## **AGREEMENT**

#### **FOR**

#### **ENGINEERING SERVICES**

This AGREEMENT, between the Norman Utilities Authority (OWNER) and Plummer Associates, Inc., (ENGINEER); WITNESSETH

WHEREAS, OWNER intends to replace approximately 4,000 LF of existing 24-inch waterline along W Tecumseh Road between 24th Street NW and Journey Parkway with a 24-inch waterline and associated inter-connections and appurtenances to provide a maintainable installation; and. This PROJECT will be identified as the Tecumseh Water Line Replacement Project and shall be as generally described in Attachment B; and

WHEREAS, OWNER requires survey and engineering services in connection with the PROJECT (the SERVICES) (the SERVICES); and

WHEREAS, ENGINEER is prepared to provide said SERVICES.

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

## **ARTICLE 1 - EFFECTIVE DATE**

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## **ARTICLE 2 - COMPLETION DATE**

ENGINEER shall complete the SERVICES in accordance with Attachment A, Project Schedule.

## **ARTICLE 3 - GOVERNING LAW**

The laws of the state of Oklahoma shall govern this AGREEMENT.

# ARTICLE 4 - SERVICES TO BE PERFORMED BY ENGINEER

ENGINEER shall perform the SERVICES described in Attachment B, Scope of Services.

## **ARTICLE 5 - COMPENSATION**

OWNER shall pay ENGINEER in accordance with Attachment C, Compensation.

### **ARTICLE 6 - OWNER'S RESPONSIBILITIES**

- 6.1. <a href="OWNER-Furnished Data:">OWNER Data: Upon request, OWNER will provide to ENGINEER all data in OWNER's possession relating to ENGINEER's SERVICES on the PROJECT. Such data may include electronic data available from the OWNER's Geographic Information System (GIS), data generated by OWNER's water distribution system model and existing water quality data. ENGINEER will reasonably rely upon the accuracy, timeliness, and completeness of the information provided by OWNER. OWNER's data is provided for temporary use or copying by ENGINEER.
- 6.2. Access to Facilities and Property: OWNER will make its facilities accessible to ENGINEER as required for ENGINEER's performance of its SERVICES.
- 6.3. <u>Timely Review:</u> OWNER will examine ENGINEER's studies, reports, sketches, drawings, specifications, proposals, and other documents; and transmit OWNER comments or other decisions to ENGINEER in a timely manner.
- 6.4. <u>Meetings:</u> OWNER will participate in monthly progress meetings or other meetings with ENGINEER or contractor(s) defined in Scope of Services.

- 6.5. <u>Advertisements, Permits, and Access:</u> Unless otherwise agreed to in the Scope of Services, OWNER will obtain, arrange, and pay for all advertisements for bids; permits and licenses required by local, state, or federal authorities; and land, easements, rights-of-way, and access necessary for ENGINEER's SERVICES or PROJECT construction.
- 6.6. <u>Hazardous Substances</u>: If hazardous substances in any form are encountered or suspected, ENGINEER will stop its own work in the affected portions of the PROJECT to permit testing and evaluation. ENGINEER will, if requested by OWNER, conduct tests to determine the extent of the problem and will perform the necessary studies and recommend necessary remedial measures at an additional fee with contract terms to be negotiated.

# **ARTICLE 7 - STANDARD OF CARE**

ENGINEER shall exercise the same degree of care skill and diligence in the performance of the SERVICES as is ordinarily possessed and exercised by a professional engineer under similar circumstances. ENGINEER shall correct the SERVICES that fail to satisfy this standard of care. No warranty, express or implied is included in this AGREEMENT or in any drawing, specifications, report or opinion produced pursuant to this AGREEMENT.

