AGENDA
SHAWNEE MUNICIPAL AUTHORITY
March 6, 2017 AT 6:30 P.M.
COMMISSION CHAMBERS AT CITY HALL
SHAWNEE, OKLAHOMA

CALL TO ORDER

DECLARATION OF A QUORUM

All motions will be made in the affirmative. The fact that a commissioner makes or offers a second to a motion does not mean that the commissioner must vote in favor of passage.

1. Consider approval of Consent Agenda:

   a. Minutes from the February 21, 2017 regular meeting.

2. Presentation by C.H. Guernsey & Company regarding Master Plan Professional Services.

3. Consider authorization of Agreement between Shawnee Municipal Authority and C.H. Guernsey & Company for Engineering, Design, Bidding and Construction Services.

4. New Business

   (Any matter not known about or which could not have been reasonably foreseen prior to the posting of the agenda)

5. Adjournment

Respectfully submitted

Phyllis Loftis, CMC, City Clerk

Shawnee Municipal Authority **1.a.**

Meeting Date: 03/06/2017
SMA Minutes 02-21-2017
Submitted By: Lisa Lasyone, City Clerk
Department: City Clerk

Information

Title of Item for Agenda
Minutes from the February 21, 2017 regular meeting.

Fiscal Impact

Attachments

SMA Minutes 02-21-2017

THE TRUSTEES OF THE SHAWNEE MUNICIPAL AUTHORITY OF THE CITY OF SHAWNEE, COUNTY OF POTTAWATOMIE, STATE OF OKLAHOMA, MET IN REGULAR SCHEDULED SESSION IN THE COMMISSION CHAMBERS AT CITY HALL, 9TH AND BROADWAY, SHAWNEE, OKLAHOMA, TUESDAY, FEBRUARY 21, 2017, DURING THE BOARD OF CITY COMMISSIONERS MEETING AT 6:30 P.M., PURSUANT TO NOTICE DULY POSTED AS PRESCRIBED BY LAW. UPON ROLL CALL, A QUORUM WAS DECLARED WITH THE FOLLOWING MEMBERS IN ATTENDANCE:

PRESENT: Bushong, Gillham, Harrod, Finley, Rutherford, Shaw, Salter
ABSENT: None

Call to Order

Declaration of a Quorum

AGENDA ITEM NO. 1: Consider approval of Consent Agenda:

a. Minutes from the February 6, 2017 regular meeting.

b. Accept utility relocation improvement project at the Pacific Air Holding Hanger, Shawnee Regional Airport and placing the maintenance bond into effect.

c. Authorize staff to purchase a ½ ton 4x4 crew cab pickup from the state bid.

d. Budget Amendment – Fund 501
Amend budget for leave payouts through February 10, 2017

Commissioner Shaw asked that Consent Agenda Item No. 1(b) be pulled for separate consideration.

A motion was made by Trustee Harrod, seconded by Trustee Rutherford, to approve Consent Agenda Item Nos. 1(a-d), less item 1(b). Motion carried 7-0.

AYE: Harrod, Rutherford, Shaw, Salter, Bushong, Gillham, Finley
NAY: None

Regarding Consent Agenda Item No. 1(b), Commissioner Shaw asked when the maintenance bond would go into effect for this project. City Manager Justin

Erickson explained the maintenance bond would go into effect when the project is accepted by the City Commission.

A motion was made by Commissioner Shaw, seconded by Commissioner Bushong, to approve Consent Agenda Item No. 1(b). Motion carried 7-0.

AYE: Shaw, Bushong, Gillham, Harrod, Finley, Rutherford, Salter
NAY: None

AGENDA ITEM NO. 2: New Business (Any matter not known about or which could not have been reasonably foreseen prior to the posting of the agenda)

There was no New Business.

AGENDA ITEM NO. 3: Adjournment

There being no further business to be considered, the meeting was adjourned by power of the Chair. (8:07 p.m.)

_____
RICHARD FINLEY
CHAIRMAN

ATTEST:

_____
PHYLLIS LOFTIS, SECRETARY

Shawnee Municipal Authority **2.**

Meeting Date: 03/06/2017

Guernsey Presentation

Submitted By: Lisa Lasyone, City Clerk

Department: City Clerk

Information

Title of Item for Agenda

Presentation by C.H. Guernsey & Company regarding Master Plan Professional Services.

Fiscal Impact

Attachments

No file(s) attached.

Shawnee Municipal Authority **3.**

Meeting Date: 03/06/2017

Guernsey Agreement

Submitted By: Lisa Lasyone, City Clerk

Department: City Clerk

Information

Title of Item for Agenda

Consider authorization of Agreement between Shawnee Municipal Authority and C.H. Guernsey & Company for Engineering, Design, Bidding and Construction Services.

Fiscal Impact

Attachments

Guernsey Memo

Guernsey Agreement

Shawnee
MUNICIPAL AUTHORITY

MEMORANDUM

To: Justin Erickson, City Manager
From: Steve Nelms, Utility Director S.N
CC: Mayor and City Commission, Cindy Arnold, Finance Director
Date: 03/06/2017
Re: Authorize Engineering Services Agreement with C.H. Guernsey

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Nature of the Request

Staff is respectfully requesting authorization from the City Commission to enter into an agreement for professional services with C.H Guernsey.

Staff Analysis, Considerations

In 2014, SMA completed a comprehensive water and wastewater master plan which evaluated Shawnee's water supply, water treatment facility, wastewater treatment facilities, water distribution system and wastewater collection system. The Utility Master Plan included a capital improvement plan with recommendations prioritizing the short term projects (0-5 years and 5-10 years) and long term projects (10-20 years). On June 6, 2016 the City Commission authorized staff to request statement of qualifications from qualified engineering firms. Staff solicited sixteen large engineering firms and received proposals from four firms. Staff interviewed all four engineering firms on August 10, 2016. On August 15, 2016 the City Commission authorized staff to negotiate contract terms for engineering services with Burns & McDonnell and the parties were unable to agree upon contract terms for engineering services and negotiations ended on January 12, 2017. On January 20, 2017, staff resumed negotiating contract terms for engineering services with the next highest ranked firm, C.H Guernsey. After negotiations, C.H Guernsey and staff came to an agreement on contract terms and a scope of services, which is now presented to you this evening. Contract documents provide for an agreed upon fee of 6.0% of the total installed cost of construction (TIC) for the design service phase and 1.85% TIC for the bidding and construction phase.

Recommendation

Staff respectfully recommends that the City Commission approve the contract with C.H Guernsey.

Budget Consideration

Staff has been anticipating the cost of the proposed CIP projects and working with our finance department. The actual cost of the projects will not be known until the engineering has been completed. Sufficient funds to pay for these professional services has been budgeted.

OWNER: CITY OF SHAWNEE / SHAWNEE MUNICIPAL AUTHORITY

ENGINEER: C.H. GUERNSEY & COMPANY

AGREEMENT
BETWEEN OWNER AND ENGINEER
FOR
PROFESSIONAL SERVICES

TASK ORDER EDITION

Prepared by

EJCDC
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and
Issued and Published Jointly by

ACEC
American Council of Engineering Companies

AGC of America
The Associated General Contractors of America
Quality People. Quality Projects.

ASCE American Society of Civil Engineers

National Society of Professional Engineers
Professional Engineers in Private Practice

AMERICAN COUNCIL OF ENGINEERING COMPANIES

_____

ASSOCIATED GENERAL CONTRACTORS OF AMERICA

_____

AMERICAN SOCIETY OF CIVIL ENGINEERS

_____

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
A Practice Division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

This Agreement has been prepared for use with the Standard General Conditions of the Construction Contract (EJCDC C-700, 2007 Edition). Their provisions are interrelated, and a change in one may necessitate a change in the other.

TABLE OF CONTENTS

Page

EJCDC
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES

TASK ORDER EDITION

THIS IS AN AGREEMENT effective as of _____ ("Effective Date") between

City of Shawnee / Shawnee Municipal Authority ("Owner") and

C.H. Guernsey & Company ("Engineer").

From time to time Owner may request that Engineer provide professional services for Specific Projects. Each engagement will be documented by a Task Order. This Agreement sets forth the general terms and conditions which shall apply to all Task Orders duly executed under this Agreement.

Owner and Engineer further agree as follows:

ARTICLE 1 – SERVICES OF ENGINEER

1.01 *Scope*

A. Engineer's services will be detailed in a duly executed Task Order for each Specific Project. The general format of a Task Order is shown in Attachment 1 to this Agreement. Each Task Order will indicate the specific services to be performed and deliverables to be provided. Basic and Additional Services that may be included in a Task Order are set forth in Exhibit A, "Engineer's Services."

B. This Agreement is not a commitment by Owner to Engineer to issue any Task Orders.

C. Engineer shall not be obligated to perform any prospective Task Order unless and until Owner and Engineer agree as to the particulars of the Specific Project, including the scope of Engineer's services, time for performance, Engineer's compensation, and all other appropriate matters.

1.02 *Task Order Procedure*

A. Owner and Engineer shall agree on the scope, time for performance, and basis of compensation for each Task Order. Each duly executed Task Order shall be subject to the terms and conditions of this Agreement.

B. Engineer will commence performance as set forth in the Task Order.

ARTICLE 2 – OWNER'S RESPONSIBILITIES

2.01 *General*

A. Owner shall have the responsibilities set forth herein, in Exhibit B, "Owner's Responsibilities," and in each Task Order.

B. Owner shall compensate Engineer as set forth in each Task Order, pursuant to the applicable terms of Exhibit C.

C. Owner shall be responsible for, and Engineer may rely upon, the accuracy and completeness of all requirements, programs, instructions, reports, data, and other information furnished by Owner to Engineer pursuant to this Agreement. Engineer may use such requirements, programs, instructions, reports, data, and information in performing or furnishing services under this Agreement.

ARTICLE 3 – TERM; TIMES FOR RENDERING SERVICES

3.01 *Term*

A. This Agreement shall be effective and applicable to Task Orders issued hereunder for five years from the Effective Date of the Agreement.

B. The parties may extend or renew this Agreement, with or without changes, by written instrument establishing a new term.

3.02 *Times for Rendering Services*

A. The times for performing services or providing deliverables will be stated in each Task Order. If no times are so stated, Engineer will perform services and provide deliverables within a reasonable time.

B. If, through no fault of Engineer, such periods of time or dates are changed, or the orderly and continuous progress of Engineer's services is impaired, or Engineer's services are delayed or suspended, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.

C. If Owner authorizes changes in the scope, extent, or character of the Specific Project, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.

D. Owner shall make decisions and carry out its other responsibilities in a timely manner so as not to delay the Engineer's performance of its services.

E. If Engineer fails, through its own fault, to complete the performance required in a Task Order within the time set forth, as duly adjusted, then Owner shall be entitled, as its sole remedy, to the recovery of direct damages, if any, resulting from such failure.

F. With respect to each Task Order, the number of Construction Contracts for Work designed or specified by Engineer upon which the Engineer's compensation has been established shall be identified in the Task Order. If the Work designed or specified by Engineer under a Task Order is to be performed or furnished under more than one prime contract, or if Engineer's services are to be separately sequenced with the work of one or more prime Contractors (such as in the case of fast-

tracking), then Owner and Engineer shall, prior to commencement of final design services, develop a schedule for performance of Engineer's remaining services in order to sequence and coordinate properly such services as are applicable to the work under such separate Construction Contracts. This schedule is to be prepared and included in or become an amendment to the authorizing Task Order whether or not the work under such contracts is to proceed concurrently.

ARTICLE 4 – INVOICES AND PAYMENTS

4.01 *Invoices*

A. *Preparation and Submittal of Invoices:* Engineer shall prepare invoices in accordance with its standard invoicing practices, the terms of Exhibit C, and the specific Task Order. Engineer shall submit its invoices to Owner on a monthly basis. Invoices are due and payable within 30 days of receipt.

4.02 *Payments*

A. *Application to Interest and Principal:* Payment will be credited first to any interest owed to Engineer and then to principal.

B. *Failure to Pay:* If Owner fails to make any payment due Engineer for services and expenses within 60 days after receipt of Engineer's invoice, then:

1. the compounded amount due Engineer will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said sixtieth day; and

2. Engineer may, after giving seven days written notice to Owner, suspend services under any Task Order issued until Owner has paid in full all amounts due for services, expenses, and other related charges. Owner waives any and all claims against Engineer for any such suspension.

C. *Disputed Invoices:* If Owner contests an invoice, Owner may withhold only that portion so contested, and must pay the undisputed portion.

D. *Legislative Actions:* If after the Effective Date of a Task Order any governmental entity takes a legislative action that imposes sales or use taxes, fees, or charges on Engineer's services or compensation under the Task Order, then the Engineer may invoice such new taxes, fees, or charges as a Reimbursable Expense to which a factor of 1.0 shall be applied. Owner shall reimburse Engineer for the cost of such invoiced new taxes, fees, and charges; such reimbursement shall be in addition to the compensation to which Engineer is entitled under the terms of Exhibit C and the specific Task Order.

ARTICLE 5 – OPINIONS OF COST

5.01 *Opinions of Probable Construction Cost*

A. Engineer's opinions of probable Construction Cost are to be made on the basis of Engineer's experience and qualifications and represent Engineer's estimate as an experienced and qualified professional generally familiar with the construction industry. However, because Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions,

Engineer cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by Engineer. If Owner requires greater assurance as to probable Construction Cost, Owner must employ an independent cost estimator as provided in Exhibit B.

5.02 *Designing to Construction Cost Limit*

A. If a Construction Cost limit for a Specific Project is established between Owner and Engineer in a Task Order, Engineer's rights and responsibilities with respect thereto will be governed by Exhibit F, "Construction Cost Limit," to this Agreement.

5.03 *Opinions of Total Project Costs*

A. The services, if any, of Engineer with respect to Total Project Costs for a Specific Project shall be limited to assisting the Owner in collating the various cost categories which comprise Total Project Costs. Engineer assumes no responsibility for the accuracy of any opinions of Total Project Costs.

ARTICLE 6 – GENERAL CONSIDERATIONS

6.01 *Standards of Performance*

A. *Standard of Care:* The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with Engineer's services.

B. *Technical Accuracy:* Owner shall not be responsible for discovering deficiencies in the technical accuracy of Engineer's services. Engineer shall correct deficiencies in technical accuracy without additional compensation unless such corrective action is directly attributable to deficiencies in Owner-furnished information.

C. *Consultants:* Engineer shall serve as Owner's prime professional under each Task Order. Engineer may employ such Consultants as Engineer deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objections by Owner.

D. *Reliance on Others:* Subject to the standard of care set forth in Paragraph 6.01.A, Engineer and its Consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.

E. *Compliance with Laws and Regulations, and Policies and Procedures:* Engineer and Owner shall comply with applicable Laws and Regulations.

1. Prior to the Effective Date of each Task Order, Owner shall provide to Engineer in writing any and all policies and procedures of Owner applicable to Engineer's performance of services under such Task Order. Engineer shall comply with such policies and procedures pursuant to the standard of care set forth in Paragraph 6.01.A, and to the extent compliance is not inconsistent with professional practice requirements.

2. Each Task Order is based on Laws and Regulations and Owner-provided written policies and procedures as of the Effective Date of such Task Order. Changes after the Effective Date to these Laws and Regulations, or to Owner-provided written policies and procedures, may be the basis for modifications to Owner's responsibilities or to Engineer's scope of services, times of performance, or compensation.

F. Engineer shall not be required to sign any documents, no matter by whom requested, that would result in Engineer having to certify, guarantee, or warrant the existence of conditions whose existence Engineer cannot ascertain within its services for that Specific Project. Owner agrees not to make resolution of any dispute with Engineer or payment of any amount due to the Engineer in any way contingent upon Engineer signing any such certification.

G. The General Conditions for any construction contract documents prepared hereunder are to be the "Standard General Conditions of the Construction Contract" as prepared by the Engineers Joint Contract Documents Committee (EJCDC C-700, 2007 Edition) unless both parties mutually agree in a Task Order to use other General Conditions.

H. Engineer shall not at any time supervise, direct, control, or have authority over any contractor work, nor shall Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, for the safety precautions and programs incident thereto, for security or safety at the Site, nor for any failure of a contractor to comply with Laws and Regulations applicable to such contractor's furnishing and performing of its work.

I. Engineer neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.

J. Engineer shall not provide or have any responsibility for surety bonding or insurance-related advice, recommendations, counseling, or research, or for enforcement of construction insurance or surety bonding requirements.

