

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is entered into between The City of Norman (OWNER) and Freese and Nichols (CONSULTANT) for the following reasons:

1. OWNER intends to design improvements to five roadway locations as a result of the May 2015 storms and flooding; and,
2. OWNER requires certain professional survey, design, analysis and engineering services in connection with the Project (the Services); and,
3. CONSULTANT is prepared to provide the Services.

In consideration of the promises contained in this Agreement, OWNER and CONSULTANT agree as follows:

ARTICLE 1 - EFFECTIVE DATE

The effective date of this Agreement shall be 24th day of November, 2015.

ARTICLE 2 - GOVERNING LAW

This Agreement shall be governed by the laws of the State of Oklahoma.

ARTICLE 3 - SCOPE OF SERVICES

CONSULTANT shall provide the Services described in Attachment A, Scope of Services.

ARTICLE 4 - SCHEDULE

CONSULTANT shall exercise its reasonable efforts to perform the Services described in Attachment A according to the Schedule set forth in Attachment B.

ARTICLE 5 - COMPENSATION

OWNER shall pay CONSULTANT in accordance with Attachment C, Compensation. Invoices shall be due and payable upon receipt. OWNER shall give prompt written notice of any disputed amount and shall pay the remaining amount.

ARTICLE 6 - OWNER'S RESPONSIBILITIES

OWNER shall be responsible for all matters described in Attachment D, OWNER'S Responsibilities. OWNER hereby represents that it owns the intellectual property rights in any plans, documents or other materials provided by OWNER to CONSULTANT. If OWNER does not own the intellectual property rights in such plans, documents or other materials, prior to providing same to CONSULTANT, OWNER shall obtain a license or right to use, including the right to sublicense to CONSULTANT. OWNER hereby grants CONSULTANT the right to use the intellectual property associated with plans, documents or other materials it owns or has the right to use for the limited purpose of performing the Services. OWNER represents that CONSULTANT'S use of such documents will not infringe upon any third parties' rights.

ARTICLE 7 - STANDARD OF CARE

The same degree of care, skill, and diligence shall be exercised in the performance of the Services as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. No other warranty, express or implied, is included in this Agreement or in any drawing, specification, report, opinion, or other instrument of service, in any form or media, produced in connection with the Services.

ARTICLE 8 -INDEMNIFICATION AND LIABILITY

Indemnification. The CONSULTANT and the OWNER each hereby agree to defend, indemnify, and hold harmless the other party, its officers, servants, and employees, from and against any and all liability, loss, damage, cost, and expense (including attorneys' fees and accountants' fees) caused by an error, omission, or negligent act of the indemnifying party in the performance of services under this Agreement. The CONSULTANT and the OWNER each agree to promptly serve notice on the other party of any claims arising hereunder, and shall cooperate in the defense of any such claims. In any and all claims asserted by any employee of the CONSULTANT against any indemnified party, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONSULTANT or any of the CONSULTANT'S employees under workers' compensation acts, disability benefit acts, or other employee benefit acts. The acceptance by OWNER or its representatives of any certification of insurance providing for coverage other than as required in this Agreement to be furnished by the CONSULTANT shall in no event be deemed a waiver of any of the provisions of this indemnity provision. None of the foregoing provisions shall deprive the OWNER of any action, right, or remedy otherwise available to the OWNER at common law.

Survival. The terms and conditions of this Article shall survive completion of the Services, or any termination of this Agreement.

ARTICLE 9 - INSURANCE

During the performance of the Services under this Agreement, CONSULTANT shall maintain the following insurance:

- (a) General Liability Insurance, with a limit of \$1,000,000 per occurrence and \$2,000,000 annual aggregate.
- (b) Automobile Liability Insurance, with a combined single limit of \$1,000,000 for each person and \$1,000,000 for each accident.
- (c) Workers' Compensation Insurance in accordance with statutory requirements and Employers' Liability Insurance, with a limit of \$500,000 for each occurrence.
- (d) Professional Liability Insurance, with a limit of \$1,000,000 per claim and annual aggregate.