# **ARTICLE 8 - LIABILITY AND INDEMNIFICATION**

- 8.1 <u>General</u>. Having considered the potential liabilities that may exist during the performance of the SERVICES, the benefits of the PROJECT, the ENGINEER's fee for the SERVICES and in consideration of the promises contained in this AGREEMENT, OWNER and ENGINEER agree to allocate and limit such liabilities in accordance with this Article.
- Indemnification and Liability. The ENGINNER agrees to defend, indemnify, and hold harmless the OWNER, 8.2 its officers, servants, and employees, from and against legal liability for all claims, losses, damage, cost, and expense (including reasonable attorneys' fees and accountants' fees) caused by a negligent act, error, or omission of the ENGINEER in the performance of services under this Agreement. OWNER agrees to defend, indemnify, and hold harmless the ENGINEER, its officers, servants, and employees, from and against legal liability for all claims, losses, damage, cost, and expense (including reasonable attorneys' fees and accountants' fees) caused by a negligent act, error, or omission of the OWNER in the performance of services under this Agreement, provided such indemnification shall be applicable only to the extent sovereign immunity has been waived pursuant to Oklahoma law. The ENGINEER and the OWNER each agree to promptly service notice on the other party of any claims arising hereunder, and shall cooperate in the defense of such claims. 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 ENGINEER 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 OWNER at common law.
- 8.3 <u>Employee Claims</u>. ENGINEER shall indemnify OWNER against legal liability for damages arising out of claims by ENGINEER's employees. OWNER shall indemnify ENGINEER against legal liability for damages arising out of claims by OWNER's employees.
- 8.4 <u>Consequential Damages</u>. To the fullest extent permitted by law, ENGINEER shall not be liable to OWNER for any special, indirect or consequential damages resulting in any way from the performance of the SERVICES.
- 8.5 <u>Survival</u>. Upon completion of all SERVICES obligations and duties provided for in this AGREEMENT or if this AGREEMENT is terminated for any reason the terms and conditions of this Article shall survive.

#### **ARTICLE 9 - INSURANCE**

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

- 9.1 Worker's compensation insurance for ENGINEER's employees as required by Oklahoma Workers Compensation Statutes.
- 9.2 Comprehensive general liability insurance with a minimum of \$1,000,000 per each occurrence and \$2,000,000 aggregate.
- 9.3 Comprehensive automobile liability insurance with a minimum of \$1,000,000 combined limit.
- 9.4 Professional Liability (errors and omissions) insurance providing a minimum policy value of \$2,000,000 aggregat.

ENGINEER shall furnish OWNER certificates of insurance that shall include a provision that such insurance shall not be canceled without at least thirty days written notice to OWNER. All PROJECT contractors shall be required to include OWNER and ENGINEER as additional insured on their General Liability Insurance policies.

ENGINEER and OWNER each shall require its insurance carriers to waive all rights of subrogation against the other and its directors, officers, partners, commissioners, officials, agents and employees for damages covered by property insurance during and after the SERVICES. A similar provision shall be incorporated into all contractual arrangements entered into by OWNER and shall protect OWNER and ENGINEER to the same extent.

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

ENGINEER shall not be responsible for: (1) construction means, methods, techniques, sequences, procedures or safety precautions and programs in connection with the PROJECT; (2) the failure of any contractor, subcontractor, vendor or other PROJECT participant, not under contract to ENGINEER, to fulfill contractual responsibilities to the OWNER or to comply with federal, state or local laws, regulations, and codes; or (3) procuring permits, certificates and licenses required for any construction unless such responsibilities are specifically assigned to ENGINEER in Attachment B, Scope of Services.

## ARTICLE 11 - OPINIONS OF COST AND SCHEDULE

Since ENGINEER 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, ENGINEER's opinion of probable costs and of PROJECT schedules shall be made on the basis of experience and qualifications as a professional engineer. ENGINEER does not guarantee that proposals, bids, or actual PROJECT costs will not vary from ENGINEER's cost estimates.

# **ARTICLE 12 - REUSE OF DOCUMENTS**

Upon OWNER's request ENGINEER shall furnish OWNER with deliverables and/or other data on electronic media. All documents, including but not limited to, drawings, specifications and computer software prepared by ENGINEER pursuant to this AGREEMENT are instruments of Service in respect to the PROJECT. Said documents are not intended or represented to be suitable for reuse by OWNER or others on extensions of the PROJECT or on any other PROJECT.

#### **ARTICLE 13 - TERMINATION**

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. The non-performing party shall have fifteen (15) calendar days from the date of the termination notice to cure or to submit a plan for cure acceptable to the other party.

OWNER may terminate or suspend performance of this AGREEMENT for OWNER's convenience upon written notice to ENGINEER. ENGINEER shall terminate or suspend performance of the SERVICES on a schedule

acceptable to OWNER. If termination or suspension is for OWNER's convenience, OWNER shall pay ENGINEER for all the SERVICES performed to date, amount not to exceed the normal fee amount due for the SERVICES rendered and termination or suspension expenses. Upon restart, an equitable adjustment shall be made to ENGINEER's compensation.

## **ARTICLE 14 - DELAY IN PERFORMANCE**

Neither OWNER nor ENGINEER shall be considered in default of this AGREEMENT for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this AGREEMENT, such circumstances include, but are not limited to abnormal weather conditions; floods; earthquakes; fire; epidemics; war; riot and other civil disturbances; strikes, work slowdowns and other labor disturbances; sabotage; judicial restraint; and inability to procure permits, licenses, or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or SERVICES required to be provided by either OWNER or ENGINEER under this AGREEMENT.

