of the PMF.

DISCUSSION:

FTN Associates, Ltd. is a local engineering firm with expertise in lakes, dams, hydraulics, and hydrology. They were formally selected per RFQ 19-01, Selection #8 to provide engineering analysis and design regarding the current Lake Fayetteville spillway capacity and to explore options for increasing this capacity to pass 100% of the PMF. Phase One of this study will provide the hydraulic and hydrologic calculations necessary to define the PMF in this watershed, and assess the actual capacity of the current spillway. Future Phases Two and Three would analyze downstream effects (City of Johnson) and construction-level engineering design. After each phase of this project, the City will meet with ANRC to ensure compliance and agreement for next steps. Phase One of this study is not to exceed \$63,466.00.

BUDGET/STAFF IMPACT:

Funds are available in the Water & Sewer Rate Operations Study account within the Water and Sewer Fund.

Attachments:

Engineering Services Agreement with FTN Associates, Ltd.
Fee/Tasks Matrix



water resources / environmental consultants

124 W Sunbridge Drive, Suite 3 • Fayetteville, AR 72703 • (479) 571-3334 • FAX (479) 571-3338

August 9, 2019
cgranderson@fayetteville-ar.gov

Mr. Corey Granderson, PE
Utilities Engineer
City of Fayetteville
2435 S Industrial Drive
Fayetteville, AR 72701

RE: Revised Lake Fayetteville Spillway Modification Feasibility Study
FTN No. P04370-2159-001

Dear Mr. Granderson:

FTN Associates, Ltd. (FTN) appreciates the opportunity to submit the following revised proposal to provide professional engineering services related to a feasibility study for potential spillway modifications at Lake Fayetteville in Fayetteville, AR (the Project).

Our Basic Services for the Project are proposed to be performed in a phased approach. Phase I will consist of providing for topographic surveying services and updating hydrologic and hydraulic analyses in support of the feasibility study, all as set forth in the printed Scope of Work for Basic Services included as Appendix A to the terms of the Agreement for Professional Engineering Services Between City of Fayetteville, Arkansas and FTN Associates, Ltd. (the Agreement). We will also furnish such Additional Services as you may request. Subsequent phases of the Project will be addressed in the future once the results of Phase I are known so as to allow for the definition of detailed Scopes of Work to be developed.

We expect to start our services promptly after receipt of your acceptance of this proposal and written authorization to proceed. We anticipate Phase I requiring approximately 6 months to complete following the approval of its authorization to proceed. Additional information regarding the project schedule and deliverables is presented in Appendix B to the Agreement.

This proposal, which includes the Agreement and its associated appendices, represents the entire understanding between you and us with respect to the Project and may only be modified in writing signed by both of us. This proposal will be open for acceptance until October 27, 2019, unless changed by us in writing.

Initial _____

Mr. Corey Granderson, PE
August 9, 2019
Page 2

We appreciate having the opportunity to work with you on this Project. If you have questions or need additional information please don't hesitate to call me or Kale Farmer, PE, CFM, at (479) 571-3334.

Respectfully submitted,
FTN ASSOCIATES, LTD.



Lee Beshoner, PE, CFM
Senior Water Resources Engineer

LJB/kae

Attachments

S:\PROPOSALS\04370-2159-001\FINAL\2019-08-09 FTN PROP CITY OF FAYETTEVILLE-SPILLWAY FEASIBILITY STUDY_REV1.DOCX ^{KF}



Initial _____

AGREEMENT
FOR
PROFESSIONAL ENGINEERING SERVICES
BETWEEN
CITY OF FAYETTEVILLE, ARKANSAS
AND
FTN ASSOCIATES, LTD.

THIS AGREEMENT is made as of August 9, 2019, by and between City of Fayetteville, Arkansas, acting by and through its Mayor (hereinafter called CITY OF FAYETTEVILLE) and FTN Associates, Ltd. (hereinafter called ENGINEER).

CITY OF FAYETTEVILLE from time to time requires professional engineering services in connection with the evaluation, design, and/or construction supervision of capital improvement projects. Therefore, CITY OF FAYETTEVILLE and ENGINEER in consideration of their mutual covenants agree as follows:

ENGINEER shall serve as CITY OF FAYETTEVILLE's professional engineering consultant in those assignments to which this Agreement applies, and shall give consultation and advice to CITY OF FAYETTEVILLE during the performance of ENGINEER's services. All services shall be performed under the direction of a professional engineer registered in the State of Arkansas and qualified in the particular field.