K. Engineer shall not be responsible for the acts or omissions of any Contractor, Subcontractor, or Supplier, or of any of their agents or employees or of any other persons (except Engineer's own employees and its Consultants) at a Site or otherwise furnishing or performing any of a Contractor's work; or for any decision made regarding the Contract Documents, or any application, interpretation, or clarification of the Contract Documents other than those made by Engineer.

L. While at a Site, Engineer's employees and representatives shall comply with the specific applicable requirements of Contractor's and Owner's safety programs of which Engineer has been informed in writing.

6.02 *Design Without Construction Phase Services*

A. For each design performed or furnished, Engineer shall be responsible only for those Construction Phase services that have been itemized and expressly required of Engineer in the authorizing Task Order. With the exception of such expressly required services, Engineer shall have no design, shop drawing review, or other obligations during construction and Owner assumes all responsibility for the application and interpretation of the Contract Documents, contract administration, construction observation and review, and all other necessary Construction Phase engineering and professional services. Owner waives all claims against the Engineer that may be in any way connected to

Construction Phase engineering or professional services except for those services that are expressly required of Engineer in the authorizing Task Order.

6.03 *Use of Documents*

A. All Documents are instruments of service in respect to a Specific Project, and Engineer shall retain an ownership and property interest therein (including the copyright and the right of reuse at the discretion of the Engineer) whether or not the Specific Project is completed. Owner shall not rely in any way on any Document unless it is in printed form, signed or sealed by the Engineer or one of its Consultants.

B. Either party to this Agreement may rely that data or information set forth on paper (also known as hard copies) that the party receives from the other party by mail, hand delivery, or facsimile, are the items that the other party intended to send. Files in electronic media format of text, data, graphics, or other types that are furnished by one party to the other are furnished only for convenience, not reliance by the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern. If the parties agree to other electronic transmittal procedures, such are set forth in Exhibit J.

C. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any transmittal errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files.

D. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of such documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the documents' creator.

E. Owner may make and retain copies of Documents for information and reference in connection with use on the Specific Project by Owner. Engineer grants Owner a limited license to use the Documents on the Specific Project, extensions of the Specific Project, and for related uses of the Owner, subject to receipt by Engineer of full payment for all services relating to preparation of the Documents and subject to the following limitations: (1) Owner acknowledges that such Documents are not intended or represented to be suitable for use on the Specific Project unless completed by Engineer, or for use or reuse by Owner or others on extensions of the Specific Project, on any other project, or for any other use or purpose, without written verification or adaptation by Engineer; (2) any such use or reuse, or any modification of the Documents, without written verification, completion, or adaptation by Engineer, as appropriate for the specific purpose intended, will be at Owner's sole risk and without liability or legal exposure to Engineer or its Consultants; (3) Owner shall indemnify and hold harmless Engineer and Engineer's Consultants from all claims, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from any use, reuse, or modification of the Documents without written verification, completion, or adaptation by Engineer; and (4) such limited license to Owner shall not create any rights in third parties.

F. If Engineer at Owner's request verifies or adapts the Documents for extensions of the Specific Project or for any other purpose, then Owner shall compensate Engineer at rates or in an amount to be agreed upon by Owner and Engineer.

6.04 *Insurance*

A. At all times when any Task Order is under performance, Engineer shall procure and maintain insurance as set forth in Exhibit G, "Insurance." Engineer shall cause Owner to be listed as an additional insured on any applicable general liability insurance policy carried by Engineer which is applicable to a Specific Project.

B. At all times when any Task Order is under performance, Owner shall procure and maintain insurance as set forth in Exhibit G.

C. Owner shall require Contractors to purchase and maintain policies of insurance covering workers' compensation, general liability, property damage (other than to the Work itself), motor vehicle damage and injuries, and other insurance necessary to protect Owner's and Engineer's interests in the Project. Owner shall require Contractor to cause Engineer and its Consultants to be listed as additional insureds with respect to such liability and other insurance purchased and maintained by Contractors.

D. Owner and Engineer shall each deliver to the other certificates of insurance evidencing the coverages indicated in Exhibit G. Such certificates shall be furnished prior to commencement of Engineer's services under any Task Order and at renewals thereafter during the life of this Agreement.

E. All policies of property insurance relating to a Specific Project shall contain provisions to the effect that Engineer's and Consultants' interests are covered and that in the event of payment of any loss or damage the insurers will have no rights of recovery against Engineer or its Consultants, or any insureds, additional insureds, or loss payees thereunder.

F. All policies of insurance shall contain a provision or endorsement that the coverage afforded will not be canceled or reduced in limits by endorsement, and that renewal will not be refused, until at least 30 days prior written notice has been given to Owner and Engineer and to each other additional insured (if any) to which a certificate of insurance has been issued.

G. Under the terms of any Task Order, or after commencement of performance of a Task Order, Owner may request that Engineer or its Consultants, at Owner's sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective than those specified in Exhibit G. If so requested by Owner, and if commercially available, Engineer shall obtain and shall require its Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by Owner.

6.05 *Suspension and Termination*

A. *Suspension*

1. *By Owner:* Owner may suspend a Task Order upon seven days written notice to Engineer.

2. *By Engineer:* If Engineer's services are substantially delayed through no fault of Engineer, then Engineer may, after giving seven days written notice to Owner, suspend services under a Task Order.

B. *Termination:* The obligation to provide further services under this Agreement, or under a Task Order, may be terminated:

1. For cause,

a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement or any Task Order through no fault of the terminating party.

b. By Engineer:

1) upon seven days written notice if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional; or

2) upon seven days written notice if the Engineer's services under a Task Order are delayed or suspended for more than 90 days for reasons beyond Engineer's control.

3) Engineer shall have no liability to Owner on account of such termination.

c. Notwithstanding the foregoing, neither this Agreement nor the Task Order will terminate under Paragraph 6.05.B.1.a if the party receiving such notice begins, within seven days of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

2. For convenience,

a. By Owner effective upon Engineer's receipt of notice from Owner.

C. *Effective Date of Termination:* The terminating party under Paragraph 6.05.B may set the effective date of termination at a time up to 30 days later than otherwise provided to allow Engineer to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Task Order materials in orderly files.

D. *Payments Upon Termination:*

1. In the event of any termination under Paragraph 6.05, Engineer will be entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all Reimbursable Expenses incurred through the effective date of termination. Upon making such payment, Owner shall have the limited right to the use of Documents, at Owner's sole risk, subject to the provisions of Paragraph 6.03.E.

2. In the event of termination by Owner for convenience or by Engineer for cause, Engineer shall be entitled, in addition to invoicing for those items identified in Paragraph 6.05.D.1, to invoice Owner and to payment of a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with Engineer's Consultants, and other related close-out costs, using methods and rates for Additional Services as set forth in Exhibit C.

6.06 *Controlling Law:*

A. This Agreement is to be governed by the law of the state or jurisdiction in which the Specific Project is located, which is the State of Oklahoma for the purposes of this Agreement.

6.07 *Successors, Assigns, and Beneficiaries:*

A. Owner and Engineer each is hereby bound and the successors, executors, administrators, and legal representatives of Owner and Engineer (and to the extent permitted by Paragraph 6.07.B the assigns of Owner and Engineer) are hereby bound to the other party to this Agreement and to the successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of this Agreement.

B. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.

C. Unless expressly provided otherwise in this Agreement:

1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Contractor, Subcontractor, Supplier, other individual or entity, or to any surety for or employee of any of them.

2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Owner and Engineer and not for the benefit of any other party.

3. The Owner agrees that the substance of the provisions of this Paragraph 6.07.C shall appear in any Contract Documents prepared for any Specific Project under this Agreement.

6.08 *Dispute Resolution:*

A. Owner and Engineer agree to negotiate all disputes between them in good faith for a period of 30 days from the date of notice prior to invoking the procedures of Exhibit H or other provisions of this Agreement, or exercising their rights under law.

B. If the parties fail to resolve a dispute through negotiation under Paragraph 6.08.A, then either or both may invoke the procedures of Exhibit H. If Exhibit H is not included, or if no dispute resolution method is specified in Exhibit H, then the parties may exercise their rights under law.

6.09 *Environmental Condition of Site:*

A. With respect to each Task Order, Specific Project, and Site:

1. Owner has disclosed to Engineer in writing the existence of all known and suspected Asbestos, PCBs, Petroleum, Hazardous Waste, Radioactive Material, hazardous substances, and other Constituents of Concern located at or near the Site, including type, quantity, and location.

2. Owner represents to Engineer that to the best of its knowledge no Constituents of Concern, other than those disclosed in writing to Engineer, exist at the Site.

3. If Engineer encounters or learns of an undisclosed Constituent of Concern at the Site, then Engineer shall notify (a) Owner and (b) appropriate governmental officials if Engineer reasonably concludes that doing so is required by applicable Laws or Regulations.

4. It is acknowledged by both parties that Engineer's scope of services does not include any services related to Constituents of Concern. If Engineer or any other party encounters an undisclosed Constituent of Concern, or if investigative or remedial action, or other professional services, are necessary with respect to disclosed or undisclosed Constituents of Concern, then Engineer may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Specific Project affected thereby until Owner: (1) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Constituents of Concern; and (2) warrants that the Site is in full compliance with applicable Laws and Regulations.

5. If the presence at the Site of undisclosed Constituents of Concern adversely affects the performance of Engineer's services under this Agreement, then the Engineer shall have the option of (a) accepting an equitable adjustment in its compensation or in the time of completion, or both; or (b) terminating this Agreement for cause on 30 days notice.

6. Owner acknowledges that Engineer is performing professional services for Owner and that Engineer is not and shall not be required to become an "owner," "arranger," "operator," "generator," or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, which are or may be encountered at or near the Site in connection with Engineer's activities under this Agreement.

6.10 *Indemnification and Mutual Waiver*

A. *Indemnification by Engineer:* To the fullest extent permitted by law, Engineer shall indemnify and hold harmless Owner, and Owner's officers, directors, members, partners, agents, consultants, and employees from reasonable third party claims, costs, losses, and damages recoverable under applicable law on account of negligence arising out of or relating to this Agreement, any Task Order, or any Specific Project, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Engineer or Engineer's officers, directors, members, partners, agents,

employees, or Consultants. **This indemnification provision is subject to and limited by the provisions, if any, agreed to by Owner and Engineer in Exhibit I, "Limitations of Liability."**

B. *Indemnification by Owner:* Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants as required by Laws and Regulations and to the extent (if any) required in Exhibit I, Limitations of Liability.

C. *Environmental Indemnification:* To the fullest extent permitted by law, Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals, and all court, arbitration, or other dispute resolution costs) caused by, arising out of, relating to, or resulting from a Constituent of Concern at, on, or under any Site, provided that (i) any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, and (ii) nothing in this Paragraph shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence or willful misconduct.

D. *Percentage Share of Negligence*: To the fullest extent permitted by law, a party's total liability to the other party and anyone claiming by, through, or under the other party for any cost, loss, or damages caused in part by the negligence of the party and in part by the negligence of the other party or any other negligent entity or individual, shall not exceed the percentage share that the party's negligence bears to the total negligence of Owner, Engineer, and all other negligent entities and individuals.

E. *Mutual Waiver*: To the fullest extent permitted by law, Owner and Engineer waive against each other, and the other's employees, officers, directors, members, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to a Specific Project.

6.11 *Miscellaneous Provisions*

A. *Notices:* Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, by facsimile, by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

B. *Survival:* All express representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive its completion or termination for any reason.

C. *Severability:* Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Engineer, which agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

D. *Waiver:* A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

E. *Accrual of Claims*: To the fullest extent permitted by law, all causes of action arising under this Agreement shall be deemed to have accrued, and all statutory periods of limitation shall commence, no later than the date of Substantial Completion of each particular Specific Project.

F. *Applicability to Task Orders:* The terms and conditions set forth in this Agreement apply to each Task Order as if set forth in the Task Order, unless specifically modified. In the event of conflicts between this Agreement and a Task Order, the conflicting provisions of the Task Order shall take precedence for that Task Order. The provisions of this Agreement shall be modified only by a written instrument. Such amendments shall be applicable to all Task Orders issued after the effective date of the amendment if not otherwise set forth in the amendment.

G. *Non-Exclusive Agreement*: Nothing herein shall establish an exclusive relationship between Owner and Engineer. Owner may enter into similar agreements with other professionals for the same or different types of services contemplated hereunder, and Engineer may enter into similar or different agreements with other project owners for the same or different services contemplated hereunder.

ARTICLE 7 – DEFINITIONS

7.01 *Defined Terms*

A. Wherever used in this Agreement (including the Exhibits hereto and any Task Order) terms (including the singular and plural forms) printed with initial capital letters have the meanings indicated in the text above, in the exhibits or Task Order, or in the following provisions:

1. *Addenda:* Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Documents.

2. *Additional Services:* Services to be performed for or furnished to Owner by Engineer in accordance with a Task Order which are not included in Basic Services for that Task Order.

3. *Agreement:* This "Agreement between Owner and Engineer for Professional Services – Task Order Edition" including those Exhibits listed in Article 8 and any duly executed Task Order.

4. *Application for Payment:* The form acceptable to Engineer which is to be used by a Contractor in requesting progress or final payments for the completion of its Work and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

5. *Asbestos:* Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

6. *Basic Services:* Specified services to be performed for or furnished to Owner by Engineer in accordance with a Task Order.

7. *Bid:* The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

8. *Bidding Documents:* The advertisement or invitation to Bid, instructions to bidders, the Bid form and attachments, the Bid bond, if any, the proposed Contract Documents, and all Addenda, if any.

9. *Change Order:* A document recommended by Engineer, which is signed by a Contractor and Owner to authorize an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Times.

10. *Constituent of Concern:* Any substance, product, waste, or other material of any nature whatsoever (including, but not limited to, Asbestos, Petroleum, Radioactive Material, and PCBs) which is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§1801 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; and (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

11. *Construction Agreement:* The written instrument which is evidence of the agreement, contained in the Contract Documents, between Owner and a Contractor covering the Work.

12. *Construction Contract:* The entire and integrated written agreement between Owner and Contractor concerning the Work.

13. *Construction Cost:* The cost to Owner of those portions of an entire Specific Project designed or specified by Engineer. Construction Cost does not include costs of services of Engineer or other design professionals and consultants; cost of land or rights-of-way, or compensation for damages to properties; Owner's costs for legal, accounting, insurance counseling or auditing services; interest or financing charges incurred in connection with a Specific Project; or the cost of other services to be provided by others to Owner pursuant to Exhibit B of this Agreement. Construction Cost is one of the items comprising Total Project Costs.

14. *Consultants:* Individuals or entities having a contract with Engineer to furnish services with respect to a Specific Project as Engineer's independent professional associates, consultants, subcontractors, or vendors. The term Engineer includes Engineer's Consultants.

15. *Contract Documents:* Those items so designated in the Construction Contract, including the Drawings, Specifications, construction agreement, and general and supplementary conditions. Only printed or hard copies of the items listed in the Construction Contract are Contract Documents. Approved Shop Drawings, other Contractor submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

16. *Contract Price:* The moneys payable by Owner to a Contractor for completion of the Work in accordance with the Contract Documents and as stated in the Construction Agreement.

17. *Contract Times:* The numbers of days or the dates stated in a Construction Agreement to: (i) achieve Substantial Completion, and (ii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

18. *Contractor:* The entity or individual with which Owner has entered into the Construction Contract.

19. *Correction Period:* The time after Substantial Completion during which a Contractor must

correct, at no cost to Owner, any Defective Work, normally one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee or specific provision of the Contract Documents.

20. *Defective:* An adjective which, when modifying the word Work, refers to Work that is unsatisfactory, faulty, or deficient, in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to Engineer's recommendation of final payment.

21. *Documents:* Data, reports, Drawings, Specifications, Record Drawings, and other deliverables, whether in printed or electronic media format, provided or furnished in appropriate phases by Engineer to Owner pursuant to this Agreement.

22. *Drawings:* That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by a Contractor. Shop Drawings are not Drawings as so defined.

23. *Effective Date of the Construction Agreement:* The date indicated in a Construction Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Construction Agreement is signed and delivered by the last of the two parties to sign and deliver.

24. *Effective Date of the Agreement*: The date indicated in this Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

25. *Effective Date of the Task Order*: The date indicated in the Task Order on which it becomes effective, but if no such date is indicated, it means the date on which the Task Order is signed and delivered by the last of the two parties to sign and deliver.