Should such circumstances occur the non-performing party shall, within a reasonable period after 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 15 - COMMUNICATIONS**

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

ENGINEER: Alan Swartz, P.E.

Plummer Associates, Inc. 531 Couch Drive, Suite 200 Oklahoma City, OK 73102

405-440-2725

aswartz@plummer.com

OWNER: Peter, Wolbach, Staff Engineer

City of Norman - Utilities Department

225 N Webster Avenue

P.O. Box 370

Norman OK 73069 / 73070

405-823-2885

Peter.wolbach@normanok.gov

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

#### **ARTICLE 16 - WAIVER**

A waiver by either OWNER or ENGINEER 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 17 - SEVERABILITY**

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

### **ARTICLE 18 - NON-DISCRIMINATION**

In connection with the performance of work under this contract, the ENGINEER agrees as follows:

- A. The ENGINEER agrees not to discriminate against any employee or applicant for employment because of race, color, religion, ancestry, national origin, age, place of birth, disability, sex, sexual orientation, gender identity or expression, familial status, or marital status, including marriage to a person of the same sex. The ENGINEER shall take affirmative action to ensure that employees are treated without regard to their race, color, religion, ancestry, national origin, age, place of birth, disability, sex, sexual orientation, gender identity or expression, familial status, or marital status, including marriage to a person of the same sex. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruiting or recruitment, advertising, lay-off, termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The ENGINEER and any companies subcontracted shall agree to post in a conspicuous place, available to employees and applicants for employment, notices to be provided by the City Clerk of the City of Norman setting forth the provisions in this section.
- B. In the event of the ENGINEER's noncompliance with this nondiscrimination clause, the contract may be canceled or terminated by the City Council. The ENGINEER may be declared by the City Council ineligible for further contracts with the said agency until satisfactory proof of intent to comply shall be made by the ENGINEER.
- C. The ENGINEER agrees to include this nondiscrimination clause in any subcontracts connected with the performance of this agreement.

## **ARTICLE 19 - INTEGRATION**

This AGREEMENT represents the entire and integrated AGREEMENT between OWNER and ENGINEER. It supersedes all prior and contemporaneous communications, representations, and agreements, whether oral or written, relating to the subject matter of this AGREEMENT. This AGREEMENT, including its attachments and schedules, may only be changed by a written amendment executed by both parties. The following attachments and schedules are hereby made a part of this AGREEMENT:

Attachment A - Schedule Attachment B - Scope of Services Attachment C - Compensation

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

OWNER and ENGINEER each binds itself and its directors, officers, partners, successors, executors, administrators, assigns, and legal representatives to the other party to this AGREEMENT and to the directors, officers, partners, successors, executors, administrators, assigns, and legal representatives of such other party in respect to all provisions of this AGREEMENT.

IN WITNESS WHEREOF, OWNER and ENGINEER h	ave executed this AGREEMENT.
DATED this day of	20
Alan Plummer and Associates, Inc. DBA Plummer  By:  When Manda	Associates, Inc. – ENGINEER ATTEST  Wantalans
Title: Vice President	Corporate Secretary
Norman Utilities Authority – OWNER APPROVED as to form and legality this day of	of Jebney, 20 24. Olimbethologia City Attorney
APPROVED by the Trustees of the Norman Utilities At 20	uthority this day of,
	ATTEST
Ву:	-
Title:	

# ATTACHMENT A SCHEDULE

The Project shall be completed in accordance with the following schedule.

- Draft Technical Memorandum shall be delivered to OWNER within 120 calendar days from Notice to Proceed.
- Final Technical Memorandum shall be delivered to OWNER within 30 calendar days following receipt of OWNER comments.
- Bidding Documents at 65% shall be delivered to OWNER within 60 calendar days following acceptance of the Engineering Report by the OWNER.
- Bidding Documents at 95% shall be delivered to OWNER 45 calendar days following receipt of OWNER comments on 65% Bidding Documents.
- Final Bidding Documents shall be submitted to the OWNER within 30 calendar days following receipt of OWNER comments on 95% Bidding Documents.