SECTION 1 - AUTHORIZATION OF SERVICES

- 1.1 Services on any assignment shall be undertaken only upon written Authorization of CITY OF FAYETTEVILLE and agreement of ENGINEER.
- 1.2 Assignments may include services described hereafter as Basic Services or as Additional Services of ENGINEER.
- 1.3 Changes, modifications or amendments in scope, price or fees to this contract shall **not** be allowed without a formal contract amendment approved by the Mayor and the City Council **in advance** of the change in scope, costs, fees, or delivery schedule.

SECTION 2 - BASIC SERVICES OF ENGINEER

- 2.1 Perform professional services in connection with the Project as hereinafter stated.
 - 2.1.1 The Scope of Services to be furnished by ENGINEER during the Project is included in Appendix A attached hereto and made part of this Agreement.
- 2.2 ENGINEER shall coordinate their activities and services with the CITY OF FAYETTEVILLE. ENGINEER and CITY OF FAYETTEVILLE agree that ENGINEER has full responsibility for the engineering services.

SECTION 3 - RESPONSIBILITIES OF CITY OF FAYETTEVILLE

- 3.1 CITY OF FAYETTEVILLE shall, within a reasonable time, so as not to delay the services of ENGINEER.
 - 3.1.1 Provide full information as to CITY OF FAYETTEVILLE's requirements for the Project.
 - 3.1.2 Assist ENGINEER by placing at ENGINEER's disposal all available information pertinent to the assignment including previous reports and any other data relative thereto.
 - 3.1.3 Assist ENGINEER in obtaining access to property reasonably necessary for ENGINEER to perform its services under this Agreement.
 - 3.1.4 Examine all studies, reports, sketches, cost opinions, proposals, and other documents presented by ENGINEER and render in writing decisions pertaining thereto.
 - 3.1.5 The Utilities Engineer is the CITY OF FAYETTEVILLE's project representative with respect to the services to be performed under this Agreement. The Utilities Engineer shall have complete authority to transmit instructions, receive information, interpret and define CITY OF FAYETTEVILLE's policies and decisions with respect to materials, equipment, elements and systems to be used in the Project, and other matters pertinent to the services covered by this Agreement.
 - 3.1.6 CITY OF FAYETTEVILLE and/or its representative will review all documents and provide written comments to ENGINEER in a timely manner.

SECTION 4 - PERIOD OF SERVICE

- 4.1 This Agreement will become effective upon the first written notice by CITY OF FAYETTEVILLE authorizing services hereunder.
- 4.2 The provisions of this Agreement have been agreed to in anticipation of the orderly progress of the Project through completion of the services stated in the Agreement. ENGINEER will proceed with providing the authorized services immediately upon receipt of written authorization from CITY OF FAYETTEVILLE. Said authorization shall include the scope of the services authorized and the time in which the services are to be completed. The anticipated schedule for this project is included as Appendix B.

SECTION 5 - PAYMENTS TO ENGINEER

- 5.1 The maximum not-to-exceed amount authorized for this Agreement is **\$63,500**. The CITY OF FAYETTEVILLE shall compensate ENGINEER based on an hourly NTE basis described in Appendix C.
- 5.2 Statements
 - 5.2.1 Monthly statements for each calendar month shall be submitted to CITY OF FAYETTEVILLE or such parties as CITY OF FAYETTEVILLE may designate for professional services consistent with ENGINEER's normal billing schedule. Once established, the billing schedule shall be maintained throughout the duration of the Project. Applications for payment shall be made in accordance with a format to be developed by ENGINEER and approved by CITY OF FAYETTEVILLE. Applications for payment shall be accompanied each month by the updated project schedule as the basis for determining the value earned as the work is accomplished. Final payment for professional services shall be made upon CITY OF FAYETTEVILLE's approval and acceptance with the satisfactory completion of the study and report for the Project.

5.3 Payments

5.3.1 All statements are payable upon receipt and due within thirty (30) days. If a portion of ENGINEER's statement is disputed by CITY OF FAYETTEVILLE, the undisputed portion shall be paid by CITY OF FAYETTEVILLE by the due date. CITY OF FAYETTEVILLE shall advise ENGINEER in writing of the basis for any disputed portion of any statement. CITY OF FAYETTEVILLE will make reasonable effort to pay invoices within 30 days of date the invoice is approved, however, payment within 30 days is not guaranteed.

5.4 Final Payment

5.4.1 Upon satisfactory completion of the work performed under this Agreement, as a condition before final payment under this Agreement, or as a termination settlement under this Agreement, ENGINEER shall execute and deliver to CITY OF FAYETTEVILLE a release of all claims against CITY OF FAYETTEVILLE arising under or by virtue of this Agreement, except claims which are specifically exempted by ENGINEER to be set forth therein. Unless otherwise provided in this Agreement or by State law or otherwise expressly agreed to by the parties to this Agreement, final payment under this Agreement or settlement upon termination of this Agreement shall not constitute a waiver of CITY OF FAYETTEVILLE's claims against ENGINEER or his sureties under this Agreement or applicable performance and payment bonds, if any.