26. *Engineer:* The individual or entity named as such in this Agreement.

27. *Field Order:* A written order issued by Engineer which directs minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

28. *General Conditions*: That part of the Contract Documents which sets forth terms, conditions, and procedures that govern the Work to be performed or furnished by a Contractor with respect to a Specific Project.

29. *Hazardous Waste*: The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

30. *Laws and Regulations; Laws or Regulations:* Any and all applicable laws, rules, regulations, ordinances, codes, standards, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

31. *Owner:* The individual or entity with which Engineer has entered into this Agreement and for which the Engineer's services are to be performed. Unless indicated otherwise, this is the same individual or entity that will enter into any construction contracts concerning the Project.

32. *PCBs:* Polychlorinated biphenyls.

33. *Petroleum:* Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

34. *Project:* The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

35. *Radioactive Materials:* Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Record Drawings:* The Drawings as issued for construction on which Engineer, upon completion of the Work, has shown changes due to Addenda or Change Orders and other information which Engineer considers significant based on record documents furnished by Contractor to Engineer and which were annotated by Contractor to show changes made during construction.

37. *Reimbursable Expenses:* The expenses incurred directly by Engineer in connection with the performing or furnishing of Basic and Additional Services for a Specific Project for which Owner shall pay Engineer as indicated in Exhibit C.

38. *Resident Project Representative:* The authorized representative, if any, of Engineer assigned to assist Engineer at the Site of a Specific Project during the Construction Phase. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of the RPR agreed to by Owner. The duties and responsibilities of the RPR will be as set forth in each Task Order.

39. *Samples:* Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

40. *Shop Drawings:* All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for a Contractor and submitted by a Contractor to Engineer to illustrate some portion of the Work.

41. *Site:* Lands or areas indicated in the Contract Documents for a Specific Project as being furnished by Owner upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for use of a Contractor.

42. *Specifications:* That part of the Contract Documents prepared by Engineer consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work to be performed by a Contractor and certain administrative details applicable thereto.

43. *Specific Project:* An undertaking of Owner as set forth in a Task Order.

44. *Subcontractor*: An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at a Site.

45. *Substantial Completion:* The time at which the Work has progressed to the point where, in the opinion of Engineer, the Work is sufficiently complete, in accordance with the Contract Documents, so that the Work can be utilized for the purposes for which it is intended.

46. *Supplementary Conditions:* That part of the Contract Documents which amends or supplements the General Conditions.

47. *Supplier:* A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or Subcontractor.

48. *Task Order:* A document executed by Owner and Engineer, including amendments if any, stating the scope of services, Engineer's compensation, times for performance of services and other relevant information for a Specific Project.

49. *Total Project Costs:* The sum of the Construction Cost, allowances for contingencies, the total costs of services of Engineer or other design professionals and consultants, cost of land, rights-of-way, or compensation for damages to properties, or Owner's costs for legal, accounting, insurance counseling, or auditing services, or interest and financing charges incurred in connection with a Specific Project, or the cost of other services to be provided by others to Owner pursuant to Exhibit B of this Agreement.

50. *Work:* The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents for a Specific Project. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by those Contract Documents.

51. *Work Change Directive:* A written directive to a Contractor signed by Owner upon recommendation of the Engineer, ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change directed or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

ARTICLE 8 – EXHIBITS AND SPECIAL PROVISIONS

8.01 *Exhibits*

Attachment 1, Task Order (Suggested Form)

Exhibit A, Engineer's Services *[NOTE: Services, tasks, and terms in Exhibit A are for reference in preparing specific Task Orders, and are contractually binding only to the extent expressly incorporated in a specific Task Order]*.

Exhibit B, Owner's Responsibilities

Exhibit C, Payments to Engineer for Services and Reimbursable Expenses

Exhibit D, Duties, Responsibilities and Limitations of Authority of Resident Project Representative

Exhibit E, Notice of Acceptability of Work

Exhibit F, Construction Cost Limit

Exhibit G, Insurance

Exhibit H, Dispute Resolution

Exhibit I, Limitations on Liability

Exhibit J, Special Provisions

Exhibit K, Amendment to Task Order

8.02 *Total Agreement*

A. This Agreement (together with the Exhibits identified as included above) constitutes the entire agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument based on the format provided in Exhibit K to this Agreement, "Amendment to Task Order."

8.03 *Designated Representatives*

A. With the execution of this Agreement, Engineer and Owner shall designate specific individuals to act as Engineer's and Owner's representatives with respect to the services to be performed or furnished by Engineer and responsibilities of Owner under this Agreement. Such individuals shall have authority to transmit instructions, receive information, and render decisions relative to the Agreement on behalf of each respective party. Each Task Order shall likewise designate representatives of the two parties.

8.04 *Engineer's Certifications*

A. Engineer certifies that it has not engaged in corrupt, fraudulent, or coercive practices in competing for or in executing the Agreement. For the purposes of this Paragraph 8.04:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the selection process or in the Agreement execution;

2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the selection process or the execution of the Agreement to the detriment of Owner, or (b) to deprive Owner of the benefits of free and open competition;

3. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the selection process or affect the execution of the Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on Page 1.

OWNER:	ENGINEER:
City of Shawnee / Shawnee Municipal Authority	C.H. Guernsey & Company
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: Senior Vice President
	Firm's Certificate No. 10
	State of : Oklahoma
Date Signed: _____	Date Signed: _____
Address for giving notices:	Address for giving notices:
_____	5555 North Grand Boulevard
_____	Oklahoma City, OK 73112
DESIGNATED REPRESENTATIVE (Paragraph 8.03.A):	DESIGNATED REPRESENTATIVE (Paragraph 8.03.A):
_____	_____
Title: _____	Title: _____
Phone Number: _____	Phone Number: _____
Facsimile Number: _____	Facsimile Number: _____
E-Mail Address: _____	E-Mail Address: _____

Approved as to form and legality this _____day of _____, 20___.

_____
City Attorney

SUGGESTED FORM OF
TASK ORDER

This is Task Order No. _____, consisting of _____ pages.

Task Order

[NOTE TO USER: Modify as to scope, compensation, schedule, and other key items.]

In accordance with Paragraph 1.01 of the Agreement Between Owner and Engineer for Professional Services – Task Order Edition, dated _____ ("Agreement"), Owner and Engineer agree as follows:

1. Specific Project Data

   A. Title: _____

   B. Description: _____

   C. Number of Construction Contracts

   The Specific Project is anticipated to be constructed under _____ Construction Contracts.

2. Services of Engineer

   [Check all that apply.]

   ☐ Study and Report Services

   [After reviewing Part 1 of Exhibit A, Engineer's Services, supplement or modify Part 1 as needed for the Specific Project and attach, reference, or insert specific text here.]

   ☐ Design Services

   [After reviewing Part 2 of Exhibit A, Engineer's Services, supplement or modify Part 2 as needed for the Specific Project and attach, reference, or insert specific text here.]

   ☐ Designing to a Construction Cost Limit

   Under this Task Order Engineer will design to a Construction Cost Limit, subject to the terms of Paragraph 5.02 of the Agreement and of Exhibit F to the Agreement. Exhibit F is expressly incorporated by reference. The Construction Cost Limit is $_____. The bidding or negotiating contingency to be added to the Construction Cost Limit is _____ percent.

SUGGESTED FORM OF
TASK ORDER

☐ Bidding or Negotiating Services

[After reviewing Part 3 of Exhibit A, Engineer's Services, supplement or modify Part 3 as needed for the Specific Project and attach, reference, or insert specific text here.]

☐ Construction and Commissioning Services

[After reviewing Part 4 of Exhibit A, Engineer's Services, supplement or modify Part 4 as needed for the Specific Project and attach reference, or insert specific text here.]

☐ Resident Project Representative Services

[After reviewing Exhibit D, Schedule of Duties, Responsibilities, and Limitations of Authority of Resident Project Representative Engineer, supplement or modify Exhibit D as needed for the Specific Project and attach reference, or insert specific text here.]

☐ Other Services

[After reviewing Part 5 of Exhibit A, Engineer's Services, supplement or modify Part 5 as needed for the Specific Project and attach, reference, or insert specific text here.]

X Additional Services Requiring an Amendment to Task Order

Part 6 of Exhibit A is incorporated by reference unless otherwise noted.

3. Owner's Responsibilities

Owner shall have those responsibilities set forth in Article 2 and in Exhibit B, subject to the following: *[Here state any additions or modifications to Exhibit B, for this Specific Project.]*

4. Times for Rendering Services

Phase	Completion Date
_____	_____
_____	_____
_____	_____

5. Payments to Engineer

A. Owner shall pay Engineer for services rendered as follows:

Category of Services	***Compensation Method***	***Lump Sum, or Estimate of Compensation for Services***
Basic Services (Study and Report, Design, Bidding or Negotiating, Construction and Commissioning, Other Services)	Choose <u>One</u>: A. Lump Sum B. Standard Hourly Rates C. Percentage of Construction Cost *D. [Insert any other compensation method]*	
Resident Project Representative	Choose <u>One</u>: A. Lump Sum B. Standard Hourly Rates *C. [Insert any other compensation method]*	
Additional Services Requiring an Amendment to Task Order	Standard Hourly Rates	

B. The terms of payment are set forth in Article 4 of the Agreement and in Exhibit C.

6. Consultants:

7. Other Modifications to Agreement:

[Supplement or modify Agreement and Exhibits, if appropriate.]

8. Attachments:

9. Documents Incorporated By Reference:

10. Terms and Conditions: Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement

is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is _____, _____.

OWNER:	ENGINEER:
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____
	Engineer License or Firm's Certificate No. _____ State of: _____
DESIGNATED REPRESENTATIVE FOR TASK ORDER:	DESIGNATED REPRESENTATIVE FOR TASK ORDER:
Name: _____	Name: _____
Title: _____	Title: _____
Address: _____	Address: _____
E-Mail Address: _____	E-Mail Address: _____
Phone: _____	Phone: _____
Fax: _____	Fax: _____

This is **EXHIBIT A**, consisting of _____ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services – Task Order Edition** dated _____, _____.

Engineer's Services

PART 1 – STUDY AND REPORT PHASE SERVICES

A1.01 *Study and Report Phase*

For each Task Order that includes study or report services, select from or supplement the following possible services:

A. The Engineer shall:

1. Consult with Owner to define and clarify Owner's requirements for a Specific Project and available data.

2. Advise Owner as to the necessity of Owner's providing data or services of the types described in Exhibit B, and, if requested, assist Owner in obtaining such data and services.

3. Identify, consult with, and analyze requirements of governmental authorities having jurisdiction to approve the portions of a Specific Project designed or specified by Engineer, including but not limited to mitigating measures identified in the environmental assessment.

4. Identify and evaluate alternate solutions available to Owner for a Specific Project, and, after consultation with Owner, recommend to Owner those solutions which in Engineer's judgment meet Owner's requirements for a Specific Project.

5. Prepare a report (the "Report") which will, as appropriate, contain schematic layouts, sketches and conceptual design criteria with appropriate exhibits to indicate the agreed-to requirements, considerations involved, and those alternate solutions available to Owner which Engineer recommends. The Report will be accompanied by:

   Engineer's opinion of Total Project Costs for each solution which is so recommended for a Specific Project with each component separately itemized, including the following, which will be separately itemized:

   a. opinion of probable Construction Cost,

   b. allowances for contingencies and for the estimated total costs of design, professional, and related services provided by Engineer and,

   c. on the basis of information furnished by Owner, allowances for other items and services included within the definition of Total Project Costs.

6. Furnish the number of review copies of the Report to Owner within the time period set forth in the Task Order and review it with Owner.

7. Revise the Report in response to Owner's and other parties' comments, as appropriate, and furnish the number of final copies of the revised Report to the Owner within the time period set forth in the Task Order.

B. Engineer's services under the Study and Report Phase will be considered complete on the date when the final copies of the revised Report have been delivered to Owner.

PART 2: DESIGN ACTIVITIES

A1.02 *Preliminary Design Phase*

For each Task Order that includes preliminary design services, select from or supplement the following possible services:

A. Engineer shall on the basis of the above acceptance, selection, and authorization*:*

1. Prepare Preliminary Design Phase documents consisting of final design criteria, preliminary drawings, outline specifications and written descriptions of a Specific Project.

2. Provide necessary field surveys and topographic and utility mapping for design purposes. Utility mapping will be based upon information obtained from utility owners.

3. Advise Owner if additional reports, data, information, or services of the types described in Exhibit B are necessary and assist Owner in obtaining such reports, data, information, or services.

4. Based on the information contained in the Preliminary Design Phase documents, submit a current opinion of probable Construction Cost and any adjustments to Total Project Costs known to Engineer, which will be itemized as provided in the Study and Report Phase Services section above.

5. Furnish the Preliminary Design Phase documents to and review them with Owner.

6. Submit to Owner the number of final copies of the Preliminary Design Phase documents and revised opinion of probable Construction Cost within the time period set forth in the Task Order.

B. Engineer's services under the Preliminary Design Phase will be considered complete on the date when final copies of the Preliminary Design Phase documents have been delivered to Owner.

A1.03 *Final Design Phase*

For each Task Order that includes final design services, select from or supplement the following possible services:

A. Engineer shall:

1. Prepare final Drawings and Specifications indicating the scope, extent, and character of the Work to be performed and furnished by Contractor. Where appropriate, prepare Specifications in general conformance with the format of the Construction Specifications Institute.

2. Provide technical criteria, written descriptions, and design data for Owner's use in filing applications for permits from or approvals of governmental authorities having jurisdiction to review or approve the final design of a Specific Project and assist Owner in consultations with appropriate authorities.

3. Provide Owner a current opinion of probable Construction Cost and any adjustments to Total Project Costs known to Engineer, itemized as provided in the Study and Report Phase Services section above.

4. Prepare and furnish Bidding Documents for review and approval by Owner, its legal counsel, and other advisors, as appropriate, and assist Owner in the preparation of other related documents.

5. Submit the number of final copies of the Bidding Documents and a current opinion of probable Construction Cost to Owner within the time period set forth in the Task Order.

6. Prepare for, coordinate with, participate in, and respond to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructibility review requested by Owner; and perform or furnish services required to revise studies, reports, Drawings, Specifications, or other Bidding Documents as a result of such review processes.

B. Engineer's services under the Final Design Phase will be considered complete on the date when the required submittals have been delivered to Owner.

PART 3: BIDDING AND NEGOTIATION

A1.04 *Bidding or Negotiating Phase*

For each Task Order that includes bidding or negotiation services, select from or supplement the following possible services:

A. The Engineer shall:

1. Assist Owner in advertising for and obtaining bids or negotiating proposals for the Work and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend pre-Bid conferences, if any, and receive and process Contractor deposits or charges for the Bidding Documents.

2. Issue Addenda as appropriate to clarify, correct, or change the Bidding Documents.

3. Consult with Owner as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by Contractor for those portions of the Work as to which such acceptability is required by the Bidding Documents.

4. Prepare additional Bidding Documents or Contract Documents for alternate bids or prices requested by Owner for the Work or a portion thereof.

5. If bidding documents require, the Engineer shall evaluate and determine the acceptability of "or equals" and substitute materials and equipment proposed by bidders, but subject to the

provisions below regarding additional compensation for an excessive number of such substitute or "or equal" submittals.

6. Attend the bid opening, prepare bid tabulation sheets, and assist Owner in evaluating bids or proposals and in assembling and awarding contracts for the Work.

7. Assist Owner with bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services.

8. Perform or provide additional Bidding or Negotiating Phase tasks or deliverables as included in a Task Order.

B. The Bidding or Negotiating Phase will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective Contractors (except as may be required if Exhibit F is a part of the Task Order).

PART 4: CONSTRUCTION AND COMMISSIONING

A1.05 *Construction Phase*

For each Task Order that includes Construction Phase services, select from or supplement the following possible services:

A. Engineer shall provide the following services:

1. *General Administration of Construction Contract:* Consult with Owner and act as Owner's representative as provided in the General Conditions. The extent and limitations of the duties, responsibilities and authority of Engineer as assigned in said General Conditions shall not be modified, except as Engineer may otherwise agree in writing. All of Owner's instructions to Contractor will be issued through Engineer, who shall have authority to act on behalf of Owner in dealings with Contractor to the extent provided in this Agreement and said General Conditions except as otherwise provided in writing.