# ATTACHMENT B SCOPE OF SERVICES

#### 1.0 BACKGROUND

Norman Utilities Authority (OWNER) is replacing the 24-inch ductile iron waterline along Tecumseh Road between 24th Ave. NW and Journey Parkway due breaks and leaks and the significant depth of the line that hamper work on the line when required. The Project will consist of replacing approximately 4,400 LF of the existing waterline between the limits described above with a new 24-inch C-900 PVC waterline including a new crossing under Interstate 35. Under this contract, This project will consist of the following phases of work with their associated tasks:

- Project Management and Coordination
- 35% Design including Technical Memorandum, 35% P&P Sheets and Preliminary Opinion of Probable construction cost (OPCC).
- Detailed Design including of the 65%, 95% and 100% Design Plans, Project Specifications, and OPCC for the waterline design.
- Bid Phase Services
- Construction Phase Services

Geotechnical analysis, surveying, and utility location will be preliminarily addressed under Items 2.2.3, 2.2.4 and 2.2.5 of the Technical Memorandum and will be finalized during the detailed design phase.

#### 2.0 BASIC SERVICES

Basic Services provided by the ENGINEER will generally be covered under six main activities: Project Management and Coordination, Technical Memorandum, Detailed Design, Bid Phase Services, and Construction Phase Services. Specific tasks for each activity are identified in the following sections.

## 2.1 PROJECT MANAGEMENT AND COORDINATION

## 2.1.1 Project Management

- 2.1.1.1 Project management will be provided for the PROJECT and will include developing and implementing a project management plan; tracking and managing internal schedules of work; monitoring and addressing issues related to the scope of work, budget and deliverables; preparing and processing monthly billings; providing labor resources necessary to fulfill scoped work; scheduling and participating in quality control reviews; and providing updates to the OWNER on a regular basis.
- 2.1.1.2 ENGINEER shall prepare a common monthly invoice for all General Services.

### 2.1.2 Project Coordination

- 2.1.2.1 ENGINEER will coordinate design efforts on project tasks identified below.
- 2.1.2.2 ENGINEER as the prime design consultant will manage sub-consultant's field and design activities and coordinate those efforts with the OWNER.

#### 2.2 35% DESIGN

#### 2.2.1 Document Review

2.2.1.1 The OWNER shall provide the following information to the ENGINEER for review: existing Geographic Information Systems (GIS) information; existing geotechnical documents; existing environmental documents; record drawings from previous projects associated with the PROJECT; available survey information; and available utility information.

#### 2.2.2 Coordination with ODOT

2.2.2.1 ENGINEER shall coordinate with the Oklahoma Department of Transportation (ODOT) on the existing and proposed waterlines that are located within or are proposed to be located in the ODOT ROW and Limits of no Access areas. ENGINEER shall file for and obtain an ODOT Crossing Permit for I-35 if necessary. ENGINEER shall submit design packages to ODOT as necessary for coordination.

# 2.2.3 Hydraulic Modeling

- 2.2.3.1 Conduct hydraulic modeling using the OWNER's calibrated water model files to verify the system's operational changes if the Tecumseh waterline segment is taken out of service during construction.
  - 2.2.2.1.1 ENGINEER shall evaluate the impacts to the pressures and flows in the system based on extended outages during peak and low water demands.
  - 2.2.2.1.2 No other changes to the model are anticipated by this effort model data (including future demands and future water supply) and model calibration are as completed previously by others. Other operating scenarions will be considered and additional service.

## 2.2.4 Geotechnical Engineering

- 2.2.4.1 Geotechnical investigation will occur on parcels where ROE has been obtained at the selected sites. Soil borings will be advanced in selected locations based on surface conditions, pre-existing geotechnical data and other factors. When possible, soil borings will be placed on public ROW. Samples will be acquired and laboratory tests will be conducted to provide engineering data necessary for the design. Laboratory tests for each sample collected are anticipated to include:
  - a. Dry, saturated, buoyant and total unit weight
  - b. Cohesion
  - c. Particle size and gradation
  - d. Atterberg's limits
  - e. Unified Soil Classification
  - f. Internal soil friction angle
  - g. Void ratio
  - h. Elastic modulus
  - i. Resistivity
  - j. pH
  - k. oxidation-reduction potential
  - l. sulfides
  - m. moisture content
- 2.2.4.2 The geotechnical budget allowance is based on 4 soil borings up to 20 feet total depth (TD) and 3 borings up to 40 feet total depth. The borings will be backfilled using bentonite grout. Pavement will be patched with either ready-mix concrete or asphalt cold patch to match the existing pavement. Actual work required will be

refined as the PROJECT progresses. Billing will be based on actual work performed by the geotechnical subcontractor.