SECTION 6 - GENERAL CONSIDERATIONS

6.1 Insurance

6.1.1 During the course of performance of these services, ENGINEER will maintain (in United States Dollars) the following minimum insurance coverages:

<u>Type of Coverage</u>	<u>Limits of Liability</u>
Workers' Compensation Employers' Liability	Statutory \$500,000 Each Accident
Commercial General Liability Bodily Injury and Property Damage	\$1,000,000 Combined Single Limit
Automobile Liability: Bodily Injury and Property Damage	\$1,000,000 Combined Single Limit
Professional Liability Insurance	\$1,000,000 Each Claim

ENGINEER will provide to CITY OF FAYETTEVILLE certificates as evidence of the specified insurance within ten days of the date of this Agreement and upon each renewal of coverage.

6.1.2 CITY OF FAYETTEVILLE and ENGINEER waive all rights against each other and their officers, directors, agents, or employees for damage covered by property insurance during and after the completion of ENGINEER's services.

6.2 Professional Responsibility

6.2.1 ENGINEER will exercise reasonable skill, care, and diligence in the performance of ENGINEER's services and will carry out its responsibilities in accordance with customarily accepted professional engineering practices. CITY OF FAYETTEVILLE will promptly report to ENGINEER any defects or suspected defects in ENGINEER's services of which CITY OF FAYETTEVILLE becomes aware, so that ENGINEER can take measures to minimize the consequences of such a defect. CITY OF FAYETTEVILLE retains all remedies to recover for its damages caused by any negligence of ENGINEER.

6.3 Cost Opinions and Projections

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

6.4 Changes

6.4.1 CITY OF FAYETTEVILLE shall have the right to make changes within the general scope of ENGINEER's services, with an appropriate change in compensation and schedule only after Fayetteville City Council approval of such proposed changes and, upon execution of a mutually acceptable amendment or change order signed by the Mayor of the CITY OF FAYETTEVILLE and the duly authorized officer of ENGINEER.

6.5 Termination

6.5.1 This Agreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this Agreement through no fault of the terminating party, provided that no termination may be effected unless the other party is given:

6.5.1.1 Not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate,

6.5.1.2 An opportunity for consultation with the terminating party prior to termination.

6.5.2 This Agreement may be terminated in whole or in part in writing by CITY OF FAYETTEVILLE for its convenience, provided that ENGINEER is given:

- 6.5.2.1 Not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate,
- 6.5.2.2 An opportunity for consultation with the terminating party prior to termination.
- 6.5.3 If termination for default is effected by CITY OF FAYETTEVILLE, an equitable adjustment in the price provided for in this Agreement shall be made, but
 - 6.5.3.1 No amount shall be allowed for anticipated profit on unperformed services or other work,
 - 6.5.3.2 Any payment due to ENGINEER at the time of termination may be adjusted to cover any additional costs to CITY OF FAYETTEVILLE because of ENGINEER's default.
- 6.5.4 If termination for default is effected by ENGINEER, or if termination for convenience is effected by CITY OF FAYETTEVILLE, the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide for payment to ENGINEER for services rendered and expenses incurred prior to the termination, in addition to termination settlement costs reasonably incurred by ENGINEER relating to commitments which had become firm prior to the termination.
- 6.5.5 Upon receipt of a termination action under Paragraphs 6.5.1 or 6.5.2 above, ENGINEER shall:
 - 6.5.5.1 Promptly discontinue all affected work (unless the notice directs otherwise),
 - 6.5.5.2 Deliver or otherwise make available to CITY OF FAYETTEVILLE all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by ENGINEER in performing this Agreement, whether completed or in process.
- 6.5.6 Upon termination under Paragraphs 6.5.1 or 6.5.2 above CITY OF FAYETTEVILLE may take over the work and may award another party an agreement to complete the work under this Agreement.
- 6.5.7 If, after termination for failure of ENGINEER to fulfill contractual obligations, it is determined that ENGINEER had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of CITY OF FAYETTEVILLE. In such event, adjustments of the agreement price shall be made as provided in Paragraph 6.5.4 of this clause.
- 6.6 Delays
 - 6.6.1 In the event the services of ENGINEER are suspended or delayed by CITY OF FAYETTEVILLE or by other events beyond ENGINEER's reasonable control, ENGINEER shall be entitled to additional compensation and time for reasonable costs incurred by ENGINEER in temporarily closing down or delaying the Project.
- 6.7 Rights and Benefits
 - 6.7.1 ENGINEER's services will be performed solely for the benefit of CITY OF FAYETTEVILLE and not for the benefit of any other persons or entities.