2. *Resident Project Representative (RPR):* Provide the services of an RPR at the Site of the Specific Project to assist the Engineer and to provide more extensive observation of Contractor's work. Duties, responsibilities, and authority of the RPR are as set forth in the Task Order and in Exhibit D, "Duties, Responsibilities and Limitations of Authority of Resident Project Representative." The furnishing of such RPR's services will not limit, extend, or modify Engineer's responsibilities or authority except as expressly set forth in Exhibit D.

3. *Selecting Independent Testing Laboratory:* Assist Owner in the selection of an independent testing laboratory to perform the services identified in Paragraph B2.01.0.

4. *Pre-Construction Conference:* Participate in a pre-construction conference prior to commencement of Work at the Site.

5. *Schedules:* Receive, review, and determine the acceptability of any and all schedules that Contractor is required to submit to Engineer, including the Progress Schedule, Schedule of Submittals, and Schedule of Values.

6. *Baselines and Benchmarks:* As appropriate, establish baselines and benchmarks for locating the Work which in Engineer's judgment are necessary to enable Contractor to proceed.

7. *Visits to Site and Observation of Construction:* In connection with observations of Work in progress :

    a. Make visits to the Site at intervals appropriate to the various stages of construction, as Engineer deems necessary, in order to observe as an experienced and qualified design professional the progress of Contractor's executed Work. Such visits and observations by Engineer, and the Resident Project Representative, if any, are not intended to be exhaustive or to extend to every aspect of the Work in progress or to involve detailed inspections of the Work in progress beyond the responsibilities specifically assigned to Engineer in the Task Order and the Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on Engineer's exercise of professional judgment as assisted by the Resident Project Representative, if any. Based on information obtained during such visits and observations, Engineer will determine in general if the Work is proceeding in accordance with the Contract Documents, and Engineer shall keep Owner informed of the progress of the Work.

    b. The purpose of Engineer's visits to, and representation by the Resident Project Representative, if any, at the Site of the Specific Project, will be to enable Engineer to better carry out the duties and responsibilities assigned to and undertaken by Engineer during the Construction Phase, and, in addition, by the exercise of Engineer's efforts as an experienced and qualified design professional, to provide for Owner a greater degree of confidence that the completed Work will conform in general to the Contract Documents and that Contractor has implemented and maintained the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Engineer shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control over the Work, nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by Contractor, for security or safety at the Site, for safety precautions and programs incident to Contractor's Work, or for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work. Accordingly, Engineer neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish or perform the Work in accordance with the Contract Documents.

8. *Defective Work:* Reject Work if, on the basis of Engineer's observations, Engineer believes that such Work (a) is defective under the standards set forth in the Contract Documents, (b) will not produce a completed Project that conforms to the Contract Documents or (c) will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.

9. *Clarifications and Interpretations; Field Orders:* Issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of the Work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. Subject to any limitations in the Contract

Documents, Engineer may issue Field Orders authorizing minor variations from the requirements of the Contract Documents.

10. *Change Orders and Work Change Directives:* Recommend change orders and work change directives to Owner, as appropriate, and prepare change orders and work change directives as required.

11. *Shop Drawings and Samples:* Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. Engineer shall meet any Contractor's submittal schedule that Engineer has accepted.

12. *Substitutes and "or-equal":* Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor, but subject to any provisions below regarding additional compensation for evaluation of such substitute or "or equal" submittals.

13. *Inspections and Tests:* Require such special inspections or tests of the Work as deemed reasonably necessary, and receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Contract Documents. Engineer's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. Engineer shall be entitled to rely on the results of such tests.

14. *Disagreements between Owner and Contractor:* Render formal written decisions on all duly submitted issues relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the execution, performance or progress of the Work; review each duly submitted Claim by Owner or Contractor, and in writing either deny such Claim in whole or in part, approve such Claim, or decline to resolve such Claim if Engineer in its discretion concludes that to do so would be inappropriate. In rendering such decisions, Engineer shall be fair and not show partiality to Owner or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.

15. *Applications for Payment:* Based on Engineer's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:

    a. Determine the amounts that Engineer recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute Engineer's representation to Owner, based on such observations and review, that, to the best of Engineer's knowledge, information and belief, the Work has progressed to the point indicated, the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other

qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work. In the case of unit price work, Engineer's recommendations of payment will include final determinations of quantities and classifications of the Work (subject to any subsequent adjustments allowed by the Contract Documents). The responsibilities of Engineer contained in Paragraph A1.05.A.15.a are expressly subject to the limitations set forth in Paragraph A1.05.A.15.b and other express or general limitations in this Agreement and elsewhere.

b. By recommending any payment, Engineer shall not thereby be deemed to have represented that observations made by Engineer to check the quality or quantity of the Work as it is performed and furnished have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents. Neither Engineer's review of the Work for the purposes of recommending payments nor Engineer's recommendation of any payment including final payment will impose on Engineer responsibility to supervise, direct, or control the Work in progress or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on Engineer to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any portion of the Work in progress, materials, or equipment has passed to Owner free and clear of any liens, claims, security interests, or encumbrances, or that there may not be other matters at issue between Owner and Contractor that might affect the amount that should be paid.

16. *Contractor's Completion Documents:* Receive, review and transmit to Owner maintenance and operating instructions, schedules guarantees, bonds, certificates, or other evidence of insurance not previously submitted and required by the Contract Documents, certificates of inspection, tests and approvals, Shop Drawings, Samples and other data approved as provided above, and transmit the annotated record documents which are to be assembled by Contractor in accordance with the Contract Documents to obtain final payment. The extent of such review by Engineer will be limited as provided above.

17. *Substantial Completion:* Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with Owner and Contractor, visit the Site to determine if the Work is Substantially Complete. If after considering any objections of Owner, Engineer considers the Work Substantially Complete, Engineer shall deliver a certificate of Substantial Completion to Owner and Contractor.

18. *Final Notice of Acceptability of the Work:* Conduct a final payment inspection to determine if the completed Specific Project of Contractor is acceptable so that Engineer may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, Engineer shall also provide a notice in the form attached hereto as Exhibit E ("Notice of Acceptability of Work") that the Work is acceptable (subject to the provisions of Paragraph A1.05.A.15.b) to the best of Engineer's knowledge, information, and belief and based on the extent of the services provided by Engineer under this Agreement.

19. *Defective Work:* Together with Owner, visit the Site to observe any apparent defects in the Work, assist Owner in consultations and discussions with Contractor concerning correction of any such defects, and make recommendations as to replacement or correction of Defective Work, if any.

20. *Correction Period:* Together with Owner or Owner's representative, visit the Site within one month before the end of the Correction Period to ascertain whether any portion of the Work is subject to correction.

B. *Duration of Construction Phase*: The Construction Phase will commence with the execution of the first Construction Agreement for a Specific Project or any part thereof and will terminate upon written recommendation by Engineer for final payment to Contractors. If a Specific Project involves more than one prime contract as indicated in the Task Order, Construction Phase services may be rendered at different times in respect to the separate contracts.

A1.06 *Commissioning Phase*

For each Task Order that includes facilities commissioning services, select from or supplement the following possible services:

A. Engineer shall:

1. Assist Owner in connection with the adjusting of Specific Project equipment and systems.

2. Assist Owner in training Owner's staff to operate and maintain Specific Project equipment and systems.

3. Prepare operation and maintenance manuals.

4. Assist Owner in developing procedures for (a) control of the operation and maintenance of Specific Project equipment and systems, and (b) related record-keeping.

5. Prepare and furnish to Owner, in the format agreed to, Record Drawings showing appropriate record information based on Project annotated record documents received from Contractor.

PART 5– OTHER SERVICES

A2.01 *For each Task Order, consider the inclusion of the following possible services:*

A. Engineer shall:

1. Prepare applications and supporting documents for private or governmental grants, loans or advances in connection with a Specific Project; prepare or review environmental assessments and impact statements; review and evaluate the effects on the design requirements for a Specific Project of any such statements and documents prepared by others; and assist in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of a Specific Project.

2. Provide services to make measured drawings of or to investigate existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by Owner.

3. Provide renderings or models for Owner's use.

4. Undertake investigations and studies including, but not limited to, detailed consideration of operations, maintenance, and overhead expenses; the preparation of financial feasibility and cash flow studies, rate schedules, and appraisals; assist in obtaining financing for a Specific Project; evaluate processes available for licensing, and assist Owner in obtaining process licensing; detailed quantity surveys of materials, equipment, and labor; and audits or inventories required in connection with construction performed by Owner.

5. In addition to baselines and benchmarks, provide more extensive construction surveys and staking to enable a Contractor to perform its work and any type of property surveys or related engineering services needed for the transfer of interests in real property; and provide other special field surveys.

6. Provide assistance in responding to the presence of any Constituent of Concern at any Site, in compliance with current Laws and Regulations.

7. Prepare to serve or serve as a consultant or witness for Owner in any litigation, arbitration or other dispute resolution process related to a Specific Project.

PART 6: ADDITIONAL SERVICES REQUIRING AMENDMENT TO TASK ORDER

A2.02 *Additional Services Requiring an Amendment to Task Order*

A. *Advance Written Authorization Required:* During performance under a Task Order, Owner may authorize Engineer in writing to furnish or obtain from others Additional Services of the types listed below. The Task Order shall be amended to reflect the inclusion of such Additional Services. Services resulting from significant changes in the scope, extent, or character of the portions of a Specific Project designed or specified by Engineer or its design requirements including, but not limited to, changes in size, complexity, Owner's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date of the Task Order or are due to any other causes beyond Engineer's control.

1. Services resulting from Owner's request to evaluate additional Study and Report Phase alternative solutions beyond those identified in Paragraph A.1.01.A.4.

2. Services required as a result of Owner's providing incomplete or incorrect Project information to Engineer.

3. Providing Construction Phase services beyond the Contract Times set forth in the Task Order.

4. Providing more extensive services required to enable Engineer to issue notices or certifications requested by Owner, subject to the terms of Paragraph 6.01.F of the Agreement.

5. Overtime work requiring higher than regular rates.

6. Other services proposed to be performed or furnished by Engineer not otherwise provided for in this Agreement.

B. *Advance Written Authorization Not Required:* Engineer shall advise Owner in advance that Engineer will immediately commence to perform or furnish the Additional Services of the types listed below. For such Additional Services, Engineer need not request or obtain specific advance written authorization from Owner. Engineer shall cease performing or furnishing such Additional Services upon receipt of written notice from Owner. The Task Order shall be amended to reflect the inclusion of such Additional Services.

1. Services in connection with Work Change Directives and Change Orders to reflect changes requested by Owner so as to make the compensation commensurate with the extent of the Additional Services rendered.

2. Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or-equal" items; services after the award of any Construction Contract in evaluating and determining the acceptability of a proposed substitution, whether approved or not; evaluation and determination of an excessive number of proposed "or equals" or substitutions whether proposed before or after award of the Construction Contract.

3. Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages.

4. Additional or extended services during construction made necessary by (1) emergencies or acts of God endangering the Work (advance notice not required), (2) the presence at the site of any Constituent of Concern or items of historical or cultural significance, (3) Work damaged by fire or other cause during construction, (4) a significant amount of defective, neglected, or delayed work by Contractor, (5) acceleration of the progress schedule involving services beyond normal working hours, or (6) default by Contractor.

5. Services in connection with any partial utilization of any part of the Work on a Specific Project by Owner prior to Substantial Completion.

6. Reviewing a Shop Drawing more than three times, as a result of repeated inadequate submissions by Contractor.

7. While at the Site, compliance by Engineer and its staff with those terms of Owner's or Contractor's safety program enacted or provided to Engineer subsequent to the Effect Date of the Task Order that exceed those normally required of engineering personnel by federal, state, or local safety authorities for similar construction sites.

8. Evaluation of an unreasonable claim or an excessive number of claims or requests for information submitted by a Contractor or others in connection with the Work on a Specific Project.

This is **EXHIBIT B**, consisting of _____ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services – Task Order Edition** dated _____, _____.

Owner's Responsibilities

Article 2 of the Agreement is amended and supplemented to include the following responsibilities unless expressly stated otherwise in a Task Order.

A. Provide Engineer with all criteria and full information as to Owner's requirements for the Specific Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which Owner will require to be included in the Drawings and Specifications; and furnish copies of Owner's standard forms, conditions, and related documents for Engineer to include in the Bidding Documents, when applicable.

B. Furnish to Engineer any other available information pertinent to the Specific Project including reports and data relative to previous designs, or investigation at or adjacent to the Site of the Specific Project.

C. Following Engineer's assessment of initially-available Specific Project information and data and upon Engineer's request, furnish or otherwise make available such additional Specific Project related information and data as is reasonably required to enable Engineer to complete its Basic and Additional Services. Such additional information or data would generally include the following:

1. Property descriptions.

2. Zoning, deed, and other land use restrictions.

3. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.

4. Explorations and tests of subsurface conditions at or contiguous to the Site, drawings of physical conditions relating to existing surface or subsurface structures at the Site, or hydrographic surveys, with appropriate professional interpretation thereof.

5. Environmental assessments, audits, investigations and impact statements, and other relevant environmental or cultural studies as to a Specific Project, the Site and adjacent areas.

6. Data or consultations as required for a Specific Project but not otherwise identified in the Agreement, the Exhibits thereto, or the Task Order.

D. Give prompt written notice to Engineer whenever Owner observes or otherwise becomes aware of the presence at the Site of any Constituent of Concern, or of any other development that affects

the scope or time of performance of Engineer's services, or any defect or nonconformance in Engineer's services, the Work, or in the performance of any Contractor.

E. Authorize Engineer to provide Additional Services as set forth in the Task Order as required.

F. Arrange for safe access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services under the Task Order.

G. Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by Engineer for the Specific Project (including obtaining advice of an attorney, insurance counselor, and other advisors or consultants as Owner deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.

H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Specific Project designed or specified by Engineer and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Specific Project.

I. Recognizing and acknowledging that Engineer's services and expertise do not include the following services, provide, as required for the Specific Project:

1. Accounting, bond and financial advisory, independent cost estimating, and insurance counseling services.

2. Legal services with regard to issues pertaining to the Specific Project as Owner requires, a Contractor raises, or Engineer reasonably requests.

3. Such auditing services as Owner requires to ascertain how or for what purpose a Contractor has used the moneys paid.

J. Place and pay for advertisement for Bids in appropriate publications.

K. Advise Engineer of the identity and scope of services of any independent consultants employed by Owner to perform or furnish services in regard to the Specific Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructability review.

L. Furnish to Engineer data as to Owner's anticipated costs for services to be provided by others (including, but not limited to, accounting, bond and financial, independent cost estimating, insurance counseling and legal advice) for Owner so that Engineer may assist the Owner in collating the various cost categories which comprise Total Project Costs.

M. If Owner designates a construction manager or an individual or entity other than, or in addition to, Engineer to represent Owner at the Site, define and set forth in the Task Order the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of Engineer.

N. If more than one prime contract is to be awarded for the Work of the Specific Project designed or specified by Engineer, designate in the Task Order a person or entity to have authority and

responsibility for coordinating the activities among the various prime Contractors. Define and set forth in the Task Order the duties, responsibilities, and limitations of authority of such individual or entity and the relation thereof to the duties, responsibilities, and authority of Engineer.

O. Attend the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job related meetings, and Substantial Completion and final payment visits to the Site.

P. Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of Samples, materials, and equipment required by the Contract Documents, or to evaluate the performance of materials, equipment, and facilities of Owner, prior to their incorporation into the Work for the Specific Project with appropriate professional interpretation thereof.

Q. Provide Engineer with the findings and reports generated by any independent testing laboratory, if Engineer is required to review such documents.

R. Inform Engineer of any specific requirements of safety or security programs that are applicable to Engineer, as a visitor to the Site.

S. Perform or provide the following additional services:

This is **EXHIBIT C**, consisting of ____ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services – Task Order Edition** dated _____, _____.

Payments to Engineer for Services and Reimbursable Expenses

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties:

ARTICLE 2 – OWNER'S RESPONSIBILITIES

C2.01 *Method of Payment*

B. Owner shall pay Engineer for services in accordance with one or more of the following methods as identified in each Task Order:

1. Method A: Lump Sum
2. Method B: Standard Hourly Rates
3. Method C: Percentage of Construction Cost
4. Method D: [Identify any other method to be used to compensate Engineer for some or all of its services]

C2.02 *Explanation of Methods*

A. Method A – Lump Sum

1. Owner shall pay Engineer a Lump Sum amount for the specified category of services.
2. The Lump Sum will include compensation for Engineer's services and services of Consultants, if any. Appropriate amounts will be incorporated in the Lump Sum to account for labor, overhead, profit, and Reimbursable Expenses.
3. The portion of the Lump Sum amount billed for Engineer's services will be based upon Engineer's estimate of the proportion of the total services actually completed during the billing period to the Lump Sum.