# 2.2.5 Topographic and Easements Survey:

- 2.2.5.1 Surveying will be conducted by the ENGINEER, or its OWNER approved subcontractor. Survey scope of work will include the following tasks:
  - 2.2.5.1.1 Utility coordination. Prior to commencing any topographic fieldwork, the surveyor will coordinate with, collect, and review available public and private utility records within the project limits. The surveyor will submit a utility locate request for the project limits to Okie 811 at least 72 hours prior to survey. Contact members listed on the OKIE ticket, request utility atlas maps, and plot atlas maps as "per atlas map" if said maps are provided by the Utility Owner. Follow-up field activities will be performed as additional field markings are made by respective Utility Owners.
  - 2.2.5.1.2 Right-of-Way and Property. Survey will locate and tie existing ROW, property lines and easements including type, size, volume and page, where applicable, as provided on the County Assessors GIS Map data.
  - 2.2.5.1.3 Survey will horizontally and vertically pick up visible surface features; drainage features; manholes; curbs; signs; sidewalks; building locations; fences/retaining walls; trees and/or tree lines (SEE NOTE BELOW); roadways; railways; and city, county and franchise utilities (as provided by Okie 811 utility locate request) visible and marked within the project area to the following limits:
    - 2.2.5.1.3.1 Approximately 4,400 linear feet of pipeline alignment mapping to support the design of pipeline along Tecumseh Road from 24th Ave. NW to Journey Parkway.
    - 2.2.5.1.3.2 Alignment swaths shall be approximately 50 feet wide centered on the centerline of the pipeline alignment corridor.
  - 2.2.5.1.4 The survey of trees shall include approximate diameter. Identification of tree species is not included under Basic Services.
- 2.2.5.2 Methods and precision. Survey coordinates will be reported on the NGS Oklahoma State Plane Coordinate System, South Zone, NAD83 for Horizontal and NAVD 88 Vertical. Horizontal and vertical control will be set using multiple observed RTK with averages. Survey to conform to and with the Oklahoma Minimum Standards as defined in INSTRUCTION MANUAL FOR TOPOGRAPHIC AND PLANIMETRIC MAPPING.
- 2.2.5.3 The budget for survey established in this contract assumes full ground survey of the project limits. Billings will be based on actual work performed by the surveyor (whether ground survey, aerial survey or both).
- 2.2.5.4 Surveyor will research boundaries, subdivision plats, rights-of-way (ROW) and easements of which the surveyor has knowledge, which may affect the physical boundaries of the project. Easements with volume and page numbers (as provided) will be identified and labeled in the survey submittal. Research will include public record resources, including but not limited to: county records; ODOT records; franchise utility records (gas, telephone, electric, cable and others); ownership or easement records as available; and title/abstracting reports from owner on proposed easement parent tracts.

## 2.2.5.5 Deliverables

- Survey Data will be delivered as a Civil 3D file
- The above listed Ownership and Road Profile Exhibits.
- Overall drawing with the line and right-of-way shown in AutoCAD 2000 format with control.

Five (5) hard copies of each created Ownership Plat and Road Profile

## 2.2.6 Subsurface Utility Engineering

2.2.6.1 An allowance of \$16,500 has been established to vacuum excavate test holes along the new pipeline route, as directed by the ENGINEER, to locate crossing and adjacent utilities. Upon completion of each hole, provide the test hole data form including the Northing, Easting, elevation, size and description of the utility. Two pictures will be taken, one of the utility and one of the test hole board showing the depth. Record information (where available) will be provided for the existing utilities to help identify the locations and work with the owners to determine the status of the lines.

## 2.2.7 Opinion of Probable Construction Cost

- 2.2.7.1 ENGINEER will provide an AACE Class 4 Opinion of Probable Construction Cost (OPCC) to reflect costs associated with the anticipated Project.
- 2.2.7.2 In providing opinions of costs, financial analysis, economic feasibility projections, and schedules for the project, the ENGINEER has no control over cost or price of labor and materials; unknown conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by third parties; quality, type, management, or direction of operation personnel; and other economic and operational factors that may materially affect the ultimate project cost or schedule. Therefore, the ENGINEER makes no warranty that the OWNER's actual project cost, financial aspects, economic feasibility, or schedules will not vary from the ENGINEER's opinions, analyses, projections, or estimates.

#### 2.2.8 Draft Technical Memorandum

2.2.8.1 The Engineer shall prepare a Technical Memorandum (TM) that includes a summary of the proposed alignment, coordination with ODOT, hydraulic modeling results, utility coordination, I-35 crossing, easement requirements and any other important design considerations. The TM shall also include the 35% Plan and Profile sheets. The profile will be limited to a preliminary waterline elevation based on anticipated utility conflicts, service connections, and reconnections to existing waterlines. Profile will include top of pipe, known utility conflicts, connections and existing ground profile along the centerline of the proposed alignment.