6.8 Dispute Resolution

6.8.1 Scope of Paragraph: The procedures of this Paragraph shall apply to any and all disputes between CITY OF FAYETTEVILLE and ENGINEER which arise from, or in any way are related to, this Agreement, including, but not limited to the interpretation of this Agreement, the enforcement of its terms, any acts, errors, or omissions of CITY OF FAYETTEVILLE or ENGINEER in the performance of this Agreement, and disputes concerning payment.

6.8.2 Exhaustion of Remedies Required: No action may be filed unless the parties first negotiate. If timely Notice is given under Paragraph 6.8.3, but an action is initiated prior to exhaustion of these procedures, such action shall be stayed, upon application by either party to a court of proper jurisdiction, until the procedures in Paragraphs 6.8.3 and 6.8.4 have been complied with.

6.8.3 Notice of Dispute

6.8.3.1 For disputes arising prior to the making of final payment promptly after the occurrence of any incident, action, or failure to act upon which a claim is based, the party seeking relief shall serve the other party with a written Notice.

6.8.3.2 For disputes arising within one year after the making of final payment, CITY OF FAYETTEVILLE shall give ENGINEER written Notice at the address listed in Paragraph 6.14 within thirty (30) days after occurrence of any incident, accident, or first observance of defect or damage. In both instances, the Notice shall specify the nature and amount of relief sought, the reason relief should be granted, and the appropriate portions of this Agreement that authorize the relief requested.

6.8.4 Negotiation: Within seven days of receipt of the Notice, the Project Managers for CITY OF FAYETTEVILLE and ENGINEER shall confer in an effort to resolve the dispute. If the dispute cannot be resolved at that level, then, upon written request of either side, the matter shall be referred to the President of ENGINEER and the Mayor of CITY OF FAYETTEVILLE or his designee. These officers shall meet at the Project Site or such other location as is agreed upon within 30 days of the written request to resolve the dispute.

6.9 CITY OF FAYETTEVILLE represents that it has sufficient funds or the means of obtaining funds to remit payment to ENGINEER for services rendered by ENGINEER.

6.10 Publications

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

6.11 Indemnification

6.11.1 CITY OF FAYETTEVILLE agrees that it will require all construction Contractors to indemnify, defend, and hold harmless CITY OF FAYETTEVILLE and ENGINEER from and against any and all loss where loss is caused or incurred or alleged to be caused or incurred in whole or in part as a result of the negligence or other actionable fault of the Contractors, or their employees, agents, Subcontractors, and Suppliers.

6.12 Ownership of Documents

6.12.1 All documents provided by CITY OF FAYETTEVILLE including original drawings, CAD drawings, estimates, field notes, and project data are and remain the property of CITY OF FAYETTEVILLE. ENGINEER may retain reproduced copies of drawings and copies of other documents.

6.12.2 Engineering documents, computer models, drawings, specifications and other hard copy or electronic media prepared by ENGINEER as part of the Services shall become the property of CITY OF FAYETTEVILLE when ENGINEER has been compensated for all Services rendered, provided, however, that ENGINEER shall have the unrestricted right to their use. ENGINEER shall, however, retain its rights in its standard drawings details, specifications, databases, 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 ENGINEER.

6.12.3 Any files delivered in electronic medium may not work on systems and software different than those with which they were originally produced. ENGINEER makes no warranty as to the compatibility of these files with any other system or software. Because of the potential degradation of electronic medium over time, in the event of a conflict between the sealed original drawings/hard copies and the electronic files, the sealed drawings/hard copies will govern.

6.13 Notices

6.13.1 Any Notice required under this Agreement will be in writing, addressed to the appropriate party at the following addresses:

CITY OF FAYETTEVILLE's address:
113 West Mountain Street
Fayetteville, Arkansas 72701

ENGINEER's address:
124 W. Sunbridge Drive
Suite 3
Fayetteville, Arkansas 72703

6.14 Successor and Assigns

6.14.1 CITY OF FAYETTEVILLE and ENGINEER each binds himself and his successors, executors, administrators, and assigns to the other party of this Agreement and to the successors, executors, administrators, and assigns of such other party, in respect to all covenants of this Agreement; except as above, neither CITY OF FAYETTEVILLE nor

ENGINEER shall assign, sublet, or transfer his interest in the Agreement without the written consent of the other.

6.15 Controlling Law

6.15.1 This Agreement shall be subject to, interpreted and enforced according to the laws of the State of Arkansas without regard to any conflicts of law provisions.