B. Method B – Standard Hourly Rates

1. For the specified category of services, the Owner shall pay Engineer an amount equal to the cumulative hours charged to the Specific Project by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class for all services performed on the Specific Project, plus Reimbursable Expenses and Consultant's charges, if any.
2. Standard Hourly Rates include salaries and wages paid to personnel in each billing class plus the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.

3. Engineer's Reimbursable Expenses Schedule and Standard Hourly Rates are attached to this Exhibit as Appendices 1 and 2.

4. The total estimated compensation for the specified category of services shall be stated in the Task Order. This total estimated compensation will incorporate all labor at Standard Hourly Rates, Reimbursable Expenses, and Consultants' charges, if any.

5. The amounts billed will be based on the cumulative hours charged to the specified category of services on the Specific Project during the billing period by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class, plus Reimbursable Expenses and Engineer's Consultant's charges, if any.

6. The Standard Hourly Rates and Reimbursable Expenses Schedule shall be adjusted annually (as of _____) to reflect equitable changes in the compensation payable to Engineer.

C. Method C – Percentage of Construction Cost

1. For the specified category of services, the Owner shall pay Engineer an amount equal to _____ percent of the Construction Cost. This amount includes compensation for Engineer's Services and services of Engineer's Consultants, if any. The percentage of Construction Cost noted herein accounts for labor, overhead, profit, and Reimbursable Expenses.

2. As a basis for payment to Engineer, Construction Cost will be based on one or more of the following determinations with precedence in the order listed for Work designed or specified by Engineer:

   a. For Work designed or specified and incorporated in the completed Project, the actual final price of the Construction Contract(s), as duly adjusted by change orders.

   b. For Work designed or specified but not constructed, the lowest bona fide Bid received from a qualified bidder for such Work; or, if the Work is not bid, the lowest bona fide negotiated proposal for such Work.

   c. For Work designed or specified but not constructed upon which no such Bid or proposal is received, Engineer's most recent opinion of probable Construction Cost.

   d. Labor furnished by Owner for the Project will be included in the Construction Cost at current market rates including a reasonable allowance for overhead and profit. Materials and equipment furnished by Owner will be included at current market prices.

   e. For purposes of determining Construction Cost under this provision, no deduction is to be made from Construction Contract pricing on account of any penalty, liquidated damages, or other amounts withheld from payments to Contractor(s).

3. *Progress Payments:*

   a. The portion of the amounts billed for Engineer's services which is on account of the Percentage of Construction Cost will be based upon Engineer's estimate of the percentage of the total services actually completed during the billing period.

b. Upon conclusion of each phase of Basic Services, Owner shall pay such additional amount, if any, as may be necessary to bring total compensation paid during such phase on account of the percentage of Construction Cost to the following estimated percentages of total compensation payable on account of the percentage of Construction Cost for all phases of Basic Services:

Study and Report Phase	_____%
Preliminary Design Phase	_____%
Final Design Phase	_____%
Bidding or Negotiating Phase	_____%
Construction Phase	_____%
	100%

c. Engineer may alter the distribution of compensation between individual phases of the work noted herein to be consistent with services actually rendered, but shall not exceed the total estimated compensation amount unless approved in writing by Owner.

D. Method D – *[Identify and define any other method to be used to compensate Engineer for some or all of its services]*

C2.03 *Reimbursable Expenses*

Costs incurred by Engineer in the performance of the Task Order in the following categories constitute Reimbursable Expenses:

A. Transportation and subsistence incidental thereto; advertisements, postage, and shipping costs; providing and maintaining field office facilities including furnishings and utilities; subsistence and transportation of Resident Project Representative and their assistants; toll telephone calls, faxes, and telegrams; and reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Specific Project-related items in addition to those required under Exhibit A. If authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment. Reimbursable expenses shall be paid at rates set forth in Appendix 1 to this Exhibit C which shall be adjusted annually (as of January 1st) to reflect equitable changes in the rates.

B. The amounts payable to Engineer for Reimbursable Expenses will be the project-specific internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to a Specific Project, the latter multiplied by a Factor of 1.0.

C2.04 *Serving as a Witness*

A. For services performed by Engineer's employees as witnesses giving testimony in any litigation, arbitration or other legal or administrative proceeding under Paragraph A2.01.A.20, at a rate of 1.5 times the witness's standard hourly rate. Compensation for Consultants for such services will be by reimbursement of Consultants' reasonable charges to Engineer for such services.

C2.05 *Other Provisions Concerning Payment*

A. *Extended Contract Times*. Should the Contract Times to complete the Work be extended beyond the period stated in the Task Order, payment for Engineer's services shall be continued based on the Standard Hourly Rates Method of Payment.

B. *Estimated Compensation Amounts*

1. Engineer's estimate of the amounts that will become payable for services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.

2. When estimated compensation amounts have been stated in a Task Order and it subsequently becomes apparent to Engineer that a compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof. Promptly thereafter Owner and Engineer shall review the matter of services remaining to be performed and compensation for such services. Owner shall either agree to such compensation exceeding said estimated amount or Owner and Engineer shall agree to a reduction in the remaining services to be rendered by Engineer so that total compensation for such services will not exceed said estimated amount when such services are completed. If Engineer exceeds the estimated amount before Owner and Engineer have agreed to an increase in the compensation due Engineer or a reduction in the remaining services, the Engineer shall give written notice thereof to Owner and shall be paid for all services rendered thereafter.

This is **Appendix 1 to EXHIBIT C**, consisting of _____ pages, referred to in and part of the **Standard Form of Agreement between Owner and Engineer for Professional Services – Task Order Edition**, dated _____, _____.

Standard Hourly Rate and Reimbursable Expenses Schedule

Current agreements for engineering services stipulate that the standard hourly rates and reimbursable expenses are subject to review and adjustment per Exhibit C. Hourly rates and reimbursable expenses for services effective on the date of this Agreement are shown on the following schedule.

Rate Schedule - C.H. Guernsey & Company Engineering & Environmental Group, January 2017			
Principal-in-Charge	$215		
	Senior	Project	Staff
Project Manager	$210	$185	$160
Project Coordinator	$115	$100	$85
Chemical Engineer	$185	$170	$160
Process Engineer	$175	$155	$140
Mechanical Engineer	$185	$150	$120
Electrical Engineer	$185	$160	$124
Civil Engineer	$180	$145	$120
Water Resources Planner/Engr	$175	$155	$124
Structural Engineer	$185	$160	$130
Regulatory Compliance Specialist	$155	$140	$120
Environmental Engineer	$160	$120	$90
Geologist/Hydrogeologist	$160	$120	$90
Environmental Scientist/Planner	$125	$106	$77
Urban Planner	$165	$130	$100
Landscape Architect	$130	$100	$85
Ecologist	$140	$110	$90
Environmental Compliance Specialist	$140	$110	$90
Safety Compliance Specialist	$150	$110	$90
Engineer II / Engineer Intern	$115	$100	$80
Right-of –Way Agent	$115	$100	$80
Designer	$115	$105	$90
Engineering Technician/CADD	$77	$69	$61
Document Control	$74	$68	$60
Administrative Support	$55	$48	$42
Student Intern	-	$54	$42

Rates are adjusted on an annual basis each January 1st
15% Mark-up on all Subcontractors
Expenses (printing, mailing, etc.) reimbursed at cost
  Letter Size: B&W = 0.10/Ea; Color = 0.20/Ea
  11x17 Size: B&W = 0.20/Ea; Color = 0.40/Ea
  Plots: B&W = 0.30/SF; Color = 0.80/SF; Color Glossy = 1.75/SF
Mileage charges @ Current IRS rate/mile
Equipment schedule available as necessary
Expert witness @ 50% surcharge

This is **EXHIBIT D**, consisting of _____ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services – Task Order Edition** dated _____, _____.

Schedule of Duties, Responsibilities, and Limitations of Authority of Resident Project Representative

The following duties, responsibilities, and limitations of authority may be incorporated in the Task Order for a Specific Project:

D1.01 *Resident Project Representative*

A. Engineer shall furnish a Resident Project Representative ("RPR") to assist Engineer in observing progress and quality of the Work. The RPR may provide full time representation or may provide representation to a lesser degree.

B. Through RPR's observations of Contractor's work in progress and field checks of materials and equipment, Engineer shall endeavor to provide further protection for Owner against defects and deficiencies in the Work. However, Engineer shall not, during such RPR field checks or as a result of such RPR observations of Contractor's work in progress, by the RPR, supervise, direct, or have control over Contractor's work, nor shall Engineer (including the RPR) have authority over or responsibility for the means, methods, techniques, sequences, or procedures selected or used by any contractor, for security or safety at the Site, for safety precautions and programs incident to any contractor's work in progress, or for any failure of a contractor to comply with Laws and Regulations applicable to such contractor's performing and furnishing of its work. The Engineer (including RPR) neither guarantees the performances of any contractor nor assumes responsibility for any contractor's failure to furnish and perform the Work in accordance with the Contract Documents. In addition, the specific limitations set forth in Paragraph A1.05 of Exhibit A as incorporated in the Task Order are applicable.

C. The duties and responsibilities of the RPR are limited to those of Engineer in the Agreement with the Owner and in the Contract Documents, and are further limited and described as follows:

1. *General:* RPR is Engineer's representative at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions.

   - RPR's dealings in matters pertaining to a Contractor's work in progress shall in general be with Engineer and Contractor.

   - RPR's dealings with Subcontractors shall only be through or with the full knowledge and approval of Contractor.

   - RPR shall generally communicate with Owner only with the knowledge of and under the direction of Engineer.

2. *Schedules:* Review the progress schedule, schedule of Shop Drawing and Sample submittals, and schedule of values prepared by a Contractor and consult with Engineer concerning acceptability.

3. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.

4. *Liaison:*

    a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, and assist in providing information regarding the intent of the Contract Documents.

    b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.

    c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.

5. *Interpretation of Contract Documents:* Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.

6. *Shop Drawings and Samples:*

    a. Record date of receipt of Samples and approved Shop Drawings.

    b. Receive Samples which are furnished at the Specific Project Site by Contractor, and notify Engineer of availability of Samples for examination.

    c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal for which RPR believes that the submittal has not been approved by Engineer.

7. *Modifications:* Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.

8. *Review of Work and Rejection of Defective Work:*

    a. Conduct on-Site observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.

    b. Report to Engineer whenever RPR believes that any part of Contractor's work in progress will not produce a completed project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Specific Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

9. *Inspections, Tests, and System Start-ups:*

a. Consult with Engineer in advance of scheduled inspections, tests, and systems start-ups.

b. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.

c. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.

d. Accompany visiting inspectors representing public or other agencies having jurisdiction over a Specific Project, record the results of these inspections, and report to Engineer.

10. *Records:*

a. Maintain at the Site orderly files for correspondence, reports of job conferences, reproductions of original Contract Documents including all change orders, field orders, work change directives, addenda, additional Drawings issued subsequent to the execution of the Construction Contract, Engineer's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing and Sample submittals received from and delivered to Contractor, and other Specific Project-related documents.

b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, weather conditions, data relative to questions of change orders, field orders, work change directives, or changed conditions, Site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.

c. Record names, addresses, fax numbers, e-mail addresses, web site locations and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.

d. Maintain records for use in preparing project documentation.

e. Upon completion of the Work, furnish original set of all RPR Specific Project documentation to Engineer.

11. *Reports:*

a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.

b. Draft and recommend to Engineer proposed change orders, work change directives, and Field Orders. Obtain backup material from Contractor.

c. Furnish to Engineer and Owner copies of all inspection, test, and system startup reports.

d. Immediately notify Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, damage to property by fire or other causes, or the discovery of any Constituent of Concern..

12. *Payment Requests:*

    a. Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

13. *Certificates, Operation and Maintenance Manuals:*

    a. During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by a Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

14. *Completion:*

    a. Participate in visits to the Project to assist in determining Substantial Completion, assist in the determination of Substantial Completion and the preparation of lists of items to be completed or corrected.

    b. Participate in a final visit to the Project in the company of Engineer, Owner, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied.

    c. Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work. (See Exhibit E).

D. Resident Project Representative shall not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).

2. Exceed limitations of Engineer's authority as set forth in this Agreement.

3. Undertake any of the responsibilities of a Contractor, subcontractors, suppliers, or a Contractor's superintendent.

4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of the Contractor’s work.

5. Advise on, issue directions regarding, or assume control over security safety practices, precautions and programs in connection with the activities or operations of Owner or Contractor.

6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.

7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.

8. Authorize Owner to occupy a Specific Project in whole or in part.

This is **EXHIBIT E**, consisting of __ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services – Task Order Edition** dated _____, _____.

NOTICE OF ACCEPTABILITY OF WORK

PROJECT:

OWNER:

OWNER'S CONSTRUCTION CONTRACT IDENTIFICATION:

EFFECTIVE DATE OF THE CONSTRUCTION CONTRACT:

ENGINEER:

NOTICE DATE:

To: _____
OWNER

And To: _____
CONTRACTOR

From: _____
ENGINEER

The Engineer hereby gives notice to the above Owner and Contractor that the completed Work furnished and performed by Contractor under the above Contract is acceptable, expressly subject to the provisions of the related Contract Documents and the terms and conditions set forth in this Notice.

By: _____

Title: _____

Dated: _____

CONDITIONS OF NOTICE OF ACCEPTABILITY OF WORK

The Notice of Acceptability of Work ("Notice") is expressly made subject to the following terms and conditions to which all persons who receive said Notice and rely thereon agree:

1. Said Notice is given with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in the same locality.

2. Said Notice reflects and is an expression of the professional judgment of Engineer.

3. Said Notice is given as to the best of Engineer's knowledge, information, and belief as of the Notice Date.

4. Said Notice is based entirely on and expressly limited by the scope of services Engineer has been employed by Owner to perform or furnish during construction of the Specific Project (including observation of the Contractor's work) under Engineer's Agreement with Owner and under the Construction Contract referenced in this Notice, and applies only to facts that are within Engineer's knowledge or could reasonably have been ascertained by Engineer as a result of carrying out the responsibilities specifically assigned to Engineer under Engineer's Agreement with Owner and the Construction Contract referenced on the reverse hereof.

5. Said Notice is not a guarantee or warranty of Contractor's performance under the Construction Contract referenced in this Notice nor an assumption of responsibility for any failure of Contractor to furnish and perform the Work thereunder in accordance with the Contract Documents.

This is **EXHIBIT F**, consisting of _____ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services – Task Order Edition** dated _____, _____.

Construction Cost Limit

Paragraph 5.02 of the Agreement is amended and supplemented to include the following when incorporated in the Task Order for a Specific Project:

F5.02 *Designing to Construction Cost Limit*

A. A Construction Cost limit may be set forth in the Task Order.

B. If a Construction Cost limit is set forth in a Task Order, then the Task Order will also specify bidding or negotiating contingency to be added to such Construction Cost limit.

C. The acceptance by Owner at any time during Basic Services of a revised opinion of probable Construction Cost in excess of the then established Construction Cost limit will constitute a corresponding increase in the Construction Cost limit.

D. Engineer will be permitted to determine what types of materials, equipment and component systems, and the types and quality thereof are to be included in the Drawings and Specifications and to make reasonable adjustments in the scope, extent, and character of a Specific Project to the extent consistent with the project requirements and sound engineering practices to bring the project within the Construction Cost limit.

E. If the Bidding or Negotiating Phase has not commenced within three months after completion of the Final Design Phase, or if industry-wide prices are changed because of unusual or unanticipated events affecting the general level of prices or times of delivery in the construction industry, the established Construction Cost limit will not be binding on Engineer, and Owner shall consent to an adjustment in such Construction Cost limit commensurate with any applicable change in the general level of prices in the construction industry between the date of completion of the Final Design Phase and the date on which proposals or Bids are sought.