#### 2.2.9 Final Technical Memorandum

2.2.9.1 After receiving input and comments from the OWNER, ENGINEER shall update and finalize the TM. ENGINEER shall deliver three (3) bound hard copies and one (1) pdf electronic copy of the final technical memorandum to the OWNER.

#### 2.3 DETAILED DESIGN

## 2.3.1 Meetings

- 2.3.1.1 The ENGINEER shall conduct one (1) design phase initiation meeting with the CITY. In this meeting, the ENGINEER will review and confirm the scope, schedule, resources, responsibilities. The ENGINEER and the CITY will clarify and define the CITY's expectations; requirements; equipment, valve, and piping preferences; and responsibilities for the Project.
- 2.3.1.2 The ENGINEER will conduct two (2) review workshops with the CITY. The review workshops shall be at the 65% and 95% design milestones. The ENGINEER shall provide the following items no later than seven (7)

- days prior to each review workshop: agenda, half-size (11"x17") drawings (PDF format), and specifications (PDF format).
- 2.3.1.3 The ENGINEER will conduct two (2) project team coordination meetings.
- 2.3.1.4 The ENGINEER will conduct two (2) internal quality control (QC) meetings.

## 2.3.2 65% and 95% Design

- 2.3.2.1 The ENGINEER will prepare, for the approval by the OWNER, drawings and specifications setting forth in detail the requirements for the construction of the Project, which shall comply with all applicable laws, statutes, ordinances, codes, and regulations. The standard of care applicable to the ENGINEER's services will be the degree of skill and diligence normally employed by professional engineers or consultants performing the same or similar services at the time of such services are performed. The ENGINEER will reperform any service not meeting this standard of care without additional compensation.
  - 2.3.2.1.1 The 65% design package shall consist of the following items:
    - 2.3.2.1.1.1 General Sheets which will include a cover sheet, sheet index, project location map, general construction notes, survey coordination sheet, and overall site plan.
    - 2.3.2.1.1.2 Plan and Profile sheets shall show the following: proposed plan/profile, pipe size, appurtenance locations, existing utilities and utility easements, and pertinent information needed to construct the project. Property lines, legal description (Lot Nos., Block Nos., and Addition Names) along with property ownership shall be provided on plan view. Plans will reflect surveyed conditions for the proposed pipeline for a total of up to 4,100 linear feet at a 1-inch equals 20-feet scale.
    - 2.3.2.1.1.3 ENGINEER will provide an AACE Class 3 OPCC to reflect costs associated with the anticipated Project.
  - 2.3.2.1.2 The 95% design package shall consist of the following items: Updated 65% design package with updated drawings, specifications, and an updated AACE Class 2 OPCC.
- 2.3.2.2 The ENGINEER will utilize the City of Norman's Standard Specifications and Constuction Drawings (City Specifications) to the maximum extent possible. Additional technical specifications will be prepared as required to supplement the City Specifications.

# 2.3.3 Permitting and Utility Coordination

- 2.3.3.1 After completion of the 95% quality control review meeting and prior to the advertisement for bids, ENGINEER will provide contract documents and prepare an engineering design report and calculations to comply with ODEQ requirements to obtain a Permit to Construct. OWNER will electronically submit the application package to ODEQ for review. If necessary, incorporate modifications requested by ODEQ. The OWNER will be responsible for fees associated with the permitting process.
- 2.3.3.2 Pursuant to Section 2.2.2, ENGINEER will prepare all required attachments for the ODOT application process. OWNER will submit application package to ODOT for their approval. If necessary, incorporate modifications requested by ODOT. The OWNER will be responsible for fees associated with the permitting process.
- 2.3.3.3 Submit plans as required to all private utility companies that may be affected by the project.

#### 2.3.4 100% Design

2.3.4.1 ENGINEER will provide a written response to OWNER 95% comments and will modify documents incorporating required changes including any ODEQ, ODOT, or private utility required changes.

ENGINEER will provide the following sealed construction contract documents to OWNER: two (2) half-size (11"x17") drawing sets; two (2) specification sets; a Final OPCC and PDF files of the aforementioned documents.

#### 2.4 BID PHASE SERVICES

#### 2.4.1 Pre-Bid Activities

- 2.4.1.1 Assist the OWNER in the advertisement of the project for competitive bids.
- 2.4.1.2 Assist the OWNER in securing bids, preparing addenda, issuing notice to bidders and notifying construction news publications. The notice to bidders will be furnished to the OWNER for publication in the local news media. The cost for publications shall be paid by the OWNER. The ENGINEER will distribute bid documents, plans and specifications for the Project to prospective bidders via CivCast.Coordinate and conduct a pre-bid conference for the project for each bid package included in Basic Services.
- 2.4.1.3 In conjunction with the OWNER, ENGINEER will issue addenda in response to questions raised during the bidding process. ENGINEER will transmit addenda to all plan holders via CivCast.