6.16 Entire Agreement

6.16.1 This Agreement represents the entire Agreement between ENGINEER and CITY OF FAYETTEVILLE relative to the Scope of Services herein. Since terms contained in purchase orders do not generally apply to professional services, in the event CITY OF FAYETTEVILLE issues to ENGINEER a purchase order, no preprinted terms thereon shall become a part of this Agreement. Said purchase order document, whether or not signed by ENGINEER, shall be considered as a document for CITY OF FAYETTEVILLE's internal management of its operations.

SECTION 7 - SPECIAL CONDITIONS

7.1 Additional Responsibilities of ENGINEER

7.1.1 CITY OF FAYETTEVILLE's review, approval, or acceptance of design drawings, specifications, reports and other services furnished hereunder shall not in any way relieve ENGINEER of responsibility for the technical adequacy of the work. Neither CITY OF FAYETTEVILLE's review, approval or acceptance of, nor payment for any of the services shall be construed as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

7.1.2 ENGINEER shall be and shall remain liable, in accordance with applicable law, for all damages to CITY OF FAYETTEVILLE caused by ENGINEER's negligent performance of any of the services furnished under this Agreement except for errors, omissions or other deficiencies to the extent attributable to CITY OF FAYETTEVILLE or CITY OF FAYETTEVILLE-furnished data.

7.1.3 ENGINEER's obligations under this clause are in addition to ENGINEER's other express or implied assurances under this Agreement or State law and in no way diminish any other rights that CITY OF FAYETTEVILLE may have against ENGINEER for faulty materials, equipment, or work.

7.2 Remedies

7.2.1 Except as may be otherwise provided in this Agreement, all claims, counter-claims, disputes and other matters in question between CITY OF FAYETTEVILLE and ENGINEER arising out of or relating to this Agreement or the breach thereof will be decided in a court of competent jurisdiction within Arkansas.

7.3 Audit: Access to Records

7.3.1 ENGINEER shall maintain books, records, documents and other evidence directly pertinent to performance on work under this Agreement in accordance with generally accepted accounting principles and practices consistently applied in effect on the date of execution of this Agreement. ENGINEER shall also maintain the financial information and data used by ENGINEER in the preparation of support of the cost submission required for any negotiated agreement or change order and send to CITY OF FAYETTEVILLE a copy of the cost summary submitted. CITY OF FAYETTEVILLE, the State or any of their authorized representatives shall have access to all such books, records, documents and other evidence for the purpose of inspection, audit and copying during normal business hours. ENGINEER will provide proper facilities for such access and inspection.

7.3.2 Records under Paragraph 7.3.1 above, shall be maintained and made available during performance on assisted work under this Agreement and until three years from the date of final payment for the project. In addition, those records which relate to any controversy arising out of such performance, or to costs or items to which an audit exception has been taken, shall be maintained and made available until three years after the date of resolution of such appeal, litigation, claim or exception.

7.3.3 This right of access clause (with respect to financial records) applies to:

7.3.3.1 Negotiated prime agreements:

7.3.3.2 Negotiated change orders or agreement amendments in excess of \$10,000 affecting the price of any formally advertised, competitively awarded, fixed price agreement:

7.3.3.3 Agreements or purchase orders under any agreement other than a formally advertised, competitively awarded, fixed price agreement. However, this right of access does not apply to a prime agreement, lower tier subagreement or purchase order awarded after effective price competition, except:

7.3.3.3.1 With respect to record pertaining directly to subagreement performance, excluding any financial records of ENGINEER;

7.3.3.3.2 If there is any indication that fraud, gross abuse or corrupt practices may be involved;

7.3.3.3.3 If the subagreement is terminated for default or for convenience.

7.4 Covenant Against Contingent Fees

7.4.1 ENGINEER warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an agreement of understanding for a commission, percentage, brokerage or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by ENGINEER for the purpose of securing business. For breach or violation of this warranty, CITY OF FAYETTEVILLE shall have the right to annul this Agreement without liability or at its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

7.5 Gratuities

7.5.1 If CITY OF FAYETTEVILLE finds after a notice and hearing that ENGINEER or any of ENGINEER's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts or otherwise) to any official, employee or agent of CITY OF FAYETTEVILLE, in an attempt to secure an agreement or favorable treatment in awarding, amending or making any determinations related to the performance of this Agreement, CITY OF FAYETTEVILLE may, by written notice to ENGINEER terminate this Agreement. CITY OF FAYETTEVILLE may also pursue other rights and remedies that the law or this Agreement provides. However, the existence of the facts on which CITY OF FAYETTEVILLE bases such finding shall be in issue and may be reviewed in proceedings under the Remedies clause of this Agreement.