CONSULTANT shall, upon written request, furnish OWNER certificates of insurance which shall include a provision that such insurance shall not be canceled without at least thirty days' written notice to OWNER. OWNER shall require all Project contractors to include OWNER, CONSULTANT, and its parent company, affiliated and subsidiary entities, directors, officers and employees, as additional insureds on their General and Automobile Liability insurance policies, and to indemnify both OWNER and CONSULTANT, each to the same extent

ARTICLE 10 - LIMITATIONS OF RESPONSIBILITY

CONSULTANT shall not be responsible for (a) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project; (b) the failure of any contractor, subcontractor, vendor, or other Project participant, not under contract to CONSULTANT, to fulfill contractual responsibilities to OWNER or to comply with federal, state, or local laws, regulations, and codes; or (c) procuring permits, certificates, and licenses required for any construction unless such procurement responsibilities are specifically assigned to CONSULTANT in Attachment A, Scope of Services. In the event the OWNER requests CONSULTANT to execute any certificates or other documents, the proposed language of such certificates or documents shall be submitted to CONSULTANT for review at least 15 days prior to the requested date of execution. CONSULTANT shall not be required to execute any certificates or documents that in any way would, in CONSULTANT's sole judgment, (a) increase CONSULTANT'S legal or contractual obligations or risks; (b) require knowledge, services or responsibilities beyond the scope of this Agreement; or (c) result in CONSULTANT having to certify, guarantee or warrant the existence of conditions whose existence CONSULTANT cannot ascertain.

ARTICLE 11 - OPINIONS OF COST AND SCHEDULE

Because 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 practitioner of its profession. CONSULTANT does not guarantee that proposals, bids, or actual Project costs will not vary from CONSULTANT'S cost estimates or that actual schedules will not vary from CONSULTANT'S projected schedules.

ARTICLE 12 - REUSE OF DOCUMENTS

All documents, including, but not limited to, plans, drawings, and specifications prepared by CONSULTANT as deliverables pursuant to the Scope of Services 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 modifications or extensions of the Project or on any other project. Any reuse without prior written verification or adaptation by CONSULTANT for the specific purpose intended will be at OWNER'S sole risk and without liability or legal exposure to CONSULTANT. OWNER shall indemnify and hold harmless CONSULTANT and its subconsultants against all judgments, losses, damages, injuries, and expenses, including reasonable attorneys' fees, arising out of or resulting from such reuse. Any verification or adaptation of documents will entitle CONSULTANT to additional compensation at rates to be agreed upon by OWNER and CONSULTANT.

ARTICLE 13 - OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

Except as otherwise provided herein, documents, drawings, and specifications prepared by CONSULTANT and furnished to OWNER as part of the Services shall become the property of OWNER; provided, however, that CONSULTANT shall have the unrestricted right to their use. CONSULTANT shall retain its copyright and Ownership rights in its design, drawing details, specifications, data bases, computer software, and other proprietary property. Intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of CONSULTANT.

ARTICLE 14 - TERMINATION AND SUSPENSION

This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement; provided, however, the nonperforming party shall have 14 calendar days from the receipt of the termination notice to cure or to submit a plan for cure acceptable to the other party. OWNER may terminate or suspend performance of this Agreement for OWNER'S convenience upon written notice to CONSULTANT. CONSULTANT shall terminate or suspend performance of the Services on a schedule acceptable to OWNER, and OWNER shall pay CONSULTANT for all the Services performed. Upon restart of suspended Services, an equitable adjustment shall be made to CONSULTANT'S compensation and the Project schedule.

ARTICLE 15 - 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 nonperforming party. For purposes of this Agreement, such circumstances include, but are not limited to, abnormal weather conditions; floods; earthquakes; fire; epidemics; war, riots, and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage; judicial restraint; and delay in or 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. CONSULTANT shall be granted a reasonable extension of time for any delay in its performance caused by any such circumstances. Should such circumstances occur, the nonperforming 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.

ARTICLE 16 - NOTICES

Any notice required by this Agreement shall be made in writing to the address specified below:
OWNER:

Tim M. Miles, P.E.
Capital Projects Engineer
City of Norman
P.O. Box 370
Norman, OK 73070

Freese and Nichols, Inc.:

Tricia H. Hatley, P.E.
Vice President
9211 Lake Hefner Parkway, Suite 300
Oklahoma City, OK, 73120

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

ARTICLE 17 - DISPUTES

In the event of a dispute between OWNER and CONSULTANT arising out of or related to this Agreement, the aggrieved party shall notify the other party of the dispute within a reasonable time after such dispute arises. If the parties cannot thereafter resolve the dispute, each party shall nominate a senior officer of its management to meet to resolve the dispute by direct negotiation or mediation.

Should such negotiation or mediation fail to resolve the dispute, either party may pursue resolution of the dispute by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association; provided, however, in the event the parties are unable to reach agreement to arbitrate under terms reasonably acceptable to both parties, either party may pursue resolution in any court having jurisdiction. During the pendency of any dispute, the parties shall continue diligently to fulfill their respective obligations hereunder.