#### 2.4.2 Post-Bid Activities

- 2.4.2.1 Prepare estimate to be opened at the formal bid opening.
- 2.4.2.2 Assist the OWNER in the opening and tabulation of bids for construction of project and recommend to the OWNER as to the proper action on all proposals received.
- 2.4.2.3 Assist the OWNER in coordinating the execution of the conformed contract documents. Provide conformed documents (plans and specifications) in electronic format (PDF OCR) via ftp site or optical disc.
- 2.4.2.4 Preparation of additional copies of the documents for the OWNER or other parties will be performed by the ENGINEER as an ADDITIONAL SERVICE.

# 2.5 CONSTRUCTION PHASE SERVICES

# 2.5.1 Pre-Construction Conference and Monthly Progress Meetings

- 2.5.1.1 Conduct pre-construction conference and, in conjunction with the OWNER, issue clarifications in response to guestions raised at the conferences.
- 2.5.1.2 Attend monthly progress meetings as needed at City Offices with the OWNER and the PROJECT contractor. Meet with OWNER staff and/or the City Council for PROJECT discussions, coordination and presentations as required by the OWNER.

#### 2.5.2 Field Activities

- 2.5.2.1 Represent the OWNER in Non-Resident construction administration of the project. In this capacity, the construction administration duties shall not place any responsibility on ENGINEER for the techniques, sequences and methods of construction or the safety precautions incident thereto, and the ENGINEER will not be responsible or liable in any degree for the Contractor's failure to perform the construction work in accordance with the Contract Documents.
- 2.5.2.2 The presence and duties of ENGINEER's personnel at a construction site, whether as onsite representative or otherwise, do not make the ENGINEER or its personnel in any way responsible for those duties that belong to the CITY and/or construction contractors or other entities, and do not relieve the construction contractors or any other entity from their obligations, duties, and responsibilities, including, but not limited to,

- all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the construction work in accordance with the contract documents and any health and/or safety precautions related to such construction work.
- 2.5.2.3 ENGINEER and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health and/or safety precautions related to such work and have no duty for inspecting, noting, observing, correcting, or reporting on health and/or safety deficiencies of the construction contractors or other persons at the site except ENGINEER's own personnel.
- 2.5.2.4 The presence of the ENGINEER's personnel at a construction site is for the purpose of providing the ENGINEER and the CITY a greater degree of confidence that the completed work conforms generally to the contract documents and that the integrity of the design concept, as reflected in the contract documents, has been implemented and preserved. The ENGINEER neither guarantees the performance of any construction contractor nor assumes responsibility for contractor's failure to perform the work in accordance with the contract documents.
- 2.5.2.5 Make an average of one visit every other month to the site for a 12-month period (6 visits total) beginning with the date of execution of a construction contract by the OWNER to observe the progress and the quality of work and attend a construction progress meeting. The ENGINEER shall become familiar with the progress and quality of the work completed and will determine in general if the work when completed will be in accordance with the contract documents. In addition, on the basis of on-site observations, the ENGINEER shall exercise reasonable care and due diligence in discovering and promptly reporting to the OWNER any defects or deficiencies in the work of CONTRACTOR or any subcontractor. The OWNER's approval, acceptance, use of, or payment for all or any part or the ENGINEER's services hereunder or the PROJECT itself shall in no way alter the ENGINEER's obligations or the OWNER's rights hereunder.
- 2.5.2.6 Meet and review construction progress with OWNER inspectors, or 3rd Party Inspection personnel under contract with the OWNER, during the monthly site visits.
- 2.5.2.7 Exhaustive or continuous on-site inspections by the Engineer to check quality or quantity of the work or material shall be considered an ADDITIONAL SERVICE.
- 2.5.2.8 Conducting, with the OWNER's representative, a final inspection of the PROJECT for conformance with the design concept of the PROJECT and general compliance with the contract documents.