7.5.2 In the event this Agreement is terminated as provided in Paragraph 7.5.1, CITY OF FAYETTEVILLE may pursue the same remedies against ENGINEER as it could pursue in the event of a breach of the Agreement by ENGINEER As a penalty, in addition to any other damages to which it may be entitled by law, CITY OF FAYETTEVILLE may pursue exemplary damages in an amount (as determined by CITY OF FAYETTEVILLE) which shall be not less than three nor more than ten times the costs ENGINEER incurs in providing any such gratuities to any such officer or employee.

7.6 Arkansas Freedom of Information Act

7.6.1 City contracts and documents, including internal documents and documents of subcontractors and sub-consultants, prepared while performing City contractual work are subject to the Arkansas Freedom of Information Act (FOIA). If a Freedom of Information Act request is presented to the CITY OF FAYETTEVILLE, ENGINEER will do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas Freedom of Information Act (A.C.A. §25-19-101 et seq.). Only legally authorized photocopying costs pursuant to the FOIA may be assessed for this compliance.

IN WITNESS WHEREOF, CITY OF FAYETTEVILLE, ARKANSAS by and through its Mayor, and ENGINEER, by its authorized officer have made and executed this Agreement as of the day and year first above written.

CITY OF FAYETTEVILLE, ARKANSAS

ENGINEER

By: _____
Mayor, Lioneld Jordan

By: Lee Beshone

ATTEST:

By: _____
City Clerk

Title: Branch Mgr. / Water Resources Eng.

END OF AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

APPENDIX A
REVISED DRAFT Scope of Work for Basic Services
Feasibility Study for
Lake Fayetteville Spillway Modifications
Fayetteville, Arkansas

Attached to and made part of the Agreement for Professional Engineering Services dated August 9, 2019 between FTN Associates, Ltd. (ENGINEER) and the City of Fayetteville, AR (CITY OF FAYETTEVILLE), with respect to the Project described therein. The objectives, proposed tasks, and assumptions for the Project are as follow:

OBJECTIVE

The primary objective of the Project is to perform updated hydrologic and hydraulic analyses on Clear Creek upstream of the Lake Fayetteville dam to determine the Probable Maximum Flood (PMF) event based on up-to-date information. This information is intended to aid the CITY OF FAYETTEVILLE in determining the current spillway capacity and the future development of spillway modifications if required. Based on Title 7 of the Arkansas Natural Resources Commission's (ANRC) Rules Governing Design and Operation of Dams, the dam is classified as a high hazard dam of intermediate size and should, therefore, be capable of safely passing the Probable Maximum Flood (PMF). Existing information provided by the CITY OF FAYETTEVILLE indicates that that the current configuration of the spillway is capable of passing a 0.43 PMF event without overtopping the dam. The use of more up to date precipitation data for probable maximum precipitation, as well as updated land use characteristics contributory watersheds will provide for a more accurate assessment of the potential need for spillway modifications.

The Project is proposed to be performed using a phased approach with subsequent phases structured in a manner that will provide the CITY OF FAYETTEVILLE with an opportunity to choose an alternative that will allow them to obtain an orderly and cost-effective solution to modifying the Lake Fayetteville spillway. The following specific tasks are proposed to accomplish this objective.

PHASE I — EXISTING CONDITIONS EVALUATION

TASK I: TOPOGRAPHIC SURVEY

ENGINEER will coordinate with its surveying subconsultant, B&F Engineering, Inc. (B&F), to develop hydrographic and topographic surveying of portions of the existing dam and spillway, including the spillway approach channel. This information will be used to develop a terrain model for those areas relevant to the existing conditions analysis and potential future spillway improvements. ENGINEER proposes to use B&F as our surveying subconsultant for the Project due to their extensive experience performing bathymetric and topographic surveying of this type. This task generally consists of the following:

- 1) Preparation and travel to site;

- 2) Coordinate and meet on-site with ENGINEER to clarify specific extents of the survey, including in-field coordination with engineer to discuss site area. A digital extent of the proposed survey area can be provided upon request;
- 3) The basis of horizontal and vertical control will include at least three control points set as part of the current survey and shall be referenced to Arkansas State Plane, North Coordinate System, NAD 83, US survey foot (horizontal) and NAVD 88 (vertical). The monuments will be on or near the dam such that they can be used in the future for construction control;
- 4) Identify existing survey control (datum information to be provided by the CITY OF FAYETTEVILLE, if available) and tie to current survey;
- 5) Perform bathymetric survey of the spillway approach channel and topographic survey of a portion of the dam embankment (approximately 10.5-acre area) and perimeter area. Topographic survey will include sufficient field ties to produce 1 foot contours (1"=50' in perimeter areas and 1"=20' in areas likely to be included in new spillway design).
- 6) Download and process data;
- 7) Upload data to terrain modeling software (e.g., AutoCAD, etc.) and create surface model; and
- 8) Review and address QA/QC comments regarding data gathered.