F. If the lowest bona fide proposal or Bid exceeds the established Construction Cost limit, Owner shall (1) give written approval to increase such Construction Cost limit, or (2) authorize negotiating or rebidding the Specific Project within a reasonable time, or (3) cooperate in revising the Specific Project's scope, extent, or character to the extent consistent with the Specific Project's requirements and with sound engineering practices. In the case of (3), Engineer shall modify the Contract Documents as necessary to bring the Construction Cost within the Construction Cost limit. Owner shall pay Engineer's cost to provide such modification services, including the costs of the services of its Consultants, all overhead expenses reasonably related thereto, and Reimbursable Expenses, but without profit to Engineer on account of such services. The providing of such services will be the limit of its responsibility in this regard and, having done so, Engineer shall be entitled to payment for services and expenses in accordance with this Agreement and will not otherwise be liable for damages attributable to the lowest bona fide proposal or bid exceeding the established Construction Cost limit.

This is **EXHIBIT G**, consisting of _____ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services – Task Order Edition** dated _____, _____.

Insurance

Paragraph 6.04 of the Agreement is amended and supplemented to include the following agreement of the parties.

G6.04 *Insurance*

A. The limits of liability for the insurance required by Paragraphs 6.04.A and 6.04.B of the Agreement are as follows:

1. *By Engineer:*

a.	Workers' Compensation:		Statutory
b.	Employer's Liability –		
	1)	Each Accident:	$ 500,000
	2)	Disease, Policy Limit:	$ 500,000
	3)	Disease, Each Employee:	$ 500,000
c.	General Liability –		
	1)	Each Occurrence (Bodily Injury and Property Damage):	$ 1,000,000
	2)	General Aggregate:	$ 2,000,000
d.	Excess or Umbrella Liability –		
	1)	Each Occurrence:	$10,000,000
	2)	General Aggregate:	$10,000,000
e.	Automobile Liability –		
	1)	Combined Single Limit (Bodily Injury and Property Damage): Each Accident	$ 1,000,000
f.	Professional Liability –		
	1)	Each Claim Made:	$ 5,000,000
	2)	Annual Aggregate:	$ 5,000,000

2. *By Owner:*

a. Workers' Compensation: Statutory

b. Employer's Liability –

1) Each Accident $_____
2) Disease, Policy Limit $_____
3) Disease, Each Employee $_____

c. General Liability –

1) General Aggregate: $_____
2) Each Occurrence (Bodily Injury and Property Damage): $_____

d. Excess Umbrella Liability --

1) Each Occurrence: $_____
2) General Aggregate: $_____

e. Automobile Liability –

1) Combined Single Limit (Bodily Injury and Property Damage): Each Accident $_____

f. Other (specify): $_____

B. *Additional Insureds:*

1. Engineer and the Consultants identified in the Task Order for a Specific Project shall be listed on Owner's general liability policies of insurance as additional insureds, and on any applicable property insurance policy as loss payees, as provided in Paragraph 6.04.B.

This is **EXHIBIT H**, consisting of _____ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services – Task Order Edition** dated _____, _____.

Dispute Resolution

Paragraph 6.08 of the Agreement is supplemented to include the following agreement of the parties:

H6.08 *Dispute Resolution*

A. Owner and Engineer agree that they shall first submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement, including any Task Order, or the breach thereof ("Disputes") to mediation by [insert name of mediator, or mediation service]. Owner and Engineer agree to participate in the mediation process in good faith. The process should be conducted on a confidential basis, and shall be completed within 120 days. If such mediation is unsuccessful in resolving a Dispute, then (1) the parties may mutually agree to a dispute resolution of their choice, or (2) either party may seek to have the Dispute resolved by a court of competent jurisdiction.

This is **EXHIBIT I**, consisting of _____ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services – Task Order Edition** dated _____, _____.

Limitations of Liability

I6.10.A *Limitation of Engineer's Liability*

1. *Engineer's Liability Limited to Amount of Insurance Proceeds*: Engineer shall procure and maintain insurance as required by and set forth in Exhibit G to this Agreement. Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, the total liability, in the aggregate, of Engineer and Engineer's officers, directors, members, partners, agents, employees, and Consultants, to Owner and anyone claiming by, through, or under Owner for any and all claims, losses, costs, or damages whatsoever arising out of, resulting from or in any way related to a Specific Project or Task Order, or this Agreement, from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability, breach of contract, indemnity obligations, or warranty, express or implied, of Engineer or Engineer's officers, directors, partners, agents, employees, or Consultants, or any of them (hereafter "Owner's Claims"), shall not exceed the total insurance proceeds paid on behalf of or to Engineer by Engineer's insurers in settlement or satisfaction of Owner's Claims under the terms and conditions of Engineer's insurance policies applicable thereto (excluding fees, costs and expenses of investigation, claims adjustment, defense, and appeal).

2. *Exclusion of Special, Incidental, Indirect, and Consequential Damages*. To the fullest extent permitted by law, and notwithstanding any other provision in the Agreement, consistent with the terms of paragraph 6.10 the Engineer and Engineer's officers, directors, members, partners, agents, employees, or Consultants, shall not be liable to Owner or anyone claiming by, through, or under Owner for any special, incidental, indirect, or consequential damages whatsoever arising out of, resulting from, or in any way related to a Specific Project, Task Order, or this Agreement, from any cause or causes, including but not limited to any such damages caused by the negligence, professional errors or omissions, strict liability, breach of contract, indemnity obligations, or warranty, express or implied, of Engineer or Engineer's officers, directors, members, partners, agents, employees, or Consultants.

3. *Agreement Not to Claim for Cost of Certain Change Orders*: Owner recognizes and expects that certain Change Orders may be required to be issued as the result in whole or part of imprecision, incompleteness, errors, omissions, ambiguities, or inconsistencies in the Drawings, Specifications, and other design documentation furnished by Engineer or in the other professional services performed or furnished by Engineer for each Task Order under this Agreement ("Covered Change Orders").

4. *Indemnification by Owner:* To the fullest extent permitted by law, Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Owner or Owner's

officers, directors, members, partners, agents, employees, consultants, or others retained by or under contract to the Owner with respect to this Agreement or to the Project.

This is **EXHIBIT J**, consisting of _____ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated _____, _____.

Special Provisions

None

This is **EXHIBIT K**, consisting of _____ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services – Task Order Edition** dated _____, _____.

Amendment To Task Order No. _____

1. Background Data:

   a. Effective Date of Task Order Agreement:

   b. Owner:

   c. Engineer:

   d. Specific Project:

2. Description of Modifications

[Include the following paragraphs that are applicable and delete those not applicable to this amendment. Refer to paragraph numbers used in the Agreement or a previous amendment for clarity with respect to the modifications to be made. Use paragraph numbers in this document for ease of reference herein and in future correspondence or amendments.]

a. Engineer shall perform the following Additional Services:

b. The Scope of Services currently authorized to be performed by Engineer in accordance with the Task Order and previous amendments, if any, is modified as follows:

c. The responsibilities of Owner with respect to the Task Order are modified as follows:

d. For the Additional Services or the modifications to services set forth above, Owner shall pay Engineer the following additional or modified compensation:

e. The schedule for rendering services under this Task Order is modified as follows:

f. Other portions of the Task Order (including previous amendments, if any) are modified as follows:

[List other Attachments, if any]

3. Task Order Summary (Reference only)
   a. Original Task Order amount: $_____
   b. Net change for prior amendments: $_____

c. This amendment amount: $_____
d. Adjusted Task Order amount: $_____

The foregoing Task Order Summary is for reference only and does not alter the terms of the Task Order, including those set forth in Exhibit C.

Owner and Engineer hereby agree to modify the above-referenced Task Order as set forth in this Amendment. All provisions of the Agreement and Task Order not modified by this or previous Amendments remain in effect. The Effective Date of this Amendment is _____.

OWNER:		ENGINEER:	
By:	_____	By:	_____
Title:	_____	Title:	_____
Date Signed:	_____	Date Signed:	_____

TASK ORDER

This is Task Order No. 1, consisting of _____ pages.

Task Order

In accordance with paragraph 1.01 of the Standard Form of Agreement Between Owner and Engineer for Professional Services – Task Order Edition, dated _____ ("Agreement"), Owner and Engineer agree as follows:

1. **Specific Project Data**

   A. Title: Treatment Plant Upgrades

   B. Description: Design and construction administration services for the upgrade of the Water Treatment Plant (WTP), the upgrade of the Northside Wastewater Treatment Plant (WWTP), and the upgrade/new design of the Southside WWTP

2. **Services of Engineer**

   A. Study and Report Services – As shown in Part 1 of Exhibit A and specifically described in Attachment 1.
   B. Design Services – As shown in Part 2 of Exhibit A and specifically described in Attachment 1.
   C. Bidding Services – As shown in Part 3 of Exhibit A and specifically described in Attachment 1.
   D. Construction and Commissioning Services – As shown in Part 4 of Exhibit A and specifically described in Attachment 1.
   E. During the Project, there may be variations/changes that deviate from the scope of services (commonly known as "scope creep") presented in Exhibit A and agreed upon herein. In performing the work, it may become evident that more or less effort is required and scope modifications may become necessary. Any scope changes will be discussed, documented, and approved by the Shawnee Municipal Authority prior to implementation. Guernsey will not accrue any out of scope charges without written express approval of Shawnee Municipal Authority.

3. **Owner's Responsibilities**

   Owner shall have those responsibilities set forth in Article 2 and in Exhibit B.

4. **Times for Rendering Services**

Phase	Completion Date
_____	_____
_____	_____

5. **Payments to Engineer**

A. At the time of contract execution, the cost of the modifications to the Northside Wastewater Treatment Plant, the Southside Wastewater Treatment Plant and the Water Treatment Plant are unknown/not defined. Based on conceptual numbers provided in the Shawnee Municipal Authority, Utility Master Plan, Water and Wastewater CIP, August 2014, and adjusted by Guernsey, based on plant visits, very conceptual budget numbers were developed as follows:

1. Northside Wastewater Treatment Plant - $13 Million
2. Southside Wastewater Treatment Plant - $12 Million
3. Water Treatment Plant - $8 Million
4. Total - $33 Million

B. These budget numbers are, however, based on only concepts and will definitely change through the design, bid and construction process. Therefore to insure equitable compensation for both the Shawnee Municipal Authority and the Engineer, compensation will be based on a percentage of actual Total Installed Cost (TIC). TIC is defined as the competitive bid cost plus all change orders, adjustments or additions during the construction of the project. The Professional Service Fee percentage will be as shown in the following table.

C. Owner shall pay Engineer for services rendered as follows:

Category of Services	***Compensation Method***	***Estimate of Compensation for Services***
Basic Services (Study and Report, Preliminary Design, Final Design, Bidding, Construction Phase)	*Percentage of Construction Cost*	*Design Services: 6% of TIC* *Bidding and Construction Phase Services: 1.85% of TIC*
Resident Project Representative and Post-Construction Phase Services	*Not Included in Task Order No. 1*	
Additional Services	*Standard Hourly Rates*	

B. By way of illustration, the conceptual construction budget amount shown above ($33 million) would result in a total design fee of $1.98 million and a bidding and construction admin fee of $601,500.

C. The terms of payment are set forth in Article 4 of the Agreement and in Exhibit C.

1. Engineer will make partial pay applications monthly during the progress of the project. These pay applications will be made based on the best project cost estimates available at the time of the application. Final adjustments will be made when the projects are closed out and accepted by the City.

2. Costs for Field Survey, Potholing, and Geotechnical consultants, and any other specialized consultants that might be required are not included in the 7.85% fee and will be itemized separately for the project as required.

6. **Consultants:**

AECOM
Lemke Land Surveying
Terracon

7. **Other Modifications to Agreement:**

None

8. **Attachments:**

Attachment 1 - Scope of Services For Upgrade of the Northside Wastewater Treatment Plant, the Southside Wastewater Treatment Plant and the Water Treatment Plant

9. **Documents Incorporated By Reference:**

None

TASK ORDER

Terms and Conditions: Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is _____, _____.

OWNER:	ENGINEER:
Shawnee Municipal Authority	C.H. Guernsey & Company
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: Senior Vice President
	Firm's Certificate No. 10
	State of: Oklahoma
DESIGNATED REPRESENTATIVE FOR TASK ORDER:	DESIGNATED REPRESENTATIVE FOR TASK ORDER:
Name: _____	Name: _____
Title: _____	Title: _____
Address: _____	Address: _____
E-Mail Address: _____	E-Mail Address: _____
Phone: _____	Phone: _____
Fax: _____	Fax: _____

ATTACHMENT 1 - SCOPE OF SERVICES FOR UPGRADE OF THE NORTHSIDE WASTEWATER TREATMENT PLANT, THE SOUTHSIDE WASTEWATER TREATMENT PLANT AND THE WATER TREATMENT PLANT

1. PROJECT INITIATION/PROJECT MANAGEMENT/MEETINGS

1.1 Project Kick-Off Meeting

The Engineer will conduct a kick-off meeting to review the scope of services and provide an opportunity for the Owner to further share input regarding the procedures and goals of the projects. The meeting will be used to finalize the project schedule, prioritize tasks, and to identify any unresolved details and coordination requirements. The meeting will also be used to identify the Owner's and Engineer's project team members and identify the sources and methods of collecting data that is required by the Engineer. The Engineer will also visit each treatment facility site to collect additional data necessary for the project design.

The goals of this initial meeting are to:

- Introduce Engineer's team members that will perform design and construction admin services continually until the projects are accepted by the City
- Review project scope/schedule/budget
- Discuss items critical to successful execution of the projects
- Determine Goals and Objectives of how success will be measured at the end of each project
- Specify the lines of communication
- Identify key project issues/Owner concerns
- Establish tentative team meeting dates for project status reviews
- Identify Owner personnel who are to provide information /services during the work
- Solicit Owner input on design items

1.2 Project Management

Management of the project team will be conducted by the Engineer's designated Project Manager, Larry Roach, P.E. This task will include leadership of the multiple discipline architect/engineers on the project design team, and will include leadership of all bid phase and construction admin activities. Mr. Roach will be the City's single point of contact for coordination and communication with Owner staff. However, the City staff will also have complete access to others on the design team and the Principal-in-Charge, Ken Senour, CEP, QEP, if the need arises.

This task will also include the preparation of monthly project progress, scope, expenditure, and schedule reports, anticipated to be delivered with Engineer's monthly invoices.

1.3 Progress Meetings

Monthly Progress Meetings

The Engineer will schedule and conduct monthly progress meetings with the Owner. The meetings will include a review of current and upcoming tasks as well as a review of the project schedule and design/construction budgets. The meetings will also be an opportunity to resolve outstanding issues

and plan the project execution for the following month. It has been assumed that eleven (11) monthly meetings will be held at the Owner's facilities. The Engineer will provide an agenda for each monthly meeting and will prepare and distribute meeting minutes for each meeting.

1.4 Periodic Site Visits

The Engineer will plan to make periodic visits, to the treatment plants as needed to gather additional information, solicit input from the Owner's staff, and update Owner regarding design progress. Progress meetings described in Task 1.3 shall coincide with these visits when possible.

1.5 Present Project Updates to City Council

The Engineer will provide up to three (3) formal presentations to the Shawnee City Council as determined necessary by the Owner's Project Manager. It is anticipated that these presentations will address all three (3) treatment plant projects and will summarize key project decisions, milestones, and progress. Presentations will be conducted by Engineer's Project Manager, Principal-in-Charge, and one key design team member per meeting, as needed.

1.6 Design Workshop

At the discretion of the Owner, the Engineer shall conduct one (1) Design Workshop. The purpose of this meeting is to inform the City staff and plant operators of the goals of the projects, the options being considered and the direction of the design. In addition, this is an opportunity for the design team to gain input and insight from the operator staff and to begin the process of developing operator "buy-in" of the proposed design solutions. The meeting will be held in the Oklahoma City offices of Guernsey and will include multidiscipline leads for mechanical, electrical, structural, process, architectural and civil. The schedule will be at the approximate 35% stage of concept design of all three projects.

2. CONCEPTUAL PLANNING AND DESIGN

2.1 Northside Wastewater Treatment Plant

2.1.1 Site Visits and Discipline Information

Engineer's design discipline leads will visit the project site to review the existing installed infrastructure. The site meetings will be used to generally determine what parts of the existing equipment and structures should be replaced, and what can be incorporated into the proposed design in an efficient manner.

2.1.2 Headworks Improvements Evaluation/Design

Engineer will provide schematic level headworks layouts (with canopy cover) and multiple screen/grit removal technologies. Each alternative will include a schematic level drawing, a description of the process, budget level cost, and summary of advantages/disadvantages. The evaluation will be summarized in a draft Technical Memorandum (TM), including a final recommendation. The project team will meet with the Owner to discuss the alternatives and incorporate comments into the final Engineering Report described below.

2.1.3 Effluent Bypass Evaluation

Engineer will review the hydraulics associated with the effluent piping and provide both gravity and pumped alternatives for review by the Owner. Each alternative will include a schematic level drawing, a brief description of the process, budget level cost, and summary of advantages/disadvantages. The evaluation will be summarized in a draft TM, including a final recommendation. Engineer will also provide bypass metering and main plant metering options for the Owner to address flow monitoring at all times during the year. The project team will meet with the Owner to discuss the alternatives and incorporate comments into the final Engineering Report.

2.1.4 Excess Flow Holding Basin Improvements

Engineer will provide a schematic level design for a peak flow holding basin. The holding basin will include a lined basin with coarse aeration and a return pumping system. The design will include a schematic level drawing of the basin and process building with pumping and blowers. Engineer will create a draft TM to describe the equipment and intended operation. The project team will meet with the Owner to discuss the schematic design of the holding basin and incorporate comments into the final Engineering Report.

2.1.5 Clarifier Concrete Visual Inspection and Upgrade Design

Engineer will visually inspect the concrete in the existing clarifiers. The inspection will include two separate site visits for visual inspection of each clarifier when they have been taken out of service and fully drained. The Engineer will develop an inspection report and provide recommendations for repair of the concrete.

2.1.6 Clarifier Internal Mechanism Replacement

Engineer will evaluate options and either duplicate the existing internal equipment or recommend an alternative mechanism for the two existing clarifiers. The analysis will include vendor data, conceptual cost estimates, a recommendation of the proposed solution, and required plans and specifications.

2.1.7 Aeration Basin and Aerobic Digester Diffuser Improvements

Engineer will assess the efficiency of the existing diffused air systems in the two extended aeration, activated sludge systems and the aerobic sludge digesters. Engineer will recommend improvements and a phasing plan to implement change-out design of the diffusers to increase efficiency and eliminate/reduce “dead spots”.

2.1.8 SCADA Design

Engineer will work with in-house staff, vendors and qualified consultants to design a basic SCADA system that controls critical unit process and accumulates essential operational data. The SCADA system will be expandable for inclusion of future control capabilities and data acquisition abilities.

2.1.9 Engineering Report

Engineer will combine the technical memoranda developed in tasks 2.1.2-2.1.8 into one document

to summarize the technical aspects/requirements of the design. This Engineering Report will be developed in accordance with the Oklahoma Funding Agency Coordinating Team (FACT) Guidelines specifically to satisfy the requirements of the Oklahoma Department of Environmental Quality (Title 252, Chapter 656 Water Pollution Control Facility Construction Standards).

2.1.10 35% Design Documents

Engineer will generate 35% design documents for the selected alternatives: Headworks, Effluent Discharge, Clarifier Modifications, Aeration Improvements, SCADA and Excess Flow Holding. Drawings will be presented in 22"x34" and 11"x17" format. A preliminary table of contents for specifications will also be provided. 35% design documents will include the following:

1. Specification table of contents
2. Field Survey and Geotechnical information (Field Survey and Geotechnical Investigations are a pass through expense to the City)
3. Drawing sheet index
4. Schematic flow diagrams with all process elements identified
5. Estimated hydraulic profile
6. Site plan with structure location and yard piping
7. Approximated structure/building floor plans, sections and dimensions
8. Approximate pipe sizing
9. Preliminary budget costs for key equipment and opinion of probable cost
10. Key design/construction constraints will be identified (e.g. geotechnical, floodplain, etc.)

Engineer will conduct a progress review workshop to review and discuss the proposed 35% design with the Owner. Engineer will incorporate all review comments from Owner into the 65% design.

Engineer will provide three (3) hard copies and an electronic copy of the 35% submittal.

2.1.11 65% Design Documents

Engineer generate 65% design documents for the project. Drawings will be presented in both 22"x34" and 11"x17" format. Preliminary specifications will also be developed which will include the preliminary edits to the Engineer's standard front-end documents outlining the general requirements of the contract between the Contractor and Owner as well as the first draft of technical specifications. A preliminary cost opinion will also be completed at this time.

Engineer will conduct a progress review workshop to review and discuss the proposed 65% design with the Owner. Engineer will incorporate all review comments from Owner into the 95% design.

Engineer will provide three (3) hard copies and an electronic copy of the 65% submittal.

2.1.12 95% Design Documents

Engineer will generate 95% design documents for the project. Drawings will be presented in both 22"x34" and11"x17" format. These documents are considered complete, pending review by the Owner and any other reviewing agencies. Final specifications with contract documents will also be prepared.

Engineer will conduct a progress review workshop to review and discuss the proposed 95% design

with the Owner. Engineer will incorporate all review comments from Owner and ODEQ into the Issue for Bid (IFB) documents.

Engineer will provide three (3) hard copies and an electronic copy of the 95% submittal.

2.1.13 IFB Documents and Final Cost Opinion

Engineer will incorporate all final comments prior to generating final Issue for Bid plans and specifications. Engineer will also prepare and deliver the final Construction Cost Opinion to the Owner. Engineer will obtain all required ODEQ construction permits.

2.2 Southside Wastewater Treatment Plant

The existing Southside WWTP is a two-stage trickling filter facility with a permitted capacity of 3.0 million gallons per day (mgd). Existing treatment processes include a coarse manual bar screen, comminutors, influent pumping and aerated grit removal; primary clarifiers and sludge pumps; two high-rate rock media roughing trickling filters; intermediate clarifiers and recirculation/re-lift pump station; one high-rate rock media polishing trickling filter; final clarifiers and pump stations; effluent chlorination, dechlorination and wet-weather effluent pump station; and two-stage anaerobic sludge digesters. Residual solids are disposed by offsite liquid land application. Wet weather flow pumps, concrete excess flow holding basins, and an earthen pond are provided for retention of influent during wet-weather peak flows.

The treatment processes used in the existing WWTP requires extensive pumping. The WWTP was constructed in 1952, with upgrades in 1960, 1971, and 1980. Key mechanical equipment and systems in the WWTP have exceeded their design service life resulting in excessive operation and maintenance (O&M) requirements. In addition, various treatment process structures have cracks, leaks, or other structural issues or design limitations. The facility is currently staffed 24-hours per day, 7 days per week requiring 10 O&M personnel.

Rather than pursue the partial rehabilitation of the existing Southside WWTP facilities, the Shawnee Municipal Authority (SMA) desires to replace the existing labor-intensive treatment process units with new unit processes to be capable of one-shift per day staffed operation combined with remote monitoring to allow unattended night and weekend operation.

The Shawnee Municipal Authority does not anticipate future growth in the Southside WWTP sewershed. Expansion of the WWTP is not anticipated to be required in the future. Current influent characteristics are 2.5 mgd flow, 210 mg/l BOD_5, and 220 mg/L TSS (as reported in the Water and Wastewater Master Plan, Smith Roberts Baldischwiler, LLC and Carollo Engineers, 2014). The WWTP is currently permitted for discharge of up to 3.0 mgd, with effluent quality limits of 30 mg/l BOD_5 and 30 mg/l TSS, and includes a requirement for biomonitoring via periodic whole effluent toxicity (WET) testing.

Although the Southside WWTP's current OPDES permit does not set effluent quality limits for effluent ammonia-nitrogen (NH_3-N), total nitrogen (TN), or total phosphorus (TP), effluent limits for these parameters are anticipated to be added by ODEQ in the future. The proposed Southside WWTP facilities must be designed to accommodate modifications to meet effluent TN and TP limits if added to the permit at a later date. The initial phase of the replacement facilities should be designed for removal of ammonia nitrogen, since excessive effluent NH_3-N can cause the WWTP

to fail its current biomonitoring requirements. Failure of recent effluent biomonitoring tests has occurred as a result of ammonia nitrogen loads introduced into the WWTP in the return flows from the anaerobic digesters.

To progress from the planning-level evaluation provided in the 2014 Water and Wastewater Master Plan to the preparation of final construction documents, a preliminary engineering phase is needed. The purpose of the preliminary design phase is to define cost effective improvements necessary to replace the existing treatment facilities with new unit processes suitable for unattended operation, while providing the ability to meet current effluent quality requirements and adapt to more stringent effluent quality requirements that may be required in the future.

The preliminary design phase will result in a Preliminary Engineering Report (PER) summarizing the results of the preliminary design phase evaluation. It is anticipated the final design phase will proceed after receiving authorization from the SMA and concurrence on the PER. The improvements recommended in the PER will serve as the basis for the scope of the final design phase of this project. The final design phase will build upon the results outlined in the PER and will result in a Final Engineering Report and construction documents. Construction phase services will commence upon approval of the construction documents and authorization to proceed.

Scope of Services

The Scope of Services has been divided into three major components: preliminary design, final design and construction. Special services that fall outside this scope of work are described later in this document.

Preliminary Design Phase

The preliminary design phase scope of work was developed based on observations obtained during an initial site visit at the plant and conversations with the SMA. The preliminary design phase includes the following Tasks. The completion of these tasks will result in full definition of the project, including an estimate of probable construction cost, to facilitate project implementation in final design.

2.2.1 Obtain wastewater treatment plant site boundary description to define property limits.

2.2.2 Establish scope of survey, arrange for survey to be performed, and coordinate surveying services. Survey scope of services to include preliminary, final design and construction phases. All field survey expenses will be a pass through expense (at actual cost) to the City.

2.2.3 If available, obtain copies of previous geotechnical reports and review reports to determine extent of additional geotechnical investigations required. If no previous geotechnical reports are available, or if data is insufficient for design, evaluate site area and establish scope of subsurface investigations to be performed. Arrange for preliminary geotechnical investigations to be performed. Geotechnical scope of services to include preliminary, final design and construction phases. All geotechnical services will be a pass through expense to the Owner at actual costs.

2.2.4 Review previous planning reports and Record Drawings, and perform a detailed site investigation to obtain the following information. The site investigation will consist of

two engineers on-site for two days to gather field data and to coordinate with plant operation staff.

a. Visual evaluation to determine integrity of existing equipment/structures and any modifications required to continue the useful life of the equipment/structures.
b. Evaluate record drawings and site conditions to determine any restrictions on location of new treatment facilities. This work task will evaluate impact of the existing lagoons for proposed or future construction.
c. Confirm current buffer zone conditions and evaluate buffer zone restrictions for future construction.
d. Obtain name plate data on existing motor control centers, switchgear and/or step-down distribution transformers, and any other major electrical equipment. Ascertain the age of existing electrical equipment and any issues associated with each piece of equipment.
e. Evaluate existing power distribution system and define system capacity and redundancy needs including power quality and reliability.

2.2.5 Confirm jurisdictional boundaries affecting work at the plant site. Confirm design criteria and building codes adopted by the City of Shawnee and any other jurisdictional authorities applicable to the proposed plant site improvements. Coordinate with ODEQ to confirm specific requirements for evaluation of treatment process alternatives and design of the project, as well as future effluent permit requirements.

2.2.6 Coordinate with SMA for influent flow data and water quality data. Review all flow data and characteristic data received, and identify data gaps in influent data that need to be addressed to define the basis of design. Influent characteristics required for design include influent maximum monthly average daily and peak flows; wet weather peak flows; BOD_5, TSS and VSS, TKN, NH_3-N, and TP; and influent pH and total alkalinity. Coordinate with SMA to obtain additional influent testing as required to address data gaps. Based on review and evaluation of this data, establish influent characteristics and treatment process effluent quality goals to be used for design of the plant improvements, and review with the SMA.

2.2.7 Evaluate 100 Year Flood Plain constraints and develop a plan to protect plant facilities from 100 year flood and enable discharge of effluent during flooding conditions. (if required)

2.2.8 Evaluate treatment process alternatives to produce required effluent quality. Develop a conceptual site plan for each alternative. This task assumes a maximum of three treatment process alternatives. Meet with the SMA to evaluate and discuss treatment process/site plan alternatives. Identify and resolve cost and operational preferences and select proposed treatment process and site plan. The feasibility and cost comparison will include conceptual sequence of construction for building new facilities and reusing existing facilities (as applicable) without interrupting the existing plant's ability to continue treating wastewater. The task shall also include definition of concept for transferring of flow from the existing facilities to the new facilities.

Headworks treatment process alternatives initially assumed for evaluation include:

a. Inclined rotary fine screens vs. climber screens
b. Vortex grit basins
c. Influent pumping using submersible vs. self-priming pumps
d. Influent flow splitter
e. Wet weather peak flow equalization

Biological treatment process alternatives initially assumed for evaluation include:

a. Oxidation ditch using vertical shaft slow-speed aerators.
b. Complete mix activated sludge with fine-bubble aeration
c. Integrated-Film activated sludge with coarse-bubble aeration
d. Final clarifiers and RAS/WAS sludge pump station for biological process

Effluent disinfection process alternatives initially assumed for evaluation include:

a. Rehabilitation and continued use of existing chlorination and dechlorination.
b. Cloth media filtration with UV disinfection
c. UV disinfection without filtration

Sludge handling process alternatives initially assumed for evaluation include:

a. Conversion of existing anaerobic digesters to aerated sludge holding basins with batch-thickening capability, and liquid land-application disposal.
b. Rehabilitation and continued use of existing primary clarifiers and anaerobic digesters, with liquid land-application disposal.

2.2.9 Develop preliminary process flow schematic and preliminary hydraulic profile for the most feasible and cost effective option. Process flow schematic to include quantitative description of each process and facility as follows: flow, loading, physical dimensions, side water depths, removal rates and equipment sizes. This task to include evaluation of influent flows and investigation of the viability of equalization basins.

2.2.10 Define improvements required in each area of the plant:

a. Civil site work including flood protection, drainage and paving, etc.
b. Influent lift station
c. Flow equalization
d. Headworks and screening excluding odor control
e. Grit removal
f. Flow splitting
g. Aeration basins including blowers/aeration equipment
h. Return and waste sludge system
i. Secondary clarifiers
j. Scum handling system
k. Chemical feed systems
l. Disinfection
m. Effluent filtration
n. Effluent flow equalization
o. Effluent pumping (or gravity flow?)
p. Sludge handling/digesters

q. Plant non-potable water and potable water distribution systems
r. Electrical service, distribution and lighting
s. Instrumentation and control systems

2.2.11 Define improvements required to electrical service, distribution and lighting as well as instrumentation and control. The electrical engineering scope of services to include:
a. Define electrical power distribution system improvements associated with the plant expansion.
b. Develop a preliminary concept for lighting and convenience receptacles.
c. Develop a preliminary concept for a plant-wide instrumentation and control system and for remote monitoring via SCADA. This system is intended to be a basic system with the ability to be expanded in the future.
d. Develop a preliminary cost opinion for modifications to the plant wide electrical distribution system, grounding system for the plant, lighting improvements, convenience receptacles, and instrumentation and control improvements.
e. Prepare narrative report to document findings from site investigation and define preliminary electrical engineering design concepts and recommendations.
f. Based on recommended scope of improvements, prepare load distribution tabulation, cost opinion, and list of specification items required for final design of the proposed improvements.

2.2.12 Prepare preliminary drawing package to define the proposed improvements. Preliminary drawing package to include site plan, process flow schematic and hydraulic profile, process and control summary table, and preliminary electrical drawings including conceptual electrical one-line diagrams of existing electrical distribution system and proposed improvements.

2.2.13 Prepare preliminary engineering phase estimate of probable construction cost.

2.2.14 Prepare project schedule to define duration for final design, bidding of the project and construction of the facility to provide the SMA with planning data for project completion.

2.2.15 Prepare PER to summarize results and submit eight (8) copies of draft report to the SMA for review and comment.

2.2.16 Obtain SMA's comments on report, revise report to incorporate these comments and issue eight (8) copies of final PER to the SMA.

2.2.17 Assist the SMA in preparing and submitting applications for CWSRF funding for the project, as required based on preliminary engineering phase estimated cost and SMA's available funding from other sources.

Final Design Phase

Upon receipt of authorization, perform final design and prepare construction drawings for the Southside WWTP improvements. The final design phase scope of work was developed based on design of the following facilities: an influent headworks excluding odor control facilities, influent lift station, earthen excess influent flow equalization basin, flow split structure, aeration basin and aeration equipment, final clarifiers, return activated sludge pump station, waste activated sludge

pump station, scum pump station, effluent flow measurement device, plant return flows pump station, non-potable water pump station, and aerated sludge holding. The final design phase scope of work also includes modification or demolition of the following existing facilities: demolition of the existing headworks, modification or demolition of the existing influent lift station, modification of the existing aerated grit basins, blowers and aeration piping, modification and/or demolition of the existing clarifiers and recirculation pump stations, modification and/or demolition of the existing trickling filters, modification and/or demolition of the existing anaerobic digesters, and modification and/or demolition of the existing disinfection systems.

2.2.18 Meet with the SMA to confirm design parameters for the project.

2.2.19 Schedule, coordinate and conduct progress meetings with the SMA. Meetings will occur at approximately monthly intervals for the duration of the final design phase. For efficiency, these meetings will also include discussions of upgrades to the Northside and Water Treatment plant in addition to discussions of Southside WWTP improvements. Three milestone submittals will be made to the SMA at the 35%, 65% and 95% complete points. Milestone submittals will consist of 22'x34" and 11'x17" size copies of all drawings underway and draft versions of project specifications. Meetings will be attended by the Guernsey Project Manager and will require eight manhours per meeting to schedule, attend and produce meeting minutes. Other team members will participate by conference call. An allowance of 48 hours has been included for team member participation.

2.2.20 Prepare construction plans and specifications for modifications to the City of Shawnee Southside WWTP, per the PER. Engineer's technical specifications, modified for job specific requirements, will be used for the project. Proposed improvements will include the following areas, as recommended based on the findings of the preliminary engineering report:

a. Design of general site improvements to include plant surface drainage, roads, parking areas, decommissioning abandoned treatment units and associated piping, and temporary erosion and sedimentation control.
b. Design of new plant headworks to include mechanically cleaned bar screens, grit chambers, bypass channel with manual screen, and associated equipment.
c. Design of influent lift station, piping and equipment.
d. Design of a new excess flow holding basin and flow split structure.
e. Design of new aeration basins including all blowers/aeration equipment and facilities located within the basin.
f. Design of new final clarifiers including all equipment located within the basin.
g. Design of a new return activated sludge pump station including all pipe and associated facilities.
h. Design of a new waste activated sludge pump station including all pipe and associated facilities.
i. Design of a new scum pump station including all pipe and associated facilities.
j. Design of new or modified chlorination/dechlorination basins and chemical feed facilities.
k. Design of effluent filtration facility including all equipment located within the basin.

l. Design of a new effluent flow measuring facility.
m. Design of a new water reuse pump station and related equipment.
n. Design of new aerobic sludge holding basins by modification of existing anaerobic digesters or other existing treatment process structures including all equipment located within the basin.
o. Design of site piping including all process, plant drain, potable water facilities, including backflow prevention and metering.
p. Design of site electrical including power service to the plant and distribution facilities within the plant to each of the areas listed above.
q. Design of instrumentation and control program for the plant, including provisions for remote monitoring and notification of alarms during unattended operation.

2.2.21 Prepare and submit completed plans for QA/QC review.

2.2.22 Prepare job specific construction contract documents for the project. Engineer's standard documents will be used and modified for job specific requirements.

2.2.23 Prepare a revised final estimate of probable construction cost for the project.

2.2.24 Prepare construction document package including final engineering report in letter format, and submit five (5) copies of the package to the SMA for review and comment. Incorporate SMA comments and prepare package for bidding.

2.2.25 Submit completed construction plans, specifications, and report to the ODEQ for review and comment. Obtain construction permits

2.2.26 Prepare and issue a Stormwater Pollution Prevention Plan for construction of the project.

2.3 Water Treatment Plant

2.3.1 *Site Visits and Discipline Information*

Engineer's design discipline leads will visit the project site to review the existing installed infrastructure. The site meetings will be used to generally determine the site access to planned improvements, site constraints, review connections/integration with existing equipment, and evaluate existing infrastructure critical to the planned improvements.

2.3.2 *Rapid Mix Basin*

Engineer will design a new rapid mix basin or modify the existing rapid mix basin to insure adequate mixing of chemicals and detention times that meet ODEQ regulations and standards of good engineering practice. The system will also split flow reasonably accurately between the two existing clarifiers and a new clarifier to be added as part of this project. This task may require the relocation of the existing influent meter and vault.

2.3.3 *New Clarifier*

Engineer will design a third clarifier similar in configuration and size as the two existing clarifiers.

2.3.4 Filter Rehabilitation

Engineer will evaluate alternatives for filter media replacement. The evaluation will focus on identifying the filter media, and/or allocation of multiple filter media types, that best align with Owner's current and future treatment objectives. The evaluation will include a review of previous evaluations of the existing filters, a summary of Engineer's experience and a literature review of granular activated carbon and anthracite media in both traditional and biologically active filtration modes. This project may also include modifications to the existing launders and the existing underdrain systems. Each alternative will include a schematic level drawing, budget level cost, and summary of advantages/disadvantages. The evaluation will be summarized in a draft TM, including a final recommendation. The project team will meet with the Owner to discuss the alternatives and incorporate comments into the final Engineering Report.

2.3.5 Granular Activated Carbon Supply System

Engineer will design a system to deliver granular activated carbon (GAC) to the filters either in super sacks or in a slurry system. This system will be permanent and available for periodic replacement or replenishment of GAC during the service life of the filters.

2.3.6 Filter Piping and Filter Building Upgrades

Engineer will design an enclosure over the existing filters and will provide design of HVAC improvements to make the space more maintainable for the plant operators. The enclosure will be coordinated with the design of the GAC supply system mentioned above and will include LED lighting. Engineer will also design replacement of all filter gallery piping, valves, fittings, meters and appurtenances in a configuration similar to the existing design. In addition, Engineer will design backwash-to-waste piping connections. Engineer will also design a method to disconnect the original plant clearwell from the 1 million gallon clearwell currently in use.

2.3.7 Temporary Filter Design/Procurement Assistance

It is anticipated that the most cost efficient way to renovate the filters will be to install a temporary, truck mounted filtration system(s) immediately east of the existing filter building. Filter modifications will be made during times of low water demand. Engineer will provide the specifications for the system, will coordinate/permit the system with ODEQ and will design the temporary connections between the temporary filters the existing filter influent flume and the existing clearwell.

2.3.8 Backwash Storage Tank Design

Engineer will design a new elevated storage tank capable of providing filter backwash rates that meet the requirements of ODEQ and the underdrain/media requirements of the modified filters. The design will include relocation of telemetry equipment currently installed on the existing tank.

2.3.9 Chemical feed modifications

Engineer will make minor modification to add redundancy to the disinfection feed

system and will design replacement of the plant's chemical feed lines.

2.3.10 Valve Modifications

Engineer will specify replacement of 25 existing valve actuators with Emersion (EIM) valves or acceptable equal. Some of this scope is included in the filter building modifications.

2.3.11 Engineering Report

Engineer will incorporate the findings of technical memoranda developed in tasks above into an Engineering Report that summarizes the technical aspects/requirements of each of the water treatment plant improvement designs including; rapid mix/flow splitting improvements, filter rehabilitation, filter building modifications, a GAC delivery system, filter piping replacement, additional clarifier, chemical lines, the clearwell isolation, and new backwash tank. This Engineering Report will be developed in accordance with the Oklahoma Funding Agency Coordinating Team Guidelines specifically to satisfy the requirements of the Oklahoma Department of Environmental Quality (Title 252 Chapter 626, Public Water Supply Construction Standards).

2.3.12 35% Design Documents

Engineer will generate 35% design documents for the planned improvements; filter rehabilitation, filter piping replacement, additional clarifier, new EIM actuators throughout the WTP, new chemical feeder and chemical feed lines, new backwash tank, and relocating the SCADA to the new backwash tank.

Drawings will be presented in 22"x34" and 11"x17" format. A preliminary table of contents for specifications will also be provided. 35% design documents will include the following:

1. Specification table of contents
2. Drawing sheet index
3. Draft revised hydraulic profile
4. Site plan with structure location and preliminary yard piping layout
5. Approximate structure/building floor plans and dimensions
6. Approximate pipe sizing
7. Preliminary budget costs for key equipment
8. Opinion of probable construction cost
9. Key design/construction constraints will be identified (e.g. access, geotechnical, floodplain, etc.)

Engineer will conduct a progress review workshop to review and discuss the proposed 35% design with the Owner. Engineer will incorporate all review comments from Owner into the 65% design.

Engineer will provide three (3) hard copies and an electronic copy of the 35% submittal.

2.3.13 65% Design Documents

Engineer will generate 65% design documents for the project. Drawings will be presented in 22'x34' and11"x17" format. Preliminary specifications will also be developed which will include the preliminary edits to the Engineer's standard front-end documents outlining the general requirements of the contract between the Contractor and Owner as well as the first draft of technical specifications. A preliminary cost opinion will also be completed at this time.

Engineer will conduct a progress review workshop to review and discuss the proposed 65% design with the Owner. Engineer will incorporate all review comments from Owner into the 95% design.

Engineer will provide three (3) hard copies and an electronic copy of the 65% submittal.

2.3.14 95% Design Documents

Engineer will generate 95% design documents for the project. Drawings will be presented in 22'x34' and11"x17" format. These documents are considered complete, pending review by the Owner and any other reviewing agencies. Final specifications with contract documents will also be prepared.

Engineer will conduct a progress review workshop to review and discuss the proposed 95% design with the Owner. Engineer will incorporate all review comments from Owner and other applicable reviewing agencies into the Issue for Bid (IFB) documents.

Engineer will provide three (3) hard copies and an electronic copy of the 95% submittal.

2.3.15 IFB Documents, Permitting and Final Cost Opinion

Engineer will incorporate all final comments prior to generating final Issue for Bid plans and specifications. Engineer will also prepare and deliver the final Construction Cost Opinion to the Owner. Engineer will obtain all necessary construction permits from ODEQ.

3. BID AND CONSTRUCTION PHASE SERVICES

3.1 General

It is anticipated that design of all projects will run concurrently and that bidding will be scheduled to optimize the competitiveness of the process. The three projects are equipment intensive and are remodels or upgrades to existing facilities. The scope below and the pricing reflects that the three projects will require considerable change management, shop drawing review, periodic site visits, punch-list preparation, correspondence/request for information (RFI) resolution, etc. The services to be provided for each plant project are described in Part 3 and Part 4 of the Agreement and are amplified below:

3.1 *Bid Phase Services*

- Pre-qualify contractors to receive notification of the bidding schedule. All efforts will fully comply with the Oklahoma Statutes for Competitive Bidding (Title 61).

Additional efforts will be taken by Guernsey, however, to solicit interest and competition from proven contractors.

- Prepare "Advertisement for Bid" form and submit to the SMA for publication in appropriate newspapers.
- Produce up to forty (40) sets of bid documents as necessary. Distribute plans and specifications to plan houses approved by the SMA and to contractors and suppliers bidding on the project. Record all issuance of bid documents. Contractors and suppliers will be charged a non-refundable fee for the plans and specifications. All fees collected for plans and specifications will offset Guernsey costs for printing.
- Provide assistance to the SMA to schedule, coordinate and attend a pre-bid conference for the project.
- Respond to questions during the bid phase of the project and coordinate the issuance of documents.
- Issue contract addenda resulting from the pre-bid conference. It is anticipated two (2) addenda will be required.
- Assist the SMA in the receipt of bids. Guernsey will tabulate the bids, verify references of the two apparent low bidders, confirm bonding and provide a recommendation of award.
- Prepare six (6) sets of contract documents and submit documents to the SMA and Contractor for execution.

3.2 Construction Phase Services

- Attend a pre-construction conference between the SMA and the Contractors to discuss general and specific requirements for fulfilling the construction contract.
- Issue all instructions to the Contractors requested by the SMA. Answer requests for information (RFI) and issue interpretations and clarifications of the plans and specifications, as needed.
- Perform Change Management Leadership. Engineer will work to anticipate any conflicts or issues that arise on the projects and will inform the Owner of any issues that significantly affect cost, schedule, scope or quality. When these issues are identified Engineer will respond either telephonically with the Contractors or on site to develop a resolution or a work around.
- Do to the retrofit nature of these projects, there are likely to be unforeseen piping, structures, subsurface conditions or other unknowns. Engineer will work to mitigate these changes, but when they occur Engineer will prepare and process change orders to the construction contract. This proposal is based on preparing three (3) change orders per project to the contract with each change order requiring approximately twelve (12) man-hours.
- Construction progress site visits. This proposal is based on one visit every two weeks to observe the progress and quality of the executed work, and to determine in general,

if the work is proceeding in accordance with the Contract Documents. These visits include concurrent, monthly on-site progress meetings for construction observation. Note, the schedule of the meetings will be flexible to concur with construction activity. Depending on the work-in-progress, some site visits may be less frequent and some site visits more frequent.

- Check and review samples, catalog data, schedules, shop drawings; laboratory, shop and mill tests of materials and equipment; and other data which the Contractor is required to submit, only for conformance with the design concept of the Project and compliance with the information given by the contract documents. This proposal is based on 100 shop drawings, total for all three projects, with each shop drawing submitted an average of two times and requiring two (2) man-hours to review each time.
- Coordinate construction materials testing and inspection services to include laboratory and field testing of soils and concrete. These services will be provided by an approved, independent sub-consultant, as a line item expense of the General Contractors.
- Based on the Engineer's on-site observations as an experienced and qualified professional, and upon review of applications for payment and the accompanying data and schedules, determine the amounts owing to the Contractor and recommend in writing payments to the Contractor in such amounts. This proposal is based on eleven (11) monthly pay estimates per project plus one (1) final pay estimate with each pay estimate requiring approximately two (2) man-hours each.
- Conduct, with the SMA, a substantial completion review of the project and develop punchlist for final completion.
- Assist the SMA with operator training of all systems. Training will be provided in accordance with the contract documents.
- Conduct, with the SMA, a final review of the project for compliance with the Contract Documents and make a recommendation concerning the project's status as it may affect the SMA's final payment to the Contractor. Provide a certification that the project was completed and the work constructed in general accordance with the plans and specifications.
- Prepare record drawings assembled from the Contractor's markups of changes made during the construction process. Provide the SMA three (3) copies of the record drawings, and the associated drawing files in electronic (PDF) format.

4. ADDITIONAL SERVICES

4.1 Survey and Utility Mapping

Engineer will direct Lemke Land Surveying in requirements to perform field surveys in sufficient detail to provide a topographic map suitable for detailed design. The survey will show property boundaries as well as the location of all utilities and surface features that are likely to affect the project. The Owner will assist in identifying the locations of all known pipelines and structures

within its property that may not be accurately reflected on the existing drawings. For budgetary purposes the survey effort is estimated to be $20,000 per plant site. This will be a pass through expense to be reimbursed by the Owner.

4.2 Geotechnical

Soil borings and laboratory tests will be performed by Engineer's subcontractor (Terracon) and submitted to the Engineer for key locations at each treatment plant site to determine subsurface conditions. The estimated cost of Geotech services at all three plants is $43,300. This will be a pass-through expense (at actual cost) to be reimbursed by the Owner.

4.2.1 NWWTP Geotechnical

It is anticipated that no more than two (2) borings are required at the Northside wastewater treatment plant site and an additional five (5) borings along the potential force main alignment. The geotechnical subcontractor will provide a geotechnical report with recommendations for the foundation designs for new structures, any site paving at the site, and recommendations along the pipeline alignment.

4.2.2 SWWTP Geotechnical

The exact level of effort required for geotechnical investigations for the Southside Wastewater Treatment Plant will be determined following the evaluation described in Task 2.2. For budgetary purposes it is safe to conclude that a maximum of 8 borings will be required.

4.2.3 WTP Geotechnical

It is anticipated that no more than six (6) borings are required at the water treatment plant site. The geotechnical firm will provide a geotechnical report with recommendations for the foundation designs for new structures and any site paving at each site.

4.2.4 Project Computers

Engineer shall provide the Owner five (5) Surface Pro 4 computers with docking station, and power cord. The Engineer is not buying any special software. The software included with the computer will be provided.

4.2.5 Resident Inspection

If directed by the Shawnee Municipal Authority, Engineer will provide on-site resident inspection services. Due to the suggested timing of the projects it is anticipated that one qualified inspector can perform the required services at all three plants. This will be an additional negotiated monthly fee.

4.2.6 Grant Assistance

Engineer will Assist Owner in preparation of any loan or grant applications on a Time and Materials (T&M) basis. This includes WIFIA applications including the preparation of letters of interest, applications, oral presentation and negotiations. Some of the grant agencies also require additional environmental clearance services. If required, these services will be performed on a

T&M basis using a scope pre-approved by the SMA. Current information indicates that there are no environmental clearance determinations required by either ODEQ or OWRB.