ARTICLE 18 - EQUAL EMPLOYMENT OPPORTUNITY

CONSULTANT hereby affirms its support of affirmative action and that it abides by the provisions of the "Equal Opportunity Clause" of Section 202 of Executive Order 11246 and other applicable laws and regulations. CONSULTANT affirms its policy to recruit and hire employees without regard to race, age, color, religion, sex, sexual preference/orientation, marital status, citizen status, national origin or ancestry, presence of a disability or status as a Veteran of the Vietnam era or any other legally protected status. It is CONSULTANT'S policy to treat employees equally with respect to compensation, advancement, promotions, transfers and all other terms and conditions of employment. CONSULTANT further affirms completion of applicable governmental employer information reports including the EEO-1 and VETS-1 00 reports, and maintenance of a current Affirmative Action Plan as required by Federal regulations.

ARTICLE 19 - 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 20 - 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 it 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 21 - INTEGRATION

This Agreement, including Attachments A, B, C, and D incorporated by this reference, 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 22 - SUCCESSORS AND ASSIGNS

OWNER and CONSULTANT each binds itself and its successors, executors, administrators, permitted assigns, legal representatives and, in the case of a partnership, its partners, to the other party to this Agreement and to the successors, executors, administrators, permitted assigns, legal representatives, and partners of such other party in respect to all provisions of this Agreement.

ARTICLE 23 - ASSIGNMENT

Neither OWNER nor CONSULTANT shall assign any rights or duties under this Agreement without the prior written consent of the other party, which consent shall not be unreasonably withheld; provided, however, CONSULTANT may assign its rights to payment without OWNER'S consent. 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 engaging independent CONSULTANTS, associates, and subcontractors to assist in the performance of the Services.

ARTICLE 24 - NO THIRD PARTY RIGHTS

The Services provided for in this Agreement are for the sole use and benefit of OWNER and CONSULTANT. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than OWNER and CONSULTANT.

IN WITNESS WHEREOF, OWNER and Atkins North America have executed this Agreement.

DATED this 24th day of November, 2015

The City of Norman
(OWNER)

Signature Cindy Rosenthal

Name Cindy Rosenthal

Title Mayor

Date 11/24/15

Attest:

[Signature]
City Clerk



Freese and Nichols, Inc.

Signature [Signature]

Name TRICIA H. HATLEY

Title VICE PRESIDENT

Date 11-19-15

Attest:

[Signature]
Secretary

Approved as to form and legality this 19 day of November 2015

[Signature]
City Attorney

ATTACHMENT A SCOPE OF SERVICES

ARTICLE 3 of the AGREEMENT is amended and supplemented to include the following agreement of the parties. The CONSULTANT shall, except as otherwise provided for herein, furnish all engineering services, labor, equipment and incidentals (SERVICES) as required for this AGREEMENT.

PART 1- DESCRIPTION OF PROJECT

The CONSULTANT is to provide SERVICES in connection with the design and preparation of construction plans, specifications and bid documents for five locations damaged in the May 2015 flooding. The CONSULTANT will also provide technical assistance throughout design and construction phases of the projects including development of right-of-way documents and utility coordination and relocations.

Project Description:

Multiple roadways were severely damaged or washed out during the May 2015 floods. Studies have been performed to properly size new structures to handle a 50-year design storm for culverts and a 100-year design storm for bridges. Following are the project locations and summary of the work included in this contract:

- Site #7: Rock Creek Road (East) – 156th Avenue NE to 168th Avenue NE – Prepare culvert plans to replace the existing crossing with a 2-10'x5' RCB or equivalent pre-engineered span bridge. Prepare plans to adjust roadway profile as necessary.
- Site #9: Post Oak Road, 108th Avenue E to 120th Avenue E – Prepare plans to replace the existing crossing with a 2-14'x10' RCB or equivalent pre-engineered span bridge.
- Site #11: Rock Creek Road, 168th Avenue NE to 180th Avenue NE – Prepare plans to replace the existing culvert with a 3-8'x6' RCB or equivalent pre-engineered span bridge.
- Site #17: 1129 Whispering Pines Drive; Imhoff Channel Liner Repair – Prepare plans for the replacement of channel lining starting south of 1129 Whispering Pines and extending to the terminus of the existing lining.
- Site #28: 72nd Avenue NE south of Tecumseh Road – Prepare sheet pile retaining wall plans for the WPA bridge on three of the wings.