While it is our understanding that the CITY OF FAYETTEVILLE has access to on-call contractors and vendors, which they have expressed interested in using to potentially reduce costs for this activity, it was determined that ENGINEER's surveying subconsultant, B&F provided a competitive fee and familiarity with required task and will be used for this task. Additionally, ENGINEER will review the delivered survey data provided by its subconsultant with respect to its suitability for use in the feasibility analysis and will coordinate with the surveyor for the resolution of deficiencies.

As the schedule for the survey can be highly variable depending upon weather conditions, as well as water levels in Lake Fayetteville and Clear Creek, we anticipate that, given adequate field conditions, the survey will be completed within two (2) months following receipt of authorization and notice to proceed.

TASK II: EXISTING CONDITIONS HYDROLOGIC ANALYSIS

ENGINEER will gather and process available topographic data and utilize hydrologic modeling previously developed as part of the Washington County Flood Insurance Study update, performed by the State of Arkansas Cooperating Technical Partners (CTP), to extend data downstream to the Lake Fayetteville dam. This hydrologic model will determine updated peak discharges for the 10%, 4%, 2%, 1% and 0.2% annual chance (10-yr, 25-yr, 50-yr, 100-yr and 500-yr recurrence interval, respectively) rainfall events.

ENGINEER also will determine the Probable Maximum Flood (PMF) at the dam using Probable Maximum Precipitation (PMP) estimates taken from NOAA's Hydrometeorological Report No. 51 (HMR-51) and the State of Arkansas's ongoing PMP restudy to perform a brief comparison between the different results. From discussions with State of Arkansas personnel, the ongoing PMP study could be used when estimating the PMF based on the studies overall progress.

Additionally, while reviewing existing conditions and PMF discharges through the spillway, ENGINEER will coordinate with the CITY OF FAYETTEVILLE and the Northwest Arkansas Regional Planning Commission (NWARPC) to gather available future land use and growth projections (e.g., year 2030, etc.) to determine future runoff conditions and possible impacts to the Lake Fayetteville spillway.

All hydrologic analyses will be run for 24-hr rainfall events and are proposed to be performed using the existing HEC-HMS model used for the Arkansas CTP study. This task does not include further subdivision of drainage basins or modification of model parameters within the previous CTP study area, other than those listed specifically in this Scope of Work. If further revisions are requested, they can be performed as Additional Services.

Additionally, no further hydrologic modeling is proposed below the Lake Fayetteville spillway at this time. If proposed spillway improvements alter hydrologic discharges downstream of the dam, then those modeling efforts will be conducted during following project phases. Additional scenarios or storm events beyond those described above are not included within this scope and, if requested, will be performed as Additional Services.

TASK III: EXISTING CONDITIONS HYDRAULIC ANALYSIS

Using the data developed in Tasks I and II, ENGINEER will develop an existing conditions hydraulic model of Clear Creek using HEC-RAS to determine discharges being released by the spillway in its current configuration. This model will serve as the basis of comparison for all proposed design scenarios developed in later phases and the basis for possible dam breach modeling resulting from the Lake Fayetteville spillway project. Downstream boundary conditions will be based on Clear Creek profiles taken from the Washington County, AR Flood Insurance Study.

TASK IV: PROJECT MANAGEMENT

Project management and client coordination, including preparation of monthly progress reports, and up to two additional meetings at the CITY OF FAYETTEVILLE offices.

Once the existing conditions hydrologic and hydraulic analyses are completed, ENGINEER will prepare a short summary report describing the findings and provide recommendations regarding possible steps forward with Phase II to examine actions that may be performed to potentially modify the Lake Fayetteville dam.

**DRAFT OUTLINE SCOPE OF WORK FOR SERVICES RELATED
TO REMAINING PHASES**

PHASE II — SPILLWAY FEASIBILITY ANALYSES

(SPECIFIC SCOPE OF SERVICES TO BE DEVELOPED FOLLOWING COMPLETION OF PHASE 1)

(THIS PHASE MAY INCLUDE SCENARIOS THAT INCLUDE ADDITIONAL MODELING DOWNSTREAM)

(POTENTIAL FEE RANGE: \$75,000-\$125,000* SUBJECT TO NUMBER AND TYPE OF SCENARIOS CHOSEN)

TASK I: GEOTECHNICAL INVESTIGATION

TASK II: SPILLWAY FEASIBILITY ANALYSES SCENARIOS

TASK III: FEASIBILITY STUDY REPORT AND CONCEPTUAL DESIGN(S)

TASK IV: COORDINATION AND PROJECT MANAGEMENT

PHASE III — DESIGN PHASE

(SPECIFIC SCOPE OF SERVICES TO BE DEVELOPED FOLLOWING COMPLETION OF PHASE 2)