## 2.5.3 Construction Documentation

- 2.5.3.1 Review samples, catalog data, schedules, shop drawings, laboratory, shop and mill tests of material and equipment and other data which the CONTRACTOR is required to submit for conformance with the design concept of the project and compliance with the information given by the Contract Documents.
- 2.5.3.2 Interpret the intent of the plans and specification for the OWNER and CONTRACTOR, responding to Requests for Information. Investigations, analyses, and studies requested by the Contractor and approved by the OWNER, for substitutions of equipment and/or materials or deviations from the plans and specifications will be considered an Additional Service. NOTE: Such studies conducted by the ENGINEER, if determined to be inadequate, due to incompleteness of ENGINEER prepared plans and specifications will be revised without additional compensation. Any defective designs, plans or specifications furnished by the ENGINEER shall be promptly corrected by the ENGINEER at no cost to the OWNER.
- 2.5.3.3 Review testing laboratories' reports and inspection bureaus required for the testing or inspection of materials, factory testing, etc., for the project. The cost of such laboratory tests or inspection shall be paid by the OWNER. Review daily construction reports and photo for general PROJECT progress.
- 2.5.3.4 Accompany the OWNER in conducting one (1) final completion inspection of the PROJECT for conformance with the design concept of the PROJECT and general compliance with the contract documents, and review

- and comment on the certificate of completion and the recommendation for final payment to the Contractor. Prepare a list of deficiencies to be corrected by the contractor before final payment is released.
- 2.5.3.5 ENGINEER will review and comment on the certificate of completion and the recommendation for monthly progress payments to the CONTRACTOR. Verification of quantities and completion of work shall be the responsibility of the OWNER. OWNER will provide a copy of the approved pay application to the ENGINEER.
- 2.5.3.6 Review and comment on the certificate of completion and the recommendation for final payment to the CONTRACTOR following final inspection of the completed Project.
- 2.5.3.7 Review, evaluate and prepare change orders as required.

## 2.6 AS-BUILT RECORD DOCUMENTS

## 2.6.1 As-Built Record Documents

2.6.1.1 Revise contract drawings with reference to the Contract Document required "red line" notations and the assistance of assigned OWNER or 3rd Party Resident Representative Staff. Revised drawings shall reflect available information as to how the work was constructed. Furnish as-built record documents in PDF, CAD and GIS formats. No hardcopy will be required.

#### ADDITIONAL SERVICES

Additional Services are those services not included in General Services that may be required for the Project but cannot be defined sufficiently at this time to establish a Scope of Work. ENGINEER will not conduct any ADDITIONAL SERVICES without written authorization from the OWNER. These include, but are not necessarily limited to the following:

- a. Other services not included in Basic or Special Services that are approved by the OWNER.
- b. Ownership plats will be prepared for up to six (6) parcels showing both permanent and temporary construction easements, with accompanying exhibits. Billings will be based on the actual number of exhibits prepared and delivered to the OWNER.
  - One electronic executed PDF of the complete instrument for each parcel.
  - Five (5) original hard copies of the complete instrument for each parcel.
- c. Resident project representative (RPR) services.
- d. Additional archeological investigations beyond those provided in Basic or Special Services. If required by ODOT, the geotechnical report shall include a hydraulic fracture analysis and general estimates of the minimum and maximum allowable mud pressures would be for a Horizontal Directional Drill (HDD) crossing of I-35.
- e. GIS processing of geophysical and/or geotechnical data beyond the assumptions provided in Basic or Special Services.
- f. Preparing applications and supporting documents for grants, loans, or planning advances for providing data for detailed applications.
- g. Providing additional copies of reports, plans, specifications, and contract documents beyond those specifically described in Basic and Special Services.
- h. Preparing environmental impact statements, storm water discharge permits, and 404 permit applications, except as specifically included in the Basic Engineering Services.

- i. Appearing before regulatory agencies or courts as an expert witness in any litigation with third parties other than condemnation proceedings arising from the development or construction of the Project, including the preparation of engineering data and reports for assistance to the OWNER.
- j. Payment of fees for permit applications and publication(s) of notices.
- k. Public relation activities and consulting services.

# ATTACHMENT C COMPENSATION

The OWNER will compensate ENGINEER on a lump sum basis for the SERVICES rendered. The lump sum fee is broken down below by task as defined in the Scope of Services:

Activity	Task Description	Lump Sum Amount
2.1	Project Management and Coordination	\$24,960
2.2	35% Design (Includes Subconsultant Expenses)	\$130,462
2.3	Detailed Design Services	\$112,020
2.4	Bid Phase Services	\$9,600
2.5	Construction Phase Services	\$30,160
2.6	As-Built Record Documents	\$6,680
Total		313,822

The ENGINEER may submit interim statements, not to exceed one per month, for partial payment for SERVICES rendered. The statements to OWNER will be by task for the percentage of work actually completed. The OWNER shall make interim payments within 30 calendar days in response to ENGINEER's interim statements.