Project Assumptions:

- The culverts/bridges to match existing crossing geometry including the width, length, and profile. The structure type and sizes of the new bridges to follow those found in the Tetra Tech reports. New culvert/bridge will be designed in accordance to the AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014. HL-93 design live load will be assumed unless specified otherwise by the OWNER.

- The OWNER will provide CONSULTANT access to existing H/H models and data produced by Tetra Tech for the FEMA reports.
- Roadway sections will be designed per OWNER Transportation Master Plan and/or to match existing roadway sections.

PART 2 – SCOPE OF WORK

Task 1 – Pre-Design

Pre-Design services include field surveying, geotechnical exploration and analysis necessary to commence the design. The CONSULTANT shall provide standard geotechnical investigation sufficient to satisfy the PROJECT design requirements. The tasks to be performed by CONSULTANT include:

Task 1A - Design Survey

Surveying shall be in accordance with the minimum standards for land surveying as stipulated by the Oklahoma State Board of Professional Engineers and Land Surveyors. Tract ownerships are to be based on observable evidence and reasonable public record research. Ownerships shown will not be conclusive to actual land title certificates.

- a. The CONSULTANT shall establish horizontal and vertical control within the PROJECT limits necessary to collect all topographic and planimetric features, boundaries, right-of-way/easement information, etc. and to serve as survey control for construction staking by the Construction Contractor. The centerline alignment of the survey will be established along the section lines of each roadway with references to each pertinent corner monument. Only the section corners on the project alignments will be recovered and established.
- b. The CONSULTANT shall provide field surveying in order to develop existing roadway cross sections with some exceptions at 100' intervals as well as at intersections and driveways throughout the PROJECT. The limits of the survey will be 25 feet beyond the existing right-of-way lines on both sides of the roadway. The limits will be extended out a minimum of 200 feet from the centerline of the roadway at the various creek crossings.
- c. The CONSULTANT shall create contours and digital terrain model from the collected data to support the design.
- d. The CONSULTANT shall collect topographic data including, but not limited to, surface features such as utilities, signs, (including type and reference marker, if any), headwalls, retaining walls, curb and grate inlet locations, pipe and box culvert flowlines, driveway locations and profile, overhead electric lines, and other pertinent data.

- e. The CONSULTANT shall provide survey in the Oklahoma State Plane Coordinate System, South Zone. The ground/grid combined scale factor shall be computed for the PROJECT and noted on the survey sheets.
- g. The CONSULTANT shall contact the Oklahoma One Call System "CALL OKIE" via the "Web Ticket" system and maintain records of reported utility holders. Information on Utility holders received from OKIE shall be shown on plan sheets. Utility drawings based on surface features, flagging, and record drawings shall be included in the plan sets. Any additional information received directly from the utility companies shall be included in the plan sets and identified.

Task 1B – Geotechnical Analysis

Geotechnical analysis shall include soil investigations, including field and laboratory tests, borings, related engineering analysis and recommendations.

- a. Select appropriate locations along the proposed roadway alignment for exploratory borings and notify Oklahoma One-Call System and the appropriate City department of the planned borings in order to locate existing underground utilities prior to commencement of the field exploration activities.
- b. Obtain relative permits (if applicable), check other existing ongoing construction and verify accessibility.
- c. If required by the City and as needed for safety purposes, provide traffic control devices during drilling operations if the borings are in close proximity to the roadway.
- d. Drill a total of 2 borings to a depth of 30 feet at each of the six selected locations for a total of 12 borings. One boring will be drilled on the upstream end and one boring will be drilled on the downstream end of each culvert crossing, provided there are not any accessibility or utility conflict issues. The borings will be drilled using continuous flight or hollow-stem augers, as appropriate.
- e. Subsurface samples shall be obtained at 2.5-foot intervals within the upper 10 feet and at 5-foot intervals thereafter using either split-spoon sampler in conjunction with the Standard Penetration Test (SPT) for immediate and non-cohesive soils and with thin-walled tube samplers for cohesive soils. Rock and rock-like materials will be sampled using the SPT sampler. At completion, the boreholes will be backfilled with auger cuttings to the ground surface.
- f. Groundwater observations within the borings will be recorded at the time of drilling and at the completion of drilling and sampling.
- g. Testing shall be performed on samples obtained from the borings to determine soil classification and pertinent engineering properties of the subsurface materials.
- h. FNI will select samples for laboratory testing, assign tests, and review the test results.
- i. Laboratory tests will be appropriately assigned for the specific subsurface materials encountered during exploration, but are expected to include:

- a. Classification tests (liquid and plastic limits and percent passing the no. 200 sieve) – maximum of 3 Atterberg limits tests and 3 percent passing the #200 Sieve for each boring.
- b. Moisture content – maximum of 4 tests per boring
- c. Dry unit weight – maximum of one test per boring
- d. Unconfined compressive strength – maximum of 3 tests per boring
- e. One-dimensional swell (overburden) – maximum of one test per culvert crossing
- j. Prepare a report of the geotechnical investigation to include:
 - a. Appendix with the boring locations, boring logs, laboratory test results, and a symbol key.
 - b. Discussion of subsurface conditions and soil properties indicated by the field and laboratory work, and the implications for design.
 - c. Foundation, subgrade, and site preparation recommendations for the six (6) proposed culvert crossings and associated retaining walls/wingwalls.
 - d. Lateral earth pressures or soil parameters for the retaining walls, as appropriate.
 - e. General discussion of expected construction related issues.
 - f. Earthwork related recommendations for use during development of the plans and specifications.

Task 1C – Fluvial Geomorphologic Assessment (included in the basic design fee)

The objective will focus on defining the extents of the stream/roadway channel protection at each bridge structure, evaluate the potential for channel downcutting to aid in the culvert/structures design and assess channel conditions and assist in the evaluation of potential materials and solutions to protect the channel.

- a. CONSULTANT will perform desktop analysis of the channel stability and evolution based on, soils, geology, topography, and landscape using literature and historical aerial photographs.

CONSULTANT will conduct site visit to field map the channel morphology, erosion and instability. It is necessary to determine the mechanisms of vertical and lateral channel movement and instability along channel at the site locations.

- c. CONSULTANT will process field data collected during the stream assessment, process and evaluate geomorphic data, and characterize the channel morphology and the channel evolution of the creek at each site. These data will be used to describe the processes driving channel instabilities within the reach at each site.
- d. CONSULTANT will perform an incipient motion analysis for the channel bed material to estimate the critical discharge. The analysis will use the H/H models from Task 3A. The critical discharge will be used to identify potential protection materials. A scour and

stable slope analysis will estimate the depth of channel incision and/or scour at the appropriate sites.

- e. Results of the analysis will be incorporated into the Preliminary Engineering Report.

Task 2 - Additional Design Services

The CONSULTANT services identified in **Task 2** are services anticipated to be required. However, the specific required level of effort by the CONSULTANT will be unknown until additional information becomes better defined during the course of the PROJECT. The identified SERVICES and anticipated level of effort are educated estimates only. SERVICES will be provided on an "as needed" and "as requested" basis according to the identified unit cost.

Task 2A – Supplemental Survey Needs

The OWNER and the CONSULTANT will have several needs for additional survey services after the initial design survey is complete. The level of effort required is unknown. An estimate of required man hours is included in the contract amount to be used "as needed" and "as requested". The anticipated items are listed below:

- a. Prepare all the necessary right-of-way map, exhibits, and descriptions for possible right-of-way acquisitions.
- b. Survey underground utility locates
- c. Survey previously unmarked utilities
- d. Stake existing right-of-way
- e. Other miscellaneous surveys required by the OWNER or the CONSULTANT

Task 3 - Design Services

The following Design Services will be provided by the CONSULTANT as necessary to complete the PROJECT as defined above:

Task 3A - Design Study and Conceptual Design

The CONSULTANT shall conduct the following preliminary design functions during the Preliminary Design task:

- a. Data collection – In addition to data obtained from the OWNER, CONSULTANT will review available data that may influence the project. CONSULTANT will visit each project location to verify survey and data collected.
- b. Prepare HEC-RAS model of crossings to include channel sections both upstream and downstream in sufficient length to model the area to show improvements. Hydrology will be gathered from either the Tetra Tech reports for each crossing, FEMA effective models, or models obtained from the OWNER. Survey around each crossing should be sufficient

for the model and cross sections needed outside of the survey limits shall be from available 2 foot topography obtained from the OWNER.

- c. Prepare preliminary Plan & Profile Sheets showing existing and proposed alignments, existing and proposed R/W, as well as city and franchise utilities.
- d. Prepare a construction phasing plan that will be refined into a detailed traffic control plan in future submittals.
- e. Prepare an Opinion of Probable Construction Cost for each project location.
- f. Document existing utilities.

No Map Revisions, FEMA CLOMR/LOMRs and no COE 404 Applications/Permits are anticipated for PROJECT.

The CONSULTANT shall attend a progress meeting to discuss conceptual design and receive comments from the OWNER.

Task 3B – 60% and Final Plans

Upon receiving review meeting comments from the OWNER, the CONSULTANT shall prepare final Construction Plans suitable for bid letting. These tasks are anticipated to include the following:

- a. Finalize P & P Sheets
- b. Finalize Cross Section Sheets
- c. Finalize Drainage Structure Tables
- d. Finalize Summary Tables
- e. Finalize Traffic Control
- f. Finalize Pay Items, Bid Quantities & Pay Item Notes
- g. Finalize Detail Sheets
- h. Finalize Engineer's Opinion of Probable Construction Cost
- i. Technical specs, contract documents (FINAL only)

CONSULTANT will work with the OWNER's Utility Coordinator to determine the approximate location of above and underground utilities that have an impact on the project and work with the utility companies to ensure that all required utility relocations are consistent with the PROJECT. Design of the OWNER-owned utilities is not anticipated for this project. If the design or relocation of CITY-owned utilities are necessary (such as water and sanitary sewer services), services will be added to this agreement by written amendment.

Submittals for this phase include a 60% design review meeting. Upon approval of each submittal, CONSULTANT shall proceed forward with construction plans. The CONSULTANT shall submit a final set of 100% plans and attend the pre-bid meeting in support of the OWNER.

Task 4 – Environmental Services

This scope assumes that the proposed improvements can be designed to meet the terms and conditions of Nationwide Permit 3 (NWP), *maintenance* or NWP 14, *linear transportation crossings* without requiring the submittal of pre-construction notification (PCN) to the U.S. Army Corps of Engineers. Based on discussions with FEMA, this scope also assumes that the proposed repairs can be designed to meet the requirements of a Categorical Exclusion (CE) for NEPA clearance and will not require an Environmental Assessment (EA). It is FNI's understanding that FEMA will prepare the CE and that FNI will provide supporting data for compliance with Section 404 of the Clean Water Act and Section 106 of the National Historic Preservation Act to FEMA as discussed below.

- a. The CONSULTANT will obtain and review information for the vicinity of the project repair sites such as soils maps, National Wetland Inventory maps, topographic maps, floodplain maps, Natural Diversity Data, and other readily available, pertinent data. This information will be evaluated to guide the nationwide permit evaluation described below, identify any potential environmental issues present in the project area, develop the description of the area surrounding the project, and provide Section 404 and Section 106 support to FEMA in the preparation of the Categorical Exclusion (CE).
- b. The CONSULTANT will conduct one site visit to document the existing conditions at each of the five repair locations and identify potential PCN triggers as well as potential habitat for federally listed threatened and endangered species within the proposed project limits.
- c. The CONSULTANT will prepare a technical memorandum documenting the results of the site visit including water crossing data forms, photos, GPS data, and an opinion on Section 404 permitting requirements. The CONSULTANT will then recommend what, if any, additional studies are needed and a proposed course of action needed to get the project authorized under a nationwide permit, without requiring a PCN. Additional studies are not included in this scope of services.
- d. The CONSULTANT will prepare a coordination letter including a project description, maps, and, photos for submittal to the State Historic Preservation Officer (SHPO).

Task 5 - Construction Phase Services

The CONSULTANT will support the construction phase of the project as follows:

- a. The CONSULTANT will respond to any Requests for Information (RFI's) as requested by the OWNER.
- b. The CONSULTANT will prepare Record Drawings and submit to the OWNER. The drawings will be prepared based on information submitted by the OWNER inspector and/or contractor.
- c. Additional construction phase services are not included but can be provided by the CONSULTANT as an additional service at the request of the OWNER.

PART 3- PLAN REQUIREMENTS

Drawings shall conform to ordinary drafting standard and shall be 22 x 34-inches (full size) and 11 x 17-inches (half size) prints. CONSULTANT shall provide and submit the required number of plan sets to complete the PROJECT. It is currently unknown the exact number of full size and half size plan sets required. For purposes of this contract, the following numbers of submittal plan sets (Preliminary Plans & Final Plans) are included in the base fees:

- Half Size – 4 sets
- Full Size – 2 set

PART 4 – ADDITIONAL SERVICES

Additional Services are not included in the existing Scope of Services. OWNER and CONSULTANT agree that the following services are beyond the Scope of Services described in the tasks above. However, CONSULTANT can provide these services, if needed, upon the OWNER's written request. Any additional amounts paid to the CONSULTANT as a result of any material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed. These additional services include:

- Services related to the development of the OWNER's project financing and/or budget.
- Performance of miscellaneous and supplemental services related to the project as requested by the OWNER.
- Development of 3D renderings and animations.
- Obtaining additional field survey.
- FEMA CLOMR/LOMR Coordination
- Public meetings
- Council meetings
- Additional environmental services that are not included in the scope of services.
- Using culvert/bridge type other than those specified in Project Assumptions for the new bridge design.
- Additional project locations as defined by the OWNER.

**ATTACHMENT B
PROJECT SCHEDULE**

ARTICLE 4 of the AGREEMENT is amended and supplemented to include the following agreement of the parties.

It is understood and agreed that the date of beginning, rate of progress, and the time of completion of SERVICES under this AGREEMENT are essential provisions of this AGREEMENT. It is further understood and agreed that the SERVICES under this AGREEMENT shall commence upon execution of the AGREEMENT between the OWNER and the CONSULTANT and after receipt of a written Notice to Proceed from the CONSULTANT. The parties mutually agree that time is of the essence in the performance of this AGREEMENT in order for the OWNER to take advantage of existing funding. The CONSULTANT agrees to provide SERVICES for each phase of the PROJECT as stated in **Attachment A - Scope of Services**, in accordance with the time frame as stated below:

Notice to Proceed- November 25, 2015

Design Study – January 11, 2016

Topographic Surveys – December 28, 2015

ROW Surveys and Mapping – R/W maps completed by January 9, 2016

Engineering Design –

 Preliminary Plans – 60 calendar days after receipt of comments on Design Study

 Final Plans – 45 calendar days after receipt of comments on Preliminary Plans

The parties further agree that the CONSULTANT will meet this schedule using standards and procedures for their submissions consistent with those currently used by Engineers/Surveyors practicing in Oklahoma. This schedule excludes the governing agency review time (except as provided above) and anytime lost while the CONSULTANT is waiting for direction either by a government agency or the OWNER, and any excusable delays as described in ARTICLE 15 of the AGREEMENT.

Dates indicated are dependent upon timely review by the OWNER, environmental clearance, Right-of-Way acquisitions, utility relocations and other factors beyond direct control of the CONSULTANT.

**ATTACHMENT C
COMPENSATION**

ARTICLE 5 of the AGREEMENT is amended and supplemented to include the following agreement of the parties. Compensation to CONSULTANT for Basic Services in Attachment A shall be a not to exceed amount of \$246,752. The Schedule of Charges are broken down by each site as follows:

Site #7

BASIC SERVICES (lump sum)

PER and Concept Design	\$ 11,699
60% Design Plans	\$ 15,482
Final Plans	\$ 17,113
<u>Construction Phase</u>	<u>\$ 2,764</u>
Total BASIC SERVICES	\$ 47,058

SPECIAL SERVICES

Topographic Survey	\$ 2,200
Geotechnical	\$ 5,123
<u>Environmental Services</u>	<u>\$ 3,750</u>
Total SPECIAL SERVICES	\$ 11,073

Grand Total for Site #7 **\$ 58,131**

Site #9

BASIC SERVICES (lump sum)

PER and Concept Design	\$ 12,545
60% Design Plans	\$ 23,648
Final Plans	\$ 18,221
<u>Construction Phase</u>	<u>\$ 2,419</u>
Total BASIC SERVICES	\$ 56,833

SPECIAL SERVICES

Topographic Survey	\$ 880
Geotechnical	\$ 5,123
<u>Environmental Services</u>	<u>\$ 3,750</u>
Total SPECIAL SERVICES	\$ 9,753

Grand Total for Site #9 **\$ 66,586**

Site #11

BASIC SERVICES (lump sum)

PER and Concept Design	\$ 8,719
60% Design Plans	\$ 11,255
Final Plans	\$ 11,403
<u>Construction Phase</u>	<u>\$ 2,536</u>
Total BASIC SERVICES	\$ 33,913

SPECIAL SERVICES

Topographic Survey	\$ 1,210
Geotechnical	\$ 5,123
<u>Environmental Services</u>	<u>\$ 3,750</u>
Total SPECIAL SERVICES	\$ 10,083

Grand Total for Site #11 **\$ 43,996**

Site #17

BASIC SERVICES (lump sum)

PER and Concept Design	\$ 7,917
60% Design Plans	\$ 15,933
Final Plans	\$ 15,114
<u>Construction Phase</u>	<u>\$ 2,536</u>
Total BASIC SERVICES	\$ 41,500

SPECIAL SERVICES

Topographic Survey	\$ 1,800
Geotechnical	\$ 5,123
<u>Environmental Services</u>	<u>\$ 3,750</u>
Total SPECIAL SERVICES	\$ 10,673

Grand Total for Site #17 **\$ 52,173**

Site #28

BASIC SERVICES (lump sum)

PER and Concept Design	\$ 2,749
Final Plans	\$ 5,642
<u>Construction Phase</u>	<u>\$ 2,392</u>
Total BASIC SERVICES	\$ 10,783

SPECIAL SERVICES

Topographic Survey	\$ 1,210
Geotechnical	\$ 5,123
<u>Environmental Services</u>	<u>\$ 3,750</u>
Total SPECIAL SERVICES	\$ 10,083

Grand Total for Site #28 **\$ 20,866**

Supplemental Survey Needs – As outlined in Attachment A, the OWNER may authorize CONSULTANT for additional topographic survey and/or preparation of easement documents to facilitate the design and construction of the proposed improvements. The following amounts are not-to-exceed limits:

Supplemental Topographic Survey	\$3,500
Easement Documents (\$250/document)	<u>\$1,500 (assumes a max of 6 documents)</u>
Total Additional Survey Needs	\$5,000

If CONSULTANT sees the Scope of Services changing so that Additional Services are needed, including but not limited to those services described as Additional Services in Attachment A, CONSULTANT will notify OWNER for OWNER's approval before proceeding. Additional Services shall be computed based on the schedule of charges.

Schedule of Charges:

<u>Position</u>	<u>Min</u>	<u>Max</u>
Professional - 1	64	109
Professional - 2	83	139
Professional - 3	89	170
Professional - 4	129	208
Professional - 5	165	228
Professional - 6	156	416
Construction Manager - 1	81	186
Construction Manager - 2	98	142
Construction Manager - 3	121	151
Construction Manager - 4	153	207
CAD Technician/Designer - 1	54	93
CAD Technician/Designer - 2	85	122
CAD Technician/Designer - 3	109	156
Corporate Project Support - 1	40	91
Corporate Project Support - 2	66	162
Corporate Project Support - 3	72	315
Intern/ Coop	33	60

Rates for In-House Services

Technology Charge

\$8.50 per hour

Bulk Printing and Reproduction

	<u>B&W</u>	<u>Color</u>
Small Format (per copy)	\$0.10	\$0.25
Large Format (per sq. ft.)		
Bond	\$0.25	\$0.75
Glossy / Mylar	\$0.75	\$1.25
Vinyl / Adhesive	\$1.50	\$2.00
Mounting (per sq. ft.)	\$2.00	
Binding (per binding)	\$0.25	

Travel

Standard IRS Rates

OTHER DIRECT EXPENSES:

Other direct expenses are reimbursed at actual cost times a multiplier of 1.10. They include outside printing and reproduction expense, communication expense, travel, transportation and subsistence away from the FNI office and other miscellaneous expenses directly related to the work, including costs of laboratory analysis, test, and other work required to be done by independent persons other than staff members. For Resident Representative services performed by non-FNI employees and CAD services performed In-house by non-FNI employees where FNI provides workspace and equipment to perform such services, these services will be billed at cost times a multiplier of 2.0. This markup approximates the cost to FNI if an FNI employee was performing the same or similar services.

These ranges and rates will be adjusted annually in February.

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**ATTACHMENT D
OWNER'S RESPONSIBILITIES**

ARTICLE 6 of the AGREEMENT is amended and supplemented to include the following agreement of the parties.

OWNER RESPONSIBILITIES

1. The OWNER shall furnish to the CONSULTANT all available information pertinent to PROJECT including previous reports, construction plans and any other data relative to design and construction of the PROJECT.
2. The OWNER shall be responsible for all permit fees.
3. The OWNER shall examine all studies, reports, sketches, estimates specifications, plan drawings, proposals and any 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.
4. The OWNER shall designate in writing a person to act as its representative in respect to the work to be performed under this AGREEMENT, and such person shall have complete authority to transmit instructions, receive information, interpret, and define the OWNER's policies and decisions with respect to materials, equipment, elements and systems pertinent to the services covered by this AGREEMENT.
5. The OWNER shall furnish legal assistance as required in the preparation, review and approval of construction documents.
6. The OWNER shall provide for meeting facilities (or arrange for meeting facilities) for all PROJECT meetings with OWNER.