(POTENTIAL FEE RANGE: \$ \$150,000 - \$225,000)

TASK I: 30% CONCEPT DESIGN SUBMITTAL

TASK II: 60% DESIGN SUBMITTAL

TASK III: 90% DESIGN SUBMITTAL

TASK IV: FINAL DESIGN SUBMITTAL

TASK V: REGULATORY FLOODPLAIN COORDINATION AND COMPLIANCE

TASK VI: SECTION 404 PERMITTING (CONCURRENT WITH DESIGN TASKS)

TASK VII: – ADEQ SHORT TERM ACTIVITY AUTHORIZATION (STAA)

TASK VIII: CONSTRUCTION STORM WATER PERMITTING

TASK IX: COORDINATION AND PROJECT MANAGEMENT

APPENDIX B
Schedule and Deliverables
Feasibility Study for
Lake Fayetteville Spillway Modifications
Fayetteville, Arkansas

SCHEDULE

TASK	START *	END *
PROJECT AUTHORIZATION	10/1/2019	
TOPOGRAPHIC SURVEY	10/1/2019	12/2/2019
EXISTING CONDITIONS HYDROLOGIC ANALYSIS	10/1/2019	2/28/2020
EXISTING CONDITIONS HYDRAULIC ANALYSIS	2/1/2020	4/3/2020
PROJECT MANAGEMENT	10/1/2019	4/3/2020

* All dates calculated based off assumed start date of 10/1/2019.

DELIVERABLES

Short summary report describing the findings and provide recommendations regarding possible steps forward with Phase II to examine actions that may be performed to potentially modify the Lake Fayetteville Dam and spillway to meet ANRC criteria.

APPENDIX C

2019 Fee Schedule¹ FTN Associates, Ltd.

<u>Labor Category</u>	<u>Hourly Rate</u>
Professional 7	\$ 199.00
Professional 6	178.00
Professional 5	158.00
Professional 4	140.00
Professional 3	122.00
Professional 2	107.00
Professional 1	95.00
Technician 4	97.00
Technician 3	87.00
Technician 2	76.00
Technician 1	64.00
Executive Assistant	71.00
Word Processing	62.00

Should back-up data be requested for reimbursable expenses, it will be provided for an administrative fee.

Payment Terms

Unless other arrangements are made in writing, invoicing will be monthly for services completed. Payment is due in full within 30 days of invoice.

¹Effective January 1, 2019 – December 31, 2019

Lake Fayetteville Dam Existing Conditions H&H Analysis Fee Estimate (Phase 1) Revised - 8/9/2019

Meetings		2 Project Review Meeting, Phase 2 Discussion Meeting																Total Cost
		Principal / Sr Eng		Project Manager / Eng / GIS				GIS / Jr. Engr.		T4	T3	T2	T1	Exec Asst	WP	Survey Subconsultant	FTN Fee	
		P7	P6	P5	P4	P3	P2	P1										
2019 Rates		\$ 199	\$ 178	\$ 158	\$ 140	\$ 122	\$ 107	\$ 95	\$ 97	\$ 87	\$ 79	\$ 64	\$ 71	\$ 62				
1	Topographic Survey																\$ 27,138	
	Coordination			4	12												\$ 2,312	
	Site Visits			2	12												\$ 1,996	
	FTN Survey Subconsultant															\$ 19,000	\$ 1,900	
	QAQC		1	4	8												\$ 1,930	
2	Hydrology																\$ 14,554	
	Terrain data gathering			1		4											\$ 646	
	Terrain processing for H&H			2	2	8											\$ 1,572	
	Detailed review of existing data				6	10											\$ 2,060	
	Review of existing and new PMF parameters			2	6	16											\$ 3,108	
	Future Land Use Hydrology Condition Parameters			2	4	8											\$ 1,852	
	Development of parameters for hydrology			2	8	16											\$ 3,388	
	Model runs					4											\$ 488	
	QA Reviews/Revisions		2	2	2	4											\$ 1,440	
3	Hydraulics																\$ 9,824	
	Development of parameters			4	8	16											\$ 3,704	
	Model assembly				8	12											\$ 2,584	
	Hydraulic modeling				8	8											\$ 2,096	
	QA Reviews/Revisions		2	2	2	4											\$ 1,440	
4	Project Management / Coordination																\$ 14,316	
	Project Management		6	12	12									8			\$ 5,140	
	Coordination			8	8												\$ 2,384	
	Reporting		2	4	8	8								8			\$ 3,580	
	Results Meeting		8	6	6												\$ 3,212	
FTN Fee Total																	\$ 63